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

ITEM
3.18
(ID # 6054)

MEETING DATE:
Tuesday, January 30, 2018

FROM : TLMA-TRANSPORTATION:

SUBJECT: TRANSPORTATION AND LAND MANAGEMENT AGENCY - TRANSPORTATION: Approval of the Engineering Services Agreement between the County of Riverside and HNTB Corporation, for the preparation of a Project Approval/Environmental Document for proposed improvements to the Jackson St / I-10 Interchange. 4th District. [$1,878,253 -Total]; Local Funds 100%

RECOMMENDED MOTION: That the Board of Supervisors:

1. Approve the Engineering Services Agreement between the County of Riverside (County) and HNTB Corporation (HNTB) for the preparation of a Project Approval/Environmental Document for proposed improvements to the Jackson St / I-10 Interchange; and

2. Authorize the Chairman of the Board to execute the same.

ACTION: Policy

Patricia Romo, Director of Transportation 1/22/2018

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Perez, seconded by Supervisor Ashley and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended.

Ayes:	Jeffries, Tavaglione, Washington, Perez and Ashley
Nays:	None
Absent:	None
Date:	January 30, 2018
xc:	Transp.

Kecia Harper-Ihem
Clerk of the Board
By: Deputy

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

FINANCIAL DATA	Current Fiscal Year:	Next Fiscal Year:	Total Cost:	Ongoing Cost
COST	$ 700,000	$ 700,000	$ 1,878,253	$ 0
NET COUNTY COST	$ 0	$ 0	$ 0	$ 0

SOURCE OF FUNDS: Coachella Valley Association of Governments (CVAG) (75%), City of Indio (25%). There are no General Funds used in this project.	**Budget Adjustment:** No **For Fiscal Year:** 17/18 to 19/20

C.E.O. RECOMMENDATION: Approve

BACKGROUND:

Summary

The Jackson Street Interchange is located on I-10 between Monroe Street and Golf Center Parkway in the City of Indio. The interchange is a major access point for existing residential and retail sites. Significant growth and development has taken place in the past 30 years and has resulted in traffic congestion at the interchange. The interchange was originally constructed in 1972. Immediate and long-term growth in the area will cause an increase in traffic volume throughout the City. Constructing improvements to the Jackson Street interchange and Whitewater River bridge will address existing deficiencies, remove the existing bottleneck, and accommodate future growth and development.

The City of Indio (City) in cooperation with the California Department of Transportation (Caltrans) and the Coachella Valley Association of Governments (CVAG) are proposing to construct a new interchange on Interstate 10 (I-10) at Jackson Street (Project) in replacement of the existing interchange. Interchange improvements will include the construction of new structures crossing I-10 and the Whitewater River and construction of associated on-and off-ramps. The project will also include pedestrian and golf cart facilities compatible with CV Link.

The County issued a Request for Proposals (RFP) in compliance with Caltrans Local Assistance Procedures Manual to select a consulting firm for two major interchange projects on the I-10 Corridor, at Monroe Street and Jackson Street, in the City of Indio. The RFP was also used to establish a pre-qualified list of consultants that could be engaged in the future for the development of environmental and engineering documents. Eight qualified firms submitted written proposals and the top six firms, based on the evaluation of the written proposals, were interviewed. The written proposals and interviews were evaluated by representatives from Caltrans, the City of Indio, and the County.

HNTB Corporation was one of the two highest ranked firms and the one selected to provide the necessary environmental and engineering services for the Jackson Street Interchange Project. All six of the short-listed firms demonstrated their ability to provide the necessary services and were placed on the prequalified list where they will remain eligible to receive work from the County for a period of five years.

The detailed scope, proposed schedule and negotiated fee for performing the preliminary engineering and environmental services for the project are provided in Appendices "A", "B" and "C" respectively of the subject agreement.

On January 9, 2018 (Agenda item No. 3.27), the County Board of Supervisors approved the Amended and Restated Reimbursement Agreement Amendment to an Inter-Agency Cooperative Agreement between the Coachella Valley Association of Governments (CVAG), City of Indio, and the County of Riverside for the Jackson St project. This amendment delegated the County as lead Agency for this project and provided the funding for the project.

On January 9, 2018 (Agenda item No. 3.30), the County Board of Supervisors approved an Inter-Agency Cooperative Agreement between Caltrans and the County of Riverside establishing the terms, conditions and responsibilities for implementing the project improvements within Caltrans right-of-way.

Jackson Street / I-10 Interchange Project Number: C7-0049

Impact on Residents and Businesses

The proposed improvements will improve safety and enhance operational efficiency for local, regional, and interregional traveling motorists. The project will also incorporate a pedestrian, bicycle, and Neighborhood Electric Vehicle (NEV) connection with the Coachella Valley (CV) Link project along the Whitewater River. The mixed-use path is designed to encourage alternative forms of transportation and recreation.

SUPPLEMENTAL:

Additional Fiscal Information

The consultant's proposed fee for preliminary engineering and environmental documentation is $1,707,503. The contract is not to exceed $1,878,253 and includes a 10% contingency to be used only with prior written approval from the Director of Transportation. Funding will be provide by CVAG, $1,408,690 (75%), and the local share provided by the City, $469,563 (25%). County will invoice CVAG for 100% of the project cost. No County funds will be used for this contract. The work under this agreement is required to be completed within four years of approval of the funding agreement.

The estimated cost breakdown by fiscal year is:

• FY 17/18	$ 700,000
• FY 18/19	$ 700,000
• FY 19/20	$ 307,503
• Contingency	$ 170,750
Total Budget:	**$1,878,253**

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

Contract History and Price Reasonableness

The consultant's negotiated fee of $1,707,503, excluding contingency, proposed for this contract is comparable to work performed on similar projects.

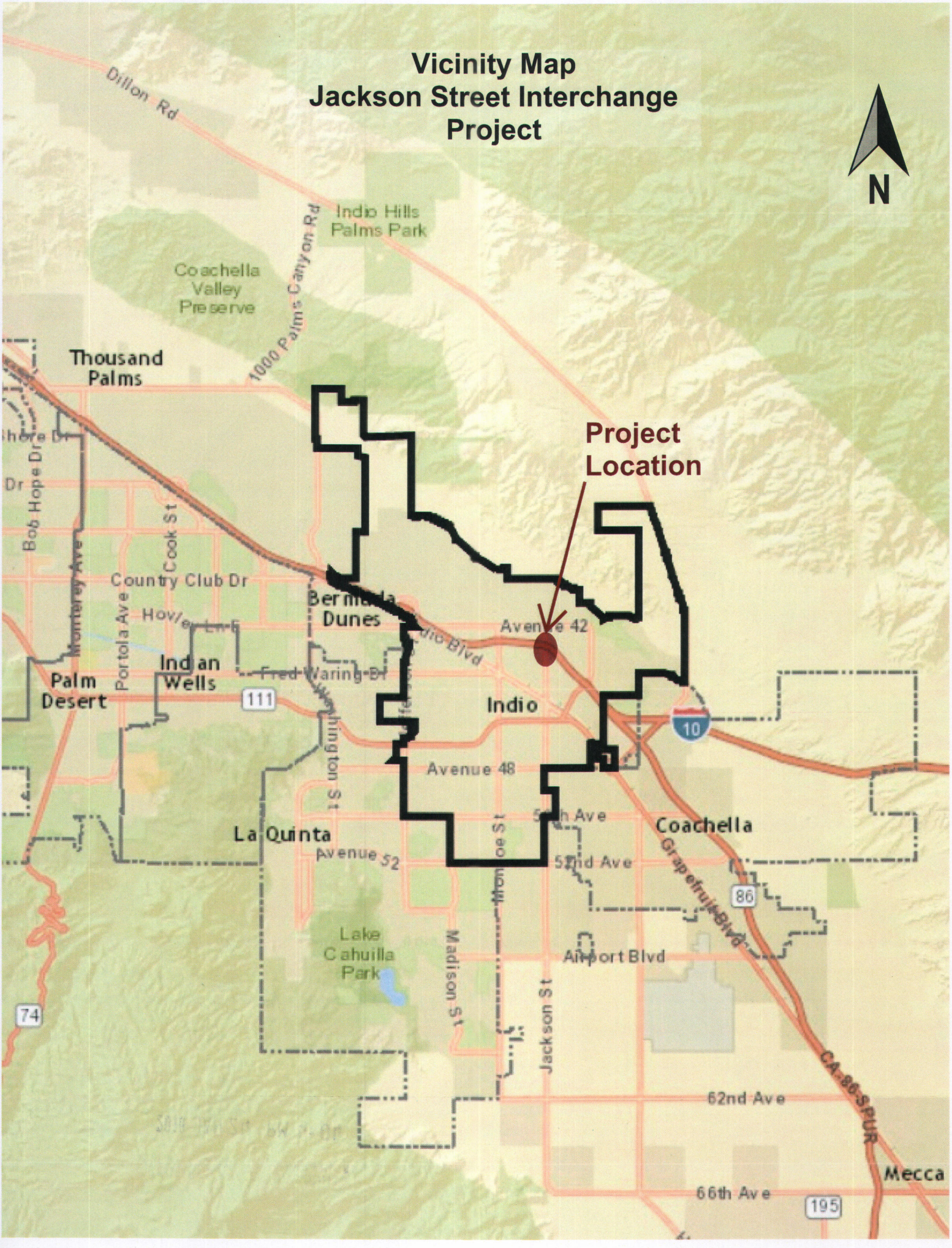
ATTACHMENTS:
Jackson St Consultant Services Agreement
Jackson Vicinity Map

Kristine Bell-Valdez 1/23/2018

Synthia M. Gunzel, Supervising Deputy County Counsel 1/23/2018

Scott Bruckner 1/23/2018

Vicinity Map
Jackson Street Interchange Project



Contract No. _____

Riverside County Transportation

ENGINEERING SERVICES AGREEMENT

for

Jackson Street Interchange

between

County of Riverside • Transportation Department

and

HNTB Corporation, Inc.

JAN 3 0 2018 3.18

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ENGINEERING SERVICES AGREEMENT

COUNTY OF RIVERSIDE, hereinafter referred to as "COUNTY", and HNTB CORPORATION INC., hereinafter referred to as "ENGINEER", located at the following addressees:

County of Riverside • Transportation Department
4080 Lemon Street, 8th Floor
Riverside, CA 92502

HNTB CORPORATION INC.
3633 Inland Empire Blvd, Suite 750
Ontario, CA 91764

do hereby agree as follows:

ARTICLE I • DESIGNATED CONTACTS

Coordination of ENGINEER, and COUNTY activities shall be accomplished through an ENGINEERING PROJECT MANAGER, and a COUNTY PROJECT MANAGER.

The ENGINEERING PROJECT MANAGER for ENGINEER shall be:

Khalil Saba, PE

The COUNTY PROJECT MANAGER for COUNTY shall be:

John Ashlock, PE

ARTICLE II • PROJECT DEFINITION

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

ARTICLE III • COOPERATIVE AGENCIES

A. Lead Agency

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

B. Cooperative Agencies

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

Federal Highway Administration

CALTRANS

City of Indio

Coachella Valley Water District

Coachella Valley Association of Governments

Union Pacific Railroad

Regional Water Quality Control Board

U.S. Fish & Wildlife Services

Army Corps of Engineers

Coachella Valley Water District

Utility Companies

Coachella Valley Conservation Commission

C. COUNTY/AGENCIES Standards

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

ARTICLE IV • CONDITIONS

A. Notifications

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

B. Assignment

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

C. Subcontracts

1. ENGINEER shall perform the services contemplated with resources available within its own organization. No portion of the services pertinent to this contract shall be subcontracted without written authorization by the COUNTY PROJECT MANAGER, except that which is expressly identified in this contract.
2. In the event ENGINEER subcontracts any portion of ENGINEER's duties under this contract, ENGINEER

shall require its subcontractors to comply with the terms of this contract in the same manner as required of ENGINEER including, but not limited to; indemnification of the COUNTY, requiring the same insurance of Subcontractors as required of ENGINEER, and having Subcontractor's insurance name the COUNTY as Additional Insured for each type of insurance where this Agreement requires ENGINEER's insurance to name COUNTY as Additional Insured.

D. Modifications

1. This contract may be amended or modified only by mutual written agreement of the parties. No alteration or variation of the terms of this contract will be valid unless made in writing and signed by the parties hereto and no oral understanding or agreement not incorporated herein, will be binding on any of the parties hereto.
2. Minor modifications are changes that do not substantially affect the Scope of Service. Minor modifications may be: a shift of funds between tasks within a budget category; the shifting of work and/or funding from one phase to another; use of contingency pursuant to Article VI.B.1. All requests for minor modifications must be approved in writing by the Director of Transportation, or his designee, prior to implementing the change.
3. There shall be no change in the ENGINEERING PROJECT MANAGER or key members of the PROJECT team without prior written approval by the COUNTY PROJECT MANAGER.
4. All modifications that do not fit within the definition of a minor modification to the contract shall be considered a major change and must be approved in writing by the ENGINEER and COUNTY Board of Supervisors prior to implementing the major change.

E. COUNTY Directives

ENGINEER shall receive contract directions and interpretations from the COUNTY PROJECT MANAGER.

F. Liability

1. ENGINEER has total responsibility for the accuracy and completeness of all data, reports, plans, specifications and estimates prepared for this PROJECT and shall check all such material accordingly. COUNTY will review all work product deliverables. The responsibility for accuracy and completeness of such items remains solely that of ENGINEER. Neither COUNTY'S review or approval shall give rise to any liability or responsibility on the part of COUNTY, or waive any of COUNTY'S rights, or relieve

ENGINEER of its professional responsibilities or obligations under this contract.

2. The plans, designs, estimates, calculations, reports and other documents furnished in accordance with the Scope of Services shall meet the criteria for acceptance and be a product of neat appearance, well organized, technically and grammatically correct, checked, and having the preparer and checker identified. The minimum standard of appearance, organization and contents shall be of similar types produced by COUNTY and AGENCIES. If any work product submitted is not complete and ready for use by COUNTY, it shall be marked "Draft" or similar designation to indicate it is not ready for use by COUNTY. COUNTY expects that all work product not so designated is ready for and can be used on PROJECT.

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

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

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

8. ENGINEER, and the agents and employees of ENGINEER, in the performance of this contract, shall act in an independent capacity and not as officers, employees or agents of COUNTY.

G. Indemnification and Defense

1. To the fullest extent permitted by applicable law, ENGINEER agrees to and shall indemnify, defend and hold harmless the County of Riverside, its Agencies, Districts, Departments and Special Districts, their respective directors, officers, Board of Supervisors, elected and appointed officials, employees, agents, volunteers and representatives (hereinafter individually and collectively referred to as "Indemnitees") from all liability, including, but not limited to loss, suits, claims, demands, actions, or proceedings caused by any alleged or actual negligence, recklessness, or willful misconduct of ENGINEER, its directors,

officers, partners, employees, agents, subconsultants or representatives or any person or organization for whom ENGINEER is responsible, arising out of or from the performance of services under this Agreement.

2. The duty to indemnify does not include loss, suits, claims, demands, actions, or proceedings caused by actual negligence of Indemnitees; however, any actual negligence of Indemnitees will only affect the duty to indemnify for the specific act adjudged by the findings of a court of competent jurisdiction to be negligence of the Indemnitees, and will not preclude a duty to indemnify for any negligence, recklessness, or willful misconduct of ENGINEER.

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

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

5. In the event there is conflict between the indemnity and defense provisions and California Civil Code Sections 2782 and 2782.8, the indemnity and defense provisions shall be interpreted to comply with Civil Code sections 2782 and 2782.8.

H. Quality Control

ENGINEER shall implement and maintain the following quality control procedures during the preparation of the plans and documents relating to PROJECT. ENGINEER shall have a quality control plan in effect during the entire time services are being performed under this contract. The plan shall establish a process whereby calculations are independently checked, plans checked, corrected and back-checked, and all job related correspondence and memoranda routed and received by affected persons and then

bound in appropriate job files. Where several drawings show different work in the same area, means shall be provided to avoid conflicts and misalignment in both new and existing improvements. Evidence that the quality control plan is functional may be requested by the COUNTY PROJECT MANAGER. All plans, calculations documents and other items submitted to the COUNTY PROJECT MANAGER for review shall be marked clearly as being fully checked and that the preparation of the material followed the quality control plan established for the work.

I. Value Engineering

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

J. Extra Work

1. ENGINEER shall not perform Extra Work until receiving written authorization from the COUNTY PROJECT MANAGER.
2. In the event that COUNTY directs ENGINEER to provide services constituting Extra Work, COUNTY shall provide extra compensation to the ENGINEER. Allowable compensation for approved extra work will be based on the provisions of Appendix C, Budget, which is attached hereto and incorporated herein by reference.
3. An amendment to this contract providing for such compensation for Extra Work shall be issued by COUNTY to ENGINEER. Such Amendment shall not be effective until executed by both parties.

