

Mt Murphy Road Bridge at the South Fork of the American River

Draft CH2M HILL Scope of Work

Revised - March 29, 2013

The CH2M HILL team scope of work outlines the key tasks and subtasks that are critical to the successful development of the alternatives analysis phase of the Mt. Murphy Road Bridge Project.

This scope is organized into two Phases – 1A and 1B. This accommodates the need for early alternatives analysis on the feasibility of rehabilitation of the existing bridge prior to a full alternatives analysis process of other options. The main 6 Tasks are listed below. They are organized based on those tasks to be completed in each Phase. Note: Different aspects of Task 6 is spread throughout both Phases 1A and 1B.

Phase 1A:

Task 1—Kick-Off Activities

Task 6 - Project Management

Phase 1B:

Task 2—Public Involvement

Task 3—Engineering

Task 4—Environmental

Task 5—Reports

Task 6—Project Management

PHASE 1A

Task 1: Kick-Off Activities

Review Existing Plans and Requirements

CH2M HILL will coordinate with project stakeholders to identify and collect data relevant to the project. The CH2M HILL team will review the Bridge Record Plans, Caltrans Bridge Inspection Reports, the Marshall Gold Discovery State Historic Park General Plan, available Records of Survey and the County of El Dorado 2004 General Plan to ensure consistency with guidance and policy that is applicable to this transportation facility. CH2M HILL will conduct a review of the background information associated with the project, including any other reports and studies that may be recommended by project stakeholders such as any hydrologic and hydraulic data for the South Fork of the American River, existing as-built drawing of existing street improvements, utilities, drainage systems, and other features within the project area that may be impacted by the proposed improvements. To do so efficiently, CH2M HILL staff will meet with representatives from appropriate jurisdictional agencies, approximately 3 meetings.

Deliverables:

- Technical Memorandum: Background Information, which will include the document summaries and notes from stakeholder discussions. This memorandum will be no more than five pages.

Assumptions:

- The CEDDOT, EDCTC, El Dorado Irrigation District, and Caltrans will provide hard copies of requested information, including all existing survey records.
- 10 hours are budgeted for meetings with other agencies.

Duration:

- This task will be 28 days from Notice To Proceed (NTP).

Kick-Off Meeting

Following Notice to Proceed, the CH2M HILL team will conduct a project kick-off meeting with the CEDDOT and agency stakeholders. Team organization, design schedule, project goals, critical activities, data needs, and project deliverables will be discussed and documented. A key goal of the meeting will be to solicit team member feedback on the planned project approach and obtain County endorsement on the details of the work plan. Subconsultants WRECO, MacDonald Architects and ICF will attend the Project kick-off meeting.

Deliverables:

- One kick-off meeting with the CEDDOT, EDCTC, Caltrans representatives, CH2M HILL team; prepare meeting agenda and notes.

Duration:

- The planning and execution of this task will be 21 days from NTP.

Develop Design Criteria

Developing preliminary design criteria for the project will be important for the team to be able to develop viable alternatives. The design criteria will include bridge clear width, design speed, seismic requirements, emergency vehicle loading, scour requirements, pedestrian access, constructability and staging as well as required minimum approach widths. We will also research how the criteria affects funding, for example, will the HBP program still fund work that does not resolve structural deficiencies. A technical memorandum will document the review and evaluation of relevant design standards from various sources and to determine the appropriate design criteria for the development of the project alternatives. Our team will meet with the County, Caltrans Local Assistance, FHWA and State Parks to obtain endorsement of the Design Criteria.

Deliverables:

- Project Design Criteria Memorandum.

Assumptions:

- We assume one draft version for comments and then the final document.
- We will use one of the Project Delivery Team (PDT) meetings to review and get endorsement on the Design Criteria.

Duration:

- The duration of this task is anticipated to be 42 days from NTP.

