

Appendix E – Avoidance, Minimization, and/or Mitigation Summary

In order to be sure that all of the environmental measures identified in this document are executed at the appropriate times, the following mitigation program (as articulated on the proposed Environmental Commitments Record [ECR] that follows) would be implemented. During project design, avoidance, minimization, and /or mitigation measures will be incorporated into the project's final plans, specifications, and cost estimates, as appropriate. All permits will be obtained prior to implementation of the project. During construction, environmental and construction/ engineering staff will ensure that the commitments contained in this ECR are fulfilled. Following construction and appropriate phases of project delivery, long-term mitigation maintenance and monitoring will take place, as applicable. As the following ECR is a draft, some fields have not been completed, and will be filled out as each of the measures is implemented. Note that some measures may apply to more than one resource area. Duplicative or redundant measures have not been included in this ECR. An asterisk (*) denotes mitigation for a significant impact under CEQA.

This page intentionally left blank

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
HUMAN ENVIRONMENT									
Land Use									
<i>Project Features</i>									
No Measures Required									
<i>Avoidance, Minimization, and/or Mitigation Measures</i>									
LU-1 During final design, design modifications that will minimize or avoid the loss of landscaping and noncompliance with general development standards will be selected, if feasible. If such losses cannot be minimized or avoided and the project still results in the loss of landscaping or other noncompliance with development standards, the California Department of Transportation (Caltrans) will coordinate with the Cities of Laguna Hills, Laguna Woods, and Lake Forest, to obtain landscaping or setback variances for properties where the project would reduce the required amount of landscaping below the applicable municipal landscaping and setback requirements.	Caltrans Project Engineer	Design	No						
LU-2 Prior to construction, the construction contractor will generate time-stamped photo documentation of the preconstruction conditions of all temporary staging areas. All construction access, mobilization, material laydown, and staging areas would be returned to a condition equal to the preconstruction staging condition.	Caltrans Project Engineer	Preconstruction Construction	No						
LU-3 Following completion of the project, areas that are temporarily disturbed by construction activities would be returned to their property owners in the same or better condition than prior to construction. Owners of parcels where TCEs would be required would receive compensation for the temporary use of a portion of their property.	Caltrans Project Engineer	Design Construction	No						
LU-4 Caltrans will continue to coordinate with the cities of Lake Forest, Laguna Hills, and Laguna Woods to reflect the modification of land use designations for properties that will be acquired for the project that are not currently designated for transportation uses within the Land Use Element of their General Plan.	Caltrans Project Engineer City of Laguna Hills, City of Laguna Woods, City of Lake Forest	Design Construction Post Construction	No						
LU-5 (REL-1) Property acquisition will be conducted in compliance with the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (Public Law 91-646, 84 Statutes 1894). The Uniform Act mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced by federal or federally assisted projects. The Uniform Act provides for uniform and equitable treatment by federal or federally assisted programs of persons displaced from their homes, businesses, or farms and establishes uniform and equitable land acquisition policies.	Caltrans Project Engineer Caltrans Right of Way	Design	No						
LU-6 (Section 4f-1) Caltrans would relocate the facilities of the mini park to the adjacent open space during the construction phase, this would provide for an opportunity to enhance and upgrade the mini park.	Caltrans Project Engineer Resident Engineer	Design Construction	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
LU-7 (Section 4f-2) Caltrans and the City of Lake Forest will perform outreach activities during the design phase to seek community's choice of park facilities/features	Division of Environmental Analysis	Design	No						
LU-8 (Section 4f-3) If feasible, Caltrans would also recommend constructing the new park facilities in the proposed location in advance of the actual impacts to Cavanaugh Mini Park, this will allow the community to continue the use of the park facilities during construction.	Caltrans Project Engineer Resident Engineer	Design Construction	No						
Community Impacts									
<i>Project Features</i>									
PF-CI-1 Caltrans Standard Specification 5-1.31: requires that the job site be neatly maintained in areas visible to the public.	Resident Engineer Construction Contractor	Design Construction	No						
PF-CI-2 Caltrans Standard Specifications Section 5-1.39: Before Contract acceptance, restore damaged work to the same state of completion as before the damage.	Construction Contractor Caltrans Project Engineer	Design Post Construction	No						
PF-CI-3 Caltrans Standard Specifications Section 7-1.03: Construction activities must not inconvenience the public or abutting property owners. Schedule and conduct work to avoid unnecessary inconvenience to the public and abutting property owners.	Construction Contractor Resident Engineer	Construction	No						
PF-CI-4 Caltrans Standard Specifications Section 7-1.04: Do not construct a temporary facility that interferes with the safe passage of traffic. Control dust resulting from the work, inside and outside the right-of-way. Move workers, equipment, and materials without endangering traffic. Whenever your activities create a condition hazardous to the public, furnish, erect and maintain those fences, temporary railing, barricades, lights, signs, and other devices and take any other necessary protective measures to prevent damage or injury to the public. Provide flaggers whenever necessary to ensure that the public is given safe guidance through the work zone.	Construction Contractor Resident Engineer	Construction	No						
<i>Avoidance, Minimization, and/or Mitigation Measures</i>									
See Land Use LU-5 through LU-8									
Utilities and Emergency Services									
<i>Project Features</i>									
PF-UES-1 All temporary closures and detour plans would be coordinated with law enforcement, fire protection, and emergency medical service providers to minimize temporary delays in emergency response times, including the identification of alternate routes for emergency vehicles and routes across the construction areas that are developed in coordination with the affected agencies.	Caltrans Project Engineer Caltrans Resident Engineer	Design Preconstruction Construction Prior to utility relocation activities	No						
PF-UES-2 To ensure that emergency response times are not disrupted, the Orange County Sheriff's and Fire Departments will be informed of the project construction schedule, lane closures (if any), and detour plans well in advance of any detour plan or lane closure being implemented throughout the construction period.	Caltrans Contractor Resident Engineer	Design Construction	No						
<i>Avoidance, Minimization, and/or Mitigation Measures</i>									

