



BOARD OF SUPERVISORS AGENDA ITEM REPORT
CONTRACTS / AWARDS / GRANTS

Requested Board Meeting Date: August 2, 2016

or Procurement Director Award ☐

Contractor/Vendor Name (DBA): PSOMAS, Inc. (Headquarters: Los Angeles, CA)

Project Title/Description:

Design Engineering Services for Kolb Road: Sabino Canyon Road to Sunrise Drive (4KSCSR).

Purpose:

Award of Contract: Contract No. CT-TR-16-368 to the most qualified consultant in an amount not to exceed \$2,324,350.65 for a contract term through June 30, 2021 for planning and design of the widening of Kolb Road between Sabino Canyon Road and Sunrise Drive. Administering Department: Transportation.

Procurement Method:

Solicitation for Qualifications No. 212916 was conducted pursuant to A.R.S. § 34-603 and Pima County Board of Supervisors Policy D 29.1(IV). Three (3) responsive statements of qualifications were received and evaluated by a six (6) member committee using a qualifications and experience based selection criteria. The evaluation included consideration of Small Business Enterprise participation and Small Local Architectural and Engineering Firm Preference in accordance with Pima County Procurement Code 11.12.030 (D). Based upon the scoring of the statements of qualifications, all three (3) firms were invited to participate in interviews. As a result of the combined scoring from the statement of qualifications and interviews, PSOMAS, Inc. was determined to be the highest ranked firm with which the County subsequently negotiated the not-to-exceed amount of the contract.

Program Goals/Predicted Outcomes:

Final Plans will be available for the bidding and construction of Kolb Road between Sabino Canyon Road and Sunrise Drive.

Public Benefit:

The project will improve safety, reduce congestion, improve operations and increase mobility for commuters along the Kolb Road corridor, more specifically between Sabino Canyon Road and Sunrise Drive.

Metrics Available to Measure Performance:

Project design is completed, allowing for bidding and construction of roadway.

Retroactive:

No

Procure Dept 07/14/16 PM04:24

To: COB- 7-15-16- (1)
Ver. - 1
pgs. - 52

Original Information

Document Type: CT Department Code: TR Contract Number (i.e., 15-123): 16-368
Effective Date: 8/02/2016 Termination Date: 06/30/2021 Prior Contract Number (Synergen/CMS): _____
☒ Expense Amount: \$ 2,324,350.65 ☐ Revenue Amount: \$ _____
Funding Source(s): 1997 HURF Bond

Cost to Pima County General Fund: \$00.00

Contract is fully or partially funded with Federal Funds? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards
Were insurance or indemnity clauses modified? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards
Vendor is using a Social Security Number? ☐ Yes ☒ No ☐ Not Applicable to Grant Awards

If Yes, attach the required form per Administrative Procedure 22-73.

Amendment Information

Document Type: _____ Department Code: _____ Contract Number (i.e., 15-123): _____
Amendment No.: _____ AMS Version No.: _____
Effective Date: _____ New Termination Date: _____
☐ Expense ☐ Revenue ☐ Increase ☐ Decrease Amount This Amendment: \$ _____
Funding Source(s): _____

Cost to Pima County General Fund: _____

Contact: Anthony V. Schiavone 7/5/16
Department: Procurement 7/6/16 Telephone: (520) 724-3245
Department Director Signature/Date: [Signature] 7/10/16
Deputy County Administrator Signature/Date: [Signature] 7/11/16
County Administrator Signature/Date: [Signature] 7/14/16
(Required for Board Agenda/Addendum Items)

PIMA COUNTY DEPARTMENT OF TRANSPORTATION	
PROJECT:	Design Engineering Services for Kolb Rd: Sabino Canyon Road to Sunrise Drive (4KSCSR)
CONSULTANT:	PSOMAS, Inc. 333 E. Wetmore Road, Suite 450 Tucson, AZ 85705
AMOUNT:	Not to Exceed \$2,324,350.65
FUNDING:	1997 HURF Bonds

CONTRACT

NO. CT-TR-16-368

AMENDMENT NO. _____

This number must appear on all
invoices, correspondence and
documents pertaining to this
contract.

(stamp here)

CONSULTANT SERVICES CONTRACT

THIS Contract is entered into between Pima County, a body politic and corporate of the State of Arizona, hereinafter called COUNTY, and PSOMAS, Inc., hereinafter called CONSULTANT, collectively referred to as the Parties.

W I T N E S S E T H

WHEREAS, COUNTY requires the services of a CONSULTANT registered in the State of Arizona and qualified to provide Design Engineering Services for the Kolb Road: Sabino Canyon Road to Sunrise Drive Project; and,

WHEREAS, CONSULTANT is qualified and willing to provide such services; and

WHEREAS, based on CONSULTANT'S representations in response to Pima County Solicitation No. 121916, CONSULTANT was determined to be the most qualified for this Project, and

WHEREAS, CONSULTANT has proposed to perform the work at a price acceptable to COUNTY.

NOW, THEREFORE, in consideration of the foregoing recitals and other valuable and good consideration the Parties agree as follows:

ARTICLE 1 – TERM AND EXTENSION/RENEWAL/CHANGES

This Contract as approved by the Board of Supervisors commences on August 2, 2016, and terminates on June 30, 2021, unless sooner terminated or further extended pursuant to the provisions of this Contract.

COUNTY has the option to extend the Contract termination date for project completion. Any modification or extension of the Contract termination date will be by formal written amendment executed by the Parties. The Procurement Director or the COUNTY Board of Supervisors, as required by the Pima County Procurement Code must approve change orders to the Contract or the Scope of Services before CONSULTANT performs the work authorized by the change order.

ARTICLE 2 – SCOPE OF SERVICES

CONSULTANT agrees to provide Design Engineering Services for the Kolb Road: Sabino Canyon Road to Sunrise Drive Project for the COUNTY as described in **EXHIBIT A: SCOPE OF WORK** (25 pages), attached to this Contract.

ARTICLE 3 – COMPENSATION AND PAYMENT

In consideration of the services specified in this Contract, COUNTY agrees to pay CONSULTANT Not to Exceed Two Million, Three Hundred Twenty-four Thousand, Three Hundred Fifty Dollars and Sixty-five Cents (\$2,324,350.65). CONSULTANT'S fees are as stated in **EXHIBIT B: CONSULTANT FEE PROPOSAL** (6 pages), attached to this Contract. Hourly rates and all other rates included under this Contract will remain fixed throughout the term of the Contract. COUNTY may consider adjustments to rates in connection with any extensions of the Contract term.

Unless otherwise agreed, CONSULTANT will submit invoices monthly. All invoices will be accompanied by a narrative description of the work performed during the period covered by the invoice, time accounting information, and an allocation of all direct costs, including reimbursable costs and SUBCONSULTANT charges, to the tasks identified in the Scope of Work for which those costs were incurred. The time accounting information should be sufficient to show the workers and hours worked by day for the period covered by the invoice. SUBCONSULTANT charges will be supported by appropriate documentation with each separate invoice submitted.

For the period of record retention required under Article 22, COUNTY reserves the right to question any payment made under this article and to require reimbursement therefor by setoff or otherwise for payments determined to be improper or contrary to the Contract or law.

CONSULTANT will not perform work in excess of the Contract Amount without prior authorization by an amendment executed by COUNTY. Work performed in excess of the Contract Amount without prior authorization by amendment is at CONSULTANT'S own risk.

ARTICLE 4 – INSURANCE

The Insurance Requirements herein are minimum requirements for this Contract and in no way limit the indemnity covenants contained in this Contract. COUNTY in no way warrants that the minimum limits contained herein are sufficient to protect the CONSULTANT from liabilities that arise out of the performance of the work under this Contract. The CONSULTANT is free to purchase additional insurance.

CONSULTANT'S insurance will be placed with companies licensed in the State of Arizona or hold approved non-admitted status on the Arizona Department of Insurance List of Qualified Unauthorized Insurers. Insurers will have an "A.M. Best" rating of not less than A- VII. COUNTY in no way warrants that the above-required minimum insurer rating is sufficient to protect the CONSULTANT from potential insurer insolvency.

4.1 Minimum Scope and Limits of Insurance:

CONSULTANT will procure and maintain, until all of their obligations have been discharged, coverage with limits of liability not less than those stated below.

- 4.1.1 Commercial General Liability (CGL) – Occurrence Form with limits of \$1,000,000 Each Occurrence and \$2,000,000 General Aggregate. Policy will include bodily injury, property damage, and broad form contractual liability coverage, and products – completed operations.
- 4.1.2 Business Automobile Liability – Bodily Injury and Property Damage for any owned, hired, and/or non-owned automobiles used in the performance of this Contract with a Combined Single Limit (CSL) of \$1,000,000.
- 4.1.3 Workers' Compensation and Employers' Liability - Statutory requirements and benefits. Coverage is compulsory for employers of one or more employees. Employer's Liability - \$500,000.

Note: The Workers' Compensation requirement will not apply to a CONSULTANT that is exempt under A.R.S. § 23-901, and when such CONSULTANT executes the appropriate COUNTY Sole Proprietor or Independent CONSULTANT waiver form.

- 4.1.4 Professional Liability (Errors and Omissions) Insurance – This insurance is required when soliciting work from licensed professionals. The policy limits will be not less than \$2,000,000 Each Claim and \$2,000,000 Annual Aggregate. The policy will cover professional misconduct or negligent acts for those positions defined in the Scope of Work of this contract.

In the event that the Professional Liability insurance required by this Contract is written on a claims-made basis, CONSULTANT warrants that any retroactive date under the policy will precede the effective date of this Contract and, either continuous coverage will be maintained, or an extended discovery period will be exercised, for a period of two (2) years beginning at the time work under this Contract is completed.

Examples of Professional Services requiring E&O insurance: Accounting, Architecture, Asbestos Design, Inspection or Abatement Contractors, Licensed Health Care Practitioners, Legal Services, Engineering Services, or Surveying

4.2 Additional Insurance Requirements:

The policies will include, or be endorsed to include, as required by this written agreement, the following provisions:

- 4.2.1 Additional Insured Endorsement: The General Liability and Business Automobile Liability Policies will each be endorsed to include COUNTY, its departments, districts, boards, commissions, officers, officials, agents, and employees as additional insured with respect to liability arising out of the activities performed by or on behalf of the CONSULTANT.

- 4.2.2 Subrogation Endorsement: The General Liability, Business Automobile Liability and Workers' Compensation Policies will each contain a waiver of subrogation endorsement in favor of COUNTY, and its departments, districts, boards, commissions, officers, officials, agents, and employees for losses arising from work performed by or on behalf of the CONSULTANT.

- 4.2.3 Primary Insurance Endorsement: The CONSULTANT'S policies will stipulate that the insurance afforded the CONSULTANT will be primary and that any insurance carried by the Department, its agents, officials, employees or COUNTY will be excess and not contributory insurance, as provided by A.R.S. § 41-621 (E).

- 4.2.4 Insurance provided by the CONSULTANT will not limit the CONSULTANT'S liability assumed under the indemnification provisions of this Contract.

4.3 Notice of Cancellation:

For each insurance policy required by the insurance provisions of this Contract, the CONSULTANT must provide to COUNTY, within two (2) business days of receipt, a notice if a policy is suspended, voided, or cancelled for any reason. Such notice will be mailed, emailed, hand-delivered or sent by facsimile transmission to Pima County Procurement, 130 W. Congress, Tucson, AZ 85701, Fax (520) 724-4434.

4.4 Verification of Coverage:

CONSULTANT will furnish COUNTY with certificates of insurance (valid ACORD form or equivalent approved by COUNTY) as required by this Contract. An authorized representative of the insurer will sign the certificates.

- 4.4.1 All certificates and endorsements, as required by this written agreement, are to be received and approved by COUNTY before work commences. Each insurance policy required by this Contract must be in effect at, or prior to, commencement of work under this Contract. Failure to maintain the insurance coverage or policies as required by this Contract, or to provide evidence of renewal, is a material breach of contract.

4.4.2 All certificates required by this Contract will be sent directly to the Department. COUNTY project or contract number and project description will be noted on the certificate of insurance. COUNTY reserves the right to require complete copies of all insurance policies required by this Contract at any time.

4.5 Approval and Modifications:

COUNTY Risk Management reserves the right to review or make modifications to the insurance limits, required coverage, or endorsements throughout the life of this Contract, as deemed necessary. Such action will not require a formal contract amendment but may be made by administrative action.

ARTICLE 5 – INDEMNIFICATION

To the fullest extent permitted by law, CONSULTANT indemnifies and holds harmless COUNTY, its officers, employees and agents from and against any and all suits, actions, legal administrative proceedings, claims or demands and costs attendant thereto, including reasonable attorney's fees and court costs, to the extent caused by any negligent, reckless or intentionally wrongful act or omission of CONSULTANT, its agents, employees or anyone acting under its direction or control or on its behalf in connection with performance of this Contract. The obligations under this Article do not extend to the negligence of COUNTY, its agents, employees or indemnities.

All warranty and indemnification obligations under this Contract survive expiration or termination of the Contract, unless expressly provided otherwise. Any indemnification provision inconsistent with A.R.S. § 34-226 is, in all cases, not void, but will be interpreted and applied as if it were consistent with A.R.S. § 34-226.

Upon request, CONSULTANT may fully indemnify and hold harmless any private property owner granting a right of entry to CONSULTANT for the purpose of completing the project.

ARTICLE 6 – COMPLIANCE WITH LAWS

CONSULTANT will comply with all applicable federal, state, and local laws, rules, regulations, standards and Executive Orders, without limitation to those designated within this Contract. The laws and regulations of the State of Arizona govern the rights of the Parties, the performance of this Contract, and any disputes hereunder. Any action relating to this Contract will be brought and maintained in Superior Court in Pima County. Any changes in the governing laws, rules, and regulations during the term of this Contract apply, but do not require an amendment.

ARTICLE 7 – STATUS OF CONSULTANT

The status of CONSULTANT is that of an independent contractor and CONSULTANT is not considered an employee of Pima County and is not entitled to receive any of the fringe benefits associated with regular employment, and will not be subject to the provisions of the merit system. CONSULTANT will be responsible for payment of all Federal, State and Local taxes associated with the compensation received by CONSULTANT from COUNTY. CONSULTANT will be responsible for program development and operation without supervision by COUNTY.

ARTICLE 8 – CONSULTANT'S PERFORMANCE

CONSULTANT will perform the work in accordance with the terms of the Contract and with the degree of care and skill required of any similarly situated Arizona registrant. CONSULTANT will employ suitably trained and skilled professional personnel to perform all required services under this Contract. Prior to changing any key personnel, especially those key personnel COUNTY relied upon in making this Contract, CONSULTANT will obtain the approval of COUNTY.

CONSULTANT is responsible for the professional quality, technical accuracy, timely completion, and the coordination of all its effort and other services furnished by CONSULTANT under this Agreement. Without additional compensation, CONSULTANT will correct or revise any errors, omissions, or other deficiencies in all products of its efforts and other services provided. This includes resolving any deficiencies arising out of the acts or omissions of CONSULTANT found during or after the course of the services performed by or for CONSULTANT under this Agreement, regardless of COUNTY having knowledge of or condoning or accepting the products or the services. Correction of such deficiencies will be at no cost to COUNTY.

ARTICLE 9 – NON-WAIVER

The failure of COUNTY to insist in any one or more instances upon full and complete compliance with any of the terms and provisions of this Contract or to take any action permitted as a result thereof is not a waiver or relinquishment of the right to insist upon full and complete performance of the same or any other covenant or condition either in the past or in the future. The acceptance by either Party of sums less than may be due and owing it at any time is not an accord and satisfaction.

ARTICLE 10 – SUBCONSULTANT

CONSULTANT will be fully responsible for all acts and omissions of its SUBCONSULTANT and of persons directly or indirectly employed by SUBCONSULTANT and of persons for whose acts any of them may be liable to the same extent that CONSULTANT is responsible for the acts and omissions of persons directly employed by it. Nothing in this Contract creates any obligation on the part of COUNTY to pay or see to the payment of any money due any SUBCONSULTANT, except as may be required by law.

ARTICLE 11 – NON-ASSIGNMENT

CONSULTANT will not assign its rights to this Contract in whole or in part, without prior written approval of COUNTY. COUNTY may withhold assignment at its sole discretion, provided that COUNTY will not unreasonably withhold such approval.

ARTICLE 12 – NON-DISCRIMINATION

CONSULTANT will comply with all provisions and requirements of Arizona Executive Order 2009-09 which is hereby incorporated into this Contract as if set forth in full herein **including flow down of all provisions and requirements to any SUBCONSULTANTS**. During the performance of this Contract, CONSULTANT will not discriminate against any employee, client or any other individual in any way because of that person's age, race, creed, color, religion, sex, disability or national origin.

ARTICLE 13 – AMERICANS WITH DISABILITIES ACT

CONSULTANT will comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, 42 U.S.C. 12101-12213) and all applicable federal regulations under the Act, including 28 CFR Parts 35 and 36. If CONSULTANT is carrying out government programs or services on behalf of COUNTY, then CONSULTANT will maintain accessibility to the program to the same extent and degree that would be required of COUNTY under 28 CFR Sections 35.130, 35.133, 35.149 through 35.151, 35.160, 35.161 and 35.163. Failure to do so could result in the termination of this Agreement.

ARTICLE 14 – CANCELLATION FOR CONFLICT OF INTEREST

This Contract is subject to the provisions of A.R.S. §38-511 which provides in pertinent part:

"The state, its political subdivisions or any department of either may, within three years after its execution, cancel any contract, without penalty or further obligation, made by the state, its political subdivisions, or any of the departments or agencies of either if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the state, its political subdivisions or any of the

departments or agencies of either is, at any time, while the contract or any extension of the contract is in effect, an employee or agent of any other party to the contract in any capacity or a consultant to any other party to the contract with respect to the subject matter of the contract."

