

EXHIBIT "F"
Supplemental Agreement Form

WORK AUTHORIZATION NO. 1
SUPPLEMENTAL AGREEMENT NO. 2
Contract No. C – 10 – 062 – 02 - 16

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 TEDSI INFRASTRUCTURE GROUP, professional engineers of Mission, Texas, hereinafter called the "Engineer".

PART 1. Scope of Work. The purpose of this Supplemental Agreement #2 to Work Authorization No. 1 is to provide Geotechnical Engineering Services as indicated below:

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

PART 2. Estimated Cost. The estimated cost for services under this Supplemental Agreement No. 2 to Work Authorization No. 1 is \$ 45,000.00. This amount is based upon the costs outlined in the *Estimated Cost Proposal* attached hereto as ATTACHMENT "D".

PART 3. Payment. Compensation and payment to the Engineer for the services established under this Supplemental Agreement #2 to Work Authorization No. 1 shall be made in accordance with Articles 5, 6, and 7 of the Agreement.

PART 4. Period of Service. This Supplemental Agreement #2 to Work Authorization No. 1 shall become effective on the date of final acceptance of the parties hereto, and all work associated with this Supplemental Agreement #2 to Work Authorization No. 1 shall be performed within the time period identified in the Work Authorization No. 1 *Work Schedule*.

PART 5. Responsibilities and Obligations. This Supplemental Agreement #2 to Work Authorization No. 1 does not waive the parties' responsibilities and obligations provided under the Agreement.

PART 6. Acceptance and Acknowledgement. This Supplemental Agreement #2 to Work Authorization No. 1 is hereby accepted and acknowledged as indicated below and effective as of ____ day of _____, 2011.

THE ENGINEER:
TEDSI INFRASTRUCTURE GROUP

BY: _____
Jesse Salinas, (Principal)

THE OWNER:
HIDALGO COUNTY

BY: _____
Joseph Palacios (County Commissioner)

COUNTY JUDGE:
HIDALGO COUNTY

BY: _____
Ramon Garcia

APPROVED AS TO FORM:
ATLAS & HALL

BY: _____
Stephen Crain

LIST OF ATTACHMENTS:

ATTACHMENT "B" - Services to be Provided by the Engineer
ATTACHMENT "D" - Estimated Cost Proposal

ATTACHMENT "B"
Scope of Services
Supplemental Agreement No. 2
To Work Authorization N. 1
Contract No. C-10-062-02-16

I. Geotechnical Drilling and Miscellaneous Field Services

Based on the location map (or general directive) we are proposing the drilling and sampling of subsurface materials within the project limits as follows:

Structural Borings

- Fifteen (15) Borings will be drilled (Borings will be advanced to a depth of approximately 20 feet below the existing top of natural ground)

Engineering Laboratory will stake the boring locations and provide utility clearances prior to performing the field exploration portion of the project. The borings will be advanced to the specified depths and in-situ soil testing will be performed in general accordance with ASTM or TxDOT Standard Test Procedures (ASTM D1586 – Standard Penetration Testing or Tex-132-E – Texas Cone Penetration). The soil will be sampled as needed to verify subsurface materials and strata changes. Final drilling depths and elevations will be based on topographic conditions at the time of our drilling operations.

Unless requested, the Client will be responsible for obtaining any necessary permits or authorization to egress areas (right of entry) where the borings are to be drilled. All samples will be removed from the sample apparatus during drilling operations. Lab personnel will conduct various field tests on the recovered samples, visually classify the samples, and record the appropriate data on a field boring log. The samples will be appropriately packaged to minimize loss of their natural moisture content and to reduce the possibility of damage during transportation to our soils laboratory.

Drilling services will also include a 24-hour water level reading at each boring location, which may require piezometers be installed to maintain the integrity of the borehole overnight or over a weekend. Following completion of drilling, sampling, and subsurface water monitoring operations, all boreholes will be backfilled with soil cuttings from the completed borings. If there is not enough soil cuttings available, alternate fill will be used to backfill the completed boreholes.

