RESOLUTION

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF EL PASO:

That the City Manager be authorized to sign an Agreement for Professional Services by and between the CITY OF EL PASO and HNTB Corporation, a Missouri corporation authorized to do business in Texas, for a project known as "Design for Intelligent Transportation System (ITS) Infrastructure at Zaragoza and Bridge of the Americas (BOTA) International Ports Of Entry (POE)" for an amount not to exceed **$1,934,517.00**; that the City Engineer is authorized to approve additional Basic Services and Reimbursables for an amount not to exceed $50,000.00 and to approve Additional Services for an amount not to exceed $50,000.00 if such services are necessary for the proper execution of the project and that the increased amounts are within the appropriate budgets of the project for a total amount of $2,034,517.00; and that the City Manager be authorized to establish the funding sources and make any necessary budget transfers and execute any and all documents necessary for the execution of the Agreement.

APPROVED THIS 31st DAY OF January 2023.

CITY OF EL PASO:

Oscar Leeser, Mayor

ATTEST:

Laura D. Prine
City Clerk

APPROVED AS TO FORM:

Roberta Brito
Assistant City Attorney

APPROVED AS TO CONTENT:

Assistant Director Capital Improvement
Jerry DeMuro for
Yvette Hernandez, P.E., City Engineer
Capital Improvement Department

CITY OF EL PASO A/E SELECTION SCORESHEET

Rater	SOLICITATION #2022-0599 Design for ITS Infra at Zaragoza and BOTA		
	AECOM	HNTB Corporation	Walter P Moore
Rater 1	88	89	87
Rater 2	59	66	54
Rater 3	74	80	73
Rater 4	55	77	49
Rater 5	89	85	84
Total Raters Score	365	397	347
References	9	7	9
OVERALL SCORE	374	404	356

#1	HNTB	404
#2	AECOM	374
#3	Walter P Moore	356

THE STATE OF TEXAS)
)
COUNTY OF EL PASO)

AN AGREEMENT FOR PROFESSIONAL SERVICES

This Agreement is made this 31st day of January, 2023 by and between the City of El Paso, a municipal corporation organized and existing under the laws of the State of Texas, hereinafter referred to as the **"Owner"**, and HNTB Corporation, a Missouri corporation authorized to do business in Texas, hereinafter referred to as the **"Consultant"**.

WHEREAS, the Owner intends to engage the Consultant to perform professional services for the project known as "Design for Intelligent Transportation System (ITS) Infrastructure at Zaragoza and Bridge of the Americas (BOTA) International Ports of Entry (POE)**"**, hereinafter referred to as the **"Project"**, as further described in **Attachment "A"**; and

WHEREAS, Consultant has been selected to perform such services as required by the Owner, and the Consultant was selected through the Owner's selection procedure, in accordance with all applicable state and local laws and ordinances.

NOW, THEREFORE, for the consideration set forth in this Agreement and its attachments, the Owner and Consultant agree as follows:

ARTICLE I.
ATTACHMENTS

1.1 The attachments listed herein and attached to this Agreement are incorporated herein by reference for all purposes.

Attachment "A"	Scope of Services and Budget
Attachment "B"	Consultant's Fee Proposal and Hourly Rates
Attachment "C"	Consultant's Basic and Additional Services
Attachment "D"	Payment and Deliverable Schedules
Attachment "E"	Insurance Certificate

ARTICLE II.
PROJECT

2.1 The Owner hereby agrees to retain the Consultant and the Consultant agrees to perform the services identified in this Agreement for the Project. The Project shall consist of the Consultant's completion of the Scope of Services as further described in **Attachment "A"**. Such Scope of Services shall be completed in accordance with the identified phases described in **Attachment "D"**.

2.2 The Consultant shall comply with the City of El Paso Capital Improvement Department Construction Document Guidelines in effect on the execution date of this Agreement in the performance of the services requested under this Agreement. Such Guidelines are available in the Capital Improvement Department.

2.3 The Consultant shall serve as the Owner's professional representative for the construction of the Project to which this Agreement applies and shall give consultation and advice to the Owner during the performance of services.

2.4 The Owner shall provide all available information to the Consultant, as to the Owner's requirements for each Project's construction contract. The Owner shall also provide to the Consultant, all known information pertinent to the Project site, including previous reports and other data relative to design, such as "as-built" drawings or physical conditions now existing at the Project site. In performing its services, the Consultant will be entitled to rely upon the accuracy of the Owner-provided information.

2.5 The Owner hereby designates the City Engineer of the City of El Paso as the Owner's representative with respect to the professional services to be provided by the Consultant pursuant to this Agreement. The City Engineer shall have complete authority to transmit instructions, receive information, interpret and define Owner's policies, and decisions with respect to materials, equipment, elements, and systems pertinent to the work covered by this Agreement. City Engineer will render written decisions within a five (5) working day time period.

ARTICLE III.
CONSULTANT FEES AND PROJECT BUDGET

3.1 PAYMENT TO CONSULTANT. The Owner shall pay to the Consultant an amount not to exceed **$1,934,517.00** for all basic services and reimbursables performed pursuant to this Agreement.

The City Engineer may, without further authorization from the City Council and in a form approved by the City Attorney, increase the total payment identified for all basic services and reimbursables performed pursuant to this Agreement in an amount not to exceed **$50,000.00,** if such services are necessary for proper execution of the Project and the increased amounts are within the appropriate budget identified for the identified Project.

In addition, if authorized in advance by the City Engineer, in a form approved by the City Attorney, the Consultant may perform such Additional Services as also enumerated within **Attachment "C"** in an amount not to exceed **$50,000.00,** if such services are necessary for proper execution of any identified Projects and the increased amounts are within the appropriate budget identified for the identified Projects. Additional Services exceeding **$50,000.00** must have prior approval by City Council through written amendment to this Agreement.

The parties agree and understand that all fees and compensation to the Consultant shall only become due and payable in accordance with the terms of this Agreement and the fees to be charged for the Project shall be pursuant to the Consultant's fee proposal for such Basic and Additional Services at the rates which is attached hereto as **Attachment "B".** Payments to the Consultant shall be made pursuant to **Attachment "D"**.

3.2 CONSULTANT'S SERVICES. The Basic Services to be provided by the Consultant for this Agreement are attached hereto as **Attachment "C".**

3.3 CONSULTANT'S INVOICES. The Consultant shall bill the Owner not more often than monthly, through written invoices pursuant to **Attachment "D"**. Invoices shall indicate the costs for outside consultants with copies of their invoices as back-up materials as well as other authorized direct costs for hourly rate contracts. All invoices shall be made in writing. Within ninety days (90) of substantial completion of construction, all outstanding invoices for all work completed to date by the Consultant shall be submitted to the Owner.

3.3.1 Each invoice shall contain a brief summary indicating, at a minimum, the total amount authorized for the Consultant, the current invoiced amount and the amount billed to date. In addition to the Summary, each invoice shall provide a Progress Report. The Progress Report shall describe, at a minimum, the progress of the Project to date also indicating the percentage of completion of the Project. The established schedule for completion shall not be revised except by written amendment to this Agreement, executed by both parties.

3.3.2 The Owner agrees to pay invoices for all services performed as soon as reasonably possible but not later than thirty (30) days from receipt. Upon dispute, however, the Owner may, upon notice to the Consultant, withhold payment to the Consultant for the amount in dispute only, until such time as the exact amount of the disputed amount due the Consultant is determined. The total amount paid to Consultant shall not exceed Consultant's fee proposal, except by written amendment to this Agreement, executed by both parties.

3.4 PROJECT CONSTRUCTION BUDGET AND TIME. The Consultant acknowledges that the total project budget for the Project is $14,000,000.00, which is to include all features essential to the operation of the Project for its intended use as described in the Scope of Services and Project budget in **Attachment "A".** The Consultant does hereby agree to design the Project such that the Consultant's final agreed cost opinions for the construction of the Project, including all features essential to its intended use, is within the above-budgeted amount for the base bid. If the Consultant's cost opinions exceed the Project Budget at any time, the Consultant shall make recommendations to the Owner to adjust the Project's size or quality and the Owner shall cooperate with the Consultant to adjust the scope of the Project. If all responsible bids exceed the City approved Consultant's final cost opinions by more than **ten percent (10%),** the Consultant agrees, at the direction of the Owner, to redesign the Project without additional charge to the Owner in order to bring the Project within the budgetary limitations.

3.5 COSTS NOT ENUMERATED. Except as specifically set forth in this Agreement and its attachments, all costs related to the completion of the services requested herein shall be borne by the Consultant and not passed on to the Owner or otherwise paid by the Owner, unless a written amendment to this Agreement is executed by both parties allowing for additional costs.

ARTICLE IV.
PERIOD OF SERVICE AND TERMINATION

4.1 PERIOD OF SERVICE. The services called for by each phase shall begin upon the issuance of a Notice to Proceed from the City Engineer. The Consultant shall complete the

requested services in accordance with the timelines and schedules outlined in **Attachments "C" and "D".**

4.2 SUSPENSION. Barring an early termination as provided herein, this Agreement shall remain in force: a) For a period which may reasonably be required for the design, award of construction contracts, and construction of the improvements included in all construction contracts, including extra work and required extensions thereto; or b) Unless construction has not begun within a period of **twelve (12) months** after the completion of the services called for in that phase of work last authorized. However, should the Consultant's services be suspended for a period longer than six months, the City and Consultant may renegotiate remaining fees due to changes in salaries or increased costs that may occur during the suspension period. The Owner may determine that this Agreement will remain in full force past the twelve-month period noted above. Such a determination will be based upon the individual circumstances of this Project and this Agreement.

4.3 TERMINATION. This Agreement may be terminated as provided herein.

4.3.1 TERMINATION BY OWNER. It is mutually understood and agreed by the Consultant and Owner that the Owner may terminate this Agreement, in whole or in part for the convenience of the Owner, upon **fourteen (14) consecutive calendar days'** written notice. It is also understood and agreed that upon such notice of termination, the Consultant shall cease the performance of services under this Agreement. Upon such termination, the Consultant shall provide one final invoice for all services completed and reimbursable expenses incurred prior to the Owner's notice of termination. Owner shall compensate Consultant in accordance with this Agreement; however, the Owner may withhold any payment to the Consultant that is held to be in dispute for the purpose of setoff until such time as the exact amount due the Consultant from the Owner is determined. Nothing contained herein, or elsewhere in this Agreement shall require the Owner to pay for any services that are not in compliance with the terms of this Agreement and its attachments.

4.3.2 TERMINATION BY EITHER PARTY. It is further understood and agreed by the Consultant and Owner that either party may terminate this Agreement in whole or in part. Such a termination may be made for failure of one party to substantially fulfill its contractual obligations, pursuant to this Agreement, and through no fault of the other party. No such termination shall be made, unless the other party being terminated is granted: a) written notice of intent to terminate enumerating the failures for which the termination is being sought; b) a minimum of **seven (7) consecutive calendar days** to cure such failures; and c) an opportunity for consultation with the terminating party prior to such termination. However, the Owner retains the right to immediately terminate this Agreement for default if the Consultant violates any local, state, or federal laws, rules or regulations that relate to the performance of this Agreement. In the event of termination by the Owner pursuant to this subsection, the Owner may withhold payments to the Consultant for the purpose of setoff until such time as the exact amount due the Consultant from the Owner is determined.

4.3.3 TERMINATION FOR FAILURE TO COMPLY WITH SUBCHAPTER J, CHAPTER 552, GOVERNMENT CODE. The requirements of subchapter J, Chapter 552, Government Code, may apply to this Contract and the Contractor or vendor agrees

that the Contract can be terminated if the contractor or vendor knowingly or intentionally fails to comply with a requirement of that subchapter.

4.3.4 TERMINATION SHALL NOT BE CONSTRUED AS RELEASE. Termination by either party shall not be construed as a release of any claims that the terminating party may be lawfully entitled to assert against the terminated party. Further, the terminated party shall not be relieved of any liability for damages sustained by the terminating party by virtue of any breach of this Agreement.

ARTICLE V.
INSURANCE AND INDEMNIFICATION

5.1 INSURANCE. The Consultant shall procure and maintain insurance coverage as required herein and attached in **Attachment "E"**. Consultant shall not commence work under this Agreement until the Consultant has obtained the required insurance and such insurance has been approved by the Owner. The Consultant shall maintain the required insurance throughout the term of this Agreement. Failure to maintain said insurance shall be considered a material breach of this Agreement.

5.1.1 WORKERS' COMPENSATION INSURANCE. The Consultant shall procure and shall maintain during the life of this Agreement, Workers' Compensation Insurance as required by applicable Texas law for all of the Consultant's employees to be engaged in work under this Agreement. The Consultant shall provide the following endorsement:

> "The policy is endorsed to provide that insurer waives any right of subrogation it may acquire against the Owner, its partners, agents and employees by reason of any payment made on or account of injury, including death resulting therefrom, sustained by any employee of the insured."

5.1.2 COMMERCIAL LIABILITY, PROPERTY DAMAGE LIABILITY AND AUTOMOBILE LIABILITY INSURANCE. The Consultant shall procure and shall maintain during the life of this Agreement such Commercial General Liability, Property Damage Liability and Automobile Liability Insurance as shall protect the Consultant and the Consultant's employees performing work covered by this Agreement from claims for damages for personal injury, including accidental death, as well as from claims for property damages, which may arise from operations under this contract, whether such operations be by the Consultant or by anyone directly or indirectly employed by the Consultant. The minimum limits of liability and coverages shall be as follows:

a) **Commercial General Liability**
$1,000,000.00 Per Occurrence
$1,000,000.00 Products/Completed Operations
$1,000,000.00 Personal and Advertising Injury

b) **AUTOMOBILE LIABILITY**
Combined Single Limit
$1,000,000.00 per accident

5.1.3 PROFESSIONAL LIABILITY INSURANCE. The Consultant shall procure and shall maintain, at the Consultant's sole expense, Professional Liability Insurance for the benefit of the Owner to cover the errors and omissions of the Consultant, its principals or officers, agents or employees in the performance of this Agreement with a limit of $1,000,000.00 on a claim made basis.

5.1.4 OWNER AS ADDITIONAL INSURED. The Owner shall be named as an Additional Insured on all of the Consultant's Insurance Policies, with the exception of Workers' Compensation and Professional Liability Insurance required by this Agreement.

5.1.5 PROOF OF INSURANCE. The Consultant shall furnish the City Engineer with certificates showing the type of insurance coverages, limits on each insurance policy, class of operations covered under each insurance policy, effective dates and expiration dates of policies, insurance companies providing the insurance coverages, name of agent/broker and include confirmation of any endorsement(s) required in this Agreement.

5.1.6 GENERAL INSURANCE PROVISIONS. All certificates required herein shall be attached hereto and incorporated for all purposes as **Attachment "E"**. All certificates shall also include the name of the project on the corresponding insurance certificate.

5.2 INDEMNIFICATION. TO THE FULLEST EXTENT PERMITTED BY LAW, CONSULTANT SHALL INDEMNIFY HOLD HARMLESS, AND DEFEND OWNER, AND OWNER'S OFFICERS, DIRECTORS, PARTNERS, AGENTS CONSULTANTS, AND EMPLOYEES FROM AND AGAINST ANY CLAIMS, COSTS, LOSSES, AND DAMAGES (INCLUDING BUT NOT LIMITED TO ALL FEES AND CHARGES OF ENGINEERS, ARCHITECTS, ATTORNEYS, AND OTHER PROFESSIONALS, AND ALL COURT, ARBITRATION, OR OTHER DISPUTE RESOLUTION COSTS) ARISING OUT OF OR RELATING TO THE PROJECT, PROVIDED THAT ANY SUCH CLAIM, COST, LOSS, OR DAMAGE IS ATTRIBUTABLE TO ANY NEGLIGENT ACT OR OMISSION, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY CONSULTANT OR CONSULTANT'S OFFICERS, DIRECTORS, PARTNERS, AGENTS, CONSULTANTS OR EMPLOYEES. THE CONSULTANT SHALL NOT BE RESPONSIBLE FOR ANY ACTS OF ANY OF THE CITY'S INDEPENDENT PROJECT MANAGERS.

To the extent allowed by state law, the Owner will be responsible for its own actions.

ARTICLE VI.
FEDERAL AND STATE PROVISIONS

6.1 COMPLIANCE WITH APPLICABLE LAWS – FEDERAL AND STATE FUNDING REQUIREMENTS. Consultant, at Consultant's sole expense, agrees that it will operate and perform its responsibilities and covenants under this Agreement in accordance with applicable laws, rules, orders, ordinances, directions, regulations and requirements of federal, state, county and municipal authorities, now in force or which may hereafter be in force, including,

but not limited to, those which shall impose any duty upon the Owner or Consultant with respect to the use of federal and state funds and nondiscrimination in the administration of contracts which are funded, in whole or in part, with federal and state funds.

Specifically, and not in limitation of the foregoing, Consultant agrees that to the extent required by any agreement between the Owner and any Federal and State agency, the laws of the federal government of the United States of America and the rules and regulations of any regulatory body or officer having jurisdiction over this Project, **including but not limited to:**

--The Federal Transit Administration (FTA) through a Grant Agreement or Cooperative Agreement with the Owner, or supported by FTA through a Loan, Loan Guarantee, or Line of Credit with the Owner.

--The Department of Housing and Urban Development through a Grant Agreement or Cooperative Agreement with the Owner.

--The Federal Aviation Administration (FAA) through a Grant Agreement or Cooperative Agreement with the Owner, as further described in Attachment "F".

--The Texas Department of Transportation through an Agreement with the Owner.

Copies of grant assurances will be made available to Consultant. However, provided copies shall in no way be a limitation on the Consultant's obligation to comply with any Federal and State agency, the laws of the federal government of the United States of America and the rules and regulations of any regulatory body or officer having jurisdiction over this Project.

6.1.1 CONTRACT ASSURANCE. The Consultant or subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the consultant to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

6.1.2 DBE GOOD FAITH EFFORTS. The requirements of 49 CFR Part 26, regulations of the U.S. DOT, applies to this contract. It is the policy of the Owner to practice nondiscrimination based on race, color, sex or national origin in the award of performance of this contract. All firms qualifying under this solicitation are encouraged to submit proposals. Award of this contract will be conditioned upon satisfying the requirements of this proposal. These requirements apply to all offerors, including those who qualify as a DBE. A DBE contract goal will be identified pursuant to the federal funding requirements for an individual task order established for this contract. The offeror shall make good faith efforts, as defined in Appendix A, 40 CFR Part 26, to meet the contract goal for DBE participation in the performance of this Agreement.

The Consultant will be required to submit the following information: (1) the names and addresses of DBE firms that will participate in the contract; (2) a description of the work that each DBE firm will perform; (3) the dollar amount of the participation of each DBE firm participating; (4) written documentation of the offeror's commitment to use a DBE subconsultant whose participation it submits to meet the contract goal; (5) written confirmation from the DBE that it is participating in the contract as provided in the commitment made under (4); and (6) if the contract goal is not met, evidence of good faith efforts. The offeror shall submit the information with its proposal as a condition of responsiveness.

DBE participation in this contract may be in the form of a prime contract, subcontract, joint venture, or other arrangement that qualifies under 49 CFR Section 26.55 or 26.53(g), both of which will be submitted on a Letter of Intent to the Owner.

6.2 TERMINATION FOR CANCELLATION OF GRANT. Should this Agreement be terminated as a result of cancellation of federal funds covering this Project, the Owner shall promptly notify the Consultant of the cancellation by certified mail-return receipt requested, whereupon the Consultant shall immediately, on receipt of the letter, cease and desist from performing any other work or services hereunder. In such an event, the Consultant will be paid for professional services performed to such date, upon furnishing the Owner a progress report and an invoice to such date, and upon acceptance of the work by the Owner.

6.3 TITLE VI OF THE CIVIL RIGHTS ACT OF 1964, 78 STAT.252, 42 U.S.C. 2000D TO 2000D-4 AND TITLE 49, CODE OF FEDERAL REGULATIONS, DEPARTMENT OF TRANSPORTATION.

During the performance of this contract, Consultant, for itself, its assignees and successors in interest (hereinafter referred to as the "Consultant") agrees as follows:

(1) **Compliance with Regulations**: Consultant shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(2) **Nondiscrimination**: Consultant, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. ADP shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(3) **Solicitations for Subcontractors, Including Procurements of Materials and Equipment**: In all solicitations either by competitive bidding or negotiation made by Consultant for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by Consultant of Consultant's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national

origin.

(4) **Information and Reports**: Consultant shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts other sources of information, and its facilities as may be determined by Client to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of Consultant is in the exclusive possession of another who fails or refuses to furnish this information Consultant shall so certify to Client, as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) **Sanctions for Noncompliance**: In the event of Consultant's noncompliance with the nondiscrimination provisions of this contract, the Client shall impose such contract sanctions as it may determine to be appropriate, including but not limited to:

a. Withholding of payments to the Consultant under the contract until the Consultant complies, and / or

b. Cancellation, termination or suspension of the contract in whole or in part.

(6) **Incorporation of Provisions:** Consultant shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directive issued pursuant thereto. Consultant shall take such action with respect to any subcontract or procurement as Client may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event a Consultant becomes involved in, or is threatened with litigation with a subcontractor or supplier as a result of such direction, the Consultant may request Client to enter into such litigation to protect the interests of Client and in addition, Consultant may request the United States to enter into such litigation to protect the interests of the United States.

ARTICLE VII.
GENERAL PROVISIONS

7.1 CONTRACT TIME. Consultant understands and agrees to provide all professional services and deliverables requested herein, as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect, and to use its best efforts to complete all phases of this Agreement within the time schedules indicated within **Attachment "D"**. It is acknowledged that the Consultant does not have control over all aspects of the design and construction process and cannot warrant that it will complete all services and deliverables by a certain date. The Consultant shall timely notify the City Engineer of any delay beyond its control and the City Engineer shall extend the time schedule in the event of delays which the City Engineer reasonably determines are beyond the control of the Consultant.

7.2 OPINION OF PROBABLE COST. As a design professional practicing in El Paso, the Consultant is expected to be familiar with the cost of construction, labor, and materials in the El Paso area and of bidding and market trends. The cost opinions of construction cost provided by the Consultant, as required herein, are to be made in light of such familiarity and are expected to be within **ten percent (10%)** of the bid for the base bid item expected from the lowest responsible bidder.

The Consultant's final cost opinions for the construction of the Project shall take into account labor costs which shall be based on the current City of El Paso prevailing wage rates as adopted by the City Council. In the event that the Project is funded with federal funds, the higher of the City of El Paso prevailing wage rates or the Davis-Bacon wage rates shall be utilized by the Consultant in compiling a final cost opinions for the Project.

If the Consultant's most recent cost opinion for any construction contract is in excess of the Project construction budget, the Owner shall give written approval of an increase in the limit, or shall cooperate in revising the Project's scope or quality, or both, to reduce the cost as required. Such revisions shall be made, and Drawings and Specifications modified by the Consultant without further compensation.

As noted herein, if all responsible bids exceed the final cost opinion by more than **ten percent (10%)**, the Consultant agrees, at the direction of the Owner, to redesign the Project without additional charge to the Owner in order to bring the Project within the budgetary limitations

7.3 CONSULTANT'S QUALITY OF WORK. The Owner's review of any documents prepared by the Consultant is only general in nature and its option to approve and accept the work in no way relieves the Consultant of responsibility for any specific deficiencies in its professional service. The Consultant's services shall be performed with the professional skill and care ordinarily provided by competent engineers or architects practicing under the same or similar circumstances and professional license and as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect and the orderly progress of the Project and in accordance with the time periods established in **Attachment "D"** and which shall be adjusted, if necessary, as the project proceeds. This schedule shall include allowances for periods of time required for the Owner's review, for the performance of the Owner's consultants, and for approval of submissions by authorities having jurisdiction over the project. The identified time limits shall not, except for reasonable cause, be exceeded by the Consultant or Owner.

7.4 COPYRIGHT AND REPRODUCTION RIGHTS. Upon payment of amounts due, the Drawings, Specifications, concepts and design, and other documents prepared by the Consultant for this Project including, without limitation, those in electronic form (sometimes referred to as the "Instruments of Service") are the property of the Owner, who shall be vested with all common law and statutory rights. The Owner shall have the right to the use of the Drawings, Specifications and other documents for the maintenance, repair, remodeling and renovation of the Project; provided however the Consultant shall have no liability for any use of one or more of the Instruments of Service by the Owner for maintenance, repair, remodeling and renovation of the project. The Owner has the consent of the Consultant, provided, however, the Consultant shall have no liability or responsibility for such use of the Drawings, Specifications, concepts and design, and other documents. The rights granted to the Owner herein for the use of the Drawings, Specifications and other documents for additional projects, other than the construction of the Project, shall not grant the Owner any right to rely upon the Consultant's seal on the Drawings and Specifications or to hold the Consultant responsible for any subsequent use of the Drawings, Specifications and documents. The Consultant shall provide the Owner with copies of the Instruments of Service in both electronic form and in hard copy.

