

**Findings of Fact and Statement of Overriding Considerations
for Certification of a
Final Environmental Impact Report**

**Los Angeles Zoo and Botanical Gardens
Vision Plan Project**

SCH. No. 2019011053



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TABLE OF CONTENTS

Chapter	Page
1.0 INTRODUCTION	1-1
1.1 INTRODUCTION	1-1
1.2 ORGANIZATION OF CEQA FINDINGS OF FACT	1-2
1.3 RECORD OF PROCEEDINGS	1-3
2.0 PROJECT DESCRIPTION	2-1
2.1 PROJECT LOCATION AND SETTING	2-1
2.2 PROJECT OBJECTIVES	2-1
2.3 SUMMARY OF THE PROPOSED PROJECT	2-3
2.4 DISCRETIONARY ACTION	2-3
3.0 CEQA REVIEW AND PUBLIC OUTREACH	3-1
4.0 FINDINGS OF NO ENVIRONMENTAL IMPACT	4-1
4.1 AESTHETICS AND VISUAL RESOURCES – Scenic Resources Along a Scenic Highway	4-1
4.2 AGRICULTURAL AND FORESTRY RESOURCES	4-1
4.3 BIOLOGICAL RESOURCES – Loss of Riparian or Sensitive Natural Community / Effects on Wetlands / Conflict with Habitat Conservation Plan or Natural Community Conservation Plan	4-2
4.4 GEOLOGY AND SOILS – Soil Capacity Supporting Wastewater Disposal Systems	4-2
4.5 HAZARDS AND HAZARDOUS MATERIALS – Private Air Strips and Public Airports	4-3
4.6 HYDROLOGY AND WATER QUALITY – Housing within a 100-Year Flood Hazard Area / Expose People or Structures to Seiche, Tsunami, or Mudflow	4-3
4.7 LAND USE AND PLANNING – Division of an Established Community	4-4
4.8 MINERAL RESOURCES	4-4
4.9 NOISE – Private Air Strip or Public Airport	4-4
4.10 POPULATION AND HOUSING	4-5
4.11 PUBLIC SERVICES – Libraries	4-5
5.0 FINDINGS OF LESS THAN SIGNIFICANT ENVIRONMENTAL EFFECTS WITHOUT MITIGATION	5-1
5.1 AESTHETICS AND VISUAL RESOURCES – Scenic Vistas	5-1

5.2	AIR QUALITY – Odors	5-2
5.3	CULTURAL AND TRIBAL CULTURAL RESOURCES – Historical Resources	5-2
5.4	ENERGY – Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources	5-3
5.5	GEOLOGY AND SOILS – Rupture of a Known Earthquake Fault / Soil Erosion or Loss of Topsoil	5-4
5.6	GREENHOUSE GAS EMISSIONS – Direct or Indirect Generation of Significant GHG Emissions.....	5-4
5.7	HAZARDS AND HAZARDOUS MATERIALS - Transport, Use, or Disposal of Hazardous Materials / Emergency Response and Evacuation.....	5-5
5.8	HYDROLOGY AND WATER QUALITY – Runoff	5-6
5.9	NOISE – Vibration and Groundborne Noise Levels.....	5-7
5.10	RECREATION – Construction or Expansion of Recreational Facilities	5-7
5.11	UTILITIES – Wastewater / Solid Waste.....	5-8
5.12	WILDFIRE – Runoff, Post-fire Slope Instability, or Drainage Changes.....	5-10
5.13	SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES.....	5-11
5.14	GROWTH INDUCING IMPACTS	5-12
6.0	FINDINGS OF LESS THAN SIGNIFICANT ENVIRONMENTAL EFFECTS WITH MITIGATION	6-1
6.1	AESTHETICS AND VISUAL RESOURCES – Light and Glare Effects.....	6-1
6.2	AIR QUALITY – Consistency with Applicable Air Quality Plan / Nonattainment Pollutants / Expose Sensitive Receptors to Pollutant Concentrations	6-4
6.3	BIOLOGICAL RESOURCES – Effects on Special-Status Species or Habitat / Interfere with Wildlife Movement or Corridors / Conflict with Local Policies or Ordinances Protecting Biological Resources	6-6
6.4	CULTURAL AND TRIBAL CULTURAL RESOURCES – Archaeological Resources / Human Remains / Tribal Cultural Resources	6-17
6.5	ENERGY – State or Local Plan for Renewable Energy or Energy Efficiency Consistency	6-21
6.6	URBAN FORESTRY RESOURCES – Local Tree Policy or Ordinance Consistency / Loss of Urban Forest.....	6-26
6.7	GEOLOGY AND SOILS – Seismic Related Ground Failure / Landslides / Unstable Geologic Unit / Paleontological Resources	6-30
6.8	GREENHOUSE GAS EMISSIONS – Consistency with Plans, Policies, or Regulations Adopted for the Purpose of Reducing GHG Emissions	6-35

6.9	HAZARDS AND HAZARDOUS MATERIALS – Release of Hazardous Materials / Hazardous Materials within One-quarter Mile of a School / List of Hazardous Materials Sites	6-45
6.10	HYDROLOGY AND WATER QUALITY – Water Quality / Groundwater Supplies and Recharge / Drainage Patterns	6-48
6.11	LAND USE AND PLANNING – Conflict with Land Use Plan, Policy, or Regulation	6-56
6.12	NOISE – Ambient Noise Levels	6-75
6.13	PUBLIC SERVICES – Fire Protection / Police Protection / Schools.....	6-78
6.14	RECREATION – Deterioration of Parks and Recreational Facilities.....	6-79
6.15	TRANSPORTATION – Project Consistency with Applicable Transportation Plans, Policies, and Regulations / Hazardous Design Features / Emergency Access	6-80
6.16	UTILITIES – Water / Stormwater Drainage	6-83
6.17	WILDFIRE – Emergency Response and Emergency Evacuation Plans / Exacerbated Wildfire Risk / Associated Infrastructure.....	6-87
7.0	FINDINGS OF SIGNIFICANT ENVIRONMENTAL EFFECTS	7-1
7.1	AESTHETICS AND VISUAL RESOURCES – Consistency with Applicable Zoning and Land Use Regulations.....	7-1
7.2	TRANSPORTATION – VMT.....	7-9
8.0	FINDINGS OF PROJECT ALTERNATIVES	8-1
8.1	NO PROJECT ALTERNATIVE.....	8-1
8.2	ALTERNATIVE 1 – Reduced Project Alternative.....	8-1
8.3	ALTERNATIVE 2 – Multi-modal Transportation Alternative.....	8-3
9.0	FINDINGS ON MITIGATION MONITORING AND REPORTING PROGRAM.....	9-1
10.0	FINDINGS ON CHANGES TO THE DRAFT EIR AND RECIRCULATION	10-1
10.1	CHANGES TO THE DRAFT EIR	10-1
10.2	FINDINGS REGARDING FINAL EIR	10-1
11.0	STATEMENT OF OVERRIDING CONSIDERATIONS	11-1
11.1	SIGNIFICANT UNAVOIDABLE IMPACTS	11-1
11.2	PROJECT BENEFITS.....	11-1
11.3	CONCLUSION	11-2

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1.0 INTRODUCTION

1.1 INTRODUCTION

The California Environmental Quality Act (CEQA) (Public Resources Code Section 21081) and the CEQA Guidelines (Section 15901) require that no public agency approve or carry out a project for which an Environmental Impact Report (EIR) has been certified which identifies one or more significant effects of the project on the environment unless both of the following occur:

- a) The public agency makes one or more of the following possible findings with respect to each significant effect:
 1. Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
 2. Changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
 3. Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.
- b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

As required by CEQA, the City of Los Angeles (City) finds that the Final EIR for the Los Angeles Zoo and Botanical Gardens (Zoo) Vision Plan Project (proposed Project) reflects the City's independent review and judgment. In accordance with the provisions of CEQA and the CEQA Guidelines, the City adopts these Findings as part of its certification of the Final EIR.

In conjunction with its adoption of these Findings, the City has reviewed and considered a substantial amount of material, including, but not limited to, the following:

- Los Angeles Zoo and Botanical Gardens Vision Plan Project Initial Study;
- Los Angeles Zoo and Botanical Gardens Vision Plan Project and all appendices and technical reports thereto;
- Los Angeles Zoo and Botanical Gardens Vision Plan Project Draft EIR; and
- Los Angeles Zoo and Botanical Gardens Vision Plan Project Draft Final EIR, including Public and Agency Comments and Responses to Comments.

1.2 ORGANIZATION OF CEQA FINDINGS OF FACT

The content and format of this CEQA Findings of Fact and Statement of Overriding Considerations is designed to meet the latest CEQA Statutes and Guidelines. The document is organized into the following sections:

Chapter 1, Introduction, outlines the organization of this document and identifies the location and custodian of the record of proceedings.

Chapter 2, Project Description, describes the location and existing setting, objectives, characteristics, and the required permits and approvals for the proposed Project.

Chapter 3, CEQA Review and Public Outreach, describes the steps the City of Los Angeles Bureau of Engineering (BOE) has undertaken to comply with the CEQA Guidelines as they relate to public input, review, and participation during the preparation of the Draft and Final EIRs.

Chapter 4, Findings of No Environmental Effects, provides a summary of those environmental issue areas where no reasonably foreseeable impacts would occur.

Chapter 5, Findings of Less Than Significant Environmental Effects without Mitigation, provides a summary of impacts determined to be below the threshold of significance without the incorporation of mitigation measures.

Chapter 6, Findings of Less Than Significant Environmental Effects with Mitigation, provides a summary of potentially significant environmental effects for which implementation of identified feasible mitigation measures would avoid or substantially reduce the environmental effects to less than significant levels.

Chapter 7, Findings of Significant Environmental Effects, provides a summary of potentially significant environmental effects for which no feasible mitigation measures are identified or for which implementation of identified feasible mitigation measures would not avoid or substantially reduce the environmental effects to less than significant levels.

Chapter 8, Findings Regarding Project Alternatives, provides a summary of the alternatives considered for the proposed Project.

Chapter 9, Findings on Mitigation Monitoring and Reporting Program, provides a brief discussion of the project's compliance with the CEQA Guidelines regarding the adoption of a program for reporting and monitoring.

Chapter 10, Findings on Changes to the Draft EIR and Recirculation, provides a summary of the changes to the Draft EIR in response to public comments received and findings that changes to the Draft EIR do not require recirculation of the Draft EIR for public review.

Chapter 11, Statement of Overriding Considerations, presents the Statement of Overriding Considerations for the significant adverse effects that cannot be avoided, even with the implementation of proposed mitigation measures.

1.3 RECORD OF PROCEEDINGS

The documents and other materials that constitute the record of proceedings upon which project approval is based are located at 1149 South Broadway, Suite 600, Los Angeles. The City of Los Angeles Department of Public Works (LADPW), BOE, Environmental Management Group is the custodian of such documents and other materials that constitute the record of proceedings. The record of proceedings is provided in compliance with Public Resources Code Section 21081.6(a)(2) and CEQA Guidelines Section 15091(e).

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2.0 PROJECT DESCRIPTION

2.1 PROJECT LOCATION AND SETTING

The proposed Project is located at 5333 Zoo Drive in the City, in the southern portion of Los Angeles County. The 142-acre Project site is in the northeastern portion of Griffith Park, at the base of the foothills of the Santa Monica Mountains. The Project site encompasses the entire property of the existing Zoo and is generally bordered by the Golden State Freeway or Interstate (I-) 5 to the east and the Ventura Freeway or California State Route (SR-) 134 to the north. The Los Angeles River also borders the north and east boundaries of Griffith Park before continuing south and eventually flowing into the Pacific Ocean at Long Beach.

The Zoo is bordered to the north by undeveloped land within Griffith Park, to the east by the Autry Museum of the American West, to the south by Wilson and Harding Golf Courses, and to the west by Mineral Wells Picnic Area, as well as Condor and Mineral Wells hiking trails. Existing development, animal facilities, and walkways are concentrated within the Zoo's central and eastern 102 acres, which support animal facilities, visitor-serving facilities and the Zoo's pedestrian routes. These facilities are generally developed on level and gently sloping valley bottom areas. Service and conservation uses are concentrated on steeper slopes.

Approximately 31 acres of the Zoo are undeveloped supporting a mix of non-native woodland and native habitats. Undeveloped hillsides in the Zoo support coastal sage scrub, chaparral, riparian, and southern oak woodland plant communities that are typical in the interior mountain ranges of Southern California. Ash, Southern California black walnut, oak, sycamores, willows, and mulefat can also be found in ravines, along with chaparral. The Zoo also includes several extensive groves of eucalyptus in undeveloped areas.

A total of 2,345 parking spaces for guests and Zoo employees are provided at the Zoo's main parking and an additional parking lot located south of Crystal Springs Drive, adjacent to the North Hollywood High School Zoo Magnet Center. Up to 166 parking spaces for Zoo staff is also available at several small parking areas along the perimeter roads and a secured lot. The Project site is also fully serviced by utility infrastructure which currently operates at capacity.

2.2 PROJECT OBJECTIVES

Broadly, the Vision Plan would serve as the blueprint for transformation and modernization of the Zoo over the next 20 years. The City has identified 14 objectives for the proposed Project:

1. **Animal Welfare Care.** Provide an environment for all the animals that call the Zoo home to thrive through development of state-of-the art exhibits and animal care facilities that meet or exceed Association of Zoos and Aquariums (AZA), United States Department of Agriculture and state of the industry care standards, as well as upgraded Zoo service centers and veterinary facilities that ensure optimal animal welfare.

- 2. Increase and Modernize Zoo Exhibit Space.** Increase and modernize Zoo exhibit space to maximize animal habitat areas, create infrastructure for innovative and proactive animal care and welfare practices, and represent ecosystems and lifecycles by transforming underutilized and underdeveloped areas of the Zoo.
- 3. Conservation.** Advance conservation efforts by developing facilities and programs that will support conservation actions to protect and grow animal populations and habitats.
- 4. Learning and Education.** Advance public engagement efforts by developing facilities and experiences that promote lasting relationships with nature, life-long learning, opportunities for outreach beyond the Zoo's campus, and a civic culture of conservation.
- 5. Immersive Visitor Experience.** Design Zoo exhibits and visitor spaces to provide nature-based experiences that allow Zoo visitors to engage with environments and animals in seamless, immersive spaces.
- 6. World Class Destination.** Enhance Zoo facilities and operations to increase Zoo visitation, create a sense of place that transports visitors to other parts of the world, and generate revenue to support operation of the Zoo, capital improvements, and conservation programs.
- 7. Visitor-serving Amenities.** Provide a variety of visitor-serving amenities including food and retail establishments, a range of resting and gathering places, and special event centers that will attract visitors and support a range of special events within the Zoo.
- 8. Efficient Circulation System.** Develop an efficient and accessible internal loop circulation system that maximizes access to Zoo exhibits for visitor comfort, operational efficiency, and safety, providing dedicated pathways for pedestrians, trams, and emergency and service vehicles.
- 9. Accessibility.** Design the Zoo to serve the needs of a diverse population of all ages and abilities through incorporation of Americans with Disabilities Act of 1990 (ADA) pathways, alternative travel options in the Zoo such as aerial or ground-based trams, and exhibit features and facilities for families and those with special needs, along with a cohesive approach to wayfinding.
- 10. Multi-modal Access.** Improve multi-modal accessibility and regional transportation to the Zoo, including the provision of alternative transportation options to reduce congestion and improve the circulation of vehicle traffic.
- 11. Visual Appearance.** Improve the visual characteristics of the Zoo through architectural design, landscaping, lighting, pedestrian-oriented improvements, and incorporation of symbolic design, and create features that reflect architecture of animal habitat theme areas and the Zoo history.
- 12. Capital Improvements.** Identify and provide for implementation of capital improvements and investments that are needed to ensure that future demands on the Zoo's infrastructure will be successfully accommodated.
- 13. Environmental Sustainability.** Incorporate sustainable design practices into Zoo facilities to ensure resource conservation consistent with City's Sustainable City pLAN, One Water L.A. Plan, and Resilient Los Angeles Plan.

- 14. Operational Excellence.** Provide facilities and resources that allow Zoo staff and emergency responders to safely and efficiently support Zoo operations, including safe and quick vehicle access to all parts of the Zoo, as well as ensuring the Zoo is clean, well-maintained, supportive of the organizational culture, and provides high quality customer service.

2.3 SUMMARY OF THE PROPOSED PROJECT

The proposed Project would guide physical transformation and improvement of facilities and operations of Zoo. The Vision Plan would serve as the blueprint for transformation and modernization of the Zoo over the next 20 years. The Vision Plan's proposed infrastructure and animal facility improvements prioritize animal welfare, conservation, sustainability, and community engagement. The Vision Plan also addresses operational deficiencies at the Zoo, including the quality and extent of animal habitat within exhibits such as the current lion exhibit area. The Vision Plan also addresses the currently constrained visitor circulation system and missing linkages between animal facilities, and a limited range of visitor-serving facilities. The Vision Plan would guide comprehensive animal facility improvements and capital projects to upgrade Zoo facilities and circulation to ultimately create a transformational zoo for the City, including expansion of the current elephant area by approximately 200 percent.

2.4 DISCRETIONARY ACTION

An EIR is a public document used by a public agency to analyze the significant environmental effects of a proposed Project, to identify alternatives, and to disclose possible ways to reduce or avoid environmental damage (CEQA Guidelines, Section 15121). As an informational document, an EIR does not recommend for or against approving a project. The main purpose of an EIR is to inform governmental decision makers and the public about potential environmental impacts of the project.

The EIR prepared for the Vision Plan Project will be used by the City, as the lead agency under CEQA, in making decisions with regard to the adoption of the proposed Project and the subsequent construction and development of the proposed Project, described above. Various permits and approvals would be required in order to approve and implement the proposed Project. These may include but may not be limited to, the following:

City of Los Angeles Department of Building and Safety

- Building Permit
- Grading Permit

City of Los Angeles

- Vision Plan adoption
- Certification of the Final EIR
- Permits for disposal of materials and haul routes

- Use of Public Property Permit
- Oversize Load Permit
- Tree Removal Permit

City of Los Angeles Department of Transportation

- Traffic Management Plan (TMP)

State of California, Los Angeles Regional Water Quality Control Board

- National Pollutant Discharge Elimination System (NPDES) Permit for stormwater discharge

3.0 CEQA REVIEW AND PUBLIC OUTREACH

BOE has complied with the CEQA Guidelines during the preparation of the EIR for the proposed Project. The Draft EIR, dated December 2020, was prepared after soliciting input from the public, responsible agencies, and affected agencies through the EIR scoping process. The “scoping” of the EIR was conducted utilizing several of the tools available under CEQA. In accordance with Section 15063 of the CEQA Guidelines, a Notice of Preparation (NOP) and Initial Study were prepared and distributed to the State Clearinghouse, responsible agencies, affected agencies, and other interested parties on January 24, 2019. The NOP was posted in the Los Angeles County Clerk’s office for 45 days, as well as the City Clerk’s office. Two public scoping meetings were held at Witherbee Auditorium at 5333 Zoo Drive on February 7 and February 9, 2019 to solicit input on the proposed Project. The NOP was also submitted to the California Office of Planning and Research (OPR; State Clearinghouse) to officially solicit participation in determining the scope of the EIR. Information requested and input provided during the NOP comment period regarding the scope of the EIR are included in the EIR.

The Draft EIR was circulated for a 60-day public review and comment period starting on December 17, 2020 and concluding on February 15, 2021. The timeframe of the public review period was identified in the Notice of Availability (NOA) attached to the Draft EIR. The public review period was conducted pursuant to CEQA and its implementing guidelines. The purpose of the public review period was to provide interested public agencies, organizations, and individuals the opportunity to comment on the contents and accuracy of the document. The Draft EIR and the Notice of Completion were distributed to OPR, and the State Clearinghouse. Relevant agencies also received copies of the document. The NOA was distributed to relevant legislators, agencies, and community stakeholders, and individuals. The NOA informed them of where they could view the document and how to comment. An electronic copy of the Draft EIR document was made available online at the BOE’s website. The NOA was filed by BOE at the City Clerk’s office. The NOA was also filed with the County Clerk on December 17, 2020. Due to the ongoing public health crisis associated with the COVID-19 pandemic, a virtual public meeting was held during the Draft EIR public review period to solicit comments from interested parties on the content of the Draft EIR. Information regarding the virtual public meeting was included in the NOA, which was made available online, as described above. The meeting was held on January 13, 2021. A Final EIR has been completed and includes written comments received by mail and electronic mail on the Draft EIR, oral comments received at the Draft EIR virtual public meeting, written responses to the written and oral comments received, and the associated changes to the Draft EIR.

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4.0 FINDINGS OF NO ENVIRONMENTAL IMPACT

Based on the Final EIR and the record of proceedings, the City finds that the proposed Project would have no impacts associated with agriculture and forestry resources; mineral resources; population and housing. Because the finding of No Impact was made in the Initial Study and because no further information was received or identified during the scoping process, these environmental issue areas were not carried forward for detailed analysis in the EIR.

Further, based on the Initial Study, Draft EIR, Final EIR, and the record of proceedings, the City finds that the proposed Project would have no impacts, direct, indirect, or cumulative, associated with aesthetics and visual resources (scenic resources along a scenic highway); biological resources (loss of riparian or sensitive natural communities, effects on wetlands, and conflicts with Habitat Conservation Plan/Natural Community Conservation Plan); geology and soils (soil capacity supporting wastewater disposal systems); hazards and hazardous materials (private air strips and public airports); hydrology and water quality (housing within a 100-year flood hazard area and expose people or structures to seiche, tsunami, or mudflow); land use and planning (division of an established community); noise (private air strip or public airport); and public services (libraries).

4.1 AESTHETICS AND VISUAL RESOURCES – SCENIC RESOURCES ALONG A SCENIC HIGHWAY

There are no existing designated scenic highways adjacent to or with views of the Zoo. The nearest designated scenic roadway is a segment of Riverside Drive within the City that extends from Stadium Road to Los Felix Boulevard, approximately 2.3 miles south of the Project site, just south of Griffith Park. The Project site is in the northeast corner of Griffith Park. Neither the Project site nor its immediate surroundings are visible from this City-designated scenic roadway. Therefore, the proposed Project would not result in significant impacts to scenic resources located along or viewed from a scenic highway.

4.1.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts to aesthetic and visual resources related to scenic resources located along or viewed from a scenic highway.

4.2 AGRICULTURAL AND FORESTRY RESOURCES

The Project site does not contain traditional forestry resources or lands which are classified as Prime Farmland, Unique Farmland, Farmland of statewide Importance, or designated for agricultural or timber extraction. There are no lands within the City under the Williamson Act contracts. The proposed Project does not propose any actions that would substantially affect such resources within the City or surrounding region. Therefore, implementation of the proposed Project would not result in impacts to these resource areas.

4.2.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts relating to agricultural and traditional forestry resources.

4.3 BIOLOGICAL RESOURCES – LOSS OF RIPARIAN OR SENSITIVE NATURAL COMMUNITY / EFFECTS ON WETLANDS / CONFLICT WITH HABITAT CONSERVATION PLAN OR NATURAL COMMUNITY CONSERVATION PLAN

No riparian habitat or other sensitive communities are noted on the site, and no other sensitive species associated with a unique, special, or sensitive habitat were identified or considered to have potential to exist onsite. While the Los Angeles River is located approximately 900 feet from the Project site, this portion of the river is concrete-lined and provides no riparian habitat or other sensitive communities. Further, there are no waters of the U.S. or State of California or associated wetlands onsite. There are no existing adopted habitat conservation plans, natural community conservation plan, or other approved local, regional, or state habitat conservation plan which apply to the Zoo. Implementation of the Project would have no impact on biological resources related to these issues.

4.3.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts to biological resources relating to riparian or sensitive natural communities, wetlands, or consistency with a Habitat Conservation Plan/Natural Community Conservation Plan.

4.4 GEOLOGY AND SOILS – SOIL CAPACITY SUPPORTING WASTEWATER DISPOSAL SYSTEMS

The proposed Vision Plan does not propose the construction or use of a septic tank or alternative wastewater disposal system. All sewage generated onsite would be conveyed to the City's North Outfall Sewer from a system of sewer lines beneath the Zoo. Therefore, the proposed Project would not result in a significant impact due to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems.

4.4.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts to geology and soils relating to soil capacity supporting wastewater disposal systems.

4.5 HAZARDS AND HAZARDOUS MATERIALS – PRIVATE AIR STRIPS AND PUBLIC AIRPORTS

The nearest public airport to the Project site is the Bob Hope Airport (BUR), located approximately 4.4 miles northwest of the Zoo. Los Angeles International Airport (LAX) is located approximately 15 miles southwest. The Zoo is not within the Runway Protection Zones or the Area of Influence of either BUR or LAX according to the Los Angeles County Airport Land Use Plan. Further, there are no private airstrips in the vicinity of the Project site. The Dreamworks Heliport Glendale is a private heliport located approximately 0.5 miles north of the Project site; however, this heliport is located outside of the Federal Aviation Administrations recommended 280-foot Helicopter Protection Zone. Therefore, the proposed Project would not result in a safety hazard for people visiting or working at the Zoo.

4.5.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts to hazards and hazardous materials relating development in proximity to a private air strip or public airport.

4.6 HYDROLOGY AND WATER QUALITY – HOUSING WITHIN A 100-YEAR FLOOD HAZARD AREA / EXPOSE PEOPLE OR STRUCTURES TO SEICHE, TSUNAMI, OR MUDFLOW

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the Project site is not located within a 100-year flood hazard area and does not contain any zones that are subject to flood or mudflow hazards. The nearest Special Flood Hazard Area to the Project site is the portions of the Burbank Channel and the Los Angeles River in the City of Burbank, approximately 1.25 miles north of the Project site. The Project site is not located in proximity to a dam that would have the potential to cause flooding in the Project vicinity. Therefore, the proposed Project would not place within a 100-year flood hazard area structures that would impede or redirect flood flows.

In addition, according to the FEMA Flood Insurance Rate Map, the Project site does not contain any zones that are subject to tsunami, seiche, or mudflow hazards. The Project site is not located in proximity to a large body of water. The only body of water within Griffith Park is the Hollywood Reservoir, located approximately 2.5 miles southwest of the Gottlieb Animal Health and Conservation Center at the Zoo. There are several mountains that are located between the reservoir and the Project site. Therefore, the Project site is not located in an area that is susceptible to seiches or tsunamis. The Project site is not mapped as having the potential for landslides or mudflows. Therefore, the proposed Project would not expose people or structures to inundation by seiche, tsunami, or mudflow.

4.6.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts to hydrology and water quality relating to development of housing within a 100-year flood hazard area or exposure of people or structures to seiche, tsunami, or mudflow hazards.

4.7 LAND USE AND PLANNING – DIVISION OF AN ESTABLISHED COMMUNITY

The proposed Vision Plan would not physically divide an established community. Most construction associated with the Project would occur within the existing footprint of the Zoo, with additional improvements to the parking and circulation immediately surrounding the Zoo property. The Project's proposed uses would be consistent with existing land uses at the Zoo. Therefore, the proposed Project would not physically divide an established community.

4.7.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts to land use and planning relating to division of an established community.

4.8 MINERAL RESOURCES

There are no mineral extraction operations within the Project site or anywhere in the nearby vicinity. The Project site is not designated as an existing mineral resources extraction area by the State, and because the Project site is already highly disturbed, the potential for unknown, recoverable mineral resources to occur on-site is low. Therefore, implementation of the proposed Project would not result in impacts to mineral resources.

4.8.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts relating to mineral resources.

4.9 NOISE – PRIVATE AIR STRIP OR PUBLIC AIRPORT

The nearest public airport to the Project site is the BUR, located approximately 4.4 miles northwest of the Zoo. LAX is located approximately 15 miles southwest. The Zoo is not within the Runway Protection Zones or the Airport Influence Area of either BUR or LAX according to the Los Angeles County Airport Land Use Plan. Further, there are no private airstrips near the Project site. The Dreamworks Heliport Glendale is a private heliport located approximately 0.5 miles north of the Project site; however, this heliport is located outside of the Federal Airport Authority's recommended 280-foot Heliport Protection Zone. Therefore, the proposed Project would not

expose people working in or visiting the Project site to excessive noise levels from aircraft operations.

4.9.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable noise impacts relating to development in proximity to a private air strip or public airport.

4.10 POPULATION AND HOUSING

The proposed Project would not have the potential for significant impacts associated with population and housing. The proposed Project would not result in the demolition, construction, or renovation of any residential uses or units within the City or surrounding cities of Burbank and Glendale. As such, the proposed Project would not directly increase the population of these cities. The proposed Project would, however, provide an unknown amount of short-term employment opportunities during construction as well as approximately 531 new full-time equivalent (FTE) jobs over the course of Vision Plan implementation. Short-term Project construction employment would draw from the existing regional workforce and would not significantly increase the population of these cities. Although a majority of Zoo employees would be anticipated to come from the existing regional workforce, the proposed Project could attract workers from other localities, increasing the resident population of those cities. However, assuming in the unlikely worst case all 531 new FTE employees would move from outside the region to live near the Zoo, these increases would represent less than 0.5 percent of the existing population of the cities of Los Angeles, Burbank, and Glendale, and therefore would not be considered to result in substantial population growth. Therefore, potential impacts of the proposed Project associated with population and housing would be considered less than significant.

4.10.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts relating to population and housing.

4.11 PUBLIC SERVICES – LIBRARIES

The Project has no residential components and would not accommodate additional population. The proposed Project would not substantially increase the local residential population or induce growth. The Project may create additional new jobs that would be filled by residents in the region. Any growth in population induced by the proposed Project is expected to be insubstantial and is not anticipated to directly increase demand for library services within the City and surrounding area. Further, no public libraries exist on the Project site or immediate vicinity that would be affected by the Project. Therefore, there would be no impacts to libraries.

4.11.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in no reasonably foreseeable impacts to public services relating to libraries.

5.0 FINDINGS OF LESS THAN SIGNIFICANT ENVIRONMENTAL EFFECTS WITHOUT MITIGATION

Based on the Final EIR and the record of proceedings, the City finds that the proposed Project would have less than significant environmental effects associated with aesthetics and visual resources (scenic vista, visual character); air quality (odors); cultural and tribal cultural resources (historical resources); energy (wasteful, inefficient, or unnecessary consumption of energy resources); geology and soils (rupture of a known earthquake fault and soil erosion or loss of topsoil); greenhouse gas (GHG) emissions (significant direct or indirect GHG emissions); hazards and hazardous materials (transport, use, or disposal of hazardous materials and effects on emergency access or response); hydrology and water quality (runoff); noise (vibration and groundborne noise levels); recreation (construction or expansion of recreational facilities); utilities (wastewater and solid waste); and wildfire (runoff, post-fire slope instability, or drainage changes).

The City also finds the proposed Project would not cause cumulatively considerable impacts to aesthetics and visual resources (scenic vistas); air quality (odors); cultural and tribal cultural resources (historic resources); energy (wasteful or inefficient use of resources); geology and soils (rupture of a known earthquake fault and soil erosion or loss of topsoil); GHG emissions (significant direct or indirect GHG emissions); hazards and hazardous materials (transportation, use, or disposal of hazardous materials and effects on emergency access or response); hydrology and water quality (runoff); noise (vibration and groundborne noise levels); recreation (construction of recreational facilities); utilities (wastewater and solid waste disposal); and wildfire (runoff, post-fire slope instability, or drainage changes). Each of these issues, as well as the potential irreversible environmental changes and growth inducing impacts associated with the proposed Project are discussed in this section.

5.1 AESTHETICS AND VISUAL RESOURCES – SCENIC VISTAS

There are areas within Griffith Park surrounding the Project site that provide undesignated scenic vistas due to the expansive, panoramic views of the natural terrain, more distant urban landscapes, and background of the San Gabriel Mountains. The views afforded from public trails within Griffith Park meet the City's definition of scenic views and thus are considered scenic vistas in this analysis. While existing public roadways such as Zoo Drive, Crystal Springs Road, and Griffith Park Drive offer scenic segments and some views of the Zoo, these generally do not include scenic vistas across the Zoo. The Zoo is most visible and lies within a greater viewshed from specific locations or whole segments of nearby trails, primarily Skyline Trail, Condor Trail, and North Trail. The proposed Project would have several components that would be visible from scenic vistas within Griffith Park, including from popular hiking trails uphill from the Zoo. Impacts to scenic vistas or views from vegetation removal and diminishment of the urban forest canopy would also be short-term, as the Project proposes extensive landscaping and tree replanting. Despite the addition of several taller structures or features existing distant views of Griffith Park

or urban environment from surrounding trails would not be substantially altered. Overall, the proposed Project would have a less than significant impact on existing scenic views and vistas.

5.1.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would result in less than significant aesthetics impacts to scenic vistas.

5.2 AIR QUALITY – ODORS

Potential sources that may produce objectionable odors during construction activities include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the Project site and would be temporary in nature and would not persist beyond the termination of construction activities. Facilities existing at the Zoo include animal habitats characterized by natural odors. With the exception of expansion of animal habitats and development of new animal exhibits and enclosures, implementation of the Vision Plan would not substantially change any land use designation or facility operations under existing conditions and would not introduce a new substantial source of odors onto the Project site. Impacts from odors would be less than significant.

5.2.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would result in less than significant air quality impacts related to odorous emissions.

5.3 CULTURAL AND TRIBAL CULTURAL RESOURCES – HISTORICAL RESOURCES

The Zoo is not locally designated as a historic resource and is considered a non-contributing component to Griffith Park's designation as a Los Angeles Historical-Cultural monument and California Register of Historical Resource. A historical resources assessment prepared for the proposed Project found that neither the Zoo or individual buildings, structures, or features of the Zoo are eligible for historic listing or designation at federal, state, or local levels. The property is not known to have had a significant association with an important event or trend in local, state, or national history. The Project site does not have any known association with prominent individuals or groups. The Project site does not contain any historical resources as defined by CEQA, and therefore there is no potential for impacts to historical resources as a result of the proposed Project. Therefore, Project impacts to historic resources would be less than significant.

5.3.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would result in less than significant cultural

resource impacts to historical resources and would not cause cumulatively considerable historical resources impacts.

5.4 ENERGY – WASTEFUL, INEFFICIENT, OR UNNECESSARY CONSUMPTION OF ENERGY RESOURCES

Construction of the proposed Project would utilize fuel-efficient equipment consistent with state and federal regulations, such as fuel efficiency regulations in accordance with the California Air Resources Board (CARB) Pavley Phase II standards, the anti-idling regulation in accordance with Section 2485 in Title 13 of the California Code of Regulations (CCR), and fuel requirements in accordance with Section 93115 in Title 17 of the CCR, and would comply with state measures to reduce the inefficient, wasteful, and unnecessary consumption of energy. Therefore, expenditures of energy resources during construction of the proposed Project would result in a less than significant impact. Implementation of the near-term improvements would generate a maximum potential annual increase in energy consumption of approximately 2,555 mega-watt hours (MWh) of electricity, 2,500 million British thermal units (MBTU) of natural gas, 565,554 gallons of gasoline, and 102,581 gallons of diesel fuel after accounting for annual average ongoing construction transportation fuels use. The increase in electricity and natural gas use would not place an undue burden on Los Angeles Department of Water and Power (LADWP) or Southern California Gas Company (SoCalGas) resources, respectively, and would represent a nominal increase above existing demands.

Implementation of long-term Project improvements would increase daily vehicle trips to between 2,673 and 4,095, and annual vehicle miles traveled (VMT) would be approximately 39,084,812, representing an annual increase of 16,895,528 VMT. The proposed Project in 2040 would generate a maximum potential annual increase in energy consumption of approximately 3,407 MWh of electricity, 2,513 MBTU of natural gas, 659,598 gallons of gasoline, and 6,817 gallons of diesel fuel. The increase in electricity and natural gas use would not place an undue burden on LADWP or SoCalGas resources, respectively, and would represent a nominal increase above existing demands.

All new and redevelopment activities would be subject to the provisions of the LA Green Building Code, Leadership in Energy and Environmental Design (LEED) Silver design standards and Best Management Practices (BMPs), and LA's Green New Deal pertaining to energy efficiency for non-residential buildings. Ultimately, the proposed Project would reduce facility electricity demand by up to 50 percent through the incorporation of photovoltaic solar panels producing on-site renewable energy. Overall, the proposed Project in 2040 would not result in a wasteful, inefficient, or excessive expenditure of energy resources and this impact would be less than significant.

5.4.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would result in less than significant energy impacts related to wasteful, inefficient, or unnecessary consumption of energy resources.

5.5 GEOLOGY AND SOILS – RUPTURE OF A KNOWN EARTHQUAKE FAULT / SOIL EROSION OR LOSS OF TOPSOIL

No known faults traverse the Project site. All new structures constructed at the Zoo would be required to adhere to the most current building standards of the Los Angeles Municipal Code (LAMC) and Los Angeles Building Code, which adopts California Building Code (CBC) standards. Compliance with the LAMC, Los Angeles Building Code, and CBC and adherence to the design recommendations detailed in site-specific geotechnical studies would reduce impacts related to seismic ground shaking to less than significant. Further, redevelopment of existing outdated facilities under the proposed Project would construct new buildings that meet the most current and stringent seismic requirements, thus reducing the level of risk within each planning area and at the Zoo as a whole, compared to existing conditions.

