



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

REQUEST FOR QUALIFICATIONS NOTICE

NUMBER 04A6021

Read carefully as the following revisions have been made to this document:

- On 2/26/19, Section I, General Information, Paragraph F, regarding fee and escalation was revised.
- On 10/2/18, Section I, General Information, Paragraph E, regarding financial documents was revised.

Note: Questions concerning this Request for Qualifications (RFQ) must be submitted in writing to the attention of Araya Rabidoux at araya.rabidoux@dot.ca.gov. Questions must be received no later than ten (10) calendar days after RFQ advertisement. Consultants contacting the District or Division directly seeking information about this RFQ will be disqualified from consideration in the selection process.

Proposers are advised that Caltrans has established a federally mandated overall annual DBE goal comprising both race neutral and race conscious elements to ensure equal participation of DBE groups specified in 49 CFR 26.5. In compliance with 49 CFR 26, Caltrans set a contract goal for DBEs participating in this solicitation expressed as a percentage of the total dollar value of the resultant Agreement. The DBE participation goal for this solicitation is eighteen percent (18%). See section I.H. in this RFQ for requirements.

I. GENERAL INFORMATION

- A. Caltrans is soliciting Statements of Qualifications (SOQs) from qualified firms that may lead to the award of a contract for Environmental Generalist services. In submitting your Statement of Qualifications (SOQ), you shall comply with the instructions found herein. In addition to those programs that are specified in this solicitation, prospective consultants are encouraged to consider programs that are available, such as those for the use of small businesses, disadvantaged businesses, disabled veteran businesses, new emerging firms, and other businesses covered by State and Federal programs.
- B. The estimated contract amount is \$8,000,000.00 - \$13,000,000.00.
- C. The estimated contract term is three (3) years, six (6) months.

- D. Interviews will be held via WebEx on **September 15, 2020**. Confirmation letters will be sent to those firms short-listed.
- E. The most highly qualified consulting firm will be required to submit an electronic copy of the financial documents listed on the appropriate Financial Documents Submittal Checklist available on the [A&E Contract Information](#) website. The most highly qualified consulting firm will be notified of their selection and receive instructions for the electronic submission financial documents.

The most highly qualified consulting firm must submit a complete financial documents package no later than four (4) days after notification of selection. The prime consultant must submit the complete financial documents package in order for Caltrans to have the information necessary to engage in negotiations. The prime consultant is solely responsible for timely and complete submission of financial documents on behalf of the entire proposed team; financial documents will not be accepted from proposed subconsultant firms. Failure to submit a complete financial documents package by the specified due date may result in termination of negotiations with the most highly qualified consulting firm.

- F. Negotiations will be held with the top-ranked firm in Oakland during the week of **September 21, 2020**. The fee for profit shall be ten-point-one percent (10.1%), and the escalation shall be as follows:

Period	Escalation
08/05/2020 – 07/31/2021	0%
08/01/2021 – 07/31/2022	1.5%
08/01/2022 – 07/31/2023	3.0%
08/01/2023 – 07/31/2024	3.0%

Notes:

1. Partial year will only occur on the last year of the contract term. All other periods are full years.
 2. Increases to the loaded billing rates after contract execution is not authorized for any reason per Article IV, Section 17 and Article XVI, Section 6 of the California Constitution.
- G. The scheduled date to complete cost negotiations and submit final cost proposal is **September 25, 2020**.
1. This solicitation and resultant Agreement is financed in whole or in part with federal funds and therefore subject to Title 49, Code of Federal Regulations, Part 26 (49 CFR 26) entitled "Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs." To ensure equal participation for Disadvantaged Business Enterprise (DBE) groups specified in 49 CFR 26.5, Caltrans specifies a contract goal for DBE participation. The required goal for DBE participation in this

solicitation is not less than eighteen percent (18%).

2. Only participation by certified DBEs will count toward the contract goal for this solicitation. In order to count toward a contract goal, a firm must be certified as a DBE by the California Unified Certification Program (CUCP) and possess the work codes applicable to the type of work the firm will perform on the Agreement by the SOQ submittal due date. For a list of work codes go to [Office of Civil Rights](#)
 3. It is the proposer's responsibility to verify that the DBE firm is certified as a DBE by the specified SOQ submittal due date and time. For a list of DBE's certified by the CUCP, go to [Office of Civil Rights](#) website.
 4. A DBE must perform a commercially useful function (CUF) for the type of work it will perform on the Agreement as provided in 49 CFR 26.55(c)(1)-(4). A DBE performs a CUF when it is responsible for the execution of a distinct element of the work of the Agreement and is carrying out its responsibilities by actually performing, managing, and supervising the work involved.
 5. See "Statement of Qualifications Submittal Instructions and General Contract Process Information" for detailed information and references to the required forms. Required forms will be made a part of the Agreement. Failure to meet the DBE goal or Good Faith Effort requirements and provide required DBE participation at due date and time of SOQ submittal may result in the SOQ submittal being rejected as non-responsive.
- H. Federal and/or State prevailing wage rates may apply. This requirement, if applicable, will be specified in the draft Agreement. See SOQ Submittal Instructions, Section I., H. regarding the California Department of Industrial Relations (DIR) Consultant/Contractor Registration Program on the [A&E Contract Information](#) website.
- I. Caltrans does not guarantee, either expressly or by implication, that any work or services will be required under any contract issued as a result of this RFQ.
- J. A Pre-award or Post-award Audit will be performed on any contract issued as a result of this RFQ.
- K. Contract boilerplate can be obtained on the [A&E Contract Information](#) website.

II. SCOPE OF WORK/DELIVERABLES

The work to be performed for this RFQ is described in the Scope of Work/Deliverables and is hereby incorporated as Attachment 1.

III. CONFLICT OF INTEREST

- A. Conflicts of interest may occur due to direct or indirect financial or business interests in the work to be performed or in any real property acquired for such project. Conflicts of interest can include, but are not limited to, past, existing or planned activities or because of relationships with other persons or firms. If there is a conflict of interest, the proposed team, including both the prime consultants and subconsultants, and individual employees of team members would actually or potentially be unable to render impartial assistance or advice to Caltrans. The proposer's objectivity or availability in performing the contract work may be impaired due to actual or potential conflicts of interest.

- B. If the proposed team determines that any actual or potential conflicts of interest exists, it must identify and describe in detail each conflict of interest to Caltrans, using the Disclosure of Potential Conflict of Interest Form, which can be found on the [A&E Contract Information](#) website. Along with the description of the actual or potential conflicts of interest, the proposed team shall also offer measures to avoid, neutralize, or mitigate all listed conflicts. The list of conflicts, including conflicts that apply to individuals as well as firms, and the mitigation measures on the Disclosure of Potential Conflict of Interest Form must be submitted as a separate section in the Statement of Qualifications. Disclosure of information will not disqualify a proposed team from competing for a contract. The existence of actual or potential conflicts of interest will be used as a criterion to evaluate team availability during the evaluation and selection process. Caltrans reserves the right to terminate negotiations with the first selected firm and begin negotiations with the next selected firm or to cancel the procurement prior to execution if Caltrans learns that the selected team failed to disclose any actual or potential conflicts, which it knew or should have known about, or if the proposed team provided or omitted information on the disclosure form that results in the information being false or misleading.

- C. After award, conflict of interest guidelines and policies shall continue to be monitored and enforced by the Caltrans Contract Manager. Additional information about Conflict of Interest issues can be found in the SOQ Submittal Instructions and General Contract Process Information document (Section V. Post Government Employment Restrictions and Section VI. Conflict of Interest Concerning Consultant(s)) found on the [A&E Contract Information](#) website. The State and Federal contract boilerplates on DPAC's website also contain information on conflict of interest issues (Exhibit D) and can be found on the [A&E Contract Information](#) website.
- D. The prime consultant and subconsultants may be proposed on SOQs for other Caltrans A&E on-call contracts; however, the Caltrans Contract Manager may prohibit work on specific project(s) where Caltrans determines that a conflict of interest exists.

IV. SUBMISSION OF STATEMENTS OF QUALIFICATIONS (SOQs)

- A. **IMPORTANT:** Download "Statement of Qualifications Submittal Instructions and General Contract Process Information" dated (Rev. 04/15/19) from the [Procuring A&E Contracts](#) website. Failure to follow these instructions may result in rejection of your SOQs.
- B. SOQ Package Submittal Instructions
Read instructions below carefully. You will be required to submit an electronic SOQ file to Sacramento.
1. The electronic submission of a single unprotected (i.e. not password protected) PDF file of the SOQ is required. The electronic submittal will be accepted until **3:00 p.m. on September 3, 2020**. Hard copies of the SOQs are **NOT** required. Fax copies or copies transmitted by email will not be allowed.

You will be required to create a Novell Filr account with Caltrans. Send an email message to the Contract Analyst, Araya Rabidoux, at araya.rabidoux@dot.ca.gov containing the information listed below for a link and instructions to complete the self-registration page and submit the SOQ electronically.

- Your firm's name
- Your email address
- The solicitation number for which you would like to submit an SOQ

The file name shall include the contract number, consultant name (max. 25 characters) separated by an underscore (_), ending with the ".pdf" extension.

Example A: 50A0694_JohnDoeConsulting.pdf
Example B: 50A0694_aaa1234engineer.pdf

2. SOQ submittals will be considered non-responsive if the electronic submittal is not received by the date and time specified in this RFQ.

C. Request for RFQ Copies

Copies of this RFQ may be obtained on the [Cal eProcure](#) website.

SCOPE OF WORK/DELIVERABLES
Environmental Generalist Services

for Caltrans District 4 North Counties Projects

On-Call Contract

A. Purpose of Work.

The Consultant shall perform consultation, research, professional and technical services required for Environmental Generalist Services, including, but not limited to, the preparation of various levels of Environmental Documents and Documentation (ED) and related environmental technical studies and deliverables necessary for achieving environmental compliance and project approval as required under the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and other applicable statutes, laws, regulations, and policies, on an “as-needed” basis to support the Department of Transportation (Caltrans) District 4, North counties projects. The Caltrans Contract Manager shall assign specific work to the Consultant to assist the Caltrans work force through the issuance of Task Orders describing in detail the services to be performed. The Consultant shall only perform work that is assigned in an authorized Task Order. The Contract does not guarantee that a Task Order shall be issued. The Consultant shall, if and as requested by Task Order, provide services to Caltrans including, but not limited to, the preparation of various levels of Environmental Documents and Documentation (ED) including Environmental Impact Reports (EIR), Environmental Impact Statements (EIS), Initial Study (IS)/Negative Declaration (ND)/Mitigated Negative Declaration (MND), Environmental Assessments (EA)/Finding of No Significant Impacts (FONSI), or Categorical Exemptions (CE) and Categorical Exclusions (CE) as required under the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), and other applicable statutes, laws, regulations, and policies; . Services may include stand alone technical environmental studies and assements pertaining to biological, cultural and 4(f) resources; paleontology; air quality; and community and socioeconomic impacts. All documents shall be in compliance with the Caltrans Standard Environmental Reference (SER) and Annotated Outlines. Services may also include providing support for environmental public hearings, community scopeing meetings and other professional public awareness/outreach activities as required for project approval under Federal and State environmental statutes, laws, regulations, and policies.

If and as requested by Task Order, the Consultant shall also provide services needed to obtain permits, licenses, agreements, and certifications (PLACs) from various federal, state, or local Resource Agencies or entities; conduct short and long-term environmental mitigation monitoring prior to, during, and after construction. .

1. Exclusion of Work.

The following disciplines are excluded from the Contract:

- a. Water Quality Studies.
- b. Visual Impact Analysis.
- c. Hazardous Waste.
- d. Existing Environmental Support - The Consultant shall not provide support for any elements completed by other consultants.
- e. For additional exclusions refer to "Location of Work".

The Consultant shall provide support when Caltrans lacks the expertise or available resources.

The Consultant for the Contract shall perform the services above after the contract authority for Contract 04A5473 is exhausted (expected no later than February 28, 2021). The Consultant shall plan accordingly to meet the timing of and the volume of work load needs.

B. Location of Work.

The work shall be performed on projects to improve the State transportation system throughout the counties of Marin, Solano, Napa, and Sonoma in California within the limits of District 4. The/other specific location within the above-described geographical limits of the work to be performed within this geographic area shall be identified in each Task Order.

1. Throughout the terms of the Contract, the Consultant and its Subconsultants shall disclose and briefly describe any financial, business or other relationship with Caltrans, governmental agencies (e.g. California Transportation Commission - CTC, Bay Area Toll Authority - BATA, Metropolitan Transportation Commission - MTC, and other) that relates to or concerns the Caltrans San Francisco Bay Area Toll Bridge contracts and projects which may have a potential conflict of interest with the contract, in the Statement of Qualifications.

2. This contract excludes biological mitigation and monitoring work on Toll Bridge retrofit projects that are already covered by separate project specific contracts.

C. Required Services.

1. Pursuant to an authorized Task Order, the Consultant shall provide Environmental Generalist Services within the geographical jurisdiction of the Contract set forth in "Location of Work" Section, and all necessary personnel, material, transportation, lodging, instrumentation, and the specialized facilities and equipment necessary to satisfy all appropriate agencies and required to ensure compliance with all applicable Federal, State, and Local statutes, laws, codes, regulations, policies, procedures, ordinances, standards, specifications, performance standards, and guidelines, applicable to the Consultant's services and work product.
2. Provided in Attachment A is a list of proposed Caltrans projects; District 4 North Counties. however, this list is not exclusive and it does not constitute a commitment that the projects will be initiated or completed or work assigned to the Consultant. Caltrans reserves the right to add or delete from this list of projects that are within the geographical jurisdiction of the Contract set forth in "Location of Work" Section within the District 4 North Counties jurisdiction.

Caltrans intends to utilize the Contract to complete a specific piece of work as long as it is located within the geographical jurisdiction of the Contract set forth in the "Location of Work" for each of the projects listed in the Contract utilizing the services described in this Scope of Work and as described in a Task Order. In the future, Caltrans may find it necessary to create a separate contract (or contracts) that involves a specific project listed in the Contract and includes part of the work contained in the Contract. Caltrans reserves the right to procure Architectural and Engineering (A&E) services involving the listed projects or unlisted projects (within the geographical jurisdiction of the Contract set forth in "Location of Work" Section) involving in whole or in part the same work using a project-specific agreement if the schedule to complete performance of the specific project extends beyond the term of the Contract or the cost to complete the specific project exceeds the dollar balance remaining in the Contract after accounting for amounts due to the Consultant for work previously performed and for work that is scheduled to be performed in executed task orders.

Should a project-specific agreement be procured under these provisions, the parties mutually agree that, in accordance with Exhibit D, Section III, Termination of the Contract, Caltrans shall terminate for convenience the portion of the Contract that includes the common scope of work identified in the project-specific agreement per Exhibit D, Section III, Termination of the Contract. Such partial termination for convenience shall be processed by amendment to the

Contract. Unless otherwise required by law, regulation, or Caltrans policy or procedure, the Consultant may compete for these project-specific Contracts.

3. In the Contract is a list of proposed personnel classifications for which services are anticipated to be needed by Caltrans during the term of the Contract; however, this is not an exclusive list of the personnel classifications of Environmental Generalist Services that may be requested. Caltrans reserves the right to add/or delete personnel classifications from this list. Consultant personnel will work under the general direction of a Caltrans Senior.

Environmental Planner

Associate Environmental Planner

4. Consultant agrees that:
 - a. The Consultant Contract Manager or designee shall manage, instruct and supervise all Consultant employees and subcontractors, and shall not allow any other party to manage, instruct and supervise such parties.
 - b. Consultant shall employ and discharge its own employees and subcontractors.
 - c. Unless approved in writing by the Caltrans Contract Manager, Consultant shall not hire employees or subcontractors to exclusively and only work on Caltrans matters. Consultant may hire employees and subcontractors for a specific Caltrans matter provided such party has the skills and knowledge to work on other matters and they are assigned to other matters from time to time.
 - d. The work performed by Consultant, its employees and its subcontractors shall be a regular part of Consultant's regular and established business.
 - e. Consultant shall make all of its own business (including personnel) decisions and bear the risk for its decisions.
 - f. Consultant shall provide its own tools, equipment and supplies, and Consultant shall not rely on Caltrans to provide such tools, equipment and supplies. Notwithstanding the foregoing, Caltrans may, during the term of the Agreement, allow Consultant to access selected items of equipment; provide non-employee userids and related access to Caltrans computer systems to Consultant employees and subcontractors; and provide non-employee access cards and other such forms of identification to Consultant employees and subcontractors.
 - g. Consultant shall provide its own training to its employees and subcontractors, and Consultant shall not rely upon Caltrans to provide such training.
5. A wide range of Environmental Generalist Services tasks should be expected. The Consultant shall perform and have the expertise, capability, and equipment

necessary to perform this Scope of Work, including, but not limited to, any or all of the following types of tasks/reports/studies/activities/functions which will all be related to Environmental Generalist Services:

- a. Studies of endangered, threatened, rare, proposed, and candidate species. These studies shall include, but not be limited to, surveying, identifying, monitoring, sampling, transplanting, trapping, restoring and mitigation of impacts.
- b. Wetland delineation.
- c. Construction monitoring.
- d. Mitigation implementation monitoring.
- e. Environmental Impact Reports.
- f. Environmental Impact Statements.
- g. Initial Study/Negative Declaration/Mitigated Negative Declaration.
- h. Environmental Assessments/Finding of No Significant Impacts.
- i. Categorical Exemptions/Categorical Exclusions.
- j. Notice of Determination.
- k. Record of Decision.
- l. Community Impact Analysis/Community Impact Assessments.
- m. Land Use and Growth Studies.
- n. Perform Environmental Re-evaluations.
- o. Prepare and File Notices of Completion.
- p. Economic Analysis.
- q. Floodplain studies.
- r. Sea Level Rise Analysis.
- s. Section 4(f)/6(f) Evaluations.
- t. Prepare and File Notice of Preparation (NOP) and Notice of Intent (NOI).
- u. Identify Responsible, Participating and Cooperating Agencies.
- v. Prepare Exhibits.
- w. Natural Environment Studies.
- x. Community Impact Assessment.
- y. Cumulative impact Analysis.
- z. Public Outreach Activities related to preparation and processing of CEQA/NEPA Environmental Documents and construction activities.
 - i. Create and implement a comprehensive Public Awareness Campaign (PAC).
 - ii. Inform target audiences of the project purpose and need, description, general schedule, project benefits, future improvements, and other aspects of the project.
 - iii. Help the public understand construction activities, right of way acquisition, road closures, dust, noise, and other construction related impacts.
 - iv. Identify potential problems for early resolution, facilitate communication and problem resolution, and establish face-to-face rapport with merchants, large employers, emergency services providers, and residents.

