

## Gupta & Associates, Inc.

consulting engineers TBPE Reg. #F-2593 13717 Neutron Road Dallas, Texas 75244 Tel: (972) 490-7661

18 November 2022

City of Pflugerville, Texas 15500 Sun Light Near Way, #B Pflugerville, Texas 78660

Attn: Brandon Pritchett, P.E.

Re: Pflugerville Surface Water Treatment Plant Standby Generator

Change Order #02 Recommendation

Dear Mr. Pritchett:

The Surface Water Treatment Plant Generator Project is experiencing equipment delays that require adjusting the location of the generator to allow for existing electrical infrastructure to remain in place now in order to allow a more streamlined installation and changeover of power later. Additionally, during construction, the General Contractor, McDonald Municipal and Industrial (MM&I) identified a 12" waterline that is currently in use. This waterline is shown differently in record drawings and was not identified in the SUE work. MM&I was requested to evaluate adjusting the generator location, the relocation of the 12" waterline, and miscellaneous other modifications identified.

A few other observations regarding scheduling:

- 1. The generator and switchgear to be installed permanently at the Surface Water Treatment Plant (SWTP) will not be delivered until February of 2023.
- 2. The pad-mounted transformers will not be delivered until November of 2023.
- 3. The switchgear and generator can be tested and commissioned prior to the delivery of the padmounted transformers in April 2023, allowing for the rental generators to be returned at that time.
- 4. The rental transformer will need to be onsite until December 2023.
- 5. The 12" waterline relocation will follow the original design intent from the original plant project. This work is to be done by MM&I in 2023.

MM&I was requested to provide a proposed contract modification for this work. We worked with them to get sufficient documentation and to economize the costs where possible (see attached). Their proposal is in the amount of \$219,737.07 and an additional 441 days to provide these services as a change to the existing construction contract.

It is our recommendation to approve the attached change order in the amount of \$204,771.81 with a contract extension of 441 days.

If there are any questions, or if you require additional information, please do not hesitate to contact us. We look forward to continuing to work with you on this project.

Regards,

George Luke, P.E. Gupta & Associates, Inc.

cc: V. K. Gupta, P.E. Andrew Reed, P.E.

Mazhar Hajizadeh

#### **PROPOSAL**

DATE: 11/18/2022

TO: City of Pflugerville ATTN: Brandon Pritchett

EMAIL: <u>brandonp@pflugervilletx.gov</u>

SUBJECT PROJECT: City of Pflugerville SWTP Standby Generator - Change Order #2



#### WE PROPOSE TO FURNISH THE LABOR AND MATERIALS FOR THE WORK AS FOLLOWS

#### **Provide the following:**

- 1 Scope of work as described on the following page.
- 2 Change to the contract completion date as noted on the following page.

#### **Exclusions:**

1 Any items not identified in the scope of work.

	Price
Field Order Items 1 & 2	\$ 43,387.58
Field Order Item 3	\$ (3,507.44)
Field Order Item 4	\$ 18,662.26
RFI #15, 2500 kVA	\$ 15,967.15
RFI #15, 1000 kVA	\$ 12,410.57
Relocate Water Line	\$ 121,213.50
Subtotal Price:	\$ 208,133.62
General Conditions (3%):	\$ 6,244.01
Bond (2.5%)	\$ 5,359.44
Total Price:	\$ 219,737.07
This proposal may be withdrawn by us if not accepted within 30 day	VS.
Approved by:	Date:

Should you have any further questions or comments, please do not hesitate to contact me at anytime.

Best Regards C.F. McDonald Electric, Inc.

Wayne Berkenmeier Cell: 713-202-4887 Office: 713-921-1368 wayneb@mcdonaldinc.com www.mcdonaldinc.com

#### **SCOPE OF WORK**

	Field Order #001						
1&2	Rotate generator 90 degrees and move to the North: Additional						
	excavation for duct banks, install spacers, conduit, rebar, concrete and						
	backfill.						
	Extend duct bank 2 approximately 30' to new generator pad location. 3-4" conduits, 2 with 3/C-350kcm 5kv & 350kcm (600V)G.	\$	17,082.04				
	Extend duct bank 3 approximately 25' to new generator pad location. 8-2" conduits; 6 with generator control cables / shore power; 2 spare	\$	12,410.49				
	Extend duct bank 14 approximately 30' to new generator pad location. 6-4" conduits, 4 with 3#350kcm, #350kcm G.	\$	22,756.34				
	Reduce duct bank 15 to (2)-3" from load bank connection box pad to aux. pad. Eliminate 2-4" conduits from load bank connection box to aux pad, each with 3/C-350kcm 5kv & 350kcm (600V)G.	\$	(8,861.29)				
3	Aux pad reduce to 10 x 7.	\$	(3,507.44)				
	No foundations changes are being included as the pier steel was already onsite and tied as of the Field Order issue date.	\$	-				
4	4 Load bank connection box pad 4' x 4'.						
	RFI #15						
2500	In lieu of transformer pad detail E23/00E05, install an 8'x9' mat foundation with dimensions and reinforcing per the Oncor detail, sheet 27 without piers. Over-excavate and remove 6' depth of existing expansive fat clay soil. Extend the lateral limits of the excavation 2' beyond the perimeter of the foundation. Backfill and compact per RFI #15 response. Provide a 12" thick clay cap around the perimeter of the foundation, compacted per RFI #15 response.	\$	15,967.15				
1000	In lieu of transformer pad detail E23/00E05, install a 6'x8.5' mat foundation with dimensions and reinforcing per the Oncor detail, sheet 27 without piers. Over-excavate and remove 6' depth of existing expansive fat clay soil. Extend the lateral limits of the excavation 2' beyond the perimeter of the foundation. Backfill and compact per RFI #15 response. Provide a 12" thick clay cap around the perimeter of the foundation compacted per RFI #15 response.	\$	12,410.57				
	Relocate Water Line						
1	Relocate the existing 12", 100PSI water line running below the new electrical building. Install new 12" PVC line 285 linear feet at 6' depth with 2 - 12" cut in bends and 1 - 12" bend. Additional depth or offsets if required due to conflicts with existing utilities are not included and will incur additional charges.	\$	121,213.50				

