

**NORTH COUNTY CORRIDOR  
TRANSPORTATION EXPRESSWAY AUTHORITY**

**ITEM: 3c**

**SUBJECT:**

Amendment #2 to Jacobs Contract

**STAFF RECOMMENDATIONS:**

By motion, approve the Authority Manager to execute Amendment #2 to the Agreement for Professional Design Services with Jacobs Engineering Group, Inc. for the North County Corridor Transportation Expressway Project for a total contract amount not to exceed \$7,096,592. This amount shall include, without limitation, the cost of any subcontractors, consultants, experts or investigators retained pursuant to Professional Design Service Agreement.

**FISCAL IMPACT:**

The North County Corridor project is funded by State Transportation Improvement Program (STIP) funds in the amount of \$6,200,000 and up to \$4,900,000 of Regional Transportation Impact Fees (RTIF).

The requested amendment will be funded with \$400,000 of allocated STIP funds and \$896,592 of the available RTIF funds.

**DISCUSSION:**

The NCC Board entered into an Agreement for Professional Services with Jacobs Engineering on July 21, 2008. A Task Order #1, approved on February 11, 2009, increased the Task Order apportionment and time extension, but did not involve additional compensation. The Board approved task Orders 2 and 3 on March 11, 2009.

The State Route 108 Adoption of the North County Corridor has been successfully completed for the portion of SR 108 between McHenry Avenue and SR 120 east of Oakdale. The California Transportation Commission (CTC) approved four action items at their May 20, 2010 CTC meeting:

1. Accepted the environmental document, Findings of Fact, and Statement of Overriding considerations and approved the project for future consideration of Route Adoption.
2. Adopted Route 108 in the county of Stanislaus from Route 219 and McHenry Avenue north of the City of Modesto to approximately 0.5 miles east of Albers Road south of the city of Oakdale as a freeway.
3. Adopted Route 108 in the county of Stanislaus from approximately 0.5 miles east of Albers Road south of the city of Oakdale to Route 120 approximately six miles east of the city of Oakdale as a controlled access highway.
4. Approved Resolution No. G-10-13 Adoption of 2010 State Transportation Improvement Program with language that "acknowledges the Department's continued intent to nominate up to \$91 million in the 2012 ITIP for programming of a segment of the North County Corridor – State Route 108 for construction of an ITIP eligible segment with independent utility, and..."

The phase of work to achieve route adoption proved to be more time intensive than originally anticipated. The strategy for route adoption changed on February 18, 2009 when Caltrans Director, Will Kempton, directed that the route adoption would be from SR 108 east of Oakdale to SR 219 (McHenry Avenue) and that the proposed roadway from McHenry Avenue to SR 99 would be considered a local route. Extensive rework of the environmental document was required. This included additional traffic analysis, environmental studies and public scoping meetings to inform the public of the new strategy.

The draft environmental impact report generated over 800 public and regulatory responses to the document. Responding to the comments required revisions to the document and time to address each comment that was not anticipated during the scoping of the original contract.

Coordination with CTC staff, Caltrans staff, Senator Cogdill and CTC Commissioners was required, but unanticipated in the original contract.

The items above resulted in unanticipated costs of approximately \$400,000 to complete the route adoption phase of the project. The expenditures to date leading to the route adoption are \$2,669,855. The remaining \$3,130,145 in the original contract will be applied towards the work leading to completion of the next phase of environmental document and project report.

NCC staff requested that Jacobs provide a revised clear scope and proposal to complete the project. That project is defined as a combination of a project-specific description for an identified construction segment within the limits of the project with the remainder of the project and its alternatives being defined as a design footprint of approximately 400 feet in width to allow for meaningful comparison of impacts. The next phase of work will include the following tasks:

1. Complete a "blended" CEQA/NEPA document that will analyze specific alignments from SR 99 to a connection to existing SR 108 east of Oakdale. Within this document, the specific description of the proposed action (e.g., number of lanes, interchange locations, etc.) will be defined, a distinct range of reasonable alternatives will be identified, and the preferred alignment (location) for the route will ultimately be identified.
2. Identify and environmentally clear a constructible phase 1 segment of roadway, with approximately 60% design plans completed. Producing this level of design will allow the right of way and utility relocation processes to begin as soon as the environmental document is approved. Although the design is "at risk" until the environmental document has been approved, this strategy will expedite the overall schedule.

Within the range of alternatives to be considered, the alternatives for the portion between SR 99 and McHenry Avenue will include both a local road alternative and a state route alternative.

Certification and Record of Decision and Notice of Decision associated with the project would pertain specifically to the funded constructible phase only for construction purposes. The combined document would also allow for right-of-way /corridor preservation.

The revised scope will also include budget support for:

- CTC and Commissioner coordination
- Support for TAC meetings and agency briefings
- General Plan update support for local agencies
- Oakdale Bypass Right of Way funds recovery for NCC

- Litigation support
- 60% design for a constructible phase 1 segment of road.

The estimated total (including expenditures to date) contract cost to complete the project is \$7,536,393. The amount estimated from route adoption to completion is \$4,866,538. Jacobs Engineering, through the Authority Manager's request, is discounting their fee and some subconsultant fees by 10% for a total discount of \$439,801; bringing the sum for contract completion to \$4,426,737 and total contract amount to \$7,096,592.

The new contract amount would require an amendment to the contract in the amount of \$1,296,592.

## ATTACHMENTS

- A. Contract Amendment

**Amendment No. 2. to the  
Agreement for Professional Design Services with Jacobs Engineering Group, Inc.  
for the  
North County Corridor Transportation Expressway Project**

This Amendment is made and entered into on \_\_\_\_\_, in the City of Modesto, State of California, by and between the North County Corridor Transportation Authority (NCCTEA) and Jacobs Engineering Group, Inc., (“CONSULTANT”), for and in consideration of the promises, and the mutual promises, covenants, terms, and conditions, hereinafter contained.

WHEREAS, Jacobs Engineering Group, Inc. has completed and been fully compensated for Task Order #1 and Task Order #2 as approved by the NCC TEA on March 11, 2009 (except as amended below) that is described as:

Task Order #1:

- Aerial topographic surveys and a portion of base mapping.
- Defining the Route Adoption limits.
- Assist in developing the cooperative agreement with Caltrans.
- Drafted the project charter and risk plan with Caltrans.
- Defining the environmental strategy with Caltrans.
- Issued “Notice of Preparation” for the environmental document.
- Drafted “Purpose and Need” for project.
- Determining the appropriate traffic model and completed data collection.
- Coordinating with local planning documents.
- Developing Public Outreach Communications Plan, project brochure, and conducted four public scoping meetings.
- Initiating environmental technical studies.
- Refined the Scope, Cost and Schedule for subsequent Task Orders.

Task Order #2:

- Route Adoption CEQA Document.
- Route Adoption Report.
- PSR-PDS for entire corridor to enable programming.
- Legislative support.

WHEREAS, additional work was identified and required to complete Task Order #2, and;

WHEREAS, the North County Corridor Project is ready to move forward with Task Order #3 as defined in the March 11, 2009 Board action but is better defined as follows and;

WHEREAS, an adjustment to the amount of compensation as originally stated in the Agreement is necessary to complete the project;

Now therefore, the parties hereby agree to amend the Agreement as follows:

**Amendment No. 2. to the  
Agreement for Professional Design Services with Jacobs Engineering Group, Inc.  
for the  
North County Corridor Transportation Expressway Project**

**1. Paragraph 1.2 Scope of Services, subparagraph (b) Subsequent Task Orders is amended to read as follows:**

Task Order #2:

- Route Adoption CEQA Document.
- Route Adoption Report.
- Project Report for Route Adoption.
- Legislative support.
- California Transportation Commission Support.

Task Order #3:

- Complete a “blended” CEQA/NEPA document that will analyze specific alignments from SR 99 to a connection to existing SR 108 east of Oakdale. Within this document, the specific description of the proposed action (e.g., number of lanes, interchange locations, etc.) will be defined, a distinct range of reasonable alternatives will be identified, and the preferred alignment (location) for the route will ultimately be identified
- Identify and environmentally clear a constructible phase 1 segment of roadway with approximately 60% design plans completed. The parties acknowledge that producing this level of design will allow the right of way and utility relocation processes to begin as soon as the environmental document is approved. Although the design is “at risk” until the environmental document has been approved, this strategy will expedite the overall schedule.

**2. Paragraph 2.1 Compensation is amended to read as follows:**

2.1. Compensation. Consultant shall be paid in accordance with the fee schedules approved by NCC TEA for each Task Order, which schedules are attached hereto as Exhibit “C” and made a part of the Agreement. Consultants compensation under this Agreement shall in no case exceed a total of Seven Million Ninety Six Thousand Five Hundred Ninety Two Dollars (\$7,096,592). Unless otherwise agreed to in writing by the parties, the total cost of Task Order #3 shall not exceed \$4,426,737. Said compensation shall include, but not be limited to attached scope of work and schedule.

**3. Paragraph 3.1 Commencement and Completion of Work is amended to read as follows:**

The professional services to be performed pursuant to the Agreement shall commence within five (5) days after NCCTEA delivers a Notice to Proceed for a specified Task Order. Said services shall be performed in strict compliance with the Project Schedule approved by NCCTEA as set forth in Exhibit “D” attached hereto and incorporated herein by this reference. The Project Schedule may be amended by mutual agreement of the parties. Failure to commence work in a timely manner and/or diligently pursue work to completion may be grounds for termination of this Agreement.

All other terms and conditions of said Agreement shall remain in full force and effect.

**Amendment No. 2. to the  
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for the  
North County Corridor Transportation Expressway Project**

In witness whereof, the parties have executed this Amendment effective on the date written above.

**COUNTY OF STANISLAUS**

**JACOBS ENGINEERING GROUP, INC.**

By: \_\_\_\_\_  
Matt Machado, Director  
Department of Public Works

\_\_\_\_\_  
Robert Clement  
Group Vice President, NIA West  
Jacobs Engineering

**APPROVED AS TO FORM**  
John P. Doering,  
County Counsel

By: \_\_\_\_\_  
Thomas E. Boze  
Deputy County Counsel



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## Exhibit C

### North County Corridor Amendment #2

#### *Scope of Services*

With the CTC action of Project Approval and Route Adoption on May 2010, the preparation of a combined CEQA/NEPA document to define specific NCC/SR 108 East alignments from SR 99 to a connection to existing SR 108 east of Oakdale will begin. A “Blended” CEQA EIR and Tiered NEPA document (as a single document) will be prepared. Within the combined CEQA/NEPA document, the specific description of the proposed action (e.g., number of lanes, interchange locations, etc.) will be defined, a distinct range of reasonable alternatives identified, and the preferred alignment (location) for the route ultimately identified.

The CEQA/NEPA document would achieve the following:

- Qualify the project for future federal funding,
- Allow the JPA to implement alignment preservation strategies, and
- Permit the initial funded, constructible phase to begin, Each future segment would be subject to re-evaluation or subsequent environmental documentation for project-specific impacts which means that some form of supplemental documentation for each segment can be anticipated (this is not atypical for large public infrastructure projects that compete statewide and nationally for funding sources).

The project will be defined as a combination of a project-specific description for the identified construction segment within the limits of the project with the remainder of the project and its alternatives being defined as a design footprint of approximately 400 feet in width to allow for meaningful comparison of impacts. The level of analyses of impacts for future phases under CEQA and NEPA will be “corridor level” – as opposed to project-level analyses for the funded constructible segment. Within the range of alternatives to be considered, the alternatives for the portion between SR 99 and McHenry Avenue will include both a local road alternative and a state route alternative.

