GRIFFITH PARK PERFORMING ARTS CENTER

Initial Study and Mitigated Negative Declaration

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





CITY OF LOS ANGELES
OFFICE OF THE CITY CLERK
ROOM 395, CITY HALL
LOS ANGELES, CALIFORNIA 90012
CALIFORNIA ENVIRONMENTAL QUALITY ACT

NEGATIVE DECLARATIO

(Article I, City CEQA Guidelines)

DOCUMENT FILED
City Cierk's Office
No. NG-13-404-RP
Certified by EGC
Tate 1216/13

CITY CLERK'S USE

LEAD	CITY AGENCY	' AND AD	DRESS: Dep	partment of	Recreation and	d Parks,
221 N.	Figueroa Street,	Suite 100,	Los Angeles,	CA 90012		

COUNCIL DISTRICT:

4

PROJECT TITLE: Griffith Park Outdoor Performing Arts Center

CASE NUMBER:

PRJ20658

PROJECT LOCATION: 4730 Crystal Springs Drive, within Griffith Park

PROJECT DESCRIPTION:

The proposed project includes the development of an open air outdoor stage measuring 45 feet by 45 feet on a landscaped grassy part of Griffith Park known as the Old Zoo area that currently hosts several regular annual events. The proposed project includes other ancillary improvements such as a new switchboard, resurfaced parking lot, improvements to existing restrooms, path lighting, resurfaced walkways, a new path and bridge meeting Americans with Disability Act (ADA) requirements, and undergrounding of an existing overhead power line.

NAME AND ADDRESS OF APPLICANT IF OTHER THAN CITY AGENCY:

FINDING: The Department of Recreation and Parks of the City of Los Angeles has determined that this project will not have significant effect on the environment for the following reasons:

SEE ATTACHED INITIAL STUDY

SEE ATTACHED SHEET(S) FOR ANY MITIGATION MEASURES IMPOSED

Any written objections received during the public review period are attached together with the response of the lead City Agency.

THE INITIAL STUDY PREPARED FOR THIS PROJECT IS ATTACHED

NAME OF PERSON PREPARING THIS FORM:
Paul Davis

TITLE: Environmental Specialist TELEPHONE NUMBER: (213) 202-2667

SIGNATURE (OFFICIAL):

DATE: December 16, 2013

ADDRESS: Department of Recreation and Parks 221 N. Figueroa St., Suite 100, Los Angeles, CA 90012

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CHAPTER 1

Project Description

1.1 Introduction

Background

The City of Los Angeles Department of Recreation and Parks (RAP) has prepared an Initial Study /Mitigated Negative Declaration (MND), to comply with the requirements of the California Environmental Quality Act (CEQA). The Griffith Park Performing Arts Center (proposed project) would include the development of an open air outdoor stage measuring 45 feet by 45 feet on a landscaped grassy part of Griffith Park known as the Old Zoo area that currently hosts several regular annual events. The proposed project includes other ancillary improvements such as a new switchboard, resurfaced parking lot, improvements to existing restrooms, path lighting, resurfaced walkways, a new path and bridge meeting Americans with Disability Act (ADA) requirements, and undergrounding of an existing overhead power line. The land proposed for development is owned and managed by RAP.

As specified in the CEQA Guidelines Section 15064(a), if there is substantial evidence (such as the results of an Initial Study that a project, either individually or cumulatively, may have a significant effect on the environment), the lead agency must prepare an Environmental Impact Report (EIR). The lead agency may instead prepare a Negative Declaration if it determines there is no substantial evidence that the project may cause a significant impact on the environment. The lead agency may prepare a MND if, in the course of the Initial Study analysis, it is recognized that the project may have a significant impact on the environment, but that implementing specific mitigation measures (i.e., incorporating revisions into the project) would reduce any such impacts to a less than significant level (CEQA Guidelines Section 15064[f]).

RAP has incorporated mitigation measures to reduce or eliminate any potentially significant project-related impacts. Therefore, an MND has been prepared for the proposed project. The purpose of the Initial Study/MND is to: (1) determine whether project implementation would result in potentially significant or significant effects to the environment; and (2) incorporate mitigation measures into the project design, as necessary, to eliminate the project's potentially significant or significant project effects or reduce them to a less than significant level.

Impact Methodology

In accordance with CEQA, projects that have potential to result in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, must undergo analysis to disclose the potential significant effects. The provisions of CEQA apply to California governmental agencies at all levels, including local agencies, regional agencies, State agencies, boards, commissions, and special districts. As the lead agency for the proposed project, RAP has the principal responsibility for conducting the CEQA environmental review to analyze the potential environmental effects associated with project implementation. During the review process, it was determined that

potential impacts would be reduced to less than significant with the implementation of mitigation measures. As a result, this Initial Study/MND is considered the appropriate CEQA documentation for the proposed project.

1.2 Project Location and Setting

Location

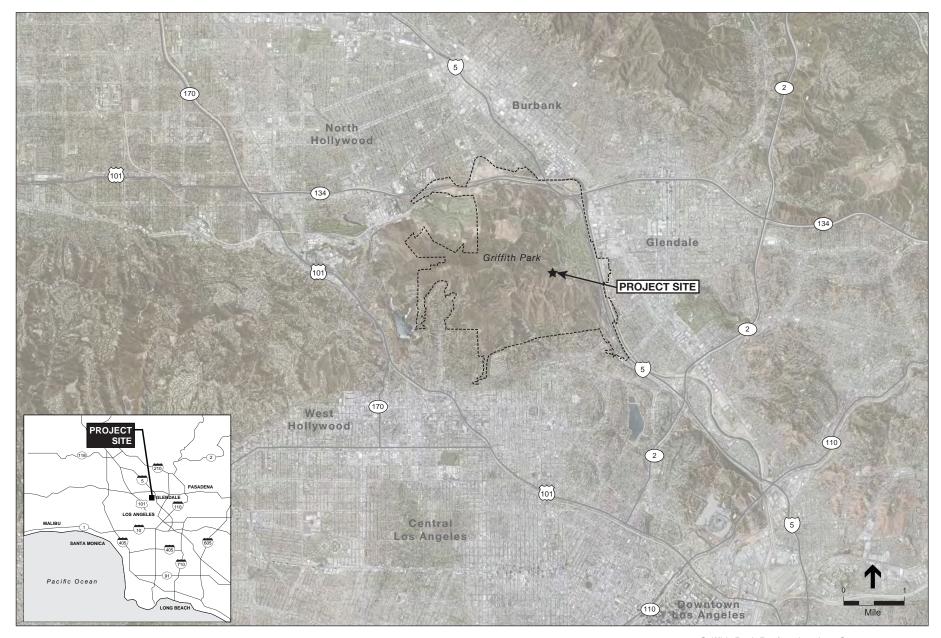
The project site is located at 4730 Crystal Springs Drive, and is entirely within Griffith Park in the City of Los Angeles, approximately 15 miles northwest of downtown (see **Figure 1-1**). Griffith Park lies just west of the Golden State Freeway [Interstate-5 (I-5)], roughly between Los Feliz Boulevard on the south and the Ventura Freeway [State Route -134 (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 situated in the "Old Zoo" area of Griffith Park, and its location relative to other nearby Griffith Park uses is shown in **Figure 1-2**.

Existing Land Uses

The project site is located entirely within Griffith Park within the Old Zoo picnic area. The project site is shown in **Figure 1-3** and is situated on a manicured grassy landscaped knoll with roughly 48 existing trees of various types and ages. It has downward slope from east to west and has a maximum elevation of 580 feet above mean sea level. There are four existing picnic bench areas with concrete pads located on the grassy area; trash receptacles; and an overhead power line and poles managed by the Los Angeles Department of Water and Power (LADWP). An existing restroom facility is located immediately north of the grassy area. The grassy area is surrounded by an existing paved circular pedestrian path. A badly damaged asphalt access road with unmarked parking stalls allowing for roughly 30 vehicles provides access to the area off of Griffith Park Drive. The lower picnic area, where pathway improvements and lighting would be made, is downslope to the east from the grassy area. It is densely populated by mature shade trees, and is primarily packed dirt with some erosion and manicured lawn.

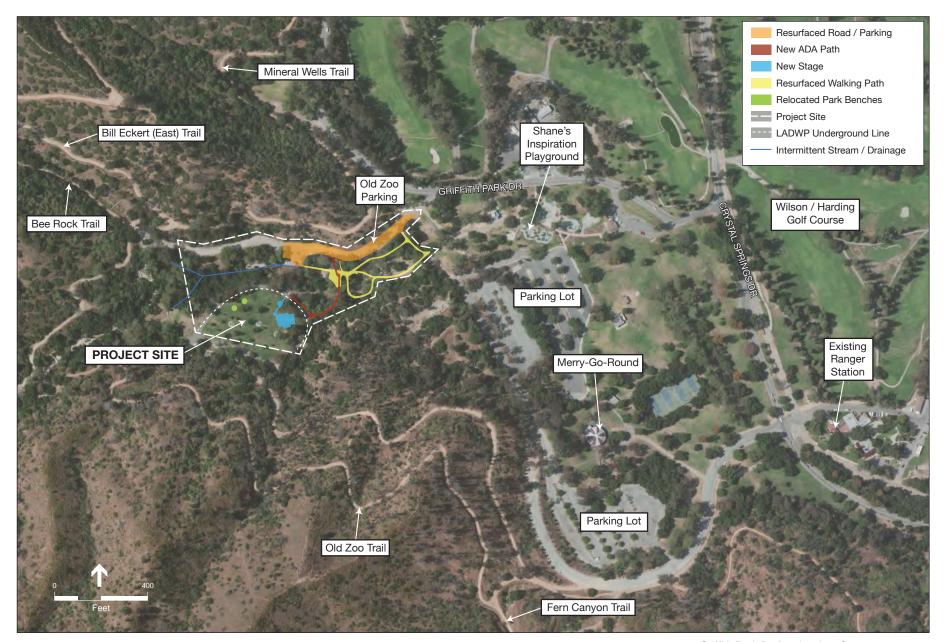
The site is designated as Open Space/Public Facilities in the Land Use Element of the City's General Plan, and is likewise zoned by the City as Open Space (OS). The City of Los Angeles Zoning Regulations list of allowable OS uses includes parks and recreation facilities, nature reserves, closed sanitary landfill sites, public water supply reservoirs, and water conservation areas. Griffith Park, where the proposed project is located, consists of over 4,200 acres and is actively managed by RAP, and is the largest municipal park with urban wilderness area in the United States.

The project site currently hosts three main events annually: Shakespeare in the Park, the LA Haunted Hayride, and Symphony in the Glen. Shakespeare in the Park is a free event that runs Thursdays through Sundays from June 20 through Labor Day weekend, and generally attracts up to 2,500 visitors. Each evening event includes a 6:00 p.m. to 7:00 p.m. pre-event, with the main performance running from 7:00 p.m. to 9:00 p.m. This is typically the largest event and is a non-amplified experience with open lawn seating. The LA Haunted Hayride runs Thursdays through Sundays through the month of October from 7:00 p.m. to 10:30 p.m. and can attract up to 4,700 paying riders which come and go throughout the evening period, throughout the duration of the event in October. Some mobile amplification is used, but it is largely non-amplified. The Symphony in the Glen is a one evening performance in early September. It is a non-amplified free event with open lawn seating.



Griffith Park Performing Arts Center . 130367.02

Figure 1-1
Project Vicinity Map



SOURCE: ESA, 2013

Griffith Park Performing Arts Center . 130367.02



SOURCE: ESA, 2013

Parking for these three events is currently accommodated in existing nearby parking lots as described below. Other than these three annual events, the project site and surrounding area are used for passive recreational uses such as picnicking and hiking on nearby trails, as well as nature walks by wildlife enthusiasts.

Surrounding Land Uses

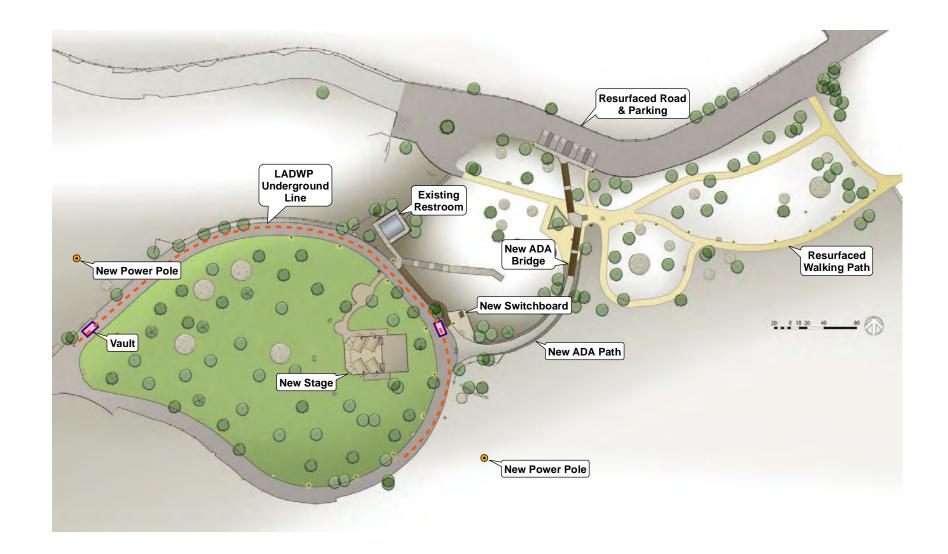
The project site is in proximity to other active use areas in the "Park Center" area of Griffith Park, including Shane's Inspiration Playground (1,000 feet to the east); the Merry-Go-Round (1,000 feet to the southeast); the Ranger Station/Visitors Center (2,300 feet to the southeast); and the southern part of the Wilson/Harding Golf Course. Paved surface parking areas are located in close proximity to the project site, including parking at Shane's Inspiration Playground and at the Merry-Go-Round. Parking in these two lots totals roughly 552 spaces (see Figure 1-2).

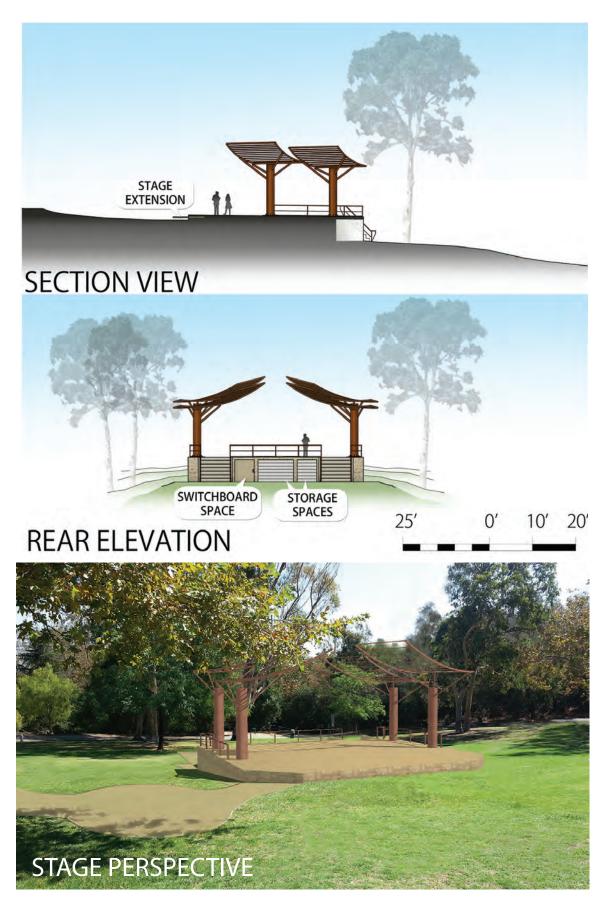
To the north, west, and south of the project site are more undeveloped passive recreation areas of Griffith Park that contain trails and native vegetation/open space. The Old Zoo Trail loops around the project site in the undeveloped open space area to the west, and the Eckert Trail branches off to the northwest. Bee Rock Trail skirts the western side of the project area, and Mineral Wells Trail extends due east from Eckert Trail at the northwest of the project site before winding northwards along Griffith Park Drive. The nearest residences are located approximately one mile to the south of the project site, outside of Griffith Park. The Greek Theatre is also located approximately one mile south/southwest of the project site. The Los Angeles Zoo and the National Autry Center are located approximately one mile north of the project site.

1.3 Project Description

The proposed project would include the construction of the outdoor performing arts stage and associated improvements as discussed in more detail below (see **Figure 1-4**). The proposed 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. 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.

The proposed stage dimensions would be 45 feet by 45 feet in length and width with chamfered corners. The front of the stage would be six to eight inches above finished grade. The back of the stage elevation would be at about 6 feet above finished grade. A finished backstage area (possibly with permeable pavers) would measure 45 feet by 30 feet for accessibility. The overall height measuring to the top of the overhead structures at the stage from grade level would be between 26 to 28 feet. A conceptual rendering of the stage is shown in **Figure 1-5**. The stage would be oriented to the west and open unreserved seating would be available in the grassy lawn area. No permanent seating would be installed. It may be necessary for existing irrigation infrastructure beneath the stage site to be relocated within the immediate vicinity of the stage. The proposed project would also relocate two existing concrete picnic bench pads within the grassy area in order to accommodate the stage and provide optimal viewing areas for visitors.





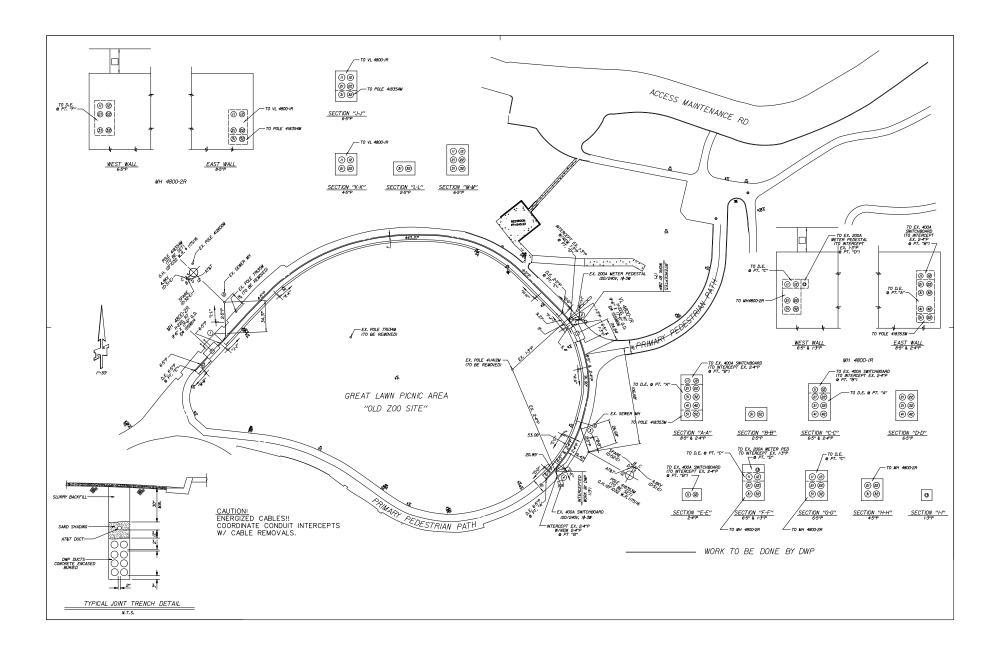
Electrical connections would be provided, but no permanent sound amplification equipment or speakers would be installed as part of the project. An electrical switchboard would be constructed in an undeveloped dirt area just to the east of the stage and the existing road. The proposed project would include the undergrounding of an existing LADWP power line that currently runs through the project site. Conducted by LADWP, the effort would include the removal of three overhead utility poles and connecting lines and the undergrounding of new power lines for approximately 600 feet within the existing pedestrian pathway that encircles the grassy knoll area (see **Figure 1-6**). Trenching would occur along the route and would be an estimated two feet wide by four feet deep. Excavation for two new poles would occur.

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.

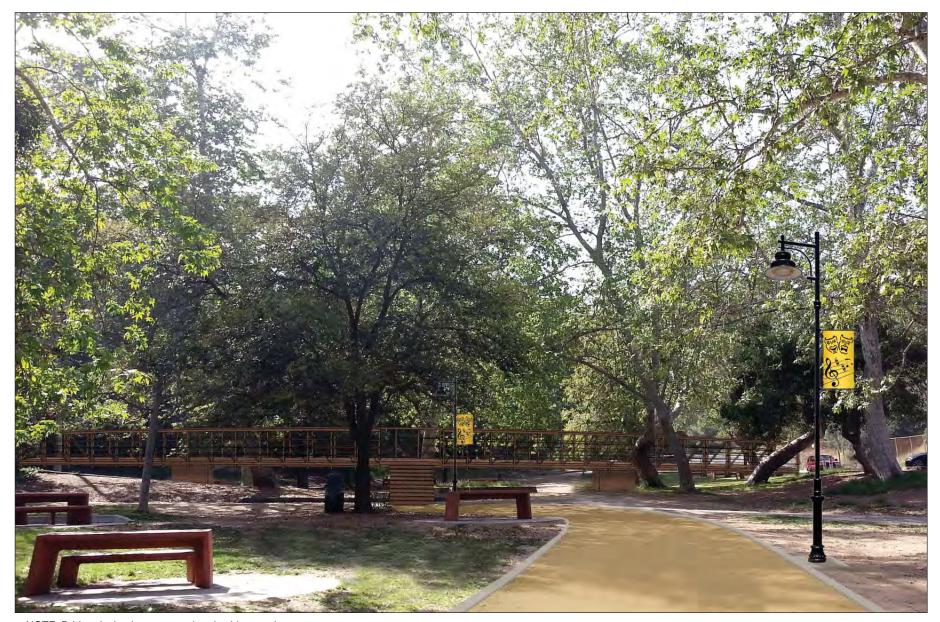
Existing unmarked parking is provided in an paved and damaged access road north of the site. There is currently capacity for an estimated 30 parking spaces provided, including one faded ADA stall. The parking area would be resurfaced with permeable pavers and an asphalt drive aisle, and striped up to an existing turn-around area and gate. Striping for between 20 and 22 standard parking stalls and up to six ADA stalls would be provided.

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 visual character 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). The area would not be illuminated when the permitted users are not present. Lights can be set to timers for shutoff and permitted users would also have the ability to turn them off when they leave. A conceptual lighting example is shown in **Figure 1-7**. 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 grassy knoll area and along the resurfaced pathway. Any lighting used for the performances would be brought in for individual events by the user groups, if needed, as is current protocol.

Phase 2 of the project would include a new prefabricated modular ADA bridge to connect the resurfaced ADA parking area to the grassy knoll and stage area. The aboveground bridge would turn into the 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). A conceptual illustration of potential bridge design is shown in **Figure 1-8**, though this design could be modified as the second phase progresses. 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 in the lower picnic area (see Figure 1-4).







NOTE: Bridge design is conceptual and subject to change.

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 and peaks at roughly 2,500 visitors per performance. 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 accessibility. 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.

Construction of the proposed project would involve limited grading of the proposed stage area, with some minor excavations for footings and other sub-grade features. Trenching would be up to four feet deep for the LADWP power lines. It is anticipated that any cut and fill from earthwork activities would be balanced on-site (no imported or exported soils needed). Some limited vegetation trimming may be necessary, particularly in the path resurfacing area; however no trees would be removed as part of this project.

Maintenance of the stage facility would involve the continued regular landscaping maintenance and routine checkup of the developed stage, restrooms, and features.