K. Disputes

1. In the event ENGINEER considers any work demanded of him to be outside the requirements of the contract, or if he considers any order, instruction, or decision of COUNTY to be unfair, he shall promptly

upon receipt of such order, instruction or decision, ask for a written confirmation of the same whereupon he shall proceed without delay to perform the work or to conform to the order, instruction, or decision; but unless ENGINEER finds such order, instruction, or decision satisfactory, he shall within 20 days after receipt of same, file a written protest with COUNTY stating clearly and in detail his objections and reasons therefore. Except for such protests or objections as are made of record in the manner specified and within the time stated herein, and except for such instances where the basis of a protest could not reasonably have been foreseen by ENGINEER within the time limit specified for protest, ENGINEER hereby waives all grounds for protests or objections to the orders, instruction, or decisions of COUNTY and hereby agrees that, as to all matters not included in such protests, the orders, instructions and decisions of COUNTY will be limited to matters properly falling within COUNTY's authority.

2. Any controversy or claim arising out of or relating to this contract which cannot be resolved by mutual agreement may be settled by arbitration in accordance with the rules of the American Arbitration Association, provided that the parties mutually agree to submit to arbitration.
3. Neither the pendency of a dispute nor its consideration by arbitration will excuse ENGINEER from full and timely performance in accordance with the terms of the contract.

L. Termination Without Cause

1. COUNTY reserves the right to terminate this contract at COUNTY's discretion and without cause, upon thirty (30) calendar days written notice to ENGINEER.
2. In the event of termination of the Agreement, upon demand, ENGINEER shall deliver to COUNTY all field notes, surveys, studies, reports, plans, drawings, specifications, and all other materials and documents prepared by or provided to ENGINEER in the performance of this contract. All such documents and materials shall be property of COUNTY.
3. In the event that this contract is terminated, ENGINEER is entitled to full payment for all services performed up to the time written notice of contract cancellation is received by ENGINEER. Payment shall be made for services performed to date based upon the percentage ratio that the basic services performed bear to the services contracted for, less payments made to date; plus any amount for authorized, but unpaid, extra work performed and costs incurred.

M. Termination for Lack of Performance

COUNTY may terminate this contract and be relieved of the payment of any consideration to ENGINEER

should ENGINEER fail to perform the covenants herein contained at the time and in the manner herein provided. In the event of such termination, COUNTY may proceed with the work in any manner deemed proper by COUNTY. In such event, ENGINEER shall be paid only for work completed and delivered to COUNTY in a timely and successful manner.

N. Insurance

Without limiting or diminishing the ENGINEER'S obligation to indemnify or hold the COUNTY harmless, ENGINEER shall procure and maintain or cause to be maintained, at its sole cost and expense, the following insurance coverage's during the term of this Agreement. As respects to the insurance section only, the COUNTY herein refers to the County of Riverside, its Agencies, Districts, Special Districts, and Departments, their respective directors, officers, Board of Supervisors, employees, elected or appointed officials, agents or representatives as Additional Insureds.

1. Workers' Compensation:

   If the ENGINEER has employees as defined by the State of California, the ENGINEER shall maintain statutory Workers' Compensation Insurance (Coverage A) as prescribed by the laws of the State of California. Policy shall include Employers' Liability (Coverage B) including Occupational Disease with limits not less than $1,000,000 per person per accident. The policy shall be endorsed to waive subrogation in favor of The County of Riverside.

2. Commercial General Liability:

   Commercial General Liability insurance coverage, including but not limited to, premises liability, unmodified contractual liability, products and completed operations liability, personal and advertising injury, and cross liability coverage, covering claims which may arise from or out of ENGINEER'S performance of its obligations hereunder. Policy shall name the COUNTY as Additional Insured. Policy's limit of liability shall not be less than $1,000,000 per occurrence combined single limit. If such insurance contains a general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the occurrence limit.

3. Vehicle Liability:

   If vehicles or mobile equipment are used in the performance of the obligations under this Agreement, then ENGINEER shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an amount not less than $1,000,000 per occurrence combined single limit. If such insurance contains a

general aggregate limit, it shall apply separately to this agreement or be no less than two (2) times the occurrence limit. Policy shall name the COUNTY as Additional Insureds.

4. Professional Liability

ENGINEER shall maintain Professional Liability Insurance providing coverage for the ENGINEER's performance of work included within this Agreement, with a limit of liability of not less then $1,000,000 per occurrence and $2,000,000 annual aggregate. If ENGINEER's Professional Liability Insurance is written on a claims made basis rather than an occurrence basis, such insurance shall continue through the term of this Agreement and ENGINEER shall purchase at his sole expense either 1) an Extended Reporting Endorsement (also, known as Tail Coverage); or 2) Prior Dates Coverage from new insurer with a retroactive date back to the date of, or prior to, the inception of this Agreement; or 3) demonstrate through Certificates of Insurance that ENGINEER has Maintained continuous coverage with the same or original insurer. Coverage provided under items; 1), 2), or 3) will continue as long as the law allows.

5. General Insurance Provisions - All lines:

   a. Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are waived, in writing, by the County Risk Manager. If the County's Risk Manager waives a requirement for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

   b. The ENGINEER must declare its insurance self-insured retention for each coverage required herein. If any such self-insured retention exceed $500,000 per occurrence each such retention shall have the prior written consent of the County Risk Manager before the commencement of operations under this Agreement. Upon notification of self-insured retention unacceptable to the COUNTY, and at the election of the Country's Risk Manager, ENGINEER'S carriers shall either; 1) reduce or eliminate such self-insured retention as respects this Agreement with the COUNTY, or 2) procure a bond which guarantees payment of losses and related investigations, claims administration, and defense costs and expenses.

   c. ENGINEER shall cause ENGINEER'S insurance carrier(s) to furnish the County of Riverside with either 1) a properly executed original Certificate(s) of Insurance and certified original copies of Endorsements effecting coverage as required herein, and 2) if requested to do so orally or in writing by the County Risk Manager, provide original Certified copies of policies including all Endorsements

and all attachments thereto, showing such insurance is in full force and effect. Further, said Certificate(s) and policies of insurance shall contain the covenant of the insurance carrier(s) that thirty (30) days written notice shall be given to the County of Riverside prior to any material modification, cancellation, expiration or reduction in coverage of such insurance. In the event of a material modification, cancellation, expiration, or reduction in coverage, this Agreement shall terminate forthwith, unless the County of Riverside receives, prior to such effective date, another properly executed original Certificate of Insurance and original copies of endorsements or certified original policies, including all endorsements and attachments thereto evidencing coverage's set forth herein and the insurance required herein is in full force and effect. ENGINEER shall not commence operations until the COUNTY has been furnished original Certificate (s) of Insurance and certified original copies of endorsements and if requested, certified original policies of insurance including all endorsements and any and all other attachments as required in this Section. An individual authorized by the insurance carrier to do so on its behalf shall sign the original endorsements for each policy and the Certificate of Insurance.

d. It is understood and agreed to by the parties hereto that the ENGINEER'S insurance shall be construed as primary insurance, and the COUNTY'S insurance and/or deductibles and/or self-insured retention's or self-insured programs shall not be construed as contributory.

e. If, during the term of this Agreement or any extension thereof, there is a material change in the scope of services; or, there is a material change in the equipment to be used in the performance of the scope of work; or, the term of this Agreement, including any extensions thereof, exceeds five (5) years; the COUNTY reserves the right to adjust the types of insurance and the monetary limits of liability required under this Agreement, if in the County Risk Manager's reasonable judgment, the amount or type of insurance carried by the ENGINEER has become inadequate.

f. ENGINEER shall pass down the insurance obligations contained herein to all tiers of subconsultants working under this Agreement.

g. The insurance requirements contained in this Agreement may be met with a program(s) of self-insurance acceptable to the COUNTY.

h. ENGINEER agrees to notify COUNTY of any claim by a third party or any incident or event that may give rise to a claim arising from the performance of this Agreement.

O. Conflict of Interest

ENGINEER warrants, by execution of this contract, that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by ENGINEER for the purpose of securing business. For breach or violation of this warranty, COUNTY has the right to annul this contract without liability, pay only for the value of the work actually performed, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee. ENGINEER may be requested to complete a Conflict of Interest Statement prior to, during, or after execution of this contract. ENGINEER understands that as a condition of this contract ENGINEER agrees to complete the Conflict of Interest Statement when requested to do so by COUNTY.

P. Legal Compliance

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

Q. Nondiscrimination

1. During the performance of this contract, ENGINEER and its Subcontractors shall not act unlawfully against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age or sex. ENGINEER and Subcontractor shall comply with the provisions of the Fair Employment and Housing Act (Government Code, Section 12900 et seq.) and applicable regulations promulgated thereunder (California Administrative Code, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900, set forth in Chapter 5 of Division 4 of Title 2 of the California Administrative Code are incorporated into this contract by reference and made a part hereof as if set forth in full. ENGINEER and its Subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement.
2. ENGINEER will provide all information and reports required by the Regulations, or orders and instructions

issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by COUNTY or AGENCIES to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of ENGINEER is in the exclusive possession of another who fails or refuses to furnish this information, ENGINEER shall so certify to COUNTY, or the Federal Highway Administration as appropriate and shall set forth what efforts he has made to obtain the information.

3. In the event of ENGINEER's noncompliance with the nondiscrimination provisions of this contract, COUNTY shall impose such contract sanctions as it determines to be appropriate, including, but not limited to:
    - Withholding of payments to ENGINEER under the contract until ENGINEER complies;
    - Cancellation, termination, or suspension of the contract in whole or in part.
4. ENGINEER shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under this contract.
5. ENGINEER shall comply with Title VI of the Civil Rights Act of 1964, as amended. Accordingly, 49 CFR 21 through Appendix H and 23 CFR 710.405(b) are applicable to this contract by reference.

R. Labor Code and Prevailing Wages

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

provisions before commencing the performance of the work of this contract."

3. Pursuant to Section 1773 of the Labor Code, the general prevailing wage rates, including the per diem wages applicable to the work, and for holiday and overtime work, including employer payments for health and welfare, pension, vacation, and similar purposes, in the county in which the work is to be done have been determined by the Director of the California Department of Industrial Relations. These wages are available from the California Department of Industrial Relations' Internet website at http://www.dir.ca.gov.
4. Should a portion of the project contain Federal funding, Federal minimum wages shall be used. The Federal minimum wage rates for this project as determined by the United States Secretary of Labor are available from the U.S Department of Labor, Employment Standards Administration, Wage and Hour Division's Internet website at http://www.access.gpo.gov/davisbacon. If there is a difference between the minimum wage rates determined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the ENGINEER and subcontractors shall pay not less than the higher wage rate. The Department will not accept lower State wage rates determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the ENGINEER and subcontractors, the ENGINEER and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

S. Review and Inspection

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

T. Record Retention / Audits

1. ENGINEER's and subconsultants' contracts, including cost proposals and indirect cost rates (ICR), are subject to audits or reviews such as, but not limited to, a Contract Audit, an Incurred Cost Audit, an ICR Audit, or a certified public accountant (CPA) ICR Audit Workpaper Review. If selected for audit or review, the contract, cost proposal and ICR and related workpapers, if applicable, will be reviewed to verify compliance with 48 CFR, Part 31 and other related laws and regulations. In the instances of a CPA ICR Audit Workpaper Review, it is ENGINEER's responsibility to ensure federal, state, or local government

officials are allowed full access to the CPA's workpapers. The contract, cost proposal, and ICR shall be adjusted by ENGINEER and approved by COUNTY contract manager to conform to the audit or review recommendations. ENGINEER agrees that individual terms of costs identified in the audit report shall be incorporated into the contract by this reference if directed by COUNTY at its sole discretion. Refusal by ENGINEER to incorporate audit or review recommendations, or to ensure that the Federal, State, or local governments have access to CPA workpapers, will be considered a breach of contract terms and cause for termination of the contract and disallowance of prior reimbursed costs.

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

U. Rebates, Kickbacks, or Other Unlawful Consideration

1. ENGINEER warrants that this contract was not obtained or secured through rebates kickbacks or other unlawful consideration, either promised or paid to any COUNTY employee. For breach or violation of this warranty, COUNTY shall have the right in its discretion; to terminate the contract without liability; to pay only for the value of the work actually performed; or to deduct from the contract price; or otherwise recover the full amount of such rebate, kickback or other unlawful consideration.

V. Prohibition of Expending Local Agency, State, or Federal Funds for Lobbying

1. ENGINEER certifies to the best of his or her knowledge and belief that:
   a. No state, federal or local agency appropriated funds have been paid, or will be paid by-or-on behalf of ENGINEER to any person for influencing or attempting to influence an officer or employee of any state or federal agency; a Member of the State Legislature or United States Congress; an officer or employee of the Legislature or Congress; or any employee of a Member of the Legislature or Congress, in connection with the awarding of any state or federal contract; the making of any state or

federal grant; the making of any state or federal loan; the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state or federal contract, grant, loan, or cooperative agreement.

b. If any funds other than federal appropriated funds have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any federal agency; a Member of Congress; an officer or employee of Congress, or an employee of a Member of Congress; in connection with this federal contract, grant, loan, or cooperative agreement; ENGINEER shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying", in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, US. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. ENGINEER also agrees by signing this document that he or she shall require that the language of this certification be included in all lower-tier subcontracts, which exceed $100,000, and that all such sub recipients shall certify and disclose accordingly.

W. Ownership of Data

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

X. Confidentiality of Data

1. All financial, statistical, personal, technical or other data and information which is designated confidential by COUNTY or AGENCIES, and made available to ENGINEER in order to carry out this contract, shall be protected by ENGINEER from unauthorized use and disclosure.

2. Permission to disclose information on one occasion for a public hearing held by COUNTY or AGENCIES relating to the contract shall not authorize ENGINEER to further disclose such information or disseminate the same on any other occasion.

3. ENGINEER shall not comment publicly to the press or any other media regarding the contract, including

COUNTY or Agencies actions regarding this contract. Communication shall be limited to COUNTY, Agency or ENGINEER's staff that are involved with the project, unless ENGINEER shall be requested by COUTY to attend a public hearing or respond to questions from a Legislative committee.

4. Each subcontract shall contain provisions similar to the foregoing related to the confidentiality of data and nondisclosure of the same.
5. ENGINEER shall not issue any news release or public relations item of any nature whatsoever regarding work performed or to be performed under this contract without prior review of the contents thereof by COUNTY and receipt of COUNTY's written permission.

Y. Funding Requirements

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

ARTICLE V • PERFORMANCE

A. Performance Period

1. This contract shall begin upon notification to proceed by the COUNTY PROJECT MANAGER.
2. ENGINEER is advised that any recommendation for contract award is not binding on COUNTY until the proposed contract is fully executed and approved by COUNTY.
3. ENGINEER shall perform PROJECT services in accordance with the provisions set forth in Appendix B, Schedule of Services, which is attached hereto and incorporated herein by reference.
4. Where ENGINEER is required to prepare and submit studies, reports, plans, etc., to COUNTY, these shall be submitted in draft as scheduled, and the opportunity provided for COUNTY to offer comments prior to final submission.
5. When COUNTY determines that ENGINEER has satisfactorily completed the PROJECT services, COUNTY may give ENGINEER a written Notice of Final Acceptance. ENGINEER shall not incur any

further costs hereunder unless so specified in the Notice of Final Acceptance. ENGINEER may request a Notice of Final Acceptance determination when, in its opinion, it has satisfactorily completed all covenants as stipulated in this contract.

6. Time is of the essence in this contract.

B. Time Extensions

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

C. Reporting Progress

1. As part of the monthly invoice ENGINEER shall submit a progress report in accordance with COUNTY Engineering Services Progress Reporting Guidelines. Progress Reports shall indicate the progress achieved during the previous month in relation to the Schedule of Services. Submission of such progress report by ENGINEER shall be a condition precedent to receipt of payment from COUNTY for each monthly invoice submitted.
2. To ensure understanding and performance of the contract objectives, meetings between COUNTY, AGENCIES, and ENGINEER shall be held as often as deemed necessary. All work objectives, ENGINEER's work schedule, the terms of the contract and any other related issues will be discussed and/or resolved. ENGINEER shall keep minutes of meetings and distribute copies of minutes as appropriate.

D. Evaluation of ENGINEER

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

ARTICLE VI • COMPENSATION

A. Work Authorization

ENGINEER shall not commence performance of any work or project services until so directed by the

County Project Manager. No payment will be made prior to approval of this contract.

B. Basis of Compensation

1. PROJECT services as provided under this contract and as described in the Scope of Services, shall be compensated for as defined in Appendix C, Budget, which is attached hereto and incorporated herein by reference. The total amount of the contract is not to exceed $1,878,253.15 and reimbursement is to be made at actual cost plus fixed fee for the following contractors:

• HNTB Corporation	$ 542,273.18
• Fehr & Peers	$ 68,200.92
• Paragon Partners	$ 29,098.93
• Value Management Strategies	$ 42,733.31
• ESA Associates	$ 345,308.08
• TranSystems	$ 498,120.93
• PACE Advanced Water Engineering	$ 56,532.81
• David Evans & Associates, Inc.	$ 48,134.48
• Earth Mechanics, Inc (EMI)	$ 77,100.21
• Contingency (10%)	$170,750.29

If a contingency budget is provided, COUNTY shall hold such contingency in reserve for unforeseen Extra Work that may arise during the performance of this agreement. Contingency budget shall only be used at the discretion of the COUNTY PROJECT MANAGER, and with prior written authorization by the COUNTY PROJECT MANAGER.