7.5 AUDITING RECORDS FOR THE SPECIFIC PROJECT. Consultant's records subject to audit shall include but not be limited to records which, have a bearing on matters of interest to the Owner in connection with the Consultant's work on this Project for the Owner and shall be open to inspection and subject to audit and/or reproduction by Owner's agent or its authorized representative to the extent necessary to adequately permit evaluation and verification of (a) Consultant's compliance with contract requirements, and (b) compliance with provisions for computing Direct Personnel Expense with reimbursables, if applicable.

Such records subject to audit shall also include those records necessary to evaluate and verify direct and indirect costs, (including overhead allocations) as they may apply to costs associated with this Agreement. In those situations where Consultant's records have been generated from computerized data, Consultant agrees to provide Owner's representatives with extracts of data files in computer readable format on data disks or suitable alternative computer data exchange format.

The Owner or its designee shall be entitled, at its expense, to audit all of the Consultant's records related to this Project, and shall be allowed to interview any of the Consultant's employees, pursuant to the provisions of this section throughout the term of this contract and for a period of **three (3) years** after final payment or longer if required by law. Such audits may require inspection and photo copying of selected documents from time to time at reasonable times (limited to Consultant's office hours) and places upon reasonable notice.

7.6 CONTRACTING INFORMATION

The Contractor must preserve all contracting information related to this Contract as provided by the records retention schedule requirements applicable to the City for the duration of this Contract. Contractor will promptly provide the City any contracting information related to this Contract that is in the custody or possession of the Contractor on request of the City. On completion of this Contract, Contractor will either provide at no cost to the City all contracting information related to this Contract that is in the custody or possession of the Contractor or preserve the contracting information related to this Contract as provided by the records retention requirements applicable to the City.

7.7 SUCCESSORS AND ASSIGNS. This Agreement shall be binding on the Owner and the Consultant, their successors and assigns. Neither party may assign, sublet, or transfer its interest in this Agreement without the written consent of the other.

7.8 VENUE. For the purpose of determining place of Agreement and the law governing the same, this Agreement is entered into in the City and County of El Paso, the State of Texas, and shall be governed by the laws of the State of Texas. Venue shall be in the County of El Paso, Texas.

7.9 GOVERNING LAW. The Consultant shall comply with applicable Federal, State and local laws and ordinances applicable to the work contemplated herein.

7.10 CAPTIONS. The captions of this Agreement are for information purposes only, and shall in no way affect the substantive terms or conditions of this Agreement.

7.11 SEVERABILITY. Should any section, paragraph or other provision of this Agreement be found invalid, such invalidity shall not affect the remaining provisions of this Agreement.

7.12 NOTICES. Any notice, demand, request, consent or approval that either party may or is required to provide to the other shall be in writing and either personally delivered or sent via certified mail, return receipt, to the following addresses:

To the Owner:	The City of El Paso Attn: City Manager P. O. Box 1890 El Paso, Texas 79950-1890
With a Copy to:	The City of El Paso Attn: City Engineer P. O. Box 1890 El Paso, Texas 79950-1890
To the Consultant:	HNTB Corporation Attn: A. Scott Haywood 303 N. Oregon Street, Suite 820 El Paso, Texas 79901-

Changes may be made to the names and addresses noted herein through timely, written notice to the other party.

7.13 CONFLICTING PROVISIONS. Any provision contained in any Attachments to this Agreement, which may be in conflict or inconsistent with any of the provisions in this Agreement shall be void to the extent of such conflict or inconsistency.

7.14 ENTIRE AGREEMENT. This Agreement, including attachments, constitutes and expresses the entire agreement between the parties and supersedes all prior negotiations, representations or agreements, whether written or oral. This Agreement shall not be amended or modified, except by written amendment, executed by both parties.

7.15 TEXAS GOVERNMENT CODE. In accordance to Chapter 2274 of the Texas Government Code, as amended from time to time, the Consultant represents and warrants to the Owner the following: (1) the Consultant does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) the Consultant will not discriminate during the term of this Agreement against a firearm entity or firearm trade association.

WITNESS THE FOLLOWING SIGNATURES AND/OR SEALS:

CITY OF EL PASO:

Tomás González
City Manager

APPROVED AS TO FORM:

Roberta Brito
Assistant City Attorney

APPROVED AS TO CONTENT:

Assistant Director Capital Improvement

Jerry DeMuro/for
Yvette Hernandez, P.E., City Engineer
Capital Improvement Department

ACKNOWLEDGMENT

THE STATE OF TEXAS §
§
COUNTY OF EL PASO §

This instrument was acknowledged before me on this 2 day of February, 2023, ~~by~~ for Tracey Jeronimo **Tomás González,** as **City Manager** of the **City of El Paso, Texas**.

Angel Rocha
Notary Public, State of Texas

ANGEL ROCHA
NOTARY PUBLIC
STATE OF TEXAS
EXPIRES 06-01-2026
ID#13158986-9

My commission expires:

06·01·26

(Signatures begin on following page)

CONSULTANT:

By: _____
Name: A. Scott Haywood
Title: Vice President

ACKNOWLEDGEMENT

THE STATE OF Texas §
§
COUNTY OF Travis §

This instrument was acknowledged before me on this 19th day of January, 2023, by HNTB Corporation, on behalf of Consultant.

JACQUELYN WEIGHT FITZPATRICK
Notary ID #125893933
My Commission Expires
October 27, 2026

_____
Notary Public, State of Texas

My commission expires:

October 27, 2026

ATTACHMENT "A"
SCOPE OF SERVICES

EXHIBIT A – SCOPE OF SERVICES

TITLE: Design for Intelligent Transportation System (ITS) infrastructure at Zaragoza and Bridge of the Americas (BOTA) International Ports of Entry (POE)

LIMITS: At BOTA POE and Zaragoza POE

CONSTRUCTION BUDGET: **$14 Million**

DESCRIPTION OF WORK:

Provide engineering design, planning, NEPA environmental clearance and bidding and construction support for ITS improvements at the Bridge of the Americas (BOTA) and Zaragoza Ports of Entry (POE), to improve traffic operations and expedite trade, to obligate the allocated funds and comply with TxDOT/FHWA funding requirements. Implement some of the ITS recommendations of the El Paso ITS POE Concept of Operations (ConOps) to improve traffic operations at BOTA POE, Zaragoza POE, Rio del Norte Dr., Winn Rd., Pan American Dr., and intersections on Loop 375 Americas North and South. Conduct discussions for the City to achieve interoperability with region's existing traffic management systems and Border Crossing Information System (BCIS). Coordinate with existing projects on these roadways underway by other agencies including the City, Customs and Border Protection (CBP), General Services Administration (GSA), Department of Public Safety (DPS) and Regional Mobility Authority and TxDOT.

The Consultant shall develop plans, specifications, and estimates for the construction of ITS infrastructure and technologies specified in the El Paso ITS POE ConOps, including fiber optic communication systems, closed circuit televisions (CCTV) surveillance system, dynamic message signs (DMS), lane management systems (LMS), data collection systems such as radio frequency identification (RFID) readers and light detection and raging in (LiDAR) readers, Wireless Fidelity (WiFi) or Bluetooth travel time detector systems, electrical service systems, conduit systems along approach roads to the BOTA and Zaragoza POE, traffic signals, high-level system requirements, assistance with system integration, and roadway improvements for the northbound (NB) cargo lanes at BOTA POE. The following are devices and geometric elements to be proposed as part of this design:

- LMS at 2 locations (6 LMS signs at BOTA POE on a single Monotube Span (MS) and 7 LMS signs at Zaragoza POE on a signage MS)
- DMS on structures at 8 locations (at Zaragoza POE)
- CCTV on high mast poles, ITS poles, or MS at 22 locations (6 CCTV at BOTA POE and 16 CCTV at Zaragoza POE)
- LiDAR, WiFi and Bluetooth detectors at 40 locations (24 detectors at BOTA POE and 16 detectors at Zaragoza POE)
- RFID readers at 20 locations (15 readers at BOTA POE and 5 readers at Zaragoza POE)
- Fiber Communications System (at BOTA and Zaragoza POEs) connecting to nearest TransVista hub cabinet

- Traffic signals, interconnect and curb ramps at 3 locations (Pan American Dr. at Winn Rd., Pan American Dr. at Plaza Cir., and Pan American Dr. at Oro Verde Rd.), with advanced traffic controllers with data collection capabilities
- Roadway improvements design for NB right-turn (at BOTA cargo site) including traffic control plans, demolition, roadway widening improvements, retaining wall modifications, and signing and striping

GENERAL SCOPE:

1.0 SERVICES REQUIRED:

1.1 Project Management (Lump Sum Services)

The Project Management services described below shall be Lump Sum Services and only during the PS&E phase of the project. The Project Management services during Bidding and Construction shall be Hourly Billing Rate Services and described in Section 1.2.

Consultant shall:

A. Organize and lead up to one (1) kickoff virtual meeting with City (includes 2 local staff and 2 out-of-town staff).
B. Prepare monthly project reports to accompany invoices for payment (up to 5 months).
C. Prepare and submit invoices after each design phase (Pre-Design, 30%, 60%, 95%, and 100%), in format described by the City at the kickoff meeting (up to 5 invoices).
D. Meet with City project manager, Bridges Department, Texas A&M Transportation Institute (TTI) and TxDOT on a bi-weekly basis during the PS&E for progress tracking purposes unless prior agreement is made with the City not to hold a meeting in any given week. The Consultant shall submit minutes of the meeting summarizing the events of the meeting within 7 calendar days after each meeting (up to 20 meetings and meeting minutes).
E. Prepare a project work schedule, indicating tasks, critical dates, milestones, deliverables and City and TxDOT review requirements. The project work schedule shall depict the order of the various tasks, milestones, and deliverables. The work schedule must incorporate and allocation of time for design phase reviews of the PS&E and the environmental documents. The Consultant shall present the work schedule to the City for review and acceptance and provide assistance in interpreting the proposed work schedule. Provide updates to the schedule (up to 3 updates).
F. Direct and coordinate activities with Consultant's team on a weekly basis during the PS&E (up to 12 months), and hold the following review meetings as part of the Project Management Plan: Senior Management Review (at 100% completion), and Closeout Review (at completion of the project).
G. Meet with subconsultant to coordinate project progress (up to 10 virtual meetings).
H. Attend general meetings including monthly Bridges Steering Committee (BSC) meetings and provide a presentation to coordinate with stakeholders in attendance (up to 8 meetings, includes 2 local staff).
I. Obtain Right of Entry (as required by CBP, GSA and DPS for up to 4 local staff) to be able to enter federal facilities during field visits.

J. Obtain Clearances (background checks, applications, or other documents required by CBP, GSA and DPS for up to 4 local staff), to be able to enter federal facilities during field visits.

K. Meet with CBP, GSA, and DPS to coordinate requirements for access to their facilities, requirements for design and construction within their facilities, ITS needs, integration, and general progress tracking of the project. The Consultant shall submit minutes of the meeting summarizing the events of the meeting within 7 calendar days after each meeting (up to 10 meetings and meeting minutes).

L. Coordinate activities with CBP and GSA in order to carry out the Donation Acceptance Process (DAP) that authorizes CBP and GSA to accept donations of real property, personal property, and non-personal services from private sector and government entities (accepted donations may be used for activities related to the construction, alteration operations and maintenance of CBP or GSA – owned Ports of Entry), (up to 10 meetings). Support the City in preparing proposal that will include Concept package (official offer letter, scope of proposal, conceptual drawings), Design & Cost Estimation Package (copy of RTL construction drawings, performance specifications, schedule, financial estimates, environmental & operational impacts), Project Proposal Package (Concept Package, Design & Cost Estimation Package), Proposed Donation Acceptance & Agreement Package (Project Proposal Package, Decision Paper), and Donation Acceptance & Agreement (approved Decision Paper, letter of acceptance, applicable legal documents). City will provide legal support services; Consultant shall not prepare legal documents.

Deliverables:

- Agenda for kickoff meeting (8.5" x 11" electronic Word/pdf)
- Meeting summary for kickoff meeting (8.5" x 11" electronic Word/pdf)
- Progress reports (up to 5 reports, 8.5" x 11" electronic pdf)
- Invoices after each design phase (up to 5 invoices, 8.5" x 11" electronic pdf)
- Agenda and sign-in for bi-weekly coordination meetings (assume up to 20 meetings, 8.5" x 11" electronic Word/pdf)
- Meeting summary for bi-weekly coordination meetings (assume up to 20 meetings, 8.5" x 11" electronic Word/pdf)
- Project schedule (up to 3 updates, 11" x 17" electronic pdf)
- PowerPoint presentation for general meetings (up to 8 presentations, draft for each presentation for review by the City with up to 1 revision and final version, 8.5" x 11" electronic PowerPoint/pdf)
- Right of Entries for CBP, GSA and DPS review and approval (for up to 4 local staff, draft for review by CBP, GSA and DPS with up to 2 revisions, and final version, 8.5" x 11" electronic Word/pdf)
- Clearances for CBP, GSA and DPS review and approval (for up to 4 local staff, draft for review by CBP, GSA and DPS with up to 2 revisions, and final version, 8.5" x 11" electronic Word/pdf)
- Agenda and sign-in for federal agency coordination meetings (assume up to 10 meetings, 8.5" x 11" electronic Word/pdf)

- Meeting summary for federal agency coordination meetings (assume up to 10 meetings, 8.5" x 11" electronic Word/pdf)
- Agenda and sign-in for coordination on DAP with federal agencies (assume up to 10 meetings, 8.5" x 11" electronic Word/pdf)
- Meeting summary for coordination on DAP with federal agencies (assume up to 10 meetings, 8.5" x 11" electronic Word/pdf)
- Concept package (8.5" x 11" electronic pdf)
- Design & Cost Estimation Package (8.5" x 11" electronic pdf)
- Project Proposal Package (8.5" x 11" electronic pdf)
- Proposed Donation Acceptance & Agreement Package (8.5" x 11" electronic pdf)
- Donation Acceptance & Agreement (8.5" x 11" electronic pdf)

1.2 Project Management (Hourly Billing Rates)

The Project Management services described below shall be Hourly Billing Rate Services and only during Bidding, and Construction parts of the project. The Project Management services during PS&E shall be Lump Sum Services and described in Section 1.1.

Consultant shall:

A. Prepare monthly project reports to accompany invoices for payment (up to 22 months).
B. Prepare and submit monthly invoices, in format described by the City at the kickoff meeting (up to 22 invoices).

Deliverables:

- Monthly progress reports (up to 22 reports, 8.5" x 11" electronic pdf)
- Monthly invoices (up to 22 invoices, 8.5" x 11" electronic pdf)

1.3 Data Collection and Field Work (Lump Sum Services)

The Consultant shall collect, review and evaluate data described below. The Consultant shall notify the City in writing whenever the Consultant finds disagreement with the information or documents:

A. Data, if available, from the City and TxDOT, including "as-built plans", existing schematics, available information from BOTA modernization/expansion project from GSA, right-of-way maps, Subsurface Utility Engineering (SUE) mapping, existing ITS fiber mapping, existing Traffic Management Center (TMC) hardware inventory, existing cross sections, existing planimetric mapping, existing aerial imagery, existing channel and drainage easement data, Border Crossing Information Systems (BCIS) data, current unit bid price information, current special provisions, special specifications, and standard drawings.
B. Utility plans and documents from appropriate municipalities and agencies, and from adjacent ongoing and recently constructed projects.
C. Conduct 1 field reconnaissance visit (with 2 local Consultant staff), to visually assess the conditions and to obtain a photographic record of notable existing features.
D. Conduct up to 2 field visits (Consultant's PM and 2 out of town staff) to the City's TMC

and TxDOT TransVista TMC to identify equipment and systems being used.

E. A non-disclosure agreement shall be executed by all parties to receive current CBP Design Standards.

The City shall provide proposed traffic signal phasing diagrams or Synchro reports for Consultant to communicate on the plans.

Deliverables:

- Copies of information or documents gathered (electronic pdf), submitted on USB drive at the completion of the project
- Non-disclosure agreement (draft for review by the City and CBP with up to 1 revision and final version, 8.5" x 11" electronic pdf)

1.4 Design (Lump Sum Services)

Design shall comply with City of El Paso Design Standards for Construction, and City of El Paso Capital Improvements Department Drawing Guidelines, TxDOT Roadway Design Manual, federal guidelines, and shall use TxDOT bid items/descriptions, TxDOT standards, TxDOT standard specifications, TxDOT special specifications and special provisions. Sign structures shall be designed in accordance with AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (consistent with applicable TxDOT standard) for 90 mph wind zone, no ice. Other structural designs shall be in accordance with TxDOT Bridge Design Guide – LRFD (2021).

Prior to beginning PS&E, the Consultant in cooperation with TxDOT, TTI, CBP, GSA, and DPS, shall plan, attend and document a Pre-Design meeting. In preparation for the Pre-Design meeting, the Consultant shall prepare meeting materials with design files plan sheets previously prepared for the City of El Paso. The Pre-Design meeting will provide for a brainstorming and collaboration on where locations of all ITS devices will be finalized before proceeding with the 30% design phase. The Pre-Design meeting shall also decide on which agencies to provide data sharing and ITS access to. The following topics shall be discussed during the Pre-Design meeting:

- Devices from ConOps
- ITS design
- Roadway design
- High-level architectural design
- System requirements
- System integration
- Engineering constraints
- TMC upgrades project coordination
- Project development schedule
- Other issues as identified by the City
- Preliminary Construction Cost Estimate
- Application requirements for irrigation crossings

- Permits, easements, and license agreements required
- Agreements with agencies

The Consultant shall prepare meeting materials (agenda and presentation). The Consultant shall prepare a summary and communicate action items resulting from the Pre-Design meeting. The Consultant's Project Manager and up to 6 staff shall attend virtually.

The Consultant shall assume that no major changes to the device locations will be required after the 60% Design Phase. This assumption is necessary to minimize schedule impacts from the need for additional design, SUE, survey and geotechnical services. Should the need arise for the addition of a device, or significant relocation (assume 100' or greater from the originally proposed location), the Consultant shall notify the City and a supplemental work authorization will be considered.

Upon agreement of device type and locations from the Pre-Design, the Consultant shall proceed with PS&E. The PS&E packages shall be completed for the following design phases:

- 30% Design Phase
- 60% Design Phase
- 95% Design Phase
- 100% Design Phase
- RTL Design Phase

The Consultant shall use a City format cover sheet and title block for the plans with graphic bar scales and north arrows. The Consultant shall use TxDOT standards and bid items for payment of materials. Sheet summaries shall also be provided in each sheet. All plans shall include interim seals for 30%, 60% and 95% design phases along with signatures and seals for 100% and RTL design phases. Consultant shall be responsible for the following deliverables and reviews:

A. Pre-Design Meeting
    1. Prepare draft agenda, sign in sheet, and PowerPoint presentation
    2. Submit draft documents to the City and TxDOT and meet to review materials (2 staff from Consultant to attend this pre-meeting virtually)
    3. Identify up to 20 participants from the City, TxDOT, TTI, CBP, GSA and DPS, and submit to the City for approval
    4. Distribute email invitation to participants
    5. Address comments and resubmit final meeting materials
    6. Conduct Pre-Design meeting (PM and up to 6 staff from Consultant to attend virtual meeting)
    7. Prepare meeting summary and document action items
    8. Identify permits, easements, and license agreements required by GSA and CBP for improvements proposed in federal property for future planning efforts
B. 30%, 60%, 95%, 100%, and RTL Design Phase

1. Cover Sheet
2. Index
3. General Notes (TxDOT Format)
4. Summary of Quantities (submit at 60%, 95%, 100%, and RTL design phases only)
5. Construction Notes
6. Typical Sections
    i. Existing ground
    ii. Baseline and apparent ROW designations
    iii. Lane widths, shoulders, parkways, and barrier
    iv. Side slope ratios
    v. Existing storm-sewer lines, and culverts identified from as-builts or design survey
    vi. Proposed pavement structure and barrier (pavement design shall match existing conditions and no new pavement design shall be provided)
7. Site Plan including the following items:
    i. Apparent ROW line
    ii. High level plans showing locations of devices
    iii. Location of roadway improvements
    iv. Key map inset
8. Existing Conditions Plan including the following items:
    i. Apparent ROW line
    ii. Existing street signage and pavement markings
    iii. Approximate locations of existing utility lines located during the survey and coordination
    iv. Roadway structures
    v. Existing drainage features
    vi. Sheet notes
    vii. Key map inset
9. Horizontal and Vertical Control Plan (submit at 60%, 95%, 100%, and RTL design phases only)
    i. Location of control points
    ii. Basis of datum for horizontal control
    iii. Basis of datum for vertical control
    iv. Date of current adjustment of datum
    v. Monumentation set for control (description, district name/number and location ties)
    vi. Surface adjustment factor and unit of measurement
    vii. Coordinates (State Plane Coordinates (SPC) Zone and surface grid)
    viii. Relevant metadata
10. Narrative of Construction Sequencing
11. Traffic Control Plan Standard Selection Table (submit at 60%, 95%, 100%, and RTL design phases only)
12. Traffic Control Plan (submit at 60%, 95%, 100%, and RTL design phases only)
13. Traffic Control Plan Standards (submit at 60%, 95%, 100%, and RTL design phases only)

14. Demolition Plan
    i. Apparent ROW line
    ii. Existing street signage and pavement markings to be removed
    iii. Approximate locations of existing utility lines located during the survey and coordination
    iv. Roadway structures to be removed
    v. Pavement to be removed
    vi. Sheet notes
    vii. Key map
15. Horizontal Layout Plan
16. Roadway Plan and Profile
    i. Improvements of NB cargo lane are anticipated to be roadway widening contained within the footprint of the retaining wall section (i.e. no modifications to adjacent bridge will be needed)
17. Roadway Grading Plan (submit at 60%, 95%, 100%, and RTL design phases only)
18. Curb Ramp and Sidewalk Layout Plan
19. Roadway Miscellaneous Details (submit at 60%, 95%, 100%, and RTL design phases only)
20. Retaining Wall Plan and Profile (submit at 60%, 95%, 100%, and RTL design phases only)
    i. Retaining wall associated with NB cargo lane improvements is assumed to be cast-in-place, maximizing the use of standards to the extent possible. The existing wall will remain in place with minor removal to achieve appropriate roadway grades.
21. Retaining Wall Details (submit at 60%, 95%, 100%, and RTL design phases only)
22. Retaining Wall Standards (submit at 60%, 95%, 100%, and RTL design phases only)
23. Boring Profiles (submit at 60%, 95%, 100%, and RTL design phases only)
24. Existing Utilities Plan
    i. Apparent ROW line
    ii. Utility lines with a different line type for each utility
25. ITS Key Map
    i. Shows sheet locations for ITS plan
26. ITS Plan
    i. Apparent ROW line
    ii. ITS layout of devices
    iii. Conduit and ground box layout
    iv. Conduit, fiber, conductor, and cable run schedule
    v. Connection to existing power sources identified during meetings with El Paso Electric
    vi. Key map inset
    vii. Summary of items
27. Fiber System Layout
    i. Main crossing streets
    ii. ITS devices, ground boxes, fiber, and cabinets

