THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

AGREEMENT FOR PROFESSIONAL SERVICES
C-08-417-12-09

THIS AGREEMENT is made, by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the **"Owner"**, and **L & G Consulting Engineers, Inc. d/b/a L & G Engineering,** professional engineers of **Edinburg, Texas**, hereinafter called the **"Engineer".**

WITNESSETH:

Whereas, the **Owner** desires to contract with the **Engineer** to provide professional engineering services for **"FM 493 from US 281 (Military Highway) to Business 83" (for preparation of Schematics, Environmental Assessments, Public Involvement, ROW Mapping, Surveying, Outfall Identification** and **Hydrologic Map, Roadway Design, ROW Acquisition Services** and **Construction Inspection** and **Construction Material Testing)** project for **Hidalgo County Precinct Number 1** hereinafter referred to as the ("Project").

NOW, THEREFORE, the **Owner** and the **Engineer** in consideration of the mutual covenants and agreements herein contained do mutuallyagree as follows:

ARTICLE 1. Employment of Engineer. The **Owner** agrees to employ the **Engineer** and the **Engineer** agrees to perform professional engineering services in connection with the **Project** as stated in the articles to follow, and for having rendered such services, the owner agrees to pay **the Engineer** compensation as stated in the articles to follow.

ARTICLE 2. Character and Extent of Services. This Agreement will provide for the development of the **Project** with the following:

2.1 Scope of Work. The **Owner** will furnish items and provide those services for the development of the **Project** and fulfillment of this Agreement, as identified in **EXHIBIT "A"** ***Services to be Provided by the Owner***, attached hereto and made a part of this Agreement. The **Engineer** shall render professional engineering services for the development and fulfillment of this Agreement as identified in **EXHIBIT "B"-** ***Services to be Provided by the Engineer***, attached hereto and made a part of this Agreement.

2.2 Classification of Services For this Agreement, the professional services to be provided by the **Engineer**, as more particularly identified in **EXHIBIT "B"**, attached hereto.

2.3 Schedule of Work. The **Engineer** shall prepare a schedule of work (hereinafter referred to as "**Work Schedule**") in accordance with the terms identified in **EXHIBIT "C"** - ***Work Schedule***, attached hereto and made a part of this Agreement exchange for such services.

2.4 Non-Exclusive Services of Engineer Hidalgo County reserves the right to request these services from other sources other than the engineer and shall not be in violation of any terms or conditions of this Agreement.

ARTICLE 3. Period of Service. Upon execution of this Agreement, the **Engineer** shall proceed with the work outlined under Article 2 hereof.

3.1 Termination Date. This Agreement shall terminate at the close of business **upon completion of this project** (hereinafter referred to as the "**Termination Date**"), unless extended by written supplemental agreement, as provided in Article 8 hereof, duly executed by the **Engineer** and the **Owner** prior to the **Termination Date**, or otherwise terminated as provided in Article 3.4 herein and below.. The **Owner** assumes no liability or obligation for payment to the **Engineer** for work performed or costs incurred by the **Engineer** prior to the date authorized by the **Owner** for the **Engineer** to begin work, during periods when work is suspended, or subsequent to the **Termination Date.**

3.2 Extension of the Termination Date. The **Engineer** shall notify the **Owner** in writing as soon as possible if it is determined, or reasonably anticipated, that the work under this Agreement cannot be completed before the **Termination Date,** and the **Owner** may , at the **Owner's** sole discretion, extend the **Termination Date** by written supplemental agreement as provided in Article 8 hereof. The **Engineer** shall allow adequate time for review and approval by the **Owner** of the written notice and request by the **Engineer** to extend the **Termination Date.**

3.3 Suspension of Work. Should the **Owner** desire to suspend the work under this Agreement, but not terminate this Agreement, the **Owner** shall provide thirty (30) calendar days verbal notification to the **Engineer**, followed by written confirmation from the **Owner** to the **Engineer** to that effect. The thirty-day notice may be waived as agreed in writing by both the **Owner** and the **Engineer**. The work under this

Agreement may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from the **Owner** to the **Engineer**. The sixty-day notice may be waived as agreed in writing by both the **Owner** and the **Engineer.**

If the **Owner** suspends the work, the **Termination Date** as identified above is not affected, and this Agreement will terminate on the date specified, unless extended by written supplemental agreement, as provided in Article 8 hereof, duly executed by the **Engineer** and the **Owner** prior to the **Termination Date.**

3.4 Termination of Agreement. This Agreement may be terminated before the stated **Termination Date** identified in Article 3.1 herein by any of the following conditions:

(1) **Commitment of Current Revenues.** In the event that, during any term hereof, the **Owner** does not appropriate sufficient funds to meet to the obligations of this Agreement, the **Owner** may terminate this Agreement upon thirty (30) days written notice to the **Engineer.** The **Owner** agrees, however, to use reasonable efforts to secure funds necessary for the continued performance of this Agreement. The parties intend this provision to be a continuing right to terminate this Agreement at the expiration of each budget period of the **Owner** pursuant to the provisions of Tex. Loc. Govt. Code Ann. §271.903 (Vernon Supp. 1995).

(2) By mutual agreement and consent, in writing, of both the **Engineer** and the **Owner**.

(3) By the **Owner,** upon failure of the **Engineer** to fulfill the **Engineer's** obligations set forth herein in a satisfactory manner as determined by the **Owner** and in sole opinion of the **Owner**, after the **Owner** provides written notice to the **Engineer** of such failure and the **Engineer** has not corrected such failure within (30) days of such written notice by the **Owner.**

(4) By the **Engineer**, upon failure of the **Owner** to fulfill the **Owner's** obligations set forth herein, after the **Engineer** provides written notice to the **Owner** of such failure and the **Owner** has not corrected such failure within thirty (30) days of such written notice by the **Engineer.**

(5) By the **Owner** without cause upon thirty (30) days written notice to the **Engineer.**

(6) By satisfactory completion of all services and obligations described herein.

Should the **Owner** terminate this Agreement as herein provided, no fees other than fees due and payable at the time of termination shall thereafter be paid to the **Engineer** notwithstanding anything herein to the contrary. In determining the value of the work performed by the **Engineer** prior to termination, the **Owner** shall be the sole judge of the value of such work performed. Compensation for work at termination will be based on a percentage of the work completed at that time. Should the **Owner** terminate this Agreement under (5) of the paragraph above, the amount charged during the thirty (30) day notice period shall not exceed

the amount charged during the preceding ninety (90) days.

If the termination of this Agreement is due to the failure of the **Engineer** to fulfill the **Engineer's** obligations under this Agreement, the **Owner** may take over the Project and prosecute the work to completion. In such case, the **Engineer** shall be liable to the Owner for any additional cost occasioned by the Owner.

If the **Engineer** defaults in the performance of this Agreement or if the **Owner** terminates this Agreement for fault on the part of the **Engineer**, the **Owner** will give consideration to payment of an amount in settlement to include: the actual costs incurred by the **Engineer** in performing the work to the date of default, the amount of work required which was satisfactorily completed to date of default, the value of the work which is usable to the **Owner**, the cost to the **Owner** of employing another consultant and/or firm to complete the work required and the time required to do so, and other factors which affect the value to the **Owner** of the work performed at the time of default. This Agreement shall not be considered as specifying the exclusive remedy for any default by the **Engineer,** but all remedies existing at law and in equity may be availed of by either party and shall be cumulative.

The termination of the Agreement and payment of an amountis settlement as prescribed above shall extinguish all rights, duties, and obligations of the **Owner** and the **Engineer** under this Agreement, except the obligations set forth in Articles 11.2, 12, 13, 15, 16, 17, 18.3, 19, 22 and 26 hereto.

ARTICLE 4. Progress and Coordination. The **Engineer** shall, from time to time during the progress of the work, confer with the **Owner**. The **Engineer** shall prepare and present such information as may be pertinent and necessary, or as may be requested by the **Owner**, in order to evaluate features of the **Engineer's** services and work.

At the request of the **Owner** or the **Engineer**, conferences shall be provided at the **Engineer's** office, the office of the **Owner,** or at other locations designated by the **Owner.** These conferences shall also include evaluation of the **Engineer's** services and work when requested by the**Owner.**

All applicable study reports shall be submitted in preliminary form for approval by the **Owner** before the final report is issued. The **Owner's** comments regarding the **Engineer's** preliminary report will be addressed by the **Engineer** in the final report.

If funds by other agencies or entities are to be used for the development of the project under this Agreement, the **Engineer's** services and work will be subject to periodic review and approval by other agencies or entities, including those of the city, county, state and/or federal agencies.

Should it be determined that the progress in the production of the **Engineer's** services and work does not satisfy the requirements of the approved **Work Schedule** as provided by **Exhibit "C"**, attached hereto, the **Owner** shall review the approved **Work Schedule** with the **Engineer** to determine the corrective action needed by either the **Owner** or the **Engineer.**

The **Engineer** shall promptly advise the **Owner** in writing of events which have a significant impact upon the progress of the **Engineer's** services and work and the approved **Work Schedule**, including:

(1) problems, delays, adverse conditions which will materially affect the ability to attain contract objectives, prevent the meeting of time schedules and goals, or preclude the timely completion and submittal of **Project** deliverables by the **Engineer** within established time periods; this disclosure will be accompanied by a statement by the **Engineer** of recommended or immediate action taken, or contemplated, and any **Owner** or other agency or entity assistance needed to resolve the situation: and

(2) favorable developments or events which enable meeting the **Work Schedule** goals sooner than anticipated.

ARTICLE 5. Compensation and Fees. For and in consideration of the services to be rendered by the Engineer, the Owner shall compensate the Engineer as follows:

5.1 *Services*. For and in consideration of the ***Services*** to be rendered by the **Engineer**, as identified in Article 2 and more particularly identified in **EXHIBIT "B"**, attached hereto, the maximum amount payable by the **Owner** to the **Engineer** for ***Services***, subject to adjustment in accordance with Article 6.1 herein, will be provided in each work authorization issued. An outline and breakdown of the **Services Fee** is more particularly identified in **EXHIBIT "D1"-*Fee Breakdown***, attached hereto and made a part of this Agreement. Payments to the **Engineer** for ***Services*** shall be made by the **Owner**, upon presentation by the **Engineer** of the monthly **Request for Payment**, in accordance with the terms and provisions of Article 6 herein.

5.2 *Special Services*. Those services that may be required to provided by the **Engineer** as ***Special Services*** are set forth below and more particularly described in **EXHIBIT "B"**, attached hereto. For and in consideration of these ***Special Services*** rendered as required by the **Engineer,** the **Owner** shall pay the **Engineer** a negotiated lump sum fee (hereafter referred to as "**Special Services Fee**") at the hourly labor rates

and non-labor rates (hereinafter referred to as "**Contract Rates**") specified in **EXHIBIT "D"** - ***Contract Rates***, attached hereto and made a part of this Agreement, and as follows:

1. **RESIDENT OR SITE ENGINEER, INSPECTOR.** Actual performances of service of project site engineer, resident engineer and/or inspector, if required by**Owner**.

2. **DOCUMENT COPIES.** Actual performance and/or providing of additional copies (over 10) of report; additional copies (over 10) of plans (contract drawings), specifications and estimates (PS&E); additional copies (over 10) of bidding documents: additional copies (over 10) of as-built drawings.

3. **EXTRA TRAVEL.** Extra travel required of **Engineer** and authorized by **Owner** to points outside of Hidalgo County.

4. **EXPERT WITNESS.** Assistance to the **Owner** as expert witness in any litigation with third parties arising from the development or construction of the **Project.**

5. **MISCELLANEOUS.** Investigations involving detailed consideration of operation, maintenance and overhead expenses and (unless otherwise agreed) the preparation of rate schedules, earning and expense statements; preparation of feasibility studies; environmental document preparation; appraisals, valuations, and material audits; or inventories required for certification of force account construction performed by the **Owner**; preparation of change orders for extra work done by the **Contractor.**

ARTICLE 6. Method of Payment.

6.1 Request for Payment. Payments to the **Engineer** for services rendered will be made while work is in progress as executed through a lump sum fee assigned to each work authorization (hereinafter referred to as "**Work Authorization**") in accordance with Article 7 herein. For each **Work Authorization,** the **Engineer** shall prepare and submit to the **Owner** monthly progress reports in sufficient detail to support the progress of the work and in support of a request for payment (hereinafter referred to as "**Request for Payment**"). The progress report shall indicate the percent completion of the work accomplished by the **Engineer** during the billing period and to the date of the **Request for Payment**. On or before noon of the first Monday of each month during the performance of the services, the **Engineer** shall submit to the **Owner** for approval a **Request for Payment**. Payment of the lump sum fee for each **Work Authorization** identified in the **Request for Payment** will be in proportion to the percent completion of the work tasks identified in such **Work Authorizations** together with a detailed breakdown of the amount and the sum of all prior payments. The **Owner** shall review each such **Request for Payment** and may make such exceptions as the **Owner** reasonably deems necessary or appropriate under the circumstances then existing. About ten (10) working days after the

Commissioners Court of the **Owner** meets approving such payment, the **Owner** shall make payment to the **Engineer** in the amount approved as aforesaid subject to Article 6.4 herein and below.

If the **Project**, or any portion(s) thereof, are deleted or otherwise not constructed, compensation to the **Engineer** by the **Owner** for the **Project** or such portions of the project shall be only the amounts paid the **Engineer** for actual work performed in accordance with the **Work Authorization**(s) approved by the **Owner. 6.2 Final Payment.** After final completion of the work and acceptance thereof by the **Owner,** the **Engineer** shall submit a final request for payment (**"Final Request for Payment"**) which shall set forth all amounts due and remaining unpaid to the **Engineer** and upon approval thereof by the **Owner,** the **Owner** shall pay to the **Engineer** the amount due (**"Final Payment"**) under such **Final Request for Payment** in accordance with the provisions of Article 6.1 hereof. The **Final Payment** shall not be made until the **Engineer** delivers to the **Owner** an affidavit that so far as the **Engineer** has knowledge or information any and all amounts due for materials and services over which the **Engineer** has control have been paid.

6.3 Qualification on Obligations to Pay. Any provision hereof to the contrary notwithstanding, the **Owner** shall not be obligated to make any payment (whether a payment under Article 6.1 hereof or **(Final Payment)** to the **Engineer** hereunder if any one or more of the following conditions precedent exist:

(1) The **Engineer** is in default of any of its obligations hereunder or otherwise is in default under this Agreement or under any contract documents related to this Agreement;

(2) Any part of such payment is attributable to the **Engineer's** services which are not performed in accordance with this Agreement; provided, however, such payment shall be made as to the part thereof attributable to the **Engineer's** services which were performed in accordance with this Agreement.

(3) The **Engineer** has failed to make payments promptly to consultants or other third parties used in connection with the **Project** for which the **Owner** has made payment to the **Engineer;**

(4) If the **Owner,** in good faith judgment, determines that the portion of the compensation then remaining unpaid will not be sufficient to complete the **Engineer's** services in accordance with this Agreement, no additional payments will be due the **Engineer** hereunder unless and until the **Engineer,** at its sole cost, performs a sufficient portion of the **Engineer's** services so that such portion of the compensation then remaining unpaid is determined by the **Owner** to be sufficient to so complete the **Engineer's** services.

6.4 No partial payment made hereunder shall be or construed to be final acceptance or approval of that part of the **Engineer's** services to which such partial payment related or relieves the **Engineer** of any of its obligations hereunder with respect thereto.

6.5 The **Engineer** shall promptly pay all bills for labor and material performed and furnished by others in connection with the performance of the **Engineer's** services.

6.6 Waiver. The making of the **Final Payment** shall constitute a waiver of all claims by the **Owner** except those arising from (1) faulty or defective services of the **Engineer** appearing after completion of the **Project.** (2) failure of the **Engineer's** services to comply with the requirements of this Agreement or any contracts or Agreements related to the **Project**, or (3) terms of any special warranties required by this Agreement or provided at law or in equity. The acceptance of **Final Payment** shall constitute a waiver of all claims by the **Engineer** except those previously made in writing and identified by the **Engineer** as unsettled at the time of the **Final Request for Payment**.

ARTICLE 7. Work Authorization. After execution of this Agreement, the **Engineer** shall proceed with the work outlined under Article 2 hereof, only as authorized by the **Owner** through an agreed **Work Authorization** document in the form identified in **EXHIBIT "E"- *Work Authorization Form***, attached hereto and made a part of this Agreement. The **Engineer** will identify, as approved by the **Owner,** the needed services for the **Project,** as required through the course of the development to the **Project.** The **Owner** shall authorize the **Engineer** to perform one or more of the agreed tasks identified in **EXHIBIT "B",** attached hereto, in the form of individual work authorizations. Upon authorization from the **Owner,** the **Engineer** will prepare a **Work Authorization** document, which will include a description of the work to be performed, including a description of the tasks and milestones, a work schedule, and an estimated cost proposal agreed upon by the **Owner** and the **Engineer**. The estimated cost proposal shall set forth in detail the computation of the cost of each work task, at the hourly rates established and identified in **EXHIBIT "D",** attached hereto. The **Work Authorizations** shall not waive the **Owner's** and the **Engineer's** responsibilities and obligations established in this Agreement.

The estimated cost proposal for each **Work Authorization**, developed by the **Engineer** and approved by the **Owner** shall be used by the **Owner** to appropriate a purchase order for the **Work Authorization.** Each executed **Work Authorization** shall become a part of this **Agreement**. Upon satisfactory completion of the **Work Authorization**, the **Engineer** shall submit the **Project's** deliverables as specified in the executed **Work Authorization** to the **Owner** for review and acceptance.

Work included in a **Work Authorization** shall not begin until the **Owner** and the **Engineer** have signed the **Work Authorization**. All work must be completed on or before the completion date specified in the **Work Authorization**, unless extended by written agreement by the **Engineer** and the **Owner.** The **Engineer** shall promptly notify the **Owner** of any event that will affect completion of the **Work Authorization.** All **Work Authorizations** must be executed and completed by both the **Engineer** and the **Owner** within the period established for this Agreement as specified in Article 3 hereof.

The final acceptance by the **Owner** of each **Work Authorization** for the **Project** shall serve as evidence of completion, on the part of the **Engineer,** of all services under this Agreement insofar as they pertain to that portion of work on the **Project** identified in the applicable work authorization.

ARTICLE 8. Supplemental Agreements. The terms of this Agreement may be amended by supplemental agreement if the Owner determines that (1) there is a need to extend the **Termination Date** identified in Article 3.1 hereof, (2) there has been a significant change in the scope, complexity or character of the services to be performed by the **Engineer,** and/or (3) for any other reason agreeable to the **Owner** and the Engineer. All supplemental agreements will be developed in the form identified in **EXHIBIT "F"** - ***Supplemental Agreement Form***, attached hereto and made a part of this Agreement, and incorporated herein by reference as "**Supplemental Agreement**".

If determined appropriate by the **Owner,** additional compensation to the **Engineer** for (1), (2) and/or (3) above shall be paid as a negotiated lump sum fee at the **Contract Rates** specified in **EXHIBIT "D"**, attached hereto. The negotiated lump sum fee shall be incorporated into the **Supplemental Agreement.**

Any **Supplemental Agreement** must be executed by both the **Engineer** and the **Owner** prior to the **Termination Date** specified in Article 3 hereof.

It is distinctly understood and agreed that no claim by the **Engineer** for additional work, as identified in Article 9 hereof, or changes or revisions in work, as identified in Article 10 hereof, shall be made by the **Engineer** until full execution of the **Supplemental Agreement** and authorization to proceed is granted by the **Owner**. The **Owner** reserves the right to withhold payment to the **Engineer** pending verification of satisfactory work performed by the **Engineer.**

Article 9. Additional Work. If the **Engineer** is of the opinion that any work it has been directed to perform is beyond the scope of this Agreement and constitutes extra work, the **Engineer** shall promptly notify the **Owner** in writing. In the event the **Owner** finds that such work does constitute extra work, the **Owner** shall so advise the **Engineer** and a written supplemental agreement will be executed between the **Owner** and the **Engineer** as provided herein. The **Engineer** shall not perform any proposed additional work or incur any additional cost prior to the execution by both the **Engineer** and the **Owner** of a supplemental agreement. Additional compensation from the **Owner** to the **Engineer** shall be paid as a negotiated lump sum fee at the Contract Rates specified in **EXHIBIT "D"** attached hereto. The negotiated lump sum fee shall be incorporated into the supplemental agreement as specified in Article 8 hereof. The **Owner** shall not be liable or under any obligation to compensate the **Engineer** for work performed or costs incurred by the **Engineer** relating to additional work not directly associated with the performance of the work authorized in this Agreement or as amended through supplemental agreement.

ARTICLE 10. Changes or Revisions in Work. If the **Owner** finds it necessary to request changes to the work, and the changes are within the applications of sound engineering principles, the **Engineer** shall make such revisions if requested and directed by the **Owner.**

10.1 Preliminary Work. The **Engineer** will make, without expense to the **Owner,** such revisions of any preliminary reports or drawings as may be required to meet the needs of the **Owner** and the applications of sound engineering principles.

10.2 Previously Approved or Satisfactorily Completed Work. If the **Owner** funds it necessary to request the **Engineer** to make changes to work previously approved by the **Owner** or work satisfactorily completed for which the **Owner** approves or, after a definite plan has been approved by the **Owner**, if a decision is subsequently made by the **Owner**, which for proper execution involves extra services and expenses for changes in or additions to the drawings specifications or other documents, this will be considered as additional work, and compensation from the **Owner** to the Engineer will be in accordance with Article 9 hereof.

