

**EXHIBIT “F”**  
**HIDALGO COUNTY**  
**Professional Engineering Services**  
**Agreement #C-22-0308-08-18**

**WORK AUTHORIZATION NO. 1**

**THIS WORK AUTHORIZATION** is made pursuant to the terms and conditions of the Professional Engineering Services Agreement No. C-22-0308-08-18, incorporated herein by reference, for the “**Extension of Shary Road 2 Miles North of SH 107**” made by and between HIDALGO COUNTY, action herein by and through the Commissioner’s Court, hereinafter called the “**Owner,**” and SAMES, Inc., hereinafter called “**Engineer**”.

**PART 1. SCOPE OF WORK**

The purpose of this Work Authorization is for the **Engineer** to provide Schematic, ROW, Environmental & Project Funding;

The **Engineer** is to provide the scope of Services as required by the Agreement with Owner.

The scope of services to be provided by the **Engineer** is identified in **Attachment “A”** – “*Scope of Services to be provided by Engineer*” attached hereto and incorporated by reference.

**PART 2. ESTIMATED COST**

The estimated cost for services under this Work Authorization is **\$ 990,135.00**. This amount is based upon the costs outlined in the **Attachment “B”** – “*Fee Proposal*” attached hereto and incorporated by reference.

**PART 3. PAYMENT**

Compensation and payment to the Engineer for the services established under this Work Authorization shall be made in accordance with the **Professional Engineering Services Agreement No. C-22-0308-08-18** between the **Owner** and the **Engineer**.

**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 the scopes of the Work Authorization, within the limits of Agreement No. #C-22-0308-08-18, provided in this Work Authorization; or on** ( \_\_\_\_\_ **DATE** \_\_\_\_\_ ). *If applicable:* Engineer shall conform to the approved “Work/Project Schedule”, attached hereto and incorporated by reference herein as **Attachment “C”**.

**PART 6. RESPONSIBILITIES AND OBLIGATIONS**

This Authorization does not waive the parties’ responsibilities and obligations provided under the **Agreement No. C-22-0308-08-18.**

**PART 7. ACKNOWLEDGEMENT AND CONFIRMATION**

Acknowledgement and confirmation by **Hidalgo County Precinct 3, Commissioner Everardo “Ever” Villarreal**, as to content and detail of this **Work Authorization No. 1.**

**HIDALGO COUNTY PRECINCT No. 3**

By: \_\_\_\_\_  
**Everardo “Ever” Villarreal, Commissioner**

**PART 8. ACCEPTANCE AND APPROVAL**

This Work Authorization is hereby accepted and approved by the Hidalgo County Commissioners Court and hereby executed and effective as of the date indicated below.

**APPROVED BY COMMISSIONERS’ COURT ON MONTH, DAY, 2022.**

**Agenda Item No. \_\_\_\_\_ Executive Office: \_\_\_\_\_**

**ENGINEER:**  
SAMES, INC.

**COUNTY:**  
COUNTY OF HIDALGO

\_\_\_\_\_  
Samuel Maldonado, P.E, R.P.L.S., CEO

\_\_\_\_\_  
Hon. Richard F. Cortez, County Judge

**ATTEST:**

\_\_\_\_\_  
Arturo Guajardo, Jr., County Clerk

**LIST OF ATTACHMENTS:**

**Attachment “A”** – *Scope of Services to be provided by Engineer*

**Attachment “B”** – *Fee Proposal*

**Attachment “C”** – *Approved Work/Project Schedule (If applicable)*



# **ATTACHMENT A**

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**PROJECT SPECIFIC SCOPE OF SERVICES  
TO BE PROVIDED BY ENGINEER**

### **Scope of Services by the Engineer**

The work to be furnished by the **Engineer** shall consist of management and engineering services for improvements in relation to the Shary Road Widening Project. The work shall be developed in accordance with the **Owner**, TxDOT, Federal, and all applicable design requirements, standards and in a format acceptable to the **Owner** and the reviewing agencies.