28. DMS/LMS Elevation Details (submit at 60%, 95%, 100%, and RTL design phases only)
    i. Existing ground
    ii. Baseline and apparent ROW designations
    iii. Lane widths, shoulders, parkways, and barrier
    iv. Side slope ratios
    v. Structural design information
        1. Structural design shall include 2 designs: worst-case scenario balanced-T truss, and worst-case cantilever overhead truss
    vi. Foundation lengths
    vii. Proposed metal beam guard fence or barrier
    viii. Reference to COSS standards
29. ITS Ethernet Ring Architecture
    i. Connection of devices to existing network through existing hub's, cabinets, or trunk line
30. Fiber Schematic Layout
    i. Existing cabinets/hub, ground boxes, fiber trunk lines, fiber splice enclosures, fiber patch panels, field ethernet switches, and ITS devices
    ii. Proposed cabinets/hub, ground boxes, fiber pig tails, fusion splices, fiber patch panels, filed ethernet switches, and ITS devices
31. ITS Fiber Termination Charts (submit at 60%, 95%, 100%, and RTL design phases only)
32. ITS Electrical Service Summary (submit at 60%, 95%, 100%, and RTL design phases only)
33. ITS Voltage Drop Calculations (submit at 60%, 95%, 100%, and RTL design phases only)
34. Typical ITS Diagram
    i. ITS devices block diagrams
35. ITS High Mast CCTV Mounting Details (submit at 60%, 95%, 100%, and RTL design phases only)
36. ITS Standards
37. Traffic Signal Plan including the following proposed items:
    i. Apparent ROW line
    ii. Traffic signal layout
    iii. Conduit and ground box layout
    iv. Illumination on signal poles
    v. Connection to existing power sources identified during meetings with El Paso Electric
    vi. Traffic signal phasing
    vii. Conduit and cable run schedule
    viii. Pole and mast arm schedule (using TxDOT sizes)
    ix. Signal head schedule
    x. Cable schedule for poles
    xi. Mast arm sign schedule
    xii. Sheet notes

xiii. Key map inset
xiv. Summary of items

38. Traffic Signal Interconnection Plan including the following proposed items:
    i. Apparent ROW line
    ii. Conduit and ground box layout
    iii. Connection to existing cabinet
    iv. Conduit, fiber, and cable run schedule
    v. Sheet notes
    vi. Key map inset
    vii. Summary of items
39. Miscellaneous Traffic Signal details including the following items:
    i. Pedestal pole and foundation detail
    ii. Pedestrian head and push button detail
    iii. Trench detail
    iv. Controller cabinet and foundation detail (coordination with TMC upgrades project will be conducted to use the same type of controllers being proposed under that project)
    v. VIVDS detail
    vi. Mast arm and pole detail (using TxDOT sizes)
    vii. Traffic signal pole foundation (using TxDOT standards)
40. Traffic Signal Standards
41. Signage and Markings Plan including the following items:
    i. Apparent ROW line
    ii. Sign locations
    iii. Pavement markings
    iv. Sheet notes
    v. Key map inset
    vi. Summary of items
42. Summary of Small Signs
43. Miscellaneous Signing Details
44. Signing and Striping Standards
45. EPIC
46. SWP3 Notes
47. SWP3 Plan
48. Erosion and Sediment Control Standards
49. Outline of Specifications (submit at 60%, 95%, 100%, and RTL design phases only)
50. List of Governing Specifications
51. TxDOT Form 1002
52. TxDOT Form 2443
53. TxDOT Form 2229 (submit at 60%, 95%, 100%, and RTL design phases only)
54. Engineer's Estimate
55. TxDOT Form Estimate (TxDOTConnect) (submit at 60%, 95%, 100%, and RTL design phases only)
56. City Bid Tabulation Form (submit at 95%, 100%, and RTL design phases only)

57. Environmental Scope Development Tool
58. Design Criteria
59. Complete action items report and complete review comment forms (submit at 60%, 95%, 100%, and RTL design phases only)
60. Engineer's Seal (submit at 60%, 95%, 100%, and RTL design phases only)
61. Contract time determination (submit at 60%, 95%, 100%, and RTL design phases only)
62. Certifications (ROW, Utilities, etc.) (submit at 60%, 95%, 100%, and RTL design phases only)
63. Temporary Road Closure Request (submit at 60%, 95%, 100%, and RTL design phases only)
64. Construction Speed Zone Request (submit at 60%, 95%, 100%, and RTL design phases only)
65. TDLR Registration Form (submit at 60%, 95%, 100%, and RTL design phases only)
66. Performance end date (submit at 95%, 100%, and RTL design phases only)
67. Redlines showing quality control
68. Utility Contact List

C. Safety Review
   1. Create a pdf package containing the TCP Narrative, TCP Standard Selection Table, TCP Detour Layout, Traffic Control Plan and TCP Standards.
   2. Submit documents to the Safety Review Committee and City Streets and Maintenance 2 weeks prior to the Safety Review Meeting for review
   3. Address comments and resubmit final meeting package
   4. Attend Safety Review Meeting (virtual meeting, PM and up to 2 local staff from Consultant)

D. District Design Reviews
   1. Attend the 30% District Design Review (virtual meeting, PM and 1 local staff from Consultant)
   2. Attend the 60% District Design Review (virtual meeting, PM and 1 local staff from Consultant)
   3. Attend the 95% District Design Review (virtual meeting, PM and 1 local staff from Consultant)
   4. Attend the 100% District Design Review (virtual meeting, PM and 1 local staff from Consultant)

Deliverables:

- Pre-Design Meeting
  a. Agenda and sign-in sheet (8.5" x 11" electronic Word/pdf)
  b. PowerPoint presentation (draft for review by the City with up to 1 revision and final version, 8.5" x 11" electronic PowerPoint/pdf)
  c. Meeting participant list and email invitation (draft for review by City with up to 1 revision and final version, 8.5" x 11" electronic Word/pdf and email)
  d. Meeting summary (draft for review by all attendees and final version, 8.5" x 11" electronic Word/pdf)
- 30% Design Phase

   a. 3 sets of 11" x 17" plan sheet hardcopies (assume up to 500 sheets per set) and 1 electronic pdf for City and District Design Review
   b. 3 sets of 8.5" x 11" front end documents hardcopies (listed as numbers 49-68 in Section 1.4.B) and 1 electronic pdf for City and District Design Review
- 60% Design Phase
   a. 3 sets of 11" x 17" plan sheet hardcopies (assume up to 500 sheets per set) and 1 electronic pdf for City and District Design Review
   b. 3 sets of 8.5" x 11" front end documents hardcopies (listed as numbers 49-68 in Section 1.4.B) and 1 electronic pdf for City and District Design Review
- 95% Design Phase
   a. 3 sets of 11" x 17" plan sheet hardcopies (assume up to 500 sheets per set) and 1 electronic pdf for City and District Design Review
   b. 3 sets of 8.5" x 11" front end documents hardcopies (listed as numbers 49-68 in Section 1.4.B) and 1 electronic pdf for City and District Design Review
- 100% Design Phase
   a. 3 sets of 11" x 17" plan sheet hardcopies (assume up to 500 sheets per set) and 1 electronic pdf for City and District Design Review
   b. 3 sets of 8.5" x 11" front end documents hardcopies (listed as numbers 49-68 in Section 1.4.B) and 1 electronic pdf for City and District Design Review
- RTL Design Phase
   a. 3 sets of 11" x 17" plan sheet hardcopies signed and sealed (assume up to 500 sheets per set) and 1 electronic pdf for City
   b. 3 sets of 8.5" x 11" front end documents hardcopies (listed as numbers 49-68 in Section 1.4.B) and 1 electronic pdf for City
   c. 1 USB with electronic pdf and CAD files
- Safety Review
   a. One draft 11" x 17" electronic pdf of package (draft for review by the City and TxDOT with up to 1 revision)
   b. One final 11" x 17" electronic pdf of package for Safety Review meeting (draft for review by the City and TxDOT with up to 1 revision)
   c. No sign-in sheet, agenda or meeting summary shall be required for this meeting
- District Design Reviews
   a. No sign-in sheets, agendas or meeting summaries shall be required for these meetings

1.5 Surveys (Lump Sum Services)

The Consultant shall use available design surveys and boundary/ROW survey as provided by the City and TxDOT from other adjacent projects, and as previously obtained during the design for the City and TxDOT. If survey data is not available, the Consultant shall consider using aerial imagery provided the City or TxDOT. If Consultant and City determine that imagery is not acceptable for the design, and if design survey is required at specific areas, an assumed value of one (1) area (500 x 500 square feet) for design survey has been included in the Task Order. Design surveys shall also include the gathering of survey data for topography, cross-sections, boundary/ROW research, and other related work in order to design the following:

- Right-turn improvements at the NB cargo lanes at BOTA as shown in **Figure 1**
- LMS improvements at SB approach at BOTA as shown in **Figure 2**
- LMS improvements at SB passenger car approach at Zaragoza as shown in **Figure 3**

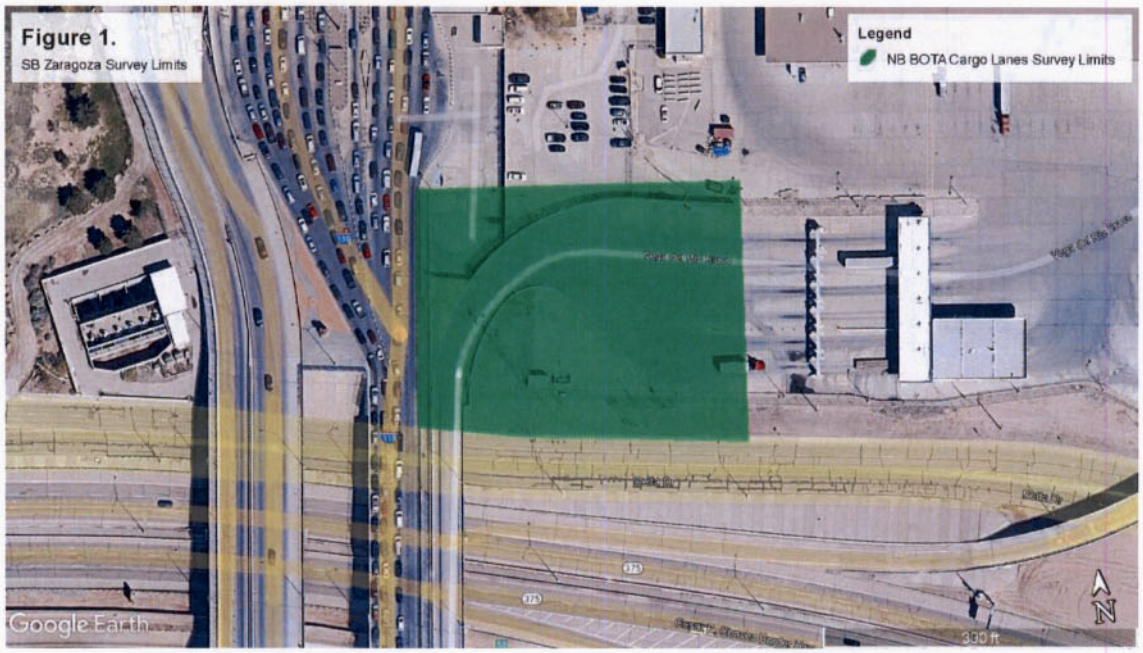


Figure 1.
SB Zaragoza Survey Limits

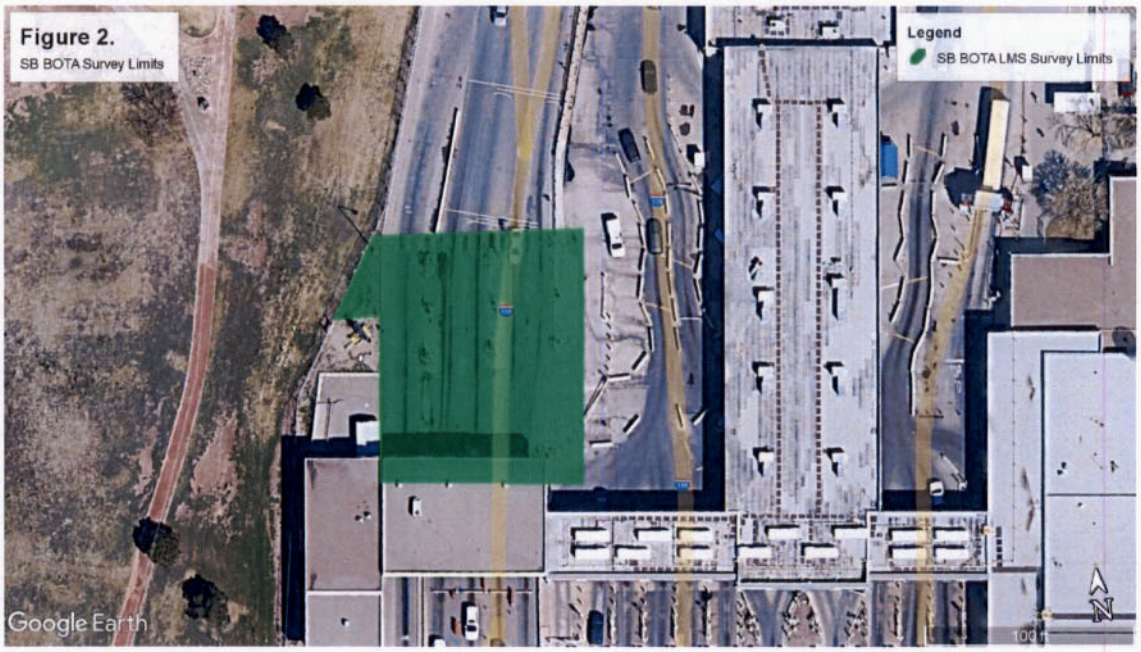
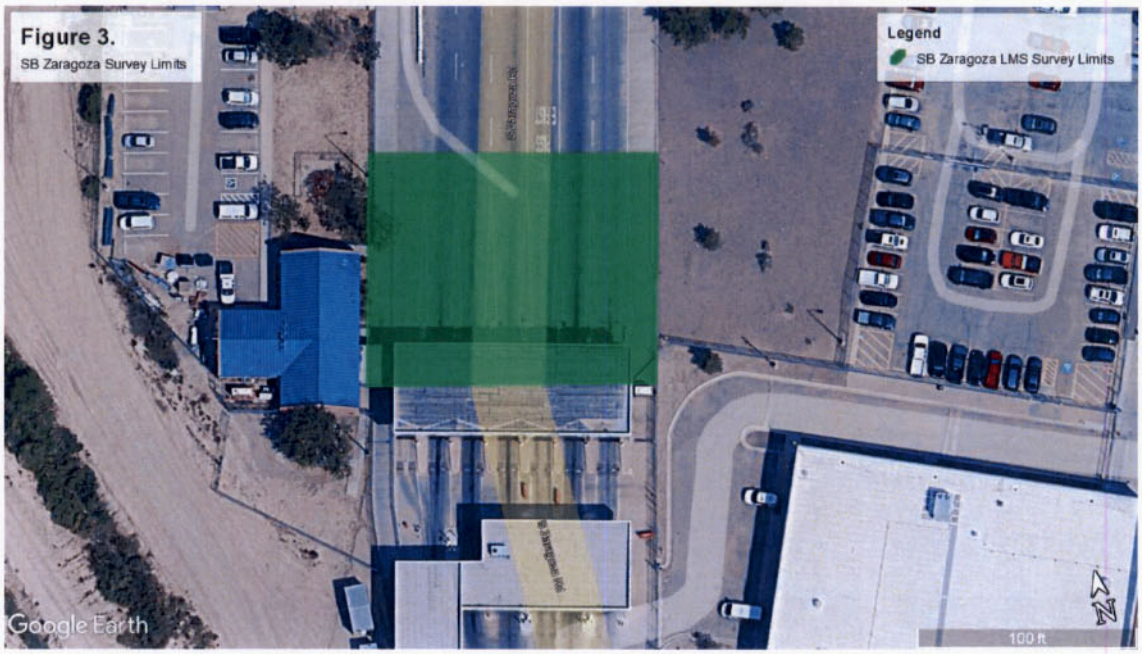


Figure 2.
SB BOTA Survey Limits



The Consultant's Surveyor shall perform the following tasks:

A. Safety Plan of Action for City and TxDOT approval
B. Right of Entry for federal facilities (for up to 5 local staff)
C. Clearance from federal agencies (for up to 5 local staff)
D. Preparing signed, sealed and dated Horizontal and Vertical Control Plans with Index Sheet
E. Locating visible Utilities and those marked by 811
F. Locate and depict topographical features and existing improvements
G. Locate and depict existing drainage structures, culverts and manholes
H. LiDAR Scan all bridges and cargo lane of roads for 3D Modeling
I. Provide a 3D and 2D Planimetric Survey
J. Provide a TIN drawing to display 1-foot contours
K. Quality Assurance / Quality Control

Traffic control shall be provided to satisfy City, TxDOT, CBP and GSA requirements. The Consultant shall obtain approval by submitting a TxDOT Safety Plan of Action and geophysical permit (assumes 2 iterations of comments for City, TxDOT, CBP and GSA approval), and shall be responsible for processing and obtaining the TxDOT permit prior to beginning any work in the field. Once approval has been obtained from all agencies, Traffic Control will be provided in accordance with the approved TCP.

Consultant shall also obtain all required Right of Entries and clearances to enter GSA, CBP, and DPS properties (for up to 5 local staff). These shall be submitted to the federal agencies (assumes 2 iterations of comments for GSA, CBP and DPS approval), and shall be responsible for processing prior to beginning any work in the field.

Deliverables:

- Safety Plan of Action for City and TxDOT review and approval (draft for review by City and TxDOT with up to 2 revision, and final version, 8.5" x 11" electronic Word/pdf)
- Right of Entries for CBP, GSA and DPS review and approval (for up to 5 local staff, draft for review by CBP, GSA and DPS with up to 2 revisions, and final version, 8.5" x 11" electronic Work/pdf)
- Clearances for CBP, GSA and DPS review and approval (draft for review by CBP, GSA and DPS with up to 2 revisions, and final version, 8.5" x 11" electronic Work/pdf)
- Digital Terrain Models (DTM) and the Triangular Irregular Network (TIN) files in a format acceptable by the City
- Horizontal and Vertical Control Plan (signed, sealed and dated, up to 5 sheets, 11" x 17" electronic pdf to be included as part of the plans)
- Maps, plans, or sketches prepared by the Consultant's Surveyor showing the results of field surveys (electronic pdf)
- Computer printouts or other tabulations summarizing the results of field surveys (electronic pdf)
- Digital files or media acceptable by the City containing field survey data (ASCII Data files)
- Maps, plats, plans, sketches, or other documents acquired from utility companies, private corporations, or other public agencies, the contents of which are relevant to the survey (electronic pdf)
- Field survey notes (electronic pdf and hard copies)
- A digital and hard copy of all computer printouts of horizontal and vertical conventional traverses, GPS analysis and results, and survey control data sheets
- GEOPAK GPK files and OpenRoads files, including CAD file with 2D and 3D planimetric survey (CAD file)
- Survey reports as described in TxDOT Survey Manual, 2016

1.6 Utility Investigation (Lump Sum and Unit Costs)

Utility Investigation (Subsurface Utility Engineering (SUE)) includes utility investigations subsurface and above ground prepared in accordance with AASHTO standards [ASCE C-1 38-02 (http://www.fhwa.dot.gov/programadmin/asce.cfm)] and Utility Quality Levels. Quality SUE Level C and D are to be performed as part of this Task Order, and Quality Levels A and B are to be performed as an option (shown below). Utility Quality Levels are defined in cumulative order (least to greatest) as follows:

- Quality Level D - Existing Records: Utilities are plotted from review of available existing records.
- Quality Level C - Surface Visible Feature Survey: Quality level "D" information from existing records is correlated with surveyed surface-visible features. Includes Quality Level D information.
- Quality Level B – Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. **(Optional)**

- Quality Level A – Provides the highest level of accuracy. It involves locating or potholing utilities as well as activities in qualities Quality levels B, C, and D. The located facility information is surveyed and mapped, and the data provides precise plan and profile information. **(Optional)**

The Consultant shall use available SUE information as provided by the City and TxDOT from other adjacent projects, and as previously obtained during the design for the City and TxDOT. If SUE information is not available, and if SUE is required at specific areas, an assumed value of one (1) area (500 x 500 square feet) for SUE has been included in the lump sum. SUE shall also be conducted within the survey limits shown in Figure 1, Figure 2, and Figure 3 in Section 1.5. SUE information shall be mapped out in a CAD file.

If SUE Quality Levels C and D described above do not provide enough information, and if SUE Quality Levels A and B are requested by the City, an assumed value of 43 holes can be conducted for SUE Quality Levels A and B in addition to the lump sum. The assumed holes are for the following devices:

- For LMS at 2 locations, 4 holes
- For DMS on structures at 8 locations, 8 holes
- For CCTV on high mast poles, ITS poles, or MS at 22 locations, 11 holes
- For LiDAR, WiFi and Bluetooth detectors at 40 locations, 15 holes
- For RFID readers at 20 locations, 5 holes

The Subconsultant conducting the survey task described in Section 1.5, shall also conduct SUE at the same time. The same Safety Plan of Action, geophysical permits, and traffic control shall be utilized to avoid duplicate work. The Subconsultant shall utilize the same right of entries and clearances obtained under Section 1.5 to avoid duplicate work.

Deliverables:

- Safety Plan of Action (see deliverables under Section 1.5)
- Geophysical permit (see deliverables under Section 1.5)
- Right of Entries (see deliverables under Section 1.5)
- Clearances (see deliverables under Section 1.5)
- Maps, plans, or sketches prepared by the Subconsultant showing the results of SUE (electronic pdf)
- Maps, plats, plans, sketches, or other documents acquired from utility companies, private corporations, or other public agencies, the contents of which are relevant to SUE (electronic pdf)
- Field survey notes (electronic pdf and hard copies)
- CAD with Quality Level D and C SUE information (CAD file)
- **(Optional)** CAD with Quality Level A and B SUE information (CAD file)

1.7 Utility Coordination (Lump Sum)

Utility Coordination shall include meetings with individual utility companies and follow up communication and coordination where ITS devices and traffic signals locations are proposed

(up to 35 locations). Coordination with El Paso Electric shall also include meetings and follow up communication and coordination where electrical service locations are proposed (up to 35 locations). No utility adjustments shall be performed as part of this project. If the City requests a utility adjustment or additional coordination, a supplemental work authorization will be required for the additional effort.

The Consultant shall perform utility coordination and liaison activities with involved utility owners, and the City to achieve timely project notifications and formal coordination meetings.

The Consultant shall coordinate activities with the City and TxDOT, or their designee, to facilitate the orderly progress and timely completion of the City's design phase. The Consultant shall be responsible for the following:

A. Meet with City and perform an on-site inspection (up to 3 visits with up to 2 local staff) to gain familiarity with existing conditions, project requirements and prepare a written report of the meeting.
B. Coordinate activities with the City and its consultants or other contractors or representatives, as authorized by the City. Also, the Consultant shall provide the City copies of diaries, correspondence and other documentation of work-related communications between the Consultant, utility owners and other outside entities when requested by the City.
C. The Consultant shall implement a schedule of periodic meetings with each utility company (assume up to 10 utility companies) and utility company's representatives for coordination purposes. Meetings shall commence as early as possible in the design process and shall continue until completion of the design. The Consultant shall notify the City at least two (2) business days in advance of each meeting to allow the City the opportunity to participate in the meeting. The Consultant shall provide meeting agendas, sign-in sheets, handouts and produce meeting minutes of meetings with said utility companies and their representatives within seven (7) business days. The frequency of such meetings shall assume up to 2 individual meetings per utility company (total of 20 meetings).
D. The Consultant shall coordinate with the local utilities committees to present a footprint drawing of the project with visual utilities only identified in the design survey, where ITS devices, traffic signals and corresponding electrical services are proposed only, at the 60% and 95% milestones.
E. The Consultant shall provide initial project notification letters to utility companies, owners, and other concerned parties (assume up to 10 letters). The Consultant shall coordinate with any other utility committees which may include county, city, or other officials.
F. The Consultant shall coordinate with El Paso Electric to establish power source locations to connect electrical services to (up to 35 locations). The Consultant shall meet with El Paso Electric to discuss power source locations. meetings shall commence as early as possible in the design process and shall continue until completion of the design. The Consultant shall notify the City at least two (2) business days in advance of each meeting to allow the City the opportunity to participate in the meeting. The Consultant shall provide meeting agendas, sign-in sheets, handouts and produce meeting minutes of

meetings with El Paso Electric within seven (7) business days. The frequency of such meetings shall assume up to 5 meetings with El Paso Electric, where each meeting will discuss multiple power source locations per assigned Engineer from El Paso Electric.

G. The Consultant shall provide the City and utility companies within the proposed ITS devices, traffic signals, electrical services, and roadway improvement locations, a Utility Contact List with information such as: (i) Utility Owner's Name; (ii) Contact Person; (iii) Telephone Numbers; (iv) Emergency Contact Number; (v) E-mail addresses. Submit at 30%, 60%, 95%, 100% and RTL design phase, each with up to 1 revision, draft and final.

Deliverables:

- Meeting summary for on-site inspection (up to 3 visits, 8.5" x 11" electronic Word/pdf)
- Copies of diaries, correspondence and communications (8.5" 11" electronic pdf)
- Meeting agendas, sign-in sheets and handouts of utility coordination meetings (assume up to 20 meetings, 8.5" x 11" electronic Word/pdf, up to 20 copies per meeting)
- Meeting summary for El Paso Electric meetings (assume up to 20 meetings, 8.5" x 11" electronic Word/pdf)
- Meeting agendas, sign-in sheets and handouts of El Paso Electric meetings (assume up to 20 meetings, 8.5" x 11" electronic Word/pdf, up to 20 copies per meeting)
- Project notification letters (assume up to 10 letters, 8.5" x 11" electronic Word/pdf)
- Utility contact list at 30%, 60%, 95% and 100% design phase, each with up to 1 revision, draft and final

1.8 Geotechnical Borings and Investigation (Lump Sum and Unit Costs)

The Consultant shall use available geotechnical data as provided by the City and TxDOT from other adjacent projects, and as previously obtained during the design for the City and TxDOT. The Engineer shall include the soil boring sheets, and Wincore logs as provided by the City and TxDOT from other adjacent projects and from the previous design for the City and TxDOT.

