3.18 CUMULATIVE IMPACTS

The proposed Project’s contribution to cumulative effects would be less than significant or less than significant with mitigation for a majority of resource areas, including air quality, biological resources, cultural and tribal cultural resources, energy, urban forestry resources, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, public services, recreation, utilities, and wildfire. However, similar to the direct effects of the proposed Project, cumulative effects would be significant and unavoidable with regard to aesthetics and visual resources as a result of inconsistency with applicable policies governing scenic quality within Griffith Park and the Zoo Drive gateway and with regard to transportation as a result of increases in vehicle miles traveled. These effects would be considered cumulatively considerable with implementation of nearby and regional development projects, including the Griffith Park Aerial Transit System.

3.18.1 INTRODUCTION

This section discusses the environmental impact analysis approach, methodology, and cumulative project scenario for the Los Angeles Zoo and Botanical Gardens (Zoo) Vision Plan (Vision Plan; Project) in the City of Los Angeles (City). The Environmental Impact Report (EIR) addresses potential impacts that could result from the construction and operation of future development anticipated to occur under the Vision Plan. As described in Section 2.0, Project Description, the Vision Plan would guide future development at the Zoo for 20 years by establishing broad standards and guiding principles for future phased development. The Vision Plan would be implemented through three near-term phases within the next 10 years and four long-term phases through the Project’s horizon. The cumulative impacts analysis considers long-term effects of the proposed Project over the 20-year horizon. Many of these impacts, particularly for the long-term phases, may not be apparent in the near-term, but they may evolve into beneficial or adverse cumulative impacts over time.

3.18.2 CUMULATIVE SETTING AND APPROACH TO CUMULATIVE IMPACT ANALYSIS

According to State of California Environmental Quality Act (CEQA) Guidelines Section 15130(a)(1), a “cumulative impact” consists of an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. State CEQA Guidelines Section 15355 define cumulative impacts as “two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts.” Cumulative impacts can result from individually minor, but collectively significant, projects occurring over a period of time (Section 15355[b]). Section 15355 of the CEQA Guidelines further state that the individual effects can be various
changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects.

State CEQA Guidelines Section 15130(a) clarifies that an EIR shall “discuss the cumulative impacts of a project when the project’s incremental effect is cumulatively considerable”. In this context, “cumulatively considerable” means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and/or the effects of probable future projects (as defined by Section 15130). The discussion of cumulative impacts must reflect the severity of the impacts as well as the likelihood of their occurrence. The standards for “significant” or “cumulatively considerable” are based on the established significance thresholds for each resource area. Per Sections 15130(b)(1)(B) and 15130(d), consistency with the projections or requirements of previously approved local, regional, statewide, or planning documents may also be a guide to determining whether a project’s impact is cumulatively significant.

State CEQA Guidelines Section 15130(b) identifies the following elements as necessary for an adequate discussion of cumulative effects:

- Cumulative context in the form of a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document that has been adopted or certified and that described or evaluated regional or area-wide conditions contributing to the cumulative impact (see Section 3.18.3 below).
- The geographic scope of the area affected by the cumulative effect and a reasonable explanation for the geographic limitation used (see Table 3.18-1).
- A summary of the expected environmental effects to result from those projects with specific reference to additional information stating where that information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project’s contribution to any significant cumulative effects.

According to the State CEQA Guidelines, the discussion and evaluation of cumulative impacts need not be as detailed as the discussion of environmental impacts attributable to the proposed Project alone. Additionally, the discussion should remain practical and reasonable (i.e., not speculative) in considering other projects and related cumulative impacts. Beneficial impacts are also considered in this cumulative impact analysis. Furthermore, per State CEQA Guidelines Section 15130 (a)(1), an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR, and that the EIR may determine that a project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant [Section 15130 (a)(3)]. Therefore, the Project would only have a significant cumulative impact if the Project’s contribution to that impact is deemed to be cumulatively considerable in light of applicable thresholds of significance.
The State CEQA Guidelines provide two different methods to determine the scope of projects for the cumulative impact analysis:

- **List Method** - A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency (CEQA Guidelines Section 15130).

- **General Plan Projection Method** - A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact (CEQA Guidelines Section 15130).

This EIR examines cumulative effects using a combination of the List and General Plan Projection methods. This approach allows for evaluation of the Project in context of near-term development impacts and longer-term regional growth projections from different programs, plans, or projects that have recently been adopted in the City and adjacent cities of...
Burbank and Glendale. A list of cumulative projects and plans is used to assess the Project’s cumulative impacts (Table 3.18-2; Figure 3.18-1).

CEQA Guidelines Section 15130(b)(2) further states that the EIR should define the geographic scope of the area affected by the cumulative effects and provide a reasonable explanation for the geographic limitation used. The geographic scope for the analysis of cumulative impacts in this EIR varies by each environmental impact topic (e.g., air basin, jurisdiction, service area, viewshed, watershed, etc.). For many of the impact topics analyzed in this EIR, the geographic scope was determined to be limited to the City. However, impact topics such as air quality, greenhouse gases and climate change, hydrology and water quality, land use and planning, population/housing, and transportation/traffic have a more regional geographic scope, as identified below.
### 3.18.3 PAST, PRESENT, AND REASONABLY FORESEEABLE RELATED ACTIONS

#### Table 3.18-2. Cumulative Projects List

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Los Angeles Zoo Projects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Angela Collier Gardens</td>
<td>Los Angeles Zoo entry</td>
<td>Commercial Event Space</td>
<td>1.4-acre outdoor event center</td>
<td>Approved</td>
</tr>
<tr>
<td>2</td>
<td>Los Angeles Department of Water and Power (LADWP) Solar Panel Project</td>
<td>Los Angeles Zoo north parking lot and entry</td>
<td>Utilities - photovoltaic (PV) solar panels</td>
<td>163,000 sf of solar panels: 149,000 sf of solar panels for the north parking lot carports 14,000 sf of PV solar panels on the Zoo entry complex rooftops 3.35 megawatts (MW)</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td><strong>Projects within the City of Los Angeles</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Los Angeles River Revitalization Master Plan</td>
<td>Los Angeles River from the confluence of Bell Creek and Arroyo Calabasas to Washington Boulevard</td>
<td>Habitat Restoration Recreation (e.g., trails) Parks and Open Space Transportation</td>
<td>1-mile-wide and 32-mile-long river corridor Five opportunity areas along that corridor Potential for several new bicycle bridges over Los Angeles River</td>
<td>Under Construction</td>
</tr>
<tr>
<td>4</td>
<td>Los Angeles River Ecosystem Restoration Project</td>
<td>Los Angeles River from the northern edge of Griffith Park to Downtown Los Angeles near First Street; construction staging identified at the North Hollywood High School Zoo Magnet Center</td>
<td>Habitat Restoration Open Space Passive Recreation</td>
<td>Restoration of 11 miles of the Los Angeles River: Creation and reestablishment of historic riparian strand and freshwater marsh habitat Opportunity for compatible passive recreation</td>
<td>Approved</td>
</tr>
<tr>
<td>5</td>
<td>Bow Tie Yard Lofts Project</td>
<td>2750-2800 W. Casitas Avenue in South Atwater Village</td>
<td>Multi-Family Residential Restaurant Retail Urban Farm</td>
<td>5.7 acres: 419 units (423,872 square feet [sf]) 64,000 sf of commercial 42,000-sf urban farm 720-space parking garage</td>
<td>Pending</td>
</tr>
</tbody>
</table>
## Table 3.18-2. Cumulative Projects List (Continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Aliso Creek - Limekiln Creek Restoration Project</td>
<td>Confluence of Aliso and Limekiln Creek flood control channels</td>
<td>Habitat Restoration Open Space</td>
<td>11.8 acres</td>
<td>Approved</td>
</tr>
<tr>
<td>7</td>
<td>Bending the River Back into the City</td>
<td>Los Angeles River at 1796 N. Baker Street and 1745 N. Spring Street</td>
<td>Water Diversion for Irrigation</td>
<td>70-foot diameter water wheel, 224-sf diversion structure, 220-foot long, 16-foot wide diversion channel</td>
<td>Approved</td>
</tr>
<tr>
<td>8</td>
<td>Big Tujunga Wash at Oro Vista Avenue Maintenance Program</td>
<td>Big Tujunga Wash and Oro Vista Avenue</td>
<td>Maintenance Dredging</td>
<td>8.8 acres</td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Habitat Restoration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Headworks Reservoir Project</td>
<td>6001 Forest Lawn Drive, Los Angeles</td>
<td>Water Storage and electric power generation</td>
<td>2 underground concrete reservoirs, 110-million-gallon combined capacity, 4-megawatt hydroelectric power generation facility, along with ground surface area habitat restoration and passive recreation overlying underground uses</td>
<td>Under Construction</td>
</tr>
<tr>
<td>10</td>
<td>2020 Floodplain Management Plan Update</td>
<td>City of Los Angeles</td>
<td>Flood Management</td>
<td>503 square miles (321,920 acres)</td>
<td>Pending</td>
</tr>
<tr>
<td>11</td>
<td>Northeast Los Angeles/ Eagle Rock/ Los Feliz/ Griffith Sewer Rehabilitation Project</td>
<td>Northeast Los Angeles, Eagle Rock, and Los Feliz</td>
<td>Public Utilities – sewer repairs</td>
<td>6 miles of pipeline</td>
<td>Approved</td>
</tr>
<tr>
<td>12</td>
<td>North Outfall Sewer (NOS) Unit 18 - Colorado Boulevard to Doran Street Phase 1 &amp; 2 - Emergency Sewer Repair Project</td>
<td>NOS between Colorado Boulevard and Doran Street</td>
<td>Public Utilities – sewer repairs</td>
<td>5,000 linear feet</td>
<td>Under Construction</td>
</tr>
</tbody>
</table>
### Table 3.18-2. Cumulative Projects List (Continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>NOS Unit 13 Forney Street to Duvall Street - Emergency Sewer Repair Project</td>
<td>NOS on Blake Avenue between Forney Street and Barclay Street</td>
<td>Public Utilities – sewer repairs</td>
<td>4,500 linear feet</td>
<td>Under Construction</td>
</tr>
<tr>
<td>14</td>
<td>NOS Unit 12 - Avenue 19/Humboldt Street - Emergency Sewer Repair Project</td>
<td>NOS south of the Interstate (I) -110 between Avenue 19 and North San Fernando Road</td>
<td>Public Utilities – sewer repairs</td>
<td>2,500 linear feet</td>
<td>Under Construction</td>
</tr>
<tr>
<td>15</td>
<td>East West Valley Interceptor Sewer Project</td>
<td>Victory Boulevard between Vineland Avenue and Haskell Avenue in North Hollywood – Valley Village and Van Nuys – North Sherman Oaks</td>
<td>Public Utilities – sewer repairs</td>
<td>6 miles force main sewer 6 pump stations and connecting sewers</td>
<td>Pending</td>
</tr>
</tbody>
</table>