1.4 Project Objectives

Proposition K (Prop K) is a City assessment that was approved by the voters in November 1996. It provides \$25 million each year for improvement, maintenance and construction of City parks and recreation facilities. There are 183 specified projects and the Griffith Park Performing Art Center is one of the specified projects.

The following objectives have been developed for the proposed project:

- Provide a permanent stage area to accommodate the existing known events that occur annually on
 the project site and allow for any other future events in a safe, orderly, and accessible location
 that can be monitored by RAP and permitted by the City.
- Provide improvements to allow for enhanced ADA -accessibility and access to the site.
- Maintain the natural landscape and minimize the disturbance of surrounding area as much as
 possible in order to remain in character with the historic designation of Griffith Park and in
 consideration of the natural wildlife areas near the site.

1.5 Construction Program

Construction of the proposed project would occur in two phases. Construction of Phase 1 (to include development of the stage, undergrounding of existing utility lines, renovation of existing restrooms, installation of path lighting, ADA picnic and viewing area) would begin in February 2014 and be completed by June 2014, in order to allow for the 2014 summer events that are held onsite. Phase 2 (to include the ADA pedestrian bridge, improved ADA paths, , and ADA parking improvements) would commence after the summer and fall events are completed, sometime in winter 2014 or spring 2015, and

would be completed by June 2015. The first activity to occur would be the removal of existing overhead power poles and lines and relocating them underground. This effort would be led jointly by LADWP and RAP.

The proposed project has been designed such that minimal grading, alteration of the existing landscape, or disturbance would occur. The majority of construction activity would be for the trenching associated with relocation of the utility lines. It is estimated that a maximum subsurface excavation would be at a depth of four feet for this effort. Construction of the stage would also require some minimal grading, not anticipated to exceed three feet in depth. Concrete for the stage would be mixed onsite. An estimated 130 to 150 truck trips would be needed to bring decomposed granite (DG), stage infrastructure, and other materials to the site. All construction activities would take place between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Traffic would be maintained on all surrounding streets throughout construction.

1.6 Required Permits and Approvals

RAP is the Lead Agency responsible for the preparation of environmental documentation in compliance with CEQA. No planning or zoning conflicts are anticipated, as the intended use of the land is consistent with the General Plan and zoning designations. RAP and other City of Los Angeles departments, are expected to utilize this IS/MND as part of their approval or permit process as set forth in Table 1-1.

TABLE 1-1 REQUIRED REVIEWS AND APPROVALS

Agency	Permit
Los Angeles RAP, Board of Recreation and Parks Commission	Design review and approval of the proposed project; individual event permitting during operation
LADWP	Power line relocation
Los Angeles City Planning and Building and Safety Departments	Grading Plan and Site Utilities, Building Review, Mechanical- Plumbing, and Building and Safety permits
Los Angeles Department of Public Works	Utility extensions for water, sewer, and electricity
Los Angeles Bureau of Engineering Recreational and Cultural Facilities Program (Proposition K)	Proposition K Funding Oversight and management
Los Angeles Office of Historic Resources	Cultural Heritage Commission review and recommendations

1.7 Areas of Known Controversy

RAP has held three community meetings regarding the proposed project prior to the preparation of this Initial Study/NOP. These meetings were held as part of the Local Voluntary Neighborhood Oversight Committee (LVNOC) process and were conducted on November 7, 2012; January 17, 2013; and May 23, 2013. At each meeting, RAP presented an overview of the proposed project and design. Community members and event participants were present and were given the option to present verbal comment. General comments were received and contributed to the current project design and details. This includes comments regarding lighting, the amount of ground disturbing activity that would be required, irrigation, stage design, parking, restroom improvements, ADA accessibility, bridge design, and site erosion.

In addition, a comment letter was received from the Friends of Griffith Park on May 22, 2013 regarding the proposed project. Comments expressed in this letter included concerns regarding future uses and events held at the facility, cumulative impacts, parking, biological impacts, impacts to the cultural/historic importance of the Old Zoo site, noise impacts, and overall user experience/enjoyment of the larger Griffith Park.

These concerns have been considered throughout the design process for the proposed project and as part of this CEQA evaluation. The Initial Study/MND documentation provides mitigation measures that would reduce potentially significant impacts to less than significant, where necessary.

CHAPTER 2

Initial Study Checklist

1. **Project Title:** Griffith Park Performing Arts Center

2. Lead Agency Name: City of Los Angeles

Department of Recreation and Parks

3. Contact Person and Phone Number: Paul Davis

(213) 202-2667

4. Project Location: 4730 Crystal Springs Drive, Los Angeles, CA

5. Project Sponsor's Name and Address: City of Los Angeles

Department of Recreation and Parks

221 North Figueroa Street Los Angeles, California 90012

6. General Plan Designation(s): Open Space/Public Facilities

7. **Zoning Designation(s):** Open Space (OS)

- 8. Project Overview: The proposed project includes the development of an open air outdoor stage measuring 45 feet by 45 feet on a landscaped grassy part of Griffith Park known as the Old Zoo area that currently hosts several regular annual events. The proposed project includes other ancillary improvements such as a new switchboard, resurfaced parking lot, improvements to existing restrooms, path lighting, resurfaced walkways, a new path and bridge meeting Americans with Disability Act (ADA) requirements, and undergrounding of an existing overhead power line.
- **9. Location and Setting:** 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 1-1). Griffith Park lies just west of Interstate-5, roughly between Los Feliz Boulevard on the south and State Route -134 on the north. The project site is situated in the "Old Zoo" area of Griffith Park.

The project site is in proximity to other active use areas in the "Park Center" area of Griffith Park, including Shane's Inspiration Playground (1,000 feet to the east); the Merry-Go-Round (1,000 feet to the southeast); the Ranger Station/Visitors Center (2,300 feet to the southeast); and the southern part of the Wilson/Harding Golf Course. Paved surface parking areas are located in close proximity to the project site, including parking at Shane's Inspiration Playground and at the Merry-Go-Round.

- **10.** Other public agencies whose review and/or approval may be required (e.g., permits, financing approval, or participation agreement. Indicate whether another agency is a responsible or trustee agency.)
 - City of Los Angeles Department of Water and Power (utility line relocation)
 - City of Los Angeles Department of Building and Safety (trustee agency to review of CEQA documentation)
 - City of Los Angeles Bureau of Engineering (trustee agency to review of CEQA documentation)
 - Los Angeles Office of Historic Resources (trustee agency to review of CEQA documentation)

2.1 Initial Study Checklist Determination:

The proposed project could potentially affect the environmental factor(s) checked below. Mitigation Measures have been included with this documentation to ensure impacts are less than significant. The following pages present a more detailed checklist and discussion of each environmental factor.

	Aesthetics		Agriculture and Forest Resources		Air Quality
\boxtimes	Biological Resources	\boxtimes	Cultural Resources		Geology, Soils and Seismicity
	Greenhouse Gas Emissions		Hazards and Hazardous Materials		Hydrology and Water Quality
	Land Use and Land Use Planning		Mineral Resources	\boxtimes	Noise
	Population and Housing		Public Services		Recreation
	Transportation and Traffic		Utilities and Service Systems		Mandatory Findings of Significance

DETERMINATION: (To be completed by Lead Agency)

On the	e basis of this initial evaluation:	
	I find that the proposed project COULD NOT have a and a NEGATIVE DECLARATION will be prepared	
	I find that although the proposed project could have a environment, there will not be a significant effect in t project have been made by or agreed to by the projec NEGATIVE DECLARATION will be prepared.	his case because revisions in the
	I find that the proposed project MAY have a significated ENVIRONMENTAL IMPACT REPORT is required	
	I find that the proposed project MAY have a "potenti "potentially significant unless mitigated" impact on the standards, and 2) has been addressed by mitigation mass described on attached sheets. An ENVIRONMEN but it must analyze only the effects that remain to be	the environment, but at least one effect ent pursuant to applicable legal easures based on the earlier analysis FAL IMPACT REPORT is required,
	I find that although the proposed project could have a environment, because all potentially significant effect in an earlier EIR or NEGATIVE DECLARATION pt (b) have been avoided or mitigated pursuant to that expected by the proposed project, no further environmental document	ts (a) have been analyzed adequately ursuant to applicable standards, and arlier EIR or NEGATIVE neasures that are imposed upon the
Paul J.	Davis	December 16, 2013 Date Department of Recreation and Parks
Printe	d Name	For

Environmental Checklist

Aesthetics

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
1.	AESTHETICS — Would the project:				
a)	Have a substantial adverse effect on a scenic vista?			\boxtimes	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?				
d)	Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?				

Discussion

a) **Less than Significant Impact.** The proposed project would be located in Griffith Park, in the eastern range of the Santa Monica Mountains. The project site is in the Old Zoo, which is part of the Green Park Corridor area of Griffith Park (RAP, 1978). The manicured lawn area of the project site has partial views of the Santa Monica Mountains to the north and west.

Phase 1 of the project, which includes construction of the stage, an underground utility line, relocated picnic tables, an electrical switchboard, pathway lighting, and upgraded ADA restroom facilities, is located on the manicured grassy area of the Old Zoo. This location is currently home to approximately 48 trees and eight picnic tables on four concrete pads. It is bordered on the south by the Old Zoo's former animal enclosures (grottos), which also contain picnic tables. This portion of project site is enclosed by a paved, pedestrian pathway, and the mature trees that surround this pathway generally block views of the mountains and other park uses nearby. The project site feels enclosed and visually isolated from the rest of the park, and does not contain scenic vistas that are present in other parts of Griffith Park.

Phase 2 of the proposed project is located to the east of the Old Zoo lawn, which is a downslope picnic area with pedestrian paths and is densely populated by mature shade trees. Phase 2 of the project includes construction of an ADA pedestrian bridge, resurfaced pathways, path lighting, and ADA parking improvements. This area is primarily packed dirt and manicured lawns, with impeded views of the slope up to the Old Zoo lawn to the west and of Shane's Inspiration Playground to the east (see Figure 1-2). Views to the north and south are generally of steep, densely-wooded slopes. Existing conditions have been documented in **Figures 2-1** through **2-3**.

Construction of the proposed open air stage would be primarily visible from within the Old Zoo area, and would not be visible from other parts of Griffith Park to the north, east, and south. Distant elevated views of the new features would be partially visible from the nearby trails that

are located on the mountain side around the project site; however, they would be obstructed by vegetation and the tall mature trees that are located on the grassy area. The stage would be a concrete poured-in place feature that is entirely open air with a metal open rooftop structure. The concrete pad would be low profile within the grassy area, and would flow with the topography of the site. The maximum height would be 26 to 28 feet, which is shorter than most of the trees onsite. The proposed project would introduce a new permanent feature within the grassy area; however, it would be compatible with the existing built features in the area, including the concrete picnic tables and built features associated with the Old Zoo. Additionally, the proposed project would involve undergrounding the existing overhead utility line that runs through the grassy area, which would remove a visually unappealing element at the site. The proposed project would not affect scenic vistas, including any from the project site, or of the project site from nearby elevated trails. Therefore, impacts to aesthetic resources would be less than significant.

- b) **Less than Significant Impact.** There are no State scenic highways in the vicinity of the proposed project. The nearest state-designated scenic highway is SR-2, which is located approximately nine miles northeast of the project site, and is not visible (Caltrans, 2013). In addition, the proposed project would not damage or remove trees, affect rock outcroppings, or affect historic buildings. Due to the proposed project's distance from a state-designated scenic highway corridor, impacts to scenic highway would be less than significant.
- c) Less than Significant Impact. The project site is located within the Old Zoo area that has a unique character and feel due to the presence of the Old Zoo animal enclosures, grottos, and signage describing the past use. The project site is set in an area of Griffith Park that is near other high use attractions, including the Merry-Go-Round, Shane's Inspiration Playground, Wilson and Harding Golf Courses, and the Ranger Station/Visitor Center. However, the visual character of the site is fairly isolated due to the nature of the enclosed grassy area lined with mature trees. The project site has served as a good location for the types of events that are held there because of this enclosed type of feeling it evokes.

Development of the stage would slightly alter the visual character of the project area, but its development would be consistent with the surrounding park area and features. Moreover, the 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 visual character of the Old Zoo area and Griffith Park in general. The stage component of the proposed project is the result of multiple design iterations and close collaboration with area users and Local Voluntary Neighborhood Oversight Committees (LVNOCs). A conceptual rendering of the stage is shown in Figure 1-5.



Proposed stage location viewed from the west looking towards trails



Grassy lawn picnic area and stage area viewed from the northeast, near restrooms



Existing onsite restroom facilities



Location of proposed ADA bridge, viewed from the south (proposed area of ADA pathway)



Existing pedestrian walkways viewed from the west, near the proposed ADA bridge location



Views from the center of the existing pedestrian walkways

The ADA bridge component of the proposed project is currently in the conceptual design phase, and RAP is still collaborating with area users and incorporating community input into final designs. A conceptual illustration of the potential bridge design is shown in Figure 1-8, though this design could be modified as the Phase 2 progresses. The final design would incorporate the suggestions of Griffith Park and Old Zoo users, and would be sensitive to the historic nature of the site. The proposed project components have been designed by RAP with collaboration and input from various area users and community groups, and the proposed project has been designed to minimize any visual incompatibilities with the character of the project area. Because the proposed project is consistent with the existing uses in the area and would not substantially alter the character of the site, impacts would be less than significant.

d) Less than Significant Impact. The proposed project would include lighting for 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 The pathway lighting component of the proposed project would not result in any substantial adverse glare effects, as the proposed project would not introduce any surfaces with materials that create glare. Additionally, the proposed project would not introduce any permanent lighting impacts. Pathway lighting fixtures would be installed solely for safety purposes, and would be activated when permitted users were present. They would be located along the western edge of the manicured lawn area, as well as along resurfaced pathways and ADA pedestrian facilities. These lights would be scheduled to be turned off at the end of any permitted use event and would not generally impact scenic nighttime views. Night hikers would not be affected by the pathway lights, as they are meant to illuminate the immediate pathway area for safety, and views of the site from elevated trails are distant and obscured by vegetation. Light emitting diode (LED) lights would be used for low power consumption and longer life within dark sky light fixtures. Any additional lighting introduced to the proposed project site would be event-specific and temporary. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views.

References

California Department of Transportation (Caltrans). Caltrans Earth, available at http://earth.dot.ca.gov/. Accessed December 2, 2013.

City of Los Angeles, Department of Recreation and Parks. Griffith Park Master Plan p 12. Adopted 1978.

Agricultural and Forest Resources

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
2.	AGRICULTURAL AND FOREST RESOURCES — In determining whether impacts to agricultural resources are solutional Agricultural Land Evaluation and Site Assessment Conservation as an optional model to use in assessing impact forest resources, including timberland, are significant environ the California Department of Forestry and Fire Protection reg Range Assessment Project and the Forest Legacy Assessment Forest Protocols adopted by the California Air Resources Box Would the project:	Model (1997) ps on agriculture imental effects, arding the state's project; and for	orepared by the Calif and farmland. In de- lead agencies may re- is inventory of fores	fornia Department termining whether ter to information to tand, including	nt of er impacts to on compiled by the Forest and
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				
d)	Result in the loss of forest land or conversion of forest land to non-forest use?				\boxtimes
e)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				

Discussion

- ANO Impact. The project site is within Griffith Park and has a land use designation of Open Space (OS) and is zoned as OS (City of Los Angeles, 1995; ZIMAS, 2013). The OS zoning identifies uses for open space including parks and recreation facilities, nature reserves, closed sanitary landfill sites, public water supply reservoirs, and water conservation areas. Areas near the project site are also designated and zoned OS, being entirely within Griffith Park. The project site and surrounding area are not currently used as agricultural land, and have not been previously used for agricultural purposes. As such, there is no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within or adjacent to the project site (DLRP, 2013). No impacts to important farmland would occur.
- b) **No Impact.** No agricultural uses are identified on the project site and it is not under a Williamson Act contract. Therefore, the proposed project would not conflict with agricultural zoning or require the cancellation of a Williamson Act contract and no impact would occur.
- c) No Impact. The project site and adjacent lands are not zoned for forest land, timberland, or timberland zoned for timberland production. The project area does not contain land previously used as forest land or timberland (Cal Fire, 2003). Thus, no impacts would occur to lands zoned for forest land or timberland.

- d) **No Impact.** The project site does not contain forest lands. Therefore implementation of the proposed project would not convert forest land to non-forest uses. No impacts to forest land would occur.
- e) **No Impact.** See responses 2 (a) and (d) above. The proposed project would not convert farmland or forest land to non-agriculture/non-forest use. Therefore, no impacts would occur to agriculture or forestry resources.

References

- City of Los Angeles, Los Angeles City General Plan Framework Element. Adopted July 1995.
- California Department of Conservation, Division of Land Resource Protection (DLRP). California Important Farmland Finder (CIFF), available at http://maps.conservation.ca.gov/ciff/ciff.html. Accessed on November 18, 2013.
- California Department of Forestry and Fire Protection (Cal Fire), The Management Landscape, available at http://frap.fire.ca.gov/data/frapgismaps-management_landscapes_download.php. Accessed November 18, 2013.
- City of Los Angeles. ZIMAS, Zoning and General Plan Land Use Map, available at http://zimas.lacity.org/. Accessed on July 8, 2013.

Air Quality

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
3.	AIR QUALITY — Where available, the significance criteria established by the abe relied upon to make the following determinations. Would the project:	applicable air qu	ality management or	air pollution con	trol district may
a)	Conflict with or obstruct implementation of the applicable air quality plan?				
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			\boxtimes	
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				
d)	Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes	
e)	Create objectionable odors affecting a substantial number of people?			\boxtimes	

Discussion

a) Less than Significant Impact. A significant air quality impact would occur if a project is not consistent with the applicable Air Quality Management Plan (AQMP) or would in some way represent a substantial hindrance to employing the policies or obtaining the goals of that plan. The project site is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the South Coast Air Management District (SCAQMD). The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and cooperates actively with all State and federal government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements, inspects emissions sources, and enforces such measures though educational programs or fines, when necessary. SCAQMD and SCAG are responsible for preparing the AQMP, which addresses federal and State Clean Air Act (CAA) requirements. Pursuant to these requirements, the SCAQMD is required to reduce emissions of criteria pollutants for which the Basin is in non-attainment. The AQMP details goals, policies, and programs for improving air quality in the Basin (SCAQMD, 2012).

The 2012 AQMP is currently the most recent plan for the Basin, and was adopted by the SCAQMD Governing Board on December 12, 2012. The 2012 AQMP was prepared to accommodate growth, to reduce the high levels of pollutants in the Basin, to meet federal and State air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy. It builds on the approaches taken from the previous 2007 AQMP and sets forth a comprehensive and integrated program that will lead the Basin into compliance with the federal 24-hour air quality standard for fine particulate matter (PM_{2.5}), and to provide an update to the Basin's commitments towards meeting the federal 8-hour ozone standards. SCAG, which is the regional metropolitan planning organization for the Southern California area, has established

the assumptions for growth, in terms of demographic growth and associated air quality impacts, and these assumptions are utilized in the AQMP.

Since the forecasted growth in SCAQMD's AQMP for the Basin relies on SCAG's regional growth forecasts, and because SCAG's growth forecasts are based upon, among other things, land uses specified in city general plans, a project that is consistent with the land use designated in a city's general plan would also be consistent with the AQMP growth projections. As discussed in the Project Description, the project site is designated as Open Space/Public Facilities in the Land Use Element of the City of Los Angeles General Plan, and is likewise zoned by the City as Open Space (OS). The City of Los Angeles Zoning Regulations list of allowable OS uses include parks and recreation facilities, nature reserves, closed sanitary landfill sites, public water supply reservoirs, and water conservation areas. Thus, because the intended use of the land by the project is consistent with the City's General Plan and zoning designations the project would be consistent with the AQMP. Additionally, the proposed project would not result in any population or employment growth that would exacerbate local concentrations of air pollutants. Furthermore, the proposed project would also not result in the violation of air quality standards, as discussed in issue "b" below. Therefore, the project would be consistent with the AQMP and this impact would be less than significant.

b) **Less than Significant Impact.** A project may have a significant impact where project-related emissions would exceed federal, state, or regional standards or thresholds, or where project-related emissions would substantially contribute to an existing or projected air quality violation. The proposed project would result in additional air emissions in the region associated with short-term construction activities and long-term operational activities.

Project Construction

Construction of the proposed project would require the use of heavy equipment for removal of existing overhead power poles and lines at the project site, minimal grading for the proposed stage, trenching associated with the relocation of the utility lines, repaving of the existing unmarked parking area, and building of the ADA bridge.

Construction activities at the project site would generate pollutant emissions from the following construction activities: (1) site preparation (e.g., removal of existing overhead power poles and lines), grading, and trenching; (2) construction workers traveling to and from project site; (3) delivery and hauling of construction supplies and debris to and from the project site; (4) the fuel combustion by onsite construction equipment; and (5) stage construction and walkway paving. Criteria air pollutants are defined as pollutants for which the federal and State governments have established ambient air quality standards for outdoor concentrations to protect public health. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include carbon monoxide (CO), nitrous oxides (NOx), particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter (PM₁₀ and PM_{2.5}), sulfur oxides (SOx), and reactive organic gases (ROG). Construction activities associated with the project involving site preparation and grading would primarily generate respirable particulate matter (PM₁₀) emissions. Mobile source emissions (use of diesel-fueled equipment onsite, and traveling to and from the project site) would primarily generate oxides of nitrogen (NOx)

emissions. The application of architectural coatings would primarily result in the release of reactive organic gas (ROG) emissions. The amount of emissions generated on a daily basis would vary, depending on the amount and types of construction activities occurring at the same time.

The analysis of daily construction emissions has been prepared utilizing the California Emissions Estimator Model (CalEEMod), as recommended by SCAQMD. CalEEMod was used to determine whether short-term construction-related emissions of criteria air pollutants associated with the proposed project would exceed SCAQMD's applicable regional thresholds and where mitigation would be required. Modeling was based on project-specific data, when available. Where project-specific information was not available, reasonable assumptions based on other similar projects and default model settings were used to estimate criteria air pollutant and ozone precursor emissions. It is mandatory for all construction projects in the Basin to comply with SCAQMD Rule 403 (Fugitive Dust) for controlling fugitive dust emissions. Incorporating Rule 403 into the proposed project would reduce regional PM₁₀ and PM_{2.5} emissions from construction activities. Specific Rule 403 control requirements include, but are not limited to:

- Applying water in sufficient quantities to prevent the generation of visible dust plumes;
- Applying soil binders to uncovered areas;
- Reestablishing ground cover as quickly as possible;
- Utilizing a wheel washing system to remove bulk material from tires and vehicle undercarriages before vehicles exit the project site; and
- Maintaining effective cover over exposed areas.

Site watering and application of soil binders would reduce the particulate matter from becoming airborne, while washing of transport vehicle tires and undercarriages would reduce re-entrainment of construction dust onto the local roadway network.

The daily emissions that are estimated to occur on peak construction days for each of the construction activities are shown in **Table 2-1**. These calculations take into account that appropriate dust control measures under SCAQMD Rule 403 would be implemented by the project during each phase of construction.

TABLE 2-1
EMISSIONS FROM PROJECT CONSTRUCTION

	Estimated Maximum Daily Emissions (lbs/day)					
Construction Activities	ROG	NOx	СО	SOx	PM_{10}	PM _{2.5}
2014	4.66	30.14	22.18	0.03	3.69	2.53
2015	5.69	41.21	30.12	0.04	3.11	2.68
SCAQMD Thresholds	75	100	550	150	150	55
Significant Impact (Yes or No)	No	No	No	No	No	No

As shown in Table 2-1, the maximum daily regional emissions generated during project construction would not exceed the SCAQMD daily significance thresholds for ROG, NO_X, CO, SOx, PM_{2.5} and PM₁₀. Since construction emissions would not exceed the SCAQMD thresholds, the regional impacts related to air quality during construction activities would be less than significant.

