

City of Miami Beach Capital Improvement Projects Office 1700 Convention Center Drive Miami Beach, FL 33139

May 11, 2021 Sent Via Email

Attn: Sabrina Baglieri

Re: West Ave 090 - South

Subj: Change Order Review - RMCF Submission dated April 21, 2021

CMA Comment Sheet Received 4/28/21

Revision #1

10 Year Storm Piping & Structures \$ 1.012.455
Water Quality \$ 3.592.652
Commodity & Subcontractor Escalation \$ 347.003
RMCF Labor Escalation \$ 131.072
Time Extension 1588 Cal Days

Sabrina,

In response to the change order review conducted yesterday 4/28/21 wherein RMCF received CMA's comment sheet (attached) we offer the following response and clarifications to our proposal sent on 4/21/21. RMCF revises its original submission dated 4/21/21 to account for errantly including 2.1B pricing from the 8/7/19 proposal in the evaluations and certain reductions in rebar, redimix quantities based on further developed WQ design, commodity and labor escalation was revised accordingly.

Pump Station Design - Items 1-4

Comments have been sent to CES for formal response and will be submitted to the City under separate cover.

Storm Drainage Design 2016-KB 60%, Phase II North of 14th Street resubmittal dated 4/2/21 and Change Order Submittal.

Item 1 - See comment C below.

Item 2 - Commodity escalation was detailed in RMCF's proposal letter with documentation provided on escalations from the U.S Bureau of Labor Statistics which confirms at least a 3.6% average increase in pricing January 2020 through February 2021. This factor was applied to specific commodities shown on the submitted spread sheet. Escalations quoted by Subcontractors and main/critical suppliers such as Flygt pumps, DI pipe, Asphalt and



Electrical where direct quotes from RMCF's suppliers under contract presently and are listed separately. These submissions reflect the most up to date pricing available.

Item 3 – Utility relocations are shown on the 60% WQ Drawings submitted under separate cover for each location. The majority of relocations are CMB utilities.

Item 4 - Labor escalation was provided at 3% and deemed reasonable. The hours provided are actual anticipated work hours for RMCF labor for the base and changed work escalated at .25% per month taking into account CO 3B escalation already approved. The 0.25% per month factor was extended to substantial completion. (see submitted spread sheet for dates and calculation.) Previous labor escalation is contained under item 11 of CO 3B and totaled \$66,026 for direct labor trades.

Item 5 - See Item B below

Item 6 – RMCF will re-organize to the City's format (template) at your direction upon approval of the Change Order amount including scope clarifications contained therein.

Item 7 - The full 60 % submittal of the WQ wells will be submitted shortly under separate cover. The 30% drawings which depict the location and arrangement of the wells including mechanical and electrical details have been submitted to e-builder.

Item 8 - Detail of the connection to the trunk lines are shown on the details provided in the 60% drainage submission.

Other items:

- A- RMCF has revised the cost sheets to designate the applied 5% Subcontractor markup and 10% RMCF mark up, accordingly.
- B- RMCF attaches back-up for the Bond and Insurance premium re-calculation of 1.51%.
- C- Conflict structure costs have not been included in either the August 7, 2019 proposal (not acted upon by the City) or the current pricing which supersedes the August 7 proposal due to the fact that FPL has not settled on relocation or payment to RMCF for installing these conflict structures. Further CO 3B item 17 did not contemplate conflict structures since the utility plan was in its infancy at the time of submission and pricing was based solely on AECOM's drainage map. In either case, either FPL relocates their ductbank with others or pays RMCF for the new conflict structures under a contract arrangement.



D- The Drainage Piping was re-calculated based on our incorrect assumption that the 2.1B proposal dated 8/7/19 was an actual Change Order. 2.1B was never acted upon by the City as a change. The final charges have been adjusted off of CO 3B item 5.

Please contact me if you require additional information.

Sincerely,

Michael R. Fischer, COO

Ric-Man Construction Florida, Inc.

Attachments:

- CMA West Ave C.O. Review Meeting Comments
- RMCF's Performance and Payment Bond Rates
- Brown & Brown Policy Premium Summary
- Commodity & Subcontractor Escalation 5/11/21
- RMCF Labor Escalation 5/11/21
- Revised Cost Spread Sheets (WQ & Drainage) Rev 1 5/11/21
- Quantity Spread Sheet Structures

CC:

Danny Mancini Tyson DiPetrillo Dan LaCross Rafael Vega Jose Caraballo Jorge Rodriguez Nick Karpathy – Chen Moore

2103 Coral Way, Suite 401 Miami, FL 33145 Office: +1 (786) 497-1500



WEST AVENUE STORM DRAINAGE DESIGN CHANGE ORDER REVIEW MEETING COMMENTS 4/28/2021

GENERAL COMMENTS:

PUMP STATION DESIGN - 60% SUBMITTAL DATED 3/22/2021

- Need to Clarify heading on sheet PS-M01 "Pump Design Criteria" and "Pump System Design Notes", what pumps they are referring to (primary pumps and sump pumps).
- The plans show five (5) primary pumps with one (1) backup pump at 19,750 GPM (44 CFS), what is the Pump Station Maximum Flow based on?
- Drainage well conductivity is given as 500 GPM/FT of Head. Has this value been verified? Has a Reasonable Assurance Report been done to justify the assumed flow? Please advise.
- Cannot determine if the proposed well design is providing an adequate bypass with a design elevation of 6.50 FT-NAVD. Please provide.

STORM DRAINAGE DESIGN 2016-091-KB 60%, PHASE II NORTH OF 14TH STREET RESUBMITTAL DATED 4/02/2021 and CHANGE ORDER SUBMITTAL

- First and foremost, this submittal is a compilation of documents put together that do not have the format, or organization that we need in order to create a Change Order. Provide a Request for Change Order document with Exhibits numbered and organized.
- Material escalations can vary from time to time and even day to day and are subject to
 revisions up to 4 months after estimated. Projects of this magnitude can command a
 better negotiated price with suppliers that does not always include the higher of the
 average increases. Please provide the most up to date pricing available with this
 submittal.
- Perhaps a clause can be stated that a credit for materials needs to be returned to the City if prices do go down during the life of the project.
- 4. The labor escalation of 3% per year seems reasonable. However, no back-up was provided in this package to compare the man-hours being claimed with the previous man-hour estimates. Please provide.



STORM DRAINAGE DESIGN 2016-091-KB 60%, PHASE II NORTH OF 14TH STREET RESUBMITTAL DATED 4/02/2021 (cont.)

- Some of the credits for the new "Drainage" spreadsheet (10yr increase + WTS) are not identified. Please identify.
- CMB/CIP will need more detail to evaluate the new prices in these proposals. Almost ½
 of the back-up package consists of the old e-mails and CES proposals that have already
 been evaluated.
- 7. The estimated increase in the duration of the project has not changed.
- 8. Plans did not include any details on the water quality pump stations (graphic views but no callouts, sections, or insets).
- 9. The direct connections of future yard drains/stub-outs to trunklines take into consideration system maintenance to prevent blockages and provide for cleaning?

STORM DRAINAGE DESIGN 2016-090–KB 60%, PHASE II SOUTH OF 14TH STREET RESUBMITTAL DATED 4/02/2021 and CHANGE ORDER SUBMITTAL

- In the narrative, please clarify conflict structures as required by 60% design drawings and specifically excluded by August 7, 2019 correspondence.
- In the narrative for subcontractor commodity escalation, complete backup must be provided to justify the proposed cost.
- In the narrative for Water Quality Enhancements utility relocations as needed shall include details describing what is affected now that was not affected before.
- 4. Provide the previous amount RMC was considering for labor escalation.
- 5. Provide back up for Water Quality enhancement cost: clarify subcontractor markup percentage and estimated amounts, GC markup, bond and insurance percentage.
- 6. All the info must be referenced as exhibits in the narrative.
- 7. Plans did not include any details on the water quality pump stations (graphic views but no callouts, sections, or insets).
- 8. The direct connections of future yard drains/stub-outs to trunklines take into consideration system maintenance to prevent blockages and provide for cleaning?



090 500TH

RIC-MAN CONSTRUCTION FLORIDA, INC. PERFORMANCE AND PAYMENT BOND RATES

For first	\$100,000 contract value	\$10.80 per \$1,000
For next	2,400,000 contract value	7.56 per \$1,000
For next	2,500,000 contract value	6.48 per \$1,000
For next	5,000,000 contract value	5.64 per \$1,000
For over	10,000,000 contract value	4.56 per \$1,000

5023,000



BROWN & BROWN OF DETROIT, INC.

35735 MOUND ROAD STERLING HEIGHTS, MI 48310

PHONE: 586-977-6300 | FAX: 586-977-6780 | WWW.BBDETROIT.COM

Ric-Man Construction Florida, Inc 3100 SW 15th Street Deerfield Beach, FL 33442

RE: Policy Premium Summary

Policy #'s; A-5CAA-0001702; ZUP-16N53072-20-NF; A-5CGA-001702; QT-660-72N270023; SXS 7186303-01

To Whom it May Concern,

Included are the policy premiums for Ric-Man Construction Florida, Inc for their insurance years.

	W/ Labor		W/ Labor	
Policy Year	General Liability	Automobile	Umbrella	Installation/Equipment
2019-2020	\$222,500 (\$51.74 rate)	\$90,000	\$123,000	\$19,828
2020-2021	\$368,869 (\$67.21 rate)	\$150,660	\$160614	\$22,525
2021-2022	\$287,017 (\$68.45 rate)	\$175,992	\$230,000	\$30,251

Please direct any additional inquires to my attention. Thank you.

Sincerely,

Brian Pilarski C.I.C.; M.B.A.; L.I.C. Commercial Insurance Agent Resident Counselor Surplus Broker South 090

2019-2020 = \$109,828 / \$34,278,000 = 0.32% 2020-2021 = \$173,185 / \$39,693,000 = 0.44%

% Inc = 38% - Contract Completion 7/2023 Allow 2 Years @ 15% Inc = 30% Inc 0.44% x 1.38 = 0.61 + 30% Escal = 0.79

Carry 0.79

	Wes	West Ave South -090	06	5/11/2021	-		
	Com	modity and Su	Commodity and Subcontractor Escalation				
Item	New	New Total	CO 3B total	Delta	Delta	Total Impact	Notes
				Material	Subcontract	Transferring Community (Community Community Co	
Quoted Escalator							
Di Pipe	s)	473,490.00	\$ 359.455.00	\$ 114.035.00			
Taxes - 7%				\$ 7,982.00			US Pipe
3.6% Escalator							See Producer Price index Granh
Trench drains	S	15,010.00	14 489 00	\$ 52100			
Aggregates	S	284,373.00	100	5 988200			
Landscaping/Irrigation	\$	275,544.00					
Pipe Commodities	S	41,440.00		\$ 1,440.00			
PVC Pipe, Fittings	s.	44,785.00	\$ 43,229.00		0		
Taxes 7% on \$27,789				\$ 1,945.00			
Subcontractor Adjustments							
Asphalt					20 103 11	8	
Electrical- So FI Elect					-	000	See Quote Comparison and Proportioning to 090 See unit Pricing spread sheet from So FI Elect
Total				4 145 005 00	200000		
OH- 10/5				\$ 14,501.00	s v	00	
Subtotal				12	5 2	00	
1.51% Bond & Ins					· ·s	00.	

West Ave 090/091			
Escalation RMCF Direct labor	5/11/2021		
	06	91	
ltem	Hours Cost	Hours Cost	Comments
Base Contract	23,762 \$ 1,019,810.00	50,573 \$ 2,157,261.00	
CO3B			
#11/23- labor escalation	\$ 66.028.00	\$ 114.825.00	
#5/17- 10 year Storm water	m		
#16- Alton Ct	1028 \$ 16,865.00		
#15- Rear to Front		939 \$ 45.862.00	
#6/18	\$ 0	S	
# 1/14- Gen sets	3433 \$ 199,037.00	\$	
#14- Lincoln Rd PS		S	
#2 -Alton CT	95 \$ 6,141.00		
#4 -6th St Side walk	53 \$ 3,120.00		
#3- Alton CT re-surfacing	385 \$ 37,714.00		
Sub Totals	36.117 \$ 1.720.909.00	69 871 \$ 3 287 389 00	
30 Months at 3% per year (0.25% per month)= 7.5% -091		S	June 2022- January 2025
27 Months at 3% per year (0.25% per Month=6.75%- 090	\$ 116,161.00		March 9,2021 - July 4,2023
New CO Escalation			
24 Months at 3% per year= 6%- 091	17,075 \$ 860,732.00	53,725 \$ 2,736,752.00	Jan 2023- Jan 2025
6 months at 3% narvoar (0.25% nor month = 1 5%), 000		\$ 164,295.00	
OCO - (0.00) - Transit oco o bei includi - Transit oco o oco	00'11'6'71 \$		Jan 2023- July 2023
Total Escalation	\$ 129,072.00	\$ 410,849.00	
1.44% N/1.55%S	\$ 2,000.00	\$ 5,916.00	
Grand Total	\$ 131 072 00	4	



West Avenue South - 090

Water Quality

Ītem	Otv	Unit	Subcontractor	Material		Labor		Equipment	NewTotal	Original Total	Delta	Notes
	Qiy	Cill	Subconti actor	.v.acci iai	MH	Rate	Total	Equipment	1 (CW I Otal	Original Total	жи	. 10163
General Conditions			<u> </u>								\$ -	
General Conditions		LS	\$ -	\$ 128,168.00	240	\$ 414.53	\$ 99,487.00	\$ 3,600.00	\$ 231,255.00	++	\$ 231,255.00	
Settelment Tank Drill 30'					 	 		 		+		1
Template												
Exacavate and Haul	102	CY	\$ 500.00	\$ -	84				\$ 9,999.00		\$ 9,999.00	ļ
Concrete Template Forms (Sonotube)	69 66	CY EA	\$ - \$ -	\$ 9,630.00 \$ 4,280.00	91 462			\$ 5,921.00 \$ 30,063.00	\$ 19,920.00 \$ 56,522.00		\$ 19,920.00 \$ 56,522.00	1
Forms (Exterior)	3	EA	\$ -	\$ 3,852.00	84			\$ 5,466.00	\$ 13,351.00	-	\$ 13,351.00	1
Blocking	1	LS	\$ -	\$ -	21	\$ 48.00	\$ 1,008.00	\$ 1,366.00	\$ 2,374.00		\$ 2,374.00	
Survey	1	LS	\$ 5,850.00	\$ -			\$ -	\$ -	\$ 5,850.00		\$ 5,850.00	
Concrete Pump Haul Old Template Debris	1	LS LS	\$ 2,140.00	\$ -	42	\$ 48.00	\$ - \$ 2,016.00	\$ -	\$ 2,140.00 \$ 8,774.00		\$ 2,140.00 \$ 8,774.00	1
Drill and Place Grout		- 13	,	3 4,025.00	42	ÿ 48.00	ÿ 2,010.00	\$ 2,733.00	3 8,774.00	+ +	3 8,774.00	
Drill and Place Grout			\$ -	\$ -	2160	\$ 45.02	\$ 97,249.00	\$ 249,096.00	\$ 346,345.00		\$ 346,345.00	
Grout Rebar			\$ -	\$ 69,818.00 \$ 37,919.00			\$ - \$ -	\$ - \$ -	\$ 69,818.00 \$ 61,544.00		\$ 69,818.00 \$ 61,544.00	
Spoils Disposal			\$ 5,062.00	\$ 37,919.00	 	 	\$ -	\$ -	\$ 5,062.00		\$ 5,062.00	1
Concrete Pump			\$ 6,420.00	\$ -			\$ -	\$ -	\$ 6,420.00		\$ 6,420.00	
Mass Excavation and Tremie			ļ. —			4						
Excavation Excavation (Last 4')	444 66	CY	\$ -	\$ - \$ -	240 104		\$ 10,734.00 \$ 4,651.00	\$ 13,665.00 \$ 5,921.00	\$ 24,399.00 \$ 10,572.00	-	\$ 24,399.00 \$ 10,572.00	1
Clean Sides	1	LS	\$ -	\$ -	72			\$ 4,099.00	\$ 7,319.00		\$ 7,319.00	
Tremie Pour	150	CY	\$ -	\$ 20,063.00	312	\$ 44.72	\$ 13,954.00	\$ 17,764.00	\$ 51,781.00		\$ 51,781.00	
Tremie Rebar/Bottom Slab	26250	LB	\$ 7,875.00	\$ 14,044.00		#DIV/0!	\$ -	\$ -	\$ 21,919.00		\$ 21,919.00	<u> </u>
Dewater and Seal Leveling Course	30	LS CY	\$ -	\$ -	120 119		\$ 5,367.00 \$ 5,713.00	\$ 6,832.00 \$ 7,743.00	\$ 12,199.00 \$ 17,469.00		\$ 12,199.00 \$ 17,469.00	1
Trucking	30		\$ 5,738.00	\$ 4,013.00	119	y 70.U1	\$ 5,713.00	\$ 7,743.00	\$ 5,738.00		\$ 5,738.00	<u> </u>
Tremie Pump and Leveling Course			\$ 1,926.00	\$ -			\$ -	\$ -	\$ 1,926.00		\$ 1,926.00	<u> </u>
Poly Tube Injection / Seal		<u> </u>	\$ -	\$ 5,350.00	 		\$ -	\$ -	\$ 5,350.00	↓ 	\$ 5,350.00	
Wet Well Drill 33'		 	 		 	 	 	 		+		1
Template					†	<u> </u>	<u> </u>			+		<u> </u>
Exacavate and Haul	102	CY	\$ 500.00	\$ -	84		\$ 4,033.00		\$ 9,999.00		\$ 9,999.00	
Concrete Template	69	CY	\$ -	\$ 9,630.00	91			\$ 5,921.00	\$ 19,920.00		\$ 19,920.00	<u> </u>
Forms (Sonotube) Forms (Exterior)	66	EA EA	\$ - \$ -	\$ 4,280.00 \$ 3,852.00	462 84		\$ 22,179.00 \$ 4,033.00	\$ 30,063.00 \$ 5,466.00	\$ 56,522.00 \$ 13,351.00		\$ 56,522.00 \$ 13,351.00	1
Blocking	1	LS	\$ -	\$ 3,832.00	21			\$ 1,366.00	\$ 2,374.00		\$ 2,374.00	1
Survey	1	LS	\$ 5,850.00	\$ -			\$ -	\$ -	\$ 5,850.00)	\$ 5,850.00	
Concrete Pump	1	LS	\$ 2,140.00	\$ -		4	\$ -	\$ -	\$ 2,140.00		\$ 2,140.00	
Haul Old Template Debris Drill and Place Grout	1	LS	\$ -	\$ 4,025.00	42	\$ 48.00	\$ 2,016.00	\$ 2,733.00	\$ 8,774.00	+ +	\$ 8,774.00	1
Drill and Place Grout			\$ -	\$ -	2855	\$ 45.04	\$ 128,584.00	\$ 329,357.00	\$ 457,941.00		\$ 457,941.00	
Grout			\$ -	\$ 81,435.00			\$ -	\$ -	\$ 81,435.00		\$ 81,435.00	
Rebar			\$ 25,515.00	\$ 45,512.00			\$ -	\$ -	\$ 71,027.00		\$ 71,027.00	
Spoils Disposal Concrete Pump		-	\$ 5,625.00 \$ 6,420.00	\$ -	<u> </u>		\$ - \$ -	\$ - \$ -	\$ 5,625.00 \$ 6,420.00		\$ 5,625.00 \$ 6,420.00	1
Mass Excavation and Tremie			3 0,420.00	, -			· -	, -	3 0,420.00	+	3 0,420.00	
Excavation	486	CY	\$ -	\$ -	200	\$ 44.73	\$ 8,945.00	\$ 11,387.00	\$ 20,332.00		\$ 20,332.00	
Excavation (Last 8')	141	CY	\$ -	\$ -	222.18	\$ 44.72		\$ 12,649.00	\$ 22,585.00		\$ 22,585.00	
Clean Sides Tremie Pour	96	LS CY	\$ -	\$ -	88 152		\$ 3,936.00 \$ 6,798.00	\$ 5,010.00 \$ 8,654.00	\$ 8,946.00 \$ 30,346.00	-	\$ 8,946.00 \$ 30,346.00	1
Tremie Rebar/Bottom Slab	16800	LB	\$ 5,040.00			#DIV/0!	\$ -	\$ -	\$ 14,028.00		\$ 14,028.00	
Dewater and Seal	1	LS	\$ -	\$ -	104				\$ 10,572.00)	\$ 10,572.00	
Leveling Course	21	CY	\$ -	\$ 2,809.00	70	\$ 48.00			\$ 10,724.00		\$ 10,724.00	
Trucking Tremie Pump and Leveling Course		-	\$ 5,738.00 \$ 1,926.00	\$ -	<u> </u>		\$ - \$ -	\$ - \$ -	\$ 5,738.00 \$ 1,926.00		\$ 5,738.00 \$ 1,926.00	1
Poly Tube Injection / Seal			\$ -	\$ 5,000.00	1		\$ -	\$ -	\$ 5,000.00		\$ 5,000.00	1
Mechanical Work												
Baffle Skimmer	3	EA	\$ -	\$ 32,100.00 \$ 416.395.00		\$ 49.03			\$ 38,552.00		\$ 38,552.00	
25 HP Flygt Pump 12" DIP Discharge	3 225	EA LF	\$ - \$ -	\$ 416,395.00 \$ 13,924.00	360 60		\$ 16,962.00 \$ 2,942.00		\$ 450,907.00 \$ 20,376.00		\$ 450,907.00 \$ 20,376.00	
12" Check Valve	3	EA	\$ -	\$ 35,085.00	18				\$ 37,021.00)	\$ 37,021.00	
NBG Sets / Flanges	60	EA	\$ -	\$ 27,799.00	120	\$ 49.03	\$ 5,884.00	\$ 7,020.00	\$ 40,703.00		\$ 40,703.00	
24" x 12" Cross w/ Cap 24" Well	3 300	EA LF	\$ -	\$ 17,201.00 \$ 6,011.00	24 15				\$ 19,782.00 \$ 232,623.00		\$ 19,782.00 \$ 232,623.00	1
24" Well 36" x 78" HS 20 Hatch & Frame	300	LF EA	\$ 225,000.00	\$ 6,011.00	15				\$ 232,623.00 \$ 1,612.00		\$ 232,623.00 \$ 1,612.00	
56" x 60" HS 20 Hatch & Frame	3	EA	\$ -	\$ -	15	\$ 49.00	\$ 735.00	\$ 881.00	\$ 1,616.00	1	\$ 1,616.00	
56" x 112" HS 20 Hatch & Frame	3	EA	\$ -	\$ -	25				\$ 2,688.00		\$ 2,688.00	<u> </u>
11'-8" x 8' x 7' Vault Concrete Cover (15' Dia.)	3 6	EA EA	\$ -	\$ 28,890.00 \$ 33,705.00	150 60		\$ 7,355.00 \$ 2,942.00	\$ 8,775.00 \$ 3,510.00	\$ 45,020.00 \$ 40,157.00		\$ 45,020.00 \$ 40,157.00	
Platform (8.44 NAVD)	3	EA	\$ 24,000.00	\$ 33,705.00	30			\$ 3,510.00	\$ 40,157.00		\$ 40,157.00	†
Landscaping Screening	3	LS	\$ 22,500.00	\$ -			\$ -	\$ -	\$ 22,500.00		\$ 22,500.00	
Grout / Seal / Coatings	1	LS	\$ -	\$ 16,050.00	150		\$ 7,355.00	\$ 8,775.00	\$ 32,180.00		\$ 32,180.00	<u> </u>
Start up / Commissioning Warranty Allowance	1	LS LS	\$ -	\$ 1,070.00 \$ 6,420.00	30 60			\$ 1,755.00 \$ 3,510.00	\$ 4,296.00 \$ 12,872.00		\$ 4,296.00 \$ 12,872.00	
24" Well Credit	1	LS	\$ (120,750.00)	\$ 6,420.00	60	45.03 ب	\$ -	\$ -	\$ 12,872.00		\$ 12,872.00	1
Electrical / I&C			. , .,,	7							· , , , , , ,	
Control Pannels w/ Floats	3	EA	\$ 102,000.00		4.5.5.5		\$ -	\$ -	\$ 102,000.00		\$ 102,000.00	
Ductbank - Civil	700	LF	\$ -	\$ 12,733.00	1084.99	\$ 47.12	\$ 51,121.00	\$ 52,892.00	\$ 116,746.00	+	\$ 116,746.00	
24" Interconnecting Pipping			\$ -	\$ 1,335.00	600	\$ 46.70	\$ 28,019.00	\$ 26,137.00	\$ 55,491.00	+	\$ 55,491.00	†
24" Interconnecting Pipping	1	LS	\$ -	\$ 2,690.00	40	\$ 51.90	\$ 2,076.00	\$ 1,484.00	\$ 6,250.00)	\$ 6,250.00	
Dewatering	1	LS	\$ 36,000.00	\$ 5,350.00	180				\$ 56,838.00		\$ 56,838.00	<u> </u>
Excavation Set up/Down & Install	300	CY LS	\$ - \$ -	\$ -	300 72		\$ 14,710.00 \$ 3,392.00		\$ 28,724.00 \$ 14,763.00		\$ 28,724.00 \$ 14,763.00	
Seal, Grout & Backfill	360	TN	\$ -	\$ -			\$ 3,392.00	\$ 2,363.00	\$ 14,703.00		\$ 14,703.00	
			\$ -	\$ -		#DIV/0!	\$ -	\$ -	\$ -		\$ -	
Utility Relocation & Removals	4	10	\$ -	\$ -		#DIV/0!	\$ -	\$ -	\$ -		\$ -	
Utility Relocation & Removals	1	LS	\$ -	\$ 3,000.00	980	ş 48.U1	\$ 47,046.00	30,194.00 ډ	\$ 80,240.00	+	\$ 80,240.00	
												
