

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

960A



**FROM:** TLMA - Transportation Department

**SUBMITTAL DATE:**  
December 2, 2010

**SUBJECT:** Engineering and Environmental Services Agreement with Jones & Stokes Associates, Inc., for the Cajalco Road Widening Project.

**RECOMMENDED MOTION:** That the Board of Supervisors:

1. Approve the attached Environmental and Engineering Services Agreement between the County of Riverside and Jones & Stokes Associates, Inc., and;
2. Authorize the Chairman of the Board to execute the same.

**BACKGROUND:** Cajalco Road (Expressway) is one of the primary transportation corridors in Western Riverside County. It links the I-15 to the I-215, and connects to the Ramona Expressway easterly from that point to SR-79 and the San Jacinto Valley. The Transportation

Juan C. Perez  
Director of Transportation

(Continued On Attached Page)

Departmental Concurrence

FORM APPROVED COUNTY COUNSEL  
BY: MARSHAL L. VICTOR DATE: 12/01/10

<b>FINANCIAL DATA</b>	Current F.Y. Total Cost:	\$5,544,210	In Current Year Budget:	Yes
	Current F.Y. Net County Cost:	\$ 0	Budget Adjustment:	No
	Annual Net County Cost:	\$ 0	For Fiscal Year:	2010/11
<b>SOURCE OF FUNDS:</b> Federal STP (100%) Project No. C00551				Positions To Be Deleted Per A-30 <input type="checkbox"/>
				Requires 4/5 Vote <input type="checkbox"/>

**C.E.O. RECOMMENDATION:**

APPROVE

BY:   
Jennifer L. Sargent

County Executive Office Signature

Dept't Recomm.:  Consent  Policy

Per Exec. Ofc.:  Consent  Policy

Prev. Agn. Ref.

District: 1

Agenda Number:

3.59

The Honorable Board of Supervisors

RE: Engineering and Environmental Services Agreement with Jones & Stokes Associates, Inc.,  
for the Cajalco Road Widening Project.

December 2, 2010

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Department has focused on making pavement and safety improvements to Cajalco Road over the years. However, there is a need to widen and to realign portions of this road to more safely accommodate existing traffic, and particularly to provide for expected traffic growth into the future.

The Riverside County Transportation Commission took action on July 8, 2009 to focus their efforts on the portion of the Mid County Parkway (MCP) between the limits of I-215 and SR-79. This change occurred as a response to numerous comments received during the environmental process and was considered at length at the June 2009 RCTC Commission meeting. Many of the concerns focused on ensuring the County's success with improvements to Cajalco Road and other East-West arterials (such as SR-74) as an alternative to a freeway-level MCP facility. Improvements to Cajalco Road are essential to reduce congestion and maintain and enhance the quality of life in Western Riverside County. The Commission reaffirmed its commitment to a future east-west arterial corridor between I-15 and I-215 by supporting the County of Riverside's planned improvements to Cajalco Road and prioritizing funding for the preparation of environmental documents by the County. The Commission has authorized \$7 million in Federal funds towards the engineering and environmental studies for this project for consultant and staff support costs. The Commission also stated that it would consider reinitiating the MCP for this segment should the County not be successful in environmentally clearing Cajalco Road.

The Riverside County Transportation Department is proceeding with the planned improvements to widen Cajalco Road between I-15 and I-215, which are intended to accommodate traffic demands for the next 20 years. The County has solicited the assistance of a consulting firm to provide the environmental and preliminary engineering services needed to environmentally clear the widening project. The scope of work includes preparation of an Environmental Impact Report (EIR) to fully analyze and assess potential impacts, study alternatives where appropriate, and determine necessary mitigation measures. Although one environmental document will be prepared for the project between I-15 and I-215 to better assess cumulative impacts, it is expected that actual right-of-way acquisition and construction would occur in phases as funds become available.

The Transportation Department will be engaging in a comprehensive public outreach effort as part of this project, including interacting with property owners, community groups, and other public agencies. We will also be reaching out to stakeholders, such as representatives of the environmental community and the Metropolitan Water District that manages Lake Mathews, as well as regulatory State and Federal agencies.

A request for proposals was advertised in the Press Enterprise and posted on the Transportation Department website. The top 3 firms, based on an evaluation of the submitted proposals, were interviewed by Riverside County Transportation Department and California Department of Transportation representatives. Jones & Stokes Associates, Inc. was selected as the firm to provide the needed environmental and engineering services. A not to exceed budget of \$5,040,190.88 was negotiated. The terms of the contract allow the Director of Transportation to authorize additional funds not to exceed 10% of the total project budget for services consistent with the approved scope of services. The total funds authorized by the Board is therefore equal to \$5,040,190.88 plus \$504,019.09 for a total of \$5,544,209.97. The proposed scope of services includes preliminary engineering, environmental studies and preparation of an environmental document.

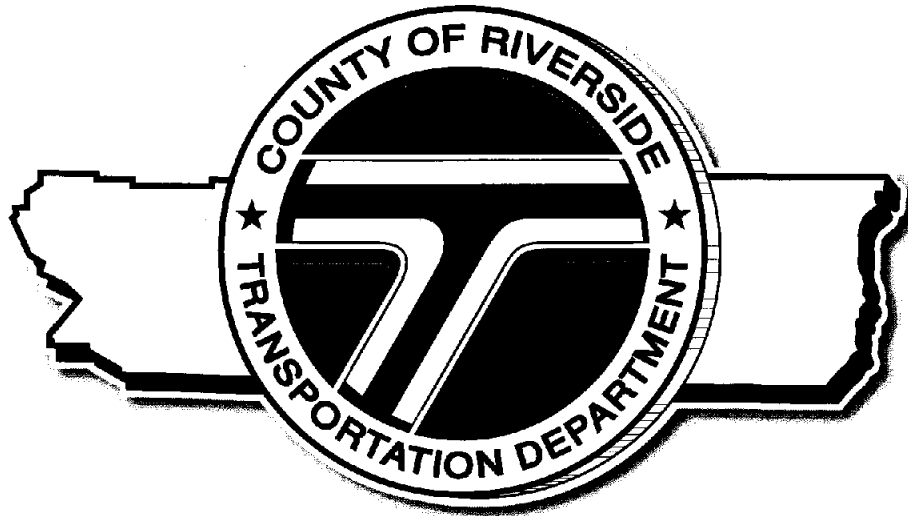
Federal Project No. STPL 5956 (195)

Caltrans EA No. 08925215L

960A  
Contract No. 10-11-014

Riverside Co. Transportation

# ENVIRONMENTAL & ENGINEERING SERVICES AGREEMENT



for

**CAJALCO ROAD WIDENING PROJECT**

between

**COUNTY OF RIVERSIDE • TRANSPORTATION DEPARTMENT**

and

**JONES & STOKES ASSOCIATES, INC.,  
A WHOLLY OWNED SUBSIDIARY OF ICF CONSULTING GROUP, INC.**

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**CONSULTING SERVICES AGREEMENT**

COUNTY OF RIVERSIDE, hereinafter referred to as "COUNTY", and Jones & Stokes Associates, Inc., a wholly owned subsidiary of ICF Consulting Group, Inc., hereinafter referred to as "CONSULTANT", located at the following addressees:

County of Riverside • Transportation Department	Jones & Stokes Associates, Inc.,
4080 Lemon Street, 8 <sup>th</sup> Floor	1 Ada, Suite 100,
Riverside, CA 92502	Irvine, CA 92816

do hereby agree as follows:

**ARTICLE I • DESIGNATED CONTACTS**

Coordination of CONSULTANT, and COUNTY activities shall be accomplished through a CONSULTING PROJECT MANAGER, and a COUNTY PROJECT MANAGER.

The CONSULTING PROJECT MANAGER for CONSULTANT shall be:

Brian Calvert

The COUNTY PROJECT MANAGER for COUNTY shall be:

C. Scott Staley

**ARTICLE II • PROJECT DEFINITION**

CONSULTANT shall furnish all technical and professional services including labor, material, equipment, transportation, supervision, and expertise to fully and adequately perform and complete the covenants set forth in Appendix A, Scope of Services, which is attached hereto and incorporated herein by reference. All services and deliverables associated with the performance and accomplishment of the covenants described in the Scope of Services is hereinafter collectively referred to as the "PROJECT".

**ARTICLE III • COOPERATIVE AGENCIES**

**A. Lead Agency**

COUNTY is designated as the lead agency for PROJECT and is working cooperatively with other agencies in the effort to complete PROJECT.

**B. Cooperative Agencies**

The cooperating agencies are listed below and will hereinafter be collectively referred to as the "AGENCIES".

FHWA, Caltrans, RCTC, EDA



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**C. COUNTY/AGENCIES Standards**

All deliverables shall be prepared in accordance with the current COUNTY and AGENCIES practices, regulations, policies, procedures, manuals and standards where applicable. All deliverables are subject to review and approval by COUNTY and AGENCIES.

**ARTICLE IV • CONDITIONS**

**A. Notifications**

All notices hereunder and communications regarding interpretation of the terms of this contract and changes thereto shall be effected by the mailing thereof by registered or certified mail, return receipt requested, postage prepaid and addressed to the attention of the CONSULTING PROJECT MANAGER or the COUNTY PROJECT MANAGER at the respective addresses provided on page one of this contract.

**B. Assignment**

Without written consent of COUNTY, this agreement is not assignable by CONSULTANT either in whole or in part.

**C. Subcontracts**

1. CONSULTANT shall perform the services contemplated with resources available within its own organization. No portion of the services pertinent to this contract shall be subcontracted without written authorization by the COUNTY PROJECT MANAGER, except that which is expressly identified in this contract.
2. In the event CONSULTANT subcontracts any portion of CONSULTANT's duties under this agreement, CONSULTANT shall require its subcontractors to comply with the terms of this contract in the same manner as required of CONSULTANT including, but not limited to; indemnification of the COUNTY, requiring the same insurance of Subcontractors as required of CONSULTANT, and having Subcontractor's insurance name the COUNTY as Additional Insured for each type of insurance where this Agreement requires CONSULTANT's insurance to name COUNTY as Additional Insured.

**D. Modifications**

1. This contract may be amended or modified only by mutual written agreement of the parties. No alteration or variation of the terms of this contract will be valid unless made in writing and signed by the parties



1 hereto and no oral understanding or agreement not incorporated herein, will be binding on any of the  
2 parties hereto except for minor modifications as defined below.

- 3 2. Minor modifications are changes that do not substantially affect the Scope of Service. Minor  
4 modifications may be: a shift of funds between tasks within a budget category; the shifting of work  
5 and/or funding from one phase to another; increase in costs for services that are consistent with the  
6 overall scope and do not cumulatively exceed ten percent (10%) of the total contract budget. Any  
7 modification that purports to delete any line item of work that was included in the original Scope of  
8 Service shall be considered a major change. All requests for minor modifications must be approved in  
9 writing by the Director of Transportation prior to implementing the change.
- 10 3. There shall be no change in the CONSULTING PROJECT MANAGER or key members of the PROJECT  
11 team without prior written approval by the COUNTY PROJECT MANAGER.
- 12 4. All modifications that do not fit within the definition of a minor modification to the contract shall be  
13 considered a major change and must be approved in writing by the CONSULTANT and COUNTY Board  
14 of Supervisors prior to implementing the major change.

15 **E. COUNTY Directives**

16 CONSULTANT shall receive contract directions and interpretations from the COUNTY PROJECT  
17 MANAGER.

18 **F. Liability**

- 19 1. CONSULTANT has total responsibility for the accuracy and completeness of all data, plans,  
20 specifications and estimates prepared for this PROJECT and shall check all such material accordingly.  
21 COUNTY will review all work product deliverables. The responsibility for accuracy and completeness of  
22 such items remains solely that of CONSULTANT. Neither COUNTY'S review or approval shall give rise  
23 to any liability or responsibility on the part of COUNTY, or waive any of COUNTY'S rights, or relieve  
24 CONSULTANT of its professional responsibilities or obligations under this Agreement.
- 25 2. The plans, designs, estimates, calculations, reports and other documents furnished in accordance with  
26 the Scope of Services shall meet the criteria for acceptance and be a product of neat appearance, well  
27 organized, technically and grammatically correct, checked and having the preparer and checker  
28 identified. The minimum standard of appearance, organization and contents shall be of similar types  
29 produced by COUNTY and AGENCIES. If any work product submitted is not complete and ready for use



1 by COUNTY on PROJECT, it shall be marked "Draft" or similar designation to indicate it is not ready for  
2 use by COUNTY. COUNTY expects that all work product not so designated is ready for and will be used  
3 on PROJECT.

4 5. The page identifying preparers of engineering reports, the title sheet for specifications and each sheet of  
5 plans, shall bear the professional seal, certificate number, registration classification, expiration date of the  
6 certificate, and signature of the professional engineer(s) responsible for their preparation.

7 6. COUNTY and CONSULTANT agree that plans, drawings or other work products prepared by  
8 CONSULTANT are for the exclusive use of COUNTY and will be used by COUNTY for the project for  
9 which they were specifically designed. CONSULTANT shall not be responsible for use of such plans,  
10 drawings or other work products if used on a different project without the written authorization or approval  
11 by CONSULTANT.

12 7. CONSULTANT acknowledges that the plans, drawings and/or other work products may be used by  
13 COUNTY for the PROJECT regardless of any disputes that may develop between CONSULTANT and  
14 COUNTY. All plans, drawings, or other work product shall be deemed the sole and exclusive property of  
15 COUNTY and ownership thereof is irrevocably vested in COUNTY whether the PROJECT is executed or  
16 not.

17 8. CONSULTANT, and the agents and employees of CONSULTANT, in the performance of this agreement,  
18 shall act in an independent capacity and not as officers, employees or agents of COUNTY.

19 **G. Indemnification and Defense**

20 1. The CONSULTANT agrees to and shall indemnify and hold harmless the County of Riverside, its  
21 Agencies, Districts, Departments and Special Districts, their respective directors, officers, Board of  
22 Supervisors, elected and appointed officials, employees, agents and representatives (hereinafter  
23 individually and collectively referred to as "Indemnitees") from all liability, including, but not limited to loss,  
24 suits, claims, demands, actions, or proceedings caused by any alleged or actual negligence,  
25 recklessness, willful misconduct, errors or omissions of CONSULTANT, its directors, officers, partners,  
26 employees, agents or representatives or any person or organization for whom CONSULTANT is  
27 responsible, arising out of or from the performance of services under this Agreement. To the extent a  
28 loss, suit, claim, demand, action, or proceeding is based on actual or alleged acts or omissions of  
29 CONSULTANT which are not design professional services, CONSULTANT shall indemnify Indemnitees





1 whether or not CONSULTANT is negligent.

2 2. The duty to indemnify includes loss, suits, claims, demands, actions, or proceedings caused by actual or  
3 alleged passive negligence of Indemnitees. The duty to indemnify does not include loss, suits, claims,  
4 demands, actions, or proceedings caused by actual active negligence of Indemnitees; however, any  
5 actual active negligence of Indemnitees will only affect the duty to indemnify for the specific act found to  
6 be active negligence, and will not preclude a duty to indemnify for any other act or omission of  
7 Indemnitees.

8 3. CONSULTANT shall defend and pay, at its sole expense, all costs and fees, including but not limited to  
9 attorney fees, cost of investigation, and defense, in any loss, suits, claims, demands, actions, or  
10 proceedings based or alleged to be based on any act or omission of CONSULTANT arising out of or from  
11 the performance of services under this Agreement. The duty to defend applies to any alleged or actual  
12 negligence, recklessness, willful misconduct, error or omission of CONSULTANT. The duty to defend  
13 shall apply whether or not CONSULTANT is a party to the lawsuit, and shall apply whether or not  
14 CONSULTANT is directly liable to the plaintiffs in the lawsuit. The duty to defend applies even if  
15 Indemnitees are alleged or found to be actively negligent, unless the act or omission at issue was caused  
16 by the sole active negligence of Indemnitees.

17  
18 4. The specified insurance provisions and limits required in this Agreement shall in no way limit or  
19 circumscribe CONSULTANT'S obligations to indemnify and hold harmless Indemnitees from third party  
20 claims.

21 5. To the maximum extent allowed by law, the indemnity provisions are intended to be type I indemnity  
22 provisions as defined by *MacDonald & Kruse, Inc. v. San Jose Steel Co.* (1972) 29 Cal.App. 3d 413. To  
23 the maximum extent allowed by law, the defense provisions are intended to provide for a defense as  
24 stated in *Crawford v. Weather Shield Mfg. Co.* (2008) 44 Cal.4th 541. In the event there is conflict  
25 between the indemnity and defense provisions and California Civil Code Sections 2782 and 2782.8, the  
26 indemnity and defense provisions shall be interpreted to comply with Civil Code sections 2782 and  
27 2782.8.

28 **H. Quality Control**

29 CONSULTANT shall implement and maintain the following quality control procedures during the  
*Environmental and Engineering Services Agreement*

1 preparation of the plans and documents relating to PROJECT. CONSULTANT shall have a quality  
2 control plan in effect during the entire time services are being performed under the contract. The plan  
3 shall establish a process whereby calculations are independently checked, plans checked, corrected and  
4 back-checked, and all job related correspondence and memoranda routed and received by affected  
5 persons and then bound in appropriate job files. Where several drawings show different work in the same  
6 area, means shall be provided to avoid conflicts and misalignment in both new and existing  
7 improvements. Evidence that the quality control plan is functional may be requested by the COUNTY  
8 PROJECT MANAGER. All plans, calculations documents and other items submitted to the COUNTY  
9 PROJECT MANAGER for review shall be marked clearly as being fully checked and that the preparation  
10 of the material followed the quality control plan established for the work.

11 **I. Value Engineering**

- 12 1. Elements of PROJECT may be considered for Value Engineering Studies. To this end, the COUNTY  
13 PROJECT MANAGER may direct the CONSULTANT to examine the various elements of the design  
14 segment and submit an informal written statement or memorandum addressing those elements where it  
15 appears significant savings and other advantages can be realized. The statement shall be sufficiently  
16 informative to enable COUNTY to determine whether to direct a detailed Value Engineering Study or  
17 possibly direct immediate design changes where the value of the change is apparent without the need of  
18 detailed study and analysis.
- 19 2. CONSULTANT or its subcontractors shall not incorporate in the design materials or equipment of single  
20 or sole source origin without written approval of COUNTY. Proprietary names of material or equipment  
21 shall not be used in the plans and specifications.

22 **J. Extra Work**

- 23 1. CONSULTANT shall not perform Extra Work until receiving written authorization from the COUNTY  
24 PROJECT MANAGER.
- 25 2. In the event that COUNTY directs CONSULTANT to provide services constituting Extra Work, COUNTY  
26 shall provide extra compensation to the CONSULTANT. Allowable compensation for approved extra  
27 work will be based on the provisions of Appendix C, Budget, which is attached hereto and incorporated  
28 herein by reference.
- 29 3. An amendment to this Agreement providing for such compensation for Extra Work shall be COUNTY to



1           CONSULTANT. Such Amendment shall not be effective until executed by both parties.

2   **K. Disputes**

- 3           1. In the event CONSULTANT considers any work demanded of him to be outside the requirements of the  
4           contract, or if he considers any order, instruction, or decision of COUNTY to be unfair, he shall promptly  
5           upon receipt of such order, instruction or decision, ask for a written confirmation of the same whereupon  
6           he shall proceed without delay to perform the work or to conform to the order, instruction, or decision; but  
7           unless CONSULTANT finds such order, instruction, or decision satisfactory, he shall within 20 days after  
8           receipt of same, file a written protest with COUNTY stating clearly and in detail his objections and  
9           reasons therefore. Except for such protests or objections as are made of record in the manner specified  
10          and within the time stated herein, and except for such instances where the basis of a protest could not  
11          reasonably have been foreseen by CONSULTANT within the time limit specified for protest,  
12          CONSULTANT hereby waives all grounds for protests or objections to the orders, instruction, or decisions  
13          of COUNTY and hereby agrees that, as to all matters not included in such protests, the orders,  
14          instructions and decisions of COUNTY will be limited to matters properly falling within COUNTY's  
15          authority.
- 16          2. Any controversy or claim arising out of or relating to this contract which cannot be resolved by mutual  
17          agreement may be settled by arbitration in accordance with the rules of the American Arbitration  
18          Association, provided that the parties mutually agree to submit to arbitration.
- 19          3. Neither the pendency of a dispute nor its consideration by arbitration will excuse CONSULTANT from full  
20          and timely performance in accordance with the terms of the contract.

21   **L. Termination Without Cause**

- 22          1. COUNTY reserves the right to terminate this contract at COUNTY's discretion and without cause, upon  
23          thirty (30) calendar days written notice to CONSULTANT.
- 24          2. In the event of termination of the Agreement, upon demand, CONSULTANT shall deliver to COUNTY all  
25          field notes, surveys, studies, reports, plans, drawings, specifications, and all other materials and  
26          documents prepared by or provided to CONSULTANT in the performance of this Agreement. All such  
27          documents and materials shall be property of COUNTY.
- 28          3. In the event that the contract is terminated, CONSULTANT is entitled to full payment for all services  
29          performed up to the time written notice of contract cancellation is received by CONSULTANT. Payment



1 shall be made for services performed to date based upon the percentage ratio that the basic services  
2 performed bear to the services contracted for, less payments made to date; plus any amount for  
3 authorized, but unpaid, extra work performed and costs incurred.

4 **M. Termination for Lack of Performance**

5 COUNTY may terminate this agreement and be relieved of the payment of any consideration to  
6 CONSULTANT should CONSULTANT fail to perform the covenants herein contained at the time and in  
7 the manner herein provided. In the event of such termination, COUNTY may proceed with the work in  
8 any manner deemed proper by COUNTY. In such event, CONSULTANT shall be paid only for work  
9 completed and delivered to COUNTY in a timely and successful manner.

10 **N. Insurance**

11 Without limiting or diminishing the CONSULTANT's obligation to indemnify or hold the COUNTY harmless,  
12 CONSULTANT shall procure and maintain or cause to be maintained, at its sole cost and expense, the  
13 following insurance coverages and shall satisfy the following terms during the term of this Agreement, or for a  
14 term otherwise specified herein.

15 1. Workers' Compensation:

16 Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California.  
17 Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less  
18 than \$1,000,000 per person per accident. Policy shall be endorsed to waive subrogation in favor of the  
19 County of Riverside; and to provide a Borrowed Servant/Alternate Employer Endorsement.

20 2. Commercial General Liability:

21 Commercial General Liability insurance coverage, including but not limited to, premises liability,  
22 contractual liability, completed operations, personal and advertising injury covering claims which may  
23 arise from or out of CONSULTANT's actual or alleged acts or omissions during any work under this  
24 Agreement.

25 The policy shall name, by endorsement, the County of Riverside and all Agencies, Special Districts and  
26 Departments of the County of Riverside, their respective Directors, Officers, Board of Supervisors,  
27 employees, agents, elected and appointed officials ("County insureds") as Additional Insureds. The policy  
28 shall provide first party insurance coverage for the County insureds for any loss, suits, claims, demands,  
29 actions, or proceedings caused by any alleged or actual negligence, recklessness, willful misconduct,

1 error or omission of CONSULTANT, its directors, officers, partners, employees, agents or representatives  
2 or any person or organization for whom CONSULTANT is responsible, arising out of or from the  
3 performance of services under this Agreement. Indemnity coverage under the policy does not include  
4 loss, suits, claims, demands, actions, or proceedings caused by actual active negligence of County  
5 insureds; however, any actual active negligence of County insureds will only affect the duty to indemnify  
6 for the specific act found to be active negligence, and will not preclude a duty to indemnify for any other  
7 act or omission of County insureds.

8 The policy's limit of liability shall not be less than \$1,000,000 per occurrence combined single limit. If  
9 such insurance contains a general aggregate limit, it shall apply separately to this agreement or be no  
10 less than two (2) times the occurrence limit.

11 The Policy shall provide a defense to the County insureds for any loss, suits, claims, demands, actions, or  
12 proceedings caused by an actual or alleged act or omission of CONSULTANT, its directors, officers,  
13 partners, employees, agents or representatives or any person or organization for whom CONSULTANT is  
14 responsible, arising out of or from the performance of services under this Agreement, whether or not  
15 CONSULTANT is negligent or otherwise at fault. A defense is required if the loss, suits, claims,  
16 demands, actions, or proceedings are based on the active negligence of the County insureds unless the  
17 active negligence of the County insureds is the sole cause of the loss, suits, claims, demands, actions, or  
18 proceedings.

19 3. Vehicle Liability:

20 CONSULTANT shall maintain Liability Insurance for all owned, non-owned or hired vehicles in an amount  
21 not less than \$1,000,000 per occurrence combined single limit. If CONSULTANT's vehicles or mobile  
22 equipment are not to be used in the performance of the obligations under this Agreement, CONSULTANT  
23 shall maintain coverage for non-owned or hired vehicles in an amount not less than \$1,000,000 per  
24 occurrence combined single limit. Such non-owned or hired vehicle coverage may be included as a part  
25 of the Commercial General Liability policy. If such insurance contains a general aggregate limit, it shall  
26 apply separately to this agreement or be no less than two (2) times the occurrence limit. Policy shall  
27 name by endorsement, the County of Riverside and all Agencies, Special Districts and Departments of  
28 the County of Riverside, their respective Directors, Officers, Board of Supervisors, employees, agents,  
29 elected and appointed officials as Additional Insureds.