10.3 Project Delays. If the **Engineer** is required to perform additional work due to delays by the imposition of causes not within the **Engineer's** control, such as by the re-advertisement of bids or by the delinquency or insolvency of contractors, such work associated with these delays shall be considered additional

work, and the **Engineer** shall be compensated by the **Owner** for such extra services and expense in accordance with Article 9 hereof.

10.4 Reduction of Project Cost. Notwithstanding any provision herein to the contrary, in the event it is necessary for the **Owner** to require changes in the final plan of the **Project** to enable it to the reduce the construction cost of the **Project** to an amount within the sum estimated by the **Engineer,** the **Engineer** will be required to make such revisions or changes. These changes will only be considered additional work by the **Engineer,** if the **Engineer** previously provided these same changes as options to the **Owner** at the stage of preliminary work or prior to the approval of the final plan for the Project, and the option or options were not selected or approved by the **Owner** to be incorporated into the final plan of the Project. Payment for this additional work will then be made to the **Engineer** in accordance with Article 9 hereof. If **the Engineer** failed to provide these changes as an option or options to the **Owner** at the stage of preliminary work or prior to the approval of the final plan of the **Project**, these changes will not be considered additional work and no additional compensation will be made to the **Engineer.**

ARTICLE 11. Ownership and Release of Documents.

11.1 Ownership of Documents. Original drawings and specifications are the property of the **Engineer** however the **Project** is the property of the **Owner**, and the **Engineer** may not use the drawings and specifications thereof for any purpose not relating to the **Project** with the **Owner's** consent. The **Owner** shall be furnished with such reproductions of drawings and specifications as the **Owner** may reasonably require. Upon completion of the work or any earlier termination of this Agreement under Article 3.4 hereof, the **Engineer** will revise drawings to reflect changes made during construction and will promptly furnish the **Owner** with one complete set of reproducible record prints. Prints shall be furnished by the **Engineer,** as an additional service, at any other time requested by **Owner.** All such reproductions shall be the property of the **Owner** who may use them without the **Engineer's** permission for any proper purpose relating to the **Project,** including but not limited to additions to or completion of the **Project.** Any additions or revisions by the **Owner** to a drawing signed, sealed, and dated by a registered professional engineer, shall be made in accordance with the Texas Engineering practice Act and the Rules of the State Board of Registration for Professional Egineers.

All documents furnished to the **Engineer** by the **Owner** shall be delivered to the **Owner** upon completion or termination of this Agreement. The **Engineer,** at the **Engineer's** own expense, may retain copies of such documents or any other data under thisAgreement.

11.2 Release of Documents or Information. Release of information to the public or others regarding the **Project** will be accordance with the Texas Public Information Act.

ARTICLE 12. Discounts, Rebates, Refunds. In connection with procurement services rendered by the **Engineer,** if procurement services are required of the **Engineer** hereunder, all discounts, rebates and refunds shall accrue to the **Owner**. For some purchases, the **Engineer** may deem that payment within the discount period is not safe; and/or inspection, guarantees, or other considerations may dictate delay. In such cases, the **Engineer** shall promptly notify the **Owner** so that a course of action may be mutually agreed upon by the **Owner** and the **Engineer.**

ARTICLE 13. Records, Accounting, Inspection. The **Engineer** shall keep full and detailed records and accounts in a manner approved by the **Owner.** The **Engineer** shall afford the **Owner's** authorized personnel and independent auditors, if any, full access to the work performed by the **Engineer** regarding the **Project** and to all of the **Engineer's** books, records, correspondence, instructions, drawings, receipts, vouchers and other documents relating to such work under this Agreement and the **Engineer** shall preserve all such records for three (3) years after final payment. The **Engineer** shall deliver to the **Owner** upon completion of such work, a statement of the cost of such work detailed according to the accounting procedure and requirements of the **Owner.**

ARTICLE 14. Sub-contracting and Assignment. The **Engineer** shall not assign, subcontract or transfer the **Engineer's** interest in this Agreement without the prior written consent of the **Owner.** The **Engineer** shall bind every subconsultant by written subcontract to observe all the terms of this Agreement to the extent that they may be applicable to each subconsultant. No subcontract relieves the **Engineer** of any responsibilities under this Agreement.

The **Engineer,** and the **Owner,** do hereby bind themselves, their successors, executors, administrators and assigns to each other party of this Agreement and to the successors, executors, administrators, and assigns of such other party in respect to all covenants of this contract.

ARTICLE 15. Patents. The **Engineer** shall indemnify and save the **Owner** harmless from all liability for alleged or actual infringement of any patent resulting from the use of apparatus or equipment furnished or designed by the **Engineer** or from the use of any process designed by the **Engineer** or effected by said apparatus or equipment, and the **Engineer** shall indemnify and save the **Owner** harmless from and against all costs, legal fees, expenses and liabilities incurred in or about any claim of or action for such infringement: provided, however, that the **Owner** shall promptly transmit to the **Engineer** all papers served on the **Owner** in any suit involving such claim of infringement, and provided further, that the **Owner** permits the **Engineer** to have entire charge and control of the defense of any such suit. If because of actual infringement the use of such apparatus, equipment, or process is enjoined, the **Engineer** shall refund the purchase price thereof in proportion to the length of service uncompleted, the life of such apparatus or equipment being assumed as five years. The **Engineer** hereby grants to the **Owner** a non-exclusive, royalty-free license under patents now or hereafter owned by the **Engineer** covering any machines, apparatus, processes, articles, or products included in the **Engineer's** work hereunder.

ARTICLE 16. Confidential Information, Inventions and Other Restrictions.

16.1 Confidential Information. The **Engineer** shall not use in any way, commercial or otherwise, except to the extent required by the proper performance of this Agreement; and shall hold in confidence and not disclose to any person, for any reason or at any time, any information relating to the secret processes, products, compositions, machinery, apparatus or trade secrets of the **Owner**, or any other confidential information given to the **Engineer** by any of the **Owner's** commissioners, elected officials, employees, or representatives or acquired by the **Engineer** during the term of or as a result of this Agreement. Any information not generally available to the public shall be considered secret and confidential for the foregoing purposes; provided, however, that any technical information which was lawfully in the **Engineer's** possession prior to such disclosure to the **Engineer** by the **Owner** or which is or shall lawfully be published or become part of general knowledge from sources other than the **Engineer** or which otherwise shall lawfully become available to the **Engineer** from a source other than the **Owner**, shall not be subject to these provisions. All the foregoing stipulations shall apply to such information and work hereunder as well as to any information and ideas originated or developed by the **Engineer** in performing such work. Such information may, of course, be disclosed to the proper officials or employees of the

Owner if necessary to perform the work hereunder. The **Engineer** shall, however, inform each of its employees who receive such information of these restrictions and the **Engineer** shall take all reasonable precautions and exert all reasonable efforts to assure conformance with such restrictions by all of its officers, employees, and agents, obtaining from them if necessary, agreements satisfactory to the **Owner,** effectuating the purposes of this Article.

16.2 Inventions. The **Engineer** shall communicate to the **Owner** at once, and require the **Engineer's** employees assigned to this **Project** to communicate to the **Owner** all inventions and improvements which any of the **Engineer's** employees, either alone or in conjunction with any of the **Owner's** employees may conceive, make or discover during the course of or as a result of work on this **Project** under this or any ensuing agreement with the **Owner** that relates to the processes, products, compositions, machinery or plants of the **Owner**, or relating in any way to any of the operations in which the **Owner** may be obligated to pay to the **Engineer** as compensation for services rendered by the **Engineer** under contract with the **Owner**. The **Engineer** shall require its employees to execute patent applications and assignments thereof to the **Owner** or its nominees, and powers of attorney relating thereto for any country the **Owner** may designate, and shall take all other actions as the **Owner** may request to maintain and protect such inventions and improvements. The **Owner** shall pay all costs or charges incurred in protecting such inventions and improvements if the **Owner** desires to protect them. Before assigning any of the **Engineer's** employees to work under any contract with the **Owner** concerning this **Project,** the **Engineer** shall obtain from them agreements satisfactory to **Owner** complying in all respects with the terms and provisions of this Article.

16.3 The rights and obligations set forth in Article 16 shall survive the performance of this Agreement, or any termination, discharge or cancellation thereof

ARTICLE 17. Engineer's Seal, Responsibility and Warranties

17.1 Engineer's Seal. The **Engineer** shall assign a responsible engineer or engineers licensed to practice in the State of Texas, who shall sign, seal and date all appropriate engineering submissions to the **Owner** in accordance with the Texas Engineering Practice Act and the Rules of the Stare Board of Registration for Professional Engineers.

17.2 Engineer's Responsibility. The **Engineer** shall be responsible for the accuracy of the work for the **Project** and shall promptly make necessary revisions or corrections resulting from errors, omissions, or negligent acts by the **Engineer**. No additional compensation will be made to the **Engineer** for any necessary revisions or corrections resulting from errors, omissions, or negligent acts by the **Engineer.**

The **Engineer's** responsibility for all questions arising from design errors and/or omissions will be determined by the **Owner** or a designee appointed by the **Owner**. The **Engineer** will not be relieved of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities until after the construction phase of the **Project** has been completed.

17.3 Warranties.

(a) The **Engineer** warrants that engineering design work performed by the **Engineer** hereunder shall be in accordance with sound engineering design practices and in conformance with applicable code and standards established for such work.

(b) Notwithstanding anything to the contrary contained in this Agreement, the **Owner** and the **Engineer** agree and acknowledge that the **Owner** is entering into this Agreement in reliance on the **Engineer's** experience and abilities with respect to performing the **Engineer's** services hereunder. The **Engineer** accepts the relationship of trust and confidence established between it and the **Owner** by this Agreement. The **Engineer** covenants with the **Owner** to use the **Engineer's** best efforts, skill, judgement and abilities to design the **Project** and to further the interests of the **Owner** in accordance with the **Owner's** requirements and procedures, in accordance with all professional standards, and in compliance with all applicable national, federal, state, county and municipal laws, regulations, codes, ordinances, orders and with those of any other body having jurisdiction. If the development of plans, specifications and estimates (hereinafter referred to as **"PS&E"**) are identified in this Agreement under Article 2 hereof or **EXHIBIT "B"**, attached hereto, as part of the services to be provided by the **Engineer** for the **Project**, prior to the commencement of construction, the **Engineer** shall certify in writing to the **Owner** that the **PS&E** for the **Project**, and the improvements when built in accordance therewith, conform to all applicable governmental regulations, statutes and ordinances then in effect. The **Engineer** represents, covenants and agrees that there are no obligations, commitments or impediments of any kind that will limit or prevent performance of the **Engineer's** services.

(c) The **Engineer** represents, covenants and agrees that all of **Engineer's** services to be furnished by the **Engineer** under or pursuant to this Agreement form the inception of the Agreement until the **Project** has been fully completed, shall be of the standard and quality which prevail among engineers of similar experience, knowledge, skill and ability engaged in engineering practice throughout Texas under the same or similar circumstances involving the design and construction of **Project.**

(d) The **Engineer** represents, covenants and agrees that the **Engineer's** special talent, training and experience cause the **Engineer** to be the prime professional on the **Project;** that because of such talent and training, the **Engineer** envisions the construction of the **Project** in its entirely and possesses the special skills which enable the **Engineer** to recognize dangerous conditions that a reasonable, prudent engineer having such special skills could anticipate may arise from the proper use of the **Project** after acceptance by **Owner;** and that the **Engineer** recognizes that any commissioners, elected officials, employees and agents of the **Owner,** plus residents and owners of property within the area affected by the **Project** are within a class of foreseeable persons who will be relying on the project being designed in a professional and safe manner.

(e) If the development of **PS&E** is identified in this Agreement under Article 2 hereof or **EXHIBIT "B"**, attached hereto, as part of the services to be provided by the **Engineer** for the **Project,** the **Engineer** represents, covenants and agrees that the **PS&E** of the **Project** will be accurate and free from any material errors. The **Engineer** additionally represents, covenants and agrees to the following: that the design of the **Project** will conform to its foreseeable use as a **Project** with all the amenities as set forth in any **PS&E** developed by the **Engineer** for the **Project;** that the result of such **PS&E**, if built in accordance therewith, will be suitable for purposes for which the **Project** is designed; and the **Project** will be inspected in a workmanlike, professional manner and will be suitable for the **Project's** intended purpose. The **Engineer's** responsibilities as set forth herein shall at no time be in any way diminished by reason of any approval by the **Owner** of any **PS&E** developed by the **Engineer** for the **Project**, nor shall the **Engineer** be released from any liability by reason of such approval by the **Owner**, it being understood that the **Owner** at all times is ultimately relying upon the **Engineer's** skill and knowledge in preparing such **PS&E.**

(f) In connection with the **Engineer's** performance of procurement services hereunder, if any, the **Engineer** use its best efforts to obtain from all vendors of equipment and materials, fullest possible warranties

against defective materials and workmanship for the benefit of the **Owner.**

ARTICLE 18. Engineer's Resources. The **Engineer** shall furnish and maintain, at the **Engineer's** own expense, office space for the performance of all services, skilled and sufficient personnel, as well as adequate and sufficient equipment to perform the services as required under this Agreement.

18.1 Project Manager. The **Engineer** shall provide a manager **(Project Manager)** for the **Project** that is a registered professional engineer in the State of Texas. The **Project** manager shall have such knowledge and experience as will enable that **Project Manager** during the course of the **Project** without prior consent of the **Owner.** If, due to situations beyond the control of the **Engineer,** the **Engineer** must change the **Project Manager** prior to the completion and acceptance of the **Project,** the **Engineer** will submit a request to change the **Project Manager** to the **Owner** for approval.

18.2 Employees of the Engineer. All employees of the **Engineer** shall have such knowledge and experience as will enable them to perform the duties assigned to them and required for the services under this Agreement. Any employee of the **Engineer** who, in the opinion of the **Owner,** is incompetent, or whose conduct becomes detrimental to the work required under this Agreement, shall immediately be removed form association with the **Project** when so instructed by the **Owner.** The **Engineer** certifies that the **Engineer** presently has employed sufficient and qualified personnel, and will maintain sufficient and qualified personnel for performance of the services under this Agreement.

18.3 Documents/Information Exchange The purpose of this Article is to define the required automated resources, format for graphics files, and information exchange pertaining to the **Project.** Taking into consideration that the **Owner** has a significant investment is the development of the **Project,** there is a need for the **Engineer** to provide consistency in document development for information exchange. Consistency in document development for information exchange and production will help facilitate an economically efficient **Project.** Therefore, the **Engineer** shall provide the **Owner** with documents and information in accordance with the special requirement outlined in **EXHIBIT "B"** attached hereto.

ARTICLE 19. Indemnification. To the fullest extent permitted by applicable law, the **Engineer** and its agents, partners, subcontractors, and consultants (collectively "**Indemnitors**") shall and do agree to indemnify, and hold harmless the **Owner,** the **Owner's** respective directors, elected officials, employees and agents

(collectively "**Indemnitees**") from and against all claims, damages, losses, liens, causes of action, suits, judgments and expenses, including attorney fees, of any nature, kind or description (collectively "Liabilities") of any person or entity whomsoever arising out of, caused by or resulting from the negligent performance of the **Engineer's** services through activities of the **Engineer**, its agents, partners, subcontractors and/or consultants performed under this Agreement, and which are caused by or result from error, omission, or negligent act of the **Engineer** or of any person employed or contracted by the **Engineer** provided that any such **Liabilities** (1) are attributable to bodily injury, personal injury, sickness, disease or death of any person, or to the injury to or destruction of tangible personal property including the loss of use and consequential damages resulting therefrom and (2) are caused in whole or in part by any negligent act or omission of the **Engineer,** anyone directly or indirectly employed by the **Engineer** or anyone for whose acts the **Engineer** may be legally liable. The **Engineer** shall also save harmless the **Owner** from any and all expense, including but not limited to, attorney fees which may be incurred by the **Owner** in litigation or otherwise resisting said claim or liabilities which may be imposed on the **Owner** as a result of such activities by the **Engineer,** its agents partners, subcontractors and/or consultants. In this connection, it is agreed and understood that the **Engineer** shall not be responsible for any portion of the liability proximately caused by the **Owner's** negligence.

ARTICLE 20. Joint and Several Liability. In the event more than one of the **Indemnitors** are connected with an accident or occurrence covered by the indemnification in Article 19 hereof, then each of such **Indemnitors** shall be jointly and severally responsible to the **Indemnitees** for indemnification and the ultimate responsibility among such **Indemnitors** for the loss and expense of any such indemnification shall be settled by separate proceedings and without jeopardy to any **Indemnitee**. The provisions of this Article shall not be construed to eliminate or reduce any other indemnification or right which the **Owner** or any of the **Indemnitees** has by law.

ARTICLE 21. Insurance. The **Engineer** shall obtain and maintain insurance in the limits of liability for each of the types of insurance coverage identified as follows.

(1) Workers' Compensation, endorsed with a waiver of subrogation in favor of the **Owner** in accordance with the statutory obligations imposed by Worker's Compensation or Occupational Disease laws under the Texas Workers' Compensation Law (**"Statutory Texas"**)

(2) Commercial General Liability, endorsed with the **Owner** as an additional insured and endorsed with a waiver of subrogation in favor of the Owner *all to the extent of the liabilities assumed by the Engineer under Article 19 and Article 20* herein, in limits of liability not less than one million dollars (**$1,000,000**) combined single limit each occurrence and in the aggregate for bodily injury and property damage.

(3) Texas Business Automobile Policy, endorsed with the **Owner** as an additional insured and endorsed with a waiver of subrogation in favor of the **Owner** *all to the extent of the liabilities assumed by the Engineer under Article 19 and Article 20 herein*, in limits of liability not less than two hundred fifty thousand dollars (**$250,000**) each person for bodily injury, five hundred thousand dollars (**$500,000**) each occurrence for bodily injury, and one hundred thousand dollars **$100,000**) each occurrence for property damage.

(4) Professional Liability in limits of **$1,000,000** each claim and aggregate.

The **Engineer** covenants and agrees to maintain an insurance policy in the minimum limits of liability for each of the types of insurance coverage identified above. The **Engineer** shall furnish the **Owner** with a certificate of insurance (***Hidalgo County* Certificate of Insurance**) showing the said policy to be in full force and effect during the period of service, identified in Article 3 hereto, for this Agreement. The completed Hidalgo County Certificate of Insurance shall be attached hereto and identified as **EXHIBIT "G"- *Hidalgo County Certificate of Insurance***. The **Engineer** will be considered in breach of contract should the **Engineer** fail to maintain an insurance policy in the minimum limits of liability and requirements identified above while performing services for and under this Agreement, and will be subject to default and termination of the Agreement as outlined in Article 3.4 hereto. Additionally, the **Engineer** covenants and agrees to use its best efforts to maintain an insurance policy in the minimum limits of liability and requirements identified above until one year following the date of the acceptance of the **Project** by **Owner.**

ARTICLE 22. Compliance with Laws. The **Engineer** shall comply with all applicable Federal, State and local laws, statutes, codes, ordinances, rules and regulations and the orders and decrees of any court, or administrative bodies or tribunals in any manner affecting the performance of this Agreement including, without limitation, worker's compensation laws, minimum and maximum salary and wage statutes and regulations and

licensing laws and regulations. When required the **Engineer** shall furnish the **Owner** with satisfactory proof of its compliance therewith.

ARTICLE 23. Non-Collusion. The **Engineer** warrants that the **Engineer** has not employed or retained any company or persons, other than a bona fide employee working solely for the **Engineer**, to solicit or secure this Agreement, and that the **Engineer** has not paid or agreed to pay any company, engineer or any other person or entity any fee, commission, percentage, brokerage fee, gifts or any other consideration contingent upon or resulting from the award or execution of this Agreement. For breach or violation of this warranty the **Owner** shall have the right to annul this Agreement without liability or, in the **Owner's** discretion, to deduct from the *Services Fee*, or otherwise recover, the full amount of each fee, commission, percentage, brokerage fee, gift or contingent fee.

ARTICLE 24. Gratuities. The **Owner** mandates that employees of the **Owner** shall not accept any benefits, gifts or favors from any person doing business or who reasonably speaking may do business with the **Owner** under this Agreement; the only exceptions allowed are ordinary business meals. Any person doing business with or who may reasonably seeking to do business with the **Owner** under this Agreement may not make any offer of benefits, gifts or favors to **Owner** employees, except as mentioned herein above. Failure on the part of the **Engineer** to adhere to this provision may result in the termination of this Agreement.

ARTICLE 25. Payment of Franchise Tax. The **Engineer** hereby certifies that the **Engineer** is not delinquent in Texas franchise tax payments, or that the **Engineer** is exempt from, or not subject to, such as tax. A false statement concerning corporation's franchise tax status shall constitute grounds for termination of the Agreement at the sole option of the **Owner.**

ARTICLE 26. Disputes. The **Engineer** shall be responsible for the settlement of all contractual and administrative issues arising out of any procurement made by the **Engineer** in support of the services under this Agreement.

