MASTER AGREEMENT FOR PROFESSIONAL SERVICES

THIS MASTER AGREEMENT FOR PROFESSIONAL SERVICES ("Agreement"), made and effective this _____ day of _____ 20___ by and between City of Mission, Texas (hereinafter called "Client"), , and S & B Infrastructure, Ltd., a Texas limited partnership, with offices at 15150 Memorial Drive, 5th Floor, Houston, TX 77079 (hereinafter called "S & B").

WHEREAS Client desires to have S & B perform, and S & B desires to perform for Client certain work upon the terms and conditions hereinafter set forth.

WHEREAS Client and S & B agree that this Agreement is subject to all terms and provisions of the City of Mission RFP Environmental Clearance, Traffic Engineering Study and Feasibility Study Services for Mission Madero-Reynosa International Bridge Project on both US and Mexico (the "RFP").

WHEREAS, Client and S & B agree that, to the extent of any conflicts between the RFP and this Agreement, the terms of this Agreement will control.

NOW THEREFORE in consideration of the payments, covenants and agreements hereinafter set forth, the parties hereto covenant and agree as follows:

SECTION 1 – INTERPRETATION

1.1 The following terms will, when used in this Agreement, have the following meanings:

1.1.1 "Consultant" means professionals and other specialists, other than S & B, engaged by Client directly.

1.1.2 "Work" means the work or services described in Attachment 2.

1.2 Words imputing the singular include the plural and vice versa, and words imputing gender include all genders.

1.3 In the event of any inconsistency between any provision of this Agreement, invoice, subcontract, service agreement, or other document issued by S & B or Client, the provision of this Agreement will apply.

SECTION 2 – SCOPE OF WORK

2.1 Client shall order Work shown in Attachment 2.

2.2 Client agrees to furnish items and provide those services for the fulfillment of this Agreement, as identified in Attachment 1 - *Services to be Provided by the Client* attached to this Agreement.

2.3 S & B agrees to furnish all management, project services, supervision, professional services and construction services as specifically required in Attachment 2 - *Services to be Provided by S & B*, attached to this Agreement.

2.4 S & B will start the Work promptly and endeavor to complete it within the agreed schedule requirements set forth in Attachment 3 – *Schedule of Work* attached to this Agreement.

2.5 S & B acknowledges that the Client, at any time, by a written order, may omit certain work and/or require additional work to be performed by S & B. Such changes, in accordance with Section 15, will entitle S & B to an equitable adjustment in compensation and schedule as appropriate.

2.6 If during the performance of the Work any conditions, changes or unforeseen occurrences are encountered that significantly affect or may affect the performance of the Work or the risk involved in providing the Work, S & B will promptly notify the Client. Subsequent to that notification, S & B may:

2.6.1 If practicable in S & B's sole judgment, complete the original scope of Work in accordance with the procedures originally intended in the Proposal; or

2.6.2 Agree with the Client to modify all pertinent portions of the pertinent Work. Such revision shall be in writing, signed by the parties and incorporated herein as required by Section 15. If the parties are unable to agree after reasonable efforts on the part of both parties, Client may terminate the Agreement in accordance with Section 11.2 hereof.

2.7 *Force Majeure*. In the event S & B is delayed or prevented from the performance of any portion(s) of the Work by governmental acts or restrictions, acts of God, scarcity of labor or materials, strikes, or any other reasons beyond S & B's reasonable control, the performance of such portion(s) of the Work will be excused for the period of delay, and the schedule and compensation due S & B will be equitably adjusted.

2.8 S & B is not responsible for and has no authority to direct or stop work being performed by Client or its agents, employees, consultants, or contractors.

2.9 Client will provide to S & B all relevant information or data pertinent to the Work required by S & B as identified in Attachment 1 of this Agreement. S & B is entitled to rely upon the accuracy and completeness of such information and data furnished by or through Client or obtained from third parties, including information and data originating with Consultants, whether such Consultants are engaged at the request of S & B or otherwise. S & B is not required to conduct an independent evaluation of the accuracy or the completeness of such information and S & B is not responsible for any errors or omissions contained in such information. Client warrants that it has disclosed all necessary project site and/or associated facilities information to S & B to enable S & B to perform the Work, and that all such information is accurate.

2.10 Client will disclose the identity and location of all utilities, hidden or obscure man-made objects, and any unusual physical characteristics located on or related to the project site and/or associated facilities. **S & B IS NOT RESPONSIBLE AND CLIENT AGREES TO DEFEND, INDEMNIFY AND HOLD HARMLESS S & B AND ITS SUBCONTRACTORS FOR ANY DAMAGE, CLAIM OR OTHER LIABILITY ASSOCIATED WITH S & B OR ITS SUBCONTRACTORS PENETRATING OR OTHERWISE DAMAGING ANY UNDERGROUND UTILITY, UNDERGROUND STORAGE TANK OR OTHER SUBSURFACE CONDITION NOT PREVIOUSLY IDENTIFIED AND LOCATED OR IMPROPERLY LOCATED BY THE CLIENT OR A UTILITY OR SIMILAR ENTITY**.

2.11 Client will give prompt consideration to all documents relating to the Work presented to it by S & B, and whenever prompt action is necessary, inform S & B of its decisions in such reasonable time so as not to delay the Work of S & B.

SECTION 3 – STANDARDS

3.1 S & B will perform the Work in accordance with the standards of care and diligence normally practiced by recognized firms in performing professional services of similar nature to the Work in Texas.

3.2 S & B will observe and comply with all applicable laws, regulations, rules, codes, standards, permits, licenses and other authorizations relating to the Work in effect as of the date this Agreement was fully executed. If an applicable law, regulation, rule, code, standard or other similar requirement changes during the execution of the pertinent Work, then Client will grant S & B an equitable adjustment to the schedule and pay any extra cost necessary to permit S & B to conform the Work to the changed law, regulation, rule, code, standard or other similar requirement.

3.3 S & B will, to the best of its ability, interpret codes and standards as they apply to the Work, but it is expressly acknowledged and agreed by Client that as the Work progresses, the interpretation of codes and standards by any public authority may differ from the interpretation of S & B, through no fault of S & B, and Client will grant an equitable adjustment to the schedule and pay any extra cost necessary to permit S & B to conform the Work to the interpretation placed upon the codes and standards or to perform to changes or differences in interpretation by such authorities during or after execution of the Work.

SECTION 4 – INDEPENDENT CONTRACTOR

4.1 S & B is an "Independent Contractor" and is not an agent, servant or employee of Client. S & B is subject to the direction and control of Client only in the manner set forth in this Agreement.

SECTION 5 – COMPENSATION

5.1 *Fixed Price Work.* If the Work is on a fixed price basis, then for and in consideration of the Work to be rendered by S & B, Client agrees to timely pay S & B the fixed price amount stated therein in accordance with Section 6 below. Such fixed price does not include any cost items not included in the Scope of Services as defined in Attachment 2 of this Agreement. The fixed price may be adjusted by a mutually agreed upon revision.

5.2 *Cost Reimbursable Work.* If the pertinent Work is on a cost reimbursable basis, then for and in consideration of the Work to be rendered by S & B, Client agrees to timely pay S & B in accordance with Section 6 below and Attachment 4 of this Agreement.

5.3 *Changes.* Any changes in the Work shall be the basis for a corresponding change in the Compensation payable to S & B. Any changes to the Work for any reason including, but not limited to, changes in scope, quantities or resulting from *force majeure* shall be performed on the same pricing basis where possible. S & B is also entitled to reasonable modifications to the schedule resulting from changes.

SECTION 6 – PAYMENT

6.1 S & B will submit an electronic invoice to the Client on a monthly basis for the amounts payable for the Work. Payment of all undisputed portions of S & B invoices will be made electronically within 15 days of the date of the invoice. If Client disputes any items in such invoice it must do so in writing within the 15 day period or it waives such dispute(s). The parties will work together to resolve any such disputes as soon as possible. If Client fails to pay the amount due S & B within 15 days of the date of the invoice, then Client shall automatically add to the payment a charge of one and one-half percent (1.5%) per month that the payment is late. S & B may, after giving seven (7) days written notice to Client, suspend Work pursuant to this Agreement until payment in full has been made by Client.

6.2 *Fixed Price Work*. For invoices for fixed price Work, payment will either be according to Attachment 4 or each invoice will show the percentage of Work completed during the invoice period. Client shall pay S & B the scheduled payment or the percentage of the fixed price that is due which is equal to the percentage of Work completed less payments previously made.

6.3 *Cost Reimbursable Work*. For invoices for cost reimbursable Work, each invoice will state the hours worked, applicable rates for Work performed, and costs charged during the invoice period together with the total amount due and the sum of all prior payments.

6.4 Client's payment to S & B of any amounts payable to S & B under this Agreement does not constitute a waiver of any of S & B's obligations or warranties or a waiver of any of Client's rights with respect thereto. However, Client's final payment to S & B for Work performed does constitute a waiver of all claims by the Client as to that Work except those arising from (1) failure of S & B's services to comply with the requirements of this Agreement, or (2) terms of any special warranties required by this Agreement as identified in Attachment 2 of this Agreement.

SECTION 7 – INSURANCE

7.1 S & B will obtain insurance coverage as specified below:

7.1.1 Commercial general liability insurance in the amount of $1,000,000 combined single per occurrence and in the aggregate covering, but not limited to bodily injury, including death, property damage, contractual liability and products and completed operations coverage. Such insurance will contain a cross liability clause and severability of interest clause and will be endorsed to include Client as an additional insured to the extent of the liabilities assumed by S & B in Section 8 ("Liability and Indemnification") of this Agreement.

7.1.2 Statutory Workers' Compensation and Employer's Liability Insurance with limits of one million dollars ($1,000,000) per employee for injury to, or death of, an employee of S & B engaged in the Work.

7.1.3 If required, Professional Liability Insurance with limits of liability of one million dollars ($1,000,000) each claim and aggregate.

7.2 The insurance provided by S & B pursuant to Section 7.1 will be in accordance with the following terms and conditions.

7.2.1 All insurance policies provided by S & B will be primary to any policies of insurance that are maintained by Client to the extent of S & B's liabilities hereunder.

7.2.2 All insurance policies provided by S & B and any subcontractors will be endorsed to provide a waiver of subrogation in favor of Client to the extent of S & B's liabilities hereunder. Client waives all rights of subrogation against S & B and their subcontractors and all insurance policies held by Client applicable to this work must be endorsed to provide a waiver of subrogation in favor of S & B and their subcontractors to the extent of Client's liabilities hereunder.

7.2.3 S & B will require each subcontractor to provide insurance comparable to that set forth in Paragraphs 7.1.1 and 7.1.2 or in amounts deemed reasonable by S & B based on that subcontractor's scope of work.

7.2.4 The providing of insurance by S & B, or any subcontractor in accordance with the requirements of this Section 7, the insolvency or bankruptcy of an insurer, or failure of any insurer to pay any claim may not be construed to be a waiver by the Client of any of the provisions of the Agreement with respect to the liability of S & B, its subcontractors, their agents or employees.

SECTION 8 – LIABILITY AND INDEMNIFICATION

8.1 **PATENT INFRINGEMENT.** S & B IS LIABLE FOR AND WILL INDEMNIFY AND SAVE CLIENT HARMLESS FROM ANY CLAIMS ARISING OUT OF ANY PATENT INFRINGEMENT PERTAINING TO THE USE OF ANY TOOLS, IMPLEMENTS OR PROCESSES DESIGNATED AND PROVIDED BY S & B TO CLIENT IN THE PERFORMANCE OF THE WORK. CLIENT IS LIABLE FOR AND WILL INDEMNIFY AND SAVE S & B HARMLESS FROM ANY CLAIMS ARISING OUT OF ANY PATENT INFRINGEMENT PERTAINING TO THE USE OF ANY TOOLS, IMPLEMENTS OR PROCESSES DESIGNATED AND PROVIDED BY CLIENT TO S & B OR ITS SUBCONTRACTORS FOR THE PERFORMANCE OF THE WORK OR SPECIFICALLY REQUIRED BY CLIENT.

8.2 **NEGLIGENCE OF S & B.** DURING THE PERIOD OF S & B'S PERFORMANCE OF THE WORK, S & B IS LIABLE FOR, AND WILL INDEMNIFY AND SAVE HARMLESS CLIENT, ITS EMPLOYEES AND AGENTS FROM AND AGAINST ANY AND ALL AWARDS, JUDGMENTS AND EXPENSES (INCLUDING LEGAL FEES) ARISING OUT OF OR DIRECTLY CONNECTED WITH ANY CLAIMS, DEMANDS, CAUSES OF ACTION OR SUITS RESULTING IN DAMAGE TO OR LOSS OF PROPERTY OR INJURY TO OR DEATH OF PERSONS TO THE EXTENT CAUSED BY THE NEGLIGENT PERFORMANCE OF S & B OR ITS SUBCONTRACTORS. THE PARTIES AGREE THAT NEITHER S & B NOR ITS SUBCONTRACTORS ARE LIABLE FOR ANY PORTION OF THE LIABILITY CAUSED BY CLIENT.

8.3 **NEGLIGENCE OF CLIENT.** CLIENT IS LIABLE FOR, AND WILL DEFEND, INDEMNIFY AND SAVE HARMLESS S & B AND ITS SUBCONTRACTORS AGAINST ANY AND ALL CLAIMS, LIABILITIES, LOSS, DAMAGE AND EXPENSES (INCLUDING REASONABLE ATTORNEY FEES) RESULTING FROM OR RELATED TO CLIENT BREACHING ITS REPRESENTATIONS OR OBLIGATIONS IN

THIS AGREEMENT, OR RESULTING FROM THE NEGLIGENT ACTS OR OMISSIONS, WILLFUL MISCONDUCT OR STRICT LIABILITY OF CLIENT OR ITS AGENTS, CONSULTANTS, CONTRACTORS OR SUBCONTRACTORS.

8.4 **JOINT NEGLIGENCE OF S & B AND CLIENT.** IN THE EVENT OF JOINT OR CONCURRENT NEGLIGENCE, FAULT, OR STRICT LIABILITY OF S & B (INCLUDING ITS SUBCONTRACTORS) AND CLIENT (INCLUDING ITS SUBCONTRACTORS), S & B'S INDEMNIFICATION OBLIGATION HEREUNDER (INCLUDING THAT OF S & B'S SUBCONTRACTORS) SHALL BE LIMITED TO S & B AND ITS SUBCONTRACTORS' ALLOCABLE SHARE BASED ON THE JOINT OR CONCURRENT NEGLIGENCE, FAULT, OR STRICT LIABILITY OF S & B AND ITS SUBCONTRACTORS, BUT NOT IN EXCESS OF THE LESSER OF TEN PERCENT OF THE VALUE OF THE WORK WHICH GAVE RISE TO THE LIABILITY OR ONE MILLION UNITED STATES DOLLARS (U.S. $1,000,000.00) PER OCCURRENCE AND IN THE AGGREGATE.

8.5 **CONSEQUENTIAL DAMAGES EXCLUSION**. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES HOWSOEVER CAUSED, INCLUDING BY THE NEGLIGENCE OR STRICT LIABILITY OF CLIENT OR S & B OR S & B'S SUBCONTRACTORS.

8.6 **CLIENT PROPERTY DAMAGE CAP**. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, S & B'S AND ITS SUBCONTRACTORS' MAXIMUM LIABILITY FOR ALL CLAIMS ARISING UNDER THIS CONTRACT RELATING TO DAMAGE TO OR LOSS OF CLIENT PROPERTY OR THE ENVIRONMENT SHALL BE LIMITED TO THE LESSER OF TEN PERCENT OF THE VALUE OF THE WORK WHICH GAVE RISE TO THE LIABILITY OR ONE MILLION STATES DOLLARS (U.S. $1,000,000.00) PER OCCURRENCE AND IN THE AGGREGATE, NO MATTER HOW SUCH CLAIM(S) MAY ARISE, INCLUDING DUE TO THE SOLE OR CONTRIBUTORY NEGLIGENCE OR STRICT LIABILITY OF S & B OR ITS SUBCONTRACTORS, AND CLIENT SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS S & B AND ITS SUBCONTRACTORS AND CAUSE ITS INSURERS TO WAIVE RIGHTS OF SUBROGATION FOR ANY CLAIM IN EXCESS THEREOF, REGARDLESS OF S & B'S OR ITS SUBCONTRACTORS' FAULT, NEGLIGENCE OR STRICT LIABILITY.