	Contract Completion Date	
1	Due to ongoing supply chain issues, the project generator, switchgear and pad	\$ -
	mount transformers have been significantly delayed (please see the attached	
	supplier letters). The generator and switchgear was customer coordinated for	
	a scheduled delivery of June 2022 prior to award of our contract and Notice to	
	Proceed. That equipemnt is now scheduled to ship in December 2022. The	
	pad mount transformers lead time at bid was 40 weeks and has shifted to 80+	
	weeks. These delays are an unfortunate reality of today's global supply chain.	
	With a now anticipated ship date of the transformers of November 2023 and	
	as there is additional work which can only be completed after this equipment	
	has been installed, we request that the substantial completion date be extended	
	to December 2023.	



		ESTIMATE NO.
JOB	Pflugerville SWTP Generator - FO-001	SHEET NO. 1

WORK Extend Ductbank 2, Approximately 30'

OF 6 SHEETS

MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR Extension	LABOR Rate	LABOR Cost	BURDEN 55%
Excavation	22.00	0.00	Е	0.00	65.36	Е	1007.00	0.70	Е	15.40	35.00	539.00	296.45
Disposal	14.62	35.00	Ε	512.00	32.90	Ε	97.00	0.20	Ε	2.92	27.00	78.84	43.36
Base / Gravel	3.67	80.00	E	294.00	32.90	Ε	49.00	0.40	E	1.47	27.00	39.69	21.83
Subgrade Prep	11.00	0.00	E	0.00	28.72	Е	285.00	0.90	Е	9.90	27.00	267.30	147.02
Reinforcing	0.23	1500.00	E	345.00	0.00	E	0.00	60.00	Е	13.80	27.00	372.60	204.93
Concrete	6.42	170.00	E	1092.00	0.00	E	0.00	0.90	E	5.78	27.00	156.06	85.83
Backfill & Compact	11.92	0.00	E	0.00	94.28	Ε	1124.00	1.00	E	11.92	35.00	417.20	229.46
Supervision	2.00							8.00	E	16.00	44.00	704.00	387.20
4" PVC	90	1040.00	С	936.00				12.00	С	10.80	32.00	345.60	190.08
Spacer	18	8.00	E	144.00				0.20	E	3.60	32.00	115.20	63.36
Support	0	50.00	E	0.00				4.00	E	0.00	32.00	0.00	0.00
4/0 Ground	30	5603.00	М	169.00				32.00	М	0.96	32.00	30.72	16.90
3/C, 350kCM, 5kV	60	38456.00	М	2308.00				135.00	М	8.10	32.00	259.20	142.56
350kCM, 600V	60	10417.00	М	626.00				34.00	М	2.04	32.00	65.28	35.90
Subtotal				6,426.00			2,562.00			102.69		3390.69	1864.88
Overhead and Profit		25%		1606.50	15%		384.30				25%	847.67	0.00
Subtotal				8032.50			2946.30					4238.36	1864.88
Tax		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.00
Subtotal				8032.50			2946.30					4238.36	1864.88
Total	\$	17,082.04											<u> </u>



		E211MATE N	10
JOB	Pflugerville SWTP Generator - F0-001	SHEET NO.	2

WORK Extend Ductbank 3, Approximately 25'

OF 6 SHEETS

MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR Extension	LABOR Rate	LABOR Cost	BURDEN 55%
Excavation	18.06	0.00	Е	0.00	65.36	Е	827.00	0.70	Е	12.64	35.00	442.40	243.3
Disposal	13.09	35.00	Ε	459.00	32.90	Ε	87.00	0.20	Ε	2.62	27.00	70.74	38.9
Base / Gravel	3.01	80.00	E	241.00	32.90	E	40.00	0.40	E	1.20	27.00	32.40	17.8
Subgrade Prep	9.03	0.00	E	0.00	28.72	E	234.00	0.90	Е	8.13	27.00	219.51	120.7
Reinforcing	0.19	1500.00	E	285.00	0.00	E	0.00	60.00	Е	11.40	27.00	307.80	169.2
Concrete	6.02	170.00	E	1024.00	0.00	E	0.00	0.90	E	5.42	27.00	146.34	80.4
Backfill & Compact	9.03	0.00	Е	0.00	94.28	E	852.00	1.00	E	9.03	35.00	316.05	173.8
Supervision	2.00							8.00	E	16.00	44.00	704.00	387.2
2" PVC	200	405.00	С	810.00				7.00	С	14.00	32.00	448.00	246.4
Spacer	40	7.00	E	280.00				0.20	E	8.00	32.00	256.00	140.8
Support	0	50.00	E	0.00				4.00	E	0.00	32.00	0.00	0.0
4/0 Ground	25	5603.00	М	141.00				32.00	М	0.80	32.00	25.60	14.0
Control cables	200	599.00	М	120.00				7.00	М	1.40	32.00	44.80	24.6
#1 for Shore Power	100	2687.00	М	269.00				18.00	М	1.80	32.00	57.60	31.6
Subtotal				3,629.00			2,040.00			92.44		3071.24	1689.1
Overhead and Profit		25%		907.25	15%		306.00				25%	767.81	0.0
Subtotal				4536.25			2346.00					3839.05	1689.1
Tax		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.0
Subtotal				4536.25			2346.00					3839.05	1689.1
Total	\$	12,410.49											



**JOB** 

## **PRICING SHEET**

Pflugerville SWTP Generator - FO-001	
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SHEET NO. 3

WORK Extend Ductbank 14, Approximately 30'

OF 6 SHEETS

ESTIMATE NO.