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
<p>UES-1 During final design, utility relocation plans for those utilities that will need to be relocated, removed, or protected-in-place will be prepared in consultation with the affected utility relocation providers/owners. If relocation is necessary, the final design will focus on relocating utilities within the State right-of-way or other existing public rights-of-way and/or easements. If relocation outside of existing rights-of-way or additional public rights-of-way and/or easements required for the project are necessary, the final design will focus on relocating those facilities to minimize environmental impacts as a result of project construction and ongoing maintenance and repair activities. The utility relocation plans will be included in the project specifications.</p> <p>Prior to and during construction, the construction contractor will implement the components of the utility relocation plans provided in the project specifications.</p> <p>Prior to utility relocation activities, the Resident Engineer will coordinate with affected utility providers regarding potential utility relocations and inform affected utility users in advance of the date and timing of potential service disruptions.</p>	Caltrans Project Engineer	Design Preconstruction Construction Prior to utility relocation activities	No						
Traffic and Transportation/Pedestrian and Bicycle Facilities									
<i>Project Features</i>									
<p>PF-TRA-1 Transportation Management Plan. The project will include preparation of a Transportation Management Plan (TMP) during the Plans, Specifications, and Estimates (PS&E) phase. "TMP" is an approach for alleviating or minimizing traffic delays by the effective application of traditional traffic handling practices and an innovative combination of various strategies. These strategies include public awareness campaigns, motorist information, incident management, construction methods, demand management, and alternate route planning.</p>	Caltrans Traffic Engineer Caltrans Resident Engineer Caltrans Project Engineer Caltrans Contractor	Design Construction	No						
<i>Avoidance, Minimization, and/or Mitigation Measures</i>									