Project construction, particularly within the existing undeveloped areas of the Zoo, would involve excavation activities that would disturb and loosen soils, allowing for possible erosion, although the temporary nature of these activities would not be expected to result in substantial erosion. The proposed Project would comply with the Regional Water Quality Control Board's (RWQCB's) NPDES, prepare a Storm Water Pollution Prevention Plan (SWPPP), and implement BMPs, to control the discharge of pollutants, including sediment, into the local surface water drainages. All Project components would also be required to comply with the Stormwater and Urban Runoff Pollution Control Ordinance (Chapter VI Article 4.4 of the LAMC) to address soil erosion, including topsoil mobilization and loss, and urban runoff. Under this ordinance, construction projects in the City must follow additional specific BMPs. With adherence to existing state and local regulations that address soil erosion, impacts potentially resulting from erosion or loss of topsoil would be less than significant.

5.5.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would result in less than significant geology and soils impacts to rupture of a known earthquake fault and soil erosion.

5.6 GREENHOUSE GAS EMISSIONS – DIRECT OR INDIRECT GENERATION OF SIGNIFICANT GHG EMISSIONS

Implementation of the near-term improvements (Phase 1-3) would generate an unmitigated net increase of 7,783.5 metric tons of carbon dioxide equivalents (MTCO₂e) annually relative to existing conditions in the CEQA baseline year of 2019. By 2030 it is estimated that improvements to the Zoo under the proposed Project would support approximately 2,808,150 visitors annually (approximately 7,715 persons per day on average) and 990 full- and part-time employees, resulting in a service population (employees plus daily visitors) of approximately 8,705 persons. Based on the Zoo's estimated annual GHG emissions and future service population, the Project would generate approximately 2.7 MTCO₂e/person/year and a net 2.3 MTCO₂e/person/year. The proposed Project's total and net estimated GHG emissions following implementation of proposed

near-term improvements would fall within the Association of Environmental Professional's recommended adjusted GHG efficiency metric thresholds that were selected for this analysis. Implementation of the complete Project would increase annual GHG emissions by approximately 9,716.4 MTCO₂e from 2019, exceeding the South Coast Air Quality Management District's (SCAQMD's) interim Tier 3 GHG emissions threshold of 3,000 MTCO₂e/year. Based on the Zoo's estimated annual GHG emissions and future service population, the proposed Project would generate a total of approximately 2.7 MTCO₂e/person/year and a net increase of 2.4 MTCO₂e/person/year. Though the Project's estimated efficiency metric (based on total Project emissions and service population) would equal the established efficiency target, the Project's GHG emissions are based on conservative estimates that do not account for proposed Project design features as well as likely GHG efficiency improvements that would be implemented in the future and would contribute to GHG emissions reductions. As such, it is reasonable to assume the Project's GHG emissions would in actuality be further below the GHG efficiency metric threshold than what has been conservatively estimated for the Project. The Project's contributions to cumulative impacts to global climate change as a result of implementation of near-term improvements, when compared against numerical thresholds, are therefore considered less than significant.

5.6.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would not directly or indirectly generate GHG emissions that would result in a significant impact to the environment and would result in less than significant impacts.

5.7 HAZARDS AND HAZARDOUS MATERIALS - TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS / EMERGENCY RESPONSE AND EVACUATION

Project construction activities would be temporary in nature occurring over 10 to 20 years, and would use hazardous materials typical of construction (i.e., fuel and lubricants for construction equipment, paving materials for road construction). These hazardous materials would potentially include gasoline, diesel fuel, lubricants, solvents, and other standard materials used for construction activities. Operation of the proposed Project would continue to include existing routine cleaning and maintenance procedures using chemicals such as cleaners, paints, solvents, vehicle fuels, etc. Additionally, the Zoo would continue to utilize potentially hazardous materials (i.e., pesticides, herbicides, etc.) for landscaping and cleaning purposes. Potentially hazardous materials that would be used and stored in the Zoo would be typical of those found currently at the Zoo (e.g., paints, fuels/lubricants, cleaning solvents, adhesives, sealers, and pesticides/herbicides) and would be consistent with what already occurs in the Zoo. Additionally, operation of the designated service and administrative support area at the southern boundary of the Zoo would provide a visitor-restricted area for hazardous materials and waste storage, rather than several locations throughout the Zoo. These materials are not classified as acutely

hazardous and the transport, use, and disposal of construction-related hazardous materials would comply with applicable laws and regulations such as those established by the California Department of Toxic Substances Control, U.S. Environmental Protection Agency, SCAQMD, Los Angeles County, and the City to protect the public health and safety. In addition to routine use, if necessary, appropriate permits, worker training, and agency inspections would be obtained and provided. Implementation of standard good housekeeping measures, BMPs, site maintenance and security precautions, as well as compliance with standards and regulations would ensure potential impacts related to the routine transport, use, or disposal of hazardous materials are less than significant.

The proposed Project does not propose changes, obstructions, or reconfigurations to public evacuation routes, so the Project would not result in physical interference or impairment to implementation of this existing emergency and evacuation plan. Emergency access would be maintained during implementation of near-term (Phases 1-3) and long-term (Phases 4-7) improvements to the maximum extent feasible during construction and impacts related to emergency access would be less than significant. Therefore, Project implementation would not impair implementation or physically interfere with an adopted emergency response plan or emergency evacuation plan and overall impacts would be less than significant.

5.7.1 Findings

Based on the Initial Study, Draft EIR, and the whole of the record, the City finds that the proposed Project would result in less than significant hazards and hazardous materials impacts related to transport, use, disposal, and release of hazardous materials and emergency response and evacuation.

5.8 HYDROLOGY AND WATER QUALITY – RUNOFF

The 19 percent increase in impervious surfaces associated with new exhibits, walkways and parking would increase stormwater runoff at the Zoo. However, the Project includes implementation of a proposed stormwater collection system and low impact development (LID) features that would substantially reduce surface runoff and peak flow, creating a minor beneficial impact to water quality, as the reduced volume and velocity of stormwater flows would reduce the rate of soil erosion and sedimentation. Therefore, implementation of the stormwater collection system would result in beneficial and less than significant impacts to polluted runoff.

5.8.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and whole of the record, the City finds that the proposed Project would result in less than significant impacts to hydrology and water quality relating to runoff.

5.9 NOISE – VIBRATION AND GROUNDBORNE NOISE LEVELS

Construction related vibration would not generate significant impacts since vibration generating equipment would typically be located more than 25 feet away from off-site structures and would not exceed 0.3 inches per second threshold at this distance.

Potential blasting (if required) would generate vibration levels that would not exceed the 98 vibration decibels (VdB) damage criterion or the 83 VdB annoyance criterion. Anticipated blasting air overpressure levels would not exceed the 133 decibel (dB) damage criterion or the 120-dB annoyance criterion. Therefore, impacts associated with blasting vibration and air overpressure would be less than significant.

As the Zoo has done in the past during construction of prior improvements, measures to protect Zoo animals may include their temporary relocation away from construction activities, closure of exhibits, or even the transfer of animals to other zoos. Accommodations specific to each animal would be developed during the planning process for each phase and details would be included in final construction plans. With continued management of each species of animal exhibited or rehabilitated at the Zoo and required compliance with the Animal Welfare Act (AWA), there would be no adverse effects on Zoo animals from vibration during construction of the Vision Plan.

The proposed Project would not include an operational source of vibration that would generate vibration levels that exceed 75 VdB. Therefore, impacts associated with operational vibration would be less than significant. Impacts associated with pile driving vibration would not exceed the 0.3 inches per second damage criterion at any off-site uses therefore, impacts associated with pile driving vibration would be less than significant.

5.9.1 Findings

Based on the Initial Study, Draft EIR, and the whole of the record, the City finds that the proposed Project would result in less than significant vibration impacts.

5.10 RECREATION – CONSTRUCTION OR EXPANSION OF RECREATIONAL FACILITIES

Currently, the Zoo serves as a unique recreational resource and attraction within the City that serves approximately 1.8 million residents and visitors of the City each year. Under the proposed Project, redevelopment and expansion of existing facilities and the construction of new facilities within the Zoo would improve the recreational value and opportunities provided by the Zoo. As proposed, this includes development of new overnight special event spaces, picnic spots, rock climbing, playgrounds (i.e., Nature Play Park), and a public park to be located within the Zoo's northern parking adjacent Zoo Drive. This public park would be separate from the Zoo and accessible at no cost to the public.

Implementation of the proposed Project and the construction of associated recreational improvements would result in impacts to the environment. These impacts are discussed in further detail in within each resource analysis presented in Section 3, *Environmental Impact Analysis and*

Mitigation of the Final EIR and below in Sections 6.0, *Findings of Less than Significant Environmental Effects with Mitigation* and 7.0, *Findings of Significant Environmental Effects*. For instance, implementation of the Project has potential to adversely affect air quality, biological resources, cultural and tribal resources, energy, the City's urban forest, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, utilities, and wildfire. As identified in those other sections, with implementation of the regulations and measures identified in those other sections of this EIR, impacts from the construction or expansion of recreational facilities would be less than significant.

5.10.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in less than significant impacts to recreation resources related to the construction or expansion of recreational facilities.

5.11 UTILITIES – WASTEWATER / SOLID WASTE

Vision Plan implementation would generate increased stormwater within the Zoo property due to the addition of impervious (i.e., paved) surfaces and would generate increased sewage flows within the Zoo's sewer system and the City's North Outfall Sewer due to the addition of a new employees and an annual increase of approximately 1.2 million new visitors.

Under Vision Plan implementation, sewer water from the Zoo and the Gene Autry Museum would be conveyed via the proposed sanitary sewer lines to the North Outfall Sewer via the existing 6-inch sewer force main that runs across the Zoo's north parking lot to the point of connection with the North Outfall Sewer located northeast of the parking lot. From the City's North Outfall Sewer, wastewater would be directed to the Los Angeles-Glendale Water Reclamation Plan (LAGWRP), treated, and discharged to the Los Angeles River similar to existing conditions for all sewer water within the Zoo. Animal pools at the Zoo would continue to be drained by the animal pond water system, which conveys pond water to the Zoo's Wastewater Facility for desilting and grit removal. Similar to existing conditions, pool water from the Zoo's Wastewater Facility would be discharged to the North Outfall Sewer and conveyed to the LAGWRP for treatment. There is no proposed increase in the total number of pools requiring periodic draining and refilling, requiring water demand and treatment at the Zoo Wastewater Facility.

The proposed Project would involve the installation of new sewer utility lines to replace the existing 50-year-old sanitary sewer system. Project implementation would generate increased stormwater and sewage flows within the Zoo. In addition, the Project would involve installation of a stormwater collection system that would capture, convey, and store rainfall from the Zoo and the 79.7-acre hillside area adjacent to the Zoo for reuse onsite as irrigation water. This system would be designed to capture a total capacity of 6.8 million gallons, which is equivalent to the 2-year, 24-hour storm event. Flows greater than a 2-year, 24-hour storm event would be directed to the Zoo Wastewater Facility via an overflow line that would run beneath the Zoo's parking lot. Following desilting and grit removal at the Zoo Wastewater Facility, stormwater would be discharged to the

North Outfall Sewer, which would direct water to the LAGWRP for treatment, similar to existing conditions for all stormwater within the Zoo.

Implementation of the proposed stormwater collection system would substantially reduce flow to the Zoo Wastewater Facility by capturing and storing rainfall from the Zoo and adjacent hillside area for reuse onsite as irrigation water. Since the Zoo Wastewater Facility would receive only overflow stormwater from flows greater than the 2-year, 24-hour storm event, the volume of water directed to the Zoo Wastewater Facility would be reduced by up to 35 million gallons per year and up to 6.8 million gallons in one day. Additional stormwater within the Zoo would not exceed the capacity of the Zoo's Wastewater Facility and the proposed stormwater collection system would adequately treat and filter stormwater onsite.

Following completion of the proposed stormwater collection system, the majority of flows to the Zoo Wastewater Facility would be comprised of animal pond water from the Zoo's exhibits. Any additional animal pools and other water features that would be constructed under the Vision Plan would be installed with Life Support Systems. Life Support Systems are recirculating water treatment systems, which require a much lower frequency of draining and filling. Therefore, Vision Plan implementation would result in an incremental increase in wastewater generation and associated impact on wastewater facilities related to animal pool water. Due to the substantial reduction in stormwater flows that would be conveyed to the Zoo Wastewater Facility, an incremental increase in generation of animal pond water would not exceed the 1.8-million-gallon maximum capacity of the Zoo Wastewater Facility. Impacts associated with increased stormwater runoff would be less than significant.

Zoo attendance growth anticipated to occur under the proposed Vision Plan would increase flow within the Zoo's wastewater treatment and conveyance system and North Outfall Sewer by approximately 30,606 gallons per day (gpd), for a total of 100,606 gpd. Additionally, proposed expansion of the animal exhibits would increase generation of animal pond water within the North Outfall Sewer by approximately 13,091 gpd or more than 25 percent, for a total of 43,091 gpd. The projected increase in wastewater could trigger the need for expansion or replacement of individual sewer line segments within the North Outfall Sewer. The proposed new plumbing systems at the Zoo would be installed in accordance with the current California Building Code and Plumbing Code (CCR Title 24), as well as Green Building Code (CCR Title 24, Part 11). All new fixtures would comply with State Water Conservation Guidelines and Green Building Standards. The City would ensure that the capacity of the local and trunk lines are sufficient to accommodate the proposed Project's sewer flows during the construction and operation phases. Furthermore, the proposed Project shall implement any upgrades to the sewer system serving the proposed Project that could be needed to accommodate the project's wastewater generation. In accordance with Section 64.15 of the LAMC, the Zoo would be required to submit a Sewer Capacity Availability Review (SCAR) request to the BOE and pay a SCAR Fee prior to building plan approval to evaluate the capacity of the existing North Outfall Sewer to convey the projected wastewater generation from the Zoo through 2040. With assurance of adequate planning-level surveys of the existing North Outfall Sewer per existing City regulations, impacts to the North Outfall Sewer associated with sanitary sewer water would be reduced to less than significant.

The Zoo's wastewater would continue to be treated at the LAGWRP, which has a capacity to serve the proposed Project's projected demand of up to 43,697 gpd and no new or expanded water or wastewater treatment facilities would be required to serve the proposed Project. Therefore, Project impacts to the LAGWRP would be less than significant.

Wastewater produced by the Zoo would meet RWQCB wastewater treatment requirements through treatment at the LAGWRP. In addition, the implementation of Section 64.15 of the LAMC and BOE Special Order No. SO06-0691 would also help meet wastewater quality treatment standards. Therefore, RWQCB wastewater treatment requirements would not be exceeded, and potential impacts related to the proposed Vision Plan would be less than significant.

With regard to solid waste, construction of the proposed Project would generate construction and demolition (C&D) waste during demolition, excavation, and trenching activities which would be disposed of at a City-certified C&D waste processor. Expansion of the Zoo's animal exhibits under Vision Plan implementation would increase operational solid waste generation at the Zoo associated with animal bedding and waste by up to 81.39 tons per day. Project implementation would also increase operational solid waste generation at the Zoo, including trash and recycling, due to projected growth in visitor attendance, employment, and additional animal residents up to is 6.19 tons per day. Factoring in diversion rates and compliance with federal, state, and local statutes and regulations related to solid waste, existing solid waste disposal facilities would have the capacity to receive the projected increase in solid waste under the proposed Project. Therefore, Project impacts associated with increases in solid waste generation would be less than significant.

5.11.1 Findings

Based on the Draft EIR, Final EIR, and the whole of the record, the City finds that the proposed Project would result in less than significant impacts to wastewater and landfill utilities and service systems.

5.12 WILDFIRE – RUNOFF, POST-FIRE SLOPE INSTABILITY, OR DRAINAGE CHANGES

Development of the Project would occur downslope or downstream of steep hillsides and three small drainages within Griffith Park. There are no creeks or rivers mapped within the Project site, but stormwater flows from the hillsides into the Zoo's stormwater management system, where stormwater is treated before it flows to the Los Angeles River. If a wildfire burned large areas within Griffith Park adjacent to the Zoo, post-fire runoff from a major storm event, slope instability, mudflows, landslides, drainage changes, and limited flooding or sedimentation could occur within the Zoo. The relatively small size of the watershed draining into the Zoo (~80-acres) would potentially limit impacts associated with post-fire runoff from a major storm event, slope instability, mudflows or landslides. However, the sandy erosion-prone soils of these hillsides, areas of very steep slopes and very steep cuts, and embankments show signs of slumping and collapse. High intensity heat from wildfires can make soils hydrophobic (i.e., repel or fail to mix with water), reducing infiltration and increasing runoff potential. If wildfire-denuded surrounding hillsides were

subjected to a high intensity rain event, new development within the Zoo has limited potential to face damage from flooding and sedimentation. Sediment and debris could plug existing and planned drainage improvements, including the proposed cistern system. Post-fire conditions on hillsides and slopes within the Zoo could cause similar effects to lower-lying facilities.

Two of the proposed subsurface cisterns serving the Condor Canyon, Bird Show and Animal Programs amphitheater, and the Nature Play Park planning area, are located on high elevation sites relative to the flat interior of the Zoo. These new cisterns would capture all runoff, debris, and sediments conveyed through the watershed, resulting in the potential accumulation of sediment or debris within the system. This would be exacerbated in the event of high rainfall closely following burn of the watershed. However, the small size of the existing watersheds would not create significant runoff, debris flow, or landslides caused by post-fire slope instability that place Project occupants or structures at substantial risk. Therefore, impacts would be less than significant.

5.12.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would result in less than significant wildfire impacts to runoff, post-fire slope instability, or drainage changes.

5.13 SIGNIFICANT AND IRREVERSIBLE ENVIRONMENTAL CHANGES

Construction and operation of new development in the Zoo would entail the commitment of (1) non-renewable energy resources; (2) human resources; and (3) natural resources, such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, and water resources, most of which are non-renewable or locally limited natural resources. Resources that would be permanently and continually consumed during the life of the proposed Vision Plan include water, electricity, natural gas, and fossil fuels, as well as landfill space; however, the amount and rate of consumption of these resources would not result in the inefficient or wasteful use of resources. Further, compliance with applicable building codes, policies, standard conservation features, and current City programs would ensure that natural resources are conserved to the maximum extent feasible. Additionally, it is possible that new technologies or systems will emerge in the future, or will become more cost-effective or user-friendly, to further reduce the reliance on nonrenewable natural resources. While future construction activities and operational activities anticipated to occur under the proposed Project would result in the irretrievable commitment of nonrenewable energy resources (primarily in the form of fossil fuels, including fuel oil, natural gas, and gasoline for automobiles and construction equipment, as well as commitment of limited landfill space), consumption of such resources is associated with any development in the region, and are not unique or unusual to the City or the Zoo.

Further, the proposed Project would not be expected to result in environmental accidents that have the potential to cause irreversible damage to the natural or human environment. While development anticipated to occur under the proposed Vision Plan would result in the limited use, transport, storage, and disposal of hazardous materials, all activities would comply with applicable

state and federal laws related to hazardous materials transport, use, and storage, which would significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage. As such, the proposed Project is not anticipated to consume energy or use other resources in a wasteful manner, or result in irreversible damage from environmental accidents associated with the Project and impacts are considered less than significant.

5.13.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and whole of the record, the City finds that the proposed Project would result in less than significant irreversible environmental changes.

5.14 GROWTH INDUCING IMPACTS

The fundamental purpose of the proposed Project is to guide improvements at the Zoo. The proposed Project would be confined entirely to property currently owned by the Zoo or City and largely within fully urbanized areas of the City. The cities of Los Angeles, Burbank, and Glendale are almost entirely built out with little to no opportunity for additional future development within the Project vicinity. Both the Zoo and surrounding areas are well-served by existing infrastructure. Implementation of the Project include minor improvement of existing utility systems or connection to utility services to serve the Zoo and improvement of existing roadways and intersection to reduce congestion around the Zoo. Major improvements to water, sewer, and circulation systems and drainage connection infrastructure or the extension of this infrastructure would not be needed. Because the proposed Project constitutes redevelopment within an urbanized area and does not require the extension of new infrastructure through undeveloped areas, Project implementation would not remove an obstacle to growth.

The Project may induce growth within the City and region due to the creation of short- and long-term employment opportunities which draw newcomers to the region and increase economic growth. For the purposes of this EIR, implementation of the Vision Plan is anticipated to result in the creation of an additional 531 FTE jobs. It is assumed that a large portion of the 531 FTE jobs would be absorbed by existing working-class residents of the City and surrounding region. Therefore, the proposed Project would not be considered growth inducing as it would not substantially affect long-term employment opportunities. Additionally, even if a portion of the 531 new employees were to move to the City or surrounding vicinity, a total increase of 531 new residents to the City would represent an insignificant increase in the overall population of the cities of Los Angeles (population 3,979,576), Burbank (population 102,511), and Glendale (population 199,303) (U.S. Census Bureau 2020). The proposed Project's potential population increase would represent less than 0.5 percent of each of these cities total populations and would not significantly increase the population of the region. Further, the proposed Project would not have significant economic or social effects that would result in adverse physical changes or deterioration of the surrounding area. Therefore, the proposed Project would not be considered growth inducing as it would not substantially affect long-term employment opportunities.

5.14.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, and whole of the record, the City finds that the proposed Project would result in less than significant growth-inducing impacts.

6.0 FINDINGS OF LESS THAN SIGNIFICANT ENVIRONMENTAL EFFECTS WITH MITIGATION

The Final EIR determined that the proposed Project would result in potentially significant environmental effects to aesthetic and visual resources (light and glare effects); air quality (consistency with applicable air quality plans, nonattainment pollutants, and exposure of sensitive receptors to pollutant concentrations); biological resources (effects on special-status species or habitat, interfere with wildlife movement or corridors, and conflict with local policies or ordinances protecting biological resources); cultural and tribal cultural resources (archaeological resources, human remains, and tribal cultural resources); energy (state or local plans); urban forestry resources (local tree policies and ordinances and loss of urban forest); geology and soils (seismic related ground failure, landslides, unstable geologic units, and paleontological resources); GHG emissions (plan, policy, and regulation consistency); hazards and hazardous materials (release of hazardous materials, hazardous materials within one-quarter mile of a school, list of hazardous materials sites); hydrology and water quality (water quality, groundwater supplies and recharge, and drainage patterns); land use (land use plan, policy, and regulation consistency); noise (ambient noise levels); public services (fire, police, schools); recreation (deterioration of parks and recreational facilities); transportation (transportation plans, policies, and regulations consistency, hazardous design features, and emergency access); utilities (water and stormwater drainage); wildfire (emergency response or emergency evacuation, wildfire risk, and infrastructure). The Final EIR identified feasible mitigation measures to avoid or substantially reduce the environmental effects in these areas. Based on the information and analysis set forth in the Final EIR, impacts would be less than significant with the identified feasible mitigation measures incorporated into the proposed Project.

The City also finds that the proposed Project would not cause cumulatively considerable impacts in the following areas after implementation of mitigation measures: air quality (nonattainment pollutants); biological resources; cultural and tribal cultural resources (archaeological or tribal cultural resources); energy (transportation energy); urban forestry resources; GHG emissions (plan, policy, and regulation consistency); hazards and hazardous materials; hydrology and water quality; land use; noise (ambient noise); transportation (hazardous design features and emergency access); and wildfire.

6.1 AESTHETICS AND VISUAL RESOURCES – LIGHT AND GLARE EFFECTS

Construction, including equipment that may be a source of light and glare, would not be highly visible to the public within the Zoo during operating hours of 10 A.M. to 5 P.M. Light and glare from the construction within the interior of the Zoo would not be highly visible from outside of the Zoo (e.g., from public trails and roads) given intervening topography, vegetation, and distance. Incidental exposure to construction lights and glare from equipment and materials within closed portion of the Zoo would potentially occur as Zoo patrons move long walkways, ride the aerial or

ground trams, and visit new and remodeled animal environments, but these effects would be temporary and minor during the day. Further, any construction activities requiring night lighting would be contained within the closed area of the Zoo and would not be highly visible from surrounding public viewing areas including roads and trails. Therefore, nighttime lighting would be localized and not perceived by the public and construction impacts related to light and glare would be less than significant.

New sources of lighting under the proposed Project would include lighting in new structures, safety lighting of the aerial tram, and parking lot, roadway, and pathway lighting, nighttime security lighting of Zoo service areas and administrative facilities. Griffith Park is open from 5:00 AM to 10:30 PM daily, which allows visitors in the park after dark to use park facilities, including park roads and trails near the Project site. Most new lighting sources would not be highly visible from the outside of the Zoo due to the intervening hillsides, vegetation, and the Zoo's urban forest obstructing views into the Zoo. However, the proposed California and Africa planning areas constructed on the Zoo's higher elevations would support structures with night lighting that could be seen from distant vistas. The proposed aerial tram would also rise above vegetation and structures within the Zoo with security lights potentially visible at night from these locations. The Project would also increase the frequency of nighttime events, which may involve lighting after the Zoo has closed. Further, reflective materials used in the aerial tram or visitor centers (e.g., view windows) could potentially catch sunlight during the day and project glare toward the public trail overlooks in Griffith Park.

The most visible new lighting on the Project site would be from parking lot security and roadway lighting in the public areas fronting the Zoo, including Zoo Drive and Crystal Springs Drive/Western Heritage Way. This area is a designated gateway to Griffith Park where increased lighting may diminish visual quality in the area. The existing main parking lot is currently lit with hooded lighting to direct light down and prevent spill over into wilderness area of the Griffith Park; this type and extent of lighting would persist under the Project, including the proposed multi-story parking structure. While additional lighting may be inconsistent with visual character of the area, the additional lighting itself would not dominate surrounding roadways, as the additional lighting would be hooded and directed downward similar to lighting that currently occurs at the Zoo.

The Project would also increase the frequency and projected attendance of special events held at the Zoo, potentially requiring longer durations of nighttime lighting prior to Zoo daily shutdown. Events may be held in proposed hilltop visitor centers in the California and Africa planning areas, which may be visible from public views in Griffith Park. However, lighting used during such events would be internal to the Zoo and such special event lighting visibility from within the Zoo would be highly limited due to distance from public viewing points (e.g., public trails) and intervening trees and vegetation.

The Zoo is not visible from nearby communities in the City, Glendale, or Burbank and, therefore, would not be affected by Project lighting or glare. Residential communities outside of Griffith Park in proximity to the Zoo are separated from the Zoo by approximately 3 miles and intervening hillsides, the Los Angeles River, and travel corridors of SR-134 and I-5 which provide lighting for traveling vehicles, and completely block views of the Zoo. Therefore, additional lights sources at

the Zoo would not adversely impact sensitive residential communities surrounding the Zoo. Uses surrounding the Zoo that have the potential to observe Project lighting include the Autry Museum of the American West and the Wilson and Harding Golf Course. However, the Autry Museum closes at 4:00 PM, and therefore, no visitors or staff would be impacted by current or future nighttime lighting occurring at the Zoo. The Wilson and Harding Golf Course closes at 10:00 PM; therefore, visitors and staff may detect night lighting at the Zoo. However, lighting from the Zoo is not anticipated to create a nuisance to the Wilson and Harding Golf Course, as the golf course is located behind a Zoo ridgeline in the Africa planning area, which would block views of lighting within the Zoo and the parking lots. Further, the golf course provides substantial lighting at its driving range and parking lot so that visitors may continue their activities after sundown. Other facilities in Griffith Park that may be sensitive to night lighting include the Griffith Observatory and the Greek Theater. However, the natural topography of Griffith Park includes a large hillside that divides these areas from one another, thereby obstructing direct views and minimizing potential light spillover.

Zoo lighting would comply with LAMC Section 93.0117, which limits the amount of exterior light intensity on surrounding areas and requires parking lot lighting to face away from streets and residences. Increased lighting would be substantially visible to surrounding uses or cause impacts to Zoo visitors. Therefore, light impacts from night lighting included in the Project would be less than significant.

However, the Project would potentially create sources of glare from bright or reflective surfaces. Given the programmatic nature of the Vision Plan, detailed designs of proposed improvements, including specifications on building materials and architectural coatings or treatment are not available. Based on the proposed conceptual design and visual simulations, several proposed new structures would be visible from higher-elevation trails located in the Project vicinity. For example, the larger developments proposed in Phases 1 through 3 such as the California and Treetops Visitors centers and the aerial tramway towers, would be visible from public trails. These structures and features may be constructed or designed with some reflective surfaces (e.g., large windows, polished surfaces) or architectural surfacing that may reflect light during certain hours of the day. Glare may be reflected from proposed hilltop visitor centers in the California and Africa planning areas, which may be visible from public views in Griffith Park. However, views of these areas would be limited due to distance from viewing points and intervening trees and vegetation. Even if some degree of glare results, these structures would only be visible in the distance from public trails and viewpoints within Griffith Park. Due to the Zoo's dense urban forest, the intermittent duration of views from pedestrians along the trails, distance of the views, and anticipated lack of large reflective surfaces or features, most Project development would not generate significant impacts from glare.

However, one proposed feature has the potential to generate substantial new glare. The proposed aerial tram would be an elevated structure rising above the Zoo's urban forest canopy and visible from adjacent public trails in Griffith Park. Though the specific materials are not known, aerial tram gondolas are typically constructed with large, rounded glass panels to allow 360° views for riders or may include other reflective features that could generate glare. The glare generated from

the gondolas could create a nuisance and distract from the scenic views overlooking the Zoo. Implementation of MM VIS-3 would require the Zoo utilize tram gondolas that would have matte finishing and earth tone colors to blend with the landscape and reduce or eliminate substantial glare. In addition, the measure would require all glass features of the gondolas to use non-reflective glass or film covers to reduce reflectivity. With implementation of this mitigation measure, Project impacts from generation of glare would be less than significant with mitigation.

6.1.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative aesthetic and visual resource impacts related to light and glare effects to a less than significant level.

MM VIS-3: Aerial Tram Glare Reduction. The proposed aerial tram support structures and gondolas shall have matte-finishing and painted with earth-tone colors to blend with the landscape. All glass features of the gondolas shall utilize non-reflective or low-reflectivity glass or film covers to avoid any potential for glare. Requirements for the use of no or low reflective materials shall be indicated on all plans for the aerial tram and be subject to review and approval by BOE prior to approval of permits.

6.2 AIR QUALITY – CONSISTENCY WITH APPLICABLE AIR QUALITY PLAN / NONATTAINMENT POLLUTANTS / EXPOSE SENSITIVE RECEPTORS TO POLLUTANT CONCENTRATIONS

The most recent air quality plan applicable to the proposed Project is the SCAQMD 2016 Air Quality Management Plan (AQMP). Sources of air pollutant emissions that would be involved in construction activities include off-road equipment exhaust, on-site ground disturbance and material displacement creating area source fugitive dust, evaporative emissions from architectural coating and paving, and on-road trips by the crew and hauling vehicle fleet. Project operational emissions are associated with facilities maintenance, natural gas use, and consumer products use and, predominantly, vehicle trips. The incremental change in operational emissions with implementation of long-term improvements would not exceed any applicable SCAQMD mass daily threshold of significance, exacerbate air quality violations, or possibly delay attainment of the air quality standards as set forth in the 2016 AQMP.

Short-term, temporary emissions associated with construction activities would not conflict with the AQMP so long as no SCAQMD air quality mass daily thresholds of significance are exceeded. Construction activities would not generate pollutants in excess of any applicable SCAQMD regional or localized threshold if they occurred sequentially. However, it is anticipated that construction of Phase 1 with an overlap in construction activity phases could potentially result in a significant air quality impact related to emissions of nitrous oxides (NO_x), as emissions would exceed the applicable regional threshold value. To address these potentially significant emissions, MM AQ-1 would reduce air pollutant emissions from off-road equipment during

construction of the proposed Project. This measure would also ensure that construction of the proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, proposed Project impacts related to the applicable air quality plan would be less than significant with mitigation.

The Los Angeles County portion of the South Coast Air Basin (SCAB) is currently designated nonattainment of the National Ambient Air Quality Standards (NAAQS) for eight-hour average ozone (O₃) and 24-hour average particulate matter less than 2.5 micrometers (PM_{2.5}), and the California Ambient Air Quality Standard (CAAQS) for O₃, particulate matter less than 10 micrometers (PM₁₀), and PM_{2.5}. Implementation of mitigation measure MM AQ-1 would ensure that maximum daily pollutant emissions generated by construction of the proposed Project would not result in a significant increase in emissions of O₃ precursors or particulate matter at either the regional or local assessment scale. Although operation of the proposed Project would increase daily vehicle trips and corresponding emissions, as well as emissions from sources located on the Project site, the incremental increases in daily air pollutant emissions during all stages of operations throughout Vision Plan improvements would remain below applicable SCAQMD mass daily thresholds of significances. Therefore, the proposed Project would not result in a cumulatively considerable net increase of nonattainment pollutants, and the impact would be less than significant.

In addition, all construction activities would be subject to the provisions of SCAQMD Rules 401 (Visible Emissions), 402 (Nuisance), and 403 (Fugitive Dust). By adhering to the stringent SCAQMD rules and regulations pertaining to emission, nuisance, and fugitive dust control and maintaining maximum daily emissions below the SCAQMD mass daily thresholds. Project construction activities would be consistent with the goals and objectives of the applicable air quality plan and would be less than significant.

6.2.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the proposed Project would result in less than significant direct and cumulative air quality impacts with implementation of the following mitigation measures.

MM AQ-1: Off-Road Construction Equipment Meeting Tier 4 Final Emissions Standards. All off-road diesel-powered construction equipment greater than 50 horsepower used for Project construction shall meet, at a minimum, Tier 4 Final off-road emissions standards. Construction contractors shall ensure that all off-road equipment meet the standards prior to deployment at the Project site and the Zoo shall demonstrate compliance with this measure to BOE prior to the start of construction. BOE shall monitor for continual compliance with these requirements throughout the course of construction.

6.3 BIOLOGICAL RESOURCES – EFFECTS ON SPECIAL-STATUS SPECIES OR HABITAT / INTERFERE WITH WILDLIFE MOVEMENT OR CORRIDORS / CONFLICT WITH LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES

Project impacts to onsite native vegetation communities and associated special-status species would be primarily related to development within the proposed California and Africa planning areas following development in laurel sumac shrubland, California coastal sage scrub habitats, coast live oak woodlands, and adjacent eucalyptus/mixed woodlands. Potentially impacted special-status plant species may include Nevin's barberry and Southern California black walnut, which are known to occur, as well as Plummer's mariposa lily, Hubby's phacelia and San Gabriel Mountains leather oak, which have potential to occur. Implementation of MM BIO-1 through MM BIO-3, would reduce proposed Project impacts to special-status plant species by requiring the protection or restoration of native plant communities and special-status species to the maximum extent feasible through pre-construction surveys, protective barrier fencing, capture, relocation, and replanting protocols. Further, with implementation of MM BIO-2 and MM WF-1, adverse impacts to biological resources as a result of installation and maintenance of vegetation clearance from fuel breaks would be reduced through maximum avoidance of native vegetation and appropriate restoration offsite. Implementation of these measures would ensure impacts associated with loss of sensitive species and habitats are less than significant with mitigation.

Project development would lead to removal of a substantial amount of native and non-native vegetation and more than 19 acres of moderate to relatively high-quality native habitats, reducing the ability for potential wildlife movement within the Zoo and roosting and foraging movement areas for migrating birds, roosting bats, and other resident wildlife. Construction noise and lighting has potential to disrupt and discourage wildlife on the lands in the immediate vicinity of the Project site. Project development is unlikely to affect regional movement of wildlife due to Griffith Park's limited connectivity to the Los Angeles River and the western Santa Monica Mountains. Implementation of MM BIO-1, MM BIO-2, MM BIO-4, and MM BIO-5 would reduce Project impacts to special-status bird species. These measures would require the implementation of construction BMPs and a Worker Environmental Awareness Program (WEAP) to reduce construction-related impacts to the maximum extent feasible. These measures would delineate vegetation communities and area of disturbance associated with proposed development plans by Project phase and preserve or replace affected vegetation communities and sensitive species at appropriate ratios.

Trees and shrubs locally protected under the existing City Tree Preservation Ordinance and Protected Tree Code Amendment, including Southern California black walnut, coast live oak trees, toyon, elderberries, and western sycamores are expected to be removed in all phases of Project development, but impacts would be concentrated within the undeveloped areas of the proposed California and Africa planning areas. Implementation of MM UF-1, requiring preservation, relocation, or replacement of protected native tree and shrub species onsite or at an appropriate offsite location within Griffith Park, and MM UF-2, requiring the Zoo implement a tree and urban canopy restoration plan, would also serve to reduce impacts associated with the

loss of protected native trees and shrubs. Implementation of these measures would ensure impacts to native trees and shrubs would be less than significant with mitigation.

6.3.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative biological resources impacts related to special-status species and other sensitive natural community, wildlife movement and corridors, and locally protected biological resources to a less than significant level.

MM BIO-1: Biological Resources Mitigation and Monitoring Program. The Zoo shall prepare and implement a Biological Resources Mitigation and Monitoring Plan (BRMMP) to mitigate loss of native vegetation communities, habitat, and special-status species from each Project phase. The BRMMP shall be prepared after completion of 30 percent design plans for each phase and shall specify timing and implementation of required biological resource restoration, enhancement, or creation measures. The BRMMP shall be prepared by a City-approved biologist as part of planning, engineering, and site design for each Project phase under the direction of and approval by BOE and Zoo planning staff. The BRMMP shall be prepared in consultation with appropriate City departments and resource agencies such as the Los Angeles Fire Department (LAFD), Recreation and Parks Department (RAP), and the California Department of Fish and Wildlife (CDFW). The BRMMP shall be updated prior to final designs and development plans for each phase. The Zoo shall be responsible for ensuring all BRMMP requirements are reflected in Project design/architectural, engineering, and grading plans. All plans for each Project phase shall be reviewed by the City to ensure compliance with the BRMMP.

