

**PROFESSIONAL SERVICES
SUPPLEMENTAL AGREEMENT # 2
FOR
NEW SWEDEN LIFT STATION AND FORCE MAIN**

**STATE OF TEXAS §
 §
COUNTY OF TRAVIS §**

This Supplemental Agreement No. 2 to a contract for Professional Services is made by and between the City of Pflugerville, Texas ("City") and Pape-Dawson Consulting Engineers, LLC ("Consultant"). City and Consultant may be referred to herein singularly as "Party" or collectively as the "Parties."

WHEREAS, the City and Consultant executed an Agreement for Professional Services ("Agreement") on the 26th day of June, 2024 for the New Sweden Lift Station and Force Main project ("Project") in the amount of \$370,043.00; and

WHEREAS, the City and Consultant executed a Supplemental Agreement # 1 for Professional Services for the Project in the amount of \$0.00, on the 20th day of May, 2025 to add additional Structural Engineering Services to accommodate polymer concrete wet well to the Agreement; and

WHEREAS, the City and Consultant desire to enter into a Supplemental Agreement # 2 for Professional Services for the Project in the amount of \$281,631.00, on the 29th day of October, 2025 to add additional engineering, permitting and construction phase services to the Agreement; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Scope of Services, and Compensation; and

WHEREAS, it is necessary for the City to amend its agreements from time to time to comply with changes in state law relating to contracts of municipalities.

NOW, THEREFORE, premises considered, the City and the Consultant agree that said Agreement is amended as follows:

I.

Article II. Term shall be amended by changing the term of the Agreement to terminate on the 2nd day of July, 2028, with the ratification and incorporation of the remaining terms of the Agreement.

Article III. Scope of Services and Exhibit A, shall be amended as set forth in the attached addendum to Exhibit A.

Article IV. Compensation to Consultant and Exhibit C (Fee Schedule), shall be amended by increasing by \$281,631.00 the amount payable under the Agreement for a total of \$651,674.00, as shown by the attached Addendum to Exhibit C (Fee Schedule).

2.

Except as amended hereby and as previously amended as indicated above, the terms of the Agreement shall remain unchanged and in full force and effect.

EXECUTED and **AGREED** to as of the dates indicated below.

**CITY OF
PFLUGERVILLE**

CONSULTANT



(Signature)

(Signature)

Printed Name: _____

Printed Name: Francisco Guerrero

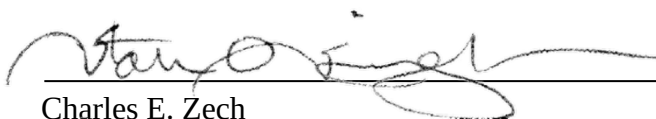
Title: City Manager/Authorized
Representative

Title: Vice President

Date: _____

10/30/2025

APPROVED AS TO FORM:



Charles E. Zech

City Attorney

DENTON NAVARRO RODRIGUEZ BERNAL SANTEE & ZECH, P.C.

October 1, 2025

(Revised: October 29, 2025)

Mr. Brandon Pritchett
City of Pflugerville
15500 Sun Light Near Way
Pflugerville, TX 78660

Re: New Sweden Lift Station and Force Main - Pflugerville, TX
Job No. 51557-00
Supplemental Amendment #2 - Additional Services Request No.1 (ASR#1)

Dear Mr. Pritchett:

The City of Pflugerville has elected to include the New Sweden Lift Station and Force Main project under the Water Infrastructure Finance and Innovation Act (WIFIA) program, an Environmental Protection Agency (EPA)-operated bank which provides funding for water infrastructure projects. This decision requires additional environmental and cultural resources investigations, expanded coordination with regulatory agencies, and design adjustments to meet federal funding requirements. These services are outside the scope of previously authorized work.