The Engineer shall render specific management and engineering services for the development of the **Project** and fulfillment of this Agreement as follows:

- I. PRELIMINARY PHASE - GENERAL PROJECT MANAGEMENT, ADMINISTRATION AND SCHEMATIC DESIGN.
  - A. GEOTECHNICAL SUBSURFACE INVESTIGATION
  - B. ENVIRONMENTAL ASSESSMENT
  - C. ACQUISITION SERVICES
  
- II. DESIGN PHASE – FINAL DESIGN AND PLANS, SPECIFICATIONS, AND ESTIMATES (PS&E).

#### **I. PRELIMINARY PHASE SERVICES**

##### **GENERAL PROJECT MANAGEMENT**

Services for GENERAL PROJECT MANAGEMENT by the Engineer will include the following (The list below details the major components required for the project, but is not intended to be an all-inclusive list of all services provided/required):

- 1. Project/Program Schedule.
  
- 2. Coordination/Meetings. The Owner may require the Engineer to attend local public hearings, policy meetings and upon request attend Owner staff meetings. The Engineer shall assist the Owner, as requested, at meetings with Federal, TxDOT, or other necessary entities as required.

##### **Planning & Assessment**

The Engineer will provide the following:

- 1) Review, verify and gather data necessary to proceed with design of the Project.
- 2) Perform interviews and meetings with the Owner's staff to identify and prioritize project and gather preliminary design information for the approved project.
- 3) Obtain geotechnical data for pavement designs and to determine subsurface conditions.

- 4) Develop pavement designs, including cost data, pavement material properties, and pavement drainage.
- 5) Identify preliminary alignments; develop typical sections.
- 4) Develop hydraulic design criteria in accordance with Local Municipal or TxDOT guidelines.
- 5) Verify FEMA FIRM zones and requirements.
- 6) Develop basic schematic layout of improvement to determine right-of-way requirements.

### **Environmental Document Preparation and Public Comment**

Complete the environmental review record checklist document for the projects in accordance with the National Environmental Policy Act (NEPA), applicable TxDOT requirement Code(s) of Federal Regulations for a Categorically Excluded Project in anticipation of a Finding of No Significant Impact (FONSI) as identified by the NEPA process. Owner will assist in coordinating and gathering data as necessary.

### **Right-of-Way Data**

The Engineer shall provide utility and right-of-way data for each approved individual project as necessary, as follows:

#### Utility Coordination/Inventory

- 1) The Engineer will develop utility layout sheets from schematics and incorporate utility information; identify all existing overhead and above ground utilities; identify all existing underground utilities; document all information on utility layout sheets; identify potential conflicts. The layout sheets will be reproducible drawings (11"x17") with the following information:
  - a) Existing and/or proposed right-of-way lines
  - b) Benchmark data
  - c) Existing and proposed drainage system(s)
  - d) Location and size of utility (plan/profile view)
  - e) Limits of existing casing pipe
  - f) Name of the owner/company
- 2) The Engineer will coordinate utility adjustments with Owner and all affected utility owners as necessary.

## **Field Survey**

The Engineer will provide the following:

- 1) Vertical and Horizontal Control. Establish and stake the Project control centerline (baselines) and offset for the Project or portions of the Project. Establish vertical control by looping all benchmark (BM) circuits and tie to monument permanent BM elevation. BM's are to be set at 1,000 ft. maximum intervals using Global Positioning System (GPS) survey, and in a location that will be undisturbed by future construction.
- 2) Topography. Obtain topographic information surveyed for the length of the control centerline, as required; provide location (station and offset), size, height, and depth and/or length and description of topographic features; to include, but not limited to the following: driveways, signs, light poles, mail boxes, all fences (including metal beam guard fence and turndowns), utilities (type, owner, location, and depth), riprap, existing right-of-way lines, private property lines, county and/or city limits, etc.
- 3) Design Centerline. Establish and stake the design centerline.

## **Right-of-Way Map**

Provide for the preparation of a project right-of-way map where right-of-way acquisition is necessary. Provide for the necessary right-of-way research, mapping, surveying, and all services related to the development of a right-of-way map. Prepare parcel sketches and field notes of all parcels requiring acquisition. Revisions to be done promptly at no cost to the owner.

## **II. DESIGN PHASE SERVICES**

### **Final Design and Plans, Specifications & Estimates**

The Engineer will develop the final design and prepare contract drawings, specifications and estimates for construction of the Project or portions of the Project as authorized by the Owner. These documents will be submitted to the applicable city, county, state, and/or federal agencies for approval.