1 4. Professional Liability:

2 CONSULTANT shall maintain Professional Liability Insurance providing coverage for performance of  
3 work included within this Agreement, with a limit of liability of not less than \$1,000,000 per occurrence  
4 and \$2,000,000 annual aggregate. If CONSULTANT's Professional Liability Insurance is written on a  
5 claims-made basis rather than an occurrence basis, such insurance shall continue through the term of  
6 this Agreement. Upon termination of this Agreement or the expiration or cancellation of the claims made  
7 insurance policy CONSULTANT shall purchase at his sole expense either 1) an Extended Reporting  
8 Endorsement (also known as Tail Coverage); or, 2) Prior Dates Coverage from a new insurer with a  
9 retroactive date back to the date of, or prior to, the inception of this Agreement; or, 3) demonstrate  
10 through Certificates of Insurance that CONSULTANT has maintained continuous coverage with the same  
11 or original insurer. Coverage provided under items; 1), 2) or 3) will continue for as long as allowed by  
12 law.

13 5 General Insurance Provisions - All lines:

- 14 a. Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of  
15 California and have an A.M. BEST rating of not less than an A: VIII (A: 8) unless such requirements  
16 are waived, in writing, by the County Risk Manager. If the County's Risk Manager waives a  
17 requirement for a particular insurer such waiver is only valid for that specific insurer and only for one  
18 policy term.
- 19 b. The CONSULTANT must declare its self-insured retentions. If such self-insured retentions exceed  
20 \$500,000 per occurrence such retentions shall have the prior written consent of the County Risk  
21 Manager before the commencement of operations under this Agreement. Upon notification of self  
22 insured retentions which are deemed unacceptable to the COUNTY, at the election of the County's  
23 Risk Manager, CONSULTANT shall either; 1) reduce or eliminate such self-insured retentions as  
24 respect to this Agreement with the COUNTY, or 2) procure a bond which guarantees payment of  
25 losses and related investigations, claims administration, defense costs and expenses.
- 26 c. The CONSULTANT shall cause their insurance carrier(s) to furnish the COUNTY with 1) a properly  
27 executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting  
28 coverage as required herein; or, 2) if requested to do so orally or in writing by the County Risk  
29 Manager, provide original Certified copies of policies including all Endorsements and all attachments

1           thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and policies of  
2           insurance shall contain the covenant of the insurance carrier(s) shall provide no less than thirty (30)  
3           days written notice or ten (10) days in the event of cancellation for nonpayment of premium be given  
4           to the COUNTY prior to any cancellation of such insurance. In the event of a material modification or  
5           cancellation of coverage, this Agreement shall terminate forthwith, unless the COUNTY receives,  
6           prior to such effective date, another properly executed original Certificate of Insurance and original  
7           copies of endorsements or certified original policies, including all endorsements and attachments  
8           thereto evidencing coverages and the insurance required herein is in full force and effect.  
9           Individual(s) authorized by the insurance carrier to do so on its behalf shall sign the original  
10          endorsements for each policy and the Certificate of Insurance. CONSULTANT shall not commence  
11          operations until the COUNTY has been furnished original Certificate (s) of Insurance and certified  
12          original copies of endorsements or policies of insurance including all endorsements and any and all  
13          other attachments as required in this Section. Submittal of certificates to County and review or  
14          approval of certificates by County does not relieve CONSULTANT of its duties to provide insurance  
15          which fully complies with the terms stated above.

16          d. It is understood and agreed by the parties hereto and the CONSULTANT's insurance company(s),  
17          that the Certificate(s) of Insurance and policies shall so covenant and shall be construed as primary  
18          insurance, and the COUNTY'S insurance and/or deductibles and/or self-insured retentions or self-  
19          insured programs shall not be construed as excess.

20          e. If, during the term of this Agreement or any extension thereof, there is a material change in the scope  
21          of services or performance of work the Risk Manager of the County of Riverside reserves the right to  
22          adjust the types of insurance required under this Agreement and the monetary limits of liability for the  
23          insurance coverages required herein, if, in the County Risk Manager's reasonable judgment, the  
24          amount or type of insurance carried by the CONSULTANT has become inadequate.

25          f. CONSULTANT shall pass down the insurance obligations contained herein to all tiers of  
26          subcontractors working under this Agreement.

27          **O. Conflict of Interest**

28                 CONSULTANT warrants, by execution of this contract, that no person or selling agency has been  
29                 employed or retained to solicit or secure this contract upon an agreement or understanding for a



1 commission, percentage, brokerage or contingent fee, excepting bona fide employees or bona fide  
2 established commercial or selling agencies maintained by CONSULTANT for the purpose of securing  
3 business. For breach or violation of this warranty, COUNTY has the right to annul this contract without  
4 liability, pay only for the value of the work actually performed, or in its discretion to deduct from the  
5 contract price or consideration, or otherwise recover, the full amount of such commission, percentage,  
6 brokerage, or contingent fee. CONSULTANT may be requested to complete a Conflict of Interest  
7 Statement prior to, during, or after execution of this contract. CONSULTANT understands that as a  
8 condition of this contract CONSULTANT agrees to complete the Conflict of Interest Statement when  
9 requested to do so by COUNTY.

10 **P. Legal Compliance**

11 CONSULTANT shall comply with all Federal, State and local laws, statutes, ordinances, rules and  
12 regulations, and the orders and decrees of any courts or administrative bodies or tribunals currently in  
13 effect and in any manner affecting the performance of this Agreement, including, without limitation,  
14 workers' compensation laws and licensing and regulations.

15 **Q. Nondiscrimination**

- 16 1. During the performance of this agreement, CONSULTANT and its Subcontractors shall not unlawfully  
17 against any employee or applicant for employment because of race, religion, color, national origin,  
18 ancestry, physical handicap, medical condition, marital status, age or sex. CONSULTANT and  
19 Subcontractor shall comply with the provisions of the Fair Employment and Housing Act (Government  
20 Code, Section 12900 et seq.) and applicable regulations promulgated thereunder (California  
21 Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment  
22 and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of  
23 Division 4 of Title 2 of the California Administrative Code are incorporated into this contract by reference  
24 and made a part hereof as if set forth in full. CONSULTANT and its Subcontractors shall give written  
25 notice of their obligations under this clause to labor organizations with which they have a collective  
26 bargaining or other agreement.
- 27 2. CONSULTANT will provide all information and reports required by the Regulations, or orders and  
28 instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources  
29 of information, and its facilities as may be determined by COUNTY or AGENCIES to be pertinent to



1 ascertain compliance with such Regulations, orders and instructions. Where any information required of  
2 CONSULTANT is in the exclusive possession of another who fails or refuses to furnish this information,  
3 CONSULTANT shall so certify to COUNTY, or the Federal Highway Administration as appropriate and  
4 shall set forth what efforts he has made to obtain the information.

5 3. In the event of CONSULTANT's noncompliance with the nondiscrimination provisions of this contract,  
6 COUNTY shall impose such contract sanctions as it determines to be appropriate, including, but not  
7 limited to:

- 8 • Withholding of payments to CONSULTANT under the contract until CONSULTANT complies;
- 9 • Cancellation, termination, or suspension of the contract in whole or in part.

10 4. CONSULTANT shall include the nondiscrimination and compliance provisions of this clause in all  
11 subcontracts to perform work under this contract.

12 5. CONSULTANT shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49  
13 CFR 21 through Appendix H and 23 CFR 710.405(b) are applicable to this contract by reference.

14 **R. Labor Code and Prevailing Wages**

15 1. Certain Classifications of Labor under this contract may be subject to prevailing wage requirements.

16 2. Reference is made to Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with  
17 Section 1720). By this reference said Chapter 1 is incorporated herein with like effect as if it were here  
18 set forth in full. The parties recognize that said Chapter 1 deals, among other things with discrimination,  
19 penalties and forfeitures, their disposition and enforcement, wages, working hours, and securing worker's  
20 compensation insurance and directly effect the method of prosecution of the work by CONSULTANT and  
21 subject it under certain conditions to penalties and forfeitures. Execution of the Agreement by the parties  
22 constitutes their agreement to abide by said Chapter 1, their stipulation as to all matters which they are  
23 required to stipulate as to by the provisions of said Chapter 1, constitutes CONSULTANT's certification  
24 that he is aware of the provisions of said Chapter 1 and will comply with them and further constitutes  
25 CONSULTANT's certification as follows: "I am aware of the provisions of Section 3700 of the California  
26 Labor Code which require every employer to be insured against liability for worker's compensation or to  
27 undertake self-insurance in accordance with the provisions of that Code, and I will comply with such  
28 provisions before commencing the performance of the work of this contract."

29 3. Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates, including the per diem

1 wages applicable to the work, and for holiday and overtime work, including employer payments for health  
2 and welfare, pension, vacation, and similar purposes, in the county in which the work is to be done have  
3 been determined by the Director of the California Department of Industrial Relations. These wages are  
4 available from the California Department of Industrial Relations' Internet website at <http://www.dir.ca.gov>.

- 5 4. Should a portion of the project contain Federal funding, Federal minimum wages shall be used. The  
6 Federal minimum wage rates for this project as determined by the United States Secretary of Labor are  
7 available from the U.S Department of Labor, Employment Standards Administration, Wage and Hour  
8 Division's Internet website at <http://www.access.gpo.gov/davisbacon>. If there is a difference between the  
9 minimum wage rates determined by the Secretary of Labor and the general prevailing wage rates  
10 determined by the Director of the California Department of Industrial Relations for similar classifications of  
11 labor, the CONSULTANT and subcontractors shall pay not less than the higher wage rate. The  
12 Department will not accept lower State wage rates determinations. This includes "helper" (or other  
13 classifications based on hours of experience) or any other classification not appearing in the Federal  
14 wage determinations. Where Federal wage determinations do not contain the State wage rate  
15 determination otherwise available for use by the CONSULTANT and subcontractors, the CONSULTANT  
16 and subcontractors shall pay not less than the Federal minimum wage rate which most closely  
17 approximates the duties of the employees in question.

18 **S. Review and Inspection**

19 CONSULTANT and any Subcontractors shall permit COUNTY and/or AGENCIES to review and inspect  
20 PROJECT activities including review and inspection on a daily basis.

21 **T. Record Retention / Audits**

- 22 1. CONSULTANT, Subcontractors, and COUNTY shall maintain all books, documents, papers, accounting  
23 records, and other evidence pertaining to the performance of the contract, but not limited to, the costs of  
24 administering the contract. All parties shall make such materials available at their respective offices at all  
25 reasonable times during the contract period and for three years from the date of final payment under the  
26 contract or three years from project closeout, whichever is later.
- 27 2. COUNTY, Caltrans, the State Auditor General, FHWA or any duly authorized representative of the  
28 Federal Government shall have access to any books, records, and documents of CONSULTANT that are  
29 pertinent to the contract for audits, examinations, excerpts, and transactions, and copies thereof shall be

1 furnished if requested.

2 **U. Ownership of Data**

3 Ownership and title to all reports, documents, plans, specifications, and estimates produced as part of  
4 this contract will automatically be vested in COUNTY and no further agreement will be necessary to  
5 transfer ownership to COUNTY.

6 **V. Confidentiality of Data**

- 7 1. All financial, statistical, personal, technical or other data and information which is designated confidential  
8 by COUNTY or AGENCIES, and made available to CONSULTANT in order to carry out this contract, shall  
9 be protected by CONSULTANT from unauthorized use and disclosure.
- 10 2. Permission to disclose information on one occasion for a public hearing held by COUNTY or AGENCIES  
11 relating to the contract shall not authorize CONSULTANT to further disclose such information or  
12 disseminate the same on any other occasion.
- 13 3. CONSULTANT shall not comment publicly to the press or any other media regarding the contract,  
14 including COUNTY or Agencies actions regarding the contract. Communication shall be limited to  
15 COUNTY, Agency or CONSULTANT's staff that are involved with the project, unless CONSULTANT shall  
16 be requested by COUTY to attend a public hearing or respond to questions from a Legislative committee.
- 17 4. Each subcontract shall contain provisions similar to the foregoing related to the confidentiality of data and  
18 nondisclosure of the same.
- 19 5. CONSULTANT shall not issue any news release or public relations item of any nature whatsoever  
20 regarding work performed or to be performed under this contract without prior review of the contents  
21 thereof by COUNTY and receipt of COUNTY's written permission.

22 **W. Funding Requirements**

- 23 1. All obligations of COUNTY are subject to appropriation of resources by various Federal, State and local  
24 agencies.
- 25 2. This agreement is valid and enforceable only if sufficient funds are made available to COUNTY for the  
26 purpose of this PROJECT. In addition, this agreement is subjected to any additional restrictions,  
27 limitations, conditions or any statute enacted by Congress, State Legislature or COUNTY that may affect  
28 the provisions, terms or funding of this contract in any manner.
- 29 3. It is mutually agreed that if sufficient funds for the program are not appropriated, this contract will be

1 amended or terminated to reflect any reduction in funds.

2 **ARTICLE V • PERFORMANCE**

3 **A. Performance Period**

- 4 1. This Contract shall begin upon notification to proceed by the COUNTY PROJECT MANAGER.
- 5 2. CONSULTANT is advised that any recommendation for contract award is not binding on COUNTY until
- 6 the proposed contract is fully executed and approved by COUNTY.
- 7 3. CONSULTANT shall perform PROJECT services in accordance with the provisions set forth in Appendix
- 8 B, Schedule of Services, which is attached hereto and incorporated herein by reference.
- 9 4. Where CONSULTANT is required to prepare and submit studies, reports, plans, etc., to COUNTY, these
- 10 shall be submitted in draft as scheduled, and the opportunity provided for COUNTY to offer comments
- 11 prior to final submission.
- 12 5. When COUNTY determines that CONSULTANT has satisfactorily completed the PROJECT services,
- 13 COUNTY may give CONSULTANT a written Notice of Final Acceptance. CONSULTANT shall not incur
- 14 any further costs hereunder unless so specified in the Notice of Final Acceptance. CONSULTANT may
- 15 request a Notice of Final Acceptance determination when, in its opinion, it has satisfactorily completed all
- 16 covenants as stipulated in this Contract.
- 17 6. Time is of the essence in this agreement.

18 **B. Time Extensions**

- 19 1. Any delay in providing PROJECT services required by this contract occasioned by causes beyond the
- 20 control and not due to the fault or negligence of CONSULTANT, shall be the reason for granting an
- 21 extension of time for the completion of the aforesaid work. When such delay occurs, CONSULTANT shall
- 22 promptly notify COUNTY in writing of the cause and of the extent of the delay whereupon COUNTY shall
- 23 ascertain the facts and the extent of the delay and grant an extension of time for the completion of the
- 24 work when, in COUNTY's judgement, their findings of fact justify such an extension of time.
- 25 2. COUNTY's findings of fact shall be final and conclusive to the parties hereto. However, this is not
- 26 intended to deny CONSULTANT it's civil legal remedies in the event of a dispute.

27 **C. Reporting Progress**

- 28 1. As part of the monthly invoice CONSULTANT shall submit a progress report in accordance with COUNTY
- 29 Engineering Services Progress Reporting Guidelines. Progress Reports shall indicate the progress



1 achieved during the previous month in relation to the Schedule of Services. Submission of such progress  
2 report by CONSULTANT shall be a condition precedent to receipt of payment from COUNTY for each  
3 monthly invoice submitted.

- 4 2. To ensure understanding and performance of the contract objectives, meetings between COUNTY,  
5 AGENCIES, and CONSULTANT shall be held as often as deemed necessary. All work objectives,  
6 CONSULTANT's work schedule, the terms of the contract and any other related issues will be discussed  
7 and/or resolved. CONSULTANT shall keep minutes of meetings and distribute copies of minutes as  
8 appropriate.

9 **D. Evaluation of CONSULTANT**

10 CONSULTANT's performance will be evaluated by COUNTY for future reference.

11 **ARTICLE VI • COMPENSATION**

12 **A. Work Authorization**

13 CONSULTANT shall not commence performance of any work or project services until so directed by the  
14 County Project Manager. No payment will be made prior to approval of this contract.

15 **B. Basis of Compensation**

- 16 1. PROJECT services as provided under this agreement as described in the Scope of Services, shall be  
17 compensated for as defined in Appendix C, Budget, which is attached hereto and incorporated herein by  
18 reference. The total amount of the Contract is not to exceed \$5,040,190.88 and reimbursement is to be  
19 made at actual cost plus fixed fee for the following contractors:

20	• Jones & Stokes Associates, Inc.	\$2,594,213.45
21	• AECOM	\$1,541,420.41
22	• Iteris	\$346,162.66
23	• URS	\$173,999.36
24	• Group Delta consultants	\$70,957.41
25	• Epic Land Solutions	\$121,454.34
26	• Arellano and Associates	\$112,000.06
27	• VMS	\$39,058.14
28	• James Allen	\$40,925.05

29 If a contingency budget is provided, COUNTY shall hold such contingency in reserve for unforeseen Extra



1 Work that may arise during the performance of this agreement. Contingency budget shall only be used at  
2 the discretion of the COUNTY PROJECT MANAGER, and with prior written authorization by the COUNTY  
3 PROJECT MANAGER.

4 No additional compensation for Extra Work will be paid except upon the issuance of an Extra Work Order  
5 by COUNTY.

6 2. Prior authorization in writing by the COUNTY PROJECT MANAGER will be required before  
7 CONSULTANT enters into any non-budgeted purchase order or subcontract exceeding \$500 for supplies,  
8 equipment or consultant services. CONSULTANT shall provide an evaluation of the necessity or  
9 desirability of incurring such costs.

10 3. For purchase of any item, service or consulting work not covered in CONSULTANT's proposal and  
11 exceeding \$500, with prior authorization by the COUNTY PROJECT MANAGER, three competitive  
12 quotations shall be submitted with the request, or the absence of bidding shall be adequately justified.

13 4. Any equipment purchased as a result of this contract is subjected to the following: CONSULTANT shall  
14 maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a  
15 useful life of at least two years and an acquisition cost of \$500 or more. If the purchased equipment  
16 needs replacement and is sold or traded in, COUNTY shall receive a proper refund or credit. At the  
17 conclusion of the contract or if the contract is terminated, CONSULTANT may either keep the equipment  
18 and credit COUNTY in an amount equal to its fair market value or sell such equipment at the best price  
19 obtainable at a public or private sale in accordance with established COUNTY procedures and credit  
20 COUNTY in an amount equal to the sales price. If CONSULTANT elects to keep the equipment, fair  
21 market value shall be determined, at CONSULTANT's expense, on the basis of a competent independent  
22 appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable by  
23 COUNTY, and CONSULTANT. If it is determined to sell the equipment, the terms and conditions of such  
24 sale must be approved in advance by COUNTY and AGENCIES.

25 5. The consideration to be paid CONSULTANT, as provided herein, shall be in compensation for all of  
26 CONSULTANT's expenses incurred in the performance hereof, including travel and per diem, unless  
27 otherwise expressly so provided.

28 6. CONSULTANT agrees that the Code of Federal Regulations Section 49, Part 18, Uniform Administrative  
29 Requirements for Grants and Cooperative Agreements to State and Local Governments shall be used to

1 determine the allowability of individual items of cost.

2 7. CONSULTANT also agrees to comply with Federal procedures in accordance with Office of Management  
3 and Budget Circular A-102, Uniform Administrative Requirements for Grants-in-Aid to State and Local  
4 Governments.

5 8. In the event of errors or omissions in the plans for PROJECT, CONSULTANT shall perform the necessary  
6 engineering services required to correct such errors and omissions without additional charge to COUNTY.

7 **C. Progress Payments**

8 1. CONSULTANT shall submit monthly invoices for PROJECT Services in accordance with Appendix C,  
9 Budget, and in accordance with COUNTY Engineering Services Invoicing Procedures.

10 2. CONSULTANT shall submit an invoice each month for PROJECT services performed during the  
11 preceding month. Invoices shall be submitted to the COUNTY PROJECT MANAGER and shall be  
12 included with a Progress Report covering the same period as the submitted invoice.

13 3. Progress payments will be based on PROJECT services provided and actual costs incurred. Payments  
14 made prior to the completion of each phase will not exceed the amount allowed in CONSULTANT's cost  
15 proposal for the completion of that phase and prior phases, unless approved in writing by the COUNTY  
16 PROJECT MANAGER..

17 4. Progress payments will be made as promptly as fiscal procedures will permit upon receipt by the  
18 COUNTY PROJECT MANAGER of itemized invoices.

19 5. COUNTY will withhold the last 10 percent of the budget for preparation of PS&E documents. The 10  
20 percent retainage is to be held after 90% of the PS&E phase has been billed and is not to be deducted  
21 from each invoice. The amount retained will be paid to CONSULTANT after COUNTY has approved  
22 CONSULTANT's plans, specifications and estimate.

23 **ARTICLE VII • GIS Information**

24 A. "GIS Information" shall include GIS digital files (including the information or data contained therein) and any  
25 other information, data, or documentation from County GIS (regardless of medium or format) that is provided  
26 pursuant to this agreement.

27 B. CONSULTANT acknowledges that the unauthorized use, transfer, assignment, sublicensing, or disclosure of  
28 the GIS information, documentation, or copies thereof will substantially diminish their value to COUNTY.

29 CONSULTANT acknowledges and agrees that COUNTY GIS information is a valuable proprietary product,



1 embodying substantial creative efforts, trade secrets, and confidential information and ideas. COUNTY GIS  
2 information is and shall remain the sole property of COUNTY; and there is no intention of COUNTY to transfer  
3 ownership of COUNTY GIS information.

4 C. COUNTY GIS information is made available to CONSULTANT solely for use in the normal course of  
5 CONSULTANT's business to produce reports, analysis, maps and other deliverables only for this PROJECT  
6 and as described within the Scope of Services.

7 D. CONSULTANT agrees to indemnify and hold harmless COUNTY, its officers, employees and agents from any  
8 and all liabilities, claims, actions, losses or damages relating to or arising from CONSULTANT's use of  
9 COUNTY GIS information.

10 E. GIS information cannot be used for all purposes; and GIS information may not be complete for all purposes.  
11 Additional investigation or research by CONSULTANT into other sources will be required. GIS information is  
12 intended only as an information base and is not intended to replace any legal records. COUNTY has used  
13 and will continue to use its best efforts to correctly input into COUNTY GIS the information contained in  
14 various legal and other records; but COUNTY accepts no responsibility for any conflict with actual legal  
15 records or for information not transferred from legal records to COUNTY GIS. COUNTY has attempted to  
16 update GIS information as often as is practically feasible. However, CONSULTANT should be aware that GIS  
17 information may not be current and changes or additions to the information contained in COUNTY GIS may  
18 not yet be reflected in COUNTY GIS.

19 F. COUNTY accepts no responsibility for the use of GIS information; and COUNTY provides no warranty for the  
20 use of COUNTY GIS or COUNTY GIS information by CONSULTANT. THE WARRANTIES SPECIFICALLY  
21 SET FORTH IN THIS AGREEMENT ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED,  
22 INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE;  
23 AND SUCH OTHER WARRANTIES ARE HEREBY EXCLUDED.

24 G. Final plans, drawings or PROJECT work products will be provided in an electronic format suitable for  
25 inclusion within the COUNTY GIS or CADD Systems by CONSULTANT and will contain the appropriate meta  
26 data and will be geographically registered using a appropriate coordinate system such as the California State  
27 Plane Coordinate System NAD 83.






ARTICLE VIII • APPROVALS

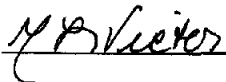
COUNTY Approvals

RECOMMENDED FOR APPROVAL:

 Dated: 12/2/10

JUAN C. PEREZ  
Director of Transportation

APPROVED AS TO FORM:  
PAMELA J. WALLS, COUNTY COUNSEL

 Dated: 12/01/10  
By Deputy

APPROVAL BY THE BOARD OF SUPERVISORS

\_\_\_\_\_ Dated: \_\_\_\_\_

\_\_\_\_\_  
PRINTED NAME  
Chairman, Riverside County Board of Supervisors

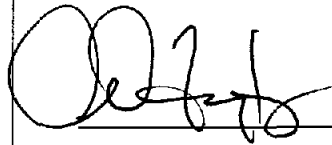
ATTEST:

\_\_\_\_\_ Dated: \_\_\_\_\_

KECIA HARPER-IHEM  
Clerk of the Board (SEAL)

CONSULTANT Approvals

CONSULTANT:

 Dated: 11/19/10

DAVID FREITAS  
PRINTED NAME

DR. VICE PRESIDENT  
TITLE

CONSULTANT:

 Dated: 11/24/10

F. MICHAEL GRAY  
PRINTED NAME

ASSISTANT SECRETARY  
TITLE

1 CAJALCO ROAD WIDENING – HARVILL AVENUE TO TEMESCAL CANYON ROAD  
2 SCOPE OF WORK – PRELIMINARY ENGINEERING/ENVIRONMENTAL DOCUMENT

3 ARTICLE AI • GENERAL INFORMATION/REQUIREMENTS

4 A. PROJECT DESCRIPTION

5 The Riverside County Transportation Department (RCTD) proposes to widen Cajalco Road from Harvill  
6 Avenue to Temescal Canyon Road from the existing 2-3 lanes to 4 lanes. The project is needed to  
7 accommodate existing and projected traffic both locally and within the region.