Under this approach, Caltrans will serve as CEQA and NEPA lead agency. The JPA will serve as the responsible agency under CEQA and as a cooperating agency under NEPA. Certification and Record of Decision and Notice of Decision associated with the approach would pertain specifically to the funded constructible phase only for construction purposes. The combined document would also allow for right-of-way/corridor preservation.

Geometric plans for a Draft Project Report will include three alignment (3) alternatives. Engineering support for a construction phasing plan for the preferred alternative will culminate in a Programmable Construction Phase with approximately 60% design plans



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completed. Producing this level of design will allow the right of way and utility relocation processes to begin as soon as the environmental document is approved. This strategy will expedite the overall schedule.

We assume this initial construction phase to be a 2-lane roadway with at-grade intersections and no interchanges from SR120 to SR 108/McHenry Avenue.

<b>Execution and Control</b>
Scope, Schedule, Budget Oversight (36months)
Schedule Updates (10)
Monthly Invoices
Monthly Progress Reports
Project Administration
<b>Coordination and Meetings</b>
Monthly Progress (PDT) Meetings (32)
Project Coordination Meetings, Caltrans Management Briefings (16), CTC Meeting and Commissioner Coordination (6), Agency Briefings/Presentations (16), General Plan Update Meetings (10), Oakdale By-pass Right-of-Way Abandonment Coordination and Meetings (3), ConAga Coordination and Meetings (3), Individual Public Meetings (6),, Litigation Support
Monthly Team Leader Coordination Meetings/Calls (32)
<b>Quality Control Program</b>
QA/QC Reviews

**Task 1 – Project Management**

**Execution and Control**

**Scope of Services:**

- Submit up to ten (10) schedule updates, to reflect changes in project process and schedule of activities
- Prepare and submit to thirty-two (32) monthly invoices and progress reports
- Manage scope, schedule and budget
- Maintain project files in Prime Consultant’s office
- Provide JPA with project files at close out of contact

**Deliverables**

- Project schedule updates





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- Project invoices and progress reports

**Coordination and Meetings**

**Scope of Services:**

- Organize, conduct, and document meetings that include the following: monthly Project Development Team (PDT) Meetings (32), that include Consultant Team Leaders, Caltrans and JPA participations, Caltrans Management Briefings (16), CTC Meeting and Commissioner Coordination (6), Agency Briefings/Presentations (16), General Plan Update Meetings (10), Oakdale By-pass Right-of-Way Abandonment Coordination and Meetings (3), ConAgra Coordination and Meetings (3), Individual Public Meetings (6), Litigation Support. All meetings will include discussion of work progress, plans for the next period, potential problems, and other project issues.

**Deliverables**

- Agendas and meeting summaries for all meetings

**Quality Control Program**

**Scope of Services:**

- Perform Independent Third Party quality control reviews in accordance with the approved QA/QC Program for the reports, plans, studies, estimates, and other documents submitted. “Continuous” quality control reviews by discipline and task managers and their production staff is included in the respective production tasks. The QA/QC Independent Third Party review is for the separate, milestone independent review of major deliverable documents (e.g., Project Report, Environmental Document and Technical Studies, etc.)

**Deliverables**

- Quality Control reviews of deliverable products, including documentation by the reviewers of their reviews

<b>Consensus Building and Outreach - (Not in TO #2)</b>
<b>Public Meetings</b>
Notification (2 workshops, 2 scoping, 2 public hearing)
Meeting Materials (Boards/Presentations/FAQs)
Stakeholder Meetings (Up to 10)
Facilitation/Attendance (2 workshops)



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Summary / Documentation
General Logistics
<b>Agency Coordination</b>
Briefing Meetings with Councils, Boards, Supervisors and Management (10)
<b>Database Development and Comment Tracking</b>
Comment Tracking Reports (4)
<b>Combined Newsletter/Fact Sheets</b>
Fact Sheets (1)
Produce Combined Newsletter (1)
<b>Website Coordination</b>
Web Page Updates Including Text and Documents
<b>Media Coordination</b>
Maintain Media Contacts List
Prepare Media Kits and Press Releases
Project-Related Article Tracking
<b>Consensus Building and Outreach - Tier I EIR/EIS</b>
<b>Public Meetings</b>
Notification (2 workshops, 2 scoping, 2 public hearing)
Meeting Materials (Boards/Presentations/FAQs)
Stakeholder Meetings (Up to 15)
Facilitation/Attendance (2 workshops)
Summary / Documentation
General Logistics
<b>Agency Coordination</b>
Briefing Meetings with Councils, Boards, Supervisors and Management (21)
<b>Database Development and Comment Tracking</b>
Database for up to 3,500 Contacts
Comment Tracking Reports (4)
<b>Combined Newsletter/Fact Sheets</b>
Fact Sheets (3)
Produce Combined Newsletter (3)
<b>Website Coordination</b>
Web Page Updates Including Text and Documents
<b>Media Coordination</b>
Maintain Media Contacts List



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<b>Prepare Media Kits and Press Releases</b>
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<b>Project-Related Article Tracking</b>
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The project team will have performed a significant amount of work to build stakeholder consensus during the PSR Stage. This task will continue the public participation work and to satisfy the requirements for the environmental studies.

## ***Task 2 - Consensus Building and Outreach Tier I EIR/EIS***

### **Scope of Services:**

#### **Public Meetings**

- Plan and organize project workshops as part of the environmental process for Route Adoption. Up to two (2) public workshops, two (2) Re-Scoping meetings, and two (2) Public Hearings to keep the community updated on the project and comply with environmental process requirements.
- Plan and organize project workshops as part of the environmental process for Tier I EIR/EIS. Up to three (3) public workshops, two (2) Scoping meetings and two (2) Public Hearings to keep the community updated on the project and comply with environmental process requirements.
- Workshop summaries will include an overview of the workshop, documentation of issues/comments, and a list of any action items/next steps
- Includes printing of meeting materials, including up to 30 exhibit boards
- Includes printing/distribution of notification materials and display advertisement placements.
- Research and identify appropriate locations to host the workshops for approximately 150 to 200 attendees
- Prepare and distribute notification materials (letters, notices, newspaper advertisements) to the community and key stakeholders
- Develop and finalize information hand outs and presentation materials for each workshop (e.g. fact sheet, PowerPoint presentation, exhibit boards)
- Organize, conduct, facilitate, and document workshops and meeting proceedings including comments from participants

#### **Deliverables**

- Notification materials (workshop announcements, display ads, press releases, elected officials letters, web site announcements)



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- Meeting agendas / PowerPoint presentations / project informational materials / exhibit boards
- Workshop and meeting summaries

## ***Agency Coordination***

### **Scope of Services:**

- Identify and maintain agency representative and key stakeholder list for ongoing coordination and discussion of issues. The proposed agency and key stakeholder list from the PSR project will be used
- Meeting location to be determined with JPA and for the convenience of agency members

### **Deliverables**

- Agency and key stakeholder contact list
- Information and presentation materials for agency meetings
- Meeting agendas and summaries with action item lists

## ***Database Development and Comment Tracking***

### **Scope of Services:**

- Supplement existing contact information utilizing Parcel Quest to identify adjacent property owners and neighbors
- Conduct research to identify additional stakeholders and interested parties
- Develop protocol for tracking comments received
- Develop and maintain database for up to 3,500 contacts for thirty-one (31) months
- Provide up to three (3) Comment Tracking Reports outlining categories of issues and disposition
- STANCOG, Stanislaus County, Modesto, Riverbank and Oakdale will provide existing contact information in electronic format
- JPA will approve/revise proposed database contacts
- Database will catalogue and track comments, issues, and resolutions originally identified by key stakeholders including community members, property owners, business interests, local organizations, interested agencies and elected officials



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## **Deliverables**

- Outline of database information for review by team and JPA
- Database with contact information and issues/comments noted
- Comment Tracking Reports

## ***Combined Newsletter/Facts Sheets***

### **Scope of Services:**

- Develop outlines and appropriate topics for each newsletter/fact sheet
- Provide three (3) combined newsletters/fact sheets (11 x 17 folded in 3-color) (kickoff, update, and conclusion of consensus building) to keep interested parties updated on project development and available information on the project development process
- Publish materials using JPA standard format for publications
- Up to 3,500 Combined Newsletter/Fact Sheet
- Combined Newsletter/Fact Sheet will be made available at workshops and distributed to people in the project mailing list. Mailing costs included

## **Deliverables**

- Newsletter/ Fact Sheet

## ***Website Coordination***

### **Scope of Services:**

- Coordinate with JPA to update project website on a regular basis
- Coordinate placement of other related data on the JPA website
- Place project materials on the JPA website upon approval by JPA
- Unless otherwise authorized, all materials to be approved by JPA staff before placement on website

## **Deliverables**

- Web page updates
- Record of items posted to website

## ***Media Coordination***

### **Scope of Services:**

- Coordinate with JPA staff to identify appropriate contacts for newspapers, radio stations, and television stations.



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- Maintain media contact list contacts to publish project information and announcements.
- Produce and distribute press kits including press releases and project information as appropriate
- Track articles on project and maintain media coverage file on project

**Deliverables**

- Newspaper articles for local papers (e.g. citywide mailers)
- Media releases and display advertisements

<b>Perform Preliminary Engineering Studies And Draft Project Report - TIER I EIR/EIS</b>
<b>Updated Project Information - As It Relates To The Preferred Alternative In The Project Report</b>
Prepare & Approve PSR-PDS (assume supporting data is prepared under engineering studies for the Draft PR)
Geotechnical Information Review
Materials Information Review
Traffic Data And Forecasts Review
Geometrics Review
Project Scope Review
Project Cost Estimate Review
<b>Engineering Studies</b>
Traffic Forecasting
Geometric Plans For Project Alternatives (2)
Construction Phasing Plans ( Preferred Alternate Only - 60% Plans for 1 alignment, 2-lane rwy, at-grade intersections, no ICs, from SR 120 to McHenry, approx 18 miles))
Value Analysis
Hydraulics/Hydrology Studies
Drainage Concept Plans
Storm Water Data Report
Traffic Operational Analysis
Right Of Way Data Sheet
Determine Right-of-Way Requirements
Utility Location Requirements
Railroad Study



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Park And Ride Study
Traffic Studies
Geotechnical Information
Structures Advance Planning Study
Preliminary Transportation Management Plan
<b>Draft Project Report</b>
Cost Estimates For Alternatives
Fact Sheet For Exceptions To Design Standards
Draft Project Report
Draft Project Report Circulation, Review, And Approval
<b>Engineering And Land Net Surveys Completion from TO #1 And Lexington Alignment</b>
Field Design Surveys
Base Mapping
<b>Environmental Study Request</b>
Surveys And Mapping For Environmental Studies
Property Access Rights For Environmental/Engineering Studies

### ***Task 3 - Perform Preliminary Engineering Studies and Draft Project Report - TIER I EIR/EIS***

#### **Basis of Estimate**

- Caltrans' Project Report format will be used
- Traffic analysis done as part of the Feasibility Study and PSR will be further developed to address Caltrans requirements in Caltrans WBS 2.160.10.35
- Three Caltrans DRAFT PR review cycle are assumed. The review cycles are defined as the Administrative Draft PR, Draft PR, and Final Draft PR.  
(NOTE: Final PR is under Task 8)

#### **Scope of Services:**

- Update Project Information – Data Collection and Field Reviews
- Develop Preliminary Geometric Plans for project alternatives for use in establishing ESL
- Prepare Preliminary Right of Way Requirements (Maps) for each alternative for use in Right-of-way Data Sheets
- Perform Traffic Forecasts/Modeling, Traffic Operational Analysis and Traffic Study
- Perform Value Analysis for Project



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- Perform Structure Advance Planning Studies
- Perform Hydrology/Hydraulics Studies
- Prepare Right of Way Data Sheet
- Define Utilities Requirements for the project alternative
- Review and Perform Railroad Study
- Perform Preliminary Geotechnical Studies
- Perform Structural Preliminary Geotechnical Studies
- Prepare Design Exceptions Fact Sheets
- Perform Constructability Review
- Develop Project Cost Estimates
- Develop Transportation Management Plan
- Develop Storm Water Data Report
- Develop Risk Management Plan
- Prepare Draft Project Report

### ***Updated Project Information - As It Relates To The Preferred Alternative In The Project Report***

#### **Scope of Services:**

- Prepare and Approve PSR-PDS, per Caltrans guidelines
- The team will collect and review existing data from sources including Caltrans; StanCOG; Cities of Oakdale, Riverbank, and Modesto; Stanislaus County; and other outside agencies. This data will include but is not limited to survey information, as-builts, and other studies and reports applicable to the corridor.
- Field reviews will be performed by the team as required and as it pertains to the team members' specialty.