Project Operations

During project operations, there would be no stationary source emissions at the project site. The primary source of pollutant emissions would be those associated with vehicle trips to and from the project site, while area source emissions such as those associated with annual reapplication of architectural coatings for the stage and consumer products at the park would be negligible. The proposed project, which involves the construction of a 45 foot by 45 foot outdoor performing arts stage and associated improvements, is designed to accommodate the existing annual events that occur on the project site. Under the project, the three existing annual events (i.e., Shakespeare in the Park, the LA Haunted Hayride, and Symphony in the Glen) 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. As such, because the proposed project would not increase the frequency or audience capacity of these existing events, the operational emissions currently generated by mobile sources associated with visitor trips to and from the project site to attend these annual events would also not increase as a result of the project.

Aside from the three existing annual events, additional future events could be held at the new outdoor facility. It is anticipated that each of these individual events would draw no more than 2,500 visitors to the project site at any given period, which is currently the highest attendance at the project site at one time, during the annual Shakespeare in the Park events (the LA Haunted Hayride event can bring 4,700 visitors each evening; however, they come and go throughout the evening with no set attendance peak). Based on the traffic study prepared for the project, it is estimated that additional future events at the project site resulting from the project would generate approximately 1,100 daily trips, including 550 trips during the evening peak hour. Since the mobile source emissions associated with these additional future events would represent a net increase in operational emissions generated by the proposed project, the daily operational emissions generated by the 1,100 daily trips associated with a future event are estimated and evaluated against SCAQMD's daily operational emissions thresholds.

The analysis of the net daily operational emissions associated with the proposed project has been estimated using CalEEMod, as recommended by the SCAQMD. The results of these calculations are presented in **Table 2-2**. As shown, the net daily emissions generated by the proposed project during operations would not exceed the applicable regional thresholds of significance set by the SCAQMD. Therefore, on days where an event outside of the three existing annual events (i.e., Shakespeare in the Park, the LA Haunted Hayride, and Symphony in the Glen) is held at the project site, impacts associated with regional operational emissions from the proposed project would be less than significant.

TABLE 2-2 EMISSIONS FROM PROJECT OPERATION

	Estimated Maximum Daily Emissions (lbs/day)						
Source	ROG	NOx	СО	SOx	PM_{10}	PM _{2.5}	
Area	0.93	0.00	0.00	0.00	0.00	0.00	
Mobile	4.66	12.43	49.51	0.10	6.90	1.96	
Total	5.59	12.43	49.51	0.10	6.90	1.96	
SCAQMD Thresholds	75	100	550	150	150	55	
Significant Impact (Yes or No)	No	No	No	No	No	No	

c) Less than Significant Impact. A cumulative impact arises when two or more individual effects that together are considerable, or that which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant impacts, which means that the proposed project's incremental effects must be viewed in connection with the effects of past, current, and probable future projects.

With respect to air quality, a significant impact may occur if the project would add a considerable cumulative contribution to federal or State non-attainment pollutants. As the Basin is currently classified as a State nonattainment area for ozone, NO₂, PM₁₀, and PM_{2.5}, cumulative development consisting of the proposed project along with other reasonably foreseeable future projects in the Basin as a whole could violate an air quality standard or contribute to an existing or projected air quality violation. With respect to determining the significance of the proposed project's contribution to regional emissions, the SCAQMD neither recommends quantified analyses of cumulative construction emissions nor provides methodologies or thresholds of significance to be used to assess cumulative construction impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project specific impacts. Furthermore, SCAQMD states that if an individual development project generates less than significant construction or operational emissions then the development project would not generate a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As discussed under Question 3(b) above, the proposed project would not generate construction or operational emissions that exceed the SCAQMD's recommended thresholds. Therefore, the proposed project would not generate a cumulatively considerable increase in emissions of the pollutants for which the Basin is in nonattainment, and impacts would be less than significant.

d) **Less than Significant Impact.** A significant impact may occur if a project were to generate pollutant concentrations to a degree that would significantly affect sensitive receptors. Sensitive receptors are populations that are more susceptible to the effects of air pollution than are the

population at large. The SCAQMD identifies the following as sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. The nearest and most notable off-site sensitive receptors to the project would be the surrounding undeveloped passive recreation areas of Griffith Park located to the north, west, and south of the project site that contain trails and native vegetation/open space. Aside from these passive recreation areas, other active use areas in the "Park Center" area of Griffith Park located near the project site include the southern part of Wilson Golf Course to the northeast, Shane's Inspiration Playground to the east, and the Merry-Go-Round to the southeast. The nearest residences to the project site are located approximately one mile to the south, outside of Griffith Park.

Localized Construction Emissions

Emissions from construction activities have the potential to generate localized emissions that may expose sensitive receptors to harmful pollutant concentrations. The SCAQMD has developed localized significance thresholds (LSTs) that are based on the amount of pounds of emissions per day that can be generated by a project that would cause or contribute to adverse localized air quality impacts (SCAQMD, 2003). These localized thresholds, which are found in the mass rate look-up tables in the "Final Localized Significance Threshold Methodology" document prepared by the SCAQMD, apply to projects that are less than or equal to five acres in size and are only applicable to a project's on-site emissions for the following criteria pollutants: NOx, CO, PM₁₀, and PM_{2.5}. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or State ambient air quality standards, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA) within the Basin. The project site, which is located in the City of Los Angeles, is located within SRA 2.

The LSTs, which are found in the mass rate look-up tables in the *Final Localized Significance Threshold Methodology* document prepared by SCAQMD, are provided for the following distances from the source of emissions: 25 meters, 50 meters, 100 meters, 200 meters, and 500 meters. Additionally, the LSTs at these distances also vary based on the size of the project site. The SCAQMD has provided LSTs for sites that are 1-acre, 2-acres, and 5-acres in size. The nearest and most notable off-site sensitive receptors that could potentially be subject to localized air quality impacts associated with construction of the proposed project would be the adjacent passive recreation areas to the north, west, and south of the project site. Although parks are not technically listed as a sensitive receptor by the SCAQMD, for the purpose of conducting a conservative analysis, the passive park uses surrounding the project site are considered to be sensitive receptors in this analysis. Given the proximity of these sensitive locations to the project site, the LSTs for a one-acre site with receptors located within 25 meters (82.02 feet) are used to address the potential localized air quality impacts associated with the project's construction-related NOx, CO, PM₁₀, and PM_{2.5} emissions.¹

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Although some of the passive recreational areas surrounding the project site are located closer than 25 meters from the project site, the SCAQMD's LST methodology indicates that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.

The peak daily emissions generated within the project site during construction activities were estimated using CalEEMod and are shown in **Table 2-3**. As LSTs are only concerned with a project's on-site emissions, the emissions shown in Table 3-3 only account for off-road and on-road (e.g., delivery trucks) equipment operating within the project site.

TABLE 2-3 LOCALIZED POLLUTANT CONCENTRATIONS FROM CONSTRUCTION EMISSIONS

	Total On-Site Emissions (pounds/day)			
-	NOx	СО	PM_{10}	PM _{2.5}
2014	30.04	20.54	2.76	2.43
2015	40.45	27.70	2.71	2.56
Localized Significance Threshold	103	562	4	3
Exceed Threshold?	No	No	No	No

As shown in Table 2-3, the peak daily emissions generated onsite during construction activities would not exceed the applicable construction LSTs for the project site. Therefore, localized air quality impacts from the project's construction activities on the surrounding off-site sensitive receptors would be less than significant.

Carbon Monoxide (CO) Hotspots

CO concentration is a direct function of motor vehicle activity (e.g., idling time and traffic flow conditions), particularly during peak commute hours and certain meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses such as residential areas, schools, and hospitals.

As discussed previously, the proposed project is designed to accommodate the existing annual events that occur on the project site. Under the project, the three existing annual events (i.e., Shakespeare in the Park, the LA Haunted Hayride, and Symphony in the Glen) would continue to operate as they have traditionally. As such, because the proposed project would not increase the audience capacity of these existing events, the CO concentrations from mobile sources associated with visitor trips to and from the project site to attend these annual events would also not increase as a result of the project.

Aside from the three existing annual events, additional future events could be held at the new outdoor facility. However, as indicated in the traffic study prepared for the project, any additional future events at the project site resulting from the project would draw no more than 2,500 daily visitors to the project site, which is currently the highest attendance at the project site during the existing Shakespeare in the Park event. As such, the estimated 1,100 daily trips that would occur

as a result of a new event at the project site would not result in a substantial increase in CO concentrations over the baseline daily CO concentrations that would normally occur for the existing events at the park.

Furthermore, it should be noted that the 1,100 daily vehicle trips generated by the project when an event occurs at the project site would not be substantial enough to contribute to a CO hotspot. Although the SCAQMD has not developed any CO hotspot screening criteria, the Sacramento Metropolitan Air Quality Management District (SMAQMD) currently uses a screening methodology which states that a project would result in a less-than-significant impact to air quality for local CO if the following criteria are met:

- The project would not result in an affected intersection experiencing more than 31,600 vehicles per hour;
- The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other locations where horizontal or vertical mixing of air would be substantially limited; and
- The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or URBEMIS models).

As the traffic associated with the proposed project would meet all of this criteria, it can be concluded that the project's impact associated with CO hotspots would be less than significant.

Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans. A toxic substance released into the air is considered a toxic air contaminant (TAC). TACs are identified by State and federal agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act. This two-step process of risk identification and risk management was designed to protect residents from the health effects of toxic substances in the air.

Construction of the proposed project would result in short-term diesel exhaust emissions from onsite heavy-duty equipment. Diesel exhaust is considered a TAC. Construction would result in the generation of diesel exhaust emissions from the use of off-road diesel equipment required for site grading and excavation, and other construction activities.

The dose to which sensitive receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the

proposed project. Thus, the duration of the proposed construction activities (approximately eight months over the course of two years) would only constitute a small percentage of the total 70-year exposure period. Thus, diesel particulates from construction activities would not be anticipated to result in the exposure of sensitive receptors to levels that exceed applicable standards, and impacts would be less than significant.

The proposed project, which consists of an outdoor performing arts stage and other site improvements, would not be a land use that would involve the use, storage, or processing of carcinogenic or non-carcinogenic TACs. As such, no toxic airborne emissions would result from implementation of the project. Therefore, impacts associated with TACs from the long-term operation of the proposed project would be less than significant.

e) **Less than Significant Impact.** A significant impact may occur if objectionable odors occur which would adversely impact sensitive receptors. According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD, 1993). As an outdoor performing arts stage, the proposed project does not include any uses identified by the SCAQMD as being associated with odors. Thus, the proposed project is not expected to result in objectionable odors during operations, and this impact would be less than significant.

During construction of the proposed project, exhaust from equipment may produce discernible odors typical of most construction sites. Such odors would be a temporary source of nuisance to adjacent uses, but would not affect a substantial number of people. As odors associated with project construction would be temporary and intermittent in nature, the odors would not be considered to be a significant environmental impact. Therefore, impacts associated with objectionable odors would be less than significant.

References

South Coast Air Quality Management District (SCAQMD). 2012. Final 2012 Air Quality Management Plan. February.

SCAQMD. 1993. CEQA Air Quality Handbook.

SCAQMD. 2003. Final Localized Significance Threshold Methodology. June (Revised July 2008).

Biological Resources

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
4.	${\bf BIOLOGICAL\ RESOURCES-Would\ the\ project:}$				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, 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 Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

Discussion

a,b) Less than Significant Impact with Mitigation Incorporation. A field reconnaissance for the proposed project was conducted by Environmental Science Associates (ESA) on November 19, 2013, to 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, drainages and riparian areas, and recorded observations of plants and wildlife species. A thorough discussion of the existing biological conditions, including potentially occurring special status species and sensitive plant communities, is in the Biological Resources Technical Report provided in **Appendix B** (ESA, 2013).

Vegetation on the site where the new stage would be located 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 area where the new ADA path and resurfaced walking path would occur is disturbed coast live oak woodland. This woodland area currently includes a damaged asphalt parking area, a picnic area, and walking paths. The remainder of the project site is developed parkland consisting of paved and dirt walkways and park facilities such as an existing restroom and picnic benches, much of which is

located within the disturbed woodland mentioned above. Intact and relatively undisturbed and disturbed coast live oak woodland is located adjacent and in the general vicinity, some of which is within the Old Zoo facilities. Current disturbances within these woodlands include walking paths and Old Zoo features including animal enclosures and zoo buildings.

To identify special-status species with recorded occurrences in the project region, ESA queried the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) within the Burbank United States Geologic Survey 7.52Quadrangle and the surrounding eight quads: San Fernando, Sunland, Condor Peak, Van Nuys, Pasadena, Beverly Hills, Hollywood, and Los Angeles (CDFW, 2013). **Tables 2-4** and **2-5** below provide a list of special-status plant and animal species, respectively, which have a potential to occur in the vicinity of the proposed project site.

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. The potential for special-status wildlife species to occur on the project site is based on the proximity to these previously recorded occurrences and the habitat conditions capable of supporting these species, such as existing vegetation communities and habitats, topography, elevation, soils, surrounding land uses, habitat preferences, and geographic ranges. The "Potential for Occurrence" category included in Table 2-5 is defined as follows:

- **Unlikely:** The project 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 project 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 site.
- **Medium Potential:** The project site and/or immediate vicinity provide suitable habitat for a particular species, and proposed development may impact this species.
- **High Potential:** The project 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 the potential criteria summarized above, seven special-status wildlife species have a high or medium potential to occur in the vicinity of the project 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*). Table 2-5 also includes the federal and State regulatory status of each species and their preferred habitat.

Project-related impacts to special-status plant or animal species would be considered a significant impact. According to the Biological Resources Technical Report (see Appendix B; ESA, 2013), based on the generally disturbed condition of the proposed project site, no special-status plant species have the potential to occur within areas that would be disturbed by the proposed project.

TABLE 2-4 SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR IN WOODLANDS IN PROJECT VICINITY

Species	Status/CNPS Rank	Growth Habit	Elevation (m)	Habitat	Flowering Period
Berberis nevinii Nevin's barberry	FE,SE/1B.1	Evergreen shrub	274-825	Chprl,CoSr,CMwld	March-June
California macrophylla round-leaved filaree	-/1B.1	Annual herb	15-1200	CMwld, VFG	March-May
Calochortus catalinae Catalina mariposa lily	-/4.2	Perennial bulbiferous herb	15-700	Chprl, CMwld, CoSr, VFG	February-June
Calochortus plummerae Plummer's mariposa lily	-/4.2	Perennial bulbiferous herb	100-1700	Chprl, CMwld, CoSr, LMCF, VFG	May-June
Camissoniopsis lewisii Lewis' evening-primrose	-/3	Annual herb	0-300	CoBlSr, CMwld, CoD, CoSr, VFG	March-June
Chorizanthe parryi var. parryi Parry's spineflower	-/1B.1	Annual herb	275-1200	Chprl, VFG, CMwld, CoSr, (opening)	April-June
Horkelia cuneata ssp. puperula Mesa horkelia	-/1B.1	Perennial herb	70-810	Chprl,CoSr,CMwld	February- September
<i>Imperata brevifolia</i> California satintail	-/2B.1	Perennial rhizomatous herb	0-1250	CoSr, Chprl, MoDeSr, MeSe, RiSr	September-May
<i>Lilium humboldtii</i> ssp. <i>humboldtii</i> Humboldt lily	-/4.2	Perennial bulbiferous herb	90-1280	Openings, Chprl, CMwld, LMCF	May-July
Malacothamnus davidsonii Davidson's bush-mallow	-/1B.2	Perennial deciduous shrub	185-855	Chprl,CoSr,CMwld, RiWld	June-January
Pseudognaphalium leucocephalum white rabbit-tobacco	-/2B.2	Perennial herb	50-790	Chprl, CMwld, CoSr, RiWld	July-December
Symphyotrichum defoliatum San Bernardino aster	-/1B.2	Perennial rhizomatous herb	2-2040	CMwld, CoSr, LMCF, MeSe, MaSw, VFG	July-November
Symphyotrichum greatae Greata's aster	-/1B.3	Perennial rhizomatous herb	300-2010	BrUF, Chprl, CMwld, LMCF, RiWld	June-October

 $\frac{CNPS\ Status}{Rank\ IB=Plants\ Rare,\ Threatened,\ Endangered\ in\ California\ and\ elsewhere}$

Threat ranks

.1 = seriously Endangered in California .2 = fairly Endangered in California

Habitat

BrUF = Broadleafed Upland Forest, Chprl = Chaparral, , CMWld = Cismontane Woodland, CoScr = Coastal Scrub, LMCF = Lower Montane Coniferous Forest,

Complete Control of $MaSw = Marshes \ and \ Swamps, \ MeSE = Meadows \ and \ Seeps, \ RiSr = Riparian \ Scrub, \ RiWld = Riparian \ Woodland, \ VFG = Valley \ and \ Foothill \ Grasslands, \ Risk = Riparian \ Scrub, \ RiWld = Riparian \ Woodland, \ VFG = Valley \ and \ Foothill \ Grasslands, \ Risk = Riparian \ Risk =$

TABLE 2-5 SPECIAL-STATUS WILDLIFE SPECIES WITH RECORDED OCCURENCES IN PROJECT AREA

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence on the Project 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 (Catostomus santaanae)	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 (Gila orcuttii)	-/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 (Rhynicthys osculus spp robustus)	-/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 (Spea hammondii)	-/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 (Taricha torosa)	-/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.
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 (Emy marmorata)	-/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.

TABLE 2-5 SPECIAL-STATUS WILDLIFE SPECIES WITH RECORDED OCCURENCES IN PROJECT AREA

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence on the Project Site
(Phyrnosoma blainvillii) and sem Found in open are washes		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 (Thamnophis hammondii)	None/SSC	Marshes, meadows, sloughs, ponds, and slow-moving water courses.	None: Suitable habitat is not present on or surrounding the proposed site.
Birds			
Burrowing owl (Athene cunicularia)	-/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 (Falco peregrinus anatum)	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 (Polioptila californica californica)	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.
least Bell's vireo (Vireo bellii pusillus)	FE/SE	Prefers dense, low, shrubby vegetation, generally within early successional stages in riparian areas with a dominance of willows (<i>Salix</i> spp.)	Unlikely: No suitable habitat is present on the project site. 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 (Eumops perotis 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 site during the site reconnaissance.
Silver haired bat (Lasionycteris 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 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 site during the site reconnaissance.

TABLE 2-5 SPECIAL-STATUS WILDLIFE SPECIES WITH RECORDED OCCURENCES IN PROJECT AREA

Species	Status: Federal/State	Preferred Habitat	Probability of Occurrence on the Project Site
Western yellow bat (Lasiurus xanthinus)	-/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</i> , <i>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 (Lepus californicus bennettii)	-/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 (Neotoma lepida intermedia)	-/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.
Big free-tailed bat (Nyctinomops macrotis)	-/SSC	A migratory species that forms maternity colonies in rock crevices and caves that are typically used long term. Big free-tailed bats roost mainly in crevices and rocks in cliff situations, with occasional roosts occurring in buildings, caves, and tree cavities.	Unlikely: Suitable foraging habitat exists within one mile of the project site, but no roosting or maternity caves occur in the vicinity for this species.
American badger (Taxidea taxus)	-/ 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.	Unlikely: 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

SE = Listed as endangered under the California Endangered Species Act (CESA)

ST = Listed as threatened under the CESA

SC = Candidate for listing (threatened or endangered) under CESA

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

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 project site; therefore, no impacts are expected to occur to this species.

The undisturbed woodland areas located immediately adjacent to the project site contain suitable woodland habitat for the coastal whiptail and the silvery legless lizard. No direct impacts would occur to these adjacent woodland areas. However, because of the proximity of the proposed project to the undisturbed woodland areas, the potential does exist that the species could pass though the proposed 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 region of the proposed project from urban development and from the existing recreational use of the 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. Impacts that could occur during construction would be considered less than significant with the implementation of **Mitigation Measures Biology-1** and **Biology-2**.

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 site. 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 proposed 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 proposed 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 bats within the immediate vicinity of the project site would be temporary during 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 Measure Biology-2.

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 small to medium sized avian species would not likely occur during construction of the proposed project. However depending on the timing of construction, eggs and nestlings of bird species with small, well-hidden nests could be subject to loss, which would result in a violation of the Migratory Bird Treaty Act 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. Implementation of **Mitigation Measure Biology-3** would reduce the potential for injury or mortality of nesting birds during construction through construction timing, establishment of nesting buffers, and worker environmental training. Therefore, impacts to nesting birds would be less than significant with mitigation.

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 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 recorded to the CNDDB in the project area and is present in the vicinity of the site in Spring Canyon, which is located 15 feet west and 50 feet south of the existing asphalt road that will be repaved. Spring Canyon is approximately 3,000 feet long and includes an ephemeral drainage. The nearest project feature to the Southern Sycamore Alder Riparian Woodland would be the repaving of Griffith Park Road, which would not result in any impacts to this woodland; therefore, impacts to this sensitive plant community would be less than significant.

MM Biology-1: Worker Environmental Awareness Program. Prior to construction, a Worker Environmental Awareness Program shall be implemented that shall include the following:

• RAP 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.

MM Biology-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 and silvery legless lizard may occur within the woodland habitats surrounding the project site. 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 potentially sensitive 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 preconstruction clearance surveys. If any ground dwelling species are identified within proposed construction zones, the qualified biologist shall capture 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.

MM Biology-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.
- c) Less than Significant Impact with Mitigation Incorporation. An intermittent stream occurs outside of the project footprint approximately 15 feet west of the segment of the Old Zoo parking area that would be repaved, as well as down slope to the north of the existing restrooms on the project site. As described in detail in the Biological Resources Technical Report (Appendix B), this stream and its tributaries are indicated as a blue-line stream on the USGS Topographic Quadrangle Map.

Two offsite drainages, one natural and one concrete-lined, drain surface water on the proposed project from the higher elevations in the west and south toward the lower elevations of the walking paths in the east of the site. The concrete-lined drainage begins at the existing restroom facility and drains water toward an existing paved walking path to the northeast. The drainage travels to the east and braids through the landscaping between the walking paths on and adjacent to the proposed project. The natural drainage referenced above occurs in the landscaped areas and initiates approximately 30 feet to the north of the proposed new ADA path and travels to the northeast where it merges with the concrete-lined drainage, where it then continues further east and ends at Shane's Inspiration Park. Once constructed, the proposed ADA bridge would provide pedestrian access over the area where the two drainages merge.

These drainages on the project site are not waters of the U.S. because they lack a defined bed and ordinary high water mark (OHWM) as defined by the US Army Corps of Engineers (USACE, 2008). Landscaping and disturbed/developed areas characterize the vegetation and cover types around these drainages; therefore, no wetland indicator plant species are present. The two drainages on the site are not considered Relatively Permanent Waters and they end in Griffith Park, nearly a mile west of the nearest Traditional Navigable Water, which is the Los Angeles River. Therefore there is no connection to Relatively Permanent Waters and no nexus with a

Traditional Navigable Water, both of which indicate that the drainages are not jurisdictional resources.

Construction would include paving with asphalt within areas that could potentially drain to the drainages adjacent to the site. 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 best management practices (BMPs), as defined in **Mitigation Measure Biology-4** would minimize any potential indirect impacts to these drainages to a less than significant level.