The BRMMP shall require measures to avoid and mitigate impacts to biological resources onsite, including, but not limited to, the following:

1. At the 30 percent design plan stage for each Project phase, biological resource surveys shall be completed for areas of potential effect in that phase by a City-approved biologist, subject to the following requirements:
 - a. The surveys shall refine the disturbance footprint of impacted habitats plus a buffer if recommended by the City-approved biologist.
 - b. The survey shall delineate native vegetation communities such as coast live oak woodland, laurel sumac shrubland, and coastal sage scrub, including maps of the extent and type.
 - c. The survey shall identify all special-status plant and animal species present or potentially present within the subject phase of Project development.
 - d. A summary of the results of the pre-construction survey shall be submitted to the City immediately upon completion of the survey. A survey report describing and delineating the extent and quality of native vegetation

communities and the presence or potential presence of special-status plant or animal species shall be submitted to the City for review and approval prior to completion of 60 percent design plans for the subject Project phase; if no native vegetation communities or special-status species are present or potentially present, the survey report shall describe such findings based on evidence from the surveys.

- e. The survey report shall map and describe the location and extent of native vegetation communities and observed special-status plant or animal species that would be impacted within the areas of potential effect for each Project phase, and require the following avoidance, minimization, and mitigation measures:
 - i. To the maximum extent feasible, onsite native vegetation communities and special-status plant species shall be protected and preserved in place, and design plans shall be amended to avoid disturbance or loss of these biological resources. The City-approved biologist shall work with Project designers during design for each phase, as required, to incorporate existing native vegetation and special-status plant species, such as Nevin's barberry, and mature native trees, such as coast live oaks, into the Zoo landscaping and facilities (e.g., exhibits, visitor-serving spaces, service areas) in a manner that would ensure the livelihood and biological value of the natural community and/or individual plant. Construction techniques for Project development to avoid and protect special-status species shall be identified as part of a required construction mitigation plan (see MM BIO-2).
 - ii. If avoidance or preservation in place cannot be achieved while meeting Project Objectives, the area of disturbed native vegetation communities and the total lost special-status plant species shall be mitigated onsite at a ratio of 2:1, as feasible given space limitation within the Zoo. To the extent feasible, native vegetation communities and special-status plant species shall be relocated or reestablished within disturbed, altered, and/or lost areas of coast live oak woodland, laurel sumac shrubland, and coastal sage scrub within the Project site. The BRMMP shall provide a description of the location and boundaries of the mitigation site and description of existing site conditions. The mitigation area shall be incorporated into the final development plans for each phase of Project development.
 - iii. If native vegetation communities and/or special-status plant species cannot be protected and/or restored onsite, the Zoo and City shall work with RAP to identify an appropriate site(s) for restoration within Griffith Park to serve as a mitigation site. Offsite restoration of affected native vegetation communities and special-status plant species shall occur at a minimum ratio of 3:1. Ratios for the restoration of native vegetation

communities and/or special-status species shall be based upon the vegetation composition, plant rarity, local demographics, and location of the mitigation site. The BRMMP shall provide a description of the location and boundaries of the offsite mitigation site. The City and City-approved biologist shall consult with CDFW to determine City-approved biologist shall consult with CDFW to determine additional measures for protection and restoration of habitats occupied by special-status species, including nesting birds.

- iv. If onsite or offsite restoration is required, the BRMMP shall specify restoration plans and techniques, as recommended by a City-approved biologist, including, but not limited to:
 1. Identification of a suitable habitat compensation area of comparable size to be preserved and managed for lost habitat or species
 2. Site preparation
 3. Seed collection and/or plant salvage, designation, or establishment of offsite plant nursery facilities.
 4. Planting, hydroseeding, replanting or seeding activities.
 5. Success criteria
 6. Maintenance and monitoring program, for the short-term plant establishment period (i.e., 1-3 years), and over the long term (i.e., 5 years)
 7. Reporting Requirements
- v. If onsite or offsite restoration is required, a binding long-term agreement with the Zoo to implement and maintain protected and restored habitats/communities shall be implemented with the City. The BRMMP shall identify typical performance and success criteria deemed acceptable by the City based on measurable goals and objectives. Minimum criteria for restored habitats shall be at least 70 percent survival of container plants and 70 percent relative vegetative cover by vegetation type. BRMMP mitigation elements that do not meet performance or final success criteria within 5 years shall be completed through an extension of the BRMMP for an additional 2 years or at the discretion of the City with the goal of completing all mitigation requirements. Monitoring of the mitigation and maintenance areas shall occur for the period established in the BRMMP, or until success criteria are met. If success criteria cannot be met through the BRMMP, the City shall specify appropriate commensurate measures (e.g., additional onsite or offsite restoration).
- vi. If special-status animal species are present or potentially present based on the survey, including bat, woodrats, Crotch's bumble bee, or legless lizard species, and migratory or nesting birds, the BRMMP shall include avoidance and minimization measures to avoid or relocate as

part of a construction mitigation plan (see MM BIO-2) and management plans for migratory and nesting birds (see MM BIO-4) and bat colonies (MM BIO-5).

MM BIO-2: Construction Mitigation Plan for Biological Resources. The Zoo shall prepare and implement a Construction Mitigation Plan (CMP) that identifies avoidance, reduction, and mitigation measures for construction-related impacts to biological resources, including special-status species. The CMP shall be prepared by a City-approved and qualified biologist prior to initiation of construction activities for Phase 1 of the Project and updated prior to construction activities for each subsequent phase. The CMP shall be approved by BOE and Zoo planning staff. The Zoo shall be responsible for ensuring all CMP requirements are included in construction plans and implemented as part of construction. All construction activities shall be monitored by a City-approved biologist to ensure compliance with the CMP. The Zoo would coordinate with CDFW Region 5 prior to the start of any construction activities.

The CMP shall require:

1. Per MM BIO-1, the CMP shall incorporate and address data from biological resource surveys for each Project phase to avoid and protect special-status plant and animal species to the maximum extent feasible, as follows:
 - a. Within six months prior to the start of construction of each Project phase, biological resource surveys shall be completed for areas affected in that phase by City-approved biologist, consistent with MM BIO-1.
 - b. If the phase-specific survey identifies presence or potential presence of special-status species, within 14 days of the start of construction (including mobilization and staging), pre-construction clearance surveys shall be completed by a City-approved biologist to either confirm or update the BRMMP related to the location and extent of special-status species. A report of the pre-construction survey shall be submitted to BOE for review and approval prior to the start of construction.
2. Based on the BRMMP and the results of the pre-construction surveys, the CMP shall require measures to avoid or mitigate impacts to special-status species present or potentially present within the Project phase; if no sensitive species are present or potentially present, the CMP shall identify findings from the surveys. If required based on the BRMMP's determination of biological resource sensitivity within each phase, the CMP shall include avoidance and minimization measures, including biological monitoring during construction, if needed. If determined appropriate based on the results of the BRMMP, a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas shall be prepared by the City-approved biologist. The list or plan shall be submitted to the City for review and approval prior to implementing any Project-related ground-disturbing activities

and vegetation removal. CMP avoidance and minimization measures shall be subject to review and approval by a City-approved biologist, including, but not limited to, the following:

- a. If present, special-status animal species, such as woodrat, legless lizard, and bat species (see also MM BIO-5), shall be relocated from the Project site either through direct capture or through passive exclusion prior to construction activities. Pursuant to the CCR, Title 14, Section 650, the City-approved biologist must obtain appropriate handling permits to capture, temporarily process, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. With cooperation and authorization from CDFW, trapping may be employed to identify woodrat species that are inhabiting the site. If determined appropriate, woodrat middens should also be relocated by qualified biologists outside of construction areas.
 - b. If present, special-status plant species, such as Nevin's barberry, shall be avoided to the extent feasible through use of high visibility exclusion fencing and signage to protect vegetation and root systems from disturbance or compaction, consistent with the BRMMP. Lost special-status plant species shall be replaced consistent with the BRMMP.
 - c. If any California Species of Special Concern (SSC) are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately. The City-approved biologist shall be notified, and dead or injured wildlife documented. A formal report shall be sent to the City and CDFW within three (3) calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent injury or death.
3. The CMP shall include BMPs to avoid or minimize impacts to biological resources during construction, including, but not limited to, the following:
- a. Construction equipment and vehicles shall be stored within existing disturbed or developed areas within the Zoo to the maximum extent feasible to avoid impacts to natural areas. All construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City. All construction access roads and staging areas shall be located to avoid known/mapped native vegetation and special-status species.
 - b. All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas in the BRMMP and CMP. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB.

- c. All trash and construction debris shall be properly disposed at the end of each day. Dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.
- d. Construction-related erosion shall be minimized to retain sediment within the area of potential effect, including installation of silt fencing, straw wattles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas.
- e. Concrete truck and tool washout shall occur in a designated construction staging areas or other offsite location such that no runoff would flow to natural areas within the Zoo or to the Zoo's stormwater collection system.
- f. All open trenches shall be constructed with appropriate exit ramps to allow species that incidentally fall into a trench to escape. All open trenches shall be inspected at the beginning of each workday to ensure that no wildlife species are present. Any wildlife species found during inspections shall be gently encouraged to leave the Project site by a qualified biologist or otherwise trained and City-approved personnel. Trenches shall remain open for the shortest period necessary to complete required work.
- g. Construction shall be limited to daylight hours (7:00 AM to 7:00 PM or sunset, whichever is sooner).

MM BIO-3: Worker Environmental Awareness Program. The Zoo shall retain a qualified, City-approved biologist to prepare a WEAP that shall be implemented during all phases of construction. WEAP training shall be provided to all personnel working on the site by a qualified, City-approved biologist. The training should review the construction-related requirements of the BRMMP and the CMP, including all special-status species that occur or have potential to occur. Training should explain all mitigation and protection measures, responsibilities of each worker, and a reporting framework. The City-approved biologist shall communicate to all workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so. The WEAP shall be prepared and approved by BOE and Zoo planning staff prior to construction activities of Phase 1.

MM BIO-4: Migratory and Nesting Bird Management. Removal of trees and other vegetation shall be conducted outside of the breeding season (generally January 15 to August 31 for raptors, March 1 to August 31 for other bird species) to the extent feasible. If Project construction activities must be conducted during these period, pre-construction nesting bird surveys by a City-approved biologist shall take place within one week prior to ground disturbance and tree removal or trimming associated with each Project phase. If no active nests or nesting activity is found within or immediately adjacent to the phase work area, construction

activities may proceed. If active nests are located during these surveys, the following measures shall be implemented:

1. A summary of the results of the pre-construction survey shall be submitted to the City immediately upon completion of the survey. Consistent with MM BIO-1 and MM BIO-2, the qualified biologist shall prepare a final report of the pre-construction survey to be submitted to BOE for review and approval prior to the start of construction. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the area of potential effect and nest and roost locations shall be included with the report. If any special-status species are observed during pre-construction surveys, the Project biologist shall report the findings and coordinate with appropriate regulatory agencies to determine appropriate procedures for handling or avoidance of the specimen.
2. If the pre-construction surveys indicate presence of nesting or roosting birds, the construction activity shall be evaluated, and avoidance methods implemented as necessary at the discretion of the qualified biologist. Methods would vary based on bird species, site conditions, and type of work to be conducted, but could consist of limited or reduced construction access; reduced vehicle speeds; and/or noise attenuation.
3. At the discretion of the qualified biologist, construction activities within 300 feet of an active nest of passerine birds shall be restricted until chicks have fledged, unless the nest belongs to a raptor, in which case a 500-foot activity restriction buffer shall be observed to avoid noise, light, and direct disturbance. The Project biologist conducting the survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions and the species involved. If during Project construction and ground disturbance activities an active nest is discovered, the City-approved biologist shall halt work immediately within the work area, activity restriction buffers shall be established, and avoidance methods shall be employed as necessary.
4. A report of findings and recommendations for bird protection shall be submitted to the City prior to vegetation removal.

MM BIO-5: Bat Colony Management. Removal of trees and older structures should be conducted outside of the maternity roost season (typically March 1 to August 31). Prior to removal of any trees over 20 inches diameter-at-breast-height (DBH) or demolition/relocation of existing onsite structures, a pre-construction acoustic and day/night roost survey shall be conducted by a qualified biologist to determine if any tree or structure proposed for removal, trimming, demolition, or relocation harbors sensitive bat species or maternal bat colonies. If present, maternal bat colonies shall not be disturbed and grading and construction activities shall avoid the bat breeding season to the extent feasible. If disturbance of structures must occur during the bat breeding season, buildings and trees must be inspected and deemed clear of bat colonies/roosts within 7 days of demolition and an

appropriately trained and approved biologist must conduct a daily site-clearance during demolition. If bats are roosting in a structure or tree in the Project site during the daytime but are not part of an active maternity colony, then exclusion measures shall be utilized and must include one-way valves that allow bats to leave but are designed so that the bats may not re-enter the structure. For each occupied roost removed, one bat box shall be installed in similar habitat as determined by the Project biologist and shall have similar cavities or crevices to those which are removed, including access, ventilation, dimensions, height above ground, and thermal conditions. If a bat colony would be eliminated from the Project site, appropriate alternate bat habitat shall be installed within the Project site. To the extent practicable, alternate bat house installation shall occur near onsite drainages.

MM UF-1: Protected Tree Plan. To offset impacts to protected and important trees and shrubs resulting from Vision Plan implementation, the Zoo shall prepare and implement a Protected Tree Plan. The Protected Tree Plan shall identify measures for the protection, relocation, and/or replacement of protected and important significant trees and shrubs. The Protected Tree Plan shall outline and require that Project activities affecting protected trees and shrubs proceed as follows:

1. Preservation of Trees and Shrubs: Protected and important trees and shrubs shall be preserved in place to the maximum extent feasible. To ensure protection of native protected trees and shrubs, as part of final design of the California and Africa area exhibits, all protected trees and shrubs shall be mapped and incorporated into the exhibit to the maximum extent feasible. The Zoo shall hire a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance to evaluate the health and structure of protected and important trees and shrubs and make recommendations for avoidance of healthy specimens to the maximum extent feasible. The tree expert shall work with project designers during the final design of each phase to incorporate such trees into the exhibits in a manner that would ensure protection of the tree or shrub from damage by exhibit animals or exhibit maintenance activities. Each protected or important tree and shrub to be retained shall have a designated Protection Zone identifying the area sufficiently large enough to protect it and its roots from significant damage during construction. The designated Protection Zone of each specimen shall be protected with 5- to 6-foot-high chain link fences. Fences shall be mounted on 2-inch galvanized iron posts, driven into the ground to a depth of at least two feet and at no more than 10-foot centers, or similarly durable material. Tree and shrub fences shall be erected before demolition, grading, or construction begins and remain until final inspection of the project. Construction and demolition activities around protected trees shall follow all industry standards. Erosion control measures, tree pruning, soil compaction preventive measures, and a tree maintenance schedule shall be implemented and verified by the

BOE and a City-authorized tree expert. Following construction, each tree or shrub preserved shall be monitored for a minimum of 5 years to ensure their long-term survivability.

2. Relocation of Trees and Shrubs: Where protected and important trees cannot be avoided and preserved in place, individuals shall be transplanted elsewhere onsite to the extent feasible. If relocation onsite is not feasible, individuals shall be transplanted to an appropriate offsite location elsewhere within Griffith Park, pursuant to the approval of the City BOE and RAP. The City-approved Tree Expert shall identify the necessary measure to be taken to ensure the maximum survivability of the relocated specimens, including relocation method, placement, irrigation method, and maintenance. Relocated individuals shall be monitored for their success for a period of 5 years. The Tree Protection Plan shall identify performance standards for determining whether relocated specimens are healthy and growing normally and shall outline procedures for periodic monitoring and implementation of corrective measures in the event the health of relocated trees declines.
3. Replacement of Trees and Shrubs: Where the preservation or relocation of protected and important trees and shrubs is not feasible, or where the health of preserved or relocated specimens becomes compromised, as part of the final design of each exhibit or feature, the Zoo shall prepare and implement a replacement planting program. Replacement of protected and important trees and shrubs should follow guidelines described in the City's Protected Tree Ordinance adopted at the time, including requirements for relocated or removed trees or shrubs to be replaced by other species protected by the ordinance at a 4:1 ratio (number of individuals restored to number of individuals impacted). Replacement of oak trees shall be subject to replacement as follows: oak trees less than 12 inches DBH be replaced at 4:1; oak trees between 12 and 24 inches DBH be replaced at 5:1; and oak trees greater than 24 inches BDH be replaced at 10:1. The replacement planting program shall be prepared by a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance. The replacement planting program shall specify the location for replacement, tree or shrub size, planting specifications, and shall include a monitoring program to ensure that the replacement planting program is successful. To the extent feasible, protected, and important trees or shrubs removed within the California or Africa exhibits shall be replaced within each exhibit. Where this is not feasible, the Tree Protection Plan shall outline provisions and standards for replacement in areas outside of each exhibit. At a minimum, the monitoring program shall require monitoring of replacement individuals for a period of 5 years and shall include performance standards for determining whether replacement specimens are healthy and growing normally and procedures for periodic monitoring and implementation

of corrective measures in the event that the health of replacement trees declines.

Replacement of removed trees and shrubs should occur within the Zoo to the extent feasible. If replacement within the Zoo is not feasible, the Zoo should coordinate with RAP and the City Forester for replacement trees and shrubs to be planted on adjacent areas of Griffith Park, provided such locations can support the tree's or shrub's survival. Each replacement tree shall be at least 15-gallon, or larger, measuring one inch or more in diameter one foot above the base, and be not less than seven feet in height measured from the base. If use of similar sized replacement trees and shrubs is not possible, smaller sized replacements may be planted. In that event, a greater number of replacement trees or shrubs may be required.

MM UF-2: Restoration Plan. To offset impacts to urban forestry resources and ensure landscaping under the Vision Plan is planned to provide urban forest value, the Zoo shall retain a qualified landscape architect to prepare a landscaping plan. The Zoo landscape plan shall be subject to review and approval by City Bureau of Engineering and shall include the following:

1. Maximize protection of existing protected and important trees and shrubs consistent with the Zoo's Tree Protection Plan identified in MM UF-1.
2. Specify a plant palette and landscape plan that ensures establishment of tree canopy that is cohesive with and supports continuity with the surrounding canopy. The plant palette shall emphasize tree species which are considered to provide a healthy mix of visual and biological value and which offer greater shade cover and carbon sequestration.
3. Plantings shall include tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures and plantings.
4. Landscaping shall occur immediately following completion of construction of a proposed area of improvement. Planting would use a combination of small containers and larger containers with more mature specimens to ensure plant health while also expediting recovery of the urban forest and minimizing duration of heat island effects following construction.

MM WF-1: Wildfire Fuel Management Plan. The Zoo shall retain a City-qualified specialists (i.e., fire management professionals) and City-approved biologist to prepare a Wildfire Fuel Management Plan (WFMP) to design the creation and maintenance of required fire buffers and fuel management zones around the Project site while preserving the integrity of existing native oak woodland, chaparral and coastal sage scrub habitats to the maximum extent feasible. To the maximum extent feasible, native trees and shrubs, such as coast live oak, coastal scrub, and grassland shall be thinned and limbed up but left in place. The WFMP shall be prepared consistent with the requirements of Public Resources Code Section 4291 and also detail methods for achieving fire safety around new and existing

structures. The WFMP shall incorporate management strategies in coordination with RAP and LAFD to address any needed future management actions in Griffith Park buffering the Project site. Vegetation and other fuels within the management zone(s) shall be maintained by the Zoo in a manner consistent with existing CFC and LAFD regulations to reduce fuel loading in vulnerable areas and to avoid the buildup of deadwood and leaf litter and/or inappropriate storage of flammable materials. Specifically, the WFMP shall describe at least the following elements:

- Vegetation coverage and type within and adjacent to the vegetation management zone(s);
- Sensitive species identification, mapping, and avoidance;
- Setbacks between structures, Project site boundaries, and access routes;
- Location and management procedure for flammable materials use and storage; and
- Development plan landscaping and planting standards within the setback areas.

The Zoo shall submit the WFMP to BOE, Emergency Management Department, RAP, LAFD, and CDFW for review and approval prior to issuance of any grading and development plans for improvements under the proposed Project.

6.4 CULTURAL AND TRIBAL CULTURAL RESOURCES – ARCHAEOLOGICAL RESOURCES / HUMAN REMAINS / TRIBAL CULTURAL RESOURCES

Construction of the proposed Project would include involving grading, excavation, and earth moving activities up to approximately 30 feet below ground surface (bgs) on the Zoo's previously developed interior and undeveloped hillsides. No previously recorded archaeological sites occur on the Project site and no archaeological resources or unique geographical features were identified onsite during ground surveys conducted for the proposed Project. Both interior developed areas of the Zoo and undeveloped hillsides have a low probability to contain any intact, previously undisturbed cultural resources. Potential for proposed Project improvements to impact unknown cultural resources is very low, but not impossible. Therefore, MM CUL-1 would be implemented to ensure that, in the unlikely event isolated unknown prehistoric and historic-period archaeological resources are encountered during construction activities, appropriate action would be taken to prevent adverse impacts. MM CUL-2 would be implemented so that any inadvertently discovered resources would be protected and curated. Therefore, Project impacts to potential prehistoric resources would be less than significant with mitigation. While possibility of discovering human remains is very low, implementation of MM CUL-3 would ensure the protection and curation of any inadvertently discovered remains. While there is little potential for the discovery of unknown buried tribal cultural resources during construction activities, implementation of MM CUL-4 through MM CUL-7, requiring the monitoring of all construction activities by an appropriate

Native American representative and the management of resources in the unlikely event that such resources are uncovered, impacts would be less than significant with mitigation.

6.4.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative cultural and tribal cultural impacts related archaeological, human remains, and tribal cultural resources to a less than significant level.

MM CUL-1: Pre-Construction Workshop. Prior to any ground disturbance activities during construction of each Project phase, a City-qualified archaeologist and shall conduct a cultural resources workshop for all construction personnel. The City-qualified archaeologist must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a Principal Investigator working with Native American archaeological sites in southern California. The qualified archaeologist will ensure that all other personnel are appropriately trained and qualified. The workshop will inform all construction personnel of the types of cultural material that may be encountered, and of the proper procedures to be followed in the event of an unexpected discovery of cultural material or human remains. Appropriate documentation will be completed to demonstrate attendance.

MM CUL-2: Unexpected Discovery of Cultural Material. In the event unexpected cultural resource material - such as flaked or ground stone, historic debris, building foundations, or non-human bone - is discovered during Project-related ground disturbances, construction personnel will stop all work within 50 feet of the discovery until a City-qualified archaeologist can evaluate the discovery for significance. Construction personnel will contact the City and Zoo staff immediately. Activities that may adversely impact the discovery will not resume without written authorization from the City that construction may proceed. The nature, extent, and significance of the discovery will be evaluated by a City-qualified archaeologist, and a Native American representative if the discovered resource is prehistoric. If the discovery is determined to be a significant cultural resource under CEQA, avoidance is the primary method of mitigation. If avoidance is not feasible, the City-qualified archaeologist will prepare a treatment plan consistent with CEQA Guidelines Section 15064.5(f) that addresses implementation of data recovery mitigation excavations. Treatment measures typically include development of avoidance strategies, capping with fill material, or mitigation of impacts through data recovery programs such as excavation or detailed documentation and public interpretation. A report of findings shall be prepared, and recovered materials curated, if needed, in an approved facility.

MM CUL-3: Unexpected Discovery of Human Remains. In the event human remains are encountered during Project-related ground disturbances, construction personnel

will stop all work in the vicinity of the discovery and immediately contact the Los Angeles County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. The City and Zoo staff will also be contacted. If the County Coroner determines the remains are prehistoric, the Coroner will contact the Native American Heritage Commission and the Native American Heritage Commission shall designate a Most Likely Descendant.

- MM CUL-4: Native American Monitoring.** A Native American representative approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and the NAHC will monitor ground disturbing construction activities. Ground disturbing construction activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that include, but are not limited to, pavement removal, pot-holing or augering, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. The Native American representative will complete daily monitoring logs that will provide the location of construction activities, and a description of the soil and any cultural materials identified. Native American monitoring will be terminated when all ground disturbing construction activities are complete or when the Native American representative determines that the proposed Project site has a low potential for impacting Tribal Cultural Resources during each phase of Project implementation. Native American monitoring during ground disturbing construction activities will be conducted consistent with current professional standards.
- MM CUL-5: Unanticipated Discovery of Tribal Cultural and Archaeological Resources.** Pursuant to MM CUL-2, upon discovery of any archaeological resources, construction activities will cease in the immediate vicinity of the discovery until the discovery can be assessed. All archaeological resources identified during proposed Project construction activities will be evaluated by the Native American representative approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation will coordinate with the City and the Zoo regarding treatment and curation of the resources including reburial or preservation for educational purposes. Per AR-2, if the discovery is a significant resource, avoidance measures or appropriate mitigation will be implemented.
- MM CUL-6: Preservation of Unique Archeological Resources.** If unique archaeological resources are discovered, preservation in place (i.e., avoidance) will be the preferred manner of treatment consistent with Public Resources Code Section 21083.2(b). If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resources and subsequent laboratory processing and analysis. Historic archaeological material that is not Native American in origin will be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an

institution agrees to accept the material. If no institution accepts the archaeological material, it will be offered to a local school or historical society for educational purposes.

MM CUL-7: Unanticipated Discovery of Human Remains and Associated Funerary Objects. Public Resources Code Section 5097.98(d)(1) defines Native American human remains as an inhumation or cremation in any state of decomposition or skeletal completeness. Consistent with MM CUL-3, in the event human skeletal material is discovered, excavation will be stopped, and the discovery will be immediately reported to the Los Angeles County Coroner consistent with Health and Safety Code 7050.5. If the County Coroner recognizes the human remains to be Native American or has reason to believe the remains are Native American, the County Coroner will contact the NAHC within 24 hours. Public Resources Code 5097.98 will be followed.

In the event human skeletal material is discovered, the following will occur:

- The Native American representative monitor will immediately redirect construction activity a minimum of 150 feet from the discovery and place an exclusion zone around the discovery. The Native American representative will contact the construction manager who will then contact the Los Angeles County Coroner. The Native American representative will also contact the Gabrieleño Band of Mission Indians-Kizh Nation, a City-qualified archaeologist, the City, and the Zoo. Construction activity will continue to be redirected while the County Coroner determines whether the human skeletal material is Native American. The discovery will be kept confidential and secure to prevent further disturbance. If the human skeletal material is determined to be Native American, the County Coroner will notify the NAHC. The NAHC will then appoint a Most Likely Descendant.
- Funerary objects/associated grave goods will be treated in the same manner as bone fragments.
- If discovered human remains cannot be fully documented and recorded on the same day, the remains will be covered with muslin cloth. A steel plate will be placed over the discovery to protect the remains. If a steel plate is not available, a 24-hour guard will be present onsite outside of regular construction hours.
- Redirecting construction activities to protect the human remains in place will be recommended if feasible. If construction activities cannot be redirected, the burials may be removed. Cremations will be removed in bulk or by any means necessary to ensure complete recovery of all material. The Gabrieleño Band of Mission Indians-Kizh Nation will work closely with the City-qualified archaeologist to ensure that any excavation to remove human remains is conducted carefully, ethically, and respectfully.
- If the discovery of human remains includes four or more burials, the location will be considered a cemetery and a separate treatment plan will be prepared.

- If data recovery excavations are approved by the Gabrieleño Band of Mission Indians-Kizh Nation, documentation will include detailed descriptive notes and sketches at a minimum. Additional documentation will be approved by the Gabrieleño Band of Mission Indians-Kizh Nation
- All feasible care will be taken to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects.
- Scientific study of the human remains, including the use of invasive diagnostic procedures/techniques, will not be conducted.
- Each discovery of human remains or associated funerary objects will be stored in opaque cloth bags. All human remains, funerary objects, sacred objects, and objects of cultural patrimony will be removed to a secure container on-site if possible. These items will be retained and reburied within six months of discovery.
- Prior to the resumption of ground disturbing construction activities, the Zoo will designate a location within the proposed Project site for the respectful reburial of the human remains and/or funerary objects. The reburial/repatriation site will be a location agreed upon between the Gabrieleño Band of Mission Indians-Kizh Nation and the Zoo to be protected in perpetuity.
- There will be no publicity regarding a discovery of human remains.
- A final report will be submitted to the Gabrieleño Band of Mission Indians-Kizh Nation and the NAHC.

6.5 ENERGY – STATE OR LOCAL PLAN FOR RENEWABLE ENERGY OR ENERGY EFFICIENCY CONSISTENCY

The proposed Project would not interfere with any statewide, regional, or local initiatives to expand renewable energy supply or improve energy efficiency. The proposed Project would be consistent with the stringent provisions of the LA Green Building Code and LEED Silver design standards and BMPs and would contribute to the expansion of renewable energy infrastructure. Additionally, the Project would enhance transportation sustainability by providing a more efficient internal circulation network, and improving pedestrian and bicyclist safety and public transit accessibility. However, implementation of the proposed Project has potential to conflict with regional plans and policies governing transportation energy initiatives due to the substantial increase in annual Zoo visitation and VMT generated by new Zoo visitors and employees. MM T-2 would ensure consistency with these plans and policies by requiring the Zoo implement a Transportation Demand Management (TDM) Program to reduce single occupancy vehicle trips to the Zoo, thereby reducing demand for transportation fuels. Therefore, with implementation of these measures, the proposed Project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of expanding renewable energy or improving energy efficiency and impacts would be less than significant with mitigation.

6.5.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative energy impacts related to state or local plan for renewable energy or energy efficiency consistency to a less than significant level.

MM T-2: Zoo Transportation Demand Management (TDM) Program. The Zoo shall prepare and implement a comprehensive TDM program to provide trip reduction strategies for Zoo visitors and employees. The TDM Program shall be prepared by a qualified transportation planner and submitted by the Zoo to the Los Angeles Department of Transportation (LADOT) for review and approval prior construction activity. The goal of the TDM Program shall be to reduce Zoo employee VMT by 10 percent below existing conditions by 2040. The TDM Program shall also apply all feasible VMT reduction strategies for visitor vehicle trips to reduce visitor VMT below projected conditions to the maximum extent feasible. The TDM Program shall be developed and approved prior to operation of Phase 1 of the Project and shall be maintained and adjusted as needed continuously.

The TDM Program shall be overseen by a Zoo TDM Coordinator. The Zoo TDM Coordinator shall be qualified transportation planner and may be a City/Zoo employee or contractor. The Zoo TDM Coordinator shall monitor visitor and employee mode share with annual surveys, collect and analyze parking and transit use data, and develop annual reports for submittal to BOE and LADOT. The surveys shall capture trip origin data, travel mode, number of people in the party, and other key data and indicators for TDM program performance relative to VMT. The Zoo TDM Coordinator shall ensure that monitoring efforts capture all Zoo-related travel behavior. Annual monitoring reports shall include trip length surveys completed at least biannually by a sample of Zoo patrons and annually by Zoo employees (e.g., trip origin data collection). Monitoring results shall be used to determine the appropriate TDM measures to employ in the coming year to maximize reductions in VMT per capita, champion transit and alternative mode transportation to the Zoo for visitors and employees, develop appropriate incentives to increase the Zoo's transit mode share incrementally over time, and develop effective marketing tools to advertise transit and non-vehicular travel mode availability and incentives.

Each annual TDM Program monitoring report shall:

- Describe the TDM efforts in place at the time to reduce vehicular trips;
- Summarize collected survey data and results;
- Evaluate parking utilization and transit use, comparing trends and annual changes;
- Analyze the results of trip reduction measures in reducing VMT relative to projected VMT increases;

- Evaluate change in available transportation infrastructure and programs serving the Zoo,
- Report the effect on Zoo employee and visitor VMT per capita and compare to current Citywide VMT per capita; and
- Provide recommendations for adjustments to the TDM Program to adaptively manage VMT reductions for visitors and employees, such as increase the charges of paid parking or expand incentives associated with proposed programs, particularly on peak days.

The TDM Coordinator shall oversee annual monitoring and reporting to evaluate the effectiveness of the TDM measures being implemented at the Zoo and recommend adjustments as needed to the TDM Program on an annual basis. The annual report shall be submitted to LADOT for review. The TDM measures shall be assessed and adapted as necessary based on the results of this review. Final annual reports and data (e.g., survey data) shall be shared with the City and made readily available for public review and use. The TDM Coordinator may reference the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* (2010) report and the Federal Highway Administration's (FHWA's) *Integrating Demand Management into the Transportation planning Process: A Deck Reference* (2012), among others, for potential additional measures or adjustments that are determined to be feasible based on the effectiveness of the TDM Program and future conditions.

The TDM Program shall be prepared consistent with the Mobility Element and in consultation with LADOT, as well as RAP, if required for measures affecting Griffith Park. Information regarding the TDM Program shall be distributed to all Zoo employees and shall be posted on the Zoo's website and other marketing materials for Zoo visitors and updated annually as needed based on the annual reports.

The TDM Coordinator shall consider a range of measures for the TDM Program to reduce employee and visitor VMT per capita, including, but not limited to, the following:

1. Measures to Reduce Zoo Employee VMT Per Capita

- Encourage employee participation in existing vanpool programs, including City employee and Metro vanpool programs, or develop/expand the Zoo vanpool program.
- Provide employee incentives to participate in a vanpool program, such as subsidized participant fees, offer in-kind services such as oil change discounts, and provide preferential parking for program participants, and regularly advertise the opportunities to vanpool through a variety of employee communication formats.
- Implement a paid parking program to discourage employee vehicle trips to the Zoo and generate revenue that the Zoo may use to expand transit ridership for

employee trips. Pricing options of onsite employee parking spaces include pay-per-use or weekly/monthly parking passes.

- Partner with rideshare companies such as Uber or Lyft to guarantee availability of an emergency ride home or provide access to City vehicles for this purpose.
- Offer employee TDM benefits for use of active transportation commuter modes, including ridesharing, transit, bicycling walking, carpool/vanpool, etc. Incentives for Zoo employees could include flexible scheduling or options for telecommuting, discount transit passes, discounted equipment to employees who bike to work, or discounted equipment (e.g., walking shoes) to employees to walk to work.
- Maximize opportunities for Zoo employees to telecommute as part of regular scheduling.
- Provide a transportation information center and a commuter club to support a collaborative approach among employees to TDM.
- Provide onsite bicycle facilities (i.e., shower, racks, and lockers) for Zoo employees in an amount and location informed by annual employee surveys and monitoring reports.
- Encourage bicycles as a primary commute mode for employees and provide incentives for biking to work, including providing free or discounted equipment to employees such as helmets, locks, bicycle commuter gear, and bicycles (electric or non-electric).
- Coordinate with LARiverworks, RAP, LADOT, the City of Burbank, and the City of Glendale to identify and facilitate new bicycle and pedestrian linkages and bridges between the Zoo and neighboring communities, particularly linkages to Los Angeles River Bike Path. The Zoo, RAP, and LADOT in consultation with the City of Glendale shall consider development of a new bicycle and pedestrian bridge across Colorado Boulevard, linking neighborhoods within the City of Glendale to Griffith Park, south of the Project site. The Zoo, RAP, and LADOT shall ensure that all bicycle and pedestrian linkages and bridges to Griffith Park are well-signed and provide lighting, are regularly patrolled by law enforcement.
- Continue to seek grant funding to support expanded TDM measures to reduce employee VMT per capita.

2. Measures to Reduce Zoo Visitor VMT Per Capita

- Offer discounted Zoo entrance tickets for patrons who bike or use transit to visit the Zoo. Visitors must provide proof of arrival via transit to receive discounted rate. Advertise the availability of ticket discounts for transit through social media and in coordination with RAP, LADOT, and Metro.
- Coordinate with Metro to increase bus service frequency to the Zoo bus stop, such as advocating for the implementation of Metro's proposed Line 501.

- Seek funding opportunities to provide proportional share funding in coordination with RAP to expand Parkline Shuttle service to increase access to Griffith Park and the Zoo from nearby Metro light rail stations, as follows:
 - Expand Parkline Shuttle service to connect to the Metro B Line Vermont/Sunset station in the south and the Metro B/G (formerly, Orange) Line North Hollywood station in the north. Shuttle routes should be coordinated with LADOT and RAP.
 - Extend Parkline Shuttle service hours to begin at 9:30 AM, before the Zoo opens each day. This expanded service should first be targeted to occur during peak demand periods such as Easter, Memorial Day, and during Los Angeles Unified School District (LAUSD) holidays, such as the week of spring break.
 - Coordinate with RAP to monitor the success of the Parkline Shuttle during such peak periods and to fund expansion of the service over time, as needed, to facilitate and accommodate increased ridership. The program shall then be expanded to broaden the hours and days of operation as needed to meet demand.
 - Coordinate with RAP on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Seek funding opportunities to provide proportional share funding in coordination with Metro and LADOT to provide an express shuttle service to and from Los Angeles Union Station and the Zoo or a connection between the Glendale Metrolink station and the Zoo.
 - Provide Union Station shuttle during operating hours on weekends and legal holidays. This new service shall first be targeted as a pilot program to occur during peak demand periods such as Easter, Memorial Day, and during LAUSD holidays, such as spring break week. If successful, the program shall then be expanded to broaden hours and days of operation.
 - Coordinate with Metro and LADOT on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Maintain and expand onsite bicycle parking for Zoo visitors in an amount and location informed by visitor surveys and annual monitoring reports.
 - Maintain and expand short-term bicycle parking within the Zoo to meet changing demands evaluated in the TDM Program annual reports.
 - Provide well-lit, clearly signed, bicycle parking that is convenient and in close proximity to the Zoo Entry to encourage bicycling by visitors.
 - Provide secure short-term bicycle parking and/or a bicycle parking attendant, bicycle valet, or indoor bicycle parking facility to prevent theft and ensure parking availability for Zoo visitors.