- 8 • Segment 1: Harvill Ave to Wood Rd
- 9 • Segment 2: Wood Rd to El Sobrante Rd
- 10 • Segment 3: El Sobrante Rd to La Sierra Ave
- 11 • Segment 4: La Sierra Ave to Temescal Canyon Rd

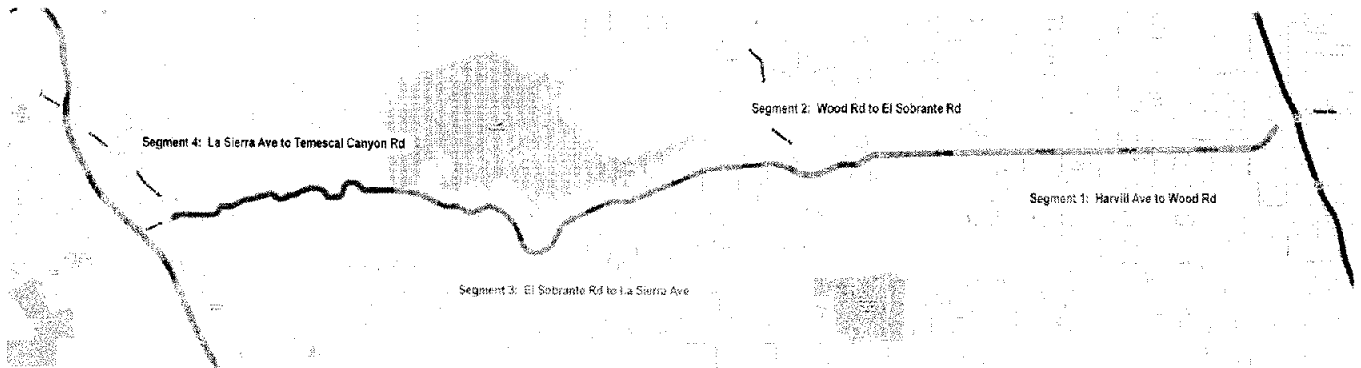
12 The services to be performed under this agreement are the environmental and engineering services necessary  
13 to obtain environmental clearance for the proposed widening improvements. The project is funded in part with  
14 federal funds and therefore NEPA compliance will be required through CALTRANS District 8 Office of Local  
15 Assistance. Under NEPA delegation CALTRANS will be the lead agency for NEPA compliance. The County of  
16 Riverside will be the lead agency for CEQA compliance.

17 Environmental tasks to be performed include the preparation of a Preliminary Environmental Study (PES)  
18 Form, technical studies and the preparation of the environmental document. Engineering tasks to be  
19 performed include preparation of engineering plans providing horizontal and vertical geometry, analysis of  
20 area hydrology and recommendations for drainage facilities, evaluation of soil conditions and development of  
21 preliminary structural recommendations, preparation of bridge planning studies and preparation of preliminary  
22 cost estimates.



**B. LOCATION**

The proposed project extends along Cajalco Road from Harvill Avenue to Temescal Canyon Road.



**C. COORDINATION**

CONSULTANT shall coordinate with other involved agencies for compatible design and phasing of construction with existing conditions. Coordination may include, but will not necessarily be limited to, the following:

- Federal Highway Administration (FHWA)
- CALTRANS
- Riverside Conservation Agency (RCA)
- Riverside County Habitat Conservation Agency
- Other Riverside County Departments
- Metropolitan Water District
- Riverside County Transportation Commission
- City of Riverside
- City of Corona
- Utility Companies
- Adjacent Property Owners
- Environmental Groups
- Development Groups
- Native American Tribes
- City of Perris

**Regulatory Agencies including:**

- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- California Department of Fish and Game (CDFG)
- Regional Water Quality Control Board (RWQCB)
- Riverside County Flood Control & Water Conservation District (RCFC & WCD)



1 CALTRANS will exercise review and approval function through the COUNTY PROJECT MANAGER at key  
2 points in the development process. CALTRANS review function will be primarily related to environmental  
3 deliverables. COUNTY will be the lead for the design and the design is not subject to approval by  
4 CALTRANS. All contacts with CALTRANS will be directed through COUNTY. Milestone PROJECT reviews  
5 will be performed for the specific products and deliverables listed herein. The COUNTY PROJECT  
6 MANAGER will conduct these reviews, in addition to the monthly project status reports and meetings. All  
7 meetings with other outside agencies will be scheduled by CONSULTANT with approval of COUNTY.

8 **D. PHASES**

9 The services performed by CONSULTANT will be accomplished in one phase:

- 10 • Phase I – Preliminary Engineering/ Environmental Document

11 **E. STANDARDS**

12 The preliminary plans / technical report and environmental document shall be prepared in accordance with  
13 current CALTRANS regulations, policies, procedures, manuals and standards including compliance with  
14 Federal Highway Administration (FHWA) requirements and/or COUNTY Road Standards as appropriate. The  
15 technical report prepared to support of the environmental document will follow the format for CALTRANS  
16 Project Reports. CONSULTANT will document design exceptions with format and content similar to  
17 CALTRANS sheets Fact Sheets. All documents shall be prepared using English Standard Units and  
18 dimensions. The engineering document will be a Project Report Equivalent that would not be reviewed or  
19 under the purview of CALTRANS.

20 **1. Environmental**

21 The procedures to be followed and the content of the environmental surveys, environmental technical  
22 reports and environmental documents are set forth in CALTRANS Environmental Handbook, CALTRANS  
23 Local Assistance Procedures Manual, CALTRANS Transportation Laboratory technical manuals for  
24 environmental studies, FHWA's Technical Advisory T6640.8A and on CALTRANS Standard  
25 Environmental Reference (SER) at the CALTRANS website.

26 Federal and State requirements for environmental analysis and impact assessment, as set forth in the  
27 National Environmental Policy Act (NEPA), the California Environmental Quality Act (CEQA) and other  
28 applicable Federal and State regulations, must be satisfied.



1       **2. Preliminary Survey/Aerial Topographical Mapping**

2           All preliminary surveys and aerial mapping shall be performed by COUNTY.

3       **3. Design**

4           Roadway design shall be in accordance with the current CALTRANS Highway Design Manual and its  
5           revisions and/or COUNTY Road Standards as appropriate. Traffic design shall be in accordance with the  
6           Manual of Uniform Traffic Control Devices (MUTCD) and the California Supplement.

7       **4. Geotechnical Design Report**

8           The Geotechnical Design Report shall be prepared in conformance with the current edition of the State  
9           Manual of Test, California Test Method 130 and COUNTY geotechnical analysis procedures.

10       **5. Project Files**

11           Project Files shall be indexed in accordance with CALTRANS Project Development Uniform File System.

12           Items 1 through 5 are not all-inclusive but are intended only to illustrate types of sources.

13       **F. KEY PERSONNEL**

14           The CONSULTANT has represented to the COUNTY that certain key personnel will perform the services and  
15           if one or more of such personnel should become unavailable, CONSULTANT may substitute other personnel  
16           of at least equal competence only after prior written approval by the COUNTY PROJECT MANAGER has  
17           been secured. The key personnel for performance of this PROJECT are:

18           Project Manager (Environmental Team Leader)	Brian Calvert
19           Senior Roadway Engineer	Edward Ng
20           Senior Structures Engineer	Mohan Char
21           Traffic Engineer	Viggen Davidian

22       **G. Deliverables**

23           The following list identifies the deliverables to be delivered to the COUNTY by CONSULTANT. All  
24           deliverables will be provided in hard copy format (as identified in the scope for each identified deliverable in  
25           this scope of work) unless otherwise noted in this scope of work and in electronic format (pdf).

- 26           • Property ownership and map for parcels within 500 feet of the project alignment
- 27           • Bridge Hydraulic Analysis
- 28           • Hydrology and Hydraulics Analysis



- 1 • Drainage Design Report
- 2 • Water Quality Management Plan
- 3 • Structures Preliminary Geotechnical Report
- 4 • Preliminary Geotechnical Report
- 5 • Alternatives Evaluation Report/Planning Report
- 6 • Initial Study
- 7 • Notice of Preparation
- 8 • Summary of Scoping Meeting comments
- 9 • Preliminary Environmental Study
- 10 • Historic Property Survey Report (including an Area of Potential Effect map, Archaeological Survey
- 11 Report, and Historic Resources Evaluation Report)
- 12 • Finding of Effect
- 13 • Visual Impact Assessment
- 14 • Noise Study Report
- 15 • Noise Abatement Decision Report
- 16 • Natural Environment Study
- 17 • Jurisdictional Delineation Report
- 18 • Paleontological Identification Report/Paleontological Evaluation Report
- 19 • Paleontological Mitigation Plan
- 20 • Air Quality Report
- 21 • Air Quality Conformity Analysis Report and Checklist
- 22 • Relocation Impact Report
- 23 • Water Quality Assessment Report
- 24 • Location Hydraulic Study
- 25 • Summary Floodplain Encroachment Report
- 26 • Community Impact Assessment
- 27 • Initial Site Assessment
- 28



- 1 • Draft Environmental Impact Report/Environmental Assessment (Complex)/Finding of No Significant
- 2 Impact
- 3 • Final Environmental Impact Report/Environmental Assessment (Complex)/Finding of No Significant
- 4 Impact
- 5 • Notice of Availability
- 6 • Environmental Commitments Record (included in EIR/EA/FONSI)
- 7 • Findings of Fact and, if necessary, a Statement of Overriding Considerations (included in EIR/EA/FONSI)
- 8 • Notice of Determination
- 9 • Federal Register Notice (for statute of limitations)
- 10 • Traffic Methodology Memorandum
- 11 • Traffic Volume Forecast Development Report
- 12 • Alignment Screening Analysis Technical Memorandum
- 13 • Trail and Bikeway Crossing Technical Memorandum
- 14 • Speed/VMT Tables (in 5-mph Speed Bins)
- 15 • Traffic Index Technical Memorandum
- 16 • Traffic Operations Analysis Report
- 17 • Responses to Comments on the Draft EIR/EA/FONSI
- 18 • Concept Alternatives Layouts
- 19 • Presentation Exhibits of Alternatives
- 20 • Cajalco Creek Channelization Study Report
- 21 • Structural Advance Planning Study (APS)
- 22 • Plans and Profiles of the Final Alternatives including Roadway Geometrics
- 23 • Project Report Equivalent
- 24 • Value Analysis Report
- 25 • Quality Control Plan
- 26
- 27
- 28



1 **ARTICLE AII • PROJECT ADMINISTRATION**

2 **A. PROJECT MANAGEMENT**

3 This task includes the day-to-day management of the PROJECT. Project Development Team (PDT)  
4 meetings with the COUNTY PROJECT MANAGER, the California Department of Transportation staff and  
5 other representatives from affected agencies will be held once a month. The environmental team leaders  
6 and/or subconsultants will attend PDT meetings, as appropriate. The PDT meetings will be held on a rotating  
7 basis with the meeting being held at the COUNTY one month and at CALTRANS the following month. The  
8 CONSULTANT shall prepare meeting notes for each meeting and have these available for review at least two  
9 weeks prior to each succeeding meeting.

10 The CONSULTANT's Project Management Plan will include a communication plan. The communication plan  
11 will consist of a roster of staff involved in the PROJECT and multiple forms of contact for each team member  
12 (address, telephone number, e-mail, etc.). The communication plan will also identify lines of communication  
13 with levels of responsibility/authority for development of the PROJECT.

14 The following assumptions have been made regarding project management and meetings.

15 *Kick-off Meeting:* CONSULTANT Project Manager, Environmental Lead, and Engineering Lead shall attend a  
16 kick-off meeting.

17 *Monthly PDT Meetings:* CONSULTANT Project Manager, Environmental Lead, and Engineering Lead (other  
18 team members shall attend meetings on an as needed basis) shall attend PDT meetings with the COUNTY  
19 and CALTRANS staff (forty-two [42] PDT meetings are assumed).

20 *Meetings:* CONSULTANT Project Manger and other team members may be required to attend meetings in  
21 addition to the PDT meetings previously identified. Forty (40) additional project meetings are assumed.

22 *Project Management:* This task includes the coordination and management efforts by the CONSULTANT  
23 Project Manager. A duration of forty-two (42) months is assumed.

24 **B. BUDGETING**

25 The CONSULTANT will prepare budgets for each task and milestone for the PROJECT. Such budgets will be  
26 entered in to the CONSULTANT's Management Information System along with actual costs incurred and  
27 used as a basis for cost monitoring and control.





1 **C. COST ACCOUNTING**

2 The CONSULTANT will prepare monthly reports of expenditures for the PROJECT by task and milestone.  
3 Expenditures will include direct labor costs, other direct costs and subconsultant costs. These reports will be  
4 included as supporting data for invoices presented to the COUNTY every month.

5 **D. SCHEDULING**

6 Within one month from the Notice to Proceed (NTP), the CONSULTANT will provide a detailed project  
7 schedule, which indicates milestones, major activities and deliverables, to the COUNTY for review and  
8 comments. This schedule will reflect assumed review times necessary by all of the agencies involved.  
9 Review of the schedule will occur at subsequent trend meetings.

10 **E. PROGRESS REPORTING**

11 Progress reports and invoices shall be prepared in accordance with COUNTY guidelines. Reports providing  
12 actual physical progress will be required monthly and shall be accompanied by an invoice.

13 **F. CONTRACT ADMINISTRATION**

14 The CONSULTANT's PROJECT MANAGER shall maintain ongoing liaison with the COUNTY PROJECT  
15 MANAGER, AGENCY contacts and utility companies to promote effective coordination during the course of  
16 project development.

17 Progress meetings with CONSULTANT's staff, subconsultants and the COUNTY PROJECT MANAGER shall  
18 be held regularly.

19 Refer to ARTICLE All, Item A, for the number of meetings that are assumed and included in this scope of  
20 work for the proposed project.

21 **ARTICLE AIII • PLANNING AND PROJECT DEVELOPMENT**

22 **A. RESEARCH AND DATA GATHERING**

23 Existing topographic mapping, photos, reports, maintenance reports, right of way maps, "as-built" plans,  
24 record maps and surveys, study reports, assessor maps, contract documents, utility index maps, local street  
25 improvement/development plans and other pertinent data will be obtained and reviewed. It is anticipated that  
26 existing topographic mapping from prior projects will be made available to the design team and additional  
27 survey data will be provided by the COUNTY. It is assumed that any reports or studies that have been  
28 previously prepared along Cajalco Road will be provided by the COUNTY.



1 **B. PROJECT DEVELOPMENT TEAM**

2 A Project Development Team (PDT) including representatives from the COUNTY, CALTRANS, and other  
3 relevant agencies shall be established within fifteen days after NTP.

4 PDT meetings shall be held monthly to resolve issues and to apprise the affected agencies of the progress of  
5 the PROJECT. A kick off meeting with the PDT (PDT Meeting No. 1) shall be held as soon as possible after  
6 NTP. Refer to ARTICLE AII, Item A, for the number of meetings that are assumed and included in this scope  
7 of work for the proposed project.

8 **C. RIGHT OF ENTRY**

9 CONSULTANT shall identify locations outside the roadway right-of-way where it will be necessary to obtain  
10 specific rights-of-entry from affected property owners. The listing of the candidate locations will be furnished  
11 to the COUNTY. CONSULTANT support is required to obtain rights-of-entry.

12 The right-of-way requirements information will be forwarded to the COUNTY'S right-of-way agent for the  
13 COUNTY to obtain the rights-of-entry for the proposed project. The information to be provided with consist of  
14 the ownership list and corresponding map. CONSULTANT will provide all required right-of-entry advance  
15 notification to property owners.

16 The following assumptions related to rights-of-entry are included.

- 17 • Rights-of-entry are anticipated to be required for up to one thousand (1,000) parcels.
- 18 • Right-of-Way Analysis will be performed for up to three hundred fifty (350) parcels.
- 19 • Advanced acquisitions may be required for environmental mitigation properties.
- 20 • COUNTY will obtain right-of-entry permits, CONSULTANT will assist with notification for those  
21 properties with special conditions for the right-of-entry permits. Anticipated support for 30 properties.
- 22 • CONSUTLANT will prepare an ownership list and map of properties extending 500 feet from project  
23 alignment.
- 24 • Advanced acquisition support is limited to assisting in obtaining right-of-entry permits only.

25 **D. DESIGN SURVEYS**

26 COUNTY shall perform field surveys, ground control, photogrammetric mapping, and digital terrain modeling.  
27 Topographic and boundary surveys are anticipated to be performed by the COUNTY or made available  
28 through the COUNTY. Survey data will be obtained from the COUNTY and incorporated into the base



1 mapping. The boundary survey mapping is anticipated to include existing right-of-way lines, centerline  
2 controls, and parcel lines along with identifying information. Record data from the boundary maps will be  
3 used to calculate the existing and proposed centerline and right-of-way of Cajalco Road and intersecting  
4 roadways, drainage and other alignments within the project limits.

5 Topographic mapping is assumed to be made available to the team through the COUNTY. It is assumed that  
6 prior mapping from the Mid-County Parkway project will be furnished to CONSULTANT and that additional  
7 supplemental survey data will be obtained and incorporated into the topographic mapping by the COUNTY  
8 Surveyor. It is assumed that the topographic mapping will be in U.S. Customary units and in known  
9 coordinate system and that no conversion of elevations or data will be necessary by CONSULTANT.

10 Supplemental topographic surveys will be performed by the COUNTY Survey Department as needed to verify  
11 the aerial mapping and to locate existing features and elevations. The location of utility potholes will also be  
12 surveyed by the COUNTY and incorporated into the topographic data set. The topographic mapping and  
13 boundary surveys are assumed to be on the same coordinate and datum base.

14 The survey data will be incorporated into the CADD data and used by CONSULTANT for the development of  
15 alignments, identification site features, compute and identify grading limits, develop earthwork quantities, and  
16 identify right-of-way needs.

17 *Deliverables:*

- 18 • None

19 **E. DESIGN DRAINAGE REPORT**

20 A Design Drainage Report will be prepared to document hydrologic and hydraulic calculations necessary to  
21 complete drainage improvement plans related to the project. Prior to developing hydrology calculations, a  
22 thorough field reconnaissance will be conducted. Available documents pertinent to this Design Drainage  
23 Report will be obtained from the COUNTY and CALTRANS for review. The CONSULTANT's analysis will be  
24 closely coordinated with the affected agencies, including the Riverside County Flood Control & Water  
25 Conservation District (RCFC & WCD). The Design Drainage Report will quantify the magnitude and  
26 frequency of design flows from adjacent areas to the PROJECT area, as well as the volumes attributable to  
27 the proposed improvements.



1 The following provides the specific scope of work for the hydrology and hydraulics/drainage analysis for the  
2 proposed project. CONSULTANT will review the major watercourses at Temescal Wash and Cajalco Creek.  
3 Bridge Hydraulic Analysis will be performed at Temescal Wash and the Cajalco Creek crossings near Harley  
4 John Road, a new bridge west of Alexander Street, and a bridge crossing south of Lake Mathews. There are  
5 no RCFC&WCD master drainage plans for the area. Therefore, a Channelization Study will be performed for  
6 Cajalco Creek to determine the tributary flow rate and preliminary estimate of the channelization required for  
7 the ultimate condition. The cross-culverts and cross drainage systems will be evaluated to determine the  
8 flows and required culvert sizes required where they cross Cajalco Road.

9 Maintenance records will be examined to identify systems or locations of known drainage problems. Prior  
10 studies, if any and if applicable, will be reviewed and the data utilized to streamline the evaluation process.

11 Hydrology and hydraulic analysis will be performed according to Riverside County Flood Control and Water  
12 conservation District (RCFC & WCD) standards. The hydrology and hydraulic analysis at this stage will be for  
13 major and the mainline systems. No detailed design of local drainage facilities is included. The costs for the  
14 local drainage facilities will be estimated based on review of road profiles and drainage patterns.

15 Where the existing culverts or drainage facilities may fall within footprints of proposed alignments and may be  
16 incorporated into the ultimate alignment, an evaluation of the physical condition of the facility will be made in  
17 coordination with COUNTY maintenance. CALTRANS DB-83 will be used a guide to evaluate and develop  
18 remediation strategies as appropriate.

19 It is assumed that a draft Bridge Hydraulic Analysis, Hydrology and Hydraulic Analysis, and Drainage Design  
20 Report will be prepared and that final copies of the reports will be prepared following review by the COUNTY  
21 of the draft report.

22 *Deliverables:*

- 23 • Draft and Final Bridge Hydraulic Analysis
  - 24 • Draft and Final Hydrology and Hydraulics Analysis
  - 25 • Draft and Final Drainage Design Report (two hard copies and one digital copy each)
- 26  
27  
28



1 **F. PRELIMINARY WATER QUALITY MANAGEMENT PLAN (WQMP)**

2 CONSULTANT shall prepare a Water Quality Management Plan (WQMP) in compliance with the latest  
3 COUNTY guidelines. The plan will include a concept SWPPP outlining construction Best Management  
4 Practices (BMPs) as well as recommendations for operational BMPs.

5 The Riverside County Municipal NPDES Storm Water permit was renewed in January 2010 which will result  
6 in lowered thresholds and the addition of new classifications needing reporting. The RCFC&WCD is  
7 developing the guidelines and standards to implement the new permit requirements. These are not expected  
8 to be completed until summer of 2011. Roadways are a new classification added to the list of priority  
9 development categories for which a Water Quality Management Plan (WQMP) is required. A WQMP will be  
10 prepared in accordance with the new guidelines from RCFC&WCD. The major elements of a WQMP will be  
11 identification of the affected receiving water bodies, determination if whether they are on the impacted water  
12 bodies 303(d) list, identify pollutants of concern, and develop strategies and BMP's to control the pollutants.  
13 For this phase of the work, the BMP devices will be to preliminarily size and identify probable locations and  
14 types of BMP's to consider, but will not be detailed out. It is anticipated that the final selection and detailed  
15 designs of the BMP's will be accomplished in the PS&E phase.

16 The alignment and proposed project improvements in the Lake Mathews area will take into account the  
17 Metropolitan Water District's (MWD) drainage management plan to protect the water quality and mitigate the  
18 impacts of development in the Lake Mathews watershed. Where possible, the project will coordinate with the  
19 Lake Mathews regional treatment facilities. Where necessary stand-alone post-construction BMP's will be  
20 identified to be implemented.

21 It is assumed that a draft WQMP will be prepared and that a final WQMP will be prepared following review by  
22 the COUNTY of the draft report.

23 *Deliverables:*

- 24 • Draft and Final Water Quality Management Plan (four hard copies and one digital copy each)

25 **G. PRELIMINARY GEOTECHNICAL REPORT**

26 The draft preliminary geotechnical report is intended for use in the preliminary plans and environmental  
27 documents. CONSULTANT shall collect existing subsurface information that is available for the project area  
28



1 including geological maps published by the California Division of Mines and Geology, geological maps published  
2 by the United States Geological Survey and ground water well information.

3 CONSULTANT shall review available data and shall provide seismic and geologic information and  
4 groundwater data for the preliminary plans and environmental documents. CONSULTANT shall identify any  
5 seismic and geologic hazards that will impact the design and construction of this project. These findings will  
6 be documented in a report to be reviewed and approved by the COUNTY.

7 The following provides the specific scope of work for the geotechnical work for the proposed project.

8 CONSULTANT will review project plans, any existing as-built plans and log of test borings (LOTBs) for  
9 structures in the project area, review published geologic and seismic information, and perform a geotechnical  
10 and geologic site reconnaissance and photographic documentation. On the basis of a review of the existing  
11 data, geologic, and seismic data applicable for the proposed project, and site reconnaissance and  
12 observation, we will provide preliminary recommendations and recommend the scope of work for PS&E level  
13 studies. This will be adequate for Project Report/Advanced Planning Study (PR/APS) level study and will be  
14 based on the review of existing data and surface reconnaissance. This scope of work does not include any  
15 drilling and sampling or laboratory testing.

16 CONSULTANT work and reports will be prepared in accordance with CALTRANS Manuals and Standards.

17 Reports prepared will be a Structures Preliminary Geotechnical Report (SPGR) for the Temescal Creek  
18 Bridge in accordance with Memo-to-Designers 35-1 (2008), and a Preliminary Geotechnical Report (PGR) in  
19 accordance with CALTRANS guidelines.

20 The SPGR will address:

- 21 • Subsurface conditions, including groundwater
- 22 • Geologic hazards
- 23 • Seismic Information
- 24 • Fault rupture potential
- 25 • Design Peak Bedrock / Ground Acceleration (PGA, PBA)
- 26 • Design earthquake magnitude (M)
- 27 • Soil Profile Type
- 28 • Potential for liquefaction, lateral spreading and other secondary hazards
- Feasible foundation type(s) for site
- Potential construction issues



- Initial corrosion evaluation
- Identification of potential for Foundation Load Test(s)

The PGR report will include:

- Purpose and scope of work;
- Site conditions;
- Existing facilities and proposed improvements;
- General geology, subsurface and groundwater conditions;
- Existing structure and foundation data;
- Preliminary seismic parameters for CALTRANS seismic design;
- Liquefaction potential;
- Types of foundations for new structures;
- Comments and preliminary recommendations on pavement design, rippability, slope stability, embankment, cuts and fills, grading, retaining wall foundations;
- Anticipated scope of final investigation; and
- Vicinity and site plan, regional geologic map, fault map, site photographs, and other documentation.

