



June 20th, 2024

City of Laredo
Utilities Department
5816 Daugherty Ave
Laredo, TX 78041

**Attention: Mr. Ryan Bell PE
C/O City of Laredo – Utilities Department**

Project: Manadas Creek Wastewater Treatment Plant

Re: Price Escalation due to Delay in Contract Execution and Notice to Proceed – Rev 2

On June 20th 2024, PLW received Engineer’s comments to PLW’s letter submitted on February 5, 2024. While items 1, 2, 3, 4, 5, 8 and 9 were satisfied by the description provided in PLW’s letter, Engineer now requests additional clarification on items 6, 7, 10, 11, 12 and 13.

The following breakdown shows the final proposal of \$726,898.24 from the original proposal of \$1,410,842.00 submitted on July 3rd2023. An agreement on this final sum would also close out all adjustments for costs and savings generated during the contract execution and notice to proceed period.

Please see additional clarification for each item:

6) Trucking Escalation. PLW waives this request subject to the approval of this proposal.

7) Fuel Escalation Impact. See chart below of historical fuel price in the US.



Source: https://ycharts.com/indicators/us_retail_diesel_price

For a total of 100,000 gal of fuel, this chart shows an average of \$4.65/gal vs the original \$3.73/gal from bid date. This represents a 24.66% increase in fuel cost.

10) Lines A & B Escalation. PLW waives this request subject to the approval of this proposal.

11 thru 13) Labor Escalation. Labor escalation related to contract award delay implied a 3-month delay of the project completion, which affects a total of 10,159.3 man-hr (25% of a total of 40,637.3 man-hr/year) at an increase of \$3.58/hr. This unit rate is the difference between a unit price escalation of 5% year-over-year vs a 3% year-over-year. This updated amount is subject to the approval of this proposal.

Current breakdown below:

MANADAS - Escalation & VE's			BID		ACTUAL - Rev1		ACTUAL - Rev2		DELTA Rev-2 (Current)	DELTA Rev-1	DELTA
Description	Unit of Measure	Quantity	Unit Cost in Bid	Total Cost in Bid	Unit Cost Executed	Total Cost Required	Unit Cost Executed	Total Cost Required			
Identified Escalation impacts											
Concrete Material - Truck load Surcharge based on Cost of Fuel Escalation	Truckloads	985	\$ 15.00	\$14,775	\$ 25.50	\$25,118	\$ 25.50	\$25,117.50	(\$10,342.50)	(\$10,343)	(\$3,096)
	Truckloads	446	\$ 15.00	\$6,690	\$ 25.50	\$11,373	\$ 25.50	\$11,373.00	(\$4,683.00)	(\$4,683)	(\$10,092)
Concrete Material - Mix Escalation	CY	14000	\$ 123.00	\$1,722,000	\$ 142.00	\$1,988,000	\$ 142.00	\$1,988,000.00	(\$266,000.00)	(\$266,000)	(\$353,220)
HOBAS Material - Price Escalation- Named Supplier Per SPEC	LSUM	1		\$455,452		\$510,106		\$510,106.24	(\$54,654.24)	(\$54,654)	(\$54,654)
SUEZ Process Equipment escalation - Submitted	LSUM	1		\$319,000		\$470,000		\$470,000.00	(\$151,000.00)	(\$151,000)	(\$151,000)
Rebar Price Escalation (until February 13th 2023).	TON	558.245	\$ 1,220.00	\$681,059	\$ 1,297.60	\$724,379	\$ 1,297.60	\$724,378.71	(\$43,319.81)	(\$43,320)	(\$43,320)
	TON	558.245	\$ 1,220.00	\$681,059	\$ 1,257.60	\$702,049	\$ 1,257.60	\$702,048.91	(\$20,990.01)	(\$20,990)	(\$20,990)
Construction Equipment - Fuel Escalation Impact	GAL	100000	\$ 3.73	\$373,000		\$458,790	\$ 4.65	\$464,981.80	(\$91,981.80)	(\$85,790)	(\$92,000)
Misc Metals	LSUM	1		\$1,150,982		\$1,186,680		\$1,186,680.00	(\$35,698.00)	(\$35,698)	(\$62,909)
NPW Vertical Turbine Pumps	LSUM	1		\$150,236		\$162,128		\$162,128.00	(\$11,892.00)	(\$11,892)	(\$11,892)
Labor Escalation	man-hr	10159.33	\$ 39.25	\$398,787	\$ 42.83	\$435,146	\$42.83	\$435,124.10	(\$36,336.88)	(\$36,358)	(\$145,434)
Total Escalation									(\$726,898.24)	(\$1,035,000)	(\$1,410,842)

Where some of the items have been removed as explained above. Final settlement amount proposed by PLW is **\$726,898.24**.

Thanks

Adriano Casas, P.E., PMP
Project Manager



C: 346.413.3786

acasas@plwUS.com | plwUS.com

webber

A Ferroviaal company

February 10, 2026

City of Laredo
5816 Daugherty Ave
Laredo TX, 78041
Attn: Judd Gilpin

Re: CPR No. 2-Rev 5
Manadas Creek WWTP
CCMA Job No. 73836 73836

Mr. Gilpin,

Webber Waterworks proposes to complete these modifications as directed for the Lump Sum price of **\$ 651,464.01**. This proposal is for the work associated with **Railroad casing thickness change request**

120 additional days will be required to perform this work if executed change order is received within 30 days. Please note, this is an estimated additional time for these particular modification and an excess of modifications can affect the completion date of the project.

Please find the attached Webber cost summary and associated reference material for your review and acceptance. If you have any questions or need additional information, please do not hesitate to call.

Regards,
Webber Waterworks

webber ■ ■ David
A Ferroviaal company Perez-Menendez
2026.02.10
13:36:41-06'00'

David Perez Menendez
Sr. Project Manager

Railroad casing thickness change request

Scope of Work

Pursuant to "Pipeline Crossing Agreement" between Union Pacific Railroad Company and the City of Laredo executed on 06/25/2023 a 0.75" casing steel wall thickness is required as opposed to 0.625" as originally intended. Additional requirements are also required as part of the Pipeline Crossing Agreement, and included in the Work Plan approved by Railpros and UPRR. This includes:

1. Steel Casing thickness (0.75" from previous 0.625") & 24-hr continuous work shift.
2. Additional 7LF of casing pipe due to the presence of existing underground utilities.
3. Geotechnical Exploration and UP Work Plan Process.
4. Ground Monitoring.
5. Cathodic Protection.
6. Grouting.
7. Use of Flaggers and Observers. This is an estimated amount. If additional time is needed due to any reasons related or unrelated to the work, PLW may seek additional compensation from the City of Laredo.
8. Project Supervision.
9. Additional Insurance Coverage.
10. Contingency Plan if settlement at rails exceeds the maximum limits.

Additionally, this Change Order includes a request for a total of 120 additional calendar days, accounting for the potential extended duration of the work plan review and approval process by Railpros.

Item No.	Description	Qty	Unit	Labor		Non-Taxed Material		Subcontract		Taxed Mat'l/Equip	
				Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
1	.75" Casing in lieu of .625" Casing under the railroad - Line A.										
1.1	54" Diameter - 0.75" wall thickness steel casing pipe - Supply (Core&Main)	120.0	LF			\$ 670.00	\$ 80,400.00				
	Additional unit cost due to:										
1.2	1) 24/7 work requirement to fully complete the 54" casing with 3/4" thickness. (AZAR Services).	120.0	LF					\$ 725.00	\$ 87,000.00		
	2) Additional welding and equipment to manipulate the casing.										
1.3	Remobilization (AZAR Services)	1.0	LS					\$ 16,500.00	\$ 16,500.00		
1.4	Traffic Control (AZAR Services)	1.0	LS					\$ 3,500.00	\$ 3,500.00		
2	Additional 7LF of casing due to presence of underground utilities.										
2.1	54" Diameter - 0.75" wall thickness steel casing pipe - Supply	7.0	LF			\$ 670.00	\$ 4,690				
2.2	Cost related to the installation of the additional 7ft of casing and pipe.	7.0	LF					\$ 1,250.00	\$ 8,750.00		
3	Geotechnical Exploration and UP Work Plan Process										
3.1	Geotechnical Investigation and UPRR Work Plan Submittal	1.0	LS					\$ 25,459.00	\$ 25,459.00		
4	Ground Monitoring										
4.1	Labor (2-men crew for 8hr/day during 2 weeks) - 4 times a every 24hrs while boring through Zone A.	112.0	HR	\$ 48.67	\$ 5,451.26						
4.2	Labor (2-men crew for 2hr/day during 1 week) - Once per day for 7 days after bore is completed.	14.0	HR	\$ 48.67	\$ 681.41						
5	Cathodic Protection										
5.1	Cathodic Protection Design	1.0	LS					\$ 8,000.00	\$ 8,000.00		
5.2	Cathodic Protection Installation	1.0	LS					\$ 54,000.00	\$ 54,000.00		
6	Grouting										
6.1	Contact Grout, reference to work plan	1.0	LS					\$ 10,900.00	\$ 10,900.00		
7	Use of Flaggers and Observers										
7.1	Flaggers - Supplied by Railpros. 24-7 for a total of 3 weeks. Unit price includes overtime.	504.0	HR					\$ 138.50	\$ 69,804.00		
7.2	Observers - Supplied by Railpros. 24-7 for 3 a total of 3 weeks. Unit price includes overtime.	504.0	HR					\$ 191.67	\$ 96,601.68		
8	Project Supervision										
8.1	Project Superintendent - 24/7 - 2 additional shifts of 8hr each day	336.0	HR	\$ 118.98	\$ 39,975.94						
8.2	Labor (1 worker) - 24-7 - 2 additional shifts of 8hr each a day.	336.0	HR	\$ 48.67	\$ 16,353.79						
9	Additional Insurance Coverage										
9.1	Additional Policy Limits as required by the Contractual Documents	1.0	LS					\$ 9,093.00	\$ 9,093.00		
Direct Cost Subtotal					62,462.40		85,090.00		389,607.68		-
Small Tools @ 0.0%					-		-		-		-
Safety Materials, Equipment, & Training @ 0.0%					-		n/a		n/a		n/a
Tax @ 0.00%					n/a		n/a		n/a		-
Subtotal 2					62,462.40		85,090.00		389,607.68		-
Subs					15,615.60		21,272.50		58,441.15		-
Subtotal 3					78,078.00		106,362.50		448,048.83		-
Warranty @ 1.0%					780.78		1,063.63		4,480.49		-
Bonds @ 1.0%					780.78		1,063.63		4,480.49		-
Insurance					780.78		1,063.63		4,480.49		-
Total of all columns					80,420.34		109,553.38		461,490.30		-

Grand Total Cost 651,464.01

AZAR SERVICES LLC

February 09, 2026

ITEM NO.	DESCRIPTION	ESTIMATED		UNIT PRICE	TOTAL AMOUNT	JUSTIFICATION
		QTY.	UNIT			
	GENERAL REQUIREMENTS					
	DEDUCT					
1	Jack and Bore	120.00	LS	\$ (650.00)	\$ (78,000.00)	
1	Mobilization	1.00	LS	\$ 6,500.00	\$ 6,500.00	Additional Mobilization due to delay
	ADD			SUBTOTAL	\$ 6,500.00	
	Jack and Bore UPRR Crossing					
2	Jack and Bore UPRR Crossing 24/7 until complete as per UPRR requiriements w/ 3/4" casing wall thickness	120.00	LF	\$ 1,375.00	\$ 165,000.00	Additraonal man power , Larger equipments and additona welding mateials plus additional over time to
3	Pot hole existing Utilities	1.00	LS	\$ 6,500.00	\$ 6,500.00	Unforseen Utilities
4	Traffic Control	1.00	LS	\$ 3,500.00	\$ 3,500.00	
5	Trench shoring requirements	100.00	LF	\$ 150.00	\$ 15,000.00	
6	Re-moblization	1.00	LS	\$ 10,000.00	\$ 10,000.00	
6	RR Monitor services Flaggers BY OTHERS	7.00	Days	\$ 3,500.00		Cost to supply RR Monitor includign 24 hours by owner
7	RR Monitor services Observers BY OTHERS	7.00	Days	\$ 4,800.00		Cost to supply RR Flaggers including 24 Hours by owner
	Sub-total				\$ 200,000.00	
	Total				\$ 128,500.00	\$107,000.00
	Labor and equipment only					

Geotechnical Engineering Associates, LLC
 Post Office Box 86
 Brandon, MS 39043



PARTIAL INVOICE

Geotechnical Investigation and Engineering Consultation

Laredo UPRR Consultation

Laredo, Texas

March 24 - April 12, 2025

Bill To
Webber
Adriano Casas
8409 Tejas Loop
Laredo, TX 78045

GEA Invoice No.: 25031
 Invoice Date: 4/17/2025
 GEA Project No.: 25012
 Webber Job No.: P5H
 Webber Contract No: 2025CP5H00004

Services Rendered: Prepare draft work plan, track and ground monitoring plan and contingency plan for utility crossing under railroad. Perform geotechnical investigation including: 2 soil borings, install 2 temporary piezometers, laboratory testing, engineering analysis and report.