- Design bicycle racks with space-efficient configurations, such as vertically staggered racks and two-tier racks.
- Provide a bike share station at the Zoo as a part of the Metro Bike Share, Ofo, or a new bike share program specific to Griffith Park. Funding shall be determined based on the area required for the bike station. The bike share station shall be well-lit and located at a safe and convenient location adjacent to the Zoo entrance.
- Develop and implement a paid parking program for Zoo visitors to discourage personal vehicle trips to the Zoo and provide a secure funding source to help subsidize TDM, transit improvement, and other trip reduction measures, considering the following options:
 - A Peak Period Parking Program would charge for preferred parking during the highest visitation periods, including all weekends (Saturdays and Sundays), holidays, the spring months (April and May), and December, collecting fees for preferred parking on approximately 170 days of the year (based on the 2020 calendar year).
 - An Everyday Parking Program would charge for preferred parking 364 days of the year (every day the Zoo is open).
 - Maintain at least 15 percent of parking spaces as free parking to meet the needs of disadvantaged households and ensure that low-income visitors may continue to visit the Zoo.
 - The Zoo's TDM Coordinator shall prepare a quarterly report on the effectiveness of the Paid Parking Program and monthly revenue generated.
 - Continue to seek grant funding to support expanded TDM measures to reduce visitor VMT per capita.

6.6 URBAN FORESTRY RESOURCES – LOCAL TREE POLICY OR ORDINANCE CONSISTENCY / LOSS OF URBAN FOREST

A significant impact to urban forestry resources would occur if protected trees and shrubs, such as California live oaks, western sycamores, and toyons, or important trees such as mature Moreton bay figs and acacias, may also be removed or damaged to accommodate proposed Project improvements. Based on the results of the tree survey, a total of 142 native trees and 85 native shrubs protected under the City's existing Protected Tree Ordinance and proposed Protected Tree Code Amendment would be subject to damage or removal during construction of the California and Africa improvements. Additional trees considered important (Moreton Bay figs, coral, acacia, sycamore, scrub oak, and maple trees) within developed areas of the Zoo are also likely be subject to damage or removal during construction. These may include hundreds of trees located throughout the Zoo, primarily eucalyptus and pines, in nearly all proposed development areas. Thus, implementation of the Vision Plan has the potential to damage or remove hundreds

of trees and shrubs, some of which are protected under existing and proposed City ordinances or warranted individual protection.

With the implementation of MM UF-1, impacts to protected and important trees and shrubs would be addressed consistent with applicable City tree protection policies, requiring replacement of removed protected and important trees at a 4:1 ratio as indicated by the City's proposed Protected Tree Preservation Ordinance amendment, notification of large-scale tree removal, acquisition of a necessary tree removal permit(s), and application of City tree removal procedures. Since significant trees impacted during Project implementation would be protected, relocated, or replaced, impacts would be less than significant with mitigation.

Project implementation would create a significant impact due to the proposed removal of substantial numbers of trees during construction, reducing the City's urban forest canopy. However, following completion of construction activities, tree cover and the urban canopy is proposed to be restored as part of a major landscaping and tree planting program, which would replace or improve the City's urban forest over the life of the Project. With implementation of MM UF-2, requiring preparation of a detailed landscape plan as part of each proposed phase, the Project area would be landscaped, irrigated, and maintained with a diverse mix of tree species that would individually and cumulatively provide significant urban forest value. Implementation of this measure would ensure recovery or even enhancement of the Zoo's, and the City's, urban forest such that a net loss of urban forestry resources would not occur. Impacts would be less than significant with mitigation.

6.6.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative urban forestry resources impacts related to consistency with a local tree protection ordinance or other policy implemented for preventing the loss of urban forest resources to a less than significant level.

MM UF-1: Protected Tree Plan. To offset impacts to protected and important trees and shrubs resulting from Vision Plan implementation, the Zoo shall prepare and implement a Protected Tree Plan. The Protected Tree Plan shall identify measures for the protection, relocation, and/or replacement of protected and important significant trees and shrubs. The Protected Tree Plan shall outline and require that Project activities affecting protected trees and shrubs proceed as follows:

1. Preservation of Trees and Shrubs: Protected and important trees and shrubs shall be preserved in place to the maximum extent feasible. To ensure protection of native protected trees and shrubs, as part of final design of the California and Africa area exhibits, all protected trees and shrubs shall be mapped and incorporated into the exhibit to the maximum extent feasible. The Zoo shall hire a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance to evaluate the health and structure of protected and important trees and shrubs and make recommendations for

avoidance of healthy specimens to the maximum extent feasible. The tree expert shall work with project designers during the final design of each phase to incorporate such trees into the exhibits in a manner that would ensure protection of the tree or shrub from damage by exhibit animals or exhibit maintenance activities. Each protected or important tree and shrub to be retained shall have a designated Protection Zone identifying the area sufficiently large enough to protect it and its roots from significant damage during construction. The designated Protection Zone of each specimen shall be protected with 5- to 6-foot-high chain link fences. Fences shall be mounted on 2-inch galvanized iron posts, driven into the ground to a depth of at least two feet and at no more than 10-foot centers, or similarly durable material. Tree and shrub fences shall be erected before demolition, grading, or construction begins and remain until final inspection of the project. Construction and demolition activities around protected trees shall follow all industry standards. Erosion control measures, tree pruning, soil compaction preventive measures, and a tree maintenance schedule shall be implemented and verified by the BOE and a City-authorized tree expert. Following construction, each tree or shrub preserved shall be monitored for a minimum of 5 years to ensure their long-term survivability.

2. Relocation of Trees and Shrubs: Where protected and important trees cannot be avoided and preserved in place, individuals shall be transplanted elsewhere onsite to the extent feasible. If relocation onsite is not feasible, individuals shall be transplanted to an appropriate offsite location elsewhere within Griffith Park, pursuant to the approval of the City BOE and RAP. The City-approved Tree Expert shall identify the necessary measure to be taken to ensure the maximum survivability of the relocated specimens, including relocation method, placement, irrigation method, and maintenance. Relocated individuals shall be monitored for their success for a period of 5 years. The Tree Protection Plan shall identify performance standards for determining whether relocated specimens are healthy and growing normally and shall outline procedures for periodic monitoring and implementation of corrective measures in the event the health of relocated trees declines.
3. Replacement of Trees and Shrubs: Where the preservation or relocation of protected and important trees and shrubs is not feasible, or where the health of preserved or relocated specimens becomes compromised, as part of the final design of each exhibit or feature, the Zoo shall prepare and implement a replacement planting program. Replacement of protected and important trees and shrubs should follow guidelines described in the City's Protected Tree Ordinance adopted at the time, including requirements for relocated or removed trees or shrubs to be replaced by other species protected by the ordinance at a 4:1 ratio (number of individuals restored to number of individuals impacted). Replacement of oak trees shall be subject to replacement as

follows: oak trees less than 12 inches DBH be replaced at 4:1; oak trees between 12 and 24 inches DBH be replaced at 5:1; and oak trees greater than 24 inches BDH be replaced at 10:1. The replacement planting program shall be prepared by a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance. The replacement planting program shall specify the location for replacement, tree or shrub size, planting specifications, and shall include a monitoring program to ensure that the replacement planting program is successful. To the extent feasible, protected, and important trees or shrubs removed within the California or Africa exhibits shall be replaced within each exhibit. Where this is not feasible, the Tree Protection Plan shall outline provisions and standards for replacement in areas outside of each exhibit. At a minimum, the monitoring program shall require monitoring of replacement individuals for a period of 5 years and shall include performance standards for determining whether replacement specimens are healthy and growing normally and procedures for periodic monitoring and implementation of corrective measures in the event that the health of replacement trees declines.

Replacement of removed trees and shrubs should occur within the Zoo to the extent feasible. If replacement within the Zoo is not feasible, the Zoo should coordinate with RAP and the City Forester for replacement trees and shrubs to be planted on adjacent areas of Griffith Park, provided such locations can support the tree's or shrub's survival. Each replacement tree shall be at least 15-gallon, or larger, measuring one inch or more in diameter one foot above the base, and be not less than seven feet in height measured from the base. If use of similar sized replacement trees and shrubs is not possible, smaller sized replacements may be planted. In that event, a greater number of replacement trees or shrubs may be required.

MM UF-2: Restoration Plan. To offset impacts to urban forestry resources and ensure landscaping under the Vision Plan is planned to provide urban forest value, the Zoo shall retain a qualified landscape architect to prepare a landscaping plan. The Zoo landscape plan shall be subject to review and approval by City Bureau of Engineering and shall include the following:

1. Maximize protection of existing protected and important trees and shrubs consistent with the Zoo's Tree Protection Plan identified in MM UF-1.
2. Specify a plant palette and landscape plan that ensures establishment of tree canopy that is cohesive with and supports continuity with the surrounding canopy. The plant palette shall emphasize tree species which are considered to provide a healthy mix of visual and biological value and which offer greater shade cover and carbon sequestration.
3. Plantings shall include tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures and plantings.

4. Landscaping shall occur immediately following completion of construction of a proposed area of improvement. Planting would use a combination of small containers and larger containers with more mature specimens to ensure plant health while also expediting recovery of the urban forest and minimizing duration of heat island effects following construction.

6.7 GEOLOGY AND SOILS – SEISMIC RELATED GROUND FAILURE / LANDSLIDES / UNSTABLE GEOLOGIC UNIT / PALEONTOLOGICAL RESOURCES

Risk for differential settlement is low to moderate at the Project site. However, individual projects may encounter increased expansion potential related to soil compaction levels based on site-specific soil conditions and testing results, especially where uncertified fills exist below a development site. The northwestern portion of the Zoo underlying the existing Papiano Play Park is also designated as an earthquake-induced liquefaction zone. The Project would involve redevelopment of existing outdated facilities and facilitate the construction of new buildings and facilities that meet the most current and stringent seismic requirements, thus reducing the level of risk in each planning area and within the Zoo as a whole, compared to existing conditions. New construction and redevelopment would comply with the Los Angeles Building Code and CBC, and adhere to the design recommendations detailed in site-specific geotechnical studies thereby addressing potential impacts related to seismic-related ground failure, including liquefaction. With MM GEO-1 to ensure geotechnical investigations are completed for each phase of Project development and that engineering techniques and technologies are integrated into final Zoo development plans, impacts related to ground failure would be less than significant with mitigation.

Several Project components would involve excavation and building construction techniques that would produce vibrations (such as jackhammering, drilling, blasting, and pile installation). While the Project site is not located in an area susceptible to large-scale landslides, the Zoo Entry and undeveloped hillside proposed for the California planning area are areas of landslide concern and some slopes along the western and northern portions of the site may be subject to small to moderate sized rock falls. Per MM GEO-1, these slopes would be observed, mapped, and further evaluated for Project components proposed adjacent to exposed rock slopes or if cuts slopes are planned in bedrock areas (e.g., California planning area). Therefore, impacts related to landslide risks would be less than significant with mitigation.

Excavation activities associated with the Project may loosen exposed soils or slopes causing instability within the excavation site or compromised stability for adjacent properties. All excavation activities in the Project site would be required to adhere to mandatory regulations set forth by the California Occupational Safety and Hazard Administration (CalOSHA) to ensure the safety of construction workers during excavation, the Los Angeles Building Code and CBC, which includes requirements for safeguards at work sites to ensure stable excavations and cut or fill slopes, and the City's plan check process. The City is also required to prepare and submit a site-specific geotechnical report for review and approval by the Los Angeles Department of Building

and Safety (LADBS) prior to the issuance of a grading or a building permit. Geotechnical reports would be prepared in accordance with the requirements of the County's Manual for Preparation of Geotechnical Reports and are required to evaluate site-specific geological hazards, including groundwater hazards.

Therefore, with MM GEO-1 to ensure geotechnical investigations are completed for each phase of Project development and that engineering techniques and technologies are integrated into final Zoo development plans, geologic risks associated with unstable geology would be minimized and impacts would be less than significant with mitigation.

Due to the proposed excavation and ground disturbing activities into geologic units with high and moderate paleontological potential, Project construction may directly impact previously unidentified paleontological resources. Per MM GEO-2 and MM GEO-3, implementation of combined paleontological resource mitigation plan with as-needed monitoring and worker training would reduce potentially significant impacts to paleontological resources through the recovery, preparation, deposition, and maintenance of fossil specimens uncovered during ground disturbing activities in an appropriate museum repository. Thus, impacts would be less than significant with mitigation.

6.7.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative geology and soils impacts to a less than significant level.

MM GEO-1: Site-Specific Geotechnical Evaluation. Prior to the design and construction of proposed improvements at in each phase of the Project, a detailed geotechnical evaluation, including subsurface exploration and laboratory testing, shall be performed, consistent with LADBS standards and approvals. The geotechnical evaluation shall 1) further evaluate the specific subsurface conditions, including liquefaction and landslide potential, at each development site, 2) provide site-specific data regarding potential geologic and geotechnical constraints, and 3) provide information pertaining to the engineering characteristics of earth materials with regard to the proposed Project. Recommendations for earthwork, excavations, foundations, shoring, pavements, and other pertinent geotechnical design considerations shall be formulated from the detailed geotechnical evaluation. In the California planning area, the proposed hillside cut, excavation, and reinforcement required for Condor Canyon and its potential bridges shall be evaluated and designed with appropriate shoring mechanisms to avoid landslide and soil instability during construction and operation. The recommendations of the geotechnical report shall be incorporated into the final design and construction of the Project components. The geotechnical reports shall analyze for the following hazards:

- If the site-specific geotechnical evaluation finds that slope instability is an issue in certain phases of development such as California and Africa planning area improvements, engineering techniques and technologies as retaining walls or graded soil buttresses, shall be employed during construction and/or operation.
- If the site-specific geotechnical evaluation finds that liquefaction is an issue in certain phases of development such as development of Zoo Entry, Nature Play Park, or Asia planning area improvements or the proposed parking structure, engineering techniques and technologies such as removal and recompaction, densification of existing soils, or deepened foundations shall be employed during construction and operation.
- If the site-specific geotechnical evaluation finds that expansive soils are an issue in certain phases of development such as development of Zoo Entry, Nature Play Park, or Asia planning area improvements, engineering techniques and technologies such as removal and replacement with low expansive materials or special reinforced design of foundations and slabs shall be employed during construction and operation.
- If the site-specific geotechnical evaluation finds that dynamic compaction of dry soils is an issue in certain phases of development, engineering techniques and technologies such as removal and recompaction, densification of existing soils, or deepened foundations may be employed during construction and operation.

The Zoo shall prepare each geotechnical evaluation for each improvement in Phases 1 – 7 to inform final design and engineering of improvements. Each geotechnical investigation shall be reviewed and approved by LADBS and the City BOE prior to groundbreaking of each phase. LADBS and the City BOE shall review and approve all geotechnical investigations and review final Zoo development and engineering plans to ensure geotechnical recommendations are accurately incorporated prior to Project-related construction.

MM GEO-2: Site-specific Paleontological Mitigation Plan. A qualified paleontologist approved by the City of Los Angeles and the Los Angeles County Natural History Museum Vertebrate Paleontology Department shall be retained prior to earth-moving activities associated with construction of any individual Project phase. Prior to these earth-moving activities, the paleontologist shall determine if a site-specific mitigation plan is required for each phase based on the underlying geology and the proposed depths of excavation proposed by development and engineering plans for each phase. If a site-specific mitigation plan is required, the plan shall specify the level and types of mitigation efforts as set forth below, based on the types and depths of any ground disturbing activities and associated, impacted geological unit.

Where a site-specific mitigation plan is required, earth-moving activities shall be monitored by the paleontologist or a monitor. Monitoring is only required in those

areas of the individual development phase where these activities would disturb previously undisturbed geological units and dependent upon the units present. Monitoring shall be conducted on a full-time basis in areas underlain by the Upper Topanga Formation, and at depths greater than 10 feet bgs in areas underlain by Quaternary alluvium. Monitoring shall consist of:

- Visually inspecting debris piles and freshly exposed cuts for larger fossil remains.
- Periodic dry screening sediment, rock, and debris for smaller fossil remains
- Recovery of all vertebrate fossil specimens, a representative sample of invertebrate or plant fossils, or any fossiliferous rock sample that may be easily recovered.
- Diversion of ground disturbing activities away from large or unusually productive fossil localities for the time that is required to recover the resource by the paleontologist or monitor(s).
- Notification of the paleontologist or monitor (if not on-site) by the construction crew of any unanticipated discoveries of fossil resources. Ground disturbing activities will be temporarily diverted while the paleontologist or monitor assess the resource and determine if recovery is warranted or if ground-disturbing activities may resume in the area.
- Collection of rock or sediment samples of the Upper Topanga Formation or Quaternary alluvium for each construction site for processing for small fossils. The total weight of all processed samples from either rock unit shall not exceed 1,000 pounds (2,000 pounds total). The results of processing initial 250-pound test samples shall be used by the paleontologist in determining how much of the remaining total samples shall be collected and processed. More of the samples shall be processed if the recovered remains are sufficiently concentrated (at least 4-5 identifiable specimens per sample), generally identified to genus or species level, and represent a taxonomically diverse faunal assemblage. With the development of each successive construction site, the paleontologist or monitor, may specify that less than 1,000 pounds shall be processed, based on the amount of excavation and other ground disturbing activities that would occur in areas underlain by the Quaternary alluvium, 10 feet bgs, or Upper Topanga Formation, and on the results of processing samples from the same rock unit at previous construction sites.
- Unless potentially fossilized remains are discovered at or near the surface, no paleontological monitoring of ground disturbing activities in the Quaternary alluvium at depths less than 10 feet bgs, and no samples shall be collected or processed.
- The paleontologist or monitor shall maintain daily monitoring logs that record the tasks accomplished, locations, where ground disturbing activities and monitoring were conducted, geological units encountered, any fossil specimen

recovered, and associated specimen data and geologic and geographic site data.

If no fossil remains are found after 50 percent of ground-disturbing activities have been completed in an area underlain by Quaternary alluvium or Upper Topanga Formation, monitoring may be reduced or suspended in the remainder of that area with approval from the City of Los Angeles.

If a site-specific mitigation program is required, the paleontologist shall reach a formal agreement with a recognized museum repository, such as the Los Angeles County Natural History Museum, before the mitigation program begins. The agreement shall include specifications regarding final disposition and permanent storage and maintenance of any fossil specimens recovered as part of the mitigation program as well as archiving associated fossil specimen data and corresponding geologic and geographic site data, and level of treatment/preparation of the fossil specimens. The fossil collection shall be donated to a public, nonprofit repository with a research interest in the collection. The costs to be charged by the repository for curating and permanently storing the collected fossil specimens shall be specified in the repository agreement.

If paleontological resources are discovered and curated as a result of a required site-specific mitigation program, a final technical report of results and findings shall be prepared by the paleontologist in accordance with City of Los Angeles requirements, as applicable. Copies of the final report and any supporting documentation, including the paleontologist's or monitor's field notes and fossil site maps shall be archived at the designated repository. The final report shall be prepared upon completion of ground disturbing activities for the first applicable phase of Project development. Subsequent reports for additional phases shall be issued as addenda to the first final report. Individual projects whose ground disturbing activities are completed within a single calendar year may be addressed collectively in one report or addendum, as applicable.

MM GEO-3: Worker Paleontological Resource Awareness Program. Prior to construction of each phase, workers shall receive education regarding the recognition of possible paleontological resources, during grading and excavation. Such training shall provide construction personnel with direction regarding the procedures to be followed in the unlikely event that previously unidentified paleontological materials are discovered during construction. Training shall also inform construction personnel that unauthorized collection or disturbance of paleontological resources is not allowed. The training shall be prepared by a City-approved paleontologist and shall provide a description of paleontological resources that may be encountered in the Project site, outline steps to follow in the event that a discovery is made, and provide contact information for the Project paleontologist and appropriate City personnel. The training shall be conducted concurrent with other environmental or safety awareness and education programs for the Project,

provided that the program elements pertaining to paleontological resources is provided by a qualified instructor meeting applicable professional qualifications standards. To prevent inadvertent potential significant impacts to paleontological resources that may be encountered during ground disturbance or construction activities, in the event of any inadvertent discovery of paleontological resources during construction, all work within the vicinity of the resource established by the City-approved paleontologist shall temporarily cease. If a paleontological resource is discovered, the City-approved paleontologist shall be notified to assess the significance of the find and provide recommendations as necessary for its proper disposition and the need for a site-specific mitigation plan, consistent with MM GEO-2.

6.8 GREENHOUSE GAS EMISSIONS – CONSISTENCY WITH PLANS, POLICIES, OR REGULATIONS ADOPTED FOR THE PURPOSE OF REDUCING GHG EMISSIONS

The Project would support the state's strategies in the 2017 Climate Change Scoping Plan to reduce GHG emissions. The 2017 Climate Change Scoping Plan relies on a broad array of GHG reduction strategies, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms, such as the Cap-and-Trade Program. These potential strategies include increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting high speed rail and other alternative transportation options, and use of high efficiency appliances, water heaters, and heating, ventilation, and air conditioning (HVAC) systems. The Project would benefit from statewide and City efforts towards increasing the portion of electricity provided from renewable resources. The Project would also benefit from statewide efforts towards increasing the fuel economy standards of vehicles. The Project would utilize energy efficient appliances and equipment, as well as electric-powered vehicles by providing electric vehicle (EV) spaces. The Project would be designed with up to 70,000 square feet (sf) of solar photovoltaic panels to reduce energy demand and increase use of renewably sourced energy. In addition, consistent with the City's Green Building Code, new development under the Project would be designed to include green building measures and be equipped with energy and water efficient systems or appliances. While CARB is in the process of developing a framework for the 2030 reduction target in the Scoping Plan, the Project would support or not impede implementation of these potential reduction strategies identified by CARB. The Project would not introduce a new land use development outside of a High-Quality Transit Area, and implementation of the Project would improve access to the site via alternative modes of travel by improving access to the site by transit and promoting pedestrian and bicycle access, consistent with the elements of the Southern California Association of Government's (SCAG's) Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS), which was derived to comply with Senate Bill (SB) 375 and determined to contain sufficient targets to meet statewide emissions reduction goals associated with regional transportation planning.

Further, the Project would support the City's GHG reduction goals and policies established in the City's General Plan, Hollywood Community Plan, Sustainable City pLAN, and the City's Green New Deal. The proposed Project includes several sustainable design features and characteristics, such as the capture and reuse of stormwater runoff for irrigation, utilization of LADWP recycled water supplies to reduce demand for potable water supplies, efficient landscape irrigation systems, installation of up to 70,000 sf of rooftop solar electric photovoltaic panels, use of LEED Silver construction techniques, and various measures to reduce Project VMT. All these measures are either directly intended to or would indirectly reduce overall GHG impacts.

Thus, the proposed Project would be consistent with the City General Plan, Sustainability pLAN, Green New Deal, California Renewables Portfolio Standard, SB 350, SB 100, CCR Title 24, California Green Building Standards Code Requirements, SB 375, recommendations of the State Attorney General, OPR and Climate Action Team, and all applicable goals of the 2016-2040 RTP/SCS with implementation of mitigation requiring preparation of a SWPPP (MM HYD-2) and replacement of trees contributing to the urban forest (MM UF-1 and MM UF-2), and implementation of TDM measures for reducing Zoo VMT (MM T-2). Therefore, the Project would be consistent with applicable local plans, policies, and regulations and impacts would be less than significant with mitigation.

6.8.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to ensure and enhance Project consistency with applicable plans, policies, and regulations adopted with the intent of reducing GHG emissions and reduce potentially significant direct and cumulative GHG impacts to a less than significant level.

MM UF-1: Protected Tree Plan. To offset impacts to protected and important trees and shrubs resulting from Vision Plan implementation, the Zoo shall prepare and implement a Protected Tree Plan. The Protected Tree Plan shall identify measures for the protection, relocation, and/or replacement of protected and important significant trees and shrubs. The Protected Tree Plan shall outline and require that Project activities affecting protected trees and shrubs proceed as follows:

1. Preservation of Trees and Shrubs: Protected and important trees and shrubs shall be preserved in place to the maximum extent feasible. To ensure protection of native protected trees and shrubs, as part of final design of the California and Africa area exhibits, all protected trees and shrubs shall be mapped and incorporated into the exhibit to the maximum extent feasible. The Zoo shall hire a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance to evaluate the health and structure of protected and important trees and shrubs and make recommendations for avoidance of healthy specimens to the maximum extent feasible. The tree expert shall work with project designers during the final design of each phase to incorporate such trees into the exhibits in a manner that would ensure

protection of the tree or shrub from damage by exhibit animals or exhibit maintenance activities. Each protected or important tree and shrub to be retained shall have a designated Protection Zone identifying the area sufficiently large enough to protect it and its roots from significant damage during construction. The designated Protection Zone of each specimen shall be protected with 5- to 6-foot-high chain link fences. Fences shall be mounted on 2-inch galvanized iron posts, driven into the ground to a depth of at least two feet and at no more than 10-foot centers, or similarly durable material. Tree and shrub fences shall be erected before demolition, grading, or construction begins and remain until final inspection of the project. Construction and demolition activities around protected trees shall follow all industry standards. Erosion control measures, tree pruning, soil compaction preventive measures, and a tree maintenance schedule shall be implemented and verified by the BOE and a City-authorized tree expert. Following construction, each tree or shrub preserved shall be monitored for a minimum of 5 years to ensure their long-term survivability.

2. Relocation of Trees and Shrubs: Where protected and important trees cannot be avoided and preserved in place, individuals shall be transplanted elsewhere onsite to the extent feasible. If relocation onsite is not feasible, individuals shall be transplanted to an appropriate offsite location elsewhere within Griffith Park, pursuant to the approval of the City BOE and RAP. The City-approved Tree Expert shall identify the necessary measure to be taken to ensure the maximum survivability of the relocated specimens, including relocation method, placement, irrigation method, and maintenance. Relocated individuals shall be monitored for their success for a period of 5 years. The Tree Protection Plan shall identify performance standards for determining whether relocated specimens are healthy and growing normally and shall outline procedures for periodic monitoring and implementation of corrective measures in the event the health of relocated trees declines.
3. Replacement of Trees and Shrubs: Where the preservation or relocation of protected and important trees and shrubs is not feasible, or where the health of preserved or relocated specimens becomes compromised, as part of the final design of each exhibit or feature, the Zoo shall prepare and implement a replacement planting program. Replacement of protected and important trees and shrubs should follow guidelines described in the City's Protected Tree Ordinance adopted at the time, including requirements for relocated or removed trees or shrubs to be replaced by other species protected by the ordinance at a 4:1 ratio (number of individuals restored to number of individuals impacted). Replacement of oak trees shall be subject to replacement as follows: oak trees less than 12 inches DBH be replaced at 4:1; oak trees between 12 and 24 inches DBH be replaced at 5:1; and oak trees greater than 24 inches BDH be replaced at 10:1. The replacement planting program shall

be prepared by a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance. The replacement planting program shall specify the location for replacement, tree or shrub size, planting specifications, and shall include a monitoring program to ensure that the replacement planting program is successful. To the extent feasible, protected, and important trees or shrubs removed within the California or Africa exhibits shall be replaced within each exhibit. Where this is not feasible, the Tree Protection Plan shall outline provisions and standards for replacement in areas outside of each exhibit. At a minimum, the monitoring program shall require monitoring of replacement individuals for a period of 5 years and shall include performance standards for determining whether replacement specimens are healthy and growing normally and procedures for periodic monitoring and implementation of corrective measures in the event that the health of replacement trees declines.

Replacement of removed trees and shrubs should occur within the Zoo to the extent feasible. If replacement within the Zoo is not feasible, the Zoo should coordinate with RAP and the City Forester for replacement trees and shrubs to be planted on adjacent areas of Griffith Park, provided such locations can support the tree's or shrub's survival. Each replacement tree shall be at least 15-gallon, or larger, measuring one inch or more in diameter one foot above the base, and be not less than seven feet in height measured from the base. If use of similar sized replacement trees and shrubs is not possible, smaller sized replacements may be planted. In that event, a greater number of replacement trees or shrubs may be required.

MM UF-2: Restoration Plan. To offset impacts to urban forestry resources and ensure landscaping under the Vision Plan is planned to provide urban forest value, the Zoo shall retain a qualified landscape architect to prepare a landscaping plan. The Zoo landscape plan shall be subject to review and approval by City Bureau of Engineering and shall include the following:

1. Maximize protection of existing protected and important trees and shrubs consistent with the Zoo's Tree Protection Plan identified in MM UF-1.
2. Specify a plant palette and landscape plan that ensures establishment of tree canopy that is cohesive with and supports continuity with the surrounding canopy. The plant palette shall emphasize tree species which are considered to provide a healthy mix of visual and biological value and which offer greater shade cover and carbon sequestration.
3. Plantings shall include tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures and plantings.
4. Landscaping shall occur immediately following completion of construction of a proposed area of improvement. Planting would use a combination of small containers and larger containers with more mature specimens to ensure plant

health while also expediting recovery of the urban forest and minimizing duration of heat island effects following construction.

MM HYD-2: Preparation of a Storm Water Pollution Prevention Plan (SWPPP). For each phase of construction, the City shall require the building contractor to prepare and submit a SWPPP as part of the City's NPDES Construction General Permit 45 days prior to the start of work for approval. The contractor is responsible for understanding the Construction General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of 1 acre, or where the area of disturbance is less than 1 acre but is part of the Project's plan of development that in total disturbs 1 or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to stormwater and shall include specific BMPs to control the discharge of material from the site, including, but not limited to:

- Temporary detention basins, straw bales, sand bagging, mulching, erosion control blankets, silt fencing, and soil stabilizers shall be used.
- Sufficient physical protection and pollution prevention measures to prevent sedimentation, siltation, and/or debris from entering the onsite storm drain system, proposed stormwater management system, and the Los Angeles River.
- Soil stockpiles and graded slopes shall be covered after 14 days of inactivity and 24 hours prior to and during inclement weather conditions.
- Fiber rolls shall be placed along the top of exposed slopes and at the toes of graded areas to reduce surface soil movement, as necessary.
- Sandbags, or other equivalent techniques, shall be utilized along graded areas to prevent siltation transport to the surrounding areas.
- A routine monitoring plan shall be implemented to ensure success of all onsite erosion and sedimentation control measures.
- Dust control measures shall be implemented to ensure success of all onsite activities to control fugitive dust.
- Streets, parking areas, and paved pathways affected by phased Project construction shall be cleaned daily or as necessary to remove sediment, soils, and other construction debris.
- BMPs shall be strictly followed to prevent spills and discharges of pollutants onsite (material and container storage, proper trash disposal, construction entrances, etc.); additional BMPs shall be implemented for any fuel storage or fuel handling that could occur onsite during construction.

The SWPPP must be prepared in accordance with the guidelines adopted by the State Water Resources Control Board (SWRCB). The SWPPP shall be submitted to the City BOE along with grading/development plans for review and approval. The SWPPP and notices shall be submitted to the SWRCB under their Stormwater

Multi-Application, Reporting, and Tracking System (SMARTS). The SWPPP shall be designed to address erosion and sediment control during all phases of development of the site until all disturbed areas are permanently stabilized.

All development plans and permits shall reflect the approved erosion control plan and BMPs submitted to the SWRCB. The Zoo shall be responsible for ensuring all requirements are included in construction plans and implemented as part of construction. All construction activities shall be monitored by a City BOE staff to ensure compliance with the SWPPP.

All construction activities shall be monitored by City staff to ensure compliance with the SWPPP during grading and after conclusion of grading activities to monitor runoff. A Qualified SWPPP Practitioner shall be retained by the developer for overall management and reporting responsibility regarding the SWPPP and documentation under SMARTS in accordance with their permitting requirement. The City will keep a copy of the SWPPP on the Project site during grading and construction activities.

The City shall file a Notice of Completion once construction of each Project phase is complete, identifying that pollution sources were controlled during the construction of the proposed Project and implementing a closure SWPPP for the site.

MM T-2: Zoo Transportation Demand Management (TDM) Program. The Zoo shall prepare and implement a comprehensive TDM program to provide trip reduction strategies for Zoo visitors and employees. The TDM Program shall be prepared by a qualified transportation planner and submitted by the Zoo to LADOT for review and approval prior construction activity. The goal of the TDM Program shall be to reduce Zoo employee VMT by 10 percent below existing conditions by 2040. The TDM Program shall also apply all feasible VMT reduction strategies for visitor vehicle trips to reduce visitor VMT below projected conditions to the maximum extent feasible. The TDM Program shall be developed and approved prior to operation of Phase 1 of the Project and shall be maintained and adjusted as needed continuously.

The TDM Program shall be overseen by a Zoo TDM Coordinator. The Zoo TDM Coordinator shall be qualified transportation planner and may be a City/Zoo employee or contractor. The Zoo TDM Coordinator shall monitor visitor and employee mode share with annual surveys, collect and analyze parking and transit use data, and develop annual reports for submittal to BOE and LADOT. The surveys shall capture trip origin data, travel mode, number of people in the party, and other key data and indicators for TDM program performance relative to VMT. The Zoo TDM Coordinator shall ensure that monitoring efforts capture all Zoo-related travel behavior. Annual monitoring reports shall include trip length surveys completed at least biannually by a sample of Zoo patrons and annually by Zoo

employees (e.g., trip origin data collection). Monitoring results shall be used to determine the appropriate TDM measures to employ in the coming year to maximize reductions in VMT per capita, champion transit and alternative mode transportation to the Zoo for visitors and employees, develop appropriate incentives to increase the Zoo's transit mode share incrementally over time, and develop effective marketing tools to advertise transit and non-vehicular travel mode availability and incentives.

Each annual TDM Program monitoring report shall:

- Describe the TDM efforts in place at the time to reduce vehicular trips;
- Summarize collected survey data and results;
- Evaluate parking utilization and transit use, comparing trends and annual changes;
- Analyze the results of trip reduction measures in reducing VMT relative to projected VMT increases;
- Evaluate change in available transportation infrastructure and programs serving the Zoo,
- Report the effect on Zoo employee and visitor VMT per capita and compare to current Citywide VMT per capita; and
- Provide recommendations for adjustments to the TDM Program to adaptively manage VMT reductions for visitors and employees, such as increase the charges of paid parking or expand incentives associated with proposed programs, particularly on peak days.

The TDM Coordinator shall oversee annual monitoring and reporting to evaluate the effectiveness of the TDM measures being implemented at the Zoo and recommend adjustments as needed to the TDM Program on an annual basis. The annual report shall be submitted to LADOT for review. The TDM measures shall be assessed and adapted as necessary based on the results of this review. Final annual reports and data (e.g., survey data) shall be shared with the City and made readily available for public review and use. The TDM Coordinator may reference the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* (2010) report and the FHWA's *Integrating Demand Management into the Transportation planning Process: A Deck Reference* (2012), among others, for potential additional measures or adjustments that are determined to be feasible based on the effectiveness of the TDM Program and future conditions.

The TDM Program shall be prepared consistent with the Mobility Element and in consultation with LADOT, as well as RAP, if required for measures affecting Griffith Park. Information regarding the TDM Program shall be distributed to all Zoo employees and shall be posted on the Zoo's website and other marketing materials for Zoo visitors and updated annually as needed based on the annual reports.

The TDM Coordinator shall consider a range of measures for the TDM Program to reduce employee and visitor VMT per capita, including, but not limited to, the following:

1. Measures to Reduce Zoo Employee VMT Per Capita

- Encourage employee participation in existing vanpool programs, including City employee and Metro vanpool programs, or develop/expand the Zoo vanpool program.
- Provide employee incentives to participate in a vanpool program, such as subsidized participant fees, offer in-kind services such as oil change discounts, and provide preferential parking for program participants, and regularly advertise the opportunities to vanpool through a variety of employee communication formats.
- Implement a paid parking program to discourage employee vehicle trips to the Zoo and generate revenue that the Zoo may use to expand transit ridership for employee trips. Pricing options of onsite employee parking spaces include pay-per-use or weekly/monthly parking passes.
- Partner with rideshare companies such as Uber or Lyft to guarantee availability of an emergency ride home or provide access to City vehicles for this purpose.
- Offer employee TDM benefits for use of active transportation commuter modes, including ridesharing, transit, bicycling walking, carpool/vanpool, etc. Incentives for Zoo employees could include flexible scheduling or options for telecommuting, discount transit passes, discounted equipment to employees who bike to work, or discounted equipment (e.g., walking shoes) to employees to walk to work.
- Maximize opportunities for Zoo employees to telecommute as part of regular scheduling.
- Provide a transportation information center and a commuter club to support a collaborative approach among employees to TDM.
- Provide onsite bicycle facilities (i.e., shower, racks, and lockers) for Zoo employees in an amount and location informed by annual employee surveys and monitoring reports.
- Encourage bicycles as a primary commute mode for employees and provide incentives for biking to work, including providing free or discounted equipment to employees such as helmets, locks, bicycle commuter gear, and bicycles (electric or non-electric).
- Coordinate with LARiverworks, RAP, LADOT, the City of Burbank, and the City of Glendale to identify and facilitate new bicycle and pedestrian linkages and bridges between the Zoo and neighboring communities, particularly linkages to Los Angeles River Bike Path. The Zoo, RAP, and LADOT in consultation with the City of Glendale shall consider development of a new bicycle and pedestrian bridge across Colorado Boulevard, linking neighborhoods within the

City of Glendale to Griffith Park, south of the Project site. The Zoo, RAP, and LADOT shall ensure that all bicycle and pedestrian linkages and bridges to Griffith Park are well-signed and provide lighting, are regularly patrolled by law enforcement.