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
Visual/Aesthetics									
<i>Project Features</i>									
No Measures Required									
<i>Avoidance, Minimization, and/or Mitigation Measures</i>									
VIS-1 Construction Lighting. At a minimum, the construction contractor shall minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights shall be used. Portable lights shall be operated at the lowest allowable wattage and height and shall be raised to a height no greater than 20 feet. All lights shall be screened and directed downward toward work activities and away from the night sky and nearby residents to the maximum extent possible. The number of nighttime lights used shall be minimized to the greatest extent possible	Caltrans Project Engineer Construction Contractor	Construction	No						
VIS-2 Replacement Landscape and Irrigation in Areas Impacted by Construction. To maintain the context of the project area (color, form, and texture) landscaping shall be installed that is compatible with the existing landscape along I-5 in the project vicinity and surrounding area. Where feasible, landscaping shall include specimen sized trees and/or shrub/groundcover mass planting, and landscape treatment along walls to soften the hardscape features and reduce glare and radiant heat from the walls. In areas where sound walls are visible from adjacent residential land uses, vines and landscaping shall be utilized to screen views to the wall where feasible. The landscape concept, plan, and plant palette shall be determined in consultation with, and approved by, the District Landscape Architect in consultation with the Cities of Lake Forest, Laguna Hills, and Laguna Woods during the Plans, Specifications, and Estimate (PS&E) phase. All vine and landscape proposed shall conform with the planting policy requirements of Caltrans and the applicable goals and policies of the City of Lake Forest General Plan, Laguna Hills General Plan, and Laguna Woods General Plan, as well as the tree preservation policies identified in the Lake Forest Municipal Code, Laguna Hills Municipal Code, and Laguna Woods Municipal Code. The planting plan shall be reviewed and approved by the Caltrans Biologist to be in accordance with executive orders 13751, Safeguarding the Nation from the Impacts of Invasive Species (2016), and 13112, Invasive Species (1999).	Caltrans Project Engineer Construction Contractor Landscape Architect	Design Construction	No						
VIS-3 Preservation of Existing Landscape. Damage to existing vegetation, especially mature, established trees, within the project limits or in close proximity to the project limits shall be minimized as much as possible.	Caltrans Project Engineer Construction Contractor	Construction	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
VIS-4 Aesthetic Treatments for New Noise Barriers, Retaining Walls, and Elevated Features. To reduce the visual impact of new noise barriers and other elevated structures, the use of aesthetic treatments consisting of color, textures, and/or artistic designs compatible with existing walls/structures shall be determined. If the only option is to match existing in-kind, new noise barriers shall be supplemented with self-attaching vines to soften their appearance and applied with anti-graffiti coating (if allowable) to discourage graffiti.	Caltrans Project Engineer Construction Contractor	Construction	No						
Cultural Resources									
<i>Project Features</i>									
PF-CUL-1 Discovery of Cultural Materials. If cultural materials are discovered during site preparation, grading, or excavation, the construction Contractor will divert all earthmoving activity within and around the immediate discovery area until a qualified archaeologist can assess the nature and significance of the find. At that time, coordination will be maintained with the California Department of Transportation (Caltrans) District 12 Environmental Branch Chief or the District 12 Native American Coordinator to determine an appropriate course of action. If the discovery of cultural materials occurs outside the Caltrans right-of-way, then coordination with the appropriate local agency will be conducted as well.	Caltrans Archaeologist Caltrans Resident Engineer Construction Contractor	Construction Postconstruction (if necessary)	No						
PF-CUL-2 Discovery of Human Remains. If human remains are discovered during site preparation, grading, or excavation, California State Health and Safety Code (H&SC) Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the Orange County Coroner shall be contacted. If the remains are thought to be Native American, the Coroner will notify the Native American Heritage Commission (NAHC), who pursuant to California Public Resources Code (PRC) Section 5097.98, will then notify the Most Likely Descendant (MLD). At that time, the persons who discovered the remains will contact the Caltrans District 12 Environmental Branch Chief or the District 12 Native American Coordinator so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of California PRC 5097.98 are to be followed as applicable.	Caltrans Archaeologist Caltrans Resident Engineer Construction Contractor	Construction Postconstruction (if necessary)	No						
<i>Avoidance, Minimization, and/or Mitigation Measures</i>									
No mitigation required									