ARTICLE 15 – TERMINATION OF CONTRACT FOR DEFAULT

- A. Upon a failure by CONSULTANT to cure a default under this Contract within ten (10) days of receipt of notice from COUNTY of the default, COUNTY may, in its sole discretion, terminate this Contract for default by written notice to CONSULTANT. In this event, COUNTY may take over the work and complete it by Contract or otherwise. CONSULTANT and its sureties, if any, will be liable for any damage to COUNTY resulting from CONSULTANT'S default, including any increased costs incurred by COUNTY in completing the work.
- B. The occurrence of any of the following constitutes an event of default:
1. Abandonment of or refusal or failure to prosecute the work or any separable part thereof with the diligence that will insure completion within the time specified in this Contract, including any extension, or a failure to complete the work (or the separable part of the work) within the specified time;
 2. Persistent or repeated refusal or failure to supply enough properly skilled workers or materials to perform the work on schedule;
 3. Failure to provide competent supervision at the site;
 4. Failure to take down, rebuild, repair, alter or amend any defective or deficient work, or to remove any defective or deficient Material
 5. Failure to make prompt payment to SUBCONSULTANTS or suppliers for material or labor;
 6. Loss of CONSULTANT'S business or other required license or authority, or any curtailment or cessation for any reason of business or business operations that would substantially impair or preclude CONSULTANT'S performance of this Contract;
 7. Disregard of laws, ordinances, or the instructions of COUNTY or its representatives, or any otherwise substantial violation of any provision of the Contract; or
 8. If a voluntary or involuntary action for bankruptcy is commenced with respect to CONSULTANT, or CONSULTANT becomes insolvent, makes a general assignment for the benefit of creditors, or has a receiver or liquidator appointed in respect of its assets.
- C. In the event of a termination for default:
1. All finished and unfinished as-builts, shop drawings, documents, data, studies, surveys, drawings, photographs, reports and other information in whatever form, including electronic, acquired or prepared by CONSULTANT for this project become COUNTY'S property and will be delivered to COUNTY not later than five (5) business days after the effective date of the termination;
 2. COUNTY may withhold payments to CONSULTANT arising under this or any other Contract for the purpose of set-off until such time as the exact amount of damage due COUNTY from CONSULTANT is determined; and
 3. Subject to the immediately preceding subparagraph (2), COUNTY'S liability to CONSULTANT will not exceed the reasonable value of work satisfactorily performed prior to the date of termination for which payment has not been previously made.
- D. The Contract will not be terminated for default nor CONSULTANT charged with damages under this Article, if—
1. Excepting item (8) in paragraph B above, the event of default or delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of CONSULTANT. Examples of such causes include—
 - (i) Acts of God or of the public enemy,
 - (ii) Acts of the COUNTY in either its sovereign or contractual capacity,
 - (iii) Acts of another consultant in the performance of a Contract with the COUNTY,
 - (iv) Fires,
 - (v) Floods,

- (vi) Epidemics,
 - (vii) Quarantine restrictions,
 - (viii) Strikes,
 - (ix) Freight embargoes,
 - (x) Unusually severe weather, or
 - (xi) Delays of SUBCONSULTANTS or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both CONSULTANT and the SUBCONSULTANTS or suppliers; and
2. CONSULTANT, within three (3) days from the beginning of any event of default or delay (unless extended by COUNTY), notifies COUNTY in writing of the cause(s) therefor. In this circumstance, COUNTY will ascertain the facts and the extent of the resulting delay. If, in the judgment of COUNTY, the findings warrant such action, the time for completing the work may be extended.
- E. For the purposes of paragraph A above, "receipt of notice" includes receipt by hand by CONSULTANT'S onsite project manager, facsimile transmission, or under the Notices clause of this Contract.
- F. If, after termination of the Contract for default, it is determined that the CONSULTANT was not in default, or that the delay was excusable, the rights and obligations of the Parties will be the same as if the termination had been issued for the convenience of the COUNTY.
- G. The rights and remedies of COUNTY in this Article are cumulative and in addition to any other rights and remedies provided by law or under this Contract.

ARTICLE 16 – TERMINATION FOR CONVENIENCE OF COUNTY

COUNTY may terminate this Contract at any time by giving written notice to CONSULTANT of such termination and specifying the effective date thereof, at least fifteen (15) days before the effective date of such termination. In that event, all finished or unfinished documents and other materials will, at the option of COUNTY, become its property. If COUNTY terminates the Contract as provided herein, COUNTY will pay CONSULTANT an amount based on the time and expenses incurred by CONSULTANT prior to the termination date. However, COUNTY will make no payment for anticipated profit on unperformed services.

ARTICLE 17 – NON-APPROPRIATION OF FUNDS

Notwithstanding any other provision in this Contract, COUNTY may terminate this Contract if for any reason the Pima County Board of Supervisors does not appropriate sufficient monies for the purpose of maintaining this Contract. In the event of such termination, COUNTY has no further obligation to CONSULTANT, other than payment for services rendered prior to termination.

ARTICLE 18 – NOTICES

Any notice required or permitted to be given under this Contract will be in writing and will be served by delivery or by certified mail upon the other Party as follows:

COUNTY:

Priscilla S. Cornelio, P.E., Director
Department of Transportation
201 N. Stone Avenue
Tucson, AZ 85701
Tel: (520) 724-6410
Fax: (520) 838-7347

CONSULTANT:

Alejandro Angel PhD, P.E, Vice President
PSOMAS, Inc.
333 E. Wetmore, Suite 450
Tucson, AZ 85705
Tel: (520) 292-2300
Fax: (520) 292-1290

ARTICLE 19 – OTHER DOCUMENTS

CONSULTANT and COUNTY in entering into this Contract have relied upon information provided in CONSULTANT'S response to a request for fee proposal. These documents are hereby incorporated into and made a part of this Contract as if set forth in full herein, to the extent not inconsistent with the provisions of this Contract. CONSULTANT will perform services in accordance with the terms of the Contract and at a level of care consistent with prevailing industry standards. In the event any provision of this Contract is inconsistent with those of any other document, the Contract provisions will prevail.

ARTICLE 20 – REMEDIES

Either Party may pursue any remedies provided by law for the breach of this Contract, provided, however, that the procedures in ARTICLE 24 are first exhausted. No right or remedy is intended to be exclusive of any other right or remedy and each is cumulative and in addition to any other right or remedy existing at law or at equity or by virtue of this Contract.

ARTICLE 21 – SEVERABILITY

Each provision of this Contract stands alone, and any provision of this Contract found to be prohibited by law is ineffective to the extent of such prohibition without invalidating the remainder of this Contract.

ARTICLE 22 – BOOKS AND RECORDS

CONSULTANT will keep and maintain proper and complete books, records and accounts, which will be open at all reasonable times for inspection and audit by duly authorized representatives of COUNTY.

CONSULTANT will retain all records relating to this Contract at least five (5) years after its termination or cancellation or until any related pending proceeding or litigation has been closed, if later. Alternatively, CONSULTANT may, at its option, deliver such records to COUNTY for retention.

ARTICLE 23 – DELAYS

Neither Party hereto is in default in the performance of its obligations hereunder to the extent that the performance of any such obligation is prevented or delayed by any cause, existing or future, which is beyond the reasonable control of such Party.

ARTICLE 24 – DISPUTES

In the event of a dispute between COUNTY and CONSULTANT regarding any part of this Contract or the Parties' obligations or performance hereunder, either Party may request a special meeting between their respective representatives to resolve the dispute. If the dispute remains unresolved, then either Party may request escalation of the issue to a meeting between the Director of the Pima County Department administering this Contract and CONSULTANT'S counterpart official, such meeting to be held within one week of the request, unless otherwise agreed. If the dispute is still not resolved after that meeting, then either Party may pursue such remedy or remedies as may be available to them under the laws of the State of Arizona.

The Parties will continue performance of their respective obligations under this Contract notwithstanding the existence of any dispute.

ARTICLE 25 – OWNERSHIP OF DOCUMENTS

All original drawings, field data, estimates, field notes, plans, specifications, documents, reports, calculations, and other information developed by CONSULTANT under this Contract vest in and become the property of COUNTY and will be delivered to COUNTY upon completion or termination of the

services, but CONSULTANT may retain and use copies thereof. COUNTY agrees that the material will not be used for any project other than the project for which it was designed without the express permission of CONSULTANT.

ARTICLE 26 – PUBLIC INFORMATION

Pursuant to A.R.S. § 39-121 et seq., and A.R.S. §§ 34-603(H), 604(H), in the case of construction or Architectural and Engineering services procured under A.R.S. Title 34, Chapter 6, all information submitted by CONSULTANT in any way related to this Contract, including, but not limited to, pricing, product specifications, work plans, and any supporting data becomes public information and upon request, is subject to release and/or review by the general public including competitors.

Any information submitted related to this Contract that CONSULTANT believes constitutes proprietary, trade secret or otherwise confidential information must be appropriately and prominently marked as CONFIDENTIAL prior to submittal to COUNTY and be accompanied by an index specifically identifying and describing the general contents of each page so marked. The index is a public record and should not include any information considered confidential.

Notwithstanding the above provisions, in the event records marked CONFIDENTIAL are requested for public release pursuant to A.R.S. § 39-121 et seq., COUNTY will release records marked CONFIDENTIAL ten (10) business days after the date of notice to CONSULTANT of the request for release, unless CONSULTANT has, within the ten (10) day period, secured a protective order, injunctive relief or other appropriate order from a court of competent jurisdiction, enjoining the release of the records. For the purposes of this paragraph, the day of the request for release is not counted in the time calculation. CONSULTANT will be notified of any request for such release on the same day of the request for public release or as soon thereafter as practicable.

COUNTY will not, under any circumstances, be responsible for securing a protective order or other relief enjoining the release of records marked CONFIDENTIAL, nor will COUNTY be in any way financially responsible for any costs associated with securing such an order.

ARTICLE 27 – LEGAL ARIZONA WORKERS ACT COMPLIANCE

CONSULTANT hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to CONSULTANT'S employment of its employees, and with the requirements of A.R.S. § 23-214 (A) (together the "State and Federal Immigration Laws"). CONSULTANT will further ensure that each SUBCONSULTANT who performs any work for CONSULTANT under this Contract likewise complies with the State and Federal Immigration Laws.

COUNTY has the right at any time to inspect the books and records of CONSULTANT and any SUBCONSULTANT in order to verify such party's compliance with the State and Federal Immigration Laws.

Any breach of CONSULTANT'S or any SUBCONSULTANT'S warranty of compliance with the State and Federal Immigration Laws, or of any other provision of this section, is a material breach of this Contract subjecting CONSULTANT to penalties up to and including suspension or termination of this Contract. If the breach is by a SUBCONSULTANT, and the subcontract is suspended or terminated as a result, CONSULTANT will take such steps as may be necessary to either self-perform the services that would have been provided under the subcontract or to retain a replacement SUBCONSULTANT (subject to COUNTY approval if SBE or DBE preferences apply), as soon as possible so as not to delay project completion.

CONSULTANT will advise each SUBCONSULTANT of COUNTY'S rights, and the SUBCONSULTANT'S obligations, under this Article by including a provision in each subcontract substantially in the following form:

"SUBCONSULTANT hereby warrants that it will at all times during the term of this Contract comply with all federal immigration laws applicable to SUBCONSULTANT'S employees, and with the requirements of A.R.S. § 23-214 (A). SUBCONSULTANT further agrees that COUNTY may inspect the SUBCONSULTANT'S books and records to insure that SUBCONSULTANT is in compliance with these requirements. Any breach of this paragraph by SUBCONSULTANT is a material breach of this Contract subjecting SUBCONSULTANT to penalties up to and including suspension or termination of this Contract."

Any additional costs attributable directly or indirectly to remedial action under this Article are the responsibility of CONSULTANT. In the event that remedial action under this Article results in delay to one or more tasks on the critical path of CONSULTANT'S approved construction or critical milestones schedule, such period of delay will be excusable delay for which CONSULTANT is entitled to an extension of time, but not costs.

ARTICLE 28 – ISRAEL BOYCOTT CERTIFICATION

CONTRACTOR hereby certifies that it is not currently engaged in, and will not for the duration of this Contract engage in, a boycott of Israel as defined by A.R.S. § 35-393.01. Violation of this certification by CONTRACTOR may result in action by the COUNTY up to and including termination of this Contract.

ARTICLE 29 – ENTIRE AGREEMENT

This document constitutes the entire agreement between the Parties pertaining to the subject matter hereof, and all prior or contemporaneous agreements and understandings, oral or written, are hereby superseded and merged herein. This Contract may be modified, amended, altered or extended only by a written Amendment signed by the Parties.

IN WITNESS WHEREOF, the Parties have affixed their signatures to this Contract on the dates written below.

APPROVED:

Chair, Board of Supervisors

Date

CONSULTANT:

Signature

Name and Title (Please Print)

Date

ATTEST:

Clerk of the Board

APPROVED AS TO FORM:

Deputy County Attorney

ANDREW FLAGG

Name (Please Print)

SCOPE OF WORK

Kolb Road: Sabino Canyon to Sunrise Drive Design Concept Report & Environmental Assessment and Mitigation Report & Plans, Specifications, and Estimate

Pima County Solicitation Number 212916

During the term of this Agreement, the engineering consultant, PSOMAS, (CONSULTANT) shall perform professional services for Pima County (County) in connection with the above referenced project. This scoping document shall be used to plan, conduct, and complete the CONSULTANT's work on the project.

I. BACKGROUND

The 1997 Bond program identified Kolb Road between Sabino Canyon and Sunrise Drive as a scenic, major route needing improvements. The initial project identified the need to widen the existing two lane roadway to a four lane divided roadway. Subsequent to that, further analysis occurred relative to the traffic volumes associated with Kolb Road and the surrounding area, and it was determined that a three lane roadway (middle two way left turn lane) would address the traffic needs of the area, with the 1997 Bond program narrative updated accordingly. This effort will develop a Design Concept Report (DCR) and associated Initial Design Phase Plans, an Environmental Assessment and Mitigation Report (EAMR), and associated Final Design Phase Plans, along with Initial and then Final Plans, Specifications and Estimate (PS&E) for Kolb Road between Sabino Canyon and Sunrise Drive.

II. PROJECT DESCRIPTION

This project consists of widening approximately 1.9 miles of Kolb Road from an existing two lane roadway to a three lane roadway between Sabino Canyon and Sunrise Drive in compliance with the 1997 Bond program. This effort is being pursued to improve safety and operations (with turning lanes to be provided where warranted), increase mobility, and address accessibility/operational issues. The roadway will contain multi-use lanes, drainage, landscaping, neighborhood screening and noise mitigation in accordance with the results of a traffic study. The median will be a two-way left turn lane. Other potential improvements to be considered and evaluated include provisions for pedestrians and other uses, along with landscaped shoulders. This effort will complete DOT-32.

The scope of work for this effort includes the CONSULTANT providing Engineering Design services according to the Pima County Roadway Design Manual and this contract for:

- Engineering, to include development of a DCR and PA and Initial Design Plans which will address issues such as alignment, channelization, drainage, right-of-way, major and minor structures, right-of-way needs, and cost estimates for Kolb Road between Sabino Canyon and Sunrise Drive.
- Development of an EAMR and CE document with Final Design Plans (as referenced in the Pima County Roadway Design Manual) for the project.
- Perform Detailed Design Phase services, which will include development of both Initial and Final Plans, Specifications & Estimate (PS&E) documents for construction (as referenced in the Pima County Roadway Design Manual) and Post-Design Construction phase services for the project.

III. DESIGN CRITERIA

The 2013 Pima County Roadway Design Manual, and relevant updates, shall be used to provide roadway and drainage design criteria. AASHTO, A Policy on Geometric Design of Highways and Streets, 2011 will be used for roadway design criteria that falls outside of Pima County RDM Standards.

V. PROJECT SCHEDULE

The project is estimated to be 54 months in duration. An estimated timeframe for completion of the corridor DCR, PA, EAMR and CE is 12 months. The Final Design effort is estimated to be 20 months to accommodate federal review and approval and occur subsequent to the approval of the EAMR and CE. Post design services are then estimated to occur over the final 22 months of the contract.

VI. ITEMS AND SERVICES TO BE FURNISHED BY THE COUNTY

The County will provide the items and services to the CONSULTANT per the Solicitation for Qualifications Number 212916 and as modified in this scope of work. County will also provide CONSULTANT with documents and data files received from previous reviews/studies of this corridor, which may or may not have been fully completed.

VII. ABBREVIATIONS

The following abbreviations may be referred to throughout this scope of work:

AASHTO	American Association of State Highway and Transportation Officials
ADEQ	Arizona Department of Environmental Quality
ADOT	Arizona Department of Transportation
ADT	Average Daily Traffic
AGFD	Arizona Game and Fish Department
ASM	Arizona State Museum
CE	Categorical Exclusion
Corps	U.S. Army Corps of Engineers
County	Pima County
DCR	Design Concept Report
EAMR	Environmental Assessment and Mitigation Report
EA	Environmental Assessment
EPG	Environmental Planning Group
ESR	Environmentally Sensitive Roadway
ESA	Endangered Species Act
ESAL	Equivalent Single Axle Load
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
GIS	Geographic Information System
LOS	Level of service
Manual	2013 Pima County Department of Transportation Roadway Design Manual
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
PA	Project Assessment
PAG	Pima Association of Governments
PCDOT	Pima County Department of Transportation
PCOCRHP	Pima County Office of Cultural Resources and Historic Preservation
PCRFC	Pima County Regional Flood Control District
PCRWRD	Pima County Regional Wastewater Reclamation Department
PLSS	Public Land Survey System
PS&E	Plans, specifications, and estimates
RDM	Roadway Design Manual
ROE	Right of Entry
SHPO	State Historic Preservation Office

SOQ	Pima County Solicitation Number 212916
R/W	Right-of-way
TDM	Transportation Demand Management
USFWS	U.S. Fish and Wildlife Service

VIII. PROJECT DOCUMENTATION

The documents listed as "**Deliverables**" in the Work Tasks, Section IX of this scope of work, and other exhibits or presentations for the work covered by this AGREEMENT and associated supplements, if necessary, will be furnished by the CONSULTANT to the County upon completion of the various tasks of work. Whether the documents are submitted in electronic media or in tangible format, any use of the materials on another project or on extensions of this project beyond the use for which they were intended, or any modification of the materials or conversion of the materials to an alternate system or format will be without liability or legal exposure to the CONSULTANT. The County will assume all risks associated with such use, modifications, or conversions. If the County uses materials other than how they were intended, then the CONSULTANT may remove from the electronic materials delivered to the County, all references to the CONSULTANT's involvement and will retain a tangible copy of the materials delivered to the County, which will govern the interpretation of the materials and the information recorded. Electronic files are considered working files only; the CONSULTANT is not required to maintain electronic files beyond 90 days after the project final billing and makes no warranty as to the viability of electronic files beyond 90 days from date of transmittal.

