

Appendix A
Mitigation Monitoring and Reporting Program

Impacts	Mitigation Measure	Responsible/Monitoring Party	Monitoring Action or Implementation Stage
<i>Biological Resources</i>			
<p>The analysis contained within Section 5.4 (Biological Resources) indicates that the project site assessment revealed that the majority of special-status wildlife known to occur in the general region had a “low” or “not likely to occur” potential of occurrence within the Biological Survey Area (BSA), due to the developed nature of habitats within the BSA. Although several special-status plant species are known to occur in the region, due to the developed nature of the BSA, all were determined to have a “not likely to occur” potential. During construction, if these activities occur during the avian nesting season, the proposed Project could be in conflict with the Migratory Bird Treaty Act (MBTA). The analysis also determined no riparian habitat or other sensitive communities are present within the BSA. Because construction activities would remove vegetation (non-native/ornamental) these activities could result in the spread of noxious weeds within the project site and adjacent areas. The San Diego Creek occurs within the BSA; however, project construction is not anticipated to temporarily or permanently impact any portion of Creek potentially under the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), or California Department of Fish and Wildlife (CDFW). Further, the analysis determined that with the implementation of mitigation measures BIO-1 through BIO-4, impacts would be less than significant.</p>	<p>BIO-1 Wildlife Pre-Construction Surveys: Prior to ground disturbance or vegetation clearing within the Project site, a qualified biologist shall conduct surveys for wildlife (no more than 14 days prior to site disturbing activities) where suitable habitat is present and directly impacted by construction activities. Wildlife found within the Project site or in areas potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the project prior to the start of construction. Special-status species may require specific permits prior to handling and/or have established protocols for relocation and those found within a Project impact area shall be relocated by an authorized biologist to suitable habitat outside the impact area. Records of all detection, capture, and release shall be reported to California Department of Fish and Wildlife (CDFW).</p>	<p>City of Irvine, Department of Transportation</p>	<p>Prior to earthmoving activities or construction and then during initial ground disturbing activities, and periodically, as needed thereafter.</p>

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	<p>BIO-2 Environmental Awareness Training: The Project proponent shall have a qualified biologist prepare an environmental awareness and compliance training program. All Project personnel will be required to attend and complete the environmental awareness and compliance training program. The training program shall present the environmental regulations and applicable permit conditions that the Project team shall comply with. The training program shall include applicable measures established for the Project to minimize impacts to water quality and avoid sensitive resources, habitats and species. Dated sign-in sheets for attendees at these meetings shall be maintained and submitted to the City of Irvine.</p>	City of Irvine, Department of Transportation	Initial training prior to construction and administered as needed, provided new contractor/staff access the work site area.
	<p>BIO-3 Implement Best Management Practices: Prior to the issuance of any grading permits and/or notice to proceed, the Project proponent shall submit grading plans and specifications to the City of Irvine, which indicate that the Project shall implement the following BMPs:</p> <ul style="list-style-type: none"> • Restrict non-essential equipment to the existing roadways and/or ruderal areas to avoid disturbance to native vegetation. • All excavation, steep-walled holes or trenches in excess of six inches in depth shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches will also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume or will be removed from the trench or hole by a qualified biologist holding the appropriate permits (if required). 	City of Irvine, Department of Transportation	Prior to and during construction.

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	<ul style="list-style-type: none"> • Minimize mechanical disturbance of soils to reduce impact of habitat manipulation on small mammals, reptiles, and amphibians. • Removal/disturbance of vegetation shall be minimized to the greatest extent feasible. • Install and maintain appropriate erosion/sediment control measures, as needed, throughout the duration of work activities. • Vehicles shall not be driven, or equipment operated, in water covered/wetted portions of a stream channel, or where riparian vegetation may be destroyed, except as otherwise provided for in the permits/agreements from the CDFW, United States Army Corps of Engineers (USACE), and/or Regional Water Quality Control Board (RWQCB). • No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials. 		
	<p>BIO-4 Nesting Bird Surveys and Avoidance Measures: Prior to initial site disturbance/issuance of grading permits, seasonally timed presence/absence surveys for nesting birds shall be conducted by a qualified biologist. If construction activities carry over into a second nesting season(s) the surveys will need to be completed annually until the Project is complete. A minimum of three survey events, three days apart shall be conducted (with the last survey no more than three days prior to the start of site disturbance), if construction is scheduled to begin during avian nesting season (February 15th through September 15th); surveys for raptors shall be conducted from January 1st to August 15th. Surveys shall be conducted within 500 feet of all Project activities.</p>	<p>City of Irvine, Department of Transportation</p> <p>California Department of Fish and Wildlife</p>	<p>Prior to earthmoving activities or construction.</p>

