

EXHIBIT "D"
HIDALGO COUNTY
Professional Engineering Services
Contract #C-CAP-08-023a-09-02
Work Authorization Form

WORK AUTHORIZATION NO. 03

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, Millennium Engineers Group, Inc. professional engineers of Edinburg, Texas, hereinafter called "**Engineer**".

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide Construction Materials Testing Services for 3rd Call Colonias Access Program projects: Esperanza Estates, Mesquite Acres, Morningside South, McColl Estates, Las Milpas Subdivision, and Sundowners Retirement Center. Projects are located in Precinct 2.

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 \$40,067.72. 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 5.1 of the Agreement.

PART 4. FUNDING

This Work Authorization No. 3 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 or .

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. 2 Commissioner Hector "Tito" Palacios as to content and detail of this Work Authorization No. # 03.

HIDALGO COUNTY
COMMISSIONER PRECINCT NO. 02:

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 _____, 2009.

THE ENGINEER:
Millennium Engineers Group, Inc.

THE OWNER:
HIDALGO COUNTY

By: _____
Type Name

By: Juan D. Salinas III, County Judge

ATTEST:

by: Arturo Guajardo Jr., County Clerk

EXHIBIT "A"

Services to be Provided by County

The following provides an outline of the services to be provided by the Owner in the development of Projects (as defined and more particularly identified in Exhibit "A" attached to this Agreement).

General

The Owner will provide to the Laboratory the following:

- 1) Provide the authorization to proceed with services through coordination with the project consulting and design Engineer.
- 2) Payment for work performed by the Laboratory and accepted by the Owner in accordance with Article 3 of this Agreement.
- 3) Assistance to the Laboratory, as necessary, to obtain the required data and information from other local, regional, State and Federal agencies the Engineer cannot easily obtain.
- 4) Provide any available relevant data the Owner may have on file concerning the projects.
- 5) Provide timely review and decisions in response to the Laboratory's request for information and/or required submittals and deliverables, in order for the Laboratory to maintain the agreed upon work schedule prepared in accordance with Exhibit "A" attached to this Agreement.
- 6) Attend and participate in progress meetings as required and as coordinated and conducted by Laboratory.
- 7) Provide the authorization to proceed with services on project by project basis through consulting design and construction engineer.

Exhibit "B"

Services to be Provided by Laboratory

The services to be provided by the LABORATORY in providing geotechnical engineering services, construction materials testing services, construction observation services and environmental services for the Hidalgo County Colonia Access Program - Precinct #2 Projects is as follows:

A. Preliminary Phase:

- 1) Attend preliminary conferences with the OWNER and, if requested, with the funding agency and other government agencies or interested parties regarding the Project.
- 2) Provide for the necessary geotechnical investigation and testing necessary to develop design.
- 3) Provide environmental studies as may be necessary to complete a project.
- 4) Provide assistance to the OWNER in providing material requirements and specifications for design, construction and maintenance projects.
- 5) Provide assistance to the OWNER in providing pavement design recommendations for the design, construction and maintenance projects.
- 6) Provide assistance to the OWNER in providing pavement rehabilitation recommendations for the design, and maintenance projects.
- 7) Provide assistance to the OWNER in providing pavement condition studies.

B. Design Phase:

- 1) Attend the OWNER'S and respective Party's meeting as requested for the purpose of explaining geotechnical investigation report recommendations and preliminary testing results and their impact to proposed design activities.
- 2) Perform any additional geotechnical investigations, testing and environmental studies necessary to collect information required in the design of the Project.
- 3) Provide assistance to the OWNER in providing material requirements and specifications for design, construction and maintenance projects.
- 4) Provide assistance to the OWNER in providing pavement design recommendations for the design, construction and maintenance projects.
- 5) Provide assistance to the OWNER in providing pavement rehabilitation recommendation for the design, construction and maintenance projects.
- 6) Provide assistance to the OWNER in providing pavement condition studies.
- 7) Furnish the OWNER all necessary report for preliminary design, design, and construction and maintenance projects.