IX. WORK TASKS

General Assumptions:

- 1. The level of effort for each phase and work task is limited to the amount of labor and expenses identified in a Project Budget spreadsheet (Fee Calculation). Costs are itemized to aid in project tracking purposes only. The budget may be transferred between tasks, provided the total contracted amount is not exceeded. Additional services beyond these limits will be considered Extra Work.*
- 2. The PROJECT duration is anticipated to be 54 months for the Conceptual Design, Final Design and Post Design Services. The CONSULTANT is responsible for meeting deadlines for their and their sub-consultants' tasks only.*
- 3. The analyses, design, plans, specifications, and estimate performed or prepared as part of the PROJECT will be in English units. Metric units will not be used on this PROJECT.*
- 4. The plans will be prepared in accordance with Pima County design practices and standards as identified on the Pima County DOT website and current PAG standards/specifications.*
- 5. Design plans shall be developed using Microstation Version 8 (V8) and PCDOT CAD drafting standards. Final plan submittals shall be in electronic (V8) and hardcopy format.*
- 6. Survey file submittals (monumentation, horizontal and vertical control, right-of-way plans) shall be in AutoCad Civil 3D 2016 (or compatible version) format and Microstation Version 8 (V8).*
- 7. Originals of all project deliverables will be delivered to the County.*
- 8. Meeting summaries will be distributed electronically. Hard copies will not be provided.*
- 9. Unless specified within individual tasks, an original and 3 copies of each report will be submitted to the County.*

Kolb Road: Sabino Canyon to Sunrise Drive
Design Concept Report
&
Environmental Assessment and Mitigation Report
&
Plans, Specifications, Estimates

The following tasks are organized and numbered to coincide as closely as possible with Chapter 3, *Design Process*, identifies in the 2013 Pima County Roadway Design Manual.

TASK 3.2 QUALITY CONTROL PLAN AND PROJECT MANAGEMENT

Assumptions:

1. *Management resources are provided for a 54-month Design, Final Design and Post Design period.*
2. *Attendance by CONSULTANT at meetings will be limited to the Project Manager and an average of one Task Manager. Other team members will attend as required.*
3. *For estimating purposes, it is assumed that meetings described in Task 3.2.3 will have the following durations, including time for preparation, travel, prepare meeting summaries, revise meeting summaries with County corrections, and distribute the meeting summaries:*
 - *monthly progress meetings (2 hours);*
 - *pre-review overview meetings (2 hours);*
 - *major review comment meetings (4 hours);*
 - *minor review comment meetings (2 hours).*
4. *The CONSULTANT will be responsible for preparing graphics, handouts, and making arrangements for meetings and for preparing meeting summaries. Locations for CAC meetings will be arranged by the County.*
5. *CONSULTANT's hours for performing quality control shall be billed toward the specific tasks.*

Task 3.2.1. Quality Control Plan. Develop a project-specific quality control plan that identifies responsible personnel, technical review, checking procedures, and monitoring process. Submit within 15 days of notice to proceed. The process shall follow the tenets of the PCDOT Interactive Project Development Process. Each major submittal shall include verification of the quality control completed on said submittal.

Deliverables:

- Project-Specific Quality Control Plan.
- Verification of quality control shall be provided with each major submittal.
- Responses to all review comments.

Task 3.2.2. Project Management. Develop project design by coordinating design efforts. The anticipated management activities are as follows:

- a. Coordinate with all stakeholders through all means necessary, including but not limited to, phone, electronically, paper, face-to-face, etc.
- b. Ensure that project team members are communicating and cooperating on project tasks.
- c. Generate and regularly update a project contact list.
- d. Establish and keep updated correspondence files for all correspondence, including electronic, phone, paper, etc.

Deliverables:

- DCR and PA with Initial Design Phase Plans.
- EAMR and CE and Final Design Phase Plans.
- Initial PS&E.
- Final PS&E.
- Project Team Contact List.
- Correspondence files.
- Responses to all review comments.

Task 3.2.3. Meetings and Communication. This task involves coordinating meeting times, inviting meeting participants, preparing for meetings, creating an agenda, facilitating meetings, and providing a meeting summary for all meetings. The anticipated design team meetings and activities are as follows:

- a. Conduct monthly meeting with the project team (32 total).
- b. Conduct sub-consultant and in-house team meetings (as needed/required).
- c. Conduct pre-review overview meetings with County reviewers prior to major submittals to deliver and explain submittal.
- d. Conduct major review comment meetings to discuss review comments and responses with the County and the project team.
- e. Conduct minor review comment meetings to discuss review comments and responses with individual reviewers for comments identified as needing additional resolution.
- f. Conduct other meetings including but not limited to, design, review, update, internal, external, etc. (as needed/required).

Deliverables:

- Meeting agendas and displays.
- Meeting summaries as required.
- Responses to all review comments.

Task 3.2.4. Schedule. Create a schedule to prepare DCR and PA with Initial Design Phase, an EAMR and CE with Final Design Phase Plans, Initial PS&E, and Final PS&E submittals within 15 days of notice to proceed; update schedule monthly. Track and submit CONSULTANT costs monthly.

Deliverables:

- Schedule for DCR and PA, including Initial Design Phase Plans, EAMR and CE and Final Design Phase Plans, Initial PS&E, and Final PS&E.
- Monthly schedule updates.
- Monthly invoices for work performed.
- Monthly three month outlook budget projections.
- Responses to all review comments.

TASK 3.2.5. Cost Estimating. CONSULTANT to develop a Base Estimate that identifies the major components of project scope and their cost, defines all components of scope, and describes all scope and cost assumptions within 15 days of notice to proceed. CONSULTANT will update the Cost by reviewing, updating and documenting assumptions and costs for each item, and including contingency information in the report during major plan submittals.

Deliverables:

- Base Estimate - Incorporate risk analysis and contingency information into the estimate, identifying all assumptions.
- Estimates for Initial Design Phase thru Final PS&E submittals. Incorporate risk analysis and contingency information into the estimate. Identify all assumptions.

TASK 3.3 UTILITY COORDINATION

Assumptions:

1. The PCDOT Project Manager will attend the PCDOT monthly Utility Coordination meetings on an as-needed basis. The CONSULTANT is not required to attend these meetings.
2. Data collected will be consistent with the level of information needed to designate, locate, and map all utilities.
3. Resources are provided for up to 40 potholes under Additional Services. If additional potholes are needed, their number and location will be identified, and a Contract Modification will be prepared to cover this additional pothole work. Potholing shall not begin until the area has received cultural clearance and utility coordination.
4. PCDOT will provide utility base maps that have been provided to-date from: Pima County Regional Water Reclamation District, Tucson Electric Power, Southwest Gas, Century Link, and Comcast Cable. The CONSULTANT is required to obtain base maps from other utilities present. Additional research may be required by the CONSULTANT to verify and supplement the utility base maps.
5. Resources to gather data for utilities is being provided under Task 3.3.1., not Task 3.7.1.
6. Resources for surveying Blue Stake information are provided in Task 3.10.7.
7. Subsurface utility designations will be shown in the strip map derived in Task 3.10.8.
8. Sewer modification plans are not included in this work; however, Psomas will prepare sheets summarizing sewer manhole adjustments to match the proposed road grade. The cost of those sheets is included under task 3.20, Preparation of Construction Documents.
9. Tucson Water modification plans are included in Task 3.25
10. Joint Trench coordination efforts are considered Additional Services.
11. Consultant shall adhere to Pima County Ordinance 2008-72, Regulations for the Use of Public Right of Way.

Task 3.3.1. Data Gathering, Utility Designation, Letter of Acceptance. The CONSULTANT will verify that utility base maps and prior rights documentation are complete for each utility. For consistency, a utility coordinator will be designated to be the main point of contact for all utility coordination work. The CONSULTANT will provide and maintain a website for project and utility information and make it accessible to utilities, County, and project team members.

The CONSULTANT and County will establish a Utility Relocation Date whereby utilities will be required to clear the project of utility impacts identified in *Task 3.3.2 Design Coordination, Utility Impact Identification*. All formal utility correspondence is to be reviewed and approved by the County prior to distribution. The CONSULTANT will initiate and conduct meetings as needed with the five known utility franchises within the corridor (PCRWRD, TEP, SW Gas, CenturyLink, Comcast), and any other utilities present in the corridor. Meetings are assumed to be attended by two CONSULTANT team members and have a duration of 2 hours per meeting (2 hours per attendee) to prepare, attend, and provide minutes. Prior to the completion of *Task 3.10.7 Existing Conditions Surveys*, the CONSULTANT will request each utility to mark its facilities, providing the approximate horizontal position on the ground surface and provide electronic files of certified horizontal survey data associated with these ground surface markings and also their above grade facilities, including service connections, all of which being tied to an accepted County control and datum, being accurate to within six inches. CONSULTANT shall draft onto an Existing Utilities Mapping Package (40 scale) the horizontal data surveyed by PIMA COUNTY and as horizontally designated by CONSULTANT (if necessary) and provide the COUNTY with a Letter of Acceptance from each utility indicating that the representation of the utility's facilities on the Existing Utilities Mapping Package is accurate. All utilities will be designated, located, and mapped

according to ASCE Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02). The CONSULTANT will conduct a field review of utility information shown on the Existing Utilities Mapping Package for consistency with utility base maps and utility field survey data.

Task 3.3.2. Design Coordination, Utility Impact Identification. The CONSULTANT will monitor the project's design for utility impacts, distribute progress design drawings to utilities for review and identification of utility impacts; and maintain a List of Utility Impacts, said list being available to the County upon request. The CONSULTANT will update the County as necessary on the status of utility activities and notify the County immediately of any utility unable to meet the Utility Relocation Date. Initial and Final Design Phase Plans will be provided to all utilities for their review and comments. Resources are also being provided in this task for the Utility Coordinator to attend up to ten individual meetings (2 per franchise, 5 franchises, 2 hours per meeting) plus correspondences with all utilities.

Task 3.3.3. Utility Impact Mitigation. The CONSULTANT will initiate, coordinate and facilitate utility impact meetings with County, utility and appropriate team members to develop mitigation measures acceptable to the County that will clear the project of utility impacts by the Utility Relocation Date. The CONSULTANT will update utilities as to the status of all utility impacts by the Utility Relocation Date. The CONSULTANT will compile a List of Utility Impacts and Approved Mitigation Measures.

Task 3.3.4. Quality Control Review. The CONSULTANT will provide quality control reviews of the deliverables listed below.

Deliverables:

- Utility Relocation Date
- Plans for distribution to utilities
- Letters of Acceptance
- Meeting minutes prepared, distributed to project team, and revised as needed.
- Design plans containing updated mapping of utility information, including potholing information.
- List of utility impacts and mitigation measures.
- Responses to all review comments.

TASK 3.4 PUBLIC PARTICIPATION

Assumptions:

1. *Pima County will lead all public participation activities*
2. *Pima County will take the lead in organizing, staffing and preparing for all public meetings.*
3. *Pima County will initiate the formation of the CAC, including public notifications and member selection.*
4. *Pima County will facilitate the CAC meetings and distribute meeting agendas and summaries.*
5. *For estimating purposes, it is assumed the four CAC meetings will be attended by an average of 4 CONSULTANT task leaders including the project manager, and have an average duration including travel and preparation of 2 hours for a total of 4 hours per meeting for CONSULTANT staff. Sub-consultants will attend as required.*
6. *For estimating purposes, it is assumed that approximately 12 hours will be required (2 team members at 4 hours each) for CONSULTANT staff to prepare for and attend each of the two public meetings and one public hearing. PCDOT Staff will prepare for, attend, and produce meeting summaries of public meetings, but not other follow-up tasks.*
7. *Pima County will reproduce and distribute CAC meeting notices, public meeting notices, surveys, and newsletters, including the mailing lists, handling, and postage.*
8. *Pima County will place and pay for public notification advertisements and reproduce and mail surveys.*

9. Meals or refreshments will not be provided at CAC or public meetings.
10. PCDOT will coordinate meeting dates, times, locations, and set-up for all CAC and public meetings, including rental of all meeting facilities and providing insurance.
11. PCDOT will place ad announcements in the local newspapers.
12. PCDOT will develop, establish, and control a project web site and will post public notices and other information provided by the consultant.
13. PCDOT will distribute news releases to appropriate media.
14. PCDOT will distribute government official notifications.
15. PCDOT will be the primary contact for community inquiries and concerns.

Task 3.4.1. Public Participation Plan. Pima County will develop and implement the Public Participation Plan for the project. The CONSULTANT will provide as-needed services in support of the Plan.

Task 3.4.2. Community Advisory Committee Meetings. The CONSULTANT will attend approximately four CAC meetings.

Deliverables:

- Displays/Roll plots as needed.

Task 3.4.3. Public Meetings. The CONSULTANT will attend approximately two public open houses and one public hearing.

Deliverables:

- Displays/Roll plots as needed.

Task 3.4.5. Quality Control Review. The CONSULTANT will provide quality control reviews of all the deliverables listed in Task 3.4.

TASK 3.5 FEDERAL, STATE, AND LOCAL COORDINATION

Assumptions:

1. Federal funding will be used for this project.

Task 3.5.1. Coordinate Between Participating Agencies. The CONSULTANT will prepare an agency scoping list, prepare agency scoping letters inviting agencies to a scoping meeting, and facilitate an agency scoping meeting. The scoping letters will follow the ADOT Local Public Agency guidelines. Meeting arrangement logistics (room reservation, setup, etc.) will be made by Pima County. The CONSULTANT will prepare an agency scoping meeting summary report. If needed, the CONSULTANT will prepare up to five written scoping response letters.

The CONSULTANT will coordinate with ADOT and FHWA, including up to four coordination meetings. The CONSULTANT will coordinate and attend one Clean Water Act Section 404 meeting with Pima County and the U.S. Army Corps of Engineers. It is anticipated that the work will be completed under a non-notifying Nationwide Permit #14. The meeting is anticipated prior to submittal of the Preliminary Jurisdictional Delineation. If a submittal of a Nationwide Permit #14 application is required, the effort will be identified as Additional Services. The CONSULTANT will identify and coordinate with other agencies, such as Arizona State Land Department, etc., as identified necessary.

The CONSULTANT will maintain an agency coordination log documenting coordination efforts.

Deliverables:

- Agency scoping list, draft and final scoping letters, a scoping meeting summary report, draft and final scoping response letter.
- Display materials as needed.
- Meeting Agenda, meeting minutes, and distributed to project team, and revised as needed.
- Record of communication that documents all coordination efforts.
- Responses to all review comments.

TASK 3.6 PUBLIC ART

Assumptions:

1. *The artist selection panel will be organized by TPAC and Pima County.*
2. *Pima County Administrative Procedure 3-16 requires one person who is the project or design principal to be part of the public art selection jury. This will be Pima County Project Manager.*
3. *The proposed artwork is unknown; therefore, the coordination effort assumes that one foundation for standalone artwork will be required and power for lighting. Should the coordination effort require additional work, the work will be identified as Additional Services.*

Task 3.6.1. Coordination with Artist. The CONSULTANT will include the project artist on the design team and will coordinate the work of the artist with the overall design of the project. The CONSULTANT will incorporate artist concepts into the design plans, DCR, and EAMR.

Task 3.6.2. Quality Control Review. The CONSULTANT will provide quality control reviews of the deliverables listed below.

Deliverables:

- Project Plans, DCR, and EAMR will incorporate the artist's concepts.
- Responses to all review comments.

TASK 3.7 DATA GATHERING

Assumptions:

1. *Utility data to be gathered under Task 3.3.1.*

Task 3.7.1. Gather Existing Information. The CONSULTANT will obtain and review assessor maps, zoning maps, plats, reports, and other publicly available data described in Section 3.7 of the Design Manual for use in developing design plans.

Task 3.7.2. Site Visits During Project Design. The CONSULTANT will visit the site as required to obtain necessary design information.

Task 3.7.3. Quality Control Review. The CONSULTANT will provide quality control reviews of the deliverables listed below.

Deliverables:

- Data incorporated into the DCR and PA, Initial Design Plans and EAMR and CE with Final Design Plans, and the Initial and Final PS&E plans, along with all other reports and plans.
- Responses to all review comments.

TASK 3.8 ENVIRONMENTAL IMPACT SCREENING

Project design should follow the ESR guidelines listed in the Pima County RDM. The project is identified as an ESR because Kolb is a Major Scenic Route and the project borders some Important Riparian Areas. Generally, modification of Important Riparian Areas requires preservation of 95 percent as natural undisturbed open space, and mitigation is required for modification of up to five percent of the areas. Mitigation varies depending on the type of riparian habitat and may be as much as re-vegetating at a 1.5:1.0 ratio of acres of mitigation land to modified land with 90 trees per acre, 200 shrubs per acre, hydro-seeding with native species, installing irrigation, and providing maintenance. Project coordination and design must follow the ESR guidelines detailed in the Pima County RDM. In addition, Class I and III surveys for cultural resources (See Task 3.18.1) are recommended to identify any important archaeological sites and historic properties.

Assumptions:

1. *Pima County Department of Environmental Quality will serve as a resource to the CONSULTANT, as well as reviewing draft documents.*
2. *Pima County's Environmentally Sensitive Roadway Design guidelines apply to this project.*

Task 3.8.1. Environmental Coordination Meeting. The CONSULTANT will conduct field visits of the project area and arrange a meeting with the project design team to discuss issues that would assist in completing the Questionnaire for Areas of Impact and to review the Summary Impact Matrix. The CONSULTANT will coordinate with Game and Fish regarding potential wildlife corridors.