- v. Ensure the effective distribution and dissemination of information utilizing a variety of tools including various media.
 - vi. Integrate this PAC with other PACs and construction projects within the area.
- aa. Create and implement a comprehensive PAC.
 - bb. Revegetation Plans.
 - cc. Environmental Mitigation Monitoring.
 - dd. Long Term Mitigation Monitoring.
 - ee. Digital Electronic document transfers, database updates, and digital electronic filing consistent with the Caltrans Division of Environmental Analysis standard practices and policies. Web posting, data entry, and filing may be entailed.
 - ff. Incidental Land Surveying and Mapping to support NEPA/CEQA documentation.
 - gg. Air Quality Studies.
 - The Task Orders for Air Quality Studies may include, but are not limited to, project-level and Conformity Analysis, including CO, PM, and other HOT SPOT studies.
 - i. Health Risk Assessment.
 - ii. Baseline Emissions Development.
 - iii. Site Visits.
 - iv. Hot Spot Analysis, which may include, but not be limited to:
 - Carbon Monoxide (CO) analysis.
 - Particulate Matter smaller than 10 microns (PM-10 AND PM-2.5) Analysis.
 - Construction Emission Analysis.
 - hh. Biological Studies/Biological Technical Studies.
 - Biological study, assessment, survey, and monitoring of existing sensitive, candidate, threatened, and endangered species are major components of the Contract. These services are needed prior to, during, and after construction phase. The Consultant is expected to have a wide variety of experienced biologists to provide high quality services in the following areas:
 - i. Biological Assessment.
 - ii. Biological Surveys.
 - iii. Wetlands Assessments.
 - iv. Wetlands Study/Delineation.
 - v. Environmental Permit Applications.
 - vi. Resource Agency Permit related Coordination.
 - vii. Natural Environment Study (NES) Report.
 - viii. U.S. Army Corps of Engineers Permit (404/10).
 - ix. U.S. Forest Service PLACs.
 - x. Coastal Development Permit(s).
 - xi. Department of Fish and Wildlife 1600 Agreement(s)/2080.1/2081 Permit(s).
 - xii. Department of Fish and Wildlife California Endangered Species Act (CESA) 2081 Incidental Take Permits.

- xiii. U.S. Fish and Wildlife Service (Section 7) Endangered Species Act (ESA) Informal and Formal Consultation.
- xiv. National Marine Fisheries Service (Section 7).
- xv. Regional Water Quality Control Board (401) Permit.
- xvi. Biological Mitigation Measures.
- xvii. Construction Monitoring for identifying Best Management Practices (BMP) lapses:
Caltrans and the construction contractor are both responsible for the identification and implementation of water quality BMPs. However, the consultant construction monitor, during construction, is responsible for identifying any lapses in the BMPs so that they may be immediately remedied by the Resident Engineer.
- xviii. Wildlife corridor analysis:
Consultant biologists and ecologists shall have a documented minimum three (3) years demonstrated experience acceptable to Caltrans, and shall be trained and qualified to conduct the tasks listed in the Contract. Personnel shall possess or obtain the necessary collecting and/or handling permits, and/or have species specific experience, in order to provide services as required for all sensitive, candidate, threatened, and endangered species. Resumes must be submitted to Caltrans prior to execution of the Contract and shall include permit information and shall be provided to resource agencies for their review and approval.
- xix. Bat surveys and placement of bat exclusions both on and off structure.
- xx. Perform biological surveys for plant species and vegetation mapping.
- xxi. Perform biological surveys for animal species including, but not limited to, birds, mammals, fish, amphibians, reptiles, invertebrates, and general wildlife.
- xxii. Pre-construction surveys.
- xxiii. Work in relation to the exclusion of wildlife from Caltrans structures.
- xxiv. Construction monitoring for compliance with agency permits.
- xxv. Construction-related environmental monitoring, such as hydro-acoustic monitoring for avian and marine mammal protection, special-status plant and animal species and endangered species.
- xxvi. Perform California Department of Fish and Wildlife Service protocol surveys for listed birds, mammals, fish, amphibians, reptiles, invertebrates, and plant species.
- xxvii. Conduct Hydrogeomorphology studies.
- xxviii. Fish Passage Assessments.
- xxix. Assessment of anadromous fish populations and fish passage per DFG code Section 5901.
- xxx. Wetlands Habitat Restoration studies and plans.

- xxxi. Habitat Restoration studies and plans.
 - xxxii. Delineate Wetlands and other Federal and State jurisdictional waters.
 - xxxiii. Mitigation implementation monitoring.
 - xxxiv. Mitigation Plans.
 - xxxv. Provide recommendations for avoidance, minimization, and mitigation of project impacts.
 - xxxvi. Prepare Natural Environment Study Reports per Caltrans specifications.
 - xxxvii. Prepare Biological Assessments/Biological Evaluations (BA/BE) per Federal and State specifications.
- ii. Cultural Resource Studies (including architectural history studies).
- jj. Noise and Vibration Studies.
- The Consultant shall provide services to produce general noise and vibration studies for projects required by FHWA and the CEQA/NEPA process. The Consultant shall provide all necessary equipment and instrumentation to perform work as specified by Task Orders and based on the Caltrans Work Breakdown Structure (WBS) as follows:
- i. Perform noise studies on state routes for new construction projects and retrofit projects. Determine if project-related noise impacts are anticipated and provide a recommendation of either abatement or mitigation measures warranted.
 - ii. Perform vibration studies for new transportation projects or existing transportation facilities. Studies will include measurement or prediction of source levels, propagation and potential impacts. Pre and post damage assessment surveys and respective documentation will be required.
 - iii. Perform noise and vibration studies of aircraft and rail when requested by the Caltrans Contract Manager.
 - iv. Perform all activities related to noise impact analysis for use in the Environmental Document and prepare a technical report documenting study results.
 - v. The Consultant's reports shall comply with the content and format specified in the Annotated Noise Study Report Outline in the Forms and Templates of the Caltrans Standard Environmental Reference website (<http://www.dot.ca.gov/ser/forms.htm>).
 - vi. Provide presentation and assistance to Caltrans staff to improve the quality of noise and vibration studies for transportation projects.
 - vii. All work under this portion of the Contract shall be conducted according to the terms, Provisions, and requirements of the California Department of Transportation "Traffic Noise Analysis protocol", August 2006 (or the most recent version), the California Department of Transportation "Technical Noise Supplement", November 2009, (or the most recent version), which can be found in the Caltrans Standard Environmental Reference website

(<http://www.dot.ca.gov/hq/env/noise/index.htm>)

(http://env.dot.ca.gov/noise_vibration/transportation_noise/library.shtml#noiseadv), FHWA, and others.

- kk. Paleontology Studies.
- ll. Conducting field reviews.
- mm. Perform visual inventory of the project area, including tree surveys.
- nn. Perform viewshed analyses.
- oo. Perform scenic resource(s) determination and studies.
- pp. Assist in coordination with local agencies, citizen groups, and business groups related to community design and scenic issues.
- qq. Prepare conceptual mitigation plans and recommendations.
- rr. Prepare abstract for inclusion in environmental document text.
- ss. Prepare transmittal memo outlining study results, potential significance of impacts and significance criteria, and proposed mitigation measures.
- tt. Prepare photo-realistic visual simulation graphics and exhibits.
- uu. Perform 3D topographic modeling.
- vv. Prepare public exhibits, including, but not limited to, large-scale imagery and graphics, handouts, and videos. Large-scale imagery shall be created using “Genuine Fractals,” or similar software as approved by Caltrans.
- ww. Prepare required correspondence, meeting minutes, agendas, action items, invoices, and status reports.
- xx. Prepare and maintain project files.
- yy. Prepare and update project schedules.
- zz. All final documents must be delivered in print and digital electronic media formats. Print size and numbers as stated in task orders. Digital Electronic format of documents must be in Microsoft Word format with simulations in editable format.

Task Orders may be assigned for the above work.

- 6. The Consultant shall provide standardized reports including, but not limited to, Natural Environment Studies (NES), Biological Assessments (BA), Wetlands Assessment, and Mitigation Monitoring Plan Reports (MMP) detailing all findings.
- 7. The work shall be performed pursuant to the National Environmental Policy Act (NEPA), California Environmental Quality Act (CEQA), regional, local, and other applicable statutes, laws, codes, regulations, policies, procedures, ordinances, standards, specifications, performance standards, and guidelines.
- 8. The required information and documentation shall be prepared for project environmental clearance under the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), Section 106 of the National

Historic Preservation Act (NHPA), the January 1, 2014 First Amended Programmatic Agreement (PA) among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and Caltrans regarding compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA), the Memorandum of Understanding (MOU) between the Federal Highway Administration and Caltrans concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program, which became effective on July 1, 2007, (MAP-21 amended 23 US 327 to establish a revised and permanent Surface Transportation Project Delivery Program. As a result, Caltrans entered into a memorandum of understanding pursuant to 23 USC 327 [NEPA Assignment MOU] with FHWA. The NEPA Assignment MOU became effective October 1, 2012.) and other applicable statutes, laws, codes, regulations, and Federal and State policies, procedures, ordinances, standards, specifications, performance standards, and guidelines.

Activities required to conduct specialized studies in architectural history, California history, historical archaeology, ethnographic studies, and prehistoric archaeology shall include, but not be limited to, archaeological excavations and specialized data analyses (including, but not limited to, radiocarbon dating, obsidian hydration dating, identification and analysis of human remains, marine and terrestrial mammal bone, fish bone, and invertebrate remains, identification of macro and micro-botanical material, analysis of lithic artifacts, and geomorphologic analyses). Survey, recordation, and evaluation of standing architectural and engineering structures will sometimes be needed.

Studies related to the evaluation and mitigation of prehistoric archaeological resources shall be consistent with the guidance contained in the 2017 San Francisco Bay-Delta Regional Context and Research Design for Native American Archaeological Resources, Caltrans District 4.

9. The Consultant shall also provide large-scale graphic presentations for public exhibits and design support in the development of environmental documents and project approval on Caltrans transportation facilities under the Contract.

10. At the sole discretion of Caltrans, Consultant may be required to provide the required services on safety projects, emergency projects, Emergency Storm Damage Projects, excess parcel assessments, or other current/future transportation projects, including minor projects not listed above, except for those specially excluded above, within the geographical jurisdiction of the Contract set forth in "Location of Work" Section. However, the dollar value of the services not listed

in the Contract shall not exceed 10% of the total value of services that are listed and performed in the Contract.

11. The potential projects may vary in scope and size, and may encompass any type of improvement for the State transportation system including, but not limited to, roadway rehabilitation, widening and/or realignment of existing facilities, relocation of existing facilities, and construction of new facilities. The project location, project limits, purpose, expected results, project deliverables, period of performance, project schedule, and scope of work to be performed shall be described in each Task Order.
12. Consultant shall be available, on two (2) days' written notice:
 - a. To meet with Caltrans; to participate in internal Project Development Team (PDT) meetings or other Caltrans meetings.
 - b. To attend public meetings (day and evening) where an expert is required.
 - c. To participate in any public hearings necessary for a Project.
 - d. To provide technical expertise on an "as-needed" basis.
1. The Consultant may be expected to spend time for extended assignments to perform A&E services at Caltrans offices. At the sole discretion and convenience of Caltrans, Caltrans may permit Consultant to use office space, office equipment (such as copiers, printers and telephones) and furniture at various Caltrans field offices on a short-term, temporary basis. Consultant will provide its own computers, office supplies, and related work materials. The Consultant, including its Subconsultants, shall include the Field Office Indirect Cost Rate in its cost proposals and use the Field Office Indirect Cost Rate in billing Caltrans for those personnel utilizing Caltrans' (field) office facilities. The cost rates will reflect the Consultant's lower costs where Caltrans provides office space, office equipment and furniture. If the Consultant, including its Subconsultants, does not currently have a Field Office Indirect Cost Rate, it will develop and use a Field Office Indirect Cost Rate to reflect an equitable distribution of allowable costs to the contract (as specified in 48 CFR 31.203(f)). When working on-site in the Caltrans Facilities, the Consultant shall adjust its hours to meet the business needs of Caltrans and shall generally work and be present during Caltrans building business hours (which are 8:00 a.m. - 5:00 p.m.). The business hours can be adjusted in different Task Orders.
2. The Consultant's Environmental Generalist Services shall be in support of Federal and State environmental laws and regulations. Reports/Studies shall become part of the required documentation for project approval under Federal and State environmental laws and regulations. These formal environmental compliance

documents and formal clearance may include Environmental Impact Reports (EIR), Environmental Impact Statements (EIS), Initial Study (IS)/ Negative Declaration (ND)/ Mitigated Negative Declaration (MND), Environmental Assessments (EA)/ Finding of No Significant Impacts (FONSI), or Categorical Exemptions (CE)/ Categorical Exclusions (CE).

3. Responsibilities with regards to NEPA, in most cases, shall be that of Caltrans, since these responsibilities have been assigned to Caltrans by the Federal Highway Administration (FHWA). Caltrans shall be the lead State agency or Responsible Agency for environmental compliance for these projects under CEQA.
4. Personnel with expertise in Global Positioning System (GPS), Geographic Information System (GIS), GeoRef (<http://www.agiweb.org/index.html>), and Environmental Systems Research Institute (ESRI) GIS software will also be needed.
5. The Consultant shall possess, or be capable of obtaining and actually obtain prior to conducting work, any necessary permits, or approvals for harassing, trapping, handling, or determining the presence and densities for those species as may be required by the various resource/regulatory agencies.
6. A wide range of Biological Services tasks should be expected. The Consultant shall be prepared to perform specialized services itself or via a Subconsultant including, but not limited to, the following:
 - a. Threatened and Endangered Species (For example, Least Bell's Vireo, Desert Tortoise, Vernal pool fairy shrimp).
 - i. Studies.
 - ii. Surveys (include any protocol requirements and provide a link to the Service website that details those).
 - iii. Mitigation planning and implementation.
 - b. Studies on endangered, threatened, rare, proposed, and candidate species. These shall include U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service, and California Department of Fish and Wildlife (CDFW) protocol surveys for plants and animals.
 - c. Protocol or Specialized Surveys.
 - i. California Rapid Assessment Method (include specific requirements on training, experience, area of expertise, and other).
 - ii. Fish Passage Assessment Protocol Level Surveys (include link to DFG protocol information).
 - iii. Botanical surveys (include link to CDFW protocol information).
 - d. Specialized Reports and Studies.
 - i. Habitat Mitigation and Monitoring Plans (HMMP).

- ii. California Rapid Assessment Method (CRAM).
 - iii. Wildlife Corridor Studies.
 - iv. Post Construction Monitoring Reports.
 - e. General Surveys and Studies.
 - i. Wildlife Crossings and Corridor Studies.
 - ii. Bio-acoustic/hydro-acoustic studies for fish, birds, and other.
 - iii. Vegetation mapping.
 - iv. Invasive species mapping.
 - f. Mitigation/Restoration Planning and Monitoring (specify habitat types).
 - i. Mitigation Plan preparation.
 - ii. Monitoring of mitigation sites.
 - g. Permit Application Preparation (specify agencies).
 - h. Construction Monitoring.
 - i. Biological monitoring.
 - ii. Protocol level construction surveys and handling (be specific).
 - i. Wetlands identification and delineation shall be in accordance with procedures described in the 1987 Federal Manual for Identifying and Delineating Jurisdictional Wetlands and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Consultant shall have expertise in conducting assessment of wetland functions and values using published procedures such as the Habitat Evaluation Procedures (HEP) and/or the Wetland Evaluation Technique (Adamus et al, 1987). The level of evaluation, however, shall not be included in Consultant's initial field investigations. If a wetlands' evaluation is warranted, as determined through consultation with Caltrans, Consultant shall develop a study plan for Caltrans' review and approval; subsequently, a separate Task Order, may be executed to cover the wetlands evaluation. This procedure does not preclude inclusion of normal qualitative evaluations typically found in NEPA/CEQA documents.
- 7. Biological Technical Study Requirements.
 - a. Biological technical studies shall be undertaken to describe the project's environmental setting and local biotic resources, and summarize results of any in-depth biological studies. Biological Assessments/Biological Evaluations shall be undertaken to analyze the effects of the project on Federally and State listed as well as proposed listed species.
 - b. Caltrans "Standard Environmental Reference" shall guide the Consultant for biological resources, located at <http://www.dot.ca.gov/ser/vol3/vol3.htm>. Studies may include, but not be limited to:
 - i. Literature and records research.
 - ii. Field reconnaissance.
 - iii. Mapping habitat types.

- iv. General fish, wildlife and plant species list compilations.
 - v. Identifying migration corridors.
 - vi. Endangered species surveys.
 - vii. Wildlife surveys (including protocol requirements).
 - viii. Assessing project impacts on biological resources.
 - ix. Development of mitigation measures.
 - x. Mitigation site suitability analysis.
 - xi. Environmentally Sensitive Habitat Areas (ESHA) requirements in coastal zones.
8. Wetland Assessment Requirements.
- a. Wetland Assessments shall be undertaken to identify and delineate any wetlands that are present within the study area.
 - b. The United States Army Corps of Engineers (USACE) and United States Environmental Protection Agency (USEPA) jointly define wetlands as: “Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.” This definition shall be used in determining whether a particular habitat is a wetland for the purposes of Executive Order 11990, Section 404 of the Clean Water Act, NEPA and CEQA.
 - c. Wetlands identification and delineation shall follow procedures as specified by the USACE at the time the work is performed. Current USACE standards are described in the following:
 - i. Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1. U.S. Army Engineers Waterways Experiment Station, Vicksburg, Mississippi. Available at <http://www.lrh.usace.army.mil/Portals/38/docs/USACE%2087%20Wetland%20Delineation%20Manual.pdf>
 - ii. U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), Final Report. September. U.S. Army Research and Development Center, Vicksburg, Mississippi. Available at http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf
 - iii. U.S. Army Corps of Engineers. 2010. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (Version 2.0), Final Report.

May. U.S. Army Research and Development Center, Vicksburg, Mississippi. Available at
http://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/reg_supp/
http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/west_mt_finalsupp2.pdf

- d. The minimum standards for wetland delineations are established by each USACE district. The current standards for the San Francisco District are available at
<http://www.spn.usace.army.mil/regulatory/JD/Info%20Req.pdf>. The current standards for the Sacramento District are available at
<http://www.spl.usace.army.mil/Missions/Regulatory/Jurisdictional-Determination/>
 - e. For projects within the coastal zone, the wetland regulatory definition used shall be the State Coastal Commission “single parameter” wetland definition.
 - f. For delineation of "other waters of the United States", the standards specified by the USACE at the time the work is performed shall be followed. Current USACE standards for delineation of other waters of the U.S. are as follows:
 - i. U.S. Army Corps of Engineers. 2005. Regulatory Guidance Letter 05-05: Ordinary High Water Mark Identification. December 7. Available at.
http://www.spk.usace.army.mil/Portals/12/documents/regulatory/jd/minimum-standards/Minimum_Standards_for_Delineation_with_Template-final.pdf
http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/cwa_guide/app_h_rgl05-05.pdf
 - ii. Lichvar, Robert W., and Shawn M. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the United States: a Delineation Manual. August. U.S. Army Corps of Engineers, ERDC/CRREL TR-08-12. Available at
http://www.spk.usace.army.mil/Portals/12/documents/regulatory/pdf/Ordinary_High_Watermark_Manual_Aug_2008.pdf
9. Fish Passage Assessment Requirements.
- a. Fish Passage Assessments shall be undertaken to identify and characterize any impediments or barriers at Caltrans’ culvert or bridge structures to resident fish or anadromous fish movement within the study area. Fish passage assessments shall utilize the methodology and analyze results

according to species passage criteria defined in the California Department of Fish and Wildlife's document "California Salmonid Stream Habitat Restoration Manual" located at <http://www.dfg.ca.gov/nafwb/manual.html>, the California Department of Fish and Wildlife's document "Culvert Criteria for Fish Passage," (May 2002 or later), and the National Oceanic and Atmospheric Administration - Fisheries document "Guidelines for Salmonid Passage at Stream Crossings" (September 2001 or later).