Early Alternative Screening

It will be important to screen out unfeasible alternatives early in the alternative development process. From the first public meeting and our discussions with the County, we understand that alternatives that try to save the existing bridge need to be evaluated. Because of its age, condition and width, retrofitting and/or widening of the existing bridge will require significant analysis. As part of the alternative screening task we will prepare a technical memorandum on feasibility of reusing, retrofitting and/or widening the existing bridge. We will also provide a technical memorandum on the feasibility of extending Scott Road as an early alternative screening activity.

Existing Bridge Investigation and Analysis/Rehabilitation Feasibility

Using the truss and approach as-builts and the Caltrans load rating calculations, we will perform an analysis to identify the controlling bridge members and elements. Detailed evaluation of non-controlling components will not be performed in this phase of the project. CH2M HILL will perform a single day walkthrough review of the existing controlling components where they are visible from the existing roadway or from below the bridge on the approaches. The walkdown review shall be performed with intent to determine a general physical and functional condition of the truss and approach spans to form the basis for the evaluation of the bridge, as well as analysis for proposed pedestrian loadings; to generate cost estimates for maintenance/retrofit actions; and to establish priorities for the repair and/or rehabilitation. The results of the walkdown review and analysis shall be summarized in a technical memorandum.

Deliverables:

- Technical Memorandum summarizing the results of the inspection and analysis, one electronic PDF file of draft and final Memorandum.

Assumptions:

- The single day walkdown review will be used to estimate the average condition of controlling members, for example, how much section loss has occurred. Should retrofit or widening of the existing bridge not have fatal flaws from the preliminary analysis, a detailed assessment of each member of the bridge may be necessary and that work would be additional work to CH2M HILL.
- No under bridge inspection of the truss will be performed.
- The initial evaluation of the structure will be based on probable material properties.
- No fracture critical inspections will be performed.
- Caltrans load rating calculations are available and accurate.
- NBIS formatting and coding will not be used, as this information will not be uploaded to the NBIS database.

Duration: The duration of this task is anticipated to be 60 days following NTP.

Extension of Scott Road to Bayne Road

We will review an extension of Scott Road to Bayne Road to address potential closure of Mt Murphy Road during construction and to serve as a potential construction detour. A preliminary alignment, edges of road for 2-way traffic, and assumptions for cut/fill limits based on topography will be provided to determine limits of impact to adjacent properties and to identify right of way impacts for this extension. Impacted driveways will be identified but formal tie-ins will not be designed. Formal roadway modeling will also not be conducted.

Deliverables:

- Conceptual 50 scale, 11x17 extension plans.
- Technical Memorandum discussing the Scott Road to Bayne Road alternative.

Duration:

- The duration of this task is anticipated to be 60 days following NTP.

Task 6: Project Management (Phase 1A)

Project Safety Plan

CH2M HILL requires that all projects, regardless of size or activities, have written safety plans. These project-specific documents outline how health and safety requirements are administered for each project. The type and complexity of the activities performed on a project dictate the type of written safety plan, additional training or medical surveillance requirements, forms/permits, and self-assessment checklists.

CH2M HILL will implement a health and safety program for both CH2M HILL and subcontractor employees participating in field work on this project. The plan will cover the anticipated hazards associated with field work and will include information on how site personnel are to protect themselves from onsite hazards. In addition, the Field Safety Instructions will outline what personal protective equipment is required to be worn by site personnel during field work, and will cover incident reporting and emergency procedures. CH2M HILL personnel assigned to perform field work on this project will have been completed basic Health and Safety training requirements which will include 10-hour Construction Awareness and other pertinent safety courses.

All project personnel who will work in the field are required to read, understand, and abide by the requirements identified in the written safety plan.

Deliverables:

- Project Safety Plan.

Assumptions:

- Except for the project manager and safety officer, 2 hours are allotted to each employee who will work in the field to review and sign the Field Safety Instructions.

Duration:

- This task will be complete within 30 days of the NTP and prior to any field work.