ESTIMATED DT. PRICED DT	EXILIDED BI		CII	LUKED BT					DAIL	0/2 1/2022			
MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR EXTENSION	LABOR Rate	LABOR Cost	BURDEN 55%
Excavation	22.00	0.00	Ε	0.00	65.36	Е	1007.00	0.70	Ε	15.40	35.00	539.00	296.4
Disposal	18.08	35.00	Ε	633.00	32.90	Е	120.00	0.20	Ε	3.62	27.00	97.74	53.7
Base / Gravel	3.67	80.00	E	294.00	32.90	E	49.00	0.40	Ε	1.47	27.00	39.69	21.8
Subgrade Prep	11.00	0.00	E	0.00	28.72	Ε	285.00	0.90	Е	9.90	27.00	267.30	147.0
Reinforcing	0.26	1500.00	E	390.00	0.00	Ε	0.00	60.00	Е	15.60	27.00	421.20	231.6
Concrete	8.80	170.00	E	1496.00	0.00	E	0.00	0.90	E	7.92	27.00	213.84	117.6
Backfill & Compact	9.53	0.00	Ε	0.00	94.28	Е	899.00	1.00	Ε	9.53	35.00	333.55	183.4
Supervision	2.00							8.00	E	16.00	44.00	704.00	387.2
4" PVC	180	1040.00	С	1872.00				12.00	С	21.60	32.00	691.20	380.1
Spacer	36	8.00	E	288.00				0.20	Е	7.20	32.00	230.40	126.7
Support	0	50.00	E	0.00				4.00	E	0.00	32.00	0.00	0.0
4/0 Ground	30	5603.00	М	169.00				32.00	М	0.96	32.00	30.72	16.9
350kCM, 600V Heater Power	480	10417.00	М	5001.00				34.00	М	16.32	32.00	522.24	287.2
Subtotal				10,143.00			2,360.00			125.52		4090.88	2249.9
Overhead and Profit		25%		2535.75	15%		354.00				25%	1022.72	0.0
Subtotal				12678.75			2714.00					5113.60	2249.9
Tax		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.0
Subtotal				12678.75			2714.00					5113.60	2249.9
Total	\$	22,756.34											



ESTIMATE NO. \_\_\_\_\_SHEET NO. 4

WORK Reduce Ductbank 15, from 4 to 2 conduits between load bank pad and aux pad

OF

OF 6 SHEETS

	MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR EXTENSION	LABOR Rate	LABOR Cost	BURDEN 55%
1	Excavation	0.00	0.00	Е	0.00	65.36	Ε	0.00	0.70	E	0.00	35.00	0.00	0.00
2	Disposal	0.00	35.00	Е	0.00	32.90	Е	0.00	0.20	Е	0.00	27.00	0.00	0.00
3	Base / Gravel	0.00	80.00	Е	0.00	32.90	Е	0.00	0.40	Е	0.00	27.00	0.00	0.00
4	Subgrade Prep	0.00	0.00	Е	0.00	28.72	Е	0.00	0.90	Е	0.00	27.00	0.00	0.00
5	Reinforcing	0.00	1500.00	Е	0.00	0.00	Е	0.00	60.00	Е	0.00	27.00	0.00	0.00
6	Concrete	0.00	170.00	Е	0.00	0.00	Ε	0.00	0.90	Ε	0.00	27.00	0.00	0.00
7	Backfill & Compact	0.00	0.00	Е	0.00	94.28	Ε	0.00	1.00	Е	0.00	35.00	0.00	0.00
8														
9														
10														
11														
12	Supervision	1.00							8.00	Е	8.00	44.00	352.00	193.60
13	4" PVC	40	1040.00	С	416.00				12.00	С	4.80	32.00	153.60	84.48
14	Spacer	8	8.00	E	64.00				0.20	Е	1.60	32.00	51.20	28.16
15	Support	0	50.00	E	0.00				4.00	Е	0.00	32.00	0.00	0.00
16	4/0 Ground	20	5603.00	М	113.00				32.00	М	0.64	32.00	20.48	11.26
17	3/C, 350kCM, 5kV	100	38456.00	М	3846.00				135.00	М	13.50	32.00	432.00	237.60
18	350kCM, 600V	100	10400.00	М	1040.00				34.00	М	3.40	32.00	108.80	59.84
19														
20														
21														
22														
23														
L														
	Subtotal				5,479.00			0.00			31.94		1118.08	614.94
	Overhead and Profit		25%		1369.75	15%		0.00				25%	279.52	0.00
	Subtotal				6848.75			0.00					1397.60	614.94
-	Тах		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.00
	Subtotal				6848.75			0.00					1397.60	614.94
ŀ	Total	\$	(8,861.29)											



**JOB** 

## **PRICING SHEET**

Pflugerville SWTP Generator - FO-001	
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**SHEET NO.** 5

ESTIMATE NO.