10. When required, the Consultant shall utilize Native American Monitors/Advisors or Most-Likely Descendant as specified in the Task Order. Caltrans shall designate the appropriate Native American Monitors/Advisors or Most-Likely Descendants in the Task Orders. The Consultant shall comply with California Public Resources Code Section 5097.9 and Health and Safety Code Section 7050.
11. Paleontological surveys and studies shall include, but not be limited to, the following:
 - a. Pre-field research and record searches.
 - b. Work planning and survey team mobilization.
 - c. Field investigations, inventories.
 - d. Site mapping.
 - e. Photography.
 - f. Report preparation.
12. Under California law, paleontological resources are protected by the California Environmental Quality Act (CEQA), the California Administrative Code, Title 14, Section 4306 et seq., and Public Resources Code Section 5097.5.
13. The Consultant shall comply with all standard requirements outlined in "Standard Measures for Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources (Society of Vertebrate Paleontology, 10/7/90)."
14. The Consultant shall have a good working knowledge of computer graphic programs that shall produce high level graphic/photo-realistic simulations and the ability to produces professionally formatted reports and studies.
15. The Consultant shall perform professional and technical oversight review on behalf of Caltrans for locally-prepared visual analysis studies and reports, including high level graphic/photo-realistic simulations, and provide written comments to the Caltrans Contract Manager in coordination with the Caltrans

Task Order Manager in support of the planning, design and construction of elements for proposed Caltrans transportation facilities.

16. The Consultant and Subconsultant personnel shall not meet, discuss, nor confer with the public, Caltrans personnel, Agency personnel, State personnel, Federal personnel or any person other than the Caltrans Contract Manager or Caltrans designee, and approved Consultant personnel. Any communications with any person, excluding the Caltrans Contract Manager or Caltrans designee and approved Consultant personnel, require prior written approval from the Caltrans Contract Manager.

17. Paleontological Study Requirements.

Unless otherwise specified in the Task Order, the following requirements shall pertain to the Consultant's paleontological efforts:

- a. At the direction of the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, and detailed in executed task orders, Consultant shall undertake appropriate actions to address matters concerning identification, evaluation, and, as necessary, mitigation of paleontological resources. The Consultant shall provide reports detailing these efforts.
- b. All Consultant paleontological staff must meet the qualifications criteria as stated in Caltrans' Standard Environmental Reference, Volume I, Chapter 8, Paleontology (<http://www.dot.ca.gov/ser/vol1/sec3/physical/Ch08Paleo/chap08paleo.htm>).
- c. Caltrans shall approve the paleontological study area.
- d. Consultant shall conduct pre-field research, conduct a records and literature search at the appropriate facilities and shall make results available to Caltrans on request.
- e. As specified by the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, and detailed in executed task orders, Consultant will prepare the proper level of documentation that may include: a Paleontological Identification Report (PIR), a Paleontological Evaluation Report (PER), Paleontological Mitigation Plan (PMP), Paleontological Mitigation Report (PMR), and a Paleontological Stewardship Summary (PSS). All reports and studies shall be prepared within the regulations, policies, procedures, standards, and guidelines presented in Caltrans' Standard Environmental Reference, Volume I, Chapter 8, Paleontology (<http://www.dot.ca.gov/ser/vol1/sec3/physical/Ch08Paleo/chap08paleo.htm>).

- i. Draft reports/studies. Consultant shall submit three (3) copies of the draft report(s) within the time frame specified in the Task Order. The draft report(s) shall include all illustrations, maps and site records. Caltrans shall complete review of the draft within three (3) weeks after receipt.
 - ii. Final reports/studies. Consultant will submit the final report(s) within four (4) weeks after receipt of Caltrans' comments (or as specified in Task Order). In addition, Consultant will submit one (1) original copy of the report(s), including all original copy maps, illustrations and photographs (with negatives). This submittal shall include a computer disk(s) (Microsoft Word) as stipulated in the Task Order containing copies of all files.
- f. The Consultant shall perform a Paleontological Resource Assessment for proposed projects. The Paleontological Resource Assessment will describe existing paleontological resources within the study area. As defined here, paleontological resources (i.e. fossils) are remains and/or traces of prehistoric plant and animal life exclusive of humans. Paleontological resources include not only the actual fossil remains, but also the collecting localities and the geologic formations containing those remains.

18. Paleontological Monitoring of Construction Activities.

Unless otherwise specified in the Task Order, the following requirements shall pertain to Consultant's monitoring activities:

- a. At the direction of the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, and detailed in executed task orders, Consultant shall undertake monitoring of construction activities to identify the presence or absence of intact subsurface paleontological deposits within the construction area. If paleontological deposits are revealed during monitoring activities and it is determined, in consultation with Caltrans that data recovery efforts are required, Consultant may be responsible for conducting those efforts.
- b. The Consultant shall perform on-site construction monitoring. The Consultant will attend pre-construction meetings. The Consultant shall monitor construction in the vicinity of known significant fossil localities and in areas with geological formations with moderate to high probability of producing significant Paleontological resources. A Paleontologist will be present at all times to monitor during the original cutting of previously undisturbed sediments of the formations.
- c. Consultant's pre-field research should include:
 - i. A visit to each construction area to be monitored.

- ii. A review of the paleontological reports that identified the need for monitoring and a literature review of paleontological reports that characterize the content of.
- d. Consultant shall provide its own equipment for the purpose of completing all monitoring activities. Caltrans may provide additional services and/or facilities, to be decided before implementation of monitoring, as defined in the Task Order.
- e. If monitoring results are negative for paleontological deposits, Consultant shall submit three (3) draft copies of a Construction Monitoring Report (CMR) within three (3) weeks of completion of monitoring activities. The draft CMR shall include all required maps, stratigraphic profiles and photographs. Caltrans shall complete review of the draft CMR within two (2) weeks of receipt. Within four (4) weeks after receipt of Caltrans' comments, Consultant shall submit ten (10) copies of the final report, incorporating changes and additions as requested by Caltrans. In addition, Consultant will submit one (1) unbound, reproducible original report including all original maps, illustrations and photographs (including negatives).
- f. If intact paleontological deposits are revealed during monitoring activities, Consultant shall inform Caltrans' Resident Engineer of the necessity of halting work in the area of the deposits. Immediately thereafter, Consultant shall contact the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager to determine necessity for conducting data recovery efforts.
- g. If Caltrans determines that data recovery efforts are necessary, Caltrans may choose to issue a Task Order for the additional work, to prepare a separate contract for the data recovery work, or to perform the work in-house. If Caltrans issues a Task Order for the data recovery work, the Consultant shall prepare a proposal within five (5) working days of receipt of Caltrans' Task Order. Unless otherwise specified in the Task Order, Consultant's proposal shall outline the scope of work, schedule of investigation, purposes of the investigation, field and recordation techniques to be employed, analytical techniques to be employed, curation requirements, appropriate safety measures to be taken, and a research design of appropriate scale and depth to place the proposed investigation in context for the purposes of meeting the objectives of the investigation, as outlined in the Task Order.
- h. The Consultant shall perform fossil recovery. Through excavation, the Consultant shall recover both macro and micro fossils encountered during monitoring. Data recovery methods may include both manual and mechanical techniques. Plaster jackets and/or application of preservative materials will be used to stabilize and remove macrofossils. Microfossils will be recovered by taking bulk samples of the fossil-bearing matrix and screen washing the material. The Consultant, in consultation with the

- Department Environmental Branch Chief, will determine adequate sample size.
- i. The Consultant shall identify, catalog, and curate macrofossils. The Consultant will prepare recovered specimens to a point of identification and stabilize them for preservation. Specimens will be identified and catalogued. The Consultant will arrange for adequate storage of specimens recovered during monitoring and salvage operations. Adequate storage includes curation of individual specimens into the collections of a recognized, paleontologic specimen repository with a permanent Curator, such as a museum or a university.
 - j. The Consultant shall sort, identify, catalog, and curate microfossils. The Consultant will use appropriate methods to sort, by heavy liquid flotation and screening. The Consultant shall identify by use of microscope, comparative collections, manuals and relevant literature. The Consultant shall catalog and curate similar to the macrofossils.
 - k. The Consultant shall perform fossil dating. Where appropriate, the Consultant, shall date both the macro and micro specimens using uranium series dating, radiocarbon C-14 dating, thermoluminescence, amino acid racemization dating; bio-stratigraphic analysis, pedological analysis.
 - l. The Consultant shall prepare a mitigation report. The Consultant shall prepare a report presenting the findings of the data recovery program. The report will include a discussion of the field and laboratory methodology, site geology, site stratigraphy, faunal list, and the significant relationship of the site compared to similar fossil localities and its contribution to local and regional research issues. An itemized inventory list of curated specimens will be appended to the report.
19. The Consultant shall not negotiate or make decisions in Caltrans' name. Caltrans shall retain responsibility for initiating and managing all final consultation, both informal and formal, with other consultants; other contractors; Federal, State, and Local resource and regulatory agencies; and other involved agencies, regarding regulatory, project, project impacts, project mitigation proposals, project mitigation, project compensation, project proposals, and any issues. The Consultant shall be available (within two (2) working day(s) written notice) to provide advice and to participate in such consultations as required in each Task Order, as directed by the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, and at the request of Caltrans. Should specific permits or agreements be required, Caltrans may require the Consultant to prepare appropriate information.

20. When authorized by the Caltrans Contract Manager and required by a Task Order, the Consultant may establish direct contact for the purpose of obtaining information, expertise, and assistance in developing baseline data and resource inventories relative to the project OR assist with coordination to achieve compatibility with the concerns and requirements of Caltrans and other resource or regulatory agencies with, but not limited to: other consultants; other contractors; Federal, State, and Local resource and regulatory agencies; U.S. Army Corps of Engineers; U.S. Fish and Wildlife Service; National Marine Fisheries Service; U.S. Forest Service; U.S. National Park Service; U.S. Department Of The Interior Bureau of Land Management; Federal Highway Administration; California Department of Fish and Wildlife; California Fish and Game Commission; California Department of Parks and Recreation; California State Water Quality Control Boards; California State Water Resources Control Boards; California Regional Water Resources Control Boards; California Coastal Commission; Native American Heritage Commission; Regional Clearinghouse of the California Historical Resources Information System; Regional Water Quality Control Boards; other involved agencies; other agencies; institutions; researchers or groups; and others.
- a. Caltrans shall provide prior written approval for, and may participate in, any and all contacts, intra-agency scoping meetings, or other meetings with resource or regulatory agencies to discuss the project, project impacts, project mitigation proposals, project mitigation, project compensation, project proposals. The Consultant shall maintain a record of all such contacts and shall transmit copies of these records to Caltrans, at a minimum, with the regular monthly progress reports.
 - b. The Consultant shall not commit Caltrans to any mitigation measures or mitigation compensation.
 - c. The Consultant shall not negotiate or make decisions in Caltrans' name. Caltrans shall retain responsibility for initiating and managing all final consultation, both informal and formal, with other consultants; other contractors; Federal, State, and Local resource and regulatory agencies; and other involved agencies, regarding regulatory, project, project impacts, project mitigation proposals, project mitigation, project compensation, project proposals, and any issues. The Consultant shall be available (within two (2) working day(s) written notice) to provide advice and to participate in such consultations as required in each Task Order, as directed by the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, and at the request of Caltrans. Should specific permits or agreements be required, Caltrans may require the Consultant to prepare appropriate information.
21. The Caltrans Contract Manager shall decide the manner in which the coordination of individual matters is undertaken. At the Caltrans Contract Manager's option in coordination with the Caltrans Task Order Manager, such coordination may be

performed by the Consultant's direct contact personnel, by the Consultant acting on behalf of Caltrans, or by Caltrans only. When coordination efforts require agreements, such agreements shall be obtained by Caltrans.

22. The Consultant shall assist Caltrans in obtaining necessary approvals and permits. The Consultant shall identify all necessary approvals and permits, prepare signature-ready permit applications, and track the status of permit applications, as specified in each Task Order.
23. Consultant shall participate in an informal consultation process with Caltrans and responsible Federal and State agencies to develop recommendations for project modifications to eliminate or lessen project impacts on sensitive biotic resources, including species of concern. Similar consultation may also be required to develop measures to compensate for unavoidable Project impacts identified by these studies and to develop mitigation measures. Measures agreed to by Caltrans during informal consultation with responsible Federal and State agencies shall be included in relevant reports. If agreement cannot be reached, all recommendations for project modifications and/or mitigation/compensation measures developed through this informal consultation process, including general strategies for monitoring the success of proposed mitigation measures shall be presented in a separate transmittal document to accompany the appropriate report(s).
24. Unless otherwise specified in the Task Order, the Consultant shall be responsible for obtaining Native American monitors or participants in coordination with Caltrans.
25. At Caltrans' request, the Consultant shall conduct a field review for Caltrans' environmental personnel of any resources identified during the Consultant's field studies.

D. Workplan Standards Guide Codes.

Task Orders are based on the Caltrans Workplan Standards Guide (WSG). The latest WSG is found in the Guide to Project Delivery Workplan Standards Guide, which is available from the Caltrans' Publication Unit and on the Internet at <http://www.dot.ca.gov/hq/projmgmt/guidance.htm>. The WSG references the Work Breakdown Structure (WBS) categories, which are potential and related work activities applicable to the Contract. The WGS references WBS categories which present the potential and related work activities that the Consultant may be required to perform. All revisions to the current version of the Work Breakdown Structure (WBS) shall apply during the life of the Contract.

The WBS activities below applicable to the Contract are limited to those set forth below:

100	Perform Project Management (Contract Management)
100	Perform Project Management (See Note 1)
	<ul style="list-style-type: none"> • Prepare Invoices • Prepare, circulate, and file correspondence and memos as appropriate • Perform scheduling and coordination • Progress reports • Sub-contract management
100.10	Project Management PA&ED Component
100.10.05	PA&ED Component Initiation and Planning
100.10.10	PA&ED Component Execution and Control
100.10.15	PA&ED Component Close Out
100.15	Project Management PS&E Component
100.15.05	PS&E Component Initiation and Planning
100.15.10	PS&E Component Execution and Control
100.15.15	PS&E Component Close Out
100.20	Project Management - Construction Component
100.20.05	Construction Component - Initiation and Planning
100.20.10	Construction Component - Execution and Control
100.20.15	Construction Component Close Out
160	Perform Preliminary Engineering Studies and Draft Project Report
160.05.05	Approved PID Review
160.05.30	Project Scope Review
160.15.25	Draft Project Report Circulation Review and Approval
160.30	Environmental Study Request (ESR)
160.30.05	Maps for ESR
160.30.10	Surveys and Mapping for Environmental Studies
160.30.15	Property Access Rights for Environmental/Engineering Studies
160.40	NEPA Assignment
165	Perform Environmental Studies and Prepare Draft Environmental Document (DED)
165.05	Environmental Scoping of Alternatives Identified for Study in PID (Project Initiation Document)
165.05.05	Project Information Review
165.05.10	Public and Agency Scoping Process
165.05.15	Alternatives for Further Study
165.05.99	Other Environmental Scoping of Alternatives Identified for Studies in PID
165.10	General Environmental Studies
165.10.15	Community Impact Analysis, Land Use and Growth Studies

165.10.25	Noise Study
165.10.30	Air Quality Study
165.10.40	Energy Studies
165.10.45	Summary of Geotechnical Report
165.10.55	Draft Right of Way Relocation Impact Document
165.10.60	Location Hydraulic and Floodplain Study Report
165.10.65	Paleontology Study
165.10.70	Wild and Scenic Rivers Coordination
165.10.75	Environmental Commitments Record
165.10.99	Other Environmental Studies
165.15	Biological Studies
165.15.05	Biological Assessment
165.15.10	Wetlands Study
165.15.15	Resource Agency Permit Related Coordination
165.15.20	Natural Environment Study (NES) Report
165.15.99	Other Biological Studies
165.20	Cultural Resource Studies
165.20.05	Archaeological Survey
165.20.05.05	Area Of Potential Effects/Study Area Map
165.20.05.10	Native American Consultation
165.20.05.15	Records and Literature Search
165.20.05.20	Field Survey
165.20.05.25	Archaeological Survey Report (ASR)
165.20.05.99	Other Archaeological Survey Products
165.20.10	Extended Phase I Archaeological Studies
165.20.10.05	Native American Consultation
165.20.10.10	Extended Phase I Proposal
165.20.10.15	Extended Phase I Field Investigation
165.20.10.20	Extended Phase I Materials and Analysis
165.20.10.25	Extended Phase I Report
165.20.10.99	Other Phase I Archaeological Study Products
165.20.15	Phase II Archaeological Studies
165.20.15.05	Native American Consultation
165.20.15.10	Phase II Proposal
165.20.15.15	Phase II Field Investigation
165.20.15.20	Phase II Materials Analysis
165.20.15.25	Phase II Report
165.20.15.99	Other Phase II Archaeological Study Products
165.20.20	Historical and Architectural Resource Studies
165.20.20.05	Preliminary Area of Potential Effects/Study Area Maps for Architecture
165.20.20.10	Historic Resources Evaluation Report - Archaeology
165.20.20.15	Historic Resource Evaluation Report - Architecture (HRER)
165.20.20.20	Bridge Evaluation
165.20.20.99	Other Historical and Architectural Resource Study Products

165.20.25	Cultural Resources Compliance Consultation Documents
165.20.25.05	Final Area of Potential Effects/Study Area Maps
165.20.25.10	PRC 5024.5 Consultation
165.20.25.15	Historic Property Survey Report/Historic Resources Compliance Report (HPSR)/(HRCR)
165.20.25.20	Finding of Effect (FOE)
165.20.25.25	Archaeological Data Recovery Plan/Treatment Plan
165.20.25.30	Memorandum of Agreement (MOA)
165.20.25.99	Other Cultural Resources Compliance Consultation Products
165.25	Draft Environmental Document
165.25.05	Draft Environmental Document Analysis
165.25.10	Section 4(f)/6(f) Evaluation
165.25.15	Categorical Exemption/Categorical Exclusion (CE) Determination
165.25.20	Environmental Quality Control and Other Reviews
165.25.25	Approval to Circulate Resolution
165.25.30	Environmental Coordination
165.25.99	Other Draft Environmental Document Products
165.30	NEPA Assignment
170	Permits, Agreements, and Route Adoptions during PA&ED Component (Project Approval & Environmental Documentation)
170.05	Required Permits
170.10	Permits
170.10.05	U.S. Army Corps of Engineers Permit (404/10)
170.10.10	U.S. Forest Service PLACs
170.10.15	U.S. Coast Guard PLACs
170.10.20	Department of Fish and Wildlife 1600 Agreement(s)/2080.1/2081 Permit(s)
170.10.25	Coastal Development Permit
170.10.30	Local Agency Concurrence/PLACs
170.10.45	U.S. Fish and Wildlife Service/National Marine Fisheries Service Approval
170.10.60	Updated Environmental Commitments Record (ECR)
170.10.95	Other PLACs
170.25	Agreement for Material Sites
170.40	Route Adoptions
170.45	MOU from Tribal Employment Rights Office (TERO)
170.55	NEPA Assignment
175	Circulate Draft Environmental Document and Select Preferred Project Alternative
175.05	DED Circulation
175.05.05	Master Distribution and Invitation Lists
175.05.10	Notices Regarding Public Hearing and Availability of DED
175.05.15	DED Publication and Circulation
175.05.20	Federal Consistency Determination (Coastal Zone)
175.05.99	Other DED circulation products