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
PHYSICAL ENVIRONMENT									
Water Quality and Storm Water Runoff									
<i>Project Features</i>									
PF-WQ-1 The project will comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2012-0011-DWQ, NPDES No. CAS00003 and any subsequent permits in effect at the time of construction	Caltrans Resident Engineer	Construction	No						
PF-WQ-2 The project will comply with the provisions of the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009- DWQ, NPDES No. CAS000002 and any subsequent permits in effect at the time of construction.	Caltrans Resident Engineer	Construction	No						
PF-WQ-3 The project will comply with the Construction General Permit by preparing and implementing a Storm Water Pollution Prevention Plan (SWPPP) to address all construction-related activities, equipment, and materials that have the potential impact water quality for the appropriate Risk Level. The SWPPP will identify the sources of pollutants that may affect the quality of storm water and include BMPs to control the pollutants, such as sediment control, catch basin inlet protection, construction materials management, and non-storm water BMPs. All work must conform to the Construction Site BMP requirements specified in the latest edition of the Storm Water Quality Handbooks: Construction Site Best Management Practices Manual to control and minimize the impacts of construction and construction related activities, material and pollutants on the watershed. These include, but are not limited to, temporary sediment control, temporary soil stabilization, scheduling, waste management, materials handling, and other non-stormwater BMPs.	Caltrans Resident Engineer	Construction	No						
PF-WQ-4 Design Pollution Prevention Best Management Practices (BMPs) will be implemented such as preservation of existing vegetation, slope/ surface protection systems (permanent soil stabilization), concentrated flow conveyance systems such as ditches, berms, dikes and swales, overside drains, flared end sections, and outlet protection/ velocity dissipation devices.	Caltrans Project Engineer Caltrans Resident Engineer	Design Construction	No						
PF-WQ-5 Caltrans approved treatment Best Management Practices (BMPs) will be implemented consistent with the requirements of National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the State of California, Department of Transportation, Order No. 2012-0011-DWQ, NPDES No. CAS00003 and any subsequent permits in effect at the time of construction. Treatment BMPs may include Design Pollution Prevention (DPP) Infiltration Areas, Infiltration Devices, Biofiltration Strips and Swales, Detention Devices, Media Filters, Multi-Chamber Treatment Train (MCTT), Wet Basin and Open Graded Friction Courses.	Caltrans Project Engineer Caltrans Resident Engineer	Design Construction	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
PF-WQ-6 If dewatering is required, Construction site dewatering must comply with the General Waste Discharge Requirements for Groundwater Extraction Discharges to Surface Waters within the San Diego Region (Order No. R9-2015-0013, NPDES No. CAG919003) and any subsequent updates to the permit at the time of construction. This Permit addresses temporary dewatering operations during construction. Dewatering BMPs must be used to control sediment and pollutants, and the discharges must comply with the WDRs issued by the San Diego RWQCB	Caltrans Resident Engineer Construction Contractor	Construction	No						
<i>Avoidance, Minimization, and Mitigation Measures</i>									
No mitigation is required.									
Geology/Soils/Seismic/Topography									
<i>Project Features</i>									
PF-GEO-1 Caltrans Standard Specifications 48-2.02. B and Section 19 Earthwork General: The project will comply with the most current Caltrans procedures and design criteria regarding seismic design to mitigate any adverse effects related to seismic ground shaking. Earthwork will be performed in accordance with Caltrans Standard Specifications, Section 19, which requires standardized measures related to compacted fill, overexcavation and recompaction, and retaining walls, among other requirements. Moreover, Caltrans Highway Design Manual (HDM) Topic 113, Geotechnical Design Report, would require that a site-specific, geotechnical field investigation be performed for the proposed project during the design phase. The findings and recommendations from the investigation would be incorporated into the final design.	Caltrans Project Engineer	Design	No						
<i>Avoidance, Minimization, and Mitigation Measures</i>									
GEO-1 All improvements under both Build Alternatives and Design Option B would be constructed and operated in accordance with all applicable safety standards, such as California Occupational Safety and Health Administration (Cal/OSHA) related to worker safety during construction and operation in Title 8 Chapter 3.2, California Safety and Health Regulations, California Code of Regulations; and National Fire Protection Association (NFPA) Safety Codes and Standards.	Caltrans Project Engineer	Design	No						
GEO-2 During design phase, a detailed geotechnical investigation will be conducted by qualified geotechnical personnel to assess the geotechnical conditions at the project area. The geotechnical investigation will include exploratory borings to investigate site-specific soils and conditions and to collect samples of subsurface soils for laboratory testing. Those soil samples will be tested to determine liquefaction potential, collapsibility potential, stability, and corrosion potential. The project-specific findings and recommendations of the geotechnical investigation will be summarized in Structure Foundation Reports (SFRs) and a Geotechnical Design Report (GDR) to be submitted to the California Department of Transportation (Caltrans) for review and approval. Those findings and recommendations will be incorporated in the final design of the selected Build	Caltrans Project Engineer	Design	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
Alternative.									
Paleontology									
<i>Project Features</i>									
PF-PAL-1 Caltrans Standard Specification 14-7.03: Discovery of Unanticipated Paleontological Resources. If unanticipated paleontological resources are discovered, all work within 60 feet of the discovery must cease and the construction Resident Engineer must be notified. Work cannot continue near the discovery until authorized.	Caltrans Resident Engineer Caltrans Archaeologist Construction Contractor	Construction Post-Construction	No						
<i>Avoidance, Minimization, and Mitigation Measures</i>									