### Projects within the City of Glendale

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>South Glendale Community Plan</td>
<td>South Glendale Community Planning Area</td>
<td>Residential Commercial Industrial Transit-Oriented Development Mixed use</td>
<td>48,240 units 24,009,000 sf non-residential uses</td>
<td>Approved</td>
</tr>
<tr>
<td>17</td>
<td>Grayson Repowering Project</td>
<td>Grayson Power Plant 800 Air Way, Glendale</td>
<td>Public Utilities – plant repowering</td>
<td>12 acres</td>
<td>Pending</td>
</tr>
<tr>
<td>18</td>
<td>Biogas Renewable Generation Project</td>
<td>Between the Scholl Canyon Landfill and the Grayson Power Plant</td>
<td>Public Utilities</td>
<td>5 miles pipeline 60,000-gallon water tank for fire protection 10,000-gallon domestic water tank</td>
<td>Pending</td>
</tr>
<tr>
<td>19</td>
<td>Pipeline Management Program</td>
<td>City of Glendale</td>
<td>Public Utilities – water infrastructure repairs</td>
<td>12,886 linear feet water mains</td>
<td>Under Construction</td>
</tr>
<tr>
<td>20</td>
<td>Aliso Canyon Action Plan</td>
<td>Greater Los Angeles Area</td>
<td>Public Utilities – gas storage Utilities Conservation</td>
<td>18 actions to reduce the possibility of electrical service interruptions</td>
<td>Approved</td>
</tr>
</tbody>
</table>
### Table 3.18-2. Cumulative Projects List (Continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Highland Avenue Rehabilitation Project</td>
<td>Highland Avenue, Burchett Street, Brand Park Access Road, Lawson Place, Cavanagh Road, and Vincent Way</td>
<td>Public Utilities – sewer repairs</td>
<td>Transportation – road rehabilitation, traffic signal improvements, ADA improvements</td>
<td>8,000 linear feet 3 vehicle detection cameras 4 trees (removal) and 4 trees (to plant)</td>
</tr>
<tr>
<td>22</td>
<td>San Fernando Road Rehabilitation Project (Phase 3), Public Works Yard Recycled Water Main Extension, and Adjacent Streets Improvement Project</td>
<td>San Fernando Road at Los Angeles Street to 548 W. Chevy Chase Drive, Glendale; Los Angeles Street between San Fernando Road and south of West Garfield Avenue, West Windsor Road between Los Angeles Street and San Fernando Road, and West Garfield Avenue between Los Angeles Street and San Fernando Road</td>
<td>Public Utilities - recycled water main extension Transportation - road rehabilitation</td>
<td>1,600 linear feet of recycled water pipeline</td>
<td>Under Construction</td>
</tr>
<tr>
<td>23</td>
<td>Emergency Sewer and Storm Drain Repair Project</td>
<td>City of Glendale</td>
<td>Public Utilities – sewer and storm drain system</td>
<td></td>
<td>238 linear feet of sewer repairs at 20 locations 3,570 linear feet of sewer pipe lining 21 sewer manhole repairs 3 storm drain structure repairs</td>
</tr>
<tr>
<td>24</td>
<td>Flower Street Widening Project</td>
<td>Flower Street between Fairmont Avenue and Sonora Avenue</td>
<td>Transportation – general purpose lanes (each direction)</td>
<td></td>
<td>3,605 linear feet</td>
</tr>
<tr>
<td></td>
<td>City of Burbank Projects</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Providence Saint Joseph Emergency Department and Urgent Care Project</td>
<td>Providence Saint Joseph Medical Center 501 S. Buena Vista Street, Burbank</td>
<td>Medical Center Transportation – pedestrian sidewalks and crossings</td>
<td>34,500-sf Emergency Department 8,500-sf Urgent Care</td>
<td>Approved</td>
</tr>
<tr>
<td>#</td>
<td>Project</td>
<td>Location</td>
<td>Land Use</td>
<td>Size/Unit Intensity</td>
<td>Project Status</td>
</tr>
<tr>
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<td>---------------------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>26</td>
<td>ALOFT and Residence Inn Hotels</td>
<td>2500 N. Hollywood Way, Burbank</td>
<td>Hotel Restaurant</td>
<td>420 hotel rooms: 420 Aloft hotel rooms 5,700 sf of restaurant</td>
<td>Pending</td>
</tr>
<tr>
<td>27</td>
<td>777 Front Street</td>
<td>777 N. Front Street, Burbank</td>
<td>Multi-Family Residential</td>
<td>7.08 acres: 573 residential units 307 hotel rooms 1,067 sf of commercial retail space 1,800 sf of restaurant 1,168 parking spaces</td>
<td>Under Construction</td>
</tr>
<tr>
<td>28</td>
<td>Burbank Town Center</td>
<td>600 N. San Fernando Boulevard, Burbank</td>
<td>Multi-Family Residential</td>
<td>16.5 acres: 1,165 residential units or micro-unit apartments 200-room hotel 738,126 sf of retail/restaurant 120,000-sf office building with 5 live-work units and 5 townhome apartments</td>
<td>Pending</td>
</tr>
<tr>
<td>29</td>
<td>Premier on First Mixed Use Project</td>
<td>103 E. Verdugo Avenue, Burbank</td>
<td>Multi-Family Residential</td>
<td>1.8 acres: 14-story mixed use building 154 residential units 10,600-sf retail space Option A: 12- to 13-story hotel (230 rooms), 4,700 sf of restaurant space, 15,300 sf of retail, and subterranean parking. Option B: 11-story office building (158,000 sf), 24,700 sf of retail, and subterranean and podium parking garages</td>
<td>Pending</td>
</tr>
</tbody>
</table>
### 3.18 Cumulative Impacts

#### Table 3.18-2. Cumulative Projects List (Continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>AC Hotel</td>
<td>550 N. Third Street, Burbank</td>
<td>Hotel, Restaurant, Transportation – parking</td>
<td>38,803 sf: 196-room hotel with fitness center, lounge/library, pool/spa deck, outdoor courtyard, and rooftop viewing deck 3,800 sf of restaurant space 196 subterranean parking spaces</td>
<td>Approved</td>
</tr>
<tr>
<td>31</td>
<td>Avion Project</td>
<td>3001 N. Hollywood Way, Burbank</td>
<td>Office, Restaurant and Retail, Hotel, Utilities</td>
<td>60-acre business park: 1,014,890 sf of industrial/warehouse 142,250 sf of creative office use 7,740 sf of restaurant 7,740 sf of retail 166 hotel rooms</td>
<td>Under Construction</td>
</tr>
<tr>
<td>32</td>
<td>Burbank Common</td>
<td>10 W. Magnolia Boulevard, Burbank</td>
<td>Entertainment – event space, Restaurant and Retail, Open space, Parking</td>
<td>33,000 sf of event space 19,000 sf of restaurant, retail, and special event space 47,000 sf of outdoor eating/leisure and open space</td>
<td>Pending</td>
</tr>
<tr>
<td>33</td>
<td>First Street Village</td>
<td>227, 249, 315 &amp; 333 N. First Street; 36, 42, 43, 52, 53, 57, 71, and 72 N. Palm Avenue; and 36, 52 &amp; 60 E. Magnolia Boulevard</td>
<td>Residential, Commercial</td>
<td>3 acres: three 6-story buildings 275 residential units 18, 976 sf of retail and commercial</td>
<td>Approved</td>
</tr>
<tr>
<td>34</td>
<td>Talaria</td>
<td>3401 W. Olive Avenue, Burbank</td>
<td>Residential, Retail, Transportation – parking</td>
<td>3.86 acres: 241 units 42,950-sf grocery store 760 parking spaces</td>
<td>Under Construction</td>
</tr>
<tr>
<td>35</td>
<td>Media Studios Ten-Year Development Agreement Extension Project</td>
<td>2255 N. Ontario Street, Burbank</td>
<td>Development Agreement, Amendment, Office, Transportation – parking</td>
<td>160,447-sf office building</td>
<td>Approved</td>
</tr>
</tbody>
</table>
### Table 3.18-2. Cumulative Projects List (Continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Golden State Specific Plan and High-Speed Rail</td>
<td>Burbank Bob Hope Airport vicinity</td>
<td>Industrial Commercial Residential Airport Transportation – high-speed rail station, two Metrolink stations, and the Regional Intermodal Transportation Center</td>
<td>600 acres Residential units and commercial and industrial square footage to be determined (TBD)</td>
<td>Pending</td>
</tr>
<tr>
<td>37</td>
<td>California High-Speed Rail – Burbank to Los Angeles Project Section</td>
<td>Burbank Bob Hope Airport vicinity generally following the existing railroad right-of-way (roughly parallel to Interstate [I-] 5) to Los Angeles Union Station</td>
<td>Transportation – high-speed rail and stations</td>
<td>12 miles</td>
<td>Pending</td>
</tr>
<tr>
<td>38</td>
<td>I-5 North Corridor Improvement Project</td>
<td>I-5 North Corridor, northern Los Angeles County between State Route (SR-) 134 and the Kern County line</td>
<td>Transportation – High-Occupancy Vehicle (HOV) lanes and connections, ramp improvements, bridge widening and reconstruction, and truck lanes</td>
<td>Approximately 7.5 miles</td>
<td>Under Construction</td>
</tr>
<tr>
<td>39</td>
<td>I-710 Pavement Rehabilitation and Bridge Widening Project</td>
<td>I-710 through the cities of Commerce, Vernon, Bell, and the unincorporated area of East Los Angeles from Slauson Ave to SR-60.</td>
<td>Transportation – highway rehabilitation and widening</td>
<td>3.5 miles</td>
<td>Under Construction</td>
</tr>
</tbody>
</table>
### 3.18 Cumulative Impacts

#### Table 3.18-2. Cumulative Projects List (Continued)

<table>
<thead>
<tr>
<th>#</th>
<th>Project</th>
<th>Location</th>
<th>Land Use</th>
<th>Size/Unit Intensity</th>
<th>Project Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Projects within Griffith Park</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>Griffith Park Aerial Transit System (ATS) Feasibility Study</td>
<td>Griffith Park</td>
<td>Transportation/Visitor Attraction – three alternative routes for an ATS within Griffith Park to carry visitors from lower elevation base station to viewpoint for Hollywood Sign’ bases stations proposed in Zoo north and south parking lots and at Travel Town</td>
<td>Visitor Amenities, Museum, Food Service, Restrooms, Transportation, Transit hub, Major parking garage, Uber/Lyft drop-off/pick-up, Maintenance facilities</td>
<td>Pending</td>
</tr>
<tr>
<td>41</td>
<td>Griffith Observatory Circulation Enhancement Plan</td>
<td>Griffith Park and the Los Feliz community, with Griffith Observatory in the center of the project area at 2800 East Observatory Road</td>
<td>Transportation – circulation and parking improvements, pay station, and shuttle</td>
<td>40-50 solar powered pay station terminals, 3 parking lots, 2 shuttle routes, Minimum 4 shuttle buses</td>
<td>Completed</td>
</tr>
<tr>
<td></td>
<td><strong>Southern California Association of Governments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Verdugo Road Rehabilitation within City of Glendale</td>
<td>Verdugo Road from Colorado Street to the City of Glendale’s eastern boundary</td>
<td>Transportation – street rehabilitation and traffic signal modification, Public utilities – sewer upsizing</td>
<td>2,800 linear feet, 2 traffic signal system improvements, 1 new traffic signal system, 68 new trees</td>
<td>Under Construction</td>
</tr>
<tr>
<td>43</td>
<td>Countywide Local Highway System Preservation</td>
<td>Los Angeles County</td>
<td>Transportation – highway preservation and rehabilitation</td>
<td>TBD</td>
<td>Approved</td>
</tr>
<tr>
<td>44</td>
<td>STP Local Force Account Resurfacing Project</td>
<td>City of Los Angeles</td>
<td>Transportation – street rehabilitation for ADA-compliant access ramps</td>
<td>TBD</td>
<td>Approved</td>
</tr>
</tbody>
</table>

Note: Cumulative projects located within the City and/or the vicinity of the Project site are shown in Figure 3.18-1. While cumulative projects are not located in the vicinity of the Project site, these projects are identified as having the potential to contribute towards cumulative effects.
Cumulative Project Locations

LEGEND
- Griffith Park
- Los Angeles Zoo
- City of Los Angeles
- Other City Boundary

- Pending
- Approved
- Under Construction

Notes: Project numbers correspond to those presented in Table 3.18-2. Not all listed projects fall within map frame; those that do are highlighted.

SCALE IN FEET

FIGURE 3.18-1
3.18.4 CUMULATIVE IMPACT ANALYSIS

Aesthetics and Visual Resources

Cumulative impacts related to aesthetics and visual resources would be related to potentially adverse changes to visual character and quality of scenic resource within the viewshed of public roads and trails surrounding the Zoo. There are more than 43 projects recently completed, approved, or pending in the Project vicinity (see Table 3.18-2; Figure 3.18-1); however, projects that could contribute to a cumulative visual impact are generally limited to those that would be visible from the Zoo or surrounding or nearby roadways and public trails in Griffith Park, where the visual changes associated with these projects could combine with those of the Zoo Vision Plan to potentially change the visual character or quality of the northeastern areas of Griffith Park. In particular, nearby projects such as Headworks Reservoir Project (#9), which is currently under construction, the proposed Griffith Park Aerial Transit System (ATS) and new transit hub with two options located in the north and south Zoo parking lots (#40), the Angela Collier Gardens Event Center near the Zoo entry (#1), the LADWP Solar Panel Project in the north and main Zoo parking lots (#2), and nearby elements of the Los Angeles River Revitalization Master Plan (#3) and Los Angeles River Ecosystem Restoration Plan (#4) could all combine with visual changes from the Project to contribute to cumulative aesthetic changes in the vicinity.

The approved Angela Collier Gardens Event Center would be entirely located within the interior of the Zoo campus, and therefore, would not be visible from surrounding or nearby roadways. Due to the event center’s location on the eastern side of the Zoo and elevation, it would also either not be visible or have very limited visibility from public trails within Griffith Park. Views of future development in the interior of the Zoo from surrounding public viewing areas would be limited from most locations and are largely obstructed by existing vegetation, ridgelines, or the Zoo’s existing tree canopy. Public views of Project development would be primarily limited to views of the Zoo’s interior from nearby public trails within Griffith Park and views of the Zoo’s parking lots and front entrance from Zoo Drive and Western Heritage Way, with more limited views available from Crystal Springs Road and Griffith Park Drive.