Item Description	Qty	Units	Unit Rate	Total
Field Exploration: Principal Engineer	2.5	Hours	175.00	437.50
Field Exploration: Mobilization	1	Lump Sum	4,620.00	4,620.00
Field Exploration: Soil Boring Drilling & Sampling (Daily Rate)	1	Day	3,600.00	3,600.00
Field Exploration: Piezometer Materials	1	Lump Sum	261.50	261.50
Geotechnical/Materials Lab Testing: Moisture Content Test with Visual Classification	8	Tests	8.50	68.00
Geotechnical/Materials Lab Testing: Atterberg Limits Test (one point method)	5	Tests	55.00	275.00
Geotechnical/Materials Lab Testing: No 200 Wash	7	Tests	55.00	385.00
Professional Engineering Services: Principal Engineer	35.75	Hours	175.00	6,256.25
Professional Engineering Services: Engineering Aide	3.75	Hours	75.00	281.25
Professional Engineering Services: Senior Engineer	0.5	Hours	155.00	77.50
Professional Engineering Services: Drafting Senior Technician/Designer	9	Hours	80.00	720.00
Project Expenses: Truck Mileage	1,156	Miles	0.75	867.00
Project Expenses: Subsistence (Meals per person)	3	Days	215.00	645.00

TOTAL DUE	\$18,494.00
------------------	--------------------

Geotechnical Engineering Associates, LLC
Post Office Box 86
Brandon, MS 39043



INVOICE

Geotechnical Investigation and Engineering Consultation

Laredo UPRR Consultation

Laredo, Texas

April 13 - May 17, 2025

Bill To
Webber
Adriano Casas
8409 Tejas Loop
Laredo, TX 78045

GEA Invoice No.: 25048
Invoice Date: 5/23/2025
GEA Project No.: 25012

Services Rendered: Geotechnical engineering consultation including revision of geotechnical report and work plans to address Railpros comments.

Item Description	Qty	Units	Unit Rate	Total
Professional Engineering Services: Principal Engineer	14.5	Hours	175.00	2,537.50
Construction Phase: Senior Engineer	16.75	Hours	155.00	2,596.25

TOTAL DUE

\$5,133.75

Geotechnical Engineering Associates, LLC
Post Office Box 86
Brandon, MS 39043



INVOICE
Geotechnical Engineering Consultation
Laredo UPRR Consultation
Laredo, Texas
May 18 - June 21, 2025

Bill To
Webber
Adriano Casas
8409 Tejas Loop
Laredo, TX 78045

GEA Invoice No.: 25058
Invoice Date: 6/23/2025
GEA Project No.: 25012

Services Rendered: Additional geotechnical analysis for pipe settlement and report revision.

Item Description	Qty	Units	Unit Rate	Total
Professional Engineering Services: Principal Engineer	8.25	Hours	175.00	1,443.75
Professional Engineering Services: Senior Engineer	2.5	Hours	155.00	387.50

TOTAL DUE	\$1,831.25
------------------	------------

Run Date: 7/17/25

Preshipment Notification



Customer #	208699
Order #	W968398
Date Ordered	05/12/25
Job #	P5H
Job Name	MANADAS WWTP
Customer Reference	
Purchase Order #	P5H
Method of Shipment	DIRECT
Contract Order #	R156961
Ordered By	ADRIANO
Ship Via	

Sold To:
 PLW WATERWORKS LLC
 STOCK #11 SAN ANTONIO EAST
 1725 HUGHES LANDING BLVD
 THE WOODLANDS, TX 77380-3875

Ship To:
 PLW WATERWORKS LLC
 MANADAS CREEK WWTP
 8409 TEJAS LOOP
 CONTACT: JAVIER 346 386 9551
 LAREDO, TX 78045

Branch:
 SAN ANTONIO-E TX
 Branch - 011
 13790 Judson Rd
 San Antonio, TX 78233 0000
 Phone: 210-657-1632

Bid Seq#	Product Code	Description	Qty Ordered	Qty Shipped	Qty B/O	Net Price	UOM	Ext Price
	/05018227540	54 .75 WALL STEEL CASING PIPE (6) 20' LENGTH/AIS (1) 7' LENGTH/AIS BEVELED X SQUARE	127		127	670.00000	EA	.00
	/80018305551	42X54 CASING SPACER CENTERED 44.50 OD X 52.50 ID RAILROAD CROSSING	2		2	238.75000	EA	.00

Terms in accordance with shipping manifest.

Special Instructions/Comments:

BID # 2317275 C/O # R156961
 BID NM: LAREDO-MANADAS CREEK WWTP - C153

Total Shipped:		.00
Total Ordered:	85567.50	

Geotechnical Engineering Associates, LLC
 Post Office Box 86
 Brandon, MS 39043



PARTIAL INVOICE

Geotechnical Investigation and Engineering Consultation

Laredo UPRR Consultation

Laredo, Texas

March 24 - April 12, 2025

Bill To
Webber
Adriano Casas
8409 Tejas Loop
Laredo, TX 78045

GEA Invoice No.: 25031
 Invoice Date: 4/17/2025
 GEA Project No.: 25012
 Webber Job No.: P5H
 Webber Contract No: 2025CP5H00004

Services Rendered: Prepare draft work plan, track and ground monitoring plan and contingency plan for utility crossing under railroad. Perform geotechnical investigation including: 2 soil borings, install 2 temporary piezometers, laboratory testing, engineering analysis and report.

Item Description	Qty	Units	Unit Rate	Total
Field Exploration: Principal Engineer	2.5	Hours	175.00	437.50
Field Exploration: Mobilization	1	Lump Sum	4,620.00	4,620.00
Field Exploration: Soil Boring Drilling & Sampling (Daily Rate)	1	Day	3,600.00	3,600.00
Field Exploration: Piezometer Materials	1	Lump Sum	261.50	261.50
Geotechnical/Materials Lab Testing: Moisture Content Test with Visual Classification	8	Tests	8.50	68.00
Geotechnical/Materials Lab Testing: Atterberg Limits Test (one point method)	5	Tests	55.00	275.00
Geotechnical/Materials Lab Testing: No 200 Wash	7	Tests	55.00	385.00
Professional Engineering Services: Principal Engineer	35.75	Hours	175.00	6,256.25
Professional Engineering Services: Engineering Aide	3.75	Hours	75.00	281.25
Professional Engineering Services: Senior Engineer	0.5	Hours	155.00	77.50
Professional Engineering Services: Drafting Senior Technician/Designer	9	Hours	80.00	720.00
Project Expenses: Truck Mileage	1,156	Miles	0.75	867.00
Project Expenses: Subsistence (Meals per person)	3	Days	215.00	645.00

TOTAL DUE	\$18,494.00
------------------	--------------------

Geotechnical Engineering Associates, LLC
Post Office Box 86
Brandon, MS 39043



INVOICE

Geotechnical Investigation and Engineering Consultation

Laredo UPRR Consultation

Laredo, Texas

April 13 - May 17, 2025

Bill To
Webber
Adriano Casas
8409 Tejas Loop
Laredo, TX 78045

GEA Invoice No.: 25048
Invoice Date: 5/23/2025
GEA Project No.: 25012

Services Rendered: Geotechnical engineering consultation including revision of geotechnical report and work plans to address Railpros comments.

Item Description	Qty	Units	Unit Rate	Total
Professional Engineering Services: Principal Engineer	14.5	Hours	175.00	2,537.50
Construction Phase: Senior Engineer	16.75	Hours	155.00	2,596.25

TOTAL DUE				\$5,133.75
------------------	--	--	--	-------------------

Geotechnical Engineering Associates, LLC
Post Office Box 86
Brandon, MS 39043



INVOICE

Geotechnical Engineering Consultation

Laredo UPRR Consultation

Laredo, Texas

May 18 - June 21, 2025

Bill To
Webber
Adriano Casas
8409 Tejas Loop
Laredo, TX 78045

GEA Invoice No.: 25058
Invoice Date: 6/23/2025
GEA Project No.: 25012

Services Rendered: Additional geotechnical analysis for pipe settlement and report revision.

Item Description	Qty	Units	Unit Rate	Total
Professional Engineering Services: Principal Engineer	8.25	Hours	175.00	1,443.75
Professional Engineering Services: Senior Engineer	2.5	Hours	155.00	387.50

TOTAL DUE				\$1,831.25
------------------	--	--	--	-------------------



FIRST CORROSION SOLUTIONS, LLC

July 18, 2025

Quote #071825.Webber.MCWTP.CP

Ariano Casas
Project Manager
Webber A Ferrovia Company
8409 Tejas Loop
Laredo, Texas 78045
346-413-3786 Mobile
acasas@wweber.com

Scope of Work

Install cathodic protection for the Manadas Creek Wastewater Plant 54" casing at pipeline crossing with railroad. The installation and materials will be in accordance with the attached engineering design drawings submitted by Dreiyim Engineering and with the installation layout proposed by Laredo Waterworks.

First Corrosion Solutions LLC, a subsidiary of First Instrument Solutions LTD, is pleased to provide you with this quotation.

Please find our price quote below to provide labor and materials for installing Cathodic Protection for the 54" casing to be installed for the Manadas Creek Wastewater Treatment Plant project. This quote includes materials specified in the design drawings (included below) and includes labor, equipment and other miscellaneous materials necessary to complete the installation.

Description	Location	Type	Price each
Materials (anodes, test stations, wiring and installation parts)	Cased crossing at railroad Laredo, Texas	New installation	\$15,705.00*
Labor and Equipment			\$38,295.00*
TOTAL LABOR, MATERIALS AND EQUIPMENT			\$54,000.00*

*Applicable sales tax is not included. Please provide us with a tax exempt certificate, if applicable.

Pricing includes:

1. All materials listed in the design document Bill of Materials are included.
2. First Corrosion Solutions will provide -
 - Company supervisor
 - Installation crew with truck and tools
 - Mini- excavator
 - Skid Steer and Auger
 - Trailers for materials and equipment
3. First Corrosion Solutions will perform all trenching, digging, and backfilling for the anode installations.

First Instruments Solutions, LTD. 5853 Leopard Street Corpus Christi, TX 78408 (361)887-9001



FIRST CORROSION SOLUTIONS, LLC

4. Texas811 Locate Request (One Call Service)
5. Specialty equipment other than required under the scope of this project will be charged at T&M rates.
6. All change of work orders will be in writing and approved by Webber, City of Laredo and First Corrosion Solutions personnel and may be subject to additional charges.
7. Delays due to conditions at job site locations not under the control of First Corrosion Solutions may be subject to additional charges.

Price is valid for 60 days from the date of this proposal.

Please indicate your approval by providing First Corrosion Solutions with an approved purchase order. We will order materials and schedule crews as soon as we receive your acceptance. Materials delivery is three weeks after receipt of order.

Best Regards,

Roland Gonzalez
CP Manager
First Corrosions Solutions
First Instrument Solutions
5853 Leopard St.
Corpus Christi, TX 78408
Office (361)887-9001
Mobile (956)763-0135

From: [Gonzalez Caballero, Ignacio](#)
To: [Rolando Gonzalez](#)
Cc: [Casas, Adriano](#)
Subject: Proposed Cathodic Protection Layout
Date: Monday, April 21, 2025 11:27:33 AM
Attachments: [image001.png](#)
[image002.png](#)

Rolando,

This is what we are proposing. Please, let us know if the engineer it's ok with it:



Regards
Ignacio G. Caballero
Manager Survey Services
Waterworks

webber
A Ferrovial company

C +1 346-386-3470
igonzalet@webber.com

Casas, Adriano

From: Rolando Gonzalez <rgonzalez@fcscorrosion.com>
Sent: Tuesday, April 1, 2025 12:12 PM
To: Casas, Adriano
Cc: Ramon Rodriguez
Subject: RE: Laredo - Cathodic Protection

External email. Caution: Do not click links or attachments unless you recognize the sender and know the content is safe.

Adriano,

Here are budgetary cost estimates for providing a design and installation of cathodic protection on the 54" casing to be installed under the railroad:

Design Phase - \$8,000

- Engineered design drawings will be provided.