8.7 **OVERALL LIMITATION OF LIABILITY**. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, CLIENT AGREES THAT THE LIABILITY OF S & B, AND ITS SUBCONTRACTORS, AGENTS, CONSULTANTS AND EMPLOYEES, WITH RESPECT TO ANY AND ALL CLAIMS ARISING UNDER THIS AGREEMENT OR THE RENDITION OF SERVICES IN CONNECTION THEREWITH, OR THE USE OF ANY PART OF THE WORK, WHETHER BASED IN CONTRACT, BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING S & B'S OR ITS SUBCONTRACTORS' SOLE OR CONTRIBUTORY NEGLIGENCE AND STRICT LIABILITY), STATUTE, EQUITY OR OTHER THEORY OF LAW, SHALL BE LIMITED TO THE LESSER OF TEN PERCENT OF THE VALUE OF THE WORK WHICH GAVE RISE TO THE LIABILITY OR ONE MILLION STATES DOLLARS (U.S. $1,000,000.00) PER OCCURRENCE AND IN THE AGGREGATE, REGARDLESS OF S & B'S OR ITS SUBCONTRACTORS' FAULT, NEGLIGENCE OR STRICT LIABILITY.

SECTION 9 – WARRANTIES

9.1 S & B warrants that the Work will be performed in accordance with the terms and conditions in Article 3.1 of this Agreement.

9.2 *Fixed Price Work*. For Work performed on a fixed price basis, if Client gives S & B prompt written notice of a breach of warranty within a period of one (1) year after Client's acceptance of the Work, S & B will promptly at its own expense re-perform and correct the services of the type originally performed by S & B which is found to be in breach of the warranty.

9.3 *Cost Reimbursable Work*. For Work performed on a cost reimbursable basis, if Client gives S & B prompt written notice of a breach of warranty within a period of one (1) year after Client's acceptance of the Work, S & B shall reperform and correct the services of the type originally performed by S & B which is found to be in breach of the warranty on a cost reimbursable basis with no markup for profit included.

9.4 *Pass-through on Materials and Equipment*. Notwithstanding the previous provisions of this Section 9, S & B does not guarantee or warrant, either expressly or implicitly, the materials in or workmanship of supplies, materials, equipment or machinery manufactured by third parties and furnished or used by S & B in the performance of the Work. S & B will endeavor to obtain from all vendors and suppliers, and assign to Client, the customary warranties and guarantees of such vendors and suppliers with respect thereto, and S & B will, at the sole cost and expense of Client, render reasonable assistance to Client, short of litigation to enforce those warranties and guarantees for the benefit of Client.

9.5 All warranties of any nature made by S & B in connection with the quality and efficiency of the work are limited to those set forth in this Section 9. S & B makes no other warranties or guarantees, express or implied, including, without limitation, warranties of fitness for a particular purpose or merchantability.

SECTION 10 – OWNERSHIP AND USE OF PROJECT DOCUMENTS

10.1 All documents, including drawings, plans, models, designs, specifications and reports which are developed in connection with the Work and prepared by S & B are the property of the Client. Said documents are prepared for and made available for the sole use of the Client and the contents thereof may not be used or relied upon by any other person without the express written authorization of S & B. ANY UNAUTHORIZED USE OR DISTRIBUTION OF THESE DOCUMENTS IS AT THE CLIENT'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO S & B, AND THE CLIENT SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS S & B FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING FROM SAID UNAUTHORIZED USE OR DISTRIBUTION. S & B is entitled to a copy of the said documents for record purposes.

SECTION 11 – TERMINATION

11.1 *Termination for Default.* Either party has the right to terminate this Agreement for cause provided it gives the other party written notice of the reason and gives that other party ten (10) working days to provide a plan to cure the alleged deficiency. The parties will then meet and mutually agree upon a plan to cure the deficiency. If the party alleged to be in default does not implement the mutually agreeable plan within five (5) working days of the date the plan was mutually agreed upon, then the other party may immediately terminate this Agreement. If the Agreement is terminated for default, then Client must pay S & B for all Work properly performed up to and including the date of termination. In accordance with paragraph 6.1 herein, S & B will submit an invoice to Client for those costs and Client must pay that invoice within 15 days of receipt.

11.2 *Termination for Convenience.* Client may also, upon giving written notice to S & B, immediately terminate this Agreement for convenience. If Client terminates this Agreement for convenience:

11.2.1 Client must pay S & B for all Work properly performed up to and including the date of termination; and

11.2.2 Client must reimburse S & B for all costs associated with terminating the contract including but not limited to demobilization, restocking or cancellation charges, and subcontract cancellation charges.

11.2.3 In accordance with paragraph 6.1 above, S & B will submit an invoice to Client for those termination costs and Client must pay that invoice within 15 days of receipt.

11.3 Notwithstanding any termination of this Agreement in accordance with Sections 11.1 or 11.2, the provisions of Section 8 and Section 9 survive such termination.

SECTION 12 – HAZARDOUS CONDITIONS

12.1 If materials are encountered in the field which are judged to be potentially hazardous or a danger to S & B, all field activities associated with Work in that area will cease and the Client will be notified. Required activities for performance of the Work will be re-evaluated by S & B, and a revised cost proposal and revised scope of the Work will be provided to the Client. The activities associated with the revised scope of Work will only be performed when agreed and approved in writing by the Client in accordance with Section 15.

12.2 NOTWITHSTANDING ANY OTHER PROVISION OF THIS AGREEMENT, NOTHING CONTAINED WITHIN THIS AGREEMENT WILL BE CONSTRUED OR INTERPRETED AS REQUIRING S & B OR ITS SUBCONTRACTORS TO ASSUME ANY RESPONSIBILITY OR LIABILITY FOR THE CREATION OR EXISTENCE OF ANY HAZARDOUS OR TOXIC MATERIAL, OR ANY OTHER TYPE OF ENVIRONMENTAL HAZARD, CONTAMINATION OR POLLUTION, WHETHER LATENT OR PATENT, OR TO THE RELEASE THEREOF OR THE VIOLATION OF ANY LAW OR REGULATION RELATING THERETO, AT THE PROJECT SITE AND/OR ASSOCIATED FACILITIES PRIOR TO THE DATE ON WHICH THE PERFORMANCE OF THE WORK COMMENCED.

12.3 Nothing contained within this Agreement may be construed or interpreted as requiring S & B or its subcontractors to assume the status of "Generator" or "Transporter" as the terms appear within the Resource Conservation and Recovery Act, 42 USCA, Section 6901, et seq., as amended with regard to preexisting hazardous or toxic material at a project site.

12.4 The Client acknowledges that S & B and its subcontractors have neither created, generated, nor contributed to the creation, generation or existence of any hazardous or toxic material, or any other type of environmental hazard, contamination or pollution, whether latent or patent, or to the release thereof or the violation of any law or regulation relating thereto, at the project site and/or associated facilities prior to the date on which the performance of the Work is commenced.

SECTION 13 – MISCELLANEOUS

13.1 S & B must not, without first obtaining the written consent of Client, assign all or any portion of this Agreement.

13.2 This Agreement sets forth the entire Agreement between the parties hereto and supersedes and replaces all previous discussions, negotiations, and agreements.

13.3 Each party's right to require strict performance of the obligations of the other party under this Agreement is not extinguished or impaired by the waiver of any default under this Agreement unless such waiver is in writing and is signed by a duly authorized representative of the waiving party, and no such waiver will affect the rights of the waiving party to any other or future default, whether similar or not.

13.4 Each party must provide the other party in a timely manner with full particulars of all claims litigation or other proceedings made, instituted or threatened against or involving such party, which may affect the performance by such party of its obligations under this Agreement.

13.5 Every provision of the Agreement is intended to be severable. If any term or provision is illegal, invalid or unenforceable for any reason whatsoever such will not affect the validity of the remainder. In lieu of such illegal, invalid or unenforceable provision, a provision of similar intent as necessary to render such provision legal, valid and enforceable will be added automatically as part of this Agreement.

13.6 Neither party will, during the term of this Agreement, and for a period of 180 days thereafter, for itself or on behalf of any other person or entity, hire, contract with or engage the services of an employee of the other with whom that party or its personnel was directly involved with the Work, unless that party has obtained the written consent of the other to such hiring or contract and the soliciting party pays to the other a fee of $100,000.00.

SECTION 14 – NOTICE

14.1 All notices to either party by the other required under this Agreement shall be personally delivered or mailed to such party at the following respective addresses:

Client:	**Engineer**:
City of Mission	S & B Infrastructure, Ltd.
1201 E. 8th Street	15150 Memorial Drive, 5th Floor
Mission, TX 78572	Houston, TX 77079

14.2 Either party may, from time to time by written notice to the other, change its address.

14.3 Mailed communications must be sent by prepaid registered post and provided the postal services are not disrupted by strikes, lockouts or severe weather conditions, must be deemed to have been received by the addressee three (3) business days following the mailing thereof. In this Section, "business day" means any day except Saturday, Sunday or a recognized statutory holiday. Personally delivered, telegraphic, and facsimile communications shall be deemed to have been received on the day on which they are served and/or transmitted.

SECTION 15 – CHANGES

15.1 Any changes in the provisions of this Agreement made subsequent to the execution of this Agreement must be made by formal amendments executed and approved in the same manner as this Agreement or by mutually agreed change orders signed by authorized representatives of both parties.

15.2 *Fixed Price Work.* For changes to fixed price Work, the price for any additional work or changes shall be determined as follows where feasible:

15.2.1 Client shall ask S & B to provide an estimated cost to perform Client's desired change of scope on a fixed price basis. Client shall pay S & B for preparing all such estimates on a cost reimbursable basis using S & B's current applicable rates in accordance with Attachment 4 of this Agreement

15.2.2 If the estimated cost for the change is approved by Client, such estimate shall be included in a revision indicating the original value plus the approved change and signed as approved by both parties. S & B shall then perform such change under the terms of this Agreement.

15.2.3 If S & B's estimated cost is unacceptable to Client, the parties will negotiate and attempt to agree upon a mutually acceptable fixed price which, if agreed to, shall be signed and approved by both Parties and then performed by S & B as a Work revision subject to the terms of this Agreement.

15.3 *Cost Reimbursable Work.* For changes to cost reimbursable Work, Client shall pay S & B for all such changes on a cost reimbursable basis using S & B's current applicable rates in accordance with Attachment 4 unless the parties agree to complete the Work on a fixed price basis. In that instance, the parties shall use the procedures set forth in paragraph 15.2 above to determine the compensation for fixed price Work.

15.4 In those instances where S & B and Client are unable to agree upon a fixed price such as where circumstances are such that the Scope cannot be sufficiently defined for a fixed

price or when there is insufficient time for S & B to develop a fixed price, Client may request that S & B perform a change on a cost reimbursable basis using S & B's current applicable rates.

15.5 The schedule shall be equitably adjusted as mutually agreed by the parties for each Change Order.

SECTION 16 – ALTERNATIVE DISPUTE RESOLUTION (ADR)

16.1 Should any dispute arise out of the Work performed in accordance with this Agreement, the complaining party must put the other party on written notice of the dispute. The parties hereto must make every reasonable good faith effort through direct discussion to reach an equitable resolution within fifteen (15) days of the date a party is notified of a dispute by the other party (the "Initial Discussion Period"). If such an effort to resolve said dispute is without success within the Initial Discussion Period, then either party may, upon written notice to the other party, cause the dispute to be referred to officers (one from each party) of the respective parties who have not previously been involved in the dispute. Those officers must meet at a mutually acceptable time and place within ten (10) days after delivery of such notice and thereafter as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute. If, after thirty (30) days or sooner if mutually agreed, the parties fail to resolve the dispute, then either party may commence binding arbitration in accordance with the rules of arbitration of the Commercial Disputes Rules of the American Arbitration Association. All communications between the parties in any way connected with this Agreement and any dispute thereof must be spoken and written in English. All arbitral proceedings must be held in Houston, Harris County, Texas. The arbitrator shall have no power to award punitive or consequential damages. The award rendered by the arbitrator shall be final and judgment may be entered upon it in accordance with applicable law in any court in Texas having jurisdiction thereof.

SECTION 17 – COMPLIANCE WITH LAWS

17.1 Client and S & B represents warrant, and covenant that neither Client nor S & B nor their respective directors, officers, employees, agents, representatives, successors, or assigns has or will take any of the following actions in connection with this Agreement or the project:

a) Violate or take any action that will cause a party to this Agreement to violate or be subject to penalties under the anti-bribery laws or criminal laws of the United States, including without limitation, the Foreign Corrupt Practices Act (FCPA) and the False Claims Act;

b) Violate or take any action that will cause a party to this Agreement to violate or be subject to penalties under the Export Administration Regulations;

c) Contract with, employ, or otherwise retain a Restricted Party. A "Restricted Party" means a person or entity that is (1) listed on, or owned (meaning 50% or greater ownership interest) or otherwise (directly or indirectly) controlled by a person listed on, or acting on behalf of a person listed on, any Sanctions List (as defined

below); (2) located in, incorporated under the laws of, or owned (meaning 50% or greater ownership interest) or otherwise (directly or indirectly) controlled by, or acting on behalf of, a person located in or organized under the laws of a country that is the target of country-wide or territory wide Sanctions (currently Iran, Cuba, Sudan, Syria, and North Korea); or (3) otherwise a target of Sanctions ("target of Sanctions" signifying a person with whom a U.S. Person or other national of a Sanctions Authority would be prohibited or restricted by law from engaging in trade, business, or other activities). "Sanctions" means the economic sanctions laws, regulations, embargoes or restrictive measures administered, enacted, or enforced by: (1) the U.S. International Emergency Economic Powers Act (50 U.S.C. §§ 1701 et seq.), the U.S. Trading with the Enemy Act (50 U.S.C. App. §§ 1 et seq.), or the regulations, rules, and executive orders administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury ("OFAC") (including but not limited to 31 C.F.R., Subtitle B, Chapter V, as amended (the "OFAC Regulations")); (2) the United Nations; (3) the United Arab Emirates, Dubai or Afghanistan; or (4) the respective governmental institutions and agencies of any of the foregoing, including without limitation, OFAC, the United States Department of State, the United Nations Security Council ("UNSC"), the United Arab Emirates, Dubai, or Afghanistan, or other relevant sanctions authority (together "the Sanctions Authorities"). "Sanctions List" means the Specially Designated Nationals and Blocked Persons List ("SDN List") maintained by OFAC, the Denied Persons List, Entity List, and Unverified List maintained by the U.S. Department of Commerce Bureau of Industry and Security, or any similar list maintained by, or public announcement of Sanctions designation made by, any of the Sanctions Authorities.

SECTION 18 – EXCLUSIVE REMEDY

NOTWITHSTANDING ANYTHING IN THIS AGREEMENT TO THE CONTRARY, THERE ARE NO OTHER REPRESENTATIONS OR WARRANTIES EXPRESSED, IMPLIED, OR OTHERWISE MADE BY S & B OTHER THAN THOSE SPECIFICALLY SET FORTH IN THIS AGREEMENT. CLIENT'S RIGHTS AND REMEDIES AS SET FORTH IN THIS AGREEMENT ARE EXCLUSIVE. S & B'S LIABILITIES TO CLIENT ARE LIMITED AS SET FORTH HEREIN, WHETHER ARISING IN CONTRACT, TORT OR AT LAW, AND IRRESPECTIVE OF FAULT, NEGLIGENCE OR STRICT LIABILITY OF S & B OR ITS SUBCONTRACTORS.

SECTION 19 - GOVERNING LAW

19.1 This Agreement will be construed and the rights of Client and S & B will be determined (with respect to both interpretation of this Agreement and its performance) according to the laws of the State of Texas without regard to its conflict of laws provisions.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement to be effective as of the date first stated above.

Client:
City of Mission

By: _____
Name:
Title:
Date: _____

ENGINEER:
S & B Infrastructure, Ltd.