Project Management Plan, Schedule, Invoices and Quality

CH2M HILL will prepare a project management plan (PMP) that will facilitate project management and coordination during the AAR development. This plan will consist of monitoring the design conformance to El Dorado County guidelines (and Caltrans where appropriate), ensuring quality control (QC), maintaining project files, and developing a project schedule. The schedule will be updated monthly to reflect progress on the deliverables. The execution of our quality control plan will be assigned to this task. This task also includes management of subconsultant contracts and invoicing. CH2M HILL will prepare a monthly invoice to be included as part of this task.

CH2M HILL will prepare a status report for the County's Project Manager to be included with our monthly invoice, and will describe the work accomplished during the reporting period, summary of meetings held, and discussion of understanding issues and action items. These reports will also include any concerns or significant issues, and recommendations for additions. The status reports will correspond to the accounting cycles used for the preparation of invoices to facilitate project oversight.

Deliverables:

- Schedule Updates, Invoices (4 months), quality control reviews, and the PMP.
- One monthly status report to CEDDOT with the monthly invoice

Duration:

- This task will be a monthly occurrence for the duration of the project – approximately 4 months.

Project Meetings

CH2M HILL will facilitate Project Delivery Team (PDT) meetings every other month for the project. For Phase 1A we assume we will hold one PDT meeting. This meeting will have an agenda and a meeting summary to document the discussion, decisions, and action items for all members of the PDT. The PDT will monitor project progress, identify and solve problems, provide input for the work effort, advise the project manager in directing the course of work oversight, participate in major meetings/hearings, and provide recommendations that will lead to project implementation. The PDT will consist of a group of key interdisciplinary project team members from the County, applicable CH2M HILL team members, Caltrans Local Assistance representative, EDCTC, State Park and others as required. The PDT will be guided by the policies and procedures required for the planning, processing and approval of this project, in accordance with the County and the Caltrans PDPM.

A project charter/communication plan will be prepared by the Team to provide the framework for the team to function effectively. The Project Team will coordinate, attend, and document a project PDT kick-off meeting with the project team, the County and other key agencies as needed and as required to establish liaison, schedule key milestones, coordinate team/agencies expectations, establish the charter/communication plan, finalize the scope, schedule, approach of work for the AAR. This will include a discussion of County coordination, purpose and need refinement, available traffic data, potential additional alternatives, and public involvement.

The PDT meetings, including the kick-off meeting, serve as the primary forum for reviewing the status of the project and identifying and resolving project issues. The Project Team will provide meeting notices, prepare meeting materials and agenda, attend, and prepare meeting notes for one PDT meeting during Phase 1A.

The CH2M HILL Team will hold two one-hour meetings per month. These meetings will keep the disciplines coordinated and ensure that all Team members are receiving the most current communication about the project from the Project Manager. These meetings will be documented with an email summarizing decisions and action items for all team members.

Two staff will attend one Board of Supervisors Meeting to support staff in responding to the Early Alternatives Screening results as the first phase of work.

Deliverables:

- Project charter/communication plan, pdf only.
- Meeting agenda and summary for one PDT meeting. Email documentation of internal team meeting.
- Attendance at one Board of Supervisors Meeting – two staff.

Duration:

- This task will occur for the duration of the early alternatives analysis - approximately 4 months.

PHASE 1B

Task 2: Public Involvement and Alternative Analysis Process

CH2M HILL will conduct the public involvement to support an alternatives analysis process for the project. To facilitate this involvement we will engage the Stakeholders Advisory Committee (SAC) in 4 meetings during project development. We will also hold one public meeting to address alternative selection and to get community feedback. Our plan for each of these meetings is as follows:

Gold Discovery State Park Meeting

CH2M HILL will facilitate a meeting with State Park decision makers. We need to understand and define the opportunities and constraints for dealing with right-of-way, easements, and access issues related to possible alternatives – including ultimate project completion and construction activities. We need to understand the areas of possibility with the State Parks staff, before we can take potential solutions to the stakeholders for consideration. This meeting will include State Parks, Caltrans, El Dorado County Transportation Commission and the County immediately following NTP.

