Mitigation, Monitoring and Reporting Program for the Sabercat Trail Extension Project

This Mitigation, Monitoring and Reporting Program (MMRP) is based upon the findings in the Initial Study/Mitigated Negative Declaration (IS/MND) for the Sabercat Trail Extension Project. The environmental analysis identified the potential for some environmental impacts to occur. The MMRP in Table 1, Mitigation and Monitoring Program, lists the mitigation measures identified in the IS/MND and identifies the parties responsible for implementation, parties responsible for monitoring, and the status/timing of when the mitigation measure will be implemented.

Project Design Measures

In addition to the MMRP, the Project Description chapter of the IS/MND identifies a number of measures that are part of the project design and will be incorporated into project design and construction activities. These are not listed in the MMRP table because they are required and assumed to be part of the Project description and therefore are not considered mitigation measures. The measures include City of Fremont (City) requirements identified in Standard Details or the Fremont Municipal Code (FMC), Landscape Replacement Terms, Regulatory requirements and adherence to required stipulations on previous Sabercat Creek Mitigation Site located east of I-680.

The Standard Development Requirements to Address Resource Protection (FMC 18.218), includes direction on managing on air quality, endangered species, cultural and tribal resources, geology and soils, hazardous materials, and noise during construction and the measures include the pertinent details that would be implemented as part of the project.

The following measures would be implemented as part of the project:

- The North Trail will be designed to avoid impact on utilities, such as the ACWD pipeline and reservoir drain.
- During final design, the City, including the police department, will review the trail plan and review
 how best to incorporate Crime Prevention through Environmental Design (CPTED) measures.
 These include but are not limited to lights that only turn on through movement, plantings that reenforce keeping persons on trails, such as native thorny bushes to deter people from deviating
 from the path.
- Construction would comply with the applicable City of Fremont Standard Details which are generic
 drawings that illustrate and describe a common activity for improvements within the public right
 of way including Curb, Gutter, and Sidewalk; Signs, Streetlights, Utilities, Trails, and Other
 Miscellaneous; Traffic; and Landscape.
- To minimize impacts on trees, Landscaping Standard Detail (LSD) 9, Tree Protection Fencing, would be implemented. LSD-9 identifies tree protection measures that must be in place before construction including fencing around trees at the dripline identified for preservation, no storage of materials or construction vehicles within driplines/fenced areas of existing trees, and as required, includes a certified arborist approved by the City on site to monitor construction practices around tree protection during certain construction efforts.
- Fremont Municipal Code (FMC) Chapter 18.215, Tree Preservation, includes requirements for tree
 protection which typically apply to private property but for this proposed Project would be
 applicable to trees within the public right-of-way to ensure tree removal and replacement is

addressed consistently. Requirements of the ordinance include a tree survey for all trees greater than 6 inches diameter at breast height (DBH) for trees proposed for removal and other documents to be submitted with a Landscape Plan Submittal. The City of Fremont proposes to compensate for the removal of native trees while receiving credit for the removal of non-native and Cal-IPC Inventory trees and will specify the details on the Landscape Plan Submittal. Tree trimming will be limited to the area needed to provide a clear work area. All tree removal, solutions for preservation, and pruning activity is to be completed under the review and approval of the City Urban Forester.

- Construction activities would comply with the requirements in FMC Chapter 18.218, Standard
 Development Requirements to Address Resource Protection, which includes direction on
 managing air quality, endangered species, cultural and tribal resources, geology and soils,
 hazardous materials, and noise during construction.
- A Construction Management Plan (CMP) would be developed consistent with the requirements in FMC Section 18.218.050 and approved by the City of Fremont and Caltrans and would include the measures to minimize potential construction impacts including but not limited to dust control, construction emissions, construction traffic control, storm water pollution prevention, noise control, and cultural and tribal resource management as applicable. The CMP would include a section on the worker training to increase awareness for archaeological resources, tribal resources, paleontological resources, and biological resources prior to beginning construction activities. In addition, the CMP would include directions on managing construction activities in the natural areas including limiting the construction footprint to the smallest area possible and avoiding nighttime construction and if required restricting the use of artificial lighting to the area under construction to the extent practicable. Specific measures in the CMP with regards to the natural areas would include the following:
 - Use of Construction Vehicles. Project employees will be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards.
 - Conducting Worker Awareness Training. The City or its designee will provide training to construction personnel on the importance of protecting sensitive natural resources (i.e., listed species and designated critical and/or suitable habitat for listed species). Training will focus on recognizing special-status species and the construction scenarios where they might be encountered (e.g., grubbing, grading, trenching, excavating). Training will be conducted during preconstruction meetings so that construction personnel are aware of their responsibilities and the importance of compliance. All trainees will be required to sign a sheet indicating their attendance and completion of environmental training.
 - No pets would be allowed in construction areas in order to prevent harassment, injury, or mortality of protected species.
 - Collection and Disposal of Food Related Trash. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers and removed at least once a day from the work area.
 - Avoid Monofilament Erosion Control. Plastic monofilament netting (erosion control matting) or similar material will not be used for the project because Alameda whipsnakes, California red-legged frogs, and California tiger salamanders may become entangled or trapped in it.
 Acceptable substitutes include coconut coir matting or tackified hydroseeding compounds.