WORK Reduce aux pad from 10' x 15' to 7' x 12'

OF 6 SHEETS

Machine   Mach	ESTIMATED BY:	PRICED BY	EXTENDED BY		CHI	ECKED BY				DATE O/ Z-1/ ZOZZ					
Subspire	M	ATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER		LABOR Rate	LABOR Cost	BURDEN 55%
Sase / Gravel	Excavation		3.67	0.00	Е	0.00	65.36	Е	168.00	0.70	Ε	2.57	35.00	89.95	49.47
Subgrade Prep 0.00 0.00 E 0.00 0.00 E 0.00 0.00 E 0.00 0.00 E 0.00 0.00 C 0.00 0.00	<sup>2</sup> Disposal		2.66	35.00	Ε	94.00	32.90	Ε	18.00	0.20	Ε	0.53	27.00	14.31	7.87
Eleminoring 0.34 1500.00 E 510.00 0.00 E 0.00 60.00 E 20.40 27.00 550.80 302 Concrete 3.36 170.00 E 521.00 0.00 E 0.00 0.90 E 2.75 27.00 74.25 40 Backfill & Compact 1.22 0.00 E 0.00 94.28 E 116.00 1.00 E 1.22 35.00 42.70 23 Concrete Forms and Finishing 7.33 3.00 E 22.00	Base / Gravel		0.00	80.00	Е	0.00	32.90	Е	0.00	0.40	Ε	0.00	27.00	0.00	0.00
Concrete	Subgrade Prep		0.00	0.00	E	0.00	28.72	Е	0.00	0.90	Е	0.00	27.00	0.00	0.00
Backfill & Compact   1.22	Reinforcing		-		E	510.00		Ε	0.00	60.00	Ε	20.40	27.00	550.80	302.94
Concrete Forms and Finishing 7.33 3.00 E 22.00	Concrete		3.06	170.00	E	521.00	0.00	E	0.00	0.90	Е	2.75	27.00	74.25	40.84
Supervision	Backfill & Compact		1.22	0.00	Ε	0.00	94.28	Ε	116.00	1.00	Ε	1.22	35.00	42.70	23.49
Supervision 0.25	Concrete Forms ar	d Finishing	7.33	3.00	E	22.00				0.50	Ε	3.67	27.00	99.09	54.50
Supervision	9														
Supervision 0.25	0														
Subtotal 1,147.00 302.00 33.14 959.10 527 Overhead and Profit 25% 286.75 15% 45.30 959.10 527 Tax 0.00% 0.00 0.00% 0.00 0.00 0.00% 0.00 0.00 527 Tax 0.00% 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00 0.00% 0.00% 0.00% 0.00 0.00% 0.00% 0.00 0.00% 0															
Subtotal	Supervision		0.25							8.00	Е	2.00	44.00	88.00	48.40
Subtotal	3														
Subtotal	4														
Total	5														
19	6														
19	7														
Subtotal	В														
Subtotal	9														
Subtotal	0														
Subtotal	1														
Subtotal         1,147.00         302.00         33.14         959.10         527           Overhead and Profit         25%         286.75         15%         45.30         25%         239.78         0           Subtotal         1433.75         347.30         1198.88         527           Tax         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00         0.00%         0.00         0.00         1198.88         527           Subtotal         1433.75         347.30         1198.88         527	2														
Overhead and Profit         25%         286.75         15%         45.30         25%         239.78         0           Subtotal         1433.75         347.30         1198.88         527           Tax         0.00%         0.00         0.	3		ļ												
Overhead and Profit         25%         286.75         15%         45.30         25%         239.78         0           Subtotal         1433.75         347.30         1198.88         527           Tax         0.00%         0.00         0.00         0.00%         0.00         0.00         0.00%         0.00         0.00%         0.00         0.00         0.00%         0.00         0.00%         0.00         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00%         0.00         0.00%         0.00         0.00% <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>															
Subtotal         1433.75         347.30         1198.88         527           Tax         0.00%         0.00         0.00%         0.00         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00%         0.00         0.00% </td <td>Subtotal</td> <td></td> <td></td> <td></td> <td></td> <td>1,147.00</td> <td></td> <td></td> <td>302.00</td> <td></td> <td></td> <td>33.14</td> <td></td> <td>959.10</td> <td>527.51</td>	Subtotal					1,147.00			302.00			33.14		959.10	527.51
Tax         0.00%         0.00         0.00%         0.00         0.00%         0.00%         0.00         0.00%         0.00%         0.00         0.00%	Overhead and Prof	it		25%		286.75	15%		45.30				25%	239.78	0.00
Subtotal         1433.75         347.30         1198.88         527	Subtotal					1433.75			347.30					1198.88	527.51
	Tax			0.00%		0.00	0.00%		0.00				0.00%	0.00	0.00
Total \$ (3,507.44)	Subtotal					1433.75			347.30					1198.88	527.51
	Total		\$	(3,507.44)											



Pflugerville SWTP Generator - FO-001	
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ESTIMATE NO. \_\_\_\_\_\_\_
SHEET NO. 6\_\_\_\_\_

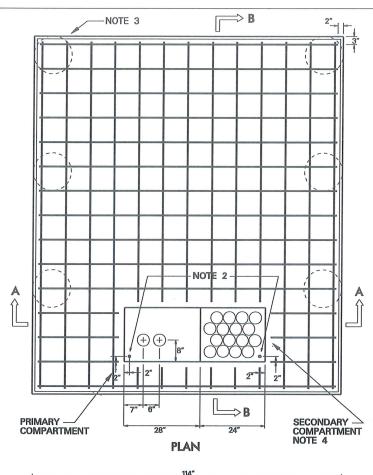
WORK Add 4' x 4' load bank connection box pad