Stakeholder Advisory Committee (SAC) Meeting #1

CH2M HILL will plan and conduct the SAC Meetings. This first meeting will describe the project development process we will undergo, and to complete a through audit of the project context. What are the issues, constraints, opportunities, and ideas for solutions that the community would like to present. This is a critical step in identifying all the issues to ensure that we define the right problems and in turn, develop the right solutions. This step can also serve as the beginning of the development of the Purpose and Need statement for the project. The input from this step will be included in the scoping documents for the project once the environmental process has begun. From this SAC Meeting #1, we will develop a draft of the Problem Definition and have a list of constraints and opportunities. This “Problem Definition” will serve as the preliminary draft of the Purpose and Need for the project.

Develop Evaluation Criteria

Following the SAC Meeting and after reviewing the meeting summary from the first public meeting held in February, CH2M HILL will develop a draft set of evaluation criteria that will reflect the technical requirements of the project as well as the community values and interest in the project. These criteria will include performance measures for each. A meeting with the PDT will be conducted to get endorsement on these evaluation criteria.

SAC Meeting #2

CH2M HILL present the evaluation criteria and brainstorm potential solutions that will address these criteria. We will not have the alternatives shown on the matrix for this meeting. We will facilitate an open discussion about the pros and cons of varying alignments and alternatives. The discussion will focus on how we will apply the evaluation criteria and how it will help screen out those solutions that don't address the problem definition and respond to the criteria. Following this meeting we will have buy-in on the evaluation criteria and process, and a list of potential alternatives for evaluating.

Conduct Alternatives Screening

CH2M HILL will complete the evaluation matrix using and apply a score for each using a constructed value for each criterion. This is a high-level screening to get down to two or three alternatives to carry forward for further engineering refinement. We will use existing data and high-level impact assessments to score these alternatives. We should have the majority of our environmental inventory complete and will be able to reasonably assess environmental impacts. If cost is a criteria, we will use order of magnitude costs as we will not have begun any detailed cost estimates at this point. Each alternative will receive an overall score and we will rank the alternatives based on that score. We will be able to do a "sensitivity analysis" on the scoring to see where alternatives are strongest, where they are weak, and what we can do to improve any that might be "community favorites".

One-on-One Stakeholder Meetings

In between the SAC meetings, we anticipate needing to meet one-on-one with individual stakeholders in the community. The camp ground property owner, the Grange, Caltrans, and certainly the State Park staff will be some of those individuals that we expect to meet with as the process moves through the steps we have defined. We assume up to four (4) one-on-one meetings with stakeholders.

Public Meeting

CH2M HILL will plan and facilitate a Public Meeting/Open House to review the draft Project Study Report results with the general public. We will ask for public input from the local community on the alternatives in the PSR and on the preferred alternative recommendation. A public notice in the local newspaper will be used to announce the public meeting. Additionally, a flyer or fact sheet will be developed to summarize the project status and announce the public meeting. This flyer/fact sheet will be sent to the project mailing list, supplied by the County. SAC members also will be contacted via email. A brief overview presentation and exhibits boards will be used to communicate the draft PSR information.

SAC Meeting #3

A final SAC meeting will be conducted to present the Alternatives Analysis Report results and describe how the project will move forward. We will be clear with the SAC that this is a possibility and that if any significant changes are made to the alternative, that they will be called together and informed of new developments.

We will develop information to be placed on the County's website for ongoing access to the project progress for the general public. This information will consist of project milestones, graphics depicting proposed solutions, and information about past and upcoming meetings.