The Headworks Reservoir Project, located approximately 1.5 miles northwest of the Zoo off Forest Lawn Drive, while readily visible from nearby public roads, is separated from the Zoo by various peaks and ridgelines within Griffith Park, which obstruct views of this cumulative project from the public roads bordering the Zoo. Travelers using Forest Lawn Drive and Zoo Drive to access Griffith Park and the Zoo are able to observe major construction at Headworks; however, after major construction is completed, the Headworks site will be restored as open space and habitat, leaving a park or open space like setting during operation. In addition, trails within Griffith Park that potentially have public views of the Zoo and Headworks Reservoir site, (e.g., Skyline Trail) would be limited due to distance, topography, and vegetation within Griffith Park, limiting or minimizing adverse cumulative changes to views.
Considered together, the proposed Project’s contribution to potential adverse impacts to views, in combination with the Headworks Reservoir and Angela Collier Gardens Event Center, are not anticipated to be a cumulatively considerable contribute to impacts to aesthetic and visual resources.

As described in Section 3.1, Aesthetics and Visual Resources, the proposed Project would involve construction activities using heavy equipment, including demolition, mass grading, tree removal, and vegetation clearing, which may be visible from the existing public trails in some locations overlooking the Zoo due to the loss of tree canopy that currently blocks views of the Zoo’s interior. While views of the construction activities and impacts to views from the removal of vegetation and tree cover are considered adverse, these impacts would be temporary and intermittent over the 20-year construction horizon. However, pending developments in proximity to the Zoo such as the Griffith Park ATS and other nearby projects (e.g., LADWP Solar Panel Project) would also involve use of heavy construction equipment and vegetation clearing that would likely overlap with Zoo facility construction due to the long-term (i.e., 20-year) schedule of the proposed Project. Impacts to scenic views from large construction equipment, vegetation clearing, roadway realignments and improvements throughout this area of Griffith Park could substantially disrupt views from portions of public roads and trails. Cumulative construction impacts would be temporary and intermittent (i.e., there would be periods of months or years with little or no visible construction) over the 20-year Project horizon and would not result in substantial permanent changes to visual resources. Therefore, cumulative impacts would be less than significant given the limited visibility of most Zoo projects and with application of standard best management practices (BMPs) such as construction fencing, siting mobilization and storage areas away from key view corridors and cleanup of construction debris after each day’s activities.

Following construction, most proposed improvements would not be visible from outside the Zoo and would not combine with visual changes from cumulative projects in the vicinity. However, views of the Project’s proposed taller features (e.g., Treetops Visitor Center, aerial tram, and California Visitor Center) would be distantly visible from segments of nearby trails. Further, exterior elements of the Project such as the realignment of Western Heritage Way, changes to the Zoo entrance and signage, and parking improvements, especially the proposed multi-story parking structure, would be highly visible from surrounding roads and trails. These changes could combine with pending projects such as the Griffith Park ATS, LADWP Solar Panel Project, and nearby elements of the Los Angeles River Revitalization Master Plan (e.g., bicycle and pedestrian bridges) and Los Angeles River Ecosystem Restoration Plan to substantially change the visual character of the area. Some of these changes could be beneficial (e.g., habitat restoration along the Los Angeles River) while others could be considered adverse such as the high towers of Griffith Park ATS which would also be highly visible from public trails proximate to the Zoo. Additionally, light and glare from nearby cumulative projects such as the proposed Griffith Park ATS and LADWP Solar Panel Project in combination with lighting used for the Zoo’s proposed aerial tram and nighttime events may cause cumulative impacts associated with glare for vehicles and pedestrians in the vicinity.
Project vicinity. However, implementation of MM VIS-3, which would require matte-finishing and non- or low-reflective glass or film covers on the aerial tram support structures and gondolas, would ensure the Project’s contribution to light and glare effects would not be cumulatively considerable and would be reduced to less than significant.

As described in Section 3.1, Aesthetics and Visual Resources, the Project’s proposed parking structure may not be consistent with the visual character and size, bulk, and scale of other existing development within the area of the Zoo Drive gateway within Griffith Park. Further, while the Vision Plan for Griffith Park discourages location of parking structures within Griffith Park, this plan does not apply to Zoo property (see Section 3.11, Land Use and Planning for complete discussion). If the Griffith Park ATS and transit hub are located within the northern or southern Zoo parking lots, an additional parking structure or a major expansion of the Zoo’s proposed parking structure and substantial roadway and intersection improvements, such as a roundabout or sub-grade bypass contemplated by the Project, would likely be required, with combined substantial effects on the visual quality and character of the vicinity and potential inconsistency with the Griffith Park Vision Plan policies for the Zoo Drive gateway. MM VIS-1, requiring the parking structure be designed or shielded to reduce visibility of the structure, would help to maintain the visual aesthetic and viewer experience of Griffith Park from local roadways and trails. However, Project construction and operation, particularly the proposed parking structure and extensive intersection improvements, in conjunction with the Griffith Park ATS Project (particularly if located on Zoo property), the LADWP Solar Panel Project, and other cumulative projects would potentially lead to substantial changes to the visual character of the northeastern area of Griffith Park. The Project’s contribution to these visual impacts would be cumulatively considerable and would be significant and unavoidable.

As with the proposed Project, the 43 cumulative projects identified in Table 3.18-2 are subject to applicable development standards and environmental review. Thus, each project would be assessed for its effect on the scenic views of or across the site. Additionally, each project would be required to comply with applicable policies and regulations of the respective jurisdiction [e.g., County of Los Angeles General Plan, Los Angeles Municipal Code (LAMC) Lighting Requirements]. Compliance with existing regulations would help reduce, but not eliminate cumulative impacts to aesthetics and visual resources identified above.

**Air Quality**

A cumulative impact related to air quality would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects within the South Coast Air Basin (Basin), would cumulatively result in growth that would be inconsistent with the South Coast Air Quality Management District’s (SCAQMD’s) Air Quality Management Plan (AQMP). This growth could interfere with attainment of federal or state ambient air quality standards within the AQMP. As discussed in Section 3.2, Air Quality, the Basin is in nonattainment for ozone (O₃) and particulate matter (PM₂.₅ and PM₁₀) and in partial nonattainment for lead. Per the SCAQMD’s 2016 AQMP, the latest emissions
inventory and air quality modeling analysis indicate that significant reductions above and beyond those already achieved are still needed for meeting these standards. Therefore, any substantial increases in the amount of O₃ precursors, particulate matter, or lead in the region would contribute to potentially significant cumulative impacts, including those attributed to construction emissions. With regard to the contribution of the proposed Project, the SCAQMD recommends methods to determine the cumulative significance of new land use projects. These methods are based on performance standards and emission reduction targets necessary to attain federal and state air quality standards projected in the AQMP.

Without mitigation, construction of the proposed Project would generate emissions of nitrous oxides (NOₓ), an O₃ precursor, in excess of the applicable SCAQMD regional mass daily threshold. Project construction in conjunction with construction of other large developments within the Basin, such as the Burbank Town Center (#28), Grayson Repowering Project (#17), and Front Street Project (#27), could result in cumulative considerable levels of NOₓ emissions. Implementation of mitigation measure MM AQ-1 would require the use of construction equipment with Tier 4 standard engines to 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. As a result, mitigated Project construction emissions would not exceed project-level significance thresholds and therefore, impacts related to cumulative increases in nonattainment pollutants would be less than significant with mitigation.

Operational air pollutant emissions generated by the Project would increase daily air pollutant emissions within the Basin when combined with operations of cumulative development within the Basin. For example, Project operation, in conjunction with operation of other large development such as the Griffith Park ATS (#40), South Glendale Community Plan (#16), and Burbank Town Center (#28) would cumulatively increase the number vehicle trips (see Transportation discussion below) and associated air pollutant emissions generated within the Basin. The combined air pollutant emissions from the proposed Project in conjunction with the Griffith Park ATS, South Glendale Community Plan, and other cumulative projects could result in cumulatively considerable impacts to regional air quality. Although Project operation 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, including operational emissions of O₃ precursors and particulate matter, would remain below applicable SCAQMD mass daily thresholds of significance during all stages of Project operations. Therefore, the Project operation’s contribution to cumulative air quality impacts would be less than significant.

**Biological Resources**

A cumulative impact related to biological resources would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects within Griffith Park, along the Los Angeles River, within the City, and within the County, would cumulatively increase the potential for loss of disturbance of a sensitive species.
or its habitat, sensitive natural communities, or other resources protected under federal, state, or local regulations. The proposed Project in combination with cumulative development within the cities of Los Angeles, Glendale, and Burbank would result in the construction, demolition, or redevelopment of areas that may result in the direct or indirect loss or disturbance of these resources. Of particular concern would be those projects that could affect habitats within Griffith Park in the vicinity of the Zoo as impacts to such habitats could combine with those of the proposed Project on biological resources.

As discussed in Section 3.3, Biological Resources, the Project would result in the direct or indirect loss or disturbance of approximately 19 acres of native vegetation communities and hundreds of individual protected trees and shrubs. Of particular concern would be the loss of roughly 6 acres of coast live oak woodland and up to 144 mature coast live oak trees and 24 California black walnut, along with Nevin’s barberry, a federally list endangered shrub. The loss of these resources under the Project would contribute incrementally to cumulative regional decline in California’s live oak woodlands, as well as declines in California black walnut populations and those of the Nevin’s barberry. These losses of habitat would also incrementally reduce foraging/nesting habitat for both common wildlife and several sensitive wildlife species in the region. Cumulative removal of habitat in the vicinity of the Project site could reduce the amount of foraging and breeding habitat for other non-sensitive mammals, birds, and reptiles. The majority of cumulative projects identified in Table 3.18-2 involve development within existing urbanized areas that do not contain natural or high-value biological resources, or potential for impact to biological resources is considered low. However, projects such as the Griffith Park ATS (#40) would likely involve removal of habitat for construction of system towers and other visitor-serving and maintenance features within Griffith Park, as well as incremental increases in disturbance to wildlife from operation of this new attraction. The Griffith Park ATS could combine with the Project to contribute localized adverse impacts on habitat adjacent to the Zoo or the movement of wildlife through the site or surrounding area.

Several cumulative projects such as the Los Angeles River Revitalization Master Plan (#3), Los Angeles River Ecosystem Restoration Plan (#4), and the Bending the River Back into the City project (#7) involve restoration or revitalization of the Los Angeles River to enhance or expand riparian and aquatic habitat and increase connectivity to the river from habitat fragments, patches, or ecological areas such as Griffith Park. While these projects may involve short term impacts to biological resources associated with construction of new facilities (e.g., bicycle and pedestrian bridges across the River) or due to removal of invasive nonnative species and other habitat restoration activities, these cumulative projects would ultimately have a net regional benefit to biological resources, including those within Griffith Park.

With incorporation of identified mitigation in Section 3.3, Biological Resources, the Project’s contribution to regional cumulative impacts to biological resources would not be cumulatively considerable due to ability for the Project to avoid or successfully mitigate all impacts
associated with loss or disturbance of sensitive and regionally significant biological resources; therefore, cumulative impacts would be less than significant with mitigation.

**Cultural and Tribal Cultural Resources**

**Historic Resources**

Cumulative impacts to historic resources can result from the gradual negative effects of past, present, and future actions over a certain period of time. For the historic built environment, the cumulative impacts analysis encompasses the Zoo and immediately surrounding area, with emphasis placed upon the Griffith Park Historic Cultural Monument. Cumulative development within the vicinity, such as the LADWP Solar Panel Project (#2) and Griffith Park ATS (#40) may contribute to a cumulatively considerable impact on the designated or eligible historic resources. In particular, the Project’s proposed multi-story parking structure in conjunction with the solar panels approved within the Zoo’s northern parking lot, and the large system towers, moving gondolas, and large parking structure that would be needed to support the Griffith Park ATS may cumulatively impact the historic integrity of Griffith Park. However, the proposed Project would not result in any impacts to historic resources, as none exist within the Zoo. The Project would therefore have a less than cumulative considerable effect on cumulative impacts to historic resources, and impacts would be less than significant. Potential impacts of cumulative development would be addressed on a project-by-project basis, with project-specific studies and mitigation measures required to reduce potential project-specific impacts.

**Cultural and Tribal Cultural Resources**

For the proposed Project, the regional resource base for archaeological and tribal cultural resources is defined geographically and ethnographically. Thus, the geographic scope of the cumulative impact analysis takes in a broad region encompassing the entire Los Angeles Basin and Los Angeles County. The analysis also takes into consideration the cultural geography of the Gabrieleno/Tongva people who occupied the region prehistorically, considering the integrity of the entire suite of resources that make up the cultural patrimony of the group.