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

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

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

4. Any equipment purchased as a result of this contract is subjected to the following: ENGINEER shall maintain an inventory of all nonexpendable property. Nonexpendable property is defined as having a useful life of at least two years and an acquisition cost of $500 or more. If the purchased equipment needs replacement and is sold or traded in, COUNTY shall receive a proper refund or credit. At the conclusion of the contract or if the contract is terminated, ENGINEER may either keep the equipment and credit COUNTY in an amount equal to its fair market value or sell such equipment at the best price obtainable at a public or private sale in accordance with established COUNTY procedures and credit COUNTY in an amount equal to the sales price. If ENGINEER elects to keep the equipment, fair market value shall be determined, at ENGINEER's expense, on the basis of a competent independent appraisal of such equipment. Appraisals shall be obtained from an appraiser mutually agreeable by COUNTY, and ENGINEER. If it is determined to sell the equipment, the terms and conditions of such sale must be approved in advance by COUNTY and AGENCIES.
5. The consideration to be paid ENGINEER, as provided herein, shall be in compensation for all of ENGINEER's expenses incurred in the performance hereof, including travel and per diem, unless otherwise expressly so provided.
6. ENGINEER agrees that the Contract Cost Principles and Procedures, CFR 48, Federal Acquisition Regulations Systems, Chapter 1, Part 31, shall be used to determine the allowability of individual items of cost.
7. ENGINEER also agrees to comply with Federal procedures in accordance the Code of Federal Regulations Section 49, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments
8. In the event of errors or omissions in the plans for PROJECT, ENGINEER shall perform the necessary engineering services required to correct such errors and omissions without additional charge to COUNTY.

C. Progress Payments

1. ENGINEER shall submit monthly invoices for PROJECT Services in accordance with Appendix C, Budget, and in accordance with COUNTY Engineering Services Invoicing Procedures.
2. ENGINEER shall submit an invoice each month for PROJECT services performed during the preceding month. Invoices shall be submitted to the COUNTY PROJECT MANAGER and shall be included with a Progress Report covering the same period as the submitted invoice.

3. Progress payments will be based on PROJECT services provided and actual costs incurred. Payments made prior to the completion of each phase will not exceed the amount allowed in ENGINEER's cost proposal for the completion of that phase and prior phases, unless approved in writing by the COUNTY PROJECT MANAGER.
4. Progress payments will be made as promptly as fiscal procedures will permit upon receipt by the COUNTY PROJECT MANAGER of itemized invoices.
5. COUNTY will withhold the last 10 percent of the budget for preparation of PS&E documents. The 10 percent retainage is to be held after 90% of the PS&E phase has been billed and is not to be deducted from each invoice. The amount retained will be paid to ENGINEER after COUNTY has approved ENGINEER's plans, specifications and estimate.

ARTICLE VII • GIS INFORMATION

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

B. ENGINEER acknowledges that the unauthorized use, transfer, assignment, sublicensing, or disclosure of the GIS information, documentation, or copies thereof will substantially diminish their value to COUNTY. ENGINEER acknowledges and agrees that COUNTY GIS information is a valuable proprietary product, embodying substantial creative efforts, trade secrets, and confidential information and ideas. COUNTY GIS information is and shall remain the sole property of COUNTY; and there is no intention of COUNTY to transfer ownership of COUNTY GIS information.

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

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

E. GIS information cannot be used for all purposes; and GIS information may not be complete for all purposes. Additional investigation or research by ENGINEER into other sources will be required. GIS information is intended only as an information base and is not intended to replace any legal records. COUNTY has used

and will continue to use its best efforts to correctly input into COUNTY GIS the information contained in various legal and other records; but COUNTY accepts no responsibility for any conflict with actual legal records or for information not transferred from legal records to COUNTY GIS. COUNTY has attempted to update GIS information as often as is practically feasible. However, ENGINEER should be aware that GIS information may not be current and changes or additions to the information contained in COUNTY GIS may not yet be reflected in COUNTY GIS.

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

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

ARTICLE VIII • APPROVALS

COUNTY Approvals

RECOMMENDED FOR APPROVAL:

Dated: 1/16/2018

Patricia Romo

Director of Transportation

APPROVED AS TO FORM:

Dated: 1/23/18

~~Marsha L. Victor~~,
Kristina Bell-Valdez
~~Chief~~ Deputy County Counsel

APPROVAL BY THE BOARD OF SUPERVISORS:

Dated: JAN 30 2018

PRINTED NAME Chuck Washington

Chairman, Riverside County Board of Supervisors

ATTEST:

JAN 30 2018
Dated: _____

KECIA HARPER-IHEM

Clerk of the Board (SEAL)

ENGINEER Approvals

ENGINEER:

Dated: 11/2/17

PRINTED NAME Thomas D. ELLIS

TITLE Senior Vice President

ENGINEER:

Dated: _____

PRINTED NAME

TITLE

APPENDIX A • ARTICLE AI • INTRODUCTION

A. PROJECT DESCRIPTION

This PROJECT will reconstruct the existing interchange at Jackson Street and Interstate 10. The proposed improvements will increase the capacity of the general area in order to reduce local street congestion and accommodate projected growth in the area. HNTB (ENGINEER) shall perform professional and technical services to provide support to the COUNTY required to prepare the Environmental Document, the Project Report, and, if the COUNTY chooses to do so at a later date, the Plans, Specifications and Estimates (PS&E) necessary to complete construction.

B. LOCATION

The I-10/Jackson Street interchange is located on I-10 between Monroe Street and Golf Center Parkway in the City of Indio. The project limits are 08-Riv-10 – R54.9/R56.5

C. COORDINATION

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

- Caltrans District 8
- City of Indio
- FHWA
- U.S. Fish & Wildlife Service
- Army Corps of Engineers
- Coachella Valley Water District
- County of Riverside
- County of Riverside
- California Dept. of Fish and Wildlife
- Regional Water Quality Control Board
- Utility Companies
- Coachella Valley Conservation Commission

CALTRANS will exercise review and approval function through the COUNTY PROJECT MANAGER at key points in the development process. All contacts with CALTRANS will be directed through COUNTY. Milestone PROJECT design reviews will be performed for the specific products and deliverables listed

herein. The COUNTY PROJECT MANAGER will conduct these reviews, in addition to the monthly project status reports and meetings. All meetings with other outside agencies will be scheduled by ENGINEER with approval of COUNTY.

D. PHASES

The services performed by ENGINEER will be accomplished in 4 Phases:

Phase I • Preliminary Engineering & Environmental Document

Phase II • Plans, Specifications and Estimates

Phase III • Bid Support

Phase IV • Construction Support

Phase I will proceed upon written notice to proceed. Phase II will not proceed until authorized in writing by COUNTY. Phase III & IV will be provided as directed by COUNTY.

E. STANDARDS

The project report, environmental document, plans specifications and estimates shall be prepared in accordance with CALTRANS regulations, policies, procedures, manuals and standards including compliance with Federal Highway Administration (FHWA) requirements. Improvements of local roads may be prepared in accordance with COUNTY standards in lieu of CALTRANS standards as directed by COUNTY. All Documents shall be prepared using English standards and dimensions.

1. Environmental

The procedures to be followed and the content of the environmental surveys, environmental technical reports, and environmental documents are set forth in CALTRANS "Project Development Procedures Manual", CALTRANS "Environmental Handbook", CALTRANS Transportation Laboratory technical manuals for environmental studies, and FHWA's "Technical Advisory T6640.8A". Federal and state requirements for environmental analysis and impact assessment, as set forth in the National Environmental Policy Act, the California Environmental Quality Act and other applicable federal and state regulations, must be satisfied.

2. Survey

All surveys (including aerial topography and corresponding CALTRANS submittals) shall be performed by COUNTY in accordance with the current Department of Transportation (CALTRANS) "Survey Manual" and its revisions. Work not covered by the manual shall be performed in accordance

with accepted professional surveying standards as approved by CALTRANS.

3. Design

Roadway design shall be in accordance with the current CALTRANS Highway Design Manual and its revisions. Basic design shall be in accordance with the approved Project Report and final environmental document with supplements and updates.

4. PS&E

Plans and specifications shall be prepared in conformance with the current editions of the CALTRANS Guide for Submittal of Plans, Specifications and Estimates, Standard Plans, Standard Specifications and Standard Special Provisions.

5. Geotechnical Design Report

The Geotechnical Design Report shall be prepared in conformance with current editions of the State Manual of Test, California Test 130.

6. Project Files

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

Items 1 through 6 are not all-inclusive but are intended only to illustrate types of sources.

F. KEY PERSONNEL

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

Project Manager: Khalil Saba

Engineering Lead: Andy Cheah

Environmental Lead: Ryan Todaro

Traffic Lead: Jason Pack

ARTICLE AII • SERVICES TO BE PROVIDED

1.0 <u>Project Management</u>

HNTB will provide project management and coordination during execution of the project, consisting of the following activities:

1.1 Project Controls & Administration

Acting as prime consultant, HNTB will execute subcontracts with all sub consultants and direct their work. Prime contract terms and conditions will be incorporated into the subcontract agreements, as required. HNTB will be the primary contact for RCTD. Under this task, HNTB will also address matters relating to the contract with RCTD, as necessary. This task will also include communication/coordination efforts by the Project Manager as part of the overall management of the project.

1.2 PDT Meetings

Monthly Project Development Team (PDT) meetings will be held at RCTD, or at Caltrans District 8. The purpose of these meetings will be to discuss and resolve project issues and coordinate activities. HNTB will prepare and distribute agendas prior to the meetings. HNTB will prepare meeting minutes, including action items, and distribute them within five (5) working days of the meetings. It is assumed there will be 24 PDT meetings during the 24-month duration of this contract.

1.3 Stakeholder & Other Coordination Meetings

Individual focused meetings will be held with various agencies and stakeholders involved in the project. These may include State and/or Federal Resource agencies, Flood Control and Water Conservation Districts, utility companies, and others. It is assumed as many as twenty (20) such stakeholder meetings will be held during the life of this contract.

1.4 Scheduling/Progress Reporting and Invoicing

Progress reports will be prepared and submitted every month describing work accomplished during the reporting period, summary of meetings held, and discussion of outstanding issues and action items. The reports will also include any concerns or significant issues with recommendations for appropriate actions. A total of twenty four (24) progress reports are anticipated. HNTB will develop a detailed schedule in GANT chart for the project using Microsoft Project and update it monthly.

1.5 Quality Control

HNTB's quality control program will be implemented and maintained throughout the project. The Project Manager will insure that quality control procedures are initiated at the start of the project, and that all HNTB staff and subconsultants implement these procedures.

1.6 Risk Management

HNTB will prepare a qualitative risk assessment register that was prepared for the PSR and in accordance

with the Risk Management Handbook. The Risk Register shall be updated on a monthly basis.

Deliverables

- Meeting Agendas and Minutes
- Progress Reports and Invoices
- Schedule Updates
- Project Management Plan / Project Quality Control Plan
- Matrix of deliverables/action items updated monthly
- Risk Register updated monthly.

2.0 Engineering Services

HNTB will evaluate three (3) build alternatives, as well as the no build alternative. The cost proposed for analysis of alternatives is based on the footprint and project limits as described in the Project Study Report – Project Development Support (PSR-PDS) document dated 12/30/2016. It is assumed that the three build alternatives to be evaluated include: Diverging Diamond (DDI),Tight Diamond, and Single Point (SPI).

2.1 Data Collection & Field Reviews

HNTB will review information assembled and developed during the preparation of the PSR-PDS, as built plans, existing engineering reports and studies, right-of-way information, and any other existing information pertaining to the project. HNTB will assess additional data needs required for preliminary engineering in support of the environmental document.

Deliverables:

- Data necessary for completion of the PA&ED Phase.

2.2 Design Surveys/Digital Mapping

It is anticipated that RCTD will provide all survey work required for the successful completion of the PA&ED phase of the project. The HNTB team will coordinate closely with RCTD survey staff to ensure that the surveying effort is accurately and adequately included in the overall schedule of the PA&ED phase.

2.3 Traffic Modeling & Operational Analysis

Fehr & Peers (F&P) will be responsible for this task. F&P is also under a separate contract with Michael Baker Inc. to perform a similar task for the I-10 Monroe Interchange project which is being developed concurrently with the I-10 Jackson interchange project. All resulting traffic studies and all work performed under this task shall be specific to the I-10 Jackson interchange and shall be delivered per the approved schedule as stand-

alone documents, should the I-10 Monroe project get delayed or cancelled.

The following scope of work and associated fee estimate incorporates the following assumptions:

- Fehr & Peers will be completing the transportation assessment for both I-10 Monroe and I-10 Jackson interchanges concurrently. The scope of services described in this section is related to the work required for the I-10 Jackson interchange.
- The Methodologies and Assumptions Memorandum deliverable and the Traffic Volumes Report deliverable will include information for both interchanges for Caltrans concurrent review.
- PDT meetings will be concurrent for both efforts.
- Separate ICE (Step 1 and Step 2) assessments and Traffic Operations Report (TOR) documents will be submitted for each interchange.

Study Area

The following study locations will be included in the PA/ED analysis:

Jackson Interchange:

- Jackson Street / Avenue 42
- Jackson Street / Showcase Parkway
- Jackson Street / I-10 Westbound Ramps*
- Jackson Street / I-10 Eastbound Ramps*
- Jackson Street / Kenner Avenue
- Jackson Street / Avenue 44
- Monroe Street / I-10 Westbound Ramps*
- Monroe Street / I-10 Eastbound Ramps*
- Golf Center Parkway / Westbound I-10 Ramps
- Golf Center Parkway / Eastbound I-10 Ramps

* Indicates locations that overlap with the Monroe Interchange assessment

In addition to the intersections listed above, the analysis will also include the Atlantic Avenue / Jackson Street and McDonalds Access / Jackson Street right-turn only intersections.

Freeway

- Westbound Direction

- I-10 Merge from Golf Center Parkway
- I-10 Mainline between Golf Center Parkway and Jackson Street
- I-10 Diverge to Jackson Street
- I-10 Merge from Jackson Street
- I-10 Mainline between Jackson Street and Monroe Street
- I-10 Diverge to Monroe Street
- I-10 Merge from Monroe Street
- I-10 Mainline between Monroe Street and Jefferson Street
- I-10 Diverge to Jefferson Street

- Eastbound Direction
  - I-10 Merge from Jefferson Street
  - I-10 Mainline between Jefferson Street and Monroe Street
  - I-10 Diverge to Monroe Street
  - I-10 Merge from Monroe Street
  - I-10 Mainline between Monroe Street and Jackson Street
  - I-10 Diverge to Jackson Street
  - I-10 Merge from Jackson Street
  - I-10 Mainline between Jackson Street and Golf Center Parkway
  - I-10 Diverge to Golf Center Parkway

Data Collection

Fehr & Peers will collect AM (6:00 AM – 9:00 AM) and PM (3:00 PM – 6:00 PM) peak period turning movement counts at all study intersections plus the driveways noted above. New mainline counts will be obtained on I-10 during both AM and PM peak hours and on a daily basis using PeMS data or other Caltrans data source. Fehr & Peers will also collect a vehicle classification counts on the Monroe and Jackson freeway overcrossings in the area to obtain vehicle fleet mix information along Monroe Street and Jackson Streets. The vehicle classification for I-10 will be obtained from Caltrans' truck count database.

Please note that traffic counts are usually collected in the Coachella Valley region during the winter months when population increases and traffic volumes can increase by as much as 20%. Fehr & Peers proposes to collect the counts in December or January to account for the winter season traffic patterns.

Fehr & Peers will collect existing traffic signal for study intersections from Caltrans and the City.

Fehr & Peers will conduct site reconnaissance of the project location and surrounding roadway network to verify existing intersection control, lane configurations, traffic signal timings, and other roadway characteristics. Peak hour traffic operations and vehicle queue lengths will be observed in order to help calibrate/ validate the traffic operations models.

Fehr & Peers will prepare a collision summary based on Caltrans TASAS data for the most recent available three-year period for I-10 in the study area.

Analysis Scenario

This scope assumes that a No Build and two (2) Build Alternatives will be evaluated for the I-10 Jackson interchange in the PA/ED phase. The analysis scenario during the PA/ED stage includes:

- Existing Conditions
- Opening Year (2025) Conditions – No Build Alternative
- Opening Year (2025) Conditions – Build Alternative (up to two build alternatives)
- Design Year (2045) Conditions – No Build Alternative
- Design Year (2045) Conditions – Build Alternative (up to two build alternatives)

Traffic Analysis Assumptions and Methodologies

Fehr & Peers will prepare a Draft Traffic Analysis Assumptions and Methodologies Memorandum and submit to Caltrans for two rounds of review at the beginning of the PA/ED phase. The memorandum will contain a list of assumptions and recommended methodologies to use for traffic forecasting and operations analysis. Review comments from Caltrans will be responded to and addressed before the preparation of the Final Memorandum.

Traffic Forecasting Model Development

Fehr & Peers will discuss with the project team to apply the appropriate travel demand forecasting (TDF) models to develop Year 2045 AM and PM peak hour traffic forecasts. The land use and roadway improvements assumptions contained in the TDF model will be reviewed prior to developing the traffic forecasts. Forecasts will be prepared for the I-10 mainline and ramps and the study intersections.

Year 2045 peak hour traffic forecasts will be developed for the No Build and two Build Alternatives for the I-10 Jackson interchange. Year 2025 forecasts will be estimated through linear interpolation between existing counts and Year 2045 forecasts.

Fehr & Peers will submit a Draft Traffic Forecasting Report to Caltrans for two rounds of review and written comments. Review comments from Caltrans will be responded to and addressed before the preparation of the Final Traffic Forecasting Report. Once approved, Fehr & Peers will proceed with the technical evaluation of the project.