Construction Phase - \$50,000 ← **Estimated Original Amount - See Actual Quote of \$54k.**

Included:

- Installation crew and company supervisor
- Materials (anodes and test stations)
- Trucks, tools, and equipment to install the cathodic protection system
- Testing and final report

Assumptions

- We will be provided with the full project specifications prior to initiating the design phase to ensure the design is in compliance with the specifications.
- All trenching and excavating will be done by Webber.
- Anodes and test stations will be installed on each end of the casing.
- The casing is 54" diameter bare steel pipe, 120' in length.

The construction phase cost estimate is a conservative estimate based on information provided to us at this time.

If you are able to procure coated pipe the materials cost will be lowered.

Thank you for your consideration. Let us know if you will need us to begin the design phase.

Regards.

Roland Gonzalez
CP Manager
First Corrosions Solutions
First Instrument Solutions
5853 Leopard St.
Corpus Christi, TX 78408

Office (361)887-9001
Mobile (956)763-0135



**FIRST
CORROSION
SOLUTIONS, LLC**



**FIRST
INSTRUMENT
SOLUTIONS**

From: Casas, Adriano <acasas@wwebber.com>
Sent: Monday, March 31, 2025 2:41 PM
To: Rolando Gonzalez <rgonzalez@fcscorrosion.com>
Cc: Ramon Rodriguez <rrodriguez@fcscorrosion.com>
Subject: RE: Laredo - Cathodic Protection

Hi. Yes, both ends will be excavated.

Line: 42" FRP line, however, the casing (cathodic protection) is 54" diameter.

Thanks

Adriano Casas
Project Manager

webber
A Ferrovial company

8409 Tejas Loop
Laredo, Texas 78045
C. 346.413.3786
acasas@plwus.com | wwebber.com

From: Rolando Gonzalez <rgonzalez@fcscorrosion.com>
Sent: Monday, March 31, 2025 2:39 PM
To: Casas, Adriano <acasas@wwebber.com>

Cc: Ramon Rodriguez <rrodriguez@fcscorrosion.com>

Subject: RE: Laredo - Cathodic Protection

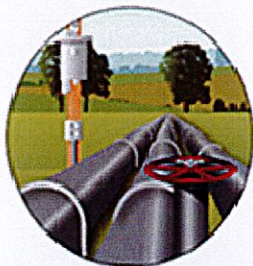
External email. Caution: Do not click links or attachments unless you recognize the sender and know the content is safe.

Adriano,

Please provide me with the line size (Outside diameter). Also, will we have access to the casing at each end to attach our wires or will we need to excavate?

Thanks.

Roland Gonzalez
CP Manager
First Corrosions Solutions
First Instrument Solutions
5853 Leopard St.
Corpus Christi, TX 78408
Office (361)887-9001
Mobile (956)763-0135



**FIRST
CORROSION
SOLUTIONS, LLC**



**FIRST
INSTRUMENT
SOLUTIONS**

From: Casas, Adriano <acasas@wwebber.com>

Sent: Monday, March 31, 2025 10:47 AM

To: Rolando Gonzalez <rgonzalez@fcscorrosion.com>

Subject: Laredo - Cathodic Protection

Hi Mr. Gonzalez. Thanks for the call.

Like discussed, we are working on a Change Order for the City of Laredo.

Currently, there are no specifications for Cathodic Protection. However, we are going to propose an Allowance for this work in case it is required. Here is the description of the work:

1. Option 1:
 - a. 120lf of steel casing, 3/4" thickness.
 - b. The casing is buried about 18ft underground.
 - c. Casing is not coated.

2. Option 2:
 - a. 120lf of steel casing, 3/4" thickness.
 - b. The casing is buried about 18ft underground.
 - c. Casing is coated.

The project location is in Laredo, TX - 8409 Tejas Loop, Laredo, TX, 78045.

Please, provide a ROM number for these two scenarios.

Thanks

Adriano Casas
Project Manager



8409 Tejas Loop
Laredo, Texas 78045
C. 346.413.3786
acasas@plwus.com | www.webber.com

Superior Grouting Services
P.O. Box 691011, Houston, TX 77269
(281) 894-4175
estimates@superiorgrouting.com



Proposal Date:
5/15/2025

To:
Adriano Casas
Webber
346-413-3786
acasas@wwebber.com

Project Name:
Webber-Laredo annulus under UPRR
Project Location:
Laredo, TX

Quote

Description	Grout	Qty	Unit	Price/Unit
Pressure grout annulus space of 56in bore with 54in casing	55PCF	130	LS	\$4,000.00
Short Load Fee				\$1,000.00
Project/Agreement Set-up				\$400.00
MOB Fee (Per Occurrence)				\$5,500.00
Estimated Total				\$10,900.00

Cubic Yardage calculation is a function of the above specified diameters, quantities and lineal footage. If additional additional material is required due to changes in the above specified scope of work or criteria, it will be billed at \$350 per foamed CY and \$450 per non-foamed CY inclusive of labor and equipment. Stand by time will be billed at a rate of \$500 per hour or fraction there of.

****A Dead Run fee of \$4,500 plus MOB will be charged if SGSI arrives on site and no work is performed.**

*NOTE: Specific Insurance requirements involving special certifications, subrogation, additional insured, safety requirements, compliance criteria or memberships or other GC administrative requirements will be billed as a pass-through cost in addition to the estimate sums.

- Owner/GC Requirements:**
- 1.) Acceptance of SGSI Grout Design Specified or advice of specific grout requirements
 - 2.) Provide water and location to wash out equipment
 - 3.) Traffic control; if required
 - 4.) Plugging of lines; marking and installation of 2" injection pipe w/ 2" threaded male adapter, and 2" vent pipe w/ 2" metal ball valves on each end
 - 5.) Any and all testing required

Term & Conditions

The preceding Statement of Work is subject to the following Terms and Conditions for Line Grouting Work. To the extent that these Terms and Conditions contradict any terms and conditions in any general or subcontract, these Terms and Conditions shall control. Each Term and Condition is material to Superior Grouting Service, Inc.'s ("Superior Grouting") agreement to perform the work outlined in the preceding Statement of Work.

1. **Entire Agreement:** This Statement of Work and these attached Terms and Conditions are the entire agreement between Superior Grouting and the customer and covers all work to be done under this Statement of Work. There are no prior representations, either verbal or written, outside of this Statement of Work. Any modification or change to the Statement of Work or these Terms and Conditions must be in writing and signed by an authorized representative of Superior Grouting.
2. **Payment:** Payment shall not be subject to Customer being paid by any other party, in whole or in part. Customer's duty to pay Superior Grouting is independent of any predicate action by any other party. Customer shall pay Superior Grouting within thirty (30) days of completion of any agreed portion of the work. Failure to make periodic payments shall entitle Superior Grouting to abandon the jobsite with no further requirement to complete work. Abandonment for failure to pay will not affect Superior's right and ability to place a lien on real property for periodic work completed, nor will it affect Superior Grouting's right to collect payment for any amounts owed.
3. **Site Preparation – Customers Responsibility:** It is the responsibility of Customer to prepare all worksite areas for timely completion, including proper installation of lines, clean/clear injection/vent pipes, concrete plugs, or other access/injection/containment requirements as stipulated in the Statement of Work. Specifically, it is the responsibility of Customer to ensure that all position and angle of inclination properties of casings and inserts are established and fixed prior to the grouting operation. These requirements need to be met to prevent flotation of pipe insert during the grouting procedure. Superior Grouting shall have no liability for shifting positions, change in degree of incline and/or flotation of pipe insert. Customer's failure to adequately prepare the site and/or provide site access to Superior Grouting constitutes a delay and may at the sole discretion of Superior Grouting require Customer to pay for any increased costs of mobilization, de-mobilization, and/or costs of materials affected by the delay in access and preparation in the site.
4. **No liability for unspecified, or contractor/design-engineer specified, grout material. Disclaimer of express or implied warrant of suitability or for particular purpose.** Superior Grouting provides a pressure grouting service. Superior Grouting does not design or manufacture grout materials, nor does it employ licensed engineers. Owner/Customer acknowledges that Superior Grouting is not a Design Engineer and does not have a Design Engineer on staff and does not specify the type of grout material required by this project. The type of grout material, and its specifications, shall be specified by Owner/ Customer and their licensed Design Engineer. Should Owner/Customer fail to specify the type of grout material, Superior Grouting will use its best efforts to determine the type of grout material to be used. However, Superior Grouting disclaims any express or implied warranty for suitability or particular purpose, and Owner/Customer, by failing to specify the type of grout material, acknowledges that Superior Grouting has no liability for damages caused by errors in grout material design.
5. **No liability for improper site preparation by Customer, Customer's Employees or Owner/Customer's Subcontractors:** Customer acknowledges that the general contractor and/or Customer is responsible for site preparation, including purchasing conduit, designing conduit system, setting and installing the conduit that the grout material will be injected into. Owner/Customer acknowledges that Superior Grouting has no liability for damages caused by any errors in site preparation, conduit design, installation or bulkhead design. Should Customer desire to have Superior Grouting's input into how to set up the grout injection/vent lines, Customer must state that in writing, and include the request for input as a separate line item in the Scope of Work.

Initials

6. **Accuracy in information provided to Superior Grouting.** Customer acknowledges that in order to quote, coordinate and execute work on any line-grouting project, Superior must be provided by Customer with accurate information specifying the diameter and total length of the casing, bore or pipeline, including the correct number and size of inserts, where applicable ("Grout Volume Calculation Input Information"). Time is of the essence in conducting line grouting work. In order to properly mobilize, have sufficient amount of grout available on the job, and to stage trucks to bring grout to the jobsite for injection, Superior must be provided accurate Grout Volume Calculation Input Information. Superior will not be liable for delays, increased costs, or damage caused by Customer providing inaccurate Grout Volume Calculation Input Information.
- a. **Volume of grout:** Superior will only inject the volume of grout that the casing (less any conduits) is calculated to hold, regardless of whether grout is coming out of a vent or not. In order to supersede this mandatory rule, Customer must designate a corporate representative, with authority to bind Customer, to approve the order to proceed with injecting additional grout. Customer assumes any and all liability for any adverse effects of injecting more grout than the volume of the casing (less any conduit, if applicable) will hold.
1. **Limitation of Liability** Owner/Customer agrees that Superior Grouting's Liability for any damages/losses/failures due to negligence of Superior Grouting, to the extent not covered by any other section of these Terms and Conditions, shall be limited to the lesser of either (a) the total cash price of the Statement of Work, or (b) percentage of total cash price of the Statement of Work represented by the current completion factor when the alleged negligence occurred.
2. **Execution of Work without Interruption:** It is agreed that Superior Grouting Services, Inc. shall be permitted to execute our work without interruption. If we are delayed at any time by an act or neglect of the Owner/Customer or their representative or employee, or any other contractor employed by the Owner (All referred to as "Owner"), for any changes ordered in the work, then we shall be reimbursed for our actual additional expense unless other arrangements have been made in writing.
3. **Access to work site.** Customer warrants that Owner will furnish Superior Grouting free access to the worksite to perform its work according to the Scope of Work. Customer will ensure an adequate staging area for Superior Grouting to perform its work.
4. **Interruptions caused by owner – additional fee:** The price quoted herein is based on one (1) move-in and one (1) move-out. If Superior is forced to move onto and off the project more than one time (meaning the original move-in prior to work and move out after work is completed), and this additional mobilization is due to the fault of the Customer or Owner, Customer shall be liable for an additional mobilization fee, which will be the greater of the mobilization fee for the job or fifteen hundred dollars (\$1,500.00).
5. **Blockages or movement of land.** Superior Grouting Services, Inc., shall not be responsible for blockages, stoppages, sloughing or heaving of ground or any other kind of intrusion or condition that impacts the flow of injected grouting material.
6. **Force Majeure.** Superior Grouting is not responsible for delays caused by work stoppages, strikes, fires, flood, acts of God, acts of war, insurrection, or pandemic ("force majeure conditions"). If work is delayed by any force majeure condition for less than 60 days, Superior Grouting shall be afforded an extension of time for its performance equal to each day lost to a force majeure condition. To the extent at a force majeure condition lasts 60 days or more, then Superior Grouting shall be excused from non-performance and the Scope of Work may be cancelled at either owner's or Superior Grouting's request.
7. **Venue and jurisdiction for dispute resolution:** In any dispute between Customer and Superior Grouting, such dispute shall be brought in the State or Federal Courts of Harris County, Texas. Customer consents to jurisdiction in Harris County for all disputes arising under this Statement of Work. All disputes shall be subject to the laws of the State of Texas without other references to Conflicts of Laws. Any arbitration provision which may be included in any general contract or subcontract to which these Terms and Conditions are attached or subsumed is expressly rejected in favor of this venue and jurisdiction provision.
8. **45 days to agree or withdrawn:** This proposal is based upon present prices and present conditions and is valid for forty-five (45) days. This Statement of Work shall be held open for forty-five (45) days. If it is not returned signed within forty-five (45) days, Superior Grouting is considered to have withdrawn the Statement of Work. Any signature by Customer after more than 45 days shall not bind Superior Grouting.