PAL-1* Paleontological Mitigation Plan. A qualified paleontologist shall prepare a Paleontological Mitigation Plan (PMP) following the guidelines in the California Department of Transportation (Caltrans) Standard Environmental Reference (SER), Environmental Handbook, Volume 1, Chapter 8 – Paleontology (November 2017) and guidelines developed by the Society of Vertebrate Paleontology (2010). The PMP shall be prepared concurrently with final design plans during the Plans, Specifications, and Estimates (PS&E) phase. The PMP shall include sections describing project activities, the geologic units within the project area and their paleontological sensitivities, the work plan for mitigating project impacts to paleontological resources, estimates of monitoring schedules and costs, decision thresholds for monitoring levels and fossil collections, a recommended repository for recovered fossils, any necessary permits, and the contents of the Paleontological Mitigation Report that is required at the end of the monitoring program regardless of whether any paleontological resources are recovered.	Caltrans Project Engineer Caltrans Archaeologist Caltrans Resident Engineer Construction Contractor	Design Construction Post-Construction	No						
Hazardous Waste/Materials									
<i>Project Features</i>									
PF-HAZ-1 Caltrans Standard Specification Section 14-11.12: Should construction activities result in the disturbance of traffic striping and pavement-marking materials, the generated wastes would be disposed of at an appropriate, permitted disposal facility as determined by a lead specialist.	Construction contractor Caltrans Resident Engineer	Construction	No						
PF-HAZ-2 Caltrans Standard Specification Section 13-4.03G: Controls dewatering work and discharge activities associated with dewatering.	Construction contractor Caltrans Resident Engineer	Construction	No						
PF-HAZ-3 Caltrans Standard Specification Section 13-4.03E(2) and Unknown Hazards Procedures in Caltrans Construction Manual (July 2017): During construction, the construction contractor will monitor soil excavation for visible soil staining, odor, and the possible presence of unknown hazardous material sources. If hazardous material contamination or sources are suspected or identified during project construction activities, the construction contractor will be required to cease work in the area and to have an environmental professional evaluate the soils and materials to determine the appropriate course of action required, consistent with the Unknown Hazards Procedures in Chapter 7 in the Caltrans' Construction Manual (July 2017).	Construction contractor Caltrans Resident Engineer	Construction	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
<i>Avoidance and Minimization Measures</i>									
<p>HAZ-1 During PA&ED phase, a qualified consultant will conduct a Phase II Site Investigation (SI) for the properties with potential contamination that would be either partially or fully acquired by the proposed project. These properties include:</p> <p>Build Alternative 2: APN 616-033-02 (Chevron Gasoline Station), 23891 Bridger Rd., Lake Forest, Full Acquisition</p> <p>Build Alternative 4 (including Design Option B): APN 621-052-02 (Former Arco Gasoline Station), 24012 Avenida De La Carlota, Laguna Hills, Full Acquisition; and APN 621-051-35 (Firestone Complete Auto Care), 24196 Laguna Hills Mall, Laguna Hills, Partial Acquisition</p> <p>The SI will identify any Recognized Environmental Concerns associated with on- or off-site releases and provide appropriate minimization, avoidance, and mitigation measures to prevent unnecessary exposure to contaminants during construction activities. Depending on the results of the SIs, subsequent sampling to determine the presence and/or absence of contaminated soil and/or groundwater or to characterize the extent of contamination on site may be required. The results of these studies will be used as part of the evaluation of any property to be acquired.</p>	<p>Caltrans Environmental Engineer</p> <p>Caltrans Project Engineer</p>	PA&ED	No						
<p>HAZ-2 During early stage of design phase, a Phase II/Site Characterization Specialist should conduct sampling along the project area to determine whether or not contamination is present and if it is within the limits identified in the Caltrans/DTSC ADL Agreement. Results of the sampling would be used to determine the disposal and/or reused methods for the excavated material.</p>	<p>Caltrans Environmental Engineer</p> <p>Caltrans Project Engineer</p>	Design	No						
<p>HAZ-3 An ACM survey and LBP survey will be conducted on any structures or bridges that are proposed to be modified as a result of this project. The surveys would be conducted during the early stage of the design phase by a certified specialist.</p>	<p>Caltrans Environmental Engineer</p> <p>Caltrans Project Engineer</p>	Design	No						
<p>HAZ-4 Any transformer to be relocated/removed during site construction/demolition should be conducted under the purview of the local purveyor to identify property-handling procedure regarding PCBs.</p>	<p>Construction contractor</p> <p>Caltrans Resident Engineer</p>	Construction	No						
Air Quality									
<i>Project Feature</i>									
<p>PF-AQ-1 The construction contractor must comply with the California Department of Transportation's (Caltrans) Standard Specifications in Section 14-9 (2018) to minimize impacts to Air Quality.</p>	<p>Caltrans Resident Engineer</p> <p>Construction Contractor</p>	Construction	No						
<p>PF-AQ-2 California Department of Transportation's (Caltrans) Standard Specifications Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.</p> <ul style="list-style-type: none"> • During clearing, grading, earthmoving, or excavation 	<p>Caltrans Resident Engineer</p> <p>Construction Contractor</p>	Construction	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
<p>operations, excessive fugitive dust emissions will be controlled by regular watering or other dust preventive measures using the following procedures, as specified in the South Coast Air Quality Management District (SCAQMD) Rule 403.</p> <ul style="list-style-type: none"> All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust. The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized to prevent excessive amounts of dust. Fugitive dust emission will be controlled by applying water or dust palliative to the disturbed soil in unpaved area. Dust control plan will be prepared and will be followed to control the fugitive dust emissions. <p>These control techniques will be indicated in project specifications. Visible dust beyond the property line emanating from the project will be prevented to the maximum extent feasible.</p> <ul style="list-style-type: none"> Project grading plans will show the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications. All trucks that are to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F), (e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads. Should the project geologist determine that asbestos-containing materials (ACMs) are present at the project study area during final inspection prior to construction, the appropriate methods will be implemented to remove ACMs. All construction vehicles both on and off site shall be prohibited from idling in excess of 5 minutes. <p>PF-AQ-3 Construction contractor must comply with the California</p>									