The Engineer will complete a Design Summary Report (DSR) for each project,

All final plan sheets will be developed by the Engineer on 11" x 17" reproducible, to scale.

The Engineer shall prepare graphic files that can be reviewed and plotted utilizing Micro-Station /AutoCAD software. The graphic files submitted must be compatible with Micro-Station/AutoCAD System without conversion or modification and must plot consistent with reproducible plots submitted.

Plan Sheets. Plan sheets developed by the Engineer will include, but not limited to, title sheet, typical sections, estimates and quantity, plan-profile, channel details, roadway details, bridge and culvert details, hydraulic details, and standards.

**Specifications** – The Engineer shall use the latest Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges. Other specifications may be developed by the Engineer, but must incorporate, references to standard TxDOT requirements of design & testing procedures.

**Estimates** – The Engineer will prepare detailed cost estimates and proposals of authorized construction, which will include summaries of bid items and quantities based on the unit price system of bidding.

All plots and graphic media provided by the Engineer as a result of this Agreement shall be delivered to the Owner. Final payment for plan sheet documents and/or associated, applicable engineering files will not be made until the files furnished by the Engineer have been demonstrated to be useable in the formats described above and herein.

Services for FINAL DESIGN AND PLANS, SPECIFICATIONS AND ESTIMATES by the Engineer will include the following:

### **Roadway Design Controls**

The Engineer will prepare the roadway design for the Project or portions of the Project as authorized by the Owner. The roadway design will be submitted to the applicable city, county, state, and/or federal agencies for approval.

### **Roadway design controls will include:**

- 1) Geometric design – horizontal and vertical alignments, intersection geometrics; to be incorporated onto plan and profile sheets.
- 2) Geometric and grading design – development of typical roadway sections through horizontal and vertical alignment determination and roadway cross sections.
- 3) Grading design – existing and design cross sections, cut/fill quantities, slope stability analysis, embankment foundation stability and settlement analysis.
- 4) Earthwork Quantities – obtained from grading design.
- 5) Miscellaneous supplemental plan details.

### **Drainage**

The Engineer will perform final hydrologic/hydraulic analysis and design for the proposed improvements of the Project or portions of the Project as authorized by the Owner.

## **Signage**

The Engineer will determine location and type of warning, regulatory, and guide signs as required by the applicable standards. All signage design will be based on the final proposed roadway design.

## **Permanent Pavement Markings**

The Engineer with the Owner will evaluate the need for pavement markings and design all permanent pavement markings in accordance with the latest applicable standards. All such designs shall be based on the final proposed roadway design.

## **Miscellaneous**

If required for the Project or portion of the Project approved by the Owner, the Engineer will provide the following miscellaneous roadway items:

### Miscellaneous Drafting, Standards, and Details

- 1) The Engineer will prepare a title sheet indicating, at a minimum, project limits, project location map, name of owner, facility identification, specification reference, Engineer's seal, signature, and date.
- 2) The Engineer will determine appropriate standard drawings to be incorporated into the plans, and sign/seal any modifications to any agency or industry approved standards.
- 3) The Engineer will develop details to clarify any construction requirement of the plan drawings.

## **PS&E Supporting Documents**

- 4) Specifications List and general Notes. The Engineer will prepare an applicable specification list, in TxDOT format, as well as any general notes that may be applicable to each PS&E submission.
- 5) Estimates. The Engineer will prepare detailed cost estimates and proposals of authorized construction, which will include summaries of bid items and quantities based, insofar as practicable, on the unit price system of bidding.
- 6) Contract Time Determination Statement. The Engineer will determine the time required for construction of the project, outlining phases of construction and appropriate rates of production and construction for bid items determined to be in the critical path for construction of the PS&E submittal.