OF 6 SHEETS

ESTIMATED BY: PRICED BY	EXTENDED BY		СП	ECKED BY					DATE OF E-17 EOLE					
MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR EXTENSION	LABOR Rate	LABOR Cost	BURDEN 55%	
Excavation	22.22	0.00	Е	0.00	65.36	Е	1017.00	0.70	Ε	15.55	35.00	544.25	299.34	
Disposal	21.48	35.00	E	752.00	32.90	Е	142.00	0.20	Ε	4.30	27.00	116.10	63.86	
Base / Gravel	11.11	80.00	E	889.00	32.90	Е	147.00	0.40	E	4.44	27.00	119.88	65.93	
Subgrade Prep	111.11	0.00	E	0.00	28.72	Е	2872.00	0.90	Е	100.00	27.00	2700.00	1485.00	
Reinforcing	0.13	1500.00	E	195.00	0.00	Е	0.00	60.00	Е	7.80	27.00	210.60	115.83	
Concrete	1.19	170.00	E	203.00	0.00	Е	0.00	0.90	Е	1.07	27.00	28.89	15.89	
Backfill & Compact	7.41	0.00	Е	0.00	94.28	Е	699.00	1.00	Е	7.41	35.00	259.35	142.64	
8 Concrete Forms and Finishing	16.00	3.00	Е	48.00				0.50	Е	8.00	27.00	216.00	118.80	
9														
0														
1														
Supervision	3.00							8.00	Ε	24.00	44.00	1056.00	580.80	
4" PVC	30	1040.00	С	312.00				12.00	С	3.60	32.00	115.20	63.36	
4 Spacer	6	8.00	E	48.00				0.20	Ε	1.20	32.00	38.40	21.12	
5 Support	0	50.00	E	0.00				4.00	Ε	0.00	32.00	0.00	0.00	
4/0 Ground	30	5603.00	М	169.00				32.00	М	0.96	32.00	30.72	16.90	
7														
8														
9														
20														
11														
22														
3														
							<u></u>							
Subtotal				2,616.00			4,877.00			178.33		5435.39	2989.47	
Overhead and Profit		25%		654.00	15%		731.55				25%	1358.85	0.00	
Subtotal				3270.00			5608.55					6794.24	2989.47	
Tax		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.00	
Subtotal				3270.00			5608.55					6794.24	2989.47	
Total	\$	18,662.26					"	'		"		. "		
						_			_					