Initials

9. **Cancellations:** Cancellations that occur within 24 hours of planned Project Start will be charged the entire cost of materials and mobilization as liquidated damages, without regard for, and with no requirement for Superior Grouting to attempt to mitigate damages by using any materials on other jobs.
10. **Non-union labor:** The pricing in the attached Statement of Work is calculated on the use of non-union labor. Should the job or customer require the use of union labor, the Statement of Work will be modified to increase price commensurate with the increased cost of labor (if any). Customer consents to the increased cost of labor, should the labor cost be for unionized labor. If Customer does not consent to the increased cost of union labor, the Statement of Work is void and is deemed to have been based on mutual misunderstanding. Customer shall have no remedy for breach of contract, tort, fraud or any other cause of action against Superior Grouting for the Statement of Work becoming void due to Customer not consenting to increased cost due to required use of union labor.
11. **Interest on late payments:** Any amounts due and owing under this Statement of Work more than 60 days shall accrue interest at an annual percentage rate of 10%, beginning from the date originally due.
12. **Attorneys' fees and litigation costs:** Should Superior Grouting engage an attorney to collect sums due under this Statement of Work, including without limitation pursuing demand letters and/or filing a lawsuit, or to defend Superior Grouting in any lawsuit filed by Customer, Customer agrees to pay

Acceptance

This proposal as offered for Thirty (30) days from today's date and may be withdrawn by Superior Grouting Services at that time.

Signature

Date

Authorized Agent

Purchase Order Number

Submitted By:

Date:
5/15/2025

Casas, Adriano

From: Straiton, Kathy
Sent: Wednesday, July 23, 2025 12:00 PM
To: Casas, Adriano
Cc: Reyes Martinez, Javier
Subject: RE: P5H - Additional Insurance Requirements
Attachments: Atlantic Star RRP app fillable PDF.pdf

Adriano,

We have received a quote.

*Amerisure has provided an updated Railroad Protective Liability quote per the attached application. **Premium is \$9,093** for the term of 9/8/2025 to 9/8/2026. The application has a lesser term. The premium would be the same regardless if issued for one year or one month. Limits are \$2,000,000 each occurrence/\$6,000,000 aggregate based on cost of \$600,000 within 50 ft of the Railroad.*

Please review, we can bind today if needed.

Thanks,
Kathy

Kathy Straiton
Proposal Coordinator

Webber, LLC
Waterworks Division
1725 Hughes Landing Blvd., Suite 1200
The Woodlands, TX 77380
T. 281.907.8600
C. 713.392.8335
kstraiton@wwebber.com | wwebber.com

From: Casas, Adriano <acasas@wwebber.com>
Sent: Thursday, July 17, 2025 3:26 PM
To: Straiton, Kathy <kstraiton@wwebber.com>
Cc: Reyes Martinez, Javier <jreyes@wwebber.com>
Subject: RE: P5H - Additional Insurance Requirements

Hi Kathy,

Please, find the attached filled out form.

Thanks

Adriano Casas
Project Manager

webber

A Ferroviaal company

8409 Tejas Loop
Laredo, Texas 78045
C. 346.413.3786
acasas@plwus.com | www.webber.com

From: Straiton, Kathy <kstraiton@wwebber.com>
Sent: Thursday, July 17, 2025 2:41 PM
To: Casas, Adriano <acasas@wwebber.com>
Cc: Reyes Martinez, Javier <jreyes@wwebber.com>
Subject: RE: P5H - Additional Insurance Requirements

Adriano,

I have received this form that needs to be completed. Do your best to complete and I will work on the holes.

Thanks!

Kathy Straiton
Proposal Coordinator

Webber, LLC
Waterworks Division
1725 Hughes Landing Blvd., Suite 1200
The Woodlands, TX 77380
T. 281.907.8600
C. 713.392.8335
kstraiton@wwebber.com | www.webber.com

From: Casas, Adriano <acasas@wwebber.com>
Sent: Thursday, July 17, 2025 1:46 PM
To: Straiton, Kathy <kstraiton@wwebber.com>
Cc: Reyes Martinez, Javier <jreyes@wwebber.com>
Subject: RE: P5H - Additional Insurance Requirements

Thanks!

Adriano Casas
Project Manager

webber

A Ferroviaal company

8409 Tejas Loop
Laredo, Texas 78045
C. 346.413.3786

From: Straiton, Kathy <kstraiton@webber.com>
Sent: Thursday, July 17, 2025 1:22 PM
To: Casas, Adriano <acasas@webber.com>
Cc: Reyes Martinez, Javier <jreyes@webber.com>
Subject: RE: P5H - Additional Insurance Requirements

Thank you! Quote was requested this morning. Cross your fingers that we get it tomorrow.

Kathy Straiton
Proposal Coordinator

Webber, LLC
Waterworks Division
1725 Hughes Landing Blvd., Suite 1200
The Woodlands, TX 77380
T. 281.907.8600
C. 713.392.8335
kstraiton@webber.com | www.webber.com

From: Casas, Adriano <acasas@webber.com>
Sent: Thursday, July 17, 2025 10:21 AM
To: Straiton, Kathy <kstraiton@webber.com>
Cc: Reyes Martinez, Javier <jreyes@webber.com>
Subject: RE: P5H - Additional Insurance Requirements

Hi Kathy, please see below:

This is a Change Order based on change in conditions. New requirements implemented in the project. This work relates to the United Pacific Railroad. See answers below:

- Why do you need this? Is the project adding a scope, etc.? **Response:** Change in conditions (thickness of the casing under the railroad, cathodic protection (new scope), contact grouting (new scope), etc.
 - Value. **Response:** Change Order amount of around \$630k. Value of Original Scope: \$150k. Total scope to be insured under these conditions: \$780k.
 - Schedule. **Response:** Total period of 4 weeks. Anticipated Starting Date on September 8th 2025.
- Requirements, required by owner? **Response:** Yes, required by Owner. See attached contractual document between the City of Laredo and UPRR (See Exhibit C).
- /When is this needed by? **Response:** 07/18/2025.

Thanks!

Adriano Casas
Project Manager



8409 Tejas Loop
Laredo, Texas 78045
C. 346.413.3786
acasas@plwus.com | www.webber.com

From: Straiton, Kathy <kstraiton@wwerber.com>
Sent: Wednesday, July 16, 2025 8:56 AM
To: Casas, Adriano <acasas@wwerber.com>
Subject: FW: P5H - Additional Insurance Requirements

Good Morning Adriano,

Please send me information regarding this request.

- Why do you need this? Is the project adding a scope, etc.?
 - Value
 - Schedule
- Requirements, required by owner?
- When is this needed by?

Anything else would be helpful. I will get the scope as soon as possible.

Thanks!

Kathy Straiton
Proposal Coordinator

Webber, LLC
Waterworks Division
1725 Hughes Landing Blvd., Suite 1200
The Woodlands, TX 77380
T. 281.907.8600
C. 713.392.8335
kstraiton@wwerber.com | www.webber.com

From: Straiton, Kathy
Sent: Tuesday, July 15, 2025 2:28 PM
To: Sobel, Rosalind <rosalind.sobel@wwerber.com>; Casas, Adriano <acasas@wwerber.com>; Gutierrez, Mikel <mikel.gutierrez@wwerber.com>; Reyes Martinez, Javier <jreyes@wwerber.com>
Subject: RE: P5H - Additional Insurance Requirements

Thanks Rosalind.

Hi Adriano,

What is it that you need for the Manadas project. Please send the request/paperwork/requirements.

Thanks,
Kathy

Kathy Straiton
Proposal Coordinator

Webber, LLC
Waterworks Division
1725 Hughes Landing Blvd., Suite 1200
The Woodlands, TX 77380
T. 281.907.8600
C. 713.392.8335
kstraiton@webber.com | webber.com

From: Sobel, Rosalind <rosalind.sobel@webber.com>
Sent: Tuesday, July 15, 2025 1:54 PM
To: Casas, Adriano <acasas@webber.com>; Gutierrez, Mikel <mikel.gutierrez@webber.com>; Reyes Martinez, Javier <jreyes@webber.com>; Straiton, Kathy <kstraiton@webber.com>
Subject: Re: P5H - Additional Insurance Requirements

Understood. Normally @Straiton, Kathy obtains the quotes for PLW directly. Kathy- I'm happy to help if this is not something you are handling. Just let me know.

Get [Outlook for iOS](#)

From: Casas, Adriano <acasas@webber.com>
Sent: Tuesday, July 15, 2025 11:45:54 AM
To: Sobel, Rosalind <rosalind.sobel@webber.com>; Gutierrez, Mikel <mikel.gutierrez@webber.com>; Reyes Martinez, Javier <jreyes@webber.com>
Subject: Re: P5H - Additional Insurance Requirements

Hi Rosalind, this is an existing project with Webber Waterworks.
It's the Manadas Creek WWTP - P5H

From: Sobel, Rosalind <rosalind.sobel@webber.com>
Sent: Thursday, July 10, 2025 11:56:44 AM
To: Gutierrez, Mikel <mikel.gutierrez@webber.com>; Casas, Adriano <acasas@webber.com>
Subject: RE: P5H - Additional Insurance Requirements

Good Afternoon,

I'm happy to help. Is this for a new bid, new project, or an established project? Also, which Division (ex: Heavy Civil, PLW, Infra)?

Kind Regards,

Rosalind J. Sobel
Corporate Insurance Manager – Legal Team



10415 Morado Circle, Suite 200
Austin, TX 78759
T. 713.964.2811
C. 512.783.4219
rosalind.sobel@webber.com | webber.com

From: Gutierrez, Mikel <mikel.gutierrez@wwebber.com>
Sent: Thursday, July 10, 2025 11:40 AM
To: Casas, Adriano <acasas@wwebber.com>; Sobel, Rosalind <rosalind.sobel@wwebber.com>
Subject: P5H - Additional Insurance Requirements

Adriano,

Adding in @Sobel, Rosalind regarding this contract. She usually procures any additional insurance for our projects. Roz, please see the attached.

Best,

Mikel Gutierrez
Paralegal

1725 Hughes Landing Blvd., Suite 1200
The Woodlands, Texas 77380
T. 713.964.2800 ext. 4499
C. 346.740.2549
Mikel.Gutierrez@wwebber.com | wwebber.com

webber

From: Casas, Adriano <acasas@wwebber.com>
Sent: Wednesday, July 9, 2025 11:28 AM
To: Gutierrez, Mikel <mikel.gutierrez@wwebber.com>
Subject: P5H - Additional Insurance Requirements

Hi Mikel, please find the attached additional requirements for our project. Can you please obtain a quote for this?

Thanks

Adriano Casas
Project Manager

webber
A Ferroviario company

8409 Tejas Loop
Laredo, Texas 78045
C. 346.413.3786
acasas@plwus.com | wwebber.com

4/9/2025

Adriano Casas
Webber LLC (Webber Waterworks, LLC)
346-413-3786
acasas@webber.com

Subject: **Quote for Contractor in Charge Services**

Dear Mr. Casas,

Thank you for contacting RailPros to provide a qualified Contractor in Charge. RailPros provides associates with extensive railroad experience, all qualified in GCOR, Maintenance-of-Way, and On-track safety. All our Contractors in Charge are dedicated to safety on the jobsite and have an acute understanding of railroad rules.

RailPros charges a daily rate which includes an 8-hour on-site workday, mobilization, and Per Diem costs. Our services are billed for the Contractor in Charge's (CIC's) time on site, to include any time setting up and taking down track protection, if applicable. Any time beyond the CIC's 8 hours will be charged at an hourly overtime rate.

The rates for our services are as follows for work performed on, over or under Union Pacific ROW:

One Time Administrative Fee:	
Certified payroll set-up fee	\$300.00
Weekly Administrative Fee:	
Certified payroll reports	\$150.00
Standard Workday:	
Standard 8-hour day	\$1,018.00
Overtime rate per hour after 8 hours	\$145.00
Nights, Weekends, and Holidays:	
Standard 8-hour day	\$1,285.00
Overtime rate per hour after 8 hours	\$164.00

In the event of cancellation, if RailPros Management is given less than 24 hours' notice, it is considered a billable day. Cancellations must be made in writing to UP.Info@RailPros.com.

This quote is based on RailPros understanding of prevailing wage requirements in Webb County, TX.

Invoices are submitted upon completion of the job or at month's end. On-going jobs are billed on a monthly basis. Payments of invoices are due upon receipt. Invoices are subject to a 1.5% fee for every 30 days the payment is delinquent. Please contact RailPros at 877-315-0513 or UP.Info@railpros.com for more information.