			\$ 406,640.00	\$ 1,150,333.00	13075.17		\$ 694,463.00	\$ 988,618.00	\$ 3,240,054.00		\$ 3,240,054.00	
											\$ 20,332.00	<u> </u>
											\$ 283,341.40 \$ 48,924.82	



Activity	Description	Quantity	Unit	Calenda WC	ar Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
*** 10	M I II. 4.	General Cond		F(210A 5	0 10.00	Takeoff:	1.00		Bid:	1.	.00 LS
10.1 Mh:	Mobilization Shifts:	1.00 Mh/Un:	LS	F6319A 5 Un/Sh:	0 10.00			63,588			63,588 63,588.00
10.2	General Conditions		DAY	F6319A 5	0 10.00	99,487		64,580	3,600		167,667
	1,920.00 Shifts:	Mh/Un:	32.0000			1,658.11		1,076.33	60.00		2,794.45
	****Biditem/Category 1,920.00 Mh/Un:	10 ****** 1,920.0000	****			99,487 99,486.72		128,168 128,168.00	3,600 3,600.00	2	231,255 31,254.72
*** 31	F	Template	CV	EC2104 5		Takeoff:	1.00	LS	Bid:		.00 LS
31.01 Mh:	Excavate and Haul 84.00 Shifts:	102.00 1.2 Mh/Un:	0.8235	F6319A 5 Un/Sh:	0 10.00 85.0000	4,033 39.53			5,466 53.59	500 4.90	9,998 98.02
31.02	Concrete Template (F6319A 5		4,369	9,630		5,921	4.90	19,920
Mh:	91.00 Shifts:	1.3 Mh/Un:		Un/Sh:	53.0769	63.31	139.57		85.82		288.70
31.03	Forms - Sonotube	66.00		F6319A 5		22,179	107.07	4,280	30,063		56,522
Mh:	462.00 Shifts:	6.6 Mh/Un:	7.0000	Un/Sh:	10.0000	336.04		64.85	455.50		856.39
31.04	Forms - Exterior	3.00	EA	F6319A 5	0 10.00	4,033		3,852	5,466		13,350
Mh:	84.00 Shifts:	1.2 Mh/Un:	28.0000	Un/Sh:	2.5000	1,344.17		1,284.00	1,821.99		4,450.16
31.05	Blocking	1.00	LS	F6319A 5	0 10.00	1,008			1,367		2,375
Mh:	21.00 Shifts:	0.3 Mh/Un:		Un/Sh:	3.3333	1,008.12			1,366.50		2,374.62
31.06	Survey	1.00	LS	F6319A 5	0 10.00			5,850			5,850
Mh:	Shifts:	Mh/Un:		Un/Sh:				5,850.00			5,850.00
31.07	Pump Concrete	1.00	LS	F6319A 5	0 10.00				2,140		2,140
Mh:	Shifts:	Mh/Un:	1.0	Un/Sh:	0 10.00	2.016		1.025	2,140.00		2,140.00
31.08 Mh:	Haul Old Template 3 42.00 Shifts:	Debris 1.00 0.6 Mh/Un:		F6319A 5 Un/Sh:	0 10.00 1.6667	2,016 2,016.25		4,025 4,025.00	2,733 2,732.99		8,774 8,774.24
***** Mh:	****Biditem/Category 784.00 Mh/Un:	31 ****** 784.0000	****			37,637 37,636.62	9,630 9,630.00	18,007 18,007.00	53,156 53,155.78		118,929 118,929.40
*** 32		Drill and PLac	no Cuosat			Takeoff:	1.00	IC	Bid:	1	.00 LS
32		Drill and r Lac	e Grout							1.	
32.01	Drill and Place Grou		FΔ	F6319A 5			1.00	25		-	
32.01 Mh: 2	Drill and Place Grou	ut 72.00		F6319A 5	0 10.00	97,249	1.00		249,096		346,345
Mh: 2	2,160.00 Shifts:	ut 72.00 24.0 Mh/Un:	30.0000	Un/Sh:	0 10.00 3.0000						346,345 4,810.34
		ut 72.00	30.0000		0 10.00 3.0000	97,249	69,818 155.15		249,096		346,345
Mh: 2	2,160.00 Shifts: Grout	ut 72.00 24.0 Mh/Un: 450.00	30.0000 CY	Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00	97,249	69,818		249,096	23,625	346,345 4,810.34 69,818
Mh: 2 32.02 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts:	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un:	30.0000 CY	Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00	97,249	69,818 155.15		249,096		346,345 4,810.34 69,818 155.15
Mh: 2 32.02 Mh: 32.03	2,160.00 Shifts: Grout Shifts: Rebar	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00	30.0000 CY LBS	Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00	97,249	69,818 155.15 37,919	5,062	249,096	23,625	346,345 4,810.34 69,818 155.15 61,544
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts:	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un:	30.0000 CY LBS	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00	97,249	69,818 155.15 37,919		249,096 3,459.67	23,625	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25
Mh: 32.02 Mh: 32.03 Mh: 32.04	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00	30.0000 CY LBS	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00	97,249	69,818 155.15 37,919	5,062	249,096	23,625	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un:	30.0000 CY LBS CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00	97,249 1,350.68	69,818 155.15 37,919 0.48	5,062 11.25	249,096 3,459.67 6,420 14.27	23,625 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un:	30.0000 CY LBS CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00	97,249	69,818 155.15 37,919 0.48	5,062	249,096 3,459.67	23,625 0.30 23,625	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 *******	30.0000 CY LBS CY CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00	97,249 1,350.68	69,818 155.15 37,919 0.48	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 4***** Mh: 2	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ******* 2,160.0000	30.0000 CY LBS CY CY cy ion and T	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00	97,249 97,249 97,248.60	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 4***** Mh: 2	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati	30.0000 CY LBS CY CY CY CY CY CY	Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00	97,249 97,249 97,248.60	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid:	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 4***** Mh: 2 *** 33 33.01	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un:	30.0000 CY LBS CY CY CY	Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 148.0000	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 660.00 1.3 Mh/Un:	30.0000 CY LBS CY CY CY 0.5405 CY 1.5758	Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 148.0000 0 10.00 50.7692	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 660.00 1.3 Mh/Un: 1.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS	Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: ********	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un:	30.0000 CY LBS CY CY CY 0.5405 CY 1.5758 LS 72.0000	Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00	30.0000 CY LBS CY CY CY 0.5405 CY 1.5758 LS 72.0000 CY	Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54,95 10,573 160.19 7,320 7,319.54 51,780
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.04	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 100 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800	D Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: **** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 1.00 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800	O Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954	107,736 107,736.16 1.00 20,063 133.75 14,044	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764	23,625 0.30 23,625 23,625.00 1.	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: **** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.05 Mh: 33.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: om Slab 26,250.00 Mh/Un:	30.0000 CY LBS CY CY ***** On and T CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	O Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 0 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 11.00	30.0000 CY LBS CY CY ***** ion and T CY 0.5400 CY 1.5758 LS 72.0000 CY 2.0800 LBS	O Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02	107,736 107,736.16 1.00 20,063 133.75 14,044	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.06 Mh: 33.06	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 100 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 Mh/Un: 150.00 3.9 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00 0.6667	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76	107,736 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 30.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00 0.6667 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76 5,713	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43 6,832 6,832.49 7,743	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05 Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07 Mh: 33.07 Mh: 33.07	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course 119.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 0 150.00 Mh/Un: 150.00 1.5 Mh/Un: 1.00 1.5 Mh/Un: 30.00 1.7 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 1.111 0 10.00 38.4615 0 10.00 0.6667 0 10.00 17.6471	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76	107,736 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00 LS	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469 582.29
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 30.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 1.111 0 10.00 38.4615 0 10.00 0.6667 0 10.00 17.6471	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76 5,713	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43 6,832 6,832.49 7,743	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05 Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07 Mh: 33.08	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course 119.00 Shifts: Trucking	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 1.5 Mh/Un: 1.00 1.7 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS LS 120.0000 CY 3.9667 LS	F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00 0.6667 0 10.00 17.6471 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76 5,713	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00 LS	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43 6,832 6,832.49 7,743	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469 582.29 5,738