MM Biology-4: 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 Griffith Park Road, 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 Mitigation Measure Biology-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 shall be cleaned up immediately and disposed of at an appropriate off site location.
- Spill kits capable of containing hazardous spills shall be stored on-site. Required materials will be specified in contractor specifications.
- d) Less Than Significant Impact with Mitigation Incorporation. 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 (ESA, 2013).

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 SR-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 wildlife 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 Griffith 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 site. Terrestrial migratory birds such as warblers and sparrows have the potential to be present in the vicinity of the site during spring and fall migration periods.

Locally, wildlife is expected to move throughout Griffith Park and some terrestrial species may focus their movement within the stream corridor north of the project site in Spring Canyon. These species could be deterred from their movement corridors near the proposed project site by lighting used during construction and operation of the proposed project. 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. **Mitigation Measure Biology-5** is included to minimize the projects potential to affects local wildlife movement in the vicinity of the project.

MM Biology-5: Local Wildlife Movement. The project site is located within Griffith Park, which provides habitat for local wildlife movement. The following mitigation measures are recommended to reduce potential impacts wildlife movement during construction and operation:

- 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.
- e) **Less Than Significant Impact with Mitigation Incorporation.** The City of Los Angeles Protected Tree Ordinance (No.177404) protects any of the following Southern California native tree species measuring four inches or greater in trunk diameter at 4.5 feet above ground level:
 - 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*)
 - Southern California black walnut (Juglans californica var. californica)
 - California Sycamore (*Platanus racemosa*)
 - 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 either directly (pruning, removal) or indirectly (grade alteration) impact protected trees within their drip line require a permit to be issued by the Urban Forestry Division.

In addition, RAP has a Tree Preservation Policy that also protects trees. Their policy provides protection to urban forest trees within parks beyond the protections regulated by the City of Los

Angeles Tree Preservation Ordinance. This policy regulates protection of heritage, special habitat value, or common park tree 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 proposed project contains several tree species protected by the City Tree Protection Ordinance; including coast live oak, California sycamore, and California bay laurel. In addition, all trees within the park are considered "common park trees" by the RAP Tree Preservation Policy. Implementation of the proposed project would not result in any removal of trees. However, 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 the tree city's and RAP's tree 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 considered less than significant with implementation of **Mitigation Measure Biology-6**.

MM Biology-6: 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, a RAP arborist 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 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.
- f) No Impact. The proposed project is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or State Habitat Conservation Plan. The majority of Griffith Park is within Significant Ecological Area (SEA) 37; however the project site is 70 feet west of and outside of this SEA (County of Los Angeles, 1980). The SEA is described as an extensive, relatively undisturbed island of natural vegetation in an urbanized, metropolitan area. The SEA supports the coastal sage scrub, chaparral, riparian, and southern oak woodland plant communities typical for the interior mountain ranges of Southern California. The proposed project is also located within the Griffith Park Wildlife Management Plan area as defined by RAP. This draft plan establishes a baseline in terms of known threats to wildlife and includes recommendations that help assist RAP staff in making land management decisions in Griffith Park and the surrounding open space areas. The proposed project would follow the recommended BMPs whenever applicable. In addition, the project would not alter land use and would not conflict with the guidance in the Griffith Park Wildlife Management Plan, and no impacts would occur.

References

California Department of Fish and Wildlife (CDFW), 2013. California Natural Diversity Database (CNDDB). USGS 7.5 minute topographic quadrangles: San Fernando, Sunland, Condor Peak, Van Nuys, Burbank, Pasadena, Beverly Hills, Hollywood, Los Angeles. Information dated November 2013.

California Department of Fish and Game (CDFG). 2006. Fish and Game Code of California.

California Native Plant Society (CNPS). 2012. Inventory of Rare and Endangered Plants (online edition, v7-09b). California Native Plant Society. Sacramento, CA. Accessed on Monday, November, 2013 from http://www.cnps.org/inventory.

- California Native Plant Society (CNPS). 2001. Botanical Survey Guidelines of the California Native Plant Society.
- Cooper, Daniel S. 2009. Cahuenga Peak Biological Inventory. Prepared for the Trust for Public Land by Cooper Ecological Monitoring. July 7, 2009.
- County of Los Angeles. 1980. Los Angeles County General Plan. Los Angles County Department of Regional Planning.
- City of Los Angeles. 2006. Department of Recreation and Parks Tree Preservation Policy.
- Environmental Science Associates (ESA). 2013. Griffith Park Performing Arts Center, Biological Resources Technical Report. December. See also Appendix B.
- Texas Department of Parks and Wildlife (TDPW). 2013. Western Mastiff Bat (*Eumops perotis*) Accessed December 2013. From http://www.tpwd.state.tx.us/huntwild/wild/species/westmastiff/
- U.S. Army Corps of Engineers (USACE). 2008. Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.
- U.S. Fish and Wildlife Service (USFWS). 2012. Federal Endangered and Threatened Species in Los Angeles County.

Cultural Resources

Issu	nes (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
5.	CULTURAL RESOURCES — Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?		\boxtimes		
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to \$15064.5?		\boxtimes		
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		\boxtimes		
d)	Disturb any human remains, including those interred outside of formal cemeteries?		\boxtimes		

Discussion

ESA cultural resources staff conducted a Phase I Cultural Resources Study in order to identify and evaluate the potential for any historical or archaeological resources to be impacted as a result of the proposed project (see **Appendix C**; ESA, 2013). The study included: (1) archival research; (2) a California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search; (3) a pedestrian survey; and (4) Natural History Museum of Los Angeles County (NHMLAC) records search and literature review. As a result of the study, Griffith Park (P-19-175297) was identified as encompassing the project site, and the Old (Griffith Park) Los Angeles Zoo (P-19-176303) and the Griffith Park Merry-Go-Round (P-19-176298) were identified within ¼ mile of the project area. These three resources are described in detail below. In addition, a Sacred Lands File Search (SLF) conducted by the Native American Heritage Commission indicated that Native American cultural resources are known to be located within the project vicinity; however, no specific location information was provided. No archaeological resources (including human remains) were identified within ¼ mile radius, or within the project site itself.

No paleontological resources were identified in the project area; however, sensitive fossil-bearing formations may underlie some portions of the general project area at greater depths.

Built Environment Resources

As a result of the study, three built historic resources: Griffith Park (P-19-175297); old (Griffith Park) Los Angeles Zoo (P-19-176303); and Griffith Park Merry-Go-Round (P-19-176298) were identified within ¼ mile of the project site. The resource identified as Griffith Park encompasses the project site.

Griffith Park (P-19-175297) is the largest urban park in the City of Los Angeles, as well as one of the largest five parks in the United States, and includes approximately 4,300 acres of natural and landscaped features. The park opened in 1898 on land donated to the City of Los Angeles by Griffith J. Griffith, a successful land speculator. Griffith Park is listed in the California Register of Historical Resources, was previously determined eligible for listing in the National Register of Historic Places under Criterion A, and is therefore considered a historical resource under CEQA. The park was identified as a National Register-eligible district under the theme of Parks and Recreation. The park has figured prominently in the history of Los Angeles and has provided recreational space for the surrounding community since its inception. The period of significance for this National Register-eligible resource was identified as 1896-

1944. Contributing features include Fern Dell, Mount Hollywood, Bird Sanctuary, Griffith Park Observatory and Planetarium, Los Feliz Adobe, Merry-Go-Round, Harding Golf Course Clubhouse, Swimming Pool and Building, Boys' Camp, and Mulholland Fountain. Non-contributing features include Old (Griffith Park) Los Angeles Zoo, Greek Theatre, Girls' Camp, Travel Town, and Autry National Center. Griffith Park (19-175297) encompasses the project area. Griffith Park is also designated as a Los Angeles Historic-Cultural Monument (HCM) (No. 942) with a period of significance between 1896 and 1958.

Old (Griffith Park) Los Angeles Zoo (P-19-176393) was built in Griffith Park in 1912. At that time the animal collection from the Eastlake Park (now Lincoln Park) Zoo were moved to Griffith Park. In 1966, the zoo was again moved to its current location in Griffith Park. The Old (Griffith Park) Los Angeles Zoo has been previously determined ineligible for the National Register by consensus through the Section 106 process (California Historic Resource Status Code 6Y). The Old Zoo buildings (Works Progress Administration constructed caves and grottos) are located 200 feet south of the Project area. The Old Zoo Buildings, although not found to be contributors to Griffith Park in connection with its National Register eligibility, are regarded as contributing resources to Griffith Park as an HCM, and are considered to be historically or culturally significant under CEQA.

Griffith Park Merry-Go-Round (P-19-176298) was constructed in 1926 and moved to its current location in 1936. It was previously determined eligible for listing in the National Register as a contributor to Griffith Park, is listed in the California Register, and is therefore considered a historical resource under CEQA (SCCIC, 2013). The Merry-Go-Round is located approximately 1,000 feet southeast of the project site.

Archaeological Resources

While no archaeological resources were identified within the project site as a result of this study, the SLF search did indicate that Native American cultural resources are known to be located near the project area. The project involves limited grading of the proposed stage area, with some minor excavations for footings and other sub-grade features (up to three feet). Trenching would occur up to four feet deep for the LADWP power lines. Some limited vegetation trimming may be necessary, particularly in the path resurfacing area; however no trees would be removed as part of this project. These actions have the potential to unearth, expose, or disturb subsurface archaeological, historical, or Native American resources. Should archaeological resources be discovered, they may qualify as historical resources under CEQA.

Paleontological Resources

A paleontological records search and geologic map research were conducted through the Natural History Museum of Los Angeles County as part of an adjacent project on May 29, 2013 (Aron and Kelly, 2013). The records search and research indicated that the project area is underlain by younger quaternary Holocene alluvium (Qa) which has a low probability of yielding significant vertebrate remains. Elsewhere in Griffith Park, however, surface exposures of older quaternary alluvium and Miocene Monterey Formation (also sometimes referred to as either the Puente Formation or the Modelo Formation in this area) have been identified, both of which have a high probability of yielding significant vertebrate fossils. Although these sediments were not encountered at the surface during the pedestrian field survey, it is possible that such sediments could be present below the surface. Should such paleontological resources be

disturbed as a result of the proposed project, it could constitute the destruction of a unique paleontological resource of site or unique geologic feature under CEQA.

a) Less than Significant with Mitigation Incorporation. A significant effect would occur if the project results in a substantial adverse change in the significance of a historical resource. Three built historic resources, Griffith Park (P-19-175297), the Old (Griffith Park) Los Angeles Zoo (P-19-176303), and the Griffith Park Merry-Go-Round (P-19-176298) were identified within ¼ mile of the project site as a result of this study. Griffith Park encompasses the project site, and would not be affected by the project. The Old (Griffith Park) Los Angeles Zoo buildings, contributors to Griffith Park as an HCM, are located 200 feet south of the project site, and would not be directly or indirectly affected by the proposed project. The third resource (Griffith Park Merry-Go-Round) is located 1,000 feet from the project site and would not be directly or indirectly impacted by the proposed project.

Significant impacts to Griffith Park and the contributing Old (Griffith Park) Los Angeles Zoo buildings are not anticipated as a result of the proposed project. The proposed project involves limited ground disturbance in connection with the construction of the open air stage, undergrounding of existing utility lines, and resurfacing of existing streets and walkways. These actions would not materially alter the character of Griffith Park or change the use of the park, nor would it impact any of the identified contributors to this resource. During operation of the proposed project, the park grounds would be largely unaltered and the park would continue to be used for public recreation, including serving the ongoing events that are held on the project site, as it had during and since its identified period of significance. The physical aspects of integrity of Griffith Park and the Old (Griffith Park) Los Angeles Zoo buildings would remain much as they do currently. Therefore, the project would not affect the resources' integrity and would not result in a substantial adverse change in the significance of Griffith Park or the Old (Griffith Park) Los Angeles Zoo buildings as contributing resources. Consequently, the impacts anticipated to Griffith Park and the Old (Griffith Park) Los Angeles Zoo buildings are considered less than significant.

While unlikely, there remains the possibility that as yet unidentified archaeological resources that may qualify as historical resources could be encountered as a result of project-related ground-disturbing activities. Impacts to unidentified archaeological resources that qualify as historical resources could constitute a substantial adverse change in the significance of a historical resource. With the incorporation of **Mitigation Measures Cultural-1** and **Cultural-2**, potential impacts to archaeological resources that qualify as historical resources would be reduced to less than significant.

MM Cultural-1: Pre-Construction Training. Prior to earthmoving activities, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior, 2008) shall conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of cultural resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains (see Mitigation Measure Cultural-4). RAP shall ensure that construction personnel

are made available for and attend the training and shall retain documentation demonstrating attendance.

MM Cultural-2: Inadvertent Archaeological Discoveries. In the event of the discovery of archaeological materials, the construction foreman shall immediately halt all work activities in the vicinity (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeologist. After cessation of earthmoving activities, the construction foreman shall immediately contact RAP. Work shall not resume until authorized by RAP and the qualified archaeologist.

If the qualified archaeologist determines that the discovery constitutes a significant resource under CEQA, preservation in place is the preferred manner of mitigation. In the event preservation in place is demonstrated to be infeasible, and data recovery is determined to be the only feasible mitigation option, a detailed Cultural Resources Treatment Plan shall be prepared and implemented by a qualified archaeologist in consultation with RAP. RAP shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in origin. Archaeological materials recovered during any investigation shall be curated at an accredited facility. The report(s) documenting implementation of the Cultural Resources Treatment Plan shall be submitted to RAP and to the SCCIC.

- b) Less than Significant with Mitigation Incorporation. No archaeological resources were identified within the project site as a result of the cultural resources study; therefore no impacts to resources qualifying as unique archaeological resources are anticipated. However, as mentioned above, the project involves ground-disturbing activities that could uncover resources qualifying as unique archaeological resources. With the incorporation of Mitigation Measures Cultural-1 and Cultural-2, potential impacts to archaeological resources that qualify as unique archaeological resources would be reduced to less than significant.
- c) Less than Significant with Mitigation Incorporation. No sensitive fossil bearing formations are anticipated at or near the surface within the project site, although deeper ground disturbing activities could potentially intrude upon sensitive rock units and could cause impacts to unique paleontological resources. With the incorporation of Mitigation Measure Cultural-3, potential impacts to paleontological resources would be reduced to less than significant.

MM Cultural-3: Inadvertent Paleontological Discoveries. In the event fossil materials are exposed during ground disturbing activities, work (within 100 feet of the discovery) shall be halted until a qualified paleontologist meeting the criteria established by the Society for Vertebrate Paleontology is retained to assess the find. If the find is identified as significant, appropriate treatment as determined by the paleontologist shall be implemented prior to the re-commencement of ground disturbance in the area. A report documenting the methods and results of the treatment shall be prepared and submitted to RAP and filed with the local repository.

d) Less than Significant with Mitigation Incorporation. No known cemeteries or other burial places are known to exist within the project area and the proposed project is unlikely to disturb human remains. However, because the proposed project would involve earthmoving activities, it is possible that such actions could unearth, expose, or disturb previously unknown human remains. With the incorporation of Mitigation Measure Cultural-4, potential impacts to human remains would be less than significant.

MM Cultural-4: Inadvertent Human Remains Discoveries. If human remains are encountered, RAP shall halt work in the vicinity (within 100 feet) of the find and contact the Los Angeles County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission shall be notified, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code Section 5097.98 (as amended by AB 2641). The Native American Heritage Commission shall designate a Most Likely Descendant for the remains per Public Resources Code Section 5097.98. RAP shall ensure that the immediate vicinity where the Native American human remains are located is not damaged or disturbed by further development activity, according to generally accepted cultural or archaeological standards or practices, until the landowner has discussed and conferred with the Most Likely Descendant regarding their recommendations, as prescribed in Public Resources Codes Section 5097.98, taking into account the possibility of multiple human remains.

References

Aron and Kelly, 2013. Paleontological Investigation Report of the Los Angeles Department of Water and Power Griffith Park South Water Recycling Project, Los Angeles, California, August 2013.

Environmental Science Associates (ESA), *Griffith Park Performing Arts Center Project – Phase I Cultural Resources Study*, December 2013.

Environmental Science Associates (ESA), Los Angeles Department of Water and Power Griffith Park South Water Recycling Project, City of Los Angeles, California – Phase I Cultural Resources Study, August 2013.

Geology, Soils, and Seismicity

Issu	es (and	d Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
6.		OLOGY, SOILS, AND SEISMICITY — uld the project:				
a)		ose people or structures to potential substantial adverse cts, including the risk of loss, injury, or death involving:				
	i)	Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)				
	ii)	Strong seismic ground shaking?			\boxtimes	
	iii)	Seismic-related ground failure, including liquefaction?				
	iv)	Landslides?			\boxtimes	
b)	Res	ult in substantial soil erosion or the loss of topsoil?			\boxtimes	
c)	wou pote	ocated on a geologic unit or soil that is unstable, or that all become unstable as a result of the project, and entially result in on- or off-site landslide, lateral ading, subsidence, liquefaction, or collapse?				
d)	the	ocated on expansive soil, as defined in Table 18-1-B of Uniform Building Code (1994), creating substantial s to life or property?				
e)	sept whe	re soils incapable of adequately supporting the use of ic tanks or alternative wastewater disposal systems re sewers are not available for the disposal of tewater?				

Discussion

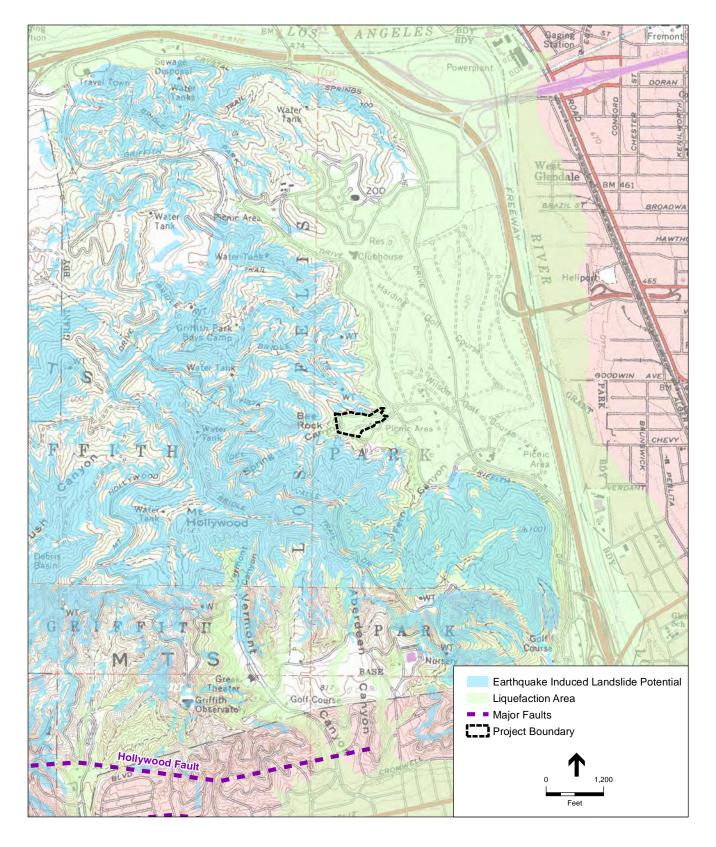
a.i) Less than Significant Impact. The project area is located in the eastern Santa Monica Mountains, which is an east-west trending range located, and is found in the southern portion of the Burbank Quadrangle. Geological formations in the project area are of Cenozoic age, mainly Neogene and Quaternary formations (Jennings and Strand, 1981). The project site is not located within an Alquist-Priolo Earthquake Fault Zone (CGS, 2013). The nearest fault line is the Hollywood Fault, located approximately 1.6 miles south of the project site (USGS, 2013). The Hollywood Fault is considered a westward extension of the Raymond fault and is located relatively parallel to the Santa Monica fault. The fault line extends in an east-northeast direction for approximately nine miles through Beverly Hills, West Hollywood, and Hollywood. The most recent surface rupture along this fault was during the Holocene period (SCEC, 2001; SCEDC, 2013). The project site is not located in a California Special Study Zone (CGS, 2013) or City of Los Angeles designated Fault Rupture Study Zone (City of Los Angeles, 1996).

Because the project site is not located within a designated fault rupture zone and no faults are known to lie within the project site, the potential for fault rupture is minimal and impacts would be less than significant.

a.ii) Less than Significant Impact. As stated above in 6 (a)(i), the Hollywood Fault is the nearest active fault approximately 1.6 miles south of the project site. The project site is within a seismically active region and earthquakes in the region could produce strong ground shaking on the project site. The proposed project would develop an open-air stage to be used for temporary, short-term events and would not develop habitable structures that would expose people to a greater risk than existing surrounding uses. In addition, proposed facilities would comply with applicable requirements set forth in the California Building Code (CBC) development regulations and the City of Los Angeles Bureau of Engineering (BOE) Standard Project Specifications. The underground utility line, outdoor stage, and ADA bridge would be designed to accommodate site-specific ground motions. Standard geotechnical and structural design criteria required in the CBC would reduce excessive earthquake response and minimize potential damage or collapse of the stage.

Compliance with applicable regulations would ensure safe and efficient project implementation within areas subject to seismic movement. The project design would be subject to Special Publication 117, "Guidelines for Evaluating and Mitigating Seismic Hazards in California." Conformance with this publication in addition to the CBC and BOE requirements would provide for protection from seismic ground shaking. Therefore, the proposed project would not substantially expose people or structures to adverse effects related to ground shaking, and impacts would be less than significant.

- a.iii) Less than Significant Impact. Liquefaction as a result of an earthquake typically occurs in saturated and loose soils in areas where the groundwater table is 50 feet or less below ground surface. During an earthquake, a sudden increase in soil pore water pressure can cause soils to lose strength and behave as a liquid, resulting in the phenomenon known as liquefaction. As shown in Figure 2-4, the project site is located within an area that has the potential for seismic-induced liquefaction (CGS, 2013; BOE, 2013). Compliance with the CBC and BOE standards in the design and construction of the proposed project would reduce potential damage to the new infrastructure from liquefaction. Therefore, by following these prescribed construction standards, the proposed project would result in a less than significant impact with regards to seismic-related ground failure, including liquefaction.
- a.iv) Less than Significant Impact. Landslides are ground failures in steep areas, in which a large section of a slope detaches and slides downhill. As shown on Figure 2-4, the proposed project is located adjacent to upslope areas that have earthquake-induced landslide potential as defined by the Burbank Quad Seismic Hazard Zone Map (GCS, 2013). As previously stated, the Hollywood Fault is approximately 1.6 miles south of the project site and the project site is located within a seismically active area. The proposed project must comply with the seismic design parameters contained in the CBC and BOE seismic requirements. Compliance with these standards in the design and construction of the proposed project would reduce potential damage from landslides on the new infrastructure, and impacts would be less than significant.



Griffith Park Performing Arts Center . 130367.02

Figure 2-4 Geologic Hazards b) Less than Significant Impact. Construction of the proposed project would require minimal grading or earthwork, on less than one acre (approximately 0.3 acres). Minimal excavation would be required for the open-air stage. Trenching activities for the undergrounding of the existing utility line would also occur. The trench would be located within the existing paved pedestrian pathway and would be approximately 24 inches deep and 24 inches wide, and approximately 600 feet in length. Although construction of the proposed project does not require a Construction General Permit under the National Pollutant Discharge Elimination System (NPDES) because it is under an acre, standard erosion control measures would be implemented to reduce any short-term erosion and RAP would ensure that no substantial adverse construction related erosion impacts would occur. The majority of the improvements, the 45 foot by 45 foot concrete stage, would result in additional impervious surfaces; however, this would occur within an existing landscaped and manicured grassy area that is not experiencing erosion.