Task 3.8.2. Questionnaire for Establishing Potential Areas of Impact. The CONSULTANT will complete the questionnaire using field visits, correspondence, other reports, specialists, and other information. All sources will be cited.

Task 3.8.3. Summary Impact Matrix. The CONSULTANT will complete the matrix. The CONSULTANT will use the matrix to establish potential adverse environmental impacts. The Summary Impact Matrix will incorporate the results of the Cultural Resources review effort (by others), Jurisdictional Delineation conducted as part of Task 3.18.4, and Hazardous Materials Investigation conducted as part of Task 3.18.5. Additional data collection for zoning, planned developments, potential annexation and planned developments and relevant planning documents collected as part of Task 3.7.1 will be incorporated as necessary to consider potential design modifications.

Task 3.8.4. Environmental Results Memorandum. The CONSULTANT will prepare a memo to summarize the screening process, discuss issues noted, recommend courses of action, and identify issues that exceed original scope of work. The CONSULTANT will review and discuss the results of the screening with the entire design team.

Task 3.8.5. Team Review. The CONSULTANT will plan, prepare for, and attend a project team meeting to review and discuss environmental concerns.

Task 3.8.6. Project Modifications/Alternatives. The CONSULTANT will document project changes and their anticipated environmental effects.

Task 3.8.7. Quality Control Review. The CONSULTANT will provide quality control reviews of the deliverables listed below.

Deliverables:

- Meeting minutes, prepared, distributed to project team, and revised as needed.
- Completed Questionnaire for Establishing Potential Areas of Impact.
- Completed Summary Impact Matrix.
- Completed Environmental Results Memorandum.

- Memorandum detailing project changes and anticipated environmental effects.
- Responses to all review comments.

TASK 3.9 LOCATION REPORT

Assumption:

1. A Location Report is not required for this project.

TASK 3.10 SURVEY AND MAPPING

Assumptions:

1. The CONSULTANT will provide Mobile Terrestrial Laser Scan data on the roadway to enhance vertical accuracy and to aid the design in determining pay quantities in accordance with the Standard Specifications for earthwork, e.g. – roadway excavation, drainage excavation, embankment demand and borrow. This task will require the CONSULTANT checking assumptions 2 and 3 below.
2. PIMA COUNTY SURVEY will perform a Geodetic Control Survey based upon the Arizona State Plane Coordinate System of 1983 (NAD 83) and the North American Vertical Datum of 1988 (NAVD 88) by using N.G.S. control points and tying into PC/COT G.I.S. control.
3. PIMA COUNTY SURVEY will provide Vertical and Horizontal control.
4. PIMA COUNTY SURVEY will provide right-of-way, utility base mapping, and supplemental surveys along with the appropriate document research to support these surveys.
5. The CONSULTANT will coordinate utility location activities with utilities. CONSULTANT shall coordinate with County appointed representative coordinating blue stake locating activity.
6. The CONSULTANT will coordinate its survey activities with PIMA COUNTY SURVEY. Field surveys will be conducted in conformance with established Arizona Boundary Survey Minimum Standards and Pima County RDM.
7. PIMA COUNTY SURVEY will perform additional survey research to identify any benchmarks from previous improvement projects with descriptions and elevations, copies of any section corner recovery records along the right-of-way that tie the project to the Public Land and Survey System (PLSS) corners.
8. The CONSULTANT will prepare Right-of-Way plans for the project. The Right-of-Way plans will depict the existing and proposed Right-of-Way Lines from Sabino Canyon to Sunrise Drive. Pima County will provide approximately 80 parcel title reports to be used for the parcel, easement and prior rights documentation.
9. Existing right-of-way will be documented in the form of a CAD reference file. This information will be used for the DCR phase of the project.
10. PIMA COUNTY SURVEY will identify and locate Pima County Department of Transportation (PCDOT) GPS stations for use in controlling the surveys for this project.
11. PIMA COUNTY SURVEY will stake approximately 31 boring hole locations as provided by others (geotechnical investigation) and provide existing ground elevations at said locations.
12. PIMA COUNTY SURVEY has the ability to save down AutoCAD files to version 2013.

Task 3.10.1. Initial Planning and Reconnaissance. The CONSULTANT will hold a formal coordination meeting with PIMA COUNTY SURVEY prior to the start of any survey efforts to identify/discuss survey mapping project requirements and procedures and how the survey efforts will be coordinated with the CONSULTANT design team.

Task 3.10.2. Horizontal Control. PIMA COUNTY SURVEY will perform a Geodetic Control Survey based on NAD 83 and NAVD 88 datums by using N.G.S. control points and tying to PC/COT GIS control points. PIMA COUNTY will also field reference control points, and other found monuments, within the existing right-of-way, outside of the construction area.

Task 3.10.3. Vertical Control Traverse. PIMA COUNTY SURVEY will establish a bench circuit originating from PC/COT GIS vertical control points to prescribed field accuracy. The work will include mathematically adjusting the remaining error. The work also includes setting construction benchmarks at 500' intervals outside of the proposed construction areas and on alternating sides of the roadway. CONSULTANT will field verify all vertical control points set from the PC/COT GIS points.

Task 3.10.4. Results of Survey Drawing. PIMA COUNTY SURVEY will prepare a Results of Survey Drawing showing existing section lines, right-of-way, ownership, and existing features from Sabino Canyon to Sunrise Drive. Approximate property lines will be included on the Results of Survey by PIMA COUNTY. If necessary, for easement or R/W acquisitions, the CONSULTANT will perform parcel survey(s) limited to the budget included in the Fee Calculation.

Task 3.10.5. Survey Report. A Survey Report is not required for this project due to PIMA COUNTY performing project survey.

Task 3.10.6. Topographic Mapping. The CONSULTANT will utilize Mobile Terrestrial Laser Scan data to map the existing pavement, shoulder and driveway areas, supplemented with existing PAG 2015 LiDAR mapping for areas outside the R/W. Deliverables will include a digital terrain model and planimetric mapping in Microstation V8 and AutoCAD 2013 or newer version, and 2015 PAG orthophotos in .jpg or .tif format. The project corridor will cover 150 feet on each side of the existing Kolb Road and Snyder Road centerlines, and approximately 1,000 feet along Snyder Road (starting 400 ft west of Kolb Road). Ground control will be provided by PIMA COUNTY SURVEY and will be field checked by the CONSULTANT prior to processing and geo-referencing the point cloud data. Additional field work may be required to collect features and elevations of objects not included in the scan due to obstructions or occlusion.

Task 3.10.7. Utility Surveys. PIMA COUNTY SURVEY will locate underground utilities as identified and marked by others from Sabino Canyon to Sunrise Drive. Blue Staking and other utility features will be located during the culture survey.

Task 3.10.8. Culture Surveys. PIMA COUNTY SURVEY will locate fences, mail boxes, culvert and manhole inverts, drainage features and flows, and match-in locations along the project length from Sabino Canyon to Sunrise Drive. The work will also include the CONSULTANT downloading and converting field results into Microstation V8 CAD format.

Task 3.10.9. Right-of-way of Surveys. After analyzing the initial field survey, PIMA COUNTY SURVEY will field locate all relevant survey monuments to determine the existing right-of-way including street monuments, property corners and occupation and coordinate with the CONSULTANT in defining the existing right-of-way from Sabino Canyon to Sunrise Drive. The CONSULTANT will download and analyze the results and prepare Right-of-Way plans with the title report information as part of this task.

Task 3.10.10. Roadway Design Manual Survey Efforts. PIMA COUNTY SURVEY will complete other survey related tasks as identified by the Pima County Project Manager and provided within the Design Manual.

Task 3.10.12. Legal Descriptions & Reference Maps. The CONSULTANT will prepare legal descriptions and maps for new right-of-way, drainage easements, temporary construction easements, and other land acquisition needs as requested by Pima County. Legal description reference maps will be 8.5"x11". The CONSULTANT shall include effort for the preparation of 50 legal descriptions and associated reference maps and the probable need for determining parcel property lines.

Task 3.10.13. Quality Control Review. PIMA COUNTY SURVEY and the CONSULTANT will provide quality control reviews of the Survey and Mapping deliverables listed below.

Deliverables:

- Digital black & white files (uncolored digital photo) to the County in .tif format and digital ASCII points files in comma delimited format.
- Results of survey drawings by PIMA COUNTY of existing right of way conditions.
- Results of right of way survey will be provided in accordance with the Pima County RDM in strip map format showing right-of-way data (including existing and proposed right-of-way lines, parcel lot lines, parcel numbers, locations of buildings close to or within right-of-way takes, etc.) with the preliminary Right-of-Way Plan submittal. Potential acquisition and easements will be identified on the drawing.
- Responses to all review comments.

TASK 3.11 DRAINAGE REPORT

Assumptions:

1. *The PIMA COUNTY SURVEY will field survey drainage features under Task 3.10.8.*
2. *The CONSULTANT shall coordinate its activities with the PCRFC*

Task 3.11.1. Review Existing Plans and Reports. The CONSULTANT will review available plans and reports for existing subdivisions and improvements along the project alignment and identify drainage features and flows potentially impacted by the project.

Task 3.11.2. Peak Discharge Determination. The CONSULTANT will prepare a drainage map showing watercourses and associated drainage areas for drainage crossing the roadway. The work will include determining basin areas and other hydrologic properties for offsite drainages impacting the project. The work will also include determining the 100-year peak discharges and precipitation-induced hydrographs at key points within the watershed using PCFCD methodology.

Task 3.11.3. Existing Hydraulic Conditions. The CONSULTANT will use HEC-RAS and other appropriate flow modeling software (e.g. - Flo-2D) to evaluate existing drainage conditions where needed for channels, culverts, or other flooding. The CONSULTANT will use these models to determine impacts of proposed improvements on existing flooding conditions.

Task 3.11.4. Drainage Reports. The CONSULTANT will prepare a report in the phases described in Section 3.11 of the Design Manual. The work includes preparing and processing the three submittals described below:

Initial Design Phase Submittal. The CONSULTANT will prepare the Initial Design Phase Submittal per Section 3.11 of the Design Manual. A full hydraulic analysis, including evaluation of overtopping of roadway and upstream and downstream impacts, will be included. The CONSULTANT will identify potential Clean Water Act 404 permitting and right-of-way acquisition needs for cross-drainage.

Final Design Phase Submittal. The CONSULTANT will prepare the Final Design Phase Submittal per Section 3.11 of the Design Manual.

Final PS&E Phase Submittal. The CONSULTANT will prepare the Final PS&E Phase Submittal for the project in response to Pima County's Final Design Phase Submittal comments as well as revisions to the final project design per Section 3.11 of the Design Manual.

Task 3.11.5. FEMA Requirements. The CONSULTANT will make final determination of impacts to FEMA floodplain, determine impacts associated with Conditional Letter of Map Revision (CLOMR) and Letter of Map Revision (LOMR) and complete efforts to obtain updates as required.

Task 3.11.6. Quality Control Review. The CONSULTANT will provide quality control reviews of the drainage report for each submittal.

Deliverables:

- Initial Design Phase Drainage Report per Section 3.11 of the Design Manual.
- Final Design Phase Drainage Report per Section 3.11 of the Design Manual.
- Final PS&E Phase Drainage Report per Section 3.11 of the Design Manual.
- CLOMR/LOMR Determination and Updates.
- Responses to all review comments.

TASK 3.12 GEOTECHNICAL INVESTIGATION

Assumptions:

1. *The limits for the investigation associated with pavement structure analysis are from Sabino Canyon to Sunrise Drive.*
2. *The limits for the investigation associated with other project structures (e.g. – drainage, walls) are from Sabino Canyon to Sunrise Drive.*

Task 3.12.1. Geotechnical Testing and Analysis and Report. The CONSULTANT will provide geotechnical testing, analysis, and report per Section 3.12 of the Design Manual and the Preliminary Engineering & Design (PE&D) manual of the ADOT Material Group. The report will also include retaining wall selection. The geotechnical effort will correspond to 100% of the final design effort and will include investigations to develop concepts and final designs.

The scope of fieldwork is estimated to include approximately 31 soil borings. Approximately 5 of these borings will be in culvert areas and will be drilled up to 15 feet deep. Approximately 18 will be located in pavement widening areas and will typically be to depths of 5 feet; however, some may be as deep as 10 to 15 feet in proposed cut areas. The remaining 9 soil borings will be locations identified as possible cut and fill walls and will be 40 to 50 feet deep. Soil samples from some of the culvert locations may also be used for the pavement improvements. Consultant will obtain up to 20 shallow depth grab samples for use in resistivity and PH testing in the case metal pipes are used on the project due to Value Engineering.

The CONSULTANT will provide appropriate laboratory testing for representative soil samples. Recommendations will be developed based on applicable PCDOT, Maricopa (MCDOT), and ADOT standards. The results of all investigations, as well as recommendations will be provided in one consolidated geotechnical report.

Note: Prior to performing any fieldwork, Consultant will obtain right-of-way permits from Pima County, contact Arizona Bluestake for underground utility location(s), and provide traffic control according to the permit while working.

Task 3.12.2. Quality Control Review. The CONSULTANT will provide a quality control review on the Geotechnical Report.

Deliverables:

- Geotechnical report per Section 3.12 of the Design Manual.
- Responses to all review comments.

TASK 3.13 PAVEMENT DESIGN REPORT

Assumptions:

1. *The limits for the Pavement Design Report are from Sabino Canyon to Sunrise Drive.*

2. *ESAL calculations will be provided by the CONSULTANT to assist with the pavement design.*

Task 3.13.1. Pavement Design Report. The CONSULTANT will perform pavement design following the updated PCDOT methodology. The CONSULTANT will prepare the Pavement Design Report per Section 3.13 of the Design Manual and include the following:

- A summary of the general geotechnical characteristics of the soil;
- Traffic data considerations being used for the development of the pavement structure;
- Discussion concerning the procedures and results of the pavement structure design;
- Recommended structural sections, including alternatives, with criteria such as cost, construction and other factors considered;

Task 3.13.2. Quality Control Review. The CONSULTANT will provide a quality control review on the Pavement Design Report.

Deliverables:

- Pavement Design Report per Section 3.13 of the Design Manual.
- Responses to all review comments.

TASK 3.15 TRAFFIC ENGINEERING REPORT

Assumptions:

1. *CONSULTANT staff will perform all necessary analyses as required by the PCDOT RDM and prepare the initial and final sealed traffic engineering report.*
2. *The limits for the Traffic Report are from Sabino Canyon to Sunrise Drive.*
3. *Traffic counts and crash information for the corridor will be provided by the County.*
 - a. *Peak hour turning movement counts will be provided at the Kolb Road intersections with Sunrise Drive, Sabino Canyon Road, Snyder Road and Territory Drive.*
 - b. *ADTs with classification will be provided for the following:*
 - i. *Kolb Road, north and south of Snyder Road*
 - ii. *Snyder Road, east and west of Kolb Road.*
 - iii. *Territory Drive*
4. *PAG will be the source of design year (2040 interpolated from the 2045 model) traffic volumes for the future scenarios for the project.*
5. *CONSULTANT will participate in monthly progress meetings, over-the-shoulder review meetings, comment review meetings, CAC meetings, public open houses and other coordination meetings as necessary.*
6. *CONSULTANT staff will prepare exhibits for traffic engineering report and will prepare exhibits/displays required for CAC meetings and public open houses.*
7. *CONSULTANT to provide ten copies of the Traffic Engineering Report at each submittal.*
8. *In addition to the operational analysis, CONSULTANT will prepare a traffic safety evaluation for inclusion in the Traffic Engineering Report. The evaluation will include:*
 - a. *Assessment of current safety conditions and comparison to similar facilities (if available from PAG)*
 - b. *Predictive analysis - CONSULTANT will use the predictive method from the Highway Safety Manual (HSM) to estimate crash frequency and the change associated with the proposed improvements.*
 - c. *Benefit analysis – CONSULTANT will quantify the safety benefits of the improvements in terms of crash reduction and associated cost savings.*

Task 3.15.1. Initial Traffic Engineering Report. The CONSULTANT will complete an Initial Traffic Engineering Report for the project in accordance with the RDM.

Task 3.15.2. Final Traffic Engineering Report. The CONSULTANT will complete a Final Traffic Engineering Report for the project in accordance with the RDM.

Task 3.15.3. Meetings. CONSULTANT's Traffic Engineering Report Task Leader will attend project meetings, PCDOT Traffic meetings, CAC meetings, and public meetings as needed.

Task 3.15.4. Quality Control Review. The CONSULTANT will provide quality control review of the Traffic Engineering Report.

Deliverables:

- Initial Traffic Report
- Final Traffic Report
- Display materials as needed.
- Meeting minutes, distributed to project team, and revised as needed.
- Responses to all review comments.

TASK 3.16 ARTERIAL STREET LIGHTING DESIGN REPORT

Assumptions:

1. None

Task 3.16.1. Draft Lighting Design Report. The CONSULTANT will prepare a Draft and Final Street Lighting Report in accordance with the Pima County Roadway Design Guideline for the following locations:

- Kolb Road and Snyder Road intersections
- Kolb Road from Sunrise Drive to Territory Drive near the commercial center
- Sabino Canyon Road at the Rural Metro Fire Station

The CONSULTANT will perform the analysis as follows:

1. Assess adequacy of existing lighting.
2. Develop up to three alternatives for future conditions (maintain existing lighting, new HPS luminaires, LED luminaires).

Task 3.16.2. Quality Control Review. The CONSULTANT will provide quality control review of the Street Lighting Report.

Deliverables:

- Lighting Design Report per Section 3.16 of the Design Manual.
- Meeting minutes, distributed to project team, and revised as needed.
- Display materials as needed.
- Responses to all review comments.

TASK 3.17 DESIGN CONCEPT REPORT

Assumptions:

1. The limits for the Design Concept Report (DCR) and Project Assessment (PA) are from Sabino Canyon to Sunrise Drive.
2. Assumes no major opposition to the project and a 12 month project schedule for this component of the project effort.
3. Thirty copies of the draft DCR and thirty copies of the final DCR will be provided. The PA will be provided in PDF format.
4. This project is identified as an ESR and is subject to the additional requirements found in Section 4.0 of the RDM.