C. Construction/Maintenance Phase:

- 1) Attend the OWNER'S and respective Party's pre-construction and construction meetings as requested for the purpose of explaining geotechnical investigation report recommendation and preliminary testing results and their impact to proposed construction activities and establish coordination and lines of communication for proposed construction materials testing during construction activities.
- 2) Consult and advise with the OWNER during construction.
- 3) Provide construction materials testing for construction and maintenance project as required by the project plans and specifications and/or specified by the project design engineer.
- 4) Review all material designs as requested by the OWNER and/or project design engineer.
- 5) Furnish the OWNER all necessary reports for construction and maintenance projects.
- 6) Provide construction observation services as requested by the OWNER on construction and maintenance projects.

D. Miscellaneous/Other

- 1) Act for Owner in professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of the profession.
- 2) Perform all technical services under the general direction of a Licensed Professional Engineer in the State of Texas and in substantial accordance with the basic requirements of the appropriate Standards of the American Society for Testing and Materials, where applicable, or other standards designated by County.
- 3) Employ testing machines which have been calibrated within a period not exceeding twelve (12) months from the time of use by devices of accuracy traceable to the National Institute for Standards and Technology (NIST) of the United States Department of Commerce, and, upon request, submit to the OWNER or its authorized representative documentation of such calibration.
- 4) Promptly submit formal construction materials testing reports for all tests, observations and services performed indicating where applicable, compliance with OWNER specifications or other documents. Such reports shall be completed and factual, citing the tests performed, methods employed, values obtained, parts of the structure and location at which tests were made.
- 5) The plans and specifications prepared under this Agreement shall become the property of the OWNER upon completion of the work and payment in full of all monies due to the Laboratory.
- 6) Retain all pertinent records relating to the services performed for a period of five (5) years following submission of all reports, during which period the records will be made available to the Owner within a reasonable time.

NOTE: Change in and/or additional services to Scope will require prior approval from Owner prior to undertaking.

EXHIBIT "C"
ENGINEER'S CONTRACT FEE SCHEDULE

For the services to be provided by the ENGINEER the charge will be on the basis of the units and unit fee rates established in this schedule of tests, staff personnel services and additional services. The overtime premium, required by the Fair Labor Standards Act for nonexempt classifications, will be charged for overtime hours worked because of the County's requirements and its authorization. However, except for the overtime premium, the maximum charges shall not exceed the rates shown in this schedule.

Soils and Aggregate Section

Material Preparation Time	\$40.00/hr
Atterberg Limits (ASTM or TxDOT).....	59.00/ea
Sieve Analysis	
Dry through No. 40 (4 sieves).....	50.00/ea
Additional Sieves.....	12.00/ea
Percent Passing No. 200 Sieve.....	42.00/ea
Moisture Density Relationship	
ASTM D 698 (Standard Proctor).....	175.00/ea
ASTM D 1557 (Modified Proctor).....	185.00/ea
Tex 113-E (TxDOT Proctor).....	185.00/ea
Nuclear Density Test (In conjunction with Inspection)	
ASTM D 2950 or Tex 115-E, Part II.....	22.00/ea
Depth Test	6.00/ea
Wet Ball Mill (Tex 116-E)	175.00/ea
Determination of Optimum Lime Content	
PI Method – (Max. 3 points)	275.00/ea
Tex 121-E - (Max. 3 points)	275.00/ea
PH Method - (Max. 3 points)	275.00/ea
Additional Points	75.00/ea
California Bearing Ratio (includes M/D Relationship & 3 specimens)...	600.00/ea
Additional Specimens	150.00/ea
Moisture Content of Aggregates and Base(Small).....	8.00/ea
Moisture Content of Aggregates and Base(Large).....	35.00/ea
Linear Shrinkage (Tex 107-E)	65.00/ea
pH (TxDOT Tex 128-E).....	70.00/ea
Resistivity of Soils (Tex 129-E)	85.00/ea
Specific Gravity	75.00/ea
Unit Weight (Loose or Dry)	45.00/ea
Soundness (5-cycle Magnesium)	425.00/ea