In addition, the City has directed Pape-Dawson to split the project into two separate construction packages—one for the lift station site and a second one for the 14-inch force main—to allow construction of the lift station to proceed while easement acquisition efforts continue for the force main. This change necessitates the preparation of two distinct sets of construction documents, along with separate permitting, bidding, and coordination efforts. The need for two construction plan sets, construction document preparation and Travis County coordination results in additional design time and staff effort not anticipated in the original scope. The City is also in the process of annexing the lift station property into the City limits, which necessitate additional permitting efforts required with the various City departments including landscaping design.

Pape-Dawson is requesting funding to provide the additional engineering services necessary to complete the design and permitting of both the lift station and force main improvements under this revised project structure referenced above. These services are considered outside the scope of previously authorized work. Our proposed scope of services and associated fees are outlined below:

- | | |
|---|-----------------|
| I. PROJECT MANAGEMENT (TASK 501) | \$25,400 |
| <p>This task includes coordination with City of Pflugerville (the City) staff, stakeholders, consultants and subconsultants. This task also includes Quality Assurance and Quality Control of design and construction documents. These services are anticipated to extend six (6) months over the 24 month in the original contract. If the project extends beyond thirty (30) months, Pape-Dawson may request additional services.</p> | |

II. DESIGN SERVICES (TASK 201) \$30,440

Pape-Dawson will create two independent plan sets to separate the force main plans from the lift station plans.

- Modifications include:
 - Create a new plan set for the force main sheets, including but not limited to:
 - Cover Sheet
 - General Notes
 - Detail Sheets
 - Erosion and Sedimentation Controls
 - Plan and Profile
 - Traffic Control Plans
- Prepare a second project manual (front end documents and technical specs) for the force main set utilizing standards established by the City.
- Revise bid quantities for each project.
- Revise site plan design to include a sliding gate in lieu of swing gate.
- Incorporate site plan changes based on landscape requirements from Landscape Architect.
- Coordinate with AQUA on force main encroachment with existing and proposed water lines.
- Coordinate with Manville WSC on force main encroachment with existing and proposed water lines and revise design based on conflicts encountered.
- Coordinate with Oncor for electrical serviceability, provide documentation, easement coordination, attend site visit as necessary and revise site plan as needed.

III. LANDSCAPE & IRRIGATION CONSTRUCTION DOCUMENTS (TASK 319) \$5,600

Based on approved Site Plan(s), landscape improvements to consist of:

- Meet with the Client and the appropriate governmental authorities to form the parameters for developing the subject property in conformance with applicable regulations. Collect and gather information and data, which might affect the development plan for the site. Information to be analyzed and reviewed with the Client, as necessary, to support accuracy and avoid potential delays and conflicts.
- Develop a landscape plan including planting and irrigation (if required) that meets the minimum code and ordinances for the City of Pflugerville. The plan is to include appropriate calculations and details as applicable by their ordinance requirements. The plan is required as part of the site development process. Revisions to the planting plan due to Client changes, prior to or during the approval period, to be an additional service charged at the Consultant's hourly rates.
- Address review comments and revise the landscape plan, as necessary.