This proposal *does not* include activities and corresponding costs that may be associated with the following:

- Providing an ATV mounted drill rig, dozer or special equipment to clear areas of vegetation and debris or to regrade the site to gain access to the boring locations;
- Regrading the site or portions of the site after drilling activities are completed;

- Site safety meetings that may be required; or
- Encountering hazardous or contaminated soils or substances during our field activities.

We will notify you should these services become necessary for us to complete our field exploration activities. We can arrange to provide for these services as part of our project scope, should you authorize us to do so.

II. Geotechnical Laboratory Testing Services

Geotechnical Laboratory Testing will be performed on the samples recovered during the field study to evaluate their physical and engineering properties. Testing shall include several of the following test procedures:

- (1) Atterberg Limits (ASTM D4318 or Tex-104-E, 105-E, 106-E)
This procedure will be used to aid in the classifying of the soil and to provide information on the potential vertical rise and contraction of the soil. Test data furnished will include Liquid Limit, Plasticity Index, and Linear Shrinkage test results.
- (2) Gradation (-200) (ASTM D1140 or Tex-111-E)
This procedure will be used to aid in the classifying of the soil. A No. 200 sieve will be used to distinguish fine grained material as well as for cohesive soils.
- (3) Lab. Determination of Moisture in Soils (ASTM D2216 or Tex-103-E)
This procedure will aid in determining the in-situ moisture of the soil to be able to evaluate the potential vertical rise and contraction of the soil.
- (4) Sulfate Content of Soil (ASTM C1580 or Tex-145-E)
This procedure will identify the soluble sulfate content of soil by using the turbidimetric techniques. The results of this procedure will be utilized to determine whether or not the subgrade material can be lime treated for stabilization or if other methods of stabilization will need to be proposed. The presence of extreme amounts of soluble sulfates will exclude lime treatment as a stabilization option.
- (5) Unconfined Compression (ASTM D2166)
This procedure determines the direct unconfined compressive strength of a soil of which can be correlated to shear strength of a soil sample (comparison with strength testing).
- (6) Consolidation Testing (ASTM D2435)
This procedure is utilized to predict the magnitude and potential rate of consolidation of soil in laboratory mimicked field conditions (laterally restrained and axially drained) while subjected to controlled stress loading increments.
- (7) pH Testing of Soil (Tex-128-E)
This procedure will provide the pH of a soil for determination of acidic or basic nature of soil environment.

Engineering Services

Engineering analyses will be conducted after reviewing the results of both the field and laboratory phases of our study. The findings and conclusions derived from our analyses will be presented in a written engineering report (three (3) copies), which will be prepared by one of our engineers. The report will include a boring location plan, boring logs with laboratory classification of recovered soil samples and subsurface water conditions encountered. The report will provide engineering analyses/recommendations for:

- Strength Parameters and Structural Evaluation of Soil Borings
- Net Allowable Bearing Capacity of In-Situ Soils for Anticipated Loading
- Effects of Structures on Allowable Bearing Pressure and Estimated Settlement
- Potential for Soil Movement Due to Volume Change
- Soil Improvement Methods and Procedures (if applicable)
- Recommendations for Construction and Inspection
- Additional Considerations and Recommendations (where applicable)

Our report will provide general comments and applicable recommendations regarding construction methods, sequences, and potential difficulties that may arise during overall construction as it relates to the soil aspects of this project. This information may serve to guide pavement selection and design and assist in the preparation of specifications for the project.

Schedule

Based on the requested services, we estimate that the drilling operations will take approximately five (5) days to complete. We anticipate that drilling operations can begin within five (5) to seven (7) days following notice to proceed, staking of the borings, clearing the boring locations of utilities and site and weather conditions permitting. The report and engineering analyses should be completed within two (2) weeks after completion of the drilling operations.

ATTACHMENT D
Supplemental Agreement No. 2
To
Work Authorization No. 1
Contract No. C-10-062-02-16

J – 09-00 (8 Miles)

ADDITIONAL SPECIAL SERVICES:

Geotechnical Engineering

15 Borings @ \$3,000/ea.

\$45,000.00

TOTAL ADDITIONAL SPECIAL SERVICES

\$45,000.00