# **ATTACHMENT B**

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## **FEE PROPOSAL**

Hidalgo County Precinct #3: Shary Road Extension - Project Development & Design Fee Proposal  
 From SH 107 to Mile 9 Rd  
 (Work Authorization 1)

ESTIMATE SUMMARY OF MAN-HOURS  
 7/18/2022

TASK DESCRIPTIONS		Principal/Senior Project Engineer	Project Manager	Agency Coordination/Utility Manager	Project/Design Engineer	EIT	Engineering Tech	Project Admin/Clerk	Records/Document Control	Traffic Engineer	Survey 2 Man Crew	Totals
<b>Phase I - Schematic, ROW, Environmental &amp; Project Planning</b>												
1	Environmental Document (TxDOT/FHWA Clearance)	10	50	450	190		140	185	5			1030
2	Public Involvement for the Project w/1 Public Meeting	8	20	86	104			24				242
3	Archeological & Historical Research	20	100	70	100	120	120	20	30	10		590
4	Topographic Survey (\$30k/mile)	10	30	35	50	60	80	8	5		360	638
5	Schematic Development & TxDOT Approval	50	126	85	250	370	408					1289
6	Hydrologic Map/H&H Report	20	50	60	100	150	180	2	5			567
7	Public Involvement for the Project w/1 Public Hearing	8	20	86	104			24				242
8	Project Development (Funding/Entity Coordination/AFA Development, etc...)	12	40	430								482
9	Traffic Signal Warrants (Old Hwy 107 & Mile 8 Rd)	8	20	20	30		20	16	10	40		164
10	Traffic & LOS Analysis for Off-System Rdwy (Env & Pvmnt Des Purposes)	16	40	20	50	30	96	16		150		418
11	Parcel Sketches & Field Notes (est 30 parcels @ \$3,500/parcel)	30	60	30	60	120	120	30	30		870	1350
12	ROW Acquisition Services (est 30 parcels @ \$7,500/parcel)	120	330	120	400	425	450	120	130			2095
13	ROW Relocation Assistance	10	15	30	50							105
14	Project Management	12	50	35								97
<b>Subtotal Labor Hours (PHASE I)</b>		<b>334</b>	<b>951</b>	<b>1557</b>	<b>1488</b>	<b>1275</b>	<b>1614</b>	<b>445</b>	<b>215</b>	<b>200</b>	<b>1230</b>	
<b>Phase II - PS&amp;E, Geotechnical &amp; Utility Coordination</b>												
1	PS&E Development	270	600	360	1550	1902	2650	340	20			7692
2	Geotechnical Testing & Pavement Design	60	150		260		160	20				650
3	Permitted Utility Coordination	8	24	32	110	48	122	12				356
4	Compensable Utility Coordination	28	64	76	216	94	276	12	25			791
5	Subsurface Utility Engineering (10 potholes)	4	8	15	20		30	2	5			84
6	Project Management	14	32	32	24							102
7	Project Site Visits	6	22	22	30							80
<b>Subtotal Labor Hours (PHASE II)</b>		<b>390</b>	<b>900</b>	<b>537</b>	<b>2210</b>	<b>2044</b>	<b>3238</b>	<b>386</b>	<b>50</b>	<b>0</b>	<b>0</b>	
<b>PHASE III - Construction Letting &amp; Project Management</b>												
1	Local Let Bid Package Development Assistance	16	42	92	98			4				252
2	Letting Assistance (Pre-Bid Meeting, RFI's, Pre-Con Meeting, etc...)	14	62	66	86							228
<b>Subtotal Labor Hours (PHASE III)</b>		<b>30</b>	<b>104</b>	<b>158</b>	<b>184</b>			<b>4</b>				
<b>TOTAL HOURS</b>		<b>754</b>	<b>1955</b>	<b>2252</b>	<b>3882</b>	<b>3319</b>	<b>4852</b>	<b>835</b>	<b>265</b>	<b>200</b>	<b>1230</b>	<b>19544</b>
<b>Loaded Hourly Rates</b>		\$ 175.00	\$ 150.00	\$ 140.00	\$ 120.00	\$ 85.00	\$ 80.00	\$ 65.00	\$ 75.00	\$ 150.00	\$ 65.00	
<b>Direct Labor</b>		\$ 131,950.00	\$ 293,250.00	\$ 315,280.00	\$ 465,840.00	\$ 282,115.00	\$ 388,160.00	\$ 54,275.00	\$ 19,875.00	\$ 30,000.00	\$ 79,950.00	\$ 2,060,695.00
<b>TOTAL ESTIMATE</b>		<b>\$ 131,950.00</b>	<b>\$ 293,250.00</b>	<b>\$ 315,280.00</b>	<b>\$ 465,840.00</b>	<b>\$ 282,115.00</b>	<b>\$ 388,160.00</b>	<b>\$ 54,275.00</b>	<b>\$ 19,875.00</b>	<b>\$ 30,000.00</b>	<b>\$ 79,950.00</b>	<b>\$ 2,060,695.00</b>