- IV. PERMITTING (TASK 305) \$19,200**
Initiate a separate Travis County (TC) permit for the force main project/plan set. Additional agency coordination is required to secure permits and encroachments for the projects. These include:
- Travis County – Create, process and secure a permit for the force main plan set. Address County comments and revise the plans.
 - City of Pflugerville – Create, process, and secure Construction permit for the force main that is within the City Limits and Site Plan permit for the lift station site that is being annexed into the city limits. Address City comments and revise the plan, as necessary.
- V. ENDANGERED SPECIES ASSESSMENT (TASK 232) \$4,010**
- Site visit by a PD US Fish and Wildlife Service (USFWS) permitted biologist familiar with the habitat requirements for species listed by the USFWS as having the potential to occur on the subject property to make a field reconnaissance.
 - Based on the site visit and aerial photography, the likelihood of occurrence of species on the property is to be assessed. A report to be prepared describing endangered species assessment methodology and characteristics of the property that support the conclusions of habitat potential. The report to include a map-delineating area that may be suitable for the listed species.
- VI. JURISDICTIONAL WATERS DELINEATION (TASK 233) \$6,050**
Conduct a jurisdictional waters determination on the project, following guidelines from the US Army Corps of Engineers (USACE), including the 1987 Wetland Delineation Manual. A report is to be prepared with a map of areas that would potentially be under the jurisdiction of the USACE according to the most recent guidance, data forms, soils, vegetation, and hydrology analysis. A summary of jurisdictional waters as defined in the Federal Wetland Regulations 33 Code of Federal Regulations (CFR) Part 328 and the Clean Water Act as was done prior to the 2015 rule and incorporating the Sackett Case Supreme Court decision is also to be provided.
- VII. PRELIMINARY ENVIRONMENTAL ASSESSMENT (PEA) QUESTIONNAIRE (TASK 711) \$17,410**
Prepare a Preliminary Environmental Assessment (PEA) in accordance with Environmental Protection Agency (EPA) and National Environmental Policy Act (NEPA) requirements necessary for WIFIA funding eligibility. Services under this task will include review of existing environmental data, limited site reconnaissance, identification of potential environmental impacts, and preparation of a draft and final PEA questionnaire document for submittal to the City and regulatory agencies. Coordination with EPA and other agencies will be included to verify compliance with applicable federal requirements.

- VIII. AMENDED AGENCY CONSULTATION LETTER (TASK 239) \$2,625**
As part of the project planning process prior to project construction, Pape-Dawson cultural resources staff to amend existing consultation letter for the lead regulatory agency summarizing the existing conditions OR verifying the project meets the requirements of Antiquities Code of Texas (Subchapter A, Sec. 191.0525[d]) and to provide concurrence with recommendations that no cultural resources survey is needed to provide compliance with the ACT and Section 106 of the NHPA.
- IX. BIDDING AND AWARD SERVICES (TASK 401) \$8,500**
This task anticipates a public bidding process for the force main construction package, including
- Prepare bid documents for public advertisement and bidding by the City.
 - Provide responses to bidders' questions.
 - Attend and participate in public pre-bid conference with the City.
 - Prepare addenda, bid clarification responses as appropriate for distribution to bidders.
 - Prepare revisions to plans, details and/or specifications as appropriate.
 - Schedule and attend the project's public bid opening.
 - Prepare an evaluation of bid proposals and prepare an Engineer's award recommendation letter.
- X. CONSTRUCTION PHASE SERVICES (TASK 402) \$64,200**
- The construction phase services for the lift station site were included in the original contract. This proposal includes additional fee considering the force main project as a separate contract, the additional construction material testing management as requested by the City and the additional landscape related items for the lift station site.
 - Assuming a 12-month construction Phase for the force main contract.
 - Project coordination and routine communication with the City and other entities/agencies (County, TxDOT) as necessary. Manage budgets, schedules, invoicing, and other activities associated with managing the project.
 - Coordinate and attend one (1) Pre-Construction conference.
 - Attend (12) monthly construction progress meetings and visits during the construction period to review and document progress.
 - Prepare meeting agenda prior to each monthly construction progress meeting, provide meeting minutes, and construction observation report after each site visit.
 - Review contractor submittals (25), requests for information (15), change order requests (5) and provide responses.
 - Review contractors' applications for payment with accompanying data and update schedule.
 - Attend substantial completion walkthrough with the City and generate punch list.
 - Provide substantial completion letter and engineers letter of concurrence.

- Prepare record drawings.

XI. CONSTRUCTION MATERIAL TESTING - SUBCONSULTANT (TASK 504-003) (INCLUDING 10% MARKUP) \$88,956

This task includes coordination with the City and subconsultant on the material testing scope (attached) for scheduling and results only. This task does not include QA/QC and review of the results.

XII. DIRECT EXPENSES (INCLUDING 10% MARKUP) (TASK 503) \$9,240

Direct Expenses include travel, express mail, special deliveries, and subcontractor expenses related to these services on a not to exceed (NTE) basis. Direct Expenses include a 10% markup on cost.