- o Prevent Wildlife Entrapment. Section 10 of the Endangered Species Act (ESA) generally prohibits the unauthorized take, which is defined in the ESA as harass, harm, pursue, hunt shoot, wound, kill, trap, capture, or collect any threatened or endangered species. To prevent inadvertent entrapment of special-status species during construction, excavated holes or trenches more than one-foot deep with walls steeper than 30 degrees will be covered at the close of each working day by plywood or similar materials. Alternatively, an additional 4-foot-high vertical barrier, independent of exclusionary fences, will be used to further prevent the inadvertent entrapment of special-status species. If it is not feasible to cover an excavation or provide an additional 4-foot-high vertical barrier, independent of exclusionary fences, one or more escape ramps constructed of earth fill or wooden planks will be installed. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape or the USFWS will be contacted by telephone for guidance. The USFWS will be notified of the incident by telephone and electronic mail within 48 hours.
- Listed Species Identified on Site. The federal ESA and the California ESA both have requirements that if a listed species is identified, the Resident Engineer will immediately contact the agency-approved project biologist(s) in the event that a special-status species is observed within a construction zone. The Resident Engineer will suspend construction activities within a 50-foot radius of the animal until it leaves the site voluntarily or an agency-approved protocol for removal has been established.

Landscape Replacement

The following landscaping requirements are incorporated as part of the project design:

- Planting is to be completed within 2 years of applicable project section completion, with a minimum of 3-years plant establishment period for areas outside Caltrans right-of-way. For restoration plantings within Caltrans right-of-way, there shall be a 5-year plant establishment monitoring program and 10-years for tree plantings.
- The plantings within residential neighborhoods shall be selected to provide a landscape that reaches full maturity 10-15 years post installation. Tree species for landscape planting would be selected and placed to avoid impacting ACWD water pipelines and facilities.
- Replacement of landscaping where planting strips have been disturbed during construction along Osgood Road and Blacow Road.
- Landscaping along the trail within the I-680 right-of-way but west of the I-680 freeway will be
 designed to buffer the trail users' exposure to dust and views of frequent spoil deposits on the
 'mound'.
- Landscaping and tree replacement plantings within the Sabercat Historical Park shall be designed to continue the Park's objective of preserving native and riparian habitat.

Regulatory Requirements

Other public agencies permit whose approval is required prior to construction include the following:

- National Pollutant Discharge Elimination System (NPDES) Construction Stormwater General Permit
- Caltrans Updated Freeway Agreement

- Caltrans Right-of-Way Certification
- Joint Caltrans and City of Fremont Maintenance Agreement (may be included in the Freeway Agreement)
- UPRR/BART: Construction and Maintenance Agreements
- California Public Utilities Commission: GO88-B Authorization
- Alameda County Water District Groundwater Well and Drilling Permit

Required stipulations from the previous Sabercat Creek Mitigation Site

The project would have a temporary impact on the Sabercat Creek Mitigation Site located east of I-680 and north of the project. The area of temporary impact is estimated to be less than 0.02 acres. Final design will continue to investigate methods for further avoiding this impact. Impacts within the Sabercat Creek Mitigation Site requirements in accordance with condition 12 of the original Section 1602 permit require replacement and/or restoration as described herein:

- Full restoration of any disturbed areas,
- A 6:1 replacement ratio of tree plantings that are not oak trees, and
- An 8:1 replacement ratio of any oak tree removed

The replacement trees are proposed to be planted within Caltrans property inside or nearby the mitigation site with hand tools that do not include machinery. Tree placement will not require clearing or altering the landscape. For restoration plantings within Caltrans right-of-way, there shall be a 5-year plant establishment monitoring program and 10-years for tree plantings. These requirements will adhere to the same requirements listed under "Landscape Replacement" above.