The quoted rates are valid for 30 days and is subject to the Services Agreement (SA).

RailPros (SOW) Scope of Work

RailPros agrees to provide flagging and other staff support services to client or its contractors (the "Services") at the dates, locations and times requested by client. The Services will be provided pursuant to the terms and conditions in the Agreement. RailPros will require employees and any subcontractors and agents involved in the providing such Services to comply with the applicable terms of this Agreement in providing such Services. RailPros warrants that (i) Services will be provided in a workmanlike manner, (ii) RailPros Personnel will have the requisite experience, skills, knowledge, training and education to perform Services in a professional manner and in accordance with this Agreement. The Services will be provided in compliance with all governmental laws, regulations, and rules, and in accordance with Maintenance of Way and Signal Department On-Track-Safety Roadway Worker Rules and the Company's Operating Rules. A Scope of Services/Service Quote shall be prepared for each site at which the Services are to be performed, and it shall become apart of this Agreement when authorized in writing by each party's authorized representative. The Scope of Services will set forth, at a minimum, the cost, location, dates, times and expected number of personnel required for each job site.

RailPros Field Services, Inc.

SERVICES AGREEMENT

This Services Agreement ("Agreement") is entered into by and between RailPros Field Services, Inc. ("RailPros") and the entity or individual ("Customer") described in the Scope of Work/Customer Information Request. The SOW is expressly incorporated herein by reference for all purposes. The SOW also provides RailPros' charges for services requested. This Agreement shall become effective upon the earlier of the Customer's executing this agreement or RailPros' reasonably undertaking to perform services requested by the Customer (the "Effective Date").

WHEREAS Customer desires to retain RailPros to provide certain services described and set forth in further detail in the SOW (the "Services"); and

WHEREAS, RailPros has the capability and capacity to provide the Services and—subject to the terms and conditions set forth herein—is willing to perform such Services; and

In consideration of the mutual covenants and agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, RailPros and Customer (hereinafter, collectively, the "Parties," or each, individually, a "Party") agree as follows:

1. RailPros shall provide Services to the Customer: (1) in accordance with the terms of this Agreement; (2) within any parameters set forth in the SOW; and (3) to the reasonable satisfaction of the Customer. In turn, the Customer shall pay RailPros for its services at the applicable daily rate(s) set forth in the SOW.
2. RailPros shall periodically provide Customer with invoices that set forth the value of the Services provided to Customer during a defined period of time (collectively, the "Invoices"; individually, an "Invoice"). Invoiced amounts are due and payable within thirty (30) days of the date included on an Invoice, and Customer shall remit payment to RailPros at 5605 N MacArthur Blvd, Suite 650, Irving, Dallas County, TX 75038. In the event Customer fails to timely remit payment to RailPros as required in this Section 2, RailPros may elect to immediately cease providing Services to Customer—without providing any advance notice to Customer— until Customer remits payment for all amounts owed by Customer for Services. Customer expressly agrees and acknowledges that it shall neither assert nor seek to enforce any claim for damages or penalties arising from RailPros' ceasing performance under this Section 2. RailPros' right to cease providing Services based on nonpayment and/or untimely payment is independent of any right(s) set forth in Section 5 of this Agreement.
3. In the event that Customer contests any charge(s) included on an Invoice and/or asserts that any Services described in an Invoice were deficient, Customer shall submit a written complaint to RailPros (a "Complaint") within fifteen (15) business days of its receipt of the challenged Invoice. A Complaint must set forth (in detail): (1) the Services and/or Invoice entries that Customer is contesting; (2) the basis for Customer's Complaint; and (3) Customer's desired solution. Failure to timely submit a Complaint shall constitute a waiver of any grievances related to the subject Invoice and shall further be construed as an unequivocal agreement to pay all amounts described therein.
4. Customer may terminate this Contract, in whole or in part, at any time without cause, and without liability except for required payment for services rendered by providing at least twenty-four (24) hours written notice to RailPros. Failure to provide timely notice under this provision shall obligate Customer to pay RailPros for one (1) additional days' worth of Services at the applicable daily rate(s) set forth in the SOW.
5. RailPros may terminate this Agreement without liability, effective upon providing notice to Customer, if Customer: (1) materially breaches a provision of this Contract and fails to cure its breach within fifteen (15) days after receipt of written

notice of its breach, or (2) becomes insolvent or admits and/or demonstrates its inability or unwillingness to pay its debts as they become due.

6. This Agreement shall commence as of the Effective Date and shall continue thereafter until the Services described in the SOW are completed or the Contract is terminated.

7. This Agreement benefits solely the Parties hereto and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, confers on any third party any legal or equitable right, benefit or remedy of any nature whatsoever under or by reason of this Agreement.

8. This Agreement may not be altered, amended, modified, or otherwise changed, except by a writing duly executed by the Parties hereto.

9. This Agreement constitutes the final and entire agreement between the Parties, and this Agreement supersedes all prior understandings and agreements, if any, among or between the Parties.

10. The failure of any Party to enforce at any time any provision of this Agreement shall not be construed to be a waiver of such provision, nor in any way affect the validity of this Contract or any part thereof or the right of any person thereafter to enforce each provision. No waiver of any breach of this Agreement shall be held to constitute a waiver of any other breach.

11. This Agreement shall be interpreted and construed under the laws of the State of Texas, and venue for all suits arising out of or relating to this Contract shall be brought exclusively in a Texas state district or county court sitting in Tarrant County, Texas.

12. All invoices, requests, communications, and notices required to be sent to Customer shall be delivered to the address(es) and/or email address(es) set forth in the SOW. All Complaints, requests, communications, and notices required to be sent to RailPros shall be sent to RailPros at 5605 N MacArthur Blvd, Suite 650, Irving, Dallas County, TX 75038, Attention: Legal. Any notice of termination and/or cancellation shall be sent to RailPros at Legal@RailPros.com.

13. Neither of the Parties shall be liable for any delays or failures in performance due to acts of God, strikes, lockouts, labor restrictions by governmental authority, civil riots, war and acts of terrorism.

14. In the event of any subsequent litigation involving the interpretation or enforcement of this Contract, the prevailing Party shall recover against the non-prevailing Party all its costs and reasonable attorneys' fees incurred in connection with the lawsuit.

15. In connection with RailPros' providing the Services, RailPros agrees to obtain the following insurance policies: (1) a Commercial General Liability policy with limits of not less than \$1,000,000 per occurrence and \$2,000,000 general aggregate (the "CGL Policy") and (2) a Commercial Automobile Liability policy with limits of not less than \$1,000,000 (collectively, the "Policies").

The Policies shall include Customer as additional insureds (collectively, the "Additional Insureds"). Coverage for the Additional Insureds shall be primary and non-contributory to any other insurance maintained by Customer. Coverage for Additional Insureds under the CGL Policy shall be set forth via an ISO endorsement form CG 20 26 07 04 (or equivalent endorsement), unless otherwise limited by applicable law. The Policies shall include a Waiver of Subrogation in favor of Customer. RailPros agrees to provide Customer with Certificate(s) of Insurance that verify the foregoing.

In addition, RailPros agrees to maintain Workers' Compensation insurance (the "WC Policy") with limits established by statute in the state where the Services will be provided. All RailPros employees providing Services shall be covered under the WC Policy, including employees who are sole proprietors, members, or partners, whether or not required by applicable law. The WC Policy shall also include a Waiver of Subrogation in favor of Customer.

16. RailPros and Customer each agree to indemnify, defend, and hold the other harmless from any third-party claims, costs, liabilities, judgments, expenses, or damages (including reasonable attorneys' fees and other costs of suit) alleged to arise from the indemnifying party's sole negligence in performing their respective obligations under this Agreement.

Thank you,

By my signature, I acknowledge that I have read, understand, and agree to the terms in the quote and service agreement

RailPros

RYAN MCCARTY
Field Operations Coordinator - Flagging
(877) 315-0513 Option 1

Client Company Representative (Print Name/Sign)

Title

Date

If you have any questions regarding this quote and/or service agreement, or would like further information, please feel free to contact RailPros.

RailPros offers a full suite of right of way services including permitting, utility inspections, railroad engineering services and customizable training. To learn more, visit www.railpros.com

webber

A Ferrovial company

September 18, 2025

City of Laredo
5816 Daugherty Ave
Laredo TX, 78041
Attn: Oscar Martel

Re: CPR No. 5
Manadas Creek WWTP
Job No. CCMA Job No. 73836

Mr. Martel,

PLW Waterworks proposes to complete these modifications as directed for the Lump Sum price of 10,754.06. This proposal is for the work associated with **Electrical Scope additions**

0 additional days will be required to perform this work if executed change order is received within 30 days. Please note, this is an estimated additional time for these particular modification and an excess of modifications can affect the completion date of the project.

Please find the attached Webber cost summary and associated reference material for your review and acceptance. If you have any questions or need additional information, please do not hesitate to call.

Regards,
Webber Waterworks LLC

David Perez-Menendez
Sr. Project Manager

Electrical Scope additions

Scope of Work

This Change Proposal Request covers the following scope additions and modifications:
 - Moving Ground Inside fence
 - RWCP RFI #082
 - Chart Recorder RFI #086
 - Moving Level at Headworks
 - PLC Feed MCC2

Item No.	Description	Qty	Unit	Labor		Non-Taxed Material		Subcontract		Taxed Mat'l/Equip	
				Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
	Subcontractor W-Industries - Several Scopes. Backup attached.	1.00	LS					\$ 8,352.67	\$ 8,352.67		
Subtotal 1											
Direct Cost Subtotal Prime Contractor & Subcontractor A					-		-		8,352.67		-
Payroll Taxes and Worker Compensation @ 54.0%					-		n/a		n/a		n/a
Tax @ 8.25%					n/a		n/a		n/a		-
Equipment Compensation @15%					n/a		n/a		n/a		-
Subtotal 2					-		-		8,352.67		-
Overhead & Profit @ 25.0% - Labor, Equip, & Material, @ 25.0% - Subs					-		-		2,088.17		-
Subtotal 3					-		-		10,440.84		-
Warranty @ 1.00%					-		-		104.41		-
Bonds @ 1.00%					-		-		104.41		-
Insurance @ 1.00%					-		-		104.41		-
Subtotal 4					-		-		10,754.06		-
Total of all columns					10,754.06						
Other					-						

Grand Total Cost 10,754.06

CHANGE ORDER PROPOSAL FORM

Project: Manadas Creek WWTP
Owner: City of Laredo
Contractor: W-Industries
Project Manager: Brian Lingua

Change Proposal No. 3
 Date Submitted 8/12/2025

Brief Description of proposed work to be performed:

RFI's and other CO - Breakdown

Sub-Contractor Work											
Description	Man Hours	Hourly Rate	Labor Total	Mtl. Qty. Req'd	Mtl. Unit Cost	Material Total	Equip Time Units	Equip Time Cost	Equip Total	Lump Sum	Sub Totals
Moving ground inside fence	26.88	\$ 65.00	\$ 1,747.20	1	\$ 360.49	\$ 360.49	1	\$ 1,427.22	\$ 1,427.22		
RWCP Feed - RFI #82	9.03	\$ 65.00	\$ 586.95	1	\$ 256.23	\$ 256.23					
Chart Recorder - RFI #86	1.42	\$ 65.00	\$ 92.30	1	\$ 89.89	\$ 89.89					
Moving Level - Headworks	7.51	\$ 65.00	\$ 488.15	1	\$ 496.48	\$ 496.48					
PLC Feed - MCC2	4.16	\$ 65.00	\$ 270.40	1	\$ 173.88	\$ 173.88					
			\$ -			\$ -					
Sub-Contractor Direct Work			\$ 3,185.00			\$ 1,376.97			\$ 1,427.22		\$ -

The itemized breakdown is to include:

- 1) List of materials and equipment to be installed;
- 2) Man hours for labor by classification;
- 3) Equipment used in construction;
- 4) Consumable supplies, fuels, and materials;
- 5) Royalties and patent fees;
- 6) Bonds and insurance;
- 7) Overhead and profit;
- 8) Field office costs;
- 9) Home office cost; and
- 10) Other items of cost.

Sub-Contractor Work Totals	
Labor Sub Total	\$ 3,185.00
40% Overhead (office Labor)	\$ 1,274.00
Labor Total	\$ 4,459.00
Material Total	\$ 1,376.97
Equipment Total	\$ 1,427.22
Sub Total	\$ 7,263.19
15% Sub-Contractor's Fee	\$ 1,089.48
Total Cost	\$ 8,352.67



REQUEST FOR INFORMATION

No.