#### ***Traffic Forecasting***

#### **Scope of Services:**

- Use the current version of the StanCOG RTP Model to determine opening year and design year peak hour forecasts for up to 30 existing intersections and 60 new intersections that would be created by the Project.
- Determine average daily traffic (ADT) volumes at up to 40 existing/new roadway locations.





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- A focused model validation exercise will be undertaken in the study area, followed by the use of the model to predict changes in travel patterns in the opening and design year time period. A calibration/validation memorandum will be developed that presents initial model validation procedures and results, to be reviewed with StanCOG and Caltrans. If the model does not meet the specified Caltrans targets, we will work to improve the validation results by adjusting link characteristics and conducting select link analyses to ensure reasonable movements through the project area.
- Review the results with StanCOG and Caltrans and if the revised model meets the specified validation target we will proceed with the future year forecasting. However, if the revised model still does not fully meet all of the targets, we will review the progress made with Caltrans and request approval to proceed with forecasting.
- Opening year and design year traffic forecasts will be developed for up to five alternatives including No Project conditions.
- Submit a technical memorandum summarizing the traffic forecasts for review and approval by the Project Development Team (PDT). Once approved, we will proceed with the technical evaluation of the alternatives.

**Deliverables:**

- Traffic Forecasting Technical Memorandum

***Geometric Plans for Project Report***

- Geometric plans for the Draft Project Report will include three alignment (3) alternatives. Plans shall be prepared at 1" = 300' scale (approximately 1" = 500' for reduced plans). Appropriate dimensions and features to the design will be labeled.
- Right-of-Way requirements will be shown. Retaining wall and sound wall locations will be shown with approximate heights. Daylight limits of standard slopes will be delineated.
- Profiles and superelevation diagrams will be provided for the mainline, interchange ramps and cross streets for the four alternatives.

**Deliverables:**

- Geometric plans for three (3) alignment alternatives.



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## ***Construction Phasing Concept Plans***

### **Scope of Services:**

- Prepare construction phasing plans for the preferred alternative Programmable Construction Phase (60% plans for 2-lane roadway with at-grade intersections and no ICs from SR120 to McHenry). The phasing plans will be prepared at 1" = 50' scale (approximately 1" = 100' for reduced plans).

### **Deliverables:**

- Concept construction phasing plans for one (1) alternative

## ***Value Analysis***

### **Scope of Services:**

- Conduct a VA Study to comply with the NHS VE mandate and follow the Caltrans VA methodology as outlined in the Chapter 19, "Value Analysis" of the Project Development Procedures Manual (PDPM) and detailed in the Caltrans VA Team Guide and Report Guide.
- Provide on site team leadership and final report documentation for a six (6) day project studies.
- Provide a qualified, independent Certified Value Specialist (CVS), certified by SAVE International and a registered Professional Engineer (PE) with civil/transportation engineering background.
- Provide VA study documentation in accordance with the Caltrans VA Report Guide.
- Provide 6-8 additional team members with specific expertise to serve as members of a VA team. This selection of team members will be coordinated with Caltrans and the JPA. The potential team members may include the following disciplines:
  - Highway Design
  - Traffic Design
  - Traffic Analysis
  - Hydraulic Design
  - Structural Design
  - Construction Staging
  - Construction



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- Environmental Planning
- Other team members to be provided by stakeholder agencies

**Deliverables:**

- Draft and Final VA Reports

***Hydraulics/Hydrology Studies***

**Scope of Services:**

- A hydrology study will be performed based on gross acreage determinations tributary to the proposed drainage systems shown on the Drainage Concept Plans. The analysis will be based on a cfs/acre basis, developed for the differing land uses. A qualitative assessment will be made for existing cross drainage systems to assess its extension through the project. A detailed hydrology and hydraulic analysis is not included in the scope of work.

**Deliverables:**

- Hydrology Study

***Drainage Concept Plans***

**Scope of Services:**

- Drainage facilities for the preferred alternative will be evaluated and identified in a qualitative manner. No profiles will be provided. For determining the extent of drainage improvements, Consultant shall identify critical locations for drainage concentration points and develop conveyance systems to accommodate the locations. Rough estimates of design discharges will be developed on gross acreage determinations of tributaries to the proposed drainage systems on a cfs/acre basis. These values will be used to provide preliminary sizing of the drainage systems within the project site. The capacity of existing storm drain systems will be estimated using normal depth calculations to determine if the existing facilities have adequate capacity to accommodate increase in storm water run off resulting from the project.

**Deliverables:**

- Concept Drainage Plans (Layout only)



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## ***Storm Water Data Report***

### **Scope of Services:**

- In accordance with the Caltrans Project Planning and Design Guide dated May 2007, a Storm Water Data Report (SWDR) shall be prepared.
- The SWDR is to include the following information: Project description, identification of the receiving water bodies, geotechnical information, design pollution prevention and post-construction BMPs proposed, costs, and checklists. Phased construction shall be considered in the report.
- The SWDR will be signed by the Project Engineer and then submitted to JPA and Caltrans for review and approval by the District/Regional Design Storm Water Coordinator, the designated Landscape Representative, the designated Maintenance Representative, and final approval by the Project Manager to verify that storm water quality design issues have been addressed, and the data is complete, and accurate.
- The SWDR will be prepared and revised at the Draft and Final PR phases.
- The SWDR will be prepared for a single alternative (preferred) as there is not a significant differential impact to the main water bodies between the alternatives. Two reviews (three submittals) are assumed for both the Draft and Final SWDR.

### **Deliverables:**

- Storm Water Data Report (Draft and Final)

## ***Traffic Operational Analysis***

### **Scope of Services:**

- The intersection traffic counts, lane configurations, signal timings, and other information collected will be used to develop existing AM and PM peak hour Synchro models. Synchro provides results consistent with the Transportation Research Board's 2000 Highway Capacity Manual (HCM) methodology.
- Intersections that are clustered together (less than 1000 foot spacing) will be converted to micro-simulation (using the SimTraffic software) to determine existing intersection delay and level of service.
- Existing traffic operations for intersections that are not clustered together will be determined directly from the Synchro LOS output.
- Freeway mainline, merge and diverge operations will be determined from analysis procedures delineated in the 2000 HCM for the AM and PM peak hours. Mainline segment analysis will be performed on SR 99 from north of Hammett Road to south of Pelandale Avenue. In addition to mainline



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segment analysis, ramp junction analysis will be performed for the Hammett Road, Kiernan Avenue, and Pelandale Avenue interchanges.

- A technical memorandum summarizing the existing traffic conditions will be submitted for review and comment by the Project Development Team (PDT).
- The traffic forecasts developed will be used to develop Synchro models (AM and PM peak hour) for up to five project alternatives including No Project conditions. The Synchro models will include the same intersections evaluated under existing conditions plus up to 60 new intersections created by the Project. We estimate that up to 60 new intersections could be reasonably studied as a result of the potential 10 to 15 interchanges that could be provided as part of the Project.
- Similar to existing conditions analysis, intersections that are clustered together (less than 1000 foot spacing) will be converted to micro-simulation (SimTraffic) to determine existing intersection delay and level of service.
- Traffic operations for the intersections that are not clustered together will be determined directly from the Synchro LOS output.
- Peak hour analysis will be performed for the opening year and design year under each project alternative. Results will include average delay, level of service, and estimated queue lengths for each intersection.
- Perform AM and PM peak hour mainline and ramp junction analysis for the study locations previously identified for up to five project alternatives including No Project conditions. The mainline and ramp analysis will be consistent with the methodologies presented in the 2000 HCM. Weaving analysis, if necessary, will be consistent with the methodologies presented in Chapter 500 (Leisch Method) of the Caltrans Highway Design Manual (HDM).
- In addition to intersection level of service analysis, we will utilize the current StanCOG RTP Model to project changes in ADT on project area roadways as a result of the Project.
- The regional implications of the corridor will be evaluated by examining additional measures of effectiveness (MOEs) such as vehicle miles of travel (VMT), vehicle hours of travel (VHT), and vehicle hours of delay (VHD) with and without the Project.

### **Deliverables:**

- Existing Traffic Conditions Technical Memorandum



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## ***Right-of-Way Data Sheet***

### **Scope of Services:**

Prepare Right-of-Way Data Sheet(s) in accordance with the Caltrans Right-of-Way Manual for each alignment alternative including the following information:

- ROW Cost Estimate
- Parcel Data
- Utility Facility Conflicts
- Railroad Facility Conflicts
- Identification of previously unidentified hazardous materials
- Displacement requirements
- Borrow or Disposal Sites required
- Potential relinquishments and/or abandonment's
- Existing and/or potential Airspace sites
- Estimated ROW schedule and lead time

### **Deliverables:**

- Right-of-Way Data Sheet(s)

## ***Determine Right-of-Way Requirements***

### **Scope of Services:**

- Determine Right-of-Way requirements for the preferred alternative. Right-of-Way requirements will be established in Microstation format and tabulated in Excel spreadsheet with parcel number identification and area of take required.

### **Deliverables:**

- Tabulated Right-of-Way Requirements

## ***Utility Location Requirements***

### **Scope of Services:**

Research all utility information available from utility owners, public records, and other sources. This information will be transferred to Microstation to become a utility reference for preliminary planning and engineering.

- Work with CALTRANS, USA One-call Center, and the public and private utility companies to determine all utility owners located in or near the project alternatives



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- Determine and record utility owner key contacts; include engineers, technician, and utility locator personnel or contractors.
- Prepare and communicate general project information, as approved by project management, to utility owners. In return, obtain utility as-builts, maps, schematics, and (or) CADD drawings from the utility owners.
- Submit preliminary summary reports of all subsurface utilities in the corridor. Prepare CADD drawings with research information. Include variables along with approximate location; such as utility carriage, pipe size, material, and age. (See ASCE/FHWA quality level description D.)
- Potholing of existing utilities is not included in the work program at this stage of the project.

**Deliverables:**

- Utility record drawings and contact list
- Utility base mapping

***Railroad Study*****Scope of Services:**

- Identify impacted rail lines, including Burlington Northern- Santa Fe Railroad, Union Pacific-Southern Pacific Railroad and Sierra Railroad, operation requirements and expansion plans and prepare a Railroad Information Sheet in accordance with Exhibit 4-EX-1 (REV March 2004) of the Caltrans Right-of-Way Manual (updated March 2007) for the Project Record describing the railroad facilities and types of agreements and right required from the railroads.