Trends that have led to degradation of the regional cultural and tribal cultural resource base, and are expected to continue in the future, include continuing urban development in the Los Angeles Basin, which can result in disturbance and loss of onsite archeological resources and change to cultural landscapes. As described in Section 3.4, Cultural and Tribal Cultural Resources, there is a very low likelihood of cultural and tribal cultural resource to remain within the Project site, and Project-specific mitigation measures would reduce these potential impacts to less than significant levels. Thus, the proposed Project’s contribution to any cumulative impacts to archaeological or tribal cultural resources would not be cumulatively considerable, and impacts would be less than significant with mitigation. Cumulative development in the Project vicinity, such as the LADWP Solar Panel Project (#2) and Griffith Park ATS (#40) would result in ground disturbing activities (e.g., excavation for installation
of the footings for the Griffith Park ATS towers), which may uncover previously undisturbed archaeological resources and human remains and could potentially result in damage or loss of such resources. However, project-specific impacts on archaeological resources would be addressed on a project-by-project basis.

**Energy**

The Project’s implementation schedule would overlap with that of many cumulative projects with corresponding potential for increases in cumulative energy demand. Cumulative impacts related to energy demand would include a project’s contribution to wasteful, inefficient, or unnecessary consumption of energy in the City, region or state, particularly as it relates to potential, or where such demand may conflict with a state or local plan for renewable energy or energy efficiency, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), policies of the City General Plan and Hollywood Community Plan, the Sustainable City pLAN, and the Green New Deal. Growth within the region is anticipated to increase the demand for electricity, natural gas, and transportation energy, as well as the need for energy infrastructure, such as new or expanded energy facilities.

**Electricity**

Buildout of the Project, cumulative projects, and additional forecasted growth in LADWP’s service area would cumulatively increase the demand for electricity supplies and infrastructure capacity. Project implementation would generate a maximum potential annual increase in electricity use of approximately 2,555 megawatt-hours (MWh) in 2030 and 3,407 MWh in 2040. By comparison, the total electrical energy demand of the County was 68,486 GWh in 2018, so the Project’s 2040 electrical energy demand would contribute a 0.00005 percent increase in the County’s demand. This increase in electricity use would not place an undue burden on LADWP resources. Further, the Project involves several energy saving features such as the stormwater capture and treatment system, which would reduce electricity demand associated with water conveyance by approximately 24 percent. Additionally, the proposed Project’s 70,000 sf of solar installations would reduce electricity consumption by up to 50 percent, which would exceed the City’s goal to reduce building energy use 34 percent by 2035 and 44 percent by 2050, as established in LA’s Green New Deal. Throughout all phases of the Project, new structures, infrastructures, utilities, and landscaping would meet the LEED Silver standards of design or better to ensure energy- and resource-efficient structures. All renovated and new structures would be outfitted with low flow plumbing fixtures and energy efficient appliances (i.e., restaurant facilities) and comply with all provisions of the Los Angeles Green Building Code. Therefore, although Project development would result in the use of renewable and non-renewable electricity resources during construction and operation, the use of such resources would not be wasteful or inefficient, would be reduced by energy efficiency measures, and would be consistent with growth expectations for LADWP’s service area. Cumulative development projects within LADWP’s service area, such as the Griffith Park ATS (#40), in combination with the Project would
contribute an increase in electrical energy demand. However, the Headworks Reservoir Project (#40) which is under construction, will operate a 4 MWh hydroelectric power generation facility, increasing LADWP’s generation of renewable electrical energy. As with the Project, during construction and operation, other future development projects would be expected to incorporate energy conservation features, comply with applicable regulations, including the CALGreen Code and state energy standards under Title 24, and incorporate mitigation measures, as necessary. Additionally, the LADWP Solar Panel Project would provide up to 3.35 MW of solar energy to the LADWP grid and to the Zoo during periods of power outage further reduce cumulative demand for electric generated through use of non-renewable energy sources. This project would also reduce non-renewable electricity demand by installing electric vehicle (EV) charging stations in the Zoo’s north parking lot. As such, the Project’s contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of electricity would not be cumulatively considerable and thus, would be less than significant.

**Natural Gas**

Buildout of the Project, related projects, and additional forecasted growth in SoCalGas’s service area would cumulatively increase the demand for natural gas supplies and infrastructure capacity. Project implementation would generate a maximum potential annual increase in natural gas use of approximately 2,500 million BTU (MBTU) in 2030 and 2,513 MBTU in 2040. The annual natural gas sale to SoCal Gas customers in the County in 2018 was approximately 292,074,550 MBTU; therefore, the Project’s 2040 natural gas demand would contribute a 0.000009 percent increase in the County’s demand. The increase in natural gas use would not be wasteful nor would it place an undue burden on SoCalGas resources. Although Project development would result in the use of natural gas resources, the use of such resources would be reduced by proposed measures rendering the Project more energy-efficient, and would be consistent with regional and local growth expectations for SoCalGas’s service area. Furthermore, future development projects would be expected to incorporate energy conservation features, comply with applicable regulations, including the CALGreen Code and state energy standards under Title 24, and incorporate mitigation measures, as necessary. Additionally, all cumulative development, including the proposed Project, would be subject to the provisions of the LA Green Building Code, LEED Silver design standards and BMPs, and LA’s Green New Deal (Sustainable City pLAn 2019) pertaining to energy efficiency for residential and non-residential buildings. As such, the Project’s contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of natural gas would not be cumulatively considerable and thus, would be less than significant.

**Transportation Energy**

Buildout of the Project, related projects, and additional forecasted growth would cumulatively increase the demand for transportation-related fuel consumption in the state and region. Project implementation would generate a maximum potential annual increase in gasoline use
of approximately 565,554 gallons in 2030 and 659,598 gallons in 2040 (for all visitor and employee vehicle trips). The proposed Project gasoline consumption would increase Los Angeles County consumption by approximately 0.016 percent (in 2030) and 0.018 percent (in 2040) relative to the 2018 baseline. Additionally, Project implementation would generate a maximum potential annual increase in diesel fuel use of approximately 118,369 gallons in 2030 and 25,750 gallons in 2040 (for delivery trucks). The proposed Project diesel fuel consumption would increase Los Angeles County consumption by approximately 0.016 percent (in 2030) and 0.0001 percent (in 2040) relative to the 2018 baseline. However, over the last decade the state has implemented several policies, rules, and regulations to improve vehicle efficiency, increase the development and use of alternative fuels, reduce air pollutants and greenhouse gas (GHG) emissions from the transportation sector, and reduce vehicle miles traveled (VMT), which would reduce reliance on petroleum fuels. As with the Project, other future development projects would be expected to reduce VMT by encouraging the use of non-vehicular modes of transportation and other design features that promote VMT reductions. Additionally, the LADWP Solar Panel Project (#2) would incrementally reduce transportation non-renewable energy needs within the City and at the Zoo by installing EV charging stations in the Zoo’s north parking lot, which would be powered by onsite solar panels.

Furthermore, as discussed previously, the Project would be consistent with the energy efficiency policies emphasized by the 2016-2040. Specifically, the Project with required mitigation measures (MM T-2) would include a Transportation Demand Management (TDM) Program to coordinate expansion of public transportation access, new bicycle and pedestrian linkages, and incentives for Zoo employees and visitors to use alternative modes of transportation to the Zoo. These mitigation features would reduce VMT and associated transportation fuel consumption.

By its very nature, the 2016-2040 RTP/SCS is a regional planning tool that addresses cumulative growth and resulting environmental effects. Since the Project with implementation of mitigation measures would be consistent with the 2016-2040 RTP/SCS, its contribution to cumulative impacts related to wasteful, inefficient, and unnecessary use of transportation fuel would not be cumulatively considerable and thus, would be less than significant with mitigation.

Based on the analysis provided above, the Project’s contribution to cumulative impacts related to energy consumption (i.e., electricity, natural gas, and fuel) would not result in a cumulatively considerable effect related to the wasteful, inefficient, and unnecessary consumption of energy during construction or operation. As such, the Project’s impacts would not be cumulatively considerable. Therefore, cumulative energy impacts would be less than significant with mitigation.

**Urban Forestry Resources**

A cumulative impact related to urban forestry resources within the City would result if the potential impacts associated with the proposed Project, when combined with other past,
present, and future projects, would cumulatively increase the potential for loss of trees and shrubs protected under the LAMC Tree Preservation Ordinance and proposed amendments and the loss of the City’s urban tree canopy. The proposed Project in combination with cumulative development within the City and Griffith Park would result in development potentially requiring the removal of protected trees and shrubs, street trees, park trees, or other trees, thereby diminishing the health and value of the urban forest. The Project itself would likely require removal of hundreds of mature trees, particularly as the Zoo thins and removes large numbers of nonnative species (e.g., eucalyptus) to improve public safety and reduce fire danger, while introducing larger numbers of native trees.

Cumulative development occurring at the Zoo, in the City, or around Griffith Park has the potential to result in the loss of urban forest resources. For example, development of the Griffith Park ATS (#40) may lead to removal of parking lot or street trees in and around the Zoo, as well as potential impacts to oaks and other trees along the ATS lines or landing sites. Implementation of the Los Angeles River Revitalization Master Plan and Los Angeles River Ecosystem Restoration Plan could combine to require removal of some native trees and greater numbers of nonnative trees (e.g., eucalyptus or other invasive trees) that contribute to the urban forest. Urban redevelopment or infrastructure projects can often require removal of street trees or other ornamental landscape trees. Development in the City, however, would be required to comply with existing local policies and regulations pertaining to the preservation of urban trees and forest resources. Regulations such as the City’s Tree Preservation Ordinance and proposed amendments, the City’s Policies for the Installation and Preservation of Landscaping and Tree in Public Property, the Department of Recreation and Parks (RAP) Tree Preservation Policy, and RAP Urban Forestry Program would apply to proposed development occurring within the City and Griffith Park. These regulations include provisions for the preservation of certain trees, application for tree removal permits with the City, and/or the replacement of affected trees to maintain the City’s urban forest and important tree resources. Given that all development would be held to the conditions of these existing regulations, the cumulative impacts from development on urban forestry resources would not be significant. Implementation of Project mitigation measures in Section 3.6, Urban Forestry Resources would ensure that the Project’s contribution to any cumulative impacts would be less than cumulatively considerable, and cumulative impacts would be less than significant with mitigation.

Geology and Soils

A cumulative impact related to geology and soils would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects within the Los Angeles region, would cumulatively increase the potential for people to be exposed to geotechnical hazards. As described in Section 3.7, Geology and Soils, the occurrence probability of a large earthquake with high-frequency strong ground motions is moderate. However, any structure built in the seismically active region of Southern California
is inherently at risk of damage during major seismic events. The proposed Project in combination with cumulative residential development and large attractions such as the Griffith Park ATS (#40; 10,000 to 13,000 visitors per day), South Glendale Community Plan (#16; 48,240 new units), and Burbank Town Center (#28; 801 residential units and 200 hotel rooms) would contribute to an overall increase in the density of the Project area, as well as a corresponding increase in population exposed to potential seismic hazards.

Several cumulative projects in the Project vicinity would require excavation and trenching of native soils, including the Headworks Reservoir Project (#9), which would require excavation for 110 million-gallon capacity of underground water storage, and sewer repair projects, including but not limited to the NOS sewer repairs (Units 12, 13, and 18; #14, #13, and #12 in Table 3.18-2, respectively). Additionally, implementation of the Griffith Park ATS and transit hub (#40), if located on Zoo property, would excavate native and fill soils on and in the immediate vicinity of the Project site. Excavation activities required under the Project in combination with excavation and trenching for cumulative projects would increase the amount of soil erosion and loss of topsoil in the Project vicinity. Potential soil impacts from development within the City and the vicinity of the Project site are generally site-specific, resulting from the underlying geology and soil conditions that could adversely affect the individual structure or property. All cumulative development within the City would be required to prepare and submit site-specific geotechnical reports for review and approval by the City’s Building and Safety Division prior to the issuance of grading or building permits. The geotechnical reports would include analysis of the underlying geology and soils associated with each site prior to construction, consistent with state and City regulations. This analysis would include investigations of native soils onsite and the structural stability of any proposed excavation or trenching to ensure each individual project is designed and engineered to withstand reasonably foreseeable seismic activity or unstable soil conditions.

The California Building Code (CBC) includes provisions such that when a building or other structure is constructed adjacent to or adjoining an existing building, it must not increase loading on other building foundations/basement walls or show that any increase is within the permitted design capacity of the other building. Cumulatively, as new buildings are designed and built to code, any potential detrimental effects for adjacent structures would be mitigated. Implementation of the CBC and Los Angeles Building Code’s applicable regulations on development would be required in the event that the underlying geology or soil conditions posed a risk to safety. Therefore, since all development would be held to the individual analysis and safety restrictions, the Project’s cumulative impacts from development on soils subject to instability, subsidence, collapse, and/or expansive soil would not be cumulatively considerable and cumulative impacts would be less than significant.

**Paleontological Resources**

A cumulative impact related to paleontological resources would result if the impacts associated with the proposed Project, when combined with other past, present, and future projects in the Los Angeles Region, would cumulatively increase the potential for loss of
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Paleontological resources. As described above, cumulative development within the vicinity of the Project site, such as the Griffith Park ATS (#40), sewer repair projects, and Headworks Reservoir Project (#9) would require extensive excavation and trenching. Cumulative excavation activities may uncover previously undisturbed paleontological resources and could potentially result in damage or loss of such resources. However, in most cases project-specific impacts would be addressed on a project-by-project basis.