Anticipated fees required for securing permits and approvals included in this scope and fee document and will be charged as direct expenses include:

- *Travis County Development Permit - \$6,000 (to be determined by the County based on project construction cost)*
- *Hazardous Materials Database Report - \$400*

THIS ASR ASSUMES AND/OR EXCLUDES THE FOLLOWING:

- ◆ *No value engineering is included herein.*
- ◆ *Additional services required by the City which may arise and are not outlined above shall be compensated for on an hourly basis or negotiated to a lump sum fee. Revisions to construction plans after calculations are complete due to a redirection by the City, shall be considered an additional service.*
- ◆ *This proposal assumes the full build-out peak wet weather flow of 4 MGD will not be changed nor require resizing of the force main.*
- ◆ *Deeds and other documents will be provided by the City right-of-way agent.*
- ◆ *Assume no detailed flood studies are required.*
- ◆ *Does not include daily construction phase oversight.*
- ◆ *Should this project encounter a cave during construction, significant coordination with regulatory agencies may be required to develop a closure plan. Pape-Dawson can assist with development of a closure plan, the associated fee can be provided prior to proceeding with the work.*
- ◆ *Should this project be determined to not qualify for the PEA, Pape-Dawson can assist with additional Environmental Assessment (EA) support, the associated fee can be provided prior to proceeding with the work.*
- ◆ *Should the City or County provide additional comments requiring design or services beyond the current scope of work, Pape-Dawson to furnish the necessary additional design. A fee proposal for such services shall be submitted for approval prior to commencement of the work.*
- ◆ *If, following annexation, the lift station property is designated as a "Public Facility," and/or if the City of Pflugerville waives the applicable landscape requirements, Pape-Dawson to remove Task 319 from the scope of services. No fees associated with this task will be invoiced to the client.*

- ◆ *Additional services required by the client or regulatory agency which may arise, and are not outlined above, to be compensated for on an hourly basis or negotiated to a lump sum fee.*
- ◆ *Any required cultural resources fieldwork to be covered under a supplemental scope and fee.*
- ◆ *Public involvement is not included within this proposal. Any public involvement will be considered an additional service.*
- ◆ *Any professional opinions or recommendations related to our scope of work shall be provided in written format on Pape-Dawson letterhead and not solely expressed verbally in meetings or as part of any demonstrative presentation or email discussions.*

SUMMARY OF SCOPE AND FEES

I.	Project Management	Task 501	\$25,400
II.	Design Services	Task 201	\$30,440
III.	Landscape & Irrigation Construction Documents	Task 319	\$5,600
IV.	Permitting	Task 305	\$19,200
V.	Endangered Species Habitat Assessment	Task 232	\$4,010
VI.	Jurisdictional Waters Delineation	Task 233	\$6,050
VII.	Preliminary Environmental Assessment (PEA) Questionnaire	Task 711	\$17,410
VIII.	Amended Agency Consultation Letter	Task 239	\$2,625
IX.	Bidding and Award Services	Task 401	\$8,500
X.	Construction Phase Services	Task 402	\$64,200
XI.	Construction Material Testing (Subconsultant)	Task 504-003	\$88,956
XII.	Direct Expenses (including 10% markup)	Task 503	<u>\$9,240</u>
Total:			\$281,631

A budget increase of **\$281,631** is the estimated cost of Pape-Dawson's current understanding of the additional services identified above. Upon signing of this ASR by the client, this ASR to be governed by the existing proposal for this project signed by the client and engineer on the **26th** day of **June 2025**.

We appreciate the opportunity to work with you on this project. If you concur with this request, please acknowledge your approval by signing in the space provided below and returning this letter to our office via email, fax, or US Mail for our records.

Mr. Brandon Pritchett
New Sweden Lift Station and Force Main - Pflugerville, TX
ASR#1 (51557-00) Supplemental Amendment #2
October 1, 2025 (rev. 10/29/2025)
Page 7 of 7

If you have questions or need additional information, please do not hesitate to contact me at your earliest convenience.