**Deliverables:**

- Railroad Information Sheet

***Park and Ride Study*****Scope of Services:**

- Assess the potential to add park-and-ride facilities within the project corridor for the preferred alternative. Potential locations for park-and-ride facilities will be limited to areas adjacent to existing local access interchanges that are served by or are near existing bus service. Particular focus will be given to (but not limited to) property remainders after acquisitions or associated street modifications. Locations will be recommended (if any) and the approximate number of spaces will be determined. Park-and-ride lot layouts are not included in the scope at this phase of the project.



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### **Deliverables:**

- Draft and final Park and Ride Study

### **Traffic Studies**

#### **Scope of Services:**

- Prepare the Traffic Operations Report summarizing the results and findings.
- Prepare an Administrative Draft Traffic Operations Report to StanCOG for one round of review and written comments.
- Respond to StanCOG written comments and prepare the Draft Traffic Operations Report to submit to StanCOG, Caltrans and other PDT members for one round of review and comments.
- Respond to comments on the Draft Traffic Operations Report and prepare the Final Traffic Operations Report. We will submit the final report in both hard copy and electronic format.
- Prepare the transportation chapter of the Environmental Document. This report will build on previous work and will document the proposed project's impact on the transportation and circulation system. The report will also include a qualitative assessment of the impacts of each alternative on bicycle, pedestrian, and transit facilities within the study corridor. Mitigation measures for significant transportation impacts will be identified.
- Respond to comments on the transportation chapter of the draft environmental document.
- Prepare the traffic chapter of the Project Report that will address the proposed Project in accordance with Caltrans guidelines and requirements. This report will also build on previous work and will evaluate intersection traffic operations under existing and future conditions.
- Respond to comments on the traffic chapter of the Project Report.

#### **Deliverables:**

- Traffic Operations Report
- Text for the Traffic Section of the Environmental Document
- Text for the Traffic Section of the Project Report





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## **Geotechnical Information**

### **Scope of Services:**

Review documents provided by the design team, including Caltrans As-Built LOTB's, Foundation Reports, and Geotechnical Design Reports for existing structures and roadway improvements along the project alignment.

Review our in-house local and regional geologic and seismic hazards maps pertaining to the site.

Conduct a site geologic reconnaissance of the immediate vicinity and determine drill rig accessibility and mark boring locations for Underground Service Alert (USA). Obtain encroachment and boring permits from Stanislaus County. We assume the County will waive the encroachment permit fee.

Perform a limited subsurface exploration at the locations shown below:

<b>Structure Areas</b>	<b>Subsurface Exploration</b>
Intersection of Claus Rd. and Plainview Rd.	One boring to 75 feet
3000 ft south of Patterson Rd. on Langworth Rd.	One boring 50 to 75 feet
Intersection of Patterson Rd. and Oakdale Waterford Hwy.	One boring to 75 feet
Intersection of Warnerville Rd. and S. Stearns Rd.	One boring to 50 feet
2000 ft east of Stoddard Rd. on Warnerville Rd.	One boring 50 feet
4000 ft southwest of Lancaster Rd. and OID* south main canal intersection.	One boring to 50 feet

\*OID-Oakdale Irrigation District

Borings can be located off of the existing roadways and that traffic control at most will consist of safety signs/cones for shoulder work without flagmen. We assume that rights-of-entry (if necessary) will be provided by others.

Perform the following laboratory tests on relatively undisturbed samples obtained from the exploratory borings:

- Moisture Content and Unit Weight.
- Triaxial Compression for bearing capacity and lateral pile capacity.
- Sieve analysis.
- Plasticity Index.



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- Soil corrosivity.

Prepare Preliminary Foundation Memos for the project which will include the following:

- Summary of Site Geology and Subsurface Conditions.
- Project Location.
- As-Built Log of Test Borings for Existing Nearby Structures.
- Log of Test Borings for our Preliminary Subsurface Exploration.
- Preliminary Seismic Data and Evaluation (including ARS curve).
- Preliminary Liquefaction Evaluation.
- Preliminary Corrosion Evaluation.
- Preliminary Foundation Recommendations.
- Evaluation of embankment settlement, cut/fill slope stability, scour, soil corrosivity, and constructability issues.
- Recommendations for Additional Field Work and Laboratory Testing.

The preliminary Foundation Memo should only be used for advanced planning as additional subsurface exploration, laboratory testing and analysis will be required to prepare Final Foundation Reports for design of each bridge.

***Deliverables:***

- Draft Preliminary Foundation Memo (Type Selection) – Claus Road/Mid Main Canal, and McGee Avenue/Claribel Structures
- Draft Preliminary Foundation Memo (Type Selection) – Langworth Road, Bentley Road, Kaufman Road, Patterson Road, Albers/Brichetto, and Claribel/South Lateral Structures
- Draft Preliminary Foundation Memo (Type Selection) – OID South Main, Union, and Kearnic Laterals
- Draft Preliminary Foundation Memo (Type Selection) – Sierra RR and OID South Main Structure
- Final Preliminary Foundation Memo (Type Selection) – Claus Road/Mid Main Canal, and McGee Avenue/Claribel Structures
- Final Preliminary Foundation Memo (Type Selection) – Langworth Road, Bentley Road, Kaufman Road, Patterson Road, Albers/Brichetto, and Claribel/South Lateral Structures
- Final Preliminary Foundation Memo (Type Selection) – OID South Main, Union, and Kearnic Laterals
- Final Preliminary Foundation Memo (Type Selection) – Sierra RR and OID South Main Structure



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## ***Preliminary GDR/Materials Report***

### **Scope of Services:**

- Review documents provided by the design team, including Caltrans As-Built LOTB's, Foundation Reports, and Geotechnical Design Reports for existing structures and roadway improvements along the project alignment. To evaluate site geology and seismic conditions, BCI will review our in-house local and regional geologic and seismic hazards maps pertaining to the site.
- Perform R-value testing on relatively undisturbed samples obtained during our preliminary foundation memo exploration.

Prepare a Preliminary Geotechnical/Materials Report for the project alignment including the following:

- Project description
- Summary of site geology and subsurface conditions
- As-built LOTB for existing structures along the alignment
- LOTBs for our limited subsurface exploration
- Discussion of potential geotechnical/material issues for design
- Preliminary pavement sections.

The preliminary Geotechnical/Materials Report should only be used for advanced planning as additional subsurface exploration, laboratory testing and analysis will be required to prepare Final Geotechnical and Material Design Reports for the proposal improvements.

### **Deliverables:**

- Draft Preliminary Geotechnical/Material Report
- Final Preliminary Geotechnical/Materials Report

## ***Structure Advance Planning Study (APS)***

### ***Assumption:***

The limit of Phase 1 will involve the northerly alignment only, identified as corridor/Alternative B alignment in the Preliminary Design Report (PDR) dated April 2008,



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and will include the area between the easterly termini of the project study area near Highway 108/120 and Claus Road to the west.

Within the limit of Phase 1, the conceptual geometrics in the PDR shows that around 32 separate bridge structures will be required. The bridge structures consist of twin parallel undercrossings, canal crossings and railroad overheads as well as single overcrossings. For scoping purposes, we have identified the anticipated bridge structures beginning from the most easterly located structure and then moving to the west on the proposed alignment as follows:

- Old South Main Canal Bridge L/R
- NCC Expressway/Sierra RR Overhead L/R
- Kerney Lateral Bridge L/R
- Union Lateral Bridge L/R
- Old South Main Lateral Bridge L/R
- South Lateral Bridge L/R
- Claribel Lateral Bridge L/R
- Brichetto Lateral Bridge L/R
- Oakdale Waterford Highway - Bricheto Lateral Bridge
- Albers Road Overcrossing
- Kaufman Road Undercrossing L/R
- Patterson Road Undercrossing L/R
- Bentley Road Undercrossing L/R
- Langworth Road Overcrossing
- McGee Ave Undercrossing L/R
- Claribel Road Undercrossing L/R
- STA 570+00 Mid Main Canal Bridge L/R
- Off Ramp - Mid Main Canal Bridge

Note: We assume that the overcrossing structure at Claus Road is not included in the Phase 1 work.



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Due to project budgetary constraints, APS will not be prepared for each of the structures identified above but will be for those structures that will be a representative of a group type as mutually agreed upon. In general, the structures will be grouped as follows:

- Canal Crossings
- Undercrossings
- Overcrossings
- Overheads

### **Scope of Services:**

Based on the proposed roadway geometrics and preliminary project information, the APS will be prepared in accordance to the Caltrans' Office of Special Funded Project Procedures Guide. As part of the APS tasks, a feasible type of structure will be developed with associated cost appropriate for the specific location. The preliminary foundation report and the structure foundations will be reviewed to determine preliminary foundation type. Any preliminary hydraulic report if required will be provided by Jacobs or others for the canal crossings. BRG will review the preliminary hydraulic report and coordinate with the project hydraulic engineer as required to develop the proper structure layout to meet the requirements in the report. The studies will be developed for one alternative alignment and includes one representative structure for each of the 4 structure groups as identified above

### ***Deliverables:***

APS Report per bridge includes: a bridge APS exhibit, APS Checklist, an APS design memo, and Itemized cost estimates consistent with Project Report requirements.

## ***Preliminary Transportation Management Plan***

### **Scope of Services:**

- The preliminary Transportation Management Plan (TMP) and corresponding worksheets will be developed for each of the four project alternatives based on Caltrans current guidelines.

### **Deliverable:**

- Preliminary TMP



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### ***Cost Estimates for Alternatives***

- Provide cost estimates for three (3) alternatives based on Caltrans Project Development Procedures Manual guidelines for Project Report cost estimates. An independent review of the cost estimates will be performed.

#### **Deliverables:**

- Project Report Cost Estimates

### ***Fact Sheet for Exceptions to Design Standards***

#### **Scope of Services:**

- Identify all non-standard design features based on the Design Checklist (DIB 78-02) for the preferred alternative. Fact Sheets will be prepared for exceptions to Mandatory and Advisory standards for the selected alternative only. Up to four submittals (three review cycles) of the Fact Sheets are anticipated.

#### **Deliverables:**

- List of Non-Standard Features for the selected alternative
- Fact Sheets for Exceptions to Design Standards for selected alternative

### ***Draft Project Report***

#### **Scope of Services:**

- Prepare a Draft Project Report based on the Caltrans Project Development Procedures Manual (PDPM) Appendix K. All information prepared as part of Task 160.10 will be incorporated into the Draft Project Report as required by the PDPM. A preliminary Draft Project Report will be submitted to JPA and Caltrans for review and comment. Following receipt of one consolidated set of comments, a comment review workshop will be held with the respondents to review their comments and provide appropriate responses. A Final Draft Project Report will be prepared and submitted for review and approval. Up to four submittals (three review cycles) of the Draft Project Report are anticipated.

#### **Deliverables:**

- Preliminary Draft and Final Draft Project Report



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## ***Circulate, Review and Approve Draft Project Report***

### **Scope of Services:**

- Once the Final Draft Project Report has been submitted for review and approval, the project manager will work with JPA and Caltrans to obtain the appropriate signatures. If issues or questions arise during the approval phase, the team will work with staff to answer any remaining questions, provide additional information, and obtain signatures as appropriate.

### **Deliverables:**

- Signed Draft Project Report

## ***Aerial Mapping/Photogrammetry***

### **Scope of Services:**

- Provide additional mapping, in cooperation with Caltrans, for the proposed improvements from State Highway 99 to State Highway 108/120 and will supplement the approximate 26 miles that has already been mapped. The proposed survey will include approximately 2 additional miles of proposed route outside the existing project limits as well as additional photogrammetric mapping within the existing project limits. All surveys will be based on Caltrans specified horizontal and vertical control datums. We will collect and deliver all surveys in project data using reflectorless and/or GPS survey equipment. All work will be performed by or under the direct supervision of a licensed professional qualified to perform land surveying in the State of California. We will perform project control surveys and mapping consistent with Project Report and Environmental Document requirements. Surveying and mapping activities will provide base information on existing physical conditions within the revised project limits.

