HIDALGO COUNTY

Professional Engineering Services
Contract #C-08-389-10-28

CORRECTED
WORK AUTHORIZATION NO. 2

THIS WORK AUTHORIZATION is made pursuant to the terms and conditions of the Service Contract made by and between **HIDALGO COUNTY**, action herein by and through the **Commissioner's Court**, hereinafter called the "**Owner**," and, **DOS LOGISTICS, INC.**, professional engineer of Weslaco, Texas, hereinafter called **"Engineer".**

PART 1. SCOPE OF WORK

The purpose of this Work Authorization is for the **Engineer** to provide engineering services as it pertains to the following:

RE-ALIGNING AND PAVING OF MILE 1 NORTH TO THE EXISTING DRAINAGE DITCH AND PECAN AVENUE FROM MILE 1EAST TO THE CUL DE SAC ALONG WITH PROVIDING NECESSARY DRAINAGE IMPROVEMENTS.

The scope of services to be provided by the **Engineer** is identified in ***EXHIBIT "A"*** – ***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 $ 58,056.74.This amount is based upon the costs outlined in the Estimated **Cost Proposal** attached hereto as **EXHIBIT "B".**

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 3 of the Agreement.

PART 4. FUNDING

This Work Authorization No.1 shall be funded through funding source:
Account No. **9-1336-431-00-121-041-0-731**
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 .

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 (Corrected) Work Authorization # 2.

HIDALGO COUNTY
COMMISSIONER PRECINCTNO. 1

BY: _____
Sylvia Handy, County Commissioner

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:
DOS LOGISTICS, INC.

BY:_____
Eric C. Ybarra

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 Engineer
ATTACHMENT "B" -	Payment/ Fee Schedule
ATTACHMENT "C" -	Insurance Requirements provided by Engineer
ATTACHMENT "D" -	Work Authorization Form

ATTACHMENT "A"

Services to be Provided by the Engineer

The project will consist of data collection, preliminary engineering analysis, engineering design, bidding assistance, and construction administrative services for re-aligning and paving of Mile 1 East from Mile 4 North to the existing Drainage Ditch and Pecan Avenue from Mile 1 East to the CUL DE SAC along with providing necessary drainage improvements.

The project is divided into six phases, Preliminary Engineering and Design, Final Design, Construction Phase Services, QA/QC Services, and Special Services.

The Data Collection Services includes compilation of engineering and related data.

The Preliminary Engineering and Design phase will provide the general data collection, and develop the Preliminary Engineering plans to the schematic level, and will include typical roadway sections, locations and sizes of drainage structures at roadway and irrigation canal crossings, and related information to provide information for Final Design. This phase will develop the proposed plans to the 30-percent level required for completed plans, specifications and estimates (PS&E).

The Final Design Phase will include all plans and specifications needed to go out for construction. This section of the project will be developed to complete PS&E, for use by the County.

PHASE 1 Data Collection

A. Engineering

1. Proposed plans and calculations for outfall drainage.
2. LIDAR and aerial photos when available.
3. County/City design requirements.
4. Plans for other projects impacted by proposed roadway.

PHASE II Preliminary Engineering and Design

A. Preliminary Engineering

1. Confirm route selection and limits of work.
2. Prepare project roadway layout and drainage area map.
3. Prepare basic hydrologic & hydraulic calculations based on County requirements.

4. Determine structure sizing and limits of pavement repair on crossing structures.

5. Develop hydraulic model of project.

6. Develop preliminary Engineers Opinion of Construction Cost estimates.

7. County Review.

I. Preliminary Design Plans (30%)

a. Prepare General Drawings
b. Prepare Plan and Profile Schematic
c. Preliminary plan and profile for roadway and drainage structures
d. Preliminary hydraulic calculations sheets
e. Preliminary typical section sheets
f. Submit for county Review and approval prior to final design

PHASE II FINAL DESIGN

1. Drainage Design

The Engineer shall perform drainage design for the proposed improvements to existing facilities within the **Project**. The design of drainage improvements shall conform to the **Project** design criteria, and when possible, the standard designs required by the Owner (City, County, or State) of any associated roadways. These designs shall in all respects combine the application of sound engineering principles, and shall submitted to the applicable City, County, State, and/or Federal agencies for approval. If additional geotechnical borings or geotechnical engineering is required, the Engineer will request additional funds in the form of a supplemental agreement to this work authorization.