If geotechnical data is not available, and if data is required at specific areas, an assumed value of 10 locations for geotechnical borings at investigation at has been included in the Task Order. This is for foundation design for ITS devices and overhead sign structures and for the proposed roadway improvements, in accordance with TxDOT's Geotechnical Manual (July 2020). The City and TxDOT will review and provide comments for a boring layout submitted by the Consultant showing the general location and depths of the proposed borings. Once the Consultant receives the City's and TxDOT's review comments Consultant shall perform soil borings (field work), soil testing and prepare the boring logs in accordance with the latest edition of the TxDOT's Geotechnical Manual and TxDOT District's procedures and design guidelines.

The Consultant's Geotechnical Subconsultant shall perform the following tasks:

A. Safety Plan of Action for City and TxDOT approval
B. Geophysical permit for City and TxDOT approval
C. Right of Entry for federal facilities (for up to 5 local staff)
D. Clearance from federal agencies (for up to 5 local staff)
E. Perform soil borings and testing

F. Prepare signed, sealed and dated geotechnical memorandum which contains soil boring locations, boring logs, laboratory test results, generalized subsurface conditions, skin frication tables and design capacity curves including skin friction and point bearing. The skin friction tables and design capacity curves must be present for piling and drilled foundation.
G. Preparing signed, sealed and dated Boring profiles
H. Quality Assurance / Quality Control

Traffic control shall be provided to satisfy City and TxDOT requirements. The Consultant shall obtain approval by submitting a TxDOT Safety Plan of Action and geophysical permit (assumes 2 iterations of comments for City and TxDOT approval), and shall be responsible for processing and obtaining the TxDOT permit prior to beginning any work in the field. Once TxDOT approval has been obtained, geotechnical borings and investigation will be provided in accordance with the approved TCP.

Consultant shall also obtain all required Right of Entries and clearances to enter GSA, CBP, and DPS properties (for up to 5 local staff). These shall be submitted to the federal agencies (assumes 2 iterations of comments for GSA, CBP and DPS approval), and shall be responsible for processing prior to beginning any work in the field.

Deliverables:

- Safety Plan of Action for City and TxDOT review and approval (draft for review by City and TxDOT with up to 2 revision, and final version, 8.5" x 11" electronic Word/pdf)
- Geophysical permit for City and TxDOT review and approval (for up to 5 local staff, draft for review by City and TxDOT with up to 2 revisions, and final version, 8.5" x 11" electronic Word/pdf)
- Right of Entries for CBP, GSA and DPS review and approval (for up to 5 local staff, draft for review by CBP, GSA and DPS with up to 2 revisions, and final version, 8.5" x 11" electronic Work/pdf)
- Clearances for CBP, GSA and DPS review and approval (draft for review by CBP, GSA and DPS with up to 2 revisions, and final version, 8.5" x 11" electronic Work/pdf)
- Geotechnical memorandum (signed, sealed and dated, draft for review by the City with up to 1 revision, and final version, 8.5" x 11" electronic Word/pdf)
- Horizontal and Vertical Control Plan (signed, sealed and dated, up to 5 sheets, 11" x 17" electronic pdf, to be included as part of the plans)
- TxDOT Wincore logs (8.5" x 11" electronic pdf/clg)

1.9 Environmental Clearance (Lump Sum)

A. GSA and CBP Reporting and Coordination
    1. The Consultant shall prepare a coordination plan that will outline a process for preparation, submittal, review and coordination of required documentation including project definition reports.
    2. The Consultant (up to 2 staff) shall attend up to 3 virtual or in-person coordination meetings with GSA and CBP staff

B. Data Collection & Field Reconnaissance
   1. Obtain and update periodically publicly available information including: locations of public buildings (schools, churches, cemeteries, parks), aerial photography, National Wetland Inventory Maps, County Soil Survey Maps, TCEQ & EPA Hazardous Materials Database Information, FEMA Floodplain Information, Vegetation Information, Environmental Information from the appropriate local, state, or federal agencies, Threatened & Endangered Species Information. Assume up to 3 updates.
   2. Conduct field reconnaissance to visually inspect the project site for additional risks and field verify any environmental risks identified by the regulatory records review. Assume 1 field visit.

C. Constraints Analysis and Mapping
   1. The Consultant shall develop a constraints map that includes environmental resources, known constraints (structures, floodplain, karst features), cultural and historic resources, hazardous material sites, aerial photography, contour information, utility information, that is based on research of public databases and sources. The Consultant shall provide a summary of findings in the constraints report.

D. Categorical Exclusion Checklist:
   1. The Consultant shall conduct the appropriate level of environmental, social, and economic analysis of the proposed project area to complete Department of Homeland Security (DHS) NEPA review process. This will entail completing, submitting, and securing approval of the DHS NEPA Categorical Exclusion Worksheet, which will assist the Consultant and the City of El Paso in complying with NEPA. The Consultant shall coordinate with the City of El Paso and CBP to determine the format and content of the CE and to determine the protocol for its review and approval. Decisions reached during said coordination will be formally documented by the Consultant for future reference by each agency.
   2. The Consultant shall prepare a CE and for review and approval by the City of El Paso and CBP. The following DHS CEs are assumed (DHS Management Directive 023-01):

      B8-Acquisition, installation, maintenance, operation, or evaluation of security equipment to screen for or detect dangerous or illegal individuals or materials at existing facilities and the eventual removal and disposal of that equipment in compliance with Applicable Federal, tribal, state, and local requirements to protect the environment. Examples of the equipment include, but are not limited to: (a) low-level X-ray devices, (b) cameras and biometric devices, (c) passive inspection devices, (d) detection or security systems for explosive, biological, or chemical substances, and (e) access controls, screening devices, and traffic management systems;

      E2- New construction upon or improvement of land where all of the following conditions are met: (a) The structure and proposed use are

compatible with applicable Federal, tribal, state, and local planning and zoning standards and consistent with federally approved state coastal management programs, (b) The site is in a developed area and/or a previously disturbed site, (c) The proposed use will not substantially increase the number of motor vehicles at the facility or in the area, (d) The site and scale of construction or improvement are consistent with those of existing, adjacent, or nearby buildings, and, (e) The construction or improvement will not result in uses that exceed existing support infrastructure capacities (roads, sewer, water, parking, etc.).

3. The Consultant shall draft a Record of Environmental Consideration (REC) as required for the B8 categorical exclusion.
4. In preparing the CE and associated documents, the Consultant shall use an expedited approach and follow plain language guidelines. The CE checklist will summarize the results of the technical studies and analyses required for the project and reference relevant technical documentation prepared for the alternatives evaluation. This will include supporting materials to cover the following: project description, project location map, and project site plan.
5. The Consultant shall also assess the technical areas listed below to prepare the CE checklist. In addition, the effects to safety and security and construction impacts will be described, as applicable. The CE checklist will also identify any mitigation measures recommended for potential impacts identified.

    i. Traffic
    ii. Noise and Vibration
    iii. Environmental Justice (EJ)
    iv. Historic/Cultural Resources
    v. Biological Resources
    vi. Property Acquisition/Relocations
    vii. Wetlands and Water Quality
    viii. Archeology
    ix. Land Use
    x. Section 4(f) Parks
    xi. Property Acquisitions and Relocations
    xii. Air Quality
    xiii. Prime and Unique Farmlands
    xiv. Hazardous Materials
    xv. Safety and Security

E. Environmental Technical Analyses

1. The Consultant shall obtain access to the project file in the TxDOT Environmental Compliance Oversight System (ECOS) database. Once access is obtained, the Consultant shall complete Work Plan Development (WPD) I and WPD II activities in the database for the project using results from the constraints analysis. Upon

approval of the project work plan by TxDOT, a NEPA level assessment shall be conducted for the following resource areas, if needed:

i. Air Quality
ii. Traffic Noise
iii. Hazardous Materials
iv. Water Resources
v. State and Federal Protected Species
vi. Community Impacts
vii. Chapter 26/ Section 4(f) if needed
viii. Historic Resources
ix. Archeology

Deliverables:

- One draft and one final DHS NEPA Categorical Exclusion Worksheet for the project (draft for review by the City and final version, 8.5' x 11' electronic pdf)
- One draft and one final draft Record of Environmental Consideration (draft for review by the City and final version, 8.5' x 11' electronic pdf)
- One draft and one final Environmental Constraints Map (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final Environmental Constraints Report (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final Preliminary Water Resources Report (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final Wetlands Delineation Report (if needed) (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final Threatened and Endangered Species Analysis (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final Hazardous Materials Site Assessment (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final THC Concurrence Letter for Historic Resources (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final Archeological Background Study (ABS) (draft for review by the City and final version, 8.5" x 11" electronic pdf)
- One draft and one final Texas Antiquities Permit Application Associated Scope of Work and Report (if needed) (draft for review by the City and final version, 8.5" x 11" electronic pdf)

1.10 System Requirements (Lump Sum)

The Consultant shall coordinate with City IT Department and TTI on system requirements. This coordination will serve assist to specify the future subsystems and components between the City and how they integrate together to comprise the system and accomplish the project goals.

Consultant shall:

A. Meet with TTI and City IT Department to coordinate requirements and agree how the system will connect. The Consultant shall submit minutes of the meeting summarizing the events of the meeting within 7 calendar days after each meeting (up to 6 meetings and meeting minutes).

Deliverables:

- Three (3) TTI Coordination Meeting Agenda and Notes (draft for review by the City and final version, 8.5" x 11" electronic Word/pdf)
- Three (3) City IT Department Coordination Meeting Agenda and Notes (draft for review by the City and final version, 8.5" x 11" electronic Word/pdf)

1.11 Bidding (Hourly Billing Rate Services)

Upon written direction from the City, the Consultant shall provide the following services not to exceed the amounts established in Exhibit C:

A. Before the bidding process, the Consultant shall provide the following items
   1. Full and complete sealed set of plans (electronic and hardcopy)
   2. Full and complete sealed set of technical specifications and list of governing specifications (electronic and hardcopy)
   3. Unit price bid proposal form (electronic and hardcopy)
   4. Detailed cost estimate (electronic and hardcopy)
   5. Construction time determination (electronic)

B. During the bidding process, the Consultant shall assist the City with the following items:
   1. Respond to questions from prospective bidders (assume up to 10 questions maximum)
   2. Attend a pre-bid conference (1 meeting, 2 local staff)
   3. If required, prepare addendums. Assume this effort requires up to 5 addendums total with revisions of up to 30 sheets of 11" x 17" plans sheets

C. After bid opening, the Consultant shall provide the following documents required for TxDOT concurrence:
   1. Engineer's Cost Estimate line item review
   2. Engineer's Bid Tab review and recommendation letter (electronic and hard copy)

Deliverables:

- Before bidding process:
   a. 1 set of 11" x 17" plan sheet hardcopies signed and sealed (assume up to 500 sheets per set) and 1 electronic pdf for bidding
   b. 1 set of 8.5" x 11" hardcopies of technical specifications and list of governing specifications signed and sealed and 1 electronic pdf for bidding
   c. 1 set of 8.5" x 11" hardcopy of unit bid proposal form and 1 electronic pdf for bidding
   d. 1 set of 8.5" x 11" hardcopy of detailed cost estimate and 1 electronic pdf for bidding

e. 1 set of 8.5" x 11" hardcopy of construction time determination and 1 electronic pdf for bidding

- During bidding process:
  a. Written responses for bid clarifications (assume up to 10, 8.5"x 11" hardcopy and electronic Word/pdf)
  b. Addendums (assume up to 5 addendums, up to 30 11" x 17" plan sheets, hardcopy and electronic pdf), if required
- After bid opening:
  a. Bid tab review and recommendation letter (8.5"x 11" hardcopy and electronic Word/pdf)

1.12 Construction (Hourly Billing Rate Services)

The Engineer shall provide Construction Phase Services (assume 18 months) at the written request of the City's Project Manager. The written request must include a description of the work requested, a mutually agreed upon time limit, and any special instructions for coordination and submittal. These services shall include the following:

A. Attend pre-construction meeting (1 meeting, 2 local staff)
B. Attend partnering meeting (1 meeting, 2 local staff)
C. Attend field meetings and make visits to site (assume 1 local staff with 18 meetings and 18 visits)
D. Calculate quantities and assist the City in preparing change orders (assume up to 20 change orders)
E. Review and approval of shop drawings (assume up to 30)
F. Respond to requests for information (RFIs) (assume up to 50)
G. Provide redesign, which will include changes to the affected plan (assume up to 5 redesigns, up to 5 sheets per redesign)
H. Participate in "punch list" inspection and provide one (1) punch list to City (1 field visit per location, 1 local staff), after construction of all device locations have been completed
I. Produce and provide one (1) set of Record Drawings, hard copy (11x17) and electronic (pdf) format (assume 500 sheets). This will consist of revised plan sheets, noted with date stamp, and with clouded notes indicating changes based on markup drawings prepared by City's Contractor and provided to Consultant.
J. Provide a letter confirming project has been constructed according to plans and specifications.
K. TTI and City IT Department coordination – To coordinate which devices shall be integrated by TTI and by City IT Department, the Consultant shall participate in meetings, preparing agendas within three business prior to the meeting and providing meeting minutes within 7 business days after the meeting. Each meeting will be held virtually with audio, video, and computer screensharing capabilities unless otherwise specified.
   1. Two (2) TTI coordination meetings with the Consultant's management and development leads (up to 4 staff)
   2. Two (2) City IT Department coordination meetings with the Consultant's management and development leads (up to 4 staff)

Deliverables:

- Response to change orders (assume up to 20, electronic email and pdf)
- Response to shop drawings (assume up to 30, electronic email and pdf)
- Response to RFIs (assume up to 50, electronic email and pdf)
- Redesign plan sheets (assume up to 5 redesigns with 5 sheets each, 11" x 17" electronic pdf)
- Record drawings (assume up to 500 sheets, 11" x 17" hardcopy and electronic pdf)
- Punchlist (8.5" x 11" hardcopy and electronic pdf)
- 1 set of 11" x 17" plan sheet hardcopies signed and sealed (assume up to 500 sheets per set) and 1 electronic pdf for bidding
- Letter confirming project has been constructed according to plans and specifications (draft for review by City with up to 1 revision, and final version, 8.5" x 11" electronic Word/pdf)
- Two (2) TTI Coordination Meeting Agenda and Notes (draft for review by the City and final version, 8.5" x 11" electronic Word/pdf)
- Two (2) City IT Department Coordination Meeting Agenda and Notes (draft for review by the City and final version, 8.5" x 11" electronic Word/pdf)

2.0 EXCLUSIONS:

Consultant shall NOT be responsible for the following and shall not include as part of scope of services:

- Subsurface Utility Engineering for Level A and B is not in the Lump Sum Fee, instead can be added as optional at the City's direction
- Rework associated with utility conflicts that become necessary due to lack of utility information from utility company unresponsiveness or other construction activities
- Improvements of BOTA bridge structure
- Drainage inlet or storm sewer modifications
- Pavement Design; existing pavement design shall be utilized
- Detailed system requirements
- System requirements to describe what the system will do with the coordination with stakeholders and how the system will work. Full system requirements shall be handled by the City and TTI
- Full services of integration to BCIS and City TMC, testing and validation. Only assistance in coordination shall be required. Full integration and testing of data collectors and DMS with BCIS shall be handled by TTI, and full integration and testing of traffic signals, CCTV, and LMS shall be handled by City IT Department

If the City requests a different design or a substantial change from what is scoped above, a supplemental work authorization will be required for the additional effort.

3.0 GENERAL REQUIREMENTS AND CRITERIA

3.1 Design must meet applicable City Codes and Ordinances.

3.2 Design must comply with Capital Improvement Department Guidelines, City of El Paso Department of IT Standards, CBP Design Standards, GSA Design Standards, and TxDOT Guidelines.

3.3 Design must comply with local, state and federal laws and regulations including the Texas Accessibility Standards.

3.4 Design of data collectors and DMS shall be integrated with BCIS system by TTI with assistance in coordination from Consultant, and design of traffic signals, CCTV, and LMS shall be integrated with City TMC by City IT Department with assistance in coordination from Consultant.

3.5 All final CAD files shall be submitted to City in AutoCAD dwg format.

4.0 PROJECT SCHEDULE

The Consultant has included a schedule that incorporates review times by City and TxDOT and listed in Exhibit B.

Exhibit B

Gantt Chart

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
1		**Exhibit B-Schedule, Design for ITS Infrastructure at Zaragoza and BOTA POE**	**896 days**	**Thu 1/5/23**	**Wed 7/15/26**	
2		NTP	0 days	Thu 1/5/23	Thu 1/5/23	
3		**1.1 Project Management (Lump Sum)**	**243 days**	**Thu 1/5/23**	**Mon 12/18/23**	
4		A. Organize and lead kickoff virtual meeting	1 day	Tue 1/10/23	Tue 1/10/23	2FS+3 days
5		B. Prepare progress reports	224 days	Thu 1/5/23	Mon 11/20/23	2
6		C. Prepare and submit invoices after each phase	224 days	Thu 1/5/23	Mon 11/20/23	2
7		D. Meet with stakeholders on a bi-weekly basis	224 days	Thu 1/5/23	Mon 11/20/23	2
8		E. Maintain project schedule	224 days	Thu 1/5/23	Mon 11/20/23	2
9		F. Direct and coordinate activities	224 days	Thu 1/5/23	Mon 11/20/23	2
10		G. Meet with subconsultants to coordinate	138 days	Thu 1/5/23	Thu 7/20/23	2
11		H. Attend general meetings	224 days	Thu 1/5/23	Mon 11/20/23	2
12		I. Obtain Right of Entry	20 days	Thu 1/5/23	Thu 2/2/23	2
13		J. Obtain Clearances	20 days	Thu 1/5/23	Thu 2/2/23	2
14		K. Meet with federal agencies for coordination	100 days	Thu 1/5/23	Thu 5/25/23	2
15		L. Donation Acceptance Process	142 days	Tue 5/30/23	Mon 12/18/23	43
16		**1.2 Project Management (Hourly Billing Rates)**	**671 days**	**Tue 11/21/23**	**Tue 7/14/26**	
17		A. Prepare monthly progress reports	671 days	Tue 11/21/23	Tue 7/14/26	5,9
18		B. Prepare and submit monthly invoices	671 days	Tue 11/21/23	Tue 7/14/26	5,6
19		**1.3 Data Collection (Lump Sum)**	**30 days**	**Thu 1/5/23**	**Thu 2/16/23**	
20		A. Collect and review reference documents	25 days	Thu 1/5/23	Thu 2/9/23	2
21		B. Collect and review utility plans from projects	25 days	Thu 1/5/23	Thu 2/9/23	2
22		C. Conduct 1 field reconnaissance visit	1 day	Fri 1/27/23	Fri 1/27/23	2FS+15 days
23		D. Conduct 2 field visits to City's and TxDOT TMC	30 days	Thu 1/5/23	Thu 2/16/23	2
24		E. Non-disclosure agreement for CBP Design Standards	20 days	Thu 1/5/23	Thu 2/2/23	2
25		**1.4 Design**	**225 days**	**Thu 1/5/23**	**Tue 11/21/23**	
26		**A. Pre-Design Meeting**	**32 days**	**Thu 1/5/23**	**Mon 2/20/23**	
27		1. Prepare draft agenda, sign in and presentation	10 days	Thu 1/5/23	Thu 1/19/23	2
28		QA/QC	3 days	Fri 1/20/23	Tue 1/24/23	27
29		2. Submit draft documents for City, TxDOT review	1 day	Wed 1/25/23	Wed 1/25/23	28,4
30		3. Identify 20 participants to attend meeting and submit to City for approval	1 day	Thu 1/26/23	Thu 1/26/23	29
31		4. Distribute email invitation	1 day	Fri 1/27/23	Fri 1/27/23	30
32		5. Address comments and resubmit final materials	3 days	Thu 1/26/23	Mon 1/30/23	29
33		QA/QC	2 days	Tue 1/31/23	Wed 2/1/23	32
34		Conduct Pre-Design meeting	1 day	Mon 2/13/23	Mon 2/13/23	31FS+10 days,33
35		Prepare Meeting summary	5 days	Tue 2/14/23	Mon 2/20/23	34
36		**B. 30%, 60%, 95%, 100% and RTL Design Phase**	**225 days**	**Thu 1/5/23**	**Tue 11/21/23**	
37		30% PS&E	48 days	Thu 1/5/23	Tue 3/14/23	2
38		QA/QC	7 days	Wed 3/15/23	Thu 3/23/23	37
39		Submit 30% Design to City and TxDOT for Review	1 day	Fri 3/24/23	Fri 3/24/23	38,12,35,13
40		City and TxDOT Review Period	18 days	Mon 3/27/23	Wed 4/19/23	39
41		60% PS&E	20 days	Fri 4/21/23	Thu 5/18/23	65
42		QA/QC	5 days	Fri 5/19/23	Thu 5/25/23	41
43		Submit 60% Design to City and TxDOT for Review	1 day	Fri 5/26/23	Fri 5/26/23	42,74,20,21,22,23,94,8
44		City and TxDOT Review Period	17 days	Tue 5/30/23	Wed 6/21/23	43