82

RFI TITLE: RWCP RASWAS

DATE: 4/18/2025

RESPONSE REQUIRED BY: 5/3/2025

PROJECT: Manadas Creek WWTP

Project No : P5H

To: B. Ryan Bell, P.E.

CC:

WORK IMPACT: YES NO

SCHEDULE IMPACT: YES NO

COST IMPACT: YES NO

REQUEST:

Hi Ryan,
I hope you're doing well.
Per our electrical subcontractor's request, we're submitting this RFI to clarify what circuit and wire size should be used to feed the RWCP (Remote Water Control Panel).
Please refer to the attached file for context. Let us know if you need any additional information to provide an answer.

REF. DRAWINGS: Project plans

ATTACHMENTS:

REQUESTED BY: Javier Reyes

DATE: 4/18/2025

RESPONSE:

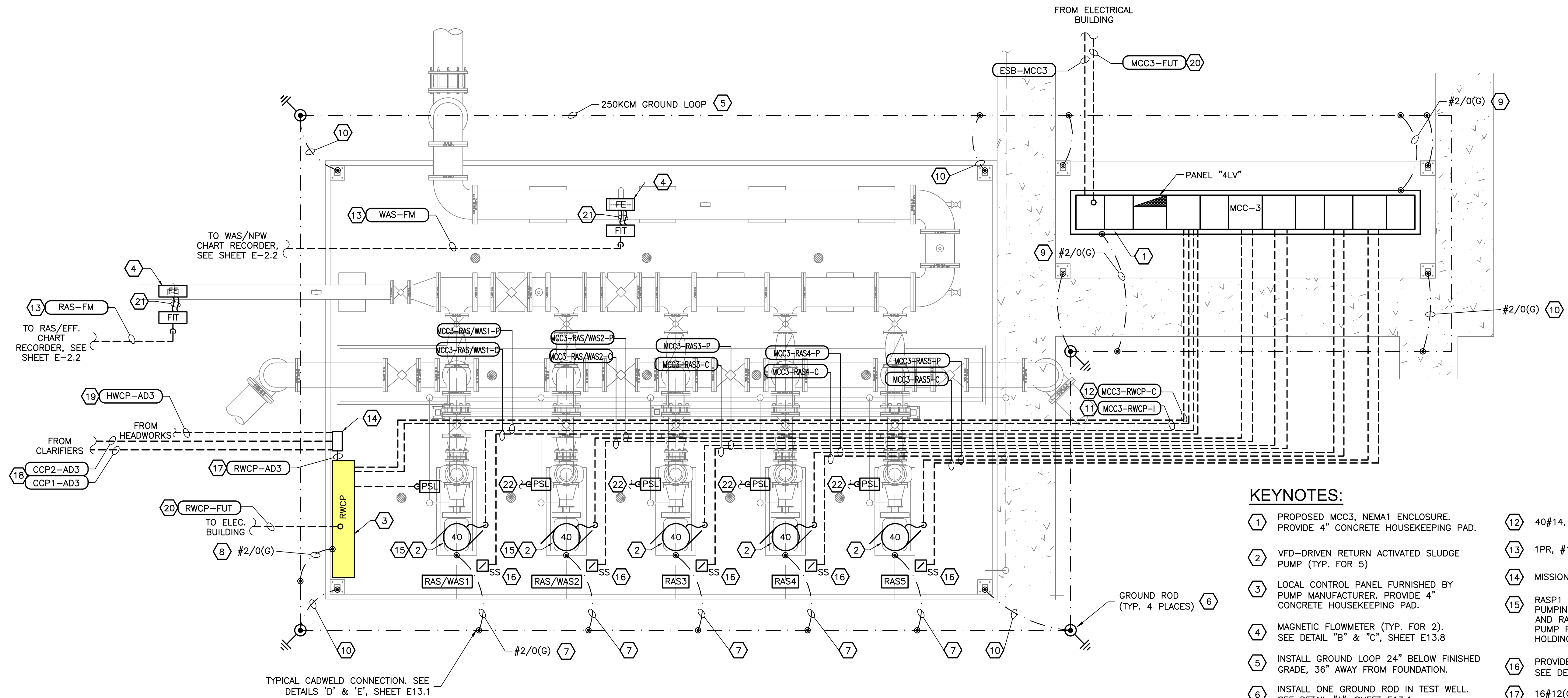
- 1. This panel should be 120V, 1-phase. Confirm RWCP voltage with Raw Water CP manufacturer.
2. Provide 120V, 1-phase circuit from MCC4/ Panel 4LV to power CP. [4LV-11]

SIGNATURE:

Handwritten signature of Elizabeth Jegner-Zarate

RESPONSE SIGNED BY: Elizabeth Jegner-Zarate, PE

DATE: 4/29/2025

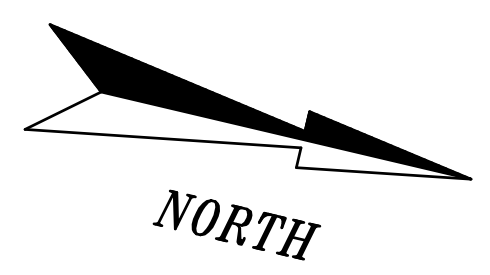


TYPICAL CADWELD CONNECTION. SEE DETAILS 'D' & 'E', SHEET E13.1

KEYNOTES:

- | | | | |
|----|---|----|---|
| 1 | PROPOSED MCC3, NEMA1 ENCLOSURE. PROVIDE 4" CONCRETE HOUSEKEEPING PAD. | 12 | 40#14, 1 1/2"C (120VAC SIGNALS) |
| 2 | VFD-DRIVEN RETURN ACTIVATED SLUDGE PUMP (TYP. FOR 5) | 13 | 1PR, #18T/S, 1"C. (FLOW SIGNALS) |
| 3 | LOCAL CONTROL PANEL FURNISHED BY PUMP MANUFACTURER. PROVIDE 4" CONCRETE HOUSEKEEPING PAD. | 14 | MISSION AUTODIALER "AD-3" |
| 4 | MAGNETIC FLOWMETER (TYP. FOR 2). SEE DETAIL "B" & "C", SHEET E13.8 | 15 | RASP1 WILL BE NORMALLY USED FOR PUMPING WAS TO SLUDGE HOLDING TANKS AND RASP2 CAN BE USED AS BACK-UP PUMP FOR PUMPING WAS TO SLUDGE HOLDING TANKS |
| 5 | INSTALL GROUND LOOP 24" BELOW FINISHED GRADE, 36" AWAY FROM FOUNDATION. | 16 | PROVIDE SUPPORT FOR CONTROL STATION. SEE DETAIL "F", SHEET E13.1 |
| 6 | INSTALL ONE GROUND ROD IN TEST WELL. SEE DETAIL "A", SHEET E13.1 | 17 | 16#12(CA), 1"C. |
| 7 | BOND #2/0 COPPER GROUND WIRE TO PUMP FRAME. SEE DETAIL "B" (SIM.), SHEET E13.1 (TYPICAL 5 PLACES) | 18 | 4#12(CA), 1"C. |
| 8 | BOND CABINET GROUND TO GROUND LOOP. | 19 | 4#12(CA), 4#12(SPARE), 1"C. |
| 9 | BOND MCC GROUND BUS TO GROUND LOOP. | 20 | 2" EMPTY CONDUIT FOR FUTURE CONTROL, TO ELEC. BUILDING |
| 10 | BOND BUILDING AND FOUNDATION STEEL TO GROUND LOOP. TYPICAL 8 PLACES. | 21 | 2 SETS : 1"C. CABLE SUPPLIED W/ MAGMETER. CONTRACTOR TO FIELD VERIFY LENGTH REQUIRED. |
| 11 | 5PR #18T/S, 5 TRIAD #18T/S, 1 1/2"C (4-20mA SIGNALS) | 22 | 2#12(C), 1"C. PRESSURE SWITCH CONDUIT TO "RWCP". TERMINATIONS AT CONTROL PANEL OMITTED FOR CLARITY. |

1 RAS/WAS PUMP BUILDING PLAN- ELECTRICAL
SCALE: 1/4" = 1'-0"



NOTES:

1. REFER TO ONE-LINE DIAGRAMS, SHEETS E0.1-E0.8 FOR WIRING & CONDUIT SIZES AND SHEETS E12.2-E12.3 FOR DUCTBANK SECTION DETAILS.