Sincerely,
Pape-Dawson Consulting Engineers, LLC



Francisco "Paco" Guerrero, P.E.
Vice President

ACKNOWLEDGED & ACCEPTED

Signature: _____

Print Name: _____

Title: _____

Date: _____

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			Project Manager	Project Engineer	Engineer in Training	CADD Technician I	Admin. Specialist	Project Manager	Designer	Senior Environmental Manager	Project Environmental Scientist	Staff Environmental Scientist	Sr. Principal Investigator	Principal Invetigator	Sr. Project Archaeologist/ Lab Manager	Project Archaeologist	Total Hrs	Total Labor \$	Subconsultant Labor Costs	Reimbursable Expenses	Total Budget
	Billing Rates-		240.00	200.00	160.00	135.00	170.00	240.00	160.00	250.00	160.00	120.00	315.00	240.00	210.00	160.00					
	Task Description and hours																				
Task 501	Project Management \$ 25400 (9%)		44	64			12										120	\$25400.00	\$0.00	\$0.00	\$25400.00
	▪ Project Coordination & Management		24	40			12										76	\$ 15,800.00	\$ -		\$ 15,800.00
	▪ Project Meetings ^{1,2}		12	24													36	\$ 7,680.00	\$ -		\$ 7,680.00
	▪ QA/QC		8														8	\$ 1,920.00	\$ -		\$ 1,920.00
Task 201	Design Services \$ 30440 (11%)		32	80		40	8										160	\$30440.00	\$0.00	\$0.00	\$30440.00
	▪ Construction Plans		20	40		40											100	\$ 18,200.00	\$ -		\$ 18,200.00
	▪ Technical Specifications		8	24			4										36	\$ 7,400.00	\$ -		\$ 7,400.00
	▪ Contract Documents		4	16			4										24	\$ 4,840.00	\$ -		\$ 4,840.00
Task 319	Landscape& Irrigation Construction Documents \$ 5600 (2%)		0	0	0	0	0	6									30	\$5600.00	\$0.00	\$0.00	\$5600.00
	▪ Consultation, Research and Analysis							6									6	\$ 1,440.00	\$ -		\$ 1,440.00
	▪ Compliance Planting Plan							4	20								24	\$ 4,160.00	\$ -		\$ 4,160.00
Task 305	Permitting \$ 19200 (7%)		20	40	20	0	0										100	\$19200.00	\$0.00	\$0.00	\$19200.00
	▪ Travis County		10	20	20												50	\$ 9,600.00	\$ -		\$ 9,600.00
	▪ City of Pflugerville		10	20	20												50	\$ 9,600.00	\$ -		\$ 9,600.00
Task 232	Endangered Species Habitat Assessment \$ 4010 (1%)		2	0	0	0	1				12	12					27	\$4010.00	\$0.00	\$0.00	\$4010.00
	▪ Endangered Species Habitat Assessment		2				1				12	12					27	\$ 4,010.00	\$ -		\$ 4,010.00
Task 233	Jurisdictional Waters Delineation \$ 6050 (2%)		1	0	0	0	1			4	14	20					40	\$6050.00	\$0.00	\$0.00	\$6050.00
	▪ Jurisdictional Waters Delineation		1				1			4	14	20					40	\$ 6,050.00	\$ -		\$ 6,050.00