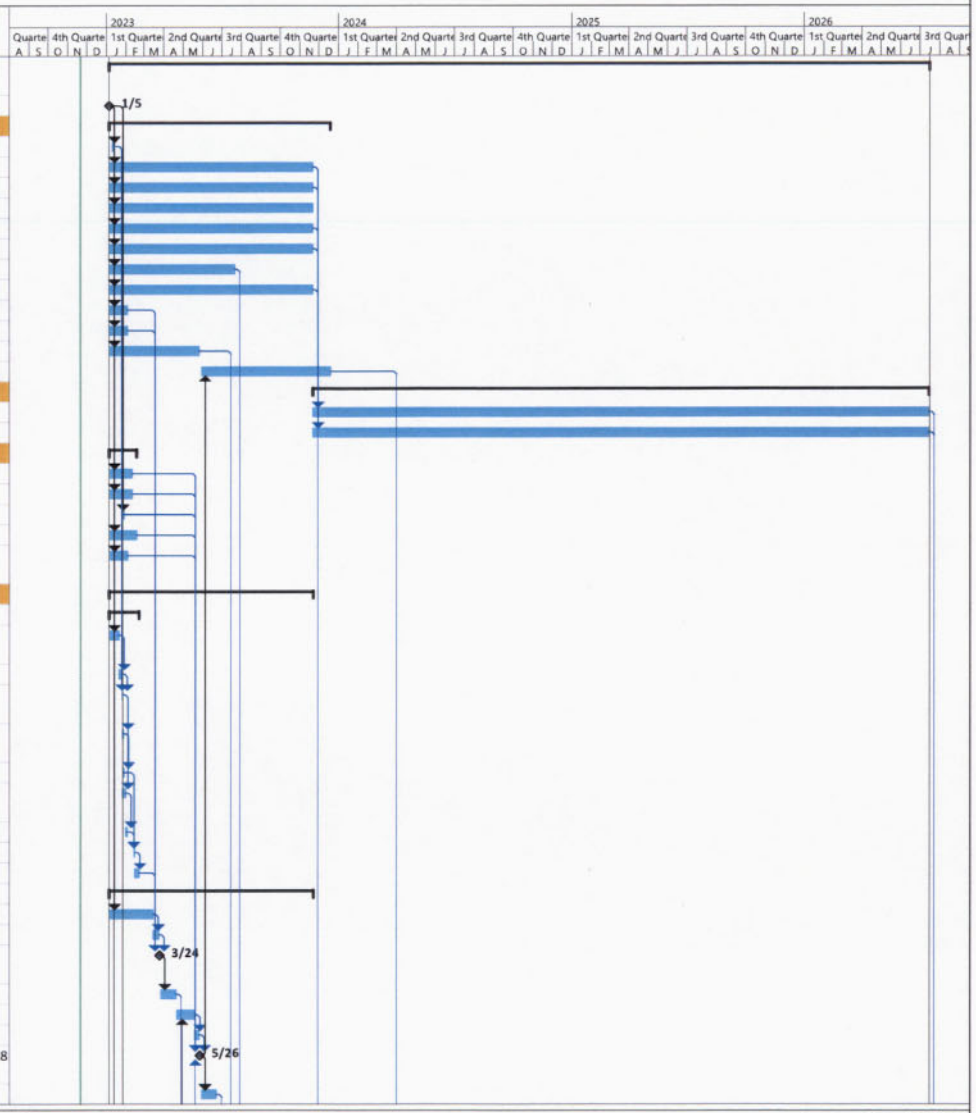


Exhibit B

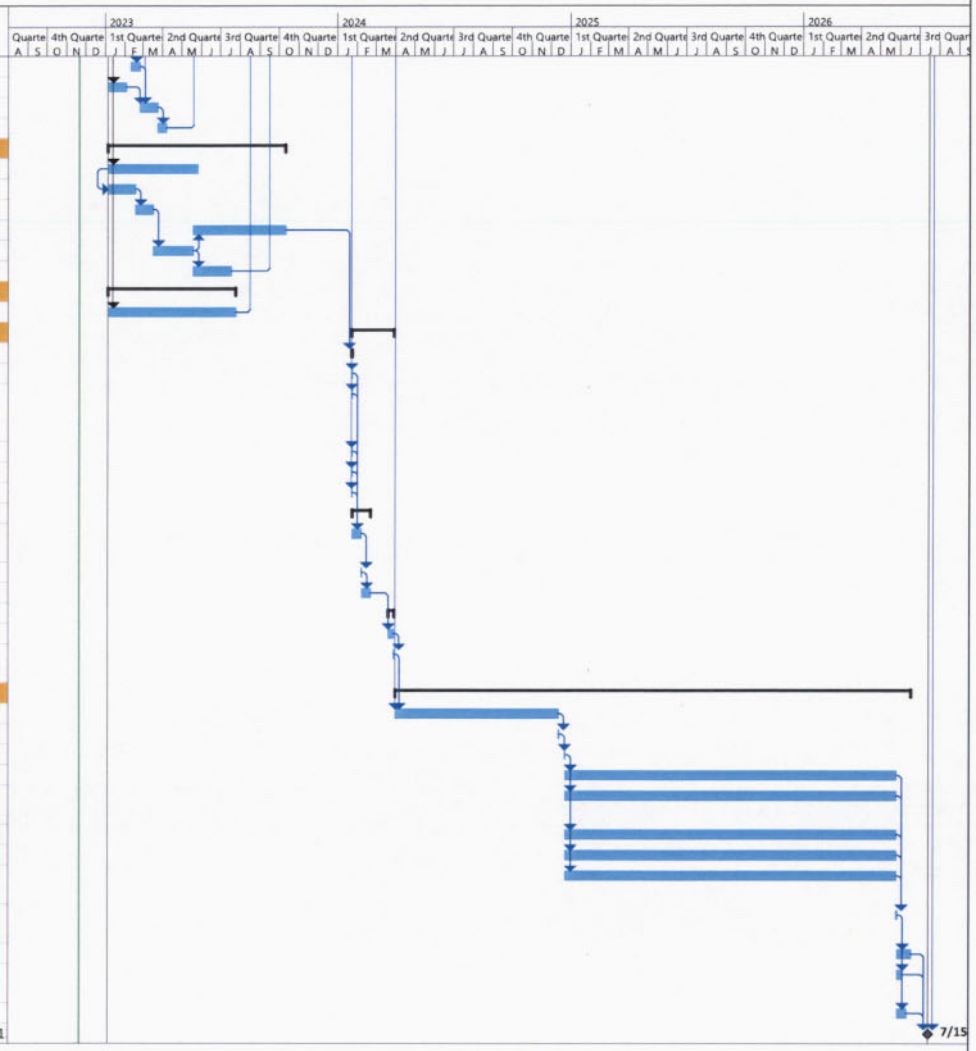
Gantt Chart

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors
45		95% PS&E	14 days	Fri 6/23/23	Thu 7/13/23	66
46		QA/QC	5 days	Fri 7/14/23	Thu 7/20/23	45
47		Submit 95% Design to City and TxDOT for Review	1 day	Fri 7/21/23	Fri 7/21/23	46,14,84,85,86,10
48		City and TxDOT Review Period	18 days	Mon 7/24/23	Wed 8/16/23	47
49		100% PS&E	19 days	Fri 8/18/23	Thu 9/14/23	67
50		QA/QC	5 days	Fri 9/15/23	Thu 9/21/23	49
51		Submit 100% Design to City and TxDOT for Review	1 day	Fri 9/22/23	Fri 9/22/23	50,101
52		City and TxDOT Review Period	18 days	Mon 9/25/23	Wed 10/18/23	51
53		RTL PS&E	17 days	Fri 10/20/23	Mon 11/13/23	68
54		QA/QC	5 days	Tue 11/14/23	Mon 11/20/23	53
55		Submit RTL Design to City and TxDOT for Review	1 day	Tue 11/21/23	Tue 11/21/23	54,11,8
56		**C. Safety Review**	**23 days**	**Fri 6/23/23**	**Wed 7/26/23**	
57		1. Create a pdf package of TCP	5 days	Fri 6/23/23	Thu 6/29/23	66
58		QA/QC	3 days	Fri 6/30/23	Wed 7/5/23	57
59		2. Submit to Safety Review Committee and City Streets and Maintenance	1 day	Thu 7/6/23	Thu 7/6/23	58
60		Safety Review Committee and City Streets and Maintenance Review Period	5 days	Fri 7/7/23	Thu 7/13/23	59
61		3. Address comments and resubmit final package	5 days	Fri 7/14/23	Thu 7/20/23	60
62		QA/QC	3 days	Fri 7/21/23	Tue 7/25/23	61
63		4. Attend Safety Review Meeting	1 day	Wed 7/26/23	Wed 7/26/23	62
64		**D. District Design Reviews**	**128 days**	**Thu 4/20/23**	**Thu 10/19/23**	
65		1. Attend 30% DDR	1 day	Thu 4/20/23	Thu 4/20/23	40
66		2. Attend 60% DDR	1 day	Thu 6/22/23	Thu 6/22/23	44
67		3. Attend 95% DDR	1 day	Thu 8/17/23	Thu 8/17/23	48,63,103
68		4. Attend 100% DDR	1 day	Thu 10/19/23	Thu 10/19/23	52
69		**1.5 Surveys**	**50 days**	**Thu 1/5/23**	**Thu 3/16/23**	
70		A. Safety Plan of Action	10 days	Thu 1/5/23	Thu 1/19/23	2
71		Safety Plan of Action Review and Approval	10 days	Fri 1/20/23	Thu 2/2/23	70
72		Clearance from federal agencies	20 days	Thu 1/5/23	Thu 2/2/23	2
73		Survey	20 days	Fri 2/3/23	Thu 3/2/23	72,71
74		Data Processing	10 days	Fri 3/3/23	Thu 3/16/23	73
75		**1.6 Utility Investigation**	**69 days**	**Thu 1/5/23**	**Wed 4/12/23**	
76		Safety Plan of Action	10 days	Thu 1/5/23	Thu 1/19/23	2
77		Safety Plan of Action Review and Approval	10 days	Fri 1/20/23	Thu 2/2/23	76
78		Clearance from federal agencies	20 days	Thu 1/5/23	Thu 2/2/23	2
79		SUE field work	39 days	Fri 2/3/23	Wed 3/29/23	78,77
80		SUE deliverables - sketches, DGN files	10 days	Thu 3/30/23	Wed 4/12/23	79
81		**1.7 Utility Coordination**	**139 days**	**Thu 1/5/23**	**Fri 7/21/23**	
82		A. Coordinate a work plan	15 days	Thu 1/5/23	Thu 1/26/23	2
83		B. Meet with City and perform on-site inspection	10 days	Fri 1/27/23	Thu 2/9/23	82
84		C. Coordinate activities with City	139 days	Thu 1/5/23	Fri 7/21/23	2
85		D. Utility coordination meetings (20 meetings)	114 days	Fri 2/10/23	Fri 7/21/23	83
86		E. Electrical service coordination	114 days	Fri 2/10/23	Fri 7/21/23	83
87		**1.8 Geotechnical Borings and Investigation**	**65 days**	**Thu 1/5/23**	**Thu 4/6/23**	
88		A. Safety Plan of Action	10 days	Fri 1/27/23	Thu 2/9/23	2FS+15 days
89		Safety Plan of Action Review and Approval	10 days	Fri 2/10/23	Thu 2/23/23	88
90		B. Geophysical Permit	10 days	Fri 1/27/23	Thu 2/9/23	2FS+15 days

Exhibit B

Gantt Chart

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessors
91			Geophysical Permit Review and Approval	10 days	Fri 2/10/23	Thu 2/23/23	90
92			Clearance from federal agencies	20 days	Thu 1/5/23	Thu 2/2/23	2
93			Geotechnical borings	20 days	Fri 2/24/23	Thu 3/23/23	92,91,89
94			Data Processing	10 days	Fri 3/24/23	Thu 4/6/23	93
95			**1.9 Environmental Clearance**	**195 days**	**Thu 1/5/23**	**Tue 10/10/23**	
96			A. GSA and CBP Reporting and Coordination	100 days	Thu 1/5/23	Thu 5/25/23	2
97			B. Data Collection and Field Reconnaissance	30 days	Thu 1/5/23	Thu 2/16/23	96SS
98			C. Constraints Analysis and Mapping	20 days	Fri 2/17/23	Thu 3/16/23	97
99			D. Categorical Exclusion Checklist	100 days	Fri 5/19/23	Tue 10/10/23	100
100			E. Environmental Technical Analyses	45 days	Fri 3/17/23	Thu 5/18/23	98
101			Review and Approval by City and GSA	40 days	Fri 5/19/23	Mon 7/17/23	100
102			**1.10 System Requirements**	**140 days**	**Thu 1/5/23**	**Mon 7/24/23**	
103			A. Meet with TTI and City IT Department	140 days	Thu 1/5/23	Mon 7/24/23	2
104			**1.11 Bidding**	**49 days**	**Tue 1/23/24**	**Fri 3/29/24**	
105			**A. Before Bidding Process**	**1 day**	**Tue 1/23/24**	**Tue 1/23/24**	**99**
106			1. Provide complete sealed set of plans	1 day	Tue 1/23/24	Tue 1/23/24	55FS+40 days
107			2. Provide complete sealed set of technical specifications and list of governing specifications	1 day	Tue 1/23/24	Tue 1/23/24	55FS+40 days
108			3. Provide unit price bid proposal form	1 day	Tue 1/23/24	Tue 1/23/24	55FS+40 days
109			4. Provide detailed cost estimate	1 day	Tue 1/23/24	Tue 1/23/24	55FS+40 days
110			5. Provide Construction Time Determination	1 day	Tue 1/23/24	Tue 1/23/24	55FS+40 days
111			**B. During Bidding Process**	**21 days**	**Wed 1/24/24**	**Wed 2/21/24**	
112			1. Respond to questions from prospective bidders	10 days	Wed 1/24/24	Tue 2/6/24	106,107,108,109,110
113			2. Attend a pre-bid conference meeting	1 day	Wed 2/7/24	Wed 2/7/24	112
114			3. Prepare addendums	10 days	Thu 2/8/24	Wed 2/21/24	113
115			**C. After Bid Opening**	**7 days**	**Thu 3/21/24**	**Fri 3/29/24**	
116			Engineer's cost estimate line item review	6 days	Thu 3/21/24	Thu 3/28/24	114FS+20 days
117			Engineer's bid tab review, recommendation letter	1 day	Fri 3/29/24	Fri 3/29/24	116
118			**1.12 Construction**	**564 days**	**Mon 4/1/24**	**Thu 6/18/26**	
119			6 Month Start Delay for Material Acquisition	180 days	Mon 4/1/24	Thu 12/12/24	117,15
120			A. Attend a pre-construction meeting	1 day	Fri 12/13/24	Fri 12/13/24	119
121			B. Attend partnering meeting	1 day	Mon 12/23/24	Mon 12/23/24	120FS+5 days
122			C. Attend field meetings and make visits to site	360 days	Tue 12/24/24	Tue 5/26/26	121
123			D. Calculate quantities and assist the Owner in preparing change orders	360 days	Tue 12/24/24	Tue 5/26/26	121
124			E. Review and approval of shop drawings	360 days	Tue 12/24/24	Tue 5/26/26	121
125			F. Respond to requests for information (RFIs)	360 days	Tue 12/24/24	Tue 5/26/26	121
126			G. Provide redesign, which will include changes to the affected plan	360 days	Tue 12/24/24	Tue 5/26/26	121
127			H. Participate in "punch list" inspection and provide punch list to Owner	2 days	Wed 5/27/26	Thu 5/28/26	126,122,123,124,125
128			I. Produce and provide Record Drawings	15 days	Fri 5/29/26	Thu 6/18/26	127
129			J. Provide letter confirming project has been constructed to plans	5 days	Fri 5/29/26	Thu 6/4/26	127
130			K. TTI and City IT Department Coordination	10 days	Fri 5/29/26	Thu 6/11/26	127
131			Close Task Order	1 day	Wed 7/15/26	Wed 7/15/26	17,18,128FS+17 days,1



ATTACHMENT "B"
CONSULTANT'S FEE PROPOSAL AND HOURLY RATES

EXHIBIT C

HNTB

PROJECT NAME: DESIGN FOR ITS INFRASTRUCTURE AT ZARAGOZA AND BOTA INTERNATIONAL PORTS OF ENTRY

PRIME PROVIDER NAME: HNTB

Types of Services	HNTB		FXSA			HVJ			Subtotals
	Labor	Direct Expenses	Labor	Direct Expenses	Unit Costs	Labor	Direct Expenses	Unit Costs	
Lump Sum Fee									
1.1 Project Management	$ 85,065	$ 16,348	$ 27,782			$ 4,582			$ 133,777
1.3 Data Collection and Field Work	$ 9,881								$ 9,881
1.4 Design	$ 1,220,444								$ 1,220,444
1.5 Surveys	$ 8,346		$ 108,788	$ 24,758					$ 141,892
1.6 Utility Investigation	$ 3,457		$ 25,445						$ 28,902
1.7 Utility Coordination	$ 27,753		$ 101,936						$ 129,690
1.8 Geotechnical Borings and Investigation	$ 8,346					$ 21,657	$ 8,938		$ 38,941
1.9 Environmental Clearance	$ 71,930								$ 71,930
1.10 System Requirements	$ 9,402								$ 9,402
Total (Lump Sum)	**$ 1,444,626**	**$ 16,348**	**$ 263,950**	**$ 24,758**		**$ 26,239**	**$ 8,938**		**$ 1,784,858**

Types of Services	HNTB		FXSA			HVJ			Subtotals
	Labor	Direct Expenses	Labor	Direct Expenses	Unit Costs	Labor	Direct Expenses	Unit Costs	
Hourly Services Fee									
1.2 Project Management	$ 38,370								$ 38,370
1.11 Bidding	$ 23,190								$ 23,190
1.12 Construction	$ 58,600								$ 58,600
Total (Hourly Billing Rate)	**$ 120,160**								**$ 120,160**

Types of Services	HNTB		FXSA			HVJ			Subtotals
	Labor	Direct Expenses	Labor	Direct Expenses	Unit Costs	Labor	Direct Expenses	Unit Costs	
Unit Costs Fee									
1.6 Utility Investigation					$ 7,275.00				$ 7,275
1.8 Geotechnical Borings and Investigation								$ 22,224.00	$ 22,224
Total (Unit Costs)					**$ 7,275**			**$ 22,224**	**$ 29,499**

	Labor	Direct Expenses	Unit Costs	Total
Total	**$ 1,854,975**	**$ 50,043**	**$ 29,499**	**$ 1,934,517**

HNTB - LUMP SUM

			Classification	Project Manager II	Project Manager I	Task Leader	ITS Planner II	Quality Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Design Technician	Intern	Senior Environmental Planner	Environmental Planner	GIS Analyst	Project Analyst	Document Controls	Total Hours	Total $
			Loaded Rate	$ 326.06	$ 198.58	$ 280.27	$ 240.92	$ 271.07	$ 262.55	$ 243.45	$ 179.02	$ 134.15	$ 159.24	$ 80.54	$ 212.16	$ 141.75	$ 189.84	$ 152.33	$ 170.28		
1.1	Project Management																				
	A		Organize and lead up to one kickoff virtual meeting (2 local staff and 2 out of town staff)	2	2	2	2													8	$ 2,091.69
	B		Prepare progress reports (up to 5 reports)		5	5												20		30	$ 5,440.92
	C		Prepare and submit invoices after each design phase (up to 5 invoices)		10													30		40	$ 6,555.79
	D		Meet with stakeholders on a bi-weekly basis during PS&E (up to 20 meetings)	20	20						20									60	$ 14,073.44
	E		Maintain project schedule (up to 3 updates)	2	3															5	$ 1,247.88
	F		Direct and coordinate activities with Consultant's team (up to 12 months)		48			12												60	$ 12,784.83
	G		Meet with subconsultants to coordinate project progress (up to 10 virtual meetings)	2	10															12	$ 2,637.96
	H		Attend general meetings (up to 8 meetings)	4	8															12	$ 2,892.92
	I		Obtain Right of Entry (up to 4 local staff)		8															8	$ 1,588.67
	J		Obtain Clearances (up to 4 local staff)		8															8	$ 1,588.67
	K		Meet with federal agencies for coordination (up to 10 meetings)	10	10						10									30	$ 7,036.72
	L		Donation Acceptance Process	10	20				50		20		20							120	$ 27,125.20
1.2	See Hourly Billing Rates Fee Table for this section																				
1.3	Data Collection and Field Work																				
	A		Collect and review reference documents		4						4	8								16	$ 2,583.66
	B		Collect and review utility plans from adjacent projects		2						2	2								6	$ 1,023.52
	C		Conduct 1 field reconnaissance visit (2 local staff)									16								16	$ 2,146.45
	D		Conduct 2 field visits to City's TMC and TxDOT TMC (PM and 2 out of town staff)		4	4	4													12	$ 2,879.12
	E		Non-discolsure agremeent to receive current CBP Design Standards	1	2				2											5	$ 1,248.34
1.4	Design																				
	A		Pre-Design Meeting																		
		1	Prepare draft agenda, sign in sheet, and presentation	3	8	2	2				40	40								95	$ 16,136.36
		2	Submit draft documents for City and TxDOT review		1															1	$ 198.58
		3	Identify 20 participants to attend meeting and submit to City for approval		1															1	$ 198.58
		4	Distribute email invitation		1															1	$ 198.58
		5	Address comments and resubmit final meeting materials		2	1	1				8									12	$ 2,350.56
		6	Conduct Pre-Design meeting (PM and up to 6 staff to attend virtual meeting)	2	2	2	2				4	2								14	$ 3,076.09
		7	Prepare meeting summary	1	1							1								3	$ 658.80
			QA/QC		2	2	2				8	8								22	$ 3,944.98
	B		30%, 60%, 95%, 100% and RTL Design Phase																		
			30% Design Phase																		
		1	Cover Sheet									2								2	$ 268.31
		2	Index		1						4									5	$ 914.68
		3	General Notes (TxDOT Format)		1						6									7	$ 1,272.73
		5	Construction Notes		2							2								4	$ 665.47
		6	Typical Sections		2						8	24		4						38	$ 5,371.19
		7	Site Plan		1							8								9	$ 1,271.81
		8	Existing Conditions Plan		1						2	8								11	$ 1,629.86
		10	Narrative of Construction Sequencing		1				4			8	10							23	$ 3,914.38
		14	Demolition Plan		1						7	18		4						30	$ 4,188.67
		15	Horizontal Layout Plan		1						19	18		4						42	$ 6,336.96
		16	Roadway Plan and Profile		1						19	18		4						42	$ 6,336.96
		18	Curb Ramp and Sidewalk Layout Plan		1						11	18		4						34	$ 4,904.76
		24	Existing Utilities Plan		1						4	20								25	$ 3,597.75
		25	ITS Key Map		1						2	16								19	$ 2,703.09
		26	ITS Plan		1						40	80								121	$ 18,091.83
		27	Fiber System Layout		1						4	16								21	$ 3,061.13
		29	ITS Ethernet Ring Architecture		1						2	4								7	$ 1,093.25
		30	Fiber Schematic Layout		1						16	40								57	$ 8,429.11
		34	Typical ITS Diagram		1							8								9	$ 1,271.81
		36	ITS Standards		1						2	2								5	$ 824.94
		37	Traffic Signal Plan		1						28	20								49	$ 7,894.33
		38	Traffic Signal Interconnection Plan		1						28	20								49	$ 7,894.33
		39	Miscellaneous Traffic Signal Details		1						8	8								17	$ 2,704.01
		40	Traffic Signal Standards		1						2									3	$ 556.63
		41	Signage and Markings Plan		1				20			20								41	$ 8,132.73
		42	Summary of Small Signs		1				20			20								41	$ 8,132.73
		43	Miscellaneous Signing Details		1				8											9	$ 2,299.01
		44	Signing and Striping Standards		1						2									3	$ 556.63
		45	EPIC		1							2								3	$ 466.89
		46	SWP3 Notes		1							2								3	$ 466.89
		47	SWP3 Plan		1				8			8								17	$ 3,372.24
		48	Erosion and Sediment Control Standards		1				2			2								5	$ 992.00
		50	List of Governing Specifications		1						4									5	$ 914.68
		51	TxDOT Form 1002		1						1									2	$ 377.61
		52	TxDOT Form 2443		1						1									2	$ 377.61
		54	Engineer's Estimate		2						6									8	$ 1,471.31
		57	Environmental Scope Development Tool		1										2					3	$ 622.90
		58	Design Criteria		2						12									14	$ 2,545.46
		67	Redlines showing quality control		1															1	$ 198.58
		68	Utility Contact List		1															1	$ 198.58

	Classification	Project Manager II	Project Manager I	Task Leader	ITS Planner II	Quality Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Design Technician	Intern	Senior Environmental Planner	Environmental Planner	GIS Analyst	Project Analyst	Document Controls	Total Hours	Total $
	Loaded Rate	$ 326.06	$ 198.58	$ 280.27	$ 240.92	$ 271.07	$ 262.55	$ 243.45	$ 179.02	$ 134.15	$ 159.24	$ 80.54	$ 212.16	$ 141.75	$ 189.84	$ 152.33	$ 170.28		
	QA/QC		8				12		24	40	8						4	96	$ 16,357.04
	60% Design Phase																		
1	Cover Sheet									2								2	$ 268.31
2	Index		1						4									5	$ 914.68
3	General Notes (TxDOT Format)		2						6									8	$ 1,471.31
4	Summary of Quantities		4						9	30		4						47	$ 6,752.31
5	Construction Notes		2							2								4	$ 665.47
6	Typical Sections		2						8	24		4						38	$ 5,371.19
7	Site Plan		1							8								9	$ 1,271.81
8	Existing Conditions Plan		1						2	8								11	$ 1,629.86
9	Horizontal and Vertical Control Plan		1						3									4	$ 735.66
10	Narrative of Construction Sequencing		1				4			8	10							23	$ 3,914.38
11	Traffic Control Plan Standard Selection Table		1				4			8	8							21	$ 3,595.91
12	Traffic Control Plan		1				4			20	20							45	$ 7,116.57
13	Traffic Control Plan Standards		1				4			2	2							9	$ 1,835.58
14	Demolition Plan		1						7	24		4						36	$ 4,993.59
15	Horizontal Layout Plan		1						19	24		4						48	$ 7,141.88
16	Roadway Plan and Profile		1						19	24		4						48	$ 7,141.88
17	Roadway Grading Plan		1						19	24		4						48	$ 7,141.88
18	Curb Ramp and Sidewalk Layout Plan		1						11	36		6						54	$ 7,480.60
19	Roadway Miscellaneous Details		1						9	24		4						38	$ 5,351.64
20	Retaining Wall Plan and Profile		1					8	12	20								41	$ 6,977.58
21	Retaining Wall Details		1					8	10	10								29	$ 5,278.00
22	Retaining Wall Standards		1					8	10	10								29	$ 5,278.00
23	Boring Profiles		1						0	2								3	$ 466.89
24	Existing Utilities Plan		1						4	20								25	$ 3,597.75
25	ITS Key Map		1						2	16								19	$ 2,703.09
26	ITS Plan		1						80	160								241	$ 35,985.07
27	Fiber System Layout		1						16	40								57	$ 8,429.11
28	DMS/LMS Elevation Details		1					36	112	8		64						221	$ 35,241.36
29	ITS Ethernet Ring Architecture		1						2	4								7	$ 1,093.25
30	Fiber Schematic Layout		1						20	50								71	$ 10,486.74
31	ITS Fiber Termination Charts		1						12	20								33	$ 5,029.94
32	ITS Electrical Service Summary		1						12									13	$ 2,346.88
33	ITS Voltage Drop Calculations		1						24									25	$ 4,495.17
34	Typical ITS Diagram		1							16								17	$ 2,345.04
35	ITS High Mast CCTV Mounting Details		1							4								5	$ 735.20
36	ITS Standards		1						2	2								5	$ 824.94
37	Traffic Signal Plan		1						28	20								49	$ 7,894.33
38	Traffic Signal Interconnection Plan		1						28	20								49	$ 7,894.33
39	Miscellaneous Traffic Signal Details		1						8	8								17	$ 2,704.01
40	Traffic Signal Standards		1						2									3	$ 556.63
41	Signage and Markings Plan		1							20	20							41	$ 6,066.35
42	Summary of Small Signs		1							20	20							41	$ 6,066.35
43	Miscellaneous Signing Details		1								8							9	$ 1,472.46
44	Signing and Striping Standards		1						2									3	$ 556.63
45	EPIC		2							2								4	$ 665.47
46	SWP3 Notes		1							2								3	$ 466.89
47	SWP3 Plan		1							8	8							17	$ 2,545.69
48	Erosion and Sediment Control Standards		1							2	2							5	$ 785.36
49	Outline of Specifications		2						4									6	$ 1,113.27
50	List of Governing Specifications		2						4									6	$ 1,113.27
51	TxDOT Form 1002		1						1									2	$ 377.61
52	TxDOT Form 2443		1						1									2	$ 377.61
53	TxDOT Form 2229		1						1									2	$ 377.61
54	Engineer's Estimate		2						6									8	$ 1,471.31
55	TxDOT Form Estimate (TxDOTConnect)		2						6									8	$ 1,471.31
57	Environmental Scope Development Tool		1										2					3	$ 622.90
58	Design Criteria		2						12									14	$ 2,545.46
59	Complete action items report and complete review comment forms		1						8									9	$ 1,630.78
60	Engineer's Seal		1						1									2	$ 377.61
61	Contract time determination		1				4			4								9	$ 1,785.41
62	Certifications (ROW, Utilities, etc.)		1						1									2	$ 377.61
63	Temporary Road Closure Request		1						2									3	$ 556.63
64	Construction Speed Zone Request		1						2									3	$ 556.63
65	TDLR Registration Form		1						4									5	$ 914.68
67	Redlines showing quality control		1															1	$ 198.58
68	Utility Contact List		1															1	$ 198.58
	QA/QC		8				12		24	40	8						4	96	$ 16,357.04
	95% Design Phase																		
1	Cover Sheet									1								1	$ 134.15
2	Index		1						1									2	$ 377.61
3	General Notes (TxDOT Format)		2						6									8	$ 1,471.31
4	Summary of Quantities		2						6	30		4						42	$ 5,818.07
5	Construction Notes		1							1								2	$ 332.74
6	Typical Sections		1						8	24		4						37	$ 5,172.61
7	Site Plan		1							8								9	$ 1,271.81
8	Existing Conditions Plan		1						1	3								5	$ 780.07
9	Horizontal and Vertical Control Plan		1						2									3	$ 556.63
10	Narrative of Construction Sequencing		1				4			8	10							23	$ 3,914.38
11	Traffic Control Plan Standard Selection Table		1				4			8	8							21	$ 3,595.91
12	Traffic Control Plan		1				4			20	20							45	$ 7,116.57
13	Traffic Control Plan Standards		1				2			1	1							5	$ 1,017.08