175.10	Public Hearing
175.10.05	Need for Public Hearing Determination
175.10.10	Public Hearing Logistics
175.10.15	Displays for Public Hearing
175.10.20	Second Notices of Public Hearing and Availability of DED
175.10.25	Map Display and Public Hearing Plan
175.10.30	Display Public Hearing Maps
175.10.35	Public Hearing
175.10.40	Record of Public Hearing
175.10.99	Other Public Hearing Products
175.15	Public Comment Responses and Correspondence
175.20	Project Preferred Alternative
175.25	NEPA Assignment
180	Prepare and Approve Project Report and Final Environmental Document
180.05.10	Approve Project Report
180.10	Final Environmental Document
180.10.05	Approved Final Environmental Document (FED)
180.10.05.05	Draft Final Environmental Document Review
180.10.05.10	Revised Draft Final Environmental Document
180.10.05.15	Section 4(f)/6(f) Evaluation
180.10.05.20	Findings
180.10.05.25	Statement of Overriding Considerations
180.10.05.30	CEQA Certification
180.10.05.35	FHWA Approval
180.10.05.40	Section 106 Consultation and MOA
180.10.05.45	Section 7 Consultation
180.10.05.50	Final Section 4(f)/6(f) Statement
180.10.05.55	Floodplain Only Practicable Alternative Finding
180.10.05.60	Wetlands Only Practicable Alternative Finding
180.10.05.65	Section 404 Compliance
180.10.05.70	Mitigation Measures
180.10.10	Public Distribution of FED and Respond to Comments
180.10.15	Final Right of Way Relocation Impact Document (See Note 1)
180.10.99	Other FED Products
180.15	Completed Environmental Document
180.15.05	Record of Decision (NEPA)
180.15.10	Notice of Determination (CEQA)
180.15.20	Environmental Commitments Record
180.15.99	Other Completed Environmental Document Products
180.20	NEPA Assignment
185.05.05	Project Concept Review
185.15.20	Value Analysis

185.20.30	Soundwall Design Report (See Note 1)
185.30.20	Site Plans for Soundwalls on Retaining Systems or Structures (See Note 1)
195	Right of Way Property Management and Excess Lands
195.45	Excess Land
195.45.05	Excess Lands Inventory
200	Utility Relocation
200.15	Approved Utility Relocation Plan
205	Permits and Agreements during PS&E Component
205.05	Required Permits
205.10	Permits
205.10.05	U.S. Army Corps of Engineers Permit (404/10)
205.10.10	U.S. Forest Service PLACs
205.10.15	U.S. Coast Guard PLACs
205.10.20	Department of Fish and Game 1600 Agreement(s)/2080.1/2080 Permit(s)
205.10.25	Coastal Development Permit
205.10.30	Local Agency Concurrence/PLACs
205.10.45	U.S. Fish and Wildlife Service/National Marine Fisheries Service Approval
205.10.60	Updated ECR (Environmental Commitments Record)
205.10.95	Other PLACs
205.25	Agreement for Material Sites
205.45	MOU from Tribal Employment Rights Office (TERO)
205.55	NEPA Assignment
230	Prepare Draft PS&E (Plans, Specifications, and Estimates)
230.05.45	Noise Barrier Plans
230.60	Updated Project Information for PS&E Package
230.60.10	Other Reviews and Update of Project Information
230.90	NEPA Assignment
235.05	Environmental Mitigation
235.05.05	Historical Structures Mitigation
235.05.10	Archaeological and Cultural Mitigation
235.05.15	Biological Mitigation
235.05.25	Paleontology Mitigation
235.05.99	Other Environmental Mitigation Products
255	Circulate, Review, and Prepare Final District PS&E Package
255.05	Circulated & Reviewed Draft District PS&E Package
255.10.25	Updated Technical Reports
255.15	Environmental Re-evaluation
255.20	Final District PS&E Package
255.40	Resident Engineer's Pending File
255.45	NEPA Assignment
260	Contract Bid Documents Ready to List
260.75	Environmental Certification at RTL

270	Construction Engineering and Contract Administration (See Note 1)
270.22	Contract Administration
270.66	Technical Support
280.70	Updated Environmental Commitments Record
285	Change Order Administration
285.05	Change Order (CO) Process
285.10	Functional Support
290	Resolve Contract Claims (See Note 1)
290.40	Potential Claim Record
290.50	Alternative Dispute Resolution
290.60	Claim Resolution
290.70	Arbitration
295	Accept Contract/Prepare Final Construction Estimate and Final Report (See Note 1)
295.35	Certificate of Environmental Compliance (CEC)
295.40	Long Term Environmental Mitigation/Mitigation Monitoring After Construction Contract Acceptance

Note:

1. Consultant shall perform only environmental-related services for these tasks.

The Consultant shall not work on any projects that are in the planning phase (K-Phase) and the Consultant shall not be reimbursed for any work performed during this phase of a project.

E. General Personnel Requirements.

1. The Consultant's personnel shall be capable, competent, and experienced in performing the types of work in the Contract with minimal instruction. Personnel skill level should match the specific job classifications, as set forth herein or in the Consultant's Cost Proposal, Attachment 2 and task complexity. The Consultant's personnel shall be knowledgeable about, and comply with, all applicable Federal, State, and Local laws and regulations.
2. The Consultant is required to submit a written request and obtain the Caltrans Contract Manager's prior written approval for any substitutions, additions, alterations, or modifications to the Consultant's originally proposed personnel and project organization, as depicted on the proposed Consultant's Organization Chart or the Consultant's cost proposals. The Consultant personnel shall have the same job classification, as set forth herein or in the Consultant's Cost Proposal, Attachment 2, not exceed the billing rate, and meet or exceed the qualifications and experience level of the previously assigned personnel, at no additional cost to

Caltrans. The Consultant personnel shall have significant experience in the work involving a similar transportation facility for at a minimum two (2) previous projects, unless otherwise approved by the Caltrans Contract Manager.

3. In responding to Caltrans' Task Order and in consultation with the Caltrans Contract Manager, the Consultant Contract Manager shall identify the specific individuals proposed for the task and their job assignments. The Consultant shall provide documentation that proposed personnel meet the appropriate minimum qualifications as required by the Contract.
4. The Consultant's personnel shall typically be assigned to and remain on specific Caltrans projects/deliverables until completion and acceptance of the project/deliverables by Caltrans. Personnel assigned by the Consultant shall be available at the start of a Task Order and after acceptance of the project/deliverable by Caltrans.
5. After the Caltrans Contract Manager's approval of the Consultant's personnel proposal and finalization of a Task Order, the Consultant may not add, delete or substitute personnel without the Caltrans Contract Manager's prior written approval.
6. Resumes containing the qualifications and experience of the Consultant's and Subconsultant's personnel, which include existing and additional personnel, and copies of their minimum required certifications, shall be submitted to the Caltrans Contract Manager for review before assignment on a project or Task Order. The resume and copies of current certification for each candidate shall be submitted to the Caltrans Contract Manager within one (1) week of receiving the request.
7. The Caltrans Contract Manager may interview the Consultant's personnel for the qualifications and experience. The Caltrans Contract Manager's decision to select the Consultant's personnel shall be binding to the Consultant and its Subconsultants. The Consultant shall provide adequate qualified personnel to be interviewed by the Caltrans Contract Manager within one (1) week of receiving the request.
8. The Caltrans Contract Manager shall evaluate the adequacy (quality and quantity) of the work performed by the Consultant's personnel, and determining whether the deliverables satisfy the acceptance tests and criteria. The Caltrans Contract Manager may reject any Consultant personnel who are determined by the Caltrans Contract Manager to lack the minimum qualifications. If at any time the level of performance is below expectations, the Caltrans Contract Manager may direct the Consultant to immediately remove Consultant personnel from the project specified in a Task Order and request that the Consultant provide another qualified person be assigned as needed. The Consultant personnel shall meet the qualifications required by the Contract for performance of the work as

demonstrated by a resume and copies of current certifications submitted by the Consultant. Consultant personnel shall receive prior written approval from the Caltrans Contract Manager. Invoices with charges for personnel not pre-approved by the Caltrans Contract Manager for work on the Contract and for each Task Order shall not be reimbursed.

9. The Consultant shall not remove or replace any existing personnel assigned to Task Orders without the prior written consent of the Caltrans Contract Manager. The removal or replacement of personnel without the written approval from the Caltrans Contract Manager shall be violation of the Contract and may result in termination of the Contract per Exhibit D, Section III, Termination of the Contract.
10. When assigned consultant personnel is on approved leave and required by the Caltrans Contract Manager, the Consultant Contract Manager shall provide a temporary substitute employee until the assigned employee returns to work from the approved leave. The Consultant personnel shall have the same job classification, as set forth herein or in the Consultant's Cost Proposal, Attachment 2, not exceed the billing rate and meet or exceed the qualifications and experience level of the previously assigned personnel, at no additional cost to Caltrans. Consultant personnel shall receive prior written approval from the Caltrans Contract Manager to work on the Contract.
11. Other project personnel who are not identified on the Consultant's cost proposal, including, but not limited to, field and laboratory technicians, shall also satisfy appropriate minimum qualifications for assigned Task Orders. Caltrans' prior written approval is required for all personnel not identified on the Consultant's organization chart or the Consultant's cost proposals before providing services under the Contract.
12. The Consultant is responsible to provide fully trained personnel to efficiently perform the work. The Consultant's personnel may be asked to attend certain special training if recommended by the Caltrans Contract Manager. On such occasions, with the approval of the Caltrans Contract Manager, Caltrans shall compensate the Consultant for the Consultant's actual cost for time spent in training only. All other costs, fees, and expenses associated with the training, including any transportation costs and training fees, shall be the Consultant's responsibility. In addition, services to train the Caltrans personnel shall not be provided by the Consultant under the Contract.
13. In location(s) where the Consultant personnel is expected to work for extended period(s) of time, the Consultant shall either relocate the personnel or make every effort to hire local persons.

F. Environmental Generalist Personnel Requirements.

1. The Consultant and all subconsultants, shall throughout the life of the Contract, retain within its firm, a staff of people who shall be properly licensed and certified in accordance with the laws of the State of California and qualified to perform all aspects of the required work described in the Contract and all work specified in a Task Order along with any emergencies that may arise during the life of this pursuant to Federal and State laws and regulations, and local plans and ordinances, governing environmental impacts of projects, including but not limited to, the National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA), the Federal Endangered Species Act, California Endangered Species Act Section 106 of the National Historic Preservation Act, the Clean Water Act, Porter-Cologne Water Quality Act, Clean Air Act, California Fish and Game Code, Coastal Zone Protection Act, and California Coastal Act.

The Consultant shall be prepared to provide additional personnel, as necessary, during the period performance of the Contract to accommodate the work.

2. Consultant Contract Manager.

The Consultant Contract Manager shall coordinate work-related matters and Consultant's operations under the Contract with the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, Functional Manager, District/Region Area Construction (Claims) Engineer, Laboratory Supervisor, Headquarters' Structural Construction Engineer, Resident Engineer, District Landscape Architect, District Surveys Engineer, District Right-of-Way Engineer, District Water Quality Program Manager, District Deputy Director for Program/Project Management, District's Traffic Operations Units, Project Coordinator, Deputy District Director for Environmental Planning and Engineering, District Surveys Office Chief, and/or District's Public Information Officer.

The Consultant Contract Manager shall have a minimum of five (5) years of responsible experience performing the duties as a contract manager for similar Environmental Generalist Services contracts. The Consultant Contract Manager shall be knowledgeable about all Caltrans policies and procedures. The Consultant Contract Manager shall be an employee of the Consultant.

The Consultant Contract Manager shall have "substantial knowledge and experience" in performing the Environmental Generalist Services work. "Substantial knowledge" is defined as having a Degree (Bachelors, Masters, or higher) in a related field. "Substantial experience" is defined as having a documented minimum five (5) years of demonstrated experience acceptable to

Caltrans in performing the Environmental Generalist Services work and NEPA and CEQA Assessment/Analysis.

In addition to other specified responsibilities, the Consultant Contract Manager shall be responsible for all matters related to the Consultant's personnel, Subconsultants, Environmental Generalist Services work, and Consultant's and Sub-Consultants' operations including, but not limited to, the following:

- a. Ensuring that deliverables are clearly defined, acceptance tested and that criteria are specific, measurable, attainable, realistic and time-bound; and that the deliverables satisfy the acceptance tests and criteria.
- b. Supervising, reviewing, monitoring, training, and directing the Consultant's and Sub-Consultants' personnel.
- c. Assigning qualified personnel to complete the required Task Order work as specified on an "as-needed" basis in coordination with the Caltrans Contract Manager.
- d. Administering personnel actions for Consultant personnel and ensuring appropriate actions taken for Subconsultant personnel.
- e. Maintaining and submitting organized project files for record tracking and auditing.
- f. Developing, organizing, facilitating, and attending scheduled coordination meetings, and preparation and distribution of meeting minutes.
- g. Implementing and maintaining quality control procedures to manage conflicts, insure product accuracy, and identify critical reviews and milestones.
- h. Assuring that all applicable safety measures are in place.
- i. Providing invoices in a timely manner and providing monthly Contract expenditures.
- j. Reviewing invoices for accuracy and completion before billing to Caltrans.
- k. Managing Subconsultants.
- l. Managing overall budget for Contract and provide report to the Caltrans Contract Manager.
- m. Monitoring and maintaining required DBE or DVBE involvement.
- n. Ensuring compliance with the provisions in the Contract and all specific Task Order requirements.
- o. Assuring Consultant and Subconsultant personnel are thoroughly trained in Caltrans' policy concerning discrimination and sexual harassment, specifically regarding identification, prevention, reporting and investigation of inappropriate conduct.
- p. Assuring Consultant and Subconsultant personnel have the professional experience, training, competence and a professional attitude to efficiently perform all required work specified in the Task Order. If the Consultant or Subconsultant personnel do not display the professional experience, training, competence and a professional attitude, the Caltrans Contract Manager may inform the Consultant, in writing, that such personnel shall

be immediately replaced with personnel conforming to these requirements and the requirements as specified in the Task Order.

3. Consultant Task Order Manager.

For each Task Order, the Consultant shall provide a Consultant Task Order Manager to coordinate the Consultant Task Order operations with the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager.

The Consultant Task Order Manager shall be accessible to the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, Functional Manager, District/Region Area Construction (Claims) Engineer, Laboratory Supervisor, Headquarters' Structural Construction Engineer, Resident Engineer, District Landscape Architect, District Surveys Engineer, District Right-of-Way Engineer, District Water Quality Program Manager, District Deputy Director for Program/Project Management, District's Traffic Operations Units, Project Coordinator, Deputy District Director for Environmental Planning and Engineering, District Surveys Office Chief, and/or District's Public Information Officer at all times during normal Caltrans working hours that Task Order work is underway.

The Consultant Task Order Manager (who may be other than the Consultant Contract Manager) shall be assigned to conduct, or direct the conduct of, all work assigned under a single Task Order. The Consultant Task Order Manager shall be the primary contact for the assigned Task Order and be available as needed for communication with Caltrans.

The Consultant Task Order Manager shall have "substantial knowledge and experience" in performing the Environmental Generalist Services work and as outlined in the Caltrans Quality Control and Assurance for Biological Technical Documents

(http://www.dot.ca.gov/ser/vol1/sec3/natural/Ch14Bio/files/QC_guidance.pdf).

"Substantial knowledge" is defined as having a Degree (Bachelors, Masters, or higher) in biology or a related field. "Substantial experience" is defined as having a documented minimum five (5) years of demonstrated experience acceptable to Caltrans in performing the Environmental Generalist Services work. Any advanced degree in biology or a related field may be substituted for three (3) years experience.

4. Consultant Task Order Lead person.

The Consultant Task Order Lead person (who may be other than the Consultant Contract Manager) shall be assigned to conduct, or direct the conduct of, all work assigned under a single Task Order. The Consultant Task Order Lead person

shall be the primary contact for the assigned Task Order and be available as needed for communication with Caltrans.

5. Consultant Personnel and Team Member Qualifications.

The Consultant team member's professional qualification shall be specified in each Task Order; however, the professional qualifications depending on the task performed shall at a minimum, include, but not be limited to the Caltrans Quality Control and Assurance for Biological Technical Documents

(http://www.dot.ca.gov/ser/vol1/sec3/natural/Ch14Bio/files/QC_guidance.pdf)

and the following:

- a. The Consultant personnel or the Subconsultant performing Environmental Generalist Services shall have a documented minimum five (5) years of demonstrated experience acceptable to Caltrans and appropriate credentials approved by the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, Functional Manager, District/Region Area Construction (Claims) Engineer, Laboratory Supervisor, Headquarters' Structural Construction Engineer, Resident Engineer, District Landscape Architect, District Surveys Office Chief, and/or District's Public Information Officer for conducting the tasks and studies as referenced in the Scope of Work.
- b. Personnel performing Environmental Generalist Services for public outreach/awareness activities shall possess the following qualifications:
 - i. A documented minimum three (3) years of demonstrated experience acceptable to Caltrans, in providing public relations services.
 - ii. A documented minimum three (3) years of demonstrated experience acceptable to Caltrans at a minimum, in developing and preparing news releases, brochures, newsletters, fact sheets, and fliers.
- c. The Consultant personnel or the Subconsultant performing Environmental Generalist Services shall have all knowledge, skills, experience, permits and approvals required by Permits, Licenses, Agreements or Certifications that apply to the specific project(s) that is (are) relevant to each Task Order, prior to beginning Task Order field work.
- d. Registered Professional Civil Engineer licensed in the State of California in good standing with the California State Board for Professional Engineers, Land Surveyors, and Geologists at all times during the Contract period.
- e. Registered Geologist licensed in the State of California in good standing with the California State Board for Professional Engineers, Land Surveyors, and Geologists at all times during the Contract period.

- f. Bachelor Degree in Natural Sciences field and shall have a documented minimum three (3) years of demonstrated experience acceptable to Caltrans in: (1) biological impact analysis of transportation projects including impacts to species of concern and their habitats, wetlands, or waters of the United State (U.S.); or (2) biological mitigation development and monitoring.
- g. Consultant biologists and ecologists shall have a documented minimum three (3) years demonstrated experience acceptable to Caltrans, and shall be trained and qualified to conduct the tasks listed in the Contract. Personnel shall possess or obtain the necessary collecting and/or handling permits, and/or have species specific experience, in order to provide services as required for all sensitive, threatened, and endangered species. Resumes must be submitted to Caltrans prior to execution of the Contract and shall include permit information and shall be provided to resource agencies for their review and approval.
- h. Cultural resource qualifications equivalent to or exceeding all Principal Levels of Caltrans Professional Qualifications Standards as outlined in Attachment 1 of the Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it pertains to the Administration of the Federal-Aid Highway Program in California.
- i. Personnel performing field construction monitoring activities as specified in this Scope of Work and wildlife corridor analysis shall possess the following qualifications:
 - i. A documented minimum three (3) years of demonstrated experience acceptable to Caltrans, managing field services in conjunction with project construction activities and schedule.
 - ii. A documented minimum three (3) years of demonstrated experience acceptable to Caltrans, working with protected resources that are impacted. Or perform duties under direct supervision of experienced personnel.
- j. Registered of Professional Archaeologists (RPA) with specific California experience.
- k. The Consultant's personnel who conduct Air Quality Studies shall be knowledgeable and capable of performing Air Quality Studies, including

use of common analysis models and methods such as the EMFAC 2007 and CALINE4 models (or most recent models approved), Caltrans' and FHWA's CO Protocol and PM10 and PM 2.5, Qualitative Analysis and Quantitative Guidance, and the Local CEQA analysis guidelines.

- l. Expertise in acoustic and vibration modeling field investigations to transportation noise is required. Some staff development work and research may be required with the Contract. A documented minimum five (5) years of demonstrated experience acceptable to Caltrans analyzing complex transportation noise and vibration is required.
 - m. The Consultant shall provide a professional Geologist licensed in the State of California in good standing with the California State Board for Professional Engineers, Land Surveyors, and Geologists at all times during the Contract period for Paleontology work conducted under the contract. The licensed Geologist must also be a qualified paleontologist with a paleontological resource Excavation Permit for the collection of vertebrate fossils issued by the Bureau of Land Management. If a licensed professional Geologist is not available as stated above, the Consultant must provide, in addition to a professional licensed Geologist, a qualified Paleontologist with a paleontological resource excavation permit for the collection of vertebrate fossils issued by the Bureau of Land Management. The professional Paleontologist shall work under the direction of the professional Geologist licensed in the State of California in good standing with the California State Board for Professional Engineers, Land Surveyors, and Geologists at all times during the Contract period.
6. In the Contract, a person who is authorized to review and approve Consultant Environmental Generalist analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, other documents, other items, and deliverables in place of the Consultant Contract Manager shall be hereafter referred to as the Consultant Environmental Generalist Responsible Person. The Consultant General Environmental Responsible Person, shall be a (or engineer, certified technician, the Consultant Contract Manager registered in the State of California) signing analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, other documents, other items, and deliverables under the Contract requiring the signature of a Consultant Environmental Generalist Responsible Person (or engineer, certified technician, the Consultant Contract Manager registered in the State of California) shall be currently employed by the Consultant or its Subconsultants at the time the

deliverables are submitted to Caltrans for consideration under the review and acceptance process.

7. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, other documents, other items, and deliverables under the Contract not fully approved by Caltrans bearing the signature of the Consultant Environmental Generalist Responsible Person (or engineer, certified technician, the Consultant Contract Manager registered in the State of California) who is no longer employed by the Consultant or its Subconsultants, shall be replaced by analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, other documents, other items, and deliverables under the Contract bearing the signature of a qualified replacement Consultant Environmental Generalist Responsible Person (or engineer, certified technician, the Consultant Contract Manager registered in the State of California) who is currently employed by the Consultant or its Subconsultants. In such an event, no additional time shall be allowed or cost reimbursed to the Consultant without the prior written approval of the Caltrans Contract Manager.
8. All of the Consultant's work shall be conducted under the direction of the Consultant Contract Manager who shall have the appropriate experience as described in the Contract. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, other documents, other items, and deliverables under the Contract requiring the Consultant Environmental Generalist Responsible Person (or engineer, certified technician, the Consultant Contract Manager registered in the State of California)'s signature, shall be produced by the responsible Consultant personnel having appropriate experience, and shall be signed by a Consultant Environmental Generalist Responsible Person (or engineer, certified technician, the Consultant Contract Manager registered in the State of California).
9. The Consultant shall provide documents that proposed personnel meet the appropriate minimum qualifications as defined in the Caltrans Environmental Handbook (<http://www.dot.ca.gov/ser/envhand.htm>), Volume I; Volume I, Chapter 8, Volume II, Chapter 2 and Attachment 1 of the *First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act as it Pertains to the Administration of the Federal-Aid Highway Program in California (PA)*; and the United States Secretary of the Interior's Professional Qualification Standards (36 CFR Part 61). The qualifications define minimum education and

experience required to perform identification, evaluation, registration, and treatment activities for purposes of historic preservation for Federal Undertakings (http://www.nps.gov/history/local-law/arch_stnds_9.htm Caltrans' prior written approval is required for all historians and archaeological personnel not identified on the Consultant's organization chart. Other registered or certified personnel include, but not be limited to, California Registered Geologist and Certified Industrial Hygienists.)

10. Any lead acoustical analyst or staff member responsible for the assessment of traffic noise impacts, traffic noise abatement, or review and approval of final noise reports shall at a minimum have a BS or BA degree in a related field and five (5) years of demonstrated experience in acoustical analysis. In lieu of five (5) years of experience, equivalent qualifications as determined by the Caltrans Environmental Analysis Division or successful completion of all of the following will be allowed:
 - a. Institute of Noise Control Engineering (INCE) Fundamentals examination.
 - b. FHWA course, The Fundamentals and Abatement of Highway Traffic Noise.
 - c. National Highway Institute (NHI) Course 142051 Highway Traffic Noise.
11. It is expected that a majority of the work (>75%) shall be completed with Caltrans staff at a Caltrans facility and the Consultant will assist Caltrans to perform the remaining work.

At the request of the Caltrans Contract Manager, Consultant personnel working will complete security and privacy awareness training each year (see <http://itsecurity.dot.ca.gov/training>).

12. When any of the following positions are needed, the approximate range for the number of positions are as follows:
 - a. 1-5, Environmental Planner
 - b. 1-5, Associate Environmental Planner.

G. Consultant Availability and Work Hours.

1. The typical workday includes all hours worked by the Caltrans' construction contractor on the project as identified in the Task Order and also as directed by the Caltrans Contract Manager. Unless otherwise specified in the Task Order or directed by the Caltrans Contract Manager, the normal workday shall be Monday through Friday, from 8 a.m. to 5 p.m. or any combination of five (5) consecutive days which may include Saturday and/or Sunday, and the normal workweek shall consist of forty (40) hours. If Saturday and/or Sunday is part of a regular work week as determined by Caltrans, then the Saturday and/or Sunday work shall be treated as work performed on a regular workday and no overtime shall be paid for the first eight (8) hours on Saturday or Sunday. Consultant Contract Manager

shall be responsible for providing Consultant personnel who can satisfy the requirements set forth in the Agreement.

If Caltrans determines that the Consultant's services and work product need to be received outside of normal business hours (including instances where receipt is required to avoid danger to life or property), the Consultant may be directed to provide its services and work product during specific hours during the week (including hours that are outside of normal business hours). Night work may be required on projects involving high traffic areas. The Caltrans' construction contractor's operations may be restricted to specific hours during the week, which shall become the normal workday for Consultant's personnel. Changes in hours or schedules shall be documented by amendment of Task Orders. Any shift differential rate pay shall be reimbursed in accordance with the applicable Department of Industrial Relations (DIR) determination.

On days when work is not performed by the construction contractor, such as rainy or unsuitable weather days, Consultant's services shall not be provided unless authorized by the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, Functional Manager, District/Region Area Construction (Claims) Engineer, Laboratory Supervisor, Headquarters' Structural Construction Engineer, Resident Engineer, District Landscape Architect, District Surveys Engineer, District Right-of-Way Engineer, District Water Quality Program Manager, District Deputy Director for Program/Project Management, District's Traffic Operations Units, Project Coordinator, Deputy District Director for Environmental Analysis, District Surveys Office Chief, and/or District's Public Information Officer.

The Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, Functional Manager, District/Region Area Construction (Claims) Engineer, Laboratory Supervisor, Headquarters' Structural Construction Engineer, Resident Engineer, District Landscape Architect, District Surveys Engineer, District Right-of-Way Engineer, District Water Quality Program Manager, District Deputy Director for Program/Project Management, District's Traffic Operations Units, Project Coordinator, Deputy District Director for Environmental Analysis, District Surveys Office Chief, and/or District's Public Information Officer shall provide advance notice of one (1) working day(s)/twenty-four(24) hour/eight (8) hours if the Consultant's services are not required as a result of a cessation of construction activities or if reassignment of personnel is required. If Caltrans fails to provide the required advance notice and the Consultant personnel are not required as a result of cessation of construction activities, Caltrans shall provide a maximum of four (4) hours compensation.

It is anticipated that variations in the Caltrans' construction contract activities will occur. During the contract period, the Caltrans Functional Manager and/or Contract Manager may ask the Consultant Contract Manager to reassign

Consultant employees from a project or an office with low activity to assist on another project or office with high activity. The Consultant Contract Manager will be notified at least two (2) working days prior to this reassignment.

2. The Consultant's typical work day(s) shall include, but not be limited to, working in conjunction, coordination, and cooperation with all of the following:
 - a. Caltrans Contract Manager.
 - b. Caltrans Task Manager.
 - c. Caltrans Functional Manager.
 - d. Caltrans Project Manager.
 - e. Caltrans Field Construction Manager/Senior, or designated individuals.
3. The Consultant shall obtain approval from the Resident Engineer prior to entering any Caltrans' project construction site.
4. The Consultant shall obtain approval from the Caltrans Facility Manager prior to conducting activities within a maintenance station or other Caltrans facility.

H. General Requirements.

1. The Consultant shall prepare the required analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract according to requirements of the Contract and applicable Caltrans Manuals for the work.
2. As directed and as a first order of work, the Consultant shall prepare and update a comprehensive Critical Path Method (CPM) network diagram, Bar Chart Schedule, Logic Network Schedule, and the Caltrans Work Breakdown Structure (WBS) for each Task Order issued by the Caltrans Contract Manager showing a deliverables schedule as well as other relevant data to monitor project progress, Consultant's work control, and Caltrans review of work status, if required in the Task Order. The relevant data shall include a list of activities with budgeted cost, milestones, and target date for completion of each activity. The minimum number of task details shall be identified in the Task Order. This workplan shall be updated once a month to show the approved baseline schedule and the actual progress schedule.

Caltrans shall review these documents and return them to the Consultant with notes and comments as soon as possible in order to validate the planning and cost control procedures within the first calendar month of performance period.

3. The Consultant's timesheet/invoices/expenses shall be subject to the review of the Consultant Contract Manager and the subsequent review and the approval of the

Caltrans Contract Manager before submitting timesheets, invoices, or expense reimbursement requests for payment.

4. The Consultant shall begin the required work within two (2) working days after receiving a fully executed Task Order and the issuance of the Notice to Proceed (NTP) from the Caltrans Contract Manager to the Consultant Contract Manager or on the date specified in the Task Order. Some work, however, may require Consultant personnel to mobilize within 24-hour of notifications. Once the work begins, the work shall be prosecuted/performed diligently until all required work has been completed to the satisfaction of the Caltrans Contract Manager or Caltrans designee.
5. The work shall not be performed when conditions prevent a safe and efficient operation, and shall only be performed with written authorization by Caltrans.
6. The Consultant Contract Manager, Consultant Task Order Manager, and Key Personnel shall be accessible to the Caltrans Contract Manager at all times during normal Caltrans working hours or after hours as required by the Caltrans Contract Manager.
7. The Consultant Contract Manager or designee may advise the Caltrans Contract Manager of the perceived need to have the Consultant's employees to work overtime to meet Task Order schedules, and the Consultant's Contract Manager shall take effective measures to address the Caltrans Contract Manager's need. All overtime shall be pre-approved by the Caltrans Contract Manager or designee. Overtime pay shall be paid only to persons covered by the Fair Labor Standards Act.
8. All Consultant personnel are required to sign a confidentiality and nondisclosure agreement.
9. The Consultant may not disclose any information to third parties without prior written approval of the Caltrans Contract Manager.
10. The Consultant shall only provide incidental non-Architectural and Engineering (A&E) services, such as Computer Aid Drafting & Design (CADD) support, GIS support, utilities location support, traffic control, office support, field office support, and meeting support, provided (a) such services are necessary for the completion of the A&E tasks and/or deliverables performed by the Consultant described in executed Task Orders and covered by the work in the Contract and (b) the rendering of the services is approved in advance by the Caltrans Contract Manager. These incidental services shall only be provided to support the Consultant's personnel who are performing A&E services, tasks, and deliverables on the Contract. The Contract amount spent on such incidental services shall be relatively minor when compared to the professional A&E services performed.

The Consultant shall not be paid or reimbursed for any incidental non-A&E services provided to Caltrans unless provided in the fashion described in the Contract and included in the executed Task Order. The Consultant is responsible for ensuring that Task Orders only include any incidental non-A&E services.

11. Incidental training services may be provided only if the training involves the specific work product of the Agreement. Such incidental training services are permitted, but only if:
 - a. The training involves the specific work product created under the Agreement (and does not involve general A&E training and is not the work product of a previous agreement); and
 - b. The total aggregate cost of all training under the Agreement does not exceed 10% of the total authority of the Agreement; and
 - c. The training is an incidental task within the Agreement and not the purpose for entering into the Agreement.
12. The Consultant shall include the Caltrans Contract Manager in written communications to other Caltrans personnel for any clarification on the scope of work.

I. Coordination.

1. For each Task Order, the Consultant shall carry out instructions received from the Caltrans Contract Manager, and as directed by the Caltrans Contract Manager, shall coordinate activities and work closely with multiple stakeholders including, but not limited to, Caltrans' various functional units, Caltrans' project managers, local agencies, various environmental groups, other state agencies, Native American tribal governments, utility companies, railroads, other agencies, other entities with an interest in the project (including, but not limited to, FHWA), other consultants, other contractors, and planning, engineering, and construction firms (and its suppliers and subcontractors) contracted by Caltrans working on the same projects or adjacent projects. In the event an instruction or direction is unclear to the Consultant, the Consultant shall ask the Caltrans Contract Manager to clarify the instruction or direction. The work is a critical element of compatible designs, project planning and construction schedules and shall be accomplished in a timely fashion. Projects having complex and overlapping schedules and therefore Project work may have overlapping and parallel (not serial order) schedules or make work discontinues. Projects have complex and overlapping schedules and field work may be intermittent. Task Orders may be written for treatment of unanticipated finds encountered during project work. When unanticipated finds

are encountered, a rapid response shall be necessary to avoid costly construction delays.

2. The foregoing paragraph does not relieve the Consultant of professional responsibility during the performance of the Contract. In instances where the Consultant believes a better standard solution to a task being performed or an issue being addressed is possible, the Consultant shall promptly notify the Caltrans Contract Manager of these concerns, together with the reasons therefore. However, Caltrans shall make all final decisions on the interpretation of the instructions, directions, work product and outputs that are described in the Task Order.
3. The Consultant shall be required to work with other Caltrans Functional Units and others (including, but not limited to, Regional Water Quality Control Board - RWQCB, Permitting Agencies,) as directed by the Caltrans Contract Manager.
4. The Consultant shall work closely with the Caltrans Contract Manager and the Caltrans designee identified in the Task Order.
5. The Consultant shall have the capability to send to and receive from Caltrans' digital electronic mail system and file transfer protocol system including, but not limited to, attachments for word processing, photographs, spreadsheets, and databases.
6. Caltrans shall not reimburse the Consultant for costs to relocate its personnel to the service area of the Contract. Caltrans shall not reimburse the Consultant for per diem costs, unless preapproved by the Caltrans Contract Manager. Caltrans shall not reimburse the Consultant for out-of-state travel without prior written approval from the Caltrans Contract Manager.
7. The Consultant shall obtain the Caltrans Contract Manager's approval prior to making presentations at non-Caltrans sponsored conferences or workshops for any services provided under the Contract.
8. The Consultant shall notify the Caltrans Contract Manager or Caltrans designee in writing a minimum one (1) week before it begins any field work, unless the Task Order specifies some other notification date.
9. Caltrans shall not incur costs beyond the funding commitments in the Contract and each Task Order. If the Consultant anticipates that funding for work will be insufficient to complete work, the Consultant shall promptly notify the Caltrans Contract Manager.

J. General Equipment Requirements.

1. The Consultant or its Subconsultants shall not incorporate any materials or equipment of a single or sole source origin without the advance written approval of Caltrans.
2. The Consultant may claim reimbursement for providing equipment or supplies. However, such claimed costs shall be in compliance with 48 Code of Federal Regulation (CFR), Chapter 1, Part 31 (Federal Acquisition Regulation - FAR cost principles) and 2 CFR, Part 200, and be consistent with the Consultant's company-wide allocation policies and charging practices with all clients including federal government, state governments, local agencies, and private clients.

K. Environmental Generalist Equipment Requirements.

1. Office Equipment and Supplies (Consultant's Office):

The Consultant shall have and provide adequate office equipment and supplies to complete the work required by the Contract. Such equipment and supplies shall include, but not be limited to, the following:

- a. Office Supplies.
- b. Computers with appropriate software, printers, plotters, fax machines, calculators, data collectors and their necessary attachments and accessories.
- c. Data processing systems, software packages, reference materials, or other tools, including hardware and software, used in providing transportation engineering deliverables. This includes, but not be limited to, the following:
 - i. Microsoft Office Software (including, but not limited to, Word, Excel, PowerPoint).
 - ii. Adobe Acrobat Professional version 5 or later.
- d. The Consultant shall provide a computer system for each person working under a Task Order that meets the Caltrans current specifications. Qualified Caltrans IT personnel shall install required software. Caltrans reserves the right to provide the computer equipment and access to computer system on a short-term, temporary basis if such items are beneficial to Caltrans' interest.
- e. Reference material, or other tools, used in providing deliverables.
- f. Caltrans shall not purchase any hardware, software, or other equipment (including, but not limited to, batteries, paper, and office supplies) that may be required for the Consultant to perform work required in the Contract. The Caltrans Contract Manager shall approve any Consultant's

request for digital electronic connections and compatibility with current Caltrans Windows-based networks and programs in writing prior to the use and/or installation of any electronic hardware and/or software.

g. In-house printing, reproduction, and delivery services.

2. Field Equipment and Supplies:

Consultant shall have and provide adequate field tools, instruments, equipment, materials, supplies, and safety equipment to complete the required field work and that meet or exceed Caltrans Specifications per the Caltrans Manuals. The tools, instruments, equipment, materials, supplies, and safety equipment required for each Consultant field personnel shall include, but not be limited to, the following, if required by the Task Order:

- a. Sufficient vehicles suitable for the work to be performed and terrain conditions of the project sites. Vehicles shall be fully equipped with all necessary tools, instruments, equipment, materials, supplies, and safety equipment required for the efficient operation of the Consultants' field personnel, including cellphones. Each Vehicle shall have sufficient ground clearance to safely maneuver through highway construction sites while fully loaded with equipment and materials.
- b. A laptop computer or tablet with appropriate software. An aircard may be required by Caltrans by written notice.
- c. Communication device: Mobile telephone, cell phone shall be compatible with the current Caltrans cellular phone system.
- d. Hand tools including but not limited to; shovels, gloves, pick, measuring tape, buckets, wheel barrow, heat gun, sledge hammer, concrete and asphalt thermometers, clip board, calculator, peg book, as appropriate for the requested field personnel work.
- e. All necessary safety equipment including fire extinguisher, hard-soled safety footwear, white hard hats, eye protection, hearing protection, and approved safety vests as appropriate for the requested field work to be performed safely and efficiently within operating highway and construction zone environments.
- f. Necessary miscellaneous tools, non-consumables, and supplies including, but not limited to, hammers, and shovels.
- g. All GPS equipment.
- h. Traffic cones, at a minimum 25, for traffic control as necessary. Such cones shall be 28 inches, minimum, in height.

3. The Consultant shall provide all necessary tools, instruments, equipment, materials, supplies, and safety equipment required to perform the work identified in each Task Order and the Contract accurately, efficiently, and safely. The Consultant's personnel shall be fully trained in the use of such necessary tools,

instruments, equipment, materials, supplies, and safety equipment. The Consultant shall not be reimbursed separately for tools of the trade, which may include, but not be limited to, the above-mentioned equipment.

L. Standards.

1. All work/services under the Contract shall be performed in accordance with all applicable Federal, State, and Local statutes, laws, codes, regulations, policies, procedures, ordinances, standards, specifications, performance standards, and guidelines, including the latest Caltrans regulations, policies, procedures, manuals, standards, specifications, performance standards, directives, guidelines, handbooks, guidance documents, forms, templates, policy memo, methodologies, and other informational or directive publications, including compliance with Federal Highway Administration (FHWA) and State guidelines for implementing those requirements; and any permits, licenses, agreements or certifications that apply to specific Task Orders; the terms and conditions of the Contract; and current Caltrans Manuals and any future revisions. Work not covered by the “Manuals” shall be performed as specified in the Task Order. If no standards exist, Task Orders may call for the development of new standards, so long as these standards do not conflict with the requirements, or amend the Scope of Work under of the Contract.
 - a. The Consultant is responsible for obtaining, at its expense, all necessary manuals, reference documents, and other materials.
 - b. Caltrans Manuals generally may be purchased from the Publication Distribution Unit. The Publications staff may be reached at (916) 263-0822, and the center is located at the following address:

State of California
California Department of Transportation
Publication Distribution Unit
1900 Royal Oaks Drive
Sacramento, CA 95815-3800
 - c. Manuals and documents that are not available from the Caltrans Publication Distribution Center or are not available from Caltrans’ Internet web site may be requested from the Caltrans Contract Manager. Caltrans does not guarantee the availability of publications nor its Internet web pages. Required Manuals include:
 - i. <http://www.dot.ca.gov/dpac/publications.html>
 - ii. <http://www.dot.ca.gov/manuals.html>
 - d. Caltrans’ regulations, policies, procedures, manuals, standards, specifications, performance standards, directives, guidelines, handbooks, guidance documents, forms, templates, policy memo, methodologies, and other informational or directive publications, are dynamic documents and subject to change. The Consultant is responsible to verify that the latest version or update is used.