Request for Inf	ormation (RFI)						
Project Name: City of Pflugerville Surface Water Treatment Plant Standby Generator	Contractor: McDonald Electric						
RFI Number: 15	Engineering Firm: Gupta						
Prepared By: Brad Hibbetts	Attn: Mazhar Hajizadeh						
Date Response Needed: 05/13/2022	Plan Sheet: 00E05						
Subject: Transformer pad							
Details: The pad detail on sheet 00E05 note 2 refers to so not see a transformer pad detail in the structural drawing depicted in the electrical detail with reinforcing similar if this is sufficient or if there are additional requirement.	gs. We have included a $\sim$ 24" slab on grade pad as to the generator pad shown on 15S01. Please advise						
05/11/2022	Brad Hibbetts						
Date	Signature						
Response:  USE A MAT FOUNDATION WITH 24" THICKNESS. REINFORCE WITH #6 TOP BARS WITH STANDARD HOOKS @ 12"C/C, EW, AND #6 BOTTOM BARS @ 12"C/C.  OVER-EXCAVATE AND REMOVE A MINIMUM 6'-0" DEPTH OF EXISTING EXPANSIVE FAT CLAY SOIL. EXTEND THE LATERAL LIMITS OF THE EXCAVATION 2 0" BEYOND THE PERIMETER OF THE FOUNDATION. BACKFILL WITH CRUSHED LIMESTONE BASE MATERIAL (TXDOT STD SPEC ITEM 247, GRADE 1-2, TYPE A) OR NON-EXPANSIVE SELECT FILL (SOILS CLASSIFIED AS SP, SM, SC, CL, OR DUAL CLASSIFICATIONS THEREOF, LIQUID LIMIT NOT GREATER THAN 35, PLASTICITY INDEX BETWEEN 7 AND 15, FREE OF ORGANIC MATERIALS). PLACE BACKFILL IN 8" LOOSE LIFTS, COMPACT TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN -1% TO +2% OF THE OPTIMUM MOISTURE. PROVIDE AN 12" THICK COMPACTED CLAY CAP AROUND THE PERIMETER OF THE FOUNDATION OVER THE BACKFILL. EXTEND THE CLAY CAP 2'-0" HORIZONTALLY BEYOND THE LIMITS OF THE BACKFILL. THE CLAY CAP SHALL BE CLAYS AND SANDY CLAYS, LIQUID LIMIT NOT LESS THAN 30, PLASTICITY INDEX NOT LESS THAN 15, MORE THAN 50% PASSING THE NO. 200 SIEVE, FREE OF ORGANIC MATERIALS. PLACE CLAY CAP IN 8" LOOSE LIFTS, COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN +0% TO +5% OF THE OPTIMUM MOISTURE.							
LATERAL LIMITS OF THE EXCAVATION 2 0" BEYOND THE PER LIMESTONE BASE MATERIAL (TXDOT STD SPEC ITEM 247, GF CLASSIFIED AS SP, SM, SC, CL, OR DUAL CLASSIFICATIONS TO PLASTICITY INDEX BETWEEN 7 AND 15, FREE OF ORGANIC M TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY (ASTM DESTRUMENT OF THE MODEL OF THE BACKFILL. EXTEND THE CLAY CAP 2'-0" HORIZON CAP SHALL BE CLAYS AND SANDY CLAYS, LIQUID LIMIT NOT MORE THAN 50% PASSING THE NO. 200 SIEVE, FREE OF ORGO COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DEI	RIMETER OF THE FOUNDATION. BACKFILL WITH CRUSHED RADE 1-2, TYPE A) OR NON-EXPANSIVE SELECT FILL (SOILS THEREOF, LIQUID LIMIT NOT GREATER THAN 35, IATERIALS). PLACE BACKFILL IN 8" LOOSE LIFTS, COMPACT 198), AT A MOISTURE CONTENT WITHIN -1% TO +2% OF THE LAY CAP AROUND THE PERIMETER OF THE FOUNDATION FALLY BEYOND THE LIMITS OF THE BACKFILL. THE CLAY LESS THAN 30, PLASTICITY INDEX NOT LESS THAN 15, GANIC MATERIALS. PLACE CLAY CAP IN 8" LOOSE LIFTS,						
LATERAL LIMITS OF THE EXCAVATION 2'-0" BEYOND THE PER LIMESTONE BASE MATERIAL (TXDOT STD SPEC ITEM 247, GF CLASSIFIED AS SP, SM, SC, CL, OR DUAL CLASSIFICATIONS TO PLASTICITY INDEX BETWEEN 7 AND 15, FREE OF ORGANIC M TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY (ASTM DESTRUMENT OF THE BACKFILL. EXTEND THE CLAY CAP 2'-0" HORIZON CAP SHALL BE CLAYS AND SANDY CLAYS, LIQUID LIMIT NOT MORE THAN 50% PASSING THE NO. 200 SIEVE, FREE OF ORCOMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DEI TO +5% OF THE OPTIMUM MOISTURE.	RIMETER OF THE FOUNDATION. BACKFILL WITH CRUSHED RADE 1-2, TYPE A) OR NON-EXPANSIVE SELECT FILL (SOILS THEREOF, LIQUID LIMIT NOT GREATER THAN 35, IATERIALS). PLACE BACKFILL IN 8" LOOSE LIFTS, COMPACT 198), AT A MOISTURE CONTENT WITHIN -1% TO +2% OF THE LAY CAP AROUND THE PERIMETER OF THE FOUNDATION FALLY BEYOND THE LIMITS OF THE BACKFILL. THE CLAY LESS THAN 30, PLASTICITY INDEX NOT LESS THAN 15, GANIC MATERIALS. PLACE CLAY CAP IN 8" LOOSE LIFTS,						
LATERAL LIMITS OF THE EXCAVATION 2 0" BEYOND THE PER LIMESTONE BASE MATERIAL (TXDOT STD SPEC ITEM 247, GF CLASSIFIED AS SP, SM, SC, CL, OR DUAL CLASSIFICATIONS TO PLASTICITY INDEX BETWEEN 7 AND 15, FREE OF ORGANIC M TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY (ASTM DESTRUMENT OF THE BACKFILL. EXTEND THE CLAY CAP 2'-0" HORIZON CAP SHALL BE CLAYS AND SANDY CLAYS, LIQUID LIMIT NOT MORE THAN 50% PASSING THE NO. 200 SIEVE, FREE OF ORCOMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DEITO +5% OF THE OPTIMUM MOISTURE.	RIMETER OF THE FOUNDATION. BACKFILL WITH CRUSHED RADE 1-2, TYPE A) OR NON-EXPANSIVE SELECT FILL (SOILS THEREOF, LIQUID LIMIT NOT GREATER THAN 35, IATERIALS). PLACE BACKFILL IN 8" LOOSE LIFTS, COMPACT 198), AT A MOISTURE CONTENT WITHIN -1% TO +2% OF THE LAY CAP AROUND THE PERIMETER OF THE FOUNDATION FALLY BEYOND THE LIMITS OF THE BACKFILL. THE CLAY LESS THAN 30, PLASTICITY INDEX NOT LESS THAN 15, GANIC MATERIALS. PLACE CLAY CAP IN 8" LOOSE LIFTS, NSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN +0%						
LATERAL LIMITS OF THE EXCAVATION 2'-0" BEYOND THE PER LIMESTONE BASE MATERIAL (TXDOT STD SPEC ITEM 247, GF CLASSIFIED AS SP, SM, SC, CL, OR DUAL CLASSIFICATIONS TO PLASTICITY INDEX BETWEEN 7 AND 15, FREE OF ORGANIC M TO A MINIMUM OF 95% OF MAXIMUM DRY DENSITY (ASTM DESTRUMENT OF THE BACKFILL. EXTEND THE CLAY CAP 2'-0" HORIZON CAP SHALL BE CLAYS AND SANDY CLAYS, LIQUID LIMIT NOT MORE THAN 50% PASSING THE NO. 200 SIEVE, FREE OF ORCE COMPACT TO A MINIMUM OF 95% OF THE MAXIMUM DRY DEI TO +5% OF THE OPTIMUM MOISTURE.  Response Prepared By: Michael Robertson, P.E. 06/	RIMETER OF THE FOUNDATION. BACKFILL WITH CRUSHED RADE 1-2, TYPE A) OR NON-EXPANSIVE SELECT FILL (SOILS THEREOF, LIQUID LIMIT NOT GREATER THAN 35, IATERIALS). PLACE BACKFILL IN 8" LOOSE LIFTS, COMPACT 198), AT A MOISTURE CONTENT WITHIN -1% TO +2% OF THE LAY CAP AROUND THE PERIMETER OF THE FOUNDATION FALLY BEYOND THE LIMITS OF THE BACKFILL. THE CLAY LESS THAN 30, PLASTICITY INDEX NOT LESS THAN 15, GANIC MATERIALS. PLACE CLAY CAP IN 8" LOOSE LIFTS, NSITY (ASTM D698), AT A MOISTURE CONTENT WITHIN +0%						



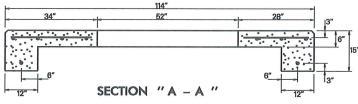
#### REINFORCEMENT SPACING: 9" CENTERS

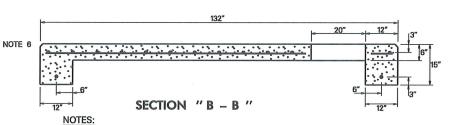
	ORCING SCH BEAMS (NO				
NUMBER OF #3 BARS	LENGTH	WEIGHT (LBS)			
9	128"	36.1			
14	110"	48.2			
6	96"	18.0			
6	8"	1.5			
3	30"	2.8			
3	24"	2.2			