The existing trail area that would be improved as part of the proposed project is currently experiencing fairly substantial erosion. The proposed project would resurface and level the existing trails to make them ADA compliant. The proposed project would also install an above ground bridge in the area experiencing the strongest erosion. The raised pedestrian bridge would eliminate foot traffic on this segment of the trail experiencing erosion, and would therefore limit the amount of erosion that is currently occurring. The proposed project would not increase or exacerbate soil erosion occurring in the project area, and construction of the ADA bridge would prevent impedance of stormwater flows that could cause flooding and increased erosion. Impacts related to erosion or the loss of topsoil would be less than significant.

c) Less than Significant Impact. Subsidence occurs when a void is located or created underneath the ground surface causing the surface to collapse. Subsidence can be created through tunnels, wells, covered quarries, and caves beneath a surface. In addition, subsidence usually occurs as a result of excessive groundwater pumping or oil extraction. Due to previous and existing land uses at the project site it is not anticipated the project site would experience subsidence.

As described above, the project site is located within an area that is subject to earthquake-induced landslides and liquefaction. However, the proposed project must comply with the seismic design parameters contained in the CBC and BOE seismic requirements. Compliance with the CBC and BOE standards in the design and construction of the proposed project would reduce potential damage to the new infrastructure from on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. As a result, impacts would be less than significant.

d) Less than Significant Impact. The project site is located in areas identified as having primarily colluvium and residuum weathered from sand, shale, or slate, as well as stream channel gravel and sand sediments (NRCS, 2013; Mesmer, 1903). These soils typically have low expansive potential. As described above, the proposed project must comply with the seismic design parameters contained in the CBC and BOE seismic requirements. Compliance with these standards in the design and construction of the proposed project would reduce potential damage to the new infrastructure from ground movement, including movement from expansive soils. Therefore, proposed project impacts related to expansive soils are less than significant.

e) **No Impact.** Existing restrooms would be refurbished to meet ADA access requirements. The proposed project does not include the installation of septic tanks or alternative wastewater disposal systems. Thus, no impacts would occur.

References

- California Department of Conservation, Geologic Map of California Compiled by Charles W. Jennings and Rudolph Strand. 1981.
- California Department of Conservation, California Geological Survey (CGS), California Geological Regulatory Maps, available at http://www.quake.ca.gov/gmaps/WH/regulatorymaps.htm. Accessed November 21, 2013.
- California Institute of Technology, Southern California Earthquake Data Center (SCEDC). Significant Earthquakes and Faults: Historical Earthquakes and Significant Faults in Southern CA, available at http://www.data.scec.org/significant/index.html. Accessed on July 8, 2013.
- City of Los Angeles, General Plan Safety Element. Adopted November 1996.
- City of Los Angeles, Bureau of Engineering (BOE), Navigate LA Portal, available at http://navigatela.lacity.org/index01.cfm. Accessed November 25, 2013.
- Mesmer, Louis. "Soil Survey of the Los Angeles Area, California," *Field Operations of the Bureau of Soils*, pp 1263-1306. 1903, available at http://soils.usda.gov/survey/online_surveys/california/losangelesCA1903/losangelesCA1903.pdf. Accessed November 21, 2013.
- SCEC Working Group C, *Active Faults in the Los Angeles Metropolitan Region*, SCEC Special Pub. Series, No. 001, Southern California Earthquake Center, September 2001.
- United States Department of Agriculture, Natural Resources Conservation Service (NCRS). Web Soil Survey, available at http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed November 20, 2013.
- United States Geological Survey (USGS), Quaternary Faults, available at http://earthquake.usgs.gov/hazards/qfaults/google.php. Accessed November 21, 2013.

Greenhouse Gas Emissions

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
7.	GREENHOUSE GAS EMISSIONS — Would the project:				
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?				
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes	

Discussion

a) Less than Significant Impact. Gases that trap heat in the atmosphere are referred to as greenhouse gases (GHGs) because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as a driving force for global climate change. Definitions of climate change vary between and across regulatory authorities and the scientific community, but in general can be described as the changing of the earth's climate caused by natural fluctuations and anthropogenic activities, which alter the composition of the global atmosphere.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), chlorofluorocarbons (CFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). Carbon dioxide is the "reference gas" for climate change, meaning that emissions of GHGs are typically reported in "carbon dioxide-equivalent" (CO_2e) measures. There is international scientific consensus that human-caused increases in GHGs have and will continue to contribute to global warming, although there is uncertainty concerning the magnitude and rate of the warming. Potential global warming impacts in California may include, but are not limited to, loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, an increase in large forest fires, and more drought years. Secondary effects are likely to include global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which sets forth a series of target dates by which statewide emission of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

In 2006, California passed the California Global Warming Solutions Act of 2006 (Assembly Bill No. 32; California Health and Safety Code Division 25.5, Sections 38500, et seq., or AB 32), which requires CARB to design and implement emission limits, regulations, and other measures, such that feasible and cost-effective statewide GHG emissions are reduced to 1990 levels by 2020.

On March 18, 2010, the California Office of Planning and Research (OPR) submitted amendments to the *CEQA Guidelines* for GHG emissions, as required by Public Resources Code section 21083.05 (Senate Bill 97) became effective. These *CEQA Guideline* amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments are relatively modest changes to various portions of the existing *CEQA Guidelines*. Modifications address those issues where analysis of GHG emissions may differ in some respects from more traditional CEQA analysis.

The proposed project would contribute to global climate change as a result of emissions of GHGs, primarily CO₂, emitted during construction and operations. GHG emissions would be generated during construction of the project and once fully operational, the project would generate GHG emissions from mobile sources associated with vehicles trips by visitors to the project site. As defined by the California Air Pollution Control Officers Association (CAPCOA), GHG impacts are considered to be exclusively cumulative impacts (CAPCOA, 2008); there are no non-cumulative GHG emission impacts from a climate change perspective. Thus, the purpose of this GHG analysis is to determine whether the proposed project impact is cumulatively considerable.

While SCAQMD has issued proposed standards and guidelines, there currently are no adopted State or local standards for determining the cumulative significance of the proposed project's GHG emissions on global climate change. SCAQMD has currently adopted a threshold of 10,000 metric ton per year (MT/year) CO₂e for industrial. Additionally, SCAQMD has proposed, but not adopted, a 3,000 MT/year CO₂e threshold for mixed use developments, a 3,500 MT/year CO₂e threshold for residential developments, and a 1,400 MT/year CO₂e threshold for commercial developments. These draft threshold options are being evaluated through the GHG Thresholds Working Group and have not been adopted as of this writing (SCAQMD, 2010). The proposed project, which consists of a 45 foot by 45 foot outdoor performing arts stage and associated improvements at Griffith Park, is not a development that would generate substantial levels of GHG emissions. The primary source of GHG emissions generated during operation of the project would be from motor vehicle trips by visitors, which are estimated to average 1,100 daily vehicle trips per event at the project site. Due to the small amount of GHG emissions that would be generated by the project, and in the absence of an adopted threshold that is applicable to the proposed project, the use of a screening threshold would be appropriate to determine whether the project would require further analysis and mitigation with regard to climate change. CAPCOA has recommended a conservative screening criteria of 900 MT/year CO₂e for determining whether projects would require further analysis and mitigation with regard to climate change. For the purpose of this analysis, the project's total annual GHG emissions resulting from construction and operational activities have been quantified using CalEEMod and are evaluated against the 900 MT/year CO₂e screening criteria.

The project's total annual GHG emissions are shown in **Table 2-6**. For construction GHG emissions, SCAQMD recommends that the total emissions for a project be amortized over a 30-year period and added to its operational emission estimates (SCAQMD, 2008). A conservative estimate for the purposes of input into CalEEMod, it was assumed that the proposed project would result in a net increase of one event at the project site per month over existing baseline conditions.

As shown in Table 2-6, under the scenario where one additional event per month over existing baseline conditions is held at the project site, the proposed project's total annual GHG emissions resulting from construction and operational activities would be 59 MT CO₂e per year. Thus, the project's construction and operational GHG emissions would not exceed the 900 MT of CO₂e per year screening threshold recommended by CAPCOA. Therefore, the proposed project would not result in the generation of substantial levels of GHG emissions and would not result in emissions that would adversely affect the statewide attainment of GHG emission reduction goals of AB 32. This impact would be less than significant.

TABLE 2-6
ESTIMATED PROJECT CONSTRUCTION AND OPERATIONS-RELATED GHG EMISSIONS

Emission Source	Proposed Project EmissionsCO ₂ e (MT/yr)
Construction	
Total	240
Construction (Amortized over 30 years)	8
Operations ^a	
Mobile Sources	51
TOTAL PROJECT EMISSIONS	59
CAPCOA Screening Threshold	900
Significant Impact?	No

NOTES: CO₂e= carbon dioxide equivalent; MT/yr = metric tons per year; see Appendix A for CalEEMod model outputs.

a The project's annual operational GHG emissions assumes one event at the project site per month, which results in a daily volume of 1,100 vehicle trips per event. Based on the CalEEMod output, the daily operational GHG emissions for the project associated with one event at the project site is 9,271 pounds per day CO₂e, which would total 51 MT per year CO₂e for 12 events over the course of a year.

b) Less than Significant Impact. The proposed development of an outdoor performing arts stage and associated improvements at Griffith Park would serve the existing visitors to Griffith Park, and would not be a type of land use that would result in, or introduce, growth that has not been accounted for by the City of Los Angeles. The proposed project is designed to accommodate the existing annual events that occur on the project site, and serves to provide improved viewing capabilities, set up and breakdown abilities for performers, and improved safety and ADA access at the project site. As such, the proposed development would not conflict with any adopted plan's goals of reducing GHG emissions. In addition, the Open Space and Greening Focus Area of the City of Los Angeles' Climate Action Plan (Green LA: An Action Plan to Lead the Nation in Fighting Global Warming) had called for the creation of 35 new City parks by 2010 (City of Los Angeles, 2007). Although that target year has passed, the project nonetheless serves the purpose of creating new recreational activities for the City, which would be consistent with goals of the plan. Therefore, this impact would be less than significant.

References

California Air Pollution Control Officers Association (CAPCOA). 2008. CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act. January.

- City of Los Angeles. 2007. Green LA: An Action Plan to Lead the Nation in Fighting Global Warming. May.
- South Coast Air Quality Management District (SCAQMD). 2008. *Draft Guidance Document Interim CEQA Greenhouse Gas (GHG) Significance Threshold*. October 2008.
- SCAQMD. 2010. Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15. Available at http://www.aqmd.gov/ceqa/handbook/GHG/2010/sept28mtg/ghgmtg15-web.pdf. September 2008.

Hazards and Hazardous Materials

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
8.	HAZARDS AND HAZARDOUS MATERIALS — Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				

Discussion

a) Less than Significant Impact. The short-term construction activities of the proposed project would require transportation and use of limited quantities of fuel, oil, sealants, and other common hazardous materials related to construction. Construction activities would occur in two phases; Phase 1 would be an estimated two months and Phase 2 would be completed subsequently within a similar timeframe. Thus, the proposed project's use of hazardous materials would be short-term, in minimal quantities, and within a limited area. Additionally, the use of hazardous materials and substances during construction would be subject to federal, state, and local health and safety requirements for handling, storage, and disposal.

Operation of the proposed project would not require the use of chemicals that could create a hazard through routine transport, use, or disposal of hazardous materials. Because the use of hazardous materials would be minimal and temporary, hazards to the public or the environment related to the transport, use, or disposal of hazardous materials would be less than significant.

- b) Less than Significant Impact. As discussed above in 8(a), the use of hazardous materials would be minimal during short-term construction activities. However, hazardous materials may accidently be spilled or otherwise released into the environment. To minimize potential impacts from release of hazardous materials, use of such substances during construction would be subject to federal, State, and local health and safety requirements for handling, storage, and disposal. Furthermore, RAP would prevent construction vehicles from being fueled or maintained on-site, and a limited volume of hazardous materials would be stockpiled. Therefore, impacts related to upset and accident conditions involving the release of hazardous materials into the environment would be less than significant.
- No Impact. The proposed project is located in Griffith Park and is not located within one-quarter mile of an existing or proposed school. The nearest school is the Glenfeliz Elementary School located at 3955 Glenfeliz Boulevard, approximately 1.4 miles southeast of the project site. The proposed project would not have an impact on an existing or proposed elementary school with hazardous materials.
- d) No Impact. A database search was conducted to determine the presence of known hazardous materials in the project vicinity. The project site is not included in either the California Department of Toxic Substances Control (DTSC) database Envirostor (which tracks CORTESE Superfund sites, hazardous waste permitted facilities, corrective action facilities, and existing site cleanup activities) or the State Water Resource Control Board (WRCB) database Geotracker (which tracks hazardous materials sites that impact groundwater, including leaking underground fuel tanks) (DTSC, 2013; WRCB, 2013). There are no hazardous materials sites within a half mile from the project site. Because the project area does not contain any documented hazardous materials or wastes, the proposed project would not create a significant hazard to the public or the environment. Thus, no impacts would occur.
- e) **No Impact.** The proposed project is not located within a public airport land use plan area or within two miles of a public airport. The nearest public airport is Bob Hope Airport located at 2627 N. Hollywood Way in the City of Burbank, and is more than five miles northwest of the project area. Therefore, no airport-related hazardous impacts would occur.
- f) **No Impact.** The proposed project is not located within the vicinity of a private airstrip. The nearest private airport is Crystal Airport located approximately 35 miles northwest of the project site. No airstrip related hazardous impacts would occur.
- g) Less than Significant Impact. The proposed project would not alter the street system in the project vicinity. Although not anticipated, any required traffic detour plans during construction would be compatible with the City of Los Angeles Hazard Mitigation Plan, and RAP would coordinate with nearby first responders to address any emergency response routes that coincide with localized site construction traffic. Therefore, impacts would be less than significant.
- h) **Less than Significant Impact.** The proposed project, and the majority of Griffith Park, is located in an area designated as a Very High Fire Hazard Severity Zone by Cal Fire (Cal Fire, 2011). However, unlike most of Griffith Park that is covered in dense dry shrubs, the proposed stage and Phase 1 improvement site is located on a manicured grassy landscaped knoll that contains

deciduous trees. There is no housing in the project area. Although the construction of the stage would introduce a new structure that could be vulnerable to wildland fires, the presence of infrequent large crowds at the site would not expose a significant number of people to a potentially hazardous condition. Therefore, impacts associated with wildland fire are considered less than significant.

References

- California Department of Forestry and Fire Protection (Cal Fire), Very High Fire Hazard Severity Zone map Los Angeles County, 2011, available at http://frap.cdf.ca.gov/data/frapgismaps/select.asp. Accessed November 20, 2013.
- California Department of Toxic Substances Control (DTSC), Envirostor Database, available at http://www.envirostor.dtsc.ca.gov/public/. Accessed November 22, 2013.
- California State Water Resource Control Board (WRCB), Geotracker Database, available at http://geotracker.waterboards.ca.gov/. Accessed November 22, 2013.

Hydrology and Water Quality

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
9.	HYDROLOGY AND WATER QUALITY — Would the project:				
a)	Violate any water quality standards or waste discharge requirements?				
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c)	Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion or siltation on- or off-site?				
d)	Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?				
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
f)	Otherwise substantially degrade water quality?			\boxtimes	
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
h)	Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				\boxtimes
i)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
j)	Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?				\boxtimes

Discussion

a) Less than Significant Impact. The proposed project would comply with all applicable stormwater management requirements, e.g. the Los Angeles County Department of Public Works Standard Urban Stormwater Mitigation Plan, to prevent stormwater pollution during construction. However, because construction would involve less than an acre of ground disturbance (approximately 0.3 acre) the proposed project does not require a NPDES General Construction Permit. Nevertheless, standard erosion control measures would be implemented to reduce any short-term erosion that could violate water quality standards. Therefore, impacts to water quality standards would be less than significant.

- No Impact. The proposed project would not utilize existing groundwater resources nor would the addition of a 45 foot by 45 foot concrete stage cause a reduction in groundwater recharge capacity. Changes to groundwater supply would not be a result of the proposed project, and would not impact the ability of any preexisting land uses or water purveyors in the project vicinity to utilize groundwater resources from the Hollywood Basin, which lies at the foot of the Santa Monica Mountains. Thus, there would be no impact to groundwater.
- Less than Significant Impact. The proposed project would not significantly impact drainage patterns of the overall project area. While no streams or rivers cross the project site, there is an existing downhill drainage pattern that runs from west to east, from the Old Zoo lawn area towards the lower picnic area. However, construction of the ADA bridge would help to mitigate any pedestrian walkway impacts to low-lying drainage paths. Although construction of the proposed project does not require a NPDES General Construction Permit because it is under an acre, standard erosion control measures would be implemented to reduce any short-term erosion and the project would be constructed in accordance with all applicable requirements of the Los Angeles Municipal code. The majority of the improvements, the 45 foot by 45 foot concrete stage, would result in additional impervious surfaces; however this would occur within an existing located on a manicured grassy landscaped knoll that is not experiencing erosion. In this way, RAP would ensure that no substantial adverse construction related erosion impacts would occur.

The existing pathways that would be improved as part of the proposed project is currently experiencing fairly substantial erosion. The proposed project would resurface and level the existing pathways to make them ADA compliant. The proposed project would also install an above ground bridge in the area experiencing the strongest erosion. The raised pedestrian bridge would eliminate foot traffic on this segment of the pathway experiencing erosion, and would therefore limit the amount of erosion that is currently occurring. The proposed project would not increase or exacerbate soil erosion occurring in the project area, and construction of the ADA bridge would prevent impedance of stormwater flows that could cause flooding and increased erosion. Therefore, impacts related to erosion would be less than significant.

- d) Less than Significant Impact. Although the proposed project would introduce new infrastructure and impermeable surfaces to the project site, due to the minor site improvements, development would not result in a substantial increase in runoff volume during construction or operation that would result in flooding conditions on- or off-site. The concrete 45 foot by 45 foot stage is located on a manicured grassy landscaped knoll and any runoff would traverse the site into the surrounding grassy area with no overflow. Therefore, impacts related to runoff and flooding would be less than significant.
- e) **Less than Significant Impact.** Although the proposed project would introduce new infrastructure and impermeable surfaces to the project site due to the proposed project site size it would not result in a substantial increase in runoff volume during construction or operation that would exceed the capacity of the Los Angeles River Channel, the storm drain system serving the site, and would not substantially increase the probability that polluted runoff would reach the storm

- drain system (DPW, 2013a). Therefore, impacts to the storm water drainage system would be less than significant.
- f) Less than Significant Impact. The proposed project would involve short-term construction and minimal maintenance activities that would not substantially degrade water quality, and would adhere to standard erosion control measures during construction. Additionally, RAP would avoid introducing any new potential sources of water pollutants or increase the potential of the site to substantially degrade water quality by following federal, state, and local health and safety requirements for handling, storage, and disposal of any hazardous materials used during construction of the proposed project. Therefore, impacts to water quality would be less than significant.
- g) **No Impact.** The proposed project is not located within a 100-year flood hazard area as mapped on the Federal Emergency Management Agency (FEMA) 100-year Flood Insurance Rate Map (DPW, 2013b). In addition, the proposed project does not include housing or other habitable structures. Therefore, no impact relating to flooding would occur.
- h) **No Impact.** The proposed project is not located within a 100-year flood hazard area and would not include the construction of structures that would impede or redirect flood flows. Therefore, no impact would occur.
- i) **No Impact.** The Mulholland Dam and Hollywood Reservoir, owned and operated by LADWP, are located in the Hollywood Hills approximately 2.5 miles west of the project site. However, the project site is not in an inundation area (City of Los Angeles, 1996). In addition, no levees or dams are located on the project site and no off-site levees or dams would be modified as part of the proposed project. As a result, the proposed project would not expose people or structures to a significant risk of loss as a result of the failure of a levee or dam and there would be no impact.
- j) No Impact. Tsunamis are usually caused by displacement of the ocean floor causing large waves and are typically generated by seismic activity. The project site is located approximately 15 miles from the Pacific Ocean; therefore a tsunami hazard is not present for project site. A seiche is a standing wave in an enclosed or partly enclosed body of water. Seiches are normally caused by earthquake activity, and can affect harbors, bays, lakes, rivers, and canals. The Hollywood Reservoir is located approximately 2.5 miles west of the project site, which is too far to be impacted by a seiche event at the reservoir. Lastly, mudflow is a mixture of soil and water that runs like a river of mud down a hillside and is usually generated by heavy rainfall. The project site is located adjacent to a hillside but would not introduce new habitable structures that would expose permanent residents or workers to potential mudflows (DPW, 2013c). Therefore, impacts related to seiche, tsunami, or mudflow mudflows would not occur and there would be no impact.

References

California Department of Water Resources (DWR), "Dams within the Jurisdiction of the State of California," Division of Safety of Dams. 2012, available at http://www.water.ca.gov/damsafety/damlisting/. Accessed November 25, 2013.

City of Los Angeles, General Plan – Safety Element. Adopted November 1996.

- Los Angeles County Department of Public Works (DPW), Los Angeles County Storm Drain System, available at http://dpw.lacounty.gov/fcd/stormdrain/index.cfm. Accessed November 26, 2013. 2013a.
- Los Angeles County Department of Public Works (DPW), Flood Zone Determination, available at http://dpw.lacounty.gov/wmd/floodzone/. Accessed November 25, 2013. 2013b.
- Los Angeles County Department of Public Works (DPW), Fire Disaster Information, available at http://dpw.lacounty.gov/wrd/fire/. Accessed November 25, 2013. 2013c.

Land Use and Land Use Planning

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
10.	LAND USE AND LAND USE PLANNING — Would the project:				
a)	Physically divide an established community?				\boxtimes
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?				

Discussion

- a) **No Impact.** The project site is located in Griffith Park and consists of the construction of an open-air outdoor stage and associated improvements within an entirely recreational area. There are no established communities within Griffith Park and the nearest residential neighborhood is one mile south of the project site. The proposed project would not physically divide an established community and no impacts would occur.
- b) **No Impact.** Both the City of Los Angeles General Plan land use designation and the zoning classification of the project site are OS, as are adjacent areas within Griffith Park. The project site is located in the lower, flatter areas of Griffith Park called the Green Park Corridor. The character of this area is established by lawns, trees, and flowing park spaces; this zone is meant to establish a larger and more useful continuous series of park spaces for recreational uses, such as picnicking and free play (RAP, 1978). While the proposed project would not constrain or change the existing land uses within the project area and would not conflict with the existing land use, zoning, or Griffith Park Master Plan designations, the stage could alter the perceived tranquility of the natural areas immediately surrounding that are used for passive recreation (picnicking, hiking and wildlife observation) while in use due to noise and potentially increased attendance during performances. Although no amplified sound events are planned and the three ongoing regular Old Zoo Park events (Shakespeare in the Park, Symphony in the Glen, and LA Haunted Hayride) have not used sound amplification in the past, the incorporated electrical switchboard would provide performers with the capability to amplify. However, amplified sound users must nevertheless be in accordance with municipal code and their use would need to be permitted by RAP. Construction of the project components would only temporary impact uses of the immediate vicinity. As a result, no impacts related to conflicts with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating environmental effects would occur.
- c) No Impact. The project site is not located in an approved or draft Habitat Conservation Plan or Natural Community Conservation Plan. It is located within the study limits of the Griffith Park Wildlife Management Plan area (Cooper Ecological Monitoring, 2008). The Wildlife Management Plan is considered a draft document and is not an adopted land planning tool, but

establishes a baseline of known threats to wildlife and includes best management practices (BMPs) to assist RAP staff when making land management decisions in and around Griffith Park. Though the proposed project would introduce a permanent stage to the lawn that could affect free-play uses and would also introduce the potential for amplified sound performances that may ultimately affect the character of the Old Zoo area, the proposed project would not alter land use. Therefore, the project would not conflict with the wildlife plan. Thus, no impacts would occur.