Task 711	Preliminary Environmental Assessment (PEA) Questionn: \$ 17410 (6%)		0	0	0	0	4			33	23	40					100	\$17410.00	\$0.00	\$0.00	\$17410.00
	▪ Reviewing WIFIA PEA Guidance/Forms										2						2	\$ 320.00	\$ -		\$ 320.00
	▪ Gathering and Reviewing Background Data									2		6					8	\$ 1,220.00	\$ -		\$ 1,220.00
	▪ Internal and Project Coordination									8	4						12	\$ 2,640.00	\$ -		\$ 2,640.00
	▪ Completing Questionnaire Sections (including detailed narrative responses)						2			15	15	30					62	\$ 10,090.00	\$ -		\$ 10,090.00
	▪ QA/QC						2			8	2	4					16	\$ 3,140.00	\$ -		\$ 3,140.00
Task 239	Amended Agency Consultation Letter \$ 2625 (1%)		0	0	0	0	0						1	3	3	6	13	\$2625.00	\$0.00	\$0.00	\$2625.00
	▪ Amend Agency Consultation Letter												1	3	3	6	13	\$ 2,625.00	\$ -		\$ 2,625.00
Task 401	Bidding & Award Services \$ 8500 (3%)		24	12	0	0	2										38	\$8500.00	\$0.00	\$0.00	\$8500.00
	▪ Bidding & Award		24	12			2										38	\$ 8,500.00	\$ -		\$ 8,500.00
Task 491	Construction Phase Services \$ 64200 (2058%)		108	124	40	16	0	6	0								312	\$64200.00	\$0.00	\$0.00	\$64200.00
	▪ Project Coordination & Management		12				12										24	\$ 4,920.00	\$ -		\$ 4,920.00
	▪ Preconstruction Meeting ²		6	6													12	\$ 2,640.00	\$ -		\$ 2,640.00
	▪ Monthly Construction Meetings ²		72	72													144	\$ 31,680.00	\$ -		\$ 31,680.00
	▪ Submittals, RFIs, COs, payment apps		20	40	40			2									100	\$ 19,200.00	\$ -		\$ 19,200.00
	▪ Substantial completion and punch list ²		6	6				4									12	\$ 2,640.00	\$ -		\$ 2,640.00
	▪ Record drawings		4			16											20	\$ 3,120.00	\$ -		\$ 3,120.00
Task 504-003	Construction Materials Testing (Subconsultant) \$ 88956 (32%)		0	0	0	0	0										0	\$8087.00	\$80869.00	\$0.00	\$88956.00
	▪ Construction Materials Engineering and Testing																0	\$ 8,087.00	\$ 80,869.00		\$ 88,956.00
Task 503	Direct Expenses (including 10% markup)		0	0	0	0	0										0	\$840.00	\$0.00	\$8400.00	\$9240.00
																	0	\$ 840.00	\$ -	\$ 8,400.00	\$ 9,240.00
TOTALS			199	268	80	56	28	16	20	37	49	72	2	6	6	12	851	\$ 192,362.00	\$ 80,869.00	\$ 8,400.00	\$ 281,631.00
Notes:	1. Assuming 6 additional monthly virtual meetings at 2 hrs per meeting including documentation. 2. Assuming 6/hrs per in person meeting, including travel time, agenda preparation, and follow up documentation for 12-month duration.																				