The scope of work assumes minimal modifications to the selected travel demand model and anticipate that either the RIVTAM model, SCAG model, or the CVAG TPPS/RACE/TUMF model will be used to develop travel forecasts. If an alternative model is more appropriate than those noted above, it is assumed that those models will be provided to Fehr & Peers for use in this forecasting effort.

In addition to traffic forecasts, the selected Model will be used to determine the regional implications of the project by examining additional measures of effectiveness (MOEs) such as vehicle miles of travel (VMT) and vehicle hours of traveled (VHT) with and without the Project per PA/ED requirements. The VMT and VHT will be estimated for existing, opening year, and design year conditions.

Early Alternative Screening

After the initial forecasts have been developed, Fehr & Peers will conduct an early screening assessment of alternatives. The goal of this exercise is to work collaboratively with the designers to identify multiple alternative designs that could be considered for the I-10 Jackson interchange location. Our scope assumes that we will be looking at both I-10 Monroe and I-10 Jackson interchanges at a macro level; evaluating the ramp terminal intersections in Synchro and identifying potential configurations that would meet the purpose and need for the project. This screening assumes up to three interchange alternatives at each location to be evaluated in Synchro to determine the likelihood of these alternatives providing acceptable operations. Additionally, we will work with the design team to identify the appropriate treatments to best accommodate bicycles and pedestrians under each alternative and will qualitatively evaluate how each treatment serves those modes.

The result of the alternative screening assessment will be a matrix identifying how well each alternative meets criteria we will develop in coordination with the design engineer. We also assume that one PDT meeting will be dedicated to discussing the screening process that will narrow the ultimate alternatives that should be carried forward into the traffic operations analysis.

Traffic Operations Analysis

Fehr & Peers will analyze the study intersections under AM and PM peak hour conditions using the VISSIM

software, consistent with what was identified in the PSR/PDS. The VISSIM simulation analysis will model the effects of vehicle queues on intersection capacity more accurately than the macroscopic equations provided by the Highway Capacity Manual (HCM). Peak hour factors will be based on the traffic counts. Peak hour delay and level of service will be calculated for each intersection consistent with HCM analysis procedures. The traffic simulation results will be based on a statistically valid set of multiple runs using different random value seeds. The micro-simulation model will also be used to determine intersection queuing and delay where appropriate. The freeway analysis will be conducted using HCM 6th Edition methodologies for mainline, ramp junction, and weaving segment analysis. Traffic operations analysis will be conducted under existing, opening year, and design year conditions for the analysis scenarios identified above.

A qualitative assessment of pedestrian, bicycle, and transit facilities will also be performed as part of the PA&ED phase of the project to determine if either of the proposed build alternatives hinder or eliminate existing or proposed bikeways, result in unsafe conditions for bicyclists or pedestrians, or cause a substantial delay in service. An assessment of how each build alternative would influence safety within the study area will also be performed. In addition, pedestrian delay impacts from signal timing will be assessed for future year conditions.

Develop Draft and Final TOR

Fehr & Peers will prepare the Traffic Operations Report (TOR) summarizing the results and findings (separate documents for each interchange). They will prepare a Draft TOR to submit to Caltrans and other PDT members for two rounds of review and comments. They will submit the Final TOR in both hard copy and electronic format. It is anticipated that the TOR will be incorporated into the Project Approval Report and Environmental Document by others.

Step 1 and Step 2 Intersection Control Evaluation (ICE)

Fehr & Peers will evaluate the project in accordance with Caltrans Traffic Operations Policy Directive 13-02: Intersection Control Evaluation (ICE will be evaluated separately for each interchange). Fehr & Peers will provide the appropriate Step 1 ICE information upon completion of the approved traffic forecasting efforts. They have budgeted to respond to one round of Caltrans comments on the Step 1 ICE assessment.

Once the Step 1 ICE assessment has been approved by Caltrans, Fehr & Peers will complete a Step 2 ICE assessment for any traffic control that is not screened out as part of the Step 1 ICE assessment. They will prepare a Step 2 ICE assessment and submit to Caltrans for review. Fehr & Peers has budgeted to respond

to one set of Step 2 ICE comments and resubmit the document as final.

Meetings

Fehr & Peers will attend up to ten (10) meetings (PDT, focused technical meetings, etc.) as directed by the consultant team.

2.4 Drainage Studies

HNTB will conduct a project drainage assessment which will include preliminary hydrologic and hydraulic analysis sufficient for the environmental documents and preliminary engineering. The scope will also include bridge hydraulic analysis and scour analysis for the Coachella Valley Stormwater Channel. The proposed bridges will be sized to avoid significant impacts to the Standard Project Flood (SPF).

HNTB will visit the project site to assess the existing drainage patterns. HNTB will evaluate historical flooding records, such as aerial photographs and high watermarks covering a span of several years. A preliminary hydraulic analysis will be conducted to estimate the size and cost of needed cross-culverts and/or bridges. The findings from this drainage study will be documented in a report. The report will address issues that will be included in the draft environmental document. Concept drainage and Best Management Practices (BMPs) plans will be prepared to accompany the report. A PA/ED level Stormwater Data Report will be prepared based on Caltrans PPDG Guidelines.

Deliverables

Draft and Final for each:

- Concept Drainage Report
- Concept Drainage Plans
- Coachella Valley Stormwater Channel (CVSC) Hydraulics Study and Scour Analysis
- Stormwater Data Report
- Floodplain Evaluation Report
- Location Hydraulic Study
- Water Quality Assessment Report
- Preliminary Drainage Cost Estimate

Assumptions

1. Three reviews for the Concept Drainage Report
2. Baseline HEC-RAS model is readily available

2.5 Utility Coordination

HNTB will identify the existing utilities affected by the project, and estimate costs associated with utility relocations for the build alternatives. HNTB will gather as-built information on the existing utilities in the project area from Caltrans and from the agencies within the project limit. HNTB will contact each of the utility companies in the area and obtain their plans for future facilities. This information will be utilized during refinement of project alternatives. Existing utility owner prior rights or needed agreements will be identified by HNTB. HNTB will identify conflicts and relocation requirements and will prepare an approximate cost estimate for the relocation.

Deliverables

- Preliminary utility location plans.
- Cost estimates for utility relocations.
- Conflict maps.
- Utility Coordination Meetings (10)

2.6 Geotechnical

Earth Mechanics, Inc. (EMI) will provide geotechnical support on the following design elements:

Structure Preliminary Geotechnical Report

EMI will prepare a Structure Preliminary Geotechnical Report (SPGR) for each bridge Advance Planning Study (APS) and for all the special design retaining wall APSs. An idealized soil profile and design strength parameters for foundation analysis will be developed based on existing subsurface data obtained from the as-built log-of-test-boring sheets for the existing bridges. EMI will provide seismic design parameters (acceleration and response spectrum) using the latest Caltrans web-based seismic design criteria. Using the soil profile and strength parameters, EMI will provide preliminary foundation type and foundation design data for the proposed bridge improvements and the special design retaining walls. For pile foundations, we will estimate the required pile length based on preliminary axial nominal resistances provided by the Structural Designers.

Deliverables:

- ONE Structure Preliminary Geotechnical Report for the Jackson Overcrossing,
- ONE Structure Preliminary Geotechnical Report for the Whitewater River Bridge,
- ONE Structure Preliminary Geotechnical Report for all the special design retaining walls.

District Preliminary Geotechnical Report

EMI will prepare a District Preliminary Geotechnical Report (DPGR) documenting the site geotechnical and geologic conditions. The DPGR will include topography, geology and identification of potential geologic hazards, liquefaction potential and general mitigation measures with respect to geologic and seismic hazards for input to the environmental document. EMI will also address stability and settlement of proposed roadway embankments. The evaluation will be based on a review of existing subsurface data and will not include field investigations, borings or laboratory testing.

Deliverable:

- ONE District Preliminary Geotechnical Report.

Preliminary Materials Report

EMI will prepare a Preliminary Materials Report (PMR) to provide pavement structural sections and alternatives, and corrosion potential of on-site soils and culvert materials requirements. The evaluation will be based on a review of available existing subsurface data and will not include field investigations, borings or laboratory testing. EMI will follow Caltrans pavement design procedure using traffic indices and pavement design lives provided by the Civil Designers. Information on existing pavement sections will be based on the Typical Section Sheets provided by the Civil Designers. Recommendations for rehabilitation of existing pavements will not be included in this report. The calculated pavement sections will be used by the Civil Designers to perform a pavement Life Cycle Cost Analysis (LCCA).

Deliverable:

- ONE Preliminary Materials Report.

Aerially Deposited Lead (ADL) Investigation and Reporting

Soil Samples: Caltrans requires ADL boring interval to be 300 feet or less, and depending on the lateral distance of the excavation, more than one-line of borings is sometimes required. We assume only one line of borings is required for this project.

According to the Caltrans Guidance, samples for ADL testing should be obtained from depths extending to the bottom of proposed construction excavations. Since higher ADL concentrations are usually found near the ground surface and the ADL concentration usually diminishes with depth, EMI is proposing a two-phase program in an attempt to reduce costs. The boring and sampling depth for Phase 1 will be limited to 4 feet. If soils are determined to have high levels of lead, then a Phase 2 field sampling would be required to collect

samples from greater depths (to proposed excavation depths). The scope given below is for Phase 1 work only.

EMI proposes to excavate no more than forty-five (45) shallow borings to collect near-surface material samples for ADL testing. Samples will be collected from borings excavated using a 3-inch stainless steel hand-auger. Near-surface soil samples will be collected approximately at 0.5, 1.5, 3 and 4-foot depths from each boring.

EMI will forward the soil samples to a California Certified analytical laboratory for testing:

- All samples shall be tested for total lead using U.S.EPA Method 6010B,
- Samples that contain greater than or equal to 80 mg/kg of total lead shall be analyzed for soluble lead using California Waste Extraction Test (citric acid extraction) for extractable lead,
- Samples that contain greater than or equal to 5 mg/l of extractable lead using CA WET (citric acid), shall be analyzed using CA WET (de-ionized extraction) for de-ionized extractable lead,
- Samples that contain greater than or equal to 1,000 mg/kg of total lead, or greater than or equal to 5 mg/l of extractable lead using CA WET (Citric acid) shall be analyzed using the EPA Toxic Characteristic Leaching Procedure (TCLP) for leachable lead, and
- Ten percent of soil samples collected shall be analyzed using U.S.EPA Method 9045C for pH.

Yellow Thermoplastic Traffic Striping Samples. Yellow thermoplastic traffic stripes will be sampled at Jackson Street and Jackson Street on- and off-ramps. The sampled yellow thermoplastic traffic striping will be tested for concentrations of lead and chromium.

The retrieved paint samples will be immediately placed in clean glass jars with teflon lids. Jars will be labeled with project information including the project name and number, sample number, location from which the sample was collected, and date and time of sampling. All samples will be entered on chain-of-custody forms and transported to a certified laboratory for testing.

- Samples shall be analyzed for total lead using U.S.EPA Method 6010B,
- Samples shall be analyzed for Chromium using U.S.EPA Method 6010B,
- Samples that contain greater than or equal to 50 mg/kg total lead shall be analyzed for soluble lead using California Waste Extraction Test (Citric acid extraction) for extractable lead,
- Samples that contain greater than or equal to 50 mg/kg total chromium shall be analyzed for soluble lead using CA WET (Citric acid extraction),

- Samples that contain greater than or equal to 100 mg/kg of total lead, or greater than or equal to 5 mg/l of extractable lead using CA WET (Citric acid) shall be analyzed using the EPA Toxic characteristic Leaching Procedure (TCLP) for leachable lead, and
- Samples that contain greater than or equal to 100 mg/kg of total chromium, or greater than or equal to 5 mg/l of extractable lead using CA WET (Citric acid) shall be analyzed using TCLP for leachable lead.

EMI will prepare a report for the project, summarizing the findings of the lead testing investigation. The report will include findings of the field sampling, results of laboratory tests and the statistical analysis, and recommendations for reuse of on-site soils excavated during construction within Caltrans Right-of-Way.

Deliverable:

- ONE Aerially Deposited Lead Investigation Report.

2.7 Preliminary Structural Studies (Advanced Planning Studies)

HNTB will develop a preliminary structures design for the purpose of establishing reliable cost estimates and evaluating any potential environmental impacts. HNTB will prepare Advanced Planning Study (APS) for the bridges listed below within the project limits. The available existing data that are related to or would influence the design of the structures will be collected and reviewed. This includes hydrologic information, site seismicity, geotechnical information and reports, and right of way information.

Deliverables

- APS, preliminary foundation report, APS checklist (For each bridge listed below).
- Design memo and itemized cost estimates will be delivered per Caltrans' OSFP information and Procedures Guide dated June 2002

Bridge #	Bridge Name
56-0612	Jackson Street Overcrossing
56C-84	Whitewater River Bridge (Jackson Street)
Misc. Retaining Walls	

2.8 Right-of-Way Requirements

HNTB will identify the right-of-way requirements associated with the build alternatives. Right-of-way information will be digitally overlaid on base maps and potential acquisitions will be identified.

Deliverables

- Preliminary Right-of-Way requirement maps.

2.9 Right of Way Data Sheets

Paragon will prepare Right of Way Data Sheets for the alternatives including the following information:

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

HNTB will provide Information for the Utility facilities, Railroad facilities, borrow or disposal sites and Hazardous Materials portions of the Data sheet, and will provide right of way alignment maps for each alternative. The Design CADD files will be used to identify the proposed right of way requirements. The proposed right of way requirements will be used with the County assessor parcel information and comparative land values to determine estimated costs. Escalation factors and a narrative for the data sheet will be prepared and incorporated into the data sheet for each alternative.

DELIVERABLES:

- Preparation of Right of Way Data Sheet for the build alternatives.

2.10 Geometric Plans & Alternatives Development & Refinement

HNTB will continue to refine the build alternatives based upon comments received through the project development process. Layout sheets at 1"=100' scale will be prepared for the build alternatives. Preliminary horizontal and vertical alignments, cross sections, typical sections, construction staging/detour plans, will also be prepared for both alternatives.

Deliverables

- Preliminary design ½ size 11x17 drawings per Caltrans District 8 guidelines for the build alternatives that can be used for analysis during the development of the environmental document.

2.11 Cost Estimates

HNTB will develop cost estimates for the build alternatives for comparison, leading to the selection of a Preferred Alternative. Cost estimates will be prepared in accordance with the Caltrans Project Development Procedures Manual for projects at the PA&ED phase.

Deliverables

- Cost estimates for the build alternatives to be used in selecting a Preferred Alternative.

2.12 Preliminary Transportation Management Plan

HNTB will establish TMP strategies and estimate their respective costs. This includes determining the feasibility of using surface streets for traffic diversion, and developing traffic handling plans with the project stakeholders, especially the city of Indio within the project limits. HNTB will coordinate with Caltrans and will update the TMP Data Sheet.

Deliverables

- Preliminary Transportation Management Plan (TMP)

2.13 Design Exception Fact Sheets

HNTB will identify non-standard design features (Advisory & Mandatory) associated with the build alternatives, and will prepare Fact Sheets to obtain Caltrans and FHWA approval for any design exceptions that will be proposed. Fact Sheets will be prepared in accordance with Caltrans procedures. Draft Fact Sheets will first be discussed with Caltrans and FHWA staff and will be submitted for review. Comments received will be addressed and final Fact Sheets will be resubmitted and circulated for signatures.

Deliverables

- Approved design exception Fact Sheets

Assumptions

- The Cost Proposal allows for the preparation of 5 fact sheets only.

2.14 Geometric Approval Drawings (GADs)

HNTB will prepare a set of Geometric Approval Drawings (GADs) for the preferred alternative. The GADs will include plans, typical sections, profiles, superelevation, and traffic volumes as described in Caltrans District 8

QC/QA Guide for GAD procedures. HNTB will prepare the Design Checklist as described in Caltrans Design Information Bulletin (DIB) 78, and will attend a GAD scoping meeting with Caltrans prior to GAD submittal in order to coordinate any project specific features related to operational analysis or to roadway geometrics. Draft GAD package will be submitted for review. Comments received will be addressed and final GADs will be submitted for signature.

Deliverables

- Approved GADs

2.15 Project Report

After the distribution of the Draft Project Report (DPR) and Draft Environmental Document, HNTB will prepare a draft final Project Report (PR) to document the selection of the preferred alternative and to update the cost estimate. A draft final PR will be circulated for comments and review. Comments received will be addressed and a final PR will be resubmitted and circulated for signatures.

Deliverables

- Approved Project Report

2.16 Value Engineering

It is anticipated that a Value Engineering (VE) study will be done for this project per Caltrans and FHWA guidelines. VE Study to comply with SAVE International guidelines. VMS will lead the VE procedures, the identification of the VE team, conducting the analysis, and preparing the draft and final VE report, would be done by VMS. HNTB will provide the services of the Project Manager, one Senior Specialist, and one Project Engineer for a period of five (5) days to participate in the VE team meetings. HNTB will also provide the services of the Roadway Lead Engineer for one (1) day to participate in the VE team meeting. HNTB will also provide copies of project information and data that will be available at the time the VE study will be conducted.

Deliverables

- Five days participation for PM, Senior Specialist, Project Engineer
- One day participation for the Roadway Lead Engineer
- Draft and final VE report.