Biditem Activity	Description			Quantity	Unit	Calend WC	dar Hrs/Shif	t Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
33.10	Poly Tube	e Injection	/ Seal	1.00	LS	F6319A	50 10.00)	5,350				5,350
Mh:		Shifts:		Mh/Un:		Un/Sh:			5,350.00				5,350.00
*****	****Biditem/	Category	33	*****	****			43,638	43,469	5,738	57,952	7,875	158,672
Mh:	967.00	Mh/Un:	96	57.0000				43,637.81	43,468.75	5,738.00	57,952.28	7,875.00	158,671.84
*** 51			Te	emplate				Takeoff:	1.00	IS	Bid:	1	00 LS
51.01	Excavate	and Haul	1,	102.00	CY	F6319A	50 10.00		1.00	23	5,466	500	9,998
Mh:	84.00	Shifts:	1.2	Mh/Un:	0.8235	Un/Sh:	85.0000	39.53			53.59	4.90	98.02
51.02		Template (F6319A			9,630		5,921		19,920
Mh:	91.00	Shifts:	1.3	Mh/Un:		Un/Sh:	53.0769		139.57	4.200	85.82		288.70
51.03 Mh:	Forms - S 462.00	Sonotube Shifts:	6.6	66.00 Mh/Un:		F6319A Un/Sh:	50 10.00 10.0000			4,280 64.85	30,063 455.50		56,522 856.39
51.04	Forms - E		0.0	3.00		F6319A				3,852	5,466		13,350
Mh:	84.00	Shifts:	1.2	Mh/Un:		Un/Sh:	2.5000	,		1,284.00	1,821.99		4,450.16
51.05	Blocking			1.00		F6319A		,		-,	1,367		2,375
Mh:	21.00	Shifts:	0.3	Mh/Un:	21.0000	Un/Sh:	3.3333				1,366.50		2,374.62
51.06	Survey			1.00	LS	F6319A	50 10.00			5,850			5,850
Mh:		Shifts:		Mh/Un:		Un/Sh:				5,850.00			5,850.00
51.07	Pump Cor			1.00	LS	F6319A	50 10.00				2,140		2,140
Mh:	** 1.011	Shifts:	.	Mh/Un:	* a	Un/Sh:	5 0 1 0 00	2016		4.005	2,140.00		2,140.00
51.08	42.00	Template		1.00 Mh/Un:		F6319A Un/Sh:		,		4,025	2,733		8,774
Mh:	42.00	Shifts:	0.6	Min/Un:	42.0000	Un/Sn:	1.6667	2,016.25		4,025.00	2,732.99		8,774.24
*****	****Biditem/	Category	51	*****	****			37,637	9,630	18,007	53,156	500	118,929
Mh:	784.00	Mh/Un:		34.0000				37,636.62		18,007.00	53,155.78		118,929.40
*** 52			Dr	ill and PLac	ce Grout			Takeoff:	1.00	LS	Bid:	1.	00 LS
52.01	Drill and	Place Grou	ıt	72.00	EA	F6319A	50 10.00	128,584			329,357		457,941
Mh: 2	2,855.99	Shifts:	31.7	Mh/Un:	39.6665	Un/Sh:	2.2689	1,785.88			4,574.40		6,360.29
52.02	Grout			486.00	CY	F6319A	50 10.00		81,435				81,435
Mh:		Shifts:		Mh/Un:		Un/Sh:			167.56				167.56
		OIIII COI											
52.03	Rebar			85,050.00	LBS	F6319A	50 10.00		45,512			25,515	,
52.03 Mh:		Shifts:		85,050.00 Mh/Un:		F6319A Un/Sh:			45,512 0.54	5 625		25,515 0.30	0.84
52.03 Mh: 52.04	Rebar Spoils Dis	Shifts: sposal		85,050.00 Mh/Un: 450.00		F6319A Un/Sh: F6319A			,	5,625 12.50		,	0.84 5,625
52.03 Mh: 52.04 Mh:	Spoils Dis	Shifts: sposal Shifts:		85,050.00 Mh/Un: 450.00 Mh/Un:	CY	F6319A Un/Sh: F6319A Un/Sh:	50 10.00)	,	5,625 12.50	6.420	,	0.84 5,625 12.50
52.03 Mh: 52.04 Mh:		Shifts: sposal Shifts:		85,050.00 Mh/Un: 450.00	CY	F6319A Un/Sh: F6319A	50 10.00)	,		6,420 13.21	,	0.84 5,625 12.50 6,420
52.03 Mh: 52.04 Mh: 52.05 Mh:	Spoils Dis	Shifts: sposal Shifts: Pump Shifts:		85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un:	CY CY	F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00)	0.54	12.50	13.21	0.30	71,027 0.84 5,625 12.50 6,420 13.21
52.03 Mh: 52.04 Mh: 52.05 Mh:	Spoils Dis	Shifts: sposal Shifts: Pump Shifts:	52	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un:	CY CY	F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00	128,584	0.54	12.50 5,625	13.21 335,777	0.30 25,515	0.84 5,625 12.50 6,420 13.21
52.03 Mh: 52.04 Mh: 52.05 Mh:	Spoils Dis	Shifts: sposal Shifts: Pump Shifts:		85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un:	CY CY	F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00)	0.54	12.50	13.21	0.30 25,515	0.84 5,625 12.50 6,420 13.21
52.03 Mh: 52.04 Mh: 52.05 Mh: ****** Mh: 2	Spoils Dis	Shifts: sposal Shifts: Pump Shifts:	2,85	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un:	CY CY ****	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00	128,584 128,583.65 Takeoff:	0.54	5,625 5,625.00	13.21 335,777 335,776.98 Bid:	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21
52.03 Mh: 52.04 Mh: 52.05 Mh: ******* Mh: 2	Spoils Dis Concrete ****Biditem/9 2,855.99 Excavation	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un:	2,85 M	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: ******* 55.9900 ass Excavati 486.00	CY CY ***** on and To	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00	128,584 128,583.65 Takeoff:	0.54 126,948 126,947.58	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21 622,448 622,448.21 00 LS 20,332
52.03 Mh: 52.04 Mh: 52.05 Mh: ************************************	Spoils Dis Concrete ****Biditem/9 2,855.99 Excavation 200.00	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts:	2,85 M	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: ******* 455.9900 ass Excavati 486.00 Mh/Un:	CY ***** fon and Tr CY 0.4115	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000	128,584 128,583.65 Takeoff: 0 8,945 0 18.40	0.54 126,948 126,947.58	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84
52.03 Mh: 52.04 Mh: 52.05 Mh: ************************************	Spoils Dis Concrete ****Biditem/0 2,855.99 Excavation 200.00 Excavation	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8')	2,85 M	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: ******* 455.9900 ass Excavati 486.00 Mh/Un: 141.00	CY cy 0.4115	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936	0.54 126,948 126,947.58	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh:	Spoils Dis Concrete ****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts:	2,85 M	85,050.00 Mh/Un:	CY ***** **** **** **** **** **** ****	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: remie F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 50.7742	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47	0.54 126,948 126,947.58	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18
52.03 Mh: 52.04 Mh: 52.05 Mh: ************************************	Spoils Dis Concrete ****Biditem/0 2,855.99 Excavation 200.00 Excavation 222.18 Clean Sid	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les	2,85 M 2.5	85,050.00 Mh/Un:	CY ***** **** **** **** **** **** ****	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: remie F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 50.7742 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,936	0.54 126,948 126,947.58	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh:	Spoils Dis Concrete ****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18 Clean Sid 88.00	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts:	2,85 M	85,050.00 Mh/Un:	CY con and To CY 0.4115 CY 1.5757 LS 88.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 50.7742 50 10.00 0.9091	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,936 3,935.62	126,948 126,947.58 1.00	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04	Spoils Dis Concrete ****Biditem/0 2,855.99 Excavation 200.00 Excavation 222.18 Clean Sid 88.00 Tremie Po	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our	2,85 M 2.5 2.8 1.1	85,050.00 Mh/Un:	CY ***** ***** ***** ***** ***** ****	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 50.7742 50 10.00 0.9091 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,936 2 3,935.62 0 6,798	126,948 126,947.58 1.00	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654	25,515 25,515.00	0.84 5,622 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,347
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh:	Spoils Dis Concrete *****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18 Clean Sid 88.00 Tremie Po	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our Shifts:	2,85 M 2.5 2.8 1.1 1.9	85,050.00 Mh/Un:	CY CY ***** fon and Tr CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833	remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 50.7742 50 10.00 0.9091 50 10.00 50.5263	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,936 2 3,935.62 0 6,798 7 70.81	126,948 126,947.58 1.00	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49	25,515 25,515.00	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,347 316.11
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh:	Spoils Dis Concrete *****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18 Clean Sid 88.00 Tremie Po	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our Shifts:	2,85 M 2.5 2.8 1.1 1.9	85,050.00 Mh/Un:	CY CY ***** fon and Tr CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 50.7742 50 10.00 0.9091 50 10.00 50.5263	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,936 2 3,935.62 0 6,798 7 70.81	126,948 126,947.58 1.00	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654	25,515 25,515.00	0.84 5,622 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,347 316.11 14,028
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh: 53.05 Mh:	Spoils Dis Concrete *****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18 Clean Sid 88.00 Tremie Po	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our Shifts: ebar / Bott Shifts:	2,85 M 2.5 2.8 1.1 1.9	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: ******* 486.00 Mh/Un: 141.00 Mh/Un: 1.00	CY CY ***** fon and To CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 50.7742 50 10.00 0.9091 50 10.00 50.5263 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 3,936 3,935.62 0 6,798 70.81	126,948 126,947.58 1.00 14,894 155.15 8,988	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,347 316.11 14,028 0.84 10,573
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh: 53.05 Mh: 53.06 Mh:	Spoils Dis Concrete *****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18 Clean Sid 88.00 Tremie Po 152.00 Tremie Ro Dewater a 104.00	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our Shifts: ebar / Bott Shifts: and Seal Shifts:	2,85 M 2.5 2.8 1.1 1.9	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: ******* 55.9900 ass Excavati 486.00 Mh/Un: 141.00 Mh/Un: 1.00 Mh/Un: 96.00 Mh/Un: 16,800.00 Mh/Un: 1.00 Mh/Un:	CY CY ***** fon and To CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS LS 104.0000	remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 0.9091 50 10.00 50.5263 50 10.00 0.7692	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,936 2 70.81 0 6,798 7 70.81	126,948 126,947.58 1.00 14,894 155.15 8,988 0.54	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,347 316.11 14,028 0.84 10,573
52.03 Mh: 52.04 Mh: 52.05 Mh: ******* Mh: 2 *** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh: 53.05 Mh: 53.06 Mh: 53.07	Spoils Dis Concrete *****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18 Clean Sid 88.00 Tremie Po 152.00 Tremie Ro Dewater a 104.00 Leveling	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our Shifts: ebar / Bott Shifts: and Seal Shifts: Course	2,85 M 2.5 2.8 1.1 1.9 om Slab	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: 486.00 Mh/Un: 55.9900 ass Excavati 486.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 16,800.00 Mh/Un: 1.00 Mh/Un: 21,00	CY CY ***** fon and To CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS LS 104.0000 CY	remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50.7742 50 10.00 0.9091 50 10.00 50.5263 50 10.00 0.7692 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 18.40 0 9,936 2 70.47 3,936 3,935.62 0 6,798 70.81	126,948 126,947.58 1.00 14,894 155.15 8,988 0.54	5,625 5,625.00	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15 5,921 5,921.48 4,555	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448.2 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,34 316.11 14,028 0.84 10,572 10,572.68
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh: 53.05 Mh: 53.06 Mh: 53.07 Mh:	Spoils Dis Concrete *****Biditem/v 2,855.99 Excavatic 200.00 Excavatic 222.18 Clean Sid 88.00 Tremie Po 152.00 Tremie Ro Dewater a 104.00 Leveling 70.00	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our Shifts: ebar / Bott Shifts: and Seal Shifts: Course Shifts:	2,85 M 2.5 2.8 1.1 1.9 om Slab	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: 486.00 Mh/Un: 55.9900 ass Excavati 486.00 Mh/Un: 141.00 Mh/Un: 1.00 Mh/Un: 16,800.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un:	CY CY ***** fon and To CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS LS 104.0000 CY 3.33333	remie F6319A Un/Sh:	50 10.00 50 10.00 194.4000 50 10.00 50.7742 50 10.00 50.5263 50 10.00 0.7692 50 10.00 0.7692 50 10.00 0.7692	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,935.62 0 6,798 70.81 0 4,651 2 4,651.20 0 3,360 0 160.02	126,948 126,947.58 1.00 14,894 155.15 8,988 0.54	5,625 5,625.00 LS	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946 130,347 31,647 31,647 14,028 0.84 10,572 622,448.21 00 LS
52.03 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh: 53.05 Mh: 53.05 Mh: 53.05 Mh: 53.05 Mh: 53.05	Spoils Dis Concrete *****Biditem/0 2,855.99 Excavatio 200.00 Excavatio 222.18 Clean Sid 88.00 Tremie Po 152.00 Tremie Ro Dewater a 104.00 Leveling	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: ebar / Bott Shifts: and Seal Shifts: Course Shifts:	2,85 M 2.5 2.8 1.1 1.9 om Slab	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: 486.00 Mh/Un: 55.9900 ass Excavati 486.00 Mh/Un: 141.00 Mh/Un: 1.00	CY CY ***** fon and To CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS LS 104.0000 CY 3.33333	remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50.7742 50 10.00 0.9091 50 10.00 50.5263 50 10.00 0.7692 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 0 18.40 0 9,936 2 70.47 0 3,935.62 0 6,798 70.81 0 4,651 2 4,651.20 0 3,360 0 160.02	126,948 126,947.58 1.00 14,894 155.15 8,988 0.54	5,625 5,625.00 LS	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15 5,921 5,921.48 4,555	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,34.7 316.17 4,028 10,572 510.67 5,738
52.03 Mh: 52.04 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.06 Mh: 53.06 Mh: 53.07 Mh: 53.08 Mh:	Spoils Dis Concrete *****Biditem/9 2,855.99 Excavatic 200.00 Excavatic 222.18 Clean Sid 88.00 Tremie Po 152.00 Tremie Ro Dewater a 104.00 Leveling 70.00 Trucking	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: ebar / Bott Shifts: and Seal Shifts: Course Shifts: Shifts:	2,85 M 2.5 2.8 1.1 1.9 om Slab 1.3 1.0	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: 486.00 Mh/Un: 55.9900 ass Excavati 486.00 Mh/Un: 141.00 Mh/Un: 1.00 Mh/Un:	CY CY ***** fon and Tr CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS LS 104.0000 CY 3.33333 LS	remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50.7742 50 10.00 0.9091 50 10.00 50.5263 50 10.00 0.7692 50 10.00 21.0000 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 1 18.40 0 9,936 2 70.47 3,935.62 0 6,798 6 70.81 0 4,651 2 4,651.20 0 3,360 1 160.02	126,948 126,947.58 1.00 14,894 155.15 8,988 0.54	5,625 5,625.00 LS	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15 5,921 5,921.48 4,555 216.90	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,34.7 316.17 4,028 10,572 5,738
52.03 Mh: 52.04 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.02 Mh: 53.06 Mh: 53.07 Mh: 53.07 Mh: 53.08 Mh: 53.09	Spoils Dis Concrete *****Biditem/9 2,855.99 Excavatic 200.00 Excavatic 222.18 Clean Sid 88.00 Tremie Po 152.00 Tremie Ro Dewater a 104.00 Leveling 70.00 Trucking	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: our Shifts: ebar / Bott Shifts: and Seal Shifts: Course Shifts: Shifts:	2,85 M 2.5 2.8 1.1 1.9 om Slab 1.3 1.0	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: 486.00 Mh/Un: 55.9900 ass Excavati 486.00 Mh/Un: 141.00 Mh/Un: 1.00	CY CY ***** fon and Tr CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS LS 104.0000 CY 3.33333 LS	remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50.7742 50 10.00 0.9091 50 10.00 50.5263 50 10.00 0.7692 50 10.00 21.0000 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 1 18.40 0 9,936 2 70.47 3,935.62 0 6,798 6 70.81 0 4,651 2 4,651.20 0 3,360 1 160.02	126,948 126,947.58 1.00 14,894 155.15 8,988 0.54	5,625 5,625.00 LS	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15 5,921 5,921,48 4,555 216.90	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448.21 00 LS 20,332 41.84 22,586 160.18 8,946.11 30,347 316.11 14,028 10,573 10,572.68 10,724 510.67 5,738 5,738.00
52.03 Mh: 52.04 Mh: 52.04 Mh: 52.05 Mh: **** 53 53.01 Mh: 53.02 Mh: 53.03 Mh: 53.04 Mh: 53.05 Mh: 53.06 Mh: 53.07 Mh: 53.08 Mh:	Spoils Dis Concrete *****Biditem/6 2,855.99 Excavation 200.00 Excavation 222.18 Clean Sid 88.00 Tremie Po 152.00 Tremie Ro Dewater a 104.00 Leveling 70.00 Trucking Tremie Po	Shifts: sposal Shifts: Pump Shifts: Category Mh/Un: on Shifts: on (Last 8') Shifts: les Shifts: ebar / Bott Shifts: and Seal Shifts: Course Shifts: Shifts:	2,85 M 2.5 2.8 1.1 1.9 om Slab 1.3 1.0	85,050.00 Mh/Un: 450.00 Mh/Un: 486.00 Mh/Un: 486.00 Mh/Un: 55.9900 ass Excavati 486.00 Mh/Un: 141.00 Mh/Un: 1.00 Mh/Un:	CY CY ***** On and Tr CY 0.4115 CY 1.5757 LS 88.0000 CY 1.5833 LBS LS 104.0000 CY 3.33333 LS	remie F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 50 10.00 194.4000 50 10.00 0.9091 50 10.00 0.7692 50 10.00 0.7692 50 10.00 21.0000 50 10.00	128,584 128,583.65 Takeoff: 0 8,945 1 8.40 0 9,936 2 70.47 3,935.62 0 6,798 7 0.81 0 4,651 2 4,651.20 0 3,360 1 60.02	126,948 126,947.58 1.00 14,894 155.15 8,988 0.54	5,625 5,625.00 LS	13.21 335,777 335,776.98 Bid: 11,387 23.43 12,649 89.71 5,010 5,010.49 8,654 90.15 5,921 5,921.48 4,555 216.90	25,515 25,515.00 1. 5,040 0.30	0.84 5,625 12.50 6,420 13.21 622,448 622,448.21



Biditem Activity	Description	Quantity	Unit	Calendar WC Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
***** Mh:	*****Biditem/Category 836.18 Mh/Un:	3 ***** 836.1800	****		37,626 37,626.18	26,691 26,691.15	5,738 5,738.00	50,104 50,104.06	10,040 10,040.00 1	130,199
*** 54		Mechanical W	ork		Takeoff:	1.00	LS	Bid:	1 (00 LS
54.01	Baffle Skimmer	3.00		F6319A 50 10.00		32,100	L 5	3,510	1.0	38,552
Mh:	60.00 Shifts: 1.2	Mh/Un:	20.0000		,	10,700.00		1,169.99	1	2,850.63
54.05	25 HP Flygt Pump	3.00		F6319A 50 10.00		416,395		17,550		450,907
Mh:	360.00 Shifts: 6.0	Mh/Un:		Un/Sh: 0.5000		138,798.26		5,849.94	15	0,302.25
54.06	12" DIP Discharge 60.00 Shifts: 1.2	225.00	0.2667	F6319A 50 10.00	,	13,924		3,510		20,376
Mh: 54.08	60.00 Shifts: 1.2 12" Check Valve	Mh/Un: 3.00		Un/Sh: 187.5000 F6319A 50 10.00		61.88 35,085		15.60 1,053		90.56
Mh:	18.00 Shifts: 0.4	Mh/Un:		Un/Sh: 8.3333		11,695.10		350.99	1	2,340.29
54.09	NBG Sets / Flanges	60.00		F6319A 50 10.00		27,799		7,020		40,702
Mh:	120.00 Shifts: 2.4	Mh/Un:	2.0000	Un/Sh: 25.0000	98.06	463.31		117.00		678.37
54.10	24 x 12 Cross w/Cap	3.00		F6319A 50 10.00		17,201		1,404		19,782
Mh:	24.00 Shifts: 0.5	Mh/Un:		Un/Sh: 6.2500		5,733.77		467.99		6,594.03
54.11 Mh:	24" Well 15.00 Shifts: 0.3	300.00 Mh/Un:		F6319A 50 10.00 Un/Sh: 1,000.0000		6,011 20.04		877 2.92	225,000 750.00	232,624 775.41
54.12	36"x 78" HS 20 Hatch &			F6319A 50 10.00		20.04		877	/30.00	1,613
Mh:	15.00 Shifts: 0.3	Mh/Un:	5.0000					292.50		537.65
54.13	56"x 60" HS 20 Hatch &			F6319A 50 10.00				881		1,617
Mh:	15.00 Shifts: 0.3	Mh/Un:	5.0000	Un/Sh: 10.0000	245.16			293.71		538.86
54.14	56"x 112" HS 20 Hatch &			F6319A 50 10.00	,			1,462		2,688
Mh:	25.00 Shifts: 0.5	Mh/Un:	8.3333			20.000		487.50		896.11
54.15	11'-8" x 8' x 7' Vault 150.00 Shifts: 3.0	3.00 Mh/Un:		F6319A 50 10.00 Un/Sh: 1.0000	,	28,890 9,630.00		8,775 2,924.97	1	45,020 5,006.59
Mh: 55.01	Concrete Cover (15' Dia.)			F6319A 50 10.00	,	33,705		3,510	1	40,157
Mh:	60.00 Shifts: 1.2	Mh/Un:		Un/Sh: 5.0000	,	5,617.50		584.99		6,692.82
55.02	Platform (8.44 NAVD)	3.00		F6319A 50 10.00		-,,,,,,,,,,		1,755	24,000	27,226
Mh:	30.00 Shifts: 0.6	Mh/Un:	10.0000	Un/Sh: 5.0000	490.33			585.00	8,000.00	9,075.32
55.03	Landscaping Screening	3.00	LS	F6319A 50 10.00	1				22,500	22,500
Mh:	Shifts:	Mh/Un:		Un/Sh:		4 6 0 = 0			7,500.00	-
55.04	Grout / Seal / Coatings	1.00		F6319A 50 10.00	,	16,050		8,775	2	32,180
Mh: 55.05	150.00 Shifts: 3.0 Start-up / Commissioning	Mh/Un: 1.00		Un/Sh: 0.3333 F6319A 50 10.00		16,050.00 1,070		8,774.91 1,755	3	4,296
Mh:	30.00 Shifts: 0.6	Mh/Un:	30.0000			1,070.00		1,754.99		4,295.97
55.06	Warranty Allowance	1.00		F6319A 50 10.00	,	6,420		3,510		12,872
Mh:	60.00 Shifts: 1.2	Mh/Un:	60.0000	Un/Sh: 0.8333	2,941.94	6,420.00		3,509.96	1	2,871.90
55.07	24" Well Credit	-1.00	LS	F6319A 50 10.00					-120,750	
Mh:	Shifts:	Mh/Un:		Un/Sh:					120,750.00 1	20,750.00
***	******D: 1:4/C-4	4 ****			57.757	(24 (50		(())5	150.750	000 202
		,192.0000				634,650 634,650.17		66,225 66,224.93	150,750 150,750.00 9	
*** 55		Electrical / I&			Takeoff:	1.00	LS	Bid:		00 LS
55.1	Control Pannels w/ Floats		EA	F6319A 50 10.00						102,000
Mh:	Shifts:	Mh/Un:		Un/Sh:	51 101	10.722		52,002	34,000.00 3	-
55.2 Mh:	Ductbank - Civil 1,084.99 Shifts: 18.1	700.00 Mh/Un:		F6319A 50 10.00 Un/Sh: 38.7104		12,733 18.19		52,892 75.56		116,747
		55 ***** ,084.9900	****		51,121 51,121.46	12,733 12,733.00		52,892 52,892.24	102,000 102,000.00 ²	
*** 70		24" Interconn	ecting Pin	ping	Takeoff:	1.00	LS	Bid:	1.0	00 LS
70.01	24" Interconnecting Pippi			F6319A 50 10.00		535	800	26,137		55,491
Mh:	600.00 Shifts: 7.5	Mh/Un:		Un/Sh: 0.1333	,	535.00	800.00	26,137.29	5	5,490.93
70.02	Dewatering	1.00		F6319A 50 10.00		2,690		1,484		6,250
Mh:	40.00 Shifts: 1.0	Mh/Un:		Un/Sh: 1.0000				1,484.07		6,249.96
70.03	Excavation	300.00		F6319A 50 10.00		5,350		7,007	36,000	56,838
Mh: 70.04	180.00 Shifts: 3.0 Set up / Down & Install	Mh/Un: 1.00		Un/Sh: 100.0000 F6319A 50 10.00		17.83		23.36 14,014	120.00	189.46 28,724
Mh:	300.00 Shifts: 6.0	Mh/Un:		F6319A 50 10.00 Un/Sh: 0.1667				14,014.02	?	28,724
70.05	Seal, Grout & Backfill	360.00		F6319A 50 10.00		8,988		2,383		14,763
Mh:	72.00 Shifts: 1.2	Mh/Un:		Un/Sh: 300.0000		24.97		6.62		41.01