2. Manuals, Documents, and Websites.

The following manuals, documents and links to internet sites are referenced in association with the work in the Contract. The list is not all-inclusive, but is intended to illustrate the types of reference material and sources of information.

- a. Caltrans' Internet Home Webpage:
<http://www.dot.ca.gov/>
- b. Caltrans' Code of Safe Practices:
<http://www.dot.ca.gov/hq/construc/safety/>
- c. California Business and Professions Code:
http://www.leginfo.ca.gov/.html/bpc_table_of_contents.html
- d. California Code of Regulations:
<http://www.oal.ca.gov/ccr.htm>
- e. California Health and Safety Code:
<http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=hsc>
- f. California Public Contract Code:
http://www.leginfo.ca.gov/.html/pcc_table_of_contents.html
- g. California Public Resources Code:
http://www.leginfo.ca.gov/.html/prc_table_of_contents.html
- h. Caltrans Highway Design Manual:
<http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm>
<http://www.dot.ca.gov/hq/oppd/hdm/hdmtoc.htm#hdm>
- i. Manual of Uniform Traffic Control Devices (MUTCD):
California Manual on Uniform Traffic Control Devices:
<http://mutcd.fhwa.dot.gov/>
<http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp>
http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca_mutcd.htm
<http://www.dot.ca.gov/hq/traffops/engineering/mutcd/index.htm>
- j. Caltrans Traffic Manual and Manual on Uniform Traffic Control Devices (MUTCD) 2003 California Supplement:
<http://www.dot.ca.gov/hq/traffops/signtech/signdel/trafficmanual.htm>

<http://www.dot.ca.gov/hq/traffops/signtech/signdel/trafficmanual-current.htm>

<http://www.dot.ca.gov/hq/traffops/engineering/control-devices/trafficmanual-current.htm>

<http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp>

http://www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca_mutcd.htm

- k. Caltrans Traffic Impact Studies (TIS) Guidelines:
<http://www.dot.ca.gov/hq/traffops/developserv/operationalsystems/reports/tisguide.pdf>
<http://www.dot.ca.gov/dist1/d1transplan/tisguide-Dec02.pdf>
- l. Caltrans Surveys Manual:
http://www.dot.ca.gov/hq/row/landsurveys/SurveysManual/Manual_TOC.html
- m. Caltrans Construction Manual:
<http://www.dot.ca.gov/hq/construc/constmanual/>
<http://www.dot.ca.gov/hq/construc/manual2001/>
- n. Construction Manual:
Chapter 5 Section 1 Project Records and Reports
<http://www.dot.ca.gov/hq/construc/constmanual/chapter5/sec5-1.pdf>
- o. Caltrans Project Development Procedures Manual (PDPM):
<http://www.dot.ca.gov/hq/oppd/pdpm/pdpmn.htm>
<http://www.dot.ca.gov/hq/oppd/pdpm/pdpm.htm>
- p. Project Development Procedures Manual: Chapter 7 - Uniform File System:
http://www.dot.ca.gov/hq/oppd/pdpm/chap_pdf/chapt07.pdf
- q. Project Development Procedures Manual: Chapter 15 - Final Project Development Procedures:
http://www.dot.ca.gov/hq/oppd/pdpm/chap_pdf/chapt15.pdf
- r. Caltrans CADD Users Manual:

<http://www.dot.ca.gov/hq/oppd/cadd/usta/caddman/english/toc.htm>

<http://www.dot.ca.gov/hq/oppd/cadd/usta/caddman/default.htm>

http://www.dot.ca.gov/hq/esc/oe/project_plans/index.htm

- s. CADD Users Manual Chapter 4.3 As-Built Plans (March 30, 2011)
<http://www.dot.ca.gov/hq/oppd/cadd/usta/caddman/english/4-3.pdf>
- t. Caltrans Construction Manual: Traffic Safety Guidelines:
http://www.dot.ca.gov/hq/construc/manual2001/chapter2/chp2_2.pdf
- u. Caltrans Surveys Manual - Chapter 12: Construction Staking Handbook
Construction Staking Handbook:
Construction Staking: Chapter 12 of Caltrans Surveys Manual:
http://www.dot.ca.gov/hq/row/landsurveys/SurveysManual/12_Surveys.pdf
- v. Caltrans Standard Plans and Standard Specifications:
Caltrans Specification and Estimate Procedures:
<http://www.dot.ca.gov/hq/esc/oe/>
<http://www.dot.ca.gov/hq/esc/oe/standards.php>
<http://www.dot.ca.gov/hq/esc/oe/conststand.html>
http://www.dot.ca.gov/hq/esc/oe/construction_standards.html
http://www.dot.ca.gov/hq/esc/oe/project_plans/
http://www.dot.ca.gov/hq/esc/oe/project_plans/highway_plans/stdplans_US-customary-units_10/viewable_pdf/2010-Std-Plns-for-Web.pdf
http://www.dot.ca.gov/hq/esc/oe/construction_contract_standards/std_specs/2010_StdSpecs/2010_StdSpecs.pdf
http://www.dot.ca.gov/hq/esc/oe/project_plans/HTM/06_plans_disclaim_US.htm
http://www.dot.ca.gov/hq/esc/oe/project_plans/highway_plans/stdplans_US-customary-units_10/viewable_pdf/2010-Std-Plns-for-Web.pdf
- w. Standard Plans 2002 Dual Units:
http://www.dot.ca.gov/hq/esc/oe/project_plans/HTM/stdplns-dual-new02.htm (broken link)
http://www.dot.ca.gov/hq/esc/oe/project_plans/HTM/stdplns-dual-new02.htm

- x. Caltrans Standard Special Provisions:
<http://www.dot.ca.gov/hq/esc/oe/conststand.html>
http://www.dot.ca.gov/hq/esc/oe/construction_standards.html

- y. Caltrans Guide for the Submittal of Plans, Specifications, and Estimates:
Caltrans Plans Preparation Manual:

<http://www.dot.ca.gov/hq/oppd/cadd/usta/caddman/english/4-1.pdf>
<http://www.dot.ca.gov/hq/oppd/cadd/usta/caddman/default.htm>
<http://www.dot.ca.gov/hq/oppd/cadd/usta/ppman/default.htm>
<http://www.dot.ca.gov/hq/oppd/cadd/usta/ppman/toc.htm>
<http://www.dot.ca.gov/hq/esc/oe/standards.php>
http://www.dot.ca.gov/hq/esc/oe/construction_standards.html

- z. Project Plan Preparation Manual of Instructions:
<http://www.dot.ca.gov/hq/oppd/cadd/usta/ppman/2-1.pdf>

- aa. Caltrans Policy and Guidelines: Cost Estimate:
<http://www.dot.ca.gov/hq/oppd/costest/costest.htm>

- bb. Caltrans Right of Way Manual:
<http://www.dot.ca.gov/hq/row/rowman/manual/index.htm>
<http://www.dot.ca.gov/hq/row>

- cc. Caltrans Project Management Handbook:
<http://www.dot.ca.gov/hq/projmgmt/guidance.htm>
http://www.dot.ca.gov/hq/projmgmt/documents/pmhb_5thed.pdf

- dd. Caltrans Project Management Directives:
http://pd.dot.ca.gov/pm/ProjectOffice/ProcessGuidance_Directives/Guidance_DirectivesHome.asp

- ee. Caltrans Project Risk Management Handbook:
http://www.dot.ca.gov/hq/projmgmt/guidance_prmhb.htm

- ff. Quantitative Risk Analysis section (page 14) of Caltrans Project Risk Management Handbook:

http://www.dot.ca.gov/hq/projmgmt/documents/prmhb/archive/caltrans_project_risk_management_handbook_20070502.pdf

- gg. Project Management Institute (PMI) "A Guide to the Project Management Body of Knowledge":
www.pmi.org

- hh. Caltrans Standard Environmental Reference Webpage:
Caltrans Standard Environmental Reference (SER), Caltrans Environmental Handbook, Volume I, Volume II, Volume III, and Volume IV:
<http://www.dot.ca.gov/ser/>
<http://www.dot.ca.gov/ser/envhand.htm>

- ii. Caltrans Standard Environmental Reference, Biological Resources:
<http://www.dot.ca.gov/ser/vol3/vol3.htm>

- jj. Caltrans PEAR Handbook:
<http://www.dot.ca.gov/ser/pear.htm>

- kk. Caltrans Quality Control and Assurance for Biological Technical Documents:
http://www.dot.ca.gov/ser/vol1/sec3/natural/Ch14Bio/files/QC_guidance.pdf

- ll. Secretary of the Interior's Professional Qualification Standards:
http://www.nps.gov/history/local-law/arch_stnds_9.htm

- mm. Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register, Vol. 48, No. 190, September 1983):
https://www.nps.gov/history/local-law/arch_stnds_8_2.htm

- nn. Caltrans Technical Publications and Manuals:
<http://www.dot.ca.gov/hq/esc/techpubs/>

- oo. Caltrans Ready-to-list and Construction Contract Award Guide:
http://www.dot.ca.gov/hq/esc/oe/specifications/rtl_guide (broken link)
http://www.dot.ca.gov/hq/esc/oe/rtl_guide.html

- pp. Caltrans Design Information Bulletins:
<http://www.dot.ca.gov/hq/oppd/dib/dibprg.htm>

- qq. Construction Policy Bulletins (CPBs):
<http://www.dot.ca.gov/hq/construc/manual2001/CPBindex.HTM>

- rr. Caltrans Design Memorandum:
<http://www.dot.ca.gov/hq/oppd/design/index.htm>

- ss. Caltrans Cooperative Agreements Manual:
http://www.dot.ca.gov/hq/oppd/pdpm/chap_pdf/chapt16.pdf

- tt. Caltrans Environmental Handbook:
<http://www.dot.ca.gov/ser/envhand.htm>

- uu. Caltrans Preliminary Environmental Analysis Report (PEAR) Handbook:
Caltrans PEAR Handbook:
<http://www.dot.ca.gov/ser/pear.htm>

- vv. Caltrans Environmental Policy Memos:
Environmental Policy Memos:
<http://www.dot.ca.gov/ser/memos.htm>

- ww. California Test Methods:
<http://www.dot.ca.gov/hq/esc/ctms/index.html>

- xx. Bridge Construction Records and Procedures Manual, Volume I (8/31/07)
:
<http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCCompleteManuals/BCRPVol1.pdf>

- http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCCompleteManuals/BCRPVol1_Terms.pdf
- yy. Bridge Construction Records and Procedures Manual, Volume II (8/31/07):
<http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCCompleteManuals/BCRPVol2.pdf>
http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCCompleteManuals/BCRPVol2_Terms.pdf
- zz. Caltrans Value Analysis Program:
<http://www.dot.ca.gov/hq/oppd/value>
- aaa. METS Website:
<http://www.dot.ca.gov/hq/esc/Translab/>
- bbb. AASHTO Pavement Design Guidance:
<https://bookstore.transportation.org>
- ccc. Superpave Mix Design Standards:
<http://www.asphaltinstitute.org>
- ddd. Federal Highway Administration Title 23, Code of Federal Regulations, 637B:
<http://www.fhwa.dot.gov/legregs/directives/fapg/cfr0637b.htm>
- eee. Independent Assurance Manual:
http://www.dot.ca.gov/hq/esc/Translab/ormt/IA_reports/2005_IA_Manual.pdf
- fff. Office of Structural Materials Practices and Procedures Manual:
<http://www.dot.ca.gov/hq/esc/Translab/OSM/documents/smdocuments/OSMPP.pdf>
- ggg. Caltrans Falsework Manual:
http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCCompleteManuals/FW_Terms.pdf
- hhh. Caltrans Trenching and Shoring Manual:
http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCCompleteManuals/TS_Terms.pdf
- iii. Caltrans Foundation Manual:
http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCCompleteManuals/Foundation_Terms.pdf

- jjj. Caltrans Prestress Manual:
http://www.dot.ca.gov/hq/esc/construction/manuals/OSCCompleteManuals/PS_Terms.pdf
- kkk. Other applicable Offices of Structure Construction manuals:
<http://www.dot.ca.gov/hq/esc/construction/manuals/>
- lll. Manual of Traffic Controls for Construction and Maintenance Work Zones:
<http://www.dot.ca.gov/trafficops/camutcd/traffic-manual.html>
http://www.dot.ca.gov/trafficops/camutcd/docs/CAMUTCD2014-Part6_rev1.pdf
<http://www.dot.ca.gov/hq/traffops/engineering/mutcd/pdf/camutcd2014/Part6.pdf>
<http://www.dot.ca.gov/hq/traffops/engineering/control-devices/pdf/TMChapter5.pdf>
- mmm. Median Barrier Guidelines.
(Not available on the internet)
- nnn. AASHTO Policy on Geometric Design of Highways and Structures.
(Not a Caltrans Publication)
- ooo. Standard Test Methods.
(Not a Caltrans Publication)
- ppp. Division of Construction Oversight Engineer Field Guidelines.
Chapter 4 Project Completion.
<http://www.dot.ca.gov/hq/construc/oversightengineerfieldguidelines2005.pdf>
- qqq. Caltrans Encroachment Permits Manual.
Chapter 206.2A As-Built Plans and Other Completion Records.
http://www.dot.ca.gov/hq/traffops/developserv/permits/encroachment_permits_manual/index.html

- rrr. Local Assistance Procedures Manual.
Chapter 17.4 AS BUILT PLANS.
<http://www.dot.ca.gov/hq/LocalPrograms/lam/lapm.htm>
- sss. Office of Special Funded Projects Information and Procedures Guide.
Chapter 1-9 Project Records.
<http://www.dot.ca.gov/hq/esc/osfp/osfp-manual/osfp-manual.htm>
- ttt. Federal Highway Administration (FHWA) Guidance for Consultants:
Procedures for the Protection of Historic Properties - Section 106 Process,
and Guide for Consultants: Procedures for Completing the Natural
Environment Study and Related Biological Reports:
<http://www.fhwa.dot.gov/>
<http://www.environment.fhwa.dot.gov/guidebook/index.asp>
<http://www.fhwa.dot.gov/>
<http://www.environment.fhwa.dot.gov/guidebook/chapters/v2ch10.asp>
- uuu. Caltrans Guidance Manual: Storm Water Monitoring Protocols:
<http://www.dot.ca.gov/hq/env/stormwater/index.htm>
<http://www.dot.ca.gov/hq/env/stormwater/ongoing/monitoring/>
- vvv. “United States Environmental Protection Agency (U.S. EPA) Test
Methods for Evaluating Solid Waste,” 3rd Edition (SW-846) :
<http://www.epa.gov/epaoswer/hazwaste/test/main.htm>
- www. Caltrans Soil and Rock Logging Manual, Classification, and Presentation
Manual:
http://www.dot.ca.gov/hq/esc/geotech/sr_logging_manual/srl_manual.html
- xxx. State of California, Department of Water Resources, California Well
Standards/Well Standards Bulletins, in Bulletins 74-81 and 74-90:
http://www.water.ca.gov/groundwater/well_info_and_other/well_standards.s.cfm
http://www.water.ca.gov/groundwater/well_info_and_other/california_well_standards/well_standards_content.html
http://www.water.ca.gov/groundwater/well_info_and_other/well_standards.cfm
- yyy. California Department of Toxic Substances Control (DTSC) Aerially
Deposited Lead Variance No. V09HQSCD006, July 1, 2009.
- zzz. Caltrans Biological Guide for Consultants:

<http://www.dot.ca.gov/ser/vol1/sec3/natural/Ch14Bio/ch14bio.htm>

- aaaa. Guide to the Caltrans Capital Project Work Breakdown Structure (WBS).
- bbbb. Caltrans Survey Engineer's File (SEF) Oversight Guideline.
- cccc. Caltrans Project Planning and Design Activities Guide.
- dddd. Caltrans Externally Financed Projects Branch (EFPB) Information and Procedures Guide.
- eeee. Caltrans Right of Way Procedural Handbook- Volume 13 "Utilities".
- ffff. Caltrans Manual on High and Low Risk Underground Facilities.
- gggg. Caltrans Drafting Design User's Manual.
- hhhh. Caltrans Bridge Design Specifications Manual.
- iiii. Caltrans Bridge Design Details Manual.
- jjjj. Caltrans Bridge Design-Aids Manual.
- kkkk. Caltrans Bridge Memo to Designers.
- llll. Caltrans Bridge Standard Details Sheets.
- mmmm. Caltrans Bridge Detail Decals.
- nnnn. Caltrans Formatted Highway Plan Sheets.
- oooo. Caltrans Formatted Bridge Plan Sheets.
- pppp. Caltrans Construction Site Best Management Practices Guide.

LOCAL MANUALS

- qqqq.
- rrrr. "Tri-Regional Board Staff Recommendations for Preliminary Evaluation and Investigation of Underground Tank Sites," North Coast, San Francisco and Central Valley Regional Water Quality Control Boards, August 10, 1990.

- ssss. RWQCB - Region 2 Draft Fact Sheet for Reviewing Wetland and Riparian Projects.
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3. Products must meet contemporary professional standards for technical studies. Any and all reports due shall be drafted/written in accordance with the Guidelines for reporting formats which are found in the Caltrans Standard Environmental Reference (SER), Caltrans Environmental Handbook, Volume I, Volume II, Volume III, and Volume IV (<http://www.dot.ca.gov/ser/envhand.htm>) or any latest revisions, Project Development Procedures Manual, and as supplied by the Caltrans.
4. All studies shall be performed in accordance with the January 1, 2014 *First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California*

(PA), the 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Officer Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92, the Memorandum of Understanding (MOU) between the Federal Highway Administration and the Caltrans concerning the State of California's Participation in the Surface Transportation Project Delivery Pilot Program, which became effective on July 1, 2007, (MAP-21 amended 23 USC 327 to establish a revised and permanent Surface Transportation Project Delivery Program. As a result, the Department entered into a memorandum of understanding pursuant to 23 USC 327 [NEPA Assignment MOU] with FHWA. The NEPA Assignment MOU became effective October 1, 2012), and other Caltrans regulations, policies, procedures, manuals, standards, specifications, performance standards, directives, guidelines, handbooks, guidance documents, forms, templates, policy memo, methodologies, other informational or directive publications, and formats, including compliance with all Federal Highway Administration (FHWA) requirements as implemented and interpreted by Caltrans.

5. All Consultant work performed under the Contract shall follow the appropriate protocols, procedures, templates, and format specifications outlined in the Caltrans Environmental Handbook, Vol. II (<http://www.dot.ca.gov/ser/envhand.htm>; Caltrans' Standard Environmental Reference, Volume I, Chapter 8, Paleontology (<http://www.dot.ca.gov/ser/vol1/sec3/physical/Ch08Paleo/chap08paleo.htm>); and the United States Secretary of Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register, Vol. 48, No. 190, September 1983) (http://www.cr.nps.gov/local-law/arch_stnds_0.htm).
6. All Consultant work and document shall be prepared in accordance with the appropriate protocols, procedures, templates, and document formats found in the Caltrans Standard Environmental Reference (SER), Volume I and Volume II of the Caltrans Environmental Handbook, an on-line technical resource, for guidance in preparing and submitting environmental documents for transportation projects. The SER is located at the following website: <http://www.dot.ca.gov/ser/envhand.htm>.
7. When the Consultant is providing professional and technical oversight review and comments on behalf of Caltrans, the Consultant shall ensure the (local agency) products confirm to Caltrans' standards.