2.17 Construction Staging

HNTB will prepare preliminary construction staging plans for the build alternatives that will show the sequence of operation, work to be performed, materials to be used, and the routes to be utilized by traffic during each

construction phase. The plans will also show long term closures of lanes and ramps, detours, and the number of traffic lanes available for public traffic.

Deliverables

- Approved Preliminary Construction Staging Plans

2.18 Preliminary Traffic Design

HNTB will prepare a preliminary traffic design for both build alternatives, including safety analysis, lane closures and lane requirement charts, and traffic electrical plans.

Deliverables

- Preliminary Traffic Design for the build alternatives.

2.19 LANDSCAPE ARCHITECTURAL SERVICES

During the course of the PA&ED phase of work, DEA will participate in the following meetings:

- Project Development Team (PDT) – 3 in total
- Agency Coordination / Technical Workshop – 2 Additional Meetings including those with RCTD, City, CVAG and / or Caltrans.

Aesthetics and Landscape Concept Plan (30%)

Utilizing the topographic survey and base maps prepared by others, DEA will develop a comprehensive conceptual landscape plan for the selected build alternative. The plans will designate the location of proposed "low maintenance / drought tolerant" trees, shrub areas, ground cover and inert materials, in addition to proposed structure aesthetics (designed by others) – developed as a collaborative effort between the engineer and DEA. A proposed plant palette will also be provided for review and approval by the County, CVAG, City and / or Caltrans. Preliminary points of connection for permanent irrigation and controller locations will also be shown. Upon approval of this plan, DEA will move forward with final planting and irrigation plans. The final conceptual plan will be prepared in color with images of the proposed plant materials. A project planning cost estimate will also be provided for each of the alternatives as required in the PR document in the preliminary cost estimate format.

Deliverables

- Preparation of Concept Plans, one for one build alternative
- Cost estimates for the concept

3.0 ENVIRONMENTAL SERVICES

Understanding and Assumptions

The I-10/Jackson Street interchange is located on I-10 between Monroe Street and Golf Center Parkway in the City of Indio. The project limits are 08-Riv-10 – R54.9/R56.5. The HNTB team's Environmental tasks described below are based on the assumption that three build alternatives (Diverging Diamond Interchange (DDI), Tight Diamond Interchange and Single Point Interchange) will be evaluated during PAED phase and that the resulting environmental documentation would be an Initial Study leading to a Negative Declaration (ND) or Mitigated Negative Declaration (MND) under CEQA and a routine Environmental Assessment leading to a Finding of No Significant Impact (FONSI) under NEPA.

Under this task the HNTB team shall, at the direction of RCTD, coordinate its efforts with the City of Indio, public and private utilities, Caltrans, FHWA, and other agencies to obtain the necessary technical information for the preparation of the environmental documentation and supporting technical analysis/reports.

Furthermore, various environmental permits (Section 401 Water Quality Certification, Section 404 Nationwide Permit, and Section 1602 Streambed Alteration Agreement) will need to be obtained prior to commencement of project construction activities. Within the environmental documentation and associated technical reports, HNTB will describe the anticipated necessary environmental permits, as well as the existing and future with project environmental conditions which are relevant to the required environmental permits. This scope of services and associated cost estimate does not include the actual preparation and submittal of environmental permit applications. If desired by RCTD, we can provide these permitting services as an addition to our scope and cost estimate, at a later stage in the project development process.

The scope of work for the environmental documentation and approval task consists of the following primary activities, and related subtasks:

3.1 – TECHNICAL REPORTS

The HNTB team shall, under this Task, complete required technical reports in support of the environmental documentation. This task will include coordination with RCTD, Caltrans, and regulatory/approving agencies, and public outreach to collect and analyze information. The HNTB team shall also attend meetings, and provide additional documentation, when necessary, to respond to requests by the regulatory/approving agencies. The HNTB team may need to collaborate as directed on studies associated with other RCTD or Caltrans projects.

The Preliminary Environmental Assessment Report (PEAR) prepared for the project as part of the PSR identifies the need for the following environmental technical reports to be completed:

- Visual/Aesthetics
- Cultural Resources
- Water Quality and Storm Runoff (Included under engineering task)
- Geology, Soils, Seismic and Topography (Included under engineering task)
- Paleontological Resources
- Hazardous Waste/Materials
- Air Quality
- Noise
- Biological Resources

All of the above-noted studies will be prepared as stand-alone technical reports. Each technical report shall include a draft and final report of findings, site descriptions, photographs of survey sites, and other relevant information, including the following report sections: introduction, purpose, methods (protocols followed), study results, and mitigation recommendation.

Environmental analysis shall meet CEQA and NEPA requirements and shall be in accordance with Caltrans and FHWA guidelines. Specific work shall be performed in accordance with appropriate applicable established regulatory agency survey protocols or guidance. The HNTB team shall coordinate with Caltrans in determining the specific content and format requirements for the environmental studies.

3.1.1 – Visual/Aesthetics

The project is not on, or adjacent to, an officially-designated state scenic highway, according to the Caltrans California Scenic Highway Mapping System. A segment of State Route 74 (SR-74) is the nearest officially designated scenic highway, which is located approximately 10 miles west of the project site. Visual resources are often subjective in nature and therefore analysis is completed per the FHWA Visual Impact Assessment for Highway Project Guidelines. This screening is done pursuant to the Caltrans Standard Environmental Reference (SER), discusses the project area, and provides mitigation if necessary. The project would result in improvements to existing roadway facilities in an urbanized area. Proposed improvements are not expected to result in a substantial change in the aesthetic character of the project area, since the project would only

require widening of existing bridge structures (rather than the development of any new structures, bridges, or other features that would substantially degrade or obstruct views). It is anticipated that a Visual Technical Memorandum will be required to analyze potential changes in the visual/aesthetic environment. The Visual Technical Memorandum will be prepared by or under the supervision and direction of a Licensed Landscape Architect. ESA will prepare the Visual Technical Memorandum following the annotated outline found on Caltrans Landscape Architecture Program webpage. The Visual Technical Memorandum would briefly describe project features, impacts and any avoidance and minimization measures. Visual simulations are not included in the scope.

Deliverables:

- Draft and Final Visual Technical Memorandum

3.1.2 – Cultural Resources

Archaeological and historic property surveys of the project's direct and indirect Area of Potential Effects (APE) shall be completed. In compliance with Caltrans, FHWA, and State Historic Preservation Officer (SHPO) requirements, it's anticipated that a Historic Resources Evaluation Report (HRER) and Archaeological Survey Report (ASR) shall be prepared along with the umbrella document, the Historic Property Survey Report (HPSR). All documents shall be prepared in conformance with Section 106 of the National Historic Preservation Act (as amended), Appendix K of CEQA Guidelines, and Volume 2 of the Caltrans Standard Environmental Reference (SER).

The following tasks will be included as part of this scope of work:

Records and Literature Search: HNTB will complete a cultural resources literature and records search at the Riverside Archaeological Information Center, housed at the Riverside County Museum. Other archival sources consulted will include pertinent historical USGS topographic maps.

Area of Potential Effects (APE) Map: Once preliminary project plans and/or specific alternatives have been identified, an APE map will be prepared for review and approval by Caltrans District 8 staff. The APE Map shall be prepared in accordance with the latest edition of Caltrans SER and approval will be obtained from the Caltrans District Heritage Preservation Coordinator. The resulting project APE will include all right-of-way acquisitions, proposed access roads and routes, detour areas, temporary work areas, staging and stocking areas beyond the existing paved highway. It will include both direct (areas of project-related ground disturbance subject to walk-over by project archaeologist) and indirect effects (e.g. noise and visual impacts,

also called architectural APE) as directed in the latest edition of the SER. The APE will be defined an depicted on graphic, black and white plans, likely on the latest engineering plans available at the time on suitably scaled engineering base plans showing parcel boundaries.

Historic Properties Evaluation: This scope of work is limited to evaluation of parcels which contain buildings, structures or objects constructed before 1962 (45 years of age in 2007). The cut-off date for California Register of Historical Resources potential eligibility will be set at 45 years of age. If historically significant structures are identified within the APE, the Preparation of Findings of Effect, development of an Agreement Document identifying alternatives to avoid or minimize harm, and mitigation measures, if necessary, would be additional tasks not included in this scope of work.

Archaeological Resources: A pedestrian survey to identify potential archaeological resources of the APE will be completed. On the basis of surface inspection, cultural resources identified will be assessed using "significance" criteria as set forth in the 36 CFR 800. The objective of this task is to provide sufficient data to characterize the current status of the identified resources, to formally document known site boundaries in relation to the Project's APE, to provide a preliminary evaluation of the site's significance and research data potential, and to offer further archaeological management recommendations.

Native American Consultation: Native American coordination is also required for the project in accordance with Section 106 of the National Historic Preservation Act. The project would also be subject to Assembly Bill (AB) 52 which would require Native American consultation with tribes as required by State law. A Sacred Lands File search with the Native American Heritage Commission (NAHC) will be conducted and the NAHC will provide a list of Native American contacts that may know of cultural resources in the project area. HNTB will work with the Caltrans District Native American Coordinator to determine which of the individuals provided on the NAHC list will be contacted about the project, first by letter, and followed by telephone calls.

HPSR/ASR/HRER Report: At the conclusion of the literature and records search, archival research, archaeological and historic property surveys, and Native American consultations, the HNTB Team will prepare a Historic Properties Survey Report, an Historic Resources Evaluation Report and Archaeological Survey Report (HPSR/ASR/HRER) in accordance with Section 106 of the National historic Preservation Act, CEQA Guidelines, as well as the standards outlined in the SER, Volume 2, Cultural Resources. As part of these investigations, the HNTB Team will also identify any potential National Register eligible Section 4(f) properties. These documents will be submitted to the State Historic Preservation Officer (SHPO).

Deliverables:

- Area of Potential Affects (APE) Map
- Draft and Final Historic Property Survey Report (HPSR)
- Draft and Final Historical Resources Evaluation Report (HRER)
- Draft and Final Archaeological Survey Report (ASR)
- Letters and meetings for AB52 consultation

3.1.3 – Water Quality and Storm Runoff

The proposed project is within the jurisdiction of the Colorado River RWQCB. It must conform to Caltrans' existing Statewide National Pollutant Discharge Elimination System (NPDES) Permit and to the existing State Water Resources Control Board (SWRCB) General NPDES Permit for Construction and Land Disturbance Activities. A Water Quality Assessment Report (WQAR) will be prepared to evaluate the impacts to water quality during the PA/ED phase including performance of all activities related to water quality impact analysis. The technical report will describe the regulatory compliance requirements that must be met including compliance with:

- California General Construction Activities Storm Water Permit;
- Section 404 of the Clean Water Act under U.S. Army Corps of Engineers (Corps) jurisdiction;
- Section 401 of the Clean Water Act (Water Quality Certification) through the San Bernardino RWQCB;
- TMDLs (existing and under development); and
- (MS4) National Pollutant Discharge Elimination System (NPDES) permit.

As necessary, mitigation measures will be identified to help reduce any potential significant impacts to a level of insignificance.

Deliverables:

- Draft and Final Water Quality Assessment Report (WQAR)

3.1.4 – Geology, Soils, Seismic and Topography

To further analyze the potential for geological impacts EMI will prepare a District Preliminary Geotechnical Report (DPGR) documenting the site geotechnical and geologic conditions. The DPGR will include topography, geology and identification of potential geologic hazards, liquefaction potential and general

mitigation measures with respect to geologic and seismic hazards for input to the environmental document. EMI will also address stability and settlement of proposed roadway embankments. The evaluation will be based on a review of existing subsurface data and will not include field investigations, borings or laboratory testing.

Deliverables:

- Draft and Final District Preliminary Geotechnical Report (DPGR)

3.1.5 – Paleontological Resources

A paleontological resource records search was completed for the I-10/Jackson Street interchange on August 18, 2015, at the Los Angeles County Museum of Natural History (LACM). In addition, a cursory examination of relevant literature and published geologic mapping was conducted for the project. Further, the project area was placed on the Riverside County's (2008) Paleontological Sensitivity Map in order to determine whether or not it overlies areas of high, low, or undetermined sensitivity. On the basis of the LACM record search results, which indicate that the Lake Cahuilla sedimentary deposits underlying the project area have yielded significant paleontological resources nearby, and the determination by Riverside County (2008) that the project area has a high (High A) potential for paleontological resources, Cogstone will prepare a combined Paleontological Identification and Evaluation Report (PIR/PER) and Paleontological Mitigation Plan (PMP). An additional record search will be obtained from the Western Science Center in Riverside County. Background research sufficient to provide a paleontological context will be conducted. An intensive pedestrian survey will inspect the sediment throughout the project study area with emphasis on proposed locations of walls and other subsurface excavations. The mitigation plan will provide guidance to protect paleontological resources during project construction excavations.

Deliverables:

- Draft and Final Combined Paleontological Identification and Evaluation Report (PIR/PER) and Paleontological Mitigation Plan (PMP)

3.1.6 – Hazardous Waste/Materials

A hazardous materials and waste technical study will be prepared for the project and will follow the Caltrans guidelines for Initial Site Assessments (ISA) and Preliminary Site Investigations (PSI). The purpose of the study is to verify the presence of contamination from the on-site and off-site adjoining properties that have reported the storage, handling, and releases of hazardous materials and to further review the potential for

impacts to the project site from all of these sources. As such, during the PA/ED stage ESA will prepare a Phase I ISA in compliance with the ASTM Standard Practice 1527-13 and the Caltrans SER. Additionally, if necessary, separate reports for lead testing, ADL testing, and asbestos testing will be prepared during the PA/ED phase.

Initial Site Assessment

The following tasks will be included as part of the ISA:

Records Review: Available current and historical documents pertinent to environmental activities conducted in or near the project site will be reviewed. Topics of interest to be investigated will include: chemical usage or inventories; waste management records; Resource Conservation and Recovery Act (RCRA) activities; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) activities; and health and safety operations.

Site Reconnaissance: Site reconnaissance of the project study area will be performed to visually and physically observe and document conditions within and near the project limits. Photograph documentation of potential hazardous materials issues will be completed.

File Search and Records Review: A search of federal, state, and local regulatory agency electronic databases will be performed. This database search identifies locations that are regulated under various environmental laws, notably CERCLA, RCRA, and Toxic Substances Control Act (TSCA). The records search will also identify locations where a release of hazardous substances has occurred or is suspected.

Historical Information Review: A review of historical information sources will be conducted to evaluate whether prior land uses may pose an environmental concern within or near any properties within the project area. These historical information sources will include, as available: historical aerial photographs, fire insurance maps, and historical topographic maps. In addition, environmental lien data will be obtained for parcels that may be considered for full or partial acquisition.

Occupant and Owner Interviews: To the extent practical, interviews will be conducted with current property owners or personnel (for up to 10 properties) to determine the historical and current use of subject properties and surrounding areas, as well as any available information concerning the potential presence of hazardous materials. The parcels selected for owner/occupant interviews would be limited to parcels outside of the existing ROW that may be considered for full or partial acquisition, and/or parcels anywhere along the project alignment that are suspected or known to contain hazardous materials. If it is ultimately determined at a later

stage in the project development process that owner/personnel interviews would need to be conducted in regard to more than 10 properties, HNTB staff can perform the interviews as an addition to our scope and cost estimate.

Evaluate Data and Report Preparation: HNTB will evaluate available information collected concerning the project site and its surroundings to identify Recognized Environmental Conditions (RECs). According to the American Society for Testing and Materials (ASTM) E 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (Phase I ESA), RECs are defined as "the presence or likely presence of hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property."

Significant findings from the above-stated tasks will be summarized in a stand-alone ISA technical report, and recommendations will be made for additional site assessment activities, if needed (i.e. aerially deposited lead, lead based paint, asbestos testing). If desired by RCTD, HNTB can provide these services as an addition to this scope at a later stage in the project development process.

Deliverables:

- Draft and Final Initial Site Assessment

3.1.7 – Air Quality

The proposed project is located within the Salton Sea Air Basin (SSAB), which is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SSAB is in attainment of most of the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS); however the SSAB is in nonattainment for the following pollutants (Federal standards):

- Ozone (O3); and
- Particulate matter 10 microns in diameter or less (PM10).

The project is not exempt from the requirement to determine conformity. It does not fall under the category of exempt projects listed in Table 2 of 40 CFR 93.126 (Table 1 and 2 of the CO Protocol). However, it is exempt from regional emissions analysis (Table 3 of 40 CFR 93.127) as "Interchange reconfiguration projects". Furthermore, the project does not qualify under CE assignment 23 USC 326. Therefore, an Air Quality Assessment as well as an Air Quality Conformity Report and Transportation Air Quality Conformity Checklist

are required for the project.

Deliverables:

- Draft and Final Air Quality Assessment Report
- Draft and Final Air Quality Conformity Report
- Transportation Air Quality Conformity Checklist

3.1.8 – Noise

The proposed project would improve the operation and safety of Jackson Street and the I-10/Jackson Street interchange by relieving existing congestion and improving efficiency. Currently, the closest existing noise receptors are residential uses located approximately 170 feet to the west of the proposed roadway improvements; North Jackson Park and Andrew Jackson Elementary School are located approximately 310 feet to the west of Jackson Street. Because of the project's classification as a Type 1 project, a Noise Study Report (NSR) will have to be completed. If the NSR identifies noise impacts that require the consideration of noise abatement, a Noise Abatement Decision Report (NADR) would also be required. Given traffic volumes on I-10 and Jackson Street, it is possible that the ambient noise levels may already approach or exceed the noise abatement criteria (NAC) of 67 dBA at these residences.

