

February 17, 2023

Webb County 1620 Santa Ursula, 2nd Floor Laredo, TX 78040

Attn.: Guillermo B. Cuellar, PE Sent Via E-Mail to gbeuellar@webbcountytx.gov

Assistant Webb County Engineer

Subject: Proposal – Construction Materials Testing –

Mangana Hein Road Extension Project

One (1) Mile South of TransTexas Gas Corp. Facility

Laredo, Webb County, Texas

Dear Mr. Cuellar:

Howland Engineering and Surveying Co., Inc. (Howland) appreciates the opportunity to propose the construction materials testing (CMT) for the above referenced project in southeast Laredo, Texas. We are pleased to submit the following cost estimate.

The attached cost estimate is based on the construction plans by Crane Engineering Corp., and the standard required testing frequencies we anticipate from the Client. The total estimated fee is \$29,174.00. Please be advised that this is an <u>estimate only</u> and may change due to unforeseen quantities and/or situations during the construction phase of the project. This is not a Quality Assurance / Quality Control (QA/QC) scope. Howland will only be on-site to perform the requested test at the requested time.

Howland maintains a full-service testing laboratory in Laredo, Texas. Howland has experienced personnel with knowledge of local geologic conditions and materials. Our field personnel are certified nuclear density operators and American Concrete Institute (ACI) Grade I certified.

We appreciate the opportunity in submitting this cost and look forward providing our services. Should you have any questions or require additional information, please do not hesitate to call us at (956) 722-4411. Thank you.

Sincerely,

Howland Engineering and Surveying Co., In	c. AUTHORIZATION TO PROCEED:
TBPE Firm Registration No. F-4097	Signature:
	Print Name:
	Title:
Sergio Galindo, Jr., P.E.	Date:
Project Manager	

www.howlandcompanies.com

7615 N. Bartlett Avenue P.	.O. Box 451128 (78045)	Laredo, IX 78041	P. 956.722.4411	F. 956.441.0180
4902 Sinclair Road	San Antonio, TX 78222	P. 210.648.1600	F. 210.648.1605	
16225 Park Ter	n Place, Suite 500 🗼 Hous	ton, TX 77048 P.	. 956.251.3890	
TBPE Firm Registration No. F-40	97 / TBPLS Firm Registra	ition No. 10046400	TBPLS Firm Registrati	ion No. 10194361



Project Name: Mangana Hein Road Extension Project

Client: Webb County

Type of Service: Construction Materials and Engineering Testing

Date: February 17, 2023

	Est. Quantities	Unit		Unit Cost	Cost Est.
Moisture Density Relationship & Atterberg Limits Determination:					
Subgrade -Site/Trenching	5	EA	@	\$515.00	\$2,575.00
Select Fill Material	1	EA	@	\$515.00	\$515.00
Flexible Base (with Grain Sieve Analysis)	2	EA	@	\$690.00	\$1,380.00
Proof Rolling:					
Mangana Hein Road Subgrade	6	HR	@	\$100.00	\$600.00
Observations					
Observation: TX-5 Geogrid Installation	10	HR	@	\$65.00	\$650.00
·	•				-
Densities: Roadway:	Minimum of four (4) tests	per call out			
Mangana Hein Roadway					
Subgrade (Every 150 LF)	35	EA	@	\$40.00	\$1,408.00
Fill Material (6" Lifts)	16	EA	@	\$40.00	\$640.00
Flexible Base (2 Lifts @ Maximum 8" Lifts Every 150 LF)	70	EA	@	\$40.00	\$2,816.00
Behind Edge of Pavement (2 Lifts @ Maximum 8" Lifts Every 300 LF)	72	EA	@	\$40.00	\$2,880.00
Utilites:	,-1		I G I	φ (σ.σσ)	<i>\$2,000.00</i>
24" RCP Drainage Crossing					
Subgrade	2	EA	@	\$40.00	\$80.00
Backfill Material	20	EA	@	\$40.00	\$800.00
8'X3' Box Culverts					
Subgrade	2	EA	@	\$40.00	\$80.00
Backfill Material	20	EA	@	\$40.00	\$800.00
4'X2' Box Culverts					
Subgrade	2	EA	@	\$40.00	\$80.00
Backfill Material	20	EA	@	\$40.00	\$800.00
Concrete:	Compressive Strength Test	ting - 4 Cylinde	rs per Set		
Utilites:	·	,	,		
24" RCP Drainage Crossing					
Wingwall Footing	2	SET	@	\$250.00	\$500.00
Headwalls & Wingwalls	2	SET	@	\$250.00	\$500.00
Rip Rap	1	SET	@	\$250.00	\$250.00
8'X3' Box Culverts					
Wingwall Footing	2	SET	@	\$250.00	\$500.00
Headwalls & Wingwalls	2	SET	@	\$250.00	\$500.00
Rip Rap	1	SET	@	\$250.00	\$250.00
4'X2' Box Culverts					
Wingwall Footing	2	SET	@	\$250.00	\$500.00
Headwalls & Wingwalls	2	SET	@	\$250.00	\$500.00
Rip Rap	1	SET	@	\$250.00	\$250.00
Asphalt:					
Mangana Hein Road					
Asphalt Sampling (HMA Surface Course)	6	EA	@	\$500.00	\$3,000.00
Asphalt Densities (Every 300 LF)	18	EA	@	\$50.00	\$880.00
Asphalt Cores (Every 528 LF)	10	EA	@	\$125.00	\$1,250.00
Flexible Base Depth Checks (Every 400 LF)	13	EA	@	\$75.00	\$990.00
Steel:					
Rebar Inspection					
Wingwall Footing	6	HR	@	\$125.00	\$750.00
Wingwalls and Headwals	6	HR	@	\$125.00	\$750.00
Welding & Torque Inspection			1	· I	
Metal Beam Guard Fence (CWI Inspector)	6	HR	@	\$175.00	\$1,050.00
Allow House of Ford Constant					
Miscellaneous Fees & Services: Atterberg Limits Verification	0	EA		\$165.00	\$0.00
Atterberg Limits Verification Sieve Analysis Verification	0		@	\$165.00	
Sieve Analysis Verification Wet Ball Mill	2	EA EA	@	\$125.00	\$0.00 \$650.00
wet Ball Mill	2	EA	w	\$325.00	00.000
Project Management Fees:					
Project Management Fees: RFI/Submittals/Meetings	0	HR	@	\$150.00	\$0.00

Provide 24-hour notice prior to test service. 1.5 X for Non-Regular Working Hours

TOTAL COST EST. = \$29,174.00