Biditem				Calendar			Perm	Constr	Equip-	Sub-	
Activity	Description	Quantity	Unit	WC H	Irs/Shift	Labor	Material	Matl/Exp	Ment	Contract	Total
****	****Biditem/Category	70 *****	****			56,678	17,563	800	51,025	36,000	162,066
Mh:	1,192.00 Mh/Un:	1,192.0000				56,678.04	17,562.69	800.00	51,025.19	36,000.00 10	62,065.92
*** 90		Utility Reloca	tions & Rer	novals		Takeoff:	1.00	LS	Bid:	1.0	0 LS
90.01	Utility Relocations	& Removal 1.00) LS	F6319A 50	10.00	47,046		3,000	30,194		80,240
Mh:	980.00 Shifts:	14.0 Mh/Un:	980.0000	Un/Sh:	0.0714	47,045.74		3,000.00	30,193.80	80	0,239.54
****	****Biditem/Category	90 *****	****			47,046		3,000	30,194		80,240
Mh:	980.00 Mh/Un:					47,045.74		3,000.00	30,193.80	80	0,239.54
Mh:	14,756.16 ***REI	PORT TOTALS***				694,458	989,050	190,145	1,009,597	356,805 3,	240,055

N = Activity not adjusted to bid quantity



West Avenue North - 091

Drainage Pipe & Structures

Item	Qty	Unit	Subcontractor	Material		Labor		Equipment	NewTotal	Original Total	Delta	Notes
	20	- Cint	Subconti actor		MH	Rate	Total	Lquipment	c I otal	- 1 giiiii 10tal	Delta	
Drainage Pipe												
arming repr												
8th Street												
24" RCP	222	LF		\$ 17,243.00	196	\$ 47.06	\$ 9,224.00	\$ 8,148.00	\$ 34,615.00		\$ 34,615.00	All material reflects current pricing
22.0												
9th Street	252	1.5		6 14.702.00	1/0	e 47.00	6 700(00	e (00400	6 20 (72 00		6 20 (72 00	A11 (1 0 () 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
24" RCP	252	LF		\$ 14,783.00	168	\$ 47.06	\$ 7,906.00	\$ 6,984.00	\$ 29,673.00		\$ 29,673.00	All material reflects current pricing
11th Street												
24" RCP	217	LF		\$ 12,728.00	144.66	\$ 47.06	\$ 6,808.00	\$ 6,013.00	\$ 25,549.00		\$ 25,549.00	All material reflects current pricing
12th Street												
24" RCP	294	LF		\$ 17,250.00	196	\$ 47.06	\$ 9,224.00	\$ 8,148.00	\$ 34,622.00		\$ 34,622.00	All material reflects current pricing
			-					-	 -			
13th Street			1	 				 	1	1		
24" RCP	345	LF		\$ 20,238.00	230	\$ 47.06	\$ 10,824.00	\$ 9,562.00	\$ 40,624.00		\$ 40,624.00	All material reflects current pricing
	1			3,223.30			,	. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7,02	İ	.,,,=00	
										<u> </u>		
Alton Court												
24" RCP	516	LF		\$ 30,268.00	344	\$ 47.06	\$ 16,189.00	\$ 14,301.00	\$ 60,758.00		\$ 60,758.00	All material reflects current pricing
												All material reflects current pricing

West Avenue 24" RCP	370	LF		\$ 21,703.00	246.66	\$ 47.06	\$ 11,608.00	e 10.252.00	\$ 43,564.00		\$ 43,564.00	All material reflects current pricing
48" RCP	786	LF LF		\$ 197,910.00	571.63			\$ 10,233.00	\$ 248,575.00			All material reflects current pricing
60" RCP	1427	LF		\$ 463,496.00	1902.66			\$ 79,097.00	\$ 632,136.00		\$ 632,136.00	
60 Ne.	1,2,			ŷ 103,130.00	1502.00	ŷ 17.00	Ç 03,3 13.00	<i>ϕ 73,037.00</i>	Ç 052,130.00		ψ 032,130.00	The material reviews current priems
Pipe Credit												
24" RCP	796	LF							\$ (102,337.04)			Pipe Under Contract (Base Bid & CO 3-B)
48" RCP	2396	LF							\$ (436,774.47)		\$ (436,774.47)	Pipe Under Contract (Base Bid & CO 3-B)
Duainaga Stunaturas												
Drainage Structures												
Structures 4'x2.5' - 4'x4'												
Structures Type 2, 5, 6, J7 and F	48	EA		\$ 109,914.00	1920	\$ 47.06	\$ 90,359.00	\$ 79.819.00	\$ 280,092.00		\$ 280,092.00	All material reflects current pricing
5tractares 1, pe 2, 5, 6, 57 and 1				Ų 103,31 1.00	1520	ŷ 17.00	Ç 30,555.00	ψ 73,023.00	Ç 200,032.00		Ç 200,032.00	The material reviews current pricing
Structures 6'x4'												
Structures Type J7	7	EA		\$ 24,606.00	560	\$ 47.06	\$ 26,355.00	\$ 23,281.00	\$ 74,242.00		\$ 74,242.00	All material reflects current pricing
			ļ									
Structures 7 ¹ vA ¹			1	 					1			
Structures 7'x4' Structures Type 1, 4 and J7	11	EA	1	\$ 57,934.00	990	\$ 48.76	\$ 48,272.00	\$ 46.637.00	\$ 152,843.00		\$ 152.843.00	All material reflects current pricing
				- 57,554.00	530	7 10.70	- 10,272.00	0,037.00	- 152,045.00		+ 132,043.00	priority
		1		1						İ		
Structures Credit												
P-9 Catch Basin	4	EA							\$ (19,090.64)			Pipe Under Contract (Base Bid & CO 3-B)
J-9 Catch Basin	4	EA		ļ					 \$ (43,549.29)		\$ (43,549.29)	Pipe Under Contract (Base Bid & CO 3-B)
J-9 Catch Basin	3	EA	1	-					\$ (41,510.97)		\$ (41,510.97)	Pipe Under Contract (Base Bid & CO 3-B)
MH J-7 Round	6	EA EA	1	 					\$ (52,349.80)		\$ (52,349.80)	Pipe Under Contract (Base Bid & CO 3-B)
J-7 Catch Basin J-7 Catch Basin	5	EA EA	1	1		1			\$ (53,560.57) \$ (11,833.75)			Pipe Under Contract (Base Bid & CO 3-B) Pipe Under Contract (Base Bid & CO 3-B)
MH J-7 Round	1	EA	+			1		 	\$ (12,192.98)		\$ (12,192.98)	Pipe Under Contract (Base Bid & CO 3-B)
									- (12,132.30)		+ (12,132.30)	
		1		1						İ		
				\$ 795,619.00	3999.61		\$ 188,228.00	\$ 166,269.00	\$ 1,150,116.00		\$ 884,093.49	
									5% Subco	ontractor Markup		
										10% Markup		
									1.51%	Bond & Insurance		
										TOTAL	\$ 1,012,454.90	



Biditem Activity	Description	Quantity Unit	Calendar WC Hrs/Shif	t Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract Total
*** 100	Add B CD L 11	8th Street	E(210) 50 10 00	Takeoff:	1.00		Bid:	1.00 LS
100.01 Mh:	24" RCP Installation 196.00 Shifts: 2.	294.00 LF 5 Mh/Un: 0.66	F6319A 50 10.00 667 Un/Sh: 120.0000	- ,	15,509 52.75	1,734 5.90	8,148 27.71	34,616 117.74
***** Mh:	****Biditem/Category 196.00 Mh/Un:	100 ******** 196.0000		9,224 9,224.18	15,509 15,509.20	1,734 1,734.00	8,148 8,148.20	34,616 34,615.58
*** 110		9th Street		Takeoff:	1.00	LS	Bid:	1.00 LS
110.01	24" RCP Installation	252.00 LF	F6319A 50 10.00			1,488	6,984	29,673
Mh:	168.00 Shifts: 2.	1 Mh/Un: 0.66	667 Un/Sh: 120.0000	31.37	52.75	5.90	27.71	117.75
***** Mh:	****Biditem/Category 168.00 Mh/Un:	110 ******* 168.0000		7,906 7,906.44	13,294 13,294.08	1,488 1,488.00	6,984 6,984.16	29,673 29,672.68
*** 120		11th Street		Takeoff:	1.00	LS	Bid:	1.00 LS
120.01	24" RCP Installation	217.00 LF	F6319A 50 10.00	,	11,447	1,280	6,013	25,549
Mh:	144.66 Shifts: 1.	8 Mh/Un: 0.66	666 Un/Sh: 120.022	31.37	52.75	5.90	27.71	117.74
*****	****Biditem/Category	120 *******		6,808	11,447	1,280	6,013	25,549
Mh:	144.66 Mh/Un:	144.6600		6,807.97	11,447.40	1,280.40	6,013.04	25,548.81
*** 130		12th Street		Takeoff:	1.00	LS	Bid:	1.00 LS
130.01	24" RCP Installation	294.00 LF	F6319A 50 10.00		15,511	1,739	8,148	34,622
Mh:	196.00 Shifts: 2.	5 Mh/Un: 0.66	667 Un/Sh: 120.0000	31.37	52.76	5.91	27.71	117.76
****	****Biditem/Category	130 *******		9,224	15,511	1,739	8,148	34,622
Mh:	196.00 Mh/Un:	196.0000		9,224.18	15,510.53	1,738.80	8,148.20	34,621.71
*** 140		13th Street		Takeoff:	1.00	LS	Bid:	1.00 LS
140.01	24" RCP Installation	345.00 LF	F6319A 50 10.00	,	18,200	2,038	9,562	40,623
Mh:	230.00 Shifts: 2.	9 Mh/Un: 0.66	667 Un/Sh: 120.0000	31.37	52.75	5.91	27.71	117.75
*****	****Biditem/Category	140 *******		10,824	18,200	2,038	9,562	40,623
Mh:	230.00 Mh/Un:	230.0000		10,824.30	18,199.92	2,037.60	9,561.66	40,623.48
*** 150		Alton Court		Takeoff:	1.00		Bid:	1.00 LS
150.01 Mh:	24" RCP Installation 344.00 Shifts: 4.	516.00 LF 3 Mh/Un: 0.66	F6319A 50 10.00	,	27,221 52.75	3,047 5.90	14,301 27.71	60,758 117.75
14111.	544.00 Silitis. 4.	5 Will Cit. 0.00	007 CH/3H. 120.0000) 31.37	32.13	3.70	27.71	117.75
	9 ,	150 ********		16,189	,	3,047	14,301	60,758
Mh:	344.00 Mh/Un:	344.0000		16,189.41	27,221.03	3,046.80	14,300.89	60,758.13
*** 400	40	West Ave.		Takeoff:	1.00		Bid:	1.00 LS
390.01 Mh:	24" RCP Installation 246.66 Shifts: 3.	370.00 LF 1 Mh/Un: 0.66	F6319A 50 10.00 666 Un/Sh: 120.0130		19,519 52.75	2,184 5.90	10,253 27.71	43,564 117.74
390.09	246.66 Shifts: 3. 48" RCP	786.00 LF	F6319A 50 10.00			3,621	23,763	248,574
Mh:	571.63 Shifts: 7.		273 Un/Sh: 110.0070		247.19	4.61	30.23	316.25
390.11	60" RCP Installation	1,427.00 LF	F6319A 50 10.00			6,367	79,097	632,136
Mh: 1	,902.66 Shifts: 23.	8 Mh/Un: 1.33	333 Un/Sh: 60.0008	62.75	320.34	4.46	55.43	442.98
	****Biditem/Category	400 *******		128,054	,	12,171	113,113	924,274
Mh: 2	2,720.95 Mh/Un:	2,720.9500		128,053.58	670,935.81	12,171.30	113,113.46	924,274.15
*** 501	32c	Additional Structures	3	Takeoff:	1.00	LS	Bid:	1.00 LS
501.01	Structures 4'x2.5' & 4'x		F6319A 50 10.00			8,640	79,819	280,093
	,920.00 Shifts: 24.	0 Mh/Un: 40.00 7.00 EA	000 Un/Sh: 2.0000			180.00	1,662.90	5,835.27
501.05 Mh:	Structures 6'x4' 560.00 Shifts: 7.		F6319A 50 10.00 000 Un/Sh: 1.0000			1,260 180.00	23,281 3,325.79	74,241 10,605.89
501.06	Structures 7'x4' & 7'x7'		F6319A 50 10.00		55,894	2,040	46,637	152,843
Mh:	990.00 Shifts: 11.		000 Un/Sh: 1.0000	,		185.45	4,239.71	13,894.81
	****Biditem/Category 5,470.00 Mh/Un:	501 ********* 3,470.0000		164,986 164,986.43		11,940 11,940.00	149,736 149,736.30	507,177 507,176.94



Biditem				Caler	ıdar		Perm	Constr	Equip-	Sub-	
Activity	Description	Quantity	Unit	WC	Hrs/Shift	Labor	Material	Matl/Exp	Ment	Contract	Total
Mh:	7,469,61	***REPORT TOTALS***				353,216	952,632	35,437	316,006	1	.657,291

N = Activity not adjusted to bid quantity





090 - South Structure Comparison

Structure Type	Unit	Dimensions	Base Bid & CO 3B	60% Drawings Qty	Delta
P-9 Catch Basin	EA	48" Round	4	0	-4
J-9 Catch Basin	EA	48" x 84"	4	0	-4
J-9 Catch Basin	EA	84" x 84"	3	0	-3
MH J-7 Round	EA	60" Round	6	0	-6
J-7 Catch Basin	EA	48" x 84"	5	0	-5
J-7 Catch Basin	EA	84" x 84"	1	0	-1
MH J-7 Round	EA	96" Round	1	0	-1
Type 1	EA	7' x 4'	0	1	1
Type 2	EA	2.5' x 4'	0	1	1
Type 4	EA	7' x 4'	0	2	2
Type 5	EA	4' x 4'	0	3	3
Type 6 J Bottom	EA	4' x 4'	0	5	5
Type J7	EA	4' x 4'	0	11	11
Type J7	EA	6' x 4'	0	7	7
Type J7	EA	7' x 4'	0	6	6
Type J7	EA	7' x 7'	0	2	2
Type F	EA	4' x 2.5'	0	28	28

Structure Type	Dimensions	Base	Bid & CO 3B	60% Drawings Qty		Delta
P-9 Catch Basin	48" Round	\$	19,090.64	\$ -	\$	(19,090.64)
J-9 Catch Basin	48" x 84"	\$	43,549.29	\$ -	\$	(43,549.29)
J-9 Catch Basin	84" x 84"	\$	41,510.97	\$ -	\$	(41,510.97)
MH J-7 Round	60" Round	\$	52,349.80	\$ -	\$	(52,349.80)
J-7 Catch Basin	48" x 84"	\$	53,560.57	\$ -	\$	(53,560.57)
J-7 Catch Basin	84" x 84"	\$	11,833.75	\$ -	\$	(11,833.75)
MH J-7 Round	96" Round	\$	12,192.98	\$ -	\$	(12,192.98)
Structures Type 2, 5, 6, J7 and F	4'x2.5' & 4'x4'	\$	-	\$ 280,092.81	. \$	280,092.81
Structures Type J7	6'x4'	\$	-	\$ 74,241.23	\$	74,241.23
Structures Type 1, 4 and J7	7'x4', 7,x7'	\$	-	\$ 152,842.90	\$	152,842.90



City of Miami Beach Capital Improvement Projects Office 1700 Convention Center Drive Miami Beach. FL 33139

April 21, 2021 Sent Via Email

WEST AVE 090 SOUTH

Attn: Sabrina Baglieri

Re: West Ave 090 - South

Subj: Change Order Submission

10-Year Storm Piping and Structures

Water Quality
Commodity and Subcontractor Escalation

RMCF Labor Escalation
Time Extension

\$ 228,415
\$ 3,640,929
\$ 359,739
\$ 131,357
\$ 1,588 Calendar Days

Dear Sabrina.

Enclosed find Ric-Man Construction Florida, Inc's (RMCF) lump sum proposals to accommodate the above referenced changes to the current contract for your review and approval. RMCF based the pricing on CES Consultant's 60% revised drawings submitted under separate cover.

These drawings incorporate all the required changes and modifications so directed by the City. The history of the changes is well documented in prior correspondence, meeting minutes and Commission Resolutions as well as Change Orders and Directives. RMCF summarizes that history below.

I- 10-Year Storm Piping and Structures - \$228,415

Subsequent to the re-start of the design elements of the project following a 1-year pause to the contract between December 2017 through December 2018, Change Order # 3B was issued for certain Sea Level Rise and ULI Resiliency enhancements including added capacity to the new Lincoln Road pump station and increasing the size of drainage piping and structures per the newly completed AECOM 10-year Stormwater Drainage Map dated May 4, 2017 as modified on January 17, 2018. (Reference Item 5 in RMCF's proposal dated February 14, 2019)

In January 2019, coincident with the pricing submitted under the AECOM Drainage Mapping described above, RMCF was requested to perform an independent drainage modeling study under the 10-year storm event criteria. We were asked to review the newly



published AECOM report and take into account Pre and Post flooding considerations for the 147 Acre West Ave basin by examining the effects of the entire 600 Acre Miami Beach Basin on the West Avenue Basin with the intent of re-vamping the drainage design based on CES recommendations, RMCF's lead design consultant (A departure from DCP contract requirements). In March 2019 following a February 28, 2019 meeting with the City a final proposal was established for the study culminating in CO# 3A. The study specifically precluded water quality considerations focusing on the quantity (volume) of flooding in the West Ave affected areas, only.

On June 28, 2019 RMCF/CES presented the modeling product and made recommendations with multiple alternative approaches to improve flooding concerns at the West Ave Basin during a 10-Year storm event. Option 2.1B was selected on August 2, 2019 and RMCF/CES was directed to provide a cost proposal and continue with the design, accordingly. Option 2.1B did not consider the effects of the full 600 Acre impact on individual properties and/or low-lying finish floor elevations (FFE) within the West Ave 147acre basin.

A proposal for upsizing drainage piping and structures was presented on August 7, 2019 in the amount of \$1,071,000 but not acted upon by the City primarily due to two (2) parallel issues, (1) the objection by residents of placing the now 120,000 GPM WTS at the end of Lincoln Road and (2) a directive by the City Engineer on November 15, 2019 to halt all submittals to address with DERM a new issue - Water Quality improvements throughout the West Avenue Basin. It should be noted, the Final Drainage Report was submitted to the City on September 5, 2019 followed by 90 % drawings on October 1, 2019. Comments were received on October 21, 2020 and RMCF intended to submit 100% stamped drawings to DERM on November 15, 2020 to obtain the Class 2 permit and commence construction shortly thereafter.

As a result of the relocated WTS, which will be discussed below and the addition of Water Quality Improvements, also discussed below, the drainage piping and structures have been revised to accommodate those changes and new pricing developed. The relocated WTS cost is housed in the 091 – North contract.

Pricing is based on the following scope changes and additions from the previously issued CO 3B.

- Piping and structure pricing has been updated to coincide with the anticipated schedule for the work commencing October 2021 through July 4, 2023.
- Drainage distribution piping from mains to water quality settlement basins.
- Conflict structures as required by the 60% design drawings and specifically excluded in the August 7, 2019 proposal.
- Pipe sizes adjusted based on the relocation of the WTS from Lincoln Rd end to 1671 West Ave which affects the 090 drainage scheme.