We anticipate that design level geotechnical investigations providing formal Geotechnical Design Report and Structure Foundation Reports, where needed, will be performed during the PS&E level work after the scope of the improvements is determined.

It is assumed that a draft SPGR and PGR will be prepared and that a final SPGR and PGR will be prepared following review by the COUNTY of the draft report.

*Deliverables:*

- Draft and Final Structures Preliminary Geotechnical Report (four hard copies and one digital copy each)
- Draft and Final Preliminary Geotechnical Report (four hard copies and one digital copy each)

**H. PLANNING STUDIES**

CONSULTANT shall identify appropriate alternatives for development and analysis. The analyses will include traffic operations, costs, constructability, environmental impacts and maintenance of traffic. Preliminary cost estimates will be developed for each alternative as soon as practicable and furnished to the COUNTY.



1 The following provides the specific scope of work for the Planning Study. CONSULTANT will develop and  
2 prepare alternatives in accordance with criteria agreed upon with the COUNTY prior to starting the  
3 alternatives development. The alignment alternatives will be developed using the CALTRANS Highway  
4 Design Manual, COUNTY Road Standards, and Manual of Uniform Traffic Control Devices (MUTCD). The  
5 alignments will be developed taking into consideration the site conditions, critical information developed  
6 during the data and background information collection process, and information from the local community and  
7 key stakeholders, as available. COUNTY and community planning documents will be reviewed for critical  
8 elements to be included in the design considerations. Information from prior engineering or alignment studies  
9 will be reviewed, evaluated, and if validated, utilized in the development of the alternatives.

10 The planning studies or initial stages of alternatives development will consist of sketch alignments and basic  
11 concepts to meet the design criteria and guidelines. Up to three (3) alternatives will be developed and  
12 sketched up based on ideas generated in brain-storming sessions. These will be reviewed with the COUNTY  
13 to preliminarily assess the feasibility of the sketch alignments and if they can meet the project criteria. They  
14 will then be evaluated through a qualitative and semi-quantitative evaluation process to eliminate infeasible  
15 and/or unacceptable alternatives and carry forth the remaining alternatives into more detailed design  
16 development. The remaining alignment alternatives will be engineered to a higher level of detail in the  
17 following portion of the process (as detailed in ARTICLE AIII, Item J). It is assumed that there will be three  
18 basic alternatives that will be analyzed in detail. Within these three basic alternatives there may be some  
19 specific limited areas that will have additional variations to address specific site conditions.

20 Working with the COUNTY CONSULTANT will develop a matrix of evaluation criteria and assign weights of  
21 relative importance to the evaluation criteria. CONSULTANT will then assess the alternatives for impacts and  
22 meeting the design criteria and project requirements using existing available information. Some of the key  
23 criteria will include traffic requirements, site impacts, design standards, costs, planning and community goals,  
24 constructability, construction staging, utilities, environmental issues, design exceptions, and right-of-way.

25 CONSULTANT will develop alternatives to widen Cajalco Road to four lanes, consistent with the goal stated  
26 in the RFP. This phase of the project is for development of a range of viable and feasible alternatives that  
27 satisfy project goals, are cost-effective, and that avoid or minimize environmental and right-of-way impacts.

28 The development of design cross-sections shall take into consideration, among other factors, the ability of the





1 roadway to handle anticipated traffic volumes, right-of-way requirements, safety, grading footprint, local  
2 access needs, impacts to adjacent properties, constructability, construction staging, adherence to design  
3 standards, and meeting transportation planning goals. The sixteen mile length of Cajalco Road has a wide  
4 variety of terrain, levels of development, site conditions, and will have different kinds of impacts depending on  
5 the location. Therefore, the development of alignment alternatives will utilize different strategies and criteria  
6 to suit the site conditions and constraints at any particular location. CONSULTANT will coordinate with the  
7 COUNTY to develop and identify the criteria, cross-sections, and guidelines to be applied at the different parts  
8 of the project in the development of alignment alternatives.

9 At the west end (described by the COUNTY as Segment 4, La Sierra Ave to Temescal Canyon Rd), the  
10 alignment will be improved to bring the road up to meet current road design standards, increase the traffic  
11 capacity and operation. The terrain consists of rugged hills that are largely undeveloped and designated as  
12 rural open space. The horizontal alignment is deficient and results in advisory speeds through the curve as  
13 low as 30 mph. Many of the curves will be realigned with larger radii and the vertical curves will be improved  
14 to increase sight distances. The alternatives will consider strategies to reduce hillside grading impacts  
15 including the following, as appropriate.

- 16 • Split roadbeds for each direction
- 17 • Elimination of medians
- 18 • Steepening up cut slope banks in rock cut areas
- 19 • Use retaining walls in lieu of cut or fill slopes
- 20 • Use bridge structures in lieu of deep fills

21 In the area between La Sierra Avenue and Harley John Road, the area passes through rolling hills and gullies  
22 of the Gavilan Hills foothills. The area is predominantly open space and conservation habitat and suitable for  
23 recreational uses including trails. The crossfalls are not as significant of a concern. Alignment strategies may  
24 include:

- 25 • Inclusion of additional right-of-way for trails
- 26 • Separate roadbeds to break up expanse of roadway, provide water quality treatment options, safe left  
27 turns at limited access points



1 In the area between Harley John Road to Wood Road and the area between Alexander Street and Harvill  
2 Avenue, the area is more developed with occupied properties. In areas where both sides are developed, the  
3 widening may include:

- 4 • Widening equally on both sides
- 5 • Widen to one side and remove properties on the other side
- 6 • Use a narrower non-standard cross-section
- 7 • Remove properties on one side and construct parallel road and preserve existing roadbed for local  
8 frontage road

9 In the same area between Harley John Road to Wood Road and the area between Alexander Street and  
10 Harvill Avenue, there are a few areas where only one side is developed with occupied properties. In these  
11 areas, the widening may include:

- 12 • Widen to unoccupied side
- 13 • Construct a new parallel road on the unoccupied side and preserve existing roadbed for local  
14 frontage road

15 In the area between Wood Road and Alexander Street, the roadway is expected to be coordinated with the  
16 recent road widening from Wood Road to Carpinus Street and prior planning studies by the Boulder Springs  
17 development for the section from Carpinus Street to Alexander Street. The design alignment alternatives in  
18 this section will take into consideration the existing road improvements, approved site plans and any current  
19 approved alignments along the project.

20 Impacts to adjacent properties will be reviewed and any remediation measures identified. Impacts may  
21 include access to the property, grading, or significant changes to the setting. These impacts and the  
22 associated costs will be included in the alternatives evaluation and selection process.

23 After development and completion of the concept alignment alternatives and costs and a qualitative analysis  
24 of the impacts will be performed for each alternative. A brief Alternatives Evaluation Report/Planning Report  
25 summarizing the findings will be prepared. The COUNTY will review the conceptual alternatives, costs, and  
26 impacts and select alternatives for further detailing and consideration in the project development stage and for  
27 preparation of the environmental document. It is assumed that up to two alternatives will be identified for  
28 evaluation in the environmental document phase of the project.



1 It is assumed that a Draft Alternatives Evaluation Report/Planning Report will be prepared and provided to the  
2 COUNTY and that a Final Alternatives Evaluation Report/Planning Report will be provided that incorporates  
3 the COUNTY'S comments.

4 *Deliverables:*

- 5 • Draft and Final Alternatives Evaluation Report/Planning Report (five hard copies and one digital copy)

6 **I. ENVIRONMENTAL DETERMINATION AND ENVIRONMENTAL ISSUES**

7 Cajalco Road will be funded in part with federal funds therefore NEPA compliance will be required through  
8 CALTRANS District 8 Office of Local Assistance. Under NEPA delegation CALTRANS will be the lead  
9 agency for NEPA compliance. The County of Riverside will be the lead agency for CEQA compliance. The  
10 following assumptions are included in this scope of work.

- 11 • The NEPA document will be a Complex Environmental Assessment (EA)
- 12 • The CEQA document will be an Environmental Impact Report (EIR)
- 13 • A combined CEQA/NEPA document following the CALTRANS EIR/EA annotated outline will be  
14 followed
- 15 • Up to two build alternatives, along with the No-Build Alternative, will be evaluated in the  
16 environmental technical studies, environmental document, and Project Report equivalent
- 17 • The NEPA/404 integration process will not be required.

18 Initial Study: Following the development of conceptual engineering schematics for the alternatives that are  
19 identified for further evaluation in the environmental document, as discussed in ARTICLE AIII, Item H, and  
20 any relevant information from the COUNTY, CONSULTANT will prepare an Initial Study (IS) for the proposed  
21 project in compliance with CEQA requirements. There will likely be minimal time between the completion of  
22 the alternatives analysis and the preparation of the IS, however, if time permits then the project description,  
23 purpose and need, and map format will be provided to the COUNTY for review and comment. Otherwise,  
24 these will be submitted along with the IS for review. CEQA Guidelines Section 15063(d) indicates that an IS  
25 shall contain "in brief form":

- 26 • A description of the project, including the location of the project;
- 27 • An identification of the environmental setting;

- An identification of the environmental effects by use of a checklist, matrix, or other method, provided that entries on a checklist or other form are briefly explained to indicate that there is some evidence to support the entries. The brief explanation may be either through a narrative or a reference to another information source such as an attached map, photographs, or an earlier EIR or negative declaration. A reference to another document should include, where appropriate, a citation to the page or pages where the information is found;
- An explanation of whether the project would be consistent with existing zoning, plans, and other applicable land use controls; and
- The name of the person or persons who prepared or participated in the IS.

Issues to be addressed in the IS will be based upon the IS Environmental Checklist Form included in Appendix G of the CEQA Guidelines (current version when the IS is initiated), unless otherwise directed by the COUNTY, and will address the following environmental issues:

Aesthetics	Agricultural Resources
Air Quality	Biological Resources
Cultural Resources	Geology and Soils
Hazards and Hazardous Materials	Hydrology and Water Quality
Land Use and Planning	Mineral Resources
Noise	Population and Housing
Public Services	Recreation
Transportation and Traffic	Utilities and Service Systems
Mandatory Findings of Significance	Energy (as outlined in Appendix F of the CEQA Guidelines)

Based on the Environmental Checklist, a Draft IS will be prepared for the proposed project. It is proposed that the IS that is prepared be a screening level document in order to eliminate extensive analysis of issues in the EIR that would have no impacts or less than significant impacts. The IS will include responses to the Checklist questions based on readily available information. The responses included in the IS will be qualitative, and no technical analyses or modeling will be prepared to support the responses to the Checklist questions. It is assumed that analyses that would be performed as part of the environmental clearance efforts



1 for the proposed project would be initiated and completed as part of the environmental clearance document  
2 that is identified through preparation of the IS (for scoping purposes assumed to be an EIR). The IS that is  
3 prepared will be used as an attachment to the Notice of Preparation (described below).

4 CONSULTANT will prepare the Draft IS for COUNTY review and comment. Following review and comment  
5 by the COUNTY the Final IS will be provided to the COUNTY for concurrence.

6 *Deliverables:*

- 7 • Draft and Final Initial Study (five hard copies each)

8 Notice of Preparation: CONSULTANT will prepare a Notice of Preparation (NOP) that will advise agencies  
9 and other interested parties of the actions that are being taken in the development of the project, and  
10 soliciting their comments related to the proposed action. The NOP, along with the IS, will be distributed to all  
11 responsible agencies, trustee agencies, the California Office of Planning and Research, State Clearinghouse,  
12 and other interested parties, notifying them that an EIR will be prepared for the proposed project pursuant to  
13 CEQA. In addition to providing information regarding the proposed project, the NOP will also identify the  
14 date, time, and location for the public scoping meetings that will be carried out for the proposed project.

15 CONSULTANT will prepare a draft NOP for review and comment by the COUNTY. CONSULTANT will  
16 distribute the NOP to state and local trustee agencies and interested parties, in accordance with a COUNTY-  
17 approved distribution list. Publication of the NOP in the local newspaper is not included in this scope of work  
18 and cost. It is assumed that publication will be paid directly by the COUNTY to the newspaper that prints the  
19 notice. It is further assumed that 250 copies of the NOP and IS will be mailed to responsible and trustee  
20 agencies, members of the public, and interested organizations, including 15 copies to the State  
21 Clearinghouse. CONSULTANT will also post the NOP at the COUNTY Clerk's Office during the public review  
22 period. A State Clearinghouse Notice of Completion form will also be prepared for submittal with the copies  
23 of the NOP/IS that will be submitted to the State Clearinghouse, as required by the State Clearinghouse  
24 Handbook.

25 *Deliverables:*

- 26 • Draft and Final NOP
- 27 • Printing and mailing of 250 copies of the NOP (including the Initial Study)
- 28 • Notice of Completion to State Clearinghouse with 15 copies of NOP/IS

1 Public Scoping Meetings: CONSULTANT will work closely with the COUNTY to facilitate two public scoping  
2 meeting to gather public input on the scope of the environmental document. It is assumed that one meeting  
3 will be conducted for the eastern end of the project and one for the western end. CONSULTANT will discuss  
4 the details of the approach to the meeting with the COUNTY to ensure that we operate according to the  
5 COUNTY'S desires and within an approved format. CONSULTANT project manager, environmental lead,  
6 and outreach consultant will attend one meeting with the COUNTY to discuss the scoping meetings.  
7 Materials provided by CONSULTANT will include sign-in sheets, comment cards, and graphic boards  
8 depicting the proposed project layout and features. CONSULTANT will also prepare a meeting notice for  
9 publication in the local newspaper, if desired. It is assumed that the COUNTY will secure a meeting location,  
10 CONSULTANT will facilitate the meeting, and that CONSULTANT project manager, environmental lead, and  
11 one environmental staff member, along with the lead engineer, one engineering staff member, and the  
12 outreach consultant will be in attendance to assist the COUNTY at the meetings. It is assumed that the  
13 COUNTY will be responsible for placing the notice, if prepared, in a local newspaper, and will pay the  
14 newspaper directly for the publication. A summary of the comments received will be prepared following the  
15 meetings and provided to the COUNTY.

16 *Deliverables:*

- 17 • Conduct scoping meeting
- 18 • Scoping meeting materials (fact sheet, sign-in sheets, comment cards, graphic boards, meeting  
19 notice)
- 20 • Summary of comments

21 Preliminary Environmental Study: After identifying the alternatives to carry forward in the environmental  
22 document as part of the Planning Study that is prepared (see ARTICLE AIII, Item H), a CALTRANS  
23 Preliminary Environmental Study (PES) form (May 30, 2008) will be prepared for submittal to COUNTY first  
24 and then to CALTRANS for review. The purpose of the PES is to identify and receive concurrence from  
25 CALTRANS regarding the technical studies that will need to be prepared for the proposed project and to  
26 receive concurrence regarding the environmental document to be prepared. The PES will be prepared using  
27 existing, available information and no new analyses or detailed evaluations are assumed or included. As  
28 directed in the PES, cultural information will be provided entirely by CALTRANS. The PES will be revised



1 once following CALTRANS review. Figures will include a vicinity map, a location map, and the project  
2 layouts. No additional figures or graphics are assumed to be necessary.

3 *Deliverables:*

- 4 • Draft and Final PES (nine hard copies each)

5 Environmental Technical Studies: All technical studies will be consistent with meeting the requirements of  
6 CEQA and NEPA, as well as those of related environmental statutes and regulations. The technical studies  
7 will be prepared to cover both related statutory documentation requirements and to support preparation of a  
8 joint NEPA/CEQA document required for project approval.

9 Preparation of all technical analyses and reports will follow local, state, and federal environmental guidelines,  
10 primarily consisting of the CALTRANS Standard Environmental Reference (SER) website, CALTRANS Local  
11 Assistance Procedures Manual, local and state CEQA Guidelines, and FHWA Technical Advisory 6640.81  
12 Guidance on Preparing and Processing Environmental and Section 4(f) Documents. The formats to be used  
13 for the technical studies will follow the guidance available on the CALTRANS SER website as of the date that  
14 those studies are initiated.

15 See scope of work for each technical study for details regarding studies to be prepared.

16 Unless otherwise noted, the deliverables for the following technical studies will be a separate bound report  
17 including a standardized project description, a methodology relevant to each topic area, description of the  
18 affected environment, impact assessment, and mitigation measures. The screencheck technical study will be  
19 submitted to the COUNTY (two copies) for review. Following COUNTY review the document will be revised  
20 and a screencheck technical study will be provided to CALTRANS for review. Following CALTRANS review a  
21 Draft of each technical study will be submitted to the COUNTY and to CALTRANS for concurrent review (all  
22 reviews following the screencheck submittal are assumed to be concurrent). Following CALTRANS review a  
23 second Draft of each technical study will be submitted to the COUNTY and to CALTRANS for concurrent  
24 review. Following CALTRANS and COUNTY of the second Draft it is assumed that a revisions workshop will  
25 be held to address any outstanding comments, if any comments remain. Following the revisions workshop a  
26 final version of each report will be prepared. The final technical studies will be submitted following the  
27 workshop for final concurrence (no additional comments are assumed to be received associated with the final  
28 concurrence review). Additional revisions and submittals of technical studies would be considered out of



1 scope. In this situation a scope and cost will be submitted to the COUNTY for approval. If the revisions are  
2 required due to the quality of the submittal made by CONSULTANT then these revisions would not be  
3 considered out of scope.

4 For this scope of work, the technical studies for which a specific scope of work has been included have been  
5 assumed based on a review of existing project information. If additional studies are identified during the  
6 environmental phase of the project a scope of work and cost will be submitted for approval prior to their  
7 initiation.

8 *Deliverables:*

- 9 • Screencheck technical studies (submitted to COUNTY first and then to CALTRANS) (digital copy to  
10 COUNTY and 4 copies to CALTRANS)
- 11 • Draft technical studies (4 copies to CALTRANS and digital copy to the COUNTY)
- 12 • Second Draft technical studies (4 copies to CALTRANS and digital copy to the COUNTY)
- 13 • Final technical studies for concurrence (4 copies to CALTRANS and digital copy to the COUNTY)
- 14 • Final approved technical studies (4 copies to CALTRANS and 2 copies to the COUNTY along with a  
15 digital copy)

16 The following presents the effort to be conducted for each technical report that is included in this scope of  
17 work.

18 Historic Property Survey Report: The proposed project improvements will be subject to compliance with  
19 Section 106 of the National Historic Preservation Act. This requires consideration of potential project effects  
20 to historic properties including archaeological and historical resources listed in or eligible for listing in the  
21 National Register of Historic Places according to criteria listed in 36 CFR800. CALTRANS administers  
22 Section 106 compliance on behalf of FHWA and requires that documentation conform to specifications  
23 contained in CALTRANS Standard Environmental Reference. As of January 1, 2004, cultural resource  
24 studies must be prepared and processed in accordance with the Programmatic Agreement among the  
25 Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic  
26 Preservation Officer, and the California Department of Transportation Regarding Compliance with Section  
27 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federal-Aid Highway  
28 Program In California.





1 CONSULTANT shall conduct a records search at the Information Center of the California Historical  
2 Resources Information System and through the Sacred Lands File at the Native American Heritage  
3 Commission. This records search will consult California's database of previous studies and previously  
4 recorded sites within the proposed project area and within a 0.5-mile radius, per CALTRANS guidelines.  
5 Historic maps and photographs shall also be reviewed, if available. CONSULTANT shall establish an Area of  
6 Potential Effect (APE) map in consultation with the COUNTY and CALTRANS for obtaining CALTRANS  
7 approval. The map shall provide the survey boundaries for cultural resources to be evaluated during project  
8 studies. The APE map shall be based on the total anticipated disturbance footprint associated with project  
9 activities (e.g., road widening/interchange construction, staging areas, detours, drainage facilities, and parcels  
10 containing impacted structures, if any). CONSULTANT will also contact the Native American Heritage  
11 Commission and consult with Native American groups and other interested parties to request information  
12 regarding the types of potential cultural resources in the study area. Consultation will be conducted in  
13 accordance with appropriate and current state and federal regulations.

14 Following completion of the record search/review, CONSULTANT shall conduct a field survey of the APE for  
15 archaeological resources. This scope of work assumes that up to fifteen (15) archaeological sites will not be  
16 exempt under the PA and will require evaluation on California historic resource inventory forms (series DPR  
17 523). It is assumed that five small sites (i.e., milling sites, small lithic scatters, etc.) will require shovel testing  
18 (Extended Phase I). It is assumed that no sites will require Phase II evaluation as defined by CALTRANS.

19 Following the field review and preparation of the DPR forms an Archaeological Survey Report will be  
20 prepared.

21 In addition, a CONSULTANT qualified architectural historian will conduct a field survey of the proposed  
22 project area to record buildings, structures, and historic features through photography and written  
23 descriptions. If buildings are substantially altered or are less than 50 years old, a qualified architectural  
24 historian can exempt them from further evaluation in accordance with the Section 106 PA. Based on the  
25 RFP, it is assumed that up to twenty-five (25) buildings/structures will not be exempt under the PA and will  
26 require evaluation on California historic resource inventory form (series DPR 523). CONSULTANT will send  
27 out letters requesting information on historic properties to local governments, historical societies, and historic  
28 preservation organizations. The evaluation of properties within the APE will be reported in the Historical



1 Resource Evaluation Report (HRER), which will include a historic context statement. In addition,  
2 CONSULTANT will review the CALTRANS historic bridge inventory, and identify previously evaluated state  
3 and local bridges within the APE.

4 It is assumed that access for survey work will be provided by the COUNTY (see ARTICLE AIII, Item C).

5 It is assumed that one resources (either archaeological or historic) will be identified that is potentially eligible  
6 for listing on the Nation Register of Historic Places and that a Finding of Effect (FOE) covering a single  
7 resource will be prepared (see FOE scope below).

8 Following completion and approval of the APE and detailed reports discussed above, a summary document  
9 (the HPSR) shall be generated in accordance with CALTRANS/FHWA standards for Section 106 compliance  
10 with the National Historic Preservation Act (NHPA).

11 Finding of Effect: When historic properties (listed in or eligible for the National Register) are identified in the  
12 APE, the project's effects to these properties will need to be assessed. CONSULTANT will prepare a  
13 Findings of Effect report, which addresses the question: Does the project adversely affect a contributing  
14 element within the boundaries of the historic property (building structure, site, object, or district)? The Section  
15 106 criteria of adverse effect in 36 CFR 800.5 are used for the analysis, and there are three possible  
16 outcomes:

- 17 1. No Historic Properties Affected (either there are no historic properties present, or there are no effects to  
18 historic properties that are, or may be, present).
- 19 2. No Adverse Effect (either with or without standard conditions).
- 20 3. Adverse Effect.

21 The format and content of the Finding of Effect will follow the instructions in CALTRANS SER, Volume 2,  
22 Exhibit 2.9 (January 2004, rev: 10/08). It is assumed that one property will be evaluated in the Finding of  
23 Effect and that the result will be a Finding of No Adverse Effect.

24 Visual Impact Assessment: Preparation of the VIA will consist of three primary tasks, including the following:

- 25 • Task 1 Data Collection
- 26 • Task 2 Prepare Visual Simulations
- 27 • Task 3 Prepare Visual Impact Assessment Document

28 The completion of the above tasks will be performed in accordance with the following work plan.



1 The VIA will include visual impact analyses of the proposed changes to Cajalco Road. The VIA will focus on  
2 identification of visual impacts issues and concerns within the project area and identify critical aesthetic and  
3 visual resource issues for project alignments in design. The document will focus on the potential impacts of  
4 the proposed project by assessing the effects of the proposed change on visual resources and a worst-case  
5 viewer response. The VIA will satisfy pertinent reporting requirements, including those listed in CALTRANS  
6 Standard Environmental Reference, Volume I, Chapter 27 (Visual/Aesthetic), and pertinent FHWA reporting  
7 guidelines.

8 The VIA will be prepared by, or its preparation overseen by, a registered landscape architect in accordance  
9 with CALTRANS guidelines.

10 CONSULTANT will conduct research prior to the site visit to develop background information on the visual  
11 resources in the area. This will include a review of all relevant local plans, regulatory documents,  
12 development codes/guidelines, and any other planning and land use policies. Additionally, research on  
13 proposed projects within the immediate viewshed will be completed in order to assess any potential  
14 cumulative impacts.

15 Pre-field visit research also will include viewshed analyses to determine observers potentially affected by the  
16 project (e.g., viewers from eligible state scenic highways, nearby residences, nearby recreational users, etc.).

17 In this phase, CONSULTANT will research potential sensitive viewers and scenic resources in the areas near  
18 the project alternatives, to help determine Key Observation Points (KOPs) in the project vicinity. Importantly,  
19 CONSULTANT will also confirm, in coordination with CALTRANS and the COUNTY, the KOPs to be  
20 addressed in the visual simulations. CONSULTANT will coordinate with the COUNTY at the outset of the  
21 preparation of the VIA, and prior to consulting with CALTRANS, to identify the location of the KOPs and also  
22 the photosimulation perspectives.

23 Potential KOPs will take into consideration the following factors:

- 24 • Local residents with potential views to the project (including ancillary project components);
- 25 • Proposed future uses (e.g., proposed housing or recreational areas with potential views to the project  
26 per General or Specific Plans);
- 27 • Scenic highways;
- 28 • Traveling public; and

- Recreational areas.