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	<p>If any special-status species are observed, consultation with U.S. Fish and Wildlife Service and/or CDFW is required. If breeding birds with active nests are found prior to or during construction, a qualified biological monitor shall establish a 300-foot buffer around the nest and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails. The prescribed buffers may be adjusted by the qualified biologist based on existing conditions around the nest, planned construction activities, tolerance of the species, and other pertinent factors. The qualified biologist shall conduct regular monitoring of the nest to determine success/failure and to ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. If construction occurs outside of avian nesting season, only a single presence/absence survey will be required.</p>		
<i>Cultural Resources</i>			
<p>As noted in Section 5.5 (Cultural Resources), the analysis determined no built environment historical resources would be affected since the area was largely developed in the 1970s and through the 1990s and the minor “sliver-takes” proposed as part of the roadway widening would not result in a change to the overall setting or feeling of the area. Moreover, the records searches conducted at the South-Central Coast Information Center (SCCIC) on November 20, 2019 and pedestrian survey of the project area did not reveal the presence of historic structures. A field survey of the project area by a qualified archaeologist did not reveal surficial archaeological remains. Results of a record search requested from the Native American Heritage Commission (NAHC) Sacred Lands File were also negative. In addition to the NAHC negative results, Tribal representatives of the Gabrieleño Mission</p>	<p>CUL-1 Discovery of Prehistoric or Historic Archaeological Materials. If deposits of prehistoric or historical archaeological materials are discovered during non-monitored Project activities, all work within 25 feet of the discovery shall be redirected and a qualified archaeologist contacted, if one is not present, to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials. It is recommended that adverse effects to the finds be avoided by Project activities. If avoidance is not feasible, the archaeological deposits shall be evaluated to determine if they qualify as a historical resource or unique archaeological resource, or as historic property. If the deposits do not qualify, avoidance is not necessary. If the deposits do so qualify, adverse effects on the deposits must be avoided, or such effects must be mitigated. Mitigation may consist of, but is not limited to, recovery and analysis of the archaeological deposit; recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an</p>	<p>City of Irvine, Department of Transportation</p>	<p>Grading activities.</p>

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<p>Indians Kizh Nation responded to AB 52 notifications requesting consultation on the proposed Project. Consultation with the City was conducted on December 17, 2019 via teleconference. No project specific issues or potential resources were identified in or near the Project area by the Kizh representatives.</p> <p>Although no cultural resources were identified within the proposed Project area during the records searches, there is the possibility that undiscovered archaeological resources are buried beneath the presently paved and developed intersection.</p> <p>Should inadvertent discoveries be made during ground-disturbing work, the implementation of mitigation measures CUL-1 and CUL-2 will ensure less than significant impacts.</p>	<p>appropriate curation facility. Educational public outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the archaeological deposits discovered. The report shall be submitted to the South-Central Coast Information Center.</p> <p>CUL-2: Discovery of Human Remains. In the event that human remains are encountered, work within 25 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, a qualified archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner shall notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant (MLD) to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results and provide recommendations for the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the MLD. The report shall be submitted to the South-Central Coast Information Center.</p>		<p>Grading activities.</p>

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<i>Hazards and Hazardous Materials</i>			
As indicated in Section 5.9 (Hazards and Hazardous Materials), during the road widening construction phase of the proposed Project, there is the potential for construction workers to encounter aerially deposited lead (ADL) and lead-based paint.	<p>HAZ-1 Construction Surveys for Soils Containing Hazardous Materials and Aerially Deposited Lead: An ADL Site Investigation for exposed soils will be required (to include other potential contaminants of concern if suspected to be present – such as oil and grease, pesticides/herbicides, other potential pollutants) prior to grading and soil removal activities. The ADL investigation is required to properly characterize and profile soils that will be generated from the proposed Project for disposal purposes.</p>	City of Irvine, Department of Transportation	Prior to construction and grading and soil removal.
	<p>HAZ-2 Construction Surveys for Striping Paint Containing Hazardous Materials and Lead-Based Paint: A lead-based paint Site Investigation for exposed asphalt will be required (to include other potential contaminants of concern if suspected to be present – such as oil and grease, pesticides/herbicides, other potential pollutants) prior to grading and asphalt removal activities. The lead-based paint investigation is required to properly characterize and profile soils that will be generated from the proposed Project for disposal purposes.</p>	City of Irvine, Department of Transportation	Prior to construction and grading and soil removal.
<i>Public Services</i>			
The analysis in Section 5.15 (Public Services) indicates that in order to reconstruct the northbound Culver Drive curb-return at westbound Alton Parkway, an existing fire hydrant would need to be relocated inward of its currently location which could result in short-term significant impacts related to the provision of adequate fire suppression capabilities.	<p>PS-1 Coordinate with Orange County Fire Authority Prior to Removal/Relocation of Fire Hydrant – In advance of construction of the proposed Project, the Contractor (or City) will be required to coordinate with the Orange County Fire Authority to ensure that temporary and permanent relocation of the existing fire hydrant along westbound Alton Parkway at Culver Drive is acceptable and that the fire hydrant will have sufficient fire flow capacity to meet the Orange County Fire Authority's requirements for fire suppression.</p>	<p>City of Irvine, Department of Transportation</p> <p>Orange County Fire Authority</p>	In advance of construction.