General Public Outreach

CH2M HILL will assist the County in maintaining a project website to communicate the project alternatives and their impacts to the general public. We will also provide project updates following each SAC meeting to be used for distribution to the local media. We will prepare a project fact sheet that will be updated as the project progresses. This fact sheet will be used at the public meeting and can be emailed to the project mailing list as it is updated.

Deliverables:

- Meeting summary of State Park meeting.
- SAC meeting agendas, content material, and summaries.
- Evaluation Matrix.
- Alternatives Screening results.
- Meeting summaries of one-on-one stakeholder meetings (up to 4).

- Meeting flyers printed and mailed to 200-person mailing list; email to SAC.
- One Powerpoint presentation, one Public meeting notice to local publication; ten exhibit boards (approx 120" x 108").
- One project fact sheet to be updated four times throughout AAR for online distribution.
- 2 milestone updates to provide to County for website and for local media distribution.

Duration:

- The duration of this task is anticipated to be the duration of the ten-month study process.

Task 3: Engineering

Field Review - Field Visit and Site Reconnaissance

Site review and reconnaissance will be performed with the CEDDOT, EDCTC, Caltrans and other SAC members to identify various issues of concern included, but not limited to:

- Current uses and evidence of past uses of the site and adjacent properties
- Sensitive receptors
- Community drivers
- Circulation
- Local business drivers

CH2M HILL's Project Manager, Roadway Lead, Structures Lead, Geotechnical and Environmental Leads will conduct a field review of the study area along with representatives from CEDDOT, EDCTC, Caltrans (Harjinder Bassi and Scott Straub), and the State Park Superintendent. Existing conditions and preliminary design assumptions and parameters will be confirmed. CH2M HILL will confer with Caltrans Division of Structures Local Assistance and Caltrans District Local Assistance as necessary to confirm project assumptions and physical project limits for eligible HBP work.

Deliverables:

- Field investigation memorandum identifying the results of the investigation.

Duration:

- The duration of this task is anticipated to be 21 days following the kickoff meeting.

Project Alternative Development

The primary goal for this task is to identify and screen feasible, innovative, cost-effective, and fundable design alternatives for the Mt. Murphy Road Bridge project. This alternatives analysis will result in up to three alternatives to be carried forward for further engineer refinement in the next phase of work.

CH2M HILL will develop up to five alternatives for this screen process. These alternatives might include:

- Repair of the existing structure and construction of a parallel pedestrian bridge
- Replacement of the structure in its current location without pedestrian access on the new bridge and using the old bridge for a detour during construction and later for pedestrian access
- Replacement of the structure in an alternate location (either upstream or downstream, but not both)
- Rehabilitation and widening of the existing structure for pedestrian and vehicular use
- The extension of Scott Road to Mt. Murphy and Bayne Road

CH2M HILL will prepare high-level planning drawings with layout plans at 1"=50' scale, in U.S. customary units. Edge of pavement lines, and approximate striping plans will be shown based on accommodating the three concepts. Alignments will show the limits of the bridge, and approximate location of retaining walls. Estimates of cut/fill impact area will be made based on approximate elevation difference but roadway

modeling will not be performed. Alignments will be designed to be constructible and minimize right-of-way and utility impacts. The concepts will be plotted as a map on aerial photography for environmental and traffic analysis. Existing right-of-way and the location of major utilities and drainage structures will be shown. Conceptual drawings including proposed typical sections will be prepared for each alternative.

Improvements to intersection and approach safety will be evaluated by seeing which high accident movements are reduced or eliminated. For the purposes of our budget, our scope assumes the evaluation of the three build alternatives.