CONSULTANT will conduct a field and photographic survey of the project site and surrounding areas based on the pre-field visit research findings. The purpose of the surveys will be to visually represent the existing conditions as well as potential impacts to sensitive views and viewers posed by the alignments. This will include one field trip to the site.

CONSULTANT will include a maximum of four (4) visual simulations which will depict the project as it would appear once finished (to the extent practicable, based on preliminary engineering). This task will include time spent coordinating what views are suitable for the purposes of conveying the impacts to visual resources posed by the project, and time to prepare the visual simulations for inclusion in the document. As noted above, CONSULTANT will coordinate with CALTRANS and the COUNTY to confirm all KOPs for which visual simulations will be prepared.

CONSULTANT will prepare a VIA that will be in compliance with CALTRANS, FHWA, and CEQA and NEPA requirements. The VIA will include a description of the No Build and Build Alternatives that could affect existing environmental conditions.

Visual resources, existing conditions and potential impacts within the study area will be discussed from a qualitative perspective. To assist in the assessment of potential project-related impacts, existing viewsheds and visual resources will be characterized according to the following methodology:

- Establish three basic viewing distance zones from identified vantage points: foreground, mid-ground, and background view distances;
- Describe and characterize the visual character and quality of the study area including identification of important visual resources;
- Identify and locate sensitive viewer groups in the study area, including viewers on area roads and residential uses with views of the proposed alignments. This will include identifying the project's visibility using a computer generated view-shed model as well as assessing the number and type of viewers affected by this visibility with a map/figure indicating census data and traffic count data;
- Provide a discussion of the KOPs related to sensitive views along the area of potential affect; and



- Prepare visual simulations indicating project alignments from a number of the KOPs identified in the analysis and agreed upon by CALTRANS. CALTRANS and the COUNTY will provide input for the preparation of the view simulations.

The methodology described herein will serve as the basis for determining the degree of visual impact associated with the proposed project. Mitigation measures will be developed, if necessary, to avoid or substantially reduce significant project-related visual impacts.

Noise Study Report: CONSULTANT will prepare a noise study report evaluating the noise impacts and potential noise abatement/mitigation measures, if any, associated with the proposed project. Because federal and CALTRANS oversight is involved, the report will be prepared in accordance with procedures specified by FHWA in Title 23, Section 772 of the Code of Federal Regulations (CFR) (23 CFR 772) and the CALTRANS Traffic Noise Analysis Protocol (Protocol).

CONSULTANT will conduct an additional detailed site visit to identify noise sensitive land uses and other features of the project area relevant to the noise study once the project layouts have been refined.

CONSULTANT will consult with the CALTRANS District 8 noise specialist assigned to this project to ensure that all requirements are addressed.

A field noise study will be performed to quantify and assess existing noise conditions at the potential noise-sensitive areas. It is estimated that short-term (10 to 15 minutes duration) sound-level data will be collected at up to twenty (20) representative noise-sensitive locations throughout the area. In addition continuous 24-hour noise monitoring will be conducted at up to five (5) locations if a secure measurement location can be identified.

CONSULTANT will conduct traffic noise modeling related to the proposed project using the FHWA Traffic Noise Model (TNM) Version 2.5 and traffic data to be provided by the project traffic engineer. TNM will be used to model worst noise hour noise conditions at representative modeled receiver locations under existing conditions and design-year conditions with and without the proposed project.

Traffic noise impacts of the proposed project under 23CFR772 will be assessed by determining if implementation of the project is projected to result in traffic noise levels under design-year conditions that approach or exceed the FHWA noise abatement criteria or if implementation of the project is predicted to result in a substantial increase in noise at noise-sensitive uses. If traffic noise impacts are projected to occur,

1 information on the preliminary feasibility and reasonableness of noise abatement as defined in the Protocol  
2 will be evaluated and presented for use by decision makers in considering noise abatement. CONSULTANT  
3 will also evaluate potential construction noise impacts using methods recommended by the U.S. Department  
4 of Transportation.

5 CONSULTANT will prepare a noise study report addressing the requirements of 23CFR772 in accordance  
6 with guidance in the Protocol and following the noise analysis report format outlined in the CALTRANS  
7 Technical Noise Supplement (TeNS). If warranted the noise study report will include a preliminary noise  
8 abatement design to schematically identify the location, height, and extent of noise walls needed to abate  
9 noise impacts. In accordance with Protocol guidance, the description of noise walls will be sufficient for  
10 environmental review of the proposed project, but not for final design of the walls. Abatement allowances will  
11 be provided for each wall evaluated.

12 Noise Abatement Decision Report: It is assumed that a Noise Abatement Decision Report (NADR) will be  
13 required. CONSULTANT will prepare a NADR report that addresses those walls found to be reasonable in  
14 the Noise Study Report. It is assumed that up to five (5) walls will be addressed. The NADR will include a  
15 preliminary noise abatement design (wall design) and a detailed cost estimate (both primary and secondary  
16 costs) related to all aspects of each wall as required in the NADR. The NADR report will be prepared based  
17 on the annotated outline that is available on the CALTRANS website at the time that the analysis is initiated.  
18 No soundwalls are assumed to be required on private property.

19 Natural Environment Study: CONSULTANT will conduct a literature search, perform field surveys, and  
20 prepare a Natural Environmental Study (NES) report analyzing potential impacts to biological resources. The  
21 report will be prepared in accordance with CALTRANS SER guidance and will conform to the CALTRANS  
22 NES annotated outline that is available at the time that the NES is initiated.

23 The following tasks will be performed during the preparation of the NES:

24 *Review of Project Information and Applicable Literature*

25 A literature review will be conducted to identify special-status species or resources known or reported from  
26 the project area. The literature review will include:

- 27 1. Special status species lists from the California Department of Fish and Game (CDFG) and U.S. Fish and  
28 Wildlife Service (USFWS);



2. Database searches of current versions of the California Natural Diversity Database (CNDDDB) and the Online Inventory of the California Native Plant Society (CNPS);
3. The most recent applicable Federal Register listing package and critical habitat determination for each federally listed Endangered or Threatened species potentially occurring within the project area;
4. The most recent CDFG Annual Report on the status of California's listed Threatened and Endangered plants and animals;
5. Other available biological studies conducted in the vicinity of the project site including but not limited to the Mid-County Parkway (MCP) Draft EIR/EIS, NES, and associated focused survey reports and;
6. Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

*Field Evaluation for Biological Resource Constraints*

After reviewing relevant information, the project area will be evaluated, with a thorough walkover covering all portions relevant to potential biological resource constraints. Those portions of the project alignment was studied for the Mid-County Parkway project will be reviewed to confirm no change in existing conditions while the portions not studied previously will be fully evaluated. Detailed field notes will be compiled including conditions, visible disturbance factors, species, habitats, and more general biological resource issues observed or detected. The site will be evaluated regarding the presence, absence, or likelihood of occurrence for all special status species (including least Bell's vireo, southwestern willow flycatcher), habitats, or more general biological resource issues potentially posing a constraint to the project through applicable laws and regulations. Adjacent areas will also be briefly examined to provide context. Adjacent areas will include a visual assessment of the Mid-County Parkway alignment as covered by the MSHCP so that a well-founded equivalency determination can be provided for the project. As indicated in the MSHCP, the CETAP alternative between El Sobrante Road and the Temescal Wash is a covered activity. We will need to demonstrate that the realignment and widening of Cajalco Road south of Lake Mathews to a four-lane arterial status, or other configuration meet the criteria outlined in Section 7.2.3 of the MSHCP (Volume I). If focused habitat evaluations or focused surveys for any species other than those included in this scope of work are required then this will be communicated to the COUNTY immediately and a separate scope and cost for this work will be provided. We have included in the below scope new studies not covered by MCP project as well



1 as potential update survey work. The study area is assumed to be the proposed project footprint and up to a  
2 500-foot buffer, depending on the resource.

3 This task includes evaluations/determinations for the following potential resource issues:

- 4 • *Habitat Evaluation and Focused Survey for Burrowing Owl* – Roughly 85 percent of the project lies  
5 within the MSHCP survey area for burrowing owl. A qualified biologist will perform an evaluation of  
6 the potential for burrowing owl (*Athene cunicularia*) to occur. All areas to be evaluated will be  
7 examined carefully for habitat characteristics and disturbance factors. The study area for this work is  
8 assumed to be the proposed project footprint and a 100-foot buffer, as accessible. An additional 200-  
9 foot buffer beyond the 300-foot buffer will be visually assessed only. Based on our experience with  
10 the project alignment it is anticipated that at least a burrow survey will be required for most of the  
11 alignment. Potentially suitable habitat will be mapped. No permits are required to perform a habitat  
12 evaluation, but the biologist must be experienced with the species' biology, identification of direct and  
13 indirect sign, and physical characteristics of potentially suitable habitat. Habitat evaluations for this  
14 species can be performed any time of year. The results will be directly incorporated into the NES. It  
15 is also assumed that a focused survey will be needed and the survey would follow the current  
16 MSHCP survey protocol for this species. The results of the focused survey for burrowing owl will be  
17 directly incorporated into the NES. We have assumed that previous burrowing owl focused survey  
18 work performed for the MCP project would be updated under this scope and cost. We understand  
19 that the surveys performed for this species for the MCP project did not find the species. Our  
20 experience with the project area (i.e., Lake Mathews area) is that the species is rare but has been  
21 known to occur sporadically across years.
- 22 • *Least Bell's Vireo/Southwestern Willow Flycatcher Habitat Assessment and Focused Surveys* –  
23 Permitted biologists will conduct U.S. Fish and Wildlife Service (USFWS) protocol surveys for  
24 southwestern willow flycatcher (5 survey visits) and least Bell's vireo (8 survey visits). When possible  
25 surveys for the southwestern willow flycatcher and least Bell's vireo will be conducted during the  
26 same site visit. The area to be surveyed will be suitable habitat within the identified direct impact  
27 area plus up to a 300-foot buffer, as accessible. Based on our knowledge of the proposed alignment,  
28 we have assumed that all potentially suitable habitat being surveyed can be covered within two days





1 by one biologist. The results of the habitat assessment and focused surveys will be directly  
2 incorporated into the NES. We understand southwestern willow flycatcher was not found during the  
3 MCP project work but that least Bell's vireo was found in a drainage along Cajalco Road east of El  
4 Sobrante. Based on our knowledge of the project area, no potential for Yellow-billed Cuckoo is  
5 present.

- 6 • *Vernal Pool/Fairy Shrimp Habitat Assessment* – A review of the proposed alignment and a 200-foot  
7 buffer will be performed to determine the potential for vernal pools and/or listed fairy shrimp to be  
8 present. To be most effective this work needs to occur during mid to late winter. A review of mapped  
9 soils for the project alignment indicate very low potential for such resources/species but coarse-level  
10 mapping can miss small pockets of heavy soils that could support vernal pools and/or listed fairy  
11 shrimp. This scope does not include a fairy shrimp survey but if potential is found present, the  
12 COUNTY would be contacted immediately and a scope and cost for such services would be provided.  
13 A fairy shrimp survey must be performed during winter months and in most circumstances needs to  
14 occur over a 120-day survey window. Any potential vernal pools found during the habitat  
15 assessment, would also be surveyed for rare plants as detailed in the below special status plants  
16 habitat evaluation and focused survey scope. We understand that vernal pools and fairy shrimp were  
17 not found to have potential during the MCP project work for lands west of Interstate 215. This is  
18 consistent with our expectations. Results of this work will be incorporated into the NES.
- 19 • *Habitat Evaluation and Focused Survey for Special Status Plants* – Roughly 75 percent of the  
20 proposed alignment lies within the survey window for Narrow Endemic Plant Species Survey Area 1  
21 (*Allium munzi*, *Ambrosia pumila*, *Dodecahema leptoceras*, *Dudleya multicalulis*, *Navarretia fossalis*,  
22 *Orcuttia californica*, *Satureja chandleri*, *Sibaropsis hammittii*, *Trichocoronis wrightii* var. *wrightii*) and  
23 Criteria Area Species Survey Area 1 (*Brodiaea filifolia*, *Atriplex serenana* var. *davidsonii*, *Atriplex*  
24 *parishii*, *Centromadia pungens* ssp. *laevis*, *Erodium macrophyllum*, *Lasthenia glabrata* var. *coulteri*,  
25 *Myosurus minimus*). The study area for this work will be the proposed project alignment (limits of  
26 disturbance) and a 200-foot buffer. The species list above along with other special status plants  
27 having potential for occurrence based on geography but for which are not covered by the MSHCP  
28 (e.g., *Lepidium virginicum* var. *robinsonii*) will be evaluated for potential. For any special status plants



1 determined to have potential for occurrence, a focused survey will be performed. The survey will  
2 occur within the window of February through September to adequately capture the blooming window  
3 of the above species and we have estimated it will take a botanist a total of four (4) days to cover  
4 potential habitat per survey visit (5 survey visits assumed). Results of the habitat evaluation and  
5 focused survey will be provided in the NES.

- 6 • *MSHCP Linkage/Core/Corridor Evaluation* – A review of the proposed project alignment and any  
7 MSHCP linkages and cores will be performed. We understand the proposed alignment lies within  
8 Proposed Constrained Linkage 4, Proposed Extension of Existing Core 2, Existing Core C, and  
9 Proposed Linkage 3. The MCP project analyzed most of the movement features and we will use this  
10 information and augment it to include the additional portion of Cajalco Road not studied for the MCP  
11 project but for which traverses Proposed Extension of Existing Core 2. Maintaining animal  
12 movement, both avian and mammalian, will be crucial for this project and this field work will be  
13 focused on documenting qualitatively existing movement potential, including openness indices of  
14 existing culverts. In order to do this our team will work with RCTD and the engineering team early in  
15 the development of the footprint to incorporate the siting and design guidelines, and guidelines for  
16 construction of wildlife crossings contained in Section 7.5.2 of the WRC MSHCP (Volume I). This  
17 field work will also identify existing movement constraints (e.g., fencing, small culverts) and review  
18 existing topography along the alignment that could be used to assist avian movement in combination  
19 with potential road design elements (e.g., depressing the roadbed below the level of the adjacent  
20 natural grade). The study area for this work is the proposed limits of disturbance and a 500-foot  
21 buffer. A full analysis of this work will be provided directly into the NES.

- 22 • *Quino Checkerspot (QCB) Critical Habitat/MSHCP Conserved Lands Function and Value*  
23 *Assessment* – A small portion of the proposed alignment occurs within federally designated critical  
24 habitat for Quino Checkerspot (*Euphydryas editha quino*) and existing MSHCP Public/Quasi-Public  
25 (PQP) Conserved Lands (existing MSHCP conservation area). Generally impacts to critical habitat  
26 are covered by the MSHCP, however due to the complexity of this critical habitat occurring within  
27 existing PQP conserved lands, we recommend a focused field review of this portion of the alignment  
28 during spring to assess function and value of this portion of the alignment to Quino. This scope of



1 work does not include a focused survey. Results of this work will be directly incorporated into the  
2 NES and will support the Project Equivalency Determination and any necessary mitigation to offset  
3 removal of protected lands for Quino.

- 4 • *Public/Quasi-Public Lands and Criteria Cell Function and Value Assessment* – The proposed project  
5 is expected to impact existing MSHCP conserved lands including lands protected under the Habitat  
6 Conservation Plan for Stephen's Kangaroo Rat (SKR HCP) and the Lake Mathews Multiple Species  
7 Habitat Conservation Plan. The proposed alignment also bisects Criteria Cells 2403, 2404, 2407,  
8 2408, 2323, 2324, and 2310. The study area for this work is the proposed limits of disturbance and a  
9 500-foot buffer. An evaluation of existing function and value of these lands within the project area will  
10 be necessary to support the Project Equivalency Determination and to provide an accurate estimate  
11 of potential impacts (direct and indirect).
- 12 • *Federal, State, and MSHCP Riparian-Riverine Jurisdictional Waters and Wetlands Delineation* – The  
13 proposed alignment crosses both state and federal jurisdictional waters and wetlands as well as  
14 MSHCP riparian-riverine resources. We will use the existing delineation work performed for the MCP  
15 project and augment this existing delineation data set to include the additional areas along Cajalco  
16 that were not part of the MCP project study area. The work will follow U.S. Army Corps of Engineers  
17 (USACE) Arid West Guidelines and Rapanos as well as California Department of Fish and Game  
18 (CDFG) code 1602 requirements. For the USACE delineation we have assumed a formal delineation  
19 requiring significant nexus be determined. A preliminary delineation can be provided, preferred  
20 whereby significant nexus is assumed. MSHCP riparian-riverine resources will follow CDFG code  
21 1602 except where CDFG features are man-made. For each feature, a functions and values  
22 assessment will be performed to support the impacts analysis and MSHCP Determination of  
23 Biologically Equivalent or Superior Preservation Policies (MSHCP Volume I, Section 6.1.2). The  
24 study area for this work is the proposed limits of disturbance and a 200-foot buffer. The results of this  
25 delineation will be incorporated into a Jurisdictional Delineation Report.

26 *Technical Report Preparation*

27 A draft NES will be developed based on results of the biological surveys and analysis and will conform to the  
28 current CALTRANS NES annotated outline, as previously described. The report will describe:



- 1 a) The study methods used in identifying and assessing the biological resources at the project site, the  
2 personnel who conducted the studies, contacts made with agencies, and any limitations associated with  
3 the study;
- 4 b) The environmental setting including both the biological and physical setting at the project site;
- 5 c) The results, including special status species present on the site, if any, and a discussion of impacts  
6 (including wildlife corridors) and mitigation, as necessary; and
- 7 d) The appropriate regulatory requirements and necessary permits, if any.

8 It is assumed that the NES will be the used as the primary method of documentation to obtain a  
9 Determination of Biologically Equivalent or Superior Preservation (DBESP) and consistency determination  
10 from USFWS and CDFG. This project is complex in that it is not yet a covered activity under the MSHCP and  
11 needs to demonstrate that the proposed project is biologically equivalent with (or superior) to the Hemet to  
12 Corona/Lake Elsinore CETAP alternative (the latter being a covered activity). Hence a DBESP will be  
13 provided as an appendix to the NES as well as the MSHCP equivalency analysis demonstrating consistency  
14 with the CETAP alternative. No stand-alone documents related to the DBESP and consistency determination  
15 are assumed or included in this scope and cost.

16 Permitting (i.e., Section 401 Water Quality Certification, Section 404 permit, or Section 1602 Streambed  
17 Alternation Agreement) will likely be required during the final design stage. Initial coordination efforts with  
18 appropriate resource agencies regarding permits are included as part of this environmental document  
19 preparation process. Once level and location of impacts have been determined, based on the field work  
20 performed, then a scope and cost for the preparation and processing of these permits will be provided, if  
21 requested, by the COUNTY.

22 *Resource Agency Water Permit Related Coordination*

23 It is unknown which permits will be required and/or the extent of any permitting efforts. Permits are not  
24 assumed or included in this scope of work. Time has been included for preliminary coordination efforts with  
25 USACE, Regional Water Quality Control Board (RWQCB), and CDFG. If permits are identified as being  
26 needed then it is assumed that those would be prepared and processed under a separate project phase. The  
27 preparation of permit applications and processing are not included in this scope of work.

1 Paleontological Identification Report/Paleontological Evaluation Report: It is assumed that a combined  
2 Paleontological Information Report/Paleontological Evaluation Report (PIR/PER) will be prepared that will  
3 identify and document the viability of paleontological resources existing with the project's study limits. If  
4 CALTRANS requires that separate reports be prepared then a scope and cost for this effort will be submitted  
5 to the COUNTY for approval. The following identifies the tasks to be performed.

6 *Literature Search and Field Review*

- 7 • Applicable Laws - CONSULTANT shall review relevant State and federal statutes, regulations, and  
8 guidelines to determine the requirements for protection of paleontological resources specific to this  
9 project.
- 10 • Coordination with Agencies and Schools - CONSULTANT shall coordinate with appropriate agencies  
11 and educational facilities to collect data regarding paleontological sensitivity.
- 12 • Library Search - CONSULTANT shall search relevant published information, including technical  
13 geologic and paleontological articles, discussions of fossil localities and their geologic context,  
14 geologic maps, and descriptions of sedimentary geologic units in the project area.
- 15 • Museum Record Search - CONSULTANT shall examine unpublished specimen records in museums  
16 to obtain information relating to resource distribution in the project area.
- 17 • Field Review - CONSULTANT shall visit the proposed project site to observe stratigraphic features,  
18 bedding geometry and other relevant geologic features.

19 *Data Compilation & Sensitivity Assessment*

20 Data accumulated from the above sources will be integrated and summarized to provide a description of the  
21 known aspects of the resource, if relevant. These aspects include the probability that the affected geological  
22 units include paleontological resources, the probable/possible significance of any likely fossils, and the effects  
23 of any historic surface modifications.

24 The goal of the PER portion of the report is to identify the potential for impacts to significant paleontological  
25 resources within the project's limits. The report prepared will identify and document anticipated impact to  
26 paleontological resources existing with the project's limits of disturbance (both vertical and horizontal), if  
27 potential impacts exist.

28 CONSULTANT shall prepare a PIR/PER that includes the following:



- 1 • Summary of the proposed project
- 2 • Delineation of the project limits
- 3 • Delineation of the project excavation locations and depths
- 4 • Document efforts to avoid or minimize effects on paleontological resources
- 5 • Identify significance and/or sensitivity of paleontological resources and/or rock units following the
- 6 guidance provided at: <http://www.dot.ca.gov/ser/vol1/sec3/physical/Ch08Paleo/chap08paleo.htm#pir>
- 7 • Identification of sources consulted and results of that consultation
- 8 • Identification of any consultation related constraints
- 9 • Identification of a course of action, including identification of specific geologic formations and
- 10 paleontological resources
- 11 • Identification of the persons preparing the PIR/PER and their qualifications
- 12 • Identify whether a Paleontological Mitigation Plan (PMP) is recommended

13 Paleontological Mitigation Plan: CONSULTANT will prepare the Paleontological Mitigation Plan. The PMP  
14 shall include the following sections in compliance with CALTRANS Standard Environmental Reference. It is  
15 assumed that the project and physical information included in the PIR/PER will be sufficient for the PMP and  
16 that no further field investigation will be required.

- 17 • Title Page
- 18 • Appropriate ADA statement
- 19 • Table of Contents
- 20 • Introduction - Including a brief discussion of the goals of the proposed study, a discussion of the
- 21 construction project effects, and why mitigation is needed (e.g., compliance with CEQA).
- 22 • Background - Pertinent information to demonstrate familiarity with the project area, the type of fossils
- 23 and rock units under study, and both the published and unpublished literature for the area.
- 24 • Description of the Resource - Including a description of the rock unit(s), boundaries of the
- 25 fossiliferous formation(s), and locations of exposures in the vicinity of the project area and in the area
- 26 of direct impact.



- 1 • Proposed Research – This section shall present a clear, concise, description of why the  
2 paleontological resource is significant or has scientific importance and how the study is expected to  
3 address current gaps in the paleontological data.
- 4 • Scope of Work - This section shall detail what is being proposed to mitigate project effects, including  
5 all fieldwork and laboratory efforts. The scope states how any monitoring will be conducted, safety  
6 measures that will be implemented, the volume of any bulk samples to be taken and their locations (if  
7 known), preparation procedures for recovered specimens and reporting format and content. Since not  
8 all fossils need to be collected, the criteria for the discard of specific fossil specimens shall be made  
9 explicit. The number of field and lab crew needed and estimated duration of their participation in the  
10 study shall be provided, along with a brief statement of the qualifications (e.g., educational  
11 background and paleontological experience) of all personnel. The scope of work shall logically follow  
12 the discussion of proposed research (above) and also include the rationale for the proposed sample  
13 size and methods and support a conclusion that the effort will provide adequate material to mitigate  
14 the projects effects.
- 15 • Decision Thresholds - This section shall address how and when fieldwork will achieve the study  
16 goals, allowing fieldwork to cease. Specific decision criteria (e.g., less than "x" specimens per cubic  
17 meter) shall be stated. There will also be mention of any circumstances in which additional effort  
18 might be needed to achieve study goals, if the proposed scope of work proves unsuccessful.
- 19 • Schedule – An approximate schedule for completing the proposed work will be included and will  
20 identify an anticipated start date (based on information to be provided by the project engineer),  
21 duration of fieldwork and laboratory processing, and time for report preparation; as best as these can  
22 be estimated at this time. This schedule will be an estimate as this work is somewhat dependent on  
23 what resources, if any, are found during construction.
- 24 • Justification of Cost Estimate - This section shall provide narrative support for the information  
25 provided in the cost estimate portion of the report (see below), including the basis for person-hours  
26 estimates.



- 1 • Cost Estimate – It is not anticipated that a cost estimate will be prepared and included, however, a  
2 level of effort will be provided with an estimated number of hours for conducting the work identified in  
3 the PMP.
- 4 • Bibliography
- 5 • Curation - The curation facility shall be identified and a draft curation agreement included. It is  
6 assumed that the fully executed agreement would be obtained at a later date by the contractor prior  
7 to construction.
- 8 • Permits – Any permits that may be needed to conduct the work shall be identified.
- 9 • Appendices

10 Air Quality Report: CONSULTANT will prepare an air quality technical report that analyzes air pollutant  
11 emissions associated with changes in vehicle speed and traffic distribution patterns resulting from the  
12 proposed project. All impact analyses will be performed consistent with the technical requirements and  
13 methodologies outlined in the CALTRANS' Standard Environmental Reference (air quality chapter).