M. Field Safety.

In addition to the requirements specified elsewhere in the Contract, the following also shall apply:

1. The Consultant shall maintain a working environment that is safe for project personnel and the public. The Consultant shall provide a Code of Safe Practices that includes at a minimum, fall protection safety, lead training, respirator training, and promotes an awareness of health and safety requirements and enforce applicable regulations and contract provisions for the protection of the project personnel and the public. The Consultant's personnel shall comply with all safety provisions of the Caltrans Safety Manual (http://www.dot.ca.gov/hq/opo/safety/safetymanual_toc.htm), Caltrans Surveys Manual (http://www.dot.ca.gov/hq/row/landsurveys/SurveysManual/Manual_TOC.html), Caltrans Laboratory Safety Manual (http://www.dot.ca.gov/hq/esc/ctms/pdf/lab_safety_manual.pdf), Caltrans Traffic Manual (<http://www.dot.ca.gov/hq/traffops/signtech/signdel/trafficmanual.htm>) and Caltrans Code of Safe Practices (<http://www.dot.ca.gov/hq/construc/safety/>). The Consultant shall comply with all Federal, State, and Local Occupational Safety and Health Administration (OSHA) statutes, laws, codes, regulations, policies, procedures, ordinances, standards, rules, specifications, performance standards, and guidelines, and the safety instructions that Caltrans issues for performance of Task Order work, applicable to the work under the Contract, regarding safety equipment and procedures (including, but not limited to, use and operation). Under no circumstance shall the Consultant's safety policies be less stringent than Caltrans'.
2. The field work shall not be performed when conditions prevent a safe and efficient operation, and shall only be performed with written authorization by Caltrans.
3. The Consultant shall provide, at no cost to Caltrans, all safety equipment to perform the required services in a safe manner including, but not limited to: gloves, coveralls, sunscreen, insect repellents, fire extinguisher, hard-soled safety footwear, white hard hats, eye protection, hearing protection, and approved safety vests. The Consultant's personnel shall wear hard-soled safety footwear, white hard hats, eye protection, hearing protection, and approved safety vests at all times while working in the field.
4. The Consultant shall provide, at no cost to Caltrans, appropriate safety training for all the Consultant's and the Subconsultant's office, laboratory, and field personnel, including training required for performing the work in an office setting or in the field to work on and near highways in a safe manner.

5. The Consultant shall be solely responsible for the protection of health and safety of its personnel, Subconsultants, and Subconsultant's personnel in performance of the Contract.
6. For the Initial Site Assessment, Site Investigations, Surveys, Inspections and Testing, and any field work, a site health and safety plan shall be developed as specified in the Task Order. Noncompliance by the Consultant or Consultant's personnel with the site health and safety plan is grounds for a stop work order or dismissal of the Consultant.
7. Traffic Control.
 - a. If specified in the Task Order, Caltrans shall provide Traffic Control to accomplish the work within Caltrans' right-of-way. When Caltrans is to provide Traffic Control, the Consultant shall request the Traffic Control in advance of the work to obtain proper clearance. Limited work hours, night work or weekend work may be necessitated by the closure schedule that is approved by Caltrans for work on State freeways or highways. For work outside of Caltrans' right-of-way, the Consultant shall provide Traffic Control in coordination with the appropriate local jurisdiction and/or private owners.
 - b. If the Task Order requires the Consultant to provide traffic control or traffic control devices, the Consultant shall fulfill the following requirements:
 - i. Caltrans' 2010 Standard Specifications (Standard Specifications), which shall include any future revisions to this manual: The Contract cites specific portions of the Standard Specifications. Only the sections of the Standard Specifications cited in the Contract are requirements and are hereby incorporated by this reference as if attached to the Contract. All other portions of the Standard Specifications are not applicable to the Contract. The Standard Specifications is accessible via the internet at <http://www.dot.ca.gov/hq/esc/oe/>.
 - ii. Submit a traffic-handling traffic control plan to the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, Functional Manager, District/Region Area Construction (Claims) Engineer, Laboratory Supervisor, Headquarters' Structural Construction Engineer, Resident Engineer, District Landscape Architect, District Surveys Engineer, District Right-of-Way Engineer, District Water Quality Program Manager, District Deputy Director for Program/Project Management, District's Traffic Operations Units, Project Coordinator, Deputy District Director for Environmental Analysis, District Surveys Office Chief, and/or District's Public Information Officer for review and comment at a minimum ten (10) working days prior to the start of

- work. The traffic control plan also needs to be provided to Caltrans Permit Office for review and acceptance.
- iii. Comply with the traffic control requirements in the “Standard Specifications” including future revisions to this manual, specifically Section 7 (Public Convenience, Public Safety) and Section 12 (Temporary Traffic Control), and one or more of the following Caltrans Standard Plans, as applicable: Plan No. T10 (Traffic Control System for Lane Closure on Freeways and Expressways); Plan No. T11 (Traffic Control System for Lane and Complete Closures on Freeways and Expressways); Plan No. T12 (Traffic Control System for Lane Closure on Multilane Conventional Highways); Plan No. T13 (Traffic Control System for Lane Closure on Two Lane Conventional Highways); Plan No. T14 (Traffic Control System for Ramp Closures. (Refer to: <http://www.dot.ca.gov/hq/traffops/signtech/signdel/stdplans.htm>, http://www.dot.ca.gov/hq/esc/oe/project_plans/highway_plans/stdplans_US-customary-units_10/viewable_pdf/2010-Std-Plns-for-Web.pdf).
 - iv. Obtain the necessary approvals and encroachment permits prior to providing the traffic control or traffic control devices.
 - v. The Consultant shall provide all labor, equipment, and materials that are required for placing, operating, maintaining, repairing, replacing, transporting and removing of traffic control and traffic control devices.
 - vi. This work includes furnishing, placing and maintaining required signs, safety equipment, and traffic control and warning devices in accordance with the Manual of Traffic Controls published by Caltrans (<http://www.dot.ca.gov/hq/traffops/engineering/>, <http://www.dot.ca.gov/hq/traffops/signtech/signdel/trafficmanual-current.htm>). The manufacturer of products on the list of Prequalified and Tested Signing and Delineation Materials shall furnish the Consultant a Certificate of Compliance in conformance with the provisions in Standard Specifications, Section 6, "Certificates of Compliance," of the Standard Specifications for each type of traffic product supplied. For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the requirements of the Standard Specifications, Section 6.
 - vii. Conduct operations so as to offer the least possible obstruction and inconvenience to the public and to have under traffic control no greater length or amount of work than can be prosecuted properly

- with due regard to the rights of the public. All public traffic shall be permitted to pass through the work area with a minimum of inconvenience and delay.
- viii. Implement protective measures that are necessary to prevent accidents or damage or injury to the public. No operations shall create a condition hazardous to traffic or to the public.
 - ix. If an accident or other incident (related to or not related to the work being done for Caltrans) occurs within, or close to the work being done for Caltrans, the Consultant shall immediately stop work and remove traffic controls from the highway unless public health, welfare and safety is endangered by unfinished work or by removal of the traffic control devices. After free traffic flow is restored, other work required by the Task Order may be resumed.
 - x. Enter and leave the highway via existing ramps and crossover in the direction of public traffic. There shall be no movement across lanes.
 - xi. All trucks or other mobile equipment leaving the public traffic lane to enter the work area shall slow down gradually in advance of the turnoff to allow following traffic an opportunity to slow down safely. The Consultant shall use flashing lights on the vehicle to indicate to oncoming traffic of vehicle slowing.
 - xii. All work requiring traffic control requires the Consultant to apply for and obtain a lane closure number or prepare an adequate Traffic Management Plan (TMP) in coordination with the Caltrans District Traffic Management (DTM), Division of Traffic Operations before the start of any work that may affect traffic. The Consultant shall request lane closure numbers in accordance with the procedures specified in the "Encroachment Permit Projects Traffic Control Procedures" which is found at the following web site:
http://www.dot.ca.gov/hq/traffops/developserv/permits/encroachment_permits_manual/index.html. The Consultant shall use the "Request for Transportation Management Plan Datasheet" to request all lane closures necessary to complete the work. The Consultant shall submit the Request for Transportation Management Plan Datasheet to the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager for review and approval. Once the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager have reviewed the lane closure request, the Consultant shall then fax the "Request for Transportation Management Plan Datasheet" (see Appendix E on http://www.dot.ca.gov/hq/traffops/systemops/tmp_lcs/index.htm) to Caltrans' Division of Traffic Management (DTM). Additional time beyond the minimum seven (7) days advanced notice may be required for obtaining traffic control approval.

- xiii. Any damage caused by the Consultant to existing facilities, landscaping or irrigation within the Caltrans' right-of-way shall be replaced in kind by the Consultant at the Consultant's sole expense.
- xiv. Unless otherwise specified in a Lane Closure Chart(s) and/or approved by the District Traffic Manager, Traffic Control shall occur only between 9:00 a.m. and 3:00 p.m., Mondays through Friday except for holidays.

N. Orientation Provided by Caltrans.

- 1. Caltrans may provide orientation regarding the requirements for the Contract and each Task Order as deemed necessary by Caltrans. The orientation may consist of a description of Caltrans procedures, practices, and requirements for the specific work to be performed and sharing of project related files and notes. However, if the orientation instructions conflict with the contract or task order requirements, the Contract and the executed Task Order shall prevail over any descriptions provided.

O. Monitoring and Review Procedure.

- 1. The Caltrans Contract Manager shall have the unilateral right, from time to time, or as requested by the Consultant, to monitor and review the progress and processes of the Consultant related to work performed under the Contract.
- 2. The performance of the Consultant Contract Manager, key personnel, and team shall be evaluated by the Caltrans Contract Manager, as needed, but no less frequently than annually, and at the expiration of the Contract. Unsatisfactory reviews of specific consultant personnel may result in Caltrans requesting that they be replaced with new personnel; the Consultant shall immediately replace personnel with individuals whose qualifications at a minimum equal those of the personnel replaced at no additional cost to Caltrans. Evaluation includes, but not be limited to, the following:
 - a. Job performance.
 - b. Quality of Work.
 - c. Timely submittal of reports, invoices, daily diaries, and other required documents.
 - d. Early detection of problems and timely resolutions.
 - e. Requesting timely approval for personnel changes and travel expenditure.
 - f. Responsiveness and ability to control costs.
 - g. DBE or DVBE Participation.
 - h. Conflicts of interest.

Poor performance and any negative evaluations may result in the request for replacement of the Consultant Contract Manager, key personnel, or any

personnel; the need to replace key personnel shall reflect adversely on the Consultant's performance evaluation, and if warranted, may result in the termination of the Contract per Exhibit D, Section III, Termination of the Contract.

3. As a minimum, the monthly report should address the following specific areas:
 - a. Time related project status via a bar chart schedule.
 - b. Physical progress. (performance progress report on the Scope of Work)
 - c. Amendment summary history.
 - d. Narrative status report by task to include work accomplished in the previous month, work planned for the next month, identification of project issues, and an action plan to resolve issues. (descriptive progress report of all Task Orders).
 - e. Earned Value Report.
 - f. Graphical comparisons for actual progress vs. earned and planned progress for: physical (% complete), performance (hours complete), and cash flow.
 - g. Bar Chart Schedule showing the Critical Path and Logic Network Schedule, and identifying issues that would affect the project development activities and milestones.
 - h. Monthly forecast of work report showing total dollars expended in current month, next month's planned expenditures, and planned expenditures for the remainder of the fiscal years.
 - i. Consultant shall give written notice to the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager within seven (7) working days after Consultant knows or should know of any cause or condition which may, under reasonable foreseeable circumstances, result in delay and cost over-runs for which Consultant may request an extension of time and monies to complete the services.
 - j. Consultant shall report in a timely manner, through correspondence and monthly progress reports, whenever it appears that approved schedules outlined in the Task Order will not be met, whether or not the reasons are within the Consultant's control. In the event the Task Order Scope and Schedule of the Services are modified, and the modified Schedule is approved by Caltrans, the Consultant shall submit a revised Milestone Schedule. Consultant shall perform the Services in accordance with the latest approved revised Task Order Milestone Schedule.

P. General Materials to be Provided or made available by Caltrans.

Materials (if deemed applicable, necessary, and when available from Caltrans) that may be furnished or made available by Caltrans and where listed in the individual Task Orders and the Contract, are for the Consultant's use only, shall be returned at the end of the Contract. The Consultant shall use the materials in the execution of the specific work

described in the Task Order. These materials may include, but not be limited to, the following:

1. Appropriate background or reference information for each Task Order.
2. Project special provisions, full-size and reduced-size sets of project plans, materials information handout, and construction contract and proposal, as necessary.
3. Caltrans standardized forms.
4. Caltrans shall provide Permits to Enter for private property access. The Consultant shall notify Caltrans, in writing, sufficiently in advance of its need to enter upon private property or facility to perform work. The Consultant's notice shall specify the date, purpose, duration, location, and the time of day of the Consultant's activities. The Consultant shall not perform work on property outside of the Caltrans right-of-way until Caltrans has obtained an entry permit from the property owner. The Consultant is responsible for notifying the property owner 48 hours in advance of entering the property, unless otherwise specified in the Permit. The Consultant shall notify the Caltrans Contract Manager within 48 hours if permission has been denied. The Consultant personnel shall carry the Permits to Enter on their person while performing work outside the Caltrans Right-of-Way. No work shall be performed by the Consultant outside the Caltrans Right-of-Way without Permits to Enter. The Consultant shall comply with all conditions imposed by the Caltrans Contract Manager and requirements set forth in the Permit to Enter. The Consultant shall be responsible for any damages that consultant did to owner property at Consultant's own expense.
5. Appropriate background information, site topographic maps, as-built drawings, blank Caltrans plan sheet overlays, digital electronic seed files, cell libraries, lane closure request forms, right-of-way alignments and survey limits, preliminary utility location maps, areas where focused studies are needed, Construction Contract Documents, and Shop Drawings, as available, for each Task Order.
6. Digital Electronic templates of Task Order formats.
7. For Contract work on Caltrans' Right-of-Way, an executed contract constitutes the consultant's "Encroachment Permit." The consultant (prime as well as any subconsultants) shall carry a copy of the fully executed contract along with the pertinent Task Order(s) at all times while conducting work for Caltrans within Caltrans' Right-of-Way.
8. All pertinent correspondence and investigations.

9. The Caltrans Contract Manager may designate a Caltrans Task Order Manager to manage the technical aspects of the Task Order or each specific Task Order.
10. The Caltrans Contract Manager or Caltrans designee shall review all deliverables for compliance, substance, and quality.

Q. Environmental Generalist Materials to be Provided or made available by Caltrans.

1. Relevant and existing documents, right-of-way record data, survey maps, control, data, topographic maps, and planimetric maps), if any are available, that are applicable to the current project within the project limits.
2. Project Map depicting the Area of Potential Effects (APE) or Study Area.
3. Data and information from other relevant on-going and previous studies conducted and prepared by Caltrans.
4. Reproducible project map(s), aerial photographs, and/or Digital highway inventory photography program (DHIPP) aerial photos, if available.
5. Caltrans Cultural Resources Database (CCRD) Access template for documenting cultural resources within CCRD and creating DPR 523 site records.
6. Coordination with various public agencies and jurisdictions to obtain any necessary permits (except federal permits required for archaeological investigations on federal land).
7. Caltrans shall coordinate with the Native American Heritage Commission (NAHC) to determine the Native American contacts and Most Likely Descendent, as appropriate.
8. Project development documents such as Project Report or Project Study Report and like documents.
9. If required, Encroachment Permits or Rights of Entry Permits shall be issued to the Consultant free of charge.

Note: The Consultant is responsible for the return to Caltrans, in original condition, of all items provided for use under the Contract. The Consultant shall replace, at the Consultant's sole expense, all lost or damaged Caltrans data or materials.

R. Materials to be Provided by the Consultant.

Unless otherwise specified in the Contract, the Consultant shall provide all materials to complete the required work in accordance with the delivery schedule and cost estimate outlined in each Task Order.

1. The Consultant shall be responsible for obtaining all necessary approvals and permits for Task Order work performed on any property that Caltrans does not own or control, with the exception of private property. The Consultant shall identify all necessary approvals and permits, prepare signature-ready permit applications, and track the status of permit applications, as specified in each Task Order. Also, the Caltrans District NPDES Coordinator shall be notified prior to performance of any work.
2. The Consultant shall provide to its Environmental Generalist Services personnel sets of the following that are applicable to the current project:
 - a. Standard Specifications.
 - b. Standard Plans.
 - c. Materials listed under section "Equipment Requirements".
3. When performing work within Railroad Company property, the Consultant is required to obtain sufficient and/or adequate insurance coverage that shall comply with the Railroad Company's requirements when performing work within their jurisdiction. The amount of insurance and types of coverage required by the Railroad Company may be above and beyond that required by Caltrans. The Consultant may be required to provide additional Railroad liability insurance including, but not limited to:
 - a. Commercial General Liability Insurance.
 - b. Business Automobile Coverage Insurance.
 - c. Worker Compensation and Employers Liability Insurance.
 - d. Railroad Protective Liability Insurance.
 - e. Umbrella or Excess Insurance.
 - f. Pollution Liability Insurance.
4. Caltrans may furnish templates and style guides to the Consultant for preparing reports and documents in the format specified by Caltrans' environmental policies and practices.

S. Product Approval and Payment

1. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items produced by the Consultant in the performance of the Contract, shall be

subject to the approval and acceptance by the Caltrans Contract Manager prior to invoicing and payment for these items.

2. All of the deliverables and tasks provided for acceptance under each Task Order shall comply with the terms, covenants and conditions of the Contract.
3. Upon completion of each deliverable or task, the Caltrans Contract Manager shall either accept or reject the completed work. In the event of non-acceptance due to errors, omissions, or non-compliance with the Caltrans Manuals, as revised as of the time of the Task Order, or the provisions of the Contract, the Consultant shall remedy the errors, omissions, or non-compliance to the satisfaction of the Caltrans Contract Manager at no cost to Caltrans prior to payment. Caltrans shall withhold payment until the work is satisfactorily completed and approved by the Caltrans Contract Manager. Additional cost incurred to correct errors will not be compensated.
4. Caltrans shall not pay the Consultant for the Consultant's work under the Contract and the charges incurred by the Consultant that does not conform to the requirements specified in the Contract and to the applicable Task Order, and such work shall be corrected at the Consultant's sole expense at no additional cost to Caltrans.
5. All reviews, inspections and approvals made prior to the final acceptance of deliverables or Task Orders are intended only to provide interim authorizations to proceed and do not constitute final approval of the deliverable or Task Order.
6. Notwithstanding any other provision of the Agreement, until final acceptance of a Task Order under the Agreement, any acceptance or approval means approval to proceed, but it does not mean acceptance or approval of a deliverable or task, and, it does not reduce or eliminate any of Consultant's duties or responsibilities under the Agreement.

T. General Deliverables.

All deliverables, intermediate work products, and original documents including, but not limited to, original field notes, photographs, reports, documents, plans, data, data files, edits to field data, adjustment calculations, final results, drawings, specifications, estimates, studies, record search, records, books, maps, manuscripts, manuals, digital electronic software developed, databases, background information, spreadsheets, procedural scripts, macros developed, and intellectual properties, developed pursuant to the Contract, shall be subject to the provisions of Exhibit D, sections XIX and XX and shall be sent to Caltrans upon completion of each Task Order deliverable and acceptance/approval of the work by the Caltrans Contract Manager or immediately upon

request by the Caltrans Contract Manager. The Consultant shall retain a copy of all documents furnished to Caltrans until expiration of the Contract.