### **Survey Control**

- Supplement the existing primary project control network with the number of points required to map the area outside the existing project limits. Photo control will be established so that aerial mapping will comply with National Map Accuracy Standards.

### **Aerial Topographical Mapping**



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- Prepare new aerial mapping in English units for a specific area containing approximately 2 miles of proposed roadway outside the existing project limits as well as additional mapping within the existing project limits. The newly proposed area encompasses East Lexington Road between Crane Road and Kaufman Road. New Aerial photography is planned to supplement the existing block coverage and to encompass the alternative corridor. The flight pattern provides enough photography so that minor variations for the corridor have sufficient stereographic photo coverage for potential mapping. Photography will be acquired in color and scanned at a resolution of 12 microns. Photography will be taken at an altitude of 3600 feet above mean elevation with an average photo scale of 1:7200. From the photography a seamless digital color ortho photo will be produced at a pixel resolution of .5' (GSD). Digital mapping will be compiled to produce 2' contours and planimetry for 3 miles of corridor mapping at a width of 1000' with wider mapping at selected major intersections and other areas of interest. All mapping products will meet or exceed ASPRS Class 1 map accuracy standards.

The assumptions in preparing the aerial mapping include the following:

- Set Ground Control and Premarks (using Caltrans Requirements for airborne GPS)
- Perform Aerial Photogrammetry
  - Calibrated aerial mapping camera with 6-inch total length lens
  - color aerial negative film
  - Photography will be taken at 3600 feet above mean elevation with average scale of 1:7200
  - Digital topographic map compilation in MicroStation Caltrans format
  - Map scale of 1" = 100' with 2-foot contour intervals
  - Final contours will be generated from the DTM
  - Map will adhere to Caltrans cartographic standards and project specifications

Utilizing the control and Analytical Aerotriangulation, adjustment, scanned imagery and DTM data collected we will rectify the imagery and create a seamless color digital ortho photo covering the project area at a pixel resolution .5' (GSD)

- Final digital mapping files will be in accordance with Caltrans specifications and will be delivered in 3-D MicroStation design (DGN) and DTM files
- Two (2) sets of 9"x9" color contact prints
- One (1) CD-ROM containing 1"=100' planimetrics with 2' contours and DTM topographic mapping data in DGN format, 0.5' GSD color orthophotography in .TIF with TFW format.

## Base Map





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Aerial mapping, field design surveys, and GIS parcel information will be combined with existing project surveys to produce a project base map. Spot elevation will be shown and contours will be generated at 2' intervals. The base map will show assessors parcel lines, section corner monuments, right-of-way lines, roadways, drainage facilities, railroad tracks and facilities, levees, structures, fences, driveways, poles, streetlights, trees, and vegetation limits. A field review of the topographic survey will be performed to ensure adequate topographic features are tied and quality is assured. Plotted cross section exhibits are not included in this scope of services.

The exact boundary lines of Individual parcels will not be determined by field survey methods but the parcel lines as defined in the Stanislaus County GIS information will be incorporated into the base drawing.

**Deliverables:**

- Topographical mapping, base mapping and color aerial photographs

<b>Perform Environmental Studies And Prepare Draft Environmental Document - TIER I EIR/EIS HYBRID</b>
<b>Environmental Scoping Of Alternatives Identified For Studies In PID</b>
Project Information Review
Public And Agency Scoping Process
Alternatives For Further Study
<b>General Environmental Studies</b>
Community Impact Analysis, Land Use, And Growth Studies
Visual Impact Assessment And Scenic Resource Evaluation
Noise Study
Air Quality Study
Water Quality Studies
Energy Studies
Summary Of Geotechnical Report
Hazardous Waste Preliminary Site Investigations
Draft Right Of Way Relocation Impact Document
Location Hydraulic And Floodplain Study Report
Paleontology Study
Wild And Scenic Rivers Coordination
Environmental Commitments Record



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Other Environmental Studies
<b>Biological Studies</b>
Biological Assessment
Wetlands Study
Resource Agency Permit Related Coordination
Natural Environment Study Report
<b>Cultural Resource Studies</b>
<b>Archaeological Survey</b>
Area Of Potential Effects/Study Area Maps
Native American Consultation
Records And Literature Search
Field Survey
Archaeological Survey Report
Other Archaeological Survey Products
<b>Extended Phase I Archaeological Studies (No sub-surface investigations)</b>
Native American Consultation
Extended Phase I Proposal
Extended Phase I Field Investigation
Extended Phase I Materials Analysis
Extended Phase I Report
<b>Phase II Archaeological Studies</b>
Native American Consultation
Phase II Proposal
Phase II Field Investigation
Phase II Materials Analysis
Phase II Report
<b>Historical And Architectural Resource Studies</b>
Preliminary Area Of Potential Effects/Study Area Maps For Architecture
Historic Resources Evaluation Report - Archaeology
Historic Resource Evaluation Report- Architecture (HRER)
Bridge Evaluation
<b>Cultural Resource Compliance Consultation Documents</b>
Final Area Of Potential Effects/Study Area Maps
PRC 5024.5 Consultation
Historic Property Survey Report/Historic Resources Compliance Report
Finding Of Effect
Archaeological Data Recovery Plan/Treatment Plan



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Memorandum Of Agreement
<b>Draft Environmental Document</b>
Draft Environmental Document Analysis
Section 4(F) Evaluation
Categorical Exemption/Categorical Exclusion Determination
Environmental Quality Control And Other Reviews
Approval To Circulate Resolution
Environmental Coordination
NEPA Delegation
Required Permits During PA&ED Development
<b>Permits During PA&amp;ED Development</b>
U.S. Army Corps Of Engineers Permit (404)
U.S. Forest Service Permit(s)
U.S. Coast Guard Permit
Department Of Fish & Game 1600 Agreement(s)
Coastal Zone Development Permit
Local Agency Concurrence/Permit
Waste Discharge (NPDES) Permit
U.S. Fish And Wildlife Service Approval
Regional Water Quality Control Board 401 Permit
Updated Environmental Commitments Record
NEPA Delegation
Other Permits
<b>Circulate Draft Environmental Document And Select Preferred Project Alternative - TIER I EIR/EIS</b>
<b>DED Circulation</b>
Master Distribution And Invitation Lists
Notices Regarding Public Hearing And Availability Of Draft Environmental Document
DED Publication And Circulation
<b>Public Hearing</b>
<b>Need For Public Hearing Determination</b>
Public Hearing Logistics
Displays For Public Hearing
Second Notices Of Public Hearing And Availability Of DED
Map Display And Public Hearing Plan
Display Public Hearing Maps



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Public Hearing
Record Of Public Hearing
Public Comment Responses And Correspondence
<b>Project Preferred Alternative</b>
<b>NEPA Delegation</b>

***Task 4, 5, 6, & 7 - Perform Environmental Studies And Prepare Draft Environmental Document - TIER I EIR/EIS - Circulate Draft Environmental Document And Select Preferred Project Alternative***

With the CTC action of Project Approval and Route Adoption in May 2010, the preparation of a combined CEQA/NEPA document to define specific NCC/SR 108 East alignments from SR 99 to a connection to existing SR 108 east of Oakdale will begin. A “Blended” CEQA EIR and Tiered NEPA document (as a single document) will be prepared. Within the combined CEQA/NEPA document, the specific description of the proposed action (e.g., number of lanes, interchange locations, etc.) will be defined, a distinct range of reasonable alternatives identified, and the preferred alignment (location) for the route ultimately identified.

The CEQA/NEPA document would achieve the following:

- Qualify the project for future federal funding,
- Allow the JPA to implement alignment preservation strategies, and
- Permit the initial funded, constructible phase to begin, Each future segment would be subject to re-evaluation or subsequent environmental documentation for project-specific impacts which means that some form of supplemental documentation for each segment can be anticipated (this is not atypical for large public infrastructure projects that compete statewide and nationally for funding sources).

The project will be defined as a combination of a project-specific description for the identified construction segment within the limits of the project with the remainder of the project and its alternatives being defined as a design footprint of approximately 400 feet in width to allow for meaningful comparison of impacts. Because future construction segments are unfunded and in recognition that future segments will be subject to evaluation under future project level tier 2 supplemental analyses. The level of analyses of impacts for future phases under CEQA and NEPA will be “corridor level” – as opposed to project-level analyses for the funded constructible segment.

Within the range of alternatives to be considered, the alternatives for the portion between SR 99 and McHenry Avenue will include both a local road alternative and a state route alternative.



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Under this approach, Caltrans will serve as CEQA and NEPA lead agency. The JPA will serve as the responsible agency under CEQA and as a cooperating agency under NEPA.

Certification and Record of Decision and Notice of Decision associated with the approach would pertain specifically to the funded constructible phase only for construction purposes. The combined document would also allow for right-of-way/corridor preservation.

A new Route Adoption may have to be processed should the selected alignment significantly vary from the approved Route Adoption corridor and is not included in this scope.

The purpose of this set of tasks is to conduct detailed environmental technical studies at equal level of detail for each of the alternatives to be evaluated in the draft environmental document (DED), prepare the administrative DED and obtain approval to circulate the DED. This task assumes that up to two (2) build alternatives and a No-Build Alternative will be evaluated in the DED. A complete listing of subtasks is provided in the table which follows. Key tasks are described in the following scope of services.

## ***Task 4 - Environmental Scoping Of Alternatives Identified For Studies In PID***

### ***Project Information Review***

#### **Scope of Services:**

Review all pertinent information to the environmental process in preparation for the NEPA/CEQA Scoping process.

### ***Public and Agency Scoping Process***

#### **Scope of Services:**

Plan and conduct a NEPA/CEQA Scoping process. Included in this task is preparing required notices and filings. Key tasks include:

- Prepare CEQA Notice of Preparation (NOP) including an attached CEQA initial study (IS) documented anticipate impacts of the proposed project.
- Prepare draft NEPA Notice of Intent (NOI) for transmittal for Caltrans for publication in the Federal Register.
- Prepare public notice advertisements (ads) for publication in newspapers of general circulation.
- Compile distribution lists for NOI/NOP and general public notices.



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- Prepare displays and presentation materials for Scoping meetings and conduct meeting preparation sessions with the project team and PDT.
- Conduct up to two (2) Scoping meetings.
- Prepare a draft, revised draft and final Scoping Summary Report.

**Deliverables:**

- NOI/NOP
- CEQA Initial Study
- Public advertisements and notices
- Scoping meeting materials and displays
- Scoping meetings
- Scoping Meeting Summary Report

***Alternatives for Further Study***

**Scope of Services:**

- Based on outcome of the public and agency Scoping process and consultation with the PDT, the team will document the alternatives screening process including JPA and CALTRANS' concurrence on the alternatives to be assessed in the DED.

**Deliverables:**

- Alternatives Screening Report

**Task 5 - General Environmental Studies**

**Scope of Services:**

- Conduct environmental analyses consistent with requirements of the Caltrans Standard Environmental Reference (SER), the FHWA T6640.8A technical advisory, and applicable agency guidance's for regulated resources.
- The following technical studies are anticipated to be required. Should additional studies be requested by project team members or resource agency representatives, scopes of services for the additional work will be prepared.

***Community Impact Analysis, Land Use, and Growth Studies***

**Scope of Services:**

- Prepare a Community Impact Assessment (CIA) report following the Caltrans CIA handbook (SER).