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
Department of Transportation's (Caltrans) Standard Specifications Section 14-9.03.									
Avoidance and Minimization Measures									
No mitigation is required.									
Noise									
<i>Project Feature</i>									
PF-N-1 Caltrans Standard Specifications Section 14.8-02: Control and monitor noise resulting from work activities. Do not exceed 86 dBA L _{max} at 50 ft from the job site from 9 p.m. to 6 a.m.	Caltrans Resident Engineer Constructor Contractor	Construction	No						
Avoidance, Minimization, and/or Mitigation Measures									
No mitigation required									
BIOLOGICAL ENVIRONMENT									
Animal Species									
<i>Project Feature</i>									
No Project Features are required.									
Avoidance, Minimization, and/or Mitigation Measures									
BIO-1 Onsite Training. An employee education program will be developed. Each employee (including temporary, contractors, and subcontractors) will receive a training/awareness program prior to working on the proposed project. They will be advised of the potential impact to protected species and the potential penalties for taking such species. At a minimum, the program will include the following topics: occurrence of the listed and sensitive species in the area (including photographs), their general ecology, sensitivity of the species to human activities, legal protection afforded these species, penalties for violations of Federal and State laws, reporting requirements, and project features designed to reduce the impacts to these species and promote continued successful occupation of the project limits.	Caltrans Project Engineer Resident Engineer Biologist	Preconstruction	No						
BIO-2 Nesting Bird Avoidance. The California Department of Transportation anticipates the potential for nesting birds to occur February 1 to September 30 (Nesting Bird Season). In order to avoid impacts to nesting birds, vegetation removal and/or ground disturbance shall occur outside of the nesting bird season to avoid construction delays. If this is not feasible, a qualified biologist will survey the work area no more than 3 days prior to construction activities. If an active nest (i.e. with eggs or young) is found, a no-work buffer will be established by the qualified biologist (100 ft for passerines and up to 500 ft for special-status bird species and/or raptors). No-work limits will be determined by the biologist and will depend on the sensitivity of the species, location of the nest, and existing site conditions (e.g., existing high levels of human activity and/or noise in the vicinity of the nest).	Caltrans Biologist Resident Engineer	Construction	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
BIO-3 Biological Monitoring. A biologist will monitor all vegetation clearing and any other construction activities (at the discretion of a qualified biologist) for the duration of the project in areas adjacent to ESAs to flush any wildlife species present prior to construction to avoid direct mortality to wildlife and to ensure compliance with and proper implementation of vegetation removal, Best Management Practices (BMPs), and ESAs, and to ensure that all biological resource-related avoidance and minimization measures are properly adhered to.	Caltrans Biologist Resident Engineer	Preconstruction	No						
BIO-4 Trash Control. The project site will be kept as clean of debris as possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the site. (consistent with NCCP/HCP Section 5.6.1 Avoidance and Minimization of Sensitive Biological Resources) Permittee shall initiate a trash abatement program before starting construction and shall continue the program for the duration of the project. Permittee shall ensure that trash and food items are contained in animal-proof containers and removed at least once a week to avoid attracting opportunistic predators such as ravens, coyotes, and feral dogs.	Caltrans Project Engineer Caltrans Biologist Resident Engineer	Construction	No						
Invasive Species									
<i>Project Feature</i>									
No Project Features are required									
<i>Avoidance, Minimization, and/or Mitigation Measures</i>									
BIO-5 Inspection and Clearing of Invasive Species. In compliance with the Executive Order on Invasive Species, EO 13112, and guidance from the Federal Highway Administration (FHWA), the landscaping and erosion control included in the project will not use species listed as invasive. None of the species on the California list of invasive species will be used by California Department of Transportation for erosion control or landscaping in revegetated areas. All equipment and materials will be inspected for the presence of invasive species and cleaned, if necessary. In areas of sensitivity, extra precautions will be taken if invasive species are found in or next to the construction areas. These include the inspection and cleaning of construction equipment and eradication strategies to be implemented should an invasion occur.	Caltrans Project Engineer Resident Engineer Biologist	Construction	No						
BIO-6 Invasive Species Control. Following the Executive Order and the OCTA NCCP/HCP agreement, invasive species will be removed from the project work area and contained during construction. The use of known invasive plant species (i.e., plant species listed in the California Invasive Plant Council [Cal-IPC] California Invasive Plant Inventory with a High or Moderate rating) will be prohibited for construction, revegetation and landscaping activities. Project measures will be included to ensure invasive plant material is not spread from the project site to other areas by disposal off site or by tracking seed on equipment, clothing, and shoes. Equipment/material imported from an area of invasive plants must be identified and measures implemented to prevent importation and spreading of nonnative plant material within the project site. All construction	Caltrans Project Engineer Resident Engineer Biologist	Construction	No						