MANADAS WWTP - DUCTBANK CONDUIT SCHEDULES								
SECTION	DESIGNATION	SIZE	ORIGIN	DESTINATION	WIRING DESC. & QUANTITY	DESCRIPTION	FUTURE POWER OR I&C	
D1	EHV-OCCP	1.25"	EHV	ODOR CONTROL UNIT	SEE ONE-LINE	POWER FOR ODOR CONTROL UNIT PANEL	N POWER	
	OCCP-FUT	2"	FUTURE SCADA	OCCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO OCCP	Y I/C	
E	OCCU-AD2	1"	AD2	OCCP	2#12(A)	ODOR CONTROL SIGNAL TO ELEC BLDG AUTODIALER	N I/C	
	MCC2-AB.2A	4"	MCC2	AERATION BASIN 2	SEE ONE-LINE	POWER FOR AERATION BASIN MOTOR 2A	N POWER	
	MCC2-AB.2B	4"	MCC2	AERATION BASIN 2	SEE ONE-LINE	POWER FOR AERATION BASIN MOTOR 2B	N POWER	
	MCC2-AB.2C	4"	MCC2	AERATION BASIN 2	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE AERATION BASIN MOTOR 2C	Y POWER	
	EHV-AWG.2A	1"	EHV	AERATION BASIN 2	SEE ONE-LINE	POWER FOR AERATION WEIR GATE 2A	N POWER	
	EHV-AWG.2B	1"	EHV	AERATION BASIN 2	SEE ONE-LINE	POWER FOR AERATION WEIR GATE 2B	N POWER	
	MCC2-AABM.2A	1"	MCC2	AERATION BASIN 2	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE BASIN MIXER 2A	Y POWER	
	MCC2-AABM.2B	1"	MCC2	AERATION BASIN 2	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE BASIN MIXER 2B	Y POWER	
	MCC2-DG2	1"	MCC2	AERATION BASIN 2	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE DIVERTIR GATE 2	Y POWER	
	MCC2-EG2	1"	MCC2	AERATION BASIN 2	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE ELIMINATOR GATE 2	Y POWER	
	ELV-5,6	1"	ELV	AERATION BASIN 2	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR AERATION BASIN 2	N POWER	
	ELV-8	1"	ELV	AERATION BASIN 2	#12(P), #12(N), #12(G)	DO METER CONDUIT FOR AERATION BASIN 2	N POWER	
	ELV-20	1"	ELV	AERATION BASIN 2	#12(P), #12(N), #12(G)	DO METER CONDUIT FOR AERATION BASIN 2	N POWER	
	MCC2-LV-ABCP2	1"	MCC2 LV	ABCP2	#12(P), #12(N), #12(G)	POWER CONDUIT FOR ABCP2	N POWER	
	MCC2-ABCP2-I	1"	MCC2	ABCP2	2 PR. #18 T/S CABLE	INSTRUMENTATION CONDUIT FOR AERATION BASIN 2 CTRL PANEL	N I/C	
	MCC2-ABCP2-C	1.5"	MCC2	ABCP2	21#14(CA), 8#14(SPARE)	CONTROL CONDUIT FOR AERATION BASIN 2 CTRL PANEL	N I/C	
	F	MSB-1HV	2 SETS OF 3"	MSB	1HV	SEE ONE-LINE	POWER FOR 1HV IN SOLIDS HANDLING BUILDING	N POWER
		ESB-MCC1	5 SETS OF 4"	ESB	MCC1	SEE ONE-LINE	POWER FOR MCC1 IN UV BUILDING	N POWER
		MSB-MCC4	3 SETS OF 3"	MSB	MCC4	SEE ONE-LINE	POWER FOR MCC4	N POWER
		UVMCP-FUT	2"	FUTURE SCADA	UVMCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO UVMCP	Y I/C
MCC1-FUT		2"	FUTURE SCADA	MCC1	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC1	Y I/C	
LSCP-FUT		2"	FUTURE SCADA	LSCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO LSCP	Y I/C	
SHMCP-FUT		2"	FUTURE SCADA	SHMCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO SHMCP	Y I/C	
FILT-FUT		2"	FUTURE SCADA	FUTURE FILTERS	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO FILTERS	Y I/C	
OFC-FUT		2"	FUTURE SCADA	OFFICE BUILDING	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO OFFICE BUILDING	Y I/C	
MCC4-FUT		2"	FUTURE SCADA	MCC4	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC4	Y I/C	
NPW-FM		1"	NPW FM	WAS/NPW RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	NPW FLOWMETER SIGNAL	N I/C	
EFF-FM		1"	EFF FM	RAS/EFF RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	EFF FLOWMETER SIGNAL	N I/C	
F1		MSB-1HV	2 SETS OF 3"	MSB	1HV	SEE ONE-LINE	POWER FOR 1HV IN SOLIDS HANDLING BUILDING	N POWER
		ESB-MCC1	5 SETS OF 4"	ESB	MCC1	SEE ONE-LINE	POWER FOR MCC1 IN UV BUILDING	N POWER
		MSB-MCC4	3 SETS OF 3"	MSB	MCC4	SEE ONE-LINE	POWER FOR MCC4	N POWER
	MCC1-LS2	3"	MCC1	LIFT STATION PJB2	SEE ONE-LINE	POWER FOR LIFT STATION PUMP 2	N POWER	
	MCC1-LS4	3"	MCC1	LIFT STATION PJB4	SEE ONE-LINE	POWER FOR LIFT STATION PUMP 4	N POWER	
	MCC1-LS6	3"	MCC1	LIFT STATION PJB6	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE LIFT STATION PUMP 6	Y POWER	
	3LV-20,22	1"	3LV	LIFT STATION	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR LIFT STATION	N POWER	
	LS2-APS	1"	LSCP	LIFT STATION CJB2	2#12(P), #12(G), 2#14(S), 8#14(A)	ALARM/STATUS/120V CONTROL POWER FOR LIFT STATION PUMP 2	N I/C	
	LS4-APS	1"	LSCP	LIFT STATION CJB4	2#12(P), #12(G), 2#14(S), 8#14(A)	ALARM/STATUS/120V CONTROL POWER FOR LIFT STATION PUMP 4	N I/C	
	LS6-APS	1"	LSCP	LIFT STATION CJB6	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE LIFT STATION PUMP 6	Y I/C	
	LS2-C	1"	LSCP	LIFT STATION CJB2	4#12(C)	CONTROLS FOR LIFT STATION PUMP 2	N I/C	
	LS4-C	1"	LSCP	LIFT STATION CJB4	4#12(C)	CONTROLS FOR LIFT STATION PUMP 4	N I/C	
	LS6-C	1"	LSCP	LIFT STATION CJB6	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE LIFT STATION PUMP 6	Y I/C	
	UVMCP-FUT	2"	FUTURE SCADA	UVMCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO UVMCP	Y I/C	
	MCC1-FUT	2"	FUTURE SCADA	MCC1	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC1	Y I/C	
	LSCP-FUT	2"	FUTURE SCADA	LSCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO LSCP	Y I/C	
	SHMCP-FUT	2"	FUTURE SCADA	SHMCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO SHMCP	Y I/C	
	FILT-FUT	2"	FUTURE SCADA	FUTURE FILTERS	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO FILTERS	Y I/C	
	OFC-FUT	2"	FUTURE SCADA	OFFICE BUILDING	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO OFFICE BUILDING	Y I/C	
	MCC4-FUT	2"	FUTURE SCADA	MCC4	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC4	Y I/C	
	NPW-FM	1"	NPW FM	WAS/NPW RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	NPW FLOWMETER SIGNAL	N I/C	
	EFF-FM	1"	EFF FM	RAS/EFF RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	EFF FLOWMETER SIGNAL	N I/C	
	F2	MSB-1HV	2 SETS OF 3"	MSB	1HV	SEE ONE-LINE	POWER FOR 1HV IN SOLIDS HANDLING BUILDING	N POWER
		MSB-MCC4	3 SETS OF 3"	MSB	MCC4	SEE ONE-LINE	POWER FOR MCC4	N POWER
		MCC1-LS1	3"	MCC1	LIFT STATION PJB1	SEE ONE-LINE	POWER FOR LIFT STATION PUMP 1	N POWER
MCC1-LS3		3"	MCC1	LIFT STATION PJB3	SEE ONE-LINE	POWER FOR LIFT STATION PUMP 3	N POWER	
MCC1-LS5		3"	MCC1	LIFT STATION PJB5	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE LIFT STATION PUMP 5	Y POWER	
MCC1-FILT		2"	MCC1	FUTURE FILTERS	SEE ONE-LINE	EMPTY POWER CONDUIT FOR FUTURE FILTERS	Y POWER	
MCC1-LSM1		1"	MCC1	LIFT STATION MJB	SEE ONE-LINE	POWER FOR LIFT STATION MIXER	N POWER	
MCC1-JC1		1"	MCC1	LIFT STATION	SEE ONE-LINE	POWER FOR LIFT STATION JIB CRANE	N POWER	
3LV-1,7		1"	3LV	LIFT STATION	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR LIFT STATION	N POWER	
UV-FM1		1"	UV/INFL. METER	UV BUILDING	SEE SHEET E-8.1	UV/INFLUENT FLOWMETER SIGNAL CONDUIT	N I/C	
UV-FM2		1"	UV/INFL. METER	UV BUILDING	SEE SHEET E-8.1	UV/INFLUENT FLOWMETER SIGNAL CONDUIT	N I/C	
SHMCP-FUT		2"	FUTURE SCADA	SHMCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO SHMCP	Y I/C	
FILT-FUT		2"	FUTURE SCADA	FUTURE FILTERS	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO FILTERS	Y I/C	
OFC-FUT		2"	FUTURE SCADA	OFFICE BUILDING	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO OFFICE BUILDING	Y I/C	
MCC4-FUT		2"	FUTURE SCADA	MCC4	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC4	Y I/C	
LSCP-LTJB		1"	LSCP	LIFT STATION LTJB	1 PR. #18 T/S CABLE	LEVEL TRANSMITTER FOR LIFT STATION	N I/C	
LSCP-FJB		1"	LSCP	LIFT STATION FJB	6#12(C)	LEVEL FLOATS FOR LIFT STATION	N I/C	
LSCP-AH		1"	LSCP	LIFT STATION	4#14(CA)	ALARM AND HORN FOR LIFT STATION	N I/C	
LS1-APS		1"	LSCP	LIFT STATION CJB1	2#12(P), #12(G), 2#14(S), 8#14(A)	ALARM/STATUS/120V CONTROL POWER FOR LIFT STATION PUMP 1	N I/C	
LS3-APS		1"	LSCP	LIFT STATION CJB3	2#12(P), #12(G), 2#14(S), 8#14(A)	ALARM/STATUS/120V CONTROL POWER FOR LIFT STATION PUMP 3	N I/C	
LS5-APS		1"	LSCP	LIFT STATION CJB5	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE LIFT STATION PUMP 5	Y I/C	
LS1-C		1"	LSCP	LIFT STATION CJB1	4#12(C)	CONTROLS FOR LIFT STATION PUMP 1	N I/C	
LS3-C		1"	LSCP	LIFT STATION CJB3	4#12(C)	CONTROLS FOR LIFT STATION PUMP 3	N I/C	
LS5-C		1"	LSCP	LIFT STATION CJB5	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE LIFT STATION PUMP 5	Y I/C	

A CONDUIT SCHEDULES - SECTIONS D1-F2
SCALE: NTS

MANADAS WWTP - DUCTBANK CONDUIT SCHEDULES								
SECTION	DESIGNATION	SIZE	ORIGIN	DESTINATION	WIRING DESC. & QUANTITY	DESCRIPTION	FUTURE POWER OR I&C	
G	MSB-MCC4	3 SETS OF 3"	MSB	MCC4	SEE ONE-LINE	POWER FOR MCC4	N POWER	
	MCC4-FUT	2"	FUTURE SCADA	MCC4	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC4	Y I/C	
	MCC4-AD4	1"	AD4	MCC4	10#12(CA)	MCC4 SIGNAL TO SOLIDS HANDLING BLDG AUTODIALER	N I/C	
GH	MSB-1HV	2 SETS OF 3"	MSB	1HV	SEE ONE-LINE	POWER FOR 1HV IN SOLIDS HANDLING BUILDING	N POWER	
	MSB-MCC4	3 SETS OF 3"	MSB	MCC4	SEE ONE-LINE	POWER FOR MCC4	N POWER	
	MCC1-FILT	2"	MCC1	FUTURE FILTERS	SEE ONE-LINE	EMPTY POWER CONDUIT FOR FUTURE FILTERS	Y POWER	
	UV-FM1	1"	UV/INFL. METER	UV BUILDING	SEE SHEET E-8.1	UV/INFLUENT FLOWMETER SIGNAL CONDUIT	N I/C	
	UV-FM2	1"	UV/INFL. METER	UV BUILDING	SEE SHEET E-8.1	UV/INFLUENT FLOWMETER SIGNAL CONDUIT	N I/C	
	SHMCP-FUT	2"	FUTURE SCADA	SHMCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO SHMCP	Y I/C	
	FILT-FUT	2"	FUTURE SCADA	FUTURE FILTERS	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO FILTERS	Y I/C	
	OFC-FUT	2"	FUTURE SCADA	OFFICE BUILDING	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO OFFICE BUILDING	Y I/C	
	MCC4-FUT	2"	FUTURE SCADA	MCC4	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC4	Y I/C	
	H	MSB-1HV	2 SETS OF 3"	MSB	1HV	SEE ONE-LINE	POWER FOR 1HV IN SOLIDS HANDLING BUILDING	N POWER
MCC1-FILT		2"	MCC1	FUTURE FILTERS	SEE ONE-LINE	EMPTY POWER CONDUIT FOR FUTURE FILTERS	Y POWER	
SHMCP-FUT		2"	FUTURE SCADA	SHMCP	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO SHMCP	Y I/C	
FILT-FUT		2"	FUTURE SCADA	FUTURE FILTERS	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO FILTERS	Y I/C	
OFC-FUT		2"	FUTURE SCADA	OFFICE BUILDING	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO OFFICE BUILDING	Y I/C	
MCC4-AD4		1"	AD4	MCC4	10#12(CA)	MCC4 SIGNAL TO SOLIDS HANDLING BLDG AUTODIALER	N I/C	
J		SHMCP-SFP1.P	1"	SHMCP	SLUDGE PUMP STATION	SEE ONE-LINE	POWER FOR SLUDGE PUMP 1	N POWER
		SHMCP-SFP2.P	1"	SHMCP	SLUDGE PUMP STATION	SEE ONE-LINE	POWER FOR SLUDGE PUMP 2	N POWER
		SHMCP-SFM0V1	1"	SHMCP	SLUDGE PUMP STATION	SEE ONE-LINE	POWER FOR SLUDGE FEED MOV 1	N POWER
		SHMCP-SFM0V2	1"	SHMCP	SLUDGE PUMP STATION	SEE ONE-LINE	POWER FOR SLUDGE FEED MOV 2	N POWER
	11V-2,5	1"	11V	SLUDGE HOLDING TANKS	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR SLUDGE HOLDING TANKS	N POWER	
	11V-1,6	1"	11V	SLUDGE PUMP STATION	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR SLUDGE PUMP STATION	N POWER	
	11V-10	1"	11V	SLUDGE HOLDING TANKS	#12(P), #12(N), #12(G)	POWER FOR SLUDGE HOLDING TANK ALARM/HORN	N POWER	
	1HV-DWG1	0.75"	1HV	SLUDGE HOLDING TANKS	SEE ONE-LINE	POWER FOR SLUDGE HOLDING TANK 1 DECAN'T WEIR GATE MOV	N POWER	
	1HV-DWG2	0.75"	1HV	SLUDGE HOLDING TANKS	SEE ONE-LINE	POWER FOR SLUDGE HOLDING TANK 2 DECAN'T WEIR GATE MOV	N POWER	
	SHMCP-SHT.J	1"	SHMCP	SLUDGE HOLDING TANKS	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE SIGNALS	Y I/C	
	SHMCP-SHT.C	1"	SHT1/2	SHMCP	4#12(C)	LEVEL FLOAT SHUTDOWN SIGNALS	N I/C	
	SHMCP-SFP1.C	1"	SHMCP	SLUDGE PUMP STATION	6#14(CA)	CONTROLS AND ALARM FOR SLUDGE PUMP 1	N I/C	
	SHMCP-SFP2.C	1"	SHMCP	SLUDGE PUMP STATION	6#14(CA)	CONTROLS AND ALARM FOR SLUDGE PUMP 2	N I/C	
	K	ESB-MCC3	4 SETS OF 4"	ESB	MCC3	SEE ONE-LINE	POWER FOR MCC3 AT RAS/WAS PUMP STATION	N POWER
		EHV-HWCP1	1"	EHV	HEADWORKS CONTROL PANEL	SEE ONE-LINE	POWER FOR HEADWORKS CONTROL PANEL 1	N POWER
EHV-HWCP2		1"	EHV	FUT. HEADWORKS CTRL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE HEADWORKS CONTROL PANEL 2	Y POWER	
EHV-GCP		1"	EHV	GRIT/CLASSIFIER CONT. PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE GRIT/CLASSIFIER CONTROL PANEL	Y POWER	
ELV-9,10		1"	ELV	HEADWORKS STRUCTURE	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR HEADWORKS STRUCTURE	N POWER	
ELV-22		1"	ELV	SPLITTER BOX	#12(P), #12(N), #12(G)	LIGHTING CONDUIT FOR SPLITTER BOX STRUCTURE	N POWER	
WAS-FM		1"	WAS FM	WAS/NPW RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	WAS FLOWMETER SIGNAL	N I/C	
RAS-FM		1"	RAS FM	RAS/EFF RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	RAS FLOWMETER SIGNAL	N I/C	
HWCP-AD3		1"	AD3	HEADWORKS CONTROL PANEL	4#14(A), 4#14(SPARE)	HEADWORKS SIGNAL TO RAS/WAS PUMP STATION AUTODIALER	N I/C	
HWCP-FUT		2"	FUTURE SCADA	HEADWORKS CONTROL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO HWCP	Y I/C	
RWCP-FUT		2"	FUTURE SCADA	RAS/WAS CONTROL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO RWCP	Y I/C	
MCC3-FUT		2"	FUTURE SCADA	MCC3	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC3	Y I/C	
K1		ESB-MCC3	4 SETS OF 4"	ESB	MCC3	SEE ONE-LINE	POWER FOR MCC3 AT RAS/WAS PUMP STATION	N POWER
		WAS-FM	1"	WAS FM	WAS/NPW RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	WAS FLOWMETER SIGNAL	N I/C
		RAS-FM	1"	RAS FM	RAS/EFF RECORDER - ELEC BLDG	1 PR. #18 T/S CABLE	RAS FLOWMETER SIGNAL	N I/C
	RWCP-FUT	2"	FUTURE SCADA	RAS/WAS CONTROL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO RWCP	Y I/C	
	MCC3-FUT	2"	FUTURE SCADA	MCC3	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO MCC3	Y I/C	
L	EHV-HWCP1	1"	EHV	HEADWORKS CONTROL PANEL	SEE ONE-LINE	POWER FOR HEADWORKS CONTROL PANEL	N POWER	
	EHV-HWCP2	1"	EHV	FUT. HEADWORKS CTRL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE HEADWORKS CONTROL PANEL 2	Y POWER	
	EHV-GCP	1"	EHV	GRIT/CLASSIFIER CONT. PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE GRIT/CLASSIFIER CONTROL PANEL	Y POWER	
	ELV-9,10	1"	ELV	HEADWORKS STRUCTURE	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR HEADWORKS STRUCTURE	N POWER	
	HWCP-FUT	2"	FUTURE SCADA	HEADWORKS CONTROL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO HWCP	Y I/C	
L1	EHV-HWCP1	1"	EHV	HEADWORKS CONTROL PANEL	SEE ONE-LINE	POWER FOR HEADWORKS CONTROL PANEL	N POWER	
	EHV-HWCP2	1"	EHV	FUT. HEADWORKS CTRL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE HEADWORKS CONTROL PANEL 2	Y POWER	
	ELV-9,10	1"	ELV	HEADWORKS STRUCTURE	2#12(P), 2#12(N), #12(G)	LIGHTING AND RECEPTACLE CONDUIT FOR HEADWORKS STRUCTURE	N POWER	
	HWCP-FUT	2"	FUTURE SCADA	HEADWORKS CONTROL PANEL	EMPTY CONDUIT	EMPTY CONDUIT FOR FUTURE FIBER TO HWCP	Y I/C	
	HWCP-AD3	1"	AD3	HEADWORKS CONTROL PANEL	4#14(A), 4#14(SPARE)	HEADWORKS SIGNAL TO RAS/WAS PUMP STATION AUTODIALER	N I/C	
M	ATS1-GEN	8 SETS OF 4"	GENERATOR	ATS1	SEE ONE-LINE	POWER CONDUIT FROM GENERATOR	N POWER	
	ATS2-GEN	8 SETS OF 4"	GENERATOR	ATS2	SEE ONE-LINE	POWER CONDUIT FROM GENERATOR	N POWER	
	ELV-12	1"	GENERATOR	ELV	#12(P), #12(N), #12(G)	POWER CONDUIT FOR GENERATOR CONTROLS	N POWER	
	ELV-14	1"	GENERATOR	ELV	#12(P), #12(N), #12(G)	POWER CONDUIT FOR GEN. BATTERY CHARGER	N POWER	
	ELV-15,17	1"	GENERATOR	ELV	2#12(P), 2#12(N), #12(G)	POWER CONDUIT FOR GENERATOR CRANKCASE HEATER	N POWER	
	GEN-ANN	1"	GENERATOR	REMOTE ANNUNCIATOR	1 PR. #18 T/S CABLE	CONTROL CONDUIT FOR REMOTE ANNUNCIATOR	N I/C	
	GEN-CTRL	2"	GENERATOR	MAIN CONTROL PANEL	4#14(C), 4#14(SPARE)	CONTROL CONDUIT FOR GENSET	N I/C	
	GEN-ATS1.CTRL	2"	GENERATOR	ATS1	4#14(C), 4#14(SPARE)	CONTROL CONDUIT FOR ATS1 FROM GENSET	N I/C	
	GEN-ATS2.CTRL	2"	GENERATOR					