Noise Study Report

The noise analysis will be conducted in accordance with the requirements of the Caltrans Traffic Noise Analysis Protocol (Protocol) and Technical Noise Supplement (TeNS). The traffic noise report will quantify the existing and projected future traffic noise associated with the project, evaluate temporary noise effects from the construction of the project, identify locations where noise impacts may occur, and evaluate measures to abate potential noise impacts associated with construction and operation of the project. Specifically, ESA will perform the following subtasks for completion of the NSR:

Land Use and Receiver Identification: Identify existing noise-sensitive land uses in the vicinity of the I-10/Jackson Street interchange and also undeveloped lands for which development is planned, designed, and programmed that may be affected by the proposed project.

Noise Level Measurements: Conduct existing background noise measurements and obtain traffic noise level measurements and concurrent traffic counts at representative noise-sensitive receiver locations for the Traffic Noise Model (TNM) validation purpose.

Existing Noise Evaluation and Model Validation: ESA will use the latest version of the TNM to develop a project-specific model of the existing conditions in the project area. Measured noise levels, traffic counts obtained during the field measurements, and observed vehicle speeds will be used to validate the accuracy of the TNM noise model in predicting noise levels in the project vicinity. Adjustments to the model would be made to account for site-specific acoustical characteristics, if needed.

Future Traffic Noise Level Prediction and Impact Determination: Use the validated TNM model in conjunction with the results of the previous tasks, proposed geometric design changes, and forecast peak-hour volumes or LOS C design capacity traffic data, whichever are greater, to predict projected future peak traffic noise levels for the project No-Build and Build conditions. Calculated peak-hour noise levels will then be compared to applicable NAC to determine whether future noise levels approach or exceed the NAC, thereby triggering the need for consideration of noise abatement.

Traffic Noise Abatement Evaluation: Evaluate noise barriers for locations where predicted future noise levels approach or exceed the NAC. Develop detailed information related to locations and heights of required noise barriers and determine their acoustical feasibility and reasonableness allowance in the NSR. Additionally, provide discussion of alternative noise abatement measures. Determination of reasonableness of noise barriers will be made without an engineering review in the NSR. However, the preparation of the NADR, which will include detailed noise barrier cost estimates by the project engineer would ensure the reasonableness of the proposed noise abatement.

Construction Noise Evaluation: Based on the information related to construction equipment, activities, and construction and staging locations, estimate noise levels at nearby noise-sensitive locations during the construction of the proposed project. Provide discussion of approach to adhering to construction noise limits per standard specifications.

Noise Study Report: Prepare a NSR in accordance with Caltrans requirements. Upon receipt of review comments back from Caltrans, finalize the NSR. If the NSR identifies noise impacts that require the consideration of noise abatement, a NADR will be prepared. A NADR is not included in this scope and an amendment would be required, if it is found to be required.

Deliverables:

- Draft and Final Noise Study Report (NSR)

Noise Abatement Decision Report (NADR)

If the NSR identifies noise impacts that require the consideration of noise abatement, a Noise Abatement Decision Report (NADR) would also be required. ESA will prepare a Noise Abatement Decision Report (NADR) for the project in accordance with the requirements of the Caltrans Traffic Noise Analysis Protocol (Protocol) and Technical Noise Supplement (TeNS). The NADR will further evaluate any proposed noise abatement resulting from the Noise Study Report (NSR) prepared for the project. Specifically, ESA will perform the following subtasks for completion of the NADR:

- Review Noise Study Report (NSR): The NSR will be reviewed for any noise abatement measures determined to be acoustically feasible that should be given further consideration as part of the NADR.
- Evaluate Noise Abatement Decision Report Considerations: Each acoustically feasible noise abatement measure will be evaluated for the conditions listed in the Protocol.
- Noise Abatement Decision Report: Prepare a draft NADR in accordance with Caltrans requirements and provides data prepared as part of the evaluation described above.

Deliverables:

- Draft and Final Noise Abatement Decision Report (NADR)

3.1.9 – Biological Resources

The majority of the project site has been highly disturbed through the development of roadway infrastructure and urban development immediately adjacent to site boundaries. The majority of vegetation that would be affected by the project consists of non-native ornamental shrubs in addition to numerous mature trees.

The Coachella Valley Storm Water Channel (CVSWC) is located to the south of the I- 10/Jackson Street Interchange within the project limits. The CVSWC is a natural lined channel and runs parallel to the I-10 in the vicinity of the project site and ultimately discharges into the Salton Sea to the southeast. Due to the reconstruction of the Whitewater River Bridge over the CVSWC and potential temporary impacts to the channel during short-term construction, a Natural Environment Study – Minimal Impact (NES-MI) and Delineation of Jurisdictional Waters will be prepared during PA/ED to analyze the potential for impacts to biological resources. The project is located within the Coachella Valley Multiple Species Habitat Conservation Plan area; however, the project is not located in a conservation area requiring mitigation.

Habitat Assessment: ESA will conduct a habitat assessment of the entire project site to characterize the habitats, to determine the quality of sensitive habitats occurring throughout the site and/or to confirm the

existing conditions following a literature review of all applicable reports/studies conducted for this project and/or general vicinity. Information gathered during this assessment will be used for preparing the NES-MI. If studies determine that burrowing owl surveys are required, they will be done as part of the habitat assessment.

NES- MI: The NES report will be prepared as acceptable by Caltrans and as outlined in a current "Guidance for Consultants" in Procedures for Completing the Natural Environmental Study and Related Biological Reports. All studies and reports will be in accordance with all the requirements shown at the Caltrans Standard Environmental Reference (SER) website.

Delineation of Jurisdictional Waters: A jurisdictional delineation will be performed to quantify the existing jurisdictional waters within the project site. The jurisdiction of the U.S. Army Corps of Engineers (USACE) and the CDFW will be identified and delineated based on a two-phased approach. Phase 1 will identify potential jurisdictional areas within the project boundary utilizing a recent aerial photograph and results from the habitat assessment. Phase 2 consists of a formal jurisdictional delineation of drainage features. The USACE jurisdiction will be determined in the field using the presence of an ordinary high-water mark and the methodology in the USACE 1987 wetland delineation manual. This methodology requires that a jurisdictional wetland must contain hydrophytic vegetation, hydric soils, and appropriate hydrology. CDFG jurisdiction will be determined by the presence of hydrophytic vegetation, the location of a definable bed and bank, and the presence of associated wildlife or fish resources. The boundaries of these jurisdictions will be mapped on maps of an appropriate scale. Civil surveys of any delineated areas are not covered in this scope of work.

A stand-alone jurisdictional delineation report, which will be an appendix to the NES-MI will be prepared describing baseline conditions and analysis of potential project impacts. The report will include methods, results, and a graphic depicting the approximate size and location of any jurisdictional areas. The report will be consistent with the requirements of USACE and CDFW. Copies of field data sheets will be included. The report will describe delineation methodology, jurisdictional areas of the site, and impacts from site development. The report will provide the necessary documentation for developing and processing subsequent Section 401 and 404 permits, and a Section 1602 Streambed Alteration Agreement. The report will provide information on probable 404-permit type (Nationwide vs. Individual Permit) and timeframes for acquiring permits.

Deliverables:

- Draft and Final Natural Environment Study – Minimal Impacts (NES-MI)
- Draft and Final Delineation of Jurisdictional Waters

3.2 – ENVIRONMENTAL DOCUMENTATION

3.2.1 – Scoping Meeting

ESA will work with the HNTB Team, RCTD and Caltrans to coordinate and facilitate the Scoping Meeting to initiate the environmental process. It is assumed that RCTD will be responsible for securing the meeting location, coordinating logistical arrangements in support of the meeting. ESA will be responsible for providing the environmental information for presentation, exhibits, fact sheet, and other meeting materials. All of the Scoping Meeting materials will be reviewed and approved by Caltrans and/or RCTD.

ESA shall prepare and circulate a Notice of Initiation of Studies (NOIS) indicating that RCTD has initiated environmental analysis and preliminary engineering for the Project, and is requesting comments defining environmental and other concerns. The NOIS shall be sent to local residents, elected officials, responsible agencies, and other special interest groups on the Project mailing list. Comments received shall be used to identify particular agency and public concerns and to initiate early agency consultation. The NOIS will include the date and time of the scoping meeting. A public notice of the Project and Scoping Meeting will also be prepared for publication in appropriate daily and weekly newspapers, including a Spanish-language newspaper as appropriate. HNTB shall submit ten (10) copies each of the NOIS and publish the NOIS in newspapers.

Deliverables:

- Facilitation of one Public Scoping Meeting
- Draft and Final copies of meeting summary notes
- Materials for one (1) public scoping meeting
- Ten (10) copies each of the Draft and Final NOIS

3.2.3 – Environmental Document

HNTB has provided an optional task for ESA to prepare an Initial Study (IS) leading to a Negative Declaration under CEQA and a routine Environmental Assessment (EA) leading to a Finding of No Significant Impact (FONSI) under NEPA if it is ultimately determined that an environmental document is required for the project. The environmental document shall be prepared in accordance with the Caltrans SER, FHWA Technical

Advisory T6640.8A, and 23 CFR 771. It will also include all the necessary consultation associated with the implementation of AB 52. The scope of work for this Task includes, but is not limited to, the following:

Administrative Draft Environmental Document

Following the technical analyses described above in Task 1, ESA shall prepare an Administrative Draft Environmental Document (IS/EA) incorporating an environmental checklist, technical analyses, a discussion of critical environmental issues identified, an analysis of the cumulative effects of the project, mitigation measures, and a list of potential permits required. At a minimum, the Administrative Draft Environmental Document will include the following sections:

- Proposed Project
    - Introduction
    - Purpose and Need
    - Project Description
    - Project Alternatives
    - Permits and Approvals Needed
- Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures (permanent, construction, and cumulative impacts) for each of the following resources:
    - Land Use
    - Parks and Recreational Facilities
    - Growth
    - Farmlands/Timberlands
    - Community Impacts
    - Utilities/Emergency Services
    - Traffic and Transportation/Pedestrian and Bicycle Facilities
    - Visual/Aesthetics
    - Cultural Resources
    - Hydrology and Floodplain
    - Water Quality and Storm Water Runoff
    - Geology/Soils/Seismic/Topography
    - Paleontology

- Hazardous Waste/Materials
- Air Quality
- Noise
- Energy
- Natural Communities
- Wetlands and Other Waters
- Plant Species
- Animal Species
- Threatened and Endangered Species
- Invasive Species

- California Environmental Quality Act (CEQA) Evaluation
  - Determining Significance under CEQA
  - CEQA Environmental Checklist
  - Climate Change
- Comments and Coordination
- List of Preparers
- Distribution List
- Appendices that include the following topics:
  - CEQA checklist
  - Title VI Policy Statement
  - Summary of Relocation Benefits
  - Minimization and/or Mitigation Summary (Environmental
  - Commitments Record)
  - List of Technical Studies
- Exhibits necessary to support the evaluation of environmental resources

Draft Environmental Document

Following review by RCTD and Caltrans, the Administrative Draft Environmental Document shall be revised to incorporate RCTD and Caltrans review comments. The Revised Draft Environmental Document (IS/EA) shall be submitted to RCTD and Caltrans for review and approval to circulate. The Draft IS/EA shall contain the

unsigned proposed ND/FONSI.

Circulation and Public Hearing

When approval to circulate has been obtained from Caltrans and confirmed by the signed title sheet, ESA shall circulate the Draft IS/EA with an unsigned ND/FONSI in accordance with the requirements of the Caltrans' SER. Before the Draft IS/EA is circulated, the Draft PR must be approved to ensure that the project concept in the Draft IS/EA is consistent with the Draft PR. The Draft IS/EA shall be circulated to responsible agencies, trustee agencies, state, federal, and local agencies that have jurisdiction by law, bordering cities and counties, and other applicable groups or persons as suggested in Caltrans's SER. The cost of copies and postage shall be borne by HNTB.

In addition, a minimum of fifteen (15) copies of the Draft IS/EA shall be submitted to the State Clearinghouse, together with one copy of the Notice of Completion, for review and comments.

Following approval of the Draft IS/EA, a Notice of Availability (NOA), Notice of Intent to Adopt a Mitigated Negative Declaration (NOI), and a Notice of Public Hearing (NOPH) shall be prepared for publication by HNTB. The notices shall be placed at least once in newspapers of general circulation (as directed by RCTD and Caltrans), posted on and off site, and mailed directly to owners and occupants of contiguous properties. The HNTB team shall assist RCTD and Caltrans in conducting a formal Public Hearing. A Record of Public Hearing shall be prepared by ESA and submitted to RCTD and Caltrans. The public hearing shall conform to the requirements of Caltrans' *Project Development Procedures Manual, Chapter* 11, *Article* 7. ESA shall provide the original and ten (10) copies of the NOA, NOI, and NOPH and ten (10) copies of the Record of Public Meeting.

Prepare Responses to Comments

ESA shall address comments received from agencies and the public during the circulation period and the public hearing and develop a log of the comments and responses to them. The responses shall be submitted to RCTD and Caltrans for review. ESA shall submit ten (10) copies of an Administrative Final IS/EA.

Final Environmental Document (MND/FONSI)

Following this review, the Final IS/EA shall be prepared and submitted for approval. The proposed MND shall be signed and incorporated into the Final IS/EA. The Final IS/EA shall also become part of the PR. The Final IS/EA shall be submitted to RCTD and Caltrans for approval and signature. The FONSI shall be added to the Final IS/EA and ESA shall coordinate a 30-day public review period for the EA.

Notice of Determination & Notice of Availability

Filing of the Notice of Determination (NOD) completes the CEQA process. A Draft NOD shall be prepared and submitted to RCTD and Caltrans for review and comment. Following this review a final NOD shall be prepared and submitted to RCTD and Caltrans. ESA shall also send a copy of the Notice of Determination and a copy of the Notice of Availability - FONSI (NOAFONSI) to the State Clearinghouse along with proof of payment of an environmental filing fee (RCTD will be responsible for payment if necessary) and/or a De Minimis Impact Finding to the State Department of Fish and Wildlife.

Mitigation, Monitoring, and Reporting Plan (Environmental Commitment Record [ECR])

ESA shall develop an ECR to be included with the Final IS/EA submittal. The plan will identify mitigation measures necessary to minimize or reduce potential significant environmental impacts to a less-than significant level. The ECR shall identify all design, construction and post-regulatory mitigation requirements, the responsible party, timing, and verification. Monitoring may include the submittal of monitoring sheets/reports to RCTD, Caltrans, and other agencies. ESA shall coordinate the ECR preparation with RCTD, Caltrans and regulatory/approving agencies as appropriate.

Deliverables:

- Ten (10) copies of the Administrative Draft IS/EA
- Twenty (20) copies of the Draft IS/EA for circulation
- Original and Ten (10) copies of the NOA, NOI, and NOPH
- Five (5) copies of the Record of Public Meeting
- Responses to Comments
- Ten (10) copies of the Administrative Final IS/EA
- Twenty (20) copies of the Final IS/EA and MND/FONSI
- Filing of the Notice of Determination
- Ten (10) copies each of the Draft & Final NOD
- Original and Ten (10) copies of the ECR

3.3 –PDT MEETINGS

Monthly Project Development Team (PDT) meetings will be held at RCTD or at Caltrans District 8 in San Bernardino. The purpose of these meetings will be to discuss and resolve project issues and coordinate

activities. The proposed project schedule from Notice to Proceed (NTP) to completion of PA/ED will be 24 months. It is assumed that there will be 24 PDT meetings during advancement of this 24 month schedule. It's anticipated that the Lead Environmental Planner/Environmental Lead will attend each PDT meeting.

APPENDIX B • ARTICLE BI • INTRODUCTION

The Engineer shall perform the covenants set forth in Appendix A, Scope of Services in accordance with the performance requirements of Article V of this agreement and with the following Schedule of Services. All Covenants set forth in this agreement shall be completed by February 28, 2021, unless extended by supplemental agreement.

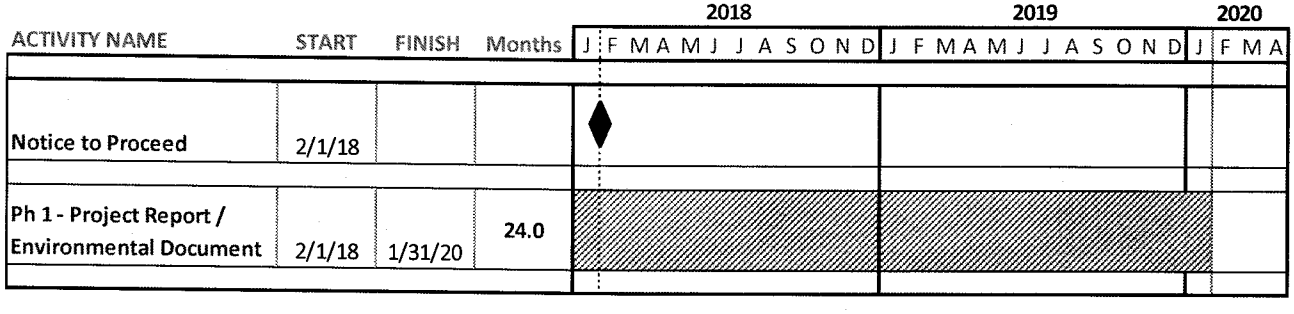
A. PHASES

The Schedule is represented by the following one phases:

1. Preliminary Engineering Report and Environmental Document

B. GANTT CHART

A gantt chart is provided below that graphically illustrates the sequencing and completion time for the project phases.