By: _____
Name: Daniel O. Rios, P.E.
Title: President
Date: _____

ATTACHMENTS:

Attachment 1	-	Services to be Provided by Client
Attachment 2	-	Services to be Provided by Engineer
Attachment 3	-	Schedule of Work
Attachment 4	-	Cost Proposal

Attachment 1
Services To Be Provided By The Client

In addition to the services listed in the Agreement, the Client will provide the following services:

(1) Provide **Engineer** with a Notice to Proceed.
(2) Payment for work performed by the **Engineer** and accepted by **Authority** in accordance with this Agreement.
(3) Assistance to the **Engineer**, as necessary, to obtain the required data and information from other local, regional, **State** and Federal agencies that the **Engineer** cannot easily obtain.
(4) Provide timely review and decisions in response to the **Engineer's** request for information and/or required submittals and deliverables, in order for the **Engineer** to maintain an agreed-upon work schedule.
(5) Assistance to the Engineer with TxDOT and/or applicable agencies for items as needed for approvals for environmental permits and/or mitigation, and commitments required as a result of environmental findings.

Attachment 2
Services to be Provided by Engineer

Environmental Clearance, Traffic Engineering Study and Feasibility Study Services for Mission Madero-Reynosa International Bridge Project on both US and Mexico

- Prepare Mexico Feasibility Studies for proposed international bridge crossing to federal standards to include pedestrians, rail, and vehicle crossing.
- Amend existing US feasibility study to ensure federal standards, traffic study if required, include rail.
- Provide an Environmental Assessment (EA) as needed for the international bridge and approach roads and for the GSA federal facilities.

A Presidential Permit as awarded could include provision for construction of a toll bridge with four roadway lanes for commercial and passenger vehicles and a rail crossing. This bridge could represent the sixth international bridge within Hidalgo County to provide additional access to the State of Tamaulipas, Mexico. Vehicular and Commercial traffic will be connected to I-2/US 83 and Mexican Federal Highway MEX-2. Rail traffic is anticipated to be connected to the U.S. freight network via Rio Valley Switching Company's (a regional short-line rail operator with multiple lines) 41-mile line from an interchange with the Class 1 Union Pacific Railroad in Harlingen, Texas west to Hidalgo County where it connects to the Mission Interchange of the Brazos Pacific Railroad in Mission, TX where the proposed International Bridge rail would connect.

Government and Agency Coordination

Engineer will (if authorized) work at the direction of Program Management staff or designee(s) of the City of Mission, Texas.

Anticipate that U.S. scoping and coordination, which will be initiated as early as possible after Notice to Proceed (NTP) and may include in-person [or virtual] meetings, will be required, at a minimum, with:

- The U.S. Congressional Representatives for the Lower Rio Grande Valley,
- The U.S. Department of State who will ultimately approve processing of an amendment / extension of the City of Mission's 1978 Presidential Permit.
- The U.S. General Services Administration to satisfy permit requirements related to federal or federally leased facilities such as the associated Border Inspection Station and Customs office, etc.
- The U.S. Department of Homeland Security agencies:
  - The U.S. Customs and Border Control regarding facility security, function, and use,
  - The U.S. Immigration and Customs Enforcement (ICE)
  - The U.S. Citizenship and Immigration Service (USCIS)
  - The Federal Emergency Management Agency regarding development in floodplains,
- The U.S. Coast Guard regarding permits and approvals for a bridge over navigable waters.
- The U.S. Department of Transportation:
  - Federal Highway Administration regarding connections to U.S. and Interstate roadways,
  - Federal Railroad Administration regarding freight rail engineering and operations,
  - Federal Transit Administration regarding passenger rail engineering and transit operations,
- The U.S. Environmental Protection Agency regarding potential impacts related to federal CERCLA (Superfund) sites, and water quality,
- The U.S. Department of Defense:
  - U.S. Army Corps of Engineers permits for work in Waters of the U.S. anticipated to be addressed

under the Nationwide Permit program through the Galveston District,

- The U.S. Department of the Interior:
  - o National Parks Service regarding national parks/refuges, monuments, and historic preservation,
  - o U.S. Fish & Wildlife Service regarding potential threatened/endangered species impacts, Bald & Golden Eagle Protection Act, and Migratory Bird Treaty Act compliance,
- The U.S. Department of Agriculture:
  - o Animal & Plant Health Inspection Service (APHIS) regarding inspection facility security, function, and use,
  - o Natural Resource Conservation Service regarding potential impacts on land use and soils management (i.e. Prime and Unique Farmlands),
- The State of Texas:
  - o Listing of the Madero International Bridge on the current regional Border Master Plan and potential funding related (fiscally constrained) Transportation Improvement Plans,
- Freight & International Trade Section coordination with the following committees: o Texas Freight Advisory Committee
  - o Border Trade Advisory Committee
  - o U.S.-Mexico Joint Working Committee
  - o U.S.-Mexico Binational Bridges and Border Crossing Group
    - ❖ Environmental Affairs Division regarding environmental document (anticipated to be an Environmental Assessment) compliance, as federally designated representatives for transportation compliance under the National Environmental Policy Act,
      - Texas General Land Office regarding any State lands or waters within the proposed project area,
      - Texas Railroad Commission for potential impacts to oil & gas activities (i.e. pipelines) which may be in the proposed project limits,
      - Texas Parks & Wildlife Department regarding federal and state listed threatened/endangered/protected species, and state parks,
      - State Historic Preservation Office and Texas Historical Commission regarding potential impacts to archeological or historic resources,
      - Texas Commission on Environmental Quality regarding water quality certifications, and potential impacts related to hazardous or other regulated waste sites,
      - Texas Alcoholic Beverage Commission regarding proposed inspection facility operations and coordination with the Hidalgo District Ports of Entry,
      - Texas Department of Agriculture regarding support for the state/federal bridge applications,
      - Texas Department of Public Safety,
- Rio Grande Valley Metropolitan Planning Organization regarding adoption of the International Bridge on the Metropolitan Transportation Plan [currently not listed on MTP 2015-2040 plan as amended and revised February 2020 or the proposed 2045 plan].
- The County Regional Mobility Authority regarding integration of roadways with currently proposed SH 365 tollway and future International Bridge Transportation Corridor projects.
- E.g.: Rio Valley Switching Company (RVSC) and Border Pacific Railroad (BOP) regarding agreements to connect / allow access to Madero International Bridge rail inspection and potential transloading facilities (as applicable),
- E.g.: Union Pacific Railroad Company (UP) regarding agreements for freight / passenger rail (?) connectivity via BOP, and
- E.g.: Kansas City Southern Railway (KCS) regarding rail interconnection in Reynosa and agreements (US and Mexico) regarding freight/passenger rail access to the International Bridge.

It is anticipated that coordination with Mexico will be required to ensure that the proposed project aligns with Mexican priorities and plans. Similar to the U.S., coordination within Mexico will be required at the local, state,

and national levels, and the U.S. Presidential Permit application must include documentation of Mexican governmental approvals and evidence of any documentation of any contractual arrangement between U.S. entities and Mexican authorities concerning construction of the facility.

To that end, coordination with Mexico would need to be performed by others (e.g. Mexican counterparts) and would include meeting with representatives from state and local agencies, participating in stakeholder and public meetings, providing project updates at bilateral meetings and conferences, and issuance of Diplomatic Notes.

Entities within Mexico that may be included in this coordination are:

- Secretaría de Comunicaciones y Transportes,
- Dirección General de Aduanas,
- Comisión Internacional de Límites y Aguas, and
- Representatives from the City of Reynosa, the Reynosa Municipality, and State of Tamaulipas.

Environmental documentation required by Mexico may include a Manifestación de Impacto Ambiental (MIA), for any areas between the international demarcation line and the terminus of the project in Mexico. Therefore, U. S. team coordination with the Mexico organizations performing this environmental impact study will be beneficial to assure the projects are addressing potential impacts consistently and assist each side with avoiding or minimizing impacts (direct or indirect).

It is anticipated that the documentation required to satisfy the U.S. federal Presidential Permit Renewal (amendment) and State of Texas International Bridge Permit application processes are largely consistent or in many cases identical information. The general scope which Engineer will develop in the application(s) will include an Environmental Assessment level of NEPA documentation generally in a format acceptable to TxDOT and the federal government [primarily USDOS, GSA/USDOT-FRA and FHWA] with supporting field studies and technical reports to address natural and cultural resources, socioeconomic and environmental justice issues. These studies and environmental documentation will evaluate a schematic level design effort and associated traffic studies to be performed by others (e.g. a consulting transportation engineer), will assess all relevant planning and development studies, and public involvement outreach performed for this Permit. The environmental consultant will be required to work in a collaborative fashion with the City's staff, consultants, and governmental partners in support of the many aspects of this binational project. It is also anticipated that the binational committee will require documentation that the Mexico agency counterparts and development team have sufficiently advanced their portion of the project plans to match the proposed environmental and design approvals schedule to facilitate submittal of a complete application to the partner governments leading to a successful outcome and signing of the Presidential Permit.

Non-EA related tasks/services:

1. Interpretive Services
2. Agency coordination/planning, Meetings with federal, state, regional, and local governmental or quasi-governmental stakeholders,
3. Potential Substantial travel to multi-agency coordination/collaboration meetings [though this may be mitigated by Virtual Meeting trends driven by the global COVID-19 pandemic],

Agency Resource Information

- AASHTO - American Association of State Highway and Transportation Officials
- BEG - Bureau of Economic Geology, University of Texas at Austin
- CEQ - Council on Environmental Quality
- ENV - Environmental Affairs Division of the Texas Department of Transportation
- District - One of the 25 geographical districts into which the Texas Department of

Transportation is divided.

- FEMA - Federal Emergency Management Agency
- FHWA - Federal Highway Administration
- IBWC - International Boundary and Water Commission
- MPO - Metropolitan Planning Organization
- NRCS - Natural Resource Conservation Service (formerly Soil Conservation Service)
- SHPO - State Historic Preservation Office
- State - Texas Department of Transportation acting on behalf of the State of Texas
- TARL - Texas Archeological Research Laboratory
- THC - Texas Historical Commission
- TCEQ - Texas Commission on Environmental Quality (formerly TNRCC)
- TPWD - Texas Parks and Wildlife Department
- TxDOT - Texas Department of Transportation
- USACE - United States Army Corps of Engineers
- USCG - United States Coast Guard
- USEPA - United States Environmental Protection Agency
- USFWS - United States Fish and Wildlife Service
- USGS - United States Geological Survey

Environmental Terms

- ACT - Antiquities Code of Texas
- APE - Area of Potential Effects
- Archeological Historic Property - an archeological site eligible for inclusion in the National Register of Historic Places (36 CFR 60) or for designation as a State Archeological Landmark (SAL) (TAC, Title 13, Part 2, Chapter 26).
- CE - Categorical Exclusion Action
- CFR - Code of Federal Regulations
- CSJ - Control Section Job
- Deliverables - Reports for environmental services
- EA - Environmental Assessment
- Environmental Services - environmental documents, studies, research, permit applications, public involvement, training, and other activities for completion of environmental documentation.
- EO - Executive Order
- EPIC - Environmental Permits Issues and Commitments
- Environmental Compliance Toolkits - the official location for approved policies, procedures, standards, and guidance from the Environmental Affairs Division of the State (web address: https://www.txdot.gov/inside-txdot/division/environmental/compliance-toolkits.html)
- FHWA Technical Advisory T 6640.8A (1987) - FHWA Format Guidance
- FONSI - Finding of No Significant Impact (23 CFR 771 and TAC, Title 43)
- Historic-age resource - a building, structure, object, or non-archeological site (defined in accordance with 36 CFR 60) that is at least 50 years old at the time of a transportation project's letting.
- Historic Property - a building, structure, object, or non-archeological site eligible for inclusion in the National Register of Historic Places (36 CFR 60).
- IP - Individual Permit
- ISA - Initial Site Assessment
- MSAT - Mobile Source Air Toxics
- NEPA - National Environmental Policy Act of 1969
- NCHRP - National Cooperative Highway Research Program

- NHPA - National Historic Preservation Act
- NRHP - National Register of Historic Places
- NRI - Nationwide River Inventory
- NWP - Nationwide Permit
- PCN - Pre-Construction Notification
- Project Area - a geographic area designated for performance of specified analyses, such as wetland or archeological studies.
- SAL - State Antiquities Landmark
- Project Area - a geographic area designated for performance of specified analyses, such as wetland or archeological studies. • Section 4(f) – refers to the original section within the U.S. Department of Transportation (DOT) Act of 1966, which established the requirement for consideration of park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development. The law, now codified in 49 U.S.C. §303 and 23 U.S.C. §138, is implemented by the Federal Highway Administration (FHWA) through the regulation 23 CFR §774.
- Section 4(f) Evaluation - an evaluation prepared when a project proposed to use resources from any significant publicly owned public parks, recreation areas, or wildlife and waterfowl refuges and any land from an historic site of national, state, or local significance.
- Section 7 - refers to Section 7 of the Federal Endangered Species Act (ESA) of 1973 (16 U.S.C. §1531 et seq.), called "Interagency Cooperation," which is the mechanism by which Federal agencies ensure the actions they take, including those they fund or authorize, do not jeopardize the existence of any listed species.
- Section 106 - refers to Section 106 of the National Historic Preservation Act of 1966 (54 U.S.C. 306108), which requires Federal agencies to take into account the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment. In addition, federal agencies are required to consult on the Section 106 process with State Historic Preservation Offices (SHPO), Tribal Historic Preservation Offices (THPO), Indian Tribes (to include Alaska Natives) [Tribes], and Native Hawaiian Organizations (NHO).
- SOP - Standard Operating Procedure – established procedure to be followed in carrying out a given operation or in a given situation.
- Study Area - the geographic area to be discussed in an environmental document.
- TAC - Texas Administrative Code
- TPDES - Texas Pollutant Discharge Elimination System
- Transportation Activity - a construction or other project performed by the State or under its jurisdiction
- Transportation Project - The planning, construction, or reconstruction of a transportation facility that the department has the legal authority to plan, construct, or reconstruct, including but not limited to, a public road or highway, bridge, ferry, transit facility, or high occupancy vehicle lane.
- TxDOT NEPA MOU - the December 16, 2014 "Memorandum of Understanding (MOU) between FHWA and TxDOT concerning the State of Texas' Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327."
- TXNDD - Texas Natural Diversity Database
- USC - United States Code
- Wetland Determination - Preliminary study to determine whether a wetland is present.
- UTM - Universal Transverse Mercator
- Wetland Delineation - Demarcation of the boundaries of a wetland in accordance with the most current version of the USACE *Wetlands Delineation Manual* (Technical Report Y-87-1).
- Waters of the U.S. - Jurisdictional limits of the U.S. Army Corps of Engineers under the Clean

Waters Act, as defined in 33 CFR 328.

FUNCTION CODE 102(110) - FEASIBILITY STUDIES – Update US Study and Prepare Mexican Study

Data Collection

Engineer shall conduct field reconnaissance and collect data as necessary to complete the schematic design. Data shall include the following information. Items "a" to "i" will be obtained from the State, if available, while items "j" to "l" will be obtained from other agencies as required.

a. Available Corridor Major Investment Studies
b. Design data from record drawings of existing and proposed facilities
c. Existing and future design year traffic data
d. Roadway inventory information, including the number of lanes, speed limits, pavement widths and rating, bridge widths and ratings, and ROW widths
e. Aerial photos, planimetric mapping, and DTM
f. Environmental Data
g. Previously prepared drainage studies
h. Adopted land use maps and plans as available
i. Federal Emergency Management Agency (FEMA) Flood Boundary Maps and Flood Insurance Studies and Models
j. Public and private utility information
k. Plat research for adjacent properties as available
l. Local Major Thoroughfare Plan

Traffic Engineering Services as it Pertains to Presidential Permitting and Possible Eventual Bond Market Traffic & Revenue (T&R) Projections

TRAFFIC PROJECTIONS FOR PRESIDENTIAL PERMIT RENEWAL / ENVIRONMENTAL CLEARANCE SUPPORT

1. Project Management/Mobilization

This task includes a kick-off meeting with City of Mission's Program Manager (or Designee) and key stakeholders to determine important issues relevant to this study and define any alternatives, the study's overall methodology, and data requirements.