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**Deliverable:**

- Draft, revised draft and final CIA report

***Visual Impact Assessment and Scenic Resources Evaluation*****Scope of Services:**

- Prepare a visual impact assessment using the FHWA/ASLA impact guidance. The analysis will include the preparation of before and after photo-simulations (up to 20) on which changes to the quality of the visual environment will be determined.

**Deliverable:**

- Draft, revised draft and final Visual Impact Assessment report including photo-simulations.

***Noise Study*****Scope of Services:**

- The project is considered to be a Type II facility and will require a detailed traffic noise impact assessment. A traffic noise impact assessment will be conducted using the Traffic Noise Model (TNM). Prior to conducting the field monitoring and analysis, a Noise Monitoring Plan will be prepared for review and approval by JPA and Caltrans. The noise analysis will identify locations at which the project alternatives would cause noise levels to approach or exceed FHWA noise acceptability criteria (NAC). Impacted receptors will be identified and mapped and mitigation measures evaluated for effectiveness, including cost effectiveness.

**Deliverable:**

- Draft, revised draft and final Noise Study.

***Air Quality Study*****Scope of Services:**

- Prepare the Air Quality Study consistent with Caltrans' transportation project level carbon monoxide (CO) protocol, the U.S. EPA's Fugitive Dust Conformity Rule, and CEQA Air Quality guidelines. Baseline and current conditions will be described and construction. The air monitoring data will be based on the most recent information collected by the SJVAPCD and the California Air Resources Board (ARB). activities which could potentially generate impacts will be analyzed.



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- Evaluate the proposed project's impacts to long-term particulate matter concentrations and mobile source air toxics (MSAT) using the Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas (EPA, March 2006) and the Interim Guidelines on Air Toxic Analysis in NEPA Documents (FHWA, February 2006), including interagency coordination. A detailed CO hot spot analysis using the CALINE4 model will be conducted based on the peak traffic hour along the project alignments. Feasible mitigation measures will be investigated.
- Quantify greenhouse gas emissions of carbon dioxide (CO<sub>2</sub>). Using traffic data from the transportation analysis (i.e., vehicle miles traveled, vehicle hours traveled, and average travel speed) and the California Air Resources Board's EMFAC 2007 air quality model, we will estimate changes in greenhouse gas emissions in the project vicinity related to implementation of the proposed project.
- Evaluate construction impacts in conjunction with use the SJVAPCD's Indirect Source Review Guidelines (SJVAPCD Rule 9510). If project emissions exceed the limits established in Rule 9510, we will identify measures required to comply with Rule 9510.

### **Deliverable:**

- Draft, revised draft and final Air Quality Study.

### ***Water Quality Studies***

#### **Scope of Services:**

- Prepare a Water Quality Assessment Report (WQAR) for the project that discusses watershed characteristics, groundwater hydrology, regulatory requirements, pollutants of concern, and receiving water conditions, objectives and beneficial uses. The report will also discuss design pollution prevention best management practices (BMPs), construction site BMPs, and treatment BMPs that are applicable to the project alternatives per Caltrans Storm Water Quality Handbooks Project Planning and Design Guide. Information from the Storm Water data report will be incorporated into the WQAR. The project's potential impact on water quality will be evaluated and mitigation measures will be recommended which are necessary to prevent adverse water quality impacts.
- Prepare a Floodplain Evaluation based on a Location Hydraulic Study to be prepared by the project engineer. The Location Hydraulic Study will meet the requirements of Chapter 17 of the SER and in 23 CFR 650A, Section 650.111(b)(c). The report will discuss potential impacts for each alternative





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and recommend mitigation measures related to floodplain encroachment, flood-related hazards, natural or beneficial floodplain values, access interruption, and the community floodplain development plan. The summary memorandum of Location Hydraulic Study to be prepared under another task.

**Deliverable:**

- Draft, revised draft, and final Water Quality

***Energy Studies***

**Scope of Services:**

- Prepare an Energy Study using available information from the California Energy Commission and other sources. The analysis will characterize the existing energy supply sources, projected use and demands by alternative, and any adverse impacts on supplies. Project air quality and traffic information will then be used to evaluate and compare alternatives-specific impacts on energy consumption.

**Deliverable:**

- Draft, revised draft and final Energy Study report

***Summary of Geotechnical Report***

**Scope of Services:**

- To be included in the administrative draft environmental document. No additional technical report will be prepared.

**Deliverable:**

- Not applicable

***Hazardous Waste Preliminary Site Investigations***

**Scope of Services:**

An Initial Site Assessment (ISA) was not prepared as part of the PSR process (WBS 150.20.10). The ISA will be prepared for the project. It will attempt to identify potentially significant soil/groundwater contamination issues that could affect the constructability, feasibility, and/or cost of the proposed project. The ISA will focus on two distinct concerns:

1. Construction Issues – The potential for contaminated soil/groundwater to impact the planned project



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2. Liability Issues – The potential of JPA acquiring properties with known or suspected soil and/or groundwater contamination

The following scope items will be completed to develop the ISA. If potentially significant contamination is found to impact the project, additional investigation may be required:

- Review available documentation for the alignments.
- Review copies of title documents and Assessor Parcel Numbers (APN) for parcels located within the project limits and subject to partial or complete acquisition (as made available by the project team)
- Review published literature regarding site geology and groundwater conditions for the area
- Review historical aerial photographs and topographic maps for the area including the alignments for indications of potential contamination sources
- Review a commercial database search of federal, state, City and County records for indications of the use, misuse, or storage of hazardous and/or potentially hazardous materials on or near the alignment
- Complete limited reconnaissance of the alignments where accessible. We will observe current land use and indications of potential contamination on or adjacent to the alignments. This includes documentation of areas we observe that show evidence of surface staining; dumping; handling and mixing areas for hazardous materials such as pesticides, insecticides, and fuel products; apparent locations of fuel tanks; identification of existing structures that may contain asbestos and other hazardous materials, and locations and conditions of transformers.
- Identify areas during our reconnaissance where potentially significant levels of aerially deposited lead (ADL) may be present within the alignments
- Prepare a report summarizing the findings of our review, site reconnaissance, historical photograph/map evaluation, and regulatory records review. We will address identified potential hazardous materials impacts and recommend further investigation and analysis if necessary
- Prepare an ISA abstract for inclusion in the Environmental Document (ED), and prepare a transmittal memo outlining the study results, the potential significance of impacts and significance criteria, and proposed mitigation measures.

***Deliverables:***

- Draft Initial Site Assessment
- Final Initial Site Assessment



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## ***Draft Right-of-Way Relocation Impact Document***

### **Scope of Services:**

- Prepare a Draft Relocation Impact report (DRIR) in accordance with Chapter 602, Relocation Impact Documents, of the Caltrans Relocation assistance and Housing Procedures Manual. The report will include the numbers and type of displacements (residential and non-residential), the current and anticipated availability of relocation resources; and discussion of relocation problems specific to this project and suggested solution to the problems. No interviews will be conducted with residents or owners as part of this task.

### **Deliverable:**

- Draft, revised draft and final Draft Relocation Impact Report

## ***Location Hydraulic and Floodplain Study Report***

### **Scope of Services:**

- A location hydraulic study will be prepared to evaluate potential impacts to the 100-year floodplain. The analysis will include a review of the current drainage patterns of storm runoff within the project site.

### **Deliverable:**

- Draft, revised draft and final Location Hydraulic and Floodplain Study Report

## ***Paleontology Study***

### **Scope of Services:**

- Prepare a paleontology study following SER guidance. The study will consist of review of archival material, soils and geology information and previous paleontological reports to determine the sensitivity for scientific resources to be present within the footprints of proposed project alternatives. The study will document sensitivity for scientific resources, compare alternatives and provide standard discovery-based mitigation measures.

### **Deliverable:**

- Draft, revised draft and final Paleontology Study



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## ***Biological Studies***

### **Scope of Services:**

- Conduct studies to determine the impact of project alternatives on the natural environment and document the results of the investigations in a Natural Environment Study (NES) prepared to Caltrans NES guidance (SER). Because the feasibility study indicated the likely presence of habitat for state and federally protected and special status species, studies required to prepare a Biological Assessment (BA) will be conducted to comply with the federal Endangered Species Act. We shall also document the presence of state and federally protected wetlands using U.S. Army Corps of Engineers most current guidance for delineation of jurisdictional wetlands.
- Conduct agency coordination as required to complete the environmental studies and shall document all communications and consultations in the technical reports.
- Surveys would be conducted through a combination of windshield (driving) and walking surveys, and that only the natural areas within the proposed corridors and buffer areas would be walked in their entirety. We assume each survey corridor would take 3 days to survey (12 days total).
- This scope assumes USFWS will not require additional field studies to support analysis of potential growth-inducing effects on listed species.
- This scope of work includes conducting general plant and wildlife habitat surveys in the study area defined above. If habitat for special status plant and wildlife species is identified in the study area, the need for additional surveys will be determined and discussed the Authority. No protocol-level surveys are included in this scope of work. If protocol-level surveys for plants or wildlife are determined to be necessary, they may be conducted during the appropriate time of year under an amended scope of work and budget.

### **Deliverables:**

- Draft, revised draft and final Natural Environment Study NES
- Draft, revised draft and final Biological Assessment (BA)
- Draft, revised draft and final Wetlands Study

## ***Cultural Resource Studies***

### **Scope of Services:**

- Conduct research, field investigations and consultations necessary to complete the Section 106 consultation process. Guidance for the preparation of cultural resources studies will be directed by Caltrans Professionally Qualified Staff (PQS). All necessary tribal consultation and



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public involvement mandated by the Section 106 process shall be completed under guidance of PQS. Subsurface investigations for archaeological resources are not included in this work effort. Depending on the alignments designed, and their sensitivity for buried archaeological resources, Caltrans may require subsurface investigations.

- Prepare a draft Area of Potential Effects (APE) / Study Area Map which will be the study area for cultural resources. An Historic Property Survey Report (HPSR) shall be prepared to summarize and document the archaeological and historical resources investigations. The HPSR shall include appendices including the Caltrans-approved APE map, Archaeological Survey Report (ASR) and Historic Resources Evaluation Report (HRER).
- A Finding of Effect (FOE) document will be prepared to accompany the HPSR if eligible or potentially eligible resources are identified. The FOE will document the potential for project alternatives to have No Adverse Effect or Adverse Effect as defined under Section 106. A Memorandum of Agreement (MOA) shall be prepared for all resources for which an Adverse Effect determination is made. Preparation of the MOA will include consultation and coordination with affected parties and development of mitigation measures.
- Limited subsurface investigation at no more than five (5) isolated test sites is assumed to be required to complete the Section 106 eligibility process for archaeological resources. This information will be documented in a Phase I report. Subsequent levels of archaeological investigation would require the development of a supplemental scope of services.

#### **Deliverables:**

- Draft, revised draft, and final Area of Potential Effects (APE) Map
- Draft, revised draft, and final Historic Property Survey Report (HPSR) including appendices
- Draft, revised draft, and final Finding of Effect
- Draft, and revised draft Memorandum of Agreement (MOA)

## **Task 6 - Draft Environmental Document**

#### **Scope of Services:**

- Prepare an administrative draft NEPA environmental impact statement (EIS) / CEQA environmental impact report (EIR) (or Administrative ED) using the document outline posted on the Caltrans SER. The document will summarize the results of environmental technical studies, document the project Purpose & Need, the alternatives development and screening



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process, and summarize the public outreach process conducted as part of environmental compliance.

- The Administrative ED will include conceptual alignment color CAD-generated alignment maps, up to 10 color graphics, and up to 50 black and white graphics.

