Mitigation Monitoring and Reporting Program

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This mitigation monitoring and reporting program is intended to track and ensure compliance with adopted mitigation measures during the project implementation phase. For each mitigation measure recommended in the Final Supplemental Environmental Impact Report (EIR), specifications are made herein that identify the action required, the monitoring that must occur, and the agency or department responsible for oversight.

City of Livermore South Livermore Sewer Expansion Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
Biological Resources							
BIO-1: Nesting Bird Avoidance and Minimization E	Efforts						
If project construction activities occur during the nesting season (between February 1 and August 31), a qualified biologist shall conduct a pre-construction survey for nesting birds no more than 14 days prior to construction. The survey shall include the entire project alignment and a 300-foot buffer to account for nesting raptors. If nests are found, the qualified biologist shall establish an appropriate species-specific avoidance buffer of sufficient size to prevent disturbance by project activity to the nest (up to 300 feet for raptors, up to 150 feet for other birds). The qualified biologist shall perform at least two hours of pre-construction monitoring of the nest to characterize "typical" bird behavior. During construction, active nests identified during the pre-construction survey shall be monitored by the qualified biologist to determine if construction activities are causing disturbance to the bird and shall increase the buffer if it is determined the birds are showing signs of unusual or distressed behavior associated with project activities. Atypical nesting behaviors that may cause nest abandonment include, but are not limited to, defensive flights, vocalizations directed towards project personnel/activities, standing up from a brooding position, and flying away from the nest. The qualified biologist shall have authority to order the cessation of construction activities	If initial disturbing activities occur outside February 1 and August 31, retain a qualified biologist to conduct pre-construction surveys. Review and approve the report prepared by the qualified biologist recording the results of protective measures.	Prior to construction	Once	City of Livermore Community Development			
if the nesting birds exhibit atypical behavior that may cause nest failure (nest abandonment and loss of eggs and/or young) until a refined appropriate buffer is established. To prevent							

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Mitigation Measure/			Monitoring	Responsible	cation	cation	cation
Condition of Approval	Action Required	Monitoring Timing	Frequency	Agency	Initial	Date	Comments

encroachment, the established buffer(s) shall be clearly marked by high visibility material. The established buffer(s) shall remain in effect until the young have fledged or the nest has been abandoned as confirmed by the qualified biologist. The monitoring biologist shall determine the appropriate protection for active nests on a case-by-case basis using the criteria described above. The qualified biologist shall prepare a nest monitoring report at the time monitoring has been completed. The report will document the methods and results of the monitoring, and the final status of the nest (i.e., successful fledging of the nest, nest depredation, nest failure due to construction activity). The report shall be submitted to the City for approval.

Cultural Resources

CR-1: Unanticipated Archaeological Resources

If archaeological resources are encountered during ground-disturbing activities, work within 50 feet of the find shall be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology shall be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for California Register of Historical Resources eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to archaeological resources.

Require in the construction contract that work within 50 feet of archaeological finds be halted. Retain an archaeologist meeting the Secretary of Interior's Professional Qualifications Standards for archaeology following discovery of cultural artifacts to evaluate the find.

Prior to grading permit approval and during construction

Once and as needed

City of Livermore Community Development

City of Livermore South Livermore Sewer Expansion Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
Geology and Soils							
GEO-1: Unanticipated Discovery of Paleontological	al Resources						
Prior to the commencement of project construction, a qualified paleontological monitor (i.e., a paleontologist who meets the Society of Vertebrate Paleontology [2010] standards as a Paleontological Resource Monitor) shall be retained to conduct paleontological monitoring during ground-disturbing activities (including, but not limited to site preparation, grading, excavation, and trenching) of intact (i.e., previously undisturbed) areas mapped as high sensitivity geologic units (QTIp) located along the alignment. This includes areas along Tesla Road near Vasco Road and along Greenville Road approximately 3,000 feet south of Tesla Road (refer to geologic unit map prepared by Dibblee and Minch [2006a]), which are anticipated to require ground disturbance to depths greater than 15 feet. Monitoring shall be performed by a Qualified Paleontologist (i.e., a paleontologist who meets the Society of Vertebrate Paleontology [2010] standards as a Qualified Professional Paleontologist). Full-time monitoring shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as Pliocene to Pleistocene age Livermore Gravel (Qtlp), which has a high paleontological sensitivity. Additionally, initial part-time monitoring (i.e., spot-checking) shall be conducted for all ground-disturbing activities that impact previously undisturbed geologic units mapped at the surface as middle to late Holocene alluvial deposits (Qa) to check for the presence of geologic units of high sensitivity	Retain a qualified paleontological monitor who meets the Society of Vertebrate Paleontology standards to conduct paleontological monitoring during ground-disturbing activities of intact sensitive geologic units. Require in the construction contract that the monitor have the authority to temporarily divert construction equipment around paleontological finds until the resource is assessed. Review and approve the report prepared by the qualified paleontologist.	Prior to grading permit approval and during ground-disturbing activities of intact sensitive geologic units	Once and as needed	City of Livermore Community Development			