Deliverables:

- Layouts (11x17, 50 scale)
- Profiles (11x17, 50 scale)
- Typical Sections
- Preliminary Right-of-Way requirements, number of parcels affected and area of potential takes only
- Order of magnitude cost estimates
- Preliminary Construction Traffic Control, Traffic Handling, Staging, and Access (100 scale)

Assumptions:

- The following files will be provided by the County by April 1, 2013:
 - Existing digital terrain model (ACAD Civil 3D, 2011 or later)
 - Existing planimetrics with descriptive layers (ACAD Civil 3D, 2011 or later)
 - Existing contours with descriptive layers (ACAD Civil 3D, 2011 or later)
 - Existing right-of-way and utilities location data (ACAD Civil 3D, 2011 or later)
 - Survey points with point numbers, descriptors, elevations, unique layers (ACAD Civil 3D, 2011 or later)
 - Rectified aerial image
- The property owner with the key property between Scott Road and Mt. Murphy Road will consent to walkthrough of his property.
- County to provide property network on an aerial for developing the extension of Scott Road Alternative.
- No property appraisals will be done.

Duration:

- The duration of this task is anticipated to be 90 days after the first SAC Meeting #1 and after requested survey information is provided by the County.

Preliminary Bridge Foundation Report

CH2M HILL will provide a Structure Preliminary Foundation Report (PFR) to assist in the feasibility evaluation and structure vulnerability analyses. This will be a feasibility type of study, based on existing and readily available geologic and any geotechnical published data. The potential geotechnical/geologic impacts shall be discussed on a broad basis, including potential for liquefaction, geology, seismic activity, etc.. Generally, preliminary geotechnical issues relevant to the proposed project shall be presented in a qualitative manner with no specific design recommendations. No field exploration work is proposed. Certain design assumptions shall be made as to the type of foundations, approximate pile lengths etc., which will be helpful in defining the overall design program and evaluating the cost impacts. Subsequently, a detailed Bridge Foundation Report will be required during the PS&E phase.

Deliverables:

- Preliminary Foundation Report, five hard copies and one electronic pdf file of draft and final Report.

Duration:

- The duration of this task is anticipated to be 30 days after alternative development.

Preliminary Cost Estimates

The Project Team will conduct planning-level, comparative cost estimates using high-level assumptions for linear feet and generally accepted cost per square foot values for each structure as well as based on area of roadway to be reconstructed and assumptions for other roadway safety improvements. The order of magnitude cost to construct each alternative will be estimated.

Deliverables:

- Preliminary cost estimate for each alternative

Assumptions:

- Quantities will not be included for these planning-level estimates.

Duration:

- The duration of this task is anticipated to be 60 days following NTP.

Task 4: Environmental

Determine Study Area (Area of Potential Effect)

CH2M HILL will work with the County to identify the study envelope for the various environmental resource issues. Windshield surveys related to all environmental issues requiring field studies will be conducted within this geographic area.

Deliverables:

- One APE for each alternative.

Environmental Field Visits

CH2M HILL will review existing information and conduct field visits as necessary to identify potential environmental impacts and anticipate the necessary technical studies. This information will be documented in a Preliminary Environmental Study (PES). CH2M HILL will work and the County to identify the study envelope for the various environmental resource issues. Field studies related to applicable environmental issues will be conducted within this geographic area. Based on a preliminary review of the project area, the type of project and the nature of the resources, we anticipate that field visits will be necessary for cultural resources (archaeologist, architectural historian), Section 4(f), biological resources (botanist, wildlife biologist, fisheries biologist), and visual resources.

Technical specialists in other areas, such as paleontology, air quality, and noise, will use aerial photographs and existing information in the planning documents to gather necessary data. The information gathered by technical specialists will be compiled in a memo that identifies environmental resource issues that may affect the viability or cost of up to three project alternatives. A draft and final Technical Memo will be prepared.

Based on the technical memorandum, we will complete the Preliminary Environmental Studies (PES) Form addressing the alternatives that are selected as a result of the public scoping, field reviews, and engineering. We anticipate up to three alternatives will be examined. We further assume that the project alternatives will be in the general vicinity (within approximately 500 feet upstream or downstream) of the existing bridge. This form will be forwarded to Caltrans prior to the field review for their review and comment. Our goal will be to have Caltrans sign the form at this meeting, finalizing the PES form.