Task 3.17.1. Executive Summary/Project Overview and Description. The CONSULTANT will prepare the executive summary and project overview and description for the Design Concept Report.

Task 3.17.2. Project Area Characteristics (Existing Conditions). The CONSULTANT will prepare the description of existing conditions, including traffic and crash data for the DCR. The COUNSULTANT will include descriptions of conditions that could result in design modifications within the project study area for the following topics:

- Topography and terrain
- Roadway
- Rights-of-Way
- Drainage
- Utilities, Signals and Lighting
- Biology
- Archaeological and Historical Resources
- Visual and Aesthetic Resources
- Existing and Future Land Use
- Intergovernmental Agreements
- Traffic and Accident Data

Task 3.17.3. Design Standards, Criteria and Features/Alternatives. The CONSULTANT will prepare the description of design standards and criteria and description of major design features and alternatives considered for the DCR.

Task 3.17.4. Social, Economic, and Environmental Considerations/Public Involvement Efforts & Agency Coordination. The CONSULTANT will prepare the description of social, economic, and environmental considerations, summarize public involvement efforts, and describe agency coordination for the DCR. This description will be consistent with the information necessary to evaluate design alternatives for an Environmentally Sensitive Roadway.

Task 3.17.5. Design Concept Report with Conclusions and Recommendations. The CONSULTANT will compile information developed from this effort and from other studies and reports into a Design Concept Report. Additionally, the CONSULTANT will prepare the conclusions and recommendations. The CONSULTANT will identify, develop, evaluate, and describe roadway design and as and if applicable: project constraint avoidance alternatives; construction phasing concepts; and implementation strategy.

Task 3.17.6. Cost Estimate. The CONSULTANT will prepare preliminary project cost estimate, with quantity take-off calculations based on approximate quantities of major cost items. Right-of-way costs will be provided by PCDOT.

Task 3.17.7. Project Assessment. The CONSULTANT will prepare a Project Assessment in accordance with ADOT Project Assessment Guidelines. The Project Assessment will include the following sections:

- Cover Sheet
- Introduction
- Background Data
- Project Scope
- Development Considerations
- Other Requirements
- Estimated Costs
- Required Action
- Service Involvement Sheet
- Itemized Cost Estimate
- Vicinity Map

Task 3.17.8. Quality Control Review of DCR and PA. The CONSULTANT will provide a quality control review of the Design Concept Report.

Deliverables:

- Draft and Final Design Concept Report per Section 3.17 of the Design Manual.
- Cost estimates and quantity take-off calculations.
- Responses to all review comments.

TASK 3.18 ENVIRONMENTAL ASSESSMENT AND MITIGATION REPORT

Assumptions:

1. *The limits for the EAMR are from Sabino Canyon to Sunrise Driveway,*
2. *Assumes no major opposition to the project and a 12 month project schedule for this component of the project effort.*
3. *Section 106 Consultations will be the responsibility of Pima County. The CONSULTANT will assist with the consultation performed by the County*
4. *Pima County's Environmentally Sensitive Roadway Design guidelines apply to this project.*
5. *Nationwide Section 404 Permit will be appropriate and anticipate a Pre-Construction Notice Application will be required.*
6. *No Phase II investigations are included.*
7. *Cultural Resources survey work efforts will be conducted by the CONSULTANT and coordinated with PCOCRHP, with the results of these surveys summarized in the EAMR.*
8. *Community Advisory Committee (CAC) will provide letter of review for the EAMR prior to the submittal of the EAMR to the Pima County Board of Supervisors.*
9. *Thirty copies of the draft EAMR and thirty copies of the final EAMR will be provided.*

Task 3.18.1. Cultural Resources Assessment and Report. The CONSULTANT shall assure that the Cultural Resources Assessment and Report efforts are completed by individual(s) or sub-consultant(s) that are permitted and authorized by ASM/SHPO.

The CONSULTANT will conduct a cultural resources assessment using a phased approach which will include an initial Class I data gathering effort for archaeological and historic architectural resources followed by a Class III cultural resources survey. The initial data gathering effort will begin with a field visit to the project area. The purpose of the initial field reconnaissance will be to visually assess the character of the project area, gain a general sense of its environmental and cultural contexts, and look for any overt "red flag" issues.

The Class I review will pull data together from a variety of sources. The CONSULTANT will review records of past projects and sites available through the AZSITE online data base, the State Historic Preservation Office, the Pima County Department of Transportation, and the Arizona Department of Transportation. In addition, historic GLO maps and aerial photographs will be reviewed for historical period uses of the project area. The records review will cover the APE plus a half-mile buffer consistent with SHPO guidelines for linear projects.

In addition, the CONSULTANT will conduct an initial screening for historic architectural resources along the project corridor. The initial screening will be based primarily on a review of tax records available through the Pima County Assessor's website and observations made during the initial field visit. The results of the Class I review will be used to guide the Class III survey. Based on a cursory review of aerial photos as part of the preparation of this scope of work, it appears that residential development in the area did not begin until the late 1960s or 1970s; therefore, it is not anticipated that an assessment of historic architectural resources will be required for the project.

The Class III survey will include a full-coverage pedestrian survey of the APE for direct impacts. The results will be provided in a report that meets Pima County, FHWA/ADOT, SHPO, ASM standards and the Secretary of the Interior's Standards and Guidelines for archaeology and historic preservation. The report will include the findings from the Class I review, the results of the Class III survey, and National Register eligibility and management recommendations for the documented resources. Finally, the CONSULTANT will assist FHWA/ADOT with consultations by drafting consultation letters as needed throughout the Section 106 process.

Task 3.18.2. Biological Evaluation/Wildlife Habitat. The CONSULTANT will prepare a biological evaluation using the ADOT format. The CONSULTANT shall conduct a Pima Pineapple Cactus (PPC) survey. Technical assistance from the USFWS shall be included for all federal threatened or endangered species. The CONSULTANT shall include a summary of the Biological Evaluation in the EAMR and include the report in the Appendix. The CONSULTANT shall provide five copies of the Draft Biological Evaluation for Pima County's review and comments. Upon approval of the Draft report, five copies of the Final Report shall be forwarded to Pima County for their records.

Task 3.18.3. Vegetation Sampling/Measurement. After wash disturbances are identified, the CONSULTANT will conduct an inventory of vegetation and protected plant species using methods described in Chapter 4 of the RDM for an ESR and as modified by the July 2015 update to Appendix 4D of the Environmentally Sensitive Roadway Design Guidelines. The CONSULTANT will develop a technical report detailing the methodology and outcome of said investigation, along with the appropriate mitigation requirements. The CONSULTANT shall include a summary of this effort and results in the EAMR.

Task 3.18.4. Clean Water Act Permitting. The CONSULTANT will prepare a preliminary Jurisdictional Delineation Report and identify Section 404 Permit requirements. The CONSULTANT shall prepare appropriate documents for a non-notifying nationwide permit. Should a Nationwide Permit #14 application be needed, said efforts are identified as Additional Services.

Task 3.18.5. Hazardous Materials Survey. The CONSULTANT will complete a Preliminary Initial Site Assessment (PISA) for hazardous materials within the current right-of-way, potential right-of-way, and easements associated with the project and provide a Draft and Final PISA Report (CONSULTANT shall use appropriate ADOT form). The PISA shall comply with ASTM E-1528-06 (Standard Practice for Limited Environmental Due Diligence). This will include:

1. Conduct Site Reconnaissance (Section 9 of Standard)
2. Regulatory Database Review (Section 10.1 of Standard)
3. Historical Source Review (Section 10.2 of Standard)

Task 3.18.6. Air Quality. The CONSULTANT will review potential effects on air quality and report findings. The project is not within the Pima County Rillito PM10 nonattainment area, thus no Project-Level PM10 Quantitative Hot-Spot Analysis – Project of Air Quality Concern Questionnaire will be required. No quantitative

Mobile Source Air Toxins (MSAT) analysis is required as the project meets MSAT Tier 1 – No meaningful potential for MSAT effect, or an exempt project (Categorical Exclusion level project).

Task 3.18.7. Environmental Documentation. The CONSULTANT will prepare an EAMR per Section 3.18 of the Roadway Design Manual that will satisfy Pima County requirements for this phase of the project.

Task 3.18.8. Noise Analysis. The CONSULTANT will provide a Traffic Noise Analysis, evaluating potential traffic noise impacts to sensitive uses adjacent to Kolb Road improvements (approximately 1.9 miles, between Sabino Canyon and Sunrise Drive) in accordance with current PCDOT Procedure 03-5, FHWA requirements, and as discussed in Chapter 4 of the RDM for an ESR. The Traffic Noise Model will be used to predict future (2040) noise levels within the project area and to identify, as appropriate, noise mitigation components. A Draft and Final Traffic Noise Analysis Report will be prepared.

Task 3.18.9. Riparian Habitat Impact Assessment. CONSULTANT will identify riparian areas located within the project limits and determine impacts to riparian habitat in compliance with Article X of the Floodplain Ordinance (Title 16 of the Pima county Code). CONSULTANT will coordinate with PCRFC staff to confirm the documentation and mitigation requirements for a riparian permit from PCRFC. CONSULTANT will prepare necessary documentation for the floodplain use permit application. CONSULTANT will rely on the inventory and releve analysis conducted for the vegetative inventory (see Task 3.18.3) in support of the application and no further vegetation inventory will be conducted.

Task 3.18.10. Quality Control Review of EAMR. The CONSULTANT will provide a quality control review of the Environmental Assessment and Mitigation Report.

Task 3.18.11. Categorical Exclusion. The CONSULTANT will provide an Environmental Commitments memorandum to ADOT Environmental Planning (EP) at the completion of the appropriate technical reports to include; Biological Evaluation, Cultural Resources Class I/III report and consultation, Preliminary Initial Site Assessment and noise analysis (if required). The technical reports and memorandum will be submitted prior to approval of the Initial PS&E documents. The CONSULTANT will coordinate any non-standard environmental commitments (mitigation measures) with PCDOT to obtain their approval. ADOT EP will prepare a Group 2 CE for federal environmental clearance.

Deliverables:

- Cultural resources inventory and report; consultation letters.
- Biological Evaluation prepared to U. S. Fish and Wildlife Service and Pima County requirements.
- Vegetation Inventory, including listing of protected plants done in conformance with methods identified in the RDM for an ESR.
- Preliminary Jurisdictional Delineation Report and appropriate nationwide permits prepared to meet COE standards and Pima County requirements.
- Draft and Final Preliminary Initial Site Assessment for hazardous materials.
- Draft and Final Traffic Noise Analysis Report.
- EAMR, including Final Design Phase Plans per Section 3.18 of the RDM for the initial phase of the project.
- Responses to all review comments.
- Environmental Commitments Memorandum

TASK 3.19 RIGHT-OF-WAY ACQUISITION SUPPORT

Assumptions:

1. *The limits for the Right-of-Way tasks are from Sabino Canyon to Sunrise Drive.*

2. *The CONSULTANT will identify parcels from which right-of-way or easements will be required, with title research for said parcels being the responsibility of the County.*
3. *PCDOT will obtain any Rights-Of-Entry required for this project.*
4. *The preparation of legal descriptions and reference maps by CONSULTANT are covered under Task 3.10.12.*

Task 3.19.1. Existing Right-of-Way and Easements. The CONSULTANT will provide PCDOT with a list of parcels from which right-of-way or easements will be required. PCDOT will furnish any title reports required for this project based on the CONSULTANT's list. The CONSULTANT will review title reports and other recorded information to verify current right-of-way and easements. The CONSULTANT will perform any research, calculations, and additional survey needed to establish existing property and right-of-way lines to be affected by this project and integrate into mapping.

Task 3.19.2. Right-of-Way Plans. The CONSULTANT will prepare 1"=40' right-of-way plans for the project, as per Pima County RDM 3.19 and Appendix 3-O-1. In addition to existing information, all proposed right-of-way and/or easements required shall be shown with complete dimensions. Ownership data and areas required shall be shown. The CONSULTANT will coordinate with and incorporate feedback from Pima County in preparing documents and in identifying properties for potential acquisition and easements.

Task 3.19.3. Quality Control Review of Right-of-Way Documents. The CONSULTANT will provide a quality control review of the Right-of-way documents.

Deliverables:

- List of parcels from which right-of-way or easements will be required.
- Right-of-way plans.
- Responses to all review comments.

TASK 3.20 PREPARATION OF CONSTRUCTION DOCUMENTS

Assumptions:

1. *Design and PS&E Plans is from Sabino Canyon to Sunrise Drive.*
2. *Roadway cross sections will be provided by the CONSULTANT.*
3. *Noise wall design is considered an additional service.*
4. *Final Design Plans will be at a level of detail such that right-of-way acquisition and environmental permits can proceed.*
5. *It is assumed that construction sequencing plans and traffic control plans are not necessary.*

Task 3.20.1. Initial Design Phase Plans. The CONSULTANT will prepare initial roadway, median opening, and striping plans for Kolb Road from Sabino Canyon to Sunrise Drive. The Design Concept Plans will be at 1"=40' and will address horizontal and vertical alignment, cross sections, channelization, drainage, right-of-way, major and minor structures.

Task 3.20.2. Final Design Phase Plans. The CONSULTANT will develop Final Design Plans per the checklist found in Chapter 3 of the RDM, including retaining walls, preliminary median openings, striping plans, irrigation plans, and cross sections. Establish initial InRoads templates, earthwork modeling, and project cost estimate for the Final Design Phase.

Task 3.20.3. Initial PS&E. The CONSULTANT will develop Initial PS&E Plans for the project per the checklist found in Chapter 3 of the RDM, including revisions from Final Design Phase Plan submittals, adding storm drain plans, landscape plans, traffic signal plans, lighting plans, staking plans, noise wall plans and updating project cost estimate for the Initial PS&E.

Task 3.20.4. Final PS&E. The CONSULTANT will develop Final PS&E Plans per the checklist found in Chapter 3 of the RDM, including revisions from Initial PS&E, including SWPPP, construction sequencing (if applicable), traffic control, special provisions, traffic signal plans, lighting plans, signing plans and updating project cost estimate for Final PS&E.

Task 3.20.6. Quality Control Review of Plans. The CONSULTANT will provide a quality control review of each submittal of the construction documents.

Deliverables:

- Initial Design Plans per the Design Manual Checklist, including cost estimate and quantity take-off calculations.
- Final Design Plans per the Design Manual Checklist, including cost estimate and quantity take-off calculations.
- Initial PS&E Plans per the Design Manual Checklist, including cost estimate and quantity take-off calculations.
- Final PS&E Plans per the Design Manual Checklist, including cost estimates, special provisions, and quantity take-off calculations.
- Responses to all review comments.

TASK 3.25 TUCSON WATER RELOCATION PLANS

Assumptions:

1. *Data collected will be consistent with the level of information needed to designate, locate, and map Tucson Water facilities.*
2. *PCDOT will provide utility base maps that have been provided to-date from Tucson Water. Additional research may be required by the CONSULTANT to verify and supplement the utility base maps.*
3. *Resources to gather data for Tucson Water is being provided under this task*
4. *Resources for surveying Blue Stake information are provided in Task 3.10.7.*
5. *Subsurface utility designations will be shown in the strip map derived in Task 3.10.8.*
6. *Joint Trench coordination efforts are considered Additional Services.*
7. *Consultant shall adhere to Pima County Ordinance 2008-72, Regulations for the Use of Public Right of Way.*
8. *Water relocations will be required at drainage crossings only. Relocation of entire water main in Kolb Road as a result of working cover issues or the discretion of Tucson Water will require adjustment of the scope and fee.*
9. *Design report to accompany "Approval to Construct" application will be provided to Tucson Water*
10. *No alternatives analysis will be performed.*

Task 3.25.1. Data Gathering, Utility Designation, Letter of Acceptance. The CONSULTANT will acquire and review Tucson Water base maps and prior rights documentation. The PCDOT Utility Coordinator will be the main point of contact for all utility coordination work. The CONSULTANT will provide and maintain a website for project and utility information and make it accessible to Tucson Water.

All formal utility correspondence is to be reviewed and approved by the County prior to distribution. The CONSULTANT will initiate and conduct meetings as needed with Tucson Water. Meetings are assumed to be attended by two CONSULTANT team members and have a duration of 2 hours per meeting (2 hours per attendee) to prepare, attend, and provide minutes. Prior to the completion of *Task 3.10.7 Existing Conditions Surveys*, the CONSULTANT will request Tucson Water mark its facilities, providing the approximate horizontal position on the ground surface and provide electronic files of certified horizontal survey data associated with

these ground surface markings and also their above grade facilities, including service connections, all of which being tied to an accepted County control and datum, being accurate to within six inches. CONSULTANT shall draft onto an Existing Utilities Mapping Package (40 scale) the certified horizontal survey data surveyed by PIMA COUNTY and as horizontally designated by CONSULTANT (if necessary) and provide the COUNTY with a Letter of Acceptance from each utility indicating that the representation of the utility's facilities on the Existing Utilities Mapping Package is accurate. Tucson Water facilities will be designated, located, and mapped according to ASCE Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02). The CONSULTANT will conduct a field review of utility information shown on the Results of Survey Drawing for consistency with utility base maps and utility field survey data.

Task 3.25.2. Design Coordination, Utility Impact Identification. The CONSULTANT will monitor the project's design for impacts to Tucson Water and distribute progress design drawings for review and identification of impacts. The CONSULTANT will update the County as necessary on the status of utility activities and notify the County of any seasonal or other constraints that could impact the construction schedule. Initial and Final Design Phase Plans will be provided to Tucson Water for their review and comment. Resources are also being provided in this task for two CONSULTANT team members and the PCDOT Utility Coordinator to attend up to five individual meetings (2 hours per meeting including the documentation of correspondences/minutes with Tucson Water).

Task 3.25.3. Utility Impact Mitigation. The CONSULTANT will initiate, coordinate and facilitate utility impact meetings with the County and Tucson Water to develop mitigation measures acceptable to the County that will minimize costs to the project and minimize impacts to the schedule. The CONSULTANT will incorporate all approved mitigation measures into the List of Utility Impacts.