Management of the study will include the following:

- Participating in monthly progress meetings/teleconferences to appraise Program Manager of progress and identify key issues.
- Analyzing the impact of various physical scope considerations on T&R to develop an optimal solution for the Project.
- Attending key working group meetings to discuss preliminary traffic forecast results and provide input on any requirements to optimize the traffic analysis.
- Providing Project Manager with progress reports on a periodic basis and providing minutes of meetings held with project stakeholders; and
- Presenting results to the Program Manager and providing responses to their questions.

2. Review of Existing Information.

Engineer will review and validate existing documentation and traffic information. Based on the analysis of existing data, Engineer will prepare a Project needs assessment and, in coordination with the Program Manager and the City of Mission staff, identify data/resource requirements. Existing information to include previous (limited) Feasibility Studies that examined Private Occupancy Vehicle (POV) and commercial truck

traffic (sans rail projections) and will serve basis of vetted feasibility parameters which the Engineer must evaluate / incorporate as much as possible into ensuing scopes. Engineer must validate and either amend or update key assumptions.

New information relevant to the Project will also be collected, including but not limited to traffic reports, the latest traffic volumes within the study area, historical and forecasted border crossing volumes of relevant international bridges, existing origin-destination (OD) surveys, and relevant socioeconomic data.

3. Border Demand Forecast

Engineer will begin this task with a review of the existing border demand forecasts for the Hidalgo County international bridges. Engineer will prepare a needs assessment to address forecast needs and possible improvements to the previous forecasting methodology, including a review, analysis, and update of the independent variables employed in the previous forecast.

After finalizing the needs assessment of the existing Multiple Linear Regression model forecasts, Engineer will test additional forecasting methods to estimate the best model fit for the Project's T&R forecast.

Engineer will develop, validate, and implement the most statistically valid model to estimate Hidalgo County and Texas border crossing demand for vehicles (passenger and commercial) and rail (container and trains).
As part of Engineer's QA/QC procedure, and to further evaluate the econometric model results, Engineer will reproduce historical transactions and revenue trends for the Project to ensure the strongest correlation between forecast model results and historical data.

4. Travel Demand Model Update

Engineer will obtain and update the HCRMA Binational Assignment Model. As part of this effort, Engineer will utilize U.S.- and Mexico-based travel demand models (TDM). Engineer will update, review, and calibrate all four steps of the U.S. and Mexico TDMs. The final updated trip tables will be assigned binationally to consider travelers' choices between all available POEs and ODs on both sides of the U.S./Mexico border.

5. Traffic Projections for Vehicle and Rail

Engineer will use the travel demand and toll diversion models to develop traffic forecasts for the Project's opening year and a horizon year. Based on these efforts, Engineer will report projected traffic annually for the entire forecast period.

Similar to vehicle crossings, Engineer will estimate the Project's rail (container and trains) demand based on the previously described econometric model methodology and a simplified route choice model. Engineer to utilize Feasibility Study data (where possible) in their analysis to expedite / validate key vehicle traffic projection assumptions.

6. Level of Service Analysis

Engineer will perform a Level of Service (LOS) analysis of the Project's surrounding roadway network, as required by Article 12 of the Presidential Permit application. Engineer's updated Binational Assignment Model will be employed to show the impact of the Project's traffic on local roads and other major arterials of the City of Mission's roadway network.

7. Traffic and Revenue Forecast

Engineer will update the annual traffic estimates for a forecast period of 30 years, beginning with the Project's opening year. The vehicle and rail projections will be adjusted to reflect monthly variations and will take into account other possible variations found as a result of the traffic pattern investigation, such as holidays and other seasonal effects.

8. Documentation
Draft Report: A Draft Report will be prepared to document assumptions, methodologies, inputs, and results. Copies of the Draft Report will be delivered to Program Manager for review and comments.

Final Report: Engineer will evaluate and respond to comments received during the review period. Engineer will then address the comments received during this period and incorporate any necessary revisions in the Final Report.

TRAFFIC PROJECTIONS FOR PROJECT FINANCE / INVESTMENT GRADE TRAFFIC & REVENUE PROJECTIONS

1. Project Management/Mobilization
This task includes a kick-off meeting with PROGRAM MANAGER and the City of Mission staff, The Bridge Director, and key stakeholders to determine important issues relevant to this study and define any alternatives, the study's overall methodology, and data requirements.

Hands-on management of the study will include the following:

- Participating in monthly progress meetings/teleconferences to appraise PROGRAM MANAGER's Project Manager of progress and identify key issues.
- Analyzing the impact of various physical scope considerations on T&R to develop an optimal solution for the Project.
- Attending key working group meetings to discuss preliminary traffic forecast results and provide input on any requirements to optimize the traffic analysis.
- Providing PROGRAM MANAGER's Project Manager with progress reports on a periodic basis and providing minutes of meetings held with project stakeholders; and
- Presenting results to City of Mission staff and providing responses to their questions.

2. Review of Existing Information
Engineer will review and re-validate the information generated for the Presidential Permit Traffic Projections. Based on the analysis of existing data, Engineer will prepare a Project needs assessment and, in coordination with PROGRAM MANAGER and the City of Mission staff, identify data/resource requirements and develop a data collection program. New information relevant to the Project will also be collected, including but not limited to traffic reports, the latest traffic volumes, historical and forecasted border crossing volumes of relevant international bridges, existing origin-destination (OD) surveys, and relevant socioeconomic data regarding the study area.

3. Field Work/Surveys
Engineer will conduct several field work efforts for the proposed study, as described below.

- Traffic Counts for Border Crossings
- Border Crossing Time Assessment via Queue Study
- Origin-Destination (OD) Survey
- Stated Preference (SP) Survey
- Market Research Survey

The results of Engineer's field work efforts will serve as the basis for developing a binational assignment model, which estimates travelers' probabilities of choosing between the international bridge facilities along

the Hidalgo County border as a function of trade-offs in time savings, toll expenditures, other possible travel costs, and other measurable trip attributes, if applicable.

4. Socioeconomic Data Review

The unique nature of the study area and the specific role of the Project requires an analysis of numerous socioeconomic variables at the traffic analysis zone (TAZ) level. Engineer will review the newly released Lower Rio Grande Valley (LGRV) TDM's socioeconomic data and analyze the current socioeconomic conditions of the study area to develop projections for future developments at the TAZ level. For the Mexican portion of the study area, in the Reynosa-Rio Bravo Metropolitan Area, Engineer will require SIREM to conduct a socioeconomic data review due to the lack of existing socioeconomic forecasts at the TAZ level.

5. Border Demand Forecast

Engineer will prepare a needs assessment to address forecast needs and possible improvements to the previous forecasting methodology, including a review, analysis, and update of the independent variables employed in the existing forecast.

After finalizing the needs assessment of the existing Multiple Linear Regression model forecasts, Engineer will test additional forecasting methods to estimate the best model fit for the Project's T&R forecast. Engineer will develop, validate, and implement the most significant model to estimate the Hidalgo County border crossing demand.

Engineer will reproduce historical transactions and revenue trends for the Project to ensure the strongest correlation between forecast model results and historical data.

Engineer will consider evaluating border demand via an independent socioeconomist with a focus on international commerce.

6. Travel Demand Model Update

Engineer will obtain and update the HCRMA Binational Assignment Model, which was originally developed by Engineer for the 365 TOLL project. As part of this effort, Engineer will utilize U.S.- and Mexico-based TDMs. Engineer will update, review, and calibrate all four steps of the U.S. and Mexico TDMs. The final updated trip tables will be assigned binationally to consider travelers' choices between all available POEs and ODs on both sides of the U.S./Mexico border.

4. Traffic and Revenue Forecast

Engineer will use travel demand and toll diversion methodologies to develop traffic forecasts for the Project's opening year and up to four horizon years. Based on these efforts, Engineer will report projected traffic annually for the entire forecast period.

Engineer will update its model toll sensitivity analysis based on the newly developed traffic projections by varying the proposed toll rates and determining the resulting impact on traffic volumes. As a result, a set of toll sensitivity curves will be developed.

8. Sensitivity Analysis

A series of sensitivity tests will be conducted to test different sensitivities to model inputs and the impact of varying toll rates. These tests are designed to assist in developing an improved operating plan, an optimum toll rate, and to understand the impacts of potential changes in assumptions.

9. Risk Analysis

Risk analysis in T&R forecasting helps quantify uncertainties in inputs and determine the impact of these inputs on T&R projections. The steps involved in risk analysis include identifying the risk, modeling the risk, and making the appropriate recommendations.

In this approach, a limited number of model runs are used to determine the statistical relationships between changes in individual inputs—and combinations of inputs—and revenue. A "revenue model" is implemented to transform a limited number of scenarios (using the complete T&R model) into 10,000 unique scenarios selected via Monte Carlo simulation. By evaluating the frequency of different revenue outcomes from these 10,000 scenarios, we can determine—in a statistically valid way—the real-world likelihood of these outcomes.

10. Documentation

Draft Report: A Draft Report will be prepared to document assumptions, methodologies, inputs, and results. Copies of the Draft Report will be delivered to Program Manager staff for review and comments.

Final Report: Engineer will evaluate and respond to comments received during the review period. Engineer will then address the comments received during this period and incorporate any necessary revisions in the Final Report.

SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

1. Environmental Documentation.
2. Technical Reports and Documentation
3. Environmental Assessment (EA) Content and Format
4. Community Impacts
5. Historic Resource Identification, Evaluation and Documentation Services
6. Archeological Background Studies & Survey
7. Air Quality Studies
8. Traffic Noise Technical Reporting
9. Water Resources Analysis and Documentation
10. Clean Water Act, Section 404
11. Wild and Scenic Rivers (if required)- Omitted
12. Edwards Aquifer (if required)- Omitted
13. Floodplain Impacts
14. Coastal Zone and Barrier Impacts (if required)- Omitted
15. Stormwater Permits (Section 402 of the Clean Water Act)
16. USACE Permits
17. USCG Section 9 Permit (33 USC 401)
18. Fish and Wildlife Coordination Act (FWCA)
19. Biological/Natural Resources Management Analyses and Documentation
20. Invasive Species
21. Essential Fish Habitat – Omitted
22. Beneficial Landscaping
23. Farmland Impacts
24. Initial Assessment with Hazardous Materials Project Impact Evaluation Report
25. Regional Toll Analysis (if required)- Omitted
26. Public Involvement (23 CFR §771.111)

27. Section 4(f) Evaluations
28. Section 6(f) Evaluation
29. Indirect and Cumulative Impacts (ICI) Analysis
30. Re-evaluation – Omitted
31. Reference Documents

SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT

Upon receiving the Notice to Proceed (NTP), the Project Manager will schedule a project kick-off meeting with key stakeholders with the objective of confirming the project's schedule, the overall project methodology, and data requirements. The kick-off meeting will include confirming assumptions such as changes in border crossings, general traffic patterns, and overall truck traffic patterns.

Based on this meeting, the Project Manager will develop a Project Management Plan, outlining the identified project stakeholders, specific project procedures, project methodology, data collection needs, schedule, and project contact information. The Project Manager will issue a notice to stakeholders regarding project commencement and may request assistance in gathering existing data, traffic reports for the area, and details and specifics for the Project and/or other planned facilities in the area of influence, as needed.
A dedicated Quality-Assurance and Quality-Control (QA/QC) file will be maintained for the project, indicating all relevant aspects and particularities of the QA/QC procedure at hand, including specific risks, notable computer programs, reviewing methods, and a system to record the results of individual and periodic audits.

1. Environmental Documentation
Each environmental service provided by the Engineer shall have a deliverable. Deliverables shall summarize the methods used for the environmental services and shall summarize the results achieved. The summary of results shall be sufficiently detailed to provide satisfactory basis for thorough review by the State, and (where applicable) agencies with regulatory oversight. All deliverables shall meet regulatory requirements for legal sufficiency and shall adhere to the requirements for reports enumerated in the State's NEPA MOU.

a. Quality Assurance/Quality Control Review
For each deliverable, Engineer shall perform quality assurance quality control (QA/QC) reviews of environmental documents and on other supporting environmental documentation to determine whether documents conform with:

- Current Environmental Compliance Toolkit guidance published by the State's Environmental Affairs Division and in effect as of the date of receipt of the documents or documentation to be reviewed.
- Current state and federal laws, regulations, policies, guidance, agreements, and memoranda of understanding between the State and other state or federal agencies; and
- FHWA and American Association of State Highway and Transportation Officials (AASHTO) guidelines contained in "Improving the Quality of Environmental Documents, A Report of the Joint AASHTO and American Council of Engineering Companies (ACEC) Committee in Cooperation with the Federal Highway Administration" (May 2006) for: o Readability, and
- Use of evidence and data in documents to support conclusions.

Upon request by the State, Engineer shall provide documentation that the QA/QC reviews were performed by qualified staff

b. Deliverables shall contain all data acquired during the environmental service. All deliverables shall be written to be understood by the public and must be in accordance with the State's Environmental Toolkit guidance, documentation standards, current guidelines, policies, and procedures.

c. Electronic versions of each deliverable must be written in software which is compatible to the State and must be provided in a changeable format for future use by the State. Engineer shall supplement all hard copy deliverables with electronic copies in searchable Adobe Acrobat™ (.pdf) format unless another format is specified. Each deliverable shall be a single, searchable .pdf file that mirrors the layout and appearance of the physical deliverable. Engineer shall deliver the electronic files on CD-R, CD-RW media in Microsoft Windows format, or through the ftp site.

d. When the environmental service is to apply for a permit (e.g., United States Coast Guard (USCG) or United States Army Corps of Engineers (USACE), the permit and all supporting documentation shall be the deliverable.

e. Submission of Deliverables

- Deliverables shall consist of technical reports of environmental services performed in addition to documentation for a Categorical Exclusion (CE) determination, including the preparation of a Request for Classification form to classify the project as an Open Ended (d) list CE, if needed, Environmental Assessment (EA) document, or an Environmental Impact Statement (EIS) when applicable. An EA will be required for the project.
- All deliverables must comply with all applicable state and federal environmental laws, regulations and procedures and include all items listed in the Environmental Document Review Checklist.
- On the cover page of each technical report, environmental assessment (EA), finding of no significant impact (FONSI), environmental impact statement (EIS), and record of decision (ROD) prepared under the authority granted by this MOU, and for any memorandum corresponding to any CE determination it makes, Engineer shall insert the following language in a way that is conspicuous to the reader or include it in a CE project record: "The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT."

f. The State will provide the State's and other agency comments on draft deliverables to the Engineer. Engineer shall revise the deliverable:

- to include any State commitments, findings, agreements, or determinations (e.g., wetlands, endangered species consultation, Section 106, or Section 4(f)), required for the Transportation Activity as specified by the State.
- to incorporate the results of public involvement and agency coordination.
- to reflect mitigation measures resulting from comments received or changes in the Transportation Activity; and
- to include with the revised document a comment response form (matrix) in the format provided by the State.

g. All photographs shall be 3.5" x 5" color presentation printed on matte finish photographic paper or 3.5" x 5" color presentation printed on matte white, premium or photo quality laser or inkjet paper. All photographs shall be well focused and clearly depict details relevant to an evaluation of the project area. Provision of photographs shall be one original print of each image or electronic presentations of comparable quality. Comparable quality electronic photograph presentations shall be at least 1200 x 1600-pixel resolution. Photographs shall be attached to separately labeled pages that clearly identify project name; project identification (ID) number; address or Universal Transverse Mercator (UTM) of resource; description of the picture and direction of the photographic view. In addition to the hard-copy prints, an electronic version of each will be submitted with the same identification information as the hard-copy.

2. Technical Reports and Documentation

Definition of technical report and documentation for environmental services: a report, checklist, form, or

analysis detailing resource-specific studies identified during the process of gathering data to make an environmental decision.

Technical reports and documentation must be produced before an environmental document (e.g. EA) is prepared in order to identify issues early in the process. The State will determine what technical reports and documentation will be necessary for any given project. Technical reports and documentation must be prepared for the State with sufficient detail and clarity to support environmental determination(s). All technical reports must be compliant with TxDOT Environmental Compliance Toolkits, guidance, and policy. The environmental document must reference the technical reports.