The proposed Project would be required to comply with mitigation requiring monitoring of construction activities, ensuring proper identification, and treatment and preservation of any paleontological resources (see Section 3.7, Geology and Soils). To the extent impacts on paleontological resources from cumulative projects may occur, the proposed Project’s impacts would not be cumulatively considerable, and impacts would be less than significant.

**Greenhouse Gas Emissions**

The Project, in combination with any approved, pending, and proposed development presented in Table 3.18-2, would contribute to the increase of GHG emissions that cumulatively contribute to global climate change. Analysis of GHG emissions and climate change are cumulative in nature because impacts are caused by cumulative global emissions and accumulation of GHGs in the atmosphere, with such analysis focusing on citywide, regional, and statewide emissions and their contribution to national or global trends. Additionally, climate change impacts related to GHG emissions do not necessarily occur in the same area as the Project is located. Such analysis typically accounts for statewide emissions and GHG generation reduction goals outlined in state, regional, and local plans and policies.

As described in Section 3.8, Greenhouse Gas Emissions, the Project would contribute incrementally to generation of GHGs in combination with other cumulative projects, particularly larger development or redevelopment projects such as the South Glendale Community Plan (#16; 48,240 new units), the Avion Project (#31; 60 acre business park), and the Griffith Park ATS (#40), which would likely generate similar levels of vehicle trips to the Project. The Project’s unmitigated net increase in GHG emissions relative to existing (2019) conditions are estimated to be 7,783.5 metric tons of CO₂ equivalent (MTCO₂e) annually in the near-term and 9,716.4 MTCO₂e annually in the long-term (refer to Section 3.8, Greenhouse Gas Emissions). However, the GHG emissions increases do not account for external factors that would reduce GHG emissions in future years relative to existing conditions such as mandated regulatory programs for enhancing energy and fuel efficiency standards. Additionally, the Project would include physical and operational sustainability features that would promote a reduction in GHG emissions. For example, the Project would utilize energy efficiency appliances and equipment, provide EV vehicle spaces, implement up to 70,000 square feet of solar panels for onsite renewable energy generation. The Project would also remove outdated building structures and facilities that would be replaced by buildings meeting LEED Silver or equivalent energy efficiency. All end uses within Zoo facilities would at a minimum comply with the most recent applicable Title 24 energy
efficiency standards, currently 2019. The degree to which GHG emissions would be reduced through these mechanisms cannot be reasonably quantified due to the complexity of the implementation schedule and the potential GHG emissions reductions associated with other cumulative projects, such as the LADWP Solar Project (#2) that would reduce the Zoo facilities’ baseline electricity consumption in future years.

With implementation of the Project’s sustainable design features and future more stringent energy and fuel efficiency standards, the Project would not interfere with statewide initiatives to reduce GHG emissions such as the GHG reduction goals of Health and Safety Code Division 25.5, and would not conflict with GHG reduction plans such as SCAG’s RTP/SCS. Table 3.8-8 provides a topical overview of the statewide consistency analysis, organized by the applicable plan source category or strategy. Implementation of MM T-2 would require the Zoo to expand non-vehicular transportation modes to the Zoo to reduce VMT and associated GHG emissions. In addition, implementation of MM UT-1, MM UF-1, and MM UF-2 requiring use of recycled water and substantial native tree replacement on- or offsite, as well as substantial replanting of disturbed areas to maintain an urban tree canopy at the Zoo, would help to ensure compliance with policies of the Sustainable City pLAn and L.A.’s Green New Deal. MM HYD-2, requiring preparation of a Storm Water Pollution Prevention Plan to reduce or prevent discharge of pollutants during construction activities would achieve Project consistency with California Green Building Standards Code Requirements. With implementation of these measures, the Project would be consistent with all applicable goals of the 2016-2040 RTP/SCS intended to improve mobility and access to diverse destinations, promote smart growth, provide more transportation choices, and reduce VMT and associated GHG emissions, as well as those of other local plans adopted for the purpose of reducing GHG emissions. As such, the Project’s contribution to cumulative GHG impacts would not be cumulatively considerable, and cumulative impacts would be less than significant with mitigation.

Hazard and Hazardous Materials

A cumulative impact related to hazards and hazardous materials would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects within the cities of Los Angeles, Burbank, and Glendale, would cumulatively increase the potential for people to be exposed to hazardous materials, wastes, emissions, or physical conditions. Additionally, a cumulative impact would occur if the Project, in conjunction with cumulative projects, would interfere with an adopted emergency response plan or would expose people or structures to wildland fires.

Cumulative development within the Project vicinity would increase the potential to expose residents, employees, and visitors to hazardous materials through the use and transport of hazardous materials for construction and excavation of potentially contaminated soils. Cumulative projects in the vicinity such as the Grayson Repowering Project (#17) and the Griffith Park ATS (#40) are expected to transport, use, and store hazardous materials within the site vicinity during construction and/or operation. The Grayson Repowering Project
would also involve ground disturbing activities, including excavation on or in proximity to the Superfund cleanup site northeast of the Project site (refer to Section 3.9, Hazards and Hazardous Materials). Additionally, if implementation of the Griffith Park ATS (#40) would involve a transit hub on the north or south Zoo parking lots, excavation for this project could expose contaminated soils from the Superfund site and underground storage tanks (USTs) north of the Autry Museum and at the South Parking area. The potential for exposure to hazardous materials and contaminated soil from the Project in combination with the cumulative projects could result in cumulative impacts. If a lower terminal for the Griffith Park ATS is chosen on Zoo property, this construction would occur immediately adjacent to the North Hollywood High School Zoo Magnet Center where students would be considered potentially sensitive to construction emissions and wastes. Cumulative projects in the Project vicinity would be required to undergo individual environmental review, including review of potential impacts related to hazards and hazardous materials that are applicable to that particular development site and proposed use.

Cumulative projects within the Project site vicinity would also be required to comply with federal, state, and local regulations regarding the handling, use, transport, and disposal of potentially hazardous materials, as applicable. Implementation of MM HAZ-1 and MM HAZ-2, which would require a Phase II Environmental Site Assessment (ESA) and remediation activities, as necessary, would ensure the Project’s contribution to cumulative impacts from exposure to hazards or hazardous materials would not be considerable and cumulative impacts from hazards and hazardous materials would be less than significant.

The Zoo’s proposed aerial tram would be engineered in conformance with the current Safety Requirements for Passenger Tramways (ANSI B77.1) as well as CCR Title 8, Subchapter 6.1, Article 8 Wire Rope and Strand Requirements. Therefore, the Project’s contribution to cumulative impacts from safety hazards related to the aerial tram would not be cumulatively considerable, and cumulative impacts would be less than significant.

If a lower terminal for the Griffith Park ATS is chosen in the north Zoo parking lot, the ATS alignment would operate above the Zoo and the Zoo’s proposed aerial tram, which would potentially increase safety hazards for Zoo and ATS visitors. It is unclear if there are state or federal safety standards that would permit an ATS operating overhead another ATS. The ATS in combination with the proposed Project internal ATS could result in cumulative safety hazards (e.g., dropping objects, engineering malfunctions, etc.) for both riders and pedestrians below the gondolas or due to inadequate spacing between systems and accidental malfunctions of adjacent overlapping ATSs. As the final engineering designs for the ATS are not currently available, the full extent of cumulative safety impacts is unknown.

Operation of the Griffith Park ATS in conjunction with Project operation could also interfere with the Zoo’s emergency preparedness procedures and emergency evacuation of the Zoo. The proposed Project is estimated to generate up to 59,000 visitors per day and the ATS is estimated to generate an additional 10,000 to 13,000 visitors per day. Therefore, the Project’s increase in visitation combined with the increase in visitation from the ATS would contribute
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A substantial increase in the daytime population in the Project vicinity. While the exact location and design of the lower terminal, transit hub, and associated facilities (e.g., parking structure, restaurant, retail, restrooms, maintenance facilities, etc.) are unknown, the increase in visitors to the Griffith Park ATS in conjunction with the Project could affect safe and efficient evacuation of the Project area. However, Project construction and operation would maintain emergency access to the site and the proposed realignment of Western Heritage Way/Crystal Springs Drive would further reduce congestion and safety impacts associated with pedestrians crossing the street. As such, the Project’s contribution to cumulative impacts from emergency response and evacuation would not be cumulatively considerable. Thus, cumulative impacts would be less than significant.

Hydrology and Water Quality

Cumulative impacts related to hydrology and water consider the Project’s contribution to water quality, drainage and erosion, groundwater quality and recharge, and flooding potential within the cities of Los Angeles, Burbank, and Glendale and within the Los Angeles River watershed. The proposed Project, in combination with other new development projects, would contribute to increasing development of the City’s urban environment. Mixed use infill development – including the Bow Tie Yard Lofts Project (#5), South Glendale Community Plan (#16), Burbank Town Center (#28) and Avion Project (#31) – would generate urban runoff that would be collected within the City’s existing storm drain system and eventually discharged to the Los Angeles River. However, as with the proposed Project, some of these developments would include landscaping and open space that may reduce impervious surfaces.

The City manages and regulates drainage flows and water quality through plans, programs, and ordinances. The Construction General Permit and the City’s Stormwater and Urban Runoff Control Pollution Ordinance require development and implementation of a SWPPP for all construction sites over 1 acre to address potential impacts to water quality from stormwater runoff, construction BMPs to reduce discharge of pollutants, and implementation of low-impact development (LID) features. The NPDES MS4 Permit requires that permittees, including the City, implement operational stormwater runoff controls for new development and redevelopment projects. Under the NPDES MS4 Permit, these projects must be designed to minimize the footprint of the impervious area and to use LID strategies to disconnect the runoff from impervious area. Compliance with existing regulations would prevent violation of water quality standards and minimize increases in urban runoff and the potential for contributing additional sources of polluted runoff. Further, the 2020 Floodplain Management Plan Update would identify and address impacts cause by flood hazards throughout the County.

While the proposed Project would incrementally increase impervious surfaces across the Zoo campus, all stormwater generated by the Project would be captured by the proposed stormwater management system for reuse onsite as irrigation. Therefore, the Project’s
3.18 Cumulative Impacts

contribution to stormwater flows and associated impacts to flooding would not be cumulatively considerable and therefore would be less than significant.

Additionally, the proposed Project would result in long-term beneficial impacts to water quality with implementation of the proposed stormwater management system and require mitigation measures, such as MM HYD-4 and MM HYD-6, which require an operations and maintenance manual to ensure LID features and the underground stormwater capture are maintained and pre-treatment and filtering in the stormwater management system to ensure that captured water reused for irrigation does not unnecessarily contribute pollutants back into the Zoo’s drainage system. Therefore, cumulative impacts to surface water hydrology and surface water quality would be less than significant.

Land use changes across the City also have the potential to increase the demand for City groundwater supplies. For example, large developments such as the South Glendale Community Plan, Burbank Town Center, and Avion Project in combination with the Project would increase water demand, which would increase groundwater withdrawal from the San Fernando Valley Groundwater Basin (SFVGB). However, continued implementation of water conservation measures in accordance with the City’s One Water LA Plan would ensure that the groundwater supply is managed such that the groundwater aquifer is not withdrawn beyond the safe yield. Therefore, cumulative impacts to groundwater levels would be less than significant. A complete discussion of City water demand and supply is included in Section 3.16, Utilities.

Land Use and Planning

Cumulative land use impacts could occur if the Project, when combined with any of the identified cumulative development projects (refer to Table 3.18-2), would result in incompatible land uses or result in land uses that are inconsistent with adopted land use plans. The geographic context for this cumulative analysis includes the City in terms of the goals and policies within the City’s General Plan, the LAMC, the City’s Hollywood Community Plan, and the greater Los Angeles region in terms of planning for regional transportation and growth in the SCAG Regional Comprehensive Plan (RCP) and 2016-2040 RTP/SCS.¹

The Project would help to implement multiple local and regional goals and policies and would assist the City in achieving short- and long-term planning goals and objectives, such as energy efficiency and stormwater reuse. While much of the pending cumulative development presented in Table 3.18-2 would generally be consistent with SCAG, SCAQMD, and City policies for promoting more transit-oriented mixed use development within walking distance to local transit hubs, such as the South Glendale Community Plan (#16) and the Golden State

¹ Note that the Griffith Park Vision Plan does not apply to property under Zoo ownership and improvements on this property, but would apply to offsite improvements such as those at the intersection of North Zoo Drive with Western Heritage Way and the primary Zoo entrance.
Specific Plan and High-Speed Rail (#36), Project development would occur in an area with relatively poor transit service and outside of walking or easy biking distance from much of the surrounding communities. Implementation of MM T-2 would require the Zoo to expand alternative transportation modes to the Zoo to reduce trips, VMT, and congestion, and improve safe and reliable transportation alternatives to the Zoo. With implementation of these measures, the Project would be consistent with all applicable goals of the 2016-2040 RTP/SCS intended to improve mobility and access to diverse destinations, promote smart growth, provide more transportation choices, and reduce vehicular demand and associated emissions.