Deliverables:

- Technical Memorandum, draft and final, pdf.
- Signed off PES Form.

Technical Studies and Constraints Analysis

Cultural resources: A cultural resources specialist will conduct a background records search and literature review at the North Central Information Center of the California Historical Resources Information System at CSU Sacramento and local and state repositories. The records search and literature review will include the proposed project area as well as a 1-mile buffer around the area. We will also contact the California Native American Heritage Commission asking for a search of their sacred lands files database and a list of local Native American representatives that may have knowledge of resources within the study area. The project area is located within a historic park marking the site of the discovery of gold in California, and therefore, there is obviously a potential to affect a historic property. A cultural resources specialist will conduct a site visit and review project alternatives in an effort to determine, preliminarily, which alternatives would likely result in greater or lesser impacts. The constraints memo will discuss the effects that the project might have on resources within or adjacent to the project area, including any potential cultural resource issues that might affect the viability or cost of the project alternatives. All known cultural resources or possible areas of resource sensitivity will be mapped on the provided base map that shows parcel lines and ownership information for any parcel that may be affected by the project.

Section 4(f): An environmental specialist will conduct a windshield survey to identify any issues related to Section 4(f) of the Department of Transportation Act of 1966 (49 U.S. Government Code 303). The Mt. Murphy Road Bridge and Marshall Gold Discovery State Historic Park will be assessed as Section 4(f) resources and the constraints memo will identify if there are additional Section 4(f) resources in the study area. The memo will also identify the type of Section 4(f) use (fee title, temporary, or “constructive” use) that would likely occur with implementation of different options for the repair or replacement of the bridge and route; the type of 4(f) compliance that would be needed (individual Section 4(f) evaluation, programmatic Section 4(f) evaluation, de minimis impact finding, or temporary occupancy approval); and any other circumstances that have the potential to affect the viability or schedule of the project. Section 4(f) resources and any areas of potential impact will be delineated on the provided base map.

Biological Resources: A biologist will obtain and review existing information to identify the potential biological resources that may be associated with the proposed project. A wildlife and fisheries biologist will conduct a reconnaissance survey of the project area and identify potential resource issues, including sensitive species habitat, waters of the United States (including wetlands), and sensitive natural communities (e.g., riparian communities). A botanist will conduct a floristic survey of the project area. The constraints memo will summarize the information obtained during the prefield investigation and describe existing conditions. The memo will identify specific studies or focused surveys needed, any timing issues for conducting the surveys. The effect of any potential mitigation on the viability of project alternatives will be identified. If any sensitive biological resources are located in or adjacent to the project area, they will be mapped on the provided base map.

The information gathered by technical specialists will be compiled in Technical Memorandum that identifies the environmental resource issues that may affect the viability or cost of up to three project alternatives. A draft and final version of the technical memo will be prepared.

Duration:

- The duration of this task is anticipated to be 60 days.

Draft Purpose and Need

CH2M HILL, working with the Project Delivery Team (PDT) and the Stakeholder Advisory Committee (SAC) will develop a draft Purpose and Need Statement. The statement will clarify the expected outcome of the project and set the stage for consideration of the project alternatives. It will define the issues that the project is intended to address, justify the need for the project, and the goals and objectives that will guide project solutions.

This document will be the culmination of the first Public Meeting the County hosted, the first SAC meeting, and the technical deficiencies documented to justify the project under the HBP.

Deliverables:

- Draft Purpose and Need statement.

Assumptions:

- This will be a “living” document throughout the AAR phase of the project and be refined as the study progresses.

Duration:

- This task will be 14 days once the preliminary scoping activities have been completed.