Environmental technical reports and documentation must include appropriate National Environmental Policy Act of 1969 (NEPA) or federal regulatory language in addition to the purpose and methodology used in delivering the service. Technical reports and forms must include sufficient information to determine the significance of impacts. Some examples of environmental technical reports and documentation are listed below:

- Purpose and Need
- Species Analysis Form (including a Species Analysis Spreadsheet)
- Air Quality Analysis
- Archeological Background Study
- Archeological Antiquities Permit Application
- Archeological Survey Report
- Bicycle and Pedestrian Accommodation
- Chapter 26, Parks and Wildlife Code
- Community Impacts Technical Report or Assessment Technical Report Form
- Farmland Protection Policy Act
- Hazardous Materials
- Historic Resources Project Coordination Request (PCR)
- Historic Resources Survey Research Design
- Historic Resources Survey Report (HRSR)
- Indirect and Cumulative Impacts
- Section 6(f) Land and Water Conservation Fund Act
- Surface Water Analysis Form
- U.S. DOT Section 4(f) Analysis
- NEPA and Project Development
- Public Involvement
- Tier 1 Assessment
- Traffic Noise Analysis
- Work Plan Development

Minimum Deliverables for all documents and technical reports: (Additional deliverables to be identified in a work authorization based on work assigned.)

- Draft Document
- Final Document

3. Environmental Assessment (EA) Content and Format.

- The EA shall meet the requirements of 23 CFR §771.119 and TAC, Title 43, Part 1, Chapter 2. The EA content shall be in sufficient detail to meet regulatory requirements for legal sufficiency and include all items listed in the Environmental Document Review Checklist.

- Exhibits to be included in reports or EAs shall not exceed 11" by 17," and shall be in color. Text pages shall be 8.5" by 11". Exhibits and text in reports or EAs shall be neat and reproducible via photocopying without loss of legibility. The EA documents shall be reproduced on plain white paper unless otherwise approved in advance in writing by the State.
- The EA shall use good quality maps and exhibits and shall incorporate by reference and summarize background data and technical analyses to support the concise discussions of the alternatives and their impacts. The Engineer shall follow the Environmental Assessment Outline and the Environmental Handbook: Preparing an Environmental Assessment located in the Environmental Compliance Toolkits located on the TxDOT website.

Minimum Deliverables: (Additional deliverables to be identified in a work authorization based on work assigned.)

- Preliminary Draft EA for District Review
- Revised Draft EA addressing District comments
- Draft EA for Public Hearing
- Final EA

4. Community Impacts *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Community Impacts includes environmental justice, limited English proficiency, and other issues as addressed in TxDOT Environmental guidance and toolkits.

Engineer shall perform Community Impact Assessments including displacements, changes to access and travel pattern, changes to cohesion, and Environmental Justice analysis (in accordance with Executive Order 12898) and Limited English Proficiency analysis (in accordance with Executive Order 13166).

- Compile analysis to meet requirements of TA 6640.8A. Analysis must conform to applicable current State and FHWA guidance.
- Process for Community Impact Assessment must follow guidance provided in TxDOT's Community Impacts Assessment Toolkit.

5. Historic Resource Identification, Evaluation and Documentation Services *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer shall perform non-archeological historic-age resource studies related to compliance with Section 106 and Section 110 of the NHPA (36 CFR 800). Prior to conducting formal historic resource investigations, a Project Coordination Requests (PCR) must be prepared and approved by the State to determine if further studies are warranted.

The PCR shall comply with the TxDOT Environmental Compliance Toolkits provided by the State's Environmental Affairs Division in effect as of the date of the receipt of the documents.

- Engineer shall revise the PCR to address comments by the State at no additional cost to the State and may be required to integrate the findings into another environmental document. The State assumes responsibility for transmitting the findings to the Texas Historical Commission (THC) and any appropriate consulting parties, and for transmitting THC and consulting parties' comments to the Engineer's Technical Expert. Engineer's Technical Expert is an institution, firm, individual, or team that provides professional scientific services, including but not limited to archeologists, biologists, geologists, historians, or other environmental professions that conduct environmental or cultural assessments required by state or federal law for transportation projects

- Engineer shall conduct tasks associated with public involvement as requested during the historic resources reporting phase and conforming to the methodology outlined in the TxDOT Environmental Compliance Toolkits.
- Engineer shall contact interested parties as requested by the State in order to determine local knowledge of historic resources in the project area. Interested parties include but are not limited to: Certified Local Governments, Historic Preservation Offices, County Historical Commissions, the Historic Bridge Foundation, and other consulting parties.

If State determines a reconnaissance-level Historic Resources Survey is warranted upon review of the PCR, Engineer shall deliver a Research Design and a Reconnaissance-level Historic Resources Survey Report, the contents of which will be required by the State and the online toolkits. The deliverables associated with this project for historic resources are as follows:

- Project Coordination Request- Engineer shall prepare a Project Coordination Request for review and comment by the State.
- Reconnaissance-level Non-Archeological Historic Resources Survey Research Design – If required by the State, Engineer shall prepare a research design for review and comment by the State. The Research Design must conform to the TxDOT Document Standard and Report Template for Preparing an Historic Resource Research Design.
- Reconnaissance-level Non-Archeological Historic Resources Survey Report- Upon acceptance of the PCR and if requested by the State. Engineer shall perform a non-archeological historic resources reconnaissance- level survey conforming to the latest TxDOT Historic Resources Survey Standard. The survey must document each historic-age resource (defined as a building, structure, object, historic district, or non-archeological site at least 45 years old at the time of letting) within the Study Area as approved via the PCR. The Study Area must consist of the Area of Potential Effects (APE), plus parcels that are wholly or partially within the APE.
- Summary of the findings to be included in the environmental document
- Comment Response Forms (as needed for submittals)

6. Archeological Background Studies & Survey *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

- Archeological Background Study- Engineer shall provide an Archeological Background Study produced by a professional archeologist as defined in 13 TAC §26.4(2).
- The Archeological Background Study shall conform to the current Review Standard for Archeological Background Studies, available from the Environmental Compliance Toolkit.
- Unless Engineer has previously completed an Archeological Background Study for the project, the Archeological Background Study must define and consider all alternatives selected for detailed study, including all existing right of way, all proposed new right of way, easements (temporary and permanent), and any other project-specific location designated by the State. The Archeological Background study shall consider the likely depth of impacts resulting from the proposed project. The location of all alternatives selected for detailed study shall be presented on a map or maps as part of the Archeological Background Study.
- For projects in which an Archeological Background Study has already been completed by the Engineer and the project has materially changed --affecting the project limits, proposed new right of way (if any), easements (if any), any other project-specific location designated by the State, and/or the depth of impacts -- the Archeological Background Study shall incorporate the previous study by reference and focus on the project changes.
- To conduct the Archeological Background Study, the professional archeologist shall undertake a review of existing data, including, but not limited to, the Texas Archeological Sites Atlas, geologic maps, soil maps, Potential Archeological Liability Map (PALM) of the project area (if applicable), aerial

photographs, and historic maps. Based on this review, the Archeological Background Study shall identify and plot on a map the areas that require field investigation to evaluate the project's effects on archeological resources and cemeteries and shall identify the areas in which the proposed project would have no effect on archeological resources and cemeteries. The Archeological Background Study shall identify any areas proposed for field investigation where impacts are deep, extending beyond three feet in depth.

- Antiquities Permit Application, Field Surveys, and Survey Report - Engineer shall prepare an application for a Texas Antiquities Permit for an archeological survey of the APE, which must be submitted to the State and the THC for approval. Upon issuance of the permit, Engineer shall conduct the archeological field survey to include pedestrian inspection and shovel testing. The Engineer's Archeologists must excavate shovel tests as appropriate, throughout the APE to characterize the soils, potential disturbances, and determine whether archeological resources are present and, if so, assess those resources. Shovel testing must meet or exceed the Council of Texas Archeologists minimum standards for surveys in Texas. Sites (if any) must be recorded with TARL.

The results of the Archeological Survey must be included in a professional report which makes recommendations with respect to archeological resources. The Archeological Survey Report must be submitted to the State for concurrence with the findings. Upon receiving concurrence from the State, Engineer must prepare final report copies. It is assumed that this project will be a no-collect survey; therefore, artifact curation at TARL will not be required.

- Engineer shall assume that the total width of new ROW will not exceed 200 feet, and ground disturbances associated with the proposed project will be less than three feet in depth, except where the project crosses waters of the U.S. or new bridge structures or culverts will be constructed.
- This scope of work does not include formal National Register eligibility testing of archeological sites or mitigation of adverse effects through data recovery or other means. If required, these services will be performed under a supplemental agreement.

7. Air Quality Studies *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer shall prepare the air quality section in accordance with the current version of the State's Air Quality Handbook, and Air Quality toolkit. If the Air Quality Handbook requires it, the administrative record must contain it and Engineer shall prepare the following air quality elements in the format prescribed in the specific SOP documents or other Air Quality guidance documents:

- Conformity report form and applicable coordination,
- Hot-spot technical report and applicable coordination,
- CO TAQA analysis and associated technical report,
- Qualitative MSAT analysis,
- Quantitative MSAT analysis and associated technical report/meeting notes.
- Congestion Management Process Analysis & Disclosure,
- CHG analysis (only if it becomes a requirement in the Air Quality Handbook)
- Applicable disclosure statements in the environmental document as prescribed in the SOP for Preparing Air Quality Statements,
- Air quality cumulative and indirect impacts analysis as specified in the Cumulative and Indirect Impacts Analysis section of this attachment and include a discussion of the analysis in the environmental document, and
- Response to public comments received on air quality issues.

5. Traffic Noise Technical Reporting *(This scope is for the corresponding section(s) as listed in the Affected*

Environment and Environmental Consequences section of the EA.)

Engineer shall:

- Perform a traffic noise analysis in accordance with the current version of the State's (FHWA approved) "Guidelines for Analysis and Abatement of Roadway Traffic Noise" The current version of the guidance is located on the State's Traffic Noise Toolkit website. Noise analyses shall be performed for all alternatives.
- Comply with all noise policy, guidelines and standards found on the State's Traffic Noise Toolkit website. Upon request, the State will provide the Engineer's Technical Expert with existing and predicted (future) traffic data and, when available, aerial photography.
- By project location site visit, identify adjacent, land use development and photo document representative receivers that might be impacted by highway traffic noise and may benefit from feasible and reasonable noise abatement.
- Determine existing and predicted noise levels for representative receivers, as follows:
  - o For transportation activities on new location, take field measurements of existing noise levels. Field measurements must be accomplished with sound meters that meet or exceed American National Standards Institute (ANSI) S1.4-1983, Type 2.
  - o For transportation activities not on new location, perform computer modeling of existing (if not obtained through field measurements) and predicted (future) noise levels.
  - o Computer modeling must be accomplished with the latest FHWA approved Traffic Noise Model (TNM) software program which must be purchased at the expense of the Engineer's Technical Expert from the software distributor.
  - o Field measurements of existing noise levels and validation of existing model.
  - o Barrier analysis for impacted receivers.
- Identify impacted receivers in accordance with the absolute and relative impact criteria.
- Consider and evaluate all required noise abatement measures for impacted receivers in accordance with the feasible and reasonable criteria.
- Propose noise abatement measures that are both feasible and reasonable.
- Determine predicted (future) noise impact contours for transportation activities where there is adjacent undeveloped property where residential or commercial development is likely to occur in the near future.

6. Water Resources Analysis and Documentation. *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences of the EA).*

Engineer shall provide the following analyses based on request of the State:

- Surface Water Analysis form, which can include analysis of:
  - o Section 404 of the Clean Water Act
  - o Section 303(d) of the Clean Water Act
  - o General Bridge Act/Section 9 of the Rivers and Harbors Act
  - o Section 10 of the Rivers and Harbors Act
  - o Section 401 of the Clean Water Act
  - o Executive Order 11990, Protection of Wetlands
- International Boundary Water Commission (IBWC) Approval
- Waters of the U.S. (WOUS) Delineation Report
- Section 404/10 Impacts Table
- Section 404/10/9 Permitting Package, including: o USACE PCN Permitting Application
  - o USACE IP Permitting Application
  - o USACE LOP Permitting Application

o USACE RGP Permitting Application
o Conditional/Functional Assessment
o Permittee-responsible Mitigation Plan
o Permittee-responsible Mitigation Plan Implementation
o 401 Certification
o USCG Bridge Permit Application
o USCG Exception Request
o USCG Navigational Lighting

All analysis must confirm to TxDOT's latest environmental guidance, toolkits, and templates. Engineer must include as applicable the electronic shape files and meta data of geo-referenced GIS points of all relevant features.

10. Clean Water Act, Section 404 *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

- Engineer shall identify all waters within the boundaries of the project area.
- Engineer shall make a preliminary determination of USACE jurisdiction. Restrict the level of effort to identification without formal delineation
- Engineer shall delineate waters of the United States (WOUS), including wetlands. o Provide documentation which shall include all records from field work and a compilation of field documentation for all WOUS, including wetland delineations. Wetland delineations shall be performed in accordance with the current USACE Wetlands Delineation Manual (Technical Report Y-87-1) and, the appropriate regional supplement, including the Great Plains, Arid West, or Atlantic and Gulf Coastal Plain Supplement to Technical Report Y-87-1.
  o Stake all WOUS boundaries in the field.
- When the State is to apply for a permit, the permit and supporting documentation shall be the report and deliverable.
- Draft and Final Deliverable.
  o Engineer shall produce a draft and final delineation report for WOUS including wetlands. The draft report will be submitted to the State for review and approval by the State and USACE, if applicable. In the final report, address State and USACE comments from the draft report. The revised final report shall be delivered to the State within ten days of receipt of comments from the State or USACE.
  o The location of all sites, cities, villages, highways, rivers and other features or place names discussed in the text and situated in the project locale shall be shown on the appropriate figure. All tables, figures and maps shall have a number, title, appropriate explanatory note, and a source reference. In addition, where applicable, figures and all maps shall display a title, north arrow, scale, legend, and source reference.

  o The report shall be in the following format:
  a) Cover Sheet
  In accordance with the State's NEPA MOU, on the cover page of the WOUS Determination and Delineation Report prepared under the authority granted by the MOU, Engineer shall insert the following language in a way that is conspicuous to the reader or include in a CE project record:
  "The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT."

  b) Introduction
  i. Who authorized the WOUS delineation.

ii. Why the WOUS delineation is being done.
iii. Location of site (USGS 7.5' Map).
iv. Date of field visit(s).
v. Identification of delineators.

c) Methods
i. Brief description of the method used.
ii. State any modification of the method.
iii. Source of existing information.

d) Results and Discussion
i. Description of the site.
ii. Topography of the site.
iii. Plant communities of the site.
iv. Soil types identified on the site.
v. Hydrology information of the site.
vi. Existing wetland mapping (e.g., NWI, state, and local).

e) Findings
i. Types of all WOUS identified on the site (e.g., Cowardin, et al. 1979).
+ Description of WOUS identified.
+ Locations of WOUS.
+ Area of WOUS (in acres).
+ Contrast with non WOUS.
+ How was the WOUS boundary chosen (e.g., feature on landscape).
ii. Types of other waters identified on the site.
+ Description of the other waters.
+ Locations of the other waters.
+ Area of the other waters.
+ How was the other water boundary chosen (e.g., feature on landscape).

f) Conclusion.
i. Table summary of total area and types of all WOUS
ii. A map showing the location of each WOUS, including wetlands, and where a Wetland Data Form was completed.
iii. Statement regarding the need for permits.
iv. Caution that final authority rest with the appropriate agencies.

g) Literature Cited.

h) Appendix (Routine Wetland Determination Data Forms and, if required, Atypical Situation Data Forms).