ARTICLE 27. Severability. In the event any one or more of the provisions contained in this Agreement shall for any reason, be held to be invalid, illegal, or unenforceable in any respect such invalidity, illegality or unenforceability shall not affect any other provision thereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

ARTICLE 28. Notices. 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:

OWNER:
Hidalgo County
100 E. Cano, 2nd, Floor
Edinburg, Texas 785392

ENGINEER:
L & G Consulting Engineers
d/b/a L & G Engineering
100 West Expwy 83
Mercedes, Texas 78570

The Address may be changed by either party by written notice and notice sol mailed shall be effective upon mailing.

ARTICLE 29. Miscellaneous Provisions.

(a) This Agreement constitutes the entire Agreement between the**Engineer** and the **Owner** relating to the work herein described and supersedes any prior understanding or written or oral contracts between the parties respecting the subject matter defined herein. These are no previous or contemporary representations or warranties of the**Owner** or the **Engineer** not set forth herein.

(b) Except as specifically provided herein no modification, waiver, termination, rescission, discharge or cancellation of this Agreement or of any terms thereof shall be binding on the **Owner** unless in writing and executed by an officer or employee of the**Owner** specifically authorized to do so.

(c) No waiver of any provision of or a default under this Agreement shall affect the right of the **Owner** thereafter to enforce said provision or to exercise any right or remedy in the event of any other default whether or not similar.

(d) No modification, waiver, termination, discharge or cancellation of this Agreement or of any terms thereof shall impair the **Owner's** right with respect to any liabilities whether or not liquidated of the **Engineer** to the **Owner** theretofore accrued.

(e) All rights and remedies of the **Owner** specified in this Agreement are in addition to the Owner's other rights and remedies.

(f) The **Engineer** shall remain an independent contractor and shall have no power nor shall the **Engineer** represent that the **Engineer** has any power to bind the **Owner** or to assume or to create any obligation express or implied on behalf of the **Owner** except as specifically authorized in advance by the **Owner.**

(g) The Agreement shall be construed under the laws of the State of Texas and is performable in Hidalgo County, Texas.

(h) This Agreement may only be amended by a written document executed by the Owner and the **Engineer** as provided by Article 8 herein.

ARTICLE 30. Signatory Warranty The undersigned signatory or signatories for the **Engineer** hereby represent and warrant that the signatory is an officer of the organization forwhich he or she has executed this Agreement and that he or she has full and complete authority to enter into this Agreement on behalf of the **Engineer.** The above-stated representations and warranties are made for the purpose of inducing the **Owner** to enter into this Agreement.

WITNESS WHEREOF, the **Engineer** and the **Owner** have caused this **Agreement for Professional Services** to be effective as of the 9th day of December 2008.

ENGINEER:
L & G CONSULTING ENGINEERS INC.
d/b/a **L & G ENGINEERING**

BY: _____
Jacinto Garza, P.E./President

OWNER:
HIDALGO COUNTY

BY: _____
Juan D. Salinas, III, County Judge

ATTEST:

_____
Arturo Guajardo, Jr., County Clerk

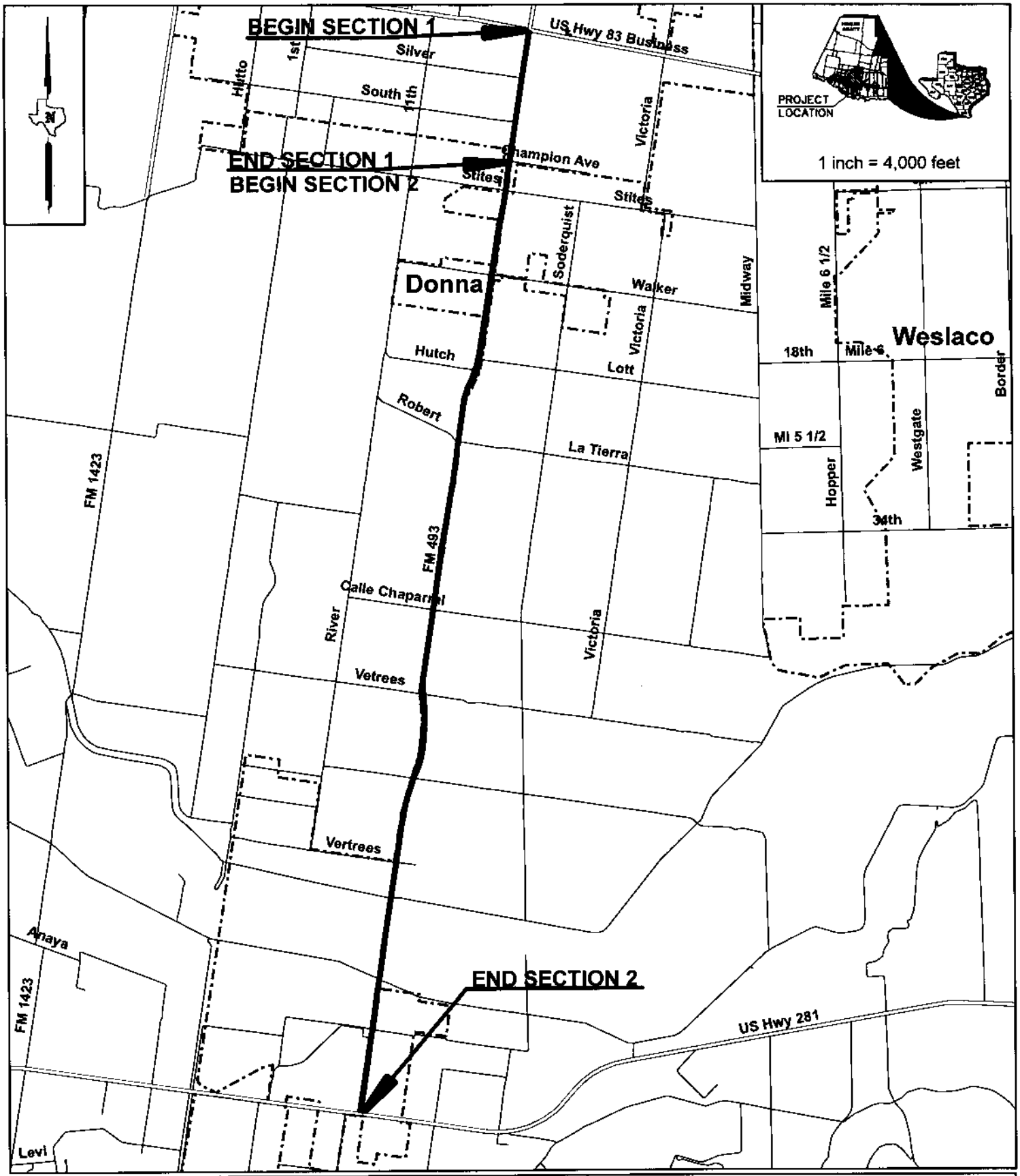
Approved by Commissioners' Court on December 9th, 2008.

APPROVED AS TO FORM:
Atlas & Hall, L.L.P.

By: _____
Stephen L. Crain, Attorney

ATTACHMENTS:

EXHIBIT A	-Scope of Services to be Provided by the Owner
EXHIBIT B	-Scope of Services to be provided by the Engineer
EXHIBIT C	-Work Schedule
EXHIBIT D	-Engineer's Rates
EXHIBIT E	-Work Authorization Form
EXHIBIT F	-Supplemental Agreement Form
EXHIBIT G	-Certificate of Insurance *(Hidalgo County)*



FM 493 SOUTH
PROJECT LOCATION MAP

APPROX. LENGTH = 6.65 MILES

THE COUNTY OF HIDALGO TEXAS

L&G Engineering
Highway / Civil
Structural / Bridge
Environmental
Construction Material Testing

2100 W. Expressway 83
Mercedes, TX. 78570
Phone : (956) 565-9813
Fax : (956) 565-9018

G:\AMAPS\FM493SOUTH\FM 493 Location.mxd

EXHIBIT A

-Scope of Services to be Provided by the Owner

EXHIBIT "A"

Services to be provided by the Hidalgo County Precinct #1

1. Hidalgo County Precinct #1 will issue work authorization to initiate all required services and designate the authorized representative of the coordination of each work authorization.

2. The Hidalgo County Precinct #1 will provide the Engineer with on-going guidance, timely reviews, and decisions necessary to complete services required by the work authorization in order to permit the Engineer to maintain an agreed upon project schedule.

3. Hidalgo County Precinct #1 will process all acceptable requests for payment in a timely manner.

EXHIBIT B

-Scope of Services to be
Provided by the Engineer

EXHIBIT "B"

Services to be provided by the Engineer

PROJECT LIMITS:

- **FM 493: From US 281 (Military Highway), North 6.65 Miles, to Business 83**

GENERAL SCOPE OF WORK:

The work to be performed by the Engineer under this Contract shall consist of providing Engineering Services required for the preparation of Schematics, Preliminary ROW Ownership, Environmental Assessment, Public Involvement, Design Surveys and ROW Determination, Outfall Identification and Hydrologic Map, Utility coordination, PS&E Development and bidding documents. In addition, this contract will include ROW acquisition provider services and construction inspection and construction material testing. The Engineer will prepare bid packages as identified in the Work Authorization for the reconstruction of FM 493 from US 281 (Military Highway) North 6.65 Miles to Business 83 in two sections. Section 1 is from Bus 83 to Champion Street and Section 2 is from Champion Street to US 281. The proposed improvements are to overlay the Section 1 and reconstruct Section 2 from an existing 28' roadway to 40 foot rural roadway providing for two lanes and shoulders along with associated drainage, structures, and grading including Traffic Control, Signing & Striping, and Traffic Signal/Flashing Beacon Installations for the subject limits.

The work to be performed by the Engineer shall also include the review of the existing drainage patterns to determine if the proposed roadway can be designed utilizing the existing outfalls. The basis for this estimate is based on the premise that the existing outfalls located at the ROW line of FM 493 will be utilized. The Engineer will examine the proposed outfall locations and associated hydrologic and hydraulic conditions and determine the feasibility and practicality of using the existing outfalls or if new outfalls are needed. **This scope does not include designing outfalls outside of the existing ROW for FM 493.** In addition, the scope includes coordinating the utilities along the project limits in preparation for construction.

The **Engineer** will furnish all equipment, materials, supplies, and incidentals as needed to perform the services required by this contract, except as otherwise specified in Exhibit A, "Services to be Provided by the County".

GENERAL SCOPE OF WORK:

The Scope of Work for this Work Authorization will be identified as follows:

- ***FC110 ~ Design Schematic Development***
- ***FC120 ~Social, Economic, and Environmental Studies, and Public Involvement***
- ***FC130 ~ Existing Right-of-Way Determination***
- ***FC150 ~ Design Surveys***
- ***FC160 ~ Roadway Design***
- ***FC161 ~ Hydrologic/Hydraulic Study***
- ***FC162 ~ Signing, Pav't Marking, Signals***

- ***FC163 ~ Irrigation Str., Estimate, Specs, Gen Notes, Misc***
- ***FC164 ~ Contract Management***
- ***FC 320 – Construction Inspection and Construction Material Testing***
- ***FC 600 – ROW Acquisition Services***

FC 110 ~ DESIGN SCHEMATIC DEVELOPMENT

After the existing centerline alignment is recovered and the proposed centerline is approved by TxDOT, the Engineer will develop a design schematic for submittal to TxDOT's Design Division.

Design Criteria

- The Engineer will prepare a Design Summary Report (DSR) to document the design criteria for the project and submit it to TxDOT for further processing.
- A Design Concept Conference (DCC) will be held to discuss and review the design criteria. The Engineer will prepare a Meeting Summary Report which will describe in detail the decisions made at the DCC and distribute it to everyone in attendance.
- The Engineer will prepare a preliminary construction cost estimate based on the results of the DCC and submit it to TxDOT.

Design Schematic

- The Engineer will develop a preliminary design schematic, based on the alignment previously selected, and submit to TxDOT for review.
- The Engineer will revise the schematic to incorporate TxDOT's comments and provide to TxDOT.
- A public meeting for this project will be scheduled. The Engineer will attend and will provide TxDOT with technical support.
- The Engineer will meet with TxDOT after the meeting to discuss modifications, if any, to the design schematic. The Engineer will incorporate the changes agreed upon, into the schematic and submit the revised schematic to TxDOT for further submittal to the Design Division and/or FHWA.
- After receiving approval of the design schematic from TxDOT, the Engineer will proceed with finalizing the design and complete the PS&E.
- The Schematic details will be completed to the Districts identified checklist.

Drainage

- The Engineer will evaluate the adequacy of the existing outfalls and develop a Hydrologic Map for the project identifying if any outfalls are needed for the project. The Engineer will coordinate with the Hidalgo County Drainage District No. 1, the Irrigation Districts, and cities in the area.

Irrigation Structures

- The Engineer will define the horizontal layout of the irrigation system in place and draw on the schematic the basis for maintaining the irrigation system whole.

FC 120 ~ ENVIRONMENTAL STUDIES, AND PUBLIC INVOLVEMENT

The Engineer will conduct the necessary research and field investigations to prepare an

Environmental Assessment document to obtain a Finding of No Significant Impacts (FONSI) clearance for the project.

Task I. Document Purpose and Need for the Project: This section will include text and graphics illustrating the description, purpose and need, objectives of the project and the existing and proposed project design. This section will also provide a description of the issues eliminated from further study.

Task II. Alternatives: This section will include text and graphics illustrating the different alternatives considered prior to selecting the preferred. It will also describe the reasonable alternatives and those eliminated from further study.

Task III. Affected Environment and Environmental Consequences: For each of the following categories the necessary background and field reconnaissance will be performed to gather data necessary for the completion of the EA. This will assist in determining which issues should be eliminated from further study or studied in detail.

Land Use and Socio-economic Impacts: Pertinent social and economic issues will be addressed in the EA; a separate report will not be prepared. At this time, it is unknown if relocations will occur; however, the EA will address any relocations anticipated. No other impacts to land use, land planning or socio-economic issues are anticipated. A Section 4(f)/6(f) will not be prepared.

Ecological Resources: A characterization of the project's ecological resources, including wetlands, vegetation, prime farmland and wildlife habitat characteristics will be performed. Ecologically sensitive resources including protected species, if any, will be identified in order to assess potential effects of project construction and operation. Any presence or absence surveys for endangered species will not be conducted. The project will be assessed for compliance with the Nationwide Permit Program; however, a permit is not anticipated. Any permitting required will be conducted by TxDOT.

Hazardous Materials: A field screening and an internet data search for potential hazardous materials sites will be conducted. A Phase I Environmental Site Assessment for hazardous materials will not be conducted.

Noise and Air Quality: A noise analysis and air quality impacts will be assessed under this scope.

Field Investigations: Field visits to identify potential environmental constraints involving land use, ecological resources and potential hazardous material sites will be conducted.

Graphics: Report graphics will be prepared for the EA as needed to show the project location, typical sections and project area photographs. In addition, the project layouts/photographs will show those resources that are necessary to convey the project's impacts to the reviewers.

Public Involvement – A discussion will be provided regarding any public involvement which occurs on the project.

Report Preparation and Submittal – The Engineer will prepare an environmental document (EA) that complies with applicable procedures of the National Environmental Policy Act (EPA) and Federal Highway Administration Technical Advisory 6640.8A. The analysis will address the

adverse and beneficial impacts of project construction and operation. Mitigation options will be emphasized where adverse impacts may potentially occur.

The Engineer will submit one draft copy of the report for review by the TxDOT Pharr District. Color photographs and exhibits will be included in both the draft and final reports. All review comment responses will be provided in writing and a meeting will not be required to discuss review comments. The draft report will be revised to incorporate District's comments. Thirteen (13) sets of the revised report will be submitted for review by ENV. After ENV reviews the report, the document will be revised and eight (8) sets of the report will be submitted. Because this project would obtain a Categorical Exclusion, no other revisions will need to be made. Upon receiving a Categorical Exclusion, a CD which includes the document and exhibits will be provided to the District for their files.

Coordination – L&G will coordinate with the SWCA to conduct all Cultural Resource Surveys and reports. TxDOT will coordinate with the appropriate resource agencies to obtain environment clearance for completion of project.

Assumptions used to derive to proposed fee estimate and scope of services:

- The Engineer will conduct field investigations in two field trips.
- The Engineer will attend the DCC and one meeting.
- All investigations will be conducted based on existing literature, field reconnaissance and aerial photographic interpretation.
- The draft EA will be submitted to TxDOT in 30 days after the public meeting and/or receipt of data needed.

FC 120 ~ ENVIRONMENTAL STUDIES, AND PUBLIC INVOLVEMENT

SWCA will conduct and prepare all Cultural Resource surveys and reports as required by TxDOT.

FC 130 ~ PRELIMINARY ROW DETERMINATION

FM 493 From Champion Street to US 281

General

1. The **Surveyor** will recover and or re-establish the existing Right-of-Way for the subject project.
2. The **Surveyor** shall monument the recovered ROW at all at all PCs, PTs, angle points, intersecting right-of-way lines of side streets, and 1000-feet stations after coordinating with the L&G Engineer. The **Surveyor** shall also monument all ROW corners.
3. **The Surveyor will submit a separate existing R.O.W. layout drawing (at scale of 1 inch = 100 feet), delineating the existing points recovered and all R.O.W. monuments that will be set before setting any points on the ground**. This map shall be utilized by L&G to attach it to the requests for the utility companies to adjust their lines prior to construction.

a. This map shall also contain the proposed centerline as set on the ground – **again do not set a centerline for construction until L&G Engineers have approved.**
b. Existing right-of-way lines will be delineated with appropriate bearings, distances, and curve data. The proposed centerline alignment will be delineated with appropriate bearings, distances, curve data and stationing. The existing ROW layout sheets stationing will be based on the proposed alignment. A north arrow will be shown on each sheet and, if possible, in the upper right hand corner.
c. Monumentation set or found will be shown and described as to material and size.
d. A station and offset based on the proposed alignment will be shown for all points set and/or recovered.
e. Intersecting streets will be shown and identified by name and right-of-way width.
f. Railroads will be shown and identified by name and right-of-way width.
g. A note will be included on each sheet stating the basis of bearings, coordinates, and datum used.
h. All existing right-of-way layout sheets shall be 11" x 17". The borders around these map sheets should ½" from the right side of the map, the top and the bottom. The border on the left side is 2". Scale of 1"=100'.

FC 150 ~ DESIGN SURVEYING

FM 493 From Champion Street to US 281

A. Design Survey

1. **The Limit of the Design survey shall be 1000-ft before and after the limits of the project. Set horizontal and vertical control for FM 493 from Bus 83 to US 281. The Basis for the H & V Control shall be the control previously established on US 281.** Set benchmarks at max 1000-ft intervals. The BM's shall be #5 I.R. 2-ft in depth set in concrete. An H&V Book will be provided to the Engineer with 3-pt reference ties.
2. Field Topographic Survey - Verify accuracy of existing topographic information by checking coordinates of Horizontal control points and elevations of benchmarks previously established by TxDOT.
3. Update existing planimetric data with current information of any improvements and apparent changes in the topography since the original planimetric data was obtained as well as field tie all existing drainage structures, driveways, and pavement edges as well as all existing roadway centerline and roadside drainage ditch profiles.
4. Fill all existing planimetric mapping void areas along FM 493, data processing and CADD mapping (2d and 3d) update, (4.7 Miles including additional limits).
5. Field locate cross culverts, driveway culverts, inverts, irrigation lines, within the project limits, data processing and CADD mapping (2d and 3d) update.
6. Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the surveyor.

6a. The surveyor shall recover and reestablish the existing centerline then coordinate with the Engineer to establish the existing centerline stationing based on the old stationing of the previous plans south of Mile 10.

7. Stake proposed centerline/baseline at 1000-foot stations, PC's and PT's as directed by Engineer. (No. 5 I.R. 2-ft long).—FOR CONSTRUCTION but not until the Engineer directs the surveyor to do so.
8. The Surveyor shall also paint the proposed centerline on the proposed pavement. (500-ft stations and a tick mark at 100-ft stations ---12 inches long with approved paint by Engineer) before construction for the purpose of utility adjustments and project location.
9. Extend topographic survey 500 feet to each side of the existing Right-of-Way on all the intersecting streets for the limit of the project except at the existing drain ditches, the survey shall be extended 500-ft east and west from the existing FM 493 ROW and the x-sections shall be 50-ft Lt and Rt from the ditch centerline plus tieing in all topo.

B. Utilities

1. Coordinate with engineer to have all existing underground utilities marked by utility companies along FM 493 and intersecting streets. Field tie the marked locations and process the information to include in the planimetric CADD mapping files. Utility lines shall be properly labeled and placed in separate levels in accordance with TxDOT requirements.
2. Collect vertical information of all exposed (by utility companies) utilities that have been identified as possible conflicts by the Engineer and process as above.

C. Miscellaneous

1. Provide the engineer with a copy of all field books developed during this project. The field books shall supplement the graphical information submitted by the surveyor. Accurate sketches of the existing conditions of all irrigation and drainage structures that were tied down by the surveyor shall be included in the field books.

2. A horizontal and vertical. control book shall be submitted to the engineer. This control book shall include the reference sketches to the BM's and Horizontal Control. Points as well as describe the basis of the datum's used.

FC 160 – DESIGN

PS&E for the above work shall be prepared in accordance with the applicable requirements of TxDOT Specifications, Standards, and manuals (updated for revisions). Whenever possible, the Department's standard drawings, standard specifications, or previously approved special provisions and/or special specifications will be used. If a special provision and/or special specification must be developed for this project, it shall be in the Departmental format and, to the extent possible, incorporate references to approved Department test procedures.