Bituminous Section

Material Preparation Time	\$43.00/hr
Sieve Analysis for Fine and Coarse Aggregate (Tex 200-F or ASTM)	
Dry (4 sieves).....	50.00/ea
Additional Sieves.....	12.00/ea
Sand Equivalent (ASTM D 2419 or Tex 203-F)	55.00/ea
Extraction of Bituminous Mixture, Percent Asphalt & Gradation.....	225.00/ea

Asphalt Cores (up to 3 inch depth and 4 inch dia.)(Min. 3 ea).....	55.00/ea
Additional Depth & Dia. (By Circumference Area)50/sq. in.
Thickness of Cores	15.00/ea
Theoretical Maximum Specific Gravity of Mixtures (Tex 227-F)	55.00/ea
Lab Density (Tex 207-F)(Lab Density).....	60.00/ea
Effect of Water on Bituminous Paving Mixtures (Tex 530-C)	75.00/ea
Hveem Stability	105.00/ea
Coring Rig	75.00/day
Asphaltic Concrete Design and Other Services	By Quote
Percent Passing No. 200 Sieve.....	42.00

Concrete Section

Material Preparation Time	\$43.00/hr
Slump Test (In conjunction with Inspection)	
ASTM C 143 or Tex 415-A.....	18.00/ea
Air Content of Fresh Concrete (In conjunction with Inspection)	
Pressure (416-A)	20.00/ea
Volumetric (414-A)	35.00/ea
Casting of Concrete Cylinders (In conjunction with Inspection).....	10.00/ea
Concrete Cylinder Compressive Strength Test.....	16.00/ea
Strip & Hold Cylinder (In conjunction with pickup).....	10.00/ea
Concrete Beam Flexure Strength Test	
6x6x22 (Minimum of 2) (Delivered to Lab).....	30.00/ea
Strip & Hold Beam (In conjunction with pickup).....	10.00/ea
Concrete Cores By Circumference Area (Min. 100 sq. in.).....	2.00/sq. in.
Sawing of Concrete Cylinders or Cores per end per specimen	25.00/ea
Thickness of Cores	15.00/ea
Coring Rig	75.00/day
Portland Cement Concrete Design or other services	By Quote

Masonry Section

Material Preparation Time.....	\$43.00/hr
Grout Prism (Compression).....	20.00
Mortar Prism (Compression).....	20.00

Soil Exploration and Geotechnical Services

Drilled Borings	
In Soil, 0 – 50 feet	\$18.00/LF
In Soil, 50 – 100 feet	20.50/LF
In Rock	By Quote
Non-Conventional Drilling.....	By Quote
Standard Penetration Test (in addition to drilling & sampling)	10.00/ea
Texas Cone Penetration Test (in addition to drilling & sampling)	20.00/ea
Shelby Tube Sampling	20.00/ea
Mobilization and Demobilization (In Rio Grande Valley).....	300.00/ea site
Mobilization and Demobilization (Outside the Rio Grande Valley).....	3.50/mile
Mobilization of Non-Conventional Drilling Equipment	By Quote

Trip Charge For Logger	0.60/mile	
Standby Time, Rig plus 2 man crew.....	200.00/hr	Monitor
Well Installation.....	By Quote	
Technician To Log Soil Test Boring.....	48.00/hr	
Field Coordination		
Field Engineer	115.00/hr	
Utility Clearance	65.00/hr	
Flagman	40.00/hr	
Per Diem (If required)	Cost + 15%	
Unconfined Compression.....	40.00/ea	
Moisture Content (Small).....	8.00/ea	Grout
Backfill	4.00/LF	
Dozer/Clearing	Cost + 15%	
Asphalt Pavement Coring	100.00/ea	
Concrete/Asphalt Patch	75.00/ea	