 Subcontractor commodity escalation has been included as a separate item due to the delay in construction start from 2019 to 2021/2022 where applicable through anticipated completion.

II- Water Quality Enhancements - \$3,640,929

As indicated above the issue of Water Quality came to a head on November 15, 2019 when the City directed RMCF (via email) to cease making its 100% drainage design submission to DERM. RMCF was informed that DERM will initiate required improvements to water quality in the West Avenue Basin before a Class 2 permit would be issued. Preceding this notice to hold, in an October 30, 2019 meeting with DPW, CIP, RMCF and CES, RMCF was informed that the present water quality approach during the upcoming permitting process would need to be addressed. It should be understood, the DCP nor the more recent modeling by CES for the 10-year storm events addressed water quality at the October 31, 2019 meeting. RMCF was directed to proceed with submission of the completed drainage design but perform additional studies of existing pump stations at 6th, 10th, 14th and 17th Street pump stations to determine treatment capacities for the West Avenue Basin. RMCF further documented the sequence of events in its October 31, 2019 letter to the City. Then came the November 15, 2019 stop work directive.

In the period between November 2019 and early February 2020 RMCF, CES and the City explored various options at the City's request to improve Water Quality standards at the West Avenue basin based on City interactions with DERM. On February 10, 2020 RMCF provided three (3) alternate schemes for review along with budgeted costs and a preliminary draft of the requested Technical Memorandum recommending the treatment of 30,000 GPM for water quality purposes utilizing fifteen (15) shallow wells, 3 of which are housed in South – 090. At that time, RMCF requested a design Change Order to initiate the work necessary to make a presentation to DERM. On February 18, 2020 RMCF provided a revised proposal based on input from the City along with revised Budget pricing and revised Technical Memorandum for the design work. On March 27, 2020 RMCF provided an expanded proposal for review by the City based on continuing technical and conceptual discussions. On May 4 and May 14, 2020 RMCF memorialized its final proposal requesting immediate NTP to proceed with the design work.

It is important to note, the City tabled the above requested design NTP pending resolution of the WTS relocation issue which directly affected the start of 090 South due to re-design considerations for Drainage. It was not until the October 28, 2020 Commission meeting that RMCF was provided clearance via Resolution 2020-31243 to proceed. On January 5, 2021 RMCF received formal direction from CIP to proceed with the Water Quality design development. CO # 5 in the amount of \$542,056 was subsequently issued on January 21, 2021.



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Pricing is based on the following scope changes and additions from previously issued CO 3B.

- RMCF will install, make operational and test three (3) settlement basins 15' OD, three (3)
 Pumping stations 15' OD servicing three (3) 24" diameter wells with structures including all
 mechanical, electrical and controls to divert drainage water at three (3) locations within the
 West Avenue basin (9th, 12th & 13th Street) utilizing primarily Secant pile construction
 methodology.
- Provide control panel platforms at three (3) locations with landscaping screening as approved by the City.
- · Utility relocations as needed included.
- Power will be provided by FPL along Alton Court in the form of a pole mounted transformer feeding a handhole. RMCF to route duct bank from handhole at power pole to pump station sites.
- Full MOT/road closures at work locations included. Access to residents will be coordinated on a case-by-case basis.
- General Conditions based on 150 days of extended field time to complete the work.
- Budgeted numbers have been updated for commodity increase to RMCF self- perform items and subcontractor pricing.

III- Commodity and Subcontractor Escalation - \$359,739

Construction commodities have increased 3.6% from Dec/Jan 2019 through February 2021 according to the Producer price Index sponsored by the U.S. Bureau of Labor Statistics. The Project under CO 3B was compensated for escalation through an expected completion date of June 21, 2022 (Feb 2019 update # 18). The current change order work has been adjusted through the new proposed substantial completion date of January 11, 2025 provided formal releases to vendors can be accomplished shortly in this highly marginalized market. Lumber and steel are experiencing large swings upward in pricing, as much as 17% and 6%, respectively. See attached Steel Price Forecast and Market Outlook published by HIS Markit. Steel pricing in the United States which impacts our, piping, pumping units, conduit, wire, re-bar, and a wealth of other steel products are expected to remain high throughout 2021 (when



commitments will be made to suppliers), due to high demand but slow recovery from COVID impacts to manufacturing these products. PVC has been affected as well due to power failures in Texas impacting production there.

RMCF has analyzed the balance of work and received input from most of our commodity suppliers moving forward. In consideration of \$359,739 (see attached Spreadsheet) RMCF will accept the risk of escalation for the period of construction through July 2023 provided approval of our pricing in the form of a formal commitment is received no later than June 30, 2021 and the City agrees to pay for stored material, offsite to combat escalation charges. The volatility of commodity markets is too extreme to accept long delays in commitments to our suppliers.

In the event the schedule slips due to no fault of RMCF, we specifically reserve our rights to recover added escalation past the February 1, 2025 substantial completion date.

A possible alternative would be to negotiate an escalation clause in the upcoming Change Order to protect RMCF and the City from the volatile swings in commodity pricing we are currently experiencing.

IV- RMCF Labor Escalation - \$131,357

Under CO# 3B – item 23 labor rates were adjusted based on anticipated Substantial Completion of June 21, 2022. Labor rates for the current changed work have been accounted for through the new proposed substantial completion date of July 4, 2023 and are included within the individual change order proposals listed above.

According to the U.S. Bureau of labor Statistics rates within the construction industry has experienced increases on average of 6% between 2019 and 2021, or 3% per year (0.25% / Mo). Consequently, RMCF proposes an escalation factor of 0.25% per month for the period between March 9, 2021 (the expected completion date under CO#3B) and July 4, 2023 (the current projected completion date) or 12 months. (see attached Spread sheet).

In addition, the new change order labor has been escalated from January 2023 – July 2023 the new projected completion date, amounting to 6 months of additional escalation.

VI- Time Extension 1,588 Calendar Days



The original contract duration was 545 calendar days. RMCF provided a time extension request on November 20, 2020 to account for the delays to the critical path of 1,619 days.

The impacts to achieving substantial completion are well documented but summarized here as follows:

Original Contract Duration	545 Days
1- Previous CO - Hurricane Irma -	30
2- Shut down delay #1-12/18/17- 12/20/18- Resiliency ULI.	368
3- Design and Construction add. January 2019 CPM Update	409
4- 10-Year Roadway/drainage changes- 8/3/19- 10/30/19.	89
5- Shut Down #2 - WTS Relo. and Water Quality- 10/31/19 -10/28/20.	364
6- Change Order design negotiation 10/28/20 - 1/15/21.	79
7- Design Restart New WTS/Water Quality/Complete Design 1/16/21-9/30/21.	219
8- Construction Impacts due to Water Quality additions.	60
Total Contract Days	2,163
Total Days Requested $(2,163 - 545 + 30 = 1,588)$	1,588 Days

RMCF provides the detailed schedule with full details of the impacts in the form of a consolidated TIA submission, attached. It should be understood that the basis of the request is rooted in a 10/4/21 construction start driven by the issuance of a Class 2 permit by DERM. Any delay in this critical process will impact the end date. DERM has not published its intentions regarding minimum standards of compliance relative to Water Quality therefore, we specifically reserve our right to additional time and cost in the event the permitting process is extended through no fault of RMCF.

It is important to note the near criticality of the Harmonization Agreement approvals by segment. The issues of encroachment removals, payments for removals, and/or relocations within the ROW over and above the DCP criteria on private property remains an open item. This in addition to recent requests to address certain vulnerable residences (50 + N&S) which may be impacted by a 10-year flood event when considering the impact of all 600



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acres (147 acres West Ave, 453 acres east of Alton). RMCF points to recent correspondence dated March 9 (2 letters) and March 17, 2021 requiring the City's input and direction.

We trust the foregoing information is complete and while not necessarily within the budgetary limits set by the City based on aforementioned market conditions, we request approval to proceed with the completion of this important project. Please contact me with any additional information you may require during your review process.

Sincerely,

Michael R. Fischer, COO.

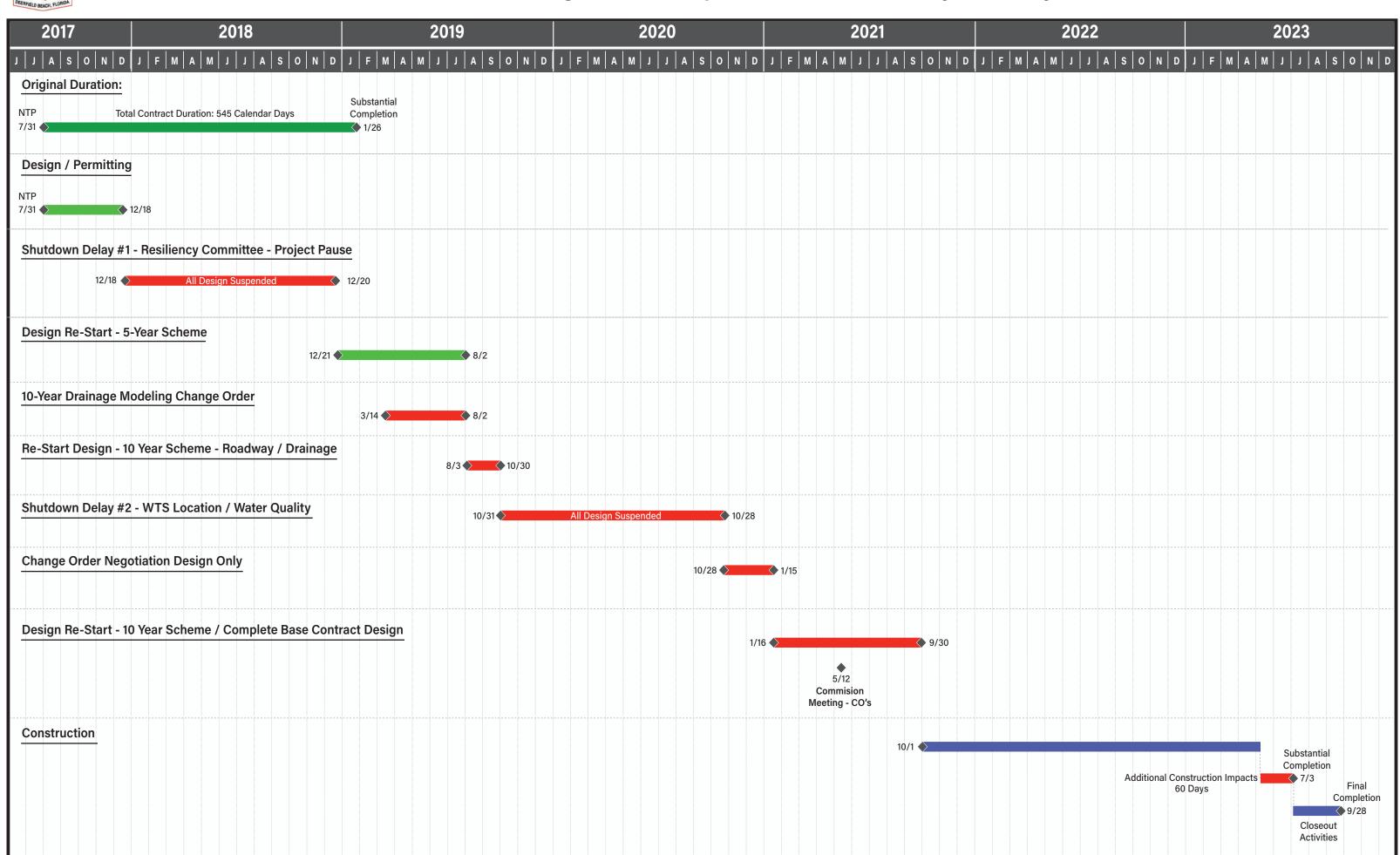
Ric-Man Construction Florida, Inc.

CC:

Danny Mancini Tyson DiPetrillo Dan LaCross Rafael Vega Jose Caraballo Jorge Rodriguez Nick Karpathy – Chen Moore

Attachments

- 1. 090 CPM Critical Path and Impacted Schedule, All Activities
- 2. February 14, 2019 Proposal Letter, Item #5
- 3. August 7, 2019 Proposal Letter Model 2.1B
- 4. November 19, 2020 Summary of Changes
- 5. November 15, 2020 Jacome-Perez Email
- 6. October 30, 2019 Meeting Minutes
- 7. October 31, 2019 RMCF Letter
- 8. March 27, 2020 Email RMCF
- 9. May 14, 2020 RMCF Letter
- 10. 10-Year Storm Pricing Sheets w/HCSS Reports
- 11. Water Quality Pricing Sheets w/ HCSS Reports
- 12. Vendor/Subcontractor Back-up Documentation
- 13. Steel Price Forecast IHS Markit
- 14. Commodity & Subcontractor Escalation Spread Sheet
- 15. Escalation RMCF Direct Labor Spread Sheet w/ Index Charts





			1	DEERFIELD BEACH, FLORIDA				
vity ID	Activity Name	OD	RE	PCT Start	Finish	Total Float	Calendar	2021 2022 2023 A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J
KB-90 WE	ST AVENUE NEIGHBORHOOD IMPROVEMENT SOUTH MARCH 31, 2021 UPDATE 43	+ NEW DESIGN	38			200		7 M 7 301 A 3 0 A D 3 F M A M 7 301 A 3 0 A D 3 F M A M 3
MILESTO	NES .							
MS-01	NTP 1 - DESIGN (7/31/2017)	0		100% 31-Jul-17 A			KB90 - 7 DAY	
MS-02	NTP 2 - CONSTRUCTION	0	0	0% 04-Oct-21	1	520	KB90 - 5 DAY	
MS-03	SUBSTANTIAL COMPLETION (NTP 1 + 545 DAYS 1/26/2019 TIA 01 2/25/2019 + RBL 3/9/2021)	0	C	0%	04-Jul-23*	-847	KB90 - 7 DAY	
MS-04	FINAL COMPLETION (SC + 90 DAYS 4/26/2019 TIA 01 5/23/2019 + RBL 6/4/2021)	0	C	0%	29-Sep-23*	-847	KB90 - 7 DAY	
WEST AV	ENUE - PUMP STATION RELOCATION AND WATER QUALITY WELLS		-					
	HNICAL INVESTIGATION (FOR WEST AVENUE PUMP STATION AND WATER QUALITY WE	(2115)	_					
A03	LANGAN: SOIL BORINGS SITE WORK AND PREPARATION OF LOGS	19	0	100% 01-Feb-21 A	25.Feb.21 A		KB90 - 5 DAY	
A05	LANGAN: PREPARATION OF WATER QUALITY WELLS GEOTECHNICAL REPORT (NORTH)	16		100% 26-Feb-21 A			KB90 - 5 DAY	
A04	LANGAN: PREPARATION OF WATER QUALITY WELLS GEOTECHNICAL REPORT (SOUTH)	21	0		3 SATES SALES SALES SALES		KB90 - 5 DAY	
		21		100% 20-160-217	204VBI-2174		KB90 - 5 DAT	
A19	PRAINAGE AND WATER QUALITY WELL SYSTEMS (60% SUBMITTAL) 60% CML, MECHANICAL, AND ELECTRICAL DESIGN FOR WATER QUALITY WELLS	44		1000/ 00 Feb 04 A	4714-044		Man C DAV	
A20	60% STORM DRAINAGE DESIGN	14	0	=	110000000000000000000000000000000000000		KB90 - 5 DAY	
A22	SCHWEBKE-SHISKIN: 60% ROADWAY SUBMITTAL TO CES	21		100% 26-Feb-21 A			KB90 - 5 DAY	
A23	SAVINO MILLER: 60% LANDSCAPE, PLANTING, AND IRRIGATION SUBMITTAL TO CES	- !		100% 29-Mar-21 A			KB90 - 5 DAY	
A24	CWt 60% MOT SUBMITTAL TO CES	1	0	100% 29-Mar-21 A			KB90 - 5 DAY	
A25	CWL 60% SIGNING AND PAVEMENT MARKINGS SUBMITTAL TO CES	1	0	100% 29-Mar-21 A			KB90 - 5 DAY	
A26		1	0	100% 29-Mar-21 A	II RESTRICTED FOR THE SEC.		KB90 - 5 DAY	
A27	CW: 60% SIGNALIZATION SUBMITTAL TO CES	1	0	100% 29-Mar-21 A			KB90 - 5 DAY	
	CWI: 60% LIGHTING SUBMITTAL TO CES		0	100% 29-Mar-21 A	200.00.150-401.000.1.777 ·		KB90 - 5 DAY	
A28	MOFFATT & NICHOL: 60% BAYWALK AND 17TH STREET DISSIPATOR SUBMITTAL TO CES	1	0	100% 29-Mar-21 A			KB90 - 5 DAY	
A21	REVISION OF STORMWATER MODEL AND REPORT	25	1	96% 26-Feb-21 A	1	529	KB90 - 5 DAY	
A29	60% STORM DRAINAGE SUBMITTAL TO RINCF	1	1	0% 02-Apr-21	02-Apr-21	529	KB90 - 5 DAY	
A30	60% WATER QUALITY WELLS SUBMITTAL TO RMCF (CIVIL, MECHANICAL, ELECTRICAL)	1	1	0% 02-Apr-21	02-Apr-21	529	KB90 - 5 DAY	
A32	RMCF REVIEW OF 60% STORM DRAINAGE SUBMITTAL	5	5	0% 05-Apr-21	09-Apr-21	529	KB90 - 5 DAY	
A33	RMCF REVIEW OF 60% WATER QUALITY WELLS SUBMITTAL (CMIL, MECHANICAL, ELECTRICAL)	5	5	0% 05-Apr-21	09-Apr-21	529	KB90 - 5 DAY	
A18	60% STRUCTURAL DESIGN FOR WATER QUALITY WELLS	20	12		16-Apr-21	520	KB90 - 5 DAY	
A31	60% WATER QUALITY WELLS SUBMITTAL TO RINCF (STRUCTURAL)	1	1	0% 19-Apr-21	19-Apr-21	520	KB90 - 5 DAY	
A34	RMCF REVIEW OF 60% WATER QUALITY WELLS SUBMITTAL (STRUCTURAL)	3	3	0% 20-Apr-21	22-Apr-21	520	KB90 - 5 DAY	
A35	ADDRESS COMMENTS FROM 60% WATER QUALITY WELLS RINCF REVIEW	4	4	0% 23-Apr-21	28-Apr-21	520	KB90 - 5 DAY	
A36	60% WATER QUALITY WELLS SUBMITTAL TO CMB	1	1	0% 29-Apr-21	29-Apr-21	520	KB90 - 5 DAY	
A37	CMB REVIEW OF 60% STORM DRAINAGE AND WATER QUALITY WELLS SUBMITTALS	10	10	0% 30-Apr-21	13-May-21	534	KB90 - 5 DAY	
COMPLE	TE DESIGN PACKAGE (100% SUBMITTAL, ALL DISCIPLINES)							
A44	SCHWEBKE-SHISKIN: 100% ROADWAY SUBMITTAL TO CES	6	6	0% 14-May-21	21-May-21	534	KB90 - 5 DAY	
A45	SAVINO MILLER: 100% LANDSCAPE, PLANTING, AND IRRIGATION SUBMITTAL TO ŒS	6	6	0% 14-May-21	21-May-21	534	KB90 - 5 DAY	
A46	CWt 100% MOT SUBMITTAL TO CES	6	6	0% 14-May-21	21-May-21	534	KB90 - 5 DAY	
A47	CWI: 100% SIGNING AND PAVEMENT MARKINGS SUBMITTAL TO CES	6	6	0% 14-May-21	21-May-21	534	KB90 - 5 DAY	
A48	CWI: 100% SIGNALIZATION SUBMITTAL TO CES	6	6	0% 14-May-21	21-May-21	534	KB90 - 5 DAY	
A49	CWI: 100% LIGHTING SUBMITTAL TO CES	6	6	0% 14-May-21	21-May-21	534	KB90 - 5 DAY	
A50	MOFFATT & NICHOL: 100% BAYWALK AND 17TH STREET DISSIPATOR SUBMITTAL TO CES	6	6	0% 14-May-21	21-May-21	534	KB90 - 5 DAY	
A40	100% STRUCTURAL DESIGN FOR WATER QUALITY WELLS	30	30	0% 30-Apr-21	10-Jun-21	520	KB90 - 5 DAY	
A42	100% CMIL, MECHANICAL, AND ELECTRICAL DESIGN FOR WATER QUALITY WELLS	30	30	0% 30-Apr-21	10-Jun-21	520	KB90 - 5 DAY	
A43	REVISION OF STORMWATER MODEL AND REPORT	30	30	0% 30-Apr-21	10-Jun-21	520	KB90 - 5 DAY	
A51	100% STORM DRAINAGE DESIGN SUBMITTAL TO RINCF AND CMB	1	1	0% 11-Jun-21	11-Jun-21	520	KB90 - 5 DAY	
A53	100% WATER QUALITY WELLS SUBMITTAL TO RIMCF AND CMB	1	1	0% 11-Jun-21	11-Jun-21	520	KB90 - 5 DAY	
A54	RMCFAND OMB REVIEW OF 100% WATER QUALITY WELLS	5	5	0% 14-Jun-21	18-Jun-21	520	KB90 - 5 DAY	
A55	ADDRESS COMMENTS FROM 100% WATER QUALITY WELLS REVIEW	13	13	0% 21-Jun-21	07-Jul-21	520	KB90 - 5 DAY	