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

APPENDIX C • ARTICLE CI • ELEMENTS OF COMPENSATION

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

A. DIRECT LABOR COSTS

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

1. Direct Salary Costs

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

2. Multiplier

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

   PAYROLL ADDITIVES..... 48.27%

   The decimal ratio of Payroll Additives to Direct Salary Costs. Payroll Additives include all employee

benefits, allowances for vacation, sick leave, and holidays, and company portion of employee insurance and social and retirement benefits, all federal and state payroll taxes, premiums for insurance which are measured by payroll costs, and other contributions and benefits imposed by applicable laws and regulations.

OVERHEAD COSTS..... 97.96%

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

TOTAL MULTIPLIER ..... 146.23 %

(sum of Payroll Additives and Overhead Costs)

B. FIXED FEE

1. The Total Fixed Fee payable to the ENGINEER is $47,343.02 (PRIME CONSULTANT Profit)
2. A pro-rata share of the Fixed Fee shall be applied to the total Direct Labor Costs expended for services each month, and shall be included on each monthly invoice.

C. OTHER DIRECT EXPENSES

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

Rates for identified Additional Direct Costs are as follows:

Item	Rate	Unit	Amount
Travel/Milage	$0.54	Mile	$6,000
Plots/Reproduction/Commercial Printing/Photos/Digital Mapping	$.09	Each	$3,000
Mail/Courier	$50	Each	$500

Miscellaneous	$20	Each	$2,000
Visual Simulations	$10,000	Lump Sum	$10,000

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

D. OUTSIDE SERVICES

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

ARTICLE CII • DIRECT SALARY RATES

Direct Salary Rates, which are the range of hourly rates to be used in determining Direct Salary Costs, are given below and are subject to the following:

A. PREMIUM OVERTIME

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

B. SALARY RATES

All Salary rates shall be in effect for three years following the effective date of the Agreement. Thereafter, ENGINEER may request adjustments to individual rates on an annual basis. ENGINEER shall notify COUNTY in writing requesting a change in the rates included herein. All adjustments to rates shall be subject to approval by the County Director of Transportation, or his designee.

POSITION OR CLASSIFICATION MAXIMUM HOURLY RATES

Principal in Charge	$90.00 -130.00
Project Manager	$50.00 - $100.00
Project Engineer	$45.00 - $100.00
Senior/Structural Engineer	$50.00 - $110.00
Associate Engineer	$35.00 - $55.00
Assistant Engineer	$25.00 – $40.00
Senior Environmental Planner	$40.00 - $80.00
Associate Environmental Planner	$35.00 - $55.00
Environmental Planner	$20.00 - $40.00
Senior CAD/Detailer	$40.00 - $60.00
Engineering Technician	$20.00 - $40.00
Clerical/Administrative	$15.00 - $40.00

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

ARTICLE CIII • INVOICING

ENGINEER shall submit invoices in accordance with the Engineering Services Agreement ARTICLE VI • COMPENSATION and with the following requirements.

1. Charges shall be billed in accordance with the terms and rates included herein, unless otherwise agreed in writing by the County Contract Administrator.
2. Base Work and Extra Work shall be charged separately, and the charges for each Phase listed in Appendix B, Schedule of Services, shall be listed separately. The charges for each individual assigned under this Agreement shall be listed separately.
3. Charges of $500.00 or more for any one item of Additional Direct Costs shall be accompanied by

substantiating documentation such as invoices, telephone logs, etc.

4. Each invoice shall indicate payments to DBE subconsultants or supplies by dollar amount and as a percentage of the total invoice and shall state the DBE goals as a percentage of Total Agreement Value.

5. Each invoice shall bear a certification signed by the Engineering Contract Manager or an officer of the firm which reads as follows:

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

ARTICLE CIV • PAYMENT

Progress payments shall be made in accordance with the Engineering Services, Agreement ARTICLE VI • COMPENSATIONS.

ARTICLE CV • COST PROPOSAL

The following cost proposal reflects the negotiated targeted contract amount. The cost proposal will serve as a guideline and reference document during the execution of this contract. ENGINEER shall be compensated in accordance with the rates provided. The proposed contract fee is $1,707,503. The total amount of the contract is not to exceed $1,878,253 including a $170,750 contingency. Reimbursement is to be made at actual cost plus fixed fee, however, billing shall not exceed the rates provided in Section B above or the rates provided in the attached Fee Proposal Worksheets below. Written approval from the COUNTY PROJECT MANAGER is required to expend any contingency funds.

I-10 Jackson IC - Project Report & Environmental Document (PA&ED) Fee Propos

November 16, 2017

COMPANIES	PHASE I	PHASE II	PHASE III	PHASE IV	TOTAL
RINTE Corporation Prime	$ 542,273.18				**$ 542,273.18**
Fehr & Peers Transportation Assessment for PA/ED Phase	$ 68,200.92				**$ 68,200.92**
Paragon Partners Project Mgmt / Prepare ROW / Cost Estimates	$ 29,098.93				**$ 29,098.93**
Value Management Strategies Value Engineering Study	$ 42,733.31				**$ 42,733.31**
ESA Associates Environmental Lead	$ 345,308.08				**$ 345,308.08**
TranSystems Project Report & Environmental Document (PA&ED)	$ 498,120.93				**$ 498,120.93**
PACE Advanced Water Engineering Bridge H&H / Scour Study	$ 56,532.81				**$ 56,532.81**
David Evans & Associates, Inc. Landscape	$ 48,134.48				**$ 48,134.48**
Earth Mechanics, Inc (EMI) Geotechnical Studies	$ 77,100.21				**$ 77,100.21**
TOTAL	**$ 1,707,502.86**				**$ 1,707,502.86**

Phase I **Preliminary Engineering & Environmental**
Phase II **Plans, Specs & Estimates**
Phase III **Bid Support**
Phase IV **Construction Support**

FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HNTB Corporation	**Project Summary**	**All Phases**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**November 16, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Khalil Saba, PE	Project Manager	194	@	$100.00	$19,400.00
Mark Weber, PE	Roadway Lead	80	@	$71.99	$5,759.20
Hiep Bui, PE	Senior Specialist	70	@	$100.00	$7,000.00
Jack Allen, PE	Senior Specialist	70	@	$100.00	$7,000.00
Portia Gonzalez, PE, QSD/QSP	Senior Project Engineer/Planner	95	@	$100.00	$9,500.00
Sam Saghafi, PE	Senior Project Engineer/Planner	95	@	$100.00	$9,500.00
Omar Merheb	Senior Project Engineer/Planner	70	@	$100.00	$7,000.00
David Tan, PE	Engineer/Designer/Planner	440	@	$63.17	$27,794.80
Portia Gonzalez, PE, QSD/QSP	Drainage Lead	76	@	$87.36	$6,639.36
	Senior Drainage Engineer	328	@	$75.04	$24,613.12
	Drainage Engineer	324	@	$55.76	$18,066.24
CADD Operator	CAD / Graphics	320	@	$21.16	$6,771.20
Admin Assistant	Clerical / Administrative	100	@	$36.71	$3,671.00
Project Analyst	Clerical / Administrative	100	@	$36.71	$3,671.00
	Structures Lead	84	@	$100.00	$8,400.00
	Structures Project Engineer	280	@	$73.16	$20,484.80
	Structures CAD	120	@	$58.34	$7,000.80

TOTAL HOURS **2,846** TOTAL DIRECT LABOR **$192,271.52**

MULTIPLIERS

ESCALATION @		(Rates Vary by Phase)	
OVERHEAD @	97.96%	(of Direct Labor + Escalation)	$188,349.18
PAYROLL ADDITIVES @	48.27%	(of Direct Labor + Escalation)	$92,809.46
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$47,343.02
		TOTAL MULTIPLIERS	**$328,501.66**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Travel/Milage	11215	Each	@	$0.54	$6,000.03
Plots/Reproduction/Commercial Printing/Photos/Digital Mapping	33333	Each	@	$0.09	$2,999.97
Mail/Courier	10	Each	@	$50.00	$500.00
Miscellaneous	100	Each	@	$20.00	$2,000.00
Visual Simulations/Meetings	1	Each	@	$10,000.00	$10,000.00

TOTAL ODC'S **$21,500.00**

SUB CONSULTANT SERVICES

COMPANY	EXPENSES	MULTIPLIERS	ODC's	TOTAL
Fehr & Peers	$20,686.70	$42,127.22	$5,387.00	$68,200.92
Paragon Partners	$10,417.84	$17,772.84	$908.25	$29,098.93
Value Management Strategies	$12,417.40	$25,005.91	$5,310.00	$42,733.31
ESA Associates	$96,690.19	$228,481.82	$20,136.08	$345,308.08
TranSystems	$175,329.68	$307,791.25	$15,000.00	$498,120.93
PACE Advanced Water Engineering	$19,393.76	$37,139.05		$56,532.81
David Evans & Associates, Inc.	$12,970.00	$26,249.98	$8,914.50	$48,134.48
Earth Mechanics, Inc (EMI)	$23,808.00	$47,242.21	$6,050.00	$77,100.21

TOTAL SUBCONSULTANT SERVICES **$1,165,229.69**

TOTAL **$1,707,502.86**

FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HNTB Corporation	**TASK 1 - PROJECT MANAGEMENT**	**Phase I**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**November 16, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Khalil Saba, PE	Project Manager	194	@	$100.00	$19,400.00
Mark Weber, PE	Roadway Lead	80	@	$71.99	$5,759.20
Hiep Bui, PE	Senior Specialist	70	@	$100.00	$7,000.00
Jack Allen, PE	Senior Specialist	70	@	$100.00	$7,000.00
Portia Gonzalez, PE, QSD/QSP	Senior Project Engineer/Planner	95	@	$100.00	$9,500.00
Sam Saghafi, PE	Senior Project Engineer/Planner	95	@	$100.00	$9,500.00
Omar Merheb	Senior Project Engineer/Planner	70	@	$100.00	$7,000.00
David Tan, PE	Engineer/Designer/Planner	440	@	$63.17	$27,794.80
Portia Gonzalez, PE, QSD/QSP	Drainage Lead	76	@	$87.36	$6,639.36
	Senior Drainage Engineer	328	@	$75.04	$24,613.12
	Drainage Engineer	324	@	$55.76	$18,066.24
CADD Operator	CAD / Graphics	320	@	$21.16	$6,771.20
Admin Assistant	Clerical / Administrative	100	@	$36.71	$3,671.00
Project Analyst	Clerical / Administrative	100	@	$36.71	$3,671.00
	Structures Lead	84	@	$100.00	$8,400.00
	Structures Project Engineer	280	@	$73.16	$20,484.80
	Structures CAD	120	@	$58.34	$7,000.80
	TOTAL HOURS	**2,846**		TOTAL DIRECT LABOR	**$192,271.52**

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	97.96%	(of Direct Labor + Escalation)	$188,349.18
PAYROLL ADDITIVES @	48.27%	(of Direct Labor + Escalation)	$92,809.46
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$47,343.02
		TOTAL MULTIPLIERS	**$328,501.66**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Travel/Milage	11215	Each	@	$0.54	$6,000.03
Plots/Reproduction/Commercial Printing/Photos/Digital Mapping	33333	Each	@	$0.09	$2,999.97
Mail/Courier	10	Each	@	$50.00	$500.00
Miscellaneous	100	Each	@	$20.00	$2,000.00
Visual Simulations/Meetings	1	Each	@	$10,000.00	$10,000.00
		TOTAL ODC'S			**$21,500.00**

SUB CONSULTANT SERVICES

COMPANY	LABOR	MULTIPLIERS	ODC'S	TOTAL
Fehr & Peers	$20,686.70	$42,127.22	$5,387.00	$68,200.92
Paragon Partners	$10,417.84	$17,772.84	$908.25	$29,098.93
Value Management Strategies	$12,417.40	$25,005.91	$5,310.00	$42,733.31
ESA Associates	$96,690.19	$228,481.82	$20,136.08	$345,308.08
TranSystems	$175,329.68	$307,791.25	$15,000.00	$498,120.93
PACE Advanced Water Engineering	$19,393.76	$37,139.05		$56,532.81
David Evans & Associates, Inc.	$12,970.00	$26,249.98	$8,914.50	$48,134.48
Earth Mechanics, Inc (EMI)	$23,808.00	$47,242.21	$6,050.00	$77,100.21
		TOTAL SUBCONSULTANT SERVICES		**$1,165,229.69**

TOTAL **$1,707,502.86**

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HNTB Corporation	Manhour Summary	All Phases
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		October 20, 2017

TASK	PROJECT MANAGER	ROADWAY LEAD	SENIOR SPECIALIST	SENIOR SPECIALIST	SENIOR PROJECT ENGINEER/PLANNER	SENIOR PROJECT ENGINEER/PLANNER	SENIOR PROJECT ENGINEER/PLANNER	ENGINEER/DESIGNER/PLANNER	DRAINAGE LEAD	SENIOR DRAINAGE ENGINEER	DRAINAGE ENGINEER	CAD TECHNICIAN	TECHNICAL / ADMINISTRATIVE	CLERICAL / ADMINISTRATIVE	HOURS	HOURS (Top & Bottom)
	$270.85	$194.99	$270.85	$270.85	$270.85	$270.85	$270.85	$171.10	$236.62	$203.25	$151.03	$57.31	$99.43	$99.43		
PHASE TOTALS	**194**	**80**	**70**	**70**	**95**	**95**	**70**	**440**	**76**	**328**	**324**	**320**	**100**	**100**	**2,362**	**2,846**
PHASE I	194	80	70	70	95	95	70	440	76	328	324	320	100	100	2,362	2,846
PHASE II																
PHASE III																
PHASE IV																

TASK	STRUCTURES LEAD	STRUCTURES PROJECT ENGINEER	STRUCTURES CAD	HOURS
	$270.85	$198.16	$158.02	
PHASE TOTALS	**84**	**280**	**120**	**484**
PHASE I	84	280	120	484
PHASE II				
PHASE III				
PHASE IV				

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HNTB Corporation	TASK 1 - PROJECT MANAGEMENT	Phase I
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		October 20, 2017

TASK	PROJECT MANAGER	ROW/UTILITY LEAD	SENIOR SPECIALIST	SENIOR SPECIALIST	SENIOR PROJECT ENGINEER/PLANNER	SENIOR PROJECT ENGINEER/PLANNER	SENIOR PROJECT ENGINEER/PLANNER	ENGINEER/DESIGNER/PLANNER	DRAINAGE LEAD	SENIOR DRAINAGE ENGINEER	DRAINAGE ENGINEER	CAD/GRAPHICS	CLERICAL/ ADMINISTRATIVE	CLERICAL/ ADMINISTRATIVE	HOURS	COST
	$270.85	$194.99	$270.85	$270.85	$270.85	$270.85	$270.85	$171.10	$236.62	$203.25	$151.03	$57.31	$99.43	$99.43		
Total Manhours	**194**	**80**	**70**	**70**	**95**	**95**	**70**	**440**	**76**	**328**	**324**	**320**	**100**	**100**	**2,362**	
Attend Kick-off & PDT Meetings	8														8	$ 2,167
Prepare/Review PDT Meeting Minutes	8														8	$ 2,167
Prepare/Review Montly Progress Reports/Invoices	8												20	20	48	$ 6,144
Prepare Project Schedule & Update Monthly	8												40	40	88	$ 10,121
Maintain Complete Project Files / Communication / Coo	150	80													230	$ 56,227
Quality Control/Quality Assurance			70	70											140	$ 37,919
Data Collection & Review of Existing Project Information																
Field Reviews																
Design Surveys/Digital Mapping																
Floodplain Evaluation Report									8	16	48				72	$ 12,394
Location Hydraulic Study									8	16	24				48	$ 8,770
Water Quality Assessment Report									4	48					52	$ 10,702
Storm Water Data Report									8	24	84				116	$ 19,457
Concept Drainage Report									8	40					48	$ 10,023
Concept Drainage Plans									8	128	120				256	$ 46,032
CVSC Hydraulics and Scour Analysis									8						8	$ 1,893
Hydrology and Hydraulics Analysis									8	40	24				72	$ 13,648
BMP Plan									8		24				32	$ 5,518
Drainage and stormwater cost estimate									8	16					24	$ 5,145
Traffic Forecasts/Modeling																
Traffic Operational Analysis (Included in Task 2.4)																
Utility Coordination & Relocation Concepts																
Geotechnical Studies (Prelim. Foundation & Materials Rpt.)																
Geotechnical Input to Environmental Document																
Fault Rupture Investigation																
Structures Advance Planning Studies																
Geotechnical Studies (Prelim. Foundation & Materials Rpt.)																
Geotechnical Input to Environmental Document																
Fault Rupture Investigation																
Structures Advance Planning Studies																

MANHOUR WORKSHEET

COMPANY: **HNTB Corporation**	SCOPE OF WORK: **TASK 1 - PROJECT MANAGEMENT**	PHASE: **Phase I**
PROJECT: **I-10 Jackson IC - Project Report & Environmental Document (PA&ED)**		DATE: **October 20, 2017**