Technician Services

Engineering Technician Time (Min. 2 Hrs).....	\$40.00/hr	
Soil and Aggregate Sampling, Density Testing, Etc.		
Concrete or Asphalt Engineering Technician Time (Min. 2 Hrs).....	43.00/hr	
Site Testing on Concrete Pours, Asphalt Field Placement, Etc.		
Senior Engineering Technician Time (Min. 2 Hrs).....	48.00/hr	
Plant Inspection, Reinforcing Steel Inspection, Etc.		
Construction Inspection Engineering Technician Time (Min. 2 Hrs)....	48.00/hr	
Plant Inspection, Reinforcing Steel Inspection, Etc.		
Engineering Specialist Time (Min. 2 Hrs).....	65.00/hr	
Pier Inspection, Pile Load Inspections, etc.		
Certified Welding Inspector (Min. 4 Hrs).....	85.00/hr	

Other Services

Vehicle Trip Charge (within 25 miles of lab office, Edinburg, TX).....	\$35.00/trip	
Vehicle Trip Charge (beyond 25 miles of lab office).....	0.60/mile	
Other Testing Not Specified (Option 1)	Cost + 15%	
Other Testing Not Specified (Option 2)	48.00/hr	
Other Services, Outside Services or Supplies	Cost + 15%	
Test Reports.....	30.00/ea	
Clerical/Administrative	40.00/hr	
Fax	1.00/page	
Photocopies		
8 1/2" x 11"	0.12/page	
8 1/2" x 14"	0.15/page	
11" x 17"	0.20/page	
Microcomputers (PC)	5.00/hr	

Professional Services

Principal Engineer.....	\$125.00/hr	
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Project Management and Coordination of Services Provided

Applied to each invoice of net services provided..... \$65.00/hr

BASIC SERVICES AGREEMENT

MEG will charge overtime at the rate of 1.5 applicable for technicians for services performed before 7 AM and after 6 PM on Monday through Friday, after 8 continuous hours on the Client's project and on Saturday, Sunday and holidays.

Hours billed will be from our office at 705 Dawson Drive, Edinburg, Texas, port to port. Fractions of hours will be billed as whole hours. Technician hours will be billed a minimum of 2 hours.

Laboratory testing performed after normal work hours of 7 AM to 6 PM on Monday through Friday will be billed the test rate plus applicable overtime hourly charges.

Project management will be billed for report review, coordination and management of project personnel.

Run Date 02/19/09 08:05 AM

Hidalgo County

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For 01/01/09 - 01/31/10

Expenditure Summary Report

FJEXS01A

Periods 01 - 13

Standard Report Format

1001 - Standard Report Sp

Account No/Description	Adjusted Budget	Y-T-D Encumb	Period Expended	Y-T-D Expended	Available Balance	Percent Used
1312 BORDER COLONIA ACCESS PROGRAM ROUND 3						
9-1312-431-00-122-460-1-339 MESCUIE ACRES SUBD-OTHER PROF SRVS	6,578.71	.00	.00	.00	6,578.71	.00
1312 BORDER COLONIA ACCESS PROGRAM ROUND 3	6,578.71	.00	.00	.00	6,578.71	.00
9 YEAR	6,578.71	.00	.00	.00	6,578.71	.00

For 01/01/09 - 01/31/10

Expenditure Summary Report

FJEXS01A

Periods 01 - 13

Standard Report Format

1001 - Standard Report Sp

Account No/Description	Adjusted Budget	Y-T-D Encumb	Period Expended	Y-T-D Expended	Available Balance	Percent Used
1312 BORDER COLONIA ACCESS PROGRAM ROUND 3						
9-1312-431-00-122-262-0-339	5,933.65	.00	.00	.00	5,933.65	.00
9-1312-431-00-122-413-0-339	5,538.89	.00	.00	.00	5,538.89	.00
9-1312-431-00-122-454-0-339	5,290.35	.00	.00	.00	5,290.35	.00
9-1312-431-00-122-900-0-339	10,545.44	.00	.00	.00	10,545.44	.00
9-1312-431-00-122-940-0-339	6,180.67	.00	.00	.00	6,180.67	.00
1312 BORDER COLONIA ACCESS PROGRAM ROUND 3						
9 YEAR						
	47,608.46	.00	.00	.00	47,608.46	.00
	47,608.46	.00	.00	.00	47,608.46	.00