- Continue to seek grant funding to support expanded TDM measures to reduce employee VMT per capita.

2. Measures to Reduce Zoo Visitor VMT Per Capita

- Offer discounted Zoo entrance tickets for patrons who bike or use transit to visit the Zoo. Visitors must provide proof of arrival via transit to receive discounted rate. Advertise the availability of ticket discounts for transit through social media and in coordination with RAP, LADOT, and Metro.
- Coordinate with Metro to increase bus service frequency to the Zoo bus stop, such as advocating for the implementation of Metro's proposed Line 501.
- Seek funding opportunities to provide proportional share funding in coordination with RAP to expand Parkline Shuttle service to increase access to Griffith Park and the Zoo from nearby Metro light rail stations, as follows:
 - Expand Parkline Shuttle service to connect to the Metro B Line Vermont/Sunset station in the south and the Metro B/G (formerly, Orange) Line North Hollywood station in the north. Shuttle routes should be coordinated with LADOT and RAP.
 - Extend Parkline Shuttle service hours to begin at 9:30 AM, before the Zoo opens each day. This expanded service should first be targeted to occur during peak demand periods such as Easter, Memorial Day, and during LAUSD holidays, such as the week of spring break.
 - Coordinate with RAP to monitor the success of the Parkline Shuttle during such peak periods and to fund expansion of the service over time, as needed, to facilitate and accommodate increased ridership. The program shall then be expanded to broaden the hours and days of operation as needed to meet demand.
 - Coordinate with RAP on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Seek funding opportunities to provide proportional share funding in coordination with Metro and LADOT to provide an express shuttle service to and from Los Angeles Union Station and the Zoo or a connection between the Glendale Metrolink station and the Zoo.
 - Provide Union Station shuttle during operating hours on weekends and legal holidays. This new service shall first be targeted as a pilot program to occur during peak demand periods such as Easter, Memorial Day, and during LAUSD holidays, such as spring break week. If successful, the program shall then be expanded to broaden hours and days of operation.

- Coordinate with Metro and LADOT on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Maintain and expand onsite bicycle parking for Zoo visitors in an amount and location informed by visitor surveys and annual monitoring reports.
 - Maintain and expand short-term bicycle parking within the Zoo to meet changing demands evaluated in the TDM Program annual reports.
 - Provide well-lit, clearly signed, bicycle parking that is convenient and in close proximity to the Zoo Entry to encourage bicycling by visitors.
 - Provide secure short-term bicycle parking and/or a bicycle parking attendant, bicycle valet, or indoor bicycle parking facility to prevent theft and ensure parking availability for Zoo visitors.
 - Design bicycle racks with space-efficient configurations, such as vertically staggered racks and two-tier racks.
 - Provide a bike share station at the Zoo as a part of the Metro Bike Share, Ofo, or a new bike share program specific to Griffith Park. Funding shall be determined based on the area required for the bike station. The bike share station shall be well-lit and located at a safe and convenient location adjacent to the Zoo entrance.
- Develop and implement a paid parking program for Zoo visitors to discourage personal vehicle trips to the Zoo and provide a secure funding source to help subsidize TDM, transit improvement, and other trip reduction measures, considering the following options:
 - A Peak Period Parking Program would charge for preferred parking during the highest visitation periods, including all weekends (Saturdays and Sundays), holidays, the spring months (April and May), and December, collecting fees for preferred parking on approximately 170 days of the year (based on the 2020 calendar year).
 - An Everyday Parking Program would charge for preferred parking 364 days of the year (every day the Zoo is open).
 - Maintain at least 15 percent of parking spaces as free parking to meet the needs of disadvantaged households and ensure that low-income visitors may continue to visit the Zoo.
 - The Zoo's TDM Coordinator shall prepare a quarterly report on the effectiveness of the Paid Parking Program and monthly revenue generated.
 - Continue to seek grant funding to support expanded TDM measures to reduce visitor VMT per capita.

MM UT-1: Recycled Water Use. In accordance with the Green New Deal pLAn and One Water L.A. Plan, the Zoo shall work with LADPW and the Los Angeles Bureau of Sanitation (LASAN) to expand recycled water lines (purple pipe) to interior portions of the Zoo. Recycled water shall be used to the maximum extent available for

washdown of the animal holding areas, powerwashing walkways and plazas, and flushing toilets, and in the Zoo's exhibits (e.g., treatment systems, ponds, aesthetics, water features, etc.) if the recycled water is dechlorinated before use, and for fire suppression where feasible. Additionally, all irrigation water demand not covered by stormwater captured in the proposed stormwater collection system (i.e., during dry years), shall be covered by recycled water. The point of connection to the City's water recycling system would be at the existing 8-inch recycled water main at the west end of the Zoo parking lot in Griffith Park, subject to review and approval of LADPW, LASAN, and BOE. LASAN staff shall ensure the recycled water main connections are incorporated into the final building plans prior grading. City staff shall ensure measures are on all Project plans to ensure that these requirements are implemented.

6.9 HAZARDS AND HAZARDOUS MATERIALS – RELEASE OF HAZARDOUS MATERIALS / HAZARDOUS MATERIALS WITHIN ONE-QUARTER MILE OF A SCHOOL / LIST OF HAZARDOUS MATERIALS SITES

The Project site is located near multiple regulated hazardous material sites, including one leaking underground storage tank (LUST) with a closed status and one Superfund cleanup site that was opened in January 1984, and is undergoing continuing cleanup and investigation activities. It is unlikely that existing contaminants identified on other nearby sites would have an impact on the Project site, due to distance, hydraulic gradient in relation to the Project site, or due to past cleanup efforts. In addition to existing hazardous materials sites in the vicinity of the Project site, the Grayson Power Plant has the potential to affect the Project site due to the risk of release of hazardous materials. However, spills are limited to the immediate area and spill response plans would address containment and clean up; therefore, it is unlikely that the volume of spills will travel beyond the immediate area of the spill and impact offsite receptors such as the Zoo. The proposed Project would involve the demolition and renovation of several buildings at the Zoo that were constructed before 1970. Due to the age of the buildings, there is a potential for hazardous materials such as asbestos containing materials (ACM) and lead-based paint (LBP) to be present onsite. The Phase II Environmental Site Assessment (ESA) required under MM HAZ-1 would identify the potential presence of ACM and LBP in the buildings proposed for demolition or renovation under the Vision Plan. If asbestos is detected during the Phase II ESA, compliance with SCAQMD Rule 1403 would be required, which would require the abatement and control of ACM prior to demolition. Similarly, CCR Title 8, Industrial Relations would require the removal and control of LBP prior to demolition. Additionally, standard BMPs would be applied, as necessary (e.g., protective equipment, fugitive dust controls etc.). With the implementation of appropriate mitigation, impacts associated with ACM and LBP would be less than significant with mitigation.

Potential contamination from the underground storage tanks (USTs) located adjacent to the South Parking area and Autry Museum may be disturbed during implementation of the circulation

improvements at Zoo Drive and Western Heritage Way during Phase 1 of the Project. Implementation of MM HAZ-1 would require a Phase II ESA to evaluate the presence of hazardous soil contamination and vapor intrusion prior to demolition and grading activities. In the event that the Phase II ESA identifies soil and/or groundwater contamination at or above regulatory levels, implementation of MM HAZ-2 would require remediation activities prior to the issuance of grading permits to ensure no adverse impacts from exposure to soil contamination. Implementation of MM HAZ-1 and MM HAZ-2 would reduce potential impacts related to the recognized environmental condition and vapor encroachment condition at the fueling station to less than significant. Operational impacts related to hazardous materials, substances, and wastes are not considered significant as the types and amounts of potentially hazardous materials used and stored for operation of the proposed Project would not substantially change from existing conditions. Users of such materials are required to follow manufacturer instructions and dispose of excess solutions and empty containers properly.

Development of the proposed aerial transit system and funicular at the Zoo would increase the potential for safety hazards associated with engineering functions. The aerial transit system would comply with the current Safety Requirements for Passenger Tramways (American National Standards Institute [ANSI] B77.1) as well as CCR Title 8, Subchapter 6.1, Article 8 Wire Rope And Strand Requirements. Similarly, design, construction, operation, and maintenance of the California planning area's funicular would comply with the current American National Standard for Funiculars–Safety Requirements (ANSI B77.2). Therefore, incorporation of the aerial transit system and funicular at the Zoo under the Vision Plan would result in no significant impacts to safety.

The Project proposes to construct updated animal enclosures and new animal enclosures would be constructed in compliance with current AZA structural engineering and design standards to include safety measures. The Zoo currently maintains operational procedures pursuant to the AZA Accreditation Standards and Related Policies in order to protect the safety of the animals, zookeepers, and Zoo visitors alike. Under operation of the Project, the Zoo would continue to comply with existing safety procedures. Therefore, safety hazards related to Zoo animals would not occur due to implementation of the Vision Plan, and safety impacts would be less than significant.

The North Hollywood High School Magnet Center is located within the 0.25 miles of the proposed Project site. Adverse impacts resulting from incidental hazardous spills during near-term and long-term construction activities may be potentially significant, however, all construction activities associated with the proposed Project components would comply with applicable federal, state, and local regulations relating to protection of the public and the environment from exposure to hazardous materials. Further, MM HAZ-1 would require the preparation of a Phase II ESA to ensure no adverse impacts related to hazardous emissions or spills would occur during implementation of the proposed near-term and long-term improvements. As such, construction impacts related to hazardous emissions and hazardous materials, substances, and waste within 0.25 miles of a school would be less than significant with mitigation. The Zoo would continue to use, store, and dispose of hazardous materials, substances, and waste in accordance with

applicable federal, state, regional, and local policies and regulations. Therefore, operational impacts related to hazardous emissions and hazardous materials, substances, and waste within 0.25 miles of a school would be less than significant.

The Project site is located in proximity to one site listed on the SWRCB GeoTracker database and one site listed on the Department of Toxic Substances Control (DTSC) EnviroStor database. Ground-disturbing activities associated with grading for the reconfigured road would increase the risk of disturbing potentially contaminated soil. In the event that contamination is observed during construction activities, implementation of MM HAZ-2 would be implemented to ensure contaminated soils are properly removed, handled, and transported to an appropriately licensed disposal facility, in accordance with local and state regulations. Therefore, impacts from implementation of near-term improvements included in the proposed Vision Plan would be less than significant with mitigation. Implementation of MM HAZ-2 would be implemented if contaminated soils are encountered during ground-disturbing activities associated with the proposed parking structure on the northeast corner of the Project site in Phase 7. Therefore, impacts from implementation of long-term improvements included in the Project would be less than significant with mitigation.

6.9.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative hazardous and hazardous materials impacts related to release of hazardous materials to a less than significant level.

MM HAZ-1: Phase II Environmental Site Assessment (ESA). Prior to Project implementation, the City shall prepare a Phase II ESA to address the following:

- Potential soil contamination around known USTs on site. Prior to ground-disturbance, a qualified environmental specialist (e.g., a licensed Professional Geologist [PG], a licensed Professional Engineer [PE] or similarly qualified individual) shall perform soil sampling and analysis to determine whether contamination exists and, if so, the extent of contamination from the following UST locations within the Project site; if contaminants are detected in soil at or above regulatory levels, then the results of the soil sampling shall be reviewed and acted upon by the LAFD and other regional or state regulatory agencies as needed:
 - The fueling station in the Zoo Construction Shop and Support area
 - West of the South Parking Area
 - North of the Autry Museum.
- ACM, LBP, and Molds in Buildings. Prior to any building demolition, the City shall conduct a comprehensive survey of ACM, LBP, and molds. If such hazardous materials are found to be present, the Zoo shall follow all applicable local, state and federal codes and regulations, as well as applicable BMPs,

related to the treatment, handling, and disposal of ACM, LBP, and molds to ensure public safety.

If the Phase II ESA identifies contamination at or above regulatory levels, prior to the issuance of grading permits for development, it shall be the responsibility of the Zoo to conduct and conclude all investigation and/or remediation activities under the oversight of the applicable regulatory agency (e.g., LAFD, DTSC, SWRCB). Remediation shall be accomplished in accordance with the requirements of the appropriate oversight agency. No Project construction shall occur in the affected area until case closure reports have been approved by the appropriate oversight agency.

MM HAZ-2: Discovery of Contamination. In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction at a development site, construction activities in the immediate vicinity of the contamination shall cease immediately. At the start of construction, all construction contractors shall be instructed to immediately stop all subsurface activities in the event that potentially hazardous materials are encountered, an odor is identified, or significantly stained soil is visible. Contractors shall be instructed to follow all applicable regulations regarding discovery and response for hazardous materials encountered during the construction process. A qualified environmental specialist (e.g., a licensed PG, a licensed PE or similarly qualified individual) shall investigate to identify and determine the level of soil and/or groundwater contamination.

If contamination is encountered, a Human Health Risk Management Plan shall be prepared and implemented that: (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development, and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., LAFD). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area.

6.10 HYDROLOGY AND WATER QUALITY – WATER QUALITY / GROUNDWATER SUPPLIES AND RECHARGE / DRAINAGE PATTERNS

Project construction has the potential to create impacts to hydrology and water quality as a result of sediment transport into onsite storm drain inlets and potential contribution of polluted

stormwater runoff as a result of delivery, handling, and storage of construction materials and wastes, as well as potential leakage and spills of construction materials. However, consistent with existing regulations, all Project components would be required to comply with the Stormwater and Urban Runoff Pollution Control Ordinance (Chapter VI Article 4.4 of the LAMC) to address soil erosion, including topsoil mobilization and loss, and urban runoff. Under this ordinance, construction projects in the City must follow additional specific BMPs. In addition, implementation of MM HYD-1 through MM HYD-3, requiring preparation of a stormwater management plan to determine the appropriate sequencing of improvements, preparation of a SWPPP as part of acquisition of a NPDES Construction General Permit, implementation of standard construction BMPs, and timing of construction to avoid adverse effects of seasonal storms would reduce potential for mobilization of sediments and typical construction pollutants during all phases of Project construction. As a result, potential sediments and contaminants would be controlled onsite and would not flow to stormwater management infrastructure or waterways, including the Los Angeles River. Therefore, implementation of these measures would reduce associated impacts on to surface and groundwater quality from earthwork and typical construction activities to less than significant with mitigation. Further, implementation of MM HYD-6 would require the Zoo install pre-treatment and LID features to treat water within the stormwater collection system and remove pollutants prior to reuse for irrigation. This measure would ensure that onsite recycled water would be high quality and would not create new water quality issues. With implementation of this measure, impacts to or from water quality would be less than significant with mitigation.

The proposed Project would increase impervious surfaces on the Project site from 51 percent to approximately 70 percent in the near-term (i.e., by 2030) but would not increase in impervious surfaces during the long-term as permeable pavement and other LID features would be expanded under proposed redevelopment. Therefore, Project implementation would not have an adverse effect on groundwater recharge. Groundwater at the Project site and immediate vicinity may be contaminated due to a historical LUST and Superfund cleanup site in proximity to the Zoo's parking lot and Western Heritage Way, as well as from fueling dispensers, USTs, and associated piping within the Zoo Construction Shop and Support area and existing storage yard. However, implementation of MM HAZ-1 would ensure impacts to groundwater contamination on- and offsite are less than significant. Under MM GEO-1, a geotechnical report would be prepared to identify measures to address groundwater impacts and any recommendations and design features identified would be applied. Therefore, impacts to groundwater quality and recharge from Project implementation would be less than significant with mitigation.

Construction activities would alter drainage on site, subject to requirements to control water quality and stormwater flows, but would not alter drainage patterns or amounts offsite to the Zoo Wastewater Facility or the Los Angeles River; therefore, construction activities associated with the proposed Project would result in a less than significant impact.

In addition to MM HYD-1 through MM HYD-3 and compliance with the Stormwater and Urban Runoff Pollution Control Ordinance, preparation of an Operations & Maintenance (O&M) Plan under MM HYD-4, application of gorilla mulch to landscaped areas under MM HYD-5, and pre-treatment, filtering, and other LID features installed as part of the stormwater collection system

as required by MM HYD-6 would reduce soil erosion impacts to less than significant with mitigation.

The proposed Project would include substantial stormwater retention and treatment facilities onsite to accommodate stormwater runoff and the new impervious areas onsite to avoid onsite and offsite increases in flooding, consistent with the requirements of the City's Stormwater and Urban Runoff Pollution Control Ordinance (LAMC Article 4.4) and the SWRCB's Post-Construction Requirements. Therefore, Project impacts to onsite and offsite flooding would be less than significant.

6.10.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative hydrology and water quality impacts related to water quality, groundwater supplies and recharge, and drainage patterns to a less than significant level.

MM HYD-1: Construction Sequencing and Design of Onsite Stormwater Management System. The Zoo shall prepare a stormwater management plan prior to Phase 1 Project implementation. The stormwater management plan shall finalize the design of the subterranean stormwater management system with minimum capacity to capture the equivalent of 2-year, 24-hour storm events as proposed by the Project, and shall consider increased capacity to maximize rainfall capture and reuse. The stormwater management plan shall indicate the sizing and design of the underground stormwater collection system for all proposed drainage areas. The stormwater management plan shall also determine the appropriate sequencing of system installation relative to the Project's development phasing to provide continuous stormwater management throughout the 20-year implementation of the proposed Vision Plan. This sequencing plan shall ensure each phase of development has a functioning onsite stormwater system prior to operation to contain and convey all stormwater flows to the underground cistern(s), to onsite LIDs (e.g., bioswales), and/or to the Zoo's Wastewater Facility. Sequencing shall avoid or minimize sedimentation into proposed LID features and underground stormwater management system infrastructure, which could lead to a loss of capacity and decrease in water quality benefits. During phased construction of the Project, the City shall also install stormwater storage facilities to supplement the underground cisterns such as rain barrels if needed to temporarily manage stormwater flows. These can be integrated into the Vision Plan redevelopment to be thematically appropriate and visually reminding visitors of the Zoo's efforts for water conservation.

The Zoo shall prepare and submit the stormwater management plan to the City BOE for review and approval prior to issuance of grading permits for each Project phase. All development plans and permits shall reflect the approved sequencing and timing of implementation of stormwater management measures. The Zoo shall

be responsible for ensuring all requirements are included in construction plans and implemented as part of construction. All construction activities shall be monitored by a City BOE staff to ensure compliance with the stormwater management plan.

MM HYD-2: Preparation of a Storm Water Pollution Prevention Plan (SWPPP). For each phase of construction, the City shall require the building contractor to prepare and submit a SWPPP as part of the City's NPDES Construction General Permit 45 days prior to the start of work for approval. The contractor is responsible for understanding the Construction General Permit and instituting the SWPPP during construction. A SWPPP for site construction shall be developed prior to the initiation of grading and implemented for all construction activity on the Project site in excess of 1 acre, or where the area of disturbance is less than 1 acre but is part of the Project's plan of development that in total disturbs 1 or more acres. The SWPPP shall identify potential pollutant sources that may affect the quality of discharges to stormwater and shall include specific BMPs to control the discharge of material from the site, including, but not limited to:

- Temporary detention basins, straw bales, sand bagging, mulching, erosion control blankets, silt fencing, and soil stabilizers shall be used.
- Sufficient physical protection and pollution prevention measures to prevent sedimentation, siltation, and/or debris from entering the onsite storm drain system, proposed stormwater management system, and the Los Angeles River.
- Soil stockpiles and graded slopes shall be covered after 14 days of inactivity and 24 hours prior to and during inclement weather conditions.
- Fiber rolls shall be placed along the top of exposed slopes and at the toes of graded areas to reduce surface soil movement, as necessary.
- Sandbags, or other equivalent techniques, shall be utilized along graded areas to prevent siltation transport to the surrounding areas.
- A routine monitoring plan shall be implemented to ensure success of all onsite erosion and sedimentation control measures.
- Dust control measures shall be implemented to ensure success of all onsite activities to control fugitive dust.
- Streets, parking areas, and paved pathways affected by phased Project construction shall be cleaned daily or as necessary to remove sediment, soils, and other construction debris.
- BMPs shall be strictly followed to prevent spills and discharges of pollutants onsite (material and container storage, proper trash disposal, construction entrances, etc.); additional BMPs shall be implemented for any fuel storage or fuel handling that could occur onsite during construction.

The SWPPP must be prepared in accordance with the guidelines adopted by the SWRCB. The SWPPP shall be submitted to the City BOE along with grading/development plans for review and approval. The SWPPP and notices shall

be submitted to the SWRCB under their Stormwater Multi-Application, Reporting, and Tracking System (SMARTS). The SWPPP shall be designed to address erosion and sediment control during all phases of development of the site until all disturbed areas are permanently stabilized.

All development plans and permits shall reflect the approved erosion control plan and BMPs submitted to the SWRCB. The Zoo shall be responsible for ensuring all requirements are included in construction plans and implemented as part of construction. All construction activities shall be monitored by a City BOE staff to ensure compliance with the SWPPP.

All construction activities shall be monitored by City staff to ensure compliance with the SWPPP during grading and after conclusion of grading activities to monitor runoff. A Qualified SWPPP Practitioner shall be retained by the developer for overall management and reporting responsibility regarding the SWPPP and documentation under SMARTS in accordance with their permitting requirement. The City will keep a copy of the SWPPP on the Project site during grading and construction activities.

The City shall file a Notice of Completion once construction of each Project phase is complete, identifying that pollution sources were controlled during the construction of the proposed Project and implementing a closure SWPPP for the site.

MM HYD-3: Avoidance of the Seasonal Storms. Ground disturbing activities such as excavation, grading, earthwork, and installation of the stormwater collection system shall occur during the dry season (May through October), including installation of the storm drains, underground cisterns, hydrological connections, and water pumps for irrigation use. Stormwater management system features shall be fully installed and restored to ensure soil stabilization and adequate stormwater conveyance capacity prior to the storm season (October through April).

The Zoo shall be responsible for ensuring all requirements are included in construction plans and implemented as part of construction. The City shall review grading and construction plans for all phases to ensure compliance. All construction activities shall be monitored by a City BOE staff to ensure compliance with the grading and construction phasing plans.

MM HYD-4: Operation and Maintenance Manual. The City shall prepare and submit an Operation and Maintenance (O&M) Manual to ensure LID features and the underground stormwater capture are maintained following installation under the proposed Project. Regular maintenance is critical for the proper operation and longevity of the LID features and stormwater collection system. For example, the O&M Manual would provide maintenance schedules for type and frequency for items such as replacing mulch, trash removal, or sediment removal for bioretention, permeable pavement, and the stormwater collection system. The

O&M Manual shall also include guidelines for each LID life-cycle and appropriate reconstruction at the end of the life-cycle.

The Zoo shall prepare and submit the O&M Manual to the City BOE and Zoo planning staff for review and approval prior to issuance of grading permits. The Zoo shall be responsible for ensuring all requirements are included in O&M Manual and implemented as part of Zoo operations.

MM HYD-5: Mulch. Immediately following the completion of landscaping installation, gorilla-mulch (i.e., shredded redwood) or similar non-animal waste mulch should be applied to landscaped and bioretention areas to minimize the risk of erosion and sedimentation. The application of mulch would also retain irrigated water within the soil, thereby reducing evaporation and irrigation requirements. Sedimentation in the stormwater collection system would result in degraded water quality, requiring additional treatment prior to stormwater reuse. Bark mulch is not recommended (especially in bioretention) as it tends to float and does not include the beneficial soil building properties of a shredded redwood or similar mulch. The Zoo shall be responsible for ensuring all landscaped areas are mulched as part of construction.

MM HYD-6: Underground Stormwater Capture Pre-Treatment and Filtering. The Zoo shall develop a pre-treatment and filtering plan and design for the stormwater collection system to ensure that captured water reused for irrigation does not unnecessarily contribute pollutants back into the Zoo's drainage system. At a minimum, the stormwater collection system must comply with SWRCB safety regulations and County Guidelines for Alternate Water Sources. Additionally, sediment and TSS shall be filtered out to the level required for the proposed irrigation system.

The Zoo shall submit pre-treatment and filtering plans to the City BOE and Zoo planning staff for review and approval prior to issuance of grading permits for each Project phase. All development plans and permits shall reflect the approved pre-treatment and filtering features. The Zoo shall be responsible for ensuring all requirements are included in construction plans and implemented as part of construction. All construction activities shall be monitored by City BOE staff to ensure compliance with the pre-treatment and filtering plans.

MM HYD-7: Smart Irrigation and Irrigation Retrofits. Existing irrigated areas within the Zoo shall be retrofitted with efficient irrigation systems as part of an overall water conservation program and should be implemented during redevelopment of the proposed planning areas. Smart controllers and efficient irrigation systems should be installed to avoid excess irrigation runoff that may contribute unfiltered pollutants back into the drainage system.

The Zoo shall indicate efficient irrigation systems in all landscape plans submitted to the City BOE and Zoo planning staff for review and approval prior to issuance of grading permits. All development plans and permits shall reflect the approved efficient irrigation features. The Zoo shall be responsible for ensuring all

requirements are included in construction plans and implemented as part of construction. All construction activities shall be monitored by a City staff to ensure compliance with the irrigation plans.

MM GEO-1: Site-Specific Geotechnical Evaluation. Prior to the design and construction of proposed improvements at in each phase of the Project, a detailed geotechnical evaluation, including subsurface exploration and laboratory testing, shall be performed, consistent with LADBS standards and approvals. The geotechnical evaluation shall 1) further evaluate the specific subsurface conditions, including liquefaction and landslide potential, at each development site, 2) provide site-specific data regarding potential geologic and geotechnical constraints, and 3) provide information pertaining to the engineering characteristics of earth materials with regard to the proposed Project. Recommendations for earthwork, excavations, foundations, shoring, pavements, and other pertinent geotechnical design considerations shall be formulated from the detailed geotechnical evaluation. In the California planning area, the proposed hillside cut, excavation, and reinforcement required for Condor Canyon and its potential bridges shall be evaluated and designed with appropriate shoring mechanisms to avoid landslide and soil instability during construction and operation. The recommendations of the geotechnical report shall be incorporated into the final design and construction of the Project components. The geotechnical reports shall analyze for the following hazards:

- If the site-specific geotechnical evaluation finds that slope instability is an issue in certain phases of development such as California and Africa planning area improvements, engineering techniques and technologies as retaining walls or graded soil buttresses, shall be employed during construction and/or operation.
- If the site-specific geotechnical evaluation finds that liquefaction is an issue in certain phases of development such as development of Zoo Entry, Nature Play Park, or Asia planning area improvements or the proposed parking structure, engineering techniques and technologies such as removal and recompaction, densification of existing soils, or deepened foundations shall be employed during construction and operation.
- If the site-specific geotechnical evaluation finds that expansive soils are an issue in certain phases of development such as development of Zoo Entry, Nature Play Park, or Asia planning area improvements, engineering techniques and technologies such as removal and replacement with low expansive materials or special reinforced design of foundations and slabs shall be employed during construction and operation.
- If the site-specific geotechnical evaluation finds that dynamic compaction of dry soils is an issue in certain phases of development, engineering techniques and technologies such as removal and recompaction, densification of existing

soils, or deepened foundations may be employed during construction and operation.

The Zoo shall prepare each geotechnical evaluation for each improvement in Phases 1 – 7 to inform final design and engineering of improvements. Each geotechnical investigation shall be reviewed and approved by LADBS and the City BOE prior to groundbreaking of each phase. LADBS and the City BOE shall review and approve all geotechnical investigations and review final Zoo development and engineering plans to ensure geotechnical recommendations are accurately incorporated prior to Project-related construction.

MM HAZ-1: Phase II Environmental Site Assessment (ESA). Prior to Project implementation, the City shall prepare a Phase II ESA to address the following:

- Potential soil contamination around known USTs on site. Prior to ground-disturbance, a qualified environmental specialist (e.g., a licensed Professional Geologist [PG], a licensed Professional Engineer [PE] or similarly qualified individual) shall perform soil sampling and analysis to determine whether contamination exists and, if so, the extent of contamination from the following UST locations within the Project site; if contaminants are detected in soil at or above regulatory levels, then the results of the soil sampling shall be reviewed and acted upon by the LAFD and other regional or state regulatory agencies as needed:
 - The fueling station in the Zoo Construction Shop and Support area
 - West of the South Parking Area
 - North of the Autry Museum.
- ACM, LBP, and Molds in Buildings. Prior to any building demolition, the City shall conduct a comprehensive survey of ACM, LBP, and molds. If such hazardous materials are found to be present, the Zoo shall follow all applicable local, state and federal codes and regulations, as well as applicable BMPs, related to the treatment, handling, and disposal of ACM, LBP, and molds to ensure public safety.

If the Phase II ESA identifies contamination at or above regulatory levels, prior to the issuance of grading permits for development, it shall be the responsibility of the Zoo to conduct and conclude all investigation and/or remediation activities under the oversight of the applicable regulatory agency (e.g., LAFD, DTSC, SWRCB). Remediation shall be accomplished in accordance with the requirements of the appropriate oversight agency. No Project construction shall occur in the affected area until case closure reports have been approved by the appropriate oversight agency.

MM HAZ-2: Discovery of Contamination. In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction at a development site,

construction activities in the immediate vicinity of the contamination shall cease immediately. At the start of construction, all construction contractors shall be instructed to immediately stop all subsurface activities in the event that potentially hazardous materials are encountered, an odor is identified, or significantly stained soil is visible. Contractors shall be instructed to follow all applicable regulations regarding discovery and response for hazardous materials encountered during the construction process. A qualified environmental specialist (e.g., a licensed PG, a licensed PE or similarly qualified individual) shall investigate to identify and determine the level of soil and/or groundwater contamination.

If contamination is encountered, a Human Health Risk Management Plan shall be prepared and implemented that: (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development, and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., LAFD). If needed, a Site Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area.

6.11 LAND USE AND PLANNING – CONFLICT WITH LAND USE PLAN, POLICY, OR REGULATION

The proposed Project would be consistent with the SCAG RTP/SCS, Los Angeles General Plan, Hollywood Community Plan, Griffith Park Wildlife Management Plan, and the Griffith Park Master Plan, with application of mitigation measures described in other resource sections.

The proposed Project would not conflict with the Griffith Park Wildlife Management Plan, given that construction of the proposed Project would occur in the boundaries of the Zoo and not near undeveloped portions of Griffith Park that are more likely to serve as high value wildlife habitat or support wildlife corridors.

The Griffith Park Vision Plan does not apply to Zoo property, therefore, the proposed improvements within the Zoo including the proposed parking structure would not conflict with this aspect from the Griffith Park Vision Plan. However, the proposed Project would potentially conflict with the Vision Plan for Griffith Park related to pedestrian accessibility and safety following improvements to the Zoo Drive/Western Heritage Way intersection due to potential increases in vehicular speeds, and over the long-term, possible impacts to the Main Trail. MM REC-1 would require the long-term Zoo Drive/Western Heritage Way intersection improvements be considerate of pedestrian, bicyclist, and equestrian safety with regard to the Main Trail and that use of this

important trail is not hindered by implementation of the improvement. With implementation of MM REC-1, the Project would be consistent with this local policy.

Implementation of MM BIO-1 through MM BIO-6 and MM UF-1 and MM UF-2 would ensure that the proposed Project would be consistent with the Conservation Element of the City of Los Angeles General Plan. Implementation of MM BIO-1 through MM BIO-6 would also ensure the proposed Project would be consistent with the Open Space Element of the General Plan.

MM T-2 would be required to reduce transportation impacts and to ensure consistency with the SCAG RTP/SCS, the Griffith Park Vision Plan, and the General Plan's Mobility Element, Open Space Element, and Air Quality Element.

The proposed Project, with implementation of required mitigation measures identified in this EIR and required consistency with existing regulations, would be consistent with all applicable land use plans, policies, and regulations. The proposed Project would not cause significant environmental impacts due to conflicts and impacts would be less than significant with mitigation.

6.11.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative land use impacts to a less than significant level.

MM BIO-1: Biological Resources Mitigation and Monitoring Program. The Zoo shall prepare and implement a BRMMP to mitigate loss of native vegetation communities, habitat, and special-status species from each Project phase. The BRMMP shall be prepared after completion of 30 percent design plans for each phase and shall specify timing and implementation of required biological resource restoration, enhancement, or creation measures. The BRMMP shall be prepared by a City-approved biologist as part of planning, engineering, and site design for each Project phase under the direction of and approval by BOE and Zoo planning staff. The BRMMP shall be prepared in consultation with appropriate City departments and resource agencies such as the LAFD, RAP, and the CDFW. The BRMMP shall be updated prior to final designs and development plans for each phase. The Zoo shall be responsible for ensuring all BRMMP requirements are reflected in Project design/architectural, engineering, and grading plans. All plans for each Project phase shall be reviewed by the City to ensure compliance with the BRMMP.

The BRMMP shall require measures to avoid and mitigate impacts to biological resources onsite, including, but not limited to, the following:

1. At the 30 percent design plan stage for each Project phase, biological resource surveys shall be completed for areas of potential effect in that phase by a City-approved biologist, subject to the following requirements:
 - a. The surveys shall refine the disturbance footprint of impacted habitats plus a buffer if recommended by the City-approved biologist.

- b. The survey shall delineate native vegetation communities such as coast live oak woodland, laurel sumac shrubland, and coastal sage scrub, including maps of the extent and type.
- c. The survey shall identify all special-status plant and animal species present or potentially present within the subject phase of Project development.
- d. A summary of the results of the pre-construction survey shall be submitted to the City immediately upon completion of the survey. A survey report describing and delineating the extent and quality of native vegetation communities and the presence or potential presence of special-status plant or animal species shall be submitted to the City for review and approval prior to completion of 60 percent design plans for the subject Project phase; if no native vegetation communities or special-status species are present or potentially present, the survey report shall describe such findings based on evidence from the surveys.
- e. The survey report shall map and describe the location and extent of native vegetation communities and observed special-status plant or animal species that would be impacted within the areas of potential effect for each Project phase, and require the following avoidance, minimization, and mitigation measures:
 - i. To the maximum extent feasible, onsite native vegetation communities and special-status plant species shall be protected and preserved in place, and design plans shall be amended to avoid disturbance or loss of these biological resources. The City-approved biologist shall work with Project designers during design for each phase, as required, to incorporate existing native vegetation and special-status plant species, such as Nevin's barberry, and mature native trees, such as coast live oaks, into the Zoo landscaping and facilities (e.g., exhibits, visitor-serving spaces, service areas) in a manner that would ensure the livelihood and biological value of the natural community and/or individual plant. Construction techniques for Project development to avoid and protect special-status species shall be identified as part of a required construction mitigation plan (see MM BIO-2).
 - ii. If avoidance or preservation in place cannot be achieved while meeting Project Objectives, the area of disturbed native vegetation communities and the total lost special-status plant species shall be mitigated onsite at a ratio of 2:1, as feasible given space limitation within the Zoo. To the extent feasible, native vegetation communities and special-status plant species shall be relocated or reestablished within disturbed, altered, and/or lost areas of coast live oak woodland, laurel sumac shrubland, and coastal sage scrub within the Project site. The BRMMP shall provide a description of the location and boundaries of the mitigation site and description of existing site conditions. The mitigation

area shall be incorporated into the final development plans for each phase of Project development.

- iii. If native vegetation communities and/or special-status plant species cannot be protected and/or restored onsite, the Zoo and City shall work with RAP to identify an appropriate site(s) for restoration within Griffith Park to serve as a mitigation site. Offsite restoration of affected native vegetation communities and special-status plant species shall occur at a minimum ratio of 3:1. Ratios for the restoration of native vegetation communities and/or special-status species shall be based upon the vegetation composition, plant rarity, local demographics, and location of the mitigation site. The BRMMP shall provide a description of the location and boundaries of the offsite mitigation site. The City and City-approved biologist shall consult with CDFW to determine City-approved biologist shall consult with CDFW to determine additional measures for protection and restoration of habitats occupied by special-status species, including nesting birds.
- iv. If onsite or offsite restoration is required, the BRMMP shall specify restoration plans and techniques, as recommended by a City-approved biologist, including, but not limited to:
 1. Identification of a suitable habitat compensation area of comparable size to be preserved and managed for lost habitat or species
 2. Site preparation
 3. Seed collection and/or plant salvage, designation, or establishment of offsite plant nursery facilities.
 4. Planting, hydroseeding, replanting or seeding activities.
 5. Success criteria
 6. Maintenance and monitoring program, for the short-term plant establishment period (i.e., 1-3 years), and over the long term (i.e., 5 years)
 7. Reporting Requirements
- v. If onsite or offsite restoration is required, a binding long-term agreement with the Zoo to implement and maintain protected and restored habitats/communities shall be implemented with the City. The BRMMP shall identify typical performance and success criteria deemed acceptable by the City based on measurable goals and objectives. Minimum criteria for restored habitats shall be at least 70 percent survival of container plants and 70 percent relative vegetative cover by vegetation type. BRMMP mitigation elements that do not meet performance or final success criteria within 5 years shall be completed through an extension of the BRMMP for an additional 2 years or at the discretion of the City with the goal of completing all mitigation requirements. Monitoring of the mitigation and maintenance areas shall

occur for the period established in the BRMMP, or until success criteria are met. If success criteria cannot be met through the BRMMP, the City shall specify appropriate commensurate measures (e.g., additional onsite or offsite restoration).