The Engineer shall furnish three (3) final cross-section plots showing both the original terrain (modified) and the design cross-sections, showing the roadway template. The design cross-sections shall indicate the slope rate on the side slopes.

FC 161 – DRAINAGE

The Engineer will perform a Geopak Drainage generated drainage analysis for all drain systems which will also include contributing runoff from the Adjacent Properties. This drainage analysis will be prepared prior to detailed design of drainage structures and will contain drainage area map(s), hydraulic calculations and Thysys and/or HEC-RAS analysis for TxDOT to approve.

FC 161 - STORM WATER POLUTION PREVENTION PLAN (SW3P)

The **ENGINEER** shall complete the plans adequately addressing a storm water pollution prevention plan for the entire project during all phases of construction. SW3P layouts shall be developed on the TCP plan sheets. SW3P plans shall **generally** include the following drawings:

- **Summary Sheet on TCP's**
- **Details & Standards**

The Engineer shall develop a project specific Storm Water Pollution Prevention Plan (SW3P) to comply with the Federal Regulations (40 CFR part 122) published in the Federal Register on Sept. 9, 1992.

FC 162 - SIGNAL DESIGN

Project Understanding

The Engineer will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the installation of permanent signals along FM 493 after and if warrants are met.

TASK 1 – General Notes for Traffic Signal installation

The Engineer will setup the General Notes sheet(s) and prepare the general notes for the traffic signal design, as well as the signing, pavement marking and wheelchair ramp design at the above intersections.

TASK 2 – Estimate and Quantities

THE ENGINEER will prepare Basis of Estimate sheets with adequate number of columns to reflect the number of the above intersections and one column for the total quantities.

THE ENGINEER will calculate quantities and prepare cost estimates at 60%, 90% and 100% levels of completion.

TASK 3 – Condition Diagram

THE ENGINEER will setup the condition diagram sheets that would show the existing configuration of each intersection and other elements as required by TxDOT.

TASK 4 – Proposed Signal Plan Layout

THE ENGINEER will setup proposed signal layout sheets that would show the proposed geometry of the above intersections along with the basic elements of the signal design, such as location of signal poles, pedestrian poles, wheel chair ramps, cross walks and service pole locations.

THE ENGINEER will contact the local power company for electrical service requirements at each of the above interceptions.

THE ENGINEER will produce submittals for TxDOT's review at the 60%, 90% and 100% completion levels.

TASK 5 – Signal Phasing and Timing

Based on traffic counts furnished by TxDOT, the Engineer will develop optimal phasing and timing charts for each of the AM peak, PM peak and Off-peak time periods, using appropriate software. The charts will be presented to TxDOT for review and approval before their incorporation into the plan sheets.

TASK 6 – Standard Sheets List

The Engineer will prepare a list of standard sheets for the 60%, 90% and 100% submittals. The Engineer will also prepare the drill shaft tables on the TSFD standard sheet as well as the shipping parts list on the SP/SMA standard sheet.

TASK 7 –Specifications List and Cost Estimate

The Engineer will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. The Engineer will also prepare cost estimates at the 60%, 90% and 100% submittals.

TASK 8 – Electrical Schedules

The Engineer will prepare tables, depicting the electrical schedule for each signalized intersection. The electrical schedules will be shown on the same sheets with the loop detector schedules and phasing/timing tables.

TASK 9 – Field Investigation and Meetings

The Engineer will conduct field investigations at the above intersection locations and record pertinent signal design information as well as identify potential design issues.

The Engineer will participate in one project progress meeting with L&G/TxDOT.

TASK 10 – Other services

The Engineer will provide tables with electrical service data for each of the services poles required at the above intersections.

Other services not covered in the above scope will be negotiated separately.

FC 162 – PAVEMENT MARKING AND MARKER LAYOUTS

TASK 1 – Plan Layouts (1"=100')

L&G will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the pavement marking and markers along FM 493 and all cross street approaches for the length

shown in the plan and profile layouts. Work will include design of ADA compliant wheelchair ramps that line up with the proposed crosswalks and any signal pole locations.

TASK 2 – Estimate and Quantities

The Engineer will prepare a summary of pavement marking and marker quantities (Basis of Estimate sheet) with adequate number of columns to reflect the types of markings to be installed by each payout sheet and one column for the total quantities.

The Engineer will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 3 – Standard Sheets List

The Engineer will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 4 –Specifications List and Cost Estimate

The Engineer will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. The Engineer will also prepare cost estimates at the 60%, 90% and 100% submittals.

FC 162 – SIGNING AND DELINEATION LAYOUTS

TASK 1 – Plan Layouts (1"=100')

L&G will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the signing and delineation along FM 493 and all cross street approaches for the length shown in the plan and profile layouts. The work will include design of flashing beacons near the School. The plans will show the following:

Existing signs to remain in place
Existing signs to be removed
Proposed new signs
Proposed new delineators and object markers.

L&G will prepare signing and delineation plans for all major cross streets.

TASK 2 – Summary of Small Signs

L&G will prepare a summary of small signs sheets along with a descriptive codes sheet. (Basis of Estimate sheet).

L&G will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 3 – Standard Sheets List

L&G will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 4 –Specifications List and Cost Estimate

L&G will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. L&G will also prepare cost estimates at the 60%, 90% and 100% submittals.

FC 163 - IRRIGATION SIPHONS AND CANALS

The ENGINEER shall coordinate with the Irrigation District(s) and prepare all necessary drawings needed for maintaining the functionality of irrigation districts irrigation lines.

FC 163: TRAFFIC CONTROL

The Engineer shall determine the project construction sequence and design a traffic control plan based upon the Texas MUTCD and the latest district traffic control design requirements. This shall include field investigations into such items as any Drainage Structures, utilities, R.O.W. restrictions, adjacent properties and cross street access, and other items which may ultimately affect the safe handling of traffic during the construction sequence.

The engineer shall meet with the Pharr District personnel early in the project design as soon as a construction sequence is developed. The construction sequence shall be updated periodically as the design progresses.

The engineer shall prepare drawings for each phase, based upon the agreed sequence of construction. The drawings shall indicate traffic lanes versus work zones per phase, including all required detours. Consideration shall be given to the use of temporary traffic control signals and, if needed, how to utilize and coordinate with the various phases. The drawings will be used by the District to obtain final concept approval of the TCP from the District Traffic Control Review Committee. Based on the results of the safety review team meeting, the detailed Traffic Control PS&E will be completed.

FC 163: UTILITIES

The Engineer shall coordinate the utilities as follows: (L&G will conduct two utility meetings with the owners at the County or at L&G's office in coordination with TxDOT)

A. Determine the ownership of the existing utilities on the subject project.

B. Contact the utility owners and locate (horizontally and vertically) existing utilities on the ground.

C. Evaluate utility conflicts with proposed construction. Prepare and submit drawings to the County, Utility Companies and copies to TxDOT, for required utility adjustment. The following information will be submitted for each required utility adjustment.

   1. A reproducible drawing 8-1\2" x 11", 11" x 17", or 22" x 34" (as appropriate) for each utility adjustment

   2. Drawing will include the following:

      a) Existing and/or proposed R.O.W lines.
      b) Existing and/or proposed roadways.
      c) Proposed drainage structure

d) Existing underground utility in plan and profile.
e) Owner of utility.
f) Benchmark

3. Provide copies to TxDOT of correspondence with utility companies and cities. If initial contact was made by phone, provide name of company and representative's name and telephone number.

4. Prepare a detailed list to TxDOT of all conflicts with existing utilities during the drainage structure design phase. List must include the following:

   a) Highway station number.
   b) Name of utility company and type of facility.
   c) Proposed highway facility - the conflict with: storm sewer, roadway, drainage ditch, drill shaft, etc.

4. The Engineer shall be responsible for notifying all utility owners, early in the design phase, regarding any utility adjustments.

5. Utility agreements to be developed by consultant, sent by consultant to companies and coordinate with them.

FC 163: BIDDING DOCUMENTS

1) The Engineer will furnish to the Owner the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.

2) The Engineer will assist Owner the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

FC 164 – CONTRACT MANAGEMENT

The Engineer will be required to meet with designated TxDOT representatives on a regularly scheduled basis to report on progress. A typewritten progress report will be required, together with evidence of the work accomplished during the period since the previous report. A bar chart indicating the percentage of completion of each task shown on Attachment "C" will also be required. Formal progress reports with bar charts will be required on a monthly basis.

The Engineer will establish a separate cost accounting system for each control-section-job (C-S-J) number to properly allocate all labor and expenses incurred. The Engineer shall invoice monthly according to Function Code breakdowns.

FC 320– CONSTRUCTION INSPECTION & CONSTRUCTION MATERIAL TESTING

The Engineer will provide engineering and support services for and during the construction of the Project or portions of the Project approved by the Owner. Specific (basic and special) services for CONSTRUCTION MANAGEMENT AND SUPPORT by the Engineer will include the following:

1) In general, the Engineer will provide the management and engineering support/data required for consultation and advisement to the Owner and act as the Owners representative as provided in the General Condition of the Construction Contract.
2) The Engineer will coordinate and conduct a pre-construction conference.
3) Defects and Deficiencies. The Engineer will use his best efforts to protect the Owner against defects and deficiencies in the work of the Contractor. The Engineer will promptly notify the Owner of any such defect or deficiency, and take all steps possible to require the Contractor to correct the defect or deficiency.
4) Contractor Payment. The Engineer will have a day to day inspector and the Engineer will review quantities as submitted by the Contractor and in coordination with the County's field inspector for the preparation of the monthly and final estimates for payment to the Contractor.
5) The Engineer will provide Project site inspection of the authorized construction contract(s) as follows:
   a) Project Engineer. The Engineer will provide visits by the Project Engineer or a competent representative of the Engineer to the site of construction for the purpose of monitoring the Contractor's progress and conformance to the construction contract plans and specifications.
   b) Resident Engineer and/or Construction Inspector(s). The Engineer will furnish the services of a Resident Engineer and/or Construction Inspector(s) for on the site inspection construction to monitor/inspect the Contractor's daily progress and conformance to PS&E specifications.
6) Shop Drawings. The Engineer will review and check all shop or working drawings furnished by the Contractor.
7) Control of Materials & Equipment. The Engineer will provide inspection of all materials and equipment furnished/used by the Contractor as follows:
   a) Review and record all laboratory, shop and mill tests of materials and equipment for compliance with the construction contract specifications.
   b) Observe and/or perform Project record testing and/or independent assurance testing as outlined in the construction contract specifications.
8) Change Orders. When applicable the Engineer will prepare the engineering data, including plan sheet drawings, specifications, and estimates, for the preparation of construction contract change orders, which may be required due to actual field conditions encountered or new requirements directed by the Owner.
9) As Built Drawings. The Engineer will develop as built drawings to depict the work as actually constructed. The Owner will be furnished five (5) set of prints.

FC 600– RIGHT-OF-WAY ACQUISITION PROVIDER SERVICES

1) *Project Administration*

a) Negotiation of Scope of Services for Work Authorization
   i) Acquisition Provider will visit project site with County personnel if necessary.

b) Project Presence at L&G Consultant Office Headquarters
   i) Full Project Office

(1) No Joint Use of County or TxDOT facilities
(2) Open during normal County and State work hours
(3) Personnel available to answer questions
(4) Availability of Project Files
(5) At least one office staff member is required to be a current commissioned notary public.

c) Overhead Costs
   i) Administrative costs

d) Communication
   i) Provide monthly progress reports with invoice.
   ii) Participate in project review meetings as determined by the County.
   iii) Prepare initial property owner contact list for use by the County in distribution of Acquisition Provider introduction letters.

e) File Management
   i) Project and parcel files will be kept in the County's Office, if necessary. Working files will be kept in the Acquisition Provider's project administrative office, but documents generated or received by the Acquisition Provider will be forwarded to the County office as they are generated or received by the Acquisition Provider, if necessary.
   ii) Prepare payment transmittal request utilizing standard payment submissions forms with supporting documentation.
   iii) Maintain records of all payments including check number, amount, and date paid, etc.
   iv) Provide copies of all incoming and outgoing correspondence as generated if requested by County at provider conference.
   v) Maintain copies of all correspondence and contacts with property owners.

2) Title Services

a) Secure preliminary title commitments from the Title Company that will be providing title insurance. Cost of preliminary title commitments will be paid by the Acquisition Provider (if requested by the title company) and will be included in the Acquisition Provider's scope of work for payment.

b) Secure title commitments updates in accord with insurance rules and requirements for parcel payment submissions. Cost of title commitment updates will be paid by the Acquisition Provider (if requested by the title company) and will be included in the Acquisition Provider's scope of work.

c) Secure title insurance for all parcels acquired, insuring acceptable title to County of Hidalgo. Written approval by the County required for any exception.

3) Appraisal

a) Appraiser may be selected from TxDOT's list of state approved fee appraisers. This list will be available for review at all District offices or at the Right of Way Division Office at 118 E. Riverside Drive, Austin, Texas, upon request.

b) Secure written permission (if necessary) from the owner to enter the property from which land is to be acquired. If the Acquisition Provider, after diligent effort, is unable to secure the necessary letter of permission from the property owner, a waiver must be obtained, in writing from the County/TxDOT. Maintain permission letters with appraisal reports.

c) Prepare (if necessary) pre-appraisal contact with interest owner(s) for each parcel using acceptable County/TxDOT forms.

d) Contact property owners or their designated representative to offer opportunity to accompany the appraiser on the appraiser's inspection of subject property. Maintain record of contact in file.

e) Prepare complete appraisal report for each parcel to be acquired utilizing TxDOT Forms No. ROW-A-5 and ROW-A-6 as applicable. These reports shall conform to County policies and procedures along with the Uniform Standards of Professional Appraisal Practices.

f) As necessary, prepare written notification to County/TxDOT of any environmental concerns associated with the right of way to be acquired which could require environmental remediation.

g) All completed appraisals will be administratively reviewed by L&G Engineering ROW Office and recommended for approval by the County of Hidalgo.

h) As necessary, the appraiser will appear and or testify as an Expert Witness in eminent domain proceedings and be available for pre-hearing or pre-trial meetings as directed by L&G Engineering and/or the County.

i) As necessary, the appraiser will coordinate with review appraiser regarding revisions, comments, or additional information that may be required.

j) The cost of the appraiser appearing as an expert witness for testimony at special commissioners hearing must be included in the proposed fee schedule for the appraiser. The cost of the appraiser's expert witness testimony for trial is not part of this contract, and shall be paid by the County.

4) Appraisal Review

a) Review Appraiser may be selected from TxDOT's list of state approved fee appraisers. This list is available for viewing at all District offices or the Right of Way Division office at 118 E. Riverside Drive, Austin, Texas upon request.

b) Review all appraisal reports for each parcel to determine consistency of values, supporting documentation related to the conclusion reached and compliance with TxDOT/County policies and procedures and the Uniform Standards of Professional Appraisal Practices.

c) Prepare and submit to County the Form ROW-RTA-10 "Tabulation of Values", for each appraisal.

d) The cost of the review appraiser appearing as an expert witness for testimony at special commissioners hearing must be included in the proposed fee schedule for the review appraiser. The cost of the appraiser's expert witness testimony for trial is not part of this contract, and shall be paid by the County.

5) Appraisal Updates

a) Prepare complete appraisal update for the parcel to be acquired utilizing TxDOT Form No. ROW-A-5, which will be furnished to the provider by TxDOT. These reports shall conform to County/TxDOT policies and procedures along with the Uniform Standards of Professional Appraisal Practices.

b) As necessary, prepare written notification to County/TxDOT of any environmental concerns associated with the right of way to be acquired which could require environmental remediation. All completed appraisals will be administratively reviewed by L&G Engineering Right of Way Office and recommended for approval by the County of Mission.

c) As necessary, the appraiser will appear or testify as an Expert Witness in eminent domain proceedings and be available for pre-hearing or pre-trial meetings as directed by the County.

d) The cost of the appraiser appearing as an expert witness for testimony at special commissioners hearing must be included in the proposed fee schedule for the appraiser. The cost of the appraiser's expert witness testimony for trial is not part of this contract, and shall be paid by the County.

e) As necessary, the appraiser will coordinate with the review appraiser regarding corrections and/or additional information that may be required.

6) Negotiation, Tasks, and Fees

a) Analyze appraisal and appraisal review reports and confirm the County's approved value prior to making offer for each parcel.

b) Analyze preliminary title report to determine potential title problems, propose methods to cure title deficiencies.

c) Prepare the initial offer letter, instruments of conveyance, and any other documents required or requested by County/TxDOT on applicable County/TxDOT forms.

d) Contact each property owner or owner's designated representative, to present the written offer in person where practical, and deliver appraisal report and required brochures. Maintain follow-up contacts and secure the necessary instruments upon acceptance of the offer for the closing.

e) Provide a copy of the appraisal report for the subject property exclusively to the property owner or authorized representative at the time of the offer. Maintain original signed Receipt of Appraisal, (unless property owner refuses to sign it, it will be so noted) for billing purposes.

f) Respond to property owner inquiries verbally and in writing within two business days.

g) Prepare a separate negotiator contact report for each parcel per contact.

h) Maintain parcel files of original documentation related to the purchase of the real property or property interests.

i) Advise property owner on the Administrative Settlement process. Transmit to County any written counter offer from property owners including supporting documentation, and provider recommendation with regard to Administrative Settlements in accordance with County/TxDOT policy and procedures.

j) Prepare final offer letter, documents of conveyance as necessary.

k) Appear and provide Expert Witness testimony as an Acquisition Provider when requested.

l) Meet at the L&G Engineering ROW office in Mission once per week as agreed-upon with the Right of Way Acquisition Manager/Administrator.

m) Provide a monthly progress report per parcel by the 25th of the month with invoice.

n) The consultant shall, as part of this proposal, estimate 10% of the 55 parcels may end up in condemnation. The consultant shall be available for any meeting/hearings as requested by the County Attorney.

7) **Closing Service Fees**

a) Coordinate with County and Title Company to obtain an updated title commitment along with other Forms and certified copy of the instrument of conveyance necessary when requesting the Parcel Payment from the County.

b) Acquisition Provider shall attend closings and provide closing services in conjunction with Title Company.

c) Acquisition Provider shall record all original instruments immediately after closing at the respective County Clerk's Office, except for donations which must be forwarded to County for acceptance by the County Commissioners.

8) **Relocation Assistance Services**

a. Residential & Business

i. **There are no anticipated relocations or displacements for this contract.**

9) **Condemnation Support**

a) Pre-Hearing Support
   i) Upon receipt of a copy of the final offer, request an updated title commitment for Eminent Domain from the Title Company.
   ii) Prepare a Bisection Clause for the original set of Legal Descriptions supplied by Surveyor if applicable
   iii) Use the information from the Title Commitment to join all interested parties on the necessary forms. Spouses of owners must also be joined.
   iv) Upon completion of the necessary forms, prepare a packet containing 2 copies each of the following documents: Title Commitment, Negotiator's Reports, Appraisal Acknowledgment, Preappraisal Contact Sheet, signed and sealed property description, and plat, Final Offer Letter, any correspondence from the land owner or representatives, along with one copy of the appraisal report. Submit packet to the County Office for submission to the County Attorney's office.
   v) Upon receipt of concurrence for the Appraisal Witness, request the update of appraisal.
   vi) Upon receipt of packet prepared by the County Attorney which will include Petition for Condemnation, Lis Pendens, Order Appointing Special Commissioners, Order Setting Hearing, Oath of Special Commissioner, and Notice of Hearings, developed by the County Attorney; the attorney shall file the original petition with the County Court at Law or other appropriate Court for a cause number to be assigned.
   vii) The County attorney shall file the Lis Pendens including the cause number with the County Clerk's Office.
   viii) Upon assignment of a court, the County Attorney shall file the Order Appointing Commissioners with the judge retaining a copy of the Order for the files.
   ix) Following appointment of Special Commissioners by the judge, the County shall secure the following documents: Oath of Commissioners signed by the Commissioners, Order Setting Hearing, 2 copies of the Notice of Hearing signed by the Commissioners.
   x) The County shall file all originals with the court and send copies marked "copy" to L & G Engineering.
   xi) The County Attorney shall send a copy of the petition to the Title Company so that the Title Company can make sure the appropriate parties were joined and that no changes in title have occurred.
   xii) The County Attorney shall set the Special Commissioners Hearing after the updated appraisal has been submitted, if there is no change in value. If there is an increase in value, County will approve the new value and the County's provider will present a revised offer and a final offer letter and submit a copy of the final offer letter.
   xiii) The County Attorney shall coordinate a pre-hearing conference prior to the hearing (the day before or earlier) to discuss facts of the case with the County, Appraiser, and Negotiator.
   xiv) After the hearing is set, the County Attorney shall serve Notices of Hearing to the indicated parties at least 11 days prior to the Commissioner's hearing. If it is necessary to join the Federal Government, be advised that they have an additional 60 days to prepare for the Hearing.
   xv) Once the notices have been served, the County Attorney shall file the original notices with the court and send copies stamped "copy" to L&G Engineering ROW Office.
   xvi) The County's Attorney shall send a reminder letter 2-3 weeks in advance to the County Administration offices, Acquisition Provider, the three special commissioners and court reporter concerning Hearing dates.