		Classification	Project Manager II	Project Manager I	Task Leader	ITS Planner II	Quality Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Design Technician	Intern	Senior Environmental Planner	Environmental Planner	GIS Analyst	Project Analyst	Document Controls	Total Hours	Total $
		Loaded Rate	$ 326.06	$ 198.58	$ 280.27	$ 240.92	$ 271.07	$ 262.55	$ 243.45	$ 179.02	$ 134.15	$ 159.24	$ 80.54	$ 212.16	$ 141.75	$ 189.84	$ 152.33	$ 170.28		
	14	Demolition Plan		1						3	12		4						20	$ 2,667.65
	15	Horizontal Layout Plan		1						14	24		4						43	$ 6,246.76
	16	Roadway Plan and Profile		1						14	24		4						43	$ 6,246.76
	17	Roadway Grading Plan		1						14	24		4						43	$ 6,246.76
	18	Curb Ramp and Sidewalk Layout Plan		1						10	30		6						47	$ 6,496.66
	19	Roadway Miscellaneous Details		1						8	24		4						37	$ 5,172.61
	20	Retaining Wall Plan and Profile		1					12	24	32								69	$ 11,709.53
	21	Retaining Wall Details		1					16	24	40								81	$ 13,756.58
	22	Retaining Wall Standards		1					1	2	4								8	$ 1,336.70
	23	Boring Profiles		1							2								3	$ 466.89
	24	Existing Utilities Plan		1						4	20								25	$ 3,597.75
	25	ITS Key Map		1						2	16								19	$ 2,703.09
	26	ITS Plan		1						100	200								301	$ 44,931.69
	27	Fiber System Layout		1						16	40								57	$ 8,429.11
	28	DMS/LMS Elevation Details		1					16	72	40								129	$ 22,349.76
	29	ITS Ethernet Ring Architecture		1						8	4								13	$ 2,167.39
	30	Fiber Schematic Layout		1						32	80								113	$ 16,659.63
	31	ITS Fiber Termination Charts		1						16	16								33	$ 5,209.43
	32	ITS Electrical Service Summary		1						20									21	$ 3,779.07
	33	ITS Voltage Drop Calculations		1						20									21	$ 3,779.07
	34	Typical ITS Diagram		1							16								17	$ 2,345.04
	35	ITS High Mast CCTV Mounting Details		1							4								5	$ 735.20
	36	ITS Standards		1						2	2								5	$ 824.94
	37	Traffic Signal Plan		1						48	40								89	$ 14,157.89
	38	Traffic Signal Interconnection Plan		1						48	40								89	$ 14,157.89
	39	Miscellaneous Traffic Signal Details		1						8	8								17	$ 2,704.01
	40	Traffic Signal Standards		1						2									3	$ 556.63
	41	Signage and Markings Plan including the following items:		1						0	20	20							41	$ 6,066.35
	42	Summary of Small Signs		1						0	20	20							41	$ 6,066.35
	43	Miscellaneous Signing Details		1						0		8							9	$ 1,472.46
	44	Signing and Striping Standards		1						2									3	$ 556.63
	45	EPIC		1							2								3	$ 466.89
	46	SWP3 Notes		1							2								3	$ 466.89
	47	SWP3 Plan		1							8	8							17	$ 2,545.69
	48	Erosion and Sediment Control Standards		1							1	1							3	$ 491.97
	49	Outline of Specifications		1						4									5	$ 914.68
	50	List of Governing Specifications		1						4									5	$ 914.68
	51	TxDOT Form 1002		1						1									2	$ 377.61
	52	TxDOT Form 2443		1						1									2	$ 377.61
	53	TxDOT Form 2229		1						1									2	$ 377.61
	54	Engineer's Estimate		1						6									7	$ 1,272.73
	55	TxDOT Form Estimate (TxDOTConnect)		1						6									7	$ 1,272.73
	56	City Bid Tabulation Form		1						12									13	$ 2,346.88
	57	Environmental Scope Development Tool		1										2					3	$ 622.90
	58	Design Criteria		1						4									5	$ 914.68
	59	Complete action items report and complete review comment forms		1						8									9	$ 1,630.78
	60	Engineer's Seal		1						1									2	$ 377.61
	61	Contract time determination		1				4			4								9	$ 1,785.41
	62	Certifications (ROW, Utilities, etc.)								1									1	$ 179.02
	63	Temporary Road Closure Request		1						2									3	$ 556.63
	64	Construction Speed Zone Request		1						2									3	$ 556.63
	65	TDLR Registration Form		1						2									3	$ 556.63
	66	Performance end date		1						4									5	$ 914.68
	67	Redlines showing quality control		1															1	$ 198.58
	68	Utility Contact List		1															1	$ 198.58
		QA/QC	8					12		24	40	8						4	96	$ 16,357.04
		100% Design Phase																		
	1	Cover Sheet									1								1	$ 134.15
	2	Index		1						2									3	$ 556.63
	3	General Notes (TxDOT Format)		1						6									7	$ 1,272.73
	4	Summary of Quantities		1						6	30		4						41	$ 5,619.48
	5	Construction Notes		1							2								3	$ 466.89
	6	Typical Sections		1						8	24		4						37	$ 5,172.61
	7	Site Plan		1							8								9	$ 1,271.81
	8	Existing Conditions Plan		1						2	8								11	$ 1,629.86
	9	Horizontal and Vertical Control Plan		1						2									3	$ 556.63
	10	Narrative of Construction Sequencing		1				4			8	10							23	$ 3,914.38
	11	Traffic Control Plan Standard Selection Table		1				4			8	8							21	$ 3,595.91
	12	Traffic Control Plan		1				4			20	20							45	$ 7,116.57
	13	Traffic Control Plan Standards		1				4			2	2							9	$ 1,835.58
	14	Demolition Plan		1						3	12		4						20	$ 2,667.65
	15	Horizontal Layout Plan		1						12	24		4						41	$ 5,888.71
	16	Roadway Plan and Profile		1						12	24		4						41	$ 5,888.71
	17	Roadway Grading Plan		1						12	24		4						41	$ 5,888.71
	18	Curb Ramp and Sidewalk Layout Plan		1						10	24		6						41	$ 5,691.74
	19	Roadway Miscellaneous Details		1						8	24		4						37	$ 5,172.61
	20	Retaining Wall Plan and Profile		1					12	24	32								69	$ 11,709.53
	21	Retaining Wall Details		1					8	16	24								49	$ 8,230.29
	22	Retaining Wall Standards		1						2	2								5	$ 824.94
	23	Boring Profiles		1							1								2	$ 332.74
	24	Existing Utilities Plan		1						4	20								25	$ 3,597.75
	25	ITS Key Map		1						2	16								19	$ 2,703.09

	Classification	Project Manager II	Project Manager I	Task Leader	ITS Planner II	Quality Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Design Technician	Intern	Senior Environmental Planner	Environmental Planner	GIS Analyst	Project Analyst	Document Controls	Total Hours	Total $
	Loaded Rate	$ 326.06	$ 198.58	$ 280.27	$ 240.92	$ 271.07	$ 262.55	$ 243.45	$ 179.02	$ 134.15	$ 159.24	$ 80.54	$ 212.16	$ 141.75	$ 189.84	$ 152.33	$ 170.28		
26	ITS Plan		1						100	200								301	$ 44,931.69
27	Fiber System Layout		1						16	40								57	$ 8,429.11
28	DMS/LMS Elevation Details		1					6	26	20								53	$ 8,997.01
29	ITS Ethernet Ring Architecture		1						8	4								13	$ 2,167.39
30	Fiber Schematic Layout		1						32	80								113	$ 16,659.63
31	ITS Fiber Termination Charts		1						16	16								33	$ 5,209.43
32	ITS Electrical Service Summary		1						20									21	$ 3,779.07
33	ITS Voltage Drop Calculations		1						20									21	$ 3,779.07
34	Typical ITS Diagram		1							8								9	$ 1,271.81
35	ITS High Mast CCTV Mounting Details		1							4								5	$ 735.20
36	ITS Standards		1						2	2								5	$ 824.94
37	Traffic Signal Plan		1						48	40								89	$ 14,157.89
38	Traffic Signal Interconnection Plan		1						48	40								89	$ 14,157.89
39	Miscellaneous Traffic Signal Details		1						8	8								17	$ 2,704.01
40	Traffic Signal Standards		1						2									3	$ 556.63
41	Signage and Markings Plan		1							20	20							41	$ 6,066.35
42	Summary of Small Signs		1							20	20							41	$ 6,066.35
43	Miscellaneous Signing Details		1								8							9	$ 1,472.46
44	Signing and Striping Standards		1						2									3	$ 556.63
45	EPIC		1							2								3	$ 466.89
46	SWP3 Notes		1							2								3	$ 466.89
47	SWP3 Plan									4	4							8	$ 1,173.55
48	Erosion and Sediment Control Standards									1								1	$ 134.15
49	Outline of Specifications		1						4									5	$ 914.68
50	List of Governing Specifications		1						4									5	$ 914.68
51	TxDOT Form 1002		1						1									2	$ 377.61
52	TxDOT Form 2443		1						1									2	$ 377.61
53	TxDOT Form 2229		1						1									2	$ 377.61
54	Engineer's Estimate		1						6									7	$ 1,272.73
55	TxDOT Form Estimate (TxDOTConnect)		1						6									7	$ 1,272.73
56	City Bid Tabulation Form		1						12									13	$ 2,346.88
57	Environmental Scope Development Tool		1										2					3	$ 622.90
58	Design Criteria		1						4									5	$ 914.68
59	Complete action items report and complete review comment forms		1						8									9	$ 1,630.78
60	Engineer's Seal		1						1									2	$ 377.61
61	Contract time determination		1				4			4								9	$ 1,785.41
62	Certifications (ROW, Utilities, etc.)		1						1									2	$ 377.61
63	Temporary Road Closure Request		1						2									3	$ 556.63
64	Construction Speed Zone Request		1						2									3	$ 556.63
65	TDLR Registration Form		1						4									5	$ 914.68
66	Performance end date		1						4									5	$ 914.68
67	Redlines showing quality control		1															1	$ 198.58
68	Utility Contact List		1															1	$ 198.58
	QA/QC		8				12		24	40	8						4	96	$ 16,357.04
	RTL Design Phase																		
1	Cover Sheet									1								1	$ 134.15
2	Index		1															1	$ 198.58
3	General Notes (TxDOT Format)		1						4									5	$ 914.68
4	Summary of Quantities		1						6	30		4						41	$ 5,619.48
5	Construction Notes		1							2								3	$ 466.89
6	Typical Sections		1						8	24		4						37	$ 5,172.61
7	Site Plan		1							4								5	$ 735.20
8	Existing Conditions Plan		1						1	4								6	$ 914.22
9	Horizontal and Vertical Control Plan		1						2									3	$ 556.63
10	Narrative of Construction Sequencing		1				2			4	4							11	$ 1,897.25
11	Traffic Control Plan Standard Selection Table		1				2			4	4							11	$ 1,897.25
12	Traffic Control Plan		1				2			4	4							11	$ 1,897.25
13	Traffic Control Plan Standards						1			2	2							5	$ 849.33
14	Demolition Plan		1						6	24		4						35	$ 4,814.56
15	Horizontal Layout Plan		1						12	24		4						41	$ 5,888.71
16	Roadway Plan and Profile		1						12	24		4						41	$ 5,888.71
17	Roadway Grading Plan		1						12	24		4						41	$ 5,888.71
18	Curb Ramp and Sidewalk Layout Plan		1						10	24		6						41	$ 5,691.74
19	Roadway Miscellaneous Details		1						8	24		4						37	$ 5,172.61
20	Retaining Wall Plan and Profile		1					4	8	61								74	$ 10,787.95
21	Retaining Wall Details		1					4	12	20								37	$ 6,003.76
22	Retaining Wall Standards		1						2	2								5	$ 824.94
23	Boring Profiles		1							1								2	$ 332.74
24	Existing Utilities Plan		1															1	$ 198.58
25	ITS Key Map		1						2	16								19	$ 2,703.09
26	ITS Plan		1						40	80								121	$ 18,091.83
27	Fiber System Layout		1						16	32								49	$ 7,355.88
28	DMS/LMS Elevation Details		1					6	22	16								45	$ 7,744.30
29	ITS Ethernet Ring Architecture		1						4	4								9	$ 1,451.29
30	Fiber Schematic Layout		1						32	40								73	$ 11,293.50
31	ITS Fiber Termination Charts		1						8	16								25	$ 3,777.23
32	ITS Electrical Service Summary		1						12									13	$ 2,346.88
33	ITS Voltage Drop Calculations		1						12									13	$ 2,346.88
34	Typical ITS Diagram		1							4								5	$ 735.20
35	ITS High Mast CCTV Mounting Details		1							4								5	$ 735.20
36	ITS Standards		1						2	2								5	$ 824.94
37	Traffic Signal Plan		1						24	20								45	$ 7,178.24
38	Traffic Signal Interconnection Plan		1						24	20								45	$ 7,178.24

			Classification	Project Manager II	Project Manager I	Task Leader	ITS Planner II	Quality Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Design Technician	Intern	Senior Environmental Planner	Environmental Planner	GIS Analyst	Project Analyst	Document Controls	Total Hours	Total $
			Loaded Rate	$ 326.06	$ 198.58	$ 280.27	$ 240.92	$ 271.07	$ 262.55	$ 243.45	$ 179.02	$ 134.15	$ 159.24	$ 80.54	$ 212.16	$ 141.75	$ 189.84	$ 152.33	$ 170.28		
		39	Miscellaneous Traffic Signal Details		1						8	4								13	$ 2,167.39
		40	Traffic Signal Standards		1						2									3	$ 556.63
		41	Signage and Markings Plan		1							10	20							31	$ 4,724.82
		42	Summary of Small Signs		1							10	20							31	$ 4,724.82
		43	Miscellaneous Signing Details		1								8							9	$ 1,472.46
		44	Signing and Striping Standards		1						2									3	$ 556.63
		45	EPIC		1							2								3	$ 466.89
		46	SWP3 Notes		1							2								3	$ 466.89
		47	SWP3 Plan		1							8	8							17	$ 2,545.69
		48	Erosion and Sediment Control Standards									1								1	$ 134.15
		49	Outline of Specifications		1						4									5	$ 914.68
		50	List of Governing Specifications		1						4									5	$ 914.68
		51	TxDOT Form 1002		1						1									2	$ 377.61
		52	TxDOT Form 2443		1						1									2	$ 377.61
		53	TxDOT Form 2229		1						1									2	$ 377.61
		54	Engineer's Estimate		1						6									7	$ 1,272.73
		55	TxDOT Form Estimate (TxDOTConnect)		1						6									7	$ 1,272.73
		56	City Bid Tabulation Form		1						12									13	$ 2,346.88
		57	Environmental Scope Development Tool		1										2					3	$ 622.90
		58	Design Criteria		1						4									5	$ 914.68
		59	Complete action items report and complete review comment forms		1						8									9	$ 1,630.78
		60	Engineer's Seal		1						1									2	$ 377.61
		61	Contract time determination						2			2								4	$ 793.41
		62	Certifications (ROW, Utilities, etc.)								1									1	$ 179.02
		63	Temporary Road Closure Request								1									1	$ 179.02
		64	Construction Speed Zone Request		1						2									3	$ 556.63
		65	TDLR Registration Form								2									2	$ 358.05
		66	Performance end date		1						4									5	$ 914.68
		67	Redlines showing quality control		1															1	$ 198.58
		68	Utility Contact List		1															1	$ 198.58
			QA/QC		8				12		24	40	8						4	96	$ 16,357.04
	C		Safety Review																		
		1	Create pdf package of TCP		2						4	4	4							14	$ 2,286.82
		2	Submit TCP documents for review		1															1	$ 198.58
		3	Address comments and resubmit final pdf package of TCP		2						8	20	20							50	$ 7,697.13
		4	Attend Safety Review Meeting (virtual meeting, PM and up to 2 local staff)		4						4									8	$ 1,510.43
			QA/QC		4						4	4	4						2	18	$ 3,024.55
	D		District Design Reviews																		
		1	Attend 30% District Design Review		2						2									4	$ 755.22
		2	Attend 60% District Design Review		2						2									4	$ 755.22
		3	Attend 95% District Design Review		2						2									4	$ 755.22
		4	Attend 100% District Design Review		2						2									4	$ 755.22
1.5	Surveys																				
	A		Safety Plan of Action coordination with Subconsultant		4						4									8	$ 1,510.43
	B		Geophysical permit coordination with Subconsultant		4						4									8	$ 1,510.43
	C		Clearance from federal agencies coordination with Subconsultant		4						4									8	$ 1,510.43
			General coordination and QAQC of Subconsultant's work		12						8									20	$ 3,815.20
1.6	Utility Investigation																				
			General coordination and QAQC of Subconsultant's work		12						6									18	$ 3,457.15
1.7	Utility Coordination																				
			Review of Subconsultant's workplan		2															2	$ 397.17
	A		Meet with City and perform on-site inspection								4									4	$ 716.10
	B		Coordinate activities with City		8						8									16	$ 3,020.87
	C		Utility coordination meetings (20 meetings)								20									20	$ 3,580.49
	D		Coordinate drawings with visual utilities		8						8									16	$ 3,020.87
	E		Provide initial project notification letters		8						8									16	$ 3,020.87
	F		Electrical service coordination								40									40	$ 7,160.98
	G		Utility Contact List Review		8						8									16	$ 3,020.87
			General coordination and QAQC of Subconsultant's work		12						8									20	$ 3,815.20
1.8	Geotechnical Borings and Investigation																				
	A		Safety Plan of Action coordination with Subconsultant		4						4									8	$ 1,510.43
	B		Geophysical permit coordination with Subconsultant		4						4									8	$ 1,510.43
	C		Clearance from federal agencies coordination with Subconsultant		4						4									8	$ 1,510.43
			General coordination and QAQC of Subconsultant's work		12						8									20	$ 3,815.20
1.9	Environmental Clearance																				
	A		GSA and CBP Reporting and Coordination		2										8					10	$ 2,094.45
	B		Data Collection and Field Reconnaissance	2	2										24	20	60			108	$ 20,366.45
	C		Constraints Analysis and Mapping	2	4										24	20	40			90	$ 16,966.83
	D		Categorical Exclusion Checklist	2	2										8	8				20	$ 3,880.55
	E		Environmental Technical Analyses	2	4										88	60				154	$ 28,621.36
1.10	System Requirements																				
	A		Coordination meetings with TTI and City IT Department	6	6	12	12													36	$ 9,402.24
1.11	See Hourly Billing Rates Fee Table for this section																				
1.12	See Hourly Billing Rates Fee Table for this section																				

Classification	Project Manager II	Project Manager I	Task Leader	ITS Planner II	Quality Manager	Senior Engineer	Project Engineer	Design Engineer	EIT	Senior Design Technician	Intern	Senior Environmental Planner	Environmental Planner	GIS Analyst	Project Analyst	Document Controls	Total Hours	Total $
Loaded Rate	$ 326.06	$ 198.58	$ 280.27	$ 240.92	$ 271.07	$ 262.55	$ 243.45	$ 179.02	$ 134.15	$ 159.24	$ 80.54	$ 212.16	$ 141.75	$ 189.84	$ 152.33	$ 170.28		
Total Hours	71	683	30	25	12	241	145	2714	3829	454	220	162	108	100	50	22	8866	
Total $	$ 23,150.53	$ 135,632.66	$ 8,408.17	$ 6,023.09	$ 3,252.81	$ 63,275.48	$ 35,300.96	$ 485,872.40	$ 513,672.97	$ 72,292.75	$ 17,718.36	$ 34,369.94	$ 15,308.66	$ 18,983.96	$ 7,616.59	$ 3,746.17		$ 1,444,625.51
																	HNTB Total Lump Sum Labor $	$ 1,444,625.51
																	HNTB Total Expenses	$ 16,348.00
																	HNTB Total Lump Sum Fee	$ 1,460,973.51

HNTB - HOURLY BILLING RATES

			Classification	Project Manager II	Project Manager I	Task Leader	Project Engineer	Design Engineer	EIT	Scheduler	Project Analyst	Document Controls	Total Hours	Total $
			Loaded Rate	$ 326.06	$ 198.58	$ 280.27	$ 243.45	$ 179.02	$ 134.15	$ 170.28	$ 152.33	$ 170.28		
1.2	Project Management													
	A		Prepare monthly progress reports (up to 22 reports)	11	22	22							55	$ 14,121.53
	B		Prepare and submit monthly invoices (up to 22 invoices)							22	110	22	154	$ 24,248.84
1.11	Bidding													
	A													
		1	Provide complete sealed set of plans		1			2	2				5	$ 824.94
		2	Provide complete sealed set of technical specifications and list of governing specifications		1			1					2	$ 377.61
		3	Provide unit price bid proposal form		1			1					2	$ 377.61
		4	Provide detailed cost estimate		1			1					2	$ 377.61
		5	Provide Construction Time Determination		1			1					2	$ 377.61
	B													
		1	Respond to questions from prospective bidders (up to 10 questions)					10					10	$ 1,790.24
		2	Attend a pre-bid conference meeting (1 meeting, 2 local staff)		2			2					4	$ 755.22
		3	Prepare addendums (up to 30 sheets)		4			20	40				64	$ 9,740.96
	C													
		1	Engineer's cost estimate line item review		4			20	20				44	$ 7,057.89
		2	Engineer's bid tab review and recommendation letter		4			4					8	$ 1,510.43
1.12	Construction													
	A		Attend a pre-construction meeting (1 meeting, 2 local staff)		1			1					2	$ 377.61
	B		Attend partnering meeting (1 meeting, 2 local staff)		1			1					2	$ 377.61
	C		Attend field meetings and make visits to site (1 local staff with 18 meetings and 18 visits)					18					18	$ 3,222.44
	D		Calculate quantities and assist the Owner in preparing change orders (assume up to 20 change orders)		8			20					28	$ 5,169.16
	E		Review and approval of shop drawings (assume up to 30)		15		15	30					60	$ 12,001.31
	F		Respond to requests for information (RFIs) (assume up to 50)		25			50					75	$ 13,915.82
	G		Provide redesign, which will include changes to the affected plan (assume up to 5 redesigns, up to 5 sheets per redesign)		4			30	30				64	$ 10,189.67
	H		Participate in "punch list" inspection and provide one (1) punch list to Owner (1 field visit per location, 1 local staff)					8					8	$ 1,432.20
	I		Produce and provide one (1) set of Record Drawings		2			8	40				50	$ 7,195.49
	J		Provide letter confirming project has been constructed to plans		1			1					2	$ 377.61
	K		TTI and City IT Department Coordination											
		1	Two (2) TTI Coordination Meetings	2	2	4							8	$ 2,170.38
		2	Two (2) City IT Department Coordination Meetings	2	2	4							8	$ 2,170.38
			Total Hours	**15**	**102**	**30**	**15**	**229**	**132**	**22**	**110**	**22**	**677**	
			Total $	**$ 4,890.96**	**$ 20,255.54**	**$ 8,408.17**	**$ 3,651.82**	**$ 40,996.60**	**$ 17,708.24**	**$ 3,746.17**	**$ 16,756.51**	**$ 3,746.17**		**$ 120,160.16**
													HNTB Total Hourly Billing Rates Labor $	**$ 120,160.16**