**Deliverable:**

- Administrative ED (50 copies)

***Draft Environmental Document Analysis***

**Scope of Services:**

- The Administrative ED will summarize the analysis of alternatives at an equal level of detail (No-Build plus two build alternatives) and will include additional analysis for which environmental stand-alone technical reports were not developed (e.g., construction-period effects and cumulative and growth-related, indirect impacts).

**Deliverable:**

- Administrative ED sections

***Section 4(f) Evaluation***

**Scope of Services:**

- Prepare a Section 4(f) evaluation based on FHWA guidance to evaluate the impacts to Section 4(f) resources (public recreational facilities, refuges, historic resources) affected by the project. Up to 10 Section 4(f) resources will be evaluated.

**Deliverable:**

- Administrative Draft and Draft Section 4(f) Evaluation

***Environmental Quality Control and Other Reviews***

**Scope of Services:**

- Conduct editorial and quality assurance reviews on the Administrative ED and incorporate the findings of these reviews into the Administrative ED prior to submittal to JPA.

**Deliverable:**

- Administrative ED



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### ***NEPA Delegation***

#### **Scope of Services:**

- Provide necessary information for compliance with the NEPA Delegation Pilot Program.

#### **Deliverable:**

- Documentation

### ***Required Permits During PA&ED Development***

#### **Scope of Services:**

- Identify the permits which will be required for the project. This information will be included in the Administrative ED.

#### **Deliverable:**

- Administrative ED

### ***Updated Environmental Commitments Record***

#### **Scope of Services:**

- Internal Caltrans task. CONSULTANT support services only.

#### **Deliverable:**

- Not applicable

### ***NEPA Delegation***

#### **Scope of Services:**

- Provide NEPA Delegation information and document readiness forms to facilitate Caltrans review of the Administrative ED.

#### **Deliverable:**

- NEPA Delegation forms



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## ***Task 7 - Circulate Draft Environmental Document and Select Preferred Project Alternative Identification***

### **Scope of Services:**

- Prepare, publish and distribute the Draft NEPA EIS / CEQA EIR / Section 4(f) Evaluation document (Draft ED).

### **Deliverable:**

- Draft ED (up to 200 copies)

## ***DED Circulation***

### **Scope of Services:**

- Upon receipt of approval to circulate from JPA, print and distribute up to 200 copies of the Draft ED. The Draft ED is expected to be approximately 750-pages-long with up to 50 alignment drawings and 25 color graphics.

### **Deliverable:**

- Draft ED

## ***Master Distribution and Invitation Lists***

### **Scope of Services:**

- Prepare a distribution list which will be included in the Draft ED. The list will include elected officials, federal, state, regional and local agency representatives, organizations and individuals. This list will service as the distribution list for the Draft ED.

### **Deliverable:**

- Distribution list

## ***Notices Regarding Public Hearing and Availability of Draft Environmental Document - DED Publication and Circulation***

### **Scope of Services:**

- Prepare draft notices of publication and availability of the Draft ED (CEQA and NEPA) and prepare draft public advertisements for JPA to publish in newspapers of general circulation. Advertisements will follow the standard Caltrans ad format.





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**Deliverable:**

- Notices and advertisements.

***Public Hearing*****Scope of Services:**

- Plan and conduct up to two (2) public hearing to meet CEQA and NEPA requirements for obtaining public and agency comments on the Draft ED. Tasks will include logistics for conducting and advertising the hearings, displays, handouts, presentations, staffing and comment documentation (including court reporter). At the conclusion of the hearing, we shall prepare a summary of the public hearings including compiling all comments received during the hearings.

**Deliverables:**

- Public hearing collateral (agenda, presentation, presentation materials, handouts), public hearing logistics, Draft, revised draft and final Public Hearing Summary Report.

***Project Preferred Alternative*****Scope of Services:**

- Following the close of the public circulation period, we shall prepare a draft Preferred Alternative Memorandum summarizing the findings of the environmental process and the public and agency representatives input. This memorandum will be the basis for JPA's consultation with Caltrans to obtain consensus on the recommended preferred alternative.

**Deliverable:**

- Draft, revised draft and final Preferred Alternative Memorandum

***NEPA Delegation*****Scope of Services:**

Ongoing auditing information task.

**Deliverable:**

- As required.



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<b>Prepare And Approve Project Report And Final Environmental Document - TIER I EIR/EIS HYBRID</b>
<b>Final Project Report</b>
Updated Draft Project Report
Approved Project Report
Updated Storm Water Data Report
Geometric Approval Drawings (GAD) for Selected Alternative
<b>Final Environmental Document</b>
Approved Final Environmental Document
Draft Final Environmental Document Review
Revised Draft Final Environmental Document
Section 4(f) Evaluation
Findings
Statement Of Overriding Considerations
CEQA Certification
FHWA Approval
Section 106 Consultation And Moa
Section 7 Consultation
Final Section 4(f) Statement
Floodplain Only Practicable Alternative Finding
Wetlands Only Practicable Alternative Finding
Section 404 Compliance
Mitigation Measures
Public Distribution Of FED And Respond To Comments
Final Right Of Way Relocation Impact Document
<b>Completed Environmental Document</b>
Record Of Decision (NEPA)
Notice Of Determination (CEQA)
Environmental Commitments Record
<b>NEPA Delegation</b>

***Task 8 - Prepare And Approve Project Report And Final Environmental Document - TIER I EIR/EIS***



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## ***Updated Draft Project Report***

### **Scope of Services:**

- Upon completion of the Response to Comments on the Environmental Document, the Draft Project Report will be updated to reflect any changes to the project that resulted from the public review and comment period. A Draft Final Project Report will be submitted to JPA and Caltrans for review and comment. Following receipt of one consolidated set of comments, a comment review workshop will be held with the respondents to review their comments and provide appropriate responses. A Final Project Report will be prepared and submitted for review and approval.

### **Deliverable:**

- Draft Final and Final Project Report

## ***Approved Project Report***

### **Scope of Services:**

- Once the Final Project Report has been submitted for review and approval, the project manager or his designee will work with JPA and Caltrans to obtain the appropriate signatures. If issues or questions arise during the approval phase, the team will work with JPA and/or Caltrans staff to answer any remaining questions, provides additional information, and obtain signatures as appropriate. Up to three submittals (two review cycles) of the Final Project Report are anticipated.

### **Deliverable:**

- Signed Project Report

## ***Updated Storm Water Data Report***

### **Scope of Services:**

- The Storm Water Data Report will be reviewed for consistency with current requirements and updated to incorporate necessary changes for the selected alternative only. Current Project Report level requirements are anticipated for this effort. Up to three submittals (two review cycles) are anticipated.

### **Deliverable:**

- Updated Storm Water Data Report for Preferred Alternative



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## ***Geometric Approval Drawings (GAD) for Selected Alternative***

### **Scope of Services:**

- Prepare geometric approval drawings (GAD) at a scale of 1" = 50' in accordance with Caltrans plan preparation criteria for GAD for the selected alternative from the Final Project Report.
- The GAD will include existing topographic and planimetric mapping, approximate right-of-way acquisition lines, center lines, calculated geometric layouts, typical sections, and a preliminary Title Sheet.
- Design roadway geometry including horizontal and vertical geometry for ramps, connectors and cross streets, including profile and superelevation diagrams. Profiles and superelevation diagrams will be provided for the areas of mainline widening based on aerial topographic mapping and record drawing information.
- Conceptual grading utilizing standard slopes will be developed to establish preliminary right-of-way limits.
- Typical cross sections will be prepared to illustrate lane and shoulders in the lane configurations and other basic cross sectional data.
- Geometric Approval Drawings will be prepared according to Caltrans guidelines. This effort provides equivalent detail to PS&E requirements for Cross Sections, Layouts, Profiles, and Superelevation Diagrams. Additional detail will be provided indicating pavement delineation, truck turning radii, and traffic volumes. Preliminary Right-of-Way requirements will also be incorporated. Approval will be obtained from Caltrans Offices of Traffic Operations and Design, and HQ Geometric Reviewer. Up to four submittals (three review cycles) of the GADs are anticipated.

### **Deliverable:**

- Geometric Approval Drawing for Preferred Alternative

## ***Approved Final Environmental Document***

### **Scope of Services:**

- Prepare an Administrative Draft Final EIS/EIR (Administrative Final ED) incorporating responses to comments received during the public circulation period and focusing on the identified preferred alternative. An Administrative Draft Final ED, revised Administrative Draft Final and Draft Final ED will be prepared for review by the JPA and Caltrans.
- The Final ED will include the revised Final Section 4(f) Evaluation which will be updated based on comments from participating agencies and any modifications to the identified preferred alternative.



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- The Final ED will include records of consultations which must be concluded prior to publication of the Final ED. This will include CEQA Findings and Statement of Overriding Considerations which will be adopted by the CEQA lead agency, an approved and signed Section 106 MOA (if required), and any updated consultation to obtain a Biological Opinion from the U.S. Fish and Wildlife Service under the federal Endangered Species Act. Federal findings required under Presidential Executive Orders will be included as appendices, as needed, including Wetlands and Floodplains Only Practicable Alternatives Findings.

**Deliverable:**

- Draft, revised draft and final draft Final ED, including Section 4(f) Evaluation, Findings and Statement of Overriding Considerations and memoranda as appendices documenting federal findings and consultations.

***Public Distribution of FED and Respond to Comments***

**Scope of Services:**

- Print and distribute up to 100 copies of the Final ED upon approval to circulate from the JPA and Caltrans.

**Deliverable:**

- Final ED (up to 100 copies)

***Final Right-of-Way Relocation Impact Document***

**Scope of Services:**

- Coordinate with the engineer to determine the final relocation impacts which will be documented for the preferred alternative in the Final ED.

**Deliverable:**

- Final ED

***Completed Environmental Document***

**Scope of Services:**

- Work with JPA to resolve comments from agency representatives and other stakeholders regarding the final conclusions of the Final ED. Upon conclusion of discussions, the Final ED will be published and Caltrans signature obtained for the title page.



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- Completion of the Final ED will include preparing a draft, revised draft and final CEQA Notice of Determination for CEQA for JPA to publish with the County Clerk and the State Clearinghouse and a draft, revised draft and final NEPA Record of Decision (ROD) for Caltrans to forward to the Federal Register.

**Deliverable:**

- Draft, revised draft and final ED

***Record of Decision (NEPA)***

**Scope of Services:**

- Prepare a draft Record of Decision (ROD) which briefly summarizes the NEPA findings, the public process, and the reasons for selection of the preferred alternative. The ROD shall also summarize the impacts of the preferred alternative (project) and the mitigation measures which JPA and Caltrans commit to implement.

**Deliverable:**

- Draft, revised draft and final Record of Decision (ROD)

***Notice of Determination (CEQA)***

**Scope of Services:**

- Prepare a CEQA Notice of Determination (NOD) form for JPA to submit to the State Clearinghouse and the County Clerk. The NOD will document the CEQA selection of the project and initiate the 30-day statute of limitations clock.

**Deliverable:**

- Draft, revised draft and final Notice of Determination (NOD) form

***Environmental Commitments Record***

**Scope of Services:**

- Internal Caltrans task. CONSULTANT support services only.

**Deliverable:**

- Not applicable



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### ***NEPA Delegation***

Provide documentation to JPA and Caltrans concerning status of the environmental process including audit data Caltrans requires for submittal to FHWA.

#### **Deliverable:**

- Audit information and Caltrans forms completed as required.