- vi. If special-status animal species are present or potentially present based on the survey, including bat, woodrats, Crotch's bumble bee, or legless lizard species, and migratory or nesting birds, the BRMMP shall include avoidance and minimization measures to avoid or relocate as part of a construction mitigation plan (see MM BIO-2) and management plans for migratory and nesting birds (see MM BIO-4) and bat colonies (MM BIO-5).

MM BIO-2: Construction Mitigation Plan for Biological Resources. The Zoo shall prepare and implement a Construction Mitigation Plan (CMP) that identifies avoidance, reduction, and mitigation measures for construction-related impacts to biological resources, including special-status species. The CMP shall be prepared by a City-approved and qualified biologist prior to initiation of construction activities for Phase 1 of the Project and updated prior to construction activities for each subsequent phase. The CMP shall be approved by BOE and Zoo planning staff. The Zoo shall be responsible for ensuring all CMP requirements are included in construction plans and implemented as part of construction. All construction activities shall be monitored by a City-approved biologist to ensure compliance with the CMP. The Zoo would coordinate with CDFW Region 5 prior to the start of any construction activities.

The CMP shall require:

1. Per MM BIO-1, the CMP shall incorporate and address data from biological resource surveys for each Project phase to avoid and protect special-status plant and animal species to the maximum extent feasible, as follows:
 - a. Within six months prior to the start of construction of each Project phase, biological resource surveys shall be completed for areas affected in that phase by City-approved biologist, consistent with MM BIO-1.
 - b. If the phase-specific survey identifies presence or potential presence of special-status species, within 14 days of the start of construction (including mobilization and staging), pre-construction clearance surveys shall be completed by a City-approved biologist to either confirm or update the BRMMP related to the location and extent of special-status species. A report of the pre-construction survey shall be submitted to BOE for review and approval prior to the start of construction.
2. Based on the BRMMP and the results of the pre-construction surveys, the CMP shall require measures to avoid or mitigate impacts to special-status species present or potentially present within the Project phase; if no sensitive species are present or potentially present, the CMP shall identify findings from the

surveys. If required based on the BRMMP's determination of biological resource sensitivity within each phase, the CMP shall include avoidance and minimization measures, including biological monitoring during construction, if needed. If determined appropriate based on the results of the BRMMP, a species-specific list (or plan) of proper handling and relocation protocols and a map of suitable and safe relocation areas shall be prepared by the City-approved biologist. The list or plan shall be submitted to the City for review and approval prior to implementing any Project-related ground-disturbing activities and vegetation removal. CMP avoidance and minimization measures shall be subject to review and approval by a City-approved biologist, including, but not limited to, the following:

- a. If present, special-status animal species, such as woodrat, legless lizard, and bat species (see also MM BIO-5), shall be relocated from the Project site either through direct capture or through passive exclusion prior to construction activities. Pursuant to the CCR, Title 14, Section 650, the City-approved biologist must obtain appropriate handling permits to capture, temporarily process, and relocate wildlife to avoid harm or mortality in connection with Project construction and activities. With cooperation and authorization from CDFW, trapping may be employed to identify woodrat species that are inhabiting the site. If determined appropriate, woodrat middens should also be relocated by qualified biologists outside of construction areas.
 - b. If present, special-status plant species, such as Nevin's barberry, shall be avoided to the extent feasible through use of high visibility exclusion fencing and signage to protect vegetation and root systems from disturbance or compaction, consistent with the BRMMP. Lost special-status plant species shall be replaced consistent with the BRMMP.
 - c. If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately. The City-approved biologist shall be notified, and dead or injured wildlife documented. A formal report shall be sent to the City and CDFW within three (3) calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent injury or death.
3. The CMP shall include BMPs to avoid or minimize impacts to biological resources during construction, including, but not limited to, the following:
- a. Construction equipment and vehicles shall be stored within existing disturbed or developed areas within the Zoo to the maximum extent feasible to avoid impacts to natural areas. All construction vehicle maintenance shall be performed in a designated offsite vehicle storage and maintenance area approved by the City. All construction access roads and

staging areas shall be located to avoid known/mapped native vegetation and special-status species.

- b. All construction materials (e.g., fuels, chemicals, building materials) shall be stored at designated construction staging areas, which shall be located outside of designated sensitive areas in the BRMMP and CMP. Should spills occur, materials and/or contaminants shall be cleaned immediately and recycled or disposed of to the satisfaction of the RWQCB.
- c. All trash and construction debris shall be properly disposed at the end of each day. Dumpsters shall be covered either with locking lids or with plastic sheeting at the end of each workday and during storm events. All sheeting shall be carefully secured to withstand weather conditions.
- d. Construction-related erosion shall be minimized to retain sediment within the area of potential effect, including installation of silt fencing, straw wattles, or other acceptable construction erosion control devices. Such measures shall be installed along the perimeter of disturbed areas.
- e. Concrete truck and tool washout shall occur in a designated construction staging areas or other offsite location such that no runoff would flow to natural areas within the Zoo or to the Zoo's stormwater collection system.
- f. All open trenches shall be constructed with appropriate exit ramps to allow species that incidentally fall into a trench to escape. All open trenches shall be inspected at the beginning of each workday to ensure that no wildlife species are present. Any wildlife species found during inspections shall be gently encouraged to leave the Project site by a qualified biologist or otherwise trained and City-approved personnel. Trenches shall remain open for the shortest period necessary to complete required work.
- g. Construction shall be limited to daylight hours (7:00 AM to 7:00 PM or sunset, whichever is sooner).

MM BIO-3: Worker Environmental Awareness Program. The Zoo shall retain a qualified, City-approved biologist to prepare a WEAP that shall be implemented during all phases of construction. WEAP training shall be provided to all personnel working on the site by a qualified, City-approved biologist. The training should review the construction-related requirements of the BRMMP and the CMP, including all special-status species that occur or have potential to occur. Training should explain all mitigation and protection measures, responsibilities of each worker, and a reporting framework. The City-approved biologist shall communicate to all workers that upon encounter with an SSC (e.g., during construction or equipment inspections), work must stop, a qualified biologist must be notified, and work may only resume once a qualified biologist has determined that it is safe to do so. The WEAP shall be prepared and approved by BOE and Zoo planning staff prior to construction activities of Phase 1.

MM BIO-4: Migratory and Nesting Bird Management. Removal of trees and other vegetation shall be conducted outside of the breeding season (generally January

15 to August 31 for raptors, March 1 to August 31 for other bird species) to the extent feasible. If Project construction activities must be conducted during these period, pre-construction nesting bird surveys by a City-approved biologist shall take place within one week prior to ground disturbance and tree removal or trimming associated with each Project phase. If no active nests or nesting activity is found within or immediately adjacent to the phase work area, construction activities may proceed. If active nests are located during these surveys, the following measures shall be implemented:

1. A summary of the results of the pre-construction survey shall be submitted to the City immediately upon completion of the survey. Consistent with MM BIO-1 and MM BIO-2, the qualified biologist shall prepare a final report of the pre-construction survey to be submitted to BOE for review and approval prior to the start of construction. The report shall detail appropriate fencing or flagging of the buffer zone and make recommendations on additional monitoring requirements. A map of the area of potential effect and nest and roost locations shall be included with the report. If any special-status species are observed during pre-construction surveys, the Project biologist shall report the findings and coordinate with appropriate regulatory agencies to determine appropriate procedures for handling or avoidance of the specimen.
2. If the pre-construction surveys indicate presence of nesting or roosting birds, the construction activity shall be evaluated, and avoidance methods implemented as necessary at the discretion of the qualified biologist. Methods would vary based on bird species, site conditions, and type of work to be conducted, but could consist of limited or reduced construction access; reduced vehicle speeds; and/or noise attenuation.
3. At the discretion of the qualified biologist, construction activities within 300 feet of an active nest of passerine birds shall be restricted until chicks have fledged, unless the nest belongs to a raptor, in which case a 500-foot activity restriction buffer shall be observed to avoid noise, light, and direct disturbance. The Project biologist conducting the survey shall have the authority to reduce or increase the recommended buffer depending upon site conditions and the species involved. If during Project construction and ground disturbance activities an active nest is discovered, the City-approved biologist shall halt work immediately within the work area, activity restriction buffers shall be established, and avoidance methods shall be employed as necessary.
4. A report of findings and recommendations for bird protection shall be submitted to the City prior to vegetation removal.

MM BIO-5: Bat Colony Management. Removal of trees and older structures should be conducted outside of the maternity roost season (typically March 1 to August 31). Prior to removal of any trees over 20 inches DBH or demolition/relocation of existing onsite structures, a pre-construction acoustic and day/night roost survey shall be conducted by a qualified biologist to determine if any tree or structure

proposed for removal, trimming, demolition, or relocation harbors sensitive bat species or maternal bat colonies. If present, maternal bat colonies shall not be disturbed and grading and construction activities shall avoid the bat breeding season to the extent feasible. If disturbance of structures must occur during the bat breeding season, buildings and trees must be inspected and deemed clear of bat colonies/roosts within 7 days of demolition and an appropriately trained and approved biologist must conduct a daily site-clearance during demolition. If bats are roosting in a structure or tree in the Project site during the daytime but are not part of an active maternity colony, then exclusion measures shall be utilized and must include one-way valves that allow bats to leave but are designed so that the bats may not re-enter the structure. For each occupied roost removed, one bat box shall be installed in similar habitat as determined by the Project biologist and shall have similar cavities or crevices to those which are removed, including access, ventilation, dimensions, height above ground, and thermal conditions. If a bat colony would be eliminated from the Project site, appropriate alternate bat habitat shall be installed within the Project site. To the extent practicable, alternate bat house installation shall occur near onsite drainages.

MM CUL 1: Pre-Construction Workshop. Prior to any ground disturbance activities during construction of each Project phase, a City-qualified archaeologist and shall conduct a cultural resources workshop for all construction personnel. The City-qualified archaeologist must meet the Secretary of Interior standards for archaeology and have a minimum of 10 years of experience as a Principal Investigator working with Native American archaeological sites in southern California. The qualified archaeologist will ensure that all other personnel are appropriately trained and qualified. The workshop will inform all construction personnel of the types of cultural material that may be encountered, and of the proper procedures to be followed in the event of an unexpected discovery of cultural material or human remains. Appropriate documentation will be completed to demonstrate attendance.

MM CUL 2: Unexpected Discovery of Cultural Material. In the event unexpected cultural resource material - such as flaked or ground stone, historic debris, building foundations, or non-human bone - is discovered during Project-related ground disturbances, construction personnel will stop all work within 50 feet of the discovery until a City-qualified archaeologist can evaluate the discovery for significance. Construction personnel will contact the City and Zoo staff immediately. Activities that may adversely impact the discovery will not resume without written authorization from the City that construction may proceed. The nature, extent, and significance of the discovery will be evaluated by a City-qualified archaeologist, and a Native American representative if the discovered resource is prehistoric. If the discovery is determined to be a significant cultural resource under CEQA, avoidance is the primary method of mitigation. If avoidance is not feasible, the City-qualified archaeologist will prepare a treatment plan

consistent with CEQA Guidelines Section 15064.5(f) that addresses implementation of data recovery mitigation excavations. Treatment measures typically include development of avoidance strategies, capping with fill material, or mitigation of impacts through data recovery programs such as excavation or detailed documentation and public interpretation. A report of findings shall be prepared, and recovered materials curated, if needed, in an approved facility.

- MM CUL-3: Unexpected Discovery of Human Remains.** In the event human remains are encountered during Project-related ground disturbances, construction personnel will stop all work in the vicinity of the discovery and immediately contact the Los Angeles County Coroner in accordance with Public Resources Code Section 5097.98 and Health and Safety Code Section 7050.5. The City and Zoo staff will also be contacted. If the County Coroner determines the remains are prehistoric, the Coroner will contact the Native American Heritage Commission and the Native American Heritage Commission shall designate a Most Likely Descendant.
- MM CUL-4: Native American Monitoring.** A Native American representative approved by the Gabrieleño Band of Mission Indians-Kizh Nation Tribal Government and the NAHC will monitor ground disturbing construction activities. Ground disturbing construction activities are defined by the Gabrieleño Band of Mission Indians-Kizh Nation as activities that include, but are not limited to, pavement removal, pot-holing or augering, grubbing, tree removal, boring, grading, excavation, drilling, and trenching. The Native American representative will complete daily monitoring logs that will provide the location of construction activities, and a description of the soil and any cultural materials identified. Native American monitoring will be terminated when all ground disturbing construction activities are complete or when the Native American representative determines that the proposed Project site has a low potential for impacting Tribal Cultural Resources during each phase of Project implementation. Native American monitoring during ground disturbing construction activities will be conducted consistent with current professional standards.
- MM CUL-5: Unanticipated Discovery of Tribal Cultural and Archaeological Resources.** Pursuant to MM CUL-2, upon discovery of any archaeological resources, construction activities will cease in the immediate vicinity of the discovery until the discovery can be assessed. All archaeological resources identified during proposed Project construction activities will be evaluated by the Native American representative approved by the Gabrieleño Band of Mission Indians-Kizh Nation. If the resources are Native American in origin, the Gabrieleño Band of Mission Indians-Kizh Nation will coordinate with the City and the Zoo regarding treatment and curation of the resources including reburial or preservation for educational purposes. Per AR-2, if the discovery is a significant resource, avoidance measures or appropriate mitigation will be implemented.

MM CUL-6: Preservation of Unique Archeological Resources. If unique archaeological resources are discovered, preservation in place (i.e., avoidance) will be the preferred manner of treatment consistent with Public Resources Code Section 21083.2(b). If preservation in place is not feasible, treatment may include implementation of archaeological data recovery excavations to remove the resources and subsequent laboratory processing and analysis. Historic archaeological material that is not Native American in origin will be curated at a public, non-profit institution with a research interest in the materials, such as the Natural History Museum of Los Angeles County or the Fowler Museum, if such an institution agrees to accept the material. If no institution accepts the archaeological material, it will be offered to a local school or historical society for educational purposes.

MM CUL-7: Unanticipated Discovery of Human Remains and Associated Funerary Objects. Public Resources Code Section 5097.98(d)(1) defines Native American human remains as an inhumation or cremation in any state of decomposition or skeletal completeness. Consistent with MM CUL-3, in the event human skeletal material is discovered, excavation will be stopped, and the discovery will be immediately reported to the Los Angeles County Coroner consistent with Health and Safety Code 7050.5. If the County Coroner recognizes the human remains to be Native American or has reason to believe the remains are Native American, the County Coroner will contact the NAHC within 24 hours. Public Resources Code 5097.98 will be followed.

In the event human skeletal material is discovered, the following will occur:

- The Native American representative monitor will immediately redirect construction activity a minimum of 150 feet from the discovery and place an exclusion zone around the discovery. The Native American representative will contact the construction manager who will then contact the Los Angeles County Coroner. The Native American representative will also contact the Gabrieleño Band of Mission Indians-Kizh Nation, a City-qualified archaeologist, the City, and the Zoo. Construction activity will continue to be redirected while the County Coroner determines whether the human skeletal material is Native American. The discovery will be kept confidential and secure to prevent further disturbance. If the human skeletal material is determined to be Native American, the County Coroner will notify the NAHC. The NAHC will then appoint a Most Likely Descendant.
- Funerary objects/associated grave goods will be treated in the same manner as bone fragments.
- If discovered human remains cannot be fully documented and recorded on the same day, the remains will be covered with muslin cloth. A steel plate will be placed over the discovery to protect the remains. If a steel plate is not available, a 24-hour guard will be present onsite outside of regular construction hours.

- Redirecting construction activities to protect the human remains in place will be recommended if feasible. If construction activities cannot be redirected, the burials may be removed. Cremations will be removed in bulk or by any means necessary to ensure complete recovery of all material. The Gabrieleño Band of Mission Indians-Kizh Nation will work closely with the City-qualified archaeologist to ensure that any excavation to remove human remains is conducted carefully, ethically, and respectfully.
- If the discovery of human remains includes four or more burials, the location will be considered a cemetery and a separate treatment plan will be prepared.
- If data recovery excavations are approved by the Gabrieleño Band of Mission Indians-Kizh Nation, documentation will include detailed descriptive notes and sketches at a minimum. Additional documentation will be approved by the Gabrieleño Band of Mission Indians-Kizh Nation
- All feasible care will be taken to avoid any unnecessary disturbance, physical modification, or separation of human remains and associated funerary objects.
- Scientific study of the human remains, including the use of invasive diagnostic procedures/techniques, will not be conducted.
- Each discovery of human remains or associated funerary objects will be stored in opaque cloth bags. All human remains, funerary objects, sacred objects, and objects of cultural patrimony will be removed to a secure container on-site if possible. These items will be retained and reburied within six months of discovery.
- Prior to the resumption of ground disturbing construction activities, the Zoo will designate a location within the proposed Project site for the respectful reburial of the human remains and/or funerary objects. The reburial/repatriation site will be a location agreed upon between the Gabrieleño Band of Mission Indians-Kizh Nation and the Zoo to be protected in perpetuity.
- There will be no publicity regarding a discovery of human remains.
- A final report will be submitted to the Gabrieleño Band of Mission Indians-Kizh Nation and the NAHC.

MM UF-1: Protected Tree Plan. To offset impacts to protected and important trees and shrubs resulting from Vision Plan implementation, the Zoo shall prepare and implement a Protected Tree Plan. The Protected Tree Plan shall identify measures for the protection, relocation, and/or replacement of protected and important significant trees and shrubs. The Protected Tree Plan shall outline and require that Project activities affecting protected trees and shrubs proceed as follows:

1. Preservation of Trees and Shrubs: Protected and important trees and shrubs shall be preserved in place to the maximum extent feasible. To ensure protection of native protected trees and shrubs, as part of final design of the California and Africa area exhibits, all protected trees and shrubs shall be mapped and incorporated into the exhibit to the maximum extent feasible. The

Zoo shall hire a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance to evaluate the health and structure of protected and important trees and shrubs and make recommendations for avoidance of healthy specimens to the maximum extent feasible. The tree expert shall work with project designers during the final design of each phase to incorporate such trees into the exhibits in a manner that would ensure protection of the tree or shrub from damage by exhibit animals or exhibit maintenance activities. Each protected or important tree and shrub to be retained shall have a designated Protection Zone identifying the area sufficiently large enough to protect it and its roots from significant damage during construction. The designated Protection Zone of each specimen shall be protected with 5- to 6-foot-high chain link fences. Fences shall be mounted on 2-inch galvanized iron posts, driven into the ground to a depth of at least two feet and at no more than 10-foot centers, or similarly durable material. Tree and shrub fences shall be erected before demolition, grading, or construction begins and remain until final inspection of the project. Construction and demolition activities around protected trees shall follow all industry standards. Erosion control measures, tree pruning, soil compaction preventive measures, and a tree maintenance schedule shall be implemented and verified by the BOE and a City-authorized tree expert. Following construction, each tree or shrub preserved shall be monitored for a minimum of 5 years to ensure their long-term survivability.

2. Relocation of Trees and Shrubs: Where protected and important trees cannot be avoided and preserved in place, individuals shall be transplanted elsewhere onsite to the extent feasible. If relocation onsite is not feasible, individuals shall be transplanted to an appropriate offsite location elsewhere within Griffith Park, pursuant to the approval of the City BOE and RAP. The City-approved Tree Expert shall identify the necessary measure to be taken to ensure the maximum survivability of the relocated specimens, including relocation method, placement, irrigation method, and maintenance. Relocated individuals shall be monitored for their success for a period of 5 years. The Tree Protection Plan shall identify performance standards for determining whether relocated specimens are healthy and growing normally and shall outline procedures for periodic monitoring and implementation of corrective measures in the event the health of relocated trees declines.
3. Replacement of Trees and Shrubs: Where the preservation or relocation of protected and important trees and shrubs is not feasible, or where the health of preserved or relocated specimens becomes compromised, as part of the final design of each exhibit or feature, the Zoo shall prepare and implement a replacement planting program. Replacement of protected and important trees and shrubs should follow guidelines described in the City's Protected Tree Ordinance adopted at the time, including requirements for relocated or

removed trees or shrubs to be replaced by other species protected by the ordinance at a 4:1 ratio (number of individuals restored to number of individuals impacted). Replacement of oak trees shall be subject to replacement as follows: oak trees less than 12 inches DBH be replaced at 4:1; oak trees between 12 and 24 inches DBH be replaced at 5:1; and oak trees greater than 24 inches BDH be replaced at 10:1. The replacement planting program shall be prepared by a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance. The replacement planting program shall specify the location for replacement, tree or shrub size, planting specifications, and shall include a monitoring program to ensure that the replacement planting program is successful. To the extent feasible, protected, and important trees or shrubs removed within the California or Africa exhibits shall be replaced within each exhibit. Where this is not feasible, the Tree Protection Plan shall outline provisions and standards for replacement in areas outside of each exhibit. At a minimum, the monitoring program shall require monitoring of replacement individuals for a period of 5 years and shall include performance standards for determining whether replacement specimens are healthy and growing normally and procedures for periodic monitoring and implementation of corrective measures in the event that the health of replacement trees declines.

Replacement of removed trees and shrubs should occur within the Zoo to the extent feasible. If replacement within the Zoo is not feasible, the Zoo should coordinate with RAP and the City Forester for replacement trees and shrubs to be planted on adjacent areas of Griffith Park, provided such locations can support the tree's or shrub's survival. Each replacement tree shall be at least 15-gallon, or larger, measuring one inch or more in diameter one foot above the base, and be not less than seven feet in height measured from the base. If use of similar sized replacement trees and shrubs is not possible, smaller sized replacements may be planted. In that event, a greater number of replacement trees or shrubs may be required.

MM UF-2: Restoration Plan. To offset impacts to urban forestry resources and ensure landscaping under the Vision Plan is planned to provide urban forest value, the Zoo shall retain a qualified landscape architect to prepare a landscaping plan. The Zoo landscape plan shall be subject to review and approval by City Bureau of Engineering and shall include the following:

1. Maximize protection of existing protected and important trees and shrubs consistent with the Zoo's Tree Protection Plan identified in MM UF-1.
2. Specify a plant palette and landscape plan that ensures establishment of tree canopy that is cohesive with and supports continuity with the surrounding canopy. The plant palette shall emphasize tree species which are considered

to provide a healthy mix of visual and biological value and which offer greater shade cover and carbon sequestration.

3. Plantings shall include tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures and plantings.
4. Landscaping shall occur immediately following completion of construction of a proposed area of improvement. Planting would use a combination of small containers and larger containers with more mature specimens to ensure plant health while also expediting recovery of the urban forest and minimizing duration of heat island effects following construction.

MM REC-1: Consideration of the Main Trail in Intersection Designs. Should the Zoo pursue improvements to the intersection of Zoo Drive/Western Heritage Way to include a roundabout or grade-separated intersection, the design of the proposed improvements shall be considerate of pedestrian, bicyclist, and equestrian mobility and safety along the Main Trail and ensure that the use of this trail is not hindered. All proposed intersection improvements, including those for design for the mobility and safety of pedestrians, bicyclists, and equestrians shall be incorporated into final plans and reviewed and approved by the City of Los Angeles BOE and the City of Los Angeles Department of Transportation prior to the issuance of permits for these improvements.

MM T-2: Zoo Transportation Demand Management (TDM) Program. The Zoo shall prepare and implement a comprehensive TDM program to provide trip reduction strategies for Zoo visitors and employees. The TDM Program shall be prepared by a qualified transportation planner and submitted by the Zoo to LADOT for review and approval prior construction activity. The goal of the TDM Program shall be to reduce Zoo employee VMT by 10 percent below existing conditions by 2040. The TDM Program shall also apply all feasible VMT reduction strategies for visitor vehicle trips to reduce visitor VMT below projected conditions to the maximum extent feasible. The TDM Program shall be developed and approved prior to operation of Phase 1 of the Project and shall be maintained and adjusted as needed continuously.

The TDM Program shall be overseen by a Zoo TDM Coordinator. The Zoo TDM Coordinator shall be qualified transportation planner and may be a City/Zoo employee or contractor. The Zoo TDM Coordinator shall monitor visitor and employee mode share with annual surveys, collect and analyze parking and transit use data, and develop annual reports for submittal to BOE and LADOT. The surveys shall capture trip origin data, travel mode, number of people in the party, and other key data and indicators for TDM program performance relative to VMT. The Zoo TDM Coordinator shall ensure that monitoring efforts capture all Zoo-related travel behavior. Annual monitoring reports shall include trip length surveys completed at least biannually by a sample of Zoo patrons and annually by Zoo employees (e.g., trip origin data collection). Monitoring results shall be used to

determine the appropriate TDM measures to employ in the coming year to maximize reductions in VMT per capita, champion transit and alternative mode transportation to the Zoo for visitors and employees, develop appropriate incentives to increase the Zoo's transit mode share incrementally over time, and develop effective marketing tools to advertise transit and non-vehicular travel mode availability and incentives.

Each annual TDM Program monitoring report shall:

- Describe the TDM efforts in place at the time to reduce vehicular trips;
- Summarize collected survey data and results;
- Evaluate parking utilization and transit use, comparing trends and annual changes;
- Analyze the results of trip reduction measures in reducing VMT relative to projected VMT increases;
- Evaluate change in available transportation infrastructure and programs serving the Zoo,
- Report the effect on Zoo employee and visitor VMT per capita and compare to current Citywide VMT per capita; and
- Provide recommendations for adjustments to the TDM Program to adaptively manage VMT reductions for visitors and employees, such as increase the charges of paid parking or expand incentives associated with proposed programs, particularly on peak days.

The TDM Coordinator shall oversee annual monitoring and reporting to evaluate the effectiveness of the TDM measures being implemented at the Zoo and recommend adjustments as needed to the TDM Program on an annual basis. The annual report shall be submitted to LADOT for review. The TDM measures shall be assessed and adapted as necessary based on the results of this review. Final annual reports and data (e.g., survey data) shall be shared with the City and made readily available for public review and use. The TDM Coordinator may reference the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* (2010) report and the FHWA's *Integrating Demand Management into the Transportation planning Process: A Deck Reference* (2012), among others, for potential additional measures or adjustments that are determined to be feasible based on the effectiveness of the TDM Program and future conditions.

The TDM Program shall be prepared consistent with the Mobility Element and in consultation with LADOT, as well as RAP, if required for measures affecting Griffith Park. Information regarding the TDM Program shall be distributed to all Zoo employees and shall be posted on the Zoo's website and other marketing materials for Zoo visitors and updated annually as needed based on the annual reports.

The TDM Coordinator shall consider a range of measures for the TDM Program to reduce employee and visitor VMT per capita, including, but not limited to, the following:

1. Measures to Reduce Zoo Employee VMT Per Capita

- Encourage employee participation in existing vanpool programs, including City employee and Metro vanpool programs, or develop/expand the Zoo vanpool program.
- Provide employee incentives to participate in a vanpool program, such as subsidized participant fees, offer in-kind services such as oil change discounts, and provide preferential parking for program participants, and regularly advertise the opportunities to vanpool through a variety of employee communication formats.
- Implement a paid parking program to discourage employee vehicle trips to the Zoo and generate revenue that the Zoo may use to expand transit ridership for employee trips. Pricing options of onsite employee parking spaces include pay-per-use or weekly/monthly parking passes.
- Partner with rideshare companies such as Uber or Lyft to guarantee availability of an emergency ride home or provide access to City vehicles for this purpose.
- Offer employee TDM benefits for use of active transportation commuter modes, including ridesharing, transit, bicycling walking, carpool/vanpool, etc. Incentives for Zoo employees could include flexible scheduling or options for telecommuting, discount transit passes, discounted equipment to employees who bike to work, or discounted equipment (e.g., walking shoes) to employees to walk to work.
- Maximize opportunities for Zoo employees to telecommute as part of regular scheduling.
- Provide a transportation information center and a commuter club to support a collaborative approach among employees to TDM.
- Provide onsite bicycle facilities (i.e., shower, racks, and lockers) for Zoo employees in an amount and location informed by annual employee surveys and monitoring reports.
- Encourage bicycles as a primary commute mode for employees and provide incentives for biking to work, including providing free or discounted equipment to employees such as helmets, locks, bicycle commuter gear, and bicycles (electric or non-electric).
- Coordinate with LARiverworks, RAP, LADOT, the City of Burbank, and the City of Glendale to identify and facilitate new bicycle and pedestrian linkages and bridges between the Zoo and neighboring communities, particularly linkages to Los Angeles River Bike Path. The Zoo, RAP, and LADOT in consultation with the City of Glendale shall consider development of a new bicycle and pedestrian bridge across Colorado Boulevard, linking neighborhoods within the

City of Glendale to Griffith Park, south of the Project site. The Zoo, RAP, and LADOT shall ensure that all bicycle and pedestrian linkages and bridges to Griffith Park are well-signed and provide lighting, are regularly patrolled by law enforcement.

- Continue to seek grant funding to support expanded TDM measures to reduce employee VMT per capita.

2. Measures to Reduce Zoo Visitor VMT Per Capita

- Offer discounted Zoo entrance tickets for patrons who bike or use transit to visit the Zoo. Visitors must provide proof of arrival via transit to receive discounted rate. Advertise the availability of ticket discounts for transit through social media and in coordination with RAP, LADOT, and Metro.
- Coordinate with Metro to increase bus service frequency to the Zoo bus stop, such as advocating for the implementation of Metro's proposed Line 501.
- Seek funding opportunities to provide proportional share funding in coordination with RAP to expand Parkline Shuttle service to increase access to Griffith Park and the Zoo from nearby Metro light rail stations, as follows:
 - Expand Parkline Shuttle service to connect to the Metro B Line Vermont/Sunset station in the south and the Metro B/G (formerly, Orange) Line North Hollywood station in the north. Shuttle routes should be coordinated with LADOT and RAP.
 - Extend Parkline Shuttle service hours to begin at 9:30 AM, before the Zoo opens each day. This expanded service should first be targeted to occur during peak demand periods such as Easter, Memorial Day, and during LAUSD holidays, such as the week of spring break.
 - Coordinate with RAP to monitor the success of the Parkline Shuttle during such peak periods and to fund expansion of the service over time, as needed, to facilitate and accommodate increased ridership. The program shall then be expanded to broaden the hours and days of operation as needed to meet demand.
 - Coordinate with RAP on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Seek funding opportunities to provide proportional share funding in coordination with Metro and LADOT to provide an express shuttle service to and from Los Angeles Union Station and the Zoo or a connection between the Glendale Metrolink station and the Zoo.
 - Provide Union Station shuttle during operating hours on weekends and legal holidays. This new service shall first be targeted as a pilot program to occur during peak demand periods such as Easter, Memorial Day, and during LAUSD holidays, such as spring break week. If successful, the program shall then be expanded to broaden hours and days of operation.

- Coordinate with Metro and LADOT on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Maintain and expand onsite bicycle parking for Zoo visitors in an amount and location informed by visitor surveys and annual monitoring reports.
 - Maintain and expand short-term bicycle parking within the Zoo to meet changing demands evaluated in the TDM Program annual reports.
 - Provide well-lit, clearly signed, bicycle parking that is convenient and in close proximity to the Zoo Entry to encourage bicycling by visitors.
 - Provide secure short-term bicycle parking and/or a bicycle parking attendant, bicycle valet, or indoor bicycle parking facility to prevent theft and ensure parking availability for Zoo visitors.
 - Design bicycle racks with space-efficient configurations, such as vertically staggered racks and two-tier racks.
 - Provide a bike share station at the Zoo as a part of the Metro Bike Share, Ofo, or a new bike share program specific to Griffith Park. Funding shall be determined based on the area required for the bike station. The bike share station shall be well-lit and located at a safe and convenient location adjacent to the Zoo entrance.
- Develop and implement a paid parking program for Zoo visitors to discourage personal vehicle trips to the Zoo and provide a secure funding source to help subsidize TDM, transit improvement, and other trip reduction measures, considering the following options:
 - A Peak Period Parking Program would charge for preferred parking during the highest visitation periods, including all weekends (Saturdays and Sundays), holidays, the spring months (April and May), and December, collecting fees for preferred parking on approximately 170 days of the year (based on the 2020 calendar year).
 - An Everyday Parking Program would charge for preferred parking 364 days of the year (every day the Zoo is open).
 - Maintain at least 15 percent of parking spaces as free parking to meet the needs of disadvantaged households and ensure that low-income visitors may continue to visit the Zoo.
 - The Zoo's TDM Coordinator shall prepare a quarterly report on the effectiveness of the Paid Parking Program and monthly revenue generated.
 - Continue to seek grant funding to support expanded TDM measures to reduce visitor VMT per capita.

6.12 NOISE – AMBIENT NOISE LEVELS

Construction activity would result in temporary increases in ambient noise levels in the proposed Project site on an intermittent basis. Equipment noise levels during general construction activities would exceed 75 decibel average (dBA) Equivalent Noise Level (Leq) at nearby sensitive receptors during Phases 1, 2, 3, 5, and 6. At the loudest phase of construction, construction activity would generate a noise level of approximately 86.2 dBA Leq at 50 feet during the most noise intensive activities such as pile driving and blasting. Blasting activity associated with the proposed Condor Canyon would result in the exceedance of 75 dBA Maximum Noise Level (Lmax) at the Skyline Trail in Griffith Park. Blasting noise would be an instantaneous event and would not result in extended noise impacts over the duration of construction activity. Receptors would only include hikers and equestrians on trails immediately adjacent to the Zoo.

MM NOI-1 through MM NOI-5 would substantially reduce construction noise levels. The equipment mufflers associated with MM NOI-1 would reduce construction noise levels by approximately 3 dBA. MM NOI-2 through MM NOI-4, although difficult to quantify, would also reduce and/or control construction noise levels. MM NOI-4 would require coordination with the construction contractor and the coordinator of the North Hollywood High School Zoo Magnet Center to avoid disruption to classroom instruction. MM NOI-5 would reduce construction noise levels by approximately 10 dBA at North Hollywood High School Zoo Magnet Center by installing temporary noise barriers around the property boundary. With implementation of these measures, noise levels would be reduced to approximately 66 dBA Leq at the exterior of the school, which would be below the 75 dBA Leq standard. Therefore, Project impacts related to construction noise would be less than significant with mitigation.

Off-site haul trucks associated with construction would generate an audible increase of approximately 0.8 dBA Leq. This increase would not represent a substantial increase in noise for an extended period. Therefore, haul truck noise impacts associated with the proposed Project would result in a less than significant.

Stationary operational noise sources introduced under the proposed Project would be similar to existing noise sources; however, increased attendance due to Zoo expansion, new Zoo facilities, and Zoo programming may result in increased noise levels and expanded duration of operational noise, including after-hours noise from evening special events. However, private event noise and increases in the number of seasonal event noise and the attendance of seasonal events is not anticipated to result in a 5 dBA or more increase in Community Noise Equivalent Level (CNEL). As such, impacts associated with event noise would be less than significant. Proposed parking improvements are not anticipated to result in a 5 dBA CNEL increase.

The proposed new service area in the southern perimeter of the Zoo would use a variety of pneumatic and electric equipment to complete various Zoo maintenance tasks. The nearest sensitive use is the Wilson and Harding Golf Course located adjacent to the south of the service area. At this distance noise levels generated by service facilities would be approximately 76.5 dBA Leq. The analysis conservatively assumes that shop faces would be facing the golf course. The existing CNEL at the adjacent portion of the golf course is estimated to be approximately 55.9

dBA CNEL, based on 24-hour measurements taken in the interior of the Zoo. Service facility noise would increase the CNEL to approximately 71.8 dBA CNEL. Therefore, a potentially significant impact could result. MM NOI-6, which would require the Zoo to orient shop faces inwards toward Zoo property, is intended to reduce service area noise through thoughtful design. This would reduce noise levels at the golf course. Therefore, Project impacts associated with service area noise would be less than significant with mitigation.

6.12.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative noise impacts related to ambient noise levels to a less than significant level.

MM NOI-1: Equipment Mufflers. The City and its contractors and subcontractors shall ensure that all construction equipment is operated with closed engine doors and is properly muffled according to manufactures specifications or as required by LADBS, whichever is the more stringent. Use of manufacturer-certified mufflers associated with construction equipment has been shown to reduce noise levels by a minimum of 8 dBA and up to 10 dBA. These requirements shall be included in all final Project plans and permit documents.

MM NOI-2: Rubber Tired Equipment. The City and its contractors and subcontractors shall use rubber-tired equipment to the maximum extent feasible during grading, excavation, and building construction activities, rather than metal-tracked equipment, to reduce noise and vibration levels. These requirements shall be included in all final Project plans and permit documents.

MM NOI-3: Equipment Idling. California State law prohibits heavy-duty diesel motor vehicles from idling for longer than five minutes (Title 13 CCR Section 2485). Under this mitigation, all construction equipment shall be turned off when not in use for an excess of five minutes, except for equipment that requires idling to maintain performance.