Task 3.25.4. Initial Design Phase Plans. The CONSULTANT will identify and include utility conflicts associated with Tucson Water facilities from Sabino Canyon north to Sunrise Drive. The Design Concept will include a summary table identifying Tucson Water Utility conflicts along the project corridor.

Task 3.25.5. Final Design Phase Plans. The CONSULTANT will develop preliminary Tucson Water relocation plans for waterline conflicts within the Final Design Plans per the checklist found in Chapter 3 of the RDM.

Task 3.25.6. Initial PS&E. The CONSULTANT will develop Initial PS&E Tucson Water relocation plans as part of the Initial PS&E Plans for the project per the checklist found in Chapter 3 of the RDM, including revisions from Final Design Phase Plan submittals, and updating project cost estimate for the Initial PS&E.

Task 3.25.7. Final PS&E. The CONSULTANT will develop Final PS&E Tucson Water relocation plans as part of the Final PS&E Plans per the checklist found in Chapter 3 of the RDM, including revisions from Initial PS&E, special provisions, and updating project cost estimate for Final PS&E.

Task 3.25.8. Quality Control Review. The CONSULTANT will provide quality control reviews of the deliverables listed below.

Deliverables:

- Plans for distribution to Tucson Water
- Letter of Acceptance from Tucson Water
- Meeting minutes prepared, distributed to project team, and revised as needed.
- Reviewing the Results of Survey Drawings for inclusion of blues take and utility mapping information, including potholing information.
- List of utility impacts and mitigation measures.
- Responses to all review comments.
- Initial Design Documents including cost estimate and quantity take-off calculations.

- Final Design Plans including cost estimate and quantity take-off calculations.
- Initial PS&E Plans including cost estimate and quantity take-off calculations.
- Final PS&E Plans including cost estimate and quantity take-off calculations.
- Responses to all review comments.

TASK 3.30 ADDITIONAL SERVICES

Assumptions:

1. *Additional services are speculative in nature as the need for them, and the ultimate level of effort to be required is unknown. Therefore, relative budgets for each of these potential tasks have been identified, but may be further defined, and or modified, should the need for them or other efforts arise as part of the overall scope of work.*

Task 3.30.1. Utility Coordination and Survey (Additional Services). In the event a utility is unable to provide the ground marking and certified survey data requested in Task 3.3.1, the CONSULTANT shall provide Utility Quality Level B information for the utility in accordance with ASCE Standard Guidelines for the collection and Depiction of Existing Subsurface Data (CI/ASCE 38-02), page 3.

- 40 potholes per the attached sub-consultant scope of services
- Updated mapping of utility information, including potholing information
- This task also accounts for additional drafting and records research to achieve Quality Level C utility line work (valves, manholes, utility lines) and then provide approximate location points to potholing service to then achieve Quality B.
- Quality Level B information for the project waterlines

Task 3.30.2. Other Services. The CONSULTANT may be called upon to perform services unknown of or identified subsequent to the original scoping of the project. These efforts may be caused by unforeseen issues that arise after the development of this scope of work. Potential services could include the need to attend additional meetings, provide displays or summaries, perform additional analysis, provide additional design (e.g. Section 404 Nationwide Permit #14 application, noise wall design, retaining wall design, joint trench design), or other efforts associated with the project beyond those identified within this scope of work.

Task 3.30.3. Post Design Services. The CONSULTANT may be called upon to provide services beyond the submittal of the final PS&E. PCDOT will coordinate all the Post-Design Services and will act as the principal initial contact for post-design questions. However, the following additional efforts may be required.

Phase I: Pre-Bid Services which may include but are not limited to:

- Attending pre-bid meetings
- Assisting in the preparation of addendums
- Addressing questions on the plans and specifications
- Bid evaluations

Phase II: Post-Design Services which may include but are not limited to:

- Attending the pre-construction meeting and partnering meetings if any
- Attending weekly construction meetings at the project site
- Making site observations of the work under construction
- Evaluating and/or recommending changes in the construction documents

- Providing design details and revised drawings as needed to support construction
- Reviewing shop drawings, erection procedure plans, form work details, and proposals for substitutions or "approved alternates"
- Evaluating value engineering proposals
- Preparing the "as-built" documents
- Conducting migratory bird nest pre-construction surveys
- Sonoran desert Tortoise Handling Guidelines

EXHIBIT B: CONSULTANT FEE PROPOSAL (6 pages)**Kolb Road, Sunrise to Sabino Canyon****PSOMAS****ESTIMATED DIRECT LABOR (Psomas)**

<u>Classification</u>	<u>Estimated Man-hours</u>	<u>Hourly Rate</u>	<u>Labor Costs</u>
Project Principal	16	\$ 218.97	\$ 3,503.46
Sr. Project Manager	1,592	\$ 187.90	\$ 299,131.23
Sr. Project Engineer	2,247	\$ 147.95	\$ 332,443.65
Project Engineer	2,723	\$ 128.72	\$ 350,495.03
Designer	3,166	\$ 101.35	\$ 320,860.64
Eng Tech/Drafter	1,960	\$ 85.81	\$ 168,189.56
Survey Manager	20	\$ 142.77	\$ 2,855.44
Project Surveyor	582	\$ 138.33	\$ 80,509.95
2-Person Crew	140	\$ 152.39	\$ 21,334.39
Survey Tech	845	\$ 77.67	\$ 65,634.32
Administration	96	\$ 90.25	\$ 8,663.95
Intern	0	\$ 50.30	\$ -
Total	13,387		

Total Estimated Labor (Psomas) \$ 1,653,621.62

ESTIMATED DIRECT EXPENSES

(Listed by Item at Estimated Actual Cost)

<u>Item</u>	<u>Quantity</u>	<u>Amount</u>	<u>Total</u>
Displays	Plotting 20	\$108.00	\$ 2,160.00
Reproduction	8.5"x11" 40000	\$0.05	\$ 2,000.00
	8.5"x11" Color 1000	\$0.39	\$ 390.00
	11"x17" 25000	\$0.11	\$ 2,750.00
	11"x17" Color 8000	\$0.65	\$ 5,200.00
	24"x36" Bond 4000	\$0.48	\$ 1,920.00
	Mylar 255	\$5.40	\$ 1,377.00
Direct Expenses TOTAL			\$ 20,797.00

<u>Subconsultant</u>	<u>Total</u>
SCE	\$ 100,716.55
EcoPlan	\$ 104,834.77
McGann	\$ 73,400.00
Sound Solutions	\$ 9,000.00
Structural Concepts	\$ 9,052.00
Sub-Consultant TOTAL	\$ 306,763.32

TOTAL ESTIMATED LABOR (Psomas)	\$ 1,653,621.62
TOTAL ESTIMATED DIRECT COSTS (Psomas)	\$ 20,797.00
TOTAL ESTIMATED OUTSIDE SERVICES	\$ 306,763.32
SUBTOTAL	\$ 1,981,181.94

ADDITIONAL SERVICES/POST DESIGN SERVICES

Psomas	\$ 254,331.97
SCE	\$ 49,613.75
EcoPlan	\$ 5,000.00
Structural Concepts	\$ 4,848.00
Cardno	\$ 29,375.00
TOTAL ADDITIONAL SERVICES/POST-DESIGN SERVICES	\$ 343,168.72

TOTAL ESTIMATED COST **\$ 2,324,350.65**

CONTRACT TOTAL **\$ 2,324,350.65**

**BILLING RATES
PSOMAS**

Labor Classification	Direct Labor Rate (\$)	Overhead (100.0%)	Fee (10%)	Calculated Billing Rate (\$)	Proposed Billing Rate (\$)
Project Principal	\$ 74.00	\$ 125.06	\$ 19.91	\$ 218.97	\$ 218.97
Sr. Project Manager	\$ 63.50	\$ 107.32	\$ 17.08	\$ 187.90	\$ 187.90
Sr. Project Engineer	\$ 50.00	\$ 84.50	\$ 13.45	\$ 147.95	\$ 147.95
Project Engineer	\$ 43.50	\$ 73.52	\$ 11.70	\$ 128.72	\$ 128.72
Designer	\$ 34.25	\$ 57.88	\$ 9.21	\$ 101.35	\$ 101.35
Eng Tech/Drafter	\$ 29.00	\$ 49.01	\$ 7.80	\$ 85.81	\$ 85.81
Survey Manager	\$ 48.25	\$ 81.54	\$ 12.98	\$ 142.77	\$ 142.77
Project Surveyor	\$ 46.75	\$ 79.01	\$ 12.58	\$ 138.33	\$ 138.33
2-Person Crew	\$ 51.50	\$ 87.04	\$ 13.85	\$ 152.39	\$ 152.39
Survey Tech	\$ 26.25	\$ 44.36	\$ 7.06	\$ 77.67	\$ 77.67
Administration	\$ 30.50	\$ 51.55	\$ 8.20	\$ 90.25	\$ 90.25
Intern	\$ 17.00	\$ 28.73	\$ 4.57	\$ 50.30	\$ 50.30

Rev 6/14/2016

Paomas
Project Fee Estimate / Authorized Task List

Project Number: 7PIM180201
Project Name: Kolo Road, Sunrise to Sahu Canyon
Project Manager: Kevin Thomson
Date: 8/27/2018

BU No.	Design Description	Project Principal \$ 218.97 / Hr. Hrs. Amount	Sr. Project Manager \$ 187.90 / Hr. Hrs. Amount	Sr. Project Engineer \$ 147.95 / Hr. Hrs. Amount	Project Engineer \$ 128.72 / Hr. Hrs. Amount	Designer \$ 101.35 / Hr. Hrs. Amount	Eng. Tech/Drafter \$ 65.81 / Hr. Hrs. Amount	Survey Manager \$ 142.77 / Hr. Hrs. Amount	Project Surveyor \$ 136.33 / Hr. Hrs. Amount	2-Person Crew \$ 152.39 / Hr. Hrs. Amount	Survey Tech \$ 77.67 / Hr. Hrs. Amount	Administration \$ 90.25 / Hr. Hrs. Amount	Intern \$ 50.30 / Hr. Hrs. Amount	Paomas Task Total	Subcontractor Amount	Task Total
3.2	Quality Control Plan and Project Management															
	Develop QA/QC Plan	\$ -	34 \$ 4,510	10 \$ 2,367	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,877	\$ -	\$ 8,877
	Respond to Review Comments	\$ -	34 \$ 4,510	40 \$ 5,915	20 \$ 2,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,002	\$ -	\$ 13,002
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Stakeholder Coordination	\$ -	60 \$ 15,032	40 \$ 5,915	40 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,098	\$ -	\$ 29,098
	Project Contact List	\$ -	\$ 1,503	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,503	\$ -	\$ 1,503
	Misc. Project Administration (Correspondence, etc.)	90 \$ 3,503	60 \$ 15,032	60 \$ 11,836	40 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	60 \$ 7,220	\$ -	\$ 42,740	\$ -	\$ 42,740
	Monthly Progress Meetings (32)	\$ -	64 \$ 12,025	64 \$ 9,486	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,494	\$ -	\$ 21,494
	Internal Team Meetings/Sub Coordination	\$ -	60 \$ 15,032	60 \$ 11,836	40 \$ 5,149	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,070	\$ -	\$ 36,070
	Pre-review Overview Meetings	\$ -	\$ 1,503	\$ -	1 \$ 1,184	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,687	\$ -	\$ 2,687
	Major Review Comments Meetings	\$ -	10 \$ 3,006	10 \$ 2,367	10 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,433	\$ -	\$ 7,433
	Minor Review Comments Meetings	\$ -	0 \$ 1,503	0 \$ 1,184	0 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,717	\$ -	\$ 3,717
	Additional Miscellaneous Meetings	\$ -	60 \$ 11,274	60 \$ 8,677	24 \$ 3,090	24 \$ 2,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,672	\$ -	\$ 25,672
	Schedule	\$ -	40 \$ 7,516	10 \$ 2,367	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,883	\$ -	\$ 9,883
	Cost Trending and Estimating	\$ -	40 \$ 7,516	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,516	\$ -	\$ 7,516
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Quality Control Plan and Project Management	90 \$ 3,503	362 \$ 46,861	265 \$ 34,223	110 \$ 14,189	64 \$ 8,496	\$ -	\$ -	\$ -	\$ -	\$ -	60 \$ 7,220	\$ -	\$ 204,892	\$ -	\$ 204,892
3.3	Utility Coordination															
	Data Gathering, Utility Designation, Letter of Acceptance	\$ -	40 \$ 7,516	40 \$ 5,915	40 \$ 5,149	60 \$ 6,081	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,863	\$ -	\$ 24,863
	Initial Utility Meetings (Assume 5)	\$ -	10 \$ 1,879	\$ -	10 \$ 1,287	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,166	\$ -	\$ 3,166
	Design Coordination, Utility Impact Identification	\$ -	40 \$ 7,516	20 \$ 2,958	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,475	\$ -	\$ 10,475
	Utility Meetings (Assume 10)	\$ -	20 \$ 3,758	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,758	\$ -	\$ 3,758
	Utility Impact Mitigation	\$ -	20 \$ 3,758	40 \$ 5,915	40 \$ 5,149	60 \$ 6,081	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,905	\$ -	\$ 20,905
	QA/QC	\$ -	12 \$ 2,255	0 \$ 1,184	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,436	\$ -	\$ 3,436
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Utility Coordination	\$ -	142 \$ 18,881	110 \$ 16,879	90 \$ 11,884	120 \$ 12,161	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 66,406	\$ -	\$ 66,406
3.4	Public Participation															
	Public Participation Plan	\$ -	0 \$ 1,503	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,503	\$ -	\$ 1,503
	Community Advisory Meetings (4)	\$ -	10 \$ 3,006	10 \$ 4,734	10 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,800	\$ -	\$ 9,800
	Public Meetings/Meeting (3)	\$ -	12 \$ 2,255	12 \$ 1,775	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,030	\$ -	\$ 4,030
	Preparation of CA/CPC Meeting Materials	\$ -	0 \$ 1,503	0 \$ 1,184	60 \$ 7,723	60 \$ 8,108	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,517	\$ -	\$ 18,517
	QA/QC	\$ -	4 \$ 752	4 \$ 592	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,343	\$ -	\$ 1,343
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Public Participation	\$ -	40 \$ 6,019	60 \$ 8,290	70 \$ 8,782	60 \$ 8,108	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,194	\$ -	\$ 36,194
3.6	Federal, State, and Local Coordination															
	Telephone for agency letters, meetings	\$ -	4 \$ 752	12 \$ 1,775	20 \$ 3,804	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,131	\$ -	\$ 6,131
	Coordinate between Participating Agencies (8 Meetings)	\$ -	12 \$ 2,255	10 \$ 1,775	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,030	\$ -	\$ 4,030
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Federal, State, and Local Coordination	\$ -	16 \$ 3,009	20 \$ 3,549	20 \$ 3,804	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,161	\$ -	\$ 10,161
3.8	Public Art															
	Coordination with Artist	\$ -	10 \$ 1,879	10 \$ 1,480	12 \$ 1,545	20 \$ 2,027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,930	\$ -	\$ 6,930
	Plans for artist (electrical, foundations, etc)	\$ -	0 \$ 1,127	10 \$ 2,367	24 \$ 3,088	20 \$ 2,027	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,611	\$ -	\$ 8,611
	QA/QC	\$ -	2 \$ 378	4 \$ 592	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 968	\$ -	\$ 968
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Public Art	\$ -	12 \$ 3,382	20 \$ 4,439	26 \$ 4,634	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,508	\$ -	\$ 16,508
3.7	Data Gathering															
	Gather Existing Information	\$ -	0 \$ 1,503	10 \$ 2,367	20 \$ 2,574	20 \$ 2,027	20 \$ 2,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,048	\$ -	\$ 11,048
	Site Visits During Project Design (4)	\$ -	10 \$ 3,006	10 \$ 2,367	10 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,433	\$ -	\$ 7,433
	QA/QC	\$ -	2 \$ 378	4 \$ 592	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 968	\$ -	\$ 968
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Data Gathering	\$ -	12 \$ 4,886	20 \$ 6,326	20 \$ 4,634	20 \$ 2,027	20 \$ 2,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,447	\$ -	\$ 19,447
3.9	Environmental Impact Screening															
	Attend Environmental Coordination Meeting	\$ -	0 \$ 594	0 \$ 444	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,008	\$ -	\$ 1,008
	Attend Team Review Meeting	\$ -	0 \$ 594	0 \$ 444	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,008	\$ -	\$ 1,008
	Materials for Matrix	\$ -	2 \$ 378	\$ -	10 \$ 1,287	0 \$ 811	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,474	\$ -	\$ 2,474
	QA/QC	\$ -	0 \$ 378	4 \$ 592	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 968	\$ -	\$ 968
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Environmental Impact Screening	\$ -	12 \$ 1,879	10 \$ 1,480	10 \$ 1,287	0 \$ 811	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,466	\$ -	\$ 6,466
3.10	Survey and Mapping															
	Project Administration and QA/QC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	60 \$ 2,284	40 \$ 5,333	\$ -	\$ -	30 \$ 1,444	\$ -	\$ 9,262	\$ -	\$ 9,262
	Parcel Research, Title Reports & Surveys	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100 \$ 22,133	40 \$ 8,096	100 \$ 12,426	\$ -	\$ -	\$ 40,657	\$ -	\$ 40,657
	Verify/Coord Horiz & Vert Control and Topo Mapping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0 \$ 1,107	24 \$ 3,857	10 \$ 932	\$ -	\$ -	\$ 5,896	\$ -	\$ 5,896
	Laser Scanning	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	10 \$ 2,213	20 \$ 3,046	10 \$ 777	\$ -	\$ -	\$ 6,036	\$ -	\$ 6,036
	Scan Data Processing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	40 \$ 6,640	\$ -	100 \$ 14,813	\$ -	\$ -	\$ 21,553	\$ -	\$ 21,553
	Utility & Potentially Coordination Activities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	20 \$ 3,320	\$ -	\$ -	\$ -	\$ -	\$ 3,320	\$ -	\$ 3,320
	Utility & Culture Map Review & Updates	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	24 \$ 3,320	10 \$ 2,436	60 \$ 6,214	\$ -	\$ -	\$ 11,972	\$ -	\$ 11,972
	Legal Descriptions (Assume 50)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	100 \$ 20,750	\$ -	170 \$ 13,593	\$ -	\$ -	\$ 34,343	\$ -	\$ 34,343
	Set Right-of-way Monuments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0 \$ 1,107	40 \$ 8,096	24 \$ 1,864	\$ -	\$ -	\$ 9,066	\$ -	\$ 9,066
		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Survey and Mapping	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	60 \$ 2,284	40 \$ 46,123	140 \$ 21,334	180 \$ 30,721	60 \$ 1,444	\$ -	\$ 141,907	\$ -	\$ 141,907