The LADWP Solar Panel Project (#2) would further enhance the Zoo’s consistency with VMT and emissions reduction policies by installing EV charging stations in the Zoo’s northern parking lot, which would encourage the use of electric vehicles at the Zoo. These actions would improve Project consistency with applicable land use plans.

The Vision Plan for Griffith Park does not apply to projects within Zoo property (e.g., proposed parking structure), but would apply to offsite improvements such as those at the intersection of Zoo Drive with Western Heritage Way, where potential for tree removal, trail closure or realignment, and changes in aesthetics along these roadways could be adversely impacted by the Project in conjunction with the planned Griffith Park ATS (#40). Proposed Project changes to operations and configurations of these roadways would potentially increase vehicle speeds, impairing trail users’ access, safety, and tranquility near this intersection and potentially conflicting with relevant policies of the Griffith Park Vision Plan. However, 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’s individual impacts would be consistent with this local policy. With implementation of this mitigation measure, the Project’s contribution to cumulative land use impacts would not be cumulatively considerable, and cumulative land use impacts would be less than significant.

All pending and future projects are required to be consistent with the City’s General Plan, SCAG RTP/SCS, and applicable community plans. For cumulative impacts that result primarily from development outside of the City’s jurisdiction (i.e., in the cities of Glendale and Burbank), the City cannot control land use policies or decisions outside of its boundaries; however, regional planning guidance provided by SCAG encourages municipalities to promote growth that would limit and reduce potential cumulative impacts, particularly related to transportation and transportation-related air pollutant emissions.

**Noise**

A cumulative noise impact would result if the potential impacts associated with the proposed Project, when combined with other cumulative projects, would cumulatively increase the ambient noise levels in the vicinity of the Project in excess of standards established in the City’s General Plan and LAMC. Similarly, a cumulative vibration impact would result if the
potential impacts associated with the proposed Project, when combined with other cumulative projects, would cumulatively generate vibration levels in excess of Federal Transit Administration (FTA) and Caltrans Vibration Guidance.

Project construction activities in combination with other future developments that are built concurrently with the Project would temporarily increase ambient noise levels at nearby receptors, such as the Autry Museum of the America West, Mineral Wells Picnic Area, Griffith Park hiking trails, and the North Hollywood High School Zoo Magnet Center. Cumulative projects in the vicinity of the North Hollywood High School Zoo Magnet Center that would be constructed on a potentially overlapping timeframe include the Angela Collier Gardens Event Center (#1), LADWP Solar Panel Project (#2), I-5 North Corridor Improvement Project (#38), and the Griffith Park ATS (#40) if a lower terminal is implemented on Zoo property. In particular, the Griffith Park ATS may involve construction activities directly adjacent to the North Hollywood High School Zoo Magnet Center if the lower terminal in the Zoo's south parking lot is implemented. While the extent of noise impacts from construction and operation of the ATS is unknown, this project could affect noise receptors in the Project vicinity, in combination with Project construction noise over the 20-year intermittent construction period. Noise impacts associated with construction and operation of the Griffith Park ATS would be analyzed during the project’s environmental review.

The Project itself would increase exterior noise levels at the North Hollywood High School Zoo Magnet Center by no more than 66.0 dBA Leq with the implementation of MM NOI-1 through MM NOI-6, which would require equipment mufflers, coordination with neighboring properties, and noise barriers. As such, the Project’s contribution to any potential cumulative construction noise impacts at this receptor would not be cumulatively considerable, and cumulative impacts to noise would be less than significant with mitigation.

As described in Section 3.12, Noise and Vibration, operational noise would occur under the Project due to increased attendance, vehicle idling, new Zoo facilities, and Zoo programming, including special events. The Project’s projected increase in attendance and associated traffic noise could result in cumulative noise impacts when combined with future traffic from the other new cumulative developments in the Project vicinity, such as the Griffith Park ATS, which is anticipated to generate 10,000 to 13,000 visitors per day. However, as shown in Table 3.12-5 the Future Plus Project conditions noise level would not exceed 75 dB at any of the intersections in the Project vicinity and the increase in noise levels between existing conditions and the Future Plus Project conditions would not exceed 0.8 dB. Additionally, existing land uses along the freeways (i.e., I-5 and SR-134) are generally industrial or office land uses. As shown in the State’s Noise and Land Use Compatibility Matrix, which has been adopted in the City’s General Plan Noise Element, noise levels up to 75 dBA CNEL would be considered “Normally Acceptable” for these type of land uses. Therefore, the Project’s contribution to cumulative operational noise would not be cumulatively considerable and impacts would be less than significant.
The vibration peak particle velocity (PPV) threshold of 0.3 inches per second would not be exceeded at any offsite structures during Project construction. However, construction of cumulative projects in the Project vicinity such as the Angeles Collier Gardens Event Center, LADWP Solar Panel Project, and the Griffith Park ATS would involve the use of heavy construction equipment and delivery trucks along Zoo Drive and Western Heritage Way/Crystal Springs Drive on a potentially overlapping timeframe as the Project. Additionally, if the Griffith Park ATS lower terminal is implemented on Zoo property, construction of this project would involve excavation activities and the use of helicopters immediately adjacent to the Autry Museum, Wilson & Harding Golf Course, and North Hollywood Highschool Magnet Center. Therefore, vibration impacts from the Project in combination with the Angeles Collier Gardens Event Center, LADWP Solar Panel Project, and the Griffith Park ATS could result in significant vibration impacts that could cause building damage and human annoyance. However, Project construction would not generate vibration levels in excess of the PPV threshold of 0.3 inches per second and onsite blasting activities would not exceed the 133-dB damage criterion or the 120-dB annoyance criterion at the Wilson and Harding Golf Courses, North Hollywood Highschool Zoo Magnet Center, and Autry Museum. Further, construction-related haul trucks, concrete deliveries, and other materials deliveries for the Project would follow approved haul routes and avoid residential neighborhood streets where lower ambient noise levels would make loud truck trips more perceptible and incompatible. Therefore, the Project’s contribution to cumulative vibration impacts would not be cumulatively considerable and impacts would be less than significant.

**Public Services**

Cumulative impacts to public services could occur if the Project, when combined with any of the identified cumulative development projects (refer to Table 3.18-2), would result in physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts. Public services within the Project vicinity are provided by the cities of Los Angeles, Burbank, Glendale, and the County of Los Angeles.

Cumulative impacts to public services are largely related to citywide population growth and changes in land use patterns. New residential development projects, such as the Bow Tie Yard Lofts Project (#5), South Glendale Community Plan (#16), Front Street Project (#27), and Burbank Town Center (#28), would result in the primary increase in regional population. However, new employment and visitation associated with commercial, retail, and recreational uses from the Project and other cumulative attractions, such as the Griffith Park ATS, would also increase daytime populations and visitation with associated demand for public services. These projects are expected to increase residences, jobs, and visitation in the City, thereby cumulatively increasing demand for the City’s public services.

The Project, in conjunction with approved, pending, or proposed development projects in the cities of Los Angeles, Burbank, and Glendale, and associated population growth, would
incrementally increase overall demand for public services including fire protection, police protection, and emergency medical services. The Project would not directly result in increased demand for school, library, or other public services, or the increase in demand for such services would be negligible. Cumulative development projects with growth inducing impacts would be required to pay development impact fees to ensure impacts to schools, libraries, and other public services are less than significant. Therefore, the Project’s contribution to cumulative effects on such services are not cumulatively considerable and impacts would be less than significant.

The Project’s contribution to potential cumulative impacts to fire and police protection services is described below.

**Fire Protection**

Cumulative impacts related to fire protection would include a project’s contribution to cumulative demand for Los Angeles Fire Department (LAFD) services. The proposed Project in conjunction with cumulative projects would increase demand for fire protection services based on an increase in residential population and daily employment. The Project does not include residential development and the approximately 660 new jobs that would be created under the Vision Plan are anticipated to be filled by the existing local workforce.

Implementation of large cumulative projects such as South Glendale Community Plan (#16), Front Street Project (#27), and Burbank Town Center (#28), in combination with the Project, would result in a net increase in the number of residents, households, and employees in the Project vicinity and could further increase the demand for fire protection services. In addition, the Griffith Park ATS (#40) would draw 10,000 to 13,000 visitors per day to the Project site if a lower terminal is chosen on Zoo property. On peak visitation days, this increase in visitors in combination with the Project’s estimated increase in visitation could cumulatively affect vehicle congestion, emergency access, and emergency response times. LAFD may also need to acquire special equipment to evacuate gondola riders from the ATS. However, due to the relatively large geographic scope of the cumulative project locations, the demand for fire service would be spread out over several stations and district. Some would be served by LAFD stations other than the station that serves the Project site (i.e., Station No. 56 of Battalion 5 of the West Bureau). A majority of the cumulative developments in the vicinity of the Project would be located in the cities of Glendale and Burbank, and therefore, would not be served by the LAFD.

Cumulative development requires the LAFD to continually evaluate the need for new or physically altered facilities to maintain adequate service ratios. Similar to the Project, the cumulative projects would be subject to the requirements of the Los Angeles Fire Code, including Table 507.3.3, which mandates the installation of automatic fire sprinkler systems if a project is located at a distance to the nearest fire station that exceeds the LAFD required response distance. Each of the cumulative projects in the City would also be subject to consultation with LAFD and LADWP during their design phase to establish fire flow.
requirements for the land uses proposed and to determine the adequacy of existing fire flow infrastructure serving their respective project sites. Any LAFD- or LADWP-required upgrades to the water distribution systems serving the cumulative projects would be addressed for each individual project in conjunction with their project approvals. Each of the cumulative projects in the City is also individually subject to LAFD review and would be required to comply with all applicable fire safety requirements of the LAFD and the City, including hydrant and access improvements, if necessary, in order to adequately mitigate fire protection impacts.

Some of the cumulative projects may be farther than the maximum response distance requirements from the nearest fire station and thus, would be required to incorporate fire sprinklers, as well as meet other requirements that may be stipulated by the LAFD on a project-by-project basis. If any of the cumulative projects creates demands on fire protection staffing, equipment, or facilities such that a new station would be required, potential environmental impacts would be addressed in conjunction with the environmental review for that project.

The LAFD obtains the necessary facilities and resources through the City’s budget process. The cumulative projects would contribute to funding fire protection services in the area by generating annual revenue from property taxes that would be deposited into the City’s General Fund, which could potentially be used to fund the construction of future fire protection facilities and support hiring more firefighters. This would further ensure that the Project’s incremental effect on fire protection service would not be cumulatively considerable. Through this process, the ability of the LAFD to provide adequate facilities to accommodate future growth and maintain acceptable levels of service would be ensured. On this basis, it is anticipated that potential impacts to fire protection would not be cumulatively considerable. Furthermore, the increased demands for additional LAFD staffing, equipment, and facilities would be funded via existing mechanisms (e.g., property taxes and government funding) to which both the Project and the cumulative projects would contribute.

As described in Section 3.13, Public Services, the Project would not result in a need for new LAFD facilities that would have an adverse environmental impact. Because the Project would not create such demands, its contribution to these impacts is not cumulatively considerable. Through the City’s regular budgeting efforts, LAFD’s resource needs, including staffing, equipment, trucks and engines, ambulances, other special apparatuses, and possibly station expansions or new station construction, would be identified and allocated according to the priorities at the time. Therefore, a cumulative increase in fire protection services demand that would require a new fire station, or the expansion, consolidation, or relocation of an existing fire station, the construction of which could cause significant environmental impacts, is not anticipated from the development of the Project or the cumulative projects, and cumulative impacts related to fire protection services would be less than significant.
Police Protection

Cumulative impacts related to police protection would include a project’s contribution to cumulative demand for Los Angeles Police Department (LAPD) services. Due to the relatively large geographic scope of the cumulative project locations, some would be served by other LAPD stations than the station that serves the Project site (i.e., Northeast Community Police Station [Northeast Division] of the Central Bureau). A majority of the cumulative developments in the vicinity of the Project would be located in the cities of Glendale and Burbank, and therefore, would not be served by the LAPD.

Increases in annual visitation at the Zoo, in conjunction with large development and other attractions, such as the Bow Tie Yard Lofts (#5) and Griffith Park ATS, would increase cumulative citywide demand for police protection services provided by the LAPD. As described in Section 3.13, Public Services, the Zoo currently experiences a relatively high number of vehicle theft/break ins, which is expected to increase with increased visitation and parking spaces under the Project, though the proposed parking structure and enhanced security would help assuage this existing issue. Since the Griffith Park ATS would draw even more visitors (i.e., 10,000 to 13,000 per day) and would require an additional parking structure, the ATS in combination with the Project could cumulatively increase demand for police protection.