Table 1 Mitigation, Monitoring and Reporting Program

Impact	Mitigation Measure	Implementation	Monitoring Responsibility	Status /Timing
Biological	MM-BIO-1: Adjust the trail or other design elements to	Contractor	City of	Prior to construction
Resources	avoid the species. If avoidance is not possible, the City will		Fremont	and during
	consult with the appropriate regulatory agency (USFWS,	Approved	Planning	construction
	CDFW, and/or CNPS). At a minimum, the City would prepare	Biologist	Division	
	and implement a Relocation and Monitoring Plan subject to			
	the review and approval of the agencies. As part of the Relocation and Monitoring Plan, seeds may be collected			
	during the appropriate season and stored in a seed bank			
	(e.g., Rancho Santa Ana Botanical Garden). Seed, seed bank,			
	and live plant salvage efforts may be performed. Since			
	relocation efforts have low success rates, compensatory			
	mitigation may also be required.			
Biological	MM-BIO-2: Work window for California tiger salamander.	Contractor	City of	During construction
Resources	Construction activities that would disturb soil within suitable		Fremont	
	habitat for California tiger salamander will occur between		Planning	
	April 15 and October 15, when the species is unlikely to be		Division	
	active and there is lower potential for an individual to enter			
	the work area.			
Biological	MM-BIO-3: In non-paved areas, monitor activities during	Contractor	City of	During construction
Resources	initial ground disturbance and during activities conducted		Fremont	
	between October 15 and April 15. A Caltrans-approved	Approved	Planning	
	biologist will monitor all initial ground disturbance and	Biologist	Division	
	submit a daily report for each monitoring day. Caltrans will			
	submit the names and qualifications of the biological			
	monitor(s) for USFWS and CDFW approval prior to initiating			
	construction activities for the proposed project. The agency- approved biologist(s) will be on-site during initial ground-			
	approved biologist(s) will be off-site during initial ground-			

Impact	Mitigation Measure	Implementation	Monitoring Responsibility	Status /Timing
	disturbing activities, and thereafter as needed to fulfill the role of the approved biologist as specified in project permits. The biologist(s) will keep copies of applicable permits in their possession when onsite. Through the Resident Engineer or their designee, the agency-approved biologist(s) shall be given the authority to communicate either verbally, by telephone, email or hardcopy with all project personnel to ensure that take of listed species is minimized and permit requirements are fully implemented. Through the Resident Engineer or their designee, the agency-approved biologist(s) shall have the authority to stop project activities to minimize take of listed species, or if he/she determines that any permit requirements are not fully implemented. If the agency-approved biologist(s) exercises this authority, the agencies shall be notified by telephone and email within 24 hours. Although not expected to occur, initial ground disturbing activities present the most likely opportunity for unearthing a CTS. If a CTS is encountered during any work activities, the biologist shall have the authority to stop work immediately and the Caltrans biologist will be notified immediately. The Caltrans biologist will notify the USFWS and CDFW, and activities in the Project Section will cease immediately and not resume until appropriate permits are obtained.			
Biological Resources	MM-BIO-4: Conduct pre-construction surveys. Prior to any ground disturbance, pre-construction surveys will be conducted by an agency-approved biologist for special-status species. These surveys will consist of walking surveys of the project limit. The biologist(s) will investigate all potential cover sites. This includes thorough investigation of mammal burrows, rocky outcrops, appropriately sized soil	Contractor Approved Biologist	City of Fremont Planning Division	No more than 14 days (2 weeks) prior to construction.