HNTB - OTHER DIRECT EXPENSES

Other Direct Expenses	Unit	Unit Cost	Units	Total $
Lodging/Hotel - Taxes and Fees	day/person	$ 30.00	10	$ 300.00
Lodging/Hotel (Taxes/fees not included)	day/person	$ 98.00	10	$ 980.00
Meals (Excluding alcohol & tips) (Overnight stay required)	day/person	$ 59.00	20	$ 1,180.00
Mileage	mile	$ 0.625	800	$ 500.00
Air Travel - Out of State - 2+ Wks Notice (Coach)	Rd Trip/person	$ 1,000.00	10	$ 10,000.00
Taxi/Cab fare	each/person	$ 45.00	10	$ 450.00
Photocopies B/W (8 1/2" X 11")	each	$ 0.25	500	$ 125.00
Photocopies B/W (11" X 17")	each	$ 0.35	8,030	$ 2,810.50
CDs/DVDs	each	$ 2.50	1	$ 2.50
			HNTB Direct Expenses Total $	**$16,348.00**

FXSA - Lump Sum

	Classification	Program Manager/Principal	Quality Manager	Surveyor (RPLS) - Senior	Surveyor (RPLS) - Junior	Survey Technician (Surveyor-In-Training) - SIT	Survey Technician	Administrative/Clerical	Abstractor (Property Deed Researcher, Courthouse or Internet research)	Survey Supervisor (Crew Chief)	Survey Instrument Technician (Rodman)	SUE Field Coordinator	Senior Engineer	SUE Technician	SUE Designating Person	Total Hours	Total $
	Loaded Rate	$ 360.50	$ 206.69	$ 222.96	$ 155.42	$ 108.42	$ 101.49	$ 63.68	$ 152.48	$ 115.22	$ 70.48	$ 135.53	$ 195.16	$ 140.95	$ 126.04		
1.1	**Project Management**																
	Prepare Monthly Progress Reports and Project Invoices				10	10		32				8	24			84	$ 10,444.45
	Conference Call Meetings with Prime to Review Progress											32	32			64	$ 10,582.33
	Prepare, distribute, and file both written and electronic correspondence							8					32			40	$ 6,754.74
1.5	**Survey**																
	Project Coordination																
	Internal Project Kickoff Meeting and Coordination	1	1		1	1	1		1	1	1					8	$ 1,270.70
	Safety Action Plan for City		4			10		4								18	$ 2,165.73
	Safety Action Plan for TxDOT		4			10		4								18	$ 2,165.73
	Right of Entry for Federal Facilities (5 Staff) (GSA, CBP and DPS)	1		1	1	1	1			1	1					7	$ 1,134.48
	Clearance from federal agencies (5 staff)(GSA, CBP and DPS)	1		1	1	1	1			1	1					7	$ 1,134.48
	Prepare Traffic Control Plan	1	1		1	1										4	$ 831.04
	NB BOTA Cargo Lanes																
	Establish Horizontal Control - NAD83.TXSP Central Zone						1			2	2					5	$ 472.87
	Establish Vertical Control - NAVD88.GEOID 2012A-Survey Feet						1			2	2					5	$ 472.87
	Prepare signed, sealed and dated Horizontal and Vertical Control Plans with Index Sheet				2	2	4									8	$ 933.62
	Review available design survey and Boundary/ROW as provided by City and TxDOT				1	2	8									11	$ 1,184.15
	Deed, Plat and ROW Research							2	12							14	$ 1,957.17
	Working Sketch					2	8									10	$ 1,028.74
	Field Recon									8	8					16	$ 1,485.54
	Conduct Boundary and ROW Determination - Depict Boundary and ROW lines on Drawing			1	2	4	4									11	$ 1,373.43
	Locate visible utilities and those marked by 811									6	6					12	$ 1,114.16
	Locate and depict topographical features and existing improvements									16	16					32	$ 2,971.08
	Locate and depict existing drainage structures, culverts and manholes.									4	4					8	$ 742.77
	Lidar Scan Project Area - Provide Client with Point Cloud		1			8				12	12					33	$ 3,302.38
	Prepare a 3D and 2D Planimetric Survey - DWG and DGN	1	1	1	5	12	40									60	$ 6,927.78
	Prepare a TIN drawing to display 1-foot contours					2	4									6	$ 622.79
	Maps, plans, or sketches showing the results of field surveys (electronic pdf)			1	2			1								4	$ 597.48
	Digital files or media acceptable by the City containing field survey data (ASCII Data files)				1			1								2	$ 219.10
	Field survey notes (electronic pdf and hard copies)				1			1								2	$ 219.10
	Quality Assurance / Quality Control		8													8	$ 1,653.56
	SB BOTA Lanes																
	Establish Horizontal Control - NAD83.TXSP Central Zone						1			2	2					5	$ 472.87
	Establish Vertical Control - NAVD88.GEOID 2012A-Survey Feet						1			2	2					5	$ 472.87
	Prepare signed, sealed and dated Horizontal and Vertical Control Plans with Index Sheet				1	1	2									4	$ 466.81
	Review available design survey and Boundary/ROW as provided by City and TxDOT				1	1	4									6	$ 669.79
	Deed, Plat and ROW Research							2	8							10	$ 1,347.24
	Working Sketch					1	4									5	$ 514.37
	Field Recon									6	6					12	$ 1,114.16
	Conduct Boundary and ROW Determination - Depict Boundary and ROW lines on Drawing			1	2	4	4									11	$ 1,373.43
	Locate visible utilities and those marked by 811									2	2					4	$ 371.39
	Locate and depict topographical features and existing improvements									8	8					16	$ 1,485.54
	Locate and depict existing drainage structures, culverts and manholes.									2	2					4	$ 371.39
	Lidar Scan Project Area - Provide Client with Point Cloud		1			4				6	6					17	$ 1,754.54
	Prepare a 3D and 2D Planimetric Survey - DWG and DGN	1	1	1	2	4	24									33	$ 3,970.36
	Prepare a TIN drawing to display 1-foot contours					1	2									3	$ 311.40
	Maps, plans, or sketches showing the results of field surveys (electronic pdf)			1	2			1								4	$ 597.48
	Digital files or media acceptable by the City containing field survey data (ASCII Data files)				1			1								2	$ 219.10
	Field survey notes (electronic pdf and hard copies)				1			1								2	$ 219.10
	Quality Assurance / Quality Control		4													4	$ 826.78
	SB Zaragoza Lanes																
	Establish Horizontal Control - NAD83.TXSP Central Zone						1			2	2					5	$ 472.87
	Establish Vertical Control - NAVD88.GEOID 2012A-Survey Feet						1			2	2					5	$ 472.87
	Prepare signed, sealed and dated Horizontal and Vertical Control Plans with Index Sheet				1	1	2									4	$ 466.81
	Review available design survey and Boundary/ROW as provided by City and TxDOT				1	1	4									6	$ 669.79
	Deed, Plat and ROW Research							2	8							10	$ 1,347.24
	Working Sketch					1	4									5	$ 514.37
	Field Recon									6	6					12	$ 1,114.16
	Conduct Boundary and ROW Determination - Depict Boundary and ROW lines on Drawing			1	2	4	4									11	$ 1,373.43
	Locate visible utilities and those marked by 811									2	2					4	$ 371.39
	Locate and depict topographical features and existing improvements									8	8					16	$ 1,485.54
	Locate and depict existing drainage structures, culverts and manholes.									2	2					4	$ 371.39
	Lidar Scan Project Area - Provide Client with Point Cloud		1			4				6	6					17	$ 1,754.54
	Prepare a 3D and 2D Planimetric Survey - DWG and DGN	1	1	1	2	4	24									33	$ 3,970.36
	Prepare a TIN drawing to display 1-foot contours					1	2									3	$ 311.40
	Maps, plans, or sketches showing the results of field surveys (electronic pdf)			1	2			1								4	$ 597.48
	Digital files or media acceptable by the City containing field survey data (ASCII Data files)				1			1								2	$ 219.10
	Field survey notes (electronic pdf and hard copies)				1			1								2	$ 219.10
	Quality Assurance / Quality Control		4													4	$ 826.78
	1 Area (500x500 Sq/ft)																
	Establish Horizontal Control - NAD83.TXSP Central Zone						2			4	4					10	$ 945.74
	Establish Vertical Control - NAVD88.GEOID 2012A-Survey Feet						2			4	4					10	$ 945.74
	Prepare signed, sealed and dated Horizontal and Vertical Control Plans with Index Sheet				4	4	8									16	$ 1,867.25

	Classification	Program Manager/Principal	Quality Manager	Surveyor (RPLS) - Senior	Surveyor (RPLS) - Junior	Survey Technician (Surveyor-In-Training) - SIT	Survey Technician	Administrative/Clerical	Abstractor (Property Deed Researcher, Courthouse or Internet research)	Survey Supervisor (Crew Chief)	Survey Instrument Technician (Rodman)	SUE Field Coordinator	Senior Engineer	SUE Technician	SUE Designating Person	Total Hours	Total $
	Loaded Rate	$ 360.50	$ 206.69	$ 222.96	$ 155.42	$ 108.42	$ 101.49	$ 63.68	$ 152.48	$ 115.22	$ 70.48	$ 135.53	$ 195.16	$ 140.95	$ 126.04		
	Review available design survey and Boundary/ROW as provided by City and TxDOT				2	4	16									22	$ 2,368.31
	Deed, Plat and ROW Research							4	24							28	$ 3,914.35
	Working Sketch					2	8									10	$ 1,028.74
	Field Recon									16	16					32	$ 2,971.08
	Conduct Boundary and ROW Determination - Depict Boundary and ROW lines on Drawing			1	4	8	8									21	$ 2,523.89
	Locate visible utilities and those marked by 811									12	12					24	$ 2,228.31
	Locate and depict topographical features and existing improvements									24	24					48	$ 4,456.63
	Locate and depict existing drainage structures, culverts and manholes.									8	8					16	$ 1,485.54
	Prepare a 3D and 2D Planimetric Survey - DWG and DGN	1	1	1	7	16	56									82	$ 9,296.09
	Prepare a TIN drawing to display 1-foot contours					2	8									10	$ 1,028.74
	Maps, plans, or sketches showing the results of field surveys (electronic pdf)			2	2			2								6	$ 884.12
	Digital files or media acceptable by the City containing field survey data (ASCII Data files)				1			1								2	$ 219.10
	Field survey notes (electronic pdf and hard copies)				1			1								2	$ 219.10
	Quality Assurance / Quality Control		16													16	$ 3,307.12
1.6	**Utility Investigation**																
	Utility Quality Levels - See FXSA Unit Costs																
	Management and Supervision of Subsurface Utility Engineering Activities	4										32	32			68	$ 12,024.35
	QA/QC Reviews		28					16				20	20			84	$ 13,420.34
1.7	**Utility Coordination**																
	Prepare and Coordinate Work Plan	1	4									32	32			69	$ 11,769.61
	Attend Initial Project Meeting			8								8	8			24	$ 4,429.27
	Document all Correspondence and Communications											32	32			64	$ 10,582.33
	Provide Initial Project Notification Letters											32	32	8	8	80	$ 12,718.29
	Obtain all Permits and Rights of Entry		4									32	32			68	$ 11,409.11
	Implement a schedule for Periodic Progress Meetings											24	24	8	8	64	$ 10,072.71
	Develop and Provide Utility Contact List/Utility Conflict Matrix		4									32	32			68	$ 11,409.11
	Coordinate with Local Utilities Committees											32	32	8	8	80	$ 12,718.29
	Schedule utility Coordination Meetings											32	32			64	$ 10,582.33
	Provide Utility Owners the General Characteristics and Footprint of Project												32			32	$ 6,245.28
	Total Hours	13	89	23	69	134	265	87	53	177	177	348	428	24	24	1911	
	Total $	$ 4,686.55	$ 18,395.85	$ 5,128.10	$ 10,723.70	$ 14,528.52	$ 26,894.02	$ 5,540.42	$ 8,081.65	$ 20,393.20	$ 12,474.43	$ 47,165.45	$ 83,530.58	$ 3,382.90	$ 3,024.99		$ 263,950.36

FXSA Total Labor $	**$ 263,950.36**
FXSA Total Expenses	**$ 24,757.75**
FXSA Total Unit Costs	**$ 7,275.00**
FXSA Total Fee	**$ 295,983.11**

FXSA - OTHER DIRECT EXPENSES

Other Direct Expenses	Unit	Unit Cost	Units	Total $
Photocopies B/W (8 1/2" X 11")	each	$ 0.25	65	$ 16.25
Photocopies B/W (11" X 17")	each	$ 0.35	65	$ 22.75
Photocopies Color (11" X 17")	each	$ 1.25	65	$ 81.25
Drawing Binders (variable depth for 11" X 17" paper)	each	$ 35.00	5	$ 175.00
CDs/DVDs	each	$ 2.50	5	$ 12.50
Trimble X7 Scanner	per day	$ 650.00	3	$ 1,950.00
TMA (1 TMA with Driver)	per day	$ 1,250.00	10	$ 12,500.00
TCP for Surveying Services	per day	$ 1,000.00	10	$ 10,000.00
			FXSA Direct Expenses Total $	**$ 24,757.75**

FXSA - Utility Engineering & Coordination Services Unit Costs

Services To Be Provided	Unit	Units	Rate	Total $
SUE (Quality Level C and D)				
Includes labor and equipment for records research, CADD, and mapping.	LF	10,000	$ 0.68	$ 6,800.00
SUE (Quality Level B - Utility Designation)				
Includes labor and equipment for records research, designating, engineering, surveying, CADD mapping and limited traffic control.	LF		$ 1.55	$ -
SUE (Quality Level A - Utility Locate, Test Holes)				
Includes labor and equipment for vacuum excavation, engineering, surveying, CADD, and limited traffic control. These prices reflect that a Quality Level B service has been provided.				
Level A: 0 to 5 ft.	each		$ 1,075.00	$ -
Level A: > 5 to 8 ft.	each		$ 1,450.00	$ -
Level A: > 8 to 13 ft.	each		$ 1,800.00	$ -
Level A: > 13 to 20 ft.	each		$ 2,300.00	$ -
Level A: > 20 ft.	VF		$ 205.00	$ -
SUE Mobilization/Demobilization				
These costs are intended to be a one-time expense compensation for mobilizing/demobilizing personnel and equipment portal to portal. Vacuum excavation truck (non-local)	Mile	100	$ 4.75	$ 475.00
			FXSA Unit Costs Total	**$ 7,275.00**

HVJ - Lump Sum

		Classification	Administrative/Clerical	Engineer - Principal	Engineer - Senior	Engineer (Project)	Engineer Technician	Engineer-In-Training	Total Hours	Total $
		Loaded Rate	$ 83.03	$ 230.65	$ 193.75	$ 169.15	$ 76.88	$ 123.01		
1.1	Project Management									
		Monthly Reports (5 months)				5			5	$ 845.73
		Prepare and submit invoices	5						5	$ 415.17
		Right of Entry and Clearance from Federal Agencies	40						40	$ 3,321.40
1.8	Geotechnical Borings and Investigation									
		Safety Plan of Action						8	8	$ 984.12
		Geophysical Permit						8	8	$ 984.12
		Staking					10		10	$ 768.84
		Boring Layout						8	8	$ 984.12
		Field Coordination						8	8	$ 984.12
		Traffic Control Plans						12	12	$ 1,476.18
		Borehole Logging					40		40	$ 3,075.37
		Pavement Coring					40		40	$ 3,075.37
		Review Lab Samples and assign testing				2		4	6	$ 830.35
		Boring Logs Preparation						8	8	$ 984.12
		Foundation Design Recommendations						16	16	$ 1,968.23
		Draft Report			2	4		16	22	$ 3,032.31
		Final Report		2	2	4		8	16	$ 2,509.50
		Total Hours	**45**	**2**	**4**	**15**	**90**	**96**	**252**	
		Total $	**$ 3,736.57**	**$ 461.30**	**$ 774.99**	**$ 2,537.18**	**$ 6,919.57**	**$ 11,809.41**		**$ 26,239.02**

HVJ Total Labor $	**$ 26,239.02**
HVJ Total Expenses	**$ 8,937.50**
HVJ Total Unit Costs	**$ 22,224.00**
HVJ Total Fee	**$ 57,400.52**

HVJ - OTHER DIRECT EXPENSES

Other Direct Expenses	Unit	Unit Cost	Units	Total $
Mileage	mile	0.625	300	187.50
TMA (1 TMA with Driver)	per day	1,250.00	7	8,750.00
			HVJ Direct Expenses Total $	**$8,937.50**

HVJ - Unit Costs

Services To Be Provided	Test Code	Unit	Consultant Proposal UC Rate	Units	Total $
Concrete/AC Patch		per patch	$ 375.00	6	$ 2,250.00
Core/drill operator/technician and coring equipment used to drill flexible and rigid pavement (2-man crew) 6-in. diameter cores		inch	$ 21.00	24	$ 504.00
Soil Boring/Rock Coring with TCP (< 60 ft.)	Tex-132-E	LF	$ 38.00	290	$ 11,020.00
Stand By of Crew		hour	$ 400.00	4	$ 1,600.00
Unconfined Compressive Strength (Rock)	ASTM D2938	each	$ 300.00	5	$ 1,500.00
Unconfined Compressive Strength (Soil)	ASTM D2166	each	$ 200.00	5	$ 1,000.00
Liquid Limit of Soils (LL)	each	Tex-104-E	$ 35.00	24	$ 840.00
Plastic Limit of Soils (PL)	each	Tex-105-E	$ 35.00	24	$ 840.00
Mobilization/Demobilization of Drilling Rig	per mile		$ 6.00	300	$ 1,800.00
Determination of Moisture Content in Soils	each	Tex-103-E	$ 14.00	30	$ 420.00
Determining Percentage of Soils Finer than the 75 micrometer (No. 200 Sieve)	each	Tex-111-E	$ 45.00	10	$ 450.00
				HVJ Unit Costs Total $	**$ 22,224.00**

HNTB - Rates				
Classification	Direct Labor Cost (Range)	Audited Overhead Rate	Profit	Hourly Billing Rate
Project Manager II	$107 - $130	146.94%	12.00%	$ 326.06
Project Manager I	$65 - $79	146.94%	12.00%	$ 198.58
Task Leader	$92 - $112	146.94%	12.00%	$ 280.27
Quality Manager	$89 - $108	146.94%	12.00%	$ 271.07
Senior Engineer	$86 - $105	146.94%	12.00%	$ 262.55
Project Engineer	$75 - $97	146.94%	12.00%	$ 243.45
Design Engineer	$59 - $75	146.94%	12.00%	$ 179.02
EIT	$44 - $54	146.94%	12.00%	$ 134.15
Intern	$27 - $33	146.94%	12.00%	$ 80.54
Senior Environmental Planner	$70 - $85	146.94%	12.00%	$ 212.16
Environmental Planner	$47 - $57	146.94%	12.00%	$ 141.75
ITS Planner II	$79 - $96	146.94%	12.00%	$ 240.92
Senior Design Technician	$52 - $64	146.94%	12.00%	$ 159.24
GIS Analyst	$62 - $76	146.94%	12.00%	$ 189.84
Scheduler	$56 - $68	146.94%	12.00%	$ 170.28
Project Analyst	$50 - $61	146.94%	12.00%	$ 152.33
Contract Administrator	$28 - $34	146.94%	12.00%	$ 83.99
Document Controls	$56 - $68	146.94%	12.00%	$ 170.28

FXSA - Rates				
Classification	Base Rate	Audited Overhead Rate	Profit	Hourly Billing Rate
Program Manager/Principal	$ 127.88	156.28%	10.00%	$ 360.50
Quality Manager	$ 73.32	156.28%	10.00%	$ 206.69
CADD Operator - Senior	$ 35.00	156.28%	10.00%	$ 98.67
CADD Operator - Junior	$ 32.50	156.28%	10.00%	$ 91.62
GIS Technician - Senior	$ 38.46	156.28%	10.00%	$ 108.42
GIS Technician - Junior	$ 28.85	156.28%	10.00%	$ 81.33
Surveyor (RPLS) - Senior	$ 79.09	156.28%	10.00%	$ 222.96
Surveyor (RPLS) - Junior	$ 55.13	156.28%	10.00%	$ 155.42
Survey Technician (Surveyor-In-Training) - SIT	$ 38.46	156.28%	10.00%	$ 108.42
Survey Technician	$ 36.00	156.28%	10.00%	$ 101.49
Administrative/Clerical	$ 22.59	156.28%	10.00%	$ 63.68
Abstractor (Property Deed Researcher, Courthouse or Internet research)	$ 54.09	156.28%	10.00%	$ 152.48
Survey Supervisor (Crew Chief)	$ 40.87	156.28%	10.00%	$ 115.22
Survey Instrument Technician (Rodman)	$ 25.00	156.28%	10.00%	$ 70.48
SUE Field Coordinator	$ 48.08	156.28%	10.00%	$ 135.53
Senior Engineer	$ 69.23	156.28%	10.00%	$ 195.16
SUE Technician	$ 50.00	156.28%	10.00%	$ 140.95
SUE Designating Person	$ 44.71	156.28%	10.00%	$ 126.04

HVJ - Rates				
Classification	Base Rate	Audited Overhead Rate	Profit	Hourly Billing Rate
Administrative/Clerical	$ 27.00	177.06%	11.00%	$ 83.03
Engineer - Principal	$ 75.00	177.06%	11.00%	$ 230.65
Engineer - Senior	$ 63.00	177.06%	11.00%	$ 193.75
Engineer (Design)	$ 50.00	177.06%	11.00%	$ 153.77
Engineer (Project)	$ 55.00	177.06%	11.00%	$ 169.15
Engineer Technician	$ 25.00	177.06%	11.00%	$ 76.88
Engineer Technician - Junior	$ 18.00	177.06%	11.00%	$ 55.36
Engineer Technician - Senior	$ 35.00	177.06%	11.00%	$ 107.64
Engineer-In-Training	$ 40.00	177.06%	11.00%	$ 123.01
Geologist - Junior	$ 40.00	177.06%	11.00%	$ 123.01
Geologist - Senior	$ 50.00	177.06%	11.00%	$ 153.77
Project Manager	$ 60.00	177.06%	11.00%	$ 184.52
CADD Operator	$ 30.00	177.06%	11.00%	$ 92.26

ATTACHMENT "C"
CONSULTANT'S BASIC AND ADDITIONAL SERVICES

For the **"DESIGN FOR INTELLIGENT TRANSPORTATION SYSTEM (ITS) INFRASTRUCTURE AT ZARAGOZA AND BRIDGE OF THE AMERICAS (BOTA) INTERNATIONAL PORTS OF ENTRY (POE)"** hereinafter referred to as the Project, the Consultant will provide the Basic and Additional Services as noted herein.

BASIC SERVICES OF THE CONSULTANT

GENERAL

1. The Consultant agrees to perform professional services in connection with the Project as hereinafter stated.

2. The Consultant shall comply with the City of El Paso Engineering Department Construction Document Guidelines, which are in effect at the time of this Agreement and are available in the City Engineering Department, in the performance of the services requested under this Agreement.

3. The Consultant shall serve as the Owner's professional representative in those phases of the Project to which this Agreement applies, and shall give consultation and advice to the Owner during the performance of services.

4. The Owner is relying upon the skill, reasonable care and knowledge of the Consultant to furnish the Owner with oversight and management of the Project within the allocated budget. The Owner's review of any documents prepared by the Consultant is only general in nature and its obligation to approve and accept the work in no way relieves the Consultant of responsibility for any specific deficiencies in the project.

REPORT/CONCEPT PHASE

1. Upon receipt of the Owner's written authorization to proceed with the **Report Phase**, the Consultant shall:

a. Consult with the Owner to determine the requirements of the Project and together with the Owner develop a mutually acceptable scope for the Project.

b. Provide preliminary investigations, studies, topographic surveys including ties to known monuments of right-of-way lines, general supervision of any other services obtained as described in Part 1.c. of this section and interpreting or incorporating results of any such services for inclusion in the Preliminary Study and Report referred to in Part 1.d. of this section.

c. (1) Provide consultation and advice as to the necessity of providing or obtaining other services such as: (a) Property surveys, boundary surveys, right-of-way surveys, and utility surveys, (b) Core borings, probings, and hydrographic surveys, (c) Laboratory testing, and (d) Inspection or other special consultation; (2) Act as the Owner's representative in

connection with such services; and (3) If concurred with and authorized by the Owner, provide, procure, or assist in procuring such Additional Services.

d. Prepare a Preliminary Study and Report on the Project based on the mutually accepted program in sufficient detail to indicate clearly the problems involved and the alternative solutions available to the Owner, to include schematic layouts, sketches, flow diagrams and reports of studies, and a general opinion of probable construction costs for such of the above listed improvements to be included in the Project, and to set forth the Consultant's recommendations.

e. As per Attachment "D", furnish the Preliminary Study and Report and a general opinion of probable construction cost opinion to the Owner.