14 The air quality technical report will provide the following discussions and analyses:

15 *Regulatory Setting and Existing Conditions*. Summarize the existing federal, state, and local air quality  
16 regulatory environment as it affects the proposed project, and describe the location of sensitive receptors in  
17 the project vicinity. Using data provided by the California Air Resources Board (CARB) and the SCAQMD,  
18 characterize existing air quality conditions in the project area and explain how those conditions are affected  
19 by local climate and topography.

20 *Evaluation of Construction Emissions*. Based on current District 8 procedure, provide a qualitative discussion  
21 related to construction emissions.

22 *Evaluation of Operations-Period Mass Emissions*. Evaluate whether the project meets transportation  
23 conformity requirements by determining whether it is included, as currently defined, in the most recent  
24 Regional Transportation Plan (RTP) and Regional Transportation Improvement Program (RTIP) prepared by  
25 the Southern California Association of Governments (SCAG). It is assumed that the projects will be included  
26 in the RTIP and that a regional analysis will not be required.

27 *Localized Carbon Monoxide Hot Spot Analysis*. Analyze the degree to which project-related traffic volumes  
28 have a potential to effect local carbon monoxide (CO) concentrations using the California Department of





1 Transportation CO Hotspot Protocol. It is anticipated that the CO screening procedure will be appropriate and  
2 that CALINE-4 dispersion modeling will not be required.

3 *Localized PM2.5/PM10 Hot Spot Analysis.* Analyze the degree to which project-related traffic volumes have a  
4 potential to affect local PM2.5 and PM10 concentrations, based on the United States Environmental  
5 Protection Agency (EPA) guidance document entitled Transportation Conformity Guidance for Qualitative Hot-  
6 spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas. This scope and cost assumes  
7 that a screening level analysis is appropriate, and that no modeling will be required by CALTRANS or FHWA  
8 to address PM2.5 and PM10.

9 *Mobile Source Air Toxics.* Evaluate proposed project-related mobile source air toxics (MSATs) emissions in  
10 accordance with FHWA interim guidance on how MSATs should be addressed in NEPA documents. It is not  
11 assumed that extensive qualitative analyses would be required to address MSATs. If an extensive  
12 quantitative analysis is required for the project, then a scope and cost estimate would be provided for this  
13 additional effort, however, such an analysis is not anticipated.

14 *Climate Change/Greenhouse Gas Emissions.* CONSULTANT will quantify emissions from short-term  
15 construction and long-term project operations. Each of the three mobile-source GHG pollutants, which  
16 include carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O), will be quantified and presented as  
17 CO<sub>2</sub>-equivalent (CO<sub>2</sub>e) emissions. CO<sub>2</sub> emissions will be quantified using a combination of the Roadway  
18 Construction Model and the CT-EMFAC emissions inventory model. CH<sub>4</sub> and N<sub>2</sub>O emissions will be  
19 quantified using estimates of vehicle miles traveled (VMT) and grams/mile emissions factors provided in the  
20 California Air Resources Board (CARB) publication *Local Government Operations Protocol Version 1.1* (May  
21 2010).

22 Consistent with South Coast Air Quality Management District (SCAQMD) suggested methodology, total  
23 construction emissions will be quantified and amortized over a 30-year period, then added to operations-  
24 period emissions to arrive at an annual emissions total.

25 Operations-period GHG emissions will be quantified using regional daily peak-period and non-peak-period  
26 vehicle miles traveled (VMT) apportioned into 5 mph speed bins for speeds between 5 mph and 75 mph. The  
27 CONSULTANT will present a comparison of GHG emissions associated with the Build Alternative(s) to the  
28 No-build Alternative to characterize effects of the proposed project on GHG emissions. The analysis of



1 climate change will also incorporate the most recent guidance found on the CALTRANS Standard  
2 Environmental Reference and CALTRANS annotated outline.

3 *SCAG Transportation Conformity Working Group.* The required TCWG form will be completed and submitted  
4 for forwarding to SCAG for inclusion on the agenda for determining if the project is a project of air quality  
5 concern (POAQC). It is assumed the project will be found to not be a POAQC and that no specific analysis  
6 will be required related to the TCWG determination other than what is already included in this scope of work.

7 *Mitigation Measures.* CONSULTANT will develop mitigation measures, where applicable, to address  
8 significant air quality impacts, if present.

9 *Air Quality Conformity Analysis Report and Checklist.* Under NEPA delegation, the federal air quality  
10 conformity determination has not been delegated to CALTRANS and must be made by FHWA.

11 CONSULTANT will prepare a separate Air Quality Conformity Analysis using the annotated outline for this  
12 report on the SER at the time that the report is initiated and will also prepare the Conformity Checklist based  
13 on the checklist that is available on the SER at the time that the Air Quality Conformity Analysis Report is  
14 prepared.

15 *Relocation Impact Report.* CONSULTANT will analyze the primary and secondary effects of potential  
16 acquisitions and displacements. The relocation impact document is anticipated to be a Relocation Impact  
17 Report (Draft and Final) and that no more than thirty (30) relocations will be required. A Draft Relocation  
18 Impact Report (DRIR) will be prepared pursuant to FHWA guidelines/policies to comply with the Uniform  
19 Relocation and Assistance and Real Property Acquisition Policies Act of 1970, as amended, the California  
20 Relocation Act, and as described in Chapter 10 of the CALTRANS Right-of-Way Manual.

21 Using aerial photography, 2000 U.S. Census data, windshield surveys, and interviews with local real estate  
22 agents, CONSULTANT will identify characteristics of potential relocations, including the number/type of  
23 residences, businesses, farms, and/or non-profit organizations. CONSULTANT will identify the  
24 characteristics of the residential displacements including lot size, improvements on parcel, age of structures,  
25 general condition, and the number of bedrooms/bathrooms. For businesses characteristics to be documented  
26 include the number of employees, building size, parking areas, and owner/tenant mix. In addition,  
27 CONSULTANT will identify and evaluate potential relocation resource areas and any difficulties that may  
28 arise, relocation-related business issues, and the project's effects on the local tax base.



1 Water Quality Study: CONSULTANT will prepare a Water Quality Assessment Report (WQAR) in  
2 conformance with CALTRANS guidelines. The WQAR will address surface water and groundwater resources  
3 within the project area. Readily available publicly-held surface water and groundwater quality data will be  
4 used in preparing the WQAR. The following topics will be addressed in the WQAR:

- 5 • Affected environment including climate, identification and description of surface water and  
6 groundwater resources, beneficial uses, water quality objectives, Clean Water Act Section 303(d)  
7 impairments, and established Total Maximum Daily Loads (TMDLs) for impaired surface water bodies
- 8 • Readily available, publicly-held quality data for highway stormwater runoff, surface waters and  
9 groundwater resources
- 10 • Federal, state, and local regulations pertaining to water quality
- 11 • Project features relevant to water quality
- 12 • Potential pollutants affecting water quality during both the construction and operational phases of the  
13 project
- 14 • Estimate of pollutant loading reductions that may be expected from permanent stormwater treatment  
15 control best management practices (BMPs) proposed (the estimate of pollutant loading reductions  
16 does not include water quality modeling)
- 17 • Lake Matthews Drainage Area Master Plan (DAMP) status and water quality issues at Lake  
18 Matthews, and potential project-related implications
- 19 • Santa Ana Regional Water Quality Control Board MS-4 permit
- 20 • Significance criteria (in consultation with regulatory, lead, and cooperating agencies)
- 21 • Identification and assessment of potential adverse effects and potential adverse cumulative effects,  
22 associated with the proposed project and identified alternatives
- 23 • Identification of mitigation measures where significant adverse effects are identified.

24 Several of the surface waters downstream from the project are identified as impaired due a variety of  
25 pollutants such as pathogens, nutrients, organic enrichment/low dissolved oxygen, sedimentation/ siltation,  
26 metals, polychlorinated biphenyls (PCBs), and unknown toxicity. Both the Santa Ana River region NPDES  
27 municipal stormwater permit and the CALTRANS statewide NPDES municipal stormwater permit are in the  
28 process of renewal and are expected to impose more stringent requirements upon roadway projects for



1 permanent treatment control BMPs and minimization (or elimination) of hydromodification impacts. The  
2 WQAR will address the stormwater permits that are in place at the time that the WQAR is initiated. If these  
3 change during the course of the project this may result in the need for an amendment to address the  
4 changes.

5 Location Hydraulic Study/Summary Floodplain Encroachment Report: Review of published mapping  
6 produced by Federal Emergency Management Agency (FEMA) indicates that the Temescal Wash at the  
7 westernmost limit of the project is designated as a 100-year floodplain. FEMA-designated floodplains  
8 associated with Cajalco Creek also occur within the project area. The Location Hydraulic Study (LHS) will  
9 evaluate preliminary designs of the Temescal Wash crossing, including the proposed bridge pier geometries  
10 and configurations and the channel geometrics. The LHS will assess project-specific design issues by  
11 modeling the channel flow upstream and through the proposed and existing bridge crossing at Temescal  
12 Wash, as well as any encroachments upon the floodplain associated with Cajalco Creek. Changes in the  
13 flood flow with the proposed project will be evaluated using the U.S. Army Corps of Engineers (ACOE) HEC-  
14 RAS computer model in accordance with CALTRANS guidelines for preparation of the LHS. The model will  
15 be developed from cross sectional data provide by the COUNTY and peak channel flows provided by the  
16 ACOE, FEMA, Riverside County Water Conservation and Flood Control District, or other local data. If no  
17 hydrologic data is available, regression equations from the United States Geologic Survey (USGS) will be  
18 applied to compute approximate peak discharges. The results of the modeling will be used to evaluate the  
19 increase in flood depth resulting from the proposed project. Locations of possible floodplain encroachment  
20 will be evaluated to identify impacts to the hydraulic characteristics of the Temescal Wash crossing. In the  
21 event that the project increases the flood depth, the increased risk to adjacent properties and impacts of the  
22 project on natural and beneficial uses of the Temescal Wash and Cajalco Creek floodplains will be evaluated.  
23 The LHS will be prepared to include the required content as prescribed in 23 CFR 650A, Section  
24 650.111(b)(c)(d), and as also provided on CALTRANS' SER, Volume 1, Chapter 17 (Floodplains).  
25 It is assumed that the proposed project will not result in a significant encroachment, as set forth at 23 CFR  
26 650.105, on any 100-year floodplain. Therefore, this scope of work assumes preparation of Summary  
27 Floodplain Encroachment Report (SFER). Pursuant to requirements set forth at CALTRANS' SER, Volume 1,  
28



1 Chapter 17 (Floodplains), the COUNTY Engineer will sign the SFER, and ultimately approved (signed) by the  
2 CALTRANS District Local Assistance Engineer.

3 Community Impact Assessment: CONSULTANT will prepare a Community Impact Assessment.

4 CONSULTANT will identify the community impacts on neighborhoods, businesses, and minority and low-  
5 income populations, as well as the project's consistency/compatibility with the existing and future land uses  
6 and plans in the area. The community impact analysis will be prepared in accordance with CALTRANS  
7 Environmental Handbook Volume 4: Community Impact Assessment. Topics to be addressed in the  
8 community impact analysis will include social impacts, economic impacts (change in employment and tax  
9 base changes), land use/growth (consistency with local plans, development opportunities), farmland, and  
10 public services impacts (accessibility and parking, utilities).

11 The community impact assessment considers how the proposed project activity would affect the people,  
12 institutions, neighborhoods, communities, organizations, and larger social and economic systems. The  
13 community impact analysis will provide a clear description of the existing conditions, the potential impacts of  
14 the project on the community and how the project relates to other development (existing and proposed) in the  
15 area. The significance of the identified impacts, and mitigation measures to best avoid the adverse impacts  
16 resulting from the project will be identified and discussed, as appropriate.

17 Potential impacts to minority and low-income populations, if any, will be addressed in compliance with  
18 Executive Order 12898: Federal Actions to Address Environmental Justice in Minority and Low-Income  
19 Populations. Data from the 2000 U.S. Census will be used to identify characteristics of populations within  
20 census block groups traversed by or adjacent to the proposed project. Community profiles will also be  
21 collected for the local project area, City, COUNTY, and the State of California to help identify regional and  
22 local trends in regards to demographics, local industry, occupations, and tax base. Potential impacts during  
23 the construction phase due to access limits will be analyzed and measures to address these impacts  
24 proposed, if required.

25 Existing planning documents will be reviewed and potential beneficial and adverse land use impacts of the  
26 proposed project and mitigation measures, if required, will be identified.



1 Initial Site Assessment: CONSULTANT will prepare an Initial Site Assessment report for the corridor which  
2 will include project screening and completion of the ISA checklist. The work will be performed in general  
3 accordance with CALTRANS and ASTM requirements. Following is a summary of tasks:

- 4 • A review of Properties information provided by the COUNTY
- 5 • Site reconnaissance to look for indicators of potential hazardous materials
- 6 • EDR Search for various agencies such as Regional Water Quality Control Board, Department of  
7 Health Services and other City/COUNTY agencies that deal with underground leaking tanks
- 8 • Review selected aerial photos and maps
- 9 • Completing the ISA checklist, and
- 10 • Provide scope of work for additional investigation, if needed.

11 The ISA that is prepared will include the following.

- 12 • Site Location Map
- 13 • Site Visit Notes
- 14 • CALTRANS ISA Checklist
- 15 • Environmental Database Search by EDR
- 16 • Transaction Screen Questionnaires
- 17 • Historical Topographic Maps and Aerial Photographs
- 18 • Selected Photographs of Site Reconnaissance

19 This is a paper study and this scope of work does not include any sampling and laboratory testing. If any  
20 Phase II effort, sampling, or laboratory testing is required then a scope and cost for this effort will be provide  
21 to the COUNTY for approval prior to conducting this work.

22 Section 4(f): A Section 4(f) analysis will be performed to ascertain potential impacts to resources within the  
23 project corridor and vicinity that are afforded protection under Section 4(f) of the U.S. Department of  
24 Transportation Act of 1966 (Act). Pursuant to that Act, and because the proposed widening/realignment of  
25 Cajalco Road will utilize federal funding, consideration of potential impacts to such resources must be  
26 considered. Specifically, resources afforded protection under Section 4(f) of the Act include publicly owned  
27 land of a public park, recreation area; a wildlife and waterfowl refuge of national, State, or local significance;



1 or land of an historic site of national, State, or local significance (as determined by the federal, state, or local  
2 officials having jurisdiction over the park, area, refuge, or site).

3 Based on preliminary investigations conducted to date, one potential Section 4(f) resource has been identified  
4 within the project area –the Estelle Mountain Lake Mathews Reserve (Reserve). Ownership/management of  
5 the Reserve includes the Metropolitan Water District (MWD), the Riverside County Habitat Conservation  
6 Authority, California Department of Fish and Game, and Bureau of Land Management. Day-to-day  
7 management is coordinated by the non-profit Center for Natural Lands Management, and approved  
8 recreational activities include, but are not necessarily limited to, hiking and viewing. Applicability of the  
9 Reserve's protection under Section 4(f) of the Act will be investigated upon initiation of the PA/ED phase.

10 For the purposes of this scope of work, it is assumed that the proposed project would not adversely affect the  
11 intended use of any Section 4(f) resource, or attributes that qualify any such resource for protection under  
12 Section 4(f) of the Act. Therefore, it is also assumed that a de minimis impact finding will be rendered for the  
13 project. A letter report will be prepared documenting the de minimus impact finding for review and approval  
14 by CALTRANS; the results of the memo report will be excerpted into the Environmental Document. Under the  
15 de minimus impact finding, it is assumed that no coordination or consultation with the Department of  
16 Transportation (FHWA) regarding the Section 4(f) impact finding will be required.

17 The requisite Section 4(f) analysis reporting for this project would adhere to guidelines pursuant to 23 Code of  
18 Federal Regulations 771.135, as well as the reporting requirements set forth in CALTRANS' Standard  
19 Environmental Reference, Volume 1, Chapter 20 [Section 4(f) and Related Requirements].

20 Environmental Document: As previously described it is assumed that the appropriate document for the  
21 proposed project would be an Environmental Impact Report/Environmental Assessment (Complex)/Finding of  
22 No Significant Impact (EIR/EA/FONSI). If an Environmental Impact Statement (EIS) is identified as the  
23 appropriate document for the proposed project based on the technical analyses performed then this will be  
24 communicated to the COUNTY and a scope and cost for performing this work will be submitted. The EIR/EA  
25 format to be used will follow the annotated outline for combined EIR/EAs included on CALTRANS SER at the  
26 time that the EIR/EA document is initiated.



1 Draft Environmental Impact Report/Environmental Assessment

2 The following submittals of the Draft EIR/EA will be made. Each submittal, except the initial submittal to the  
3 COUNTY will include a Comment/Response matrix, External QC Certification, and ED Review Checklist.

- 4 • Screencheck Draft EIR/EA to COUNTY for review
- 5 • Revised Screencheck Draft EIR/EA to COUNTY and CALTRANS for review
- 6 • Administrative Draft EIR/EA to COUNTY and CALTRANS for review
- 7 • Draft EIR/EA (1) to COUNTY and CALTRANS for review (including CALTRANS NEPA Quality  
8 Control review)
- 9 • Draft EIR/EA (2) to COUNTY and CALTRANS for review (including CALTRANS HQ and Legal  
10 reviews)
- 11 • Final Draft EIR/EA for review/concurrence

12 To reduce iterations of the document, CONSULTANT will conduct a revision workshop with the COUNTY and  
13 CALTRANS to facilitate completion of the document if warranted during the document review process.

14 Additional revisions and submittals of Draft EIR/EA beyond those identified above would be considered out of  
15 scope. In this situation a scope and cost will be submitted to the COUNTY for approval. If the revisions are  
16 required due to the quality of the submittal made by CONSULTANT then these revisions would not be  
17 considered out of scope.

18 *Deliverables:*

- 19 • Screencheck Draft EIR/EA (4 copies to the COUNTY)
- 20 • Revised Screencheck Draft EIR/EA, Comment/Response Matrix, External QC Form, Environmental  
21 Document Review Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)
- 22 • Administrative Draft EIR/EA, Comment/Response Matrix, External QC Form, Environmental  
23 Document Review Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)
- 24 • Draft EIR/EA (1), Comment/Response Matrix, External QC Form, Environmental Document Review  
25 Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)
- 26 • Draft EIR/EA (2), Comment/Response Matrix, External QC Form, Environmental Document Review  
27 Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)





- Final Draft EIR/EA Comment/Response Matrix, External QC Form, Environmental Document Review Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)

Notice of Availability and Public Meetings

Prior to public availability, CONSULTANT will prepare a public distribution list in consultation with and for approval by the COUNTY and CALTRANS. It is assumed that the notice will be distributed to property owners and residences within 300 feet of the proposed project. In addition, CONSULTANT will prepare a combined Notice of Availability/Notice of Opportunity for Public Hearing (NOA/NOPH) that also identifies the date that the two public meetings will be held in accordance with CALTRANS requirements. It is assumed that the notice will be developed in English and Spanish. The NOA/NOPH must be published in a local newspaper of public circulation (both English and Spanish) and filed with the Riverside County Clerk. CONSULTANT will coordinate publishing the notice in both newspapers but it is assumed that the cost of publication will be the responsibility of the COUNTY and will be paid by the COUNTY directly to the newspapers. The Draft EIR/EA will require a public availability period. It is assumed that the technical studies will not be included in the availability but copies will be available if requested by anyone during the public availability period. Hardcopies of the document and NOA/NOPH will be provided to the availability locations (CALTRANS, COUNTY, libraries), a CD containing the Draft EIR/EA and a hard copy of the NOA/NOPH will be provided to other agencies and officials included on the distribution list (and anyone else who specifically requests a copy of the document), and a copy of the NOA/NOPH will be provided to property owners and residences within a 300-foot radius of the proposed project.

It is assumed that two public information meetings will be held. One meeting will be held along the eastern end of the project and one along the western end. A public hearing is not assumed or included. If requested during the public availability period, a public hearing would be conducted. CONSULTANT will work closely with the COUNTY to facilitate and conduct a public information meeting during the public availability period. CONSULTANT will discuss the details of the approach to the meeting with the COUNTY and CALTRANS to ensure that we operate according to the COUNTY and CALTRANS' desires and within an approved format. It is assumed that the COUNTY will secure a meeting location, CONSULTANT will facilitate the meeting, and that the CONSULTANT project manager, environmental lead, and one environmental staff member, along with the lead engineer, one engineering staff member, and the outreach consultant will be in attendance to

1 assist the COUNTY at the meeting. Materials provided by CONSULTANT will include sign-in sheets,  
2 comment cards, and graphic boards depicting the proposed project layout and features.

3 *Deliverables:*

- 4 • Draft and Final NOA/NOPH (assumed to be transmitted electronically with no hard copies)
- 5 • 500 copies of the NOA/NOPH
- 6 • 30 hard copies and one electronic (pdf) Draft EIR/EA for availability (including the 15 copies for  
7 submittal to the State Clearinghouse)
- 8 • 80 CDs containing the Draft EIR/EA for distribution

9 Response to Comments

10 At the close of the public availability period for the Draft EIR/EA, CONSULTANT will review and respond to all  
11 comments received. In addition, CONSULTANT will attend a meeting with COUNTY and CALTRANS staff to  
12 review any written comments on the Draft EIR/EA that were received and to discuss potential responses to  
13 these comments, if the comments received warrant such a meeting. The responses to comments will be  
14 forwarded to the COUNTY and CALTRANS for review and approval prior to making any changes to the  
15 EIR/EA, if the comments received are substantial enough to warrant this process (otherwise the comments  
16 will be incorporated into the final environmental document for review). In addition, a meeting will be  
17 conducted with the COUNTY and CALTRANS to select the preferred alternative so that this can be  
18 documented in the Final EIR/EA.

19 *Deliverables:*

- 20 • 5 copies of responses to comments to the COUNTY and CALTRANS for review and concurrence, if  
21 warranted

22 Final Environmental Impact Report/Environmental Assessment (Complex)/Finding of No Significant Impact

23 Upon approval of the responses to comments by the COUNTY and CALTRANS, if warranted, CONSULTANT  
24 will revise the EIR/EA to respond to the comments, to document the circulation period and coordination, and if  
25 any changes to the project have occurred. Also, included will be a Draft Finding of No Significant Impact  
26 (FONSI), if requested by CALTRANS (based on recent experience in District 8 the District has been preparing  
27 the FONSI). The following submittals will be made:

- 28 • Screencheck Final EIR/EA to COUNTY for review



- 1 • Administrative Final EIR/EA to COUNTY and CALTRANS for review
- 2 • Draft Final EIR/EA (1) to COUNTY and CALTRANS for review (including CALTRANS NEPA Quality
- 3 Control review)
- 4 • Draft Final EIR/EA (2) to COUNTY and CALTRANS for review (including CALTRANS HQ and Legal
- 5 reviews)
- 6 • Final EIR/EA to COUNTY and CALTRANS for review/concurrence

7 To reduce iterations of the document, CONSULTANT will conduct a revision workshop with the COUNTY and  
8 CALTRANS to facilitate completion of the document if warranted during the document review process.

9 Additional revisions and submittals of Final EIR/EA beyond those identified above would be considered out of  
10 scope. In this situation a scope and cost will be submitted to the COUNTY for approval. If the revisions are  
11 required due to the quality of the submittal made by CONSULTANT then these revisions would not be  
12 considered out of scope.

13 *Deliverables:*

- 14 • Screencheck Final EIR/EA (4 copies to the COUNTY)
- 15 • Administrative Final EIR/EA, Comment/Response Matrix, External QC Form, Environmental
- 16 Document Review Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)
- 17 • Draft Final EIR/EA (1), Comment/Response Matrix, External QC Form, Environmental Document
- 18 Review Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)
- 19 • Draft Final EIR/EA (2), Comment/Response Matrix, External QC Form, Environmental Document
- 20 Review Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)
- 21 • Final Draft EIR/EA Comment/Response Matrix, External QC Form, Environmental Document Review
- 22 Checklist (8 copies to CALTRANS and 2 copies to the COUNTY)

23 *Environmental Commitments Record*

24 For the project an environmental commitments record (ECR) will be prepared in a matrix table format and  
25 included as an appendix in the Draft and Final EIR/EA. It is assumed that the ECR will be reviewed as part of  
26 the EIR/EA. The matrix table will include a description of each mitigation measure organized by topic  
27 numbered to correspond with the impacts. For each mitigation measure, the Reporting Process, Timing of  
28

1 Measure, Responsible Party, and Verification of Compliance will be identified through coordination with  
2 resource agencies and experience on other similar projects.

3 *Deliverables:*

- 4 • ECR (Included in Draft and Final EIR/EA)

5 CEQA Findings

6 CONSULTANT will prepare the appropriate documentation for certification of the final EIR by the COUNTY  
7 decision-makers. CONSULTANT will work closely with COUNTY staff to ensure the adequacy of these  
8 documents and their completion according to agenda timelines. These documents will include draft findings  
9 of fact and, if necessary, a statement of overriding considerations.