4201 Freidrich Lane, Suite 110
Austin, Texas 78744
512.447.9081 Ph
512.443.3442 Fax
www.hvj.com

Oct 29, 2025

Ms. Lorraine Liu
Project Engineer
Pape Dawson

Re: Proposal for Construction Materials Engineering and Testing (CMT) Services
City of Pflugerville – New Sweden Lift Station and Force Main

Dear Ms. Liu,

HVJ South Central Texas – M&J, Inc. (HVJ SCTX) appreciates the opportunity to submit this proposal for providing construction materials engineering and testing services for the above referenced project.

Project Description

It is our understanding that the project includes Construction of Approximately 12,500 linear feet of 14-inch force main pipeline, a 16-foot diameter wet wall, valve vault, generator pad, and electrical pad, along with 105 linear feet of 24-inch wastewater pipeline and sanitary sewer. Work includes soil trench excavation and backfilling, grout and masonry applications, pavement and driveway construction, and concrete structures reinforced with rebar where required.

Scope of Services

The specific construction materials testing services and laboratory tests for this project are as follows:

- Soils Lab and Field Testing
- Concrete, Grout for Lab and Field Testing
- Rebar and Proof roll observations

Assumptions

The following assumptions were used in the preparation of this proposal:

- Cylinders will be picked the following day for lab curing and testing.
- Only lab cured cylinders are included in the proposed budget. If companion field cured samples are required, budget will need to be revised.
- If a curing box is necessary, the contractor will provide.
- Failing tests that require a retest were not budgeted and will be considered additional services.
- Submittal review and meetings are not included in our proposal.

Budget Summary

This section of the proposal is our Time and Material Estimate for our CoMET services. We will not perform any work outside the scope of work identified in this proposal without your prior authorization. We

City of Pflugerville – New Sweden Lift Station and Force Main
Oct 29, 2025

will set up a budget summary and follow the expenses throughout the construction proceedings. Services on an hourly basis and will be invoiced monthly, at the rates included in the proposal.

HVJ was informed that the lift station and force main will be constructed under two separate contracts. Each contract is expected to last approximately 12 months, with a possibility of some overlap between them. We have prepared our proposal to reflect this, presenting both components individually as well as the combined total for both in the cost estimate breakdown attached with this proposal.

Our estimated cost to perform this combined work is **\$80,869.00**. Our cost estimate is based on construction plans provided by the client. As the schedule and frequency of requests are beyond our control, we cannot guarantee that the estimate provided would be adequate to provide the services needed throughout the entire duration of construction.

Scheduling of our personnel for this project will be at the request of you or your designated representatives. We require at least 24 hours' notice prior to providing on-call personnel to ensure proper scheduling of work.

Services will be invoiced on a unit basis in accordance with the attached Itemized Breakdown. Services not anticipated at this time will be invoices based on the Current rates. Invoice for our services are presented on monthly basis and will be due upon receipt.

HVJ South Central Texas is pleased to be of service on this project. Should you have any questions regarding the contents of this proposal, please contact us at 512-447-9081.

Sincerely,

HVJ South Central Texas – M&J, Inc.



Muzakkir Hussain Mohammad
CoMET Staff Engineer



Syed Jafer, PE
Executive Vice President

Attachments:

HVJ Cost Estimate Breakdown

CONSTRUCTION MATERIALS ENGINEERING AND TESTING - ITEMIZED SERVICES

QTY.	UNIT	SERVICES	UNIT PRICE	TOTAL
Cost Estimates for Force Main				
SOIL TEST				
<i>Field Services</i>				
260	Hour	Soil Technician (Assume 65 trips @ 4 hrs per trip)	\$ 84.00	\$ 21,840.00
39	Hour	Soil Technician for sampling and pickup (13 trips @ 3 hrs per trip)	\$ 84.00	\$ 3,276.00
78	Each	Vehicle Charge (65 +13 trips)	\$ 40.00	\$ 3,120.00
65	Each	Nuclear Guage	\$ 55.00	\$ 3,575.00
		Subtotal		\$ 31,811.00
<i>Laboratory Services</i>				
13	Each	Sieve Analysis (Tex-110E)	\$ 150.00	\$ 1,950.00
13	Each	Liquid Limit (Tex-104E)	\$ 62.00	\$ 806.00
13	Each	Plastic Limit (Tex-105E)	\$ 62.00	\$ 806.00
13	Each	Plasticity Index (Tex-106E)	\$ 20.00	\$ 260.00
13	Each	Moisture/Density Relationship (Tex 114-E)	\$ 300.00	\$ 3,900.00
13	Each	Moisture/Density Relationship (Tex 113-E)	\$ 330.00	\$ 4,290.00
		Subtotal		\$ 12,012.00
		SOIL TEST	\$	43,823.00
CONCRETE TEST				
<i>Field Services</i>				
8	Hour	Concrete Technician (Assume 2 trips @ 4 hrs per trip)	\$ 84.00	\$ 672.00
6	Hour	Concrete Technician for Cyl pickup (Assume 2 trips @ 3 hrs per trip)	\$ 84.00	\$ 504.00
18	Hour	Technician time for Rebar observation (Assume 3 trips @ 6 hrs per trip)	\$ 84.00	\$ 1,512.00
7	Each	Vehicle Charge (2+2+3 trips)	\$ 40.00	\$ 280.00
		Subtotal		\$ 2,968.00
<i>Laboratory Services</i>				
10	Each	Concrete Cylinders	\$ 40.00	\$ 400.00
		Subtotal		\$ 400.00
		CONCRETE TEST	\$	3,368.00
PROJECT MANAGEMENT AND ADMINISTRATION				
12	Hour	Project Manager, PE	\$ 179.00	\$ 2,148.00
20	Hour	Staff Engineer, EIT	\$ 125.00	\$ 2,500.00
38	Hour	Administrative	\$ 65.00	\$ 2,470.00
		Subtotal		\$ 7,118.00
		PROJECT MANAGEMENT AND ADMINISTRATION	\$	7,118.00