PROMIS
Project Fee Estimate / Authorized Task List

Project Number: 7P1M160201
Project Name: K&B Road, Sunrise to Babine Canyon
Project Manager: Kevin Thornton
Date: 02/27/2016

BU No.	Design Description	Project Principal \$ 219.97 / Hr. Hrs. Amount	Sr. Project Manager \$ 167.80 / Hr. Hrs. Amount	Sr. Project Engineer \$ 147.95 / Hr. Hrs. Amount	Project Engineer \$ 126.72 / Hr. Hrs. Amount	Designer \$ 101.35 / Hr. Hrs. Amount	Eng Tech/Draftsman \$ 65.81 / Hr. Hrs. Amount	Survey Manager \$ 142.77 / Hr. Hrs. Amount	Project Surveyor \$ 135.33 / Hr. Hrs. Amount	2-Person Crew \$ 152.59 / Hr. Hrs. Amount	Survey Tech \$ 77.67 / Hr. Hrs. Amount	Administration \$ 60.25 / Hr. Hrs. Amount	Intern \$ 50.30 / Hr. Hrs. Amount	Promis Task Total	Subcontractor Amount	Task Total
3.11	Drainage Report															
	Review Existing Plans and Report	\$ -	4 \$ 752	\$ -	3 \$ 368	12 \$ 1,216	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,354	\$ -	\$ 2,354
	Peak Discharge Determination	\$ -	3 \$ 564	\$ -	12 \$ 1,545	38 \$ 3,851	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,959	\$ -	\$ 5,959
	Existing Hydraulic Conditions	\$ -	8 \$ 1,503	\$ -	40 \$ 5,149	73 \$ 7,297	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,949	\$ -	\$ 13,949
	Initial Design Phase Submittal	\$ -	2 \$ 376	\$ -	40 \$ 5,149	40 \$ 5,149	40 \$ 4,118	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,754	\$ -	\$ 18,754
	Final Design Phase Submittal	\$ -	2 \$ 376	\$ -	38 \$ 3,347	42 \$ 4,257	24 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,038	\$ -	\$ 10,038
	Final PS&E Phase Submittal	\$ -	6 \$ 1,127	\$ -	18 \$ 2,059	38 \$ 3,648	14 \$ 1,201	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,037	\$ -	\$ 8,037
	FEMA Requirements	\$ -	9 \$ 1,127	\$ -	32 \$ 4,119	48 \$ 4,865	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,111	\$ -	\$ 10,111
	QA/QC	\$ -	8 \$ 1,503	12 \$ 1,775	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,278	\$ -	\$ 3,278
	Total Drainage Report	\$ -	39 \$ 7,328	12 \$ 1,775	177 \$ 22,783	368 \$ 31,214	88 \$ 7,380	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 70,480	\$ -	\$ 70,480
3.12.13	Geotechnical Report/Pavement Design Report															
	ES&L Projections for Pavement Design	\$ -	4 \$ 752	\$ -	34 \$ 3,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,841	\$ -	\$ 3,841
	QA/QC	\$ -	8 \$ 1,503	18 \$ 2,367	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,870	\$ -	\$ 3,870
	Total Geotechnical Report/Pavement Design Report	\$ -	12 \$ 2,255	18 \$ 2,367	34 \$ 3,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,711	\$ -	\$ 7,711
3.15	Traffic Engineering Reports															
77896	Inventory of existing conditions	\$ -	2 \$ 376	\$ -	\$ -	18 \$ 1,822	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,997	\$ -	\$ 1,997
	LOS Analysis of existing Conditions	\$ -	4 \$ 752	\$ -	30 \$ 3,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,328	\$ -	\$ 3,328
	Existing Safety Conditions	\$ -	2 \$ 376	\$ -	6 \$ 772	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,148	\$ -	\$ 1,148
	Future Safety Analysis - HCM Predictive Method	\$ -	4 \$ 752	\$ -	18 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,811	\$ -	\$ 2,811
	Projections and LOS Analysis for opening year	\$ -	2 \$ 376	\$ -	30 \$ 3,574	8 \$ 811	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,781	\$ -	\$ 3,781
	Projections and LOS analysis for 2040	\$ -	2 \$ 376	\$ -	30 \$ 3,574	8 \$ 811	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,781	\$ -	\$ 3,781
	Recommendations (timing, turn lanes, access)	\$ -	4 \$ 752	\$ -	12 \$ 1,545	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,924	\$ -	\$ 2,924
	Preparation of Initial Report	\$ -	2 \$ 376	\$ -	12 \$ 1,545	12 \$ 1,216	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,622	\$ -	\$ 2,622
	Meetings	\$ -	10 \$ 3,362	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,362	\$ -	\$ 3,362
	Address comments and submit Final Report	\$ -	2 \$ 376	\$ -	18 \$ 2,059	4 \$ 405	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,841	\$ -	\$ 2,841
	QA/QC	\$ -	\$ -	8 \$ 1,184	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,184	\$ -	\$ 1,184
	Total Traffic Engineering Report	\$ -	48 \$ 7,892	8 \$ 1,184	118 \$ 16,189	64 \$ 6,473	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,736	\$ -	\$ 28,736
3.16	Arterial Street Lighting Design Report															
	Assessment of existing lighting	\$ -	1 \$ 188	\$ -	8 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,218	\$ -	\$ 1,218
	Evaluation of lighting alternatives (3 alt)	\$ -	3 \$ 564	\$ -	24 \$ 3,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,653	\$ -	\$ 3,653
	Initial Lighting Design Report	\$ -	2 \$ 376	\$ -	8 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,408	\$ -	\$ 1,408
	Final Lighting Design Report	\$ -	1 \$ 188	\$ -	4 \$ 515	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 703	\$ -	\$ 703
	QA/QC	\$ -	\$ -	4 \$ 562	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 562	\$ -	\$ 562
	Total Arterial Street Lighting Design Report	\$ -	7 \$ 1,316	4 \$ 562	44 \$ 5,684	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,671	\$ -	\$ 7,671
3.17	Design Concept Report/Project Assessment															
	Executive Summary/Project Overview	\$ -	18 \$ 3,006	8 \$ 1,184	8 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,220	\$ -	\$ 5,220
	Project Area Characteristics	\$ -	8 \$ 1,503	18 \$ 2,367	24 \$ 3,089	34 \$ 2,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,392	\$ -	\$ 9,392
	Design Standards and Criteria	\$ -	8 \$ 1,503	12 \$ 1,775	30 \$ 3,861	12 \$ 1,216	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,396	\$ -	\$ 8,396
	Design Alternatives	\$ -	20 \$ 3,758	8 \$ 1,184	38 \$ 4,119	48 \$ 4,865	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,925	\$ -	\$ 13,925
	Social, Economic and Environmental Considerations	\$ -	18 \$ 3,006	8 \$ 1,184	8 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,220	\$ -	\$ 5,220
	Draft Report Preparation	\$ -	40 \$ 7,516	80 \$ 11,836	60 \$ 7,723	60 \$ 6,081	40 \$ 3,430	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 36,588	\$ -	\$ 36,588
	Final Report Preparation	\$ -	16 \$ 3,006	40 \$ 5,918	34 \$ 3,089	24 \$ 2,432	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,162	\$ -	\$ 16,162
	Cost Estimate	\$ -	4 \$ 752	8 \$ 1,184	24 \$ 3,089	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,078	\$ -	\$ 9,078
	Project Assessment (Draft and Final)	\$ -	20 \$ 3,758	32 \$ 4,734	18 \$ 2,059	16 \$ 1,822	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,880	\$ -	\$ 13,880
	PA Coordination with ADOT	\$ -	16 \$ 3,006	24 \$ 3,551	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,557	\$ -	\$ 9,557
	QA/QC	\$ -	8 \$ 1,503	24 \$ 4,143	18 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,705	\$ -	\$ 7,705
	Total Design Concept Report/Project Assessment	\$ -	172 \$ 32,318	200 \$ 30,089	242 \$ 31,148	232 \$ 22,701	80 \$ 6,886	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 132,093	\$ -	\$ 132,093
3.18	EAM/RCE															
77028	QA/QC	\$ -	8 \$ 1,255	24 \$ 3,551	8 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,835	\$ -	\$ 6,835
	Preparation of drawings, descriptions, plans	\$ -	8 \$ 1,127	24 \$ 3,551	\$ -	48 \$ 4,865	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,543	\$ -	\$ 9,543
	Total EAM/RCE	\$ -	16 \$ 3,382	48 \$ 7,102	8 \$ 1,030	48 \$ 4,865	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,378	\$ -	\$ 16,378
3.19	Right-of-way Acquisition Support															
	Right-of-way Analysis and Map Drawing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	20 \$ 13,280	\$ -	108 \$ 14,913	\$ -	\$ -	\$ 28,193	\$ -	\$ 28,193
	QA/QC	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	4 \$ 571	8 \$ 1,107	\$ -	\$ -	\$ -	\$ -	\$ 1,678	\$ -	\$ 1,678
	Total Right-of-way Acquisition Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	4 \$ 571	28 \$ 14,387	\$ -	108 \$ 14,913	\$ -	\$ -	\$ 29,871	\$ -	\$ 29,871
3.20	Preparation of Construction Documents															
77029	Typical Sections	\$ -	8 \$ 1,127	20 \$ 2,658	30 \$ 3,574	40 \$ 4,054	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,431	\$ -	\$ 12,431
	Initial Roadway Plans (Horizontal and Vertical Alignments)	\$ -	20 \$ 3,758	80 \$ 11,836	100 \$ 12,872	180 \$ 18,215	120 \$ 10,297	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 54,878	\$ -	\$ 54,878
	Initial Cross-Section Plans (Plan and Slop)	\$ -	8 \$ 1,503	18 \$ 2,367	40 \$ 5,149	40 \$ 4,054	18 \$ 1,373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,446	\$ -	\$ 14,446
	Right-of-Way Needs Assessment	\$ -	16 \$ 3,006	18 \$ 2,367	8 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,403	\$ -	\$ 8,403
	Cross-sections (@ 100 ft)	\$ -	4 \$ 752	18 \$ 2,367	40 \$ 5,149	\$ -	80 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,416	\$ -	\$ 13,416
	QA/QC	\$ -	8 \$ 1,503	24 \$ 4,143	18 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,705	\$ -	\$ 7,705

Psomas
Project Fee Estimate / Authorized Task List

Project Number: 7PM180201
Project Name: Kolb Road, Sunrise to Sabino Canyon
Project Manager: Kevin Thornton
Date: 6/27/2018

BLI No.	Design Description	Project Principal \$ 216.97 / Hr. Hrs. Amount	Sr. Project Manager \$ 187.90 / Hr. Hrs. Amount	Sr. Project Engineer \$ 147.95 / Hr. Hrs. Amount	Project Engineer \$ 128.72 / Hr. Hrs. Amount	Designer \$ 101.35 / Hr. Hrs. Amount	Eng. Tech/Drafter \$ 65.81 / Hr. Hrs. Amount	Survey Manager \$ 142.77 / Hr. Hrs. Amount	Project Surveyor \$ 138.33 / Hr. Hrs. Amount	2-Person Crew \$ 152.36 / Hr. Hrs. Amount	Survey Tech \$ 77.67 / Hr. Hrs. Amount	Administration \$ 90.25 / Hr. Hrs. Amount	Intern \$ 50.30 / Hr. Hrs. Amount	Psomas Task Total	Subconsultant Amount	Task Total	
10000	Cover Sheet & General Notes	\$ -	2 \$ 376	\$ -	8 \$ 1,030	\$ -	18 \$ 1,373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,779	
	Typical Sections	\$ -	6 \$ 1,127	18 \$ 2,367	20 \$ 2,574	28 \$ 2,838	18 \$ 1,373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,280	
	Pavement Structural Sections	\$ -	2 \$ 376	8 \$ 988	10 \$ 1,287	12 \$ 1,218	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,767	
	Horizontal Control	\$ -	8 \$ 1,127	10 \$ 1,480	10 \$ 1,287	28 \$ 2,838	18 \$ 1,373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,105	
	Roadway Plans	\$ -	20 \$ 3,758	60 \$ 8,877	80 \$ 10,287	180 \$ 16,215	100 \$ 8,581	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47,729	
	Sidewalk Plans	\$ -	8 \$ 1,127	10 \$ 1,480	20 \$ 2,574	48 \$ 4,885	40 \$ 4,119	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,185	
	Cross Drainage Plans	\$ -	12 \$ 2,255	24 \$ 3,551	40 \$ 5,148	60 \$ 6,081	40 \$ 3,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,467	
	Storm Drain Plans	\$ -	2 \$ 376	4 \$ 592	8 \$ 1,030	8 \$ 811	4 \$ 343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,151	
	Pavement Marking Plans	\$ -	8 \$ 1,503	16 \$ 2,367	32 \$ 4,118	40 \$ 4,054	32 \$ 2,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,789	
	Water and Sewer Conflicts	\$ -	4 \$ 752	12 \$ 1,775	8 \$ 1,030	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,557
	Cross-sections (@ 100 ft)	\$ -	4 \$ 752	10 \$ 2,367	40 \$ 5,149	\$ -	60 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,416
	Quantities / Cost Estimate	\$ -	4 \$ 752	8 \$ 1,184	24 \$ 3,089	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,078
	QA/QC	\$ -	8 \$ 1,503	40 \$ 5,918	24 \$ 3,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,510
	10000	Cover Sheet & General Notes	\$ -	\$ -	\$ -	4 \$ 515	\$ -	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,201
		Typical Sections	\$ -	4 \$ 752	8 \$ 1,184	18 \$ 2,059	20 \$ 2,027	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,708
Pavement Structural Sections		\$ -	\$ -	2 \$ 296	6 \$ 772	6 \$ 811	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,879	
Civil Details		\$ -	8 \$ 1,503	18 \$ 2,367	24 \$ 3,088	24 \$ 2,432	52 \$ 4,482	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,854	
Demolition Plans		\$ -	4 \$ 752	8 \$ 1,184	24 \$ 3,089	32 \$ 3,243	32 \$ 3,089	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,357	
Horizontal Control		\$ -	8 \$ 1,184	8 \$ 1,184	8 \$ 1,030	24 \$ 2,432	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,084	
Roadway Plans		\$ -	18 \$ 3,008	40 \$ 5,918	60 \$ 7,723	120 \$ 12,181	80 \$ 8,685	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,674	
Sidewalk Plans		\$ -	2 \$ 376	8 \$ 1,184	18 \$ 2,059	40 \$ 4,054	40 \$ 3,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,105	
Driveway Plans		\$ -	12 \$ 2,255	24 \$ 3,551	60 \$ 7,723	80 \$ 8,108	36 \$ 3,281	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 28,501	
Cross Drainage Plans		\$ -	12 \$ 2,255	36 \$ 5,326	60 \$ 7,723	80 \$ 8,081	36 \$ 3,281	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,648	
Storm Drain Plans		\$ -	4 \$ 752	8 \$ 1,184	12 \$ 1,545	12 \$ 1,218	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,382	
Traffic Signal Plans		\$ -	4 \$ 752	10 \$ 2,367	32 \$ 4,119	40 \$ 4,054	40 \$ 4,119	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,221	
Lighting and ITS Plans		\$ -	8 \$ 1,503	20 \$ 2,959	28 \$ 3,804	80 \$ 5,270	80 \$ 4,805	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,142	
Pavement Marking Plans		\$ -	4 \$ 752	12 \$ 1,775	32 \$ 4,119	60 \$ 4,054	40 \$ 3,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,132	
Signing Plans		\$ -	12 \$ 2,255	24 \$ 3,551	60 \$ 7,723	80 \$ 8,108	40 \$ 3,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,099	
10000	Sewer Plans (manhole adjustments only)	\$ -	2 \$ 376	4 \$ 592	8 \$ 1,030	4 \$ 405	4 \$ 343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,746	
	Staking Plans	\$ -	8 \$ 1,503	18 \$ 2,367	40 \$ 5,149	20 \$ 2,027	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,782	
	Special Provisions	\$ -	60 \$ 11,274	40 \$ 5,918	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,192	
	Cross-sections (@ 100 ft)	\$ -	4 \$ 752	10 \$ 2,367	40 \$ 5,149	\$ -	60 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,416	
	Quantities / Cost Estimate	\$ -	4 \$ 752	8 \$ 1,184	24 \$ 3,089	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,078	
	QA/QC	\$ -	12 \$ 2,255	60 \$ 8,877	40 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,280	
	3.26	Cover Sheet & General Notes	\$ -	\$ -	\$ -	2 \$ 257	\$ -	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 944
		Typical Sections	\$ -	2 \$ 376	8 \$ 1,184	8 \$ 1,030	18 \$ 1,822	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,897
		Pavement Structural Sections	\$ -	\$ -	2 \$ 296	4 \$ 515	6 \$ 808	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,419
		Civil Details	\$ -	8 \$ 1,127	12 \$ 1,775	18 \$ 2,059	18 \$ 1,822	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,300
		Demolition Plans	\$ -	2 \$ 376	8 \$ 1,184	18 \$ 2,059	20 \$ 2,027	24 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,705
		Horizontal Control	\$ -	2 \$ 376	4 \$ 592	4 \$ 515	18 \$ 1,822	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,760
		Roadway Plans	\$ -	8 \$ 1,503	32 \$ 4,734	40 \$ 5,149	80 \$ 8,108	60 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,643
		Sidewalk Plans	\$ -	2 \$ 376	8 \$ 1,184	8 \$ 1,030	24 \$ 2,432	24 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,081
		Driveway Plans	\$ -	8 \$ 1,503	18 \$ 2,367	40 \$ 5,149	60 \$ 8,081	60 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,248
Cross Drainage Plans		\$ -	8 \$ 1,127	18 \$ 2,367	24 \$ 3,089	32 \$ 3,243	32 \$ 2,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,573	
Storm Drain Plans		\$ -	2 \$ 376	4 \$ 592	8 \$ 1,030	8 \$ 811	4 \$ 343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,151	
Traffic Signal Plans		\$ -	4 \$ 752	14 \$ 2,071	28 \$ 2,574	24 \$ 2,432	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,546	
Lighting and ITS Plans		\$ -	4 \$ 752	12 \$ 1,775	18 \$ 2,059	20 \$ 2,027	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,330	
Pavement Marking Plans		\$ -	2 \$ 376	8 \$ 1,184	18 \$ 2,059	24 \$ 2,432	18 \$ 1,373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,424	
Signing Plans		\$ -	8 \$ 1,503	20 \$ 2,959	40 \$ 5,149	80 \$ 8,081	24 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,751	
10000	Sewer Plans (manhole adjustments only)	\$ -	\$ -	4 \$ 592	6 \$ 772	4 \$ 405	4 \$ 343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,113	
	Staking Plans	\$ -	8 \$ 1,127	18 \$ 2,367	24 \$ 3,089	18 \$ 1,822	18 \$ 1,373	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,578	
	SWPPP	\$ -	8 \$ 1,503	24 \$ 3,551	48 \$ 6,178	60 \$ 8,108	32 \$ 2,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,535	
	Special Provisions	\$ -	40 \$ 7,518	24 \$ 3,551	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,067	
	Cross-sections (@ 100 ft)	\$ -	4 \$ 752	10 \$ 2,367	40 \$ 5,149	\$ -	60 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,416	
	Quantities / Cost Estimate	\$ -	4 \$ 752	8 \$ 1,184	24 \$ 3,089	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,078	
	Final Revisions to Plans, Specs and Estimate	\$ -	18 \$ 3,008	40 \$ 5,918	60 \$ 7,723	120 \$ 12,181	80 \$ 8,685	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 35,674	
	QA/QC	\$ -	12 \$ 2,255	60 \$ 8,877	40 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,280	
	10000	Cover Sheet & General Notes	\$ -	\$ -	\$ -	2 \$ 257	\$ -	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 944
		Typical Sections	\$ -	2 \$ 376	8 \$ 1,184	8 \$ 1,030	18 \$ 1,822	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,897
		Pavement Structural Sections	\$ -	\$ -	2 \$ 296	4 \$ 515	6 \$ 808	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,419
		Civil Details	\$ -	8 \$ 1,127	12 \$ 1,775	18 \$ 2,059	18 \$ 1,822	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,300
		Demolition Plans	\$ -	2 \$ 376	8 \$ 1,184	18 \$ 2,059	20 \$ 2,027	24 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,705
		Horizontal Control	\$ -	2 \$ 376	4 \$ 592	4 \$ 515	18 \$ 1,822	8 \$ 898	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,760
		Roadway Plans	\$ -	8 \$ 1,503	32 \$ 4,734	40 \$ 5,149	80 \$ 8,108	60 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 24,643
Sidewalk Plans		\$ -	2 \$ 376	8 \$ 1,184	8 \$ 1,030	24 \$ 2,432	24 \$ 2,059	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 7,081	
Driveway Plans		\$ -	8 \$ 1,503	18 \$ 2,367	40 \$ 5,149	60 \$ 8,081	60 \$ 5,149	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 20,248	
Cross Drainage Plans		\$ -	8 \$ 1,127	18 \$ 2,367	24 \$ 3,089	32 \$ 3,243	32 \$ 2,748	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,573	
Storm Drain Plans		\$ -	2 \$ 376	4 \$ 592	8 \$ 1,030	8 \$ 811	4 \$ 343	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,151	
Traffic Signal Plans		\$ -	4 \$ 752	14 \$ 2,071	28 \$ 2,574	24 \$ 2,432	20 \$ 1,718	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -				