10 *Deliverables*

- 11 • Draft and Final findings of fact and, if necessary, a statement of overriding considerations (10 copies)

12 Notice of Determination

13 CONSULTANT will assist the COUNTY in preparing the Notice of Determination (NOD) in compliance with  
14 CEQA. CONSULTANT will file the NOD with the Office of Planning and Research (OPR). The NOD will also  
15 be posted with the Riverside County Clerk. This notice starts a statute of limitation period under CEQA.

16 CONSULTANT will utilize the NOD format, as available from OPR. The NOD will include an identification of  
17 the project and its location, description of the project, date of agency approval, determination that the project  
18 will not have a significant effect on the environment, statement that a mitigated negative declaration has been  
19 prepared pursuant to the provisions of CEQA, and an address of where a copy of the EIR may be examined.

20 Along with the NOD a California Department of Fish and Game (CDFG) filing fee or would also be filed. It is  
21 assumed that the CDFG filing fee would be paid directly by the COUNTY and that fee is not included in this  
22 scope and cost.

23 *Deliverables:*

- 24 • Draft and Final NOD (all transmittals assumed to be done electronically)

25 Federal Register Notice

26 CONSULTANT will prepare a notice for publication in the Federal Register by FHWA to start the NEPA  
27 statute of limitations. This notice will be prepared in compliance with the SER and it is assumed that a Draft  
28



1 and Final version of the notice will be prepared and that coordination and publication of the notice will be the  
2 responsibility of CALTRANS and FHWA.

3 *Deliverables:*

- 4 • Draft and Final Federal Register Notice (all transmittals assumed to be done electronically)

5 Public Outreach: CONSULTANT will provide public outreach services on a time and materials basis up to  
6 \$112,000, as directed by the COUNTY. If effort is required beyond this amount then a scope and fee will be  
7 submitted to the COUNTY for approval prior to conducting this additional effort.

8 **J. TECHNICAL REPORT**

9 The first step in the project development process will be to evaluate existing Cajalco Road and formulate  
10 various alternatives to widen the roadway to four lanes (see ARTICLE AIII, Item H). Those elements to be  
11 considered will include:

- 12 • Environmental Issues  
13 • Traffic Requirements (Existing and Future) / Maintenance of Traffic  
14 • Stage Construction  
15 • Advance Planning Studies  
16 • Utility Impacts  
17 • Existing Topography  
18 • Horizontal and Vertical Geometric Requirements  
19 • Design Exceptions  
20 • Right of Way Requirements  
21 • Project Costs

22 After completion of this initial step (see ARTICLE AIII, Item H), the COUNTY will review the conceptual  
23 alternatives, the impacts and costs of each alternative and make a decision of which alternatives are feasible  
24 and should be carried to the next step in the project development process - preparation of the environmental  
25 document. It is assumed that two Build Alternatives will be carried through the project development process  
26 and environmental document.

27 The Technical Report (i.e., Project Report Equivalent) is the engineering document that supports the  
28 environmental documentation, summarizing the major features of work associated with the project such as



1 alternatives that substantially lessen or avoid environmental impacts, number of lanes (current and future),  
2 and most efficient bridge type. Additional items that need to be considered are roadway and bridge drainage  
3 systems, impacts to both existing and future utilities and cost.

4 Traffic

5 The following provides the specific scope of work for the traffic analyses. A Traffic Methodology  
6 Memorandum will be prepared for approval by the COUNTY at the outset of the project.

7 *Study Area*

8 For purposes of the traffic analysis, the study area will be divided into two parts, with differing levels of detail  
9 of analysis in each, as follows:

- 10 • *Preliminary Engineering Area.* In this area, all roadway and freeway segments, intersections, and  
11 access points will be analyzed at the level of detail required for preliminary engineering, including  
12 identification of required lane configurations, stop control, and potential turn restrictions. In addition,  
13 frontage roads or alternative access for properties currently fronting Cajalco Road will be evaluated.  
14 Intersections, roadway segments, and ramps are included in this area.
- 15 • *Impact Area.* These locations will be analyzed in the traffic study for the purpose of identifying  
16 potential impacts resulting from the project and potential mitigation measures. Intersections, roadway  
17 segments, and ramps on the following facilities are included in this area:
  - 18 ○ Intersections that may be impacted by increased traffic or traffic diversions resulting from the  
19 proposed project.
  - 20 ○ Freeway segments or interchanges that may be impacted by increased traffic or traffic diversions  
21 resulting from the proposed project.

22 *Study Periods*

23 Traffic analysis will be conducted for the weekday a.m. and p.m. peak hours. Daily volumes and levels of  
24 service will also be analyzed.

25 *Analysis Years*

26 Traffic forecasting and analysis will be conducted for existing conditions, the project's opening year, ten years  
27 after the project's opening year, and the project's design year, which is expected to be prior to 2040.  
28



1        *Data Collection*

2        CONSULTANT will use recent traffic counts conducted by RCTC for the Mid-County Parkway project to the  
3        extent feasible. In addition, CONSULTANT will conduct weekday a.m. and p.m. peak period vehicle turning  
4        movement counts at a total of fifteen (15) intersections on Cajalco Road, including La Sierra Avenue, Gavilan  
5        Road, Harley John Road, and approximately 10 local streets between Una Street and Seaton Avenue.  
6        CONSULTANT will also conduct weekday a.m. and p.m. peak period vehicle classification turning movement  
7        counts at up to fifteen (15) additional intersections in the project vicinity for analysis of potential traffic impacts.  
8        CONSULTANT will conduct daily segment counts at a maximum of ten (10) locations on Cajalco Road and  
9        affected intersecting segments. CONSULTANT will conduct a field reconnaissance of all study intersections  
10       and roadway segments to obtain current lane geometry and other related information such as type of control,  
11       signal phasing, overlap movements and pedestrian activity.

12       CONSULTANT will obtain traffic volume data for freeway segments from PeMS. It is expected that the study  
13       area will include freeway segments on Interstate 15 from Ontario Avenue to Temescal Canyon Road and on  
14       Interstate 215 adjacent to the Cajalco Road interchange and future Mid-County Parkway interchange.

15       *Existing Levels of Service*

16       CONSULTANT will calculate daily and peak hour LOS at all study intersections and roadway segments using  
17       the Highway Capacity Software or Synchro, following Highway Capacity Manual (HCM) methodologies. HCM  
18       methodologies will also be used to analyze traffic operations on the freeway segments and ramps in the study  
19       area. Arterial segment LOS analysis will be conducted using the Modified HCM LOS Tables (originally  
20       developed by the Florida Department of Transportation) and applied to estimate segment LOS conditions for  
21       the Riverside County Congestion Management Program (CMP). The Modified HCM LOS Tables will be  
22       applied along the segments to determine the LOS for comparison with the Riverside County thresholds.

23       Existing volumes will be balanced between adjacent intersections and roadway segments to provide  
24       continuity of traffic flows.

25       *Development of Future Traffic Volumes*

26       CONSULTANT will use the Riverside County Transportation Analysis Model (RIVTAM) for the development of  
27       future traffic volumes. CONSULTANT has previously refined this model for the Mid-County Parkway project.  
28       The model network will be reviewed and refined as necessary for the project study area and analysis years.



1 All projects in the Southern California Association of Government's (SCAG) "Modeling List" will be included for  
2 the relevant analysis years. Separate future model networks will be developed for each of the following  
3 scenarios:

- 4 • Existing conditions
- 5 • Project opening year without project
- 6 • Project opening year with project
- 7 • Interim year (ten years after project opening year) without project
- 8 • Interim year with project
- 9 • Project design year without project
- 10 • Project design year with project

11 It is expected that Mid-County Parkway east of I-215 will be included in the interim year and project design  
12 year networks, but not in the project opening year networks.

13 Year 2035 socioeconomic data (SED) will be used to develop project design year volumes. If available, year  
14 2020 SED will be used to develop interim year volumes; otherwise, interim year volumes will be interpolated  
15 from design year volumes. Baseline and horizon year daily and peak hour volumes will be obtained from the  
16 model for all roadway segment and intersections in the study area. In consultation with the project team,  
17 CONSULTANT will determine whether raw model volumes will be post-processed using methodologies  
18 specified in National Cooperative Highway Research Program Report 212 (NCHRP 212) to develop final  
19 forecast volumes. The results will be documented in a Traffic Volume Forecast Development Report.

#### 20 *Screening Analysis*

21 CONSULTANT will conduct model runs for up to three alignment alternatives to assist the project team in  
22 selecting two alternatives for detailed evaluation. Average Daily Traffic (ADT) volume plots will be generated  
23 for each of the three alternatives. Detailed peak hour volumes and turning movement volumes will not be  
24 developed. The results will be documented in an Alignment Screening Analysis Technical Memorandum.

#### 25 *Alternatives Evaluation*

26 CONSULTANT will evaluate the advantages and disadvantages for traffic operations of a maximum of two  
27 alignment alternatives. Included in this evaluation will be the configuration of intersections with existing and  
28 future cross streets and the creation of new intersections where the proposed alignment deviates from the





1 current roadway alignment. CONSULTANT will coordinate with the project team and the Mid-County  
2 Parkway project team to determine the most likely configuration for the terminus of Mid-County Parkway near  
3 I-215 and incorporate that assumption into the modeling for this project.

4 *Trail and Bikeway Crossings*

5 CONSULTANT will evaluate existing and proposed crossings of the proposed alignment by bike paths,  
6 regional trails, and community trails. Based on forecast volumes and anticipated trail use, recommendations  
7 will be made for appropriate treatments of each crossing. The results will be documented in a Trail and  
8 Bikeway Crossing Technical Memorandum.

9 *Opening Year Conditions With and Without the Project*

10 CONSULTANT will prepare an opening year LOS analysis of all study locations (intersections, arterial  
11 segments, and freeway segments) for both without project and with project conditions. CONSULTANT will  
12 provide speed/VMT data (in 5-MPH speed bins) and statistics for air quality, noise, and climate change  
13 analysis to the environmental team.

14 *Interim Year Conditions With and Without the Project*

15 CONSULTANT will prepare an LOS analysis of all study locations (intersections, arterial segments, and  
16 freeway segments) for both without project and with project conditions for ten years after the project opening.  
17 CONSULTANT will provide speed/VMT data (in 5-MPH speed bins) and statistics for air quality, noise and  
18 climate change analysis to the environmental team.

19 *Design Year Conditions With and Without the Project*

20 CONSULTANT will prepare a design year LOS analysis of all study locations (intersections, arterial  
21 segments, and freeway segments) for both without project and with project conditions. CONSULTANT will  
22 provide speed/VMT data (in 5-MPH speed bins) and statistics for air quality, noise and climate change  
23 analysis to the environmental team.

24 *Identification of Project Traffic Impacts*

25 CONSULTANT will determine project traffic impacts by identifying study locations (intersections, arterial  
26 segments, and freeway segments) at which the level of service under with project conditions does not meet  
27 Riverside County, CALTRANS, or other applicable agency standards. Temporary project construction traffic  
28 impacts will also be identified.



1 *Mitigation Measures*

2 CONSULTANT will identify feasible mitigation measures to reduce traffic impacts associated with the project,  
3 if necessary. Mitigation measures may include modifications to traffic control, addition of through or turn  
4 lanes, or other methods to increase capacity or reduce demand. The effectiveness of the proposed mitigation  
5 measures will be evaluated by calculating the level of service for each impacted intersection or street  
6 segment with the implementation of the proposed mitigation measure.

7 *Traffic Index*

8 CONSULTANT will calculate the 10-year and 20-year Traffic Index for each major segment of the project,  
9 following the methodology in Section 610 of the Highway Design Manual. These calculations will be based on  
10 the forecast design year traffic automobile and truck volumes. This will be documented in a Traffic Index  
11 Technical Memorandum.

12 *Draft and Final Traffic Study*

13 CONSULTANT will document the methodology, results, and conclusions of the traffic analysis, including  
14 existing conditions, opening year conditions, design year conditions, interim year conditions, and project  
15 impacts, in a draft Traffic Operations Analysis Report. The Draft Traffic Operations Analysis Report will be  
16 provided to the COUNTY for review and comment. CONSULTANT will revise the document based upon input  
17 from the COUNTY and submit a final Traffic Study for approval.

18 CONSULTANT will respond to public and agency comments on the project's environmental document. It is  
19 anticipate that up to 64 hours of professional staff time will be required to respond to such comments.

20 Preliminary Engineering

21 *Project Alignment Engineering Design*

22 After the COUNTY identifies feasible alternatives to be taken to the next phase of further refinement,  
23 CONSULTANT will perform engineering calculation and design of the alignments, road cross-sections,  
24 profiles, and slope limits with greater detail. It is assumed that two alternatives will be identified to be carried  
25 forward and addressed. Alignment details to be developed and prepared include horizontal and vertical  
26 alignment data (curve lengths, roadway widths, lane widths). Grading slope limits and retaining wall limits  
27 and heights will be defined. Wall types (cantilevered, tie-back, soil nail, etc.) will be identified for impacts, cost  
28 and constructability. Right-of-way impacts will be identified for required right-of-way and easement needs.



1 Selection of bridges, retaining walls, rock slopes, or earth slopes across deep valleys will be made based on  
2 costs, impacts, and constructability. Drainage system limits and types will be identified for the major mainline  
3 or cross drainage systems. Driveway and access impacts will be identified.

4 There are several watercourse crossings, including Temescal Wash at the west end and Cajalco Creek at  
5 Harley John Road, that will need bridge widening or replacement. Advance planning studies will be prepared  
6 to develop and evaluate bridge structure types. In addition to the watercourses, in the area of the rugged hills  
7 at the west end, bridge structures may be proposed to reduce the grading footprint and also provide  
8 opportunities for providing wildlife crossings.

9 Other structural elements could include the consideration of retaining wall structures to reduce the grading  
10 footprint. Wall types that may be considered include cantilevered retaining walls, tie-back walls, soil nail  
11 walls, and mechanically stabilized earth (MSE) walls. In areas where rock cuts are feasible, the road  
12 alignment may incorporate rock cut slopes which can be made steeper to eliminate need for retaining walls.  
13 Architectural treatment of retaining wall structures can be incorporated to reduce the visual impact of retaining  
14 wall structures. In the areas of curved alignments, sufficient shoulder width will be provided to assure that the  
15 line of sight is not blocked by retaining walls and adequate sight distance is maintained.

16 The development of the alternatives will also take into account the constructability and its impacts on  
17 maintaining traffic flow during construction. Where necessary, determine the need for detours and road  
18 closures. The costs and impacts of constructability will be included in the evaluation and selection process.

19 Traffic signal needs will be developed based on modification or replacement of existing traffic signals  
20 systems. Estimates of the traffic signal requirements will be made in conjunction with data from the traffic  
21 analysis. Allowances will be made for street lighting where applicable.

22 The final alignment alternatives will be prepared and presented at 1"=100' scale. Alignment data, slope limits,  
23 structural elements and lane lines will be shown. Enlarged details may be included where necessary to  
24 shown critical design elements. The drawings will consist of plan and profile and may include some details.

25 The level of detail will be appropriate for the Project Report Equivalent (PRE) level.

26 Design exceptions will be identified and brought to the COUNTY'S attention to make a determination of  
27 whether variances from the design standards are acceptable. The design exceptions will be examined for  
28 several factors including safety, cost impacts, and the extent of the variance from the standards. Utilities will



1 be reviewed for impacts and conflicts that may require relocations. Utilities with prior rights will be highlighted  
2 and given greater attention to avoidance where possible. Construction cost estimates of the alternatives will  
3 be prepared that will give an accurate comparison of the costs of the various alternatives. The findings will be  
4 included in the Project Report Equivalent which is the technical report that supports the environmental  
5 documentation.

6 *Bridge and Structures*

7 Advanced Planning Studies (APS) are required in the Project Report Equivalent to document the scope and  
8 cost of the structural work on the project. An APS report will be required for each of the structures or the  
9 special design retaining walls such as tieback walls/MSE Walls depending on the roadway alignment  
10 alternative under consideration. The APS will be based on the requirements of CALTRANS Memo to  
11 Designers 1-8 and the latest Office of Specially Funded Projects (OSFP) Information and Procedures Guide.  
12 The objective of the APS will be to develop the feasible types of structures, costs and constraints applicable  
13 for the specific location. Special attention will be given to widening, span lengths, structure depths, column  
14 locations, proposed clearances, seismic requirements, approach slabs, falsework requirements, construction  
15 staging, utilities and traffic handling during construction. The APS will achieve the following objectives for the  
16 various structures:

- 17 • Define the scope of structure work in the project
- 18 • Establish the best construction cost estimates available at the early stage of the project.
- 19 • Provide an early opportunity for the COUNTY to assist in project conceptualization.
- 20 • Familiarize the OSD with the project to program their workload and to update the bridge status.
- 21 • Describe and document the design assumptions used in the early concept of the structure.

22 The bridge engineer will coordinate with the roadway engineer while developing the structure alternatives and  
23 associated cost estimates to yield the best project solution. Different bridge types such as cast-in-place  
24 versus precast concrete girders would be evaluated.

25 The structure APSs will be prepared for each of the alternative roadway alignments. An APS will be prepared  
26 in accordance with CALTRANS OSFP Information and Procedures Guide. The Structure Preliminary  
27 Geotechnical Report (SPGR) will be used to support the APSs as required by the CALTRANS Office of  
28 Special Funded Projects (OSFP) Information and Procedures Guide.



1 An APS Report will be prepared that includes the following:

- 2 1. APS Checklist
- 3 2. Design Memo
- 4 3. APS GPs
- 5 4. Itemized Cost Estimate
- 6 5. Structure Preliminary Geotechnical Report

7 The deliverables to the COUNTY will be per the requirements of CALTRANS OSFP Manual Chapter 3-2.

8 *Utility Impacts*

9 CONSULTANT will obtain utility data through the COUNTY'S utility coordinator. CONSULTANT will identify  
10 utility facilities in conflict with the proposed alignment alternatives. Where appropriate, utilities with prior rights  
11 will be identified and costs for relocations of such utilities will be included in the PRE. All high and low risk  
12 utilities, as defined by CALTRANS' Project Development Procedures Manual, will be identified in the PRE.

13 *Project Report Equivalent*

14 A Project Report Equivalent (PRE) will be prepared compiling and summarizing the preliminary engineering  
15 analysis and technical studies in the development and analysis of the alternatives. The technical report will  
16 contain the traffic analysis, description and evaluation of the alternatives, design exceptions, water quality  
17 report, pedestrian and non-motorized vehicle features, structural APS, right-of-way, hazardous materials,  
18 value analysis, and environmental reports.

19 It is assumed that the PRE will be prepared and submitted to the COUNTY for review and following comment  
20 by the COUNTY the final PRE will be prepared.

21 *Deliverables:*

- 22 • Draft and Final Advanced Planning Report (five hard copies and one digital copy)
- 23 • Draft and Final Project Report Equivalent (five hard copies and one digital copy)

24 **ARTICLE AIV • COMPUTER FACILITIES**

25 **A. CALCULATIONS**

26 All roadway calculations will be performed using Bentley InRoads software. The structural analyses and  
27 design will be performed by using SAP2000 Non Linear, CONBOX, CONSPLICE, CONSPAN, VTBRIDGE,  
28 VBENT, CT-WFRAME, CT-XSECTION, XTRACT, WINABUD, SNAIL, and in house validated/certified



1 spreadsheet programs. The data files and the results will be submitted electronically on compact discs along  
2 with a hard copy.

3 **B. COMPUTER AIDED DRAFTING AND DESIGN (CADD)**

4 All plans will be prepared using MicroStation format in conformance with the latest CALTRANS CADD Users  
5 Manual and the CALTRANS Drafting Manual to assure complete compatibility.

6 **ARTICLE AV • VALUE ENGINEERING**

7 A Value Engineering Exercise will be conducted during Phase I of the project development in complete  
8 compliance with the current CALTRANS and Federal guidelines. CONSULTANT will make the necessary  
9 arrangements to retain the services of a moderator.

10 The specific scope of work for the Value Analysis (VA) is presented below. The scope of the work includes  
11 the following:

- 12 • Provide a qualified, independent Certified Value Specialist (CVS) team leader to lead a five-day VA  
13 study in accordance with CALTRANS value methodology.
- 14 • Provide VA study documentation in accordance with the CALTRANS VA Report Guide and this task  
15 order.
- 16 • Conference rooms will be provided by the COUNTY or CALTRANS.
- 17 • Ensure that applicable data and correspondence, any other relevant information necessary for the VA  
18 study is collected, developed and distributed.
- 19 • Facilitate VA Team Meetings.

20 *Deliverables:*

- 21 • Develop the draft VA study charter (Attachments A, B and C per the CALTRANS Team Guide)
- 22 • Lead VA Study
- 23 • Complete the Preliminary VA Report with input/review of VA Team and technical reviewers in  
24 accordance with the VA Report Guide – Third Edition and with the following items:
  - 25 ○ A distribution list for the VA reports must be developed with the Project Manager.
  - 26 ○ Submit Preliminary VA Report as an electronic copy; no more than 2-weeks following Initial VA  
27 Presentation, to CONSULTANT PM and the CALTRANS DVAC for further distribution.
  - 28 ○ The preliminary report will be in Electronic format.



- Coordinate with CONSULTANT PM on the project stakeholders' responses to the preliminary VA report and prepare for an implementation meeting to resolve the disposition of the VA alternatives, finalize the VA study reportables (costs, performance and value indices).
- Submit Final VA Report as specified in CALTRANS VA Report Guide – Third Edition. Report should be submitted no more than three weeks following VA Implementation Meeting. Final VA report will be an electronic copy in PDF format of the entire report and four printed copies.
- If all VA Alternatives are not resolved at the Implementation Meeting, an Implementation Action Memo will be submitted within three working days detailing what work needs to be completed in order to develop final disposition of the VA Alternatives , who is responsible for this action and when it is due. The team leader will follow up with CONSULTANT PM and other responsible parties to resolve these open items. Once all items have been resolved, the Final Report will be completed.
- Provide CALTRANS HQ VA Program Manager electronic copies of the Preliminary and Final Reports and the VASSR so that they can include the study in their annual reports to FHWA.

**ARTICLE AVI • SUB CONSULTING SERVICES**

The following table identifies the consultants that are included on the project team for the Cajalco Road project and their roles.

Firm	Role
ICF Jones & Stokes	Prime Consultant/Environmental Documentation including preparation of the Preliminary Environmental Study; technical studies [except as noted below]; and environmental document
AECOM	Preliminary Engineering (including roadway and structures design; conceptual alignment development; hydrology and hydraulics analysis; utility conflict identification; addressing design exceptions; and preparation of cost estimates); and Project Report Equivalent
Iteris	Traffic Analysis
URS	Visual Impact Assessment; Water Quality Assessment Report; Location Hydraulic Study and Summary Floodplain Encroachment Report; Section 4(f) analysis; and Cumulative Impacts section in the environmental document
Group Delta	Geotechnical Engineering and Initial Site Assessment
Epic Land Solutions	Development of property ownership list and map for County to obtain rights-of-entry; and Relocation Impact Report
Arellano and Associates	Public Outreach
VMS	Value Analysis
James Allen	Paleontological Identification Report/Paleontological Evaluation Report; and Paleontological Mitigation Plan



**ARTICLE AVII • QUALITY CONTROL PLAN**

A Quality Control Plan will be established for this PROJECT and it will be provided to the COUNTY within two (2) weeks after NTP for review and approval.

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**APPENDIX B • ARTICLE BI • INTRODUCTION**

CONSULTANT shall perform the covenants set forth in Appendix A, Scope of Services in accordance with the performance requirements of Article V of this agreement and with the following Schedule of Services. All Covenants set forth in this agreement shall be completed by December 30, 2016, unless extended by supplemental agreement.

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Satisfactory performance and completion of the Services under this Agreement shall be compensated based upon actual costs plus a fixed fee. COUNTY will reimburse CONSULTANT for actual costs (including labor costs, overhead, and other direct costs) incurred by CONSULTANT in performance of the work, exclusive of any fixed fee. A prorata portion of CONSULTANT's fixed fee shall be included in the progress payments. Actual costs shall not exceed the estimated costs without prior written agreement between COUNTY and CONSULTANT.

**APPENDIX C • ARTICLE CI • ELEMENTS OF COMPENSATION**

Compensation for the Services will be comprised of the following elements: DIRECT LABOR COSTS, FEES, OTHER DIRECT COSTS and OUTSIDE SERVICES.

**A. DIRECT LABOR COSTS**

Direct Labor costs shall be paid in an amount equal to the Direct Salary Costs plus the product of the Direct Salary Costs and the Multiplier which are defined as follows:

1. Direct Salary Costs

Direct Salary Costs are the base salaries and wages actually paid to the CONSULTANT's personnel directly engaged in performance of the Services under the Agreement. Salary rates for specific employees shall be provided on the Fee Proposal Worksheets included in ARTICLE CV • COST PROPOSAL. All Salary rates shall be in effect for three years following the effective date of the Agreement. Thereafter, CONSULTANT may request adjustments to individual rates on an annual basis. CONSULTANT shall notify COUNTY in writing requesting a change in the rates included herein. All adjustments to rates shall be subject to approval by the County Director of Transportation, or his designee.