REQUEST FOR INFORMATION

No.

86

RFI TITLE: Chart Recorder

DATE: 5/9/2025

RESPONSE REQUIRED BY: 5/24/2025

PROJECT: Manadas Creek WWTP

Project No : P5H

To: B. Ryan Bell, P.E.

CC:

WORK IMPACT: YES NO

SCHEDULE IMPACT: YES NO

COST IMPACT: YES NO

REQUEST:

We have installed two Chart Recorders side by side on the wall as shown in the design. However, the electrical plans indicate only one Chart Recorder with no circuit assigned to it. Please clarify the following:

1. Should we provide a dedicated circuit for each Chart Recorder?
2. Can both Chart Recorders share a single circuit?
3. If separate circuits are required, please provide specifications.

REF. DRAWINGS: Project plans

ATTACHMENTS:

REQUESTED BY: Javier Reyes

DATE: 5/9/2025

RESPONSE:

Provide separate circuits: 2LV-5 and 2LV-7.

SIGNATURE:

RESPONSE SIGNED BY: Liz Segner-Sarate

DATE: 5/16/2025

Espejo, Alejandro

From: Ryan Bell <rbell@gilpinengineering.com>
Sent: Monday, July 7, 2025 4:08 PM
To: Espejo, Alejandro; Reyes Martinez, Javier
Subject: FW: Location LSHH-202 at HW

External email. Caution: Do not click links or attachments unless you recognize the sender and know the content is safe.

Alejandro,

Please see response below.

B. Ryan Bell, PE | O: 512.220.8100 M: 512.573.3397 | 9701 Brodie Lane # 203, Austin TX 78748



From: Liz Segner-Zarate <liz@jrseaengineering.com>
Sent: Monday, July 7, 2025 4:07 PM
To: Ryan Bell <rbell@gilpinengineering.com>
Subject: RE: Location LSHH-202 at HW

Ryan,

The PID shows it in the correct location- should be in the influent basin before the screens.

Thank you,

Elizabeth Segner-Zarate, PE
JRSA Engineering, INC
TBPELS Firm# 3997
6101 W. Courtyard Dr. 1-200
Austin, TX 78730
512-452-8789 (Office)
512-942-7048 (Cell)

From: Ryan Bell <rbell@gilpinengineering.com>
Sent: Thursday, July 3, 2025 10:58 AM
To: Liz Segner-Zarate <liz@jrseaengineering.com>
Subject: FW: Location LSHH-202 at HW

Good morning Liz,

Can you answer the question below?

Thanks,

Ryan

B. Ryan Bell, PE | O: 512.220.8100 M: 512.573.3397 | 9701 Brodie Lane # 203, Austin TX 78748



From: Espejo, Alejandro <aespejo@wwebber.com>
Sent: Tuesday, July 1, 2025 2:15 PM
To: Ryan Bell <rbell@gilpinengineering.com>
Cc: Reyes Martinez, Javier <jreyes@wwebber.com>
Subject: Location LSHH-202 at HW

Hello Ryan,

We have a new question that I believe we can resolve by email instead of an RFI. It is regarding the location of the LSHH at the headworks. From the P&ID we believe the level switch should be installed upstream of the bar screen. However, based on the electrical drawing, it is located downstream of the bar screen.

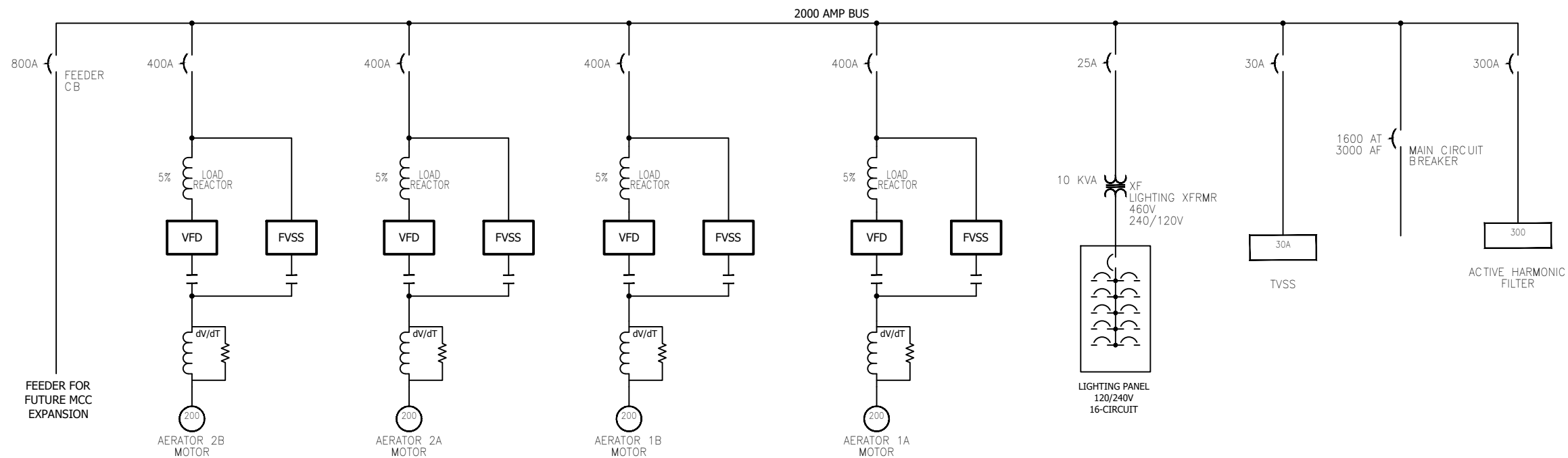
Can you confirm which is the correct location for this instrument? We can submit an official RFI if you consider necessary

Thank you

Alejandro Espejo Sanchez
Sr Commissioning Engineer
Waterworks



1725 Hughes Landing Blvd., Suite 1200
The Woodlands, Texas 77380
C. 346.268.8872
aespejo@wwebber.com | wwebber.com



There is no feed for PLC.

LOAD PANEL SCHEDULE

PANEL:	LIGHTING PANEL				VOLTAGE:	120/240V 3-WIRE
LOCATION:	MCC 2-11J				AMPACITY:	100
MOUNTING:	MCC UNIT	TOTAL LOAD A		TOTAL LOAD B		
AIC RATING:	10KA	.84		.84		TOTAL SPACES: 16
LOAD DESCRIPTION	CONNECTED KVA	CIRCUIT AMPS	CIRCUIT AMPS	CONNECTED VA	LOAD DESCRIPTION	
	A B			A B		
BASIN 1 CONTROL PANEL	.6	1 20A	20A 2	.12	DO ANALYZER 310A	
BASIN 2 CONTROL PANEL		3 20A	20A 4	.12	DO ANALYZER 310B	
DO ANALYZER 320A	.12	5 20A	20A 6	-	SPARE	
DO ANALYZER 320B		7 20A	20A 8	-	SPARE	
SPARE	-	9 20A	20A 10	-	SPARE	
SPARE	-	11 20A	20A 12	-	SPARE	
SPARE	-	13 20A	20A 14	-	SPARE	
SPARE	-	15 20A	20A 16	-	SPARE	
		17 20A	20A 18			
		19 20A	20A 20			
		21 20A	20A 22			
		23 20A	20A 24			
		25 20A	20A 26			
		27 20A	20A 28			
		29 20A	20A 30			
TOTAL LOAD	.72 .72			.12 .12		