Task 5: Reports

Draft Report Preparation

CH2M HILL will prepare a draft Alternative Analysis Report(AAR), utilizing the data from the previous tasks and including attachment studies approved by CEDDOT that summarizes our alternatives development and analysis process. The AAR will include the environmental inventory for the two to three alternatives to be carried forward. The report will include the justification and analysis used to screen out unfeasible alternatives and summarize the recommendation of carrying two to three alternatives forward for further engineering development in the next phase of work. The draft report will go through an internal quality control review prior to being submitted to the County. CH2M HILL will submit the draft AAR for review by the CEDDOT, EDCTC, and Caltrans. A review of the content of the AAR will be presented to the SAC at one of their meetings, and to the general public at a Public Meeting. Two weeks will be allowed for CEDDOT, EDCTC, and Caltrans review of the draft report.

Deliverables:

- Develop Draft Alternatives Analysis Report(AAR).

Duration:

- Draft Report Completed within 60 days following completion of Task 3: Engineering.

Final Report Presentation

CH2M HILL will address the review comments made by CEDDOT, EDCTC, and Caltrans. The general public's comments will be summarized in the final AAR for submittal to the CEDDOT. The final report will go through an internal quality control review prior to being submitted to the County.

Deliverables:

- A response to comments matrix.
- Final AAR submittal to the CEDDOT.

Duration:

- Final report will be delivered 30 days after receiving all comments.

Task 6: Project Management (Phase 1B)

Schedule, Invoices and Quality

The schedule will be updated monthly to reflect progress on the deliverables. The execution of our quality control plan will be assigned to this task. This task also includes management of subconsultant contracts and invoicing. CH2M HILL will prepare a monthly invoice to be included as part of this task.

CH2M HILL will prepare a status report for the County's Project Manager to be included with our monthly invoice, and will describe the work accomplished during the reporting period, summary of meetings held, and discussion of understanding issues and action items. These reports will also include any concerns or significant issues, and recommendations for additions. The status reports will correspond to the accounting cycles used for the preparation of invoices to facilitate project oversight.

Deliverables:

- Schedule Updates, invoices (6 months), quality control reviews, and the PMP.
- One monthly status report to CEDDOT with the monthly invoice

Duration:

- This task will be a monthly occurrence for the duration of the project – approximately 6 months.

Project Meetings

CH2M HILL will facilitate Project Delivery Team (PDT) meetings for a total of four PDT meetings, assuming this phase of the project will last for six (6) months. Each meeting will have an agenda and a meeting summary to document the discussion, decisions, and action items for all members of the PDT. These meetings will be held by teleconference. The PDT will monitor project progress, identify and solve problems, provide input for the work effort, advise the project manager in directing the course of work oversight, participate in major meetings/hearings, and provide recommendations that will lead to project implementation. The PDT will consist of a group of key interdisciplinary project team members from the County, applicable CH2M HILL team members, Caltrans Local Assistance representative, EDCTC, State Park and others as required. The PDT will be guided by the policies and procedures required for the planning, processing and approval of this project, in accordance with the County and the Caltrans PDPM.

At an appropriate point in the schedule, the project scope will be reassessed. This will be planned to follow the completion of the field review and initial environmental assessment, and establishment of a better understanding of the project alternatives and impacts. A PDT meeting will be utilized to reassess the current project against the original project scope. Any changes required in the direction or scope of the project will be determined at that time and the impact to the scope, schedule, and budget will be reassessed with the County.

The PDT meetings, including the kick-off meeting, will serve as the primary forum for reviewing the status of the project and identifying and resolving project issues. The Project Team will provide meeting notices, prepare meeting materials and agenda, attend, and prepare meeting notes for up to four (4) monthly PDT meetings.

The CH2M HILL Team will hold two one-hour meetings per month. These meetings will keep the disciplines coordinated and ensure that all Team members are receiving the most current communication about the project from the Project Manager. These meetings will be documented with an email summarizing decisions and action items for all team members.

Deliverables:

- Project charter/communication plan, pdf only.
- Meeting agenda and summary for 4 PDT meetings. Email documentation of internal team meetings.

Duration:

- This task will occur the duration of the study – approximately 6 months.