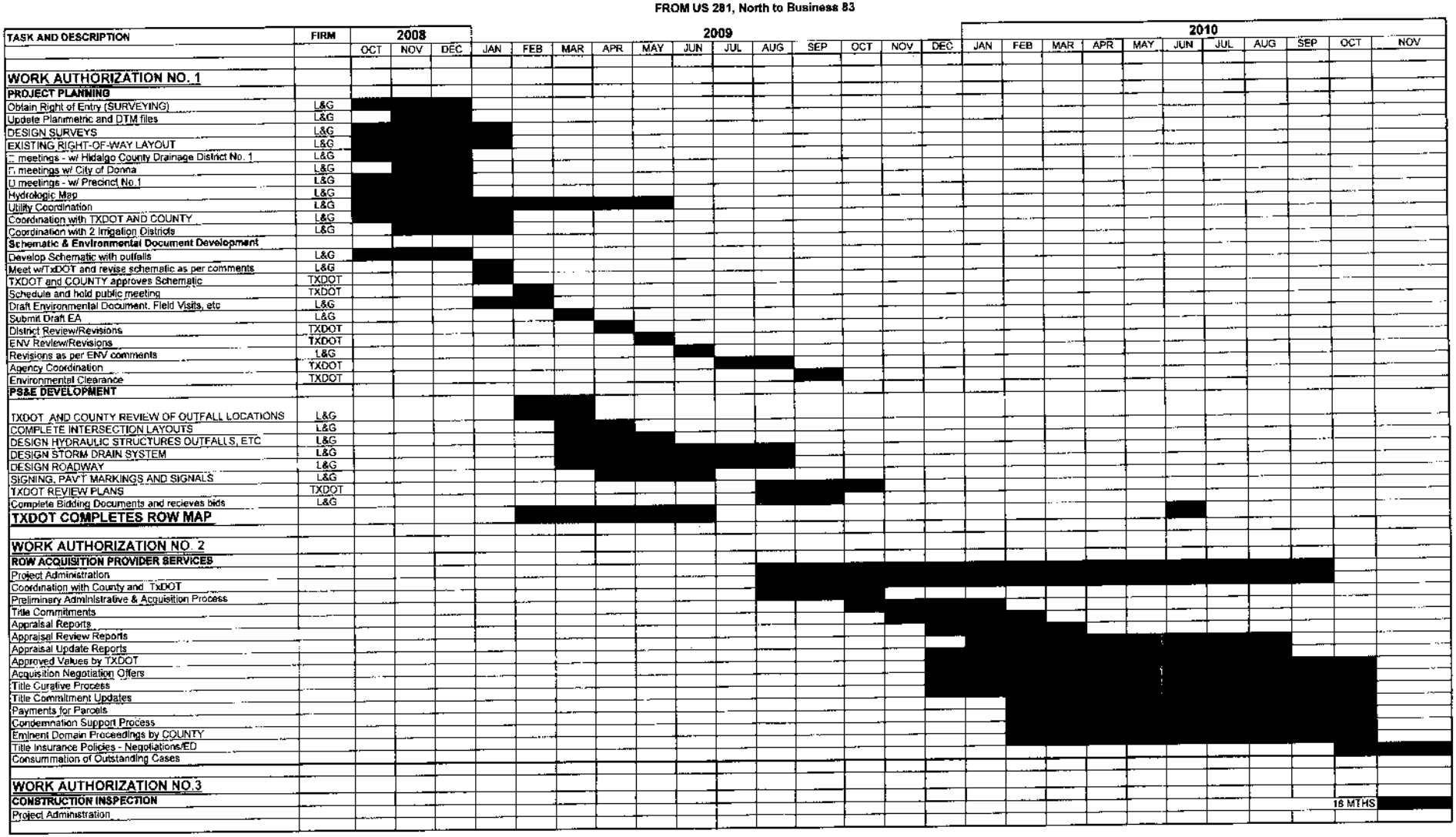
d) Post Hearing Support (by County Attorney)
   i) For the hearing, prepare the necessary forms and Special Commissioners time sheets and submit forms to Hidalgo County clerk's office.
   ii) Obtain the signatures of Special Commissioners on the Award of Commissioners and file with the court for the judge's signatures within 48 hours of the Hearing.
   iii) Give timesheets to Judge. The amount paid to the Special Commissioners is determined by the Judge.
   iv) Obtain and distribute 3 certified copies of the award as follows: 1 certified copy to the title company with a request for a commitment, 1 certified copy to the County, 1 certified copy to L&G Engineering with the Commitment to request the warrant in the amount of the Special Commissioners Award.
   v) Send the Commitment and the Award to County, along with individual special commissioner's billing requesting the payment for their fees.
   vi) File County warrant in the registry of the court. File a Notice of Deposit with the court and send certified copies to each defendant notifying them of the date of the deposit. The Date of Deposit is the Date of Take.
   vii) Take photograph of the interest to be acquired (if necessary) on the day of deposit for relocation verification.
   viii) Send written notices of the date of deposit to the County Administration office and all interested parties.
   ix) Appear as Expert Witness as requested. Sub-contractors must also appear as Expert Witnesses as requested.
   x) All acquisition negotiations file indicating all "due diligence" provided by the Acquisition Provider will be directed to the County Attorney's office for his further handling in accordance to the Eminent Domain process by the County.

EXHIBIT C

-Work Schedule

Client: Hidalgo County

ATTACHMENT C
WORK SCHEDULE
FM 493
FROM US 281, North to Business 83



ENGINEERING WORK FOR SCHEMATIC & PS&E
ENVIRONMENTAL ASSESSMENT WORK & ROW ACQUISITION PROVIDER SERVICES
TXDOT FUNCTION
CONSTRUCTION MANAGEMENT

3:41 PM 10/16/2008

EXHIBIT D

-Engineer's Contract Rates

EXHIBIT "D" FEE SCHEDULE
L&G Consulting Engineers, Inc
2007

Job Description (NSPE Grade)	Base Rate*	Contract Rate**
Project Manager	50.00	155.00
Senior Engineer	44.00	136.40
Env. Manager/Specialist	43.00	133.30
Engineer	33.65	104.32
GIS/ Env. Specialist	32.09	99.48
Designer	33.00	102.30
Engineer in Training (EIT)	24.72	76.63
Engineering Technician	24.04	74.52
CADD Operator	21.00	65.10
Administrative Assistant	17.50	54.25

Direct Labor = 100.00%
Overhead = 175.00%
Direct Labor + Overhead = 275.00%
Profit Rate = 12.5%
(275.00 x 0.125) =34.38
Multiplier = (275.00+ 34.38)/100 = 3.10

* Base Rate = average weighted estimated salary without burden.
** These are the rates to be used to negotiate work authorizations: These rates are estimates: Billings will be invoiced at Base Rate marked up by 3.10

*Base Rate = estimated raw salary without burden

REIMBURSABLE DIRECT EXPENSES

Mileage	$(***)/mi	*** Not to exceed prevailing rate for client
Car Rental	$60.00/Day	employees (additional lodging taxes allowed)
Lodging	$(***)/day	
Meals	$(***)/day	
Air Travel	$200/Round Trip	
B&W Copies (8.5x11)	$ 0.10 /sheet	
B&W Copies (11x17)	$ 0.20 /sheet	
Color Copies (8.5x11)	$ 1.00 /sheet	
Color Copies (11x17)	$ 1.50 /sheet	
Mylar (11x17)	$ 2.00 /sheet	
Report Binders/Materials	$ 9.00 /report	
Digital Plotter (Schematics)	$ 1.25 /sq. ft.	
Overnite Carrier Cost	$ 15.00 /each	
Bond Plots, third party	$ 2.00 /linear ft.	
Mylar Plots, third party	$ 3.50 /sq. ft.	
CADD Machine Cost	$ -	included in Overhead Rate

EXHIBIT "D" FEE SCHEDULE

ENGINEERING BUDGET ESTIMATE AND FEE FOR FM 493 SOUTH PROJECT

ROADWAY PROJECT ENTIRE LENGTH (Miles) Section 1: From BUS 83 to Champion St. (0.78 mi) Section 2: From Champion St to US 281 (5.87 mi)	6.65 Miles
LIMITS:	US 281 Military North 6.65 miles to BUS 83
EXISTING ROADWAY SECTION:	64' F-F urban roadway and a 28'/32' Rural
EXISTING ROW WIDTH:	80' - 60' (varies)
PROPOSED INITIAL ROADWAY SECTION: PROPOSED ULTIMATE ROADWAY SECTION:	40' Rural 84' F-F Urban
PROPOSED ROW WIDTH:	120' max
ESTIMATED CONSTRUCTION COST **ULTIMATE ROADWAY SECTION** (3.6 Mil/mi) (5.87 Miles)	$21,132,000.00
ESTIMATED CONSTRUCTION COST **INITIAL ROADWAY SECTION** (BUS 83 South to US 281) (0.78 miles of 64' F-F overlay, 5.87 miles of reconstruction to 40-ft rural roadway)	$5,198,864.93

ESTIMATED PROJECT COSTS	***FEDERAL***	***STATE***	***COUNTY***
TOTAL ROADWAY CONSTRUCTION COST	$ 3,634,649.07	$ 1,564,215.86	$ -
Section 1: From BUS 83 to Champion St. (0.78 mi)		$ 219,171.98	
Section 2: From Champion St to US 281 (5.87 mi)		$ 1,345,043.88	
WORK AUTHORIZATION NO. 1			
Schematic based on ultimate construction design (15% of 8% PS&E)			$ 254,000.00
Preliminary ROW Ownership			$ 35,000.00
Environmental Assessment & PI Support and Hist and Archeological			$ 90,000.00
Design Surveys			$ 150,000.00
Outfall Identification & Hydrologic Map Fed/state/county requirements			$ 67,000.00
Utility Coordination on State Project w/Fed funds			$ 102,000.00
PS&E Development (8% of est initial construction cost)			$ 416,000.00
Bid Documents in accordance w/Fed/State			$ 30,000.00
ESTIMATED WORK AUTHORIZATION NO. 2 PENDING			
ROW Mapping & Field Surveying (based on 126 parcels)		$ 378,000.00	
Compensible Utilities (3 high-pressure gas lines)	$ 250,000.00	$ -	$ -
Land Value Costs	$ 1,110,000.00	$ -	$ -
Roadway Right-of-Way Costs - Acq.Services @ (est. 126 Parcels @ $10,000/Parcel Avg.)			$ 1,260,000.00
ESTIMATED WORK AUTHORIZATION NO. 3 PENDING			
Construction Inspection & Construction Material Testing			$ 600,000.00
SUB-TOTAL WORK AUTHORIZATION NO. 1			**$ 1,144,000.00**
SUB-TOTAL WORK AUTHORIZATION NO. 2			**$ 1,260,000.00**
SUB-TOTAL WORK AUTHORIZATION NO. 3			**$ 600,000.00**
TOTAL PROJECT COST	**$ 4,994,649.07**	**$ 1,942,215.86**	**$ 2,404,000.00**

EXHIBIT E

-Work Authorization

HIDALGO COUNTY

Professional Engineering Services
Contract # _____
Work Authorization Form

WORK AUTHORIZATION NO. ___

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, _____, professional engineers of _____, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide _____

_____

The scope of services to be provided by the **Owner** is identified in ***EXHIBIT "A" – Scope of Services to be Provided by the Owner*** attached hereto.

The scope of services to be provided by the **Engineer** is identified in ***EXHIBIT "B" – Scope of Services to be Provided by the Engineer*** attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$** _____. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D".**

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with **Article**/Part/Section____ of the Agreement.

PART 4. FUNDING

This Work Authorization No.1 shall be funded through funding source:
Account No. _____
Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate upon completion of scopes of the work authorization.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement.**

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by **Hidalgo County** _____, Commissioner _____ as to content and detail of this **Work Authorization No.** ___.

HIDALGO COUNTY

BY:_____

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on _____ as indicated below and effective as of ____ day of _____, 2006.

THE ENGINEER:

_____

By: Engineer

THE OWNER:
HIDALGO COUNTY

_____

By: Juan D. Salinas, III, County Judge

ATTEST:

_____

By: Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS

ATTACHMENT "A" -	Service to be Provided by the Owner
ATTACHMENT "B" -	Services to be Provided by the Engineer
ATTACHMENT "C" -	Work Schedule
ATTACHMENT "D" -	Cost Proposal

EXHIBIT F

-Supplemental Agreement Form

EXHIBIT "F"

Supplemental Agreement Form

THE STATE OF TEXAS §
§
COUNTY OF HIDALGO §

SUPPLEMENTAL AGREEMENT NO. ___

TO AGREEMENT FOR PROFESSIONAL SERVICES

THIS **SUPPLEMENTAL AGREEMENT** is made pursuant to the terms and conditions of Article 8 of the Agreement made by and between **HIDALGO COUNTY**, acting herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**", and _____, Professional Engineers of, _____, Texas, hereinafter called the "**Engineer**".

WITNESSETH

WHEREAS, the **Owner** and the **Engineer** executed the **Agreement** on the _____ day of _____ **2007** concerning engineering for _____
(hereinafter referred to as the "**Project**"); and,

WHEREAS, Article ___ of the **Agreement**, (article title), establishes
_____; and,

WHEREAS, it has become necessary to amend the contract to
_____
_____

A. AGREEMENT

NOW THEREFORE, premises considered, the **Owner** and the **Engineer** agree that said **Agreement** is amended as follows:

1. Article ___ of the **Agreement**, (article title), is revised to

_____
_____
_____
_____
_____
_____
_____

All other provisions are unchanged and remain in full force and effect.

IN WITNESS WHEREOF, the Engineer and the Owner have caused this Supplemental Agreement to the Agreement for Professional Services to be executed as of the _____ day of _____, 20__.

THE ENGINEER:
ENGINEER

BY:_____

THE OWNER:
HIDALGO COUNTY

BY:_____
Juan D. Salinas III, County Judge

LIST OF ATTACHMENTS

(as required)

EXHIBIT G

-Certificate of Insurance (*Hidalgo County*)

ACORD CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YY) 07/01/08

PRODUCER
Hilb Rogal & Hobbs
(956)682-9423 FAX(956)687-1286
1400 N McColl Rd Suite 105
McAllen, TX 78501

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
L & G Consulting Engineers Inc
dba L & G Engineering
2100 W Expressway 83
Mercedes, TX 78570

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: Fidelity & Guaranty Insurance Compan	35386
INSURER B: SOUTHERN VANGUARD INSURANCE COMPANY	
INSURER C: Ace American Insurance Company	22667
INSURER D:	
INSURER E:	

COVERAGES

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

INSR LTR	ADD'L INSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
A		GENERAL LIABILITY	PACP2822L500TLC08	07/19/08	07/19/09	EACH OCCURRENCE	$2,000,000
		[X] COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea occurrence)	$50,000
		[ ] CLAIMS MADE [X] OCCUR				MED EXP (Any one person)	$5,000
						PERSONAL & ADV INJURY	$2,000,000
						GENERAL AGGREGATE	$4,000,000
		GEN'L AGGREGATE LIMIT APPLIES PER:				PRODUCTS - COMP/OP AGG	$4,000,000
		[ ] POLICY [ ] PRO-JECT [ ] LOC					
A		AUTOMOBILE LIABILITY	PACP2822L500TLC08	07/19/08	07/19/09	COMBINED SINGLE LIMIT (Ea accident)	$1,000,000
		[ ] ANY AUTO				BODILY INJURY (Per person)	$
		[ ] ALL OWNED AUTOS				BODILY INJURY (Per accident)	$
		[ ] SCHEDULED AUTOS				PROPERTY DAMAGE (Per accident)	$
		[X] HIRED AUTOS					
		[X] NON-OWNED AUTOS					
		GARAGE LIABILITY				AUTO ONLY - EA ACCIDENT	$
		[ ] ANY AUTO				OTHER THAN AUTO ONLY: EA ACC	$
						AGG	$
		EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	$
		[ ] OCCUR [ ] CLAIMS MADE				AGGREGATE	$
							$
		[ ] DEDUCTIBLE					$
		[ ] RETENTION $					$
B		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY	TSV000268001	07/23/08	07/23/09	[ ] WC STATU-TORY LIMITS [ ] OTH-ER	
		ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED?				E.L. EACH ACCIDENT	$1,000,000
		If yes, describe under SPECIAL PROVISIONS below				E.L. DISEASE - EA EMPLOYEE	$1,000,000
						E.L. DISEASE - POLICY LIMIT	$1,000,000
C		OTHER Professional	EONG2363384A002	07/20/08	07/20/09	$1,000,000 ea. Claim $1,000,000 Aggregate $15,000 Ded. ea. Claim	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS

** Supplemental Name **

First Supplemental Name applies to all policies - L & G Consulting Engineers Inc:

Hidalgo County & Texas Dept of Transporation is covered as Additional

(See Attached Descriptions)

CERTIFICATE HOLDER

Hidalgo County
400 W 13th Street
Mission, TX 78572

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRAT DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTI NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHAI IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE
Brian E Lewis

MCC

HIDALGO COUNTY
Professional Engineering Services
Contract # C-08-417-12-09
Work Authorization Form

WORK AUTHORIZATION NO. 1

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the **"Owner"**, and **L&G Consulting Engineers, Inc.** *d/b/a* **L & G Engineering,** professional engineers of Mercedes, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide **Engineering Services required for the preparation of Schematics, Environmental Assessment, Public Involvement, ROW Mapping, Surveying, and Roadway Design for the reconstruction of FM 493 from US 281 (Military Highway) North 6.65 Miles to Business 83.**

The scope of services to be provided by the **Owner** is identified in ***EXHIBIT "A" – Scope of Services to be Provided by the Owner*** attached hereto.

The scope of services to be provided by the **Engineer** is identified in ***EXHIBIT "B" – Scope of Services to be Provided by the Engineer*** attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$1,144,000.00**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D".**

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with **Article**/Part/Section 7 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 1 shall be funded through funding source:
Account No. **8-1201-431-00-121-053-0-841**
Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scopes of work authorization.**

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by **Hidalgo County Precinct No. 1,** Commissioner, **Sylvia S. Handy** as to content and detail of this **Work Authorization No. 1.**

HIDALGO COUNTY
COMMISSIONER PRECINCT NO. 1

Sylvia S. Handy, County Commissioner

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on **12/09/08** as indicated below and effective as of **9th** day of **December, 2008**.

THE ENGINEER:

Jacinto Garza, P.E./President

THE OWNER:
HIDALGO COUNTY

Juan D. Salinas, III, County Judge

ATTEST:

Arturo Guajardo, Jr., County Clerk

LIST OF ATTACHMENTS

EXHIBIT "A" - Service to be Provided by the Owner
EXHIBIT "B" - Services to be Provided by the Engineer
EXHIBIT "C" - Work Schedule
EXHIBIT "D" - Cost Proposal

EXHIBIT "B"

Services to be provided by the Engineer

PROJECT LIMITS:

- **FM 493: From US 281 (Military Highway), North 6.65 Miles, to Business 83**

GENERAL SCOPE OF WORK:

The work to be performed by the Engineer under this Contract shall consist of providing Engineering Services required for the preparation of Schematics, Preliminary ROW Ownership, Environmental Assessment, Public Involvement, Design Surveys and ROW Determination, Outfall Identification and Hydrologic Map, Utility coordination, PS&E Development and bidding documents. In addition, this contract will include ROW acquisition provider services and construction inspection and construction material testing. The Engineer will prepare bid packages as identified in the Work Authorization for the reconstruction of FM 493 from US 281 (Military Highway) North 6.65 Miles to Business 83 in two sections. Section 1 is from Bus 83 to Champion Street and Section 2 is from Champion Street to US 281. The proposed improvements are to overlay the Section 1 and reconstruct Section 2 from an existing 28' roadway to 40 foot rural roadway providing for two lanes and shoulders along with associated drainage, structures, and grading including Traffic Control, Signing & Striping, and Traffic Signal/Flashing Beacon Installations for the subject limits.

The work to be performed by the Engineer shall also include the review of the existing drainage patterns to determine if the proposed roadway can be designed utilizing the existing outfalls. The basis for this estimate is based on the premise that the existing outfalls located at the ROW line of FM 493 will be utilized. The Engineer will examine the proposed outfall locations and associated hydrologic and hydraulic conditions and determine the feasibility and practicality of using the existing outfalls or if new outfalls are needed. **This scope does not include designing outfalls outside of the existing ROW for FM 493.** In addition, the scope includes coordinating the utilities along the project limits in preparation for construction.

The **Engineer** will furnish all equipment, materials, supplies, and incidentals as needed to perform the services required by this contract, except as otherwise specified in Exhibit A, "Services to be Provided by the County".

GENERAL SCOPE OF WORK:

The Scope of Work for this Work Authorization will be identified as follows:

- ***FC110 ~ Design Schematic Development***
- ***FC120 ~Social, Economic, and Environmental Studies, and Public Involvement***
- ***FC130 ~ Existing Right-of-Way Determination***
- ***FC150 ~ Design Surveys***
- ***FC160 ~ Roadway Design***
- ***FC161 ~ Hydrologic/Hydraulic Study***
- ***FC162 ~ Signing, Pav't Marking, Signals***

- ***FC163 ~ Irrigation Str., Estimate, Specs, Gen Notes, Misc***
- ***FC164 ~ Contract Management***
- ***FC 320 – Construction Inspection and Construction Material Testing***
- ***FC 600 – ROW Acquisition Services***

FC 110 ~ DESIGN SCHEMATIC DEVELOPMENT

After the existing centerline alignment is recovered and the proposed centerline is approved by TxDOT, the Engineer will develop a design schematic for submittal to TxDOT's Design Division.