TASK	PROJECT MANAGER	ROADWAY LEAD	SENIOR SPECIALIST	SENIOR SPECIALIST	SENIOR PROJECT ENGINEER/PLANNER	SENIOR PROJECT ENGINEER/PLANNER	SENIOR PROJECT ENGINEER/PLANNER	ENGINEER/DESIGNER/PLANNER	DRAINAGE LEAD	SENIOR DRAINAGE ENGINEER	DRAINAGE ENGINEER	CADD / GRAPHICS	CLERICAL / ADMINISTRATIVE	CLERICAL / ADMINISTRATIVE	HOURS	COST
Right of Way Requirements																
Update Right of Way Data Sheet																
Geometric Plans for Project Alternatives																
Cost Estimates for Project Alternatives																
Preliminary Transportation Management Plan (TMP)					15	15	10	80				80			200	$ 29,107
Ramp Metering Report					15	15	10	80				80			200	$ 29,107
HOV Report																
Design Exception Fact Sheets																
Geometric Approval Drawings (GAD)																
Preliminary Draft Project Report																
Final Draft Project Report																
Draft Final Project Report					35	35	30	120				40	20	20	300	$ 53,887
Final Project Report					15	15	10	80				40	20	20	200	$ 30,792
Value Analysis (Support Only)	12														12	$ 3,250
Construction Staging/Traffic Handling					15	15	10	80				80			200	$ 29,107
Landscape Architecture																
Preliminary Traffic Design																
Life Cycle Cost Analysis																

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HNTB Corporation	TASK 1 - PROJECT MANAGEMENT	Phase I
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		October 20, 2017

TASK	STRUCTURES LEAD	STRUCTURES PROJECT ENGINEER	STRUCTURES CAD										HOURS	COST
	$270.85	$198.16	$158.02											
Total Manhours	**84**	**280**	**120**										**484**	
Attend Kick-off & PDT Meetings														
Prepare/Review PDT Meeting Minutes														
Prepare/Review Montly Progress Reports/Invoices														
Prepare Project Schedule & Update Monthly														
Maintain Complete Project Files / Communication / Coordination														
Quality Control/Quality Assurance														
Data Collection & Review of Existing Project Information														
Field Reviews														
Design Surveys/Digital Mapping														
Floodplain Evaluation Report														
Location Hydraulic Study														
Water Quality Assessment Report														
Storm Water Data Report														
Concept Drainage Report														
Concept Drainage Plans														
CVSC Hydraulics and Scour Analysis														
Hydrology and Hydraulics Analysis														
BMP Plan														
Drainage and stormwater cost estimate														
Traffic Forecasts/Modeling														
Traffic Operational Analysis (Included in Task 2.4)														
Utility Coordination & Relocation Concepts														
Geotechnical Studies (Prelim. Foundation & Materials Rpt.)														
Geotechnical Input to Environmental Document														
Fault Rupture Investigation														
Structures Advance Planning Studies	**84**	**280**	**120**										**484**	**$ 97,197**
Geotechnical Studies (Prelim. Foundation & Materials Rpt.)														
Geotechnical Input to Environmental Document														
Fault Rupture Investigation														
Structures Advance Planning Studies														

MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
HNTB Corporation	TASK 1 - PROJECT MANAGEMENT	Phase I

PROJECT:	DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)	October 20, 2017

TASK	STRUCTURES LEAD	STRUCTURES PROJECT ENGINEER	STRUCTURES CAD												HOURS	COST
Right of Way Requirements																
Update Right of Way Data Sheet																
Geometric Plans for Project Alternatives																
Cost Estimates for Project Alternatives																
Preliminary Transportation Management Plan (TMP)																
Ramp Metering Report																
HOV Report																
Design Exception Fact Sheets																
Geometric Approval Drawings (GAD)																
Preliminary Draft Project Report																
Final Draft Project Report																
Draft Final Project Report																
Final Project Report																
Value Analysis (Support Only)																
Construction Staging/Traffic Handling																
Landscape Architecture																
Preliminary Traffic Design																
Life Cycle Cost Analysis																

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Fehr & Peers	**Transportation Assessment for PA/ED Phase**	**All Phases**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**September 12, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Jason Pack, P.E.	PIC/PM	69	@	$80.77	$5,573.13
Anna Luo, P.E.	Senior Associate	52	@	$60.10	$3,125.20
Kara Hall	Engineer	70	@	$35.10	$2,457.00
Engineering Support	Engineer	225	@	$31.25	$7,031.25
Sandra Hyatt	Admin Support	22	@	$38.46	$846.12
Graphics Support	Graphics Support	40	@	$41.35	$1,654.00
	TOTAL HOURS	**478**		TOTAL DIRECT LABOR	**$20,686.70**

MULTIPLIERS

ESCALATION @		(Rates Vary by Phase)	
OVERHEAD @	102.98%	(of Direct Labor + Escalation)	$21,303.16
PAYROLL ADDITIVES @	73.06%	(of Direct Labor + Escalation)	$15,113.70
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$5,710.36
		TOTAL MULTIPLIERS	**$42,127.22**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Travel/Mileage	200	Each	@	$0.54	$107.00
Traffic Counts	12	Each	@	$440.00	$5,280.00
		TOTAL ODC'S			**$5,387.00**

TOTAL **$68,200.92**

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Fehr & Peers	**Transportation Assessment for PA/ED Phase**	**Phase I**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**September 12, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Jason Pack, P.E.	PIC/PM	69	@	$80.77	$5,573.13
Anna Luo, P.E.	Senior Associate	52	@	$60.10	$3,125.20
Kara Hall	Engineer	70	@	$35.10	$2,457.00
Engineering Support	Engineer	225	@	$31.25	$7,031.25
Sandra Hyatt	Admin Support	22	@	$38.46	$846.12
Graphics Support	Graphics Support	40	@	$41.35	$1,654.00
	TOTAL HOURS	**478**		TOTAL DIRECT LABOR	**$20,686.70**

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	102.98%	(of Direct Labor + Escalation)	$21,303.16
PAYROLL ADDITIVES @	73.06%	(of Direct Labor + Escalation)	$15,113.70
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$5,710.36
		TOTAL MULTIPLIERS	**$42,127.22**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Travel/Mileage	200	Each	@	$0.54	$107.00
Traffic Counts	12	Each	@	$440.00	$5,280.00
		TOTAL ODC'S			**$5,387.00**

TOTAL **$68,200.92**

SUBCONSULTANT MANHOUR WORKSHEET SUMMARY

COMPANY:	SCOPE OF WORK:	PHASE:
Fehr & Peers	Transportation Assessment for PA/ED Phase	All Phases
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		September 12, 2017

TASK	PIC/PM	SENIOR ASSOCIATE	ENGINEER	ENGINEER	ADMIN SUPPORT	GRAPHICS SUPPORT	HOURS
	$245.25	$182.49	$106.58	$94.89	$116.78	$125.56	
PHASE TOTALS	**69**	**52**	**70**	**225**	**22**	**40**	**478**
PHASE I	69	52	70	225	22	40	478
PHASE II							
PHASE III							
PHASE IV							

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Fehr & Peers	Transportation Assessment for PA/ED Phase	Phase I
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		September 12, 2017

TASK	PIC/PM	SENIOR ASSOCIATE	ENGINEER	ENGINEER	ADMIN SUPPORT	GRAPHICS SUPPORT								HOURS	COST
	$245.25	$182.49	$106.58	$94.89	$116.78	$125.56									
Total Manhours	**69**	**52**	**70**	**225**	**22**	**40**								**478**	
1.0 Project Management	5				10									15	$ 2,394
1.1 Project Administration and Control															
1.2 Project Meetings	20		10											30	$ 5,971
1.3 Budgeting															
1.4 Cost Accounting and Project Reporting															
1.5 Scheduling															
1.6 Risk Management															
1.7 Quality Control Plan		5												5	$ 912
2.0 Perform Preliminary Engineering	4	5		40										49	$ 5,689
2.1 Research and Data Gathering		2	5	10	2									19	$ 2,080
2.2 Project Development Team (PDT)															
2.3 Permits and Right of Entry															
2.4 Traffic Forecasts/Modeling	15	10	20	75	5	10								135	$ 16,591
2.5 Traffic Operations Analysis	25	30	35	100	5	30								225	$ 29,176
2.6 Value Analysis															
2.7 Geometric Alternative Analysis															
2.8 Preliminary Drainage Report															
2.9 Storm Water Data Report															
2.10 Right of Way Data Sheets															
2.11 Preliminary Drainage Study															
2.12 Utility Locations Determined for Preliminary Engineering															
2.13 Preliminary Materials Report															
2.14 Preliminary Geotechnical Report															
2.15 Structures Advanced Planning Study															
2.16 Life Cycle Cost Analysis for Pavement															
2.17 Preliminary Transportation Management Plan															
2.18 Geometric Approval Drawing															
3.0 Prepare Draft Project Report															
3.1 Cost Estimates for Alternatives															
3.2 Geometric Plans for Project Alternatives															
3.3 Fact Sheet for Exceptions															
3.4 Draft Project Report															

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Fehr & Peers	Transportation Assessment for PA/ED Phase	Phase I
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		September 12, 2017

TASK	PIC/PM	SENIOR ASSOCIATE	ENGINEER	ENGINEER	ADMIN SUPPORT	GRAPHICS SUPPORT									HOURS	COST
3.5 Modified Access Report																
3.6 Draft Project Report Circulation & Approval																
4.0 Perform Preliminary Environmental Studies																
4.1 Community Impact Analysis (CIA)																
4.2 Farmland Technical Memorandum																
4.3 Noise Study																
4.4 Noise Abatement Decision Report																
4.5 Air Quality Study																
4.6 Preliminary Visual Evaluation Memorandum																
4.7 Phase I Initial site Assessment (ISA)																
4.8 Water Quality Assessment Report (WQAR)																
4.9 Location Hydraulic & Floodplain Study Reports																
4.10 Aerially Deposited Lead Survey Memorandum (ADL Memo)																
4.11 Asbestos and Lead-Based Paint Sampling Memorandum (Asbestos Memo)																
4.12 Biological Studies																
4.13 Regulatory Approval Application Prparation Process																
4.14 Cultural Resource Studies																
5.0 Prepare Draft Environmental Document																
5.1 Prepare Draft Environmental Document																
5.2 Public Circulation of Draft Environmental Document																
5.3 Public Information Meeting and Public Hearing																
5.4 Responses to Comments on Draft Environmental Document																
6.0 Approved Project Report and Final Environmental Document																
6.1 Update Draft Project Report																
6.2 Approved Project Report																
6.3 Updated Storm Water Data Report																
6.4 Final Environmental Document																

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Paragon Partners	**Project Mgmt / Prepare ROW / Cost Estimates**	**All Phases**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**September 12, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Phil Bonina	Project Manager / Right of Way Cost Estimator	97	@	$76.92	$7,461.24
Greg Brown	Utility Coordinator	35	@	$52.88	$1,850.80
Jessica Kovari	GIS Agent	20	@	$36.06	$721.20
Brett Brown	Title Agent	10	@	$38.46	$384.60

TOTAL HOURS **162** TOTAL DIRECT LABOR **$10,417.84**

MULTIPLIERS

ESCALATION @		(Rates Vary by Phase)	
OVERHEAD @	131.90%	(of Direct Labor + Escalation)	$13,741.13
PAYROLL ADDITIVES @	14.10%	(of Direct Labor + Escalation)	$1,468.92
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$2,562.79

TOTAL MULTIPLIERS **$17,772.84**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	950		@	$0.54	$508.25
Postage at Cost	1		@	$200.00	$200.00
Telephone at Cost	1		@	$200.00	$200.00

TOTAL ODC'S **$908.25**

TOTAL **$29,098.93**

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Paragon Partners	**Project Mgmt / Prepare ROW / Cost Estimates**	**Phase I**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**September 12, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Phil Bonina	Project Manager / Right of Way Cost Estimator	97	@	$76.92	$7,461.24
Greg Brown	Utility Coordinator	35	@	$52.88	$1,850.80
Jessica Kovari	GIS Agent	20	@	$36.06	$721.20
Brett Brown	Title Agent	10	@	$38.46	$384.60
	TOTAL HOURS	**162**		TOTAL DIRECT LABOR	**$10,417.84**

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	131.90%	(of Direct Labor + Escalation)	$13,741.13
PAYROLL ADDITIVES @	14.10%	(of Direct Labor + Escalation)	$1,468.92
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$2,562.79
		TOTAL MULTIPLIERS	**$17,772.84**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Mileage	950		@	$0.54	$508.25
Postage at Cost	1		@	$200.00	$200.00
Telephone at Cost	1		@	$200.00	$200.00
		TOTAL ODC'S			**$908.25**

TOTAL **$29,098.93**

SUBCONSULTANT MANHOUR WORKSHEET SUMMARY

COMPANY:	SCOPE OF WORK:	PHASE:
Paragon Partners	Project Mgmt / Prepare ROW / Cost Estimates	All Phases
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		September 12, 2017

TASK	PROJECT MANAGER / RIGHT OF WAY COST ESTIMATOR	UTILITY COORDINATOR	GIS AGENT	TITLE AGENT	HOURS
	$208.15	$143.09	$97.58	$104.07	
PHASE TOTALS	**97**	**35**	**20**	**10**	**162**
PHASE I	97	35	20	10	162
PHASE II					
PHASE III					
PHASE IV					

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Paragon Partners	Project Mgmt / Prepare ROW / Cost Estimates	Phase I
PROJECT:		**DATE:**
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		September 12, 2017

TASK	PROJECT MANAGER / RIGHT OF WAY COST ESTIMATOR	UTILITY COORDINATOR	GIS AGENT	TITLE AGENT										HOURS	COST
	$208.15	$143.09	$97.58	$104.07											
Total Manhours	**97**	**35**	**20**	**10**										**162**	
	97	**35**	**20**	**10**										**162**	**$ 28,191**

SUBCONSULTANT MANHOUR WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Paragon Partners	Project Mgmt / Prepare ROW / Cost Estimates	Phase I
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		September 12, 2017

TASK	PROJECT MANAGER / RIGHT OF WAY COST ESTIMATOR	UTILITY COORDINATOR	GIS AGENT	TITLE AGENT											HOURS	COST

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Value Management Strategies	**Value Engineering Study**	**All Phases**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**September 12, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Hays	Principal - QA/QC	8	@	$120.00	$960.00
Kolano	Team Leader	126	@	$74.28	$9,359.28
Kramer	Project Coordinator	12	@	$55.86	$670.32
TBD	Technical Editor	44	@	$32.45	$1,427.80

TOTAL HOURS **190** TOTAL DIRECT LABOR **$12,417.40**

MULTIPLIERS

ESCALATION @		(Rates Vary by Phase)	
OVERHEAD @	173.98%	(of Direct Labor + Escalation)	$21,603.79
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$3,402.12

TOTAL MULTIPLIERS **$25,005.91**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Airfare	3		@	$720.00	$2,160.00
Car Rental	7		@	$75.00	$525.00
Meals & Incidentals	7		@	$50.00	$350.00
Lodging/Hotels	7		@	$160.00	$1,120.00
Hotel Parking	7		@	$15.00	$105.00
Airport Transportation	3		@	$100.00	$300.00
Shipping	1		@	$150.00	$150.00
Reproduction	6		@	$100.00	$600.00
Meeting Room				$350.00	

TOTAL ODC'S **$5,310.00**

TOTAL **$42,733.31**

SUBCONSULTANT FEE PROPOSAL WORKSHEET

COMPANY:	SCOPE OF WORK:	PHASE:
Value Management Strategies	**Value Engineering Study**	**Phase I**
PROJECT:		DATE:
I-10 Jackson IC - Project Report & Environmental Document (PA&ED)		**September 12, 2017**

DIRECT LABOR

PERSONNEL	POSITION	HOURS		RATE	AMOUNT
Hays	Principal - QA/QC	8	@	$120.00	$960.00
Kolano	Team Leader	126	@	$74.28	$9,359.28
Kramer	Project Coordinator	12	@	$55.86	$670.32
TBD	Technical Editor	44	@	$32.45	$1,427.80
	TOTAL HOURS	**190**		TOTAL DIRECT LABOR	**$12,417.40**

MULTIPLIERS

ESCALATION @		(of Direct Labor)	
OVERHEAD @	173.98%	(of Direct Labor + Escalation)	$21,603.79
PAYROLL ADDITIVES @		(of Direct Labor + Escalation)	
PROFIT (FIXED FEE) @	10.0%	(of Direct Labor + Escalation + Overhead + Payroll Additives)	$3,402.12
		TOTAL MULTIPLIERS	**$25,005.91**

OTHER DIRECT COSTS

••• Billed at Actual Cost •••

ITEM	QUANTITY	UNIT		UNIT COST	AMOUNT
Airfare	3		@	$720.00	$2,160.00
Car Rental	7		@	$75.00	$525.00
Meals & Incidentals	7		@	$50.00	$350.00
Lodging/Hotels	7		@	$160.00	$1,120.00
Hotel Parking	7		@	$15.00	$105.00
Airport Transportation	3		@	$100.00	$300.00
Shipping	1		@	$150.00	$150.00
Reproduction	6		@	$100.00	$600.00
Meeting Room				$350.00	
				TOTAL ODC'S	**$5,310.00**

TOTAL **$42,733.31**