MM NOI- 4: Notification Requirements and Coordination with Neighboring Properties. At least one month prior to the initiation of construction -related activities, the City Zoo shall prepare and distribute notices to property owners within 500 feet of the Project site, including the Wilson and Harding Golf Courses, RAP, North Hollywood High School Zoo Magnet Center, and the Autry Museum of the American West, as well as affected commercial businesses and residences along the haul truck route. Additional construction-related noise and disturbance signages shall be posted at or along recreational trails in the vicinity of the Zoo and at the Los Angeles Equestrian Center located in the City of Burbank, noticing the public who may use the trails at Griffith Park of future construction activities related to the proposed Project. At a minimum the notices and signages shall describe the overall construction schedule, advise residents, business owners, and employees, and

trail users of increased construction-related noise, and provide a non-automated telephone number to call to submit complaints associated with construction noise.

- The Zoo shall retain a Noise Disturbance Coordinator for the duration of Project construction activities. The Noise Disturbance Coordinator shall be responsible for responding to local complaints about construction noise. The Noise Disturbance Coordinator shall determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved. All notices that are sent to sensitive receptors within 500 feet of the construction site and all signs posted at the construction site shall list the telephone number for the Noise Disturbance Coordinator.
- Prior to initiating construction activity, the BOE's construction contractor shall coordinate with the site administrator for the North Hollywood High School Zoo Magnet Center to discuss construction activities that generate high noise levels. Coordination between the site administrator and the construction contractor shall continue on an as-needed basis throughout construction of the proposed Project to mitigate potential disruption of classroom activities.

MM NOI-5: Temporary Noise Barriers. The City and its contractors and subcontractors shall implement noise attenuation measures to the satisfaction of the LADBS. Prior to the initiation of the proposed realignment of Crystal Springs Drive/Western Heritage Way and south parking area improvements (Phase 1), a solid noise barrier wall shall be erected around the property boundary of North Hollywood High School Zoo Magnet Center. The noise barrier wall shall be designed to achieve the maximum sound attenuation feasible by breaking the line of site to the Project site. The noise barrier wall shall be based on a site-specific acoustic analysis prepared by a qualified acoustic engineer to be approved by the BOE. The noise barrier wall shall be designed to reduce construction-related noise by a minimum of 10 dBA; however, it is expected that the noise barrier wall could decrease construction-related noise levels by up to 15 dBA during certain phases of construction. The noise barrier wall design shall be subject to City staff approval and shall include an art installation (e.g., painting, adhesive pattern design, etc.) that provides visual relief during the Phase 1 construction period.

MM NOI-6: Noise Reduction Through Design. The City shall design the Zoo's planning areas to reduce operational noise levels. For example, buildings and noise generating uses, such as the proposed Service Center and Zoo Entry shops, should be oriented such that the open faces of these buildings are facing inwards towards the center of the Zoo. Additionally, noise generators for operational equipment, including but not limited to the aerial tram and funicular motors and generators shall be enclosed to reduce noise exposure.

6.13 PUBLIC SERVICES – FIRE PROTECTION / POLICE PROTECTION / SCHOOLS

The proposed Project would not create any new homes or businesses. The proposed Project would involve circulation improvements including realignment of Crystal Springs Drive, improvements to the intersection of Zoo Drive and Western Heritage Way, and internal improvements. The fire station serving the Project site is LAFD Station 56, located approximately 3.06 miles southeast. The proposed Project would not generate a need for additional firefighting or emergency medical services (EMS) personnel or new or expanded fire protection facilities. The proposed Project would not induce residential or direct population growth but would increase annual Zoo attendance and staff. Operation of the proposed Project would not exceed the capacity for LAFD service. Construction activities would comply with Occupational Safety and Health Administration, LAMC Fire Code, and CBC regulations pertaining to application of BMPs and other measures for reducing risks associated with construction. During construction, LAFD, including Fire Station 56, would be notified of any Project traffic control plans implemented during construction of external roadway improvements (e.g., Crystal Springs Drive/Western Heritage Way) to coordinate emergency response routing. Implementation of MM T-1, requiring a Construction Traffic & Access Management Plan with measures for controlling and ensuring continued access to the Zoo and through the interior of the Zoo circulation system, and coordination with the LAFD would ensure that impacts to emergency response times and access during construction would be less than significant with mitigation.

The proposed Project would increase annual Zoo visitation and may increase demand for law enforcement services. The proposed Project would include construction of a security and first aid center within the proposed entry plaza and the hiring of additional security personnel to address the anticipated increase in demand for law enforcement services. Because Zoo security would be provided onsite, the proposed Project would not generate a need for new or altered police protection facilities. The proposed Project would not require additional Los Angeles Police Department (LAPD) service capacity. Proposed modernization of security systems and implementation of MM PS-1, requiring the Zoo implement measures to increase security of the Zoo's parking lot areas would help to reduce LAPD and Zoo security demands. Construction activities would apply crime-deterrent strategies such as security fencing, nighttime lighting, and periodic patrol by Zoo security personnel. During construction, the LAPD would be notified to ensure construction would not impact emergency response. Implementation of the TMP and coordination with the LAPD would ensure that impacts to emergency response times and access during construction would be less than significant.

As stated previously, the proposed Project does not include development of any residential uses and therefore, would not generate an increased demand for public school services or need for new or physically altered school facilities. Projected increase in Zoo visitation following Project implementation could reduce parking availability for the Zoo Magnet Center, located within the Zoo's southern parking lot. To ensure parking availability remains for Zoo Magnet Center visitors, MM PS-2 would require designated parking spaces for Zoo Magnet Center school buses be included in the southern parking lot and the implementation parking hour limitations to

accommodate Zoo Magnet Center staff and visitors. With implementation of this measure, Project impacts to schools would be less than significant with mitigation.

6.13.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative public service impacts to a less than significant level.

MM PS-1: Zoo Parking Lot Security Improvements. In coordination with the City and LAPD, the Zoo shall prepare a Parking Lot Security Plan. The Plan shall identify and implement strategies to improve security within the Zoo's parking areas to reduce vehicle theft/break in or other crimes. Strategies may include but not be limited to installation of surveillance cameras to provide 24-hour video coverage of all Zoo parking areas and frequent foot- or bicycle-based patrolling of the Zoo parking areas by Zoo Security personnel. LAPD shall review and approve the Plan and parking lot security improvements shall be implemented prior to completion of Phase 1. The parking structure improvements proposed as Phase 7 shall be equipped with video surveillance.

MM PS-2: Zoo Magnet Center Parking Restrictions. The City and Zoo shall work with the LAUSD North Hollywood High School Zoo Magnet Center to coordinate improvements to the southern Zoo parking lot in Phase 1 of the proposed Project. Parking lot design and management shall ensure adequate provision of parking for the Zoo Magnet Center during peak Zoo attendance days. Measures may include, but not be limited to, reserved parking spaces for Zoo Magnet Center school buses and adequate spaces to accommodate teachers, the office administrator, and campus counselor, with an additional reserve space for visitors. Reserved parking stalls shall be in effect during hours of Zoo Magnet Center operation. Signage shall indicate all restrictions on public parking within the southern parking lot. All proposed parking improvements shall be noted on final plans and reviewed and approved by BOE and the LAUSD prior to Project construction of Phase 1.

6.14 RECREATION – DETERIORATION OF PARKS AND RECREATIONAL FACILITIES

The proposed Project would increase the annual visitation and use of the Zoo to 3,000,000 guests by 2040; however, the proposed Project would simultaneously increase the physical capacity of the Zoo to accommodate more guests and provide additional unique recreational opportunities within the City. As such, the proposed Project would effectively accommodate this increase in visitation and expand recreational facilities. Zoo parking demand is expected to exceed supply for at least a portion of one hour on 15 days in 2025, 25 days in 2027, 51 days in 2030, and 5 days in 2040. However, park and recreational facility accessibility would still be maintained through street parking and other parking facilities within Griffith Park. Circulation improvements included

in the proposed Project has the potential to affect the mobility of pedestrians, bicyclists, and equestrians along the Main Trail. MM REC-1 would require Zoo Drive/Western Heritage Way intersection improvements be considerate of pedestrian, bicyclist, and equestrian safety with regard to the Main Trail and that use of this important trail is not hindered by implementation of the improvement. With implementation of MM REC-1, impacts to mobility and safety along the Main Trail from the proposed Project would be less than significant with mitigation.

6.14.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant recreation direct and cumulative impacts related to the potential deterioration of parks and recreational facilities levels to a less than significant level.

MM REC-1: Consideration of the Main Trail in Intersection Designs. Should the Zoo pursue improvements to the intersection of Zoo Drive/Western Heritage Way to include a roundabout or grade-separated intersection, the design of the proposed improvements shall be considerate of pedestrian, bicyclist, and equestrian mobility and safety along the Main Trail and ensure that the use of this trail is not hindered. All proposed intersection improvements, including those for design for the mobility and safety of pedestrians, bicyclists, and equestrians shall be incorporated into final plans and reviewed and approved by BOE and LADOT prior to the issuance of permits for these improvements.

6.15 TRANSPORTATION – PROJECT CONSISTENCY WITH APPLICABLE TRANSPORTATION PLANS, POLICIES, AND REGULATIONS / HAZARDOUS DESIGN FEATURES / EMERGENCY ACCESS

The proposed Project has the potential to substantially increase traffic and VMT with associated potential impacts to transportation, related facilities, and potential conflicts with adopted policy. The prepared analysis examines the proposed Project's consistency with applicable plans, policies, programs, and ordinances, consistent with CEQA and the Transportation Assessment Guidelines (TAG), this analysis considers both City documents and applicable regional transportation and circulation documents that relate to the Zoo. Based upon this analysis, the proposed Project, with implementation of mitigation measures and required consistency with existing regulations, would be consistent with the SCAG RTP/SCS, Los Angeles General Plan, Hollywood Community Plan, Griffith Park Vision Plan, and Plan for a Healthy Los Angeles. The proposed Project would not cause significant environmental impacts due to conflicts with any transportation plan, policy, or regulation, and the proposed Project would not preclude the City's implementation of any adopted policy and/or program. Therefore, impacts would be less than significant with mitigation.

Construction activities would create potential conflicts between vehicles, bicycles, pedestrians, and equestrians within Griffith Park would be potentially significant. Although operational impacts of Project implementation would include increased traffic volumes and vehicle trips to surrounding roadways, such increases would be distributed among multiple streets and would not be considered to substantially increase traffic hazards. Proposed Project improvements to the Zoo's internal circulation would result in minor beneficial and less than significant operational impacts to transportation safety hazards.

Emergency access to the Zoo is currently available via Crystal Springs Drive, Zoo Drive, and Griffith Park Drive. Access into the Zoo is available at the employee and service entrance located south of the Zoo Entry from Crystal Springs Drive and at the Gottlieb Animal Health and Conservation building from Griffith Park Drive. Construction activities would result in temporary changes to roadways, access points, and staging areas that currently provide emergency access to the Zoo and nearby areas in Griffith Park. Throughout construction, internal rerouting and temporary closures of the proposed planning areas may block evacuation routes or cause circuitous or inefficient evacuation, as well as limit emergency access to internal areas of the Zoo.

Emergency vehicle access to the interior of the Zoo would be expanded and enhanced by the proposed improvements to the Project site's internal circulatory system, including the reconfiguration of internal pedestrian and non-pedestrian service roads, improvements to existing perimeter roads, service roads, and installation of a perimeter tram road would provide improved emergency vehicle access to high fire hazard areas along the Zoo's perimeter. In addition, proposed realignment of Crystal Springs Drive and improvement of the Crystal Springs Drive & Zoo Drive intersection would reduce congestion and improve emergency vehicle response to the Zoo. Proposed improvements to site circulation and access would maintain or improve emergency access to the site. Therefore, Project operational impacts to emergency access would be less than significant.

6.15.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant transportation direct and cumulative impacts to plan, policy, and regulation consistency, hazardous design features, and emergency access.

MM T-1: Construction Traffic & Access Management Plan. The Zoo shall prepare, implement, and maintain a Construction Traffic & Access Management Plan during the pre-construction design and permitting for each Project phase to address traffic management during construction. The Construction Traffic & Access Management Plan shall be subject to LADOT approval, submitted for Caltrans review, and designed to:

- Minimize traffic impacts on the surrounding street network within Griffith Park and surrounding areas to the maximum extent feasible during each construction phase;

- Minimize impacts to existing public recreational uses and parking to the greatest extent practicable;
- Ensure safety for both those constructing the proposed Project and the surrounding community;
- Minimize the impacts of truck traffic within Griffith Park;
- Avoid conflicts with planned events and festivals within Griffith Park to the greatest extent possible; and
- Provide for coordination with adjacent or nearby construction projects.

To achieve these outcomes, the Plan shall, at a minimum, include the following:

1. Ongoing Requirements throughout the Duration of Construction

- A detailed Construction Traffic & Access Management Plan for work zones shall be maintained. At a minimum, this shall include parking and travel lane configurations; warning, regulatory, guide, and directional signage; and area sidewalks, bicycle lanes, and parking lanes. The plan shall include specific information regarding the proposed Project's construction activities that may disrupt normal pedestrian and traffic flow and the measures to address these disruptions.
- Work within the public right-of-way (i.e., road realignment, intersection improvements, construction of the proposed parking structure) that is performed before 9:00 AM and after 2:00 PM on weekdays during the school year shall require flaggers and traffic controls to avoid conflicts with pick-up and drop-off at the North Hollywood High School Magnet Center.
- Any requests for work before or after normal construction hours within the public right-of-way shall be subject to review and approval through the After-Hours Permit process administered by the Los Angeles Department of Building and Safety.
- A Zoo-funded on-site construction monitor shall be present to ensure safety when work occurs within the public right-of-way (i.e., road realignment, intersection improvements, construction of the proposed parking structure), or when more hazardous activities are occurring such as heavy-haul materials delivery or oversize transport. The Construction Traffic & Access Management Plan shall identify the activities that would prompt the presence of an on-site monitor.
- Trucks shall only travel on a City-approved construction route. Construction routes shall avoid Griffith Park roads to the maximum extent feasible. Truck queuing/staging shall not be allowed on City streets. Limited queuing may occur on the construction site itself.
- Staging areas for construction materials and equipment shall be limited to fenced-off areas within the Zoo campus (with the exception of the road realignment and intersection improvements during Phase 1 and construction of the parking structure during Phase 7).

- Materials and equipment shall be minimally visible to the public; the preferred location for materials is to be onsite, with a minimum amount of materials within a work area in the public right-of-way.
- Off-street parking shall be provided for construction workers, which may include the use of a remote location with shuttle transport to the site, if determined necessary by the City.
- At the discretion of the City, construction work shall not be permitted during City-approved or RAP-sponsored large events or festivals (e.g., Griffith Park Trail Race, Harvest Festival, concerts at the Greek Theatre) within Griffith Park.

2. Project Coordination Elements That Shall Be Implemented Prior to Commencement of Construction

- The Zoo shall advise the traveling public of impending construction activities through active outreach measures (e.g., information signs, portable message signs, media listing/notification, social media, and implementation of an approved Construction Traffic & Access Management Plan).
- The Zoo shall obtain needed City permits (e.g., Use of Public Property Permit, Oversize Load Permit), as well as any Caltrans permits required, for any construction work requiring encroachment into public rights-of-way, detours, or any other work within the public right-of-way.
- The Zoo shall provide timely notification of construction schedules to all affected agencies (e.g., Metro, RAP, LAFD, LAPD, LADPW, and BOE), as well as adjacent facilities (e.g., Autry Museum of the American West, Zoo Magnet School, Wilson-Harding Golf Course).
- The Zoo shall coordinate construction work with affected agencies in advance of start of work. Coordination with Metro regarding construction activities that may impact Metro bus lines (e.g., Metro Line 96) or result in closures lasting over 6 months shall be initiated at least 30 days in advance of construction activities.
- The Zoo shall obtain LADOT approval of any haul routes for earth, concrete, or construction materials and equipment hauling.

6.16 UTILITIES – WATER / STORMWATER DRAINAGE

Construction of the proposed Project would require approximately 2,000 gpd of water during for dust control, equipment cleaning, soil excavation and export, and re-compaction and grading activities which can be accommodated by existing infrastructure. The proposed Project would also require the expansions of existing and installation of new water lines. Water would continue to be supplied from existing mains. Implementation of the proposed Project is expected to increase annual demand for potable water to 144,967,997 gallons per year (444.9 acre-feet per year [AFY]), a 35 percent increase. However, the proposed Project includes a stormwater

management system to capture surface runoff for onsite reuse as landscaping water, offsetting annual irrigation water demands by approximately 35,000,000 gallons per year (107 AFY). With this offset in annual irrigation water demands afforded by the Project's proposed stormwater capture system, the Project is anticipated to increase annual potable water demand by a 2,459,997 gallons per year (7.5 AFY) increase, or a 2.2 percent increase over existing water demands. The City would be able to serve the proposed Project without additional unplanned new or expanded entitlements. The proposed Project would be required to comply with the City's Water Efficiency Requirements and Green Building Code. Under implementation of MM UT-1, recycled water lines would be extended within the Zoo would be used to further reduce overall water demand associated with operational activities. Further, implementation of MM HYD-7 would require the City to install efficient irrigation systems for all existing and proposed new landscaped areas within the Zoo. While not required, MM UT-2 is also recommended. MM UT-2 would implement all recommended civil engineering and water efficiency measures recommended in the Appendix (*New Infrastructure: Plumbing*) of the Vision Plan thereby further reducing impacts on the Zoo's potable water demand. Therefore, with implementation of this mitigation, Project impacts on the City's potable water supplies would be less than significant with mitigation.

The City has available capacity to adequately serve the increased recycled water demands of the proposed Project. Nonetheless, in accordance with the One Water L.A. Plan, MM UT-1 would require the Zoo to extend recycled water lines throughout the interior areas of the Zoo to prevent the need for expansion of the City's recycled water system or major construction activities, thereby further reducing the Zoo's dependence on potable water supplies and securing implementation of the Green New Deal pLAN and One Water L.A. Plan.

The Project proposes the construction and operation of a new stormwater collection system. Project implementation, along with installation of the stormwater collection system would result in or contribute to construction-related impacts which are analyzed in each of the respective resources sections of Section 3, *Environmental Impact Analysis and Mitigation* of the EIR. Mitigation measures necessary to reduce Project impacts associated with installation of the new stormwater collection system are also identified therein and would be capable of reducing impacts to less than significant with mitigation.

6.16.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative utility impacts related to water and stormwater drainage to a less than significant level.

MM UT-1: Recycled Water Use. In accordance with the Green New Deal pLAN and One Water L.A. Plan, the Zoo shall work with LADPW and LASAN to expand recycled water lines (purple pipe) to interior portions of the Zoo. Recycled water shall be used to the maximum extent available for washdown of the animal holding areas, powerwashing walkways and plazas, and flushing toilets, and in the Zoo's exhibits (e.g., treatment systems, ponds, aesthetics, water features, etc.) if the recycled

water is dechlorinated before use, and for fire suppression where feasible. Additionally, all irrigation water demand not covered by stormwater captured in the proposed stormwater collection system (i.e., during dry years), shall be covered by recycled water. The point of connection to the City's water recycling system would be at the existing 8-inch recycled water main at the west end of the Zoo parking lot in Griffith Park, subject to review and approval of LADPW, LASAN, and BOE. LASAN staff shall ensure the recycled water main connections are incorporated into the final building plans prior grading. City staff shall ensure measures are on all Project plans to ensure that these requirements are implemented.

MM UT-2: Vision Plan Recommendations. Project components designed and engineered to implement the Vision Plan shall follow all recommendations and guidelines for water, wastewater, and stormwater utilities provided in the Appendix of the Vision Plan. As recommended in the Vision Plan Appendix (New Infrastructure: Plumbing), the proposed Project must provide the following features to reduce maintenance and conserve water:

- Restrooms
 - Shut-off valve for all fixtures in each restroom, located above the upper terminal water closet and behind a locked access panel.
 - Water-saving battery-operated infrared-sensored flush valves, with manual override on all water closets.
 - Push-button, ADA-metered, self-closing faucets on lavatories.
 - Hose-bibb with vacuum breaker in recessed box with locking cover.
 - Floor drains with trap primers with floors sloped to drain.
 - Clean-outs above all urinals, lavatories, and water closets.
- Public Restrooms
 - Shut-off valve for all fixtures located above the upper terminal water closet and behind a locked access panel.
 - Floor drains with trap primers sloped to drain.
 - Clean-outs above all urinals, lavatories, and water closets.
 - ADA compliant floor-mounted water closet and countertop lavatory.
- Sewer Lines
 - Cast iron soil pipe at all following locations:
 - Within the building and 5 feet outside the building line.
 - Running parallel to and within 2 feet of any building or structure.
 - 6-inch sewer lateral to fire station.
 - Provide clean-outs above all urinals, lavatories, upper terminal water closets, and sinks.
 - Provide uniform slope of 0.25-inch fall per foot whenever possible, but never less than 0.125-inch per foot.
 - Indicate invert elevations of new sewer lines at buildings, changes in direction, locations where sewer lines join and at property lines.

- Review existing sewer pipe's capacities, conditions, and materials.
- Floor Drains, Area Drains and Floor Sinks
 - Where drains or sinks are required, slope floor to drain at 0.125 inch per foot.
 - Floor drains with trap primers are required at restrooms. One floor drain shall be provided front and center for two or more urinals. One floor drain is required for water closets in all restrooms with an additional floor drain when a total of four or more water closets are provided. One floor drain shall be provided for a combination of one water closet and one urinal.
- Utility/Service Sink Room
 - Provide wall-mounted stainless-steel mop sink, with floor drain.
 - Floor sinks with trap primers are required at:
 - Utility/Service sink room.
 - Kitchens, and where preparation sinks have an indirect waste drain rather than a direct connection.
 - Trench drain.
 - Wherever required by the California Plumbing Code or the City Plumbing Code.
- Water Systems
 - Use Type L hard copper pipe inside buildings.
 - Do not run water lines under slab if at all possible.
 - Provide a shut-off valve to isolate all fixtures in each restroom, kitchens, and any other room with multiple fixtures.
 - Slope pipes up in direction of water flow to air-elimination devices, or up to a nearby expansion tank, to provide for air elimination from water lines.
 - Water hammer arrestors are required for lavatories, sinks, fountains, water closets, urinal headers, and other fixtures.
- Water Valves and Other Devices
 - Uninterrupted Service:
 - All domestic water supply mains shall be designed in an above-ground valve station with a minimum of two parallel branch lines – a primary and secondary – to provide for uninterrupted service to the site during maintenance of a backflow preventer or a pressure regulating valve. Each branch shall include a backflow preventer with strainer and when the street pressure exceeds 80 psi, a pressure regulator with strainer.
 - A separate service shall be provided for landscape irrigation, with an above-ground valve station that includes a backflow preventer and a pressure regulator with strainer when the street pressure exceeds manufacturer's or design suggested range.
- Shut-off Valves:
 - All shut-off valves shall be accessible from the room in which fixtures are installed, and shall be located at approximately 3 feet, but not more than 7

feet, from the floor. These valves shall control only fixtures in the room in which they are installed.

- Provide shut-off valves for:
 - Each group of fixtures.
 - Each restroom.

The City is required to include the above standard recommended measures from the Vision Plan's Appendix in the final building plans prior to approval. City staff shall ensure measures are on all Project plans to ensure that these requirements are implemented.

6.17 WILDFIRE – EMERGENCY RESPONSE AND EMERGENCY EVACUATION PLANS / EXACERBATED WILDFIRE RISK / ASSOCIATED INFRASTRUCTURE

The proposed Project would potentially impair existing adopted emergency response and evacuation plans during phased construction. Implementation of MM T-1, requiring a Construction Traffic & Access Management Plan with measures for controlling and ensuring continued access to the Zoo and through the interior of the Zoo circulation system, would address impacts from construction of proposed improvements on emergency access and evacuation of the Zoo in response to a wildfire. The proposed Project would include improvements to existing roadways and circulatory systems both within and surrounding the Zoo that would improve emergency response and access, including improved vehicle entry at the Gottlieb Animal Health and Conservation Center, a new vehicle entrance emergency vehicle access from Zoo Drive, realignment of Crystal Springs Drive, and improvement of the Crystal Springs Drive/Griffith Park Drive intersection. Proposed improvements to internal service roads and pedestrian paths and installation of a perimeter tram road would expand emergency vehicle site accessibility. Therefore, the proposed Project would not impair emergency response and access, and associated impacts would be less than significant.

Project implementation would expand annual visitation and employment at the Zoo and potentially, total resident animals housed at the Zoo. Proposed circulation improvements would enhance emergency evacuation routes by creating direct routes and permitting some degree of widening of internal service roads. With implementation of MM WF-2, updates to the Los Angeles Zoo Procedures Manual and the City Emergency Operations Plan would reflect changes made to the internal circulation system with each phase of Project implementation and integrate requirements for wayfinding and evacuation assistance for visitors, as well as refreshed requirements for Zoo animal protection and evacuation, during a wildfire in Griffith Park. Operational impacts on emergency evacuation and shelter in place of select species would be less than significant with mitigation.

Per MM WF-2, the Zoo would be required to update these plans as appropriate based on proposed improvements and changes in site access and circulation through Project implementation. Therefore, with the application of existing regulations and requirements to update

wildfire management and evacuation plans, the proposed Project would not significantly exacerbate wildfire risks resulting in the exposure of Zoo staff and visitors to wildfire hazards, and impacts would be less than significant with mitigation.

The Project site is located within a Very High Fire Hazard Severity Zone. New ignition sources introduced under the proposed Project could include heavy machinery and fuels during construction and increased visitation and new exhibits. To manage and reduce wildfire risks, the Zoo would continue to implement several procedures for managing fuels, ensuring adequate evacuation of the Zoo, and providing appropriate forms of access to the Zoo and surrounding Wildland Urban Interface, including compliance with applicable measures provided by the City's Fire Code and LAFD and application of emergency management and evacuation plans per both City and AZA regulations. Project implementation would develop hillside areas within the Zoo that currently acts as fuel breaks between the Zoo and wildland areas. It is likely that new fuel breaks would be located along the perimeter of the California and Africa planning areas in compliance with existing City Fire Code and LAFD regulations. With implementation of MM BIO-2 and MM WF-1, adverse impacts to biological resources as a result of installation and maintenance of these fuel breaks would be reduced through maximum avoidance of native vegetation and appropriate restoration offsite. Therefore, impacts would be less than significant with mitigation.

6.17.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that the following mitigation measures shall be implemented to reduce potentially significant direct and cumulative wildfire impacts to a less than significant level.

MM WF-1: Wildfire Fuel Management Plan. The Zoo shall retain a City-qualified specialists (i.e., fire management professionals) and City-approved biologist to prepare a WFMP to design the creation and maintenance of required fire buffers and fuel management zones around the Project site while preserving the integrity of existing native oak woodland, chaparral and coastal sage scrub habitats to the maximum extent feasible. To the maximum extent feasible, native trees and shrubs, such as coast live oak, coastal scrub, and grassland shall be thinned and limbed up but left in place. The WFMP shall be prepared consistent with the requirements of Public Resources Code Section 4291 and also detail methods for achieving fire safety around new and existing structures. The WFMP shall incorporate management strategies in coordination with RAP and LAFD to address any needed future management actions in Griffith Park buffering the Project site. Vegetation and other fuels within the management zone(s) shall be maintained by the Zoo in a manner consistent with existing CFC and LAFD regulations to reduce fuel loading in vulnerable areas and to avoid the buildup of deadwood and leaf litter and/or inappropriate storage of flammable materials. Specifically, the WFMP shall describe at least the following elements:

- Vegetation coverage and type within and adjacent to the vegetation management zone(s);

- Sensitive species identification, mapping, and avoidance;
- Setbacks between structures, Project site boundaries, and access routes;
- Location and management procedure for flammable materials use and storage; and
- Development plan landscaping and planting standards within the setback areas.

The Zoo shall submit the WFMP to BOE, Emergency Management Department, RAP, LAFD, and CDFW for review and approval prior to issuance of any grading and development plans for improvements under the proposed Project.

MM WF-2: Zoo Evacuation and Fire Response Access Plan. Prior to initiation of each phase of Project implementation, the Zoo shall prepare and implement an Evacuation and Fire Response Access Plan (EFRAP), which shall address conditions and requirements for both construction and operation of the Zoo area affected by the proposed Project. The EFRAP shall be prepared in coordination with the LAFD and RAP. The Zoo Department shall oversee implementation of the EFRAP, including updates of the Los Angeles Zoo Procedures Manual and coordination with the City Emergency Management Department – Planning Division for updates of the City Emergency Operations Plan. The EFRAP shall include, but not be limited to:

- Evacuation of Visitors and Employees
 - Designated evacuation routes and exits within the Zoo for Zoo visitors and employees;
 - Wayfinding and signage to assist with route, exits, and meeting area identification during evacuation;
 - Special considerations and requirements for nighttime evacuations;
 - Accommodations for special care or disabled guests or employees;
 - Specified egress points for transportation vehicles and traffic controls to help efficiently evacuate the Zoo's parking lot;
 - Contingency plans for changes to the construction schedule or phasing plan that would affect the primary evacuation plan and routes; and
 - Regular practice drills (e.g., one per year) for implementation of the EFRAP.
- Fire Response Access within the Zoo
 - Specified at least two dedicated ingress points for emergency responders;
 - Specified firefighter staging or command locations within the Zoo (e.g., northern parking lot or Gottlieb Animal Health Center); and
 - Traffic controls at gates and intersections to balance ingress/egress needs during evacuation.
- Zoo Animal Shelter in Place and Evacuation
 - Shelter-in-place accommodations; and

- A relocation plan from the Project site to a secondary location or facility, with associated transportation.

7.0 FINDINGS OF SIGNIFICANT ENVIRONMENTAL EFFECTS

The Final EIR determined that the proposed Project would result in potentially significant environmental effects related to aesthetics and visual resources (consistency with applicable zoning and land use regulations) and transportation (VMT generation). The Final EIR identified feasible mitigation measures to reduce the severity of environmental effects related to these impacts. However, even with the implementation of mitigation measures, impacts would remain significant and unavoidable.

The City also finds that the proposed Project would cause cumulatively considerable impacts in aesthetics and visual resources (visual character) and transportation (VMT).

7.1 AESTHETICS AND VISUAL RESOURCES – CONSISTENCY WITH APPLICABLE ZONING AND LAND USE REGULATIONS

The Project would facilitate redevelopment of the Zoo, as well as the expansion of visitor-serving and animal environment space into approximately 25 acres of existing undeveloped areas characterized mainly by vegetated ridges and hillsides. Given the existing developed nature of the site as a Zoo, proposed development would not drastically change the character of the Zoo. The Zoo would remain a zoo with rich animal environments and lively, engaging visitor areas. Development would remain low density and integrated with lush, diverse landscaping. The Project would modernize existing Zoo facilities to become more visually consistent and interesting. Further, although altering natural topography and features, expansions into undeveloped areas within the Zoo would develop unique and visually desirable facilities, particularly within the California and Africa planning areas where two modern visitor centers would be developed, set amongst engaging animal environments, walking paths, and wayfinding signage.

The greatest change in visual character within internal areas of the Project site would result from temporary removal of substantial areas of the urban forest (e.g., mixed eucalyptus woodland; specimen trees), grading and terrain reshaping to recreate animal environments and visitor amenities such as Condor Canyon, and construction on undeveloped hillsides within the California and Africa planning areas. Visual changes would occur incrementally and sequentially over seven phases of development through 2040. Each phase of development would entail closure of an area of the Zoo using fencing and signage to prevent public access. As a result, construction, including equipment, demolition, and vegetation removal, would not be highly visible to the public within the Zoo. Incidental views of the construction would potentially occur as Zoo patrons move long walkways, ride the aerial or ground trams, and visit new and remodeled animal environments, but these effects would be temporary and minor. Further, these changes to the interior of the Zoo would not be highly visible from outside of the Zoo.

Visual changes from loss of vegetation and tree canopy would potentially be inconsistent with the City's General Plan Conservation Element, Framework Element, and 1998 Hollywood Community Plan goals and policies to retain significant landforms, unique scenic features, and natural viewsheds. However, extensive new landscaping and tree replanting throughout the Zoo would

maintain and expand the dense urban forest present within the Zoo's interior over the long term, which would maintain and improve the existing visual character of the site. Changes to existing trees and vegetation would be substantial, but the Project would include replanting mature vegetation, trees, and landscaping for each phase throughout the Zoo similar to the existing condition. This impact is further mitigated with preservation in place or replacement of mature trees as part of Project landscaping with implementation of MM UF-1 and MM UF-2. These measures would also ensure regeneration of the visual quality of the Zoo as a rich, urban forest canopy and lush landscape, further ensuring that impacts to visual character within the Zoo and associated impacts to policy consistency would be less than significant with mitigation.

The features that would be visible through the tree canopy would not substantially alter visual character or aesthetic quality of the site. Instead, proposed development may incrementally transition undeveloped portions of the site to developed Zoo facilities, set in lush, landscaped grounds. This transition would be consistent with the existing character of the Zoo and would support long-term improvements to that character and history as an iconic, modern Zoo. With completion and operation of all seven phases of the development, the Project would have a beneficial effect on the visual character and quality of the Zoo, particularly as vegetation installed as part of landscape plans becomes mature and reestablishes the urban forest within the Zoo. Much of the existing development within the Zoo is antiquated, and due to gradual redevelopment of the Zoo over the years, has resulted in a built environment that does not share a consistent aesthetic theme or design. The Project would guide development uniformity in design of proposed improvements, along with planned improvements to landscaping and the urban forest would improve the quality of design and visual character of the Zoo's interior areas as viewed by Zoo patrons over the long term. Therefore, with landscaping and mitigation to preserve and replant trees, interior improvements within the Zoo would be consistent with applicable policies governing scenic quality from the Conservation Element, Framework Element, and the 1998 Hollywood Community Plan.

The proposed Project would also result in major changes to exterior public areas fronting the Zoo, including the Zoo Drive gateway to Griffith Park through the proposed roadway, intersection, and parking improvements. Further, the proposed construction of a new multi-story parking structure would also be publicly visible from Zoo Drive, Western Heritage Way, and the main entrance to the Zoo. Although no conceptual plans are available, preliminary review indicates such a structure would be approximately five stories in height with a footprint of approximately three acres if no subterranean levels were included. This structure would substantially change the character of Zoo Drive gateway fronting the Zoo from an open, tree-lined surface parking lot with clear views of vegetated hillsides to a large, bulky parking structure dominating and blocking views of surrounding features. Implementation of MM VIS-2 would require the parking structure to be redesigned to reduce structure height and visibility of the parking structure to the extent feasible to help maintain the visual aesthetic and viewer experience of Griffith Park, including the Zoo Drive gateway, which may include design of the parking structure to be partially subterranean and/or shielded to reduce visibility of the structure. Such a design would result in a reduced structure height but would result in development of an approximately 30-foot-tall structure along much of the Zoo's boundary with Zoo Drive. Such a design could reasonably result in a

channelized view corridor obstructing passer-by views of Griffith Park, particularly when considered along with proposed at-grade intersection improvements at Zoo Drive/Western Heritage Way, which may create greater impacts to aesthetics as a result of increased size, bulk, and scale (see below). This mitigated structure would remain large, tall, and bulky, potentially conflicting with the existing visual character and policies to maintain the Zoo Drive gateway in a wilderness setting. However, the mitigated structure would preserve views of the natural topography in the background and the landscaped tree buffer would retain views of natural resources. Therefore, with proposed landscaping and reduced height under MM VIS-2, the proposed parking structure would be substantially consistent with visual resource policies of the Conservation Element, Framework Element, and 1998 Hollywood Community Plan policies to retain views of the natural ridge lines and trees. Therefore, implementation of the proposed improvements within the Zoo property would be consistent with applicable zoning and other regulations governing scenic quality.

Proposed improvements outside of the Zoo property, namely roadway improvements, would substantially change the urban wilderness character of the Zoo Drive gateway area and may affect viewsheds of natural topography and resources across the park to the west and south. The proposed Vision Plan presents three options for improving traffic flows and reducing or eliminating vehicle queueing at the congested Zoo Drive/Western Heritage Way/Zoo entrance intersection: 1) installation of traffic signals, 2) a roundabout, or 3) a below-grade crossing of Zoo Drive, allowing Western Heritage Way to pass under a new bridge. Signalization would occur during Phase 1 of the Project and, if needed, either a roundabout or below-grade crossing would replace the intersection in Phase 7. Installation of traffic signals or a roundabout would not substantially alter existing visual character of this intersection in context of the Zoo or Griffith Park, although roundabout construction may require expansion outside of existing paved roadways and removal of mature eucalyptus, western sycamore, and other trees. Alternately, new bridge construction and an on- and off-ramp configuration for access between Zoo Drive, North Zoo Drive, and Western Heritage Way would require extensive grading and removal of a substantial number of existing street trees and roadside vegetation. Short-term construction impacts on visual character would be substantial as dozens of trees would likely be removed and such construction would also extend over a period of two or more years. Improvements would likely extend into Zoo and Autry Museum of the American West parking lots, eliminating or substantially altering existing landscaping and mature trees.