Task and Brief Description	Responsible Branch, Staff	Timing / Phase	NSSP Req.	Action Taken to Comply with Task	Task Completed		Remarks	Environmental Compliance	
					Initials	Date		Initials	Date
equipment will be visually inspected and cleaned with water to remove dirt, seeds, vegetative material, or other debris that could contain or hold seeds of noxious weeds before entering and exiting the project site. Inspection and cleaning of construction equipment will be performed to minimize the importation of nonnative plant material. Eradication strategies (i.e., weed abatement programs) will be employed should an invasion occur during construction.									

* denotes mitigation measures under CEQA.

ADA = Americans with Disabilities Act

ADL = aeriially deposited lead

APN = Assessor's Parcel Number

BMP = best management practices

Caltrans = California Department of Transportation

CEQA = California Environmental Quality Act

dBA = A-weighted decibel

DTSC = California Department of Toxic Substances Control

EO = Executive Order

ESA = Environmentally Sensitive Area

ft = feet

L_{max} = maximum instantaneous noise level

NCCP/HCP = Natural Communities Conservation Plan/Habitat Conservation Plan

NEPA = National Environmental Policy Act

NSSP = nonstandard special provision

OCTA = Orange County Transportation Authority

PCB = polychlorinated biphenyl

TCE= temporary construction easement

TMP = Traffic Management Plan

This page intentionally left blank