Existing LAPD staffing levels of the Northeast Division exceed the officer per 1,000 resident ratio, providing ratio of 1 officer to 893 residents. Though the Project would not individually result in the demand for any new officers due to its associated incremental increase in demand for service and existing sufficiency of services, the Project, in addition to all cumulative development within the City, would contribute to the potential increase in demand for added police staffing. However, the City Council would address LAPD departmental budget, staffing, and equipment needs as part of the annual budgetary process. This review allows LAPD to determine whether any increases in police resources and equipment is needed. The LAPD is funded through general fund revenues generated by property, sales, and transient occupancy taxes, all of which are expected to increase in proportion to new development within the City. Such increases in revenues could be used to hire additional officers and purchase equipment to maintain or improve LAPD service levels over time to meet changing demands, if determined appropriate by the City Council. Additionally, Griffith Park is served by RAP park rangers and the Security Services Division (SECSD) of the LAPD is responsible for the safety and security of the Zoo. There is no foreseeable need for facilities expansions that would cause adverse environmental impacts due to Project or cumulative demand for LAPD services. Therefore, the Project’s contribution to the demand for police services would not be cumulatively considerable, and cumulative impacts would be less than significant for police services.


3.18 Cumulative Impacts

**Recreation**

A cumulative impact would occur if the Project’s demand on recreational resources, when combined with demand from other past, present, and future projects, would cumulatively increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. A cumulative recreation impact would also occur if the Project and other cumulative projects would include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

The proposed Project would not substantially increase the local population. The Project, in combination with large residential and mixed use projects such as the Bow Tie Yard Lofts (#5; 419 units) South Glendale Community Plan (#16; 48,240 new units), and Burbank Town Center (#28; 801 residential units and 200 hotel rooms) would increase population density in the vicinity of Griffith Park and the Project site. This cumulative increase in population would increase the demand for recreational resources at Griffith Park. In addition, the Project, in combination with the Griffith Park ATS (#40), would cumulatively increase the demand for recreational resources at Griffith Park by attracting visitors. The County’s 2015 Park Needs Assessment calculated that Griffith Park experiences low park pressure within its community of North Hollywood and currently provides 6.91 acres of regional parkland per 1,000 people in a 25-mile radius.

While the proposed Project would expand existing annual visitation, the Project would also increase the Zoo’s capacity to host and accommodate the growth in demand for the Zoo’s amenities and provide additional unique recreational opportunities within the City. Demand for park and playground facilities by Zoo visitors would also be met by the proposed Nature Play Park, a proposed nature-based interactive playground for children and families, and a proposed public park along Zoo Drive in the northern parking lot. The physical degradation of other existing recreational facilities within Griffith Park is not anticipated to occur or be accelerated by additional Zoo visitation. The Project would result in no net loss of recreational lands and would not cause direct impacts to recreational facilities within Griffith Park or elsewhere. Therefore, the Project’s contribution to cumulative effects on recreational facilities is not cumulatively considerable. Further, cumulative residential development projects with growth inducing impacts would be required to pay development impact fees pursuant to the City’s Park Fee Ordinance (LAMC Section 19.17). Payment of required development impact fees would ensure that cumulative impacts to the demand for recreational facilities is less than significant.

**Transportation**

Cumulative transportation and circulation impacts would be related to the Project’s contribution to potential conflicts with City, regional, and state circulation plans, policies, and programs, conflicts with CEQA Guidelines Section 15064.3(b) (i.e., local and regional increases in VMT), and hazards due to design features and conflicts with emergency access.
The geographical context for the analysis focuses on the northeastern portion of Griffith Park and adjacent urban communities of the City and the cities of Glendale and Burbank, and considers citywide, regional, and statewide VMT.

**Consistency with Circulation Plans/Programs/Ordinances/Policies**

The Project would raise potential conflicts with adopted programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, and bicycle and pedestrian facilities, incrementally contributing to cumulative impacts regarding this issue in combination with other pending projects. The Project’s location in a transit poor area and separation from surrounding communities increases reliance on vehicular travel and associated increases in VMT that exceeds citywide averages. This increase in VMT would present a potential conflict with local, regional, and state goals for VMT reduction. The LADWP Solar Panel Project (#2) would install EV charging stations in the Zoo’s northern parking lot, which would encourage the use of electric vehicles at the Zoo and enhance the Zoo’s consistency with VMT reduction goals in all applicable plans and policies. As such, the proposed Project would not result in a substantial contribution to cumulatively considerable impacts related to transportation plans and policies. However, in combination with other pending projects such as the Griffith Park ATS, a regional attraction, that would likely generate a similar increase in VMT as the Project, regional growth would continue to increase VMT. However, with implementation of required mitigation measures identified in Section 3.15, *Transportation* and required consistency with existing regulations, the Project would be consistent with the SCAG 2016 RTP/SCS, Los Angeles General Plan, Hollywood Community Plan, and Plan for a Healthy Los Angeles. Implementation of **MM T-2**, which would require implementation of a comprehensive TDM Program, including several VMT reduction measures, and would align with VMT reduction goals in all applicable plans and policies.

However, Project-generated traffic in combination with that from the Griffith Park ATS (if located on Zoo property) and projected annual growth in vehicle trips could require installation of a roundabout or grade separation at the intersection of Zoo Drive & Western Heritage Way, rather than signalization as required to address Project traffic alone. While the design of such improvements is conceptual, a roundabout or grade separation could increase speeding and cut-through traffic in Griffith Park in potential conflict with the goals of the Vision Plan for Griffith Park to slow traffic speeds and minimize cut-through traffic. If such improvements are required, they could also create secondary impacts to safety for bicycles, pedestrians, and equestrians along Zoo Drive, Western Heritage Way, and the Main Trail through Griffith Park, and require removal of dozens of mature trees, which may conflict with the Vision Plan for Griffith Park.

Similar to the proposed Project, cumulative projects, including the Griffith Park ATS, would be analyzed for policy consistency during the environmental review process and final policy consistency would be determined as part of project review and approval process.
Conflict with CEQA Guidelines Section 15064.3, Subdivision (b)

The Project and cumulative projects such as the Griffith Park ATS would potentially conflict with CEQA Guidelines Section 15064.3(b) as Project-generated VMT would substantially exceed adopted City VMT thresholds for regional attractions (a net-zero VMT increase threshold), incrementally contributing to cumulative impacts of increases in regional VMT, especially in combination with other pending projects. In particular, the Project’s location in a transit poor area and separation from surrounding communities increases reliance on vehicular travel and associated increases in VMT that exceeds citywide averages. In combination with other pending projects, particularly the Griffith Park ATS, which as a regional attraction would likely generate a similar increase in VMT in this transit poor area, regional growth could continue to increase VMT.

While some cumulative projects may substantially increase VMT, many are mixed use developments or are located in established mixed use communities with pedestrian and bicycle access to varied uses as well as high levels of transit service, potentially limiting increases in VMT for such projects. In contrast, similar to the Project, the Griffith Park ATS project would act as a major regional attraction to convey visitors to upper elevations in Griffith Park, particularly to view the Hollywood Sign. The Griffith Park ATS is expected to draw from 10,000 to 13,000 visitors per day and generate an increase of roughly daily VMT of 67,568 to 114,035. To the extent that this new attraction both reroutes existing trips from the west to the east side of Griffith Park and attracts new visitors, cumulative VMT could increase considerably.

As described in Section 3.15, Transportation, the proposed Project would result in significant and unavoidable impacts associated with increased VMT even with proposed mitigation measures when compared to the City's net zero VMT threshold for regional attractions. Construction of a single destination ATS, particularly on Zoo property, would create substantially more severe cumulative VMT impacts. Given the preliminary nature of the Griffith Park ATS design, it is not possible to identify precise mitigation measures to address cumulative VMT impacts. However, should the Griffith Park ATS be designed to serve as a multi-modal transportation network to convey Park users to destinations around Griffith Park and if it is designed to connect to existing and planned ground transit services, it may provide a valuable option to reduce overall Park congestion, while still meeting the objectives of the Vision Plan for Griffith Park and the proposed Project, and the RTP/SCS.

The Headworks Reservoir Project, located approximately 1.5 miles west of the Zoo, is under construction and will support underground concrete reservoirs, water treatment facilities, several trails, habitat restoration, and public parking. Future VMT associated with the recreational trails and public parking would contribute to cumulative VMT impacts associated with the Project. However, the recently implemented Parkline Shuttle serving Griffith Park and the Zoo would provide improved transit service that would help incrementally limit increases in VMT. Further, potential future changes in the hours of operation of this shuttle for longer service days (e.g., begin service at 8:00 am or 9:00 am)
and possible future extension to offsite major transit centers (e.g., Union Station) could better serve Zoo patrons and employees if funded and implemented providing improved transit options for Zoo patrons, further limiting growth in VMT. Zoo coordination with RAP on tools to expand this service could advance City goals for reducing VMT growth.

In addition, under the Los Angeles River Revitalization Master Plan, the City has recently completed and planned several bicycle and pedestrian improvements in the vicinity of Griffith Park. While these projects may act as attractions to draw visitors, they will greatly improve connectivity between Griffith Park and bordering communities that will encourage increased active transportation and potentially help incrementally reduce projected cumulative increases VMT. In particular, the Garden Bridge would be located within approximately 0.5 miles of the Zoo’s Entry and the City is planning another two connecting bicycle facilities from the Los Angeles River Bike Path to Griffith Park adjacent to the Zoo. These bridges will connect communities on the north and east side of the Los Angeles River to the Los Angeles River Bike Path and Griffith Park, near the Project site, providing more travel options for visitors and the 27 percent of Zoo employees who live within 5 miles of the Zoo and potentially reducing projected increases in VMT. However, even with implementation of MM T-2, which would require implementation of a comprehensive TDM Program, pending new bike bridges and enhanced Parkline Shuttle service, the Project’s contribution to increases in VMT would remain cumulatively considerable and cumulative VMT impacts would remain unavoidable and significant.

**Substantially Increase Hazards Due to Design Features and Emergency Access**

Potential cumulative impacts associated with design feature hazards relate primarily to internal Griffith Park roadways and intersections. Project construction could overlap with that of multiple other pending projects within the vicinity of the Zoo, including the Griffith Park ATS (#40), various pending bicycle bridges, the LADWP Solar Project (#2) and others, with emergency access potentially impeded as a result of the construction traffic. Heavy haul trucks and other construction equipment (e.g., cement trucks and cranes) may disrupt vehicle, bicycle, and pedestrian traffic flows, limit turn lane capacities, and generally slow traffic movement. Potential overlap of construction activities in the Project vicinity could result in a significant increase in daily construction vehicle trips in the vicinity. However, with the implementation of MM T-1, the Project’s contribution to construction impacts related emergency access would be substantially reduced. As with the Project, cumulative projects would be subject to standard BMPs to manage construction activities that typically include traffic routing and control, vehicle, bicycle, and pedestrian safety, street closures, and construction parking management. Thus, implementation of the City-approved Construction Traffic & Access Management Plan for the Project would ensure the continued vehicle, bicycle, and pedestrian safety during construction. With the implementation of MM T-1, the proposed Project would not result in cumulatively considerable construction related impacts related to emergency access and impacts would be less than significant with mitigation.
With regard to operation, the Project contribution to cumulative geometric design feature hazards are related primarily to access to the Project site. All Project components and cumulative projects that would affect the public right-of-way (e.g., realigned roadway and intersection of Zoo Drive & Western Heritage Way) would be engineered to comply with LADOT standards and designed to intersect the roadway at a right angle to address line of sight, turning radii, spacing, etc. The roadway would also provide necessary sidewalks, crosswalks, and pedestrian movement controls to meet the City’s requirements to protect vehicle, bicycle, and pedestrian safety. Further, as with the proposed Project, each of the cumulative projects would be subject to site plan review and would meet City street design and access requirements. However, while detailed information is not yet available regarding the size, scope and location of the Griffith Park ATS, if that project is located on Zoo property, or potentially even at Travel Town, substantial increases in vehicle trips at the intersection of Zoo Drive & Western Heritage Way may exceed the capacity of a signal to service and require installation of a roundabout or grade separation as conceptually described in the Vision Plan. While precise numbers are not yet available, assuming all ATS visitors drive through this intersection to access the site, the potential exists for the Griffith Park ATS to add up to 4,561 daily vehicle trips to this intersection. If a roundabout or grade separation is installed, this could increase vehicle speeds and cut through traffic volumes along Zoo Drive and Western Heritage Way. These roads carry significant volumes of bicyclists and on-road runners as well as pedestrian crossing these streets. Greater traffic volumes and higher speeds could expose these users to increase hazards as vehicles merge. Therefore, should a roundabout or grade separation be necessary for operation of the Project in conjunction with the Griffith Park ATS, the roundabout or grade separation shall be designed in a manner that reduces vehicle speeds (e.g., speed bumps, rumble strips, stop signs). Therefore, the proposed Project in combination with other cumulative projects in the vicinity could result in cumulatively considerable impacts related to design features and safety. However, implementation of Project mitigation requiring coordination and approval of final roadway designs would ensure Project impacts are not cumulatively considerable and less than significant with mitigation.