11. Wild and Scenic Rivers (if required)- Omitted

12. Edwards Aquifer (if required)- Omitted

13. Floodplain Impacts *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer shall determine whether the Transportation Activity has the potential to affect floodplains. Studies for floodplain impacts must fulfill the requirements of Executive Order 11988 and 23 CFR 650, Subpart A. Engineer shall:

- Briefly describe the watershed characteristics of the study area in terms of land uses and changes in land use that may affect stream discharge.
- Briefly describe the streams in the study area, including evidence of stream migration, down cutting, or aggradations.
- Identify the presence and nature (e.g., zone A, zone AE, zone AE with floodway) of any Federal Emergency Management Agency (FEMA) mapped floodplains. Include the panel number.
- Indicate the existence of any significant development associated with the mapped area and identify the jurisdiction responsible for the floodplain.
- Identify the locations where an alternative will encroach on the base (100-year) floodplain ("encroachments"), where an alternative will support incompatible floodplain development and the potential impacts of encroachments and floodplain development. This identification should be included in the text and on a map.
- Include a list of all jurisdictions having control over floodplains for each alternative
- Where an encroachment or support of incompatible floodplain development results in impacts, the EA must provide more detailed information on the location, impacts and appropriate mitigation measures. In addition, if any alternative (l) results in a floodplain encroachment or supports incompatible floodplain development having significant impacts, or (2) requires a commitment to a particular structure size or type, the EA must include an evaluation and discussion of practicable alternatives to the structure or to the significant encroachment. The EA must include exhibits which display the alternatives, the base floodplains and, where applicable, the regulatory floodplains.
- For each alternative encroaching on a designated or regulatory floodplain, the EA must provide a preliminary indication of whether the encroachment would be consistent with or require a revision to the regulatory floodplain. If the preferred alternative encroaches on a regulatory floodplain, the EA must discuss the consistency of the action with the regulatory floodplain. In addition, the EA must document coordination with FEMA and local or state agencies with jurisdiction indicating that revision would be acceptable or that a revision is not required.
- If the preferred alternative includes a floodplain encroachment having significant impacts, the EA
  o The reasons why the proposed action must be located in the floodplain; must include a finding that it is the only practicable alternative as required by 23 CFR 650, Subpart A. The finding must refer to Executive Order 11988 and 23 CFR 650, Subpart A. In such cases the EA must document compliance with the Executive Order 11988 requirements and must be supported by the following information: must include a finding that it is the only practicable alternative as required by 23 CFR 650, Subpart A. The finding must refer to Executive Order 11988 and 23 CFR 650, Subpart A. In such cases the EA must document compliance with the Executive Order 11988 requirements and must be supported by the following information:

14. Coastal Zone and Barrier Impacts (if required)- Omitted

15. Stormwater Permits (Section 402 of the Clean Water Act) *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*
Engineer shall:

- Describe the need to use the TPDES General Permit, TX 150000. The text will describe how the project will comply with the terms of the TPDES, including the Stormwater Pollution Prevention Plan.
- Describe the need for Municipal Separate Storm Sewer System (MS4) notification. List MS4 participating municipalities.

16. USACE Permits *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

- Section 10 of the Rivers and Harbors Act (33 USC 403). Engineer shall determine whether the Transportation Activity requires a Section 10 permit and, if necessary and upon approval by the State, shall prepare and submit permit applications to USACE and obtain the permits.
- Section 404 of the Clean Water Act (33 USC 1344). Engineer shall determine whether the Transportation Activity requires a Section 404 permit (Regional General or Nationwide or Individual Permit (IP)) .If required and upon approval by the State, an additional scope and fee will be required to prepare and submit permit applications (i.e. Regional General Permit (RGP) application, Pre-Construction Notification (PCN), or to USACE and Engineer shall obtain the permit. If necessary, RPG applications, PCNs, and IP applications will be prepared in accordance with the current USACE policies and regulations.
- If the permit is an individual Section 404 permit, upon approval by the State, Engineer shall prepare and submit a Tier 1 checklist or a Tier II 401 certification questionnaire and water quality certification documentation to TCEQ and USACE.
- Engineer shall provide the State with documentation (including all original correspondence) of consultation with USACE and TCEQ.
- Engineer shall keep the State informed during the permit coordination process.

17. USCG Section 9 Permit (33 USC 401) *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer shall:

- Determine whether streams or other water bodies crossed by a proposed transportation facility are navigable as defined in the USCG Commandant Publication P16591.3A, "Bridge Permit Application Guide."
- Consult with the USCG, and FHWA if needed, to obtain Coast Guard concurrence on navigability and the need, if any, for a USCG Bridge Permit.
- Provide the State with documentation (including all original correspondence) of consultation with the Coast Guard.
- Upon approval by the State, submit permit application and obtain a USCG Bridge Permit for bridges crossing navigable waters. The permit(s) shall be obtained in accordance with the USCG Commandant Publication P16591.3A, "Bridge Permit Application Guide."

18. Fish and Wildlife Coordination Act (FWCA) *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer shall identify water body modifications and impacts to wildlife. The Fish and Wildlife Coordination Act (FWCA) applies to projects that would result in the control or modification of a natural stream or body of water and would require a Section 404 Individual Permit.

19. Biological/Natural Resources Management Analyses and Documentation *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer shall provide the following analyses based on request of the State:.

- Species Analysis Form, which can include:
  - o Species Analysis Spreadsheet, with: Habitat Analysis (entire project area)
    - Field survey for protected species
    - Presence/absence survey (include species)

o Tier 1 Site Assessment, with:
  - Early coordination with TPWD
  - Administrative Coordination with TPWD
o Bald and Golden Eagle Protection Act (BGEPA) analysis with coordination assistance

- Farmland Protection Policy Act (FPPA) analysis
- Preparation of USFWS/NMFS species consultation, which can include:
  o Section 7 informal consultation for USFWS/NMFS
  o Section 7 formal consultation for USFWS/NMFS
- All analysis must confirm to TxDOT's latest environmental guidance, toolkits, and templates. Engineer must include as applicable the electronic shape files and meta data of geo-referenced GIS points of all relevant features.

20. Invasive Species *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer shall address Executive Order 13112 on Invasive Species as per the Ecological Resources Handbook (TxDOT Environmental Online Toolkit).

21. Essential Fish Habitat – Omitted

22. Beneficial Landscaping *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Address Executive Memorandum on Beneficial Landscaping of April 26, 1994 as per the Ecological Resources Handbook (TxDOT Environmental Online Toolkit).

23. Farmland Impacts *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Determine farmland impacts. Identification of farmland impacts shall be in accord with the Farmland Protection Policy Act (FPPA) (7 USC 4201 et. seq.) and the Ecological Resources Handbook (TxDOT Environmental Online Toolkit) guidance on addressing FPPA, which includes determining whether the project is exempt or completion of form AD 1006 or CPA 106 as appropriate.

24. Initial Assessment with Hazardous Materials Project Impact Evaluation Report. *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*
Engineer shall:

- Perform an Initial Site Assessment (ISA) for potential hazardous materials impacts for the limits of the study area. Engineer is responsible acquiring the latest version of TxDOT's Hazardous Materials Initial Site Assessment (ISA) located in the Hazardous Materials Toolkit (http://www.txdot.gov/inside-txdot/division/environmental/compliance-toolkits/haz-mat.html). o Note: The ISA must determine the potential for encountering hazardous materials in the study area, including possible environmental liability, increased handling requirements (e.g. soil or groundwater), and potential construction worker health and safety issues.
  o Note: Engineer is responsible for reviewing and being familiar with the State's guidance related to the development of the ISA and the Hazardous Material process. All guidance and information related to this can be found on the Hazardous Materials Toolkit.
- Produce and submit to the State a completed ISA with Hazardous Materials Project Impact Evaluation Report using the State's ISA Environmental Compliance Toolkit guidance format.

- Engineer's completed ISA must include, when applicable, full copies of list search reports, including maps depicting locations, copies of agency file information, photographs, recommendations, and any other supporting information gathered by Engineer to complete the ISA.
- Provide the State a report discussing the known or potential hazardous materials impacts suitable for inclusion in the environmental document, based on the ISA information. The report of hazardous materials impacts shall include, when applicable:
  - o A concise summary of relevant information gathered during the ISA, including sufficient information to show that the study area for the Transportation Activity was adequately investigated for known or potential hazardous material contamination.
  - o A concise description of the scope of the hazardous materials ISA, disclosure of any limitations of the assessment, and a statement indicating who performed the assessment.
  - o A concise summary of the findings of the assessment for each alternative considered, along with an opinion of the potential of an identified site to impact the project during construction.
  - o A discussion of any commitments recommended for performing further investigation of suspect areas, and justification for postponement of further investigation.
  - o A summary of efforts to be employed by the State to avoid or minimize involvement with known or suspected hazardous material contamination sites during construction, and justification for not avoiding contaminated sites within the preferred alternative or corridor alignment.
  - o Disclosure of known or suspected hazardous material contamination that is anticipated to be encountered during construction.
  - o A discussion of any required or recommended special considerations, contingencies, or provisions to handle known or suspected hazardous material contamination during right-of- way negotiation and acquisition, property management, design, and construction.
  - o A summary of any early coordination or consultation conducted with the regulatory agencies, local entities, or property owners.
  - o A discussion of any further hazardous materials related coordination with, and approvals or permits required from, the regulatory agencies or other entities.
- Should the findings of the ISA conclude that additional investigation, special considerations, or other commitments from the State are required during future stages of project development, Engineer shall review those findings and commitments with the State prior to completing the hazardous materials discussion for the environmental document.

25. Regional Toll Analysis (if required) – Omitted

26. Public Involvement (23 CFR §771.111) *(This scope is for the corresponding section(s) as listed in the Public Involvement section of the EA.)*

Engineer shall:

- Perform public involvement activities in accordance with TAC, Title 43, Part 1, Chapter 2 and 36 CFR 800.2.
- Compile, maintain and update a mailing list of people, agencies and organizations interested in the Transportation Activity.
- Make all arrangements and pay for meetings with affected property owners (MAPOs), public meetings and hearings, including the site of the meetings, mailing and publishing notices, preparation of exhibits, provision for taping or transcription of proceedings, and any other arrangements as directed by the State. The Engineer's Technical Expert shall not hold public meetings or hearings in the absence of State personnel.
- Submit all legal notices to the State for review no less than two weeks prior to publication.
- Arrange at least three planning meetings with the State prior to each public meeting or hearing to review all exhibits and other materials to be used prior to public meetings or hearings.
- Obtain the State's approval for all legal notices, exhibits, and other materials.

- Provide personnel to staff meetings and hearings, including a translator and people to perform registration, make presentations, and answer questions. Staffing levels of personnel to be provided shall be identified by the State in advance of the meeting.
- Develop and submit to the State a public meeting documentation packet consistent with the Environmental Compliance Toolkits. The documentation packet shall be included in the environmental document.
- Develop and send acknowledgement letters and response letters to commenters at public meetings or hearings. The Engineer's Technical Expert shall not distribute acknowledgement or response letters without prior approval by the State.

27. Section 4(f) Evaluations. *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

- The 4(f) Section of the environmental document must document all data necessary to address to the satisfaction of the State potential use of Section 4(f) properties in accordance with 23 CFR 774.
- All Section 4(f) evaluations must meet the requirements set forth in the State's Environmental Compliance Toolkit guidance.

28. Section 6(f) Evaluation *(This scope is for the corresponding section(s) as listed in the Affected Environment and Environmental Consequences section of the EA.)*

Engineer must determine if Land and Water Conservation Fund Act funds were used for the Section 4(f) property in accordance with the regulatory requirements and TPWD guidelines.

29. Indirect and Cumulative Impacts (ICI) Analysis *(This scope is for the corresponding section(s) of the CE documentation, EA, or EIS.)*

Engineer shall provide all induced growth impact and cumulative impacts (ICI) studies that meet the requirements set forth in the State's Environmental Compliance Toolkit guidance.

30. Re-evaluation - Omitted

31. Reference Documents

Engineer shall adhere to the content of TxDOT's On-Line Environmental Compliance Toolkit guidance.

Attachment 3
Schedule of Work

It is estimated that the final ***Presidential Application*** activities can be performed in approximately 18 months to 24 months of the execution of this Work Authorization. **Engineer** will diligently pursue the completion of this Work Authorization as defined above.

The **Engineer** anticipates the following activity durations as follows:

1. Mexican Feasibility Study and Traffic Model 9 Months from NTP
2. Submit Environmental Document / Updated Permit Applications 12 - 18 months from NTP
3. Receive Approvals 18 - 24 months from NTP

Engineer will inform the **Client** (in reasonable advance of the delay) should **Engineer** encounter delays that would prevent the performance of all work in accordance with the established work schedule. A detailed schedule will be presented in the initial project meeting with Sunland Park officials at the onset of the project.

PROJECT: Mission Madero POE

S&B Infrastructure, Ltd.

Attachment 4 - Cost Proposal
Environmental Clearance, Traffic Engineering Study and Feasibility Services
LUMP SUM

S&B JOB NO.: U3163

TASK CODE	DESCRIPTION	FIRM	SERVICE	MAN-HOURS										ESTIMATED FEE	TOTALS
				Principal	QC/QA	Project Manager	Structural/Hydraulic/ Civil Engr.	Environmental Scientist/Support Manager	Staff Engineer/Scientist	GIS Manager	GIS Technician/CADD Operator	Accounting Clerk	Secretary	TOTAL	
LABOR															
A.	**PROJECT MANAGEMENT AND AGENCY COORDINATION**														
A.1	**Internal Project Management/Administration**														
1	Internal Coordination (Administration and Scheduling) (18 Months)	S & B	SPECIAL			54			54				54	162	$26,121.96
2	Initial and Progress Meetings (9 Meetings)	S & B	SPECIAL			36			36				9	81	$15,649.65
3	Quality Control/Quality/Assurance of Documents, Reports and Submittals	S & B	SPECIAL		80									80	$19,785.60
4	Project Stakeholder Coordination (78 weeks @12 hours a week)	S & B	SPECIAL					936						936	$178,607.52
A.2	**Coordination with U.S. Agencies**														
1	Perform coordination with Federal and State agencies; coordination, development of agendas and rosters, hand-outs and exhibits, conducting meetings, and documentation through final minutes (3 meetings in Washington and remainder by teleconference)	S & B	SPECIAL			36			36		40		4	116	$19,703.60
2	The Engineer shall prepare a report summarizing domestic coordination meetings, identifying the steps taken or that will be taken to secure the approval of local, state, and federal officials; summarize correspondence, meetings, agreements, identify all permits or approvals from US agencies (federal, state and local) that will be required for the development of the facility; a list of what steps will or have been taken to secure approvals; compile documentation and submit applications.	S & B	SPECIAL			12	12		16				4	44	$8,664.44
3	Bi-National Conference for Bridges & Border Crossings - For this phase, prepare and deliver 4 PowerPoint presentations of project development and status, including hand-outs and exhibits, as required.	S & B	SPECIAL			32			32		24		16	104	$17,062.24
A.3	**Coordination with Mexico**														
1	The Engineer shall initiate and conduct 2 coordination meetings with Mexico officials, develop agendas and rosters, hand-outs and exhibits, and document through final	S & B	SPECIAL			32			32					64	$13,387.84
2	The Engineer shall prepare a report summarizing international coordination meetings, identifying the steps taken or that will be taken to secure the approval of local, state, and federal officials in Mexico; summarize correspondence, meetings, agreements, understandings and/or evidence that Mexican authorities do not object to the construction of the proposed facility; provide a description of the general arrangements for financing, construction and ownership of the Mexico portion of the facility.	S & B	SPECIAL			8			8				4	20	$3,608.44
3	Coordination and Project Promotion with Mexican Agencies by Subconsultant. Includes scheduling meetings and coordinating with Mexican subconsultants/companies and producing strategy and meeting notes for all meetings in Mexico.	CPI	SPECIAL												$72,000.00
4	Assist in facilitating and obtaining letter(s) of resolution(s)	S & B	SPECIAL			4			16				6	26	$3,973.22
A.4	**Non-EA Related tasks/services**														
1	Interpretive Services (These services included above)														
2	Agency coordination/planning, Meetings with federal, state, regional, and local governmental or quasi-governmental stakeholders. (These services included above)														
3	Potential Substantial travel to multi-agency coordination/collaboration meetings [though this may be mitigated by Virtual Meeting trends driven by the global COVID-19 pandemic] (Meetings included Above)														
	Sub Total (Administration and Coordination)			0	80	214	12	936	230	0	64	0	97	1,633		**$378,564.51**