2. Roadway Design

The Engineer shall perform roadway design for any intersecting roadway approaches to the proposed improvements of the **Project**. The design of theses roadways shall conform to the Project design criteria, and when possible, the standard designs required by the Owner (City, County, or State) of the associated roadways. These designs shall in all respects combine the application of sound engineering principles, and shall submitted to the applicable City, County, State, and/or Federal agencies for approval.

3. Bridge Design

The **Engineer** shall perform bridge design required for any roadway crossings to the proposed improvements to the existing channels and/or proposed channels of the **Project**. The design of these bridges shall conform to the **Project** design criteria, required by the Owner (City, County, or State), of any associated bridge structure and/or roadway, and the requirements set forth by the latest version of the American Association of State Highway and Transportation Officials (AASHTO), "Standard Specifications for Highway Bridges". These designs shall in all respects combine the application of sound engineering principles with a high degree of economy, and shall submitted to the applicable City, County, State, and/or Federal agencies for approval.

4. Plans, Specifications & Estimates (PS&E)

i. The **Engineer** shall prepare contract drawings, specifications and estimates for construction of the Project or portions of the Project as authorized by the Owner. These documents shall in all respects combine the application of sound engineering principles, and shall be submitted to the applicable City, County, State and/or Federal agencies for approval.

ii. All final plan sheets shall be developed by the Engineer, on 24" x 36" reproducible, 4 mil, double-matte, white, opaque film.

iii. Graphics files shall be developed by the Engineer in AutoCADD design file format, and must plot consistent with the reproducible plots submitted.

iv. **Plan Sheets** Plan sheets developed by the Engineer shall include, but not be limited to, title sheet, typical sections, sequence of construction, traffic control (as applicable), specification data (including schedules for minimum sampling and testing), estimate and quantity, plan-profile, channel details, roadway details (as applicable), bridge and culvert details, hydraulic details, and standards. (Standards may be used from governing entities, but must be signed and dated by the Project Engineer of responsible supervision as being applicable to the Project.)

v. **Specifications.** Whenever possible, the Engineer shall use for roadways and bridges the latest version of the Texas Department of Transportation's Standard Specification for Construction and Maintenance of Highways, Streets and Bridges. Other specifications may be developed by the Engineer, but must incorporate, to the extent possible, references to standard requirements of AASHTO design and AASHTO testing procedures.

vi. **Estimates.** The Engineer shall prepare detailed cost estimates and proposals of authorized construction, which shall include summaries of bid items and quantities based, insofar as practicable on the unit price system of bidding. The Engineer shall not be required to guarantee the accuracy of those estimates.

5. **Construction Phase Services.** The Engineer shall provide engineering services for each authorized construction contract of the Project. Specific engineering work activities, tasks, and/or special services to be provided by the Engineer will include:

   a) **Construction Bidding**
   The Engineer shall prepare the documents for all necessary copies of approved plan, specifications, notices to bidders, and proposals.

   Note: Services for assistance in advertising for each authorized construction contract for the Project action on the bid proposals received, and the preparation of formal contract documents for the award of each construction contract will be performed by the Engineer

   b) **Project Site Representation**
   The Engineer shall prepare the documents for all necessary copies of approved plan, specifications, notices to bidders, and proposals.

      1. In general, the Engineer shall provide the engineering support and data required for consultation and advisement to the Owner, and protect the Owner against defects and deficiencies in the work of the Contractor.

      2. Monthly Reports. The Engineer shall provide the engineering support and data required to monitor the Contractor's progress on a monthly basis. This information will be utilized for the development of the monthly progress report to be provided to the Owner.