Design Criteria

- The Engineer will prepare a Design Summary Report (DSR) to document the design criteria for the project and submit it to TxDOT for further processing.
- A Design Concept Conference (DCC) will be held to discuss and review the design criteria. The Engineer will prepare a Meeting Summary Report which will describe in detail the decisions made at the DCC and distribute it to everyone in attendance.
- The Engineer will prepare a preliminary construction cost estimate based on the results of the DCC and submit it to TxDOT.

Design Schematic

- The Engineer will develop a preliminary design schematic, based on the alignment previously selected, and submit to TxDOT for review.
- The Engineer will revise the schematic to incorporate TxDOT's comments and provide to TxDOT.
- A public meeting for this project will be scheduled. The Engineer will attend and will provide TxDOT with technical support.
- The Engineer will meet with TxDOT after the meeting to discuss modifications, if any, to the design schematic. The Engineer will incorporate the changes agreed upon, into the schematic and submit the revised schematic to TxDOT for further submittal to the Design Division and/or FHWA.
- After receiving approval of the design schematic from TxDOT, the Engineer will proceed with finalizing the design and complete the PS&E.
- The Schematic details will be completed to the Districts identified checklist.

Drainage

- The Engineer will evaluate the adequacy of the existing outfalls and develop a Hydrologic Map for the project identifying if any outfalls are needed for the project. The Engineer will coordinate with the Hidalgo County Drainage District No. 1, the Irrigation Districts, and cities in the area.

Irrigation Structures

- The Engineer will define the horizontal layout of the irrigation system in place and draw on the schematic the basis for maintaining the irrigation system whole.

FC 120 ~ ENVIRONMENTAL STUDIES, AND PUBLIC INVOLVEMENT

The Engineer will conduct the necessary research and field investigations to prepare an

Environmental Assessment document to obtain a Finding of No Significant Impacts (FONSI) clearance for the project.

Task I. Document Purpose and Need for the Project: This section will include text and graphics illustrating the description, purpose and need, objectives of the project and the existing and proposed project design. This section will also provide a description of the issues eliminated from further study.

Task II. Alternatives: This section will include text and graphics illustrating the different alternatives considered prior to selecting the preferred. It will also describe the reasonable alternatives and those eliminated from further study.

Task III. Affected Environment and Environmental Consequences: For each of the following categories the necessary background and field reconnaissance will be performed to gather data necessary for the completion of the EA. This will assist in determining which issues should be eliminated from further study or studied in detail.

Land Use and Socio-economic Impacts: Pertinent social and economic issues will be addressed in the EA; a separate report will not be prepared. At this time, it is unknown if relocations will occur; however, the EA will address any relocations anticipated. No other impacts to land use, land planning or socio-economic issues are anticipated. A Section 4(f)/6(f) will not be prepared.

Ecological Resources: A characterization of the project's ecological resources, including wetlands, vegetation, prime farmland and wildlife habitat characteristics will be performed. Ecologically sensitive resources including protected species, if any, will be identified in order to assess potential effects of project construction and operation. Any presence or absence surveys for endangered species will not be conducted. The project will be assessed for compliance with the Nationwide Permit Program; however, a permit is not anticipated. Any permitting required will be conducted by TxDOT.

Hazardous Materials: A field screening and an internet data search for potential hazardous materials sites will be conducted. A Phase I Environmental Site Assessment for hazardous materials will not be conducted.

Noise and Air Quality: A noise analysis and air quality impacts will be assessed under this scope.

Field Investigations: Field visits to identify potential environmental constraints involving land use, ecological resources and potential hazardous material sites will be conducted.

Graphics: Report graphics will be prepared for the EA as needed to show the project location, typical sections and project area photographs. In addition, the project layouts/photographs will show those resources that are necessary to convey the project's impacts to the reviewers.

Public Involvement – A discussion will be provided regarding any public involvement which occurs on the project.

Report Preparation and Submittal – The Engineer will prepare an environmental document (EA) that complies with applicable procedures of the National Environmental Policy Act (EPA) and Federal Highway Administration Technical Advisory 6640.8A. The analysis will address the

adverse and beneficial impacts of project construction and operation. Mitigation options will be emphasized where adverse impacts may potentially occur.

The Engineer will submit one draft copy of the report for review by the TxDOT Pharr District. Color photographs and exhibits will be included in both the draft and final reports. All review comment responses will be provided in writing and a meeting will not be required to discuss review comments. The draft report will be revised to incorporate District's comments. Thirteen (13) sets of the revised report will be submitted for review by ENV. After ENV reviews the report, the document will be revised and eight (8) sets of the report will be submitted. Because this project would obtain a Categorical Exclusion, no other revisions will need to be made. Upon receiving a Categorical Exclusion, a CD which includes the document and exhibits will be provided to the District for their files.

Coordination – L&G will coordinate with the SWCA to conduct all Cultural Resource Surveys and reports. TxDOT will coordinate with the appropriate resource agencies to obtain environment clearance for completion of project.

Assumptions used to derive to proposed fee estimate and scope of services:

- The Engineer will conduct field investigations in two field trips.
- The Engineer will attend the DCC and one meeting.
- All investigations will be conducted based on existing literature, field reconnaissance and aerial photographic interpretation.
- The draft EA will be submitted to TxDOT in 30 days after the public meeting and/or receipt of data needed.

FC 120 ~ ENVIRONMENTAL STUDIES, AND PUBLIC INVOLVEMENT

SWCA will conduct and prepare all Cultural Resource surveys and reports as required by TxDOT.

FC 130 ~ PRELIMINARY ROW DETERMINATION

FM 493 From Champion Street to US 281

General

1. The **Surveyor** will recover and or re-establish the existing Right-of-Way for the subject project.
2. The **Surveyor** shall monument the recovered ROW at all at all PCs, PTs, angle points, intersecting right-of-way lines of side streets, and 1000-feet stations after coordinating with the L&G Engineer. The **Surveyor** shall also monument all ROW corners.
3. **The Surveyor will submit a separate existing R.O.W. layout drawing (at scale of 1 inch = 100 feet), delineating the existing points recovered and all R.O.W. monuments that will be set before setting any points on the ground.** This map shall be utilized by L&G to attach it to the requests for the utility companies to adjust their lines prior to construction.

a. This map shall also contain the proposed centerline as set on the ground – **again do not set a centerline for construction until L&G Engineers have approved.**
b. Existing right-of-way lines will be delineated with appropriate bearings, distances, and curve data. The proposed centerline alignment will be delineated with appropriate bearings, distances, curve data and stationing. The existing ROW layout sheets stationing will be based on the proposed alignment. A north arrow will be shown on each sheet and, if possible, in the upper right hand corner.
c. Monumentation set or found will be shown and described as to material and size.
d. A station and offset based on the proposed alignment will be shown for all points set and/or recovered.
e. Intersecting streets will be shown and identified by name and right-of-way width.
f. Railroads will be shown and identified by name and right-of-way width.
g. A note will be included on each sheet stating the basis of bearings, coordinates, and datum used.
h. All existing right-of-way layout sheets shall be 11" x 17". The borders around these map sheets should ½" from the right side of the map, the top and the bottom. The border on the left side is 2". Scale of 1"=100'.

FC 150 ~ DESIGN SURVEYING

FM 493 From Champion Street to US 281

A. Design Survey

1. **The Limit of the Design survey shall be 1000-ft before and after the limits of the project. Set horizontal and vertical control for FM 493 from Bus 83 to US 281. The Basis for the H & V Control shall be the control previously established on US 281.** Set benchmarks at max 1000-ft intervals. The BM's shall be #5 I.R. 2-ft in depth set in concrete. An H&V Book will be provided to the Engineer with 3-pt reference ties.
2. Field Topographic Survey - Verify accuracy of existing topographic information by checking coordinates of Horizontal control points and elevations of benchmarks previously established by TxDOT.
3. Update existing planimetric data with current information of any improvements and apparent changes in the topography since the original planimetric data was obtained as well as field tie all existing drainage structures, driveways, and pavement edges as well as all existing roadway centerline and roadside drainage ditch profiles.
4. Fill all existing planimetric mapping void areas along FM 493, data processing and CADD mapping (2d and 3d) update, (4.7 Miles including additional limits).
5. Field locate cross culverts, driveway culverts, inverts, irrigation lines, within the project limits, data processing and CADD mapping (2d and 3d) update.
6. Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the surveyor.

6a. The surveyor shall recover and reestablish the existing centerline then coordinate with the Engineer to establish the existing centerline stationing based on the old stationing of the previous plans south of Mile 10.

7. Stake proposed centerline/baseline at 1000-foot stations, PC's and PT's as directed by Engineer. (No. 5 I.R. 2-ft long).—FOR CONSTRUCTION but not until the Engineer directs the surveyor to do so.
8. The Surveyor shall also paint the proposed centerline on the proposed pavement. (500-ft stations and a tick mark at 100-ft stations ---12 inches long with approved paint by Engineer) before construction for the purpose of utility adjustments and project location.
9. Extend topographic survey 500 feet to each side of the existing Right-of-Way on all the intersecting streets for the limit of the project except at the existing drain ditches, the survey shall be extended 500-ft east and west from the existing FM 493 ROW and the x-sections shall be 50-ft Lt and Rt from the ditch centerline plus tieing in all topo.

B. Utilities

1. Coordinate with engineer to have all existing underground utilities marked by utility companies along FM 493 and intersecting streets. Field tie the marked locations and process the information to include in the planimetric CADD mapping files. Utility lines shall be properly labeled and placed in separate levels in accordance with TxDOT requirements.
2. Collect vertical information of all exposed (by utility companies) utilities that have been identified as possible conflicts by the Engineer and process as above.

C. Miscellaneous

1. Provide the engineer with a copy of all field books developed during this project. The field books shall supplement the graphical information submitted by the surveyor. Accurate sketches of the existing conditions of all irrigation and drainage structures that were tied down by the surveyor shall be included in the field books.

2. A horizontal and vertical. control book shall be submitted to the engineer. This control book shall include the reference sketches to the BM's and Horizontal Control. Points as well as describe the basis of the datum's used.

FC 160 – DESIGN

PS&E for the above work shall be prepared in accordance with the applicable requirements of TxDOT Specifications, Standards, and manuals (updated for revisions). Whenever possible, the Department's standard drawings, standard specifications, or previously approved special provisions and/or special specifications will be used. If a special provision and/or special specification must be developed for this project, it shall be in the Departmental format and, to the extent possible, incorporate references to approved Department test procedures.

The Engineer shall furnish three (3) final cross-section plots showing both the original terrain (modified) and the design cross-sections, showing the roadway template. The design cross-sections shall indicate the slope rate on the side slopes.

FC 161 – DRAINAGE

The Engineer will perform a Geopak Drainage generated drainage analysis for all drain systems which will also include contributing runoff from the Adjacent Properties. This drainage analysis will be prepared prior to detailed design of drainage structures and will contain drainage area map(s), hydraulic calculations and Thysys and/or HEC-RAS analysis for TxDOT to approve.

FC 161 - STORM WATER POLUTION PREVENTION PLAN (SW3P)

The **ENGINEER** shall complete the plans adequately addressing a storm water pollution prevention plan for the entire project during all phases of construction. SW3P layouts shall be developed on the TCP plan sheets. SW3P plans shall **generally** include the following drawings:

- **Summary Sheet on TCP's**
- **Details & Standards**

The Engineer shall develop a project specific Storm Water Pollution Prevention Plan (SW3P) to comply with the Federal Regulations (40 CFR part 122) published in the Federal Register on Sept. 9, 1992.

FC 162 - SIGNAL DESIGN

Project Understanding

The Engineer will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the installation of permanent signals along FM 493 after and if warrants are met.

TASK 1 – General Notes for Traffic Signal installation

The Engineer will setup the General Notes sheet(s) and prepare the general notes for the traffic signal design, as well as the signing, pavement marking and wheelchair ramp design at the above intersections.

TASK 2 – Estimate and Quantities

THE ENGINEER will prepare Basis of Estimate sheets with adequate number of columns to reflect the number of the above intersections and one column for the total quantities.

THE ENGINEER will calculate quantities and prepare cost estimates at 60%, 90% and 100% levels of completion.

TASK 3 – Condition Diagram

THE ENGINEER will setup the condition diagram sheets that would show the existing configuration of each intersection and other elements as required by TxDOT.

TASK 4 – Proposed Signal Plan Layout

THE ENGINEER will setup proposed signal layout sheets that would show the proposed geometry of the above intersections along with the basic elements of the signal design, such as location of signal poles, pedestrian poles, wheel chair ramps, cross walks and service pole locations.

THE ENGINEER will contact the local power company for electrical service requirements at each of the above interceptions.

THE ENGINEER will produce submittals for TxDOT's review at the 60%, 90% and 100% completion levels.

TASK 5 – Signal Phasing and Timing

Based on traffic counts furnished by TxDOT, the Engineer will develop optimal phasing and timing charts for each of the AM peak, PM peak and Off-peak time periods, using appropriate software. The charts will be presented to TxDOT for review and approval before their incorporation into the plan sheets.

TASK 6 – Standard Sheets List

The Engineer will prepare a list of standard sheets for the 60%, 90% and 100% submittals. The Engineer will also prepare the drill shaft tables on the TSFD standard sheet as well as the shipping parts list on the SP/SMA standard sheet.

TASK 7 –Specifications List and Cost Estimate

The Engineer will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. The Engineer will also prepare cost estimates at the 60%, 90% and 100% submittals.

TASK 8 – Electrical Schedules

The Engineer will prepare tables, depicting the electrical schedule for each signalized intersection. The electrical schedules will be shown on the same sheets with the loop detector schedules and phasing/timing tables.

TASK 9 – Field Investigation and Meetings

The Engineer will conduct field investigations at the above intersection locations and record pertinent signal design information as well as identify potential design issues.

The Engineer will participate in one project progress meeting with L&G/TxDOT.

TASK 10 – Other services

The Engineer will provide tables with electrical service data for each of the services poles required at the above intersections.

Other services not covered in the above scope will be negotiated separately.

FC 162 – PAVEMENT MARKING AND MARKER LAYOUTS

TASK 1 – Plan Layouts (1"=100')

L&G will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the pavement marking and markers along FM 493 and all cross street approaches for the length

shown in the plan and profile layouts. Work will include design of ADA compliant wheelchair ramps that line up with the proposed crosswalks and any signal pole locations.

TASK 2 – Estimate and Quantities

The Engineer will prepare a summary of pavement marking and marker quantities (Basis of Estimate sheet) with adequate number of columns to reflect the types of markings to be installed by each payout sheet and one column for the total quantities.

The Engineer will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 3 – Standard Sheets List

The Engineer will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 4 –Specifications List and Cost Estimate

The Engineer will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. The Engineer will also prepare cost estimates at the 60%, 90% and 100% submittals.

FC 162 – SIGNING AND DELINEATION LAYOUTS

TASK 1 – Plan Layouts (1"=100')

L&G will produce a complete set of Plans, Specifications and Estimates (PS&E) that cover the signing and delineation along FM 493 and all cross street approaches for the length shown in the plan and profile layouts. The work will include design of flashing beacons near the School. The plans will show the following:

Existing signs to remain in place
Existing signs to be removed
Proposed new signs
Proposed new delineators and object markers.

L&G will prepare signing and delineation plans for all major cross streets.

TASK 2 – Summary of Small Signs

L&G will prepare a summary of small signs sheets along with a descriptive codes sheet. (Basis of Estimate sheet).

L&G will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 3 – Standard Sheets List

L&G will calculate quantities at 60%, 90% and 100% levels of completion.

TASK 4 –Specifications List and Cost Estimate

L&G will prepare a list with all pertinent specifications and special provisions as they relate to the above tasks. L&G will also prepare cost estimates at the 60%, 90% and 100% submittals.

FC 163 - IRRIGATION SIPHONS AND CANALS

The ENGINEER shall coordinate with the Irrigation District(s) and prepare all necessary drawings needed for maintaining the functionality of irrigation districts irrigation lines.

FC 163: TRAFFIC CONTROL

The Engineer shall determine the project construction sequence and design a traffic control plan based upon the Texas MUTCD and the latest district traffic control design requirements. This shall include field investigations into such items as any Drainage Structures, utilities, R.O.W. restrictions, adjacent properties and cross street access, and other items which may ultimately affect the safe handling of traffic during the construction sequence.

The engineer shall meet with the Pharr District personnel early in the project design as soon as a construction sequence is developed. The construction sequence shall be updated periodically as the design progresses.

The engineer shall prepare drawings for each phase, based upon the agreed sequence of construction. The drawings shall indicate traffic lanes versus work zones per phase, including all required detours. Consideration shall be given to the use of temporary traffic control signals and, if needed, how to utilize and coordinate with the various phases. The drawings will be used by the District to obtain final concept approval of the TCP from the District Traffic Control Review Committee. Based on the results of the safety review team meeting, the detailed Traffic Control PS&E will be completed.

FC 163: UTILITIES

The Engineer shall coordinate the utilities as follows: (L&G will conduct two utility meetings with the owners at the County or at L&G's office in coordination with TxDOT)

A. Determine the ownership of the existing utilities on the subject project.

B. Contact the utility owners and locate (horizontally and vertically) existing utilities on the ground.

C. Evaluate utility conflicts with proposed construction. Prepare and submit drawings to the County, Utility Companies and copies to TxDOT, for required utility adjustment. The following information will be submitted for each required utility adjustment.

   1. A reproducible drawing 8-1\2" x 11", 11" x 17", or 22" x 34" (as appropriate) for each utility adjustment

   2. Drawing will include the following:

      a) Existing and/or proposed R.O.W lines.
      b) Existing and/or proposed roadways.
      c) Proposed drainage structure

d) Existing underground utility in plan and profile.
e) Owner of utility.
f) Benchmark

3. Provide copies to TxDOT of correspondence with utility companies and cities. If initial contact was made by phone, provide name of company and representative's name and telephone number.

4. Prepare a detailed list to TxDOT of all conflicts with existing utilities during the drainage structure design phase. List must include the following:

   a) Highway station number.
   b) Name of utility company and type of facility.
   c) Proposed highway facility - the conflict with: storm sewer, roadway, drainage ditch, drill shaft, etc.

4. The Engineer shall be responsible for notifying all utility owners, early in the design phase, regarding any utility adjustments.

5. Utility agreements to be developed by consultant, sent by consultant to companies and coordinate with them.

FC 163: BIDDING DOCUMENTS

1) The Engineer will furnish to the Owner the necessary copies of approved plans, specifications, notices to bidders, and proposals as prepared under PS&E.

2) The Engineer will assist Owner the tabulation of bids, recommendations to the Owner as to the proper action on all bid proposals received, and the preparation of formal contract documents for the award of each construction contract.

FC 164 – CONTRACT MANAGEMENT

The Engineer will be required to meet with designated TxDOT representatives on a regularly scheduled basis to report on progress. A typewritten progress report will be required, together with evidence of the work accomplished during the period since the previous report. A bar chart indicating the percentage of completion of each task shown on Attachment "C" will also be required. Formal progress reports with bar charts will be required on a monthly basis.

The Engineer will establish a separate cost accounting system for each control-section-job (C-S-J) number to properly allocate all labor and expenses incurred. The Engineer shall invoice monthly according to Function Code breakdowns.