Percentage of Time on the Project

36.25% 93.99% 108.27% 186.63% 159.57% 233.27% 40.14% 12.74% 9.62% 59.13%

Direct Expenses (Mileage, Printing, Copying and Misc. Direct Expenses)

\$ 20,606.95

CONTRACT AMOUNT **\$ 2,081,301.95**



Engineering Firm Reg # 10602    Surveying Firm Reg # 101416-00    Architectural Firm Reg # BR 4166  
200 S. 10<sup>th</sup> Street, Suite 1500, McAllen, Texas 78501    Phone: (956) 702-8880    Fax: (956) 702-8883  
DUNS 834820735    CAGE CODE 66N60

**EXHIBIT "E"**  
**Contract Rates**

<b>PRINCIPAL</b>	<b>\$200</b>
<b>SENIOR PROJECT MANAGER (PE)</b>	<b>\$175</b>
<b>REGISTERED PROFESSIONAL LAND SURVEYOR (RPLS)</b>	<b>\$150</b>
<b>PROFESSIONAL ENGINEER / PROJECT ENGINEER (PE)</b>	<b>\$175</b>
<b>DESIGN ENGINEER / EIT / SIT</b>	<b>\$105</b>
<b>CONSTRUCTION MANAGER</b>	<b>\$145</b>
<b>CONSTRUCTION INSPECTOR SR / JR</b>	<b>\$105 / \$85</b>
<b>CAD MANAGER / TECH III</b>	<b>\$75</b>
<b>CAD TECH II</b>	<b>\$65</b>
<b>CAD TECH I</b>	<b>\$55</b>
<b>GPS SURVEY CREW</b>	<b>\$150</b>
<b>2-MAN SURVEY CREW</b>	<b>\$130</b>
<b>CLERICAL</b>	<b>\$55</b>



# **ATTACHMENT C**

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**APPROVED WORK/PROJECT SCHEDULE**

**WORK SCHEDULE**  
**Shary Road**  
**(From SH 107 to Mile 9)**

TASK AND DESCRIPTION	ENTITY	2022						2023						2024						2025																	
		JUL	AUG	SEP	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	DEC	JAN	FEB	MAR	APR	MAY	JUN
<b>WORK AUTHORIZATION #1 TASKS</b>																																					
<b>ROW Mapping &amp; ROW Acquisition</b>																																					
Prepare ROW Map/Pacel Sketches & Field Notes	SAMES																																				
ROW Parcel Negotiations (Approx 30 Parcels)	SAMES																																				
Payments for Parcels	HC3																																				
Condemnation Support	HC3																																				
Eminent Domain Proceedings	HC3																																				
<b>Project Planning and Programming</b>																																					
Initiate coordination with RGVMPPO for project funding*	SAMES																																				
Amend RGVMPPO TIP/MTP to fund project	RGVMPO																																				
Coordinate Functional Classification of project	RGVMPO																																				
Coordinate with RGVMPPO for inclusion into the 2022 UTP	RGVMPO																																				
AFA coordination with TxDOT	SAMES																																				
AFA Approval	TxDOT																																				
<b>Schematic, Env &amp; Public Involvement</b>																																					
Environmental Scoping Meeting	SAMES																																				
Public Involvement for Public Meeting	GDJ																																				
Advertise & Conduct Public Meeting	SAMES																																				
Schematic Development For ROW Parcels	SAMES																																				
Hydrologic Map	GDJ																																				
Submit Schematic to TxDOT (After Public Meeting - TxDOT Req.)	HC3																																				
TxDOT Schematic Approval	TxDOT																																				
Environmental Document Preparation	GDJ																																				
Submit Final Draft Document	GDJ																																				
Agency Review & Revisions	TxDOT																																				
Environmental Decision	TxDOT																																				

SAMES TASK  
 HIDALGO COUNTY TASK  
 RGVMPPO/TxDOT/FHWA TASK  
 TxDOT TASK