References

City of Los Angeles. ZIMAS, Zoning and General Plan Land Use Map, available at http://zimas.lacity.org/. Accessed on November 20, 2013.

City of Los Angeles, Los Angeles City General Plan – Framework Element, available at http://cityplanning.lacity.org/cwd/framwk/chapters/03/03.htm. Accessed November 20th, 2013.

Cooper Ecological Monitoring, Inc. Griffith Park Wildlife Management Plan, Aril 10, 2008.

City of Los Angeles, Department of Recreation and Parks. Griffith Park Master Plan p 12. Adopted 1978.

Mineral Resources

Issues (and Supporting Information Sources):		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
11.	MINERAL RESOURCES — Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
b)	Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				\boxtimes

Discussion

- a) No Impact. The project area overlays two distinct Mineral Resource Zones (MRZs): MRZ-2 and MRZ-3. MRZ-2 indicates an area where adequate information supports that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists. MRZ-3 indicates an area which contains mineral deposits, the significance of which cannot be evaluated from available data (Anderson, et al., 1979 and SMARA, 2013). However, the project site has not been identified as a known mineral resource area by the California Department of Conservation and does not have a history of mineral extraction uses (Miller, 1994). Additionally, no oil wells exist on the project site according to the California Department of Conservation Division of Oil, Gas, and Geothermal Resources (DOGGR, 2013). Although originally owned by gold mine speculator Col. Griffith J. Griffith, who granted the original 3,015 acres that would become Griffith Park to the City of Los Angeles in 1896, there have been no official resource recovery attempts. Thus, the proposed project would not result in the loss of availability of a known mineral resource and no impacts would occur.
- b) **No Impact.** The project area is not used for mineral extraction or recovery, and is not known as a locally important mineral resource recovery site. The proposed project does not overlap on any official plan for a mineral resource recovery area, and no impacts would occur.

References

- Anderson, TP, et al. Generalized Aggregate Resource Classification Map San Fernando Valley and Adjacent Production-Consumption Regions. California Department of Conservation, Division of Mines and Geology. 1979.
- California Department of Conservation Department of Oil, Gas, and Geothermal (DOGGR). DOGGR Online Mapping System (DOMS), available at http://maps.conservation.ca.gov/doms/doms-app.html. Accessed on November 20, 2013.
- California Department of Conservation. California Geological Survey SMARA Mineral Land Classification Maps, available at http://www.conservation.ca.gov/cgs/minerals/mlc/Pages/Index.aspx. Accessed on November 20, 2013.

Miller, Russell V. Generalized Mineral land Classification Map of Los Angeles County	 South Half
California Department of Conservation, Division of Mines and Geology. 1994.	

Noise

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
12.	NOISE — Would the project:				
a)	Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
b)	Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?				
c)	Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
d)	Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
e)	For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?				
f)	For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

Discussion

Noise is generally defined as unwanted sound. Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements.

Whereas a noise level is a measure of noise at a given instant in time, an individual's noise exposure is a measure of noise over a period of time. For instance, community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level

changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources (e.g., traffic). As such, successive additions of sound to the community noise environment changes the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

 $L_{\rm eq}$: The $L_{\rm eq}$, or equivalent sound level, is used to describe noise over a specified period of time in terms of a single numerical value; the $L_{\rm eq}$ of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The $L_{\rm eq}$ may also be referred to as the average sound level.

 L_{max} : The maximum, instantaneous noise level experienced during a given period of time.

L_{min}: The minimum, instantaneous noise level experienced during a given period of time.

 L_{dn} : Also termed the DNL, the L_{dn} is the average A-weighted noise level during a 24-hour day, obtained after an addition of 10 dB to measured noise levels between the hours of 10:00 P.M. to 7:00 A.M. to account nighttime noise sensitivity.

CNEL: CNEL, or Community Noise Equivalent Level, is the average A-weighted noise level during a 24-hour day that is obtained after an addition of 5 dBA to measured noise levels between the hours of 7:00 p.m to 10:00 p.m. and after an addition of 10 dBA to noise levels between the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

With respect to effects on people, noise is generally regarded as loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change in noise levels is considered to be a barely perceivable difference;

- A change in noise levels of 5 dBA is considered to be a readily perceivable difference; and
- A change in noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion, hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dB, the combined sound level would be 53 dB, not 100 dB.

a) Less than Significant Impact. A significant impact would occur if the proposed project would generate excess noise that would cause the ambient noise environment at the project site to exceed noise level standards set forth in the City of Los Angeles General Plan Noise Element (Noise Element) and the City of Los Angeles Municipal Code (LAMC). Implementation of the proposed project would result in an increase in ambient noise levels during both construction and operation, as discussed in further detail below.

Construction

Construction-related noise impacts would be significant if, as indicated in Section 112.05 of the LAMC, noise from construction equipment within 500 feet of a residential zone exceeds 75 dBA at a distance of 50 feet from the noise source (City of Los Angeles, 2013). However, the above noise limitation does not apply where compliance is technically infeasible. Technically infeasible means that the above noise limitation cannot be complied with despite the use of mufflers, shields, sound barriers and/or any other noise reduction device or techniques during the operation of the equipment. In addition Section 41.40 of the LAMC also regulates noise from construction and excavation activities by prohibiting these activities from occurring during certain hours of the day. Specifically, construction and excavation work are prohibited between the hours of 9:00 p.m. and 7:00 a.m. of the following day where operation of powered tools and equipment would disturb persons occupying sleeping quarters in any dwelling hotel or apartment or other place of residence. Additionally, Section 41.40 of the LAMC prohibits persons, other than an individual homeowner engaged in the repair or construction of his single-family dwelling, from performing any construction or excavation work for any building or structure located on land developed with residential buildings or perform such work within 500 feet of land so occupied between the hours of 6:00 p.m. and 8:00 a.m. on any Saturday or national holiday. Construction and excavation work are prohibited on Sundays.

Construction of the project would occur in two phases. Construction of Phase 1 is scheduled to begin in April 2014 with completion by June 2014, and would involve development of the proposed stage, undergrounding of existing utility lines, renovation of existing restrooms, installation of lighting, and ADA picnic and viewing areas. Construction Phase 2 is scheduled to commence sometime in winter 2014 or spring 2015 with completion by June 2015, and would involve construction of the ADA pedestrian bridge, improved ADA paths, path lighting, refurbishment of existing stairs, and ADA parking improvements. Construction of the proposed project would require the use of heavy equipment for removal of existing overhead power poles and lines at the project site, minimal grading for the proposed stage, trenching associated with the relocation of the utility lines, repaving of the existing unmarked parking area, and building of the

ADA bridge. Construction activities would also involve the use of smaller power tools, generators, and other sources of noise, especially during the renovation of the existing restrooms and installation of the new electrical connections. During each construction phase there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of each activity.

Table 2-7 shows the maximum noise levels produced by various types of construction equipment that may be used at the project site based on a distance of 50 feet between the equipment and noise receptor. It should be noted that L_{max} noise levels associated with the construction equipment would only be generated when the equipment are operated at full power. Typically, the operating cycle for a piece of construction equipment would involve one or two minutes of full power operation followed by three or four minutes at lower power settings. As such, the L_{max} noise levels shown in Table 2-7 would only occur occasionally throughout the construction day.

TABLE 2-7
CONSTRUCTION EQUIPMENT NOISE EMISSION LEVELS

Construction Equipment	Noise Level (dBA, L_{max} at 50 feet)
Air Compressor	78
Backhoe	78
Compactor	83
Concrete Mixer Truck	79
Concrete Pump Truck	81
Crane	81
Dump Truck	77
Generator	81
Grader	85
Front End Loader	79
Paver	77
Pumps	81
oller	80

During construction activities associated with the proposed project, the nearest and most notable off-site sensitive receptors would be the surrounding undeveloped passive recreation areas of Griffith Park located to the north, west, and south of the project site that contain trails and native vegetation/open space. The Old Zoo Trail loops around the project site in the undeveloped open space area to the west and south, and the Eckert Trail branches off that to the northwest and north of the project site. The Bee Rock Trail is also located northwest of the project site. Aside from these passive recreation areas, other active use areas in the "Park Center" area of Griffith Park located near the project site include the southern part of Wilson Golf Course to the northeast, Shane's Inspiration Playground to the east, and the Merry-Go-Round to the southeast. The nearest residences to the project site are located approximately one mile to the south, outside of Griffith Park.

Construction noise levels for the project were estimated using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM) (FHWA, 2006). For the purpose of conducting a conservative analysis, it is assumed that four pieces of construction equipment would operate concurrently at the project site in proximity to the surrounding sensitive receptors on any given construction day. For this analysis, the following equipment and their location within the project site is assumed:

- One grader operating in the construction area of the proposed outdoor stage;
- One grader operating in the area of the new ADA path;
- One paver operating at the proposed new parking area; and
- One paver operating in the area of the proposed resurfaced walking path.

The distances of each piece of equipment to each of the identified sensitive receptors were inputted into the RCNM in order for the composite noise levels to be calculated at each receptor location. The estimated construction noise levels that would occur at each of the identified sensitive receptors during construction at the project site are shown in **Table 2-8**. Detailed construction noise calculations are included in Appendix D.

TABLE 2-8
CONSTRUCTION NOISE LEVELS AT SURROUNDING OFF-SITE SENSITIVE USES

Sensitive Land Use	Estimated Construction Noise Levels (dBA L_{eq})
Eckert (East) Trail portion located north of project site.	71
Wilson Golf Course located northeast of project site.	62
Shane's Inspiration Playground located northeast of project site.	60
Merry-Go-Round located southeast of the project site.	57
Old Zoo Trail portion located to the south of the project site.	69
Bee Rock Trail portion located northwest of project site.	61

As shown in Table 2-8, the construction noise levels forecasted at the nearest off-site sensitive receptors would range from approximately 57 dBA $L_{\rm eq}$, at the Merry-Go-Round located southeast of the project site, to approximately 71 dBA $L_{\rm eq}$, at the portion of the Eckert (East) Trail located north of the project site. Thus, even though the 75 dBA noise standards in the LAMC pertaining to construction equipment only addresses construction noise impacts relative to residentially zoned land, the noise levels experienced by the surrounding passive and active park uses at Griffith Park would also not exceed this noise level during project construction. Given that the nearest residences to the project site are located approximately one mile to the south, outside of Griffith Park, it is anticipated that the construction-related noise levels generated by the project would not be perceptible at these receptors due to the rapid attenuation of the noise levels over this distance. Furthermore, the construction activities associated with the proposed project would also comply with permitted construction hours identified in Section 41.40 of the LAMC.

Therefore, because the project would not generate construction noise levels in excess of standards established in the LAMC for construction activities, this impact would be less than significant.

Operational Noise

The proposed project, which involves the construction of a 45 foot by 45 foot outdoor performing arts stage and associated improvements, is designed to accommodate the existing annual events that occur on the project site. The project site currently hosts three main events annually: Shakespeare in the Park, the LA Haunted Hayride, and Symphony in the Glen. Shakespeare in the Park, which is a non-amplified experience with open lawn seating that runs Thursdays through Sundays from June 20 through Labor Day weekend from 6:00 p.m. to 9:00 p.m., has the highest regular event attendance at approximately 2,500 visitors at each evening event. The LA Haunted Hayride runs Thursdays through Sundays through the month of October from 7:00 P.M. to 10:30 P.M. and can attract up to 4,700 visitors over the life of the event that come and go throughout the evening period. Some mobile amplification is used at this event, but it is largely non-amplified. The Symphony in the Glen is a one evening performance in early September, and is a non-amplified free event with open lawn seating.

Under the project, the three existing annual 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. As such, because the proposed project would not increase the frequency or audience capacity of these existing events, the noise levels that are normally generated at the project site by these annual events would not be increased as a result of the project. Thus, no new noise impacts associated with the three existing annual events would result under the project.

Aside from the three existing annual events, additional future events could be held at the new outdoor facility and generate noise levels. Additionally, while the current known events that are held at the project site do not use sound amplification, amplifying equipment could be used by the future events.² However, any future event at the project site would be required to secure an event permit with the City of Los Angeles in accordance with current procedures. The issuance of an event permit would be predicated on the ability of an event to meet the noise requirements of the LAMC. Currently, Section 115.02 of the LAMC provides regulations for amplified sound in the City. According to Section 115.02 of the LAMC, no sound amplifying equipment are allowed to be installed, operated, or used for commercial purposes at any time in a residential zone or within 500 feet of a residential zone. Additionally, outside of residential zones the operation or use of sound amplifying equipment for commercial purposes is prohibited between the hours of 9:00 p.m. and 8:00 a.m. the following day. Furthermore, no sound amplifying equipment is allowed to be operated on any property adjacent to and within 200 feet of any hospital grounds or any school or church building while they are in use. Section 112.06 of the LAMC, which regulates noise levels at places of public entertainment, states that it is unlawful for any person to operate, play,

It should be noted that the proposed outdoor performing arts stage would not include any pre-installed amplifying sound systems. Any use of sound-amplifying equipment or speakers for an event would need to be supplied by the performing party. The proposed outdoor stage would only be equipped with electrical connections to support the use of sound amplification systems, where necessary.

or to permit the operation or playing of any sound amplifying equipment or similar device which produces, reproduces, or amplifies sound in any place of public entertainment at a sound level greater than 95 dBA at any point that is normally occupied by a customer unless a conspicuous and legible warning sign is located outside of such a place near each public entrance.

The project site is not located in proximity to any residential, hospital, or church uses. The nearest residence to the project site is located approximately one mile to the south, outside of Griffith Park. Thus, if sound amplifying equipment were used at the proposed outdoor stage, it would not be in violation of the noise regulations of the LAMC. In addition, the proposed facility would be required to meet the operational regulations of the rest of Griffith Park, which is open to the public from 6:00 a.m. to 10:00 p.m. Overall, the operation of the proposed project would not violate the noise regulations of the LAMC and this impact would be less than significant.

b) **Less than Significant Impact.** Vibration is sound radiated through the ground. Vibration can result from a source (e.g., subway operations, vehicles, machinery equipment, etc.) causing the adjacent ground to move, thereby creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The relationship of PPV to RMS velocity is expressed in terms of the "crest factor," defined as the ratio of the PPV amplitude to the RMS amplitude. Peak particle velocity is typically a factor of 1.7 to 6 times greater than RMS vibration velocity (FTA, 2006). The decibel notation acts to compress the range of numbers required to describe vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration sensitive equipment.

The effects of ground-borne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings. The Federal Transportation Authority (FTA) measure of the threshold of architectural damage for conventional sensitive structures is 0.2 in/sec PPV (FTA, 2006).

In residential areas, the background vibration velocity level is usually around 50 VdB (approximately 0.0013 in/sec PPV). This level is well below the vibration velocity level threshold of perception for humans, which is approximately 65 VdB. A vibration velocity level of 75 VdB

is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (FTA, 2006).

Construction

Construction activities that would occur at the project site have the potential to generate low levels of groundborne vibration. The operation of construction equipment generates vibrations that propagates through the ground and diminishes in intensity with distance from the source. The proposed project, which involves construction of a 45 feet by 45 feet outdoor performing arts stage and associated improvements including the undergrounding of existing utility lines, renovation of existing restrooms, installation of lighting, resurfacing on an existing unpaved parking lot, construction of an ADA pedestrian bridge, and resurfacing of walking paths, would not require activities that would generate high vibration levels such as blasting or pile-driving. Construction of the proposed project would only involve limited grading of the proposed stage area, with some minor excavations for footings and other sub-grade features. Trenching would occur up to 24-inches deep for the LADWP power lines. Additionally, some limited vegetation trimming may be necessary, particularly in the proposed path resurfacing area; however, not trees would be removed as part of this project. Given that no off-site sensitive structures (e.g., residences, schools, hospitals, etc.) are located in proximity to the project site,³ the main adverse impact of the vibration levels generated during project construction would be on sensitive populations (i.e., annoyance) that visit the park during the active construction days.

The City of Los Angeles has not adopted any policies or guidelines relative to groundborne vibration. However, vibration criteria for human annoyance have been established by the California Department of Transportation (Caltrans) in its *Transportation and Construction Vibration Guidance Manual* (2013). Thus, in the absence of vibration standards or regulation by the City, the vibration criteria established by Caltrans is used in this analysis. The Caltrans' vibration criteria for human annoyance are shown in **Table 2-9**.

The various PPV levels for the types of construction equipment that could potentially operate at the project site during construction are shown in **Table 2-10**. As shown in Table 2-10, vibration velocities could range from 0.003 to 0.089 inch/sec PPV at 25 feet from the source activity, depending on the type of construction equipment in use.

With respect to the vibration sources associated with construction of the proposed project, it is not anticipated that any continuous/frequent intermittent sources of vibration would occur as no pile-driving or soil compaction would be required for the project. As such, only transient sources of vibration consisting of single, isolated vibration events (e.g., dropping of soil or debris onto a haul truck, truck travel over road bumps, etc.) are anticipated to be generated at the project site during construction. Based on the vibration levels shown in Table 2-10, a PPV level as high as 0.089 inches per second can be reached at 25 feet from a large bulldozer, whereas the PPV level of a small bulldozer at 25 feet would be lower at 0.003 inches per second.

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The nearest sensitive structures to the project site are the residences located approximately one mile south of the project site, outside of Griffith Park. Due to this distance and the rapid attenuation of groundborne vibration levels, these nearest residential structures would not be exposed to any adverse vibration impacts during project construction.

TABLE 2-9
CALTRANS VIBRATION ANNOYANCE POTENTIAL CRITERIA

Maximum PPV (in/sec)

Structure and Condition	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

SOURCE: Caltrans, 2013.

TABLE 2-10
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Approximate PPV (in/sec)					
Equipment	25 Feet	50 Feet	60 Feet	75 Feet	100 Feet
Large Bulldozer	0.089	0.031	0.024	0.017	0.011
Loaded Trucks	0.076	0.027	0.020	0.015	0.010
Jackhammer	0.035	0.012	0.009	0.007	0.004
Small Bulldozer	0.003	0.001	0.0008	0.0006	0.0004

SOURCE: FTA, 2006; ESA, 2013.

During construction activities associated with the proposed project, the nearest and most notable off-site sensitive receptors would be the surrounding undeveloped passive recreation areas of Griffith Park located to the north, west, and south of the project site that contain trails and native vegetation/open space. The trails include the Old Zoo Trail, which loops around the project site in the undeveloped open space area to the west and south, the Bill Eckert Trail located to the northwest and north of the project site, and the Bee Rock Trail, which is located northwest of the project site. However, all of these trails would be located beyond 50 feet of the proposed active construction areas associated with the project. As shown in Table 2-10, a large bulldozer operating at 50 feet from a receptor would generate a PPV level of 0.031 inches per second, which would be considered to be barely perceptible for a transient vibration source according to Caltrans criteria (refer to Table 2-9). Thus, visitors hiking on these trails would not be exposed to excessive levels of vibration during project construction. Therefore, this impact would be less than significant.

Aside from the aforementioned passive recreation areas surrounding the project site, other active use areas in the "Park Center" area of Griffith Park located near the project site also include the southern part of Wilson Golf Course to the northeast, Shane's Inspiration Playground to the east, and the Merry-Go-Round to the southeast. However, because all of these active use areas are located well beyond 100 feet of the project site, no perceptible vibration levels would be experienced by park visitors located at these areas within the park and no vibration impacts would result.

Operation

The proposed project would involve the construction of an outdoor performing arts stage and associated park improvements including the undergrounding of existing utility lines, renovation of existing restrooms, installation of lighting, resurfacing on an existing unpaved parking lot, construction of an ADA pedestrian bridge, and resurfacing of walking paths. Overall, the project would not include the operation of any stationary equipment or machinery that would result in high vibration levels. As such, vibration impacts associated with operation of the proposed outdoor stage under the proposed project would be less than significant.

c) Less than Significant Impact. A significant impact would occur if the proposed project were to result in a substantial permanent increase in ambient noise levels above existing ambient noise levels without the proposed project. The proposed project, which consists of an outdoor performing arts stage and associated improvements at Griffith Park, would serve to accommodate the existing annual events that occur on the project site, and would provide improved viewing capabilities, set up and breakdown abilities for performers, and improved safety and ADA access at the project site. As such, because the proposed project would not increase the audience capacity at these events, it would also not result in a substantial permanent increase in ambient noise levels at the project site. While the new outdoor facility would allow additional future events to be held at the project site, it is anticipated that each of these individual events would draw no more than 2,500 visitors to the project site, which is currently the highest attendance at the project site during the annual Shakespeare in the Park events. Thus, the noise levels resulting from an additional event at the project site would not be any higher than those currently generated by the existing events. As discussed above in Question 12(a), any future event at the project site, including those that may use amplified noise, would be required to secure an event permit with the City of Los Angeles in accordance with current procedures. The issuance of an event permit would be predicated on the ability of an event to meet the noise requirements of the LAMC. Additionally, the project site is not located in proximity to any residential, hospital, or church uses. The nearest residence to the project site is located approximately one mile to the south, outside of Griffith Park. As such, the proposed project would not introduce a substantial permanent increase in noise levels at these off-site noise-sensitive structures.

Furthermore, the estimated traffic volumes generated by the project when a future event occurs at the project site would only be approximately 1,100 vehicle trips per day. As indicated in the *L.A. CEQA Thresholds Guide*, the volume on any given roadway would generally need to double in order to achieve a three dBA CNEL increase in ambient noise from traffic (City of Los Angeles, 2006). As discussed previously, a three dBA change in noise levels is considered to be a barely perceivable difference by the human ear. Thus, given the urbanized nature of the project area, the

addition of 1,100 vehicle trips on the local roadway network in the project vicinity on a given day where an event is held at the project site would not be sufficient to double the traffic volumes on the existing roadways. Thus, the traffic noise levels generated by the project on a day when an event is held at the project site would not result in a substantial permanent increase in ambient noise levels. Overall, these noise impacts would be less than significant.

d) **Less than Significant Impact with Mitigation Incorporation.** A significant impact may occur if the proposed project were to result in a substantial temporary or periodic increase in ambient noise levels above existing ambient noise levels without the proposed project. As defined in the *L.A. CEQA Thresholds Guide* threshold for construction noise impacts, a significant impact would occur if construction activities lasting more than one day would increase the ambient noise levels by 10 dBA or more at any off-site noise-sensitive location. In addition, the *L.A. CEQA Thresholds Guide* also states that construction activities lasting more than 10 days in a three-month period, which would increase ambient exterior noise levels by five dBA or more at a noise sensitive use, would also normally result in a significant impact.

As discussed in Question 12(a) above, noise levels associated with the project's construction activities would primarily affect the surrounding passive and active recreational park uses within Griffith Park, which would be the nearest noise-sensitive receptors to the project site. To identify the existing ambient noise levels at these receptors, noise measurements were taken at various locations surrounding the project site with a Metrosonics dB 3080 sound level meter. The measured noise levels are shown in **Table 2-11**.