2.8 CU YARDS CONCRETE TOTAL WEIGHT OF PAD 11,460 LBS

REINFORCING SCHEDULE PAD WITHOUT BEAMS										
NUMBER OF #3 BARS	WEIGHT (LBS)									
7	28.1									
12	110"	41.4								
6	96"	18.0								
6	8"	1.5								
3	2.8									
3	2.2									

1.8 CU YARDS CONCRETE TOTAL WEIGHT OF PAD 7,300 LBS





- 1. SEE DETAIL SHEET 21 FOR GENERAL NOTES.
- 2. CONTRACTOR TO OBTAIN AND INSTALL (2) 56" X 8' GROUND RODS AS SHOWN. INSTALLATION DEPTH SHALL BE 7'  $\!-\!$  6".
- 3. PIERS ARE REQUIRED ON ALL THREE PHASE TRANSFORMER PADS UNLESS WAIVED BY THE COMPANY INSPECTOR. REFERENCE DETAIL SHEET 22 FOR PIER DETAILS.
- 4. BEGIN SECONDARY CONDUITS AT RIGHT EDGE OF PAD WINDOW. ADD CONDUITS AS REQUIRED RIGHT TO LEFT. DO NOT CROSS DIVIDING LINE BETWEEN PRIMARY AND SECONDARY COMPARTMENTS.
- 5. GROUT WINDOW AS PER DETAIL SHEET 15.



# TRANSFORMER PAD THREE PHASE 1500 – 2500 KVA RADIAL

DDS-4 UG DETAIL SHEET 27 OF 57



		ESTIMATE N	0
JOB	Pflugerville SWTP Generator - RFI #15	SHEET NO.	1

WORK Revised 2500kVA Transformer Pad OF 2 SHEETS

	MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR Extension	LABOR Rate	LABOR Cost	BURDEN 55%
1 Ex	cavation	24.44	0.00	Ε	0.00	65.36	Ε	1119.00	0.70	Е	17.11	35.00	598.85	329.37
2 <b>D</b>	sposal	29.54	35.00	Е	1034.00	32.90	Ε	195.00	0.20	Е	5.91	27.00	159.57	87.76
3 B	ise / Gravel	20.37	80.00	Ε	1630.00	32.90	Ε	269.00	0.40	Ε	8.15	27.00	220.05	121.03
4 S	ıbgrade Prep	146.67	0.00	Ε	0.00	28.72	Ε	3792.00	0.90	Ε	132.00	27.00	3564.00	1960.20
5 R	einforcing	-0.34	1500.00	E	-510.00	0.00	Ε	0.00	60.00	Е	-20.40	27.00	-550.80	-302.94
6 C	oncrete	-3.08	170.00	E	-524.00	0.00	Ε	0.00	0.90	Е	-2.77	27.00	-74.79	-41.13
7 B	ickfill & Compact	4.07	0.00	E	0.00	94.28	Ε	384.00	1.00	Е	4.07	35.00	142.45	78.35
8 C	oncrete Form / Finish (no change)	0.00	3.00	E	0.00				0.50	Е	0.00	27.00	0.00	0.00
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
L														
Si	ıbtotal				1,630.00			5,759.00			144.07		4059.33	2232.64
0	verhead and Profit		25%		407.50	15%		863.85				25%	1014.83	0.00
Si	ıbtotal				2037.50			6622.85					5074.16	2232.64
Ta	X		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.00
Si	ubtotal				2037.50			6622.85					5074.16	2232.64
To	otal	\$	15,967.15											



	ESTIMATE NO.
Pflugerville SWTP Generator - RFI #15	SHEET NO. 2

WORK Revised 1000kVA Transformer Pad OF 2 SHEETS

MATERIAL	QUANTITY	MATERIAL PRICE	PER	MATERIAL EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR Extension	LABOR Rate	LABOR Cost	BURDEN 55%
Excavation	18.67	0.00	Е	0.00	65.36	Е	855.00	0.70	Е	13.07	35.00	457.45	251.60
Disposal	22.56	35.00	Е	790.00	32.90	Е	149.00	0.20	Е	4.51	27.00	121.77	66.97
Base / Gravel	15.56	80.00	Е	1245.00	32.90	Ε	205.00	0.40	E	6.22	27.00	167.94	92.37
Subgrade Prep	112.00	0.00	Ε	0.00	28.72	Ε	2895.00	0.90	Ε	100.80	27.00	2721.60	1496.88
Reinforcing	-0.23	1500.00	Е	-345.00	0.00	E	0.00	60.00	E	-13.80	27.00	-372.60	-204.93
Concrete	-2.06	170.00	Е	-351.00	0.00	E	0.00	0.90	E	-1.85	27.00	-49.95	-27.47
Backfill & Compact	3.11	0.00	Е	0.00	94.28	E	294.00	1.00	E	3.11	35.00	108.85	59.87
Concrete Form / Finish (no change)	0.00	3.00	Е	0.00				0.50	E	0.00	27.00	0.00	0.00
							<u> </u>						
Subtotal				1,339.00			4,398.00			112.06		3155.06	1735.29
Overhead and Profit		25%		334.75	15%		659.70				25%	788.77	0.00
Subtotal				1673.75			5057.70					3943.83	1735.29
Tax		0.00%		0.00	0.00%		0.00				0.00%	0.00	0.0
Subtotal				1673.75			5057.70					3943.83	1735.29
Total	\$	12,410.57					'						

## www.titusworkstexas.com

#### CHANGE PROPOSAL No. 3 rev. 1

11/17/2022

Project: SWTP

Pflugerville, Texas

Scope of Proposed Work: as described below:

Water We propose to excavate and install the following major components: 2 each 12" cut-in bend, 285 lf 12" pvc, 1 each 12" bend. Includes sawcut and repair of existing asphalt pavement. Revision: C9000 PVC, DR21 (DR25 not readily available); All pipe joints will be mechanically restrained for the same pressure rating.