Emergency Access

Construction and operation of the proposed Project in conjunction with construction and operation of the Griffith Park ATS would generate increases in construction traffic, vehicle traffic from employees and visitors, and associated congestion in the Project vicinity, if the Griffith Park ATS is implemented on Zoo property. The increased vehicle traffic and congestion resulting from the Project and Griffith Park ATS could affect emergency access to the site. However, with implementation of MM T-1, which would require preparation and implementation of a Construction Traffic & Access Management Plan to minimize traffic impacts during construction, the Project would maintain emergency vehicle access to the site during construction. Additionally, Project implementation would result in beneficial long-term impacts to emergency access due to the development of perimeter access roads.
surrounding the Project site and dedicated service roads separate from pedestrian pathways within the Zoo (refer also to Public Services). Therefore, the Project’s cumulative contribution would not be considerable and impacts to emergency access would be less than significant with mitigation.

**Utilities**

Cumulative impacts related to utilities would include a project’s contribution to increased water demand and wastewater and solid waste disposal in the City, region, or state, particularly as it relates to utilities service provider’s capacity to serve the project.

**Water Infrastructure and Supply**

A cumulative impact related to water infrastructure and supply would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects, would cumulatively increase the demand for water such that new water facilities or expansion of existing facilities would be required, the construction of which would cause significant environmental effects, or there would be insufficient water supplies to serve the projects. The proposed Project with cumulative projects would increase the demand on the existing LADWP water distribution system. In particular, large residential developments, such as the Bow Tie Yard Lofts (#5) and visitor-serving amenities (e.g., food service, restrooms, etc.) of the Griffith Park ATS (#40), would substantially contribute to an increase in the City’s potable water demand. Implementation of these projects may require new connections to existing LADWP water lines. However, as with the proposed Project, individual projects would be subject to City review to ensure that the existing water lines would be adequate to meet domestic water and fire flow demands.

Cumulative water supply impacts are considered on a City-wide and regional basis in accordance with the projections in the Urban Water Management Plan (UWMP). The City continues to conduct evaluations to ensure its water infrastructure system is adequate to meet service needs and infrastructure system improvements would be implemented as needed as part of the City’s Capital Improvement Program. LADWP’s 2015 UWMP forecasts adequate water supplies to meet all projected water demands in the City for normal, single-dry, and multi-dry years from 2020 to 2040. Furthermore, as outlined in the 2015 UWMP, LADWP is committed to providing a reliable water supply for the City. The 2015 UWMP considers climate change and the concerns of drought and dry weather and notes that the LADWP will meet all new demand for water supply associated with projected population growth through the combination of water conservation and recycling. The LADWP (through its UWMP) anticipates that its projected water supplies will meet demand through the Project implementation.

The proposed Project, along with other past, present, and future projects in the region would cumulatively increase the demand on the existing LADWP water distribution system. In particular, large residential developments, such as the Bow Tie Yard Lofts (#5) and visitor-serving amenities (e.g., food service, restrooms, etc.) of the Griffith Park ATS (#40), would
substantially contribute to an increase in the City’s potable water demand. As described in Impact UT-1, while Project implementation may require new connections to existing LADWP potable and recycled water mains, the Project would not require expansion of the City’s recycled water system or major construction activities. Therefore, the proposed Project would not result in a considerable contribution to cumulative water infrastructure impacts.

The Project’s proposed stormwater collection system is projected to reduce the Zoo’s potable water consumption by 35,000,000 gallons per year for sustainable reuse of stormwater captured onsite, consistent with the water conservation goals of the City’s One Water L.A. plan. Additionally, implementation of **MM UT-1**, which would require extension of recycled water lines within the Zoo for operational landscaping irrigation, washdown of the animal holding areas, power-washing walkways, flushing toilets, and some habitat pools, depending on the species, would further reduce the Zoo’s overall water demand. Therefore, the Project’s contribution to cumulatively water supply impacts would not be cumulatively considerable.

In terms of the City’s overall water supply condition, any cumulative project that is consistent with the City’s General Plan has been considered in the planned growth of the water system. In addition, any cumulative project that conforms to the demographic projections from SCAG’s RTP/SCS and is located in the service area is considered to have been included in LADWP’s water supply planning efforts so that projected water supplies would meet projected demands. Similar to the Project, each cumulative project would be required to comply with City and State water code and conservation programs for both water supply and infrastructure. Cumulative projects that propose changing the zoning or other characteristics beyond what is within the General Plan would be required to evaluate the change under CEQA review process. Future development projects within the service area of the LADWP would be subject to the locally mandated water conservation programs, and citywide water conservation efforts would also be expected to partially offset the cumulative demand for water. LADWP undertakes expansion or modification of water service infrastructure to serve future growth in the City as required in the normal process of providing water service. As the Project would not cumulatively contribute to water supply or infrastructure impacts, cumulative impacts related to water infrastructure and supply would be less than significant.

**Wastewater Services**

A cumulative impact related to wastewater services would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects, would cumulatively require or result in expansion of wastewater facilities, the construction of which would cause significant environmental effects, there would be insufficient capacity to serve the projects, or the projects would exceed wastewater treatment requirements of the Los Angeles Regional Water Quality Control Board (RWQCB).

As described in Section 3.16, *Utilities*, the Project would require installation of utility lines to replace the dilapidated, 50-year old sanitary sewer lines within the Project site. Excavation and trenching for installation of new utility lines within the Project site, in combination with
3.18 Cumulative Impacts

installation of new wastewater facilities for the Griffith Park ATS (#40), could cumulatively result in environmental impacts such as impacts to geology and soils, soil erosion and sedimentation, and water quality. Several other sewer projects within the City (projects #11 through #15 in Table 3.18-2) could also contribute to environmental effects in the Project vicinity, particular where wastewater is discharged to the Los Angeles River. However, cumulative sewer repairs would also ensure wastewater generated by the Project and other cumulative projects is adequately conveyed to the Los Angeles Glendale Water Reclamation Plant (LAGWRP) or other wastewater facility. The Project would result in less than significant impacts to geology and soils and water quality (refer to Section 3.7 Geology and Soils, and Section 3.10, Hydrology and Water Quality); therefore, the Project’s contribution to significant environmental effects from construction of wastewater infrastructure would not be cumulatively considerable.

The Project in conjunction with cumulative development projects in the Project vicinity, such as the South Glendale Community Plan (#16), Front Street project (#27), and Burbank Town Center (#28), would increase demand for wastewater services provided by the North Outfall Sewer and the LAGWRP. The Project is projected to generate a total of 182,493 gpd of wastewater, which would contribute less than 1 percent of the LAGWRP’s remaining daily capacity of 2.8 million gallons per day (mgd) (refer to Section 3.16.1, Environmental Setting). Therefore, the LAGWRP is expected to have adequate capacity to accommodate the proposed Project in addition to cumulative development and no new or expanded wastewater facilities would be required. The Project’s less than 1 percent contribution to the LAGWRP’s remaining capacity would not be cumulative considerable.

The Project and other cumulative projects in the vicinity would be served by the LAGWRP, which operates under a RWQCB permit, and meets the CCR Title 22, Division 4, Chapter 3 reclamation criteria for “irrigation of parks, playground, schoolyards, and other areas where the public has similar access or exposure” as well as “non-restricted recreational impoundments.” Wastewater produced by the Zoo and other cumulative projects would meet RWQCB requirements through treatment at the LAGWRP. Therefore, RWQCB wastewater treatment requirements would not be exceeded, and the Project, in combination with other cumulative projects in the vicinity, would not result in cumulative considerable impacts to wastewater treatment requirements, and impacts would be less than significant.

Solid Waste Disposal

A cumulative impact related to solid waste disposal would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects, would cumulatively increase the demand for solid waste disposal in excess of the landfill capacity within the County.

The Project in conjunction with other cumulative projects within the County would result in the cumulative generation of solid waste. As with the Project, cumulative projects would be required to comply with the Citywide Construction & Demolition (C&D) Waste Recycling
Ordinance, which requires all mixed C&D waste generated within City limits to be taken to a City-certified C&D waste processor for recycling, and with LAMC Section 66.32, which requires 70 percent of solid waste (including C&D debris) generated in the City to be recycled. With implementation of the City’s C&D Waste Recycling Ordinance, cumulative generation of C&D waste would not require the need for new or expanded landfill capacity.

With the City’s current diversion rate of 76.4, the Project would contribute approximately 1.46 tons of solid waste per day, which is less than 1 percent of the total daily permitted capacity of Sunshine Canyon Landfill, which serves the Project site. Therefore, the Project’s contribution to solid waste disposal is not cumulative considerable. With the City’s goal of 90 percent diversion by 2025, the Project and other cumulative projects within the City, such as the Bow Tie Yard Lofts (#5) and Griffith Park ATS (#40), would not contribute a cumulative considerable demand for solid waste disposal. Other large cumulative projects outside of the City, such as the South Glendale Community Plan (#16), Front Street project (#27), and Burbank Town Center (#28), would increase the demand for solid waste disposal in the County. However, the County’s 2016 Annual Report assessed future landfill disposal needs over a 15-year planning horizon based in part on forecasted waste generation and available landfill capacity and concluded that the County would be able to meet the disposal needs of all jurisdictions through 2031. Therefore, cumulative solid waste is expected to be accommodated by existing landfills within the County, and cumulative impacts related to solid waste would not be cumulative considerable and thus, would be less than significant.

Wildfire

Cumulative impacts related to utilities would include a project’s contribution to increased fire risk, potential for exposure to fire hazards or related risks (e.g., flooding, landslides, etc.), or conflicts with an adopted emergency response plan or emergency evacuation plan.

As previously described under cumulative impacts to Hazards and Hazardous Materials, Public Services, and Transportation, construction and operation of the Griffith Park ATS (#40) in conjunction with the Project could interfere with the Zoo’s emergency preparedness procedures and emergency evacuation of the Zoo (if the Griffith Park ATS is located on Zoo property). The combined increase in visitation from the Project (i.e., up to 59,000 visitors per day) and the Griffith Park ATS (i.e., 10,000 to 13,000 visitors per day) would contribute a substantial increase in the daytime population of the Project site and a related increase in congestion and difficulty accessing and evacuating the Project site. Impacts would be further exacerbated by potential evacuation of gondola riders on the Griffith Park ATS. While the exact location and design of the lower terminal, transit hub, and associated facilities (e.g., parking structure, restaurant, retail, restrooms, maintenance facilities, etc.) are unknown, the increase in visitors from Griffith Park ATS in conjunction with the Project could adversely affect safe and efficient evacuation of the Project area and impacts could be cumulative considerable. However, Project construction and operation would maintain emergency access to the site and the proposed realignment of Western Heritage Way/Crystal Springs Drive would further reduce congestion and safety impacts associated with pedestrians crossing the
street. As such, the Project’s contribution to cumulative impacts from emergency response and evacuation would not be cumulatively considerable.

Cumulative hazards from wildfire would be exacerbated by additional construction and operation of urban uses within the City and region along the wildland-urban interface. Construction of projects within the immediate vicinity of Griffith Park, such as the Griffith Park ATS (#40), would introduce additional fire hazard (e.g., ignition risks from construction equipment) that would place people and structures at risk of damage. Construction of the electrical lines for the Griffith Park ATS, in combination with the blasting required for the proposed Condor Canyon, would cumulatively increase the potential for fire risk. Similar to the Project, other Projects within Griffith Park would require tree and vegetation removal for accommodation of the projects, potentially reducing the extent of onsite flammable vegetation. However, construction activities proximate to chaparral and other fire-prone plant communities within Griffith Park would continue to present risk associated with spread of wildfire.

To manage and reduce wildfire risks, the Zoo and RAP 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 (WUI). This would include annual vegetation management and plan review to ensure appropriate designs for access and fire flow. Adherence to the California Fire Code, LAMC, and review of discretionary projects by the LAFD would reduce cumulative impacts associated with potential wildfire risk or hazards. Implementation of MM WF-1 and MM WF-2, which would require preparation and implementation of a Wildfire Fuel Management Plan and a Zoo Evacuation and Fire Response Access Plan, would reduce the Project’s individual impact and ensure the Project’s contribution to cumulative impacts from wildfire would not be cumulatively considerable. Thus, cumulative impacts wildfire would be less than significant with mitigation.