      3. Contractor Payment. The Engineer shall take measurements and calculate quantities, in accordance with the construction contract specifications, of those items of work accepted and conforming to the construction contract specifications, for the preparation of the monthly and final estimates for payment to the Contractor.
      Note: The Engineer is not responsible for actual payments to Contractor

      4. The Engineer will provide Project site representation of the authorized construction contract 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 at least one time per month for the purpose of monitoring the Constractor's progress and conformance to the construction contract plans and specifications.

         b. Resident Engineer. If authorized by the Owner, the Engineer will furnish the services of a Resident Engineer and/or

construction representative(s) for continuous on-the-site representation. If the Owner requests the Engineer provide the services of the Resident Engineer, this will be considered special services and will require a supplemental agreement to this work authorization.

5. **Miscellaneous Technical Activities**

a) **Shop Drawings**. The Engineer shall review and check all shop or working drawing furnished by the Contractor. If an individual shop or working drawing requires more than two (2) reviews, then all additional reviews by the Engineer will be considered special services.

b) **Control of Materials & Equipment**. The Engineer shall review inspection reports of all materials and equipment furnished/used by the Contractor as follows:

a. Review all laboratory, shop and mill tests of materials and equipment for compliance with the contract specifications.

b. Review Project record testing and/or independent assurance testing reports as outlined in the contract specifications.

c) **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 order, which may be required due to actual field conditions encountered or new requirements directed by the Owner. If the change order will be considered as special services.

CORRECTED
ATTACHMENT "B"
Fee Breakdown

For and in consideration of the **Services** attached to this Agreement and to be rendered by the Engineer, the Owner shall pay the Engineer the Fee as defined in this Agreement, and as more particularly identified as follows:

Basic Services Fee	=	$ 58,056.74
Engineering	=	9% of the Services Fee
Geotechnical	=	2 ½ % of the Services Fee

CORRECTED

Preliminary Construction Cost Estimate

Hidalgo County Precinct No. 1 Re-Aligning and Paving of Mile 1 North to the existing drainage ditch and Pecan Avenue from Mile 1 East to the CUL DE SAC along with providing necessary Drainage improvements.

Prepared By Dos Logistics, Inc.

A. Mile 1 East

1.	Prepare Right of Way	35.51	STA	@	$	375.00=	$ 13,316.25
2.	2" Asphalt Concrete Paving	9434	SY	@	$	20.00=	$188,680.00
3.	PRIME COAT (MC-30)	1415	GAL	@	$	3.50=	$ 4,952.50
4.	Flexbase (New base)(12")	3669	CY	@	$	30.00=	$110,070.00
5.	Lime Treated Flexbase (6")	11006	SY	@	$	3.75=	$ 41,272.50
6.	18" Culvert Pipe	220	LF	@	$	35.00=	$ 7,700.00
7.	24" Culvert Pipe	100	LF	@	$	45.00=	$ 4,500.00
8.	30" Culvert Pipe	100	LF	@	$	60.00=	$ 6,000.00
9.	36" Culvert Pipe	100	LF	@	$	80.00=	$ 8,000.00
10.	Headwall	2	EA	@	$	4,000.00=	$ 8,000.00
11.	Concrete Rip Rap	40	CY	@	$	310.00=	$ 12,400.00
12.	Roadside Ditches	7075	LF	@	$	3.50=	$ 24,762.50
13.	Driveway Repair	22	EA	@	$	1,250.00=	$ 27,500.00
14.	Striping	7075	LF	@	$	0.50=	$ 3,537.50
15.	Asphalt Pavement Repair	30	SY	@	$	35.00=	$ 1,050.00
16.	Signage	2	EA	@	$	350.00=	$ 700.00
17.	Trench Safety	520	LF	@	$	2.50=	$ 1,300.00
18.	Storm Water Pollution Prevention	1	LS	@	$	20,000.00=	$ 20,000.00
19.	Utility Relocation	1	LS	@	$	2,500.00=	$ 2,500.00
20.	Pipe Removal	440	LF	@	$	10.00=	$ 4,400.00
21.	Remove/Replace Existing Mailboxes	12	EA	@	$	350.00=	$ 4,200.00
22.	Barricade, Signs and Traffic Handling	2	MO	@	$	5,000.00=	$ 10,000.00

10% Contingency	:	**$ 50,484.13**
Engineering Fee	:	**$ 45,435.71**
Geotechnical	:	**$ 12,621.03**
Total	:	**$ 613,382.12**