**Revised Total: \$106,390.00** 

**Qualifications:** 

Assume scale is 1"=50'

ACCEPTED: the above prices and specifications are satisfactory and are hereby accepted. All work to be
performed under the same terms and conditions as specified in original contract (unless otherwise stated
herein).
Authorized

Signature: \_\_\_\_\_ Date of Acceptance: \_\_\_\_\_



## **PRICING SHEET**

		ESTIMA	TE NO.	
JOB	Pflugerville SWTP Generator - Water Line Relocate	SHEET N	NO. 1	
WORK	Relocate 12" Water Line, 285 linear feet PVC, 2 - 12" cut in bend, 1 - 12" bend, 6' depth	OF	1	SHEETS

DATE 10/27/2022 **ESTIMATED BY:** PRICED BY **EXTENDED BY CHECKED BY** 

ESTIMATED BY:	PRICED BY	EXTENDED BY		GII	ECKED BY					DAIL	10/21/2022			
Item		QUANTITY	Subcontract PRICE	PER	Subcontract EXTENSION	EQUIPMENT RATE	PER	EQUIPMENT EXTENSION	LABOR UNIT	PER	LABOR Extension	LABOR Rate	LABOR Cost	BURDEN 55%
Utility Subcontractor		1.00	106390.00	Е	106390.00									
Supervision		15.00							8.00		120.00	44.00	5280.00	2904.00
Supervision		15.00							6.00		120.00	44.00	5280.00	2904.00
Subtotal					106,390.00			0.00			120.00		5280.00	2904.00
Overhead and Profit			5%		5319.50	15%		0.00				25%	1320.00	0.00
Subtotal					111709.50			0.00					6600.00	2904.00
Tax			0.00%		0.00	0.00%		0.00				0.00%	0.00	0.00
Subtotal					111709.50			0.00					6600.00	2904.00
1		\$	121,213.50											

Sales and Service

**McDonald Electric** 

5044 Timber Creek Dr Houston, TX 77017

8/9/2022

RE: City of Pflugerville Surface Water Treatment Plant - O-85207 Delay Letter

Dear Brad,

Cummins along with other industry and markets continues to experience global supply chain disruptions, impacting many areas of our business. We have seen over the past year, a disruptive impact on our production schedule due to increased demands, vendor part shortages, and increased lead times. Significant supply disruption initially began in late 2020 and we have seen sustained impacts to our supply chain over the past year.

Throughout 2021 and the first half of 2022, we worked to make improvements and mitigate the effects from these global supply challenges, making progress in many areas such as:

- Increasing parts supply to our aftermarket Parts Distribution Centers (PDCs) to meet critical aftermarket needs and managing increased demand on critical components.
- Utilizing our remanufacturing expertise to supplement the supply of new components impacted by supply chain constraints to meet aftermarket customer requirements.
- Decreasing our total number of backorders and improving the status of many back-ordered product groups such as overhaul kits, fuel systems, and cylinder heads, allowing us to fill more orders for customers.
- Improving the accuracy of and how we use the output of our demand planning process to improve forecasting and ordering across our supply base.

As we move into the second half of the year, we are facing new unexpected challenges in many areas of our supply chain, impacting our ability to rebound quickly. Current disruptions to our



supply chain and operations are primarily driven by:

- Volatile demand, putting continued pressure on our already constrained supply base.
- The surge of the COVID-19 omicron variant, causing absenteeism to ebb and flow across
  all our global regions and creating new lockdowns in China that have impacted both
  production and logistics. Our direct operations in China have been able to continue
  operating through the most recent shutdown.
- Global transportation delays and logistics challenges reaching unprecedented levels, primarily driven by the lockdowns in China, increased transportation costs, and the ongoing conflict in Russia and Ukraine.

We are working to address these ongoing challenges and take action to mitigate the additional impact, continuing our focus on:

- Addressing staffing and absenteeism challenges while prioritizing the safety of both our colleagues and customers.
- Addressing operational challenges and global transportation and logistics delays.
- Supporting our suppliers in increasing their capacity and efficiency and solving ongoing issues with raw material and chip shortages.
- Prioritizing engine down orders to support critical service events.

The generator is scheduled to ship from our factory next week to our tank and enclosure vendor ACS. The current ship date from ACS is the week of 10/7.

The switchgear is currently scheduled to ship on December 19, 2022.

Let me know if you have any questions.



Sincerely,

Wemmy Agbesola

**Project Manager** 

Cummins Sales and Service 4855 Mountain Creek Parkway Dallas, TX 75236 972-839-4987



9/29/2022

Great Service, Great People
Since 1968!

To: McDonald Electric

Ref: Pflugerville SWTP Standby Generator Transformer Lead Time

Dear Sirs,

I wanted to make sure you were aware of the issues surrounding your above reference project in relation to the global supply chain obstacles we are facing.

In an attempt to satisfy the construction schedule for this project I have searched for alternatives with faster lead times. I was unsuccessful due to many different variables.

When this project bid back in 2021, the factory was at a 40+ week lead time. By time of NTP letter to contractor and approved submittal and release they were at 60+ weeks lead time. Currently the estimated ship date is 80+ weeks which translates to November of 2023 for this project. We remain steadfast in our expediting attempts with the factory. We will advise if this changes as we get more details.

Please feel free to reach out if you have any questions or concerns.

Thank You,

Steve Terry

713-417-4715