2. Upon receipt of the Preliminary Study and Report and before the Consultant is authorized to proceed with the Preliminary Design Phase, the Owner at its option may designate in writing various construction contracts into which the Project shall be divided, each of which may include one or more of the above listed improvements to be constructed. If the Owner designates various construction contracts into which the Project is to be divided, the Consultant shall thereafter treat each construction contract as a separate Project under this Agreement. Each construction contract shall be separately bid and the Consultant shall prepare separate preliminary design, and final design drawings, specifications, proposal forms, notices to bidders, construction contract documents, and other required documents for each construction contract.

3. As identified in the Scope of Work in Attachment "A", the Consultant shall investigate the extent and character of any potential soil or water contamination on the properties identified in the Scope of Work, conduct asbestos investigations, environmental site assessments, and provide other environmental engineering services as required and authorized. Services not included in the original scope of work shall be considered Additional Services. The Consultant shall perform such professional services as may be necessary to accomplish the work required to be performed under this Agreement, in accordance with this Agreement, applicable Texas Commission on Environmental Quality and Texas Department of State Health Services Regulations, and any and all applicable state, federal and local laws. The Consultant shall develop an Investigation Plan for the identified properties. Upon approval of the Investigation Plan by the City, the City shall arrange to issue a Notice to Proceed for the Consultant to proceed in relation to an identified property.

PHASE I - PRELIMINARY DESIGN PHASE

The Consultant shall do the following:

1. Consult with the Owner to determine the Owner's requirements for the Project.

2. Provide at the Consultant's sole expense right-of-way surveys, boundary surveys, topographic surveys, drainage surveys, and soil investigations as needed to design the Project and as required by the Scope of Work of the Agreement; obtain all available information from all utility companies and other affected agencies including, but not limited to, the Texas Department of Transportation and the U.S. Department of Interior,

Bureau of Reclamation, as needed to complete the proper design. This does not, however, include property surveys and legal descriptions as needed to acquire additional right-of-way or additional property.

3. Obtain all available horizontal and vertical locations of public utilities, and fully coordinate design of the Project with public utilities in an effort to minimize relocation of utilities as much as possible.

4. Make drawings from field measurements of existing construction when required for planning additions or alterations thereto.

5. Provide consultation and advice as to the necessity of providing or obtaining other services such as the types described herein, and act as the Owner's representative in connection with any such services, and if concurred with and authorized by the Owner, provide, procure, or assist in procuring such Additional Services.

6. Review with the Owner alternative approaches in regard to the construction of the Project. The Owner at its option may designate in writing various construction contracts into which the Project shall be divided. The Consultant may request additional reasonable compensation if the Owner designates various construction contracts into which the Project is to be divided. The Consultant shall thereafter treat each construction contract as a separate Project under this Agreement. Each construction contract shall be separately bid and the Consultant shall prepare separate preliminary design, pre-final design, and final design specifications, proposal forms, notices to bidders, construction contract documents, and other required documents for each construction contract.

7. Prepare for approval by the Owner preliminary design documents consisting of evaluation of existing structural report, design criteria, drawings, and outline specifications to develop, and establish the scope of each construction contract.

8. Prepare a detailed opinion of probable construction costs for each construction contract containing the main construction components, based on the information given in the preliminary design documents.

9. As per Attachment "D", furnish copies of the above preliminary design documents and opinion of probable construction costs for each construction contract. If the above preliminary design documents are not approved by the Owner, the Consultant shall furnish copies of the resubmitted preliminary design documents at no additional cost to the Owner.

PHASE II - PRE-FINAL DESIGN PHASE

The Consultant shall do the following separately:

1. Prepare required documents and assist the Owner in obtaining approval of such governmental authorities as may have jurisdiction over the design criteria applicable to each construction contract. The Consultant's assistance in obtaining such approvals shall include participation in submissions to and negotiations with the appropriate authorities.

The Consultant shall be fully responsible for coordination with all utility companies to resolve conflicts pertaining to location of utility lines and shall exercise customary and usual professional care for obtaining utility clearances. Since some utility locations may not be recorded or mapped, additional efforts to locate utilities maybe required as an additional service upon written approval of the Owner.

2. On the basis of the approved preliminary design documents and subject to approval of design criteria, prepare for incorporation in the construction contract documents detailed drawings and plans, hereinafter called the **"Drawings,"** to show the character and scope of the work to be performed by construction contractors on each construction contract, instructions to bidders, general conditions, special conditions, and technical provisions, hereinafter called **"Specifications."** These plans shall include the required cross sections from actual fieldwork for estimated earthwork quantities.

3. Advise the Owner of any adjustment to the Consultant's previous opinion of probable construction costs for each construction contract caused by changes in scope, design requirements, general market conditions, or construction costs and furnish a revised opinion of probable construction costs, based on the completed Drawings and Specifications. The Consultant expressly authorizes any person designated by the Owner to review at any time prior to the Bidding Phase any opinion of probable construction costs made by the Consultant. The Consultant agrees to cooperate fully in such review, and shall furnish the access to all pertinent information upon which the Consultant's cost opinions were based. In addition, detailed estimates to include orderly presented takeoff sheets, summary and main summary sheets are to be provided to the Owner. Nothing in this provision shall be construed as limiting or waiving the right of the Owner to obtain such information at any other time, or as relieving the Consultant of the responsibility of preparing opinions of probable construction costs. The Owner understands that the Consultant has no control over the cost of availability of labor, equipment, market conditions, or the contractor's method of pricing and that the Consultant's opinion of probable construction costs are made on the basis of professional judgment and experience. The Consultant makes no warranty that the bids will not vary from the opinion of probable construction costs.

4. Prepare proposal forms.

5. As per Attachment "D", furnish to the Owner copies of the Drawings for review by the Owner, other governmental authorities, and the public utilities. If the Drawings are not approved by the Owner, the Consultant shall furnish copies of the resubmitted Drawings at no additional cost to the Owner. Furnish to the Owner copies of the Specifications and copies of the design analysis showing all engineering calculations for review by the Owner, other governmental authorities who may have jurisdiction over each construction contract, and the public utilities.

PHASE III - FINAL DESIGN PHASE

The Consultant shall do the following:

1. Incorporate changes requested by the Owner and other governmental authorities after review of pre-final design documents and perform redesign necessitated by public utility conflicts.

2. Coordinate closely with utility companies during the Preliminary Design and Pre-Final Design Phases. The amount of redesign necessary to accommodate utility company comments on the pre-final design drawings is expected to be in proportion to the effectiveness of that coordination and is to be performed by the Consultant as part of the Final Design Phase of this Agreement. The Consultant shall obtain written utility clearance from all utility companies affected by the scope of this Project as part of the Final Design Phase of this Agreement.

3. Submit to the Texas Department of Licensing and Regulation, or a State Certified ADA consultant, a set of Final Design Drawings for ADA review and approval.

4. As per Attachment "D", furnish to the Owner copies of final design Drawings and Specifications for review and approval prior to the reproduction for bidding purposes.

5. As per Attachment "D", furnish to the Owner copies of the Drawings and Specifications in final approved form for bidding purposes for each construction contract.

6. Additional copies of the drawings and specifications beyond those identified in Attachment "D", required for public utilities and other agencies, will be provided by the Consultant as an Additional Service.

BIDDING PHASE

Upon receipt of Owner's written request, the Consultant shall provide any of the following services during the Bidding Phase:

1. Assist the Owner in the determination of the bidding period and bid date and provide necessary data for preparation of the notice to bidders by the Owner as required for advertising purposes.

2. Assist the Owner in responding to all questions from prospective bidders concerning the Drawings and Specifications.

3. Attend a pre-bid conference, if any, to explain the Project and to answer questions regarding the Project.

4. Prepare addenda to the Drawings and Specifications as may be required during the advertising period. Any addenda issued shall be approved by all agencies having approval

authority over the Drawings and Specifications. As per Attachment "D", deliver copies of all addenda to the Owner for appropriate action.

5. As identified in Attachment "A", assist the Owner in evaluating bids, including obtaining and providing to the Owner reasonably available information as to the quality, ability, and performance record of the three lowest responsible bidders or assist the Owner in rating all bidders using Best Value Evaluation Criteria provided by the Owner, including obtaining and providing to the Owner reasonably available information as to the quality, ability, and performance record of the bidders. If Best Value Evaluation Criteria are required after the consulting fees have been negotiated and accepted, Consultant may request Additional Services fees.

6. Advise the Owner concerning the acceptability of subcontractors and other persons and organizations proposed by the general construction contractor for those portions of the work for which such acceptability is required by the construction contract documents.

CONSTRUCTION PHASE

At Owner's request, the Consultant shall provide any of the following services associated with the Construction Phase:

1. Attend the pre-construction conference to assist the Owner in responding to all questions from the construction contractor.

2. Advise and consult with the Owner and act as the Owner's representative as provided in the general conditions of the Agreement included in the construction contract. Such general conditions shall be the Owner's standard general conditions for construction projects, with such changes and modifications as may be made in such general conditions being agreed to by both the Consultant and the Owner.

3. Unless otherwise stipulated in Attachment "A", Scope of Services, the Consultant will stake one set of control stakes for the construction contractor.

4. Visit each construction site at least once each week or more frequently, if necessary, to observe the progress and quality of the executed work and to determine if such work meets the essential performance and design features and the technical and functional requirements of the construction contract documents. The Consultant shall provide the Owner with typed or printed field notes for each construction site visit. On the basis of these on-site observations, the Consultant shall endeavor to guard the Owner against apparent defects and deficiencies in the permanent work constructed by the construction contractor. The Consultant shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work, and shall not be responsible for the construction means, methods, techniques, sequences, or procedures, or the safety precautions incident thereto. The Consultant's efforts shall be directed toward providing assurance for the Owner that each completed construction contract shall conform to the engineering requirements of the construction contract documents. However, the Consultant shall not be responsible for the construction contractor's failure to perform the construction work in accordance with the construction contract documents.

Nothing in this Agreement shall be construed as requiring the Consultant to assume responsibility for or to guarantee the complete adherence of the construction contractor to the Drawings and Specifications and the construction contract documents.

5. Review shop drawings diagrams, illustrations, brochures, catalog data, schedules, and samples, the results of tests and inspections and other data which the construction contractor is required to submit, for conformance with the design concept of each construction contract and compliance with the information given in the construction contract documents. **Such review must be complete within ten City working days following receipt of submittal documents.** The Consultant shall also assemble maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, and other documents that the construction contractor is required to submit in accordance with the construction contract documents.

6. Issue the Owner's instructions to the construction contractor when required to do so, prepare routine change orders to include independent detailed opinion of probable construction cost for the Owner's approval as required after securing approval of all agencies having approval authority over each construction contract. The Consultant shall require, as the Owner's representative and subject to the written concurrence by the Owner, special inspection or testing of the work, whether or not fabricated, installed, or completed and shall act as interpreter of the terms and conditions of the construction contract documents, subject to the Owner's interpretation of such terms and conditions. If the Owner authorizes such testing, it shall be addressed under the provisions of Additional Services of the Consultant.

7. Based on the Consultant's on-site observations as an experienced and qualified design professional and on review of the construction contractor's applications for payment and supporting data, determine the amount owing to the construction contractor and recommend in writing payment to the construction contractor in such amounts; such recommendation of payment to constitute a representation to the Owner, based on such observations and review, that the work has progressed to the point indicated and that, to the best of the Consultant's knowledge, information and belief, the quality of the work is in accordance with the construction contract documents, subject to an evaluation of the work as a functioning project upon substantial completion, to the results of any subsequent tests called for in the construction contract documents and to any qualifications stated in his approval. By recommending an application for payment, the Consultant shall not be deemed to have represented that the Consultant has made any examination to determine how or for what purposes the construction contractor has used the monies paid on account of each construction contract price.

8. Conduct with the Owner and construction contractor no more **than two brief preliminary inspections**, at times requested by the construction contractor to determine if the Project is ready for final inspection.

9. Schedule and conduct with the Owner, including representative of the City Engineer and the user department, the State ADA inspector or State certified ADA consultant, and the

construction contractor, a final inspection of the Project and prepare and publish a "punch list" of minor deficiencies to be corrected prior to final payment to the construction contractor. The **"punch list"** shall be furnished to the construction contractor and the Owner within **two City working days** after the final inspection.

10. Issue a "Certificate of Substantial Completion" using EJCDC document 1910-8-D (1983 version) when the final inspection reveals that the Project is substantially complete and fully usable for its intended purpose with only minor deficiencies to be corrected. The certificate shall be issued within **two City working days** after the final inspection.

11. Monitor and verify proper correction of all punch list deficiencies. Notify the Owner in writing when all deficiencies have been corrected, and when warranty, maintenance, and operating instructions and other documents have been submitted by the construction contractor. Act on and forward the construction contractor's final invoice for payment.

12. Furnish the Owner one set of reproducible **(D format)** "record" drawings **on Mylar** showing changes made during the construction process, based on the marked-up prints, drawings, and other data furnished by the construction contractor to the Consultant. Also provide project documents in acceptable electronic media format

13. Make written recommendations to the Owner on all claims relating to the execution and progress of the construction work.

14. Notify the Owner of all permanent work which does not conform to the result required in each construction contract; prepare a written report describing any apparent nonconforming permanent work, and make recommendations to the Owner for its correction and, at the Owner's request, have recommendations implemented by the construction contractor.

15. Furnish property surveys and legal descriptions as needed to acquire additional right-of-way or additional property.

16. Revise previously approved studies, reports, design documents, drawings, or specifications, except when said revisions are required as a result of errors, negligence, or other fault on the part of the Consultant.

17. Prepare documents for alternate bids requested by the Owner for construction work for which bids have not been awarded.

18. If Best Value Evaluation Criteria are required after the Consulting fees have been negotiated and accepted, the Consultant may request Additional Service fees.

19. Prepare detailed renderings, exhibits, or scale models for the Project, except as otherwise required herein.

20. Furnish additional tests and inspections, in excess of those required herein during the Construction Phase.

21. Prepare change orders requiring additional significant design changes not provided for in the Agreement, requested by the Owner.

22. Inspect each construction contract site prior to expiration of the guarantee period and report, in written form, observed discrepancies under guarantees provided by the construction contractor.

23. Provide additional or extended services during construction made necessary by: **a)** work damaged by fire or other cause during construction; **b)** prolongation of the construction contract time by more than **twenty-five percent** provided that such prolongation is not caused by errors, negligence, or other fault on the part of the Consultant; **c)** Acceleration of the work schedule involving services beyond normal city working hours; or **d)** the construction contractor's default under the construction contract due to delinquency or insolvency.

24. Provide extensive assistance in the initial start-up and test operation of equipment or devices and the preparation of manuals of operation and maintenance.

25. Serve as an expert witness for the Owner in any litigation or other proceeding involving the Project.

ADDITIONAL SERVICES OF THE CONSULTANT

GENERAL

If authorized in writing by the Owner, through written amendment, the Consultant shall perform or obtain Additional Services noted below, which are not covered within the Agreement. No claim for Additional Services or cost shall be allowed unless the same was done pursuant to a written authorization dated prior to the Additional Services or cost and which was authorized pursuant to the policies and procedures of the Owner (i.e., passage by City Council). The Owner shall pay for such Additional Services as indicated in the Agreement.

1. Furnish core borings, probings, and hydrographic surveys; laboratory testing; inspection of samples or materials; and other special consultations.

2. Provide Additional Services due to significant changes in the general scope of the Project or its design including, but not limited to, changes in size, complexity, or character of construction if the changes are inconsistent with approvals or instructions previously given by the Owner including revisions made necessary by adjustments in the Owner's scope or budget, except where the Consultant's preliminary study and report, preliminary design, pre-final design, or final design cost opinions exceed the budgeted amount, or in the case where all responsible bids exceed the Consultant's final design cost opinions by **ten percent** or more.

3. Furnish additional copies of studies, reports, and additional prints of Drawings and Specifications in excess of those required herein.

4. Provide investigations involving detailed consideration of operation, maintenance, and overhead expenses as well as the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals and valuations, detailed quantity surveys of material or labor.

5. Provide Additional Services in connection with the Project not otherwise provided for in this Agreement, except where those services are required as a result of negligence or other fault on the part of the Consultant.

RESIDENT PROJECT SERVICES

1. If directed in writing by the Owner, one or more full-time Resident Project Representatives shall be furnished and directed by the Consultant in order to provide more extensive representation at each construction site during the Construction Phase. Such resident project representation shall be paid for by the Owner.

2. The duties and responsibilities and the limitations on the authority of the Resident Project Representative shall be as set forth in writing by the City Engineer before such services begin.

3. Through the continuous on-site observations of the work in progress and field checks of materials and equipment by the Resident Project Representative, the Consultant shall endeavor to provide further protection for the Owner against defects and deficiencies in the work of the construction contractors, but the furnishings of such resident project representation shall not make the Consultant responsible for the construction contractor's failure to perform the construction work in accordance with the construction contract documents.

ATTACHMENT "D"
PAYMENT SCHEDULE

For the project known as **"DESIGN FOR INTELLIGENT TRANSPORTATION SYSTEM (ITS) INFRASTRUCTURE AT ZARAGOZA AND BRIDGE OF THE AMERICAS (BOTA) INTERNATIONAL PORTS OF ENTRY (POE)"**, hereinafter referred to as the Project, the Owner will compensate the Consultant an amount not to exceed **$** for all Basic Services and reimbursables noted within the Agreement and its attachments.

PAYMENT SCHEDULE

Basic services for design shall include the phases listed below at the fixed fee shown for each phase. The remainder of the fixed contract amount, if any, shall consist of the estimate for the time and materials for the bidding phase and construction phase.

Payment to Consultant

Lump Sum Payment to Consultant based on Task and Subtask Completion in accordance with Attachment B

Time and materials shall be billed to Owner by Consultant pursuant to the schedule provided in the consultant's proposal found in **Attachment "B"**. The time shown in **Attachment "B"** is an estimate. Should the services rendered during the construction phase exceed the estimated amount, written authorization will be required prior to rendering service. Written authorization shall be only by contract amendment in accordance with the contract provisions and applicable law.

The Owner shall make payments upon presentation of the Consultant's detailed Invoice and accompanying Summary and Progress Report and the Owner's written approval.

The invoice must clearly identify each employee name, title, hours worked, date of performance, task or project description, rate per hours and/or cost, and office/company location.

Reimbursable Costs: Efforts must be made to secure a *reasonable* and/or lowest rate available in the marketplace.

Receipts: Legible itemized receipts are required for the following: 1. Meals 2. Hotel (lodging) costs. 3. Airfare travel costs. 4. Parking costs. 5. Automobile or Equipment Rental costs. 6. Taxi, Limousine, Bus, Subway, or other travel costs. 7. Reproduction. 8. Shipping and Handling. 9. Local Postage/Deliveries (courier services). 10. Communication Costs. ***Tips and alcohol are not reimbursable.***

No single invoice may include items for both August and September of any given year. The Owner's fiscal year begins on September 1st of each year and ends on August 31st of each year. The Consultant's invoices must be separated into items that end August 31st and those that begin on Septembers 1st of any given year, to coincide with the Owner's fiscal year.

Communications Costs: Long Distance telephone calls need to be identified and strictly related to work performed under this Agreement in order to be reimbursable by the Owner. A log is preferred showing the date, person's name called, and explanation. Cell phone monthly charges are reimbursable if usage is strictly related to work performed under this Agreement. Legible itemized cell phone records are required.

Personal Automobile Mileage: Expense report must clearly identify the departure/arrival time, To/From destinations and purpose of trip.

Entertainment Costs: Entertainment costs are not reimbursable, including: 1. Movie costs for "Pay for View" or Cable service. 2. Alcohol costs. 3. Monetary Tips (tipping) for any and all services related to all forms of travel (and/or entertainment).

DELIVERABLE SCHEDULE

CONCEPT PHASE

The services called for in the Report Phase of this Agreement shall be completed concurrently with the preliminary design phase and **five (5) copies** of the Preliminary Study and Report shall be submitted within **30 consecutive calendar days** following the written authorization from the Owner for the Consultant to proceed. The time frame set forth in the written authorization from the Owner for the Consultant to proceed.

PHASE I—PRELIMINARY DESIGN PHASE

The services called for in **Phase I** of this Agreement shall be completed and **ten (10) copies** of any required documents and opinion of probable construction costs shall be submitted within **120 consecutive calendar days** following written authorization from the Owner for the Consultant to proceed. The time frame set forth in the written authorization from the Owner for the Consultant to proceed. If Owner does not approve the preliminary design documents, the Consultant shall furnish **five (5) copies** of the resubmitted design documents.

PHASE II—PRE-FINAL DESIGN PHASE

The services called for in **Phase II** of this Agreement shall be completed and **ten (10) copies** the required documents and services shall be submitted within **90 consecutive calendar** days following written authorization from the Owner for the Consultant to proceed. The time frame set forth in the written authorization from the Owner for the Consultant to proceed.

PHASE III—FINAL DESIGN PHASE

The services called for in **Phase III** of this Agreement shall be completed and **ten (10) copies** of final design Drawings and Specifications for review and approval prior to the reproduction for bidding purposes shall be submitted within **60 consecutive calendar** days following written authorization from the Owner for the Consultant to proceed. After review, the Consultant shall submit to Owner **Three (3) copies** of the final revised design documents and specifications for final check. Upon the approval of the final design documents, the Consultant shall furnish **ten (10) copies** of the final design documents and specifications for bidding to the Owner within **60 consecutive calendar days** following written authorization from the Owner for the Consultant to

proceed. The time frame set forth in the written authorization from the Owner for the Consultant to proceed.

PHASE IV—BIDDING PHASE

Provide services as authorized by Owner during the bid phase as described in Attachment "C" and submit **one (1) copy** of all addenda to the Owner for appropriate action within **four (4) months.**

PHASE V - CONSTRUCTION PHASE

Provide services as authorized by Owner during construction phase as described in Attachment "C" and submit one set of Mylar and one set of electronic media format copies of all record drawings to the Owner within **eighteen (18) months** from the date of substantial completion.

ATTACHMENT "E"
INSURANCE CERTI

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

1/1/2024

DATE (MM/DD/YYYY) 12/15/2022

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

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

PRODUCER	Lockton Companies 444 W. 47th Street, Suite 900 Kansas City MO 64112-1906 (816) 960-9000 kctsu@lockton.com	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS:	
		INSURER(S) AFFORDING COVERAGE	NAIC #
		INSURER A : Zurich American Insurance Company	16535
INSURED 1489174	HNTB CORPORATION 701 BRAZOS, SUITE 450 AUSTIN TX 78701	INSURER B :	
		INSURER C :	
		INSURER D :	
		INSURER E :	
		INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** 18607214 **REVISION NUMBER:** XXXXXXX

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

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT X LOC OTHER:	Y	N	GLO 0769451	1/1/2023	1/1/2024	EACH OCCURRENCE	$ 2,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 1,000,000
							MED EXP (Any one person)	$ 10,000
							PERSONAL & ADV INJURY	$ 2,000,000
							GENERAL AGGREGATE	$ 4,000,000
							PRODUCTS - COMP/OP AGG	$ 4,000,000
								$
A	AUTOMOBILE LIABILITY X ANY AUTO OWNED AUTOS ONLY HIRED AUTOS ONLY SCHEDULED AUTOS NON-OWNED AUTOS ONLY	Y	N	BAP 0769452	1/1/2023	1/1/2024	COMBINED SINGLE LIMIT (Ea accident)	$ 2,000,000
							BODILY INJURY (Per person)	$ XXXXXXX
							BODILY INJURY (Per accident)	$ XXXXXXX
							PROPERTY DAMAGE (Per accident)	$ XXXXXXX
								$ XXXXXXX
	UMBRELLA LIAB OCCUR EXCESS LIAB CLAIMS-MADE DED RETENTION $			NOT APPLICABLE			EACH OCCURRENCE	$ XXXXXXX
							AGGREGATE	$ XXXXXXX
								$ XXXXXXX
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	N	WC 0769453	1/1/2023	1/1/2024	X PER STATUTE OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

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

RE: FOR PROPOSAL PURPOSES, HNTB JOB #74860. CITY OF EL PASO IS AN ADDITIONAL INSURED AS RESPECTS GENERAL LIABILITY AND AUTO LIABILITY, IF REQUIRED BY WRITTEN CONTRACT.

CERTIFICATE HOLDER

18607214
CITY OF EL PASO
300 N. CAMPBELL
EL PASO TX 79901

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Joseph M Agnello

© 1988-2015 ACORD CORPORATION. All rights reserved.

The ACORD name and logo are registered marks of ACORD