Impact	Mitigation Measure	Implementation	Monitoring Responsibility	Status /Timing
	cracks, and debris. If any listed species are detected during preconstruction surveys, the USFWS, and/or the CDFW and the NMFS will be notified as appropriate within 48 hours.			
Biological Resources	MM-BIO-5: Conduct a pre-construction survey for WPT. No more than 14 days prior to the initiation of any activity near the riparian corridor along Sabercat Creek, the monitoring biologist shall conduct a preconstruction survey to determine whether western pond turtles are present. If any turtles are encountered, in consultation with the Caltrans biologist, they shall be relocated to suitable habitat upstream of the work prior to initiating activities.	Contractor Approved Biologist	City of Fremont Planning Division	No more than 14 days (2 weeks) prior to construction.
Biological Resources	MM-BIO-6: Conduct a pre-construction survey for SFDFWR. A qualified biologist will conduct a preconstruction survey of the BSA prior to the start of construction in woodland areas to determine if woodrat nests are present within areas of temporary and permanent impact. The need for nest dismantling and relocation will be determined by Caltrans in coordination with CDFW.	Contractor Approved Biologist	City of Fremont Planning Division	No more than 14 days (2 weeks) prior to construction.
Biological Resources	MM-BIO-7: Develop compensatory mitigation as prescribed by Caltrans and the resource agencies for impacts to the existing mitigation site uplands. In addition to the Sabercat Creek Mitigation Site replacement and restoration requirements, the City will develop the detailed tree planting plan for riparian tree replacement with a minimum of 5 feet on center between plantings. The replacement trees are proposed to be planted within Caltrans property inside or nearby the mitigation site with hand tools that do not include machinery. Tree placement will not require clearing or altering the landscape. The City would develop compensatory mitigation in coordination with Caltrans,	Contractor Approved Biologist	City of Fremont Planning Division	During construction and post construction (timeline post construction dependent on mitigation)

Impact	Mitigation Measure	Implementation	Monitoring Responsibility	Status /Timing
Paleontological Resources	CDFW, and RWQCB. Compensatory mitigation would likely involve post-project restoration of the upland zone per the originally proposed HMMP planting plan and a pledge to provide site irrigation (and herbivory protection) sufficient to ensure oak sapling survival. Additional compensatory mitigation proposed to offset these impacts would include non-native tree removal (e.g., olive, wattle, tree-of-heaven) at other Project sections. Restoration planting would be monitored for 5 years following replacement for shrubbery plants and for 10 years for trees. MM-Paleo-1: Administration of Paleontological Resources Awareness Module to Construction Personnel. A Project-specific training module will be prepared and administered	Contractor	City of Fremont Planning	Prior to construction
	to all construction personnel as part of the Project's worker environmental awareness training program. The module will provide pictures of fossils that might be encountered, review of laws and regulations protecting paleontological resources, name of a qualified paleontologist to contact if fossils are discovered, description of the role of monitors, and measures to be taken until discoveries can be assessed and recovered. Administration of the module will help to ensure that fossils are recognized and handled properly in the event they are encountered.	Paleontologist	Division	
Paleontological Resources	MM-Paleo-2: Preparation of Paleontological Mitigation Plan (PMP). A PMP will be prepared using detailed Project design plans. The PMP will provide (1) a determination of the level of monitoring necessary for each Project element based on location, excavation type, and depth; (2) monitoring instructions, as necessary; and (3) prescriptions for dealing with paleontological discoveries.	Contractor Qualified Paleontologist	City of Fremont Planning Division	Prior to construction

Impact	Mitigation Measure	Implementation	Monitoring Responsibility	Status /Timing
Tribal Cultural Resources	 MM-TCR-1: Tribal Cultural Review and Coordination. Based upon the consultation with the tribes that have requested consultation the City of Fremont would implement the following measures: Prior to construction tribes will be provided the applicable plans to review and provide input on plant and tree avoidance and protection, specifically for plants and trees of tribal cultural importance, and Tribes will be provided the opportunity to review educational signage sharing the history of Native American tribes in the Project area and have the opportunity to provide input on the language for the signs. In addition to the construction workers, City of Fremont staff associated with future landscaping and maintenance activities would be provided tribal cultural resources awareness training to ensure that tribal cultural materials or any human remains found as part of the future activities are brought to the immediate attention of the interested tribes for input on protection. Tribes will be coordinated with on the development of inadvertent discoveries, tribal cultural resource avoidance, and post ground disturbance site visit mitigation measure if tribal cultural resources are discovered during construction. Tribes will be able to request access to the site for ceremonies and harvesting of plants of tribal cultural importance. 	Contractor with City of Fremont Planning staff Tribal staff	City of Fremont Planning Division	Prior to construction and during construction