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B.		**FUNCTION CODE 102(110) - FEASIBILITY STUDIES - UPDATE US STUDY AND PREPARE MEXICAN STUDY**															
		Data Collection															
	a.	**Collection of available Studies**	S & B	SPECIAL			2	14		24		24			64	$10,166.80	
	b.	**Design Data -Preliminary Engineering Report.** Document the efforts of design, including the design criteria; alternatives analysis, preliminary layouts of proposed alternative alignment(s) and facility locations; abstract data and preliminary right of way determinations.	S & B	SPECIAL			4	40		120		120			284	$42,410.84	
	c.	**Existing and future Design Year Traffic (Part of Traffic Model & C&M Cost Proposal)**	C&M	SPECIAL													
	d.	**Final Field Reconnaissance.** Perform site visits for field reconnaissance and finalize data collection.	S & B	SPECIAL				4		16					20	$3,458.92	
	e.	**Aerial Photogrammetry / Field Survey**															
		1. Vertical / Horizontal Control															
		Set primary project control; GPS horizontal and vertical location of primary control points; set panels for aerial flight; GPS horizontal and vertical control of panel points; process GPS data and create reports.	IEG	SPECIAL											0	$289,000.00	
		2. Aerial Photogrammetry															
		Obtain new aerial photography of the route on a scale of 1"=250' with a distortion-free aerial camera; capture planimetric features; process data; create DTM; rectify images; provide 2d-planimetric, 3d-digital terrain model in dgn format on USB, to include TIN, and Geopak files; orthophoto mosaic in TIFF and TFW.	RAM	SPECIAL											0	$81,500.00	
		3. Field and RR Tracks Surveying															
		Staking of existing Tracks for Tie-ins (This work included in an all inclusive cost Proposal form IEG	IEG	SPECIAL													
		4. Utility Surveying & Coordiantion															
		Utilities – Water Supply (This work included in an all inclusive cost Proposal form IEG under Item e. 1.)	IEG	SPECIAL													
		Utilities – Wastewater (This work included in an all inclusive cost Proposal form IEG under Item e. 1.)	IEG	SPECIAL													
		Utilities – Solid Waste (This work included in an all inclusive cost Proposal form IEG under Item e. 1.)	IEG	SPECIAL													
		Utilities – Energy and Telecommunications (This work included in an all inclusive cost Proposal form IEG under Item e. 1.)	IEG	SPECIAL													
		Utility Report (This work included in an all inclusive cost Proposal form IEG under Item e. 1.)	IEG	SPECIAL													
		5. Coordination and review.	S & B	SPECIAL			2			40		40			82	$11,258.02	
	f.- l.	**These scope items are included in a. above**	S & B	SPECIAL												$0.00	
		Mexico Feasibility Studies															
	a.	Mexican Feasibility Study\Cost Benefit Analysis Study - See Transconsult Cost Proposal for breakdown	TC	SPECIAL												$299,776.00	
	b.	Mexican Feasibility Study - Layouts on Mexican Side See Caxcan Cost Proposal for breakdown	CAXCAN													$425,000.00	
	c.	Coordination and review of Mexico POE activities.	S & B	SPECIAL			40	40		80					160	$32,248.80	
		Sub Total (Data Collection & Feasibility studies)			0	0	48	98	0	280	0	184	0	0	610		**$1,194,819.38**

PROJECT: Mission Madero POE

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C.	**TRAFFIC PROJECTIONS FOR PRESIDENTIAL PERMIT RENEWAL/ENVIRONMENTAL CLEARANCE SUPPORT**															
	1. Traffic & Revenue Study (US) Assist in Update model and structure within and/or adjacent to the project area that would support the facility; traffic counts; origin and destination survey; traffic revenue analysis and modeling, risk analysis. **(For detailed breakdown see C&M Cost Proposal)**	C&M	SPECIAL												$249,872.00	
	2. Subconsultant Coordination	S & B	SPECIAL			24	24		36					84	$17,441.76	
	Sub Total (Data Collection)			0	0	24	24	0	36	0	0	0	0	84		**$267,313.76**
D	**SOCIAL, ECONOMIC AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT**															
	(1-3) Environmental Documentation, Technical Reports and EA Content and Format															
	(A) Write Technical Reports / Compile Draft EA / EIS	S & B	SPECIAL				2	60	60	40	30			192	$32,362.98	
	(B) Submit to Resource and Coordinating Agencies	S & B	SPECIAL			1	2	40	60		10			113	$18,982.79	
	(C) Coordinate and incorporate agency comments	S & B	SPECIAL				4	40	60		10			114	$19,181.16	
	(D) Release for Public Comment	S & B	SPECIAL				2	20	60		10			92	$14,906.98	
	(E) Incorporate Public Comment	S & B	SPECIAL				2	40	60		10			112	$18,723.38	
	(F) Submit Final EA /EIS for Determination	S & B	SPECIAL			1	4	40	60		10			115	$19,440.57	
	(G) Finalize purpose and need and objectives.	S & B	SPECIAL			4		4	20					28	$4,980.12	
	(H) Develop project descriptions	S & B	SPECIAL			4	4	10	30					48	$8,630.20	
	(I) Refine Alternatives Analysis. Perform final alternatives analysis; develop conceptual schematics of the feasible alternative; identify the preferred alternative for the rr bridge crossing, international border station, and connecting roadways.	S & B	SPECIAL			2	80		120		120			322	$51,047.62	
	Following Env. Items will for range of Alternatives (3 max):															
	(1) Natural Resources -															
	(a) Physiography and Topography	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(b) Geology / Soils	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(c) Land Use	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(d) Vegetation / Habitat	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(e) Threatened and Endangered Species	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(f) Prime Farmland	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(g) Floodplain	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(h) Water Quality	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(i) Waters of the US, including Wetlands	S & B	SPECIAL			1		20	300		10			331	$52,859.01	
	(2) Air Quality, Noise, and Hazardous Materials															
	(a) Air Quality	S & B	SPECIAL			2		20	40					62	$10,693.62	
	(b) Noise	S & B	SPECIAL			2		200	120	40	60			422	$71,962.02	
	(c) Hazardous Materials	S & B	SPECIAL			1		24	80	20	10			135	$22,467.49	
	(3) Cultural Resources															
	(a) Perform and report on historical & archeological. Work to be included in d (5-6)(a).	CMEC	SPECIAL													
	(b) Historical Archeological. Review and assistance by S&BI.	S & B	SPECIAL			1		20	40		10			71	$11,529.41	
	(4) Socio-Economic															
	(a) Public Facilities	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(b) Displacement of Residents and Businesses	S & B	SPECIAL			1		20	20		80			121	$16,016.61	
	(c) Socio-economic Characteristics	S & B	SPECIAL			1		20	20	10	20			71	$11,353.61	
	(d) Community Cohesion	S & B	SPECIAL			1		20	20		20			61	$9,445.41	

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	(5) Summary of Alternative Impacts	S & B	SPECIAL			1		20	80		60			161	$23,363.81	
	Following Env. Items will be based on preferred Alternative:															
	(4) Community Impacts															
	(a) Public Facilities	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(b) Regional and Community Growth	S & B	SPECIAL					20	20		20			60	$9,186.00	
	(c) Community Cohesion	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(d) Environmental Justice	S & B	SPECIAL					20	20		20			60	$9,186.00	
	(e) Community Services	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(f) Utilities – Water Supply	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(g) Utilities – Wastewater	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(h) Utilities – Solid Waste	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(i) Utilities – Energy and Telecommunications	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(5-6) Cultural Resources - Historical/Archeological															
	(a) Perform and report on historical & archeologi	CMEC	SPECIAL												$113,475.60	
	(b) Cultural Resource Coordination	S & B	SPECIAL			2		20	20		10			52	$8,609.62	
	(7-8) Probable Impacts for Air Quality and Noise															
	(a) Air Quality	S & B	SPECIAL			1		10	20					31	$5,346.81	
	(b) Traffic Noise Technical Report	S & B	SPECIAL			4		160	100	20	40			324	$55,662.04	
	(9) Water Resources and Analysis Documentation															
	(a) Water Quality	S & B	SPECIAL			1		20	60		20			101	$15,803.81	
	(b) Waters of the US, including Wetlands	S & B	SPECIAL			1		40	160	20	160			381	$54,665.41	
	(10) Clean Water Act, Section 404	S & B	SPECIAL			1		4	40		8			53	$8,257.25	
	(11) Wild and Scenic Rivers -- Omitted from Scope															
	(12) Edwards Aquifer -- Omitted from Scope															
	(13) Floodplain Impacts	S & B	SPECIAL			1	16	20	20		20			77	$13,107.65	
	(14) Coastal Zone and Barrier Impacts -- Omitted from Scope															
	(15) Stormwater Permits (Section 402 of the Clean Water Act)	S & B	SPECIAL			1		12	8		8			29	$4,697.09	
	(16) USACE Permits	S & B	SPECIAL			1		40	40		16			97	$16,002.93	
	(18) USCG Section 9 Permit	S & B	SPECIAL			1		16	16		8			41	$6,732.05	
	(18) Fish and Wildlife Coordination Act (FWCA)	S & B	SPECIAL			1		16	16		8			41	$6,732.05	
	(19-20) Biological/Natural Resources Analysis and Documentation & Invasive Species															
	(a) Physiography and Topography	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(b) Geology / Soils	S & B	SPECIAL			1		20	20		20			61	$9,445.41	
	(c) Land Use	S & B	SPECIAL			1		40	40	20	40			141	$22,447.81	
	(d) Vegetation / Habitat	S & B	SPECIAL					40	40	20	30			130	$21,093.20	
	(e) Threatened and Endangered Species	S & B	SPECIAL					60	40	20	20			140	$23,814.40	
	(21) Essential Fish Habitat -- Omitted from Scope															
	(22) Beneficial Landscaping															
	(a) Aesthetic and Visual	S & B	SPECIAL			1			10					11	$1,849.01	
	(b) Construction	S & B	SPECIAL			2	4	10	20					36	$6,521.78	
	(c) Short- And Long-Term Impact Summary	S & B	SPECIAL			1	4	20	40					65	$11,349.77	
	(23) Farmland Impacts	S & B	SPECIAL			1	2	24	24		40			91	$13,492.71	
	(24) Initial Assessment with Hazardous Materials Project Impact Evaluation Report															
	(a) Hazardous Materials **initial assessment**	S & B	SPECIAL			1		40	60		40			141	$21,810.61	
	(b) Hazardous Materials - sampling and remediation (Shown Cost is for an assessment of contaminants, laboratory costs for soil analysis, field consulting and remediation oversight, contaminant remediation (earthwork) to a depth of 6 inches, for a site not to exceed 250 square feet (25 feet x 10 feet), and disposal of not more than one 55-gallon drum of contaminated soil to an approved facility)	RK	SPECIAL												$20,000.00	

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	(c) Hazardous Materials Sub-coordination	S & B	SPECIAL					20	20					40	$6,995.60	
	(25) Regional Toll Analysis -- Omitted from Scope															
	(26) Public Involvement (23 CFR 771.111)															
	(a) Develop Mailing List, Handouts, Comment Forms, Public Notices (2 meetings)	S & B	SPECIAL					80	80	20	40		40	260	$38,794.40	
	(b) Attend (1) Public Meetings	S & B	SPECIAL			8	8	20	40				20	96	$15,388.60	
	(c) Public Hearing Preparation / Exhibits	S & B	SPECIAL					40	40	10	40		40	170	$22,895.00	
	(d) Attend Public Hearing	S & B	SPECIAL			8	8	40	40					96	$17,897.60	
	(e) Public Meeting/Hearing Outreach	S & B	SPECIAL			2	2		40		20			64	$9,525.40	
	(f) Prepare Public Meeting / Hearing Summary	S & B	SPECIAL					28	40		10		20	98	$14,103.96	
	(g) Coordination and review.	S & B	SPECIAL			8	20							28	$6,653.08	
	(27) Section 4(f) Evaluations	S & B	SPECIAL			8	20							28	$6,653.08	
	(28) Section 6(f) Evaluations	S & B	SPECIAL			8	20							28	$6,653.08	
	(29) Indirect and Cumulative Impact Analysis															
	(a) Secondary and Cumulative Impacts	S & B	SPECIAL			1		80	100	20	100			301	$46,189.41	
	(b) Impacts Without the Proposed Project	S & B	SPECIAL					20	40					60	$10,174.80	
	(c) Adverse Environmental Impacts Which Cannot Be Avoided	S & B	SPECIAL			2		120	120		120			362	$55,634.82	
	(d) Relationship Between Short-Term Uses and Long-Term Productivity	S & B	SPECIAL			2		4	20					26	$4,461.30	
	(e) Irreversible and Irretrievable Commitment of Resources	S & B	SPECIAL			1		4	20					25	$4,201.89	
	(f) Basis for Determination of Social, Economic, and Environmental Significance	S & B	SPECIAL					30	100					130	$21,620.60	
	(30) Reevaluation															
	(31) Reference Documents	S & B	SPECIAL					2	8				4	14	$1,914.80	
	Sub Total (Env. Documentation)			0	0	111	204	2,098	3,292	260	1,588	0	124	7,677		**$1,364,237.19**
	SUBTOTAL (LABOR)			**0**	**80**	**397**	**338**	**3,034**	**3,838**	**260**	**1,836**	**0**	**221**	**10,004**		**$3,204,934.84**
	Total Hours	MULTIPLIER		0	80	397	338	3,034	3,838	260	1,836	0	221	**10,004**		
	CONTRACT RATES: ($/MAN-HOUR)	2.9066		272.03	247.32	259.41	228.89	190.82	158.96	190.82	109.52	106.00	65.37			
	BASE RATES: ($/MAN-HOUR)			93.59	85.09	89.25	78.75	65.65	54.69	65.65	37.68	36.47	22.49			