Critical Remaining Work

Actual Work



				ERFIELD BEACH, FLORIDA				
vity ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	7.75
PERMITTIN	IG .					200000		A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A
A58	100% WATER QUALITY WELLS SUBMITTAL TO DERMAND SFWMD	1	1	0% 08-Jul-21	08-Jul-21	520	KB90 - 5 DAY	
A61	DERMAND SEWMD 1 ST REVIEW OF WATER QUALITY WELLS AND WEST AVENUE PUMP STATION SUBMITTAL	25	25	0% 09-Jul-21	12-Aug-21	520	KB90 - 5 DAY	
A59	REVISION OF 100% WATER MAIN DRAWINGS (ASSUMING THAT EXISTING PERMIT APPLIES)	30	30	0% 09-Jul-21	19-Aug-21	546	KB90 - 5 DAY	
A60	REVISION OF 100% SANITARY SEWER DRAWINGS (ASSUMING THAT EXISTING PERMIT APPLIES)	30	30	0% 09-Jul-21	19-Aug-21	546	KB90 - 5 DAY	
A62	ADDRESS COMMENTS FROM 100% WATER QUALITY WELLS AND WEST AVENUE PUMP STATION REVIEW	16	16	0% 13-Aug-21	03-Sep-21	520	KB90 - 5 DAY	
A63	DERMAND SEWIND 2 ND REVIEW OF WATER QUALITY WELLS AND WEST AVENUE PUMP STATION SUBMITTAL	15	15	0% 06-Sep-21	24-Sep-21	520	KB90 - 5 DAY	
A64	ISSUED FOR CONSTRUCTION (IFC) DRAWINGS SUBMITTAL TO RINCF AND CMB	5	5	0% 27-Sep-21	01-Oct-21	520	KB90 - 5 DAY	
RE-START	PROJECT			Charles Control	170	200		
CHANGE O	ORDER NEGOTIATION							
RS-040	REVISE CPM SCHEDULE	60	0	100% 21-Dec-18 A	12-Feb-19 A		KB90 - 7 DAY	
RS-020	FINALIZE 10 YEAR FLOOD CHANGE ORDER	60	0	100% 21-Dec-18 A	13-Mar-19 A		KB90 - 7 DAY	
RS-010	FINALIZE CHANGE ORDER ROADWAY & GENERATOR SETS	90	0	100% 20-Dec-18 A	23-Apr-19 A		KB90 - 7 DAY	
RS-060	ADMINISTRATION & COMMUNITY MEETING - SEGMENTED CONSTRUCTION APPROACH	10	0	100% 02-May-19 A	02-May-19 A		KB90 - 7 DAY	
RS-050	CMB APPROVES CPM	10	0	100% 13-Feb-19 A	02-Aug-19 A		KB90 - 7 DAY	
RS-070	PROPERTY OWNER MEETINGS - PIO INTERFACE (INFORMATIONAL) - ALL SEGMENTS	78	0	100% 21-Dec-18 A	02-Aug-19 A		KB90 - 7 DAY	
DESIGN								
UTILITY MAS	STER PLAN							
UMP-020	UTILITY MASTER PLAN - SCHEDULE DEVELOPMENT - SEG 1	20	0	100% 01-Feb-19 A	12-Apr-19 A		KB90 - 7 DAY	
UMP-030	UTILITY MASTER PLAN - SCHEDULE DEVELOPMENT - SEG 2	20	0	100% 15-Apr-19 A	30-Apr-19 A		KB90 - 7 DAY	
UMP-040	UTILITY MASTER PLAN - SCHEDULE DEVELOPMENT - SEG 3	20	0	100% 01-May-19 A	13-May-19 A		KB90 - 7 DAY	
UMP-050	UTILITY MASTER PLAN - SCHEDULE DEVELOPMENT - SEG 4	20	0	100% 14-May-19 A	29-May-19 A		KB90 - 7 DAY	
UMP-060	UTILITY MASTER PLAN - SCHEDULE DEVELOPMENT - SEG 5	20	0	100% 30-May-19 A	24-Jun-19 A		KB90 - 7 DAY	
THE RESERVE OF THE PARTY OF THE	& PERMITTING							
D-MOT-010	MOT PLAN SEGMENTAPPROACH	85	0	100% 21-Dec-18 A			KB90 - 7 DAY	
D-MOT-040	SEGMENT 1 - 8TH ST & WESTAVE	5	0	100% 11-Jun-19 A			KB90 - 7 DAY	
D-MOT-070	SEGMENT 2 - WEST AVE & 13TH	5	0	100% 16-Jun-19 A			KB90 - 7 DAY	
D-MOT-080	SEGMENT 3 - 12TH ST / WEST AVE & 11TH ST	5	0	100% 21-Jun-19 A	ATTOCATION WHOLE		KB90 - 7 DAY	
D-MOT-090	SEGMENT 4 - 10TH ST & WEST AVE	5	0	100% 26-Jun-19 A	30-Jun-19 A		KB90 - 7 DAY	
D-MOT-095	SEGMENT 5 - 9TH ST & WESTAVE	5	0	100% 02-Jul-19 A	06-Jul-19 A		KB90 - 7 DAY	
D-MOT-100	SEGMENT 6 - 6TH ST & PUMP STA	5	0	100% 07-Jul-19 A	11-Jul-19 A		KB90 - 7 DAY	
D-MOT-110	SEGMENT 7 - ALTON CT FROM 8TH TO 14TH MILL & PAVE	5	0	100% 12-Jul-19 A			KB90 - 7 DAY	
D-MOT-115 D-MOT-020	MOT MASTER SET - MOTED/CMB REVIEW & APPROVE	10	0	100% 17-Jul-19 A			KB90 - 5 DAY	
	RICANE IRMA	5	U	100% 13-Sep-19 A	16-Feb-20 A		KB90 - 7 DAY	
TA01-1000	HURRICANE IRMA - NO ACCESS TO OFFICES	35	0	100% 06-Sep-17 A	11-Oct-17 A		KB90 - 7 DAY	
	ERRAL TO SUSTAINABILITY AND RESILIENCY COMMITTEE FOR REVIEW					7	NESS TO EAT	
A02-1000	CMB LETTER TO RIMCF -ALL DESIGN EFFORTS SUSPENDED (12/18/2017)	0	0	100% 18-Dec-17 A		JESS CHAN	KB90 - 7 DAY	
TA02-1020	RMCF LETTER TO CMB - WORK COMPLETED TO DATE (12/20/2017)	2	0	100% 19-Dec-17 A	20-Dec-17 A		KB90 - 7 DAY	
A02-1030	CMB LETTER TO RIMCF - CONTINUE UTILITY COORDINATION AND PERMIT PROCESSING (1/2/2018)	2	0	100% 02-Jan-18 A	TOTAL TRANSPORTED TO A COLUMN		KB90 - 7 DAY	
A02-1040	MEETING BETWEEN CMB & RMCF - UTILITY EFFORT & PERMITTING (1/4/2018)	1	0	100% 04-Jan-18 A	STATE OF THE STATE		KB90 - 7 DAY	
A02-1050	RMCF LETTER TO CMB - SUGGEST PROCEEDING W/ DESIGN AT CMB's RISK (1/4/2018)	1	0	100% 04-Jan-18 A			KB90 - 7 DAY	
A02-1060	RMCF LETTER TO CMB - REQUEST WRITTEN CONFIRMATION TO CONTINUE UTILITY & PERMITTING (1/12/2018)	1	0	100% 12-Jan-18 A			KB90 - 7 DAY	
A02-1070	CMB EMAIL TO RMCF - COMMENTS ON PLANS PRESENTED / NO CONFIRMATION TO CONTINUE UTILITY & PERMITTING (1/12/2018)	1	0	100% 12-Jan-18 A			KB90 - 7 DAY	
TA02-1010	ALL DESIGN EFFORTS REMAIN SUSPENDED (ONGOING)	45	0	100% 18-Dec-17 A	THE RESEARCH OF THE PARTY OF TH		KB90 - 7 DAY	
	IPLETE 10-YEAR DRAINAGE MODELING			10 Testing 10 Testing 15 Te			1.2.7 1.41	
TIA03-1000	COMPLETE 10-YEAR DRAINAGE MODEL & SUBMIT	70	0	100% 14-Mar-19 A	28-Jun-19 A		KB90 - 5 DAY	
	The second of th	70	0	10070 144VIII-13A	20-Juli-19 A		KB90 - 5 DAY	

Critical Remaining Work

Actual Work



/ ID				EERFIELD BEACH, FLORIDA		- 1		
-	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	
TIA03-1010	CMB REVIEW & APPROVE 10-YEAR DRAINAGE MODEL	10	0	100% 01-Jul-19 A	02-Aug-19 A		KB90 - 5 DAY	A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A
ESIGN		1, 11 10 10 10 10						
NATER MAI	IN DESIGN/PERMITTING							
D1-1000	NTP 1	0	0	100% 31-Jul-17 A			KB90 - 5 DAY	
D1-1010	SUBMIT 60% PLANS	62	0	100% 31-Jul-17 A	04-Dec-17 A		KB90 - TIA 01	4 0
D1-1030	SUBMIT 90% PLANS	5	0	100% 12-Dec-17 A			KB90 - 5 DAY	
D1-1020	CMB 60% PLANS REVIEWS	5	0	100% 05-Dec-17 A			ASSESSED TO BESSELLE	
D1-010	RE-START 60% PLANS - ALL SEGMENTS - WATER MAIN	67	0	100% 21-Dec-18 A			KB90 - 5 DAY KB90 - 7 DAY	
D1-020	CMB 60% PLAN REVIEWS - WATER MAIN	10	0	100% 21-Dec-16 A				
D1-030	RE-START-90% PLANS- WATER MAIN -ALL SEGMENTS	18	0	100% 19-Mai-19 A			KB90 - 7 DAY	
D1-040	CMB 90% REVIEWS/APPROVAL - WATER MAIN - ALL SEGMENTS	5	٥	Street, Street, Section Section (Inc.)				
D1-050	SUBMIT / APPROVE MATERIAL CUT SHEETS / PROCURE - WATER MAIN	3	0	100% 04-May-19 A			KB90 - 7 DAY	
D1-070	PROCURE HEALTH DEPT & DERM PERMIT - ALL SEGMENTS - WATER MAIN		0	100% 29-May-19 A			KB90 - 7 DAY	
D1-060	IFC PLANS - WATER MAIN -ALL SEGMENTS	30	0	100% 18-May-19 A			KB90 - 7 DAY	
		5	0	100% 17-Jul-19 A	31-JUF19 A		KB90 - 7 DAY	
HAPANIA PARISON OF TAXABLE PARISON	SEWER DESIGN/PERMITTING							
D2-1000	SUBMIT 60% PLANS	44	0	100% 31-Jul-17 A	06-Nov-17 A		KB90 - TIA 01	
D2-1020	SUBMIT 90% PLANS	10	0	100% 07-Nov-17 A	07-Dec-17 A		KB90 - 5 DAY	
D2-1040	SUBMIT 100% PLANS	5	0	100% 08-Dec-17 A	19-Dec-17 A		KB90 - 5 DAY	
D2-1050	SUBMIT/APPROVAL MATERIAL CUT SHEETS	5	0	100% 11-Dec-17 A	21-Dec-17 A		KB90 - 5 DAY	
02-1060	PROCURE MDWSD/DERM PERMIT	15	0	100% 21-Nov-17 A	21-Dec-18 A		KB90 - 5 DAY	
02-1010	CMB 60% PLANS REVIEWS	10	0	100% 07-Nov-17 A	21-Dec-18 A		KB90 - 5 DAY	
D2-1030	CMB 90% PLANS REVIEWS	5	0	100% 08-Dec-17 A	21-Dec-18 A		KB90 - 5 DAY	
D2-030	RE-START- 90% PLANS - SANTARY SEWER DESIGN - ALL SEGMENTS	78	0	100% 21-Dec-18 A	29-Mar-19 A		KB90 - 7 DAY	
D2-040	CMB 90% REVIEWS/APPROVAL - SANITARY SEWER DESIGN - ALL SEGMENTS	10	0	100% 30-Mar-19 A	11-Apr-19 A		KB90 - 7 DAY	
D2-050	SUBMIT / APPROVE MATERIAL CUT SHEETS/PROCURE - SANITARY SEWER DESIGN	3	0	100% 29-May-19 A	28-Jun-19 A		KB90 - 7 DAY	
D2-070	PROCURE MOWSD / DERM PERMIT-ALL SEGMENTS - SANITARY SEWER DESIGN	30	0	100% 14-May-19 A	26-Dec-19 A		KB90 - 7 DAY	
D2-060	IFC PLANS - SANITARY SEWER DESIGN - ALL SEGMENTS	7	0	100% 27-Dec-19 A	27-Dec-19 A		KB90 - 7 DAY	
ULL ROAD	DWAY/DRAINAGE/STREET LIGHT/SIGNALIZATION DESIGN/PERMITTING							
D4-1000	PREPARE DOCUMENTS FOR COMMUNITY DESIGN REVIEW MTG.	8	0	100% 31-Jul-17 A	18-Oct-17 A		KB90 - TIA 01	
D4-1010	CITY REVIEW COMMUNITY DESIGN REVIEW MTG.	10	0	100% 19-Oct-17 A	01-Nov-17 A		KB90 - 5 DAY	
D4-1020	FINAL DOCUMENTS FOR COMMUNITY DESIGN REVIEWMTG.	5	0	100% 02-Nov-17 A	08-Nov-17 A		KB90 - 5 DAY	
D4-1030	CITY REVIEW FINAL DOCUMENTS FOR COMMUNITY DESIGN REVIEW MTG.	5	0	100% 09-Nov-17 A	10-Nov-17 A		KB90 - 5 DAY	
04-1040	SCHEDULE AND ATTEND COMMUNITY DESIGN REVIEW MTG.	5	0	100% 09-Nov-17 A	14-Nov-17 A		KB90 - 5 DAY	
D4-1042	CMB PROVIDES DOCUMENTATION OF COMMUNITY INPUT	7	0	100% 15-Nov-17 A			KB90 - 7 DAY	
D4-1061	PREPARE & SUBMIT HARMONIZATION DOCUMENTS	40	0	100% 12-Oct-17 A			KB90 - 5 DAY	
04-1050	COMPILE AND ADDRESS PUBLIC INPUT	6	0	100% 01-Dec-17 A	1 1000000000000000000000000000000000000		KB90 - 5 DAY	
D4-1062	REVIEW & APPROVE HARMONIZATION DOCUMENTS	14	0	100% 01-Dec-17 A			KB90 - 7 DAY	
04-1063	REVISE & RESUBMIT HARMONIZATION DOCUMENTS R1	5	0	100% 14-Dec-17 A			KB90 - 5 DAY	
D4-1060	SUBMIT DOCUMENTS FOR COMMISSION APPROVAL	7	0	100% 08-Dec-17 A			KB90 - 5 DAY	
D4-1080	SUBMIT 60% PLANS - CMB/MD PW/DERW/DEP	20	0	100% 09-Dec-17 A			KB90 - 5 DAY	
24-1064	REVIEW & APPROVE HARMONIZATION DOCUMENTS R1	14	0	100% 21-Dec-17 A	(A) (A) (A) (A) (A) (A) (A) (A) (A) (A)		KB90 - 7 DAY	
04-010	AECOM CERTIFIED DRAINAGE REPORT	60	0	100% 21-Dec-18 A	2 1000-1-02-A-Robbinshipson		KB90 - 7 DAY	
24-030	ROW ENCROACHMENT PLANS - ALL SEGMENTS	90	0	100% 21-Dec-18 A			KB90 - 7 DAY	
04-070	RE-START 60% PLANS - ALL SEGMENTS ROADWAY / DRAINAGE / STREET LIGHTS / SIGNAL IZATION	26	0	100% 03-Aug-19 A			KB90 - 7 DAY	
D4-020	MEET W/ SFWD - MODEL PARAMETERS ESTABLISHED AND APPROVED	10	0	100% 02-Aug-19 A			KB90 - 7 DAY	
04-080	CMB 60% PLAN REVIEWS - ALL SEGMENTS ROADWAY / DRAINAGE / STREET LIGHTS / SIGNALIZATION	5	0	100% 06-Sep-19 A			KB90 - 7 DAY	
04-090	RE-START-90% PLANS-ALL SEGMENTS ROADWAY / DRAINAGE / STREET LIGHTS / SIGNALIZATION	25	0	100% 08-Sep-19 A	\$3000000 TOURS		KB90 - 7 DAY	
D4-100	CMB 90% REVIEWS / APPROVAL - ALL SEGMENTS ROADWAY / DRAINAGE / STREET LIGHTS / SIGNALIZATION	5	1	80% 01-Oct-19 A	2 00.000 00.000 00.00000000000000000000	-693	KB90 - 7 DAY	