Client: Hidalgo County

ATTACHMENT C
WORK SCHEDULE
FM 493
FROM US 281, North to Business 83

TASK AND DESCRIPTION	FIRM	2008			2009												2010										
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
WORK AUTHORIZATION NO. 1																											
PROJECT PLANNING																											
Obtain Right of Entry (SURVEYING)	L&G																										
[illegible] Planimetric and DTM files	L&G																										
[illegible] SURVEYS	L&G																										
[illegible]NG RIGHT-OF-WAY LAYOUT	L&G																										
[illegible] meetings - w/ Hidalgo County Drainage District No. 1	L&G																										
[illegible] meetings w/ City of Donna	L&G																										
[illegible] meetings - w/ Precinct No.1	L&G																										
Hydrologic Map	L&G																										
Utility Coordination	L&G																										
Coordination with TXDOT AND COUNTY	L&G																										
Coordination with 2 Irrigation Districts	L&G																										
Schematic & Environmental Document Development																											
Develop Schematic with outfalls	L&G																										
Meet w/TxDOT and revise schematic as per comments	L&G																										
TXDOT and COUNTY approves Schematic	TXDOT																										
Schedule and hold public meeting	TXDOT																										
Draft Environmental Document, Field Visits, etc	L&G																										
Submit Draft EA	L&G																										
District Review/Revisions	TXDOT																										
ENV Review/Revisions	TXDOT																										
Revisions as per ENV comments	L&G																										
Agency Coordination	TXDOT																										
Environmental Clearance	TXDOT																										
PS&E DEVELOPMENT																											
TXDOT AND COUNTY REVIEW OF OUTFALL LOCATIONS	L&G																										
COMPLETE INTERSECTION LAYOUTS	L&G																										
DESIGN HYDRAULIC STRUCTURES OUTFALLS, ETC	L&G																										
DESIGN STORM DRAIN SYSTEM	L&G																										
DESIGN ROADWAY	L&G																										
SIGNING, PAVT MARKINGS AND SIGNALS	L&G																										
TXDOT REVIEW PLANS	TXDOT																										
[illegible]le Bidding Documents and recieves bids	L&G																										
[illegible]T COMPLETES ROW MAP																											

ENGINEERING WORK FOR SCHEMATIC & PS&E
ENVIRONMENTAL ASSESSMENT WORK & ROW ACQUISITION PROVIDER SERVICES
TXDOT FUNCTION
CONSTRUCTION MANAGEMENT

Client: Hidalgo County

ATTACHMENT C
WORK SCHEDULE
FM 493
FROM US 281, North to Business 83

TASK AND DESCRIPTION	FIRM	2008			2009											2010										
		OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
WORK AUTHORIZATION NO. 1																											
PROJECT PLANNING																											
Obtain Right of Entry (SURVEYING)	L&G																										
Update Planimetric and DTM files	L&G																										
DESIGN SURVEYS	L&G																										
EXISTING RIGHT-OF-WAY LAYOUT	L&G																										
□ meetings - w/ Hidalgo County Drainage District No. 1	L&G																										
□ meetings w/ City of Donna	L&G																										
□ meetings - w/ Precinct No.1	L&G																										
Hydrologic Map	L&G																										
Utility Coordination	L&G																										
Coordination with TXDOT AND COUNTY	L&G																										
Coordination with 2 Irrigation Districts	L&G																										
Schematic & Environmental Document Development																											
Develop Schematic with outfalls	L&G																										
Meet w/TxDOT and revise schematic as per comments	L&G																										
TXDOT and COUNTY approves Schematic	TXDOT																										
Schedule and hold public meeting	TXDOT																										
Draft Environmental Document, Field Visits, etc	L&G																										
Submit Draft EA	L&G																										
District Review/Revisions	TXDOT																										
ENV Review/Revisions	TXDOT																										
Revisions as per ENV comments	L&G																										
Agency Coordination	TXDOT																										
Environmental Clearance	TXDOT																										
PS&E DEVELOPMENT																											
TXDOT AND COUNTY REVIEW OF OUTFALL LOCATIONS	L&G																										
COMPLETE INTERSECTION LAYOUTS	L&G																										
DESIGN HYDRAULIC STRUCTURES OUTFALLS, ETC	L&G																										
DESIGN STORM DRAIN SYSTEM	L&G																										
DESIGN ROADWAY	L&G																										
SIGNING, PAVT MARKINGS AND SIGNALS	L&G																										
TXDOT REVIEW PLANS	TXDOT																										
Complete Bidding Documents and recieves bids	L&G																										
TXDOT COMPLETES ROW MAP																											

ENGINEERING WORK FOR SCHEMATIC & PS&E
ENVIRONMENTAL ASSESSMENT WORK & ROW ACQUISITION PROVIDER SERVICES
TXDOT FUNCTION
CONSTRUCTION MANAGEMENT

2:56 PM 12/23/2008

EXHIBIT "D" FEE SCHEDULE FOR WORK AUTHORIZATION #1

ENGINEERING BUDGET ESTIMATE AND FEE FOR FM 493 SOUTH PROJECT

ROADWAY PROJECT ENTIRE LENGTH (Miles) Section 1: From BUS 83 to Champion St. (0.78 mi) Section 2: From Champion St to US 281 (5.87 mi)	6.65 Miles
LIMITS:	US 281 Military North 6.65 miles to BUS 83
EXISTING ROADWAY SECTION:	64' F-F urban roadway and a 28'/32' Rural
EXISTING ROW WIDTH:	80' - 60' (varies)
PROPOSED INITIAL ROADWAY SECTION:	40' Rural
PROPOSED ULTIMATE ROADWAY SECTION:	84' F-F Urban
PROPOSED ROW WIDTH:	120' max
ESTIMATED CONSTRUCTION COST **ULTIMATE ROADWAY SECTION** (3.6 Mil/mi) (5.87 Miles)	$21,140,000.00
ESTIMATED CONSTRUCTION COST **INITIAL ROADWAY SECTION** (BUS 83 South to US 281) (0.78 miles of 64' F-F overlay, 5.87 miles of reconstruction to 40-ft rural roadway)	$5,198,864.93

ESTIMATED PROJECT COSTS	***COUNTY***
TOTAL ROADWAY CONSTRUCTION COST	$ -
Section 1: From BUS 83 to Champion St. (0.78 mi)	
Section 2: From Champion St to US 281 (5.87 mi)	
WORK AUTHORIZATION NO. 1	
Schematic based on ultimate construction design (15% of 8% PS&E)	$ 254,000.00
Preliminary ROW Ownership	$ 35,000.00
Environmental Assessment & PI Support and Hist and Archeological	$ 90,000.00
Design Surveys	$ 150,000.00
Outfall Identification & Hydrologic Map Fed/state/county requirements	$ 67,000.00
Utility Coordination on State Project w/Fed funds	$ 102,000.00
PS&E Development (8% of est initial construction cost)	$ 416,000.00
SUB-TOTAL WORK AUTHORIZATION NO. 1	**$ 1,114,000.00**
TOTAL PROJECT COST	**$ 1,114,000.00**

3. **A. Requesting approval of a professional engineering services contract (as approved as to form by legal counsel) with L & G CONSULTING ENGINEERS INC. d/b/a L & G ENGINEERING for the provision of engineering services for "FM 493 from US 281 (MILITARY HIGHWAY) North 6.65 Miles to Business 83 Project" for Hidalgo County Precinct No. 1. (as selected through the County's protocol from the "POOL" of engineers for negotiations on 09/30/08)**

   On motion of Commissioner Handy, seconded by Commissioner Garza, the Court made a UNANIMOUS vote of approval.

   B. Presentation for consideration, discussion, acceptance, and approval of WORK AUTHORIZATION NO. 1 in the amount of $ 1,144,000.00 with L & G CONSULTING ENGINEERS INC. d/b/a L & G ENGINEERING to provide engineering services for the (Preparation of Schematics, Environmental Assessment, Public Involvement, ROW Mapping, Surveying, and Roadway Design for the Reconstruction of "FM 493 from US 281 (MILITARY HIGHWAY) North 6.65 Miles to Business 83" within Hidalgo County Precinct No. 1, in connection with Contract No. C-08-417-12-09.

   On motion of Commissioner Handy, seconded by Commissioner Garza, the Court made a UNANIMOUS vote of approval.

C. **Pct 2**

1. **Requesting authority to purchase computer equipment, software and/or peripherals through our membership/participation with (DIR) Department of Information Resources awarded vendor-Calence LLC, DIR-SDD-236, requisition # 144376 in the total amount of $21,761.60 for Precinct #2 South Tower Road Community Resource Center.**

   On motion of Commissioner Handy, seconded by Commissioner Garza, the Court made a UNANIMOUS vote of approval.

2. **Presentation for discussion, consideration, acceptance, and approval of request for payment of Invoice No. 2616 in the amount of $51,328.00 (South Tower Estates Subdivision) from R. Gutierrez Engineering Corporation, contracted engineer for Precinct No. 2, after Auditor's review and processing procedures completed and authority for County Treasurer to issue payments/checks;**

   On motion of Commissioner Handy, seconded by Commissioner Garza, the Court made a UNANIMOUS vote of approval.

   At this time Commissioner Palacios returns.

3. **Approval of Request for Payment No. 1 in the amount of $9,838.40, Payment No. 3(Reimbursable) in the amount of $1,112.93 and Payment No. 4 in the amount of $1,019.50, from V-A Architecture, contracted architect for "South Tower CRC/Park Project" C-07-042-04- 17.**

   On motion of Commissioner Garza, seconded by Commissioner Palacios, the Court made a UNANIMOUS vote of approval.

AI-12662 **15.B.3.**

Pct1- Prof Engineering Svc Agreement-L&G Engineering-"FM 493 from US 281 (Military Hwy) to Bus 83"

CC REGULAR

Date: 12/09/2008
Submitted By: Letty Saenz, PURCHASING DEPT.
Submitted For: Marty Salazar
Department: PURCHASING DEPT.
Agenda Category: Purchasing Department **Purchasing only:** Prct. 1

Information

CAPTION

A. Requesting approval of a professional engineering services contract (as approved as to form by legal counsel) with L & G CONSULTING ENGINEERS INC. d/b/a L & G ENGINEERING for the provision of engineering services for "FM 493 from US 281 (MILITARY HIGHWAY) North 6.65 Miles to Business 83 Project" for Hidalgo County Precinct No. 1. (as selected through the County's protoccol from the "POOL" of engineers for negotiations on 09/30/08)

B. Presentation for consideration, discussion, acceptance, and approval of WORK AUTHORIZATION NO. 1 in the amount of $ 1,144,000.00 with L & G CONSULTING ENGINEERS INC. d/b/a L & G ENGINEERING to provide engineering services for the (Preparation of Schematics, Environmental Assessment, Public Involvement, ROW Mapping, Surveying, and Roadway Design for the Reconstruction of "FM 493 from US 281 (MILITARY HIGHWAY) North 6.65 Miles to Business 83" within Hidalgo County Precinct No. 1, in connection with Contract No. C-08-417-12-09.

BACKGROUND

Professional Engineering Agreement-L&G Engineering (as approved by legal counsel)
Work Authorization No. 1-L&G Engineering ($1,144,000.00)

Fiscal Impact

FISCAL YEAR: **ACCT. #:**
FUNDS AVAILABLE Y/N?: **MATCHING FUNDS Y/N?:**
BUDGETARY IMPACT:

To be funded from 2009 C.O. Issuance.

Attachments

Link: Prof Eng Agreement-L&G Engineering-C-08-417-12-09
Link: Exhibit "C" to agreement
Link: WA#1-FM 493 Proj-L&G Engineering

C. **Fire Marshal's Office:**
Approval of 2008 interdepartmental transfer from County Wide Administration - Contingency to Emergency Services - Various Fire Departments (1100) in the total amount of $54,281.00 to fund fire call expenditures.

On motion of Commissioner Handy, seconded by Commissioner Palacios, the Court made a UNANIMOUS vote of approval.

D. **Court Reporter Fund *(1239):***
Approval of inter-fund transfer from Countywide Administration - Contingency (1100) to Court Reporter (1239) in the amount of $15,000.00

On motion of Commissioner Handy, seconded by Commissioner Palacios, the Court made a UNANIMOUS vote of approval.

E. **PCT.1 FM 493(US 281-BUS 83) (1201):**
Approval of interfund transfer of $1,144,000.00 of new source of General Fund revenue as certified by the County Auditor and approved by Commissioners Court on 8/26/08 (AI-10753 16.A.) from the General Fund (1100) fund balance to PCT.1 FM 493(US 281-BUS 83)-Aid to Governmental Agency (1201).

On motion of Commissioner Handy, seconded by Commissioner Palacios, the Court made a UNANIMOUS vote of approval.

F. **Pct. 1 Drainage Improvement Project:**
Approval of 2008 interdepartmental transfer from Pct. 1 Paved/Unpaved Roads, to Pct. 1 Drainage Improvement Project, (1201) in the amount of $358,840.03 to fund pending drainage project(s).

On motion of Commissioner Handy, seconded by Commissioner Palacios, the Court made a UNANIMOUS vote of approval.

G. **Approval of 2008 interdepartmental transfer from County Wide Administration to Financial Advisor (1100) in the amount of $18,700.00 to pay for pending invoice from Estrada Hinojosa.**

On motion of Commissioner Handy, seconded by Commissioner Palacios, the Court made a UNANIMOUS vote of approval.

H. **Pct. 2 Val-Mex Project (1202):**
Approval of 2008 interdepartmental transfer from Pct. 2 Paved/Unpaved Roads to Pct.2 Intergovernmental Expense-Hidalgo-Val-Mex Drive (1202) in the total amount of $77,700.00, to fund the Val-Mex Drive project.

On motion of Commissioner Handy, seconded by Commissioner Palacios, the Court made a UNANIMOUS vote of approval.

AI-12689 **16.E.**

2008 interfund for PCT.1 FM493(US281-BUS83) (1201)
CC REGULAR

Date:	12/09/2008
Submitted By:	Dale Kennan, BUDGET & MANAGEMENT
Submitted For:	Pct.1-FM493 (1201)
Department:	BUDGET & MANAGEMENT
Agenda Category:	Budget and Management

Information

CAPTION

PCT.1 FM493(US281-BUS83) (1201):
Approval of interfund transfer of $1,144,000.00 of new source of General Fund revenue as certified by the County Auditor and approved by Commissioners' Court on 8/26/08 (AI-10753 16.A.) from the General Fund (1100) fund balance to PCT.1 FM493(US281-BUS83)-Aid to Governmental Agency (1201).

BACKGROUND

Funds are subject to reimbursement from Pct 1 C.O. series 2009 allotment as per reimbursement resolution approved on October 7, 2008.

Fiscal Impact

FISCAL YEAR: **ACCT. #:** 8-1201-431-00-121-053-0-841
FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Appropriation of $1,144,000.00 from G/F fund balance. Funding available for transfer as of 12/5/08.

Attachments

Link: 2008 Interfund for PCT.1 FM493(US281-BUS83) (1201)

Form Routing/Status

Form Started By: Dale Kennan Started On: 12/05/2008 04:13 PM
Final Approval Date: 12/05/2008

AI-22170 **20.B.1.**

Work Authorization #2-L&G Engineering Consulting Engineers (C-08-417-12-09)

CC REGULAR

Date: 07/27/2010
Submitted By: Vangie Garcia, PURCHASING DEPT.
Submitted For: Marty Salazar
Department: PURCHASING DEPT.
Agenda Category: Purchasing Department **Sub-category:** Prct. 1

Information

CAPTION

Requesting approval of Work Authorization #2 in the amount of $451,665.50 from L&G Engineering Consulting Engineers, Inc. d/b/a, L&G Engineering for Professional Engineering Management Services to complete the Right-Of-Way Map and Additional Surveying Services in support of TxDOT's Construction of FM 493 from US 281 (Military Highway) North 6.65 Miles to Business Highway 83 Project through Contract #C-08-417-12-09.

BACKGROUND

Fiscal Impact

FISCAL YEAR: 2010 **ACCT. #:** 0-1342-431-00-121-053-0-841
FUNDS AVAILABLE Y/N?: Y **MATCHING FUNDS Y/N?:**

BUDGETARY IMPACT:

Funding for WA #2 in relation to ROW Mapping and Surveying services for the Pct. 1 FM 493 (US 281-BUS 83) road project is pending interdept transfer from the CO's 2010 A& B issuance (fund 1342) in the amount of $451,665.50.

Refer to AI #22175, CC 7-27-10, consent agenda.

Attachments

Link: Work Authorization #2

Form Routing/Status

Route Seq	Inbox	Approved By	Date	Status
	(Originator)	Vangie Garcia	07/22/2010 05:04 PM	CREATED
1	Purchasing Department	Marty Salazar	07/23/2010 03:39 PM	APRV
2	Budget & Management	Erika Zamora	07/23/2010 04:02 PM	APRV
3	Ivan Cantu			PEND
4	Auditor's Office			

Form Started By: Vangie Garcia Started On: 07/22/2010 05:04 PM

COUNTY of HIDALGO

A.C. CUELLAR, JR.
County Commissioner, Pct. 1
1902 Joe Stephens Ave.
Weslaco, TX 78596
(956) 968-8733

Memorandum

To: **MARTHA SALAZAR – COUNTY PURCHASING AGENT**

From: **RAUL LOZANO – CHIEF ADMINISTRATOR PRECINCT I**

Date: **07/15/10**

Re: **WORK AUTHORIZATION...**

Martha,

Please facilitate our request to process work authorization for FM 493 South Road Project.

The funding source will be on our new debt issuance. The account number will be provided for by the Department of Budget & Management.

Also, this work authorization request is to be placed on the agenda for the Commissioners' Court meeting on Tuesday, July 20, 2010.

If you have any further questions, please feel free to contact me at 973-7823.

Best Regards.

L&G Engineering
Transportation Consultants

June 28, 2010

Hon. A.C. Cuellar, Jr
Commissioner, Hidalgo County Pct. No. 1
1902 Joe Stephens
Weslaco, Texas 78596

Attn: Raul Lozano

Re: FM 493 South (Work Authorization No. 2)
Limits: from US 281 (Military Highway) North 6.65 Miles to Business 83)

Dear Commissioner Cuellar:

As discussed and as per Contract No. C-08-417-12-09, previously approved on December 9, 2008, L&G Engineering is completing Work Authorization No. 1 of the above referenced project and limits and is now in the process of initiating Work Authorization No. 2. Your office has informed us to split Work Authorization No. 2 to exclude the Right-of-Way Acquisition.

Based on the Public Meeting and approved TxDOT schematic we are attached a revised Exhibit D - Fee Schedule with the new estimates for the Project. Originally we had estimated $150,000.00 for Surveying and Work Authorization No. 2 clarifies the new estimates for Survey and Right-of-Way Mapping.

Attached for your review and execution in duplicate form are two original, Work Authorizations No. 2 with attachments, for L&G Engineering (L&G) to perform engineering management and surveying services for the FM 493 South project. This Work Authorization is to provide a Right-of-Way Map and Additional Surveying Services in support of TxDOT's Construction of the FM 493 South from US 281 (Military Highway) North 6.65 Miles to Business 83. Please reference the attached Exhibit "D" – Cost Proposal for funding distributions.

Attached you will find the following:

- Two signed original Work Authorizations No. 2 with attachments
  - Exhibit "B" – Services to be Provided by the Engineer
  - Exhibit "C" – Work Schedule
  - Exhibit "D" –Fee Schedule

We look forward to working with you and your staff on this project. Should you have any questions regarding this submittal, do not hesitate to call me at (956) 565-9813.

Sincerely,
L& G ENGINEERING

Jacinto Garza, P.E.
CEO/Project Manager

Attachments

2100 W. Expressway 83 • Mercedes, TX 78570 • Office (956) 565-9813 • Fax (956) 565-9018
900 S. Stewart Rd., Ste. 9 • Mission, TX 78572 • Office (956) 585-1909 • Fax (956) 585-1927

HIDALGO COUNTY

Professional Engineering Services
Contract # C-08-417-12-09
Work Authorization Form

WORK AUTHORIZATION NO. 2

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of Section I.A. of the Agreement made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and **L&G Consulting Engineers, Inc.** *d/b/a* **L&G Engineering,** professional engineers of Mercedes, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide **Engineering Management Services required to complete the Right-of-Way Map and Additional Surveying Services in support of TxDOT's Construction of the FM 493 from US 281 (Military Highway) North 6.65 Miles to Business 83.**

The scope of services to be provided by the **Engineer** is identified in ***EXHIBIT "B" – Scope of Services to be Provided by the Engineer*** attached hereto.

PART 2. ESTIMATED COST

The estimated cost for services under this Work Authorization is **$451,665.50**. This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "D".**

PART 3. PAYMENT

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with Article/Part/Section 5, 6, 7 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 2 shall be funded through funding source:
Account No 0-1342-431-0121-0530-841
Requisition Number _____ **(MUST BE INCLUDED AFTER CC APPROVAL)**

PART 5. PERIOD OF SERVICE

This Work Authorization shall become effective on the date of final acceptance of the parties hereto, and terminate **upon completion of scopes of the work authorization**.

PART 6. RESPONSIBILITIES AND OBLIGATIONS

This Authorization does not waive the parties' responsibilities and obligations provided under the **Agreement**.

PART 7. ACKNOWLEDGEMENT AND CONFIRMATION

Acknowledgement and confirmation by **Hidalgo County Precinct No. 1,** Commissioner, **A.C. Cuellar, Jr.** as to content and detail of this Work Authorization No. 2.

HIDALGO COUNTY
COMMISSIONER PRECINCT NO. 1

A.C. Cuellar, Jr., County Commissioner

PART 8. ACCEPTANCE AND APPROVAL

This Work Authorization is hereby accepted, approved by Hidalgo County Commissioners' Court on 7/27/10 as indicated below and effective as of 27th day of July, 2010.

THE ENGINEER:
L&G ENGINEERING

Jacinto Garza, P.E., President

THE OWNER:
HIDALGO COUNTY

Rene Ramirez, Hidalgo County Judge

ATTEST:

Arturo Guajardo, Jr., County Clerk

LIST OF EXHIBITS

EXHIBIT "A" - Service to be provided by the Owner - OMITTED
EXHIBIT "B" - Services to be provided by the Engineer
EXHIBIT "C" - Work Schedule
EXHIBIT "D" - Cost Proposal

GENERAL INSTRUCTIONS

ENGINEER shall mean L&G Engineering.

SURVEYOR shall mean J.E. Saenz & Associates, Inc.

STATE shall mean Texas Department of Transportation.

COUNTY shall mean Hidalgo County.

PROJECT DESCRIPTION

The services designated herein as "Services Provided by the Engineer" shall include the performance of all engineering services for the following described facility:

County/City: Hidalgo County

Control: 0863-01-047, etc.