TABLE 2-11
EXISTING NOISE ENVIRONMENTS AT PROJECT SITE

Location	Date and Time Period	$L_{eq} dBA$	$L_{max} dBA$	Noise Sources
Within the project site lawn area for the proposed new outdoor stage, at the center of the lawn area at the picnic tables.	11/19/13 11:30 – 11:45 A.M.	43.1	57.7	Various birds chirping; light wind breeze blowing through trees and dead leaves.
2. Near the segment of Bill Eckert (East) Trail located northwest of the project site lawn area for the proposed new outdoor stage.	11/19/13 11:49 A.M. – 12:04 P.M.	44.3	55.4	Hiker and local fauna, primarily birds and squirrels.
3. Segment of Old Zoo Trail located south of the project site lawn area for the proposed outdoor stage, which meanders to Fire Road.	11/19/13 12:11 – 12:26 P.M.	45.0	58.3	Walker with dog; overhead aircraft; squirrels.
Park Center area located east of project site.	11/19/13 12:41 – 12:56 P.M.	51.9	61.4	Constant noise from children at nearby large playground; congregation and drum circle across the tennis courts to the south; dog walkers on lawn close to tennis courts; constant traffic noise from Griffith Park Drive and Crystal Springs Drive; active sprinklers to the east; overhead aircraft.

Based on the existing daytime ambient noise measurements shown in Table 2-11, the noise levels near the project site area where the new outdoor stage is proposed are generally quieter, ranging from 43 to 45 dBA $L_{\rm eq}$, than the noise levels near the Park Center area of Griffith Park, which is around 52 dBA $L_{\rm eq}$. As discussed in Question 12(a) above and shown in Table 2-8, the construction noise levels forecasted at the nearest off-site sensitive receptors to the project site would range from approximately 57 dBA $L_{\rm eq}$, at the Merry-Go-Round located southeast of the project site, to approximately 71 dBA $L_{\rm eq}$, at the portion of the Bill Eckert (East) Trail located north of the project site. As such, the passive recreation areas located to the north, west, and south of the project site (i.e., areas of the Bill Eckert Trail, Old Zoo Trail, and Bee Rock Trail) would experience an increase in noise levels exceeding 10 dBA during project construction. The active use areas in the Park Center area of Griffith Park, which includes the southern part of Wilson Golf Course, Shane's Inspiration Playground, and the Merry-Go-Round would not experience an increase in daytime noise levels of more than 10 dBA from the project's construction activities.

However, the ambient daytime noise levels at these active use areas would increase by more than 5 dBA. As the construction activities associated with the proposed project would last more than 10 days in a three month period, a substantial temporary or periodic increase in ambient noise levels would occur at both the passive and active recreational park areas located in proximity to the project site, based on criteria established in the *L.A. CEQA Threshold Guide*. Overall, a potentially significant noise impact associated with a substantial temporary or periodic increase in ambient noise levels would occur at these sensitive receptors during project construction.

It should be noted, however, that any increase in noise levels at the identified noise-sensitive locations during construction at the project site would be temporary in nature, and would not generate continuously high noise levels, although occasional single-event disturbances from grading and construction are possible. Additionally, while the estimated construction noise levels at each of the off-site sensitive receptor locations would be the loudest when construction activities are occurring at an area within the project site that is nearest to the off-site location, the majority of the time noise levels at these off-site locations would be reduced as construction activities conclude or move to another more distant location of the project site.

As the proposed project would potentially generate high noise levels during the temporary construction period as a result of heavy machinery and equipment use, **Mitigation Measures Noise-1** through **Noise-9** would be implemented to reduce construction noise impacts to the maximum extent feasible, in accordance with the construction noise regulations of the LAMC. With the incorporation of Mitigation Measures Noise-1 through Noise-9 and compliance with the noise regulations in Section 41.40 of the LAMC, which would not permit construction activities to occur during recognized sleep hours for residences, the project's temporary construction noise impacts would be reduced to a less than significant level.

MM Noise-1: The project shall comply with the City of Los Angeles Municipal Code noise regulations, including Sections 41.40 and 112.05, and any subsequent noise regulations which regulate construction noise sources.

MM Noise-2: Construction activities shall be restricted to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and 8:00 a.m. to 6:00 p.m. on Saturday.

MM Noise-3: Construction activities shall be scheduled so as to avoid operating several pieces of heavy, diesel-powered equipment simultaneously, which causes high noise levels, to the extent feasible.

MM Noise-4: The use of those pieces of construction equipment or construction methods with the greatest peak noise generation potential shall be minimized. Examples include the use of jackhammers.

MM Noise-5: Noise and groundborne vibration construction activities whose specific location on the site may be flexible (e.g., operation of compressors and generators, cement mixing, general truck idling) shall be conducted as far as possible from the nearest noise- and vibration-sensitive land uses, and natural and/or manmade barriers (e.g., intervening construction trailers) shall be used to screen propagation of noise from such activities towards these land uses to the maximum extent possible.

MM Noise-6: The project contractor shall provide enclosures and/or mufflers for stationary equipment, shroud or shield impact tools, and use power construction equipment that is installed with noise shielding and muffling devices.

MM Noise-7: All construction truck traffic shall be restricted to truck routes approved by the City of Los Angeles Department of Building and Safety, which shall avoid residential areas and other sensitive receptors to the extent feasible.

MM Noise-8: The project shall comply with the City of Los Angeles Building Regulations Ordinance No. 178048, which requires a construction site notice to be provided that includes the following information: job site address, permit number, name and phone number of the contractor and owner or owner's agent, hours of construction allowed by code or any discretionary approval for the site, and City telephone numbers where violations can be reported. The notice shall be posted and maintained at the construction site prior to the start of construction and displayed in a location that is readily visible to the public.

MM Noise-9: Notices shall be posted at visitor entrances to Griffith Park that includes information about the estimated duration and hours of construction associated with the project.

With the implementation of Mitigation Measures Noise-1 through Noise-9, along with compliance with the noise regulations under Section 41.40 of the LAMC, impacts associated with construction-related noise levels would be less than significant.

e) **No Impact.** A significant impact may occur if a proposed project were located within an airport land use plan or within two miles of a public airport or public use airport where it could

potentially expose people residing or working in the project area to excessive noise levels. There are no airports within a two-mile radius of the project site, and the project site is not within any airport land use plan or airport hazard zone. The nearest airport from the project site is the Bob Hope Airport located in Burbank, which is approximately five miles to the northwest. Thus, the proposed project would not expose people to excessive noise levels associated with airport uses. No impact would occur.

f) **No Impact.** This question would apply to a project only if it were in the vicinity of a private airstrip and would subject area residents and workers to a safety hazard. The project site is not located in the vicinity of a private airstrip. As no such facilities are located in the vicinity of the project site, no impact would occur.

References

California Department of Transportation (Caltrans). 2013. Transportation and Construction Vibration Guidance Manual. September.

City of Los Angeles. 2006. L.A. CEQA Thresholds Guide.

City of Los Angeles, Municipal Code, Chapter XI (Noise Regulation), Available at < http://www.amlegal.com/nxt/gateway.dll/California/lamc/municipalcode?f=templates\$fn=default.ht m\$3.0\$vid=amlegal:losangeles_ca_mc>. Accessed December 4, 2013.

City of Los Angeles. 1999. Noise Element of the Los Angeles City General Plan. February.

Federal Highway Administration (FHWA). 2006. Roadway Construction Noise Model.

Federal Transit Administration (FTA). 2006. Transit Noise and Vibration Impact Assessment. May.

Population and Housing

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
13.	POPULATION AND HOUSING — Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
b)	Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?				
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				\boxtimes

Discussion

- a) **No Impact.** The proposed project involves the development of an open-air outdoor stage and associated improvements to the site to accommodate existing and potential future events, and does not include housing, commercial development, or infrastructure development that would directly or indirectly affect the number of residents or employees in the area. It would not contribute to the creation of additional housing or jobs in the City of Los Angeles, and no impact would occur.
- b) **No Impact.** There are no residential land uses on the project site, and the nearest residence is one mile to the south. The proposed project would not displace any housing or require the construction of replacement housing elsewhere. No impact would occur.
- c) No Impact. There are no residential land uses on the project site and the nearest residence is one mile to the south. The proposed project would not displace people or require the construction of replacement housing elsewhere. No impact would occur.

Public Services

Issue	nes (and Supporting Information Sources):	Potentially Significant Impact	0 0	Less Than Significant Impact	No Impact
14.	PUBLIC SERVICES — Would the	project:			
a)	Result in substantial adverse physical with the provision of, or the need for, altered governmental facilities, the co could cause significant environmental maintain acceptable service ratios, resperformance objectives for any of the services:	new or physically nstruction of which I impacts, in order to sponse times, or other			
	i) Fire protection?				
	ii) Police protection?				
	iii) Schools?				\boxtimes
	iv) Parks?				\boxtimes
	v) Other public facilities?				\boxtimes

Discussion

- a.i) **Less than Significant Impact.** The proposed project would be served by the City of Los Angeles Fire Department (LAFD). The Old Zoo area of Griffith Park is within the service area of the City of Los Angeles Fire Station 50, located at 3036 Fletcher Drive and approximately 2.8 miles southeast of the project site, as well as Fire Station 56, located at 2759 Rowena Avenue and approximately 2.3 miles to the south (LAFD, 2013). Additionally, the City of Glendale Fire Station 21 at 421 Oak Street is approximately 1.6 miles northeast of the project site (GFD, 2013). Construction of the proposed project would be short-term and would not result in an increase in population or adverse impacts that would require the need for additional fire protective services beyond what is already provided. Operation of the proposed project would not result in an increase in population or adverse impacts that would require the need for additional fire protective services beyond what is already provided, and would be constructed in accordance with applicable fire codes set forth in the 2010 California Fire Code and Article 7 – Fire Protection and Prevention of the Los Angeles Municipal Code. Use of the proposed project components would consist of serving existing formalized events and potential future stage performances, and enhanced access and mobility both along project pathways and to the area restroom for park visitors, and would not require additional fire protection services. Nearby local fire responders would be notified of any traffic control plans during construction that would require coordinated response routing during construction. Therefore, a less than significant impact would occur.
- a.ii) Less than Significant Impact. The existing ranger station in Griffith Park is approximately half a mile away from the proposed project, and the City of Los Angeles Police Department's (LAPD) Northeast Community Police Station, located at 3353 San Fernando Road, is approximately 2.5 miles southeast of the project site (LAPD, 2013). Construction of the proposed project would be short-term and would not result in an increase in population or adverse impacts that would require the need for additional police protective services beyond what is already provided. Operation of

the proposed project components would consist of serving existing formalized events and potential future stage performances, and enhanced access and mobility both along project pathways and to the area restroom for park visitors, and would not require additional police protection services. Nearby local police responders would be notified of any traffic control plans during construction that would require coordinated response routing during construction. Therefore, a less than significant impact would occur.

- a.iii) **No Impact.** The proposed project involves the construction of a permanent, open-air outdoor stage and associated improvements to the site, and would not introduce permanent inhabitants to the project area that would require the construction of additional schools. No impacts would occur.
- a.iv) **No Impact.** The proposed project involves the construction of an open-air outdoor stage in the Green Park Corridor of Griffith Park as well as associated improvements to the site, and would not introduce substantial employment or population growth to the project area that would require the construction of additional parks. The proposed stage and associated improvements would serve an identified need for regularly occurring events that are located on the project site, and would make them more accessible, safe, and monitored by RAP. No impacts related to recreational facilities would occur.
- a.v) **No Impact.** The proposed project involves the construction of a permanent, open-air outdoor stage and associated improvements to the site, and would not introduce permanent inhabitants to the project area that would require additional public facilities. No impacts would occur.

References

- Glendale Fire Department (GFD). Fire Stations and Facilities, available at http://fire.ci.glendale.ca.us/firestations.asp. Accessed November 22, 2013.
- Los Angeles Fire Department (LAFD). Fire Station Locator, available at http://lafd.org/find-a-fire-station/275-fire-station-locator. Accessed November 22, 2013.
- Los Angeles Police Department (LAPD). Northeast Community Police Station, available at http://www.lapdonline.org/northeast_community_police_station. Accessed November 22, 2013.

Recreation

Issue	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
15.	RECREATION — Would the project:				
a)	Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?				
b)	Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?			\boxtimes	

Discussion

- a) Less than Significant Impact. The proposed project has the potential to substantially increase the use of the existing Old Zoo Green Park Corridor picnic and recreation area. However, official uses of the proposed project stage must be permitted by RAP and access to the electrical switchboard will be restricted to permitted users. Thus far, RAP has only permitted three recurring events in the Old Zoo area (Shakespeare in the Park, Symphony in the Glen, and the Los Angeles Haunted Hayride), and would only permit new uses that would not substantially deteriorate the existing project environment or its surroundings in Griffith Park. Additionally, the proposed project would not create population growth that would increase the use of the park such that day-to-today use would substantially increase physical deterioration, or necessitate the construction or expansion of recreational facilities. Because the proposed project will provide enhanced facilities for existing users and the performing arts, while continuing to serve users of the Griffith Park trails and wildlands areas, the project is aligned with Goal 4 of the Griffith Park Master Plan which states that the "established civic function of Griffith Park should be continued and improved" (RAP, 1978). Therefore, less than significant impacts would occur.
- b) Less than Significant Impact. The proposed project would not displace recreational users from Griffith Park or the Old Zoo Green Park Corridor such that it would require the construction or expansion of recreational facilities elsewhere in Griffith Park or the City of Los Angeles. The construction of the proposed project itself is not expected to have an adverse physical effect on the environment or induce a net population increase that would place a demand on recreation and park services compared to the level of service available. Therefore, less than significant impacts would occur.

References

City of Los Angeles Department the Park Experience, 1978.	of Recreation and Parks (RAP), Griffith Park Master Plan – Improving
-	

Transportation and Traffic

Issu	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
16.	TRANSPORTATION AND TRAFFIC — Would the project:				
a)	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				
b)	Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?				
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				
e)	Result in inadequate emergency access?			\boxtimes	
f)	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?				

Discussion

A traffic study was prepared to evaluate the potential impacts to the traffic and circulation system that serve the project site (see **Appendix E**; KOA, 2013). Coordination with the City of Los Angeles Department of Transportation (LADOT) was conducted prior to initiation of the traffic analysis. Review for the proposed project is under the jurisdiction of LADOT's Metro Development Review. Per discussions with LADOT, it was determined that due to the lack of new trips generated by the project, as trip generating events are already held at the project site and the project would serve to accommodate those existing events, a Memorandum of Understanding (MOU) and traffic study would not be necessary for the proposed project. However, a circulation and parking demand assessment was conducted to confirm and document conclusions and provide sufficient information for this CEQA analysis. In addition to an evaluation of the circulation system, an evaluation of the parking capacity and demand were conducted as part of this effort.

The project site is located within the Old Zoo picnic area at 4730 Crystal Springs Drive, and is entirely within the Griffith Park limits. Griffith Park lies just west of I-5, roughly between Los Feliz Boulevard on the south and SR-134 on the north. Freeway access ramps are provided for access to and from Griffith Park on I-5 at Los Feliz Boulevard, Griffith Park, and Zoo Drive. The circulation and parking demand assessment study area includes the following six study intersections:

- 1. Zoo Drive & I-5 NB off-ramp/SR-134 EB on-ramp (unsignalized)
- 2. Western Heritage Way & Zoo Drive (unsignalized)
- 3. Crystal Springs Drive & Griffith Park Drive (unsignalized)

- 4. Crystal Springs Drive & Fire Road (unsignalized)
- 5. Crystal Springs Drive/Griffith Park Drive & I-5 NB off-ramps/SB on-ramps (unsignalized)
- 6. Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard (signalized)

All of the study intersections are all-way stop-controlled and internal to Griffith Park, except for the intersection of Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard, which is controlled by a traffic signal at the main entrance to Griffith Park. Figure 2-5 illustrates the locations of the study intersections.

Traffic impacts associated with the proposed project were analyzed at the study intersections for the weekday and Saturday evening peak period from 5:00 p.m. to 7:00 p.m. The analysis period was chosen for the inbound trips generated by the project that would occur during weekday evening commute times and on Saturday evenings when park users are departing the park at the end of the day.

The study included the analysis of the following traffic scenarios:

- Construction Period
- Existing Year 2013
- Existing with-Project
- Future (2015) without-Project
- Future (2015) with-Project

Traffic counts were collected during the weekday and weekend at the six study intersections on Saturday, November 16, 2013 and Thursday, November 21, 2013. The traffic counts were taken during the evening hours of 5:00 p.m. to 7:00 p.m. as the time period coincides with current and likely future inbound traffic flows for evening events, as well as evening weekday commute times and departure times for daily park users.

Determination of trip generation rates associated with the proposed project was based on capacity lawn seating for existing event peak attendance, primarily the Shakespeare in the Park event which exhibits the highest attendance at 2,500 persons per evening event that enter and leave at roughly the same time (the LA Haunted Hayride event can bring 4,700 visitors each evening; however they come and go throughout the evening with no set attendance peak). For the purpose of the circulation and parking demand assessment, trips generated for these current events as well as potential future new events were evaluated for an understanding of area roadway circulation during the overlap of peak traffic and inbound vehicle trips to events. Each individual future event at the project site is expected to remain at the same or similar intensity. Only the frequency of events could increase as a result of the proposed project.

Based on the intersection lane geometries and the existing traffic volumes, the volume-to-capacity ratios (V/C) and corresponding levels of service $(LOS)^4$ were determined for the six study intersections for the weekday and weekend evening period.

Level of service values range from LOS A to LOS F. LOS A indicates excellent operating conditions with little delay to motorists, whereas LOS F represents congested conditions with excessive vehicle delay. LOS E is typically defined as the operating "capacity" of a roadway. Please refer to Appendix E for full definition of LOS standards.

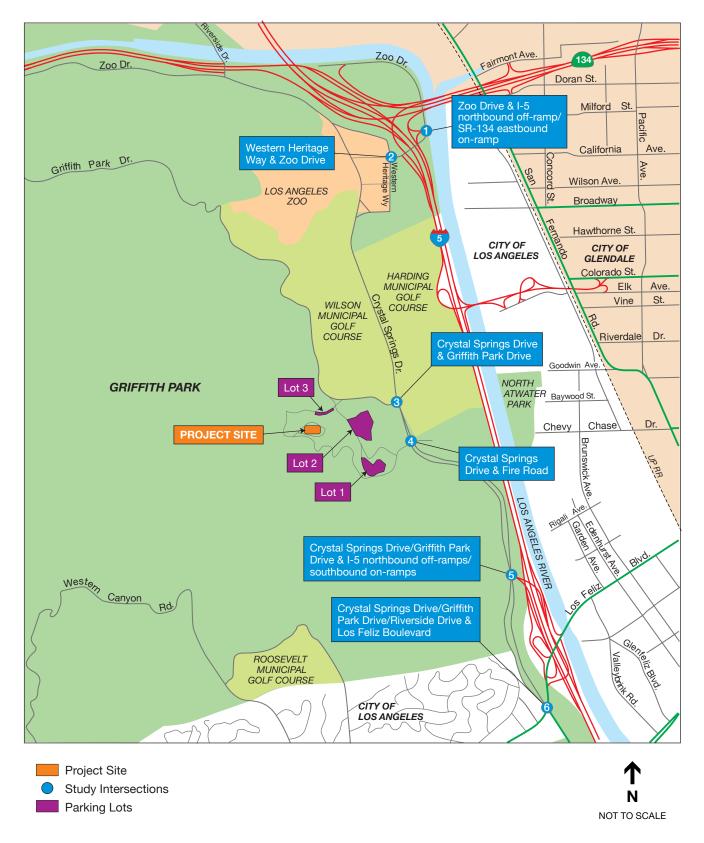


Table 2-12 shows that five of the six study intersections (the internal Griffith Park, unsignalized intersections) are currently operating at LOS C or better during the analyzed weekday and weekend evening peak hours. The unsignalized Western Heritage Way/Zoo Drive intersection is currently operating at LOS D in the weekday PM peak hour and operates at LOS A during the weekend PM peak hour.

TABLE 2-12
INTERSECTION PERFORMANCE – EXISTING CONDITIONS

		Evening Per			eak	
		Weel	kday	Weekend		
Stu	dy Intersections	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS	
1	Zoo Drive & I-5 NB off-ramp / SR-134 EB on-ramp*	9.8	A	9.5	A	
2	Western Heritage Way & Zoo Drive*	26.2	D	10.0	A	
3	Crystal Springs Drive & Griffith Park Drive*	11.2	В	8.5	A	
4	Crystal Springs Drive & Fire Road*	9.6	A	8.7	A	
5	Crystal Springs Drive / Griffith Park Drive & I-5 NB off-ramps / SB on-ramps*	9.5	A	8.6	A	
6	Crystal Springs Drive / Griffith Park Drive / Riverside Drive & Los Feliz Boulevard	0.716	C	0.648	В	

Established trip generation rate sources such as *Trip Generation*, 9th *Edition* (published by the Institute of Transportation Engineers or ITE) do not have local sources for trip generation rates, and rates for theaters are based on a very low number of surveys. The daily and peak hour trip generation totals for the proposed project were calculated using the following assumptions. The number of persons attending a typical event at the facility was defined by information provided by RAP, based on existing events:

- Typical capacity crowd of 2,500 persons
- Average number of persons per vehicle of 2.5
- Overlap of peak analyzed hour assumed to be 50 percent

The associated project trip generation estimates are summarized in **Table 2-13**. Proposed project events were calculated to generate approximately 1,100 daily trips, including 550 trips during the evening peak hour. Reverse trips for drop-offs were assumed to be 10 percent of the total trips. A majority were assumed to be inbound trips, taking place before the start of evening events. For events that might take place on weekdays, the same trip generation estimates were assumed for the analysis.

TABLE 2-13 PROJECT TRIP GENERATION

				Peak Hour	
Intensity	Unit	Daily Total	Total	In	Out
2500	Attendees	1,100	550	500	50

Trip distribution is the process of assigning the directions from which traffic would access a project site. Trip distribution is dependent upon the land use characteristics of the project, the local roadway network, and the general locations of other land uses to which project trips would originate or terminate. A trip distribution pattern was developed specifically for this project. Based on the trip generation and distribution assumptions described above, project traffic was assigned to the roadway system.

Parking Evaluation

In addition to analyzing traffic conditions, estimated Griffith Park parking area utilization by the proposed project was evaluated in the circulation and parking demand assessment. Three parking lots were included in this assessment (see Figure 1-2). Existing unmarked parking is provided in a paved but worn access road north of the site. There is currently capacity for an estimated 22 parking spaces provided, including one faded ADA stall. Hourly parking occupancy counts were collected on Thursday, November 21, 2013 and Saturday, November 23, 2013. The parking counts were taken at three existing surface lots that serve the project site and surrounding park uses between 4:00 p.m. to 9:00 p.m., as these are the hours that project trips would begin entering the park for events, and when peak parking demand would occur after the start of 7:00 p.m. events.

a,b) **Less than Significant Impact.** The proposed project would develop an open air outdoor stage at the existing Old Zoo picnic area that is intended to serve existing events that are held on a regular basis at the project site, as well as host potential future events to be permitted and approved by RAP on a case-by-case basis. The proposed project is designed to enhance accessibility to performers and visitors, and would include resurfacing an existing asphalt access road and parking area. While the actual number of events could increase from the three known events, each individual event is not anticipated to draw more than 2,500 visitors entering and leaving around the same time, based on a current understanding of the project site and capacity.