# North County Corridor Joint Powers Authority



Task	Description		Project Manager	Dep PM/Engineering Lead	Senior Engineer	Project Engineer I	Project Engineer II	CADD Designer	Project Admin	CADD/GIS	Environmental Lead	Sr Planner	Environmental-Planning	Jr. Environmental-Planning	Project Coordinator-Admin	Total Hours by Task	Total \$ by Task
			\$235.00	\$225.00	\$185.00	\$150.00	\$130.00	\$105.00	\$60.00	\$125.00	\$290.00	\$160.00	\$120.00	\$90.00			
<b>3A</b>	<b>Perform Preliminary Engineering Studies And Draft Project Report - TIER I EIR/EIS HYBRID</b>		144	706	1804	1732	1088	1212	96	4	30	16	16		22	6870	\$ 1,074,370
<b>3A.1</b>	<b>Updated Project Information - As It Relates To The Preferred Alternative In The Project Report</b>		16	40	160	160	40	80	20							516	\$ 81,160
	Approved PSR-PDS (Prepare Draft, circulated for review, update final, and process approvals)	N/A	16	40	160	160	40	80	20								\$ 81,160
	Geotechnical Information Review	N/A															\$ -
	Materials Information Review	N/A															\$ -
	Traffic Data And Forecasts Review	N/A															\$ -
	Geometrics Review	N/A															\$ -
	Project Scope Review	N/A															\$ -
	Project Cost Estimate Review	N/A															\$ -
	<b>Engineering Studies</b>		104	558	1,240	1,192	908	972	4							4,978	\$ 778,530
3A.2	Collect Traffic Data	Subconsultant	4	8	20												\$ 6,440
3A.3	Traffic Forecasting	Subconsultant	4	8	20												\$ 6,440
3A.4	Geometric Plans For Project Alternatives (assume 3 alignment alternatives)		32	260	440	460	460	460									\$ 324,520
3A.5	Construction Phasing Plans (60% Plans for 1 alignment 2-lane rwy, at-grade intersections, no ICs)		32	160	320	320	220	340									\$ 215,020
3A.6	Value Analysis	Subconsultant	16	48	48	48	20	20	4								\$ 35,580
3A.7	Hydraulics/Hydrology Studies			4	80	40	40										\$ 26,900
3A.8	Drainage Concept Plans			8	40	40	40	40									\$ 24,600
3A.9	Storm Water Data Report			4	80	60	40										\$ 29,900
3A.10	Traffic Operational Analysis	Subconsultant	4	8	16	16											\$ 8,100
3A.11	Right Of Way Data Sheet	Subconsultant	2	2	8												\$ 2,400
3A.12	Determine Right-of-Way Requirements		2	8	32	40	40	40									\$ 23,590
3A.13	Utility Location Requirements			4	20	40	40	40									\$ 20,000
3A.14	Railroad Study		2	4	20	40	8	8									\$ 12,950
3A.15	Park And Ride Study			4	8	16		8									\$ 5,620
3A.16	Traffic Studies	Subconsultant	4	8	16												\$ 5,700
3A.17	Geotechnical Information	Subconsultant		4	8	8											\$ 3,580
3A.18	Structures Advance Planning Study	Subconsultant		8	32	32											\$ 12,520
3A.19	Preliminary Transportation Management Plan		2	8	32	32		16									\$ 14,670
	<b>Draft Project Report</b>		24	100	380	380	140	120	40		6	4	16		14	1224	\$ 192,940
3A.20	Cost Estimates For Alternatives		4	8	20	40	40										\$ 17,640
3A.21	Fact Sheet For Exceptions To Design Standards		4	16	60	40	40	20									\$ 28,940
3A.22	Draft Project Report		8	60	220	220	40	80	20		4	4	16		8		\$ 107,600
3A.23	Draft Project Report Circulation, Review, And Approval		8	16	80	80	20	20	20		2				6		\$ 38,760
<b>3A.24</b>	<b>Engineering And Land Net Surveys and Lexington Alignment</b>																\$ -
	Existing Records	Subconsultant															\$ -
	Survey Control	Subconsultant															\$ -
	Aerial Topographic Mapping	Subconsultant															\$ -
	Field Design Surveys	Subconsultant															\$ -
	Base Mapping	Subconsultant															\$ -
	<b>Environmental Study Request</b>			8	24			40	32		16	12				132	\$ 18,920
3A.25	Surveys And Mapping For Environmental Studies	N/A									8						\$ 2,320
3A.26	Property Access Rights For Environmental/Engineering Studies			8	24			40	32		8	12					\$ 16,600
<b>3A.27</b>	<b>NEPA Delegation</b>									4	8				8	20	\$ 2,820





# North County Corridor Joint Powers Authority



Task	Description	Project Manager	Dep PM/Engineering Lead	Senior Engineer	Project Engineer I	Project Engineer II	CADD Designer	Project Admin	CADD/GIS	Environmental Lead	Sr Planner	Environmental-Planning	Jr. Environmental-Planning	Project Coordinator-Admin	Total Hours by Task	Total \$ by Task	
		\$235.00	\$225.00	\$185.00	\$150.00	\$130.00	\$105.00	\$60.00	\$125.00	\$290.00	\$160.00	\$120.00	\$90.00				
<b>8A</b>	<b>Prepare And Approve Project Report And Final Environmental Document - TIER I EIR/EIS HYBRID</b>																
	<b>Final Project Report</b>	36	128	280	296	140	316	12	278	248	324	420	698	312	3488	\$ 457,290	
8A.1	Updated Draft Project Report (prepared Project Report)	16	60	120	120	20	80	4								\$ 68,700	
8A.2	Approved Project Report(includes CT review of Draft & final PR and updates)	16	32	40	16	16	16									\$ 24,520	
8A.3	Updated Storm Water Data Report		4	40		24		8								\$ 11,900	
8A.4	Geometric Approval Drawings (GAD) for Selected Alternative	4	32	80	160	80	220									\$ 80,440	
	<b>Final Environmental Document</b>								262	200	310	406	594	256	2028	\$ 242,530	
8A.5	Approved Final Environmental Document															\$ -	
	Draft Final Environmental Document Review								120	60	120	180	360	160	1000	\$ 105,600	
	Revised Draft Final Environmental Document								24	40	80	80	120	60	404	\$ 47,800	
	Section 4(f) Evaluation Findings								12	6	18	24	12	4	76	\$ 10,080	
	Statement Of Overriding Considerations									4	4	4	4	4	20	\$ 2,640	
	CEQA Certification									4	8	16	8	4	40	\$ 5,080	
	FHWA Approval									2			2	4	8	\$ 760	
	Section 106 Consultation And Moa									6	4	4	8	4	26	\$ 3,580	
	Section 7 Consultation									6	12	18	6	8	50	\$ 8,550	
	Final Section 4(f) Statement									12	16	18	6	8	60	\$ 10,460	
	Floodplain Only Practicable Alternative Finding									12	12	12	6	8	50	\$ 8,340	
	Wetlands Only Practicable Alternative Finding									12	4	4	12	8	40	\$ 5,460	
	Section 404 Compliance Mitigation Measures									12	4	4	12	8	40	\$ 5,460	
										4	6	4	6	8	28	\$ 4,320	
8A.6	Public Distribution Of FED And Respond To Comments									12	16	12	8	8	60	\$ 9,740	
8A.7	Final Right Of Way Relocation Impact Document									24	4	30	16	12	86	\$ 9,200	
<b>8A.8</b>	<b>Completed Environmental Document</b>									16	32	14	14	104	48	228	\$ 24,560
	Record Of Decision (NEPA)									4	16	4	4	40	4	72	\$ 9,860
	Notice Of Determination (CEQA)									4	4	2	2	24	4	40	\$ 4,380
	Environmental Commitments Record									8	12	8	8	40	40	116	\$ 10,320
<b>8A.9</b>	<b>NEPA Delegation</b>										16				8	24	\$ 4,640
																\$ -	

# North County Corridor Joint Powers Authority



Task	Description	Total	Project Manager	Dep PM/Engineering Lead	Senior Engineer	Project Engineer I	Project Engineer II	CADD Designer	Project Admin	CADD/GIS	Environmental Lead	St Planner	Environmental-Planning	Jr. Environmental-Planning	Project Coordinator-Admin	Total Hours by Task	Total \$ by Task
			\$235.00	\$225.00	\$185.00	\$150.00	\$130.00	\$105.00	\$60.00	\$125.00	\$290.00	\$160.00	\$120.00	\$90.00			
<b>Total</b>		<b>Total</b>	<b>1,211</b>	<b>1,826</b>	<b>2,666</b>	<b>2,028</b>	<b>1,348</b>	<b>1,784</b>	<b>995</b>	<b>1,326</b>	<b>1,348</b>	<b>1,305</b>	<b>1,170</b>	<b>1,942</b>	<b>1,010</b>	<b>19,959</b>	<b>\$ 2,995,755</b>

- ASSUMPTIONS:**
- PROJECT APPORVAL - CEQA EIR/NEPA Tier I EIS (SR99 to SR 120) - PROJECT LEVEL Tier II Phase 1 (SR120 to McHenry) - document based on field studies and
  - The PR for the TIER I document will be an in-depth PR with alternatives focused on the identified corrior from the Route Adoption CEQA document.
  - TIER I - 3 alternates plus the selected initial construction phase will be studied.
  - Value Analysis will be performed for the TIER I document
  - Structural investigations, (CT Advanced Planning Studies) performed during the TIER I document.
  - The Geotechnical investigations will be prepared for the TIER I document.
  - The Geotechnical Materials report will obtained from existing information and includes Haz. Materials Assessment (15 sites max.)
  - Geometric Plans For Project Alternatives (assume 3 alignment alternatives)
  - Right of way Data Sheets will be prepared for the TIER I document (3 alternatives).
  - Utility Location/Coordination will be done during the TIER I.
  - Construction Financing (0.7% Flats for 1 alignment 2-lane twy, at-grade intersections, no ICS)

Salary Escalation	No. Years	Rate/Yr	
	3	4%	\$ 111,000.00
<b>Direct and Outside Expenses</b>			
Postage and Deliveries			\$7,110.65
Project Controls 2 hrs per week @ \$150 per hr			\$25,200.00
Travel 2 Trips per week \$0.58 per Mile 168 Miles			\$24,165.12
Reproductin Services			\$87,000.00
Equipment and Miscellaneous			\$10,800.00
<b>Total</b>			<b>\$ 154,275.77</b>
<b>Subconsultant</b>			
	Task No		
Bridge APS (BRG)	3.25	\$	147,778.00
Public Outreach - TIER I EIR/EIS (Buethe)	2A.3 - 2A.6	\$	75,811.00
Env Study and Techincal Support (ICF J&S)	4 - 8, 4A - 8A	\$	587,236.00
Value Analysis - TIER I EIR/EIS (CVS)	3A.6	\$	36,072.00
Traffic Studies - TIER I EIR/EIS (F&P)	3A.2, 3A.3, 3A.10,	\$	431,936.00
Geotechnical Report - TIER I (Blackburn)	3A.17	\$	173,995.00
Geotechnical - ISA - TIER I (Blackburn)	5A.8		
Right of Way Data Sheets - TIER I (Universal Field Svc)	3A.11	\$	20,450.00
Utility Location/Coordination - TIER I (G&K)	5A.8	\$	14,415.00
<b>Total</b>		<b>\$</b>	<b>1,487,693.00</b>
<b>Subconsultant and Project Controls Mark-up</b>			
	5%	\$	74,384.65
Surveys Lexington		\$	43,432.00
<b>Total Jacobs</b>			<b>\$3,378,847.42</b>
<b>Subtotal Cost (Jacobs + Subs)</b>			<b>\$4,866,540.42</b>
10% Reduction for Jacobs, ICF & Fehr & Peers			\$439,801.94
<b>Total Cost</b>			<b>\$4,426,738.48</b>