If installed, the grade-change and interchange improvement at Zoo Drive/Western Heritage Way would dramatically transform the visual character of this intersection and entrance to the Zoo, as well as the Zoo Drive gateway to Griffith Park. Travelers entering from North Zoo Drive would proceed over the new bridge to the Zoo parking lot, while those accessing Zoo Drive or Western Heritage Way would use an on- and off-ramp system with those proceeding along Zoo Drive and Western Heritage Way would pass under a new bridge. This envisioned infrastructure project would dramatically change this travel corridor, from what currently feels visually like a “country road” with a 4-way stop to a concrete interchange with dramatic terrain modification. The improvement would alleviate congestion at the intersection, which is the intent of the Project in Phase 7, but would increase travel speeds and separate travelers from views of the Zoo Drive

gateway and the Zoo entrance, potentially diminishing the sense of arrival currently afforded by the local roadways, open sky views, and iconic Zoo entrance sign setback from the street. The visual character of the adjacent Main Trail could also be altered due to vegetation removal and users may experience increased noise and exposure to traffic. While the roundabout or grade change, bridge and interchange option may have long-term visual benefits, because plans are entirely conceptual, the potential remains for significant visual impacts to community character. Therefore, these improvements outside of Zoo property would conflict with the goals and policies of the Conservation Element, Framework Element, 1998 Hollywood Community Plan, and Griffith Park Vision Plan to maintain the wilderness character of Griffith Park and the Zoo Drive gateway, as well as views of ridgelines, vegetation, and iconic structures.

Project implementation would also include realignment of approximately 1,200 feet of Western Heritage Way and Crystal Springs Drive to pass east and south of Zoo open storage areas in the southern parking lot along an existing 15+ foot-wide service road, which is a continuation of Western Heritage Way south of the Zoo Magnet Center, then rejoining the existing alignment of Crystal Springs Road. This realignment may require widening of this road from its current 15+ feet to the typical 30- to 35-foot cross section of Crystal Springs Drive. Although no conceptual designs are available, realignment of this road could potentially impact dozens of roadside trees, diminishing the rural visual character of an adjacent park trail that would become exposed to vehicular traffic, similar to that associated within its southward continuation along Crystal Springs Drive. However, the visual character of the realigned roadway would be similar or improved as the Zoo southern parking to the north is proposed for major new landscaping and the Wilson and Harding Golf Course, which lies to the south, would provide visual relief. However, uncertainty over design, potential for tree removal and impacts to views from the existing trail may create potentially significant impacts to community character.

For Project elements occurring in the public right of way, MM VIS-1 would ensure the Zoo Drive/Western Heritage Way intersection improvements would be designed to maximize visual compatibility with Griffith Park and the Zoo entrance and retain the wilderness identity of the park. MM VIS-1 would require intersection improvements to be designed with stone or other natural materials and sized consistent with surrounding structures and facilities in Griffith Park to the extent feasible, as well as incorporating iconic design elements, signage, and art/decorations that reflect the gateway to both the Zoo and Griffith Park. Even with these required mitigation measures, the visual changes proposed would be substantial and would not be consistent with the visual character of the Zoo Drive gateway and existing Zoo entrance or the urban wilderness identity of Griffith Park, as defined in the Griffith Park Vision Plan. For example, intersection improvements would substantially alter the Zoo Drive gateway, creating a more urban, engineered intersection with increased speeds, which would continue to substantially change the visual character of the Griffith Park Zoo Drive gateway area. Consequently, with mitigation, the proposed intersection and roadway improvements outside of Zoo property, with the compounding effect of the proposed parking structure within the Zoo that would be visible from these roadways, would not be consistent with the Conservation Element, Framework Element, 1998 Hollywood Community Plan, and Griffith Park Vision Plan goals and policies to retain viewsheds of topography and natural resources (e.g., trees) and preserve the urban wilderness identity of

Griffith Park and the Zoo Drive gateways. Therefore, the Project's proposed exterior circulation improvements would not be consistent with applicable regulations governing scenic quality, and impacts would be significant and unavoidable.

7.1.1 Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that implementation of the proposed Project would result in significant direct and cumulative aesthetic and visual impacts related to consistency with applicable zoning and land use regulations, even with the incorporation of the following mitigation measures.

MM VIS-1: Roadway and Parking Lot Improvement Design. Improvements to the intersection of Zoo Drive/North Zoo Drive/Western Heritage Way and the main Zoo entrance, Zoo parking lots, and the realignment of Crystal Springs Drive shall be designed to respect and enhance the visual quality and natural character of Griffith Park, especially designated gateways to Griffith Park as follows:

- A licensed landscape architect experienced with road and infrastructure design within highly scenic parks shall be part of any design team and charged with maintaining and enhancing visual quality and natural character of the public spaces fronting the Zoo, including the parking, roadways, intersections and trails.
- For improvements at the intersection of Zoo Drive/North Zoo Drive/Western Heritage Way and the main Zoo entrance, major structural changes, including but not limited to a new bridge, below-grade crossing, and slip ramps or a roundabout, a licensed architect experienced with road and infrastructure design within highly scenic parks shall be part of any design team and charged with creating a scenic and iconic gateway feature, including:
 - Use of stone or other natural materials consistent with surrounding structures and facilities in Griffith Park.
 - Minimize size, bulk, scale of structures to the extent feasible while also adhering to required engineering standards for safety and operations.
 - Installation of iconic design elements, signage, and art/decorations (e.g., emblematic animals or habitats, sculpture, topiary/vegetation, water feature) that reflect the gateway to both the Zoo and Griffith Park such that the bridge or roundabout become beneficial visual features.
- All improvements to access roads and intersections shall be designed to preserve existing vegetation, particularly healthy mature trees, and characteristic park features (e.g., split rail fences), and to protect views from these roads and adjacent trails.
- As part of design of these road and intersection improvement projects, a master landscape plan shall be prepared to guide tree and landscape retention and protection along these road corridors along with tree replanting and replacement landscaping.

- The Zoo shall coordinate with RAP on design of all road and intersection improvements, and parking lot perimeter plantings.

MM VIS-2: Parking Structure Design and Screening. The proposed parking structure shall be designed in such a manner as to limit size, bulk, and scale and to reduce visibility of this new parking structure. The goal for redesign of the parking structure should be reduce the structure height as much as possible. Possible ways to reduce impacts of views of the structure from adjacent roadways and public areas may include:

- Siting the parking structure in the far western corner of the parking lot as far from Zoo Drive as possible;
- Design of the structure to a height no greater than three stories above grade with development of additional subterranean construction levels as necessary to achieve the intended number of new parking spaces;
- Screening of the structure through planting of dense stands of trees and landscaping around the exterior of the structure;
- Installation of lattices or climbing vines along the exterior of the structure and;
- Use of natural materials (e.g., stone facing) or earth-tone colors to reduce the urban character of the structure.

Proposed plans for the parking structure shall demonstrate screening and compatible design with Griffith Park and the intended goal of reducing structure height to the extent feasible. If the design of the structure within the proposed footprint identified in the Vision Plan and with a reduced structure height is determined to be infeasible due to cost or other environmental factors (e.g., shallow groundwater), redesign of the structure to achieve a reduced structure height may include consideration of a design of a structure within a larger footprint and no subterranean levels. All plans for the proposed parking structure shall be subject to review and approval by BOE and Cultural Affairs Commission prior to approval of permits.

MM UF-1: Protected Tree Plan. To offset impacts to protected and important trees and shrubs resulting from Vision Plan implementation, the Zoo shall prepare and implement a Protected Tree Plan. The Protected Tree Plan shall identify measures for the protection, relocation, and/or replacement of protected and important significant trees and shrubs. The Protected Tree Plan shall outline and require that Project activities affecting protected trees and shrubs proceed as follows:

1. Preservation of Trees and Shrubs: Protected and important trees and shrubs shall be preserved in place to the maximum extent feasible. To ensure protection of native protected trees and shrubs, as part of final design of the California and Africa area exhibits, all protected trees and shrubs shall be mapped and incorporated into the exhibit to the maximum extent feasible. The Zoo shall hire a City-approved Tree Expert meeting the requirements of the

City's Protected Tree Ordinance to evaluate the health and structure of protected and important trees and shrubs and make recommendations for avoidance of healthy specimens to the maximum extent feasible. The tree expert shall work with project designers during the final design of each phase to incorporate such trees into the exhibits in a manner that would ensure protection of the tree or shrub from damage by exhibit animals or exhibit maintenance activities. Each protected or important tree and shrub to be retained shall have a designated Protection Zone identifying the area sufficiently large enough to protect it and its roots from significant damage during construction. The designated Protection Zone of each specimen shall be protected with 5- to 6-foot-high chain link fences. Fences shall be mounted on 2-inch galvanized iron posts, driven into the ground to a depth of at least two feet and at no more than 10-foot centers, or similarly durable material. Tree and shrub fences shall be erected before demolition, grading, or construction begins and remain until final inspection of the project. Construction and demolition activities around protected trees shall follow all industry standards. Erosion control measures, tree pruning, soil compaction preventive measures, and a tree maintenance schedule shall be implemented and verified by the BOE and a City-authorized tree expert. Following construction, each tree or shrub preserved shall be monitored for a minimum of 5 years to ensure their long-term survivability.

2. Relocation of Trees and Shrubs: Where protected and important trees cannot be avoided and preserved in place, individuals shall be transplanted elsewhere onsite to the extent feasible. If relocation onsite is not feasible, individuals shall be transplanted to an appropriate offsite location elsewhere within Griffith Park, pursuant to the approval of the City BOE and RAP. The City-approved Tree Expert shall identify the necessary measure to be taken to ensure the maximum survivability of the relocated specimens, including relocation method, placement, irrigation method, and maintenance. Relocated individuals shall be monitored for their success for a period of 5 years. The Tree Protection Plan shall identify performance standards for determining whether relocated specimens are healthy and growing normally and shall outline procedures for periodic monitoring and implementation of corrective measures in the event the health of relocated trees declines.
3. Replacement of Trees and Shrubs: Where the preservation or relocation of protected and important trees and shrubs is not feasible, or where the health of preserved or relocated specimens becomes compromised, as part of the final design of each exhibit or feature, the Zoo shall prepare and implement a replacement planting program. Replacement of protected and important trees and shrubs should follow guidelines described in the City's Protected Tree Ordinance adopted at the time, including requirements for relocated or removed trees or shrubs to be replaced by other species protected by the

ordinance at a 4:1 ratio (number of individuals restored to number of individuals impacted). Replacement of oak trees shall be subject to replacement as follows: oak trees less than 12 inches DBH be replaced at 4:1; oak trees between 12 and 24 inches DBH be replaced at 5:1; and oak trees greater than 24 inches BDH be replaced at 10:1. The replacement planting program shall be prepared by a City-approved Tree Expert meeting the requirements of the City's Protected Tree Ordinance. The replacement planting program shall specify the location for replacement, tree or shrub size, planting specifications, and shall include a monitoring program to ensure that the replacement planting program is successful. To the extent feasible, protected, and important trees or shrubs removed within the California or Africa exhibits shall be replaced within each exhibit. Where this is not feasible, the Tree Protection Plan shall outline provisions and standards for replacement in areas outside of each exhibit. At a minimum, the monitoring program shall require monitoring of replacement individuals for a period of 5 years and shall include performance standards for determining whether replacement specimens are healthy and growing normally and procedures for periodic monitoring and implementation of corrective measures in the event that the health of replacement trees declines.

Replacement of removed trees and shrubs should occur within the Zoo to the extent feasible. If replacement within the Zoo is not feasible, the Zoo should coordinate with RAP and the City Forester for replacement trees and shrubs to be planted on adjacent areas of Griffith Park, provided such locations can support the tree's or shrub's survival. Each replacement tree shall be at least 15-gallon, or larger, measuring one inch or more in diameter one foot above the base, and be not less than seven feet in height measured from the base. If use of similar sized replacement trees and shrubs is not possible, smaller sized replacements may be planted. In that event, a greater number of replacement trees or shrubs may be required.

MM UF-2: Restoration Plan. To offset impacts to urban forestry resources and ensure landscaping under the Vision Plan is planned to provide urban forest value, the Zoo shall retain a qualified landscape architect to prepare a landscaping plan. The Zoo landscape plan shall be subject to review and approval by City Bureau of Engineering and shall include the following:

1. Maximize protection of existing protected and important trees and shrubs consistent with the Zoo's Tree Protection Plan identified in MM UF-1.
2. Specify a plant palette and landscape plan that ensures establishment of tree canopy that is cohesive with and supports continuity with the surrounding canopy. The plant palette shall emphasize tree species which are considered to provide a healthy mix of visual and biological value and which offer greater shade cover and carbon sequestration.

3. Plantings shall include tree specimens and shrubs capable of reaching or exceeding the heights of the adjacent proposed structures and plantings.
4. Landscaping shall occur immediately following completion of construction of a proposed area of improvement. Planting would use a combination of small containers and larger containers with more mature specimens to ensure plant health while also expediting recovery of the urban forest and minimizing duration of heat island effects following construction.

7.2 TRANSPORTATION – VMT

Construction activities associated with development of the proposed Project would result in additional short-term, intermittent VMT in the Project vicinity and on the I-5 and SR-134 freeways. Operation following Project implementation would substantially increase daily VMT due to the addition of new employees and an increase of approximately 1.2 million new annual visitors. At Project buildout in 2040, daily visitor VMT is projected to increase 72 percent and daily employee VMT is projected to increase by up to 93 percent. OPR's Guidelines recommend that a significant impact would occur when a residential or office project's VMT exceeds a level of 15 percent below the existing regional or city VMT per capita and per employee, respectively. The Zoo's projected 2040 visitor VMT (11.92 VMT per capita) would be 28 percent above the City's average daily VMT per capita. Zoo employee daily VMT projected for 2040 (19.23 VMT per employee) would be 49 percent above the City's current average daily VMT per employee. Therefore, projected VMT would be greater than the City and regional averages and would exceed City transportation thresholds. The increase in VMT under the proposed Project would be inconsistent with the adopted City Thresholds of Significance, as well as state, regional and local planning goals for VMT and GHG reduction. While MM T-2 would substantially reduce Project VMT, feasible mitigation does not exist which could ensure Project increases in VMT are reduced below the City's established VMT threshold, which stipulates that any net increase in VMT for event centers and regional-serving entertainment venues would be significant. Therefore, the projected increase in Project VMT would be significant and unavoidable even with preparation of the proposed TDM program which would help the Zoo achieve at least a 10 percent reduction of existing employee VMT and a measurable reduction of projected visitor VMT, transportation impacts would be significant and unavoidable.

Findings

Based on the Initial Study, Draft EIR, Final EIR, all reference documents, and the whole of the record, the City finds that implementation of the proposed Project would result in significant and unavoidable direct and cumulative transportation impacts related to VMT generation, even with the incorporation of the following mitigation measures:

MM T-2: Zoo Transportation Demand Management (TDM) Program. The Zoo shall prepare and implement a comprehensive TDM program to provide trip reduction strategies for Zoo visitors and employees. The TDM Program shall be prepared by a qualified transportation planner and submitted by the Zoo to LADOT for review

and approval prior construction activity. The goal of the TDM Program shall be to reduce Zoo employee VMT by 10 percent below existing conditions by 2040. The TDM Program shall also apply all feasible VMT reduction strategies for visitor vehicle trips to reduce visitor VMT below projected conditions to the maximum extent feasible. The TDM Program shall be developed and approved prior to operation of Phase 1 of the Project and shall be maintained and adjusted as needed continuously.

The TDM Program shall be overseen by a Zoo TDM Coordinator. The Zoo TDM Coordinator shall be qualified transportation planner and may be a City/Zoo employee or contractor. The Zoo TDM Coordinator shall monitor visitor and employee mode share with annual surveys, collect and analyze parking and transit use data, and develop annual reports for submittal to BOE and LADOT. The surveys shall capture trip origin data, travel mode, number of people in the party, and other key data and indicators for TDM program performance relative to VMT. The Zoo TDM Coordinator shall ensure that monitoring efforts capture all Zoo-related travel behavior. Annual monitoring reports shall include trip length surveys completed at least biannually by a sample of Zoo patrons and annually by Zoo employees (e.g., trip origin data collection). Monitoring results shall be used to determine the appropriate TDM measures to employ in the coming year to maximize reductions in VMT per capita, champion transit and alternative mode transportation to the Zoo for visitors and employees, develop appropriate incentives to increase the Zoo's transit mode share incrementally over time, and develop effective marketing tools to advertise transit and non-vehicular travel mode availability and incentives.

Each annual TDM Program monitoring report shall:

- Describe the TDM efforts in place at the time to reduce vehicular trips;
- Summarize collected survey data and results;
- Evaluate parking utilization and transit use, comparing trends and annual changes;
- Analyze the results of trip reduction measures in reducing VMT relative to projected VMT increases;
- Evaluate change in available transportation infrastructure and programs serving the Zoo,
- Report the effect on Zoo employee and visitor VMT per capita and compare to current Citywide VMT per capita; and
- Provide recommendations for adjustments to the TDM Program to adaptively manage VMT reductions for visitors and employees, such as increase the charges of paid parking or expand incentives associated with proposed programs, particularly on peak days.

The TDM Coordinator shall oversee annual monitoring and reporting to evaluate the effectiveness of the TDM measures being implemented at the Zoo and recommend adjustments as needed to the TDM Program on an annual basis. The annual report shall be submitted to LADOT for review. The TDM measures shall be assessed and adapted as necessary based on the results of this review. Final annual reports and data (e.g., survey data) shall be shared with the City and made readily available for public review and use. The TDM Coordinator may reference the CAPCOA *Quantifying Greenhouse Gas Mitigation Measures* (2010) report and the FHWA's *Integrating Demand Management into the Transportation planning Process: A Deck Reference* (2012), among others, for potential additional measures or adjustments that are determined to be feasible based on the effectiveness of the TDM Program and future conditions.

The TDM Program shall be prepared consistent with the Mobility Element and in consultation with LADOT, as well as RAP, if required for measures affecting Griffith Park. Information regarding the TDM Program shall be distributed to all Zoo employees and shall be posted on the Zoo's website and other marketing materials for Zoo visitors and updated annually as needed based on the annual reports.

The TDM Coordinator shall consider a range of measures for the TDM Program to reduce employee and visitor VMT per capita, including, but not limited to, the following:

3. Measures to Reduce Zoo Employee VMT Per Capita

- Encourage employee participation in existing vanpool programs, including City employee and Metro vanpool programs, or develop/expand the Zoo vanpool program.
- Provide employee incentives to participate in a vanpool program, such as subsidized participant fees, offer in-kind services such as oil change discounts, and provide preferential parking for program participants, and regularly advertise the opportunities to vanpool through a variety of employee communication formats.
- Implement a paid parking program to discourage employee vehicle trips to the Zoo and generate revenue that the Zoo may use to expand transit ridership for employee trips. Pricing options of onsite employee parking spaces include pay-per-use or weekly/monthly parking passes.
- Partner with rideshare companies such as Uber or Lyft to guarantee availability of an emergency ride home or provide access to City vehicles for this purpose.
- Offer employee TDM benefits for use of active transportation commuter modes, including ridesharing, transit, bicycling walking, carpool/vanpool, etc. Incentives for Zoo employees could include flexible scheduling or options for telecommuting, discount transit passes, discounted equipment to employees who bike to work, or discounted equipment (e.g., walking shoes) to employees to walk to work.

- Maximize opportunities for Zoo employees to telecommute as part of regular scheduling.
- Provide a transportation information center and a commuter club to support a collaborative approach among employees to TDM.
- Provide onsite bicycle facilities (i.e., shower, racks, and lockers) for Zoo employees in an amount and location informed by annual employee surveys and monitoring reports.
- Encourage bicycles as a primary commute mode for employees and provide incentives for biking to work, including providing free or discounted equipment to employees such as helmets, locks, bicycle commuter gear, and bicycles (electric or non-electric).
- Coordinate with LARiverworks, RAP, LADOT, the City of Burbank, and the City of Glendale to identify and facilitate new bicycle and pedestrian linkages and bridges between the Zoo and neighboring communities, particularly linkages to Los Angeles River Bike Path. The Zoo, RAP, and LADOT in consultation with the City of Glendale shall consider development of a new bicycle and pedestrian bridge across Colorado Boulevard, linking neighborhoods within the City of Glendale to Griffith Park, south of the Project site. The Zoo, RAP, and LADOT shall ensure that all bicycle and pedestrian linkages and bridges to Griffith Park are well-signed and provide lighting, are regularly patrolled by law enforcement.
- Continue to seek grant funding to support expanded TDM measures to reduce employee VMT per capita.

4. Measures to Reduce Zoo Visitor VMT Per Capita

- Offer discounted Zoo entrance tickets for patrons who bike or use transit to visit the Zoo. Visitors must provide proof of arrival via transit to receive discounted rate. Advertise the availability of ticket discounts for transit through social media and in coordination with RAP, LADOT, and Metro.
- Coordinate with Metro to increase bus service frequency to the Zoo bus stop, such as advocating for the implementation of Metro's proposed Line 501.
- Seek funding opportunities to provide proportional share funding in coordination with RAP to expand Parkline Shuttle service to increase access to Griffith Park and the Zoo from nearby Metro light rail stations, as follows:
 - Expand Parkline Shuttle service to connect to the Metro B Line Vermont/Sunset station in the south and the Metro B/G (formerly, Orange) Line North Hollywood station in the north. Shuttle routes should be coordinated with LADOT and RAP.
 - Extend Parkline Shuttle service hours to begin at 9:30 AM, before the Zoo opens each day. This expanded service should first be targeted to occur during peak demand periods such as Easter, Memorial Day, and during LAUSD holidays, such as the week of spring break.

- Coordinate with RAP to monitor the success of the Parkline Shuttle during such peak periods and to fund expansion of the service over time, as needed, to facilitate and accommodate increased ridership. The program shall then be expanded to broaden the hours and days of operation as needed to meet demand.
- Coordinate with RAP on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Seek funding opportunities to provide proportional share funding in coordination with Metro and LADOT to provide an express shuttle service to and from Los Angeles Union Station and the Zoo or a connection between the Glendale Metrolink station and the Zoo.
 - Provide Union Station shuttle during operating hours on weekends and legal holidays. This new service shall first be targeted as a pilot program to occur during peak demand periods such as Easter, Memorial Day, and during LAUSD holidays, such as spring break week. If successful, the program shall then be expanded to broaden hours and days of operation.
 - Coordinate with Metro and LADOT on how best to advertise and perform outreach to user groups regarding the availability of this transit service and methods to increase ridership (e.g., social media outreach).
- Maintain and expand onsite bicycle parking for Zoo visitors in an amount and location informed by visitor surveys and annual monitoring reports.
 - Maintain and expand short-term bicycle parking within the Zoo to meet changing demands evaluated in the TDM Program annual reports.
 - Provide well-lit, clearly signed, bicycle parking that is convenient and in close proximity to the Zoo Entry to encourage bicycling by visitors.
 - Provide secure short-term bicycle parking and/or a bicycle parking attendant, bicycle valet, or indoor bicycle parking facility to prevent theft and ensure parking availability for Zoo visitors.
 - Design bicycle racks with space-efficient configurations, such as vertically staggered racks and two-tier racks.
 - Provide a bike share station at the Zoo as a part of the Metro Bike Share, Ofo, or a new bike share program specific to Griffith Park. Funding shall be determined based on the area required for the bike station. The bike share station shall be well-lit and located at a safe and convenient location adjacent to the Zoo entrance.
- Develop and implement a paid parking program for Zoo visitors to discourage personal vehicle trips to the Zoo and provide a secure funding source to help subsidize TDM, transit improvement, and other trip reduction measures, considering the following options:
 - A Peak Period Parking Program would charge for preferred parking during the highest visitation periods, including all weekends (Saturdays and

Sundays), holidays, the spring months (April and May), and December, collecting fees for preferred parking on approximately 170 days of the year (based on the 2020 calendar year).

- An Everyday Parking Program would charge for preferred parking 364 days of the year (every day the Zoo is open).
- Maintain at least 15 percent of parking spaces as free parking to meet the needs of disadvantaged households and ensure that low-income visitors may continue to visit the Zoo.
- The Zoo's TDM Coordinator shall prepare a quarterly report on the effectiveness of the Paid Parking Program and monthly revenue generated.
- Continue to seek grant funding to support expanded TDM measures to reduce visitor VMT per capita.

8.0 FINDINGS OF PROJECT ALTERNATIVES

Section 4, *Alternatives*, of the EIR discusses the alternatives considered in order to present a reasonable range of options. For alternatives considered but eliminated from further analysis, see Section 4.4.1 of the Final EIR. The City considered two build alternatives for the reduction to identified impacts, especially aesthetics, air quality, urban forestry, noise, and transportation impacts. Additionally, the No Project Alternative was analyzed in the EIR pursuant to Section 15126.6(e) of the CEQA Guidelines. This resulted in the analysis of three alternatives in the EIR, including the No Project Alternative, Alternative 1 – The Reduced Project Alternative, and Alternative 2 – The Multi-Modal Transpiration Alternative

8.1 NO PROJECT ALTERNATIVE

The evaluation of the No Project Alternative is required under CEQA. Under this alternative, the proposed Project would not be implemented in any manner. The No Project Alternative would not result in any changes to existing conditions at the Zoo. No construction activity would occur and there would be no ground-disturbing activities.

8.1.1 Environmental Effects

Under the No Project Alternative, a number of environmental impacts would be avoided or reduced compared to the proposed Project, although beneficial impacts to recreation from development of a new public park would not occur. Impacts to aesthetics and visual resources, air quality, biological resources, cultural and tribal cultural resources, noise, and transportation and circulation would be substantially less when compared to the proposed Project, due to the absence of construction activities and lack of significant increase in annual visitation under the proposed Project. Mitigation measures would not be necessary for these resource areas to avoid significant impacts under this alternative. However, the Zoo would not benefit from some of the improvements proposed under the Project, such as the improvement and expansion of space for animals, redevelopment of outdated exhibit structures (e.g., round houses), addition of parking, improvement of the Zoo's stormwater system for onsite reuse, expansion of solar PV systems onsite to offset Zoo energy demands, and improvement of offsite roadways.

8.1.2 Findings

The City finds this alternative less desirable than the proposed Project. Though the No Project Alternative would avoid or reduce a number of environmental impacts when compared to the Project, implementation of the No Project Alternative would not meet any of the Project objectives related to improving Zoo services, facilities, and operation.

8.2 ALTERNATIVE 1 – REDUCED PROJECT ALTERNATIVE

The Reduced Project Alternative would substantially avoid development within approximately 21 acres of the existing undeveloped areas of the Zoo property where protected trees, native

habitats, and other special-status plant species are present. The Reduced Project Alternative would also generate a smaller increase in visitation, thereby reducing projected VMT and reducing the size of the parking structure or eliminating the need for it entirely.

8.2.1 Environmental Effects

This alternative would reduce potentially significant impacts to biological and urban forestry resources, as well as aesthetics, air quality and GHG emissions, energy, noise, transportation, and utilities. With mitigations required for the proposed Project, Alternative 1 would reduce one significant and unavoidable impact (Impact VIS-2) related to aesthetic impacts to the visual character of the Zoo in context of the Zoo Drive gateway to Griffith Park to a less than significant level. However, Alternative 1 would still generate VMTs that exceed the City's TAG threshold of net-zero VMT for regional attractions like the Zoo and impacts related to Zoo would remain significant and unavoidable under Alternative 1.

Alternative 1 would continue to support long-term redevelopment of the existing Zoo to be partially consistent with several of the Project objectives, including improvement of animal welfare and care (Project Objective No. 1) though to a lesser extent, modernization of exhibit spaces (Project Objective No. 2), improvement of the visual appearance of the Zoo (Project Objective No. 11), and incorporation of sustainable design practices (Project Objective No. 13). However, due to the reduced footprint of the Zoo and smaller increase in visitation over time, this alternative would likely not generate as much revenue as the proposed Project and could undermine the economic viability of the Vision Plan. Therefore, this alternative may not be able to support expansion of conservation efforts, education, or enhanced visual appearance to the same extent as the proposed Project. Likewise, with less area contributing to the design and function of a redeveloped zoo, this alternative would not utilize all of the Zoo property to maximize immersive experiences for visitors or expand visitor-serving features (Project Objectives Nos. 5, 6, and 7). Further, elimination of Condor Canyon would inhibit the creation of an efficient and accessible internal loop circulation system with a Primary Loop Path (Project Objective No. 8). This feature is key to improving not only visitor experience but also to visitor safety and operational excellence (Project Objective Nos. 9 and 14). This alternative would include some improvements to the secondary/exhibit pathways and would implement the proposed Zoo aerial tram to improve access; however, a funicular would not be developed and many of the Zoo's pathways would remain inaccessible for ADA visitors and potentially difficult to navigate, similar to the existing setting at the Zoo. As a result, Alternative 1 would not meet or only partially several Project objectives.

8.2.2 Findings

The City finds this alternative less desirable than the proposed Project. Although Alternative 1 would reduce one significant and unavoidable impact (Impact VIS-2) related to aesthetic impacts to a less than significant level with mitigation and result in a slight reduction of potentially significant impacts to biological and urban forestry resources, as well as aesthetics, air quality and GHG emissions, energy, noise, transportation, and utilities, significance findings would largely remain similar to the Project. In addition, Alternative 1 would continue to result in significant

and unavoidable transportation impacts related to increases in VMT. Additionally, Alternative 1 would not meet or only partially meet most the Project objectives compared to the proposed Project.

8.3 ALTERNATIVE 2 – MULTI-MODAL TRANSPORTATION ALTERNATIVE

Under the Multi-modal Transportation Alternative, the Zoo would implement measures that would go beyond the state and regional goals and policies for reducing VMT and increasing multi-modal transportation. Alternative 2 would incorporate Project mitigation measures and additional measures for reducing VMT into the design of the proposed Project. This would involve additional measures to increase active transportation and transit to and from the Zoo by coordinating with local and responsible agencies, providing funding for key improvements, and incentivizing alternative modes of travel. Under Alternative 2, all transportation, circulation, and parking improvements proposed under the Project would continue to be implemented with the exception of the onsite parking structure, which would be reduced in size commensurate to the reduced demand for parking resulting from increased use of alternate modes of transportation.

8.3.1 Environmental Effects

Alternative 2 would substantially expand multi-modal transportation opportunities for the Zoo to give visitors and employees the option to use transit, bicycles, walking, and ridesharing as a viable and attractive travel mode. In doing so, Alternative 2 would substantially reduce total Zoo VMT to a greater extent than the Project. As a result, this alternative would reduce potentially significant impacts to aesthetics, air quality and GHG emissions, energy, land use and planning, and transportation. VMT is the metric by which transportation impacts are measured in the City, per the 2020 TAG and consistent with state law. Alternative 2 would result in a greater level of consistency with state and regional goals for reducing VMT and associated vehicle GHG emissions, slightly reducing impacts compared to the Project; however, due to the City's adopted thresholds for regional serving retail projects, impacts would remain significant and unavoidable. Similar to the Project, Alternative 2 would achieve all of the Project objectives.

8.3.2 Findings

The City finds this alternative less desirable than the proposed Project. Although Alternative 2 would achieve all of the Project objectives, substantially reduce total Zoo VMT, and result in a greater level of consistency with state and regional goals for reducing VMT and associated vehicle GHG emissions, impacts would remain significant and unavoidable. Additionally, the possibility of funding from multiple stakeholders, and the amount of funding required for new transit facilities and services, bicycle and pedestrian bridges and connections, and multi-modal incentives for employees and visitors would be costly and present challenges in terms of economic feasibility.

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9.0 FINDINGS ON MITIGATION MONITORING AND REPORTING PROGRAM

Pursuant to Section 15091 (a)(1) of the CEQA Guidelines, the City finds that implementation of the mitigation measures, BMPs, and project design standards specified in the Final EIR would substantially lessen the significant environmental effects resulting from the implementation of the proposed Project. These mitigation measures, BMPs, and design features have been required in, or incorporated into the proposed Project. In accordance with Section 15091 (d), and Section 15097 of the CEQA Guidelines, which require a public agency to adopt a program for reporting or monitoring required changes or conditions of approval to substantially lessen significant environmental effects, the Mitigation Monitoring and Reporting Program provided in the Final EIR is hereby adopted as the mitigation monitoring and reporting program for this proposed Project.

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10.0 FINDINGS ON CHANGES TO THE DRAFT EIR AND RECIRCULATION

10.1 CHANGES TO THE DRAFT EIR

In response to comments from the public and other public agencies, the proposed Project has incorporated changes subsequent to publication of the Draft EIR. All the changes to the Draft EIR are discussed in Section 1.0, *Introduction* and Section 8.0, *Response to Comments*, of the Final EIR.

10.2 FINDINGS REGARDING FINAL EIR

Pursuant to CEQA, on the basis of the review and consideration of the Final EIR, the City finds:

1. Factual corrections and minor changes have been set forth as clarifications and modifications to the Draft EIR;
2. The factual corrections and minor changes to the Draft EIR are not substantial changes in the Draft EIR that would deprive the public of a meaningful opportunity to comment on a substantial adverse environmental effect of the Proposed Project, a feasible way to mitigate or avoid such an effect, or a feasible project alternative;
3. The factual corrections and minor changes to the Draft EIR will not result in new significant environmental effects or substantially increase the severity of the previously identified significant effects disclosed in the Draft EIR;
4. The factual corrections and minor changes in the Draft EIR will not involve mitigation measures or alternatives which are considerably different from those analyzed in the Draft EIR that would substantially reduce one or more significant effect on the environment; and
5. The factual corrections and minor changes to the Draft EIR do not render the Draft EIR so fundamentally inadequate and conclusory in nature that meaningful public review and comment would be precluded.

Thus, none of the conditions set forth in CEQA requiring recirculation of a Draft EIR have been met. Incorporation of the factual corrections and minor changes to the Draft EIR into the Final EIR does not require the Final EIR be recirculated for public comment.

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11.0 STATEMENT OF OVERRIDING CONSIDERATIONS

Pursuant to CEQA Section 21081(b) and the CEQA Guidelines Section 15093, the City has balanced the benefits of the proposed Vision Plan against the unavoidable adverse impacts associated with the proposed Project and has adopted all feasible mitigation measures. The City has also examined alternatives, and has determined that adoption and implementation of the proposed Project is the most desirable, feasible, and appropriate action.

11.1 SIGNIFICANT UNAVOIDABLE IMPACTS

Based on the information and analysis set forth in the Draft EIR, Final EIR, responses to comments, and the record of proceedings, implementation of the proposed Project would result in significant impacts after mitigation related to aesthetics and transportation.

Construction of the proposed improvements to the Zoo Drive/Western Heritage Way, particularly construction of a below-grade crossing, would substantially change the visual character of the Zoo Drive gateway to Griffith Park, inconsistent with applicable regulations governing scenic quality, which would result in significant and unavoidable impacts to aesthetic and visual resources.

Existing and projected VMT would be greater than the City and regional averages and would exceed City transportation thresholds. However, a TDM program would help the Zoo achieve at least a 10 percent reduction of existing employee VMT and a measurable reduction of projected visitor VMT to help achieve measurable GHG reductions consistent with the goals of the California Climate Change Scoping Plan and local GHG plans. Even with robust mitigation, VMT transportation impacts would be significant and unavoidable.

11.2 PROJECT BENEFITS

The City has balanced the proposed Project's benefits against the significant and unavoidable impact identified for the proposed Project. The City finds that the benefits of implementing the proposed Project outweigh the significant and unavoidable impact, and the impact, therefore, is considered acceptable in light of the proposed Project's benefits. The City finds that each of the following benefits is an overriding consideration, independent of the other benefits, that warrants approval of the proposed Project notwithstanding the significant and unavoidable aesthetic and transportation impacts. The proposed Project would provide several public benefits, as described below:

- Improve the quality and extent of animal habitats within the Zoo, improving the livelihood of resident Zoo animals and the capabilities of the Zoo's service centers and veterinary facilities.
- Raise the quality of the visitor experience and visitor-serving facilities and exhibits.
- Redevelop the Zoo as a world class designation to provide unique recreational opportunities to both residents and tourists.

- Expand facilities to support the Zoo's conservation actions to protect and grow animal populations and habitats.
- Provide immersive habitats, hands-on learning opportunities, improved facilities, and other visitor amenities to enhance visitor experience and promote public education and interest in nature and conservation.
- Promote understanding of California habitats, wildlife species and unique natural systems through development of the California Exhibit.
- Reduce fire hazards through improved fire management, upgrade or replacement of existing outdated structures to current California Building Code and Fire Code standards, replacement of high fire hazard trees (e.g., eucalyptus) with a range of tree species, and maintenance or enhancement of emergency access to the Zoo and perimeter areas.
- Provide expanded event facilities to support more evening uses to make use of the Zoo's facilities for a broader range of activities.
- Improve environmental sustainability of Zoo operations, including substantial onsite solar power generation, rainwater capture, and water recycling by incorporating sustainable design practices consistent with the City's Sustainable City pLAN, One Water L.A. Plan, and Resilient Los Angeles Plan.
- Establish operational excellence at the Zoo by providing facilities and resources that allow Zoo staff and emergency responders to safely and efficiently support Zoo operations.

11.3 CONCLUSION

Based on the foregoing findings and the information contained in the record, it is hereby determined that:

- a) All significant effects on the environment due to approval of the proposed Project have been eliminated or substantially lessened where feasible, and
- b) Any remaining significant effects on the environment found to be unavoidable are acceptable due to the factors described in the Statement of Overriding Considerations above.