Psomas
Project Fee Estimate / Authorized Task List

Project Number: 7PIM100201
Project Name: Kolb Road, Sunrise to Sabino Canyon
Project Manager: Kevin Thornton
Date: 6/27/2019

BU No.	Design Description	Project Principal \$ 218.97 / Hr. Hrs. Amount	Sr. Project Manager \$ 167.90 / Hr. Hrs. Amount	Sr. Project Engineer \$ 147.65 / Hr. Hrs. Amount	Project Engineer \$ 128.72 / Hr. Hrs. Amount	Designer \$ 101.35 / Hr. Hrs. Amount	Eng Tech/Drafter \$ 85.01 / Hr. Hrs. Amount	Survey Manager \$ 142.77 / Hr. Hrs. Amount	Project Surveyor \$ 138.33 / Hr. Hrs. Amount	2-Person Crew \$ 152.36 / Hr. Hrs. Amount	Survey Tech \$ 77.67 / Hr. Hrs. Amount	Administration \$ 90.25 / Hr. Hrs. Amount	Intern \$ 50.30 / Hr. Hrs. Amount	Psomas Task Total	Subconsultant Amount	Task Total
Total Labor Costs Psomas														\$ 1,685,822		
Total Subconsultants															\$ 508,783	
Total Labor																\$ 1,685,388
3.30	Additional Services/Post Design Services															
3.30.1	Utility Coordination and Survey															
	Pinpointing (40 potholes) - (Cardno)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Update Utility Mapping	\$ -	16 \$ 3,006	16 \$ 2,367	40 \$ 5,148	40 \$ 4,054	20 \$ 1,716	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,262	\$ 29,375
3.30.2	Other Services															
	Noise Wall Structural Design - (SCJ)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Noise Wall Layout	\$ -	12 \$ 2,255	20 \$ 2,959	40 \$ 5,148	48 \$ 4,885	48 \$ 4,119	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,348	\$ 19,348
	Retaining Wall Structural Design - (SCE)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Retaining Wall Layout	\$ -	16 \$ 3,006	28 \$ 4,143	60 \$ 7,723	60 \$ 6,108	80 \$ 6,865	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,844	\$ 29,844
	Additional Meetings	\$ -	40 \$ 7,516	40 \$ 5,915	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,434	\$ 13,434
	Additional Displays, Analysis, Design	\$ -	16 \$ 3,006	10 \$ 2,367	40 \$ 5,148	40 \$ 4,054	40 \$ 3,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 18,008	\$ 18,008
	Section 404 Nationwide Permit Application	\$ -	4 \$ 752	6 \$ 1,184	\$ -	\$ -	40 \$ 3,432	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,068	\$ 10,368
	Joint Trench Design	\$ -	40 \$ 7,516	72 \$ 10,852	128 \$ 16,476	112 \$ 11,351	68 \$ 5,835	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 51,830	\$ 51,830
3.30.3	Post Design Services															
	Attend Pre-bid Meetings (2)	\$ -	4 \$ 752	4 \$ 592	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,343	\$ 1,343
	Assist in Preparation of Addendums	\$ -	8 \$ 1,503	16 \$ 2,367	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,870	\$ 3,870
	Address Questions on Plans and Specifications	\$ -	8 \$ 1,503	16 \$ 2,367	40 \$ 5,148	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,019	\$ 9,019
	Evaluate Bids	\$ -	4 \$ 752	6 \$ 1,184	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,935	\$ 1,935
	Attend Pre-construction and Partnership Meetings (2)	\$ -	8 \$ 1,503	16 \$ 2,367	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,887	\$ 2,887
	Attend Weekly Construction Meetings (8)	\$ -	48 \$ 8,267	72 \$ 10,852	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 34,307	\$ 34,307
	Evaluate Changes to Construction Documents	\$ -	4 \$ 752	16 \$ 2,367	40 \$ 5,148	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6,267	\$ 6,267
	Provide Design Details and Revised Drawings	\$ -	4 \$ 752	16 \$ 2,367	40 \$ 5,148	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,321	\$ 12,321
	Review Shop Drawings, etc.	\$ -	10 \$ 3,006	40 \$ 5,915	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,924	\$ 8,924
	Evaluate Value Engineering Proposals	\$ -	8 \$ 1,503	16 \$ 2,367	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,482	\$ 4,482
	Prepare As-Built Documents	\$ -	8 \$ 1,503	16 \$ 2,367	40 \$ 5,148	40 \$ 4,054	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 13,073	\$ 13,073
	Total Additional Services/Post Design Services	\$ -	\$ 48,983	\$ 88,301	\$ 80,238	\$ 40,838	\$ 26,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 284,332	\$ 68,387	\$ 343,188



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
7/11/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Dealey, Renton & Associates License #0020739 P. O. Box 10550 Santa Ana CA 92711-0550	CONTACT NAME: PHONE (A/C, No, Ext): 714-427-6810 FAX (A/C, No): 714-427-6818 E-MAIL ADDRESS: rlee@dealeyrenton.com
INSURED PSOMAS PSOMAS 555 South Flower Street, Suite 4300 Los Angeles CA 90071	INSURER(S) AFFORDING COVERAGE INSURER A: ACE American Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:

COVERAGES

CERTIFICATE NUMBER: 639874432

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability Claims Made			G23638381007	10/15/2015	10/15/2016	Per Claim \$2,000,000 Annual Aggregate \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

30 Day Notice of Cancellation/10 Day notice for Non-Payment of Prem
7PIM160201, Design Engineering Services for Kolb Road: Sabino Canyon Road to Sunrise Drive, (4KSCSR) CT-TR-16*368

CERTIFICATE HOLDER

CANCELLATION

<p>Pima County Attn: Christy Bustillos 130 W. Congress, 3rd Floor, Mail stop DT-AB3-126 Tucson AZ 85701</p>	<p>SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.</p> <p>AUTHORIZED REPRESENTATIVE <i>Karin Phorp</i></p>
-------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

© 1988-2014 ACORD CORPORATION. All rights reserved.

ACORD™

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/11/2016

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Greyling Ins. Brokerage/EPIC 3780 Mansell Road, Suite 370 Alpharetta, GA 30022 877 908-5619	CONTACT NAME: Jerry Noyola PHONE (A/C, No, Ext): 770-552-4225 FAX (A/C, No): 866-550-4082 E-MAIL ADDRESS: jerry.noyola@greyling.com																					
INSURED Psomas 555 South Flower Street; Suite 4300 Los Angeles, CA 90071	<table border="1"> <tr> <th colspan="2">INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr> <tr> <td>INSURER A :</td><td>National Union Fire Ins Co of P</td><td>19445</td></tr> <tr> <td>INSURER B :</td><td></td><td></td></tr> <tr> <td>INSURER C :</td><td></td><td></td></tr> <tr> <td>INSURER D :</td><td></td><td></td></tr> <tr> <td>INSURER E :</td><td></td><td></td></tr> <tr> <td>INSURER F :</td><td></td><td></td></tr> </table>	INSURER(S) AFFORDING COVERAGE		NAIC #	INSURER A :	National Union Fire Ins Co of P	19445	INSURER B :			INSURER C :			INSURER D :			INSURER E :			INSURER F :		
INSURER(S) AFFORDING COVERAGE		NAIC #																				
INSURER A :	National Union Fire Ins Co of P	19445																				
INSURER B :																						
INSURER C :																						
INSURER D :																						
INSURER E :																						
INSURER F :																						

COVERAGES **CERTIFICATE NUMBER: 16-17** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.


INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> Contractual Liab. GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC OTHER:		5268212	04/01/2016	04/01/2017	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$500,000 MED EXP (Any one person) \$25,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 \$
A	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS		4489706	04/01/2016	04/01/2017	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTION \$					EACH OCCURRENCE \$ AGGREGATE \$ \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N <input checked="" type="checkbox"/> N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	015893764 (AOS)	04/01/2016	04/01/2017	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000
A			015893765 (CA)	04/01/2016	04/01/2017	E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

7PIM160201; Design Engineering Services for Kolb Road: Sabino Canyon Road to Sunrise Drive (4KSCSR) CT-TR 16*368. Pima County, its departments, districts, boards, commissions, officers, officials, agents & employees are named as Additional Insureds with respects to General & Automobile Liability where required by written contract. The above referenced liability policies are primary & non-contributory where required by written contract. Waiver of Subrogation is applicable where required by written contract & allowed by (See Attached Descriptions)

CERTIFICATE HOLDER

CANCELLATION

Pima County Christy Bustillos 130 West Congress Street 3rd Floor, DT-AB3-126 Tucson, AZ 85701	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
-----------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

© 1988-2014 ACORD CORPORATION. All rights reserved.

DESCRIPTIONS (Continued from Page 1)

law. Should any of the above described policies be cancelled by the issuing insurer before the expiration date thereof, 30 days' written notice (except 10 days for nonpayment of premium) will be provided to the Certificate Holder.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 4/1/2016 forms a part of

policy No. 4489706 issued to Psomas

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, A. - Loss Conditions, 5. - Transfer of Rights of Recovery Against Others to Us, is amended to add:

However, we will waive any right of recovery we have against any person or organization with whom you have entered into a contract or agreement because of payments we make under this Coverage Form arising out of an "accident" or "loss" if:

- (1) The "accident" or "loss" is due to operations undertaken in accordance with the contract existing between you and such person or organization; and
- (2) The contract or agreement was entered into prior to any "accident" or "loss".

No waiver of the right of recovery will directly or indirectly apply to your employees or employees of the person or organization, and we reserve our rights or lien to be reimbursed from any recovery funds obtained by any injured employee.



AUTHORIZED REPRESENTATIVE

ENDORSEMENT

This endorsement, effective 12:01 A.M. 4/1/2016 forms a part of

policy No. 5268212 issued to PSOMAS

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY

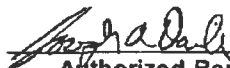
ADDITIONAL INSURED - PRIMARY INSURANCE

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

Section IV, Commercial General Liability Conditions, paragraph 4., Other Insurance, subparagraph a. Primary Insurance, is amended by the addition of the following:

However, coverage under this policy afforded to an additional insured will apply as primary insurance where required by contract, and any other insurance issued to such additional insured shall apply as excess and noncontributory insurance.



Authorized Representative or
Countersignature (in States Where
Applicable)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

This endorsement changes the policy to which it is attached effective on inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy).

This endorsement, effective 12:01 AM 4/1/2016

forms a part of Policy No. 015893764

Issued to PSOMAS

By NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA.

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

Schedule

ANY PERSON OR ORGANIZATION TO WHOM YOU BECOME
OBLIGATED TO WAIVE YOUR RIGHTS OF RECOVERY
AGAINST, UNDER ANY CONTRACT OR AGREEMENT YOU ENTER
INTO PRIOR TO THE OCCURRENCE OF LOSS.

This form is not applicable in California, Kentucky, New Hampshire, New Jersey, North Dakota, Ohio, Tennessee, Texas, Utah, or Washington. This form is not applicable in Missouri when there is a construction code on the policy and there is Missouri premium or exposure.

WC 00 03 13
(Ed. 04/84)

Countersigned by _____



Authorized Representative

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED - OWNERS, LESSEES OR
CONTRACTORS - AUTOMATIC STATUS WHEN
REQUIRED IN CONSTRUCTION AGREEMENT WITH YOU**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

- A. Section II - Who Is An Insured** is amended to include as an additional insured any person or organization for whom you are performing operations when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an additional insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf:

in the performance of your ongoing operations for the additional insured.

However, the insurance afforded to such additional insured:

1. Only applies to the extent permitted by law; and
2. Will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

A person's or organization's status as an additional insured under this endorsement ends when your operations for that additional insured are completed.

- B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:**

This insurance does not apply to:

1. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:

- a. The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
- b. Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of or the failure to render any professional architectural, engineering or surveying services.

2. "Bodily injury" or "property damage" occurring after:

- a. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- b. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

- C. With respect to the insurance afforded to these additional insureds, the following is added to Section III - Limits Of Insurance:**

The most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement you have entered into with the additional insured; or
2. Available under the applicable Limits of

Insurance shown in the Declarations;
whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

POLICY NUMBER: 5268212

COMMERCIAL GENERAL LIABILITY
CG 24 04 05 09

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization:

PURSUANT TO APPLICABLE WRITTEN CONTRACT OR AGREEMENT YOU ENTER INTO.

Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph 8. Transfer Of Rights Of Recovery Against Others To Us of Section IV - Conditions:

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

ENDORSEMENT

This endorsement, effective 12:01 A.M. 4/1/2016 forms a part of

policy No. 4489706 issued to Psomas

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - WHERE REQUIRED UNDER CONTRACT OR AGREEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

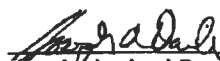
ADDITIONAL INSURED:

ANY PERSON OR ORGANIZATION FOR WHOM YOU ARE CONTRACTUALLY BOUND TO PROVIDE ADDITIONAL INSURED STATUS BUT ONLY TO THE EXTENT OF SUCH PERSON OR ORGANIZATIONS LIABILITY ARISING OUT OF THE USE OF A COVERED AUTO.

I. SECTION II - LIABILITY COVERAGE, A. Coverage, 1. - Who Is Insured, is amended to add:

- d. Any person or organization, shown in the schedule above, to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of use of a covered "auto". However, the insurance provided will not exceed the lesser of:

- (1) The coverage and/or limits of this policy, or
- (2) The coverage and/or limits required by said contract or agreement.



Authorized Representative or
Countersignature (in States Where
Applicable)

POLICY NUMBER: 5268212

COMMERCIAL GENERAL LIABILITY
CG 20 37 04 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - OWNERS, LESSEES OR CONTRACTORS - COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
ANY PERSON OR ORGANIZATION WHO YOU BECOME OBLIGATED TO INCLUDE AS AN ADDITIONAL INSURED AS A RESULT OF ANY CONTRACT OR AGREEMENT YOU HAVE ENTERED INTO _____ _____ _____	_____ _____ _____ _____ _____ _____ _____
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II - Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that

which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to Section III - Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.