2. Multiplier

The Multiplier to be applied to the Direct Salary Costs to determine the Direct Labor Costs is the sum of the following components:

PAYROLL ADDITIVES ..... 53.88 %

The decimal ratio of Payroll Additives to Direct Salary Costs. Payroll Additives include all employee benefits, allowances for vacation, sick leave, and holidays, and company portion of employee insurance and social and retirement benefits, all federal and state payroll taxes, premiums for insurance which are measured by payroll costs, and other contributions and benefits imposed by applicable laws and regulations.



1 OVERHEAD COSTS ..... 134.61 %

2 The decimal ratio of allowable Overhead Costs to CONSULTANT firm's total direct salary costs.  
 3 Allowable Overhead Costs include general, administrative and overhead costs of maintaining and  
 4 operating established offices, and consistent with established firm policies, and as defined in the Federal  
 5 Acquisitions Regulations, Part 31.2.

6 TOTAL MULTIPLIER ..... 188.49 %

7 (sum of Payroll Additives and Overhead Costs)

8 **B. FIXED FEE**

- 9 1. The Total Fixed Fee payable to the CONSULTANT is \$227,436.68 (PRIME CONSULTANT Profit)  
 10 2. A pro-rata share of the Fixed Fee shall be applied to the total Direct Labor Costs expended for  
 11 services each month, and shall be included on each monthly invoice.

12 **C. OTHER DIRECT EXPENSES**

13 Additional Direct Costs, directly identifiable to the performance of the services of this Agreement, shall be  
 14 reimbursed at the rates below, or at actual invoiced cost.

15 Rates for identified Additional Direct Costs are as follows:

Item	Rate
Reprographics	Actual Cost
Travel (Including rental Car)	Actual Cost
Project Supplies	Actual Cost
Postage/delivery	Actual Cost

21 Travel by air and travel in excess of 100 miles from CONSULTANT's office nearest to COUNTY's office must  
 22 have COUNTY's prior written approval to be reimbursed under this Agreement.

23 **D. OUTSIDE SERVICES**

24 Outside services shall be paid in accordance with the cost proposals submitted by each Subconsultant.  
 25 Billings for Outside Services shall be submitted along with the Prime Consultant's monthly Progress  
 26 Report/Billing submittals and shall be in conformance with the COUNTY Engineering Services Invoicing  
 27 Procedures.

28 **ARTICLE CII • DIRECT SALARY RATES**

29 Direct Salary Rates, which are the range of hourly rates to be used in determining Direct Salary Costs, are given



below and are subject to the following:

**A. PREMIUM OVERTIME**

Direct Salary Rates shall be applicable to both straight time and overtime work, unless payment of a premium for overtime work is required by law, regulation or craft agreement, or is otherwise specified in this Agreement. In such event, the premium portion of Direct Salary Costs will not be subject to the Multiplier.

**B. SALARY RATES**

Maximum Direct Salary Rates shown herein are in effect for the duration of the Agreement. In the event CONSULTANT desires to adjust the rates as shown; CONSULTANT shall notify COUNTY in writing requesting a change. All adjustments to the Range of Rates shall be subject to approval by the County Director of Transportation, or his designee.

**POSITION OR CLASSIFICATION HOURLY RATES**

Project Director (PM)	\$63.89	hour
Senior Consult I (Env Lead)	\$37.26	hour
Senior Consult II (NEPA/CEQA - Asst Env Lead)	\$39.00	hour
Senior Tech Analyst (Air Quality)	\$51.88	hour
Mng Consult (Noise)	\$51.78	hour
Senior Consult II (Biology)	\$39.68	hour
Mng Consult (Biology)	\$49.65	hour
Senior Tech Analyst (Archaeology)	\$49.88	hour
Senior Consult I (Visual)	\$38.82	hour
Senior Consult I (CIA, Growth, and NEPA/CEQA)	\$39.97	hour
Assoc Consult III (Noise)	\$31.21	hour
Proj Dir (Historic)	\$77.52	hour
Senior Consult I (GIS)	\$38.47	hour
Assoc Consult II (Historic)	\$32.99	hour
Assoc Consult II (Air Quality)	\$24.13	hour
Assoc Consult II (CIA and NEPA/CEQA)	\$23.21	hour
Assoc Consult II (Biology)	\$25.00	hour
Senior Consult II (Biology)	\$41.91	hour



1	Assoc Consult III (Biology)	\$33.79	hour
2	Assoc Consult I (Archaeology)	\$21.20	hour
3	Assoc Consult III (Archaeology)	\$26.54	hour
4	Assoc Consult II (Historic)	\$23.32	hour
5	Senior Consult III (Regulatory)	\$48.18	hour
6	Mng Consult (NEPA/CEQA - Growth)	\$46.62	hour
7	Senior Consult II (NEPA/CEQA - Climate Change)	\$43.47	hour
8	Senior Consult I (Regulatory)	\$35.21	hour
9	Assoc Consult II (Biology)	\$29.00	hour
10	Asst Consult (Editor)	\$29.23	hour
11	Asst Consult (Admin)	\$21.67	hour
12	Admin Tech (Proj Admin)	\$25.44	hour

13 The above rates are for CONSULTANT only. All rates for subconsultants to CONSULTANT will be in  
14 accordance with the cost proposal.

15 **ARTICLE CIII • INVOICING**

16 CONSULTANT shall submit invoices in accordance with the Environmental and Engineering Services  
17 Agreement ARTICLE VI • COMPENSATION and with the following requirements.

- 18 1. Charges shall be billed in accordance with the terms and rates included herein, unless otherwise  
19 agreed in writing by the County Contract Administrator.
- 20 2. Base Work and Extra Work shall be charged separately, and the charges for each Phase listed in  
21 Appendix B, Schedule of Services, shall be listed separately. The charges for each individual  
22 assigned under this Agreement shall be listed separately.
- 23 3. Charges of \$500.00 or more for any one item of Additional Direct Costs shall be accompanied by  
24 substantiating documentation such as invoices, telephone logs, etc.
- 25 4. Each invoice shall indicate payments to DBE subconsultants or supplies by dollar amount and as a  
26 percentage of the total invoice and shall state the DBE goals as a percentage of Total Agreement  
27 Value.
- 28 5. Each invoice shall bear a certification signed by the Consulting Contract Manager or an officer of the  
29 firm which reads as follows:



I hereby certify that the hours and salary rates charged in this invoice are the actual hours and rates worked and paid to the employees listed.

**ARTICLE CIV • PAYMENT**

Progress payments shall be made in accordance with the Environmental & Engineering Services, Agreement

**ARTICLE VI • COMPENSATIONS.**

**ARTICLE CV • COST PROPOSAL**

The following cost proposal reflects the negotiated targeted contract amount. The cost proposal will serve as a guideline and reference document during the execution of this contract. CONSULTANT shall complete the described services as directed by COUNTY. CONSULTANT shall be compensated in accordance with the rates provided. The total amount of the contract is not to exceed \$5,040,190.88. Reimbursement is to be made at actual cost plus fixed fee and shall not exceed the rates provided in Section B above.

FEE PROPOSAL SUMMARY						
	PHASE I	PHASE II	PHASE III	PHASE IV	PHASE V	TOTALS
ICF - Jones & Stokes	\$2,594,213.45					\$2,594,213.45
AECOM/LAN	\$1,541,420.41					\$1,541,420.41
Ileris	\$346,162.66					\$346,162.66
URS	\$173,999.36					\$173,999.36
Group Delta Consultants	\$70,957.41					\$70,957.41
Epic Land Solutions	\$121,454.34					\$121,454.34
Arellano and Associates	\$112,000.06					\$112,000.06
VMS	\$39,058.14					\$39,058.14
James Alien	\$40,925.05					\$40,925.05
<b>TOTALS</b>	<b>\$5,040,190.88</b>					<b>\$5,040,190.88</b>

Phase I: Preliminary Engineering/Environmental Doc  
 Phase II:  
 Phase III:  
 Phase IV:  
 Phase V:



**FEE PROPOSAL WORKSHEET**

<b>COMPANY:</b> ICF - Jones & Stokes	<b>SCOPE OF WORK:</b> Environmental and Engineering Services	<b>DATE:</b> 11/18/10	<b>REV:</b> 1
<b>PROJECT:</b> Cajalco Road Widening Project - Environmental and Engineering Services		<b>MILESTONE/PHASE/PROJ SUMMARY:</b> Preliminary Engineering/Environmental Doc	

DIRECT LABOR						
PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT	
Calvert, Brian	Proj Dir (PM)	2448	@	\$63.89	\$156,402.72	
Anderson, Keturah	Sr Consult I (Env Lead)	4172	@	\$37.26	\$155,448.72	
Sanaryan, Daniela	Sr Consult II (NEPA/CEQA - Asst Env Lead)	1670	@	\$39.00	\$65,130.00	
Cooper, Keith	Sr Tech Analyst (Air Quality)	347	@	\$51.88	\$18,002.38	
Greene, Michael	Mng Consult (Noise)	336	@	\$51.78	\$17,398.08	
Campbell, Kurt	Sr Consult II (Biology)	440	@	\$39.68	\$17,459.20	
Campbell, Patricia	Mng Consult (Biology)	971	@	\$49.65	\$48,210.15	
Robinson, Mark	Sr Tech Analyst (Archaeology)	166	@	\$49.88	\$8,280.08	
Anderson, Carson	Sr Consult I (Visual)	16	@	\$38.82	\$621.12	
Trisal, Shilpa	Sr Consult I (CIA, Growth, and NEPA/CEQA)	654	@	\$39.97	\$26,140.38	
Hardie, Jon	Assoc Consult III (Noise)	594	@	\$31.21	\$18,538.74	
Starzak, Richard	Proj Dir (Historic)	76	@	\$77.52	\$5,891.52	
Welton (Manning), Coral	Sr Consult I (GIS)	1648	@	\$38.47	\$63,398.56	
Paul, Daniel	Assoc Consult II (Historic)	254	@	\$32.99	\$8,379.46	
Ortiz, Victor	Assoc Consult II (Air Quality)	234	@	\$24.13	\$5,646.42	
Gupta, Hina	Assoc Consult II (CIA and NEPA/CEQA)	1397	@	\$23.21	\$32,424.37	
Flores, Marisa	Assoc Consult II (Biology)	598	@	\$25.00	\$14,950.00	
Romich, Mikael	Sr Consult II (Biology)	102	@	\$41.91	\$4,274.82	
Hickman, James	Assoc Consult III (Biology)	112	@	\$33.79	\$3,784.48	
Shattuck, Paul	Assoc Consult I (Archaeology)	128	@	\$21.20	\$2,713.60	
Wood, Cate	Assoc Consult III (Archaeology)	324	@	\$26.54	\$8,598.96	
Hilton, Elizabeth	Assoc Consult II (Historic)	376	@	\$23.32	\$8,768.32	
Riggs, Sheilah	Sr Consult III (Regulatory)	432	@	\$48.18	\$20,813.76	
Jean Lafontaine	Mng Consult (NEPA/CEQA - Growth)	188	@	\$46.62	\$8,764.56	
Mari Piantka	Sr Consult II (NEPA/CEQA - Climate Change)	24	@	\$43.47	\$1,043.28	
Duchardt, Amanda	Sr Consult I (Regulatory)	112	@	\$35.21	\$3,943.52	
Cogswell, Jennifer	Assoc Consult II (Biology)	305	@	\$29.00	\$8,845.00	
Irvin, Elizabeth	Asst Consult (Editor)	974	@	\$29.23	\$28,470.02	
Mountain-Castro, Jenelle	Asst Consult (Admin)	708	@	\$21.67	\$15,342.36	
Nguyen, Ngoc Tram	Admin Tech (Proj Admin)	420	@	\$25.44	\$10,684.80	
<b>TOTAL HOURS</b>		<b>20226</b>			<b>TOTAL DIRECT LABOR</b>	<b>\$788,369.36</b>

MULTIPLIERS		
ESCALATION @ 5 percent for 70 percent of fee	(Rate)	
OVERHEAD @	134.61% (of Total Direct Labor + Escalation)	\$1,061,224.00
PAYROLL ADDITIVES @	53.88% (of Total Direct Labor + Escalation)	\$424,773.41
<b>TOTAL MULTIPLIERS</b>		<b>\$1,485,997.41</b>

OTHER DIRECT EXPENSES *** Billed at Actual Cost ***				
ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Reprographics	1	@	\$66,080.00	\$66,080.00
Mileage (including rental car)	1	@	\$13,130.00	\$13,130.00
Project supplies	1	@	\$4,800.00	\$4,800.00
Postage/delivery	1	@	\$8,400.00	\$8,400.00
<b>TOTAL OTHER DIRECT EXPENSES</b>				<b>\$92,410.00</b>

OUTSIDE SERVICES (w/o fee)						
COMPANY	LABOR	MULTIPLIER	EXPENSES	FIXED FEE (PROFIT)	TOTALS	
AECOM/LAN	\$509,284.12	\$862,370.80	\$32,600.00	\$137,165.49	1,541,420.41	
Iteris	\$112,018.88	\$190,174.45	\$13,750.00	\$30,219.33	\$346,162.66	
URS	\$57,246.00	\$96,253.42	\$5,150.00	\$15,349.94	\$173,999.36	
Group Delta Consultants	\$18,300.24	\$37,881.50	\$9,157.50	\$5,618.17	\$70,957.41	
Epic Land Solutions	\$41,207.84	\$65,520.47	\$4,053.20	\$10,672.83	\$121,454.34	
Arellano and Associates	\$44,308.00	\$26,584.80	\$34,017.98	\$7,089.28	\$112,000.06	
James Allen	\$10,689.72	\$20,844.95	\$4,370.00	\$3,153.47	\$39,058.14	
James Allen (Paleontology)	\$34,840.96		\$2,600.00	\$3,484.09	\$40,925.05	
<b>TOTAL OUTSIDE SERVICES</b>					<b>\$2,445,977.43</b>	

<b>FIXED FEE (PROFIT)</b>		
ICF - JONES & STOKES @	10.00% (of Total Direct Labor + Total Multipliers)	\$227,436.68
<b>TOTAL FEES</b>		<b>\$227,436.68</b>
<b>TOTAL COST</b>		<b>\$5,040,190.88</b>



**FEE PROPOSAL WORKSHEET**

<b>COMPANY:</b> AECOM/LAN	<b>SCOPE OF WORK:</b> Civil Engineering	<b>DATE:</b> 1/11/10	<b>REV:</b> 1
<b>PROJECT:</b> Cajalco Road Widening Project - Environmental and Engineering Services		<b>MILESTONE/PHASE/PROJ SUMMARY:</b> Project Approval/Environmental Document	

**DIRECT LABOR**

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
James Faber	Engineering Director	56	@	\$87.64	\$4,907.84
Edward Ng	Project Manager	1156	@	\$75.19	\$86,919.64
Mohan Char	Struct PM	244	@	\$84.34	\$20,578.96
Norm Suydam	QA/QC	220	@	\$83.47	\$18,363.40
Robert Wong	Project Engineer	348	@	\$48.18	\$16,766.64
Robert Fish	Structural Engineer	336	@	\$68.34	\$22,962.24
Mak Khodr	Traffic Signals	56	@	\$64.98	\$3,638.88
Albert Pan	Associate Engineer	1344	@	\$49.14	\$66,044.16
Tim Liu	Design Engineer	1476	@	\$36.87	\$52,944.12
Nelly Lo	Design Engineer	960	@	\$33.00	\$31,680.00
Ray Andrasek	Structural CADD	300	@	\$48.90	\$14,670.00
Paul Lau	Project Engineer	936	@	\$46.41	\$43,439.76
Heng Chow	Design Engineer	1008	@	\$36.79	\$37,084.32
Kimberly Gee	Design Engineer	704	@	\$33.00	\$23,232.00
Alex Lam	Assistant Engineer	360	@	\$32.64	\$11,750.40
Nicolas Borrayo	Assistant Engineer	1312	@	\$28.84	\$37,838.08
Carole Espinoza	Assistant PM	8	@	\$26.01	\$208.08
Tonya Davis	Admin Assistant	232	@	\$20.00	\$4,640.00
Deborah Tsan	Junior Engineer	280	@	\$20.00	\$5,600.00
Alicia Colburn	Envir Coord	120	@	\$50.13	\$6,015.60
<b>TOTAL HOURS</b>		11456		<b>TOTAL DIRECT LABOR</b>	\$509,284.12

**MULTIPLIERS**

<b>ESCALATION @</b>	5.00% (Rate)	
<b>OVERHEAD @</b>	169.33% (of Total Direct Labor + Escalation)	\$862,370.80
<b>PAYROLL ADDITIVES @</b>	(of Total Direct Labor + Escalation)	
<b>TOTAL MULTIPLIERS</b>		\$862,370.80

**OTHER DIRECT EXPENSES** --- Billed at Actual Cost ---

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Reproduction	25000	Ea	@	\$1.00	\$25,000.00
Travel (including rental car)	2000	Ea	@	\$0.55	\$1,100.00
Project Supplies	5000	Ea	@	\$1.00	\$5,000.00
Postage/delivery	60	Ea	@	\$25.00	\$1,500.00
<b>TOTAL OTHER DIRECT EXPENSES</b>					\$32,600.00

**OUTSIDE SERVICES (w/o fee)**

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
<b>TOTAL OUTSIDE SERVICES</b>				

**FEES**

<b>OUTSIDE SERVICES ADMIN FEE @</b>	(of Total Outside Services & Outside Services Fees)	
AECOM/LAN @	10.00% (of Total Direct Labor + Total Multipliers)	\$137,165.49
<b>OUTSIDE SERVICES @</b>	(of Total Labor + Total Multiplier for Outside Services)	
<b>TOTAL FEES</b>		\$137,165.49
<b>TOTAL COST</b>		<b>\$1,541,420.41</b>













**FEE PROPOSAL WORKSHEET**

<b>COMPANY:</b> Arellano and Associates	<b>SCOPE OF WORK:</b> Public involvement/outreach	<b>DATE:</b> 1/7/10	<b>REV:</b> 1
<b>PROJECT:</b> Cajalco Road Widening Project - Environmental and Engineering Services		<b>MILESTONE/PHASE/PROJ SUMMARY:</b> Preliminary Engineering/Environmental Document	

**DIRECT LABOR**

PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
Cheryl Donahue	Outreach Manager	218	@	\$90.00	\$19,620.00
Elsa Argomaniz	Outreach Specialist	252	@	\$61.00	\$15,372.00
Raul Velazquez	Outreach Specialist	112	@	\$61.00	\$6,832.00
Katie Bumside	Outreach Specialist	138	@	\$18.00	\$2,484.00
<b>TOTAL HOURS</b>		<b>720</b>			<b>TOTAL DIRECT LABOR</b>
					<b>\$44,308.00</b>

**MULTIPLIERS**

<b>ESCALATION @ 5 percent of 50 percent of labor</b>	(Rate)	
<b>OVERHEAD</b>	60.00% (of Total Direct Labor + Escalation)	\$26,584.80
<b>PAYROLL ADDITIVES @</b>	(of Total Direct Labor + Escalation)	
<b>TOTAL MULTIPLIERS</b>		<b>\$26,584.80</b>

**OTHER DIRECT EXPENSES** --- Billed at Actual Cost ---

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Photocopying/Printing	1	Ea	@	\$7,500.00	\$7,500.00
Spanish Translation	1		@	\$2,500.00	\$2,500.00
Website Design Services	1		@	\$8,500.00	\$8,500.00
Postage	1		@	\$7,500.00	\$7,500.00
Facility Rental Fees, Public Meetings (2)	2		@	\$250.00	\$500.00
Public Meeting Advertisements	1		@	\$5,000.00	\$5,000.00
Public Meeting Supplies and Refreshments (2)	2		@	\$250.00	\$500.00
Mileage	3996		@	\$0.505	\$2,017.98
<b>TOTAL OTHER DIRECT EXPENSES</b>					<b>\$34,017.98</b>

**OUTSIDE SERVICES (w/o fee)**

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
<b>TOTAL OUTSIDE SERVICES</b>				

**FEES**

<b>OUTSIDE SERVICES ADMIN FEE @</b>	(of Total Outside Services & Outside Services Fees)	
<b>ARELLANO AND ASSOCIATES @</b>	10.00% (of Total Direct Labor + Total Multipliers)	\$7,089.28
<b>OUTSIDE SERVICES @</b>	(of Total Labor + Total Multiplier for Outside Services)	
<b>TOTAL FEES</b>		<b>\$7,089.28</b>
<b>TOTAL COST</b>		<b>\$112,000.06</b>



**FEE PROPOSAL WORKSHEET**

<b>COMPANY:</b> VMS	<b>SCOPE OF WORK</b> Value Analysis	<b>DATE:</b> 8/30/10	<b>REV:</b> 1
<b>PROJECT:</b> Cajalco Road Widening Project - Environmental and Engineering Services		<b>MILESTONE/PHASE/PROJ SUMMARY:</b> Preliminary Engineering/Environmental Document	

DIRECT LABOR					
PERSONNEL	FUNCTION	HOURS		RATE	AMOUNT
R. Terry Hays	Principal	2	@	\$88.85	\$177.70
George Hunter	CVS Team Leader	122	@	\$66.63	\$8,128.86
April Hiller	Technical Editor	48	@	\$29.71	\$1,426.08
Cheryl Kramer	Project Coordinator	8	@	\$40.38	\$323.04
Robert Stewart	Principal/QA/QC	4	@	\$88.85	\$355.40
Glen Chiasson	Project manager	4	@	\$45.00	\$180.00
Sandy Northrop	Administrative Assistant	4	@	\$24.66	\$98.64
		<b>TOTAL HOURS</b>			<b>\$10,689.72</b>

MULTIPLIERS		
<b>ESCALATION @</b>	(Rate)	
<b>OVERHEAD @</b>	195.00% (of Total Direct Labor + Escalation)	\$20,844.95
<b>PAYROLL ADDITIVES @</b>	(of Total Direct Labor + Escalation)	
<b>TOTAL MULTIPLIERS</b>		<b>\$20,844.95</b>

OTHER DIRECT EXPENSES *** Billed at Actual Cost ***					
ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Meals & Incidentals	7	Day	@	\$40.00	\$280.00
Lodging/Hotels	7	Day	@	\$120.00	\$840.00
Parking	7	Day	@	\$15.00	\$105.00
Airport Transportation	3	Trips	@	\$90.00	\$270.00
Airfare	3	Trips	@	\$500.00	\$1,500.00
Rental Car	7	Day	@	\$75.00	\$525.00
Shipping	1	LS	@	\$250.00	\$250.00
Reproduction	6	LS	@	\$100.00	\$600.00
Conference Room					
Miscellaneous Supplies					
<b>TOTAL OTHER DIRECT EXPENSES</b>					<b>\$4,370.00</b>

OUTSIDE SERVICES (w/o fee)					
COMPANY	LABOR	MULTIPLIER	EXPENSES		TOTAL
<b>TOTAL OUTSIDE SERVICES</b>					

FEES		
<b>OUTSIDE SERVICES ADMIN FEE @</b>	(of Total Outside Services & Outside Services Fees)	
<b>VMS @</b>	10.00% (of Total Direct Labor + Total Multipliers)	\$3,153.47
<b>OUTSIDE SERVICES @</b>	(of Total Labor + Total Multiplier for Outside Services)	
<b>TOTAL FEES</b>		<b>\$3,153.47</b>
<b>TOTAL COST</b>		<b>\$39,058.14</b>



**FEE PROPOSAL WORKSHEET**

<b>COMPANY:</b> James Allen	<b>SCOPE OF WORK:</b> Paleontology	<b>DATE:</b> 9/24/10	<b>REV:</b> 1
<b>PROJECT:</b> Cajalco Road Widening Project - Environmental and Engineering Services		<b>MILESTONE/PHASE/PROJ SUMMARY:</b> Preliminary Engineering/Environmental Document	

**DIRECT LABOR**

PERSONNEL	FUNCTION	HOURS	RATE	AMOUNT
James Allen	Paleontologist	308 @	\$113.12	\$34,840.96
<b>TOTAL HOURS</b>		308		<b>TOTAL DIRECT LABOR</b> \$34,840.96

**MULTIPLIERS**

<b>ESCALATION @</b>	(Rate)
<b>OVERHEAD @</b>	(of Total Direct Labor + Escalation)
<b>PAYROLL ADDITIVES @</b>	(of Total Direct Labor + Escalation)
<b>TOTAL MULTIPLIERS</b>	

**OTHER DIRECT EXPENSES** \*\*\* Billed at Actual Cost \*\*\*

ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT
Transportation (air, rental car, etc.)	1	Day @	\$2,000.00	\$2,000.00
Records Search	1	Day @	\$600.00	\$600.00
<b>TOTAL OTHER DIRECT EXPENSES</b>				\$2,600.00

**OUTSIDE SERVICES (w/o fee)**

COMPANY	LABOR	MULTIPLIER	EXPENSES	TOTAL
<b>TOTAL OUTSIDE SERVICES</b>				

**FEES**

<b>OUTSIDE SERVICES ADMIN FEE @</b>	(of Total Outside Services & Outside Services Fees)	
<b>JAMES ALLEN @</b>	10.00% (of Total Direct Labor + Total Multipliers)	
<b>OUTSIDE SERVICES @</b>	(of Total Labor + Total Multiplier for Outside Services)	
<b>TOTAL FEES</b>		\$3,484.09
<b>TOTAL COST</b>		<b>\$40,925.05</b>