Critical Remaining Work

Actual Work



			DE	ERFIELD BEACH, FLORIDA				
ity ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023 A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A
D4-120	IFC PLANS - ALL SEGMENTS ROADWAY / DRAINAGE / STREET LIGHTS / SIGNALIZATION	5	5	0% 02-Apr-21	06-Apr-21	-693	KB90 - 7 DAY	
D4-110	SUBMIT / APPROVE MATERIAL CUT SHEETS / PROCURE	10	10	0% 01-Apr-21	10-Apr-21	-697	KB90 - 7 DAY	
D4-050	PERMIT RER CLASS 2 / RER CLASS 5 DEVIATERING PERMIT	90	90	0% 01-Apr-21	29-Jun-21	-777	KB90 - 7 DAY	
HARMONIZA	ATION PLANS							
D4-040	HARMONIZATION PLANS DESIGN - SEGMENT 1	88	88	0% 21-Dec-18 A	27-Jun-21	-875	KB90 - 7 DAY	
D4-1090	HARMONIZATION PLANS DESIGN - SEGMENT 2	30	30	0% 23-Jul-19 A	27-Jul-21	-714	KB90 - 7 DAY	
D4-1100	HARMONIZATION PLANS DESIGN - SEGMENT 3	30	30	0% 27-Sep-19 A	26-Aug-21	-581	KB90 - 7 DAY	
D4-1110	HARMONIZATION PLANS DESIGN - SEGMENT 4	30	30	0% 03-Oct-19 A	25-Sep-21	-482	KB90 - 7 DAY	
D4-1120	HARMONIZATION PLANS DESIGN - SEGMENT 5	30	30	0% 16-Oct-19 A	25-Oct-21	-393	KB90 - 7 DAY	
GENERATO	OR SETS							
	T GENERATOR SET							
D-LR-010	60% DESIGN - 5TH ST GEN SET / UTILITY ID & FPL POWER SOURCE	45	0	100% 01-Dec-19 A	24-Mar-20 A		KB90 - 7 DAY	
D-LR-020	CMB REVIEWANDAPPROVE - 5TH ST GEN SET	15	1	93.33% 25-Mar-20 A		-242	KB90 - 7 DAY	
D-LR-030	90% DESIGN - 5TH ST GEN SET	10	10	0% 02-Apr-21	11-Apr-21	-242	KB90 - 7 DAY	
D-LR-040	CMB REVIEWANDAPPROVE - 5TH ST GEN SET	10	10	0% 12-Apr-21	21-Apr-21	-242	KB90 - 7 DAY	
D-LR-080	SUBMIT GEN SET EQUIPMENT - 5TH ST GEN SET	15	15	0% 22-Apr-21	06-May-21	-223	KB90 - 7 DAY	
D-LR-090	SUBMITTALS - CML / PLATFORMS / HR / STAIRS / DUCTBANK / ELECTRIC / ETC - 5TH ST GEN SET	25	25	0% 22-Apr-21	16-May-21	-233	KB90 - 7 DAY	
D-LR-100	REVIEW & APPROVE SUBMITTALS - 5TH ST GEN SET	10	10	0% 17-May-21	26-May-21	-233	KB90 - 7 DAY	
D-LR-050	BUILDING DEPT PERMITS - 5TH ST GEN SET	90	90	0% 22-Apr-21	20-Jul-21	-242	KB90 - 7 DAY	
D-LR-060	ROW PERMITTING - 5TH ST GEN SET	5	5	0% 21-Jul-21	25-Jul-21	-237	KB90 - 7 DAY	
D-LR-070	IFC PLANS - 5TH ST GEN SET	10	10	0% 21-Jul-21	30-Jul-21	-242	KB90 - 7 DAY	
D-LR-110	FAB & DELMER GEN SET - 5TH ST GEN SET	120	120	27-May-21	23-Sep-21	-233	KB90 - 7 DAY	
	GENERATOR SET	1.00			zo cop z i	200	NOOD T EN	
D-GS1-010	60% DESIGN - 6TH ST GEN SET / UTILITY ID & FPL POWER SOURCE	20	0	100% 01-Mar-20 A	24-Mar-20 A		KB90 - 7 DAY	
D-GS1-020	CMB REVIEWANDAPPROVE - 6TH ST GEN SET	10	1	90% 25-Mar-20 A	100 100 100 100 100 100 100 100 100 100	-337	KB90 - 7 DAY	
D-GS1-030	90% DESIGN - 6TH ST GEN SET	10	10	0% 02-Apr-21	11-Apr-21	-337	KB90 - 7 DAY	
D-GS1-040	CMB REVIEWANDAPPROVE - 6TH ST GEN SET	5	5	0% 12-Apr-21	16-Apr-21	-337	KB90 - 7 DAY	
D-GS1-080	SUBMIT GEN SET EQUIPMENT - 6TH ST GEN SET	10	10	0% 17-Apr-21	26-Apr-21	-317	KB90 - 7 DAY	
D-GS1-090	SUBMITTALS - CIVIL / PLATFORMS / HR / STAIRS / DUCTBANK / ELECTRIC / ETC - 6TH ST GEN SET	10	10	0% 17-Apr-21	26-Apr-21	-317	KB90 - 7 DAY	
D-GS1-100	REVIEW & APP ROVE SUBMITTALS - 6TH STIGEN SET	10	10	0% 27-Apr-21	06-May-21	-317	KB90 - 7 DAY	
D-GS1-050	BUILDING DEPT PERMITS - 6TH ST GEN SET	90	90	0% 17-Apr-21	15-Jul-21	-337	KB90 - 7 DAY	
D-GS1-060	ROW PERWITTING - 6TH ST GEN SET	5	5	0% 16-Jul-21	20-Jul-21	-337	KB90 - 7 DAY	
D-GS1-070	IFC PLANS - 6TH ST GEN SET	5	5	0% 16-Jul-21	20-Jul-21	-337	KB90 - 7 DAY	
D-GS1-110	FAB & DELMER GEN SET - 6TH ST GEN SET	120	120	0% 07-May-21	03-Sep-21	-317	KB90 - 7 DAY	
	ET GENERATOR SET #1							
D-GS2-010	60% DESIGN - 10TH ST GEN SET #1 / UTILITY ID & FPL POWER SOURCE	20	0	100% 01-Mar-20 A	24-Mar-20 A		KB90 - 7 DAY	
D-GS2-020	CMB REVIEWANDAPPROVE - 10TH ST GEN SET#1	10	1	90% 25-Mar-20 A	01-Apr-21	-373	KB90 - 7 DAY	
D-GS2-030	90% DESIGN - 10TH ST GEN SET #1	10	10	0% 02-Apr-21	11-Apr-21	-373	KB90 - 7 DAY	
D-GS2-040	CMB REVIEWANDAPPROVE - 10TH ST GEN SET#1	5	5	0% 12-Apr-21	16-Apr-21	-373	KB90 - 7 DAY	
D-GS2-080	SUBMIT GEN SET EQUIPMENT - 10TH ST GEN SET #1	10	10	0% 17-Apr-21	26-Apr-21	-354	KB90 - 7 DAY	
D-GS2-090	SUBMITTALS- CML / PLATFORMS / HR / STAIRS / DUCTBANK / ELECTRIC / ETC - 10TH ST GEN SET #1	10	10	0% 17-Apr-21	26-Apr-21	-354	KB90 - 7 DAY	
D-GS2-100	REVIEW & APPROVE SUBMITTALS - 10TH ST GEN SET #1	10	10	0% 27-Apr-21	06-May-21	-354	KB90 - 7 DAY	
D-GS2-050	BUILDING DEPT PERMITS - 10TH ST GEN SET#1	90	90	0% 17-Apr-21	15-Jul-21	-373	KB90 - 7 DAY	
D-GS2-060	ROW PERMITTING - 10TH ST GEN SET #1	5	5	0% 16-Jul-21	20-Jul-21	-373	KB90 - 7 DAY	
D-GS2-070	IFC PLANS - 10TH ST GEN SET #1	5	5	0% 16-Jul-21	20-Jul-21	-373	KB90 - 7 DAY	
D-GS2-110	FAB & DELMER GEN SET - 10TH ST GEN SET #1	120	120	0% 07-May-21	03-Sep-21	-354	KB90 - 7 DAY	
	T GENERATOR SET #2	120	120	070 07 HMay-21	00-0cp-21	-504	KDOV - / LIMI	
D-GS3-010	60% DESIGN - 10TH ST GEN SET #2 / UTILITY ID & FPL POWER SOURCE	30	0	100% 01-Mar-20 A	24.Mar. 20 A		KB90 - 7 DAY	
2 000 0 10	SON DESIGNATION OF SOLIST AND OFFICE CONTROL AND OF	30	U	100 /0 01-Wal-20 A	244VMI-20 A		VDan - 1 DWA	

Critical Remaining Work

Actual Work



				ERFIELD BEACH.	FLORIS	MENDO OF THE PROPERTY OF THE P			
tivity ID	Activity Name	OD	RD	PCT S	Start	Finish	Total Float	Calendar	2021 2022 2023 A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Ju
D-GS3-020	CMB REVIEWANDAPPROVE - 10TH ST GEN SET#2	10	1	90% 2	25-Mar-20 A	01-Apr-21	-359	KB90 - 7 DAY	
D-GS3-030	90% DESIGN - 10TH ST GEN SET #2	15	15	0% 0	2-Apr-21	16-Apr-21	-359	KB90 - 7 DAY	6
D-GS3-040	CMB REVIEWANDAPPROVE - 10TH ST GEN SET#2	7	7	0% 1	7-Apr-21	23-Apr-21	-359	KB90 - 7 DAY	
D-GS3-080	SUBMIT GEN SET EQUIPMENT - 10TH ST GEN SET #2	15	15	0% 2	4-Apr-21	08-May-21	-359	KB90 - 7 DAY	
D-GS3-090	SUBMITTALS-CML / PLATFORMS / HR / STAIRS / DUCTBANK / ELECTRIC / ETC - 10TH ST GEN SET #2	15	15	0% 2	4-Apr-21	08-May-21	-359	KB90 - 7 DAY	
D-GS3-100	REVIEW & APPROVE SUBMITTALS - 10TH ST GEN SET#2	10	10	0% 0	9 -Ma y-21	18-May-21	-359	KB90 - 7 DAY	
D-GS3-050	BUILDING DEPT PERMITS - 10TH ST GEN SET#2	90	90	0% 2	4-Apr-21	22-Jul-21	-359	KB90 - 7 DAY	
D-GS3-060	ROW PERMITTING - 10TH ST GEN SET #2	5	5	0% 2	3-Jul-21	27-Jul-21	-359	KB90 - 7 DAY	
D-GS3-070	FC PLANS - 10TH ST GEN SET #2	5	5	0% 2	3-Jul-21	27-Jul-21	-359	KB90 - 7 DAY	
D-GS3-110	FAB & DELMER DELMER GEN SETS - 10TH ST GEN SET #2	120	120	0% 1	9-May-21	15-Sep-21	-359	KB90 - 7 DAY	
CONSTRUCT	TION	SPECIAL PROPERTY.	100				STATE OF		
SEGMENT 1	CONSTRUCTION								
C2-SEG1-1000	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 1	71	71	0% 2	8-Jun-21	04-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1010	MOBILIZE & MATERIAL DELIVERY - SEG 1	2	2		15-Oct-21	06-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1020	SURVEY LAY-OUT - SEG 1	1	1		7-Oct-21	07-Oct-21	-604	KB90 - 5 DAY	
C2-SEG1-1030	ESTABLISH MOT - SEG 1	1	1	0.000.000.000.000	7-Oct-21	07-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 1	1	1	100 000 100	8-Oct-21	08-Oct-21	-604	KB90 - 5 DAY	
C2-SEG1-1050	PROTECT EXISTING TREES TO REMAIN - SEG 1	2	2	0.000	8-Oct-21	11-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1060	ESTABLISH ELECTRIC SERVICE POINTS - SEG 1	2	2		8-Oct-21	11-Oct-21	-565	KB90 - 5 DAY	
C2-SEG1-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 1	5	5		2-Oct-21	18-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1100	INSTALL SIGNALIZATION / LIGHTING / WIRE & TERMINATE / TRAFFIC LOOPS - SEG 1	5	5	10000	2-Oct-21	18-Oct-21	-554	KB90 - 5 DAY	
C2-SEG1-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 1	3	3	52,000,000	9-Oct-21	21-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1090	STRIP PAVEMENT - SEG 1	3	3	1000000 1000	2-Oct-21	26-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1110	DEWATERING SET-UP - SEG 1	2	2		7-0d-21	28-Oct-21	-605	KB90 - 5 DAY	
C2-SEG1-1120	INSTALL STORM DRAINS - SEG 1	12	12		9-Od-21	15-Nov-21	-605	KB90 - 5 DAY	
C2-SEG1-1130	REPLACE SAN, MAIN AND LATERALS - SEG 1	7	7		6-Nov-21	24-Nov-21	-605	KB90 - 5 DAY	
C2-SEG1-1140	INSTALL WM LINES - SEG 1	,		55.500 35	5-Nov-21	06-Dec-21	-605	KB90 - 5 DAY	
C2-SEG1-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 1	12	12	500000000000	7-Dec-21	22-Dec-21	-605	KB90 - 5 DAY	
C2-SEG1-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 1	12	12	CONTRACTOR	7-Dec-21	22-Dec-21	-605		
C2-SEG1-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 1	12	12		7-Dec-21	22-Dec-21	-605	KB90 - 5 DAY KB90 - 5 DAY	
C2-SEG1-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 1	7	4		7-Dec-21	28-Dec-21	-605	KB90 - 5 DAY	
	INSTALL NEW SIDEWALK - SEG 1		-		9-Dec-21	04-Jan-22	-605	KB90 - 5 DAY	
	INSTALL ASPHALT BASE 1ST LIFT - SEG 1	2	2	100000000000000000000000000000000000000		06-Jan-22	-605	KB90 - 5 DAY	
	LANDSCAPING & IRRIGATION - SEG 1	5	5		7-Jan-22	13-Jan-22	-605	KB90 - 5 DAY	
And the second second second second	SEGMENT 1 SUBSTANTIAL COMPLETION	0	0	0%	7-0011-22	13-Jan-22	-870	KB90 - 7 DAY	
	CONSTRUCTION			0,0		10 001722	-010	NBSO - 7 BAT	
THE RESERVE OF THE PARTY OF THE	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 2	10	10	00/ 04	5-Oct-21	18-Oct-21	540	KD00 E DAY	
	MOBILIZE & MATERIAL DELIVERY - SEG 2	10	2	0.2009.11.000	4-Jan-22	17-Jan-22	-542 -605	KB90 - 5 DAY KB90 - 5 DAY	
CASE HOLD RESIDENCE TO THE SECOND	ESTABLISH MOT - SEG 2		1		8-Jan-22	18-Jan-22		KB90 - 5 DAY	
	CONTROL OF THE CONTRO	1	2			No. of the last of	-605		
	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 2		4	0.000	8-Jan-22	19-Jan-22	-605	KB90 - 5 DAY	
C2-SEG2-1040	PROTECT EXISTING TREES TO REMAIN - SEG 2	1	1		0-Jan-22	20-Jan-22	-605	KB90 - 5 DAY	
C2-SEG2-1050	ESTABLISH ELECTRIC SERVICE POINTS - SEG 2	2	2		9-Jan-22 0-Jan-22	20-Jan-22	-605	KB90 - 5 DAY	
C2-SEG2-1000	DEMO CURB / GUTTER / SIDEWALK - SEG 2	5	5	100024.535		26-Jan-22	-537	KB90 - 5 DAY	
C2-SEG2-1070	ESTABLISH PEDESTRIAN ACCESS - SEG 2	5	3		1-Jan-22	27-Jan-22	-605	KB90 - 5 DAY	
		3			8-Jan-22	01-Feb-22	-605	KB90 - 5 DAY	
20103-00-00-00-00-00-00-00-00-00-00-00-00-0	INSTALL SIGNALIZATION / LIGHTING / WIRE & TERMINATE / TRAFFIC LOOPS - SEG 2	2	2		2-Feb-22	03-Feb-22	-605	KB90 - 5 DAY	
	DEWATERING SET-UP - SEG 2	1	2		7-Jan-22	04-Feb-22	-529	KB90 - 5 DAY	
02-3EG2-1110	DEVALENTO SET-UF - SEG 2	2	2	0% 04	4-Feb-22	07-Feb-22	-605	KB90 - 5 DAY	

Critical Remaining Work

Actual Work



			DEE	RFIELD BEACH, FLORIDA				
ity ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023
C2-SEG2-1120	INSTALL STORM DRAINS - SEG 2	25	25	0% 08-Feb-22	14-Mar-22	-605	KB90 - 5 DAY	A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A
C2-SEG2-1130	REPLACE SAN. MAIN AND LATERALS - SEG 2	12	12	0% 15-Mar-22	30-Mar-22	-605	KB90 - 5 DAY	
C2-SEG2-1140	INSTALL WM LINES - SEG 2	8	8	0% 31-Mar-22	11-Apr-22	-605	KB90 - 5 DAY	
C2-SEG2-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 2	20	20	0% 12-Apr-22	09-May-22	-605	KB90 - 5 DAY	
C2-SEG2-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 2	5	5	0% 03-May-22	09-May-22	-605	KB90 - 5 DAY	
C2-SEG2-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 2	20	20	0% 12-Apr-22	09-May-22	-605	KB90 - 5 DAY	
C2-SEG2-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 2	10	10	0% 10-May-22	23-May-22	-605	KB90 - 5 DAY	
2-SEG2-1190	INSTALL NEW SIDEWALK - SEG 2	10	10	0% 24-May-22	06-Jun-22	-605	KB90 - 5 DAY	
C2-SEG2-1200	INSTALL ASPHALT BASE 1ST LIFT - SEG 2	3	3	0% 07-Jun-22	09-Jun-22	-605	KB90 - 5 DAY	
C2-SEG2-1210	LANDSCAPING & IRRIGATION - SEG 2	4	4	0% 10-Jun-22	15-Jun-22	-605	KB90 - 5 DAY	
C2-SEG2-1220	SEGMENT 2 SUBSTANTIAL COMPLETION	0	0	0%	15-Jun-22	-860	KB90 - 7 DAY	
NATER QUALI	TYWELLS	1991		19.20				
A1000	WATER QUALITY WELLS AT 13TH & ALTON CT	21	21	0% 19-Jan-22	16-Feb-22	-527	KB90 - 5 DAY	
EGMENT 3	CONSTRUCTION							
C2-SEG3-1000	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 3	10	10	0% 19-Oct-21	01-Nov-21	-443	KB90 - 5 DAY	
2-SEG3-1010	MOBILIZE & MATERIAL DELIVERY - SEG 3	2	2	0% 16-Jun-22	17-Jun-22	-605	KB90 - 5 DAY	
2-SEG3-1030	ESTABLISH MOT - SEG 3	1	1	0% 20-Jun-22	20-Jun-22	-605	KB90 - 5 DAY	
2-SEG3-1020	SURVEY LAY-OUT - SEG 3	2	2	0% 20-Jun-22	21-Jun-22	-605	KB90 - 5 DAY	
2-SEG3-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 3	1	1	0% 22-Jun-22	22-Jun-22	-605	KB90 - 5 DAY	
2-SEG3-1050	PROTECT EXISTING TREES TO REMAIN - SEG 3	2	2	0% 21-Jun-22	22-Jun-22	-605	KB90 - 5 DAY	
2-SEG3-1060	ESTABLISH ELECTRIC SERVICE POINTS - SEG 3	2	2	0% 22-Jun-22	23-Jun-22	-550	KB90 - 5 DAY	
2-SEG3-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 3	5	5	0% 23-Jun-22	29-Jun-22	-605	KB90 - 5 DAY	
2-SEG3-1080	INSTALL SIGNALIZATION / LIGHTING / WIRE & TERMINATE / TRAFFIC LOOPS - SEG 3	5	5	0% 24-Jun-22	30-Jun-22	-543	KB90 - 5 DAY	
2-SEG3-1090	ESTABLISH PEDESTRIAN ACCESS - SEG 3	3	3	0% 30-Jun-22	04-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1100	STRIP PAVEMENT - SEG 3	2	2	0% 05-Jul-22	06-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1110	DEWATERING SET-UP - SEG 3	4	4	0% 07-Jul-22	12-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1120	INSTALL STORM DRAINS - SEG 3	10	10	0% 13-Jul-22	26-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1130	REPLACE SAN, MAIN AND LATERALS - SEG 3	8	8	0% 27-Jul-22	05-Aug-22	-605	KB90 - 5 DAY	
C2-SEG3-1140	INSTALL WM LINES - SEG 3	8	8	0% 08-Aug-22	17-Aug-22	-605	KB90 - 5 DAY	
C2-SEG3-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 3	20	20	0% 18-Aug-22	14-Sep-22	-605	KB90 - 5 DAY	
C2-SEG3-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 3	4	4	0% 09-Sep-22	14-Sep-22	-605	KB90 - 5 DAY	
C2-SEG3-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 3	20	20	0% 18-Aug-22	14-Sep-22	-605	KB90 - 5 DAY	
	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 3	8	8	0% 15-Sep-22		-605	KB90 - 5 DAY	
	INSTALL NEW SIDEWALK - SEG 3	10	10	0% 27-Sep-22	10-Oct-22	-605	KB90 - 5 DAY	
	INSTALL ASPHALTBASE 1STLIFT - SEG 3	2	2	0% 11-Oct-22	12-Oct-22	-605	KB90 - 5 DAY	
	LANDSCAPING & IRRIGATION - SEG 3	4	4	0% 13-Oct-22	18-Oct-22	-605	KB90 - 5 DAY	
	SEGMENT 3 SUBSTANTIAL COMPLETION	0	0	0%	18-Oct-22	-856	KB90 - 7 DAY	
WATER QUALI	SEED CONTROL OF CONTRO	· ·	U	0 78	10-04-22	4030	KB90 - 7 DAT	
A1010	WATER QUALITY WELLS AT 12TH & ALTON CT	21	21	0% 21-Jun-22	19-Jul-22	-546	KB90 - 5 DAY	
	CONSTRUCTION			070 21-001122	10.00122	040	KBSO - S BAT	
C2-SEG4-1000	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 4	10	10	0% 02-Nov-21	15-Nov-21	-364	VP00 E DAY	
Page 1975 September 1975 September 1975	MOBILIZE & MATERIAL DELIVERY - SEG 4	10	2	0% 02-400-21 0% 19-Oct-22	20-Oct-22	-605	KB90 - 5 DAY KB90 - 5 DAY	
	SURVEY LAY-OUT - SEG 4		1					
C2-SEG4-1020	ESTABLISH MOT - SEG 4		1	0% 21-Oct-22 0% 21-Oct-22	21-Oct-22 21-Oct-22	-604 -605	KB90 - 5 DAY KB90 - 5 DAY	
C2-SEG4-1030	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 4		1	0% 24-Oct-22	21-Oct-22 24-Oct-22	2000		
C2-SEG4-1040 C2-SEG4-1050	PROTECT EXISTING TREES TO REMAIN - SEG 4	1	2		Indirect State Cont.	-604	KB90 - 5 DAY	
		2	2	0% 24-Oct-22	25-Oct-22	-605	KB90 - 5 DAY	
C2-SEG4-1060	ESTABLISH ELECTRIC SERVICE POINTS - SEG 4	2	2	0% 24-Oct-22	25-Oct-22	-563	KB90 - 5 DAY	
C2-SEG4-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 4	4	4	0% 26-Oct-22	31-Oct-22	-605	KB90 - 5 DAY	