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NON LABOR																
	FedEx Courier / Runner Service	S & B (nl)	SPECIAL												$500.00	
	Exhibits, ESA Searches, etc.	S & B (nl)	SPECIAL												$8,000.00	
	Advertisements and Notices	S & B (nl)	SPECIAL												$2,500.00	
	Court Reporter (2 Meetings)	S & B (nl)	SPECIAL												$4,000.00	
	Outside reproduction (Reports, Scans, etc.)	S & B (nl)	SPECIAL												$5,000.00	
	Miscellaneous Mileage	S & B (nl)	SPECIAL												$1,000.00	
	Survey Reimbursable	IEG	SPECIAL												$28,900.00	
	Initial Meeting															
	Travel - Lodging	S & B (nl)	SPECIAL	Persons =	1	Nights =	2	Cost per Night=		$ 215.00					$430.00	
	Travel - Meals	S & B (nl)	SPECIAL	Persons =	1	Days =	2	Cost per Day =		$ 59.00					$118.00	
	Travel - Rental Vehicle	S & B (nl)	SPECIAL			Days =	2	Rental / Gas per Day=		$ 95.00					$190.00	
	Project Site Visit / Field Reconnaissance ENVIRONMENTAL															
	Travel - Lodging	S & B (nl)	SPECIAL	Persons =	2	Nights =	20	Cost per Night=		$ 215.00					$8,600.00	
	Travel - Meals	S & B (nl)	SPECIAL	Persons =	3	Days =	40	Cost per Day =		$ 59.00					$7,080.00	
	Travel - Rental Vehicle	S & B (nl)	SPECIAL			Days =	40	Rental / Gas per Day=		$ 95.00					$3,800.00	
	Public Involvement Meetings/Hearing (3 Meetings)															
	Travel - Lodging	S & B (nl)	SPECIAL	Persons =	2	Nights =	6	Cost per Night=		$ 215.00					$2,580.00	
	Travel - Meals	S & B (nl)	SPECIAL	Persons =	2	Days =	12	Cost per Day =		$ 59.00					$1,416.00	
	Travel - Rental Vehicle	S & B (nl)	SPECIAL			Days =	12	Rental / Gas per Day=		$ 95.00					$1,140.00	
	Project Site Visit / Field Reconnaissance (2 Site Visits) STRUCTURAL ENGINEER															
	Travel - Lodging	S & B (nl)	SPECIAL	Persons =	2	Nights =	2	Cost per Night=		$ 215.00					$860.00	
	Travel - Meals	S & B (nl)	SPECIAL	Persons =	2	Days =	2	Cost per Day =		$ 59.00					$236.00	
	Travel - Rental Vehicle	S & B (nl)	SPECIAL			Days =	2	Rental / Gas per Day=		$ 95.00					$190.00	
	Public Involvement Workshop/Hearings (4 Meetings)															
	Travel - Lodging	S & B (nl)	SPECIAL	Persons =	2	Nights =	4	Cost per Night=		$ 215.00					$1,720.00	
	Travel - Meals	S & B (nl)	SPECIAL	Persons =	2	Days =	4	Cost per Day =		$ 59.00					$472.00	
	Travel - Rental Vehicle	S & B (nl)	SPECIAL			Days =	4	Rental / Gas per Day=		$ 95.00					$380.00	
	US Agencies Meetings (0 meetings)															
	Travel - Lodging	S & B (nl)	SPECIAL	Persons =		Nights =		Cost per Night=		$ 215.00					$0.00	
	Travel - Meals	S & B (nl)	SPECIAL	Persons =		Days =		Cost per Day =		$ 59.00					$0.00	
	Travel - Airfare (McAllen-Washington)	S & B (nl)	SPECIAL	Persons =		Trips=		Airfare per Trip=		$ 1,600.00					$0.00	
	Travel - Rental Vehicle	S & B (nl)	SPECIAL			Days =		Rental / Gas per Day=		$ 95.00					$0.00	
	Bi-National Meetings (2) and Meetings in Mexico (2 meetings)															
	Travel - Lodging	S & B (nl)	SPECIAL	Persons =	2	Nights =	8	Cost per Night=		$ 215.00					$3,440.00	
	Travel - Meals	S & B (nl)	SPECIAL	Persons =	2	Days =	8	Cost per Day =		$ 59.00					$944.00	
	Travel - Airfare (McAllen-Mexico)	S & B (nl)	SPECIAL	Persons =	2	Trips=	4	Airfare per Trip=		$ 1,600.00					$12,800.00	
	Travel - Rental Vehicle	S & B (nl)	SPECIAL			Days =	8	Rental / Gas per Day=		$ 95.00					$760.00	
	SUBTOTAL (NON-LABOR)															**$97,056.00**
															CONTRACT TOTAL	**$3,301,990.84**

C&M Associates, Inc.
15770 North Dallas Parkway, Suite 870
Dallas, TX 75248
Tel: 214-245-5300
www.candm-associates.com

Axel Herrmann, M.S.
Principal Planner
aherrmann@candm-associates.com

Date: October 19, 2020

To: Daniel O. Rios
Executive Director
S&B Infrastructure,

Subject: **Mission/Madero–Reynosa International Bridge**
Traffic Projections for Presidential Permit Renewal

As summarized in Table 2. C&M proposes a labor lump sum budget of $249,872 for the development of this study, including direct expenses charged at cost. Direct expenses are estimated at approximately $28,200.

Table 2. Project Budget Table

	Task Description	Budget by Task
1	Project Management/Mobilization	$14,149
2	Review of Existing Information	$19,058
3	Border Demand Forecast	$51,399
4	Travel Demand Model Update	$76,219
5	Vehicle and Rail Projections	$26,511
6	Level of Service Analysis	$14,658
7	Traffic and Revenue Forecast	$7,054
8	Documentation	$12,623
Sub-Total Labor		**$221,672**
Direct Expenses*		
Travel		$2,000
Data Purchases		$1,200
Mexico SE Data		$10,000
Transearch Data (IHS)		$15,000
Sub-Total Direct Cost		**$28,200**
Total Budget		**$249,872**

Note: *Direct expenses shown are estimates and will be billed at cost.

CAXCAN S.A. de C.V.
INGENIEROS CIVILES

Mexico City. October 27, 2020.

Daniel Rios, PE.
President, S&B Infrastructure LTD. (SBI)

PROPOSAL OF SERVICES FOR THE PROJECT OF THE INTERNATIONAL BRIDGE REYNOSA - MADERO

We hereby submit to your consideration the following economic proposal for the following work:
CIVIL ENGINEERING STUDIES IN THE FIELD, PRELIMINARY DRAFTS AND CONCEPTUAL PLANS

FEE.

CONCEPT	AMOUNT
I. Topographic survey	$ 56,000.00
II. Geotechnical study	$ 74,000.00
III. Horizontal and vertical alignment for railroad tracks and roads	$ 80,000.00
IV. Preliminary draft of the International Bridge (conceptual)	
A) Topo hydraulic and Hydraulic Study	$ 45,000.00
B) Soil Mechanics Study	$ 85,000.00
A) Conceptual plan of the International Bridge	$ 85,000.00
TOTAL IN AMERICAN DOLLARS (USD) EXCLUDING VAT	$ 425,000.00

This budget includes the expenses generated from technical and coordination meetings and work meetings that take place outside the CAXCAN S.A. facilities. de C.V. in Mexico City, as well as the approval of the conceptual project by the Secretary of Communications and Transportation (SCT) and the International Boundary and Water Commission (CILA).

ATTENTIVELY:

_____
Ing. Jesus Javier Montero Casillas
DIRECTOR OPERATIVO

COX | McLAIN Environmental Consulting

S&B - Mission Madero Point-of-Entry Facility, Hidalgo County, Texas
Arch Background, Permit, Survey, and Reporting and Historic Resources PCR, Research Design, Survey, and Reporting
Cox|McLain Environmental Consulting, Inc.

LABOR

Description	Project Manager	Supervising/ Senior Sci/ Historian	Lead Historian	Historic Research Assistant	Supervising/ Senior Sci/ Archeologist	Senior Archeologist	Archeology Technician	GIS Analyst	Admin/ Clerical	Totals
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
Task 1 Archeological Background Study and Field Survey										
1.1 Archeological Background Study	2	0	0	0	4	20	0	6	1	33
1.2 Texas Antiquities Permit	2	0	0	0	4	20	0	6	1	33
1.3 Intensive Survey	2	0	0	0	4	130	280	6	1	423
1.4 Mechanical Trenching	2	0	0	0	4	130	0	6	1	143
1.5 Draft Arch Survey Report	2	0	0	0	6	48	12	8	1	77
1.6 Final Arch Survey Report / Curation	2	0	0	0	2	20	2	6	2	34
Task 2 Historic Resources Survey										
2.1 Historic Resources PCR	2	2	2	10	0	0	0	6	1	23
2.2 Research Design	2	4	4	24	0	0	0	6	1	41
2.3 Reconnaissance Survey prep and fieldwork	2	2	24	24	0	0	0	6	1	59
2.4 Draft HRSR	2	16	24	32	0	0	0	8	1	83
2.5 Final HRSR	2	2	4	4	0	0	0	6	2	20
Total Labor Hours	22	26	58	94	24	368	294	70	13	969
Rate	$125.00	$115.00	$84.00	$75.00	$115.00	$84.00	$55.00	$75.00	$52.00	
SUBTOTAL Labor Cost	$2,750	$2,990	$4,872	$7,050	$2,760	$30,912	$16,170	$5,250	$676	$73,430.00

EXPENSES

	Unit	Quantity	Rate	Total
Backhoe + operator (at cost)	Day	15	$1,500.00	$22,500.00
Mileage (Allowable IRS Rate)	Miles	7500	$0.58	$4,350.00
Hotel (taxes/fees not included)	Day	64	$96.00	$6,144.00
Hotel taxes/fees -- 15%	Day	64	$14.40	$921.60
Field Supplies (at cost)	Misc	1	$100.00	$100.00
TARL site registration (digital only)	Site	5	$96.00	$480.00
CAS Curation Fee	Inches	4	$425.00	$1,700.00
Per Diem	Day	70	$55.00	$3,850.00
Car Rental (at cost)	Day	0	$50.00	$0.00
Airport parking	Day	0	$20.00	$0.00
Rental vehicle fuel	Gal	0	$4.00	$0.00
Airfare (at cost)	R/T	0	$500.00	$0.00
TOTAL Nonlabor Expenses				$40,045.60

Notes/Assumptions: Assumes S&B Infrastructure would provide 30% design information sufficient for the production of necessary figures and field maps. Assumes that a Texas Antiquities Permit would be necessary if archeological survey is required. Includes informal consultation with the THC but no other agencies. Assumes that to the best of the client's knowledge any areas selected for field visits are free of chemical, bacterial, and other serious contaminants. If CMEC staff encounter evidence of contamination in the field (e.g., odor or visual indications of cattle dipping chemicals, petrochemical spills, sewage, etc.) without previous notification, field efforts may be cancelled or truncated. Assumes electronic submittal of documents will be sufficient and no hard copies are required to be delivered. Exclusions: ecological/NEPA services, NRHP nominations, archeological testing, monitoring, or data recovery, human remains evaluation/coordination/removal, and Section 106 consulting party coordination. All excluded services could be provided under separate scope/budget.

TOTAL COSTS - CMEC **$113,475.60**

Attachment 4
Cost Proposal

PROPOSAL FOR

MADERO-MISSION BORDER CROSSING PROJECT

Cost Proposal

Cruces y Puentes Internacionales, S.A. de C.V. fees are $72,000.00 USD (seventy two thousand dollars) the payments must be per month for the quantity of $8,000.00 USD (eight thousand dollars). At the ending of our services agreement we can considerate a renewal of it to continue the binational coordination.

Arturo de las Fuentes Hernández

President of Cruces y Puentes Internacionales S.A. de C.V.

October 23, 2020

Cruces y Puentes Internacionales S.A. de C.V.

León de los Aldamas No. 26 Col. Roma Sur México, D.F. 06700
tels.: (55) 5564-4893 5564-3888 5584-2524 fax.: (55) 5584-2524 cpi2005@prodigy.net.mx

November 5, 2020

Mr. Phillip Pawelek
S&B Infrastructure, LTD
5408 North 10th Street
McAllen Texas 78504
Phone: (956) 926-5004

Re: Proposal for Madero/ Reynosa International Border Crossing

Mr. Pawelek:

Izaguirre Engineering Group, LLC (the "Consultant" or "IEG") is pleased to present this letter of agreement for professional services to assist in the proposed project referenced above and further described below.

PROJECT DESCRIPTION: The S&B Infrastructure, LTD has requested that IEG provide a proposal for the Madero Reynosa International Border Crossing.

FEE SUMMARY: The following table represents a summary of the fees for the services further described in the scope of services listed below the table.

Task 1	Meetings with City if Mission Engineering Department, Planning Department and Public Works. Utility Recognizance (waterlines, sanitary sewer, drainage etc) Surveying, set Control Points etc Parcels Meetings with Irrigation districts, and Hidalgo County Drainage District #1 Prepare Preliminary Subdivision exhibits if necessary	$289,000 Lump Sum
	Additional Services	Hourly as Needed
	Reimbursable Expenses	Cost plus 15%

Note: The fees quoted do not include applicable sales tax. The Client shall be responsible to pay sales taxes, when applicable, in addition to the Consultant's fees, whether lump sum or hourly, and in addition to reimbursable expenses.

Izaguirre Engineering Group, LLC

Diana Izaguirre, President

Attachment 4
Cost Proposal

Oct 30, 2020

Phillip J. Pawelek, PE

S&B Infrastructure, Ltd.
5408 North 10th Street
McAllen, Texas 78504
Direct: (956) 926-5004
Main: (956) 926-5000
Cell: (956) 342-1649
pjpawelek@sbinfra.com

RE: Mission Madero POE Study

Design Surveys - Function 150
Dear Mr. Pawelek

(RAM) RODS Aerial Mapping, LLC. is pleased to offer this proposal for your review. The cost breakdown and scope of services for this work is outlined on the attached spreadsheets.

(RAM) RODS Aerial Mapping, LLC. -Aerial Mapping for Aerial LiDAR to include LiDAR Fixed Wing mobilization and data collection

Direct Expenses	$ 25,000.00
FC 150 Mapping	$ 56,500.00
Lump Sum Fee	**$ 81,500.00**

Should you have any questions or need additional information, please contact me.

Sincerely,

Terry J. Keeton C.P. CMS-Lidar
President

RABA KISTNER

Raba Kistner, Inc.
800 East Hackberry
McAllen, TX 78501
www.rkci.com

P 956.682.5332
F 956.682.5487
TBPE Firm F-3257
TBAE Firm BR 3427

Proposal No. PMA20-079-00
November 4, 2020

Mr. Phillip J. Pawelek, P.E.
S&B Infrastructure, Ltd.
5408 North 10th Street
McAllen, Texas 78504

Re: Proposal for Geotechnical Engineering Services
Proposed Madero/Reynosa International Bridge Crossing and
Associated General Services Administration (GSA) Facilities and
Railroad Inspection Facilities
Madero, Hidalgo County, Texas and
Reynosa, Tamaulipas, México

Dear Mr. Pawelek:

On the basis of the documents received by our office from you via electronic-mail attachment on Wednesday, October 28, 2020, and our telephone conversation held with you on Friday, October 30, 2020, **RABA KISTNER Consultants, Inc. (RKCI)** is pleased to submit this proposal for Geotechnical Engineering S&B Infrastructure, Ltd. (CLIENT) for the above-referenced project. The broad objectives of our study will be to determine subsurface conditions at the subject site and to provide foundation, pavement, rail track design and construction recommendations for the proposed international bridge crossing and the associated GSA facilities and railroad inspection facilities to be located on both sides of the U.S./México border.

The total lump sum cost for Hazardous Materials - sampling and remediation is $20,000. Cost is for an assessment of contaminants, laboratory costs for soil analysis, field consulting and remediation oversight, contaminant remediation (earthwork) to a depth of 6 inches, for a site not to exceed 250 square feet (25 feet x 10 feet), and disposal of not more than one 55-gallon drum of contaminated soil to an approved facility.

Transconsult S.A. de C.V.
Av. de la Alborada 124-303, Col. Parques del Pedregal,
México, D.F. C.P. 14010 +52(55)5927.5940

Attachment 4
Cost Proposal

The cost of our services is divided into consulting hours plus transportation costs considered at direct cost, as shown below.

Summary	Total Cost (USD)
Consulting	$294,106
Direct expenses	$5,670
Total	$299,776

Direct expenses are broken down below.

Direct expenses	Quantity	Rate	Total (USD)
Flights	10	$324	$3,240
Hotel+ travel expenses	10	$146	$1,460
Car rental	10	$97	$970
			$5,670

Consulting hours are broken down below.

	Hourly Contract Rate (USD)	$220.00	$136.00	$136.00	$94.00	$94.00	$136.00	$136.00	$94.00	$20.00	$25.00		
Deliverable	Task	Director	Transportation Manager	Railway operations specialist	Transportation Modeler	Economist	Financial specialist	Cost Benefit Specialist	Legal Specialist	Field Staff	Secretary	Total hours	Total Cost (USD)
Urban-Railway interference	Traffic counts (Field work)	22	44	65	0	0	0	0	0	632.2	32.7	796	$33,082
Traffic study	Network development	16	33	33	0	0	0	0	0	0	32.7	114	$13,309
Traffic study	Demand development	22	33	55	0	0	0	0	0	0	32.7	142	$17,473
Traffic study	Model Calibration	27	44	0	120	0	0	0	0	0	32.7	223	$24,013
Traffic study	Estimation of Traffic and revenue in base year	11	0	87	87	0	0	0	0	0	32.7	218	$23,272
Traffic study	Demand Forecast	27	0	0	0	98.1	98.1	0	0	0	32.7	256	$29,376
Traffic study	Traffic and revenue forecast	11	13	0	27	0	0	0	0	0	32.7	84	$7,556
Alternatives analysis	Alternatives analysis	98	76	153	0	0	0	0	152.6	0	32.7	512	$67,874
Cost Benefit Analysis	Cost Benefit Analysis	22	33	55	0	0	0	207.1	65.4	0	32.7	414	$51,786
Cost Benefit Analysis	Project follow-Up	22	0	0	0	0	0	152.6	0	0	32.7	207	$26,367
	Total	278	275	447	234	98	98	360	218	632	327	2,967	$294,106