Estimate for Force Main \$ 54,309.00

Cost Estimates for Sweden Lift Station

SOIL TEST				
<i>Field Services</i>				
40	Hour	Soil Technician (Assume 10 trips @ 4 hrs per trip)	\$ 84.00	\$ 3,360.00
8	Hour	Soil Technician for Proof Roll Observation (Assume 2 trips @ 4 hrs per trip)	\$ 84.00	\$ 672.00
9	Hour	Soil Technician for sampling and pickup (3 trips @ 3 hrs per trip)	\$ 84.00	\$ 756.00
15	Each	Vehicle Charge (10+2+3 trips)	\$ 40.00	\$ 600.00
10	Each	Nuclear Guage	\$ 55.00	\$ 550.00
		Subtotal		\$ 5,938.00
<i>Laboratory Services</i>				
3	Each	Sieve Analysis (Tex-110E)	\$ 150.00	\$ 450.00
3	Each	Liquid Limit (Tex-104E)	\$ 62.00	\$ 186.00
3	Each	Plastic Limit (Tex-105E)	\$ 62.00	\$ 186.00
3	Each	Plasticity Index (Tex-106E)	\$ 20.00	\$ 60.00
3	Each	Moisture/Density Relationship (Tex 114-E)	\$ 300.00	\$ 900.00
3	Each	Moisture/Density Relationship (Tex 113-E)	\$ 330.00	\$ 990.00

Subtotal	\$	2,772.00
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SOIL TEST	\$	8,710.00
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CONCRETE TEST

Field Services

48	Hour	Concrete Technician (Assume 12 trips @ 4 hrs per trip)	\$ 84.00	\$ 4,032.00
12	Hour	Technician for Grout testing (Assume 3 trips @ 4 hrs per trip)	\$ 84.00	\$ 1,008.00
45	Hour	Concrete Technician for Cyl pickup (Assume 12+3 trips @ 3 hrs per trip)	\$ 84.00	\$ 3,780.00
18	Hour	Technician time for Rebar observation (Assume 3 trips @ 6 hrs per trip)	\$ 84.00	\$ 1,512.00
33	Each	Vehicle Charge (12+3+15+3 trips)	\$ 40.00	\$ 1,320.00
Subtotal			\$	11,652.00

Laboratory Services

60	Each	Concrete Cylinders	\$ 40.00	\$ 2,400.00
Subtotal			\$	2,400.00

CONCRETE TEST	\$	14,052.00
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PROJECT MANAGEMENT AND ADMINISTRATION

7	Hour	Project Manager, PE	\$ 179.00	\$ 1,253.00
11	Hour	Staff Engineer, EIT	\$ 125.00	\$ 1,375.00
18	Hour	Administrative	\$ 65.00	\$ 1,170.00
Subtotal			\$	3,798.00

PROJECT MANAGEMENT AND ADMINISTRATION	\$	3,798.00
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Estimate for Lift Station : \$ 26,560.00

Total Estimate : \$ 80,869.00