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Mitigation Measure/			Monitoring	Responsible	cation	cation	cation
Condition of Approval	Action Required	Monitoring Timing	Frequency	Agency	Initial	Date	Comments

(i.e., early Holocene older alluvium [Qoa, QTlp]). If older sediments are observed at depth, then full-time monitoring shall be conducted. Ground-disturbing activities that impact previously disturbed sediments only do not require paleontological monitoring.

The duration and timing of the monitoring shall be determined by the Qualified Paleontologist. If the Qualified Paleontologist determines that full-time or part-time monitoring is no longer warranted, they may recommend reducing monitoring to periodic spot-checking or may recommend that monitoring cease entirely. Monitoring shall be reinstated if any new ground disturbances of previously undisturbed areas are required, and reduction or suspension shall be reconsidered by the Qualified Paleontologist at that time.

If a paleontological resource is discovered, the monitor shall have the authority to temporarily divert construction equipment around the find until it is assessed for scientific significance and collected. Once salvaged, significant fossils shall be prepared to a curation-ready condition and curated in a scientific institution with a permanent paleontological collection (such as the University of California Museum of Paleontology). Curation fees are the responsibility of the project owner.

A final report shall be prepared describing the results of the paleontological monitoring efforts associated with the project. The report shall include a summary of the field and laboratory methods, an overview of the project geology and paleontology, a list of taxa recovered (if any), an analysis of fossils recovered (if any) and their scientific significance, and

City of Livermore South Livermore Sewer Expansion Project

Mitigation Measure/ Condition of Approval recommendations. The report shall be submitted to the City. If the monitoring efforts produced fossils, then a copy of the report shall also be submitted to the designated museum repository.	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Com- pliance Verifi- cation Initial	Com- pliance Verifi- cation Date	Com- pliance Verifi- cation Comments
Noise							
 NOI-1: Construction Noise Reduction The following requirements are provided to reduce construction noise: Prior to the start of and for the duration of construction, the contractor shall properly maintain and tune all construction equipment in accordance with the manufacturer's recommendations to minimize noise emissions. Prior to use of any construction equipment, the contract shall fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds no less effective than as originally equipped by the manufacturer. During construction, the construction contractor shall place stationary construction equipment and material delivery (loading/unloading) areas to maintain the greatest distance from the nearest residences, or within noise reducing enclosures. The construction contractor shall post a sign along the work alignment that is clearly visible to the public, providing a contact name and telephone number for filing a noise complaint. 	Review and approve pre-construction and construction plans to ensure that all recommendations are incorporated into project construction. Monitor compliance with required measures during active construction activities.	Prior to grading permit approval and during construction.	Once and as needed	City of Livermore Community Development			

					Com- pliance Verifi-	Com- pliance Verifi-	Com- pliance Verifi-
Mitigation Measure/			Monitoring	Responsible	cation	cation	cation
Condition of Approval	Action Required	Monitoring Timing	Frequency	Agency	Initial	Date	Comments

 These measures shall be listed on all grading plans and monitored by the City of Livermore during construction.

Tribal Cultural Resources

TCR-1: Unanticipated Discovery of Tribal Cultural Resources

If cultural resources of Native American origin are identified during project construction, all earth-disturbing work within 50 feet of the find must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find and an appropriate Native American representative, based on the nature of the find, is consulted. If the City determines that the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared in accordance with state guidelines and in consultation with Native American groups and reviewed and approved by the City prior to implementation. The plan would include avoidance of the resource or, if avoidance of the resource is infeasible, the plan would outline the appropriate treatment of the resource in coordination with the archeologist and the appropriate Native American groups, as necessary.

Require in the construction contract that work within 50 feet of discovered tribal cultural resources be temporarily suspended or redirected.

Retain a qualified archaeologist and contact the proper Native American representative to evaluate the resource.

Consult with Native American groups to create a mitigation plan for the unanticipated significant tribal cultural resources.

Prior to grading permit approval and during construction.

Once and as needed

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