Unless otherwise specified in the Task Order, the deliverables shall conform to the following:

1. Data Format for Unprotected and Modifiable Digital Electronic File Transfers.

The Consultant shall deliver unprotected and modifiable digital electronic files meeting the following requirements and as specified in each Task Order:

- a. Alphanumeric information (80 character, ASCII data type).
- b. Reports (Acrobat Writer 5 and above).
- c. Graphs, charts (Acrobat Writer 5 and above).
- d. Compliance with standard naming convention (including, but not limited to, Project ID, County, Route/PM, Date).

2. The Consultant shall work in close liaison with the Caltrans Contract Manager. Time is of the essence. Caltrans shall exercise review and approval functions through the Caltrans Contract Manager at key points, as specified in each Task Order. Milestone reviews shall be performed with the Caltrans Contract Manager for the specific performance, products, and deliverables listed in each Task Order.

3. The Consultant shall prepare a cost estimate showing task, subtask, personnel, personnel hours estimated for each task or subtask, and a schedule of deliverables.

4. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract shall be prepared on Caltrans standardized forms. Necessary forms shall be provided by Caltrans for the Consultant's use.

5. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract shall be submitted in both hardcopy and unprotected and modifiable digital electronic files in the Caltrans-approved forms and in the Caltrans-approved and designated digital electronic formats (Microsoft Word, Microstation, CAiCE, AutoCAD Civil 3D, PhotoShop, 8 1/2 x 11 in green, plastic, three ring binder), in accordance with the guidelines in the Contract and each Task Order, and shall conform to Caltrans standards and the requirements of the Caltrans Office Engineer at the end of Contract or when requested by the Caltrans Contract Manager or Caltrans designee. The unprotected and modifiable digital electronic files shall include the responsible person's digital electronic signature and seal. The Consultant shall verify the latest version of software used

prior to submittal. The Consultant shall also provide plot parameter (.par) or IPARM (.i) files in accordance with I-Plot standards.

6. At the end of each Task Order or when requested by the Caltrans Contract Manager, the Consultant shall also submit one (1) unprotected and modifiable digital electronic copy of all analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract in a specified digital device format (CD, DVD, and/or flash drive). The file formats shall be specified in each Task Order. Appropriate documentation shall accompany each digital device indicating the contents of each file.
7. When the Consultant is required to prepare and submit analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract and any approved Task Order to Caltrans or review analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items submitted to Caltrans by others, these documents shall be reviewed. They shall be submitted in draft as scheduled and the opportunity provided for Caltrans to provide comments and feedback, prior to final submittal. The specific schedule for Caltrans' review of the Consultant's submittals shall be specified in the Task Order.

The Consultant personnel involved in preparation or review of analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items shall be identified in the prepared or review report.

8. If the Consultant fails to submit the required analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract and any approved Task Order, Caltrans shall have the right to withhold payment and/or terminate the Contract in accordance with the termination provisions of the Contract per Exhibit D, Section III, Termination. If the Contract is terminated, the Consultant shall, at Caltrans' request, return all materials recovered or developed by the Consultant under the Contract including, but not limited to, photos, field notes, computer data files, maps, artifact collections, catalogs, analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data,

manuals, details, deliverables, backup documents, other documents, and other items required by the Contract.

9. For each Task Order, a milestone submittal schedule shall be prepared by the Consultant and approved by the Caltrans Contract Manager. Milestones may be changed by written agreement between the Caltrans Contract Manager and the Consultant Contract Manager through an amendment to the Task Order.
10. The Consultant shall prepare and update the Caltrans Work Breakdown Structure (WBS) as set forth in the Contract for each Task Order issued by the Caltrans Contract Manager showing a deliverables schedule. It is expected that the Consultant shall complete and meet the agreed upon schedule for each Task Order. Failure to complete the work based on the agreed upon schedule in the Task Order may result in termination of the Task Order or the Contract. Caltrans may have work completed in any way allowed by law, for which the Consultant shall be liable for any additional costs incurred by Caltrans to complete the work. Such costs may be deducted from amounts due to the Consultant in pending or future invoices, or if the Contract is terminated, may be recouped by any means allowed by law.
11. The Consultant shall maintain a separate complete set of project files for each Task Order issued by the Caltrans Contract Manager performed under the Contract. The Consultant shall maintain two (2) sets of these files. One (1) set shall be maintained on site with the Consultant and the other set shall be updated by the Consultant monthly and delivered to the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager. These files shall be indexed in accordance with Caltrans' Project Development Uniform File System (http://www.dot.ca.gov/hq/oppd/pdpm/chap_pdf/chapt07.pdf). These files shall be made available to the Caltrans Contract Manager during normal working hours and shall be transferred to Caltrans upon completion of work under the Task Order. If requested by the Caltrans Contract Manager, the Consultant shall provide these project files.
12. Deliverables specified in each Task Order shall be delivered to the attention and address indicated in each Task Order.
13. The Consultant shall be capable of working in either English or Metric units.
14. All deliverables shall be prepared in Imperial English Units unless an exception is approved. The units to be used for deliverables shall be addressed within individual Task Orders.
15. A Task Order may require the Consultant to use software and digital electronic formats other than those indicated in the Contract as needed to accomplish the objectives of the Task Order.

16. Quality Control Plan:

Prior to the work, the Consultant shall prepare the quality control plan and the minimum standard of work quality and obtain approval from the Caltrans Contract Manager, in effect for each and every Task Order during the entire time the work is being performed under the Contract. The Consultant shall complete the quality control plan and certify at the completion of work that all measures contained therein were satisfied. Caltrans shall perform quality assurance on the quality control plan to assure that quality control was satisfied.

The Consultant's quality control plan shall establish a process whereby:

- a. All deliverables are reviewed for accuracy, completeness, and readability before submittal to Caltrans.
- b. Calculations and plans are independently checked, corrected and re-checked.
- c. All job-related correspondence and memoranda are routed and received by affected persons and then filed in the appropriate Task Order file.
- d. Field activities are routinely verified for accuracy and completeness, such that any discovered deficiencies do not become systemic or affect the result of a Task Order deliverable.

The Consultant shall provide an outline of the quality control program before a specific task begins and shall identify critical quality control reviews within each Task Order. The Caltrans Contract Manager shall periodically request evidence that the quality control/quality assurance plan is functioning. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract submitted to the Caltrans Contract Manager for review shall be marked clearly as being fully checked or unchecked, and that the preparation of the material followed the quality control plan established for the work. The Quality Control/Quality Assurance (QC/QA) plan shall contain provisions for the development of appropriate "checklists" to maintain product quality and control. These "checklists" shall be delivered to the Caltrans Contract Manager with the QC/QA plan. The Consultant shall update these documents when directed by the Caltrans Contract Manager. Within thirty (30) calendar days of the Notice to Proceed (NTP), the Consultant shall submit to the Caltrans Contract Manager or Caltrans designee a job specific QC/QA plan and staffing plan.

17. Subject to Caltrans review, approval, and acceptance, the Consultant has total responsibility for and shall verify the accuracy and completeness of the analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals,

details, deliverables, backup documents, other documents, and other items required by the Contract prepared by the Consultant or its Subconsultants for the projects as specified in the Contract and in each Task Order. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract shall be reviewed by Caltrans for conformity with project standards and the requirements in the Task Order and the Contract. The analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract are subject to Caltrans' review, approval, and acceptance. Reviews by Caltrans do NOT include detailed review or checking of major components, quantitative calculations, related details or accuracy of information. The responsibility for accuracy and completeness of such items remains solely that of the Consultant.

18. The Caltrans Contract Manager shall address all questions which may arise as to the quality or acceptability of deliverables furnished and work performed for the Contract.
19. Prepare the analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract in accordance with prevailing industry standards and in a form acceptable to the Caltrans Contract Manager. These items shall identify the preparer, the designated reviewers, and the criteria for acceptance. The deliverables shall satisfy the Caltrans acceptance criteria and tests. The work product shall be complete, of neat appearance, well-organized, technically and grammatically correct, independently checked for error, checked by designated reviewers (Caltrans and Consultant Personnel), dated, and shall conform to industry standards and all applicable Caltrans, State, and Federal Standards, Requirements, and Procedures. All deliverables shall be approved by the Caltrans Contract Manager or Caltrans designee.

The minimum standard of appearance, organization, and content of analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract, shall be that of similar types produced by Caltrans and set forth in related Caltrans manuals.

Caltrans and the Consultant shall develop and agree to a schedule for the services and deliverables to be completed and delivered, and where appropriate, for acceptance criteria and acceptance tests that the services and deliverables must

satisfy as a prerequisite for approval by Caltrans. All deliverables shall satisfy the Standards set forth in “Standards” Section in order to be accepted for payment.

U. Environmental Generalist Deliverables.

1. The Consultant shall obtain written approval from Caltrans for all analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract. If there are no Caltrans standardized forms, the format and content requirements for all analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract shall be specified in each Task Order. All analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract to be used for the project includes, but not be limited to, the following:
 - a. DPR 523 Record Forms.
 - b. Archaeological Survey Reports (ASR).
 - c. Historical Resources Evaluation Reports (HRER) - Archaeology.
 - d. Historical Resources Evaluation Reports (HRER) - Architectural History.
 - e. Proposals for Extended Phase I Studies.
 - f. Extended Phase I Reports (XPI).
 - g. Phase II Test Excavation Reports (usually in form of Archaeological Evaluation Reports).
 - h. Proposals for Phase III Excavations.
 - i. Phase III Excavation Reports.
 - j. Extended Phase I, Phase II, and Phase III Preliminary Reports, if appropriate.
 - k. Historic Property Survey Reports (HPSR).
 - l. Historical Resources Compliance Reports (HRCR).
 - m. Finding of Effects (FOE).
 - n. Treatment Plan (TP).
 - o. Data Recovery Plan (DRP).
 - p. ESA Action Plan.
 - q. Construction Monitoring Report (CMR).
 - r. Draft MOA.
 - s. Public Information and Outreach Deliverables.
 - t. Miscellaneous Letter Reports and Memos.
 - u. Paleontological Identification Report (PIR).
 - v. Paleontological Evaluation Report (PER).

- w. Paleontological Mitigation Plan (PMP).
 - x. Paleontological Mitigation Report (PMR).
 - y. Paleontological Stewardship Summary (PSS).
2. All Environmental Generalist Services analytical results, plans, designs, specifications, estimates, notes, calculations, analysis, reports, graphics, drawings, visual simulations, studies, product, data, manuals, details, deliverables, backup documents, other documents, and other items required by the Contract performed on computer shall be delivered to Caltrans including, but not limited to, the formats specified below:
- a. Text-based documents shall be submitted as an Adobe Portable Document Format (“pdf”) file using Adobe Acrobat Professional version 5 or later software. The pdf file shall be inclusive of all graphics (e.g. page orientation, photographs or other images, charts, and tables) and be suitable for printing in final form. The pdf file shall:
 - i. Contain functioning bookmarks, indexes, tables of contents or other hyperlinks as required by the Task Order.
 - ii. Be configured (e.g. bookmarks, indexes, table of contents, thumbnails, annotations, signatures, and security settings) as required, or as directed by the Task Order.
 - iii. Be optimized for use by Adobe Acrobat Reader 10 or newer.
 - b. Text-based documents shall also be submitted in Microsoft Word format, version 2007. The document shall include all graphics (e.g. photographs, image graphics, charts, and tables). Photographs shall be in “jpeg” file format. Other image graphics shall be in “gif” format unless otherwise specified.
 - c. All graphics (e.g. photographs or other drawings) shall be submitted separately from the pdf and Microsoft Word documents in archive-type file formats (e.g. photographs and bitmapped drawings as “tif”, Microstation drawings as “dgn”, and vector drawings as “ai”) unless otherwise specified. The intent of this section is for the Consultant to provide Caltrans with a copy of each graphic in an uncompressed file format for archive purposes. The Consultant may suggest alternative formats that are compatible with this goal.
 - d. Spreadsheet files shall be submitted in Microsoft Excel format, version 2007, or format currently in use by Caltrans.
 - e. Word processing files shall be submitted in Microsoft Word format, version 2007, or format currently in use by Caltrans.
 - f. Database files shall be submitted in Microsoft Access format, version 2007, or format currently in use by Caltrans.
 - g. The Consultant shall not format digital electronic files as “view only” or “read only” unless so specified in the Task Order.
 - h. Other - As specified in the Task Order.
 - i. GIS data in ESRI readable format.
 - j. Maps in PDF format.

3. Caltrans uses a standard project development alphanumeric coding system for all reports. The Consultant shall adhere to this system when preparing such documents. Consultant-prepared reports shall not contain any references to their firm name, including logos, acknowledgements, or credits. Consultant may utilize an "internal filing number or other methodology" while document is in draft stages and distribution is internal. If a draft document is distributed beyond internally, all reference numbers, other than Caltrans' alphanumeric system, must be removed prior to distribution.

All reports must contain the following statement inside the front cover:

"For individuals with sensory disabilities this document can be made available in alternate formats. Please call or write to: (the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager Name), (the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager Address) (the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager Phone Number), or use the CA Relay Service TTY number 1-800-735-2929."

4. Deliverables include: Noise Study Reports and Design Soundwall Reports.
5. Deliverables include, but are not limited to, the following:
 - a. Paleontological Phase I Reports (Negative and Positive).
 - b. Proposals for Phase II Mitigation.
 - c. Phase II Reports (Negative and Positive).
6. Plans shall be prepared in conformance with the current editions of Caltrans' Plans Preparation Manual, the CADD Users Manual, and the following:
 - a. All CADD work shall be in compliance with Caltrans' CADD Users Manual. CADD work shall also incorporate, as deemed necessary by the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager, any revisions to the CADD Users Manual that are made during the course of the Contract.
 - b. The Consultant shall obtain and use the latest versions of the CADD files in order to conform to Caltrans' graphics and plotting standards. Files needed include, but not be limited to: cell libraries for highways and structures, font resources, color tables, and graphics seed files. These files are provided only in MicroStation format (.dgn) and is accessible electronically from Caltrans' Internet site at http://www.dot.ca.gov/hq/oppd/cadd/rsc_files/webpage.php (click on CTCELLIB.cel to download file).

7. All CADD graphics files submitted to Caltrans shall be two-dimensional (2-D) graphics files in MicroStation format (.dgn). All graphics files submitted shall display and plot properly on the District's plotting system. Effective October 1, 1992, in accordance with the CADD Users Manual, submitted CADD plan sheet files should not contain any referenced data. All drawing data and features relating to a CADD plan sheet file shall be fully contained in that CADD file.
8. The Consultant shall submit CAiCE/AutoCAD Civil 3D archive files as described in the CADD Users Manual, Project Development Procedures Manual (PDPM), PS&E guide gold book.
9. Diskettes are not acceptable to Caltrans. Any translation efforts necessary to obtain these formats shall be the responsibility of the Consultant at no extra cost to Caltrans.
10. The Consultant requests for applicable District CADD copies of plans or topographic maps (past or present) to complete the task shall be made in writing to the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager at a minimum two (2) weeks prior to their need. The request shall describe what is needed and the reasons therefore. The Caltrans Contract Manager in coordination with the Caltrans Task Order Manager shall review the request and only forward request of information that is deemed necessary by the Caltrans Contract Manager in coordination with the Caltrans Task Order Manager. Requests for additional CADD copies of information previously provided to the Consultant by Caltrans shall be at the Consultant's expense, with no extra cost to Caltrans. The CADD files associated with another project (past or present) shall not be released without prior written authorization from the Caltrans Contract Manager or Caltrans designee.
11. The Consultant shall be responsible to convert any past CADD files and/or modify any CADD graphics to current standards. If CADD copies are not available, the Consultant shall convert what is available to meet current CADD submittal standards.

V. Conflict of Interest.

1. All Environmental Generalist Services provided by the Consultant and deliverables produced by the Consultant shall be free of any conflict of interest and shall be subject to the approval and acceptance of the Caltrans Contract Manager. The consultant shall inform the Caltrans Contract Manager of any 'perceived' conflict of interest as soon as discovered.

2. The Consultant shall not receive compensation for any services or products in which the Consultant is found to have a conflict of interest. In the event of non-acceptance due to discovery of conflict of interest, the Consultant shall provide replacement deliverables free of any conflict of interest prior to payment. In the event replacement deliverables are not possible, the Consultant shall not receive compensation for the deliverables containing conflict of interest. Examples of conflict of interest include, but not be limited to, the following:
- a. Both preparing and reviewing the same technical Environmental Generalist Services work on the same project for Caltrans or others.

The above conflict of interest scenario is only an example of possible conflicts of interest for the services provided under the Contract, but is not intended to describe all circumstances for potential or actual conflicts.

W. Travel.

Consultant must obtain travel authorization including any per diem and lodging as necessary from Caltrans Contract Manager prior to travel begins. Please refer to Caltrans Travel Policies for Consultants and Contractors for more details.

<http://www.dot.ca.gov/hq/asc/travel/ch12/1consultant.htm>

X. List of Abbreviated Terms.

A&E	Architecture and Engineering.
AER	Archaeological Evaluation Report.
ANSI	American National Standards Institute.
APE	Area of Potential Effects.
ASR	Archaeological Survey Report.
CO	Change Order.
CCRD	Caltrans Cultural Resource Database.
CE	Categorical Exemptions or Categorical Exclusions.
CEQA	California Environmental Quality Act.
CHRIS	California Historical Resources Information System office.
CMR	Construction Monitoring Report.
CPM	Critical Path Method.
DED	Draft Environmental Document.
DOE	Determinations of Eligibility.
DPR	Department of Parks and Recreation.
DRP	Data Recovery Plan.
DTM	Division of Traffic Management.
EA	Environmental Assessments.
ED	Environmental Documents.
E-FIS	Enterprise Resource Planning Financial InfraStructure.
EIR	Environmental Impact Reports.

EIS	Environmental Impact Statements.
ESRI	Environmental Systems Research Institute.
FED	Final Environmental Document.
FHWA	Federal Highway Administration.
FOE	Findings of Effect.
FONSI	Finding of No Significant Impacts.
GIS	Geographic information system.
GPS	Global Positioning System.
HABS	Historic American Buildings Survey.
HAER	Historic American Engineering Record.
HRCR	Historical Resources Compliance Report.
HRER	Historic Resource Evaluation Report.
HPSR	Historic Property Survey Report.
HSDD	Hazardous Substances Disclosure Document.
IS	Initial Study.
MND	Mitigated Negative Declaration.
MOU	Memorandum of Understanding.
NAHC	Native American Heritage Commission.
ND	Negative Declaration.
NEPA	National Environmental Policy Act.
NES	Natural Environmental Study.
NHPA	National Historic Preservation Act.
OSHA	Occupational Safety and Health Administration.
PA	Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway Program in California.
PA&ED	Project Approval and Environmental Document.
PDT	Project Development Team.
PID	Project Initiation Document.
PER	Paleontological Evaluation Report.
PIR	Paleontological Identification Report.
PMP	Paleontological Mitigation Plan.
PMR	Paleontological Mitigation Report.
PSS	Paleontological Stewardship Summary.
PS&E	Plans, Specifications, and Estimate.
RE	Resident Engineer.
R/W	Right of Way.
SER	Caltrans Standard Environmental Reference.
SHPO	State Historic Preservation Officer.
TP	Treatment Plan.
TR	Historic Property Treatment Plans.

UTM
WBS
XPI

Universal Transverse Mercator.
Work Breakdown Structure.
Extended Phase I.