Project/Description: Design Surveys, Right-of-Way Mapping for FM 493 South

Length: 6.5 Miles

Highway: FM 493

Limits: US 281 (Military Highway) North 6.65 Miles to Business 83)

Existing Facility

Project Classification

(Place an "X" in only one Project Classification)

___ Surface Treatment
___ Overlay
___ Rehabilitation Existing Road (Scarify & Reshape)
___ Convert Non-Freeway to Freeway
___ Widen Freeway
_X_ Widen Non-Freeway
___ New Location Toll Freeway
___ New Location Non-Freeway
___ Interchange (New or Reconstruct)
___ Bridge Widening or Rehabilitation
___ Bridge Replacement
___ Upgrade to Standards - Freeway
___ Upgrade to Standards - Non-Freeway
___ Miscellaneous Studies (Use Function Code 110 For All Tasks)

NOTES

RIGHT-OF-WAY DATA
(Function Code 130)

Services Provided By: Engineer	County	
		NOTE: No work involving right-of-way (ROW) data is to be performed until the state has given the engineer written approval of the final location of the proposed ROW lines.
YES		1. Ownership Data in a .dgn file a. Ownership Information shall be determined (Preliminary Title Data) for a distance of 3/4 miles before and after each existing or proposed overpass. b. Compensable utility ownership rights on TxDOT ROW shall be researched and provided. c. For each drainage outfall property preliminary ROW identification will be shown. d. For each irrigation structure pipe. e. Mailing list of owners on both side of the expressway for the project limits.
YES		2. Parcel plats & Right-of-Way Map a. A ROW map, parcel plats and field notes shall be prepared and furnished. b. ROW map and field notes shall be revised as required due to changes in Highway Ownership Changes or Revised Parcel Numbering. All plats and field notes must be signed and sealed by a Registered Professional Land Surveyor (RPLS). c. ROW map must depict all improvements affecting ROW.
YES		3. Utility Adjustments a. Highway Design Data shall be furnished by the Engineer to the County and TxDOT for joint coordination with Utility Companies of the needed Utility Adjustments.
YES		4. Field Notes a. Field notes and plats, signed and sealed by a Registered Professional Land Surveyor, for all parcels on the ROW Map (metric and english units) b. Control of Access Descriptions for all parcels on Designated Controlled Access Highways. c. Computation Sheets for Survey Closure and Area for Each Parcel. d. Ground surveys and preparation of parcel maps, legal descriptions, and right of way maps.
YES		5. Survey and Stake Right-of-Way
YES		6. Records as Required by the County and TxDOT a. Records used to establish ownership

Services Provided By: Engineer	County
YES	

7. General Guidelines for Preparation of Right-of-Way Maps

a. All procedures involving ROW maps, surveys and field notes shall be in conformance with the State's Right-of-Way, Book I and Book II, except as provided herein and in accordance with the Texas Board of Professional Land Surveying Practices Act.

b. The **engineer** shall be responsible for completing the title sheet as required and formatted by TxDOT and as discussed in Book II of the Right of Way Manual.

c. Preliminary and completed work shall be submitted as requested by the district.

d. The **engineer** shall maintain a direct line of communication and coordinate very closely with the district's design staff, through the district engineer, throughout the project.

e. (1) Minimum mathematical calculations relative to field note data are: (a) area of taking, if expressed in metric, will be carried to three decimal places or, if expressed in square feet, will be rounded to the square foot, (b) distances will be given to the nearest metric units and hundredth of a foot and (c) bearings will be carried to the nearest second. Data contained in the field notes and shown on the map shall be identical. More precise calculations may be requested by TxDOT.

(2) Calls within the body of the field notes shall be written to identify property lines and the existing and proposed ROW lines.

f. Project base line is to be drawn and stationed on the ROW map.

g. Minimum size lettering is to be 4 millimeters (5/32 inch) height for hand lettering and 140 for lettering by computer-aided design and drafting (CADD) on all ROW maps, unless otherwise authorized in writing by TxDOT.

h. As soon as property lines and parent tracts can be determined, the engineer shall submit a preliminary map for review of parcel numbers and guidance early in the development process.

i. Zip-a-tone or similar products shall not be used on map sheets.

j. All field notes and plats shall be signed, dated and sealed by a Registered Professional Land Surveyor or Licensed State Land Surveyor.

k. The ROW map sheets shall be ink or Mylar type tracing film or as otherwise authorized by TxDOT.

l. Field note data for all parcels shall be furnished on diskettes or tapes that are compatible with TxDOT.

m. THE SURVEYOR SHALL BE LIABLE FOR ALL SURVEYING MISTAKES AND SHALL BE RESPONSIBLE AT HIS SOLE EXPENSE FOR CORRECTION OF ALL ERRORS.

n. TxDOT Plan Checklist will be adhered to.

FIELD SURVEYING AND PHOTOGRAMMETRY
(Function Code 150)

ADDITIONAL SURVEYS TO SUPPLEMENT WORK AUTHORIZATION NO. 1

Services Provided By: Engineer	County	
		1. Field Surveying
NO	YES	a. Primary Project Control - 3 to 5 miles spacing Precision shall be 1 part in 20,000 or better, unless otherwise directed by the district engineer. (1) Establish horizontal control points (2) Establish vertical control points
NO	YES	b. Secondary Project Control (Surveyor shall H&V Control Points and create Survey Data Sheets for inclusion in the Project Plans). • No traverse should exceed 25 angle points. Planimetrics shall be 20 ft Lt & Rt from the proposed ROW. • The unadjusted angular error should not exceed 2 seconds per angle, plus 14 seconds. • The unadjusted ratio of precision should be one part in 10,000 or better. (The ratio of precision is the total length of the traverse divided by the total error.) • The unadjusted vertical error should not exceed 0.03 foot per mile of traverse. (1) Project control base lines
NO		(2) Photogrammetric ground control
NO		(a) Establish horizontal control
NO		(b) Establish vertical control points
NO		(c) Place and maintain control point targets
YES	NO	c. Other Field Surveying

(1) **The limit of the Design surveys shall be 500-ft before and after the limits of the project as identified by the Project Engineer on the schematic. Recover and/or re-establish horizontal and vertical control.** Set benchmarks at 1000-ft intervals and along each outfall identified on Exhibit A & B. The BM's shall be #5 I.R. 2-ft in depth set in concrete. A H&V Book will be provided by the Engineer to the Surveyor and the surveyor will provide a 3-pt reference sketch with ties to the BMs for inclusion the the existing H&V Control Book. Establish benchmark circuit throughout the project with a tolerance of 0.03'/ft per mile error vertically.

(2) Complete topographic and cross section survey, data processing, and CADD mapping (2D 3D).

(3) Locate all visible utilities, data processing and CADD mapping (2D & 3D) including irrigation lines.

(4) Field locate cross culverts, driveway culverts, inverts, irrigation lines, within the project limits, data processing and CADD mapping (2D & 3D).

(5) Right of Entry, Right of Way Research, and Appraisal District Records is the responsibility of the Surveyor.

(6) The Surveyor shall also paint the proposed centerline on the existing pavement as approved by Engineer. (500-ft stations and a tick mark at 100-ft. stations –12 inches long with approved paint by Engineer) before construction for the purpose of utility adjustments and project location.

(7) Profile and cross section intersecting streets for ties into project (500-ft. beyond the proposed ROW per schematic and 20-ft wider than the existing ROW of intersecting street).

(8) Cross section irrigation crossings for a distance of 20-ft beyond the proposed ROW at 100-ft intervals in a DTM file. Provide a complete description of irrigation appurtances as identified by the engineer sample layout.

(9) Tie Horizontally and Vertically the existing storm drain system that lies within the existing proposed ROW including the elevation of the outfall of said recovered existing storm drain systems.

Services Provided By: Engineer	County	
YES	NO	(10) Tie to existing underground and overhead utilities (location, elevation and direction) Horizontally – the surveyor shall call the 1-800 number for the utilities to be marked on the ground as well as any city water and sewer lines. He shall tie all visible utility crossings with name, address and Phone #'s of utility companies. The engineer will coordinate with the utility companies and jointly the Surveyor and the Engineer will identify which utilities were missed and need to be tied down. Vertically – The engineer shall identify all utilities that are potential conflicts and that need to be tied vertically. The engineer will advise the surveyor in writing of the needed vertical ties and the surveyor will tie the lines vertically once the surveyor has coordinated the exposure and provide the information to the engineer.
YES	NO	(11) Additional Field Surveying as shown below: (A) IRRIGATION LINES – The surveyor will meet with the engineer before he ties down any irrigation lines. The Engineer will provide him the existing Irrigation District Maps and the A&M Data of existing irrigation lines that are identified of record. He will follow the sample given to him by the engineer and tie the structures horizontally and vertically and provide Field Books to the engineer. (B) OUTFALLS – The surveyor will provide a complete 2D & 3D File including utilities of the outfall identified on Exhibit A and B **Driveways and Turnouts** (a) Inventory commercial entrances, public roads and side streets separately. (b) Obtain centerline station. (Width at ROW, PAV'T and existing radius. (c) Inventory by type (dirt, caliche, gravel or paved). If paved, indicate condition in terms of no patches, has patches or has potholes. Obtain width at R.O.W. line. (e) Obtain elevations at both edges of the driveway or turnout in line with the side drain.
YES	NO	(13) ROW staking (Existing and Proposed @ 1,000 ft. stations PC's PT's and Angle points as per ROW Map)
NO	NO	(14) Soil core hole staking -
YES	NO	(15) Determine changes in topography from voids and outdated maps due to development, erosion, etc.
YES	NO	(16) Profiles of existing drainage facilities
NO	NO	(17) Measurement of hydraulic opening under existing bridges
YES	NO	(18) Obtain elevations of manholes and valves of utilities
YES	NO	(19) Provide temporary signs, traffic control, flags, safety equipment, etc.
YES	NO	(20) Ties to existing bridges or culverts that may conflict with new construction.
N/A	N/A	(21) Bridge widening top of deck and/or top of cap elevations at the Profile Grade Line (PGL) and the edges of slab at bent locations.
YES	N/A	(22) Inventory signs, mailboxes, and driveways
YES	N/A	(23) Survey controlled data sheets per TxDOT guidelines.

Services Provided By: Engineer	County	
N/A	N/A	2. Photogrammetric Products
		a. Uncontrolled Photography
		(1) Contact Prints
		(2) Mosaics
		(3) Digital ortho plots
		b. Mapping
		(1) Planimetric Maps
		(2) Contour Maps
		(3) Cross Sections
		(4) Profiles
		(5) Digital Terrain Models (DTM)

ADDITIONAL RESPONSIBILITIES

Meetings

Meetings will be held with the FHWA, State Officials, local governments, property owners, utility owners, railroad companies, other consulting firms, etc., as needed or required by the **COUNTY**. The **ENGINEER** shall coordinate through the COUNTY for the development of this project with any local entity having jurisdiction or interest in the project (i.e., city, county, etc).

Specifications, Special Provisions, Special Specifications

Whenever possible, use the State's standard specifications or previously approved special provisions and/or special specifications. If a special provision and/or special specification is developed for this project, it shall be in the State's format and, to the extent possible, incorporate references to approved State test procedures.

The **Engineer** shall promptly make necessary revisions or corrections resulting from the **Engineer's** errors, omissions or negligent acts without additional compensation. Acceptance of the work by the **COUNTY** will not relieve the **Engineer** of the responsibility for subsequent correction of any such errors or omissions or for clarification of any ambiguities.

Document and Information Exchange

Data, Plan Sheets, General Notes and/or Specifications provided to the **COUNTY** shall be furnished on 8GB USB flash drives. Each 8 GB flash drive shall have a file titled Table of Contents. The Table of Contents shall indicate the locations of files within the directory structure of the documentation.

General Notes and specifications shall be provided in MS Office 2007 format. Plan sheets shall be provided in Microstation DGN or GEOPAK GPK format. PDF copies of plan sheets shall also be provided.

Two copies of the documentation shall be provided to the Company.

If required, the **engineer** shall provide to the **COUNTY**, a CD that contains all the plan sheets for the project. The graphics tape shall be compatible with the **COUNTY's** computer system.

CD Tape Required (YES or NO): **YES**

Proposal Time

The time indicated in the proposal and the contract shall include time necessary for reviews, approval, etc.

Office Location

The **engineer** will perform the services to be provided under this agreement out of their office or offices listed below:

Service	Office Location
PS&E ROW Mapping & Management	Mission Office

The work effort will be managed out of the Mission (City) office located at 900 South Stewart Rd. (Address), Mission (City), Texas (State).

J.E. SAENZ & ASSOCIATES, INC.
ENGINEERS ■ SURVEYORS ■ PLANNERS
CONSTRUCTION MANAGERS ■ GEOGRAPHICAL INFORMATION SYSTEMS
TBPE FIRM REGISTRATION No. 1273

June 28, 2010

Mr. Robert Macheska, P.E.
L & G Engineering
2100 W. Expressway 83
Mercedes, Tx 78570
Via E-Mail: rmacheska@lgengineers.com

Re: FM 493 Design Survey
From: BUS 83 South to US 281 (Military Highway)

Dear Mr. Macheska:

We are pleased to submit this proposal for the above referenced project. The services to be provided along with associated costs are as follows:

1.) ADDITIONAL DESIGN SURVEY FOR FM 493 $58,420.00

(This work will be in addition to survey work approved on Work Authorization #1) In reference to the irrigation lines and structures J. E. Saenz & Associates, Inc. (JES) will not be able to provide locations of any irrigation lines by probing except at standpipes that have Irrigation District mapping provided. Any requested line locations that are not at standpipes will need to be exposed/pothole by a SUE provider. After a count of irrigation line locations needed, JES will submit a per pothole cost to provide these locations.

2.) R.O.W. MAPPING AND PARCELS $367,500.00

Our site visits and preliminary research on FM 493 has led us to the understanding that there are approximately 105 parcels for right-of-way acquisition. Based on this information our basic fee for right-of-way mapping and re-staking proposed right-of-way is $367,500.00 (Estimated at $3,500 per parcel). We are prepared to move forward and expedite all necessary documentation and coordinate the acquisition procedures with Hidalgo County Right-of-Way Department for L&G Engineering. We will be conducting services for the parcel as follows:

- Property Owner Investigation
- Property Map
- Right-of-Way Map
- Aerial map
- Metes and Boundary Description
- Set all Parcel Lot Corners
- Re-staking Proposed Right-of-Way

POST OFFICE BOX 3293
EDINBURG, TEXAS 78540
www.jesaenz.com

(956) 383-2984 TEL
(956) 383-3736 FAX
info@jesaenz.com

J.E. SAENZ & ASSOCIATES, INC.
ENGINEERS ■ SURVEYORS ■ PLANNERS
CONSTRUCTION MANAGERS ■ GEOGRAPHICAL INFORMATION SYSTEMS
TBPE FIRM REGISTRATION No. 1273

Our total estimated fee for the above mentioned professional survey services are **$425,920.00.** The work schedule, Attachment "C", is based on right of entry to be provided by L&G in a timely manner.

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

Sincerely,

Jose E. Saenz, P.E.
President

Cc: File
JES/fq

POST OFFICE BOX 3293
EDINBURG, TEXAS 78540
www.jesaenz.com

(956) 383-2984 TEL
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PROJECT: FM 493 South
CLIENT: Hidalgo County Precinct No. 1

EXHIBIT C
WORK SCHEDULE

6/29/2010

TASK AND DESCRIPTION	2010 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2011 JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	2012 JAN	FEB	MAR	APR	M
ROW Mapping																													
Design Surveys																													
Final ROW Map, Parcel Sketches and Field Notes																													
ROW Acquisition (Anticipated FONSI Nov. 2010)																													
Project Administration																													
Coordination with County and TxDOT																													
Preliminary Administrative & Acquisition Process																													
Title Commitments																													
Appraisal Reports																													
Appraisal Review Reports																													
Appraisal Update Reports																													
Approved Values by TxDOT																													
Acquisition Negotiation Offers																													
Title Curative Process																													
Title Commitment Updates																													
Payments for Parcels																													
L&G Condemnation Support Process																													
Eminent Domain Proceedings by County																													
Title Insurance Policies - Negotiations/ED																													
Consummation of Outstanding Cases																													
PS&E																													
Complete Intersection Layouts																													
Roadway Design, x-sections, earthwork, etc.																													
Design Hydraulic Structures, Outfalls, etc.																													
Design Storm Drain System																													
Signing and Pav't Markings																													
Traffic Control Plan																													
Utility Coordination																													
Specifications, General Notes, Estimates																													
TxDOT Review																													
REVISIONS BY L&G AS RECEIVED FROM TXDOT																													
TxDOT PROCESS FOR LETTING AT AUSTIN																													
Estimated Construction Letting																													
Construction																													
Construction Inspection assisting TxDOT																													
																									ESTIMATED 9 MONTHS CONSTRUCTI				

L&G ENGNEERING TASK
TxDOT TASK
COUNTY TASK

Exhibit D - Cost Proposal
& Estimated Local & State Participation for FM 493 South
Limits: From Business 83 to US 281 (Military)

	Pct. #1-L&G WA #1 Executed (12/9/08)				Funds Required by 11/15/10			WA #2 Pending			WA #3 Pending	WA #4 Pending	
	Schematics (Submitted to TxDOT)	PS&E Development (In Process)	Env. Doc. (Submitted to ENV)	Des. Surveys (Pending Surveyor)	* ROW Land Cost	* Compensable Utilities	* Relocations	ROW Map	Additional Design Surveys Requested	ROW Mapping Management	ROW Acquisition Services	Construction & Inspection	ESTIMATED TOT PARTICIPATIOI
CITY	$0.00	$0.00	$0.00	$0.00	$3,560.00 (2)	$10,211.00 (5)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$13,771.00
COUNTY	$254,000.00	$650,000.00 (1)	$90,000.00	$150,000.00	$18,847.50 (3)	$0.00	$0.00	$367,500.00 (7)	$58,420.00 (9)	$25,745.50	$1,352,054.50 (8)	$60,000.00	$3,026,567.50
TXDOT	$0.00	$0.00	$0.00	$0.00	$1,590,092.50 (4)	$1,010,914.00 (6)	$25,000.00	$0.00	$0.00	$0.00	$0.00	$6,300,000.00	$8,926,006.50
TOTALS	$254,000.00	$650,000.00	$90,000.00	$150,000.00	$1,612,500.00	$1,021,125.00	$25,000.00	$367,500.00	$58,420.00	$25,745.50	$1,352,054.50	$6,360,000.00	**$11,966,345.0(**
					TOTAL FUNDS REQUIRED:		**$2,658,625.00**						

[redacted]	Work Authorization No. 1	$1,144,000.00	ISSUED
[redacted]	Work Authorization No. 2	$451,665.50	PENDING
[redacted]	Work Authorization No. 3	$1,352,054.50	PENDING
[redacted]	Work Authorization No. 4	$60,000.00	PENDING

(1) Cost includes: Utility Coordination, Outfall Identification, Prelim. ROW Ownership & PS&E Design

(2) City Participation: 11 Parcels (8.9 acres) @ $40,000/acre = $356,000 @ 1% = $3,560 (Pending TxDOT Release of ROW est. Date: 11/15/10, 1 month after est. FONSI Date: 10/15/10)

(3) County Participation: 94 Parcels - Undeveloped = 17.8 acres @ $40,000/acre = $712,000 @ 1.5% Participation = $10,680; Developed = 5 acres = 217,800 sf @ $2.50/sf = $544,500 @ 1.5% = $8,167.50 (Total=$712,000 + $544,500 = $1,256,500)
Total County Participation = $10,680 + $8,167.50 = $18,847.50 (Pending TxDOT Release of ROW est. Date: 11/15/10, 1 month after est. FONSI Date: 10/15/10)

(4) State Participation: City - $356,000 @ 99% Participation = $352,440; County (Undeveloped) - $712,000 @ 98.5% = $701,320; County (Developed) - $544,500 @ 98.5% = $536,332.50
Total State Participation = $352,440 + $701,320 + $536,332.50 = $1,590,092.50

(5) City Participation: San. Sewer - 13,615 l.f. @ $75/l.f. = $1,021,125 @ 1% Participation = $10,211.00 (Pending TxDOT Release of ROW est. Date: 11/15/10, 1 month after est. FONSI Date: 10/15/10)

(6) State Participation: San. Sewer - $1,021,125 @ 99% = $1,010,914.00

(7) County Participation: 105 parcels @ $3,500/parcel = $367,500.00 (Pending approval of schematic by TxDOT/FHWA; was submitted to TxDOT 4/5/10, est. approval date 10/5/10)

(8) County Participation: 105 parcels @ $12,500/parcel (Pending TxDOT Release of ROW est. Date: 11/15/10, 1 month after est. FONSI Date: 10/15/10)

(9) After Completion of Schematic with Public Involvement the proposed survey work by J.E. Saenz & Associates requesting additional $58,420.00

* Pending Execution of ROW Agreement Between TxDOT & County/City

Revised 6/28/201

EXHIBIT "D"

Work Authorization No. 2
FM 493 Right of Way Mapping and Surveys
L & G ENGINEERING

3.1

Task	Project Manager	Engineer	Admin/ Clerical	Total Hours	Direct Labor	Total Cost
	$50.00	$44.00	$17.50			
PROJECT MANAGEMENT						
Project Management of Contract/Progress Reports	20	40	16	76	$3,040.00	$9,424.00
Provide a review of submittals and coordinate revisions	20	40	6	66	$2,865.00	$8,881.50
Processing of Invoices	20	0	80	100	$2,400.00	$7,440.00
Total for L&G Engineering	60	80	102	242	$8,305.00	$25,745.50
SERVICES PROVIDED BY SUB-CONSULTANT						
See Att. D-1 from J.E. Saenz and Associates Additional Design Field Surveys						$58,420.00
See Att. D-1 from J.E. Saenz and Associates Field Surveys ROW Mapping and Parcels						$367,500.00
Total for J.E. Saenz & Associates						$425,920.00
			TOTAL LABOR			$451,665.50

TOTAL	**$451,665.50**