Traffic impacts are identified if a proposed project would result in a significant change in traffic conditions at a study intersection. A significant impact is typically identified if project-related traffic would cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. LADOT has established specific thresholds for project-related increases in the volume-to-capacity ratio (V/C) of signalized study intersections. Increases in peak-hour V/C ratios that are considered significant traffic impacts are shown below in **Table 2-14**.

TABLE 2-14
PEAK HOUR V/C IMPACT THRESHOLDS

Level of Service	Final V/C Ratio	Project Related v/c increase
С	> 0.701 - 0.800	Equal to or greater than 0.040
D	> 0.801 - 0.900	Equal to or greater than 0.020
E	> 0.901 - 1.000	Equal to or greater than 0.010
F	Greater than 1.000	Equal to or greater than 0.010

Impact significance standards are not defined for unsignalized intersections. Such intersections are only normally included in traffic study areas if they provide primary access to a site and analysis of traffic signal warrants may be necessary. Five of the six study intersections are unsignalized, and were included in the study area for this analysis due to their location along access points to parking areas (internal to Griffith Park) or at freeway or entrance/exit points to Griffith Park.

Construction Period

Construction of the proposed project would include minimal grading, alteration of the existing landscape, or disturbance. Therefore, truck trips required for large-scale grading and dirt hauling would not be generated during the construction period. The majority of construction activity would be for the trenching associated with relocation of on-site utility lines. Construction of the stage would require some minimal grading. A total of 130 to 150 truck trips would take place over the course of construction, based on estimates provided by RAP. These truck trips would be hauling decomposed granite, stage infrastructure, and other materials to the site. All construction activities would take place between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. Travel lanes would be maintained on all park roadways and surrounding streets throughout the construction period.

Construction truck trips would be routed directly to freeway routes from park roadways, whenever feasible. A truck routing plan would be submitted to LADOT as part of construction plan approvals. Construction truck and employee trips would not be generated during peak usage time of Griffith Park on weekends. Employee vehicle commute trips to and from the work site would be negligible in terms of potential impacts on the surrounding roadway network, due to the low-intensity nature of the construction work. Due to the characteristics of the anticipated truck and employee vehicle trips generated during the construction period, impacts of those trips are anticipated to be less than significant.

Existing and Existing with Project Scenarios

Traffic impacts for the project were determined by comparing the existing scenario conditions (with no event) to the existing with-project scenario conditions (with an event). The Western Heritage Way/Zoo Drive intersection is projected to decrease in operations from LOS D to LOS E in the weekday peak hour during an event (see **Table 2-15**). However, the Existing with Project scenario represents events that are currently held at the site (Shakespeare in the Park). Therefore, this decrease in LOS is likely occurring during several events that periodically occur now, and would continue to occur in the future during the same events. For special events, which happen at isolated times throughout the year, the LOS would be affected at this unsignalized intersection within Griffith Park. LOS would not be affected during non-event times, which is the majority of the time. The LOS E conditions represent near-capacity conditions, but the capacity of the intersection would not be exceeded. This is considered to be acceptable operations, as these traffic conditions exist with current events, and impacts would be less than significant.

TABLE 2-15
INTERSECTION OPERATIONS – EXISTING WITH-PROJECT

			Existing (2013) Conditions		Existing (2013 plus Project	
Study Intersections		Evening Peak Hour	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
1 Zoo Duiyo % I 5	Zoo Drive & I-5 NB off-ramp / SR-134 EB on-ramp*	Weekday	9.8	A	10.9	В
1 Z00 Drive & 1-3		Weekend	9.5	A	10.5	В
2 W . II .	Western Heritage Way & Zoo Drive*	Weekday	26.2	D	39.4	Е
2 Western Heritag		Weekend	10.0	A	11.7	В
2 0 10	Crystal Springs Drive & Griffith Park Drive*	Weekday	11.2	В	19.7	С
3 Crystal Springs		Weekend	8.5	A	10.6	В
4 0 110 1		Weekday	9.6	A	12.4	В
4 Crystal Springs	Drive & Fire Road*	Weekend	8.7	A	11.0	В
- Crystal Springs	Drive / Griffith Park Drive &	Weekday	9.5	A	11.3	В
	I-5 NB off-ramps / SB on-ramps*	Weekend	8.6	A	9.9	A
Crystal Springs	Drive / Griffith Park Drive / Riverside Drive &	Weekday	0.716	С	0.720	С
	Los Feliz Boulevard	Weekend	0.648	В	0.650	В

The intersection of Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard would operate at LOS C conditions both with and without an event, and the 0.004 change in the V/C ratio is not considered significant under typical traffic review by the LADOT. However, these events are current annual events that are held at the project site and would continue to occur in the future. The proposed project would potentially increase the frequency with which events could occur in the future; however, RAP would permit future events on a case-by-case basis and no future events have been identified at this time. The proposed project would not generate new trips, and as LOS C conditions represent good operating conditions (although other bottlenecks along the Los Feliz Boulevard corridor can cause peak-period congestion); thus impacts are considered less than significant under this scenario.

Future without and Future with Project Scenario

In order to evaluate the traffic impacts of future conditions when proposed project construction is complete, 2015 was used as the operational year as it represents the time when all proposed project improvements (Phase 1 and Phase 2) would be complete. In order to acknowledge regional population and employment growth, an ambient/background traffic growth rate of two percent per year was applied to the existing traffic counts. In addition to the two percent ambient traffic growth rate, traffic from other area projects (approved and pending developments) was also included as part of the year 2015 analysis. Ten area projects located in the study area were identified for inclusion in the traffic impact analysis. Area project traffic was distributed to the surrounding street system in the study area for the weekday and weekend evening peak hours. See

Table 2-16 for the Future Without Project anticipated scenario, which indicates that all intersections except the unsignalized Western Heritage Way/Zoo Drive in Griffith Park would operate at an LOS C or better during the weekday evening peak hours.

TABLE 2-16 INTERSECTION OPERATIONS – FUTURE WITH-PROJECT

			Future (2015) without Project		Future (2015 with Project	
Study Intersections		PM Peak Hour	V/C or Delay (sec.)	LOS	V/C or Delay (sec.)	LOS
1	Zoo Drive & I-5 NB off-ramp / SR-134 EB on-ramp*	Weekday	10.0	A	11.2	В
1		Weekend	9.7	A	10.7	В
2	Western Heritage Way & Zoo Drive*	Weekday	31.6	D	47.2	Е
		Weekend	10.3	В	12.1	В
	Crystal Springs Drive & Griffith Park Drive*	Weekday	11.9	В	23.1	С
3		Weekend	8.6	A	11.1	В
	Crystal Springs Drive & Fire Road*	Weekday	10.0	A	13.1	В
ļ		Weekend	8.9	A	11.3	В
	Crystal Springs Drive / Griffith Park Drive &	Weekday	9.7	A	11.7	В
5	I-5 NB off-ramps / SB on-ramps*	Weekend	8.7	A	10.2	В
	Crystal Springs Drive / Griffith Park Drive / Riverside Drive &	Weekday	0.756	С	0.760	C
Ó	Los Feliz Boulevard	Weekend	0.684	В	0.686	В

Baseline data applied to the analysis is from traffic counts conducted in November 2013. Conditions could be worse during the summer season due to a typical increase in activity in Griffith Park, but background traffic and freeway-related traffic could be also be lower. Therefore, the capacity of the analyzed locations is not expected to be exceeded during the summer months, under normal operating conditions of Griffith Park.

As shown in **Table 2-16**, vehicle traffic generated by proposed project events when added to the future 2015 year is not anticipated to result in a significant impact at any of the study intersections The unsignalized Western Heritage Way/Zoo Drive intersection is projected to worsen in operations from LOS D to LOS E in the weekday peak hour when events are scheduled to occur, similar to the existing condition. Like the Existing with Project conditions, the LOS E conditions represent near-capacity conditions, but capacity of the intersection is not exceeded. For special events (which would not be a daily occurrence), this would be acceptable operations, and these traffic conditions exist with current seasonal events.

As with the analysis of impacts with existing baseline conditions, the intersection of Crystal Springs Drive/Griffith Park Drive/Riverside Drive & Los Feliz Boulevard would operate at LOS C conditions, and the 0.004 change in the volume-to-capacity ratio over future baseline

conditions would not be considered significant under typical traffic review by the LADOT. As with the Existing with Project analysis, this impact is not considered significant for the proposed project.

Parking Impacts

Although not a requirement of CEQA, due to the location of the proposed project within Griffith Park and the nature of the events that are currently and would continue to be held at this location in the future, a parking assessment was conducted.

Table 2-17 provides a summary of parking demand within the three analyzed parking lots, with both background (general Griffith Park use) and project demand (during an event). Proposed project parking demand was assumed to be 50 percent or 425 vehicles in the 5:00 p.m. hour and 100 percent in the 6:00 p.m. and later hours. Demand was accommodated in this order in the calculations: Lot 3, Lot 2, and then Lot 1 (see Figure 2-5), as that is the expected order in which lots typically fill for current events, based on distance from the site entrance.

Overflow demand conditions are estimated to occur by the 6:00 p.m. hour for both weekday and weekend evening events. The overflow amount peaks at the 7:00 p.m. on weekday evenings at 433 vehicles, and peaks at the 6:00 p.m. hour on weekend evenings at 411 vehicles.

This overflow demand would be accommodated in other Park parking areas, as it is under current conditions. In these instances, vehicles are directed to park in other nearby parking lot areas and walk to the event site. In these instances, vehicles are directed to park in other nearby parking lot areas such as the Crystal Springs Picnic area and walk to the event site. Impacts to parking capacity would not be significant.

Congestion Management Plan

The Congestion Management Plan (CMP) for Los Angeles County requires that the traffic impact of individual development projects of potentially regional significance be analyzed. A specific system of arterial roadways plus all freeways comprises the CMP system. Per CMP Transportation Impact Analysis (TIA) Guidelines, a traffic impact analysis conducted the following:

- At CMP arterial monitoring intersections, including freeway on-ramps or off-ramps, where the proposed project will add 50 or more vehicle trips during either AM or PM weekday peak hours.
- At CMP mainline freeway-monitoring locations, where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

There are no CMP arterial monitoring stations within the general vicinity of the project site in Griffith Park. Therefore, no further analysis of CMP monitoring intersections is required. The nearest CMP mainline freeway monitoring locations to the project site are the I-5 Freeway south of the Colorado Boulevard Freeway Extension located directly east of the project site, and the

TABLE 2-17
PARKING LOT OCCUPANCY WITH PROJECT EVENTS

	Lot 1 South of Merry-Go-Round		Lot 2 North of Merry-Go-Round		Lot 3 North of / Adjacent to Project Site			TOTAL All Three Lots			
Time	Spaces	Occupancy	Regular	Handicap	Occupancy	Regular	Handicap	Occupancy	Spaces	Occupancy	Overflow*
Supply:	225	-	292	13	-	21	1	-	552	-	
Demand and O	Occupancy – Th	nursday 11/21/2013	3								
4:00 PM	20	8.9%	6	0	2.0%	7	0	31.8%	33	6.0%	0
5:00 PM	118	52.4%	292	13	100.0%	21	1	100.0%	445	80.6%	0
6:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	412
7:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	433
8:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	431
9:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	410
Demand and O	Occupancy – Sa	turday 11/23/2013	}								
4:00 PM	75	33.3%	35	0	11.5%	11	0	50.0%	121	21.9%	0
5:00 PM	168	74.7%	292	13	100.0%	21	1	100.0%	495	89.7%	0
6:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	411
7:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	402
8:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	400
9:00 PM	225	100.0%	292	13	100.0%	21	1	100.0%	552	100.0%	404

^{*}The estimated number of vehicles that must be parked in other parking areas, beyond those adjacent to the project site and the Carousel. Includes non-project (background) demand, and project demand of 450 vehicles in 5:00 PM hour and 900 vehicles in 6:00 PM and later hours.

SR-134 Freeway east of Central Avenue located about 1.5 miles east of the project site. Based on the proposed project trip generation estimates, the proposed project would add 150 new trips per hour in either direction to one of these freeway monitoring locations, at the SR-134 Freeway east of Central Avenue. Based on further analysis of this CMP freeway monitoring station, the additional trips onto this mainline location would not create a significant impact. In addition, the trips are already occurring when special events are held at the project site. This does not represent a new impact based on additional generated trips.

- No Impact. The proposed project would develop a low profile open air stage within Griffith Park with maximum heights of 26 to 28 feet with no permanent electronic equipment or materials that could potentially affect air traffic patterns. The nearest public airport is Bob Hope Airport, which is more than five miles northwest of the project site. Therefore the proposed project would have no impacts related to a potential change in air traffic patterns, including either an increase in traffic levels or a change in location, which results in substantial safety risks.
- d) Less than Significant Impact. The proposed project would provide for a permanent outdoor open air stage at a location within Griffith Park that currently hosts several annual events that hosts up to 2,500 people in an evening event. Access to the site is provided off of a badly damaged asphalt road off of Griffith Park Drive. The proposed project includes repaving this access road, as well as resurfacing existing pathways and providing for enhanced ADA access to and from the event location. Emergency access to the site and the current and potential future events would not be significantly affected by implementation of the proposed project, and impacts would be less than significant.
- e) Less than Significant Impact. The proposed project would utilize existing established access to and from the project site. No hazards as it relates to proposed project design or incompatible features would be introduced. As described above, the proposed project would result in enhanced parking and ADA access by resurfacing existing damaged access. Therefore, impacts would be less than significant.
- f) Less than Significant Impact. The project study area is served by Metro Local 96, which provides service between downtown Los Angeles to Burbank via Griffith Park Drive/Crystal Springs Drive, at a service frequency of 30 minutes. In the evening, at approximately 6:30 p.m. for northbound service and at 7:00 p.m. for southbound service, service terminates in Griffith Park. For weekend service, Local 96 operates approximately every 50 minutes, and service terminates within Griffith Park after 6:00 p.m. The proposed project is not anticipated to add new transit riders to existing transit facilities, primarily because the local bus line serving Griffith Park does not operate on park roadways into the evening hours. Therefore, impacts related to public transit are considered less than significant.

Both Class II (striped bicycle lanes) and Class III (signed routes in shared travel lanes) bicycle facilities are provided within Griffith Park along Crystal Springs Drive/Zoo Drive. A bicycle lane, which is a dedicated striped lane, is provided from the northern entrance of the Park on Forest Lawn Drive to Griffith Park Drive. South of Griffith Park Drive, the bike lane is replaced by a bike route designated by signs for use by both bicyclists and motor vehicles. The proposed

project would not affect any of the existing bike routes in the project vicinity, and would in fact enhance accessibility to the project site by repaving the existing access and parking road to the project site. Impacts related to pedestrian/bicycle access would be less than significant.

References

KOA Corporation. *Draft Griffith Park Outdoor Performance Center Traffic Circulation and Parking Study*. December 3, 2013.

Utilities and Service Systems

Issue	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
17.	UTILITIES AND SERVICE SYSTEMS — Would the project:				
a)	Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c)	Require or result in the construction of new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e)	Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				

Discussion

- a) Less Than Significant Impact. The proposed project involves the construction of an open-air outdoor stage and associated improvements to serve existing uses and future events. Construction of the proposed project would not produce wastewater and the proposed project would not require a discharge permit from the Regional Water Quality Board (RWQCB). However, the existing restroom would be refurbished to comply with ADA access standards, and potential future events may generate a minimal increase in wastewater entering the local treatment system; however, this would not conflict with or exceed existing wastewater treatment requirements and impacts related to wastewater treatment. Impacts would be less than significant.
- b) **Less than Significant Impact.** The proposed project involves the construction of a permanent, open-air outdoor stage and associated improvements to the site to serve existing uses and future events. As stated in 17(a), while the refurbished restrooms and potential increase in future events on site may cause a minimal increase in the wastewater generated on site, the proposed project would not require or result in the construction of water or wastewater treatment facilities, or the expansion of existing facilities. Impacts would be less than significant.
- c) Less than Significant Impact. The proposed project involves the construction of a permanent, open-air outdoor stage and associated improvements to the site. Construction of the proposed project is not anticipated to affect stormwater drainage in the project area. Newly constructed facilities, e.g. the stage and the relocated picnic tables, would be located on concrete pads, and the backstage area may include permeable pavers. Although certain components of the proposed

project would increase impervious surfaces in the project vicinity and may generate additional runoff (specifically the stage, new picnic table pads, and ADA path), this amount would be negligible. Because the site is less than one acre, a NPDES permit for construction is not required. However, standard erosion control measures would be implemented during construction to reduce short-term runoff and the existing storm water drainage facilities in the area are adequate to serve the proposed project. As a result, no new or expanded stormwater drainage infrastructure would be required from implementation of the proposed project and impacts would be less than significant.

- d) **Less than Significant Impact.** The proposed project involves the construction of a permanent, open-air outdoor stage and associated improvements to the site, and would not require additional irrigation or future water entitlements during construction or operation. The proposed project will not require new or expanded water entitlements. Thus, impacts would be less than significant.
- e) **Less than Significant Impact.** The proposed project involves the construction of a permanent, open-air outdoor stage and associated improvements to the site. Although one component of the project involves improvements to the onsite restroom, the proposed project would not increase wastewater generation to such a degree that it would exceed the capacity of the wastewater treatment facilities serving the project area, and impacts would be less than significant.
- Less than Significant Impact. The nearest landfill serving the project site is the Scholl Canyon Landfill located at 3001 Scholl Canyon Road in the City of Glendale. The landfill has a remaining capacity of 9.9 million cubic yards and a maximum permitting daily of 3,400 tons per day. The landfill will cease to operate in April 2030 (CalRecycle, 2013). Solid waste generated from the construction activities would not be substantial and would not place a great demand on the land fill. Operation and use of the proposed project, including the three annual events and any potential events in the foreseeable future, are not expected to generate a significant increase in additional solid waste such that the landfill that serves the project site would have insufficient capacity to accommodate it. Therefore, impacts to solid waste facilities would be less than significant.
- g) **Less than Significant Impact.** Construction and operation of the proposed project would be in accordance with federal, state, and local statutes and regulations regarding solid waste, and would result in minimal solid waste that would be hauled offsite to a local landfill in compliance with the aforementioned applicable statutes. Thus, impacts would be less than significant.

References

CalRecycle. Facility/Site Summary Details: Scholl Canyon Landfill, available at http://www.calrecycle.ca.gov/SWFacilities/Directory/19-AA-0012/Detail/. Accessed on November 21, 2013.

Mandatory Findings of Significance

Issue	es (and Supporting Information Sources):	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
18.	MANDATORY FINDINGS OF SIGNIFICANCE — Would the project:				
a)	Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				
b)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c)	Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?				

Discussion

a) Less than Significant with Mitigation Implementation. The proposed project would have the potential to impact sensitive wildlife species and natural communities during construction activities. However, with the incorporation of Mitigation Measures Biology-1 through Biology-6, potential impacts to biological resources would be reduced to less than significant levels. Construction and operation of the proposed project would not degrade the quality of the environment at the project site and vicinity; would have no direct or indirect effects to fish and wildlife species; have direct or indirect effects on plant and animal communities; or restrict the range of rare or endangered plants or animals.

The project would involve some excavation and grading activities that could potentially unearth prehistoric archaeological resources. Such actions could unearth, expose, or disturb subsurface paleontological, archaeological, historical, or Native American resources that were not observable on the surface. However, with the incorporation of Mitigation Measures Cultural-1 through Cultural-4, potential impacts to paleontological or cultural resources that represent major periods of California history or prehistory would be reduced to less than significant levels.

b) Less Than Significant Impact. A cumulative impact could occur if the project would result in an incrementally considerable contribution to a significant cumulative impact in consideration of past, present, and reasonably foreseeable future projects for each resource area. Because the majority of project impacts are construction related, the cumulative study area is generally confined to the areas adjacent to the project site, which include open spaces and other active use areas of Griffith Park. There are several past, present, and reasonably foreseeable projects identified in the Griffith Park area that are listed in Table 2-18. The closest project is the LADWP Water Recycling Project, located approximately 1,000 feet southeast of the project site.

The projects identified in the following table are characterized mainly as roadways, public recreational, and commercial in nature.

The project's proposed stage and associated infrastructure improvements would not impact any scenic vistas, State scenic highways, or generate any significant light and glare impacts; changes to the visual character of the site are localized, and cumulative aesthetic impacts would not occur. The project area does not include any agricultural or mineral resources that could be impacted; and the project would have no effect on land use and land planning or population and housing. As a result, cumulative impacts related to these resources would not occur.

TABLE 2-18 CUMULATIVE PROJECTS LIST

Project	Location	Land Use
River Supply Conduit Improvement Project Lower Reach	Zoo Drive, north of Griffith Park	Roadway; Park
Riverside Drive Bridge Widening and Rehabilitation Project	Bette Davis picnic area on the northern boundary of Griffith park	Park; Public Facility
Headworks Reservoir Project	6001 West Forest Lawn Drive	Park
North Atwater Non-Motorized Bridge Project	3900 Chevy Chase Dr	Park
LADWP Power Reliability Improvement Project	Along Los Feliz Blvd	Roadway; Commercial
Griffith Park Baseball Fields	Crystal Springs Picnic Area of Griffith Park	Park; Public Facility
LADWP Water Recycling Project	Griffith Park, between Fire Rd and Vista del Valle Dr	Park; Public Facility
BOE Interceptor Sewer	Intersection of Crystal Springs Rd and the 5 freeway exit	Roadway; Park
2014/15 Special Olympics Games Preparation	Griffith Park	Park; Public Facility
Public Storage Facility	5500 San Fernando Rd	Other
Condominiums	124 W Colorado St	Residential
Hotel	315 S Brand St	Hotel
Mixed-Use Development	3901 San Fernando Rd	Residential, Retail, Office, Live/Work
New Life Vision Church	2861 W Los Feliz Blvd	Institutional
Kaiser Permanente	4905 W Hollywood Blvd	Office
Mixed-Use Development	4900 W Hollywood Blvd	Residential, Retail
Restaurant and Deli	5500 W Hollywood Blvd	Restaurant, Commercial
High Line West	5550 W Hollywood Blvd	Residential, Retail

In addition, air quality, greenhouse gas, hazardous material, recreation, water quality and traffic impacts that are generated by construction activities and operational use of the proposed project would not be significant, and most would be short-term and limited by construction phasing and the overall short construction period. The proposed project would have less than cumulatively considerable impacts to public services, recreation, and utilities. The minimal air quality emissions, noise, hazardous materials, traffic and hydrology impacts generated by the project

would also be less than cumulatively considerable due to the location of the project and limited construction activities and duration. Furthermore, impacts related to biological resources and cultural resources and noise impacts would be less than cumulatively considerable with implementation of identified Mitigation Measures Biology-1 through Biology-6 and Mitigation Measures Cultural-1 through Cultural-4. Therefore, the proposed project would not result in any impacts that would be individually limited, but cumulatively considerable resulting from the proposed project. When the potential impacts of the proposed project are viewed in connection with past and ongoing projects, its impacts would not be cumulatively considerable.

c) Less than Significant. The proposed project has the potential to degrade the quality of the park visitors' experience during project temporary construction activities. However, construction activities would be short in duration and would not restrict visitor use, or impede the types of uses that occur in the project area (namely passive recreational uses such as picnicking and hiking on nearby trails, as well as nature walks by wildlife enthusiasts). Construction would be phased to occur outside of peak summer attendance, and Phase 1 would be completed before June 2014, ensuring that Shakespeare in the Park would not be affected. Phase 2 would begin after the LA Haunted Hayride event ends on October 31, and would be finalized before the following season of Shakespeare in the Park would begin.