Remaining Level of Effort Remaining Work

Critical Remaining Work

Actual Work

Milestone



RUN DATE:19-Apr-21 DATA DATE:01-Apr-21

TASK filter: All Activities

				FIELD BEACH, FLORION						
vity ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023 A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S		
C2-SEG4-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 4	3	3	0% 01-Nov-22	03-Nov-22	-605	KB90 - 5 DAY	A M 3 301 A 3 0 A D 3 F M A M 3 301 A 3 0 A D 3 F M A M 3 301 A 3		
C2-SEG4-1100	INSTALL SIGNALIZATION / LIGHTING / WIRE & TERMINATE / TRAFFIC LOOPS - SEG 4	7	7	0% 26-Oct-22	03-Nov-22	-558	KB90 - 5 DAY			
C2-SEG4-1090	STRIP PAVEMENT - SEG 4	2	2	0% 04-Nov-22	07-Nov-22	-605	KB90 - 5 DAY			
C2-SEG4-1110	DEWATERING SET-UP - SEG 4	1	1	0% 08-Nov-22	08-Nov-22	-605	KB90 - 5 DAY			
C2-SEG4-1120	INSTALL STORM DRAINS - SEG 4	20	20	0% 09-Nov-22	06-Dec-22	-605	KB90 - 5 DAY			
C2-SEG4-1130	REPLACE SAN, MAIN AND LATERALS - SEG 4	5	5	0% 07-Dec-22	13-Dec-22	-605	KB90 - 5 DAY			
C2-SEG4-1140	INSTALL WM LINES - SEG 4	5	5	0% 14-Dec-22	20-Dec-22	-605	KB90 - 5 DAY			
C2-SEG4-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 4	7	7	0% 21-Dec-22	29-Dec-22	-605	KB90 - 5 DAY			
C2-SEG4-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 4	5	5	0% 23-Dec-22	29-Dec-22	-605	KB90 - 5 DAY			
C2-SEG4-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 4	7	7	0% 21-Dec-22	29-Dec-22	-605	KB90 - 5 DAY			
C2-SEG4-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 4	7	7	0% 30-Dec-22	09-Jan-23	-605	KB90 - 5 DAY			
C2-SEG4-1190	INSTALL NEW SIDEWALK - SEG 4	10	10	0% 10-Jan-23	23-Jan-23	-605	KB90 - 5 DAY			
C2-SEG4-1200	INSTALL ASPHALT BASE 1ST LIFT - SEG 4	2	2	0% 24-Jan-23	25-Jan-23	-605	KB90 - 5 DAY			
C2-SEG4-1210	LANDSCAPING & IRRIGATION - SEG 4	5	5	0% 26-Jan-23	01-Feb-23	-605	KB90 - 5 DAY			
C2-SEG4-1230	SEGMENT 4 SUBSTANTIAL COMPLETION	0	0	0%	10-Feb-23	-851	KB90 - 7 DAY			
C2-SEG4-1220	PAVERS AT STREET ENDS RAISE ROADS - ADDED AMENITIES - SEG 4 10TH ST	7	7	0% 02-Feb-23	10-Feb-23	-605	KB90 - 5 DAY			
10TH STREET	GENERATOR SET #1									
C-G2-120	PREPARE UTILITIES / REMOVALS - 10TH ST GEN SET #1	10	10	0% 21-Oct-22	03-Nov-22	-588	KB90 - 5 DAY			
C-G2-130	FOUNDATION - 10TH ST GEN SET #1	5	5	0% 04-Nov-22	10-Nov-22	-588	KB90 - 5 DAY			
C-G2-140	DUCTBANK - 10TH ST GEN SET #1	5	5	0% 11-Nov-22	17-Nov-22	-588	KB90 - 5 DAY			
C-G2-150	STRUCTURE / PLATFORM - 10TH ST GEN SET #1	15	15	0% 18-Nov-22	08-Dec-22	-588	KB90 - 5 DAY			
C-G2-160	SET EQUIPMENT - 10TH ST GEN SET #1	2	2	0% 09-Dec-22	12-Dec-22	-578	KB90 - 5 DAY			
C-G2-170	WIRING AND TERMINATIONS -10TH ST GEN SET #1	5	5	0% 13-Dec-22	19-Dec-22	-487	KB90 - 5 DAY			
C-G2-165	INSTALL GAS PIPING - 10TH ST GEN SET #1	5	5	0% 13-Dec-22	19-Dec-22	-578	KB90 - 5 DAY			
C-G2-190	PRE-START-UP - 10TH ST GEN SET #1	1	1	0% 20-Dec-22	20-Dec-22	-472	KB90 - 5 DAY			
C-G2-200	LOAD BANK TESTING - 10TH ST GEN SET#1	2	2	0% 21-Dec-22	22-Dec-22	-472	KB90 - 5 DAY			
C-G2-180	HR / FINISHES / FENCING / LANDSCAPING - 10TH ST GEN SET #1	10	10	0% 20-Dec-22	02-Jan-23	-487	KB90 - 5 DAY			
C-G2-210	COMMISSIONING /ATS TESTING - 10TH ST GEN SET #1	1	1	0% 03-Jan-23	03-Jan-23	-478	KB90 - 5 DAY			
C-G2-220	TRAINING - 10TH ST GEN SET #1	1	1	0% 04-Jan-23	04-Jan-23	-478	KB90 - 5 DAY			
C-G2-230	PLACE IN OPERATION - 10TH ST GEN SET #1	1	1	0% 05-Jan-23	05-Jan-23	-478	KB90 - 5 DAY			
10TH STREET	GENERATOR SET #2									
C-G3-120	PREPARE UTILITIES / REMOVALS - 10TH ST GEN SET #2	10	10	0% 04-Nov-22	17-Nov-22	-583	KB90 - 5 DAY			
C-G3-130	FOUNDATION - 10TH ST GEN SET #2	5	5	0% 18-Nov-22	24-Nov-22	-583	KB90 - 5 DAY			
C-G3-140	DUCTBANK - 10TH ST GEN SET #2	5	5	0% 25-Nov-22	01-Dec-22	-583	KB90 - 5 DAY			
C-G3-150	STRUCTURE / PLATFORM - 10TH ST GEN SET #2	15	15	0% 09-Dec-22	29-Dec-22	-588	KB90 - 5 DAY			
C-G3-160	SET EQUIPMENT - 10TH ST GEN SET #2	2	2	0% 30-Dec-22	02-Jan-23	-588	KB90 - 5 DAY			
C-G3-170	WIRING AND TERMINATIONS -10TH ST GEN SET #2	5	5	0% 03-Jan-23	09-Jan-23	-492	KB90 - 5 DAY			
C-G3-165	INSTALL GAS PIPING - 10TH ST GEN SET #2	5	5	0% 03-Jan-23	09-Jan-23	-588	KB90 - 5 DAY			
C-G3-190	PRE-START-UP - 10TH ST GEN SET #2	1	1	0% 10-Jan-23	10-Jan-23	-485	KB90 - 5 DAY			
C-G3-200	LOAD BANK TESTING - 10TH ST GEN SET#2	2	2	0% 11-Jan-23	12-Jan-23	-485	KB90 - 5 DAY			
C-G3-180	HR / FINISHES / FENCING / LANDSCAPING - 10TH ST GEN SET #2	10	10	0% 10-Jan-23	23-Jan-23	-492	KB90 - 5 DAY			
C-G3-210	COMMISSIONING /ATS TESTING - 10TH ST GEN SET #2	1	1	0% 24-Jan-23	24-Jan-23	-492	KB90 - 5 DAY			
C-G3-220	TRAINING - 10TH ST GEN SET #2	1	1	0% 25-Jan-23	25-Jan-23	-492	KB90 - 5 DAY			
C-G3-230	PLACE IN OPERATION - 10TH ST GEN SET #2	1	1	0% 26-Jan-23	26-Jan-23	-492	KB90 - 5 DAY			
SEGMENT 5	CONSTRUCTION						CHARLES THE COLUMN			
	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 5	10	10	0% 16-Nov-21	29-Nov-21	-291	KB90 - 5 DAY			
C2-SEG5-1010	MOBILIZE & MATERIAL DELIVERY - SEG 5	2	2	0% 13-Feb-23	14-Feb-23	-605	KB90 - 5 DAY			
C2-SEG5-1030	ESTABLISH MOT - SEG 5		4	0% 15-Feb-23	15-Feb-23	-605	KB90 - 5 DAY			

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Remaining Level of Effort Remaining Work

Critical Remaining Work

Actual Work

♦ Milestone



RUN DATE:19-Apr-21 DATA DATE:01-Apr-21

TASK filter: All Activities

			DE	ERFIELD BEACH, FLORIDA				
tivity ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023 A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A
C2-SEG5-1020	SURVEY LAY-OUT - SEG 5	2	2	0% 15-Feb-23	16-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 5	1	1	0% 17-Feb-23	17-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1050	PROTECT EXISTING TREES TO REMAIN - SEG 5	2	2	0% 16-Feb-23	17-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1060	ESTABLISH ELECTRIC SERVICE POINTS - SEG 5	2	2	0% 17-Feb-23	20-Feb-23	-568	KB90 - 5 DAY	
C2-SEG5-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 5	4	4	0% 20-Feb-23	23-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1100	INSTALL SIGNALIZATION / LIGHTING / WIRE & TERMINATE / TRAFFIC LOOPS - SEG 5	3	3	0% 21-Feb-23	23-Feb-23	-561	KB90 - 5 DAY	
C2-SEG5-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 5	2	2	0% 24-Feb-23	27-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1090	STRIP PAVEMENT - SEG 5	2	2	0% 28-Feb-23	01-Mar-23	-605	KB90 - 5 DAY	
C2-SEG5-1110	DEWATERING SET-UP - SEG 5	2	2	0% 02-Mar-23	03-Mar-23	-605	KB90 - 5 DAY	4 3 4 4 5 5 6 5 6 5 6 6 6 6 6 6 6 6 6 6 6 6
C2-SEG5-1120	INSTALL STORM DRAINS - SEG 5	8	8	0% 06-Mar-23	15-Mar-23	-605	KB90 - 5 DAY	
C2-SEG5-1130	REPLACE SAN. MAIN AND LATERALS - SEG 5	7	7	0% 16-Mar-23	24-Mar-23	-605	KB90 - 5 DAY	
C2-SEG5-1140	INSTALL WM LINES - SEG 5	7	7	0% 27-Mar-23	04-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 5	10	10	0% 05-Apr-23			KB90 - 5 DAY	
C2-SEG5-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 5	10	4	0% 13-Apr-23	18-Apr-23	-605		
C2-SEG5-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 5	10	10		18-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 5	10	10	0% 05-Apr-23	18-Apr-23	-605	KB90 - 5 DAY	
	INSTALL NEW SIDEWALK - SEG 5	0	7	0% 19-Apr-23	26-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1190		/	,	0% 27-Apr-23	05-May-23	-605	KB90 - 5 DAY	
C2-SEG5-1200	INSTALL ASPHALT BASE 1ST LIFT - SEG 5	3	3	0% 08-May-23	10-May-23	-605	KB90 - 5 DAY	
C2-SEG5-1210	LANDSCAPING & IRRIGATION - SEG 5	4	4	0% 11-May-23	16-May-23	-605	KB90 - 5 DAY	
C2-SEG5-1220	SEGMENT 5 SUBSTANTIAL COMPLETION	0	0	0%	16-May-23	-847	KB90 - 7 DAY	
WATER QUAL						y: 34		
A1020	WATER QUALITY WELLS AT 9TH & ALTON CT	21	21	0% 16-Feb-23	16-Mar-23	-569	KB90 - 5 DAY	
The second secon	CONSTRUCTION							
C2-SEG6-1000	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 6	8	8	0% 30-Nov-21	09-Dec-21	-232	KB90 - 5 DAY	
C2-SEG6-1010	MOBILIZE & MATERIAL DELIVERY - SEG 6	2	2	0% 17-May-23	18-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1020	SURVEY LAY-OUT - SEG 6	1	1	0% 19-May-23	19-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1030	ESTABLISH MOT - SEG 6	1	1	0% 19-May-23	19-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 6	3	3	0% 22-May-23	24-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1100	MILL & PAVE - SEG 6	5	5	0% 25-May-23	31-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 6	5	5	0% 01-Jun-23	07-Jun-23	-605	KB90 - 5 DAY	
C2-SEG6-1190	INSTALL NEW SIDEWALK - SEG 6 AT N SIDE OF 6TH ST	5	5	0% 08-Jun-23	14-Jun-23	-605	KB90 - 5 DAY	
C2-SEG6-1220	SEGMENT 6 SUBSTANTIAL COMPLETION	0	0	0%	14-Jun-23	-847	KB90 - 7 DAY	•
6TH STREET	GENERATOR SET							
C-G1-120	PREPARE UTILITIES / REMOVALS - 6TH ST GEN SET	20	20	0% 21-Jul-21	17-Aug-21	-235	KB90 - 5 DAY	
C-G1-130	FOUNDATION - 6TH ST GEN SET	5	5	0% 18-Aug-21	24-Aug-21	-235	KB90 - 5 DAY	
C-G1-140	DUCTBANK - 6TH ST GEN SET	5	5	0% 25-Aug-21	31-Aug-21	-235	KB90 - 5 DAY	
C-G1-150	STRUCTURE / PLATFORM - 6TH ST GEN SET	15	15	0% 01-Sep-21	21-Sep-21	-235	KB90 - 5 DAY	
C-G1-160	SET EQUIPMENT - 6TH ST GEN SET	2	2	0% 22-Sep-21	23-Sep-21	-235	KB90 - 5 DAY	
C-G1-165	INSTALL GAS PIPING - 6TH ST GEN SET	5	5	0% 24-Sep-21	30-Sep-21	-223	KB90 - 5 DAY	
C-G1-170	WIRING AND TERMINATIONS -6TH ST GEN SET	10	10	0% 24-Sep-21	07-Oct-21	-235	KB90 - 5 DAY	
C-G1-190	PRE-START-UP - 6TH ST GEN SET	1	1	0% 08-Oct-21	08-Oct-21	-228	KB90 - 5 DAY	
C-G1-200	LOAD BANK TESTING - 6TH ST GEN SET	2	2	0% 11-Oct-21	12-Oct-21	-228	KB90 - 5 DAY	
C-G1-180	HR / FINISHES / FENCING / LANDSCAPING - 6TH ST GEN SET	10	10	0% 08-Oct-21	21-Oct-21	-235	KB90 - 5 DAY	
C-G1-210	COMMISSIONING /ATS TESTING - 6TH ST GEN SET	1	1	0% 22-Oct-21	22-Oct-21	-235	KB90 - 5 DAY	
C-G1-220	TRAINING - 6TH ST GEN SET	1	1	0% 25-Oct-21	25-Oct-21	-235	KB90 - 5 DAY	
C-G1-230	PLACE IN OPERATION - 6TH ST GEN SET	1	1	0% 26-Oct-21	26-Oct-21	-235	KB90 - 5 DAY	
5TH STREET	GENERATOR SET							
C-G4-120	PREPARE UTILITIES / REMOVALS - 5TH ST GEN SET	20	20	0% 27-Oct-21	23-Nov-21	,	KB90 - 5 DAY	I N IS IS IS IS IN IN LINE IN IN IN IN IN IN IN IN IN IN IN IN IN

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EXHIBIT B

KB-90 WEST AVENUE NEIGHBORHOOD IMPROVEMENT SOUTH MARCH 31, 2021 UPDATE 43 + NEW DESIGN BAR CHART - ALL ACTIVITIES



				TELD BEACH, FLOTE		- 1		
vity ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023
0.04.120	FOUNDATION - 5TH ST GEN SET					2000		A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S
C-G4-130		5	5	0% 24-Nov-21	30-Nov-21	-235	KB90 - 5 DAY	
C-G4-140	DUCTBANK - 5TH ST GEN SET	5	5	0% 01-Dec-21	07-Dec-21	-235	KB90 - 5 DAY	
C-G4-150	STRUCTURE / PLATFORM - 5TH ST GEN SET	15	15	0% 08-Dec-21	28-Dec-21	-235	KB90 - 5 DAY	
C-G4-160	SET EQUIPMENT - 5TH ST GEN SET	2	2	0% 29-Dec-21	30-Dec-21	-235	KB90 - 5 DAY	
C-G4-165	INSTALL GAS PIPING - 5TH ST GEN SET	5	5	0% 31-Dec-21	06-Jan-22	-223	KB90 - 5 DAY	
C-G4-170	WIRING AND TERMINATIONS -5TH ST GEN SET	10	10	0% 31-Dec-21	13-Jan-22	-235	KB90 - 5 DAY	
C-G4-190	PRE-START-UP - 5TH ST GEN SET	1	1	0% 14-Jan-22	14-Jan-22	-228	KB90 - 5 DAY	
C-G4-200	LOAD BANK TESTING - 5TH ST GEN SET	2	2	0% 17-Jan-22	18-Jan-22	-228	KB90 - 5 DAY	
C-G4-180	HR / FINISHES / FENCING / LANDSCAPING - 5TH ST GEN SET	10	10	0% 14-Jan-22	27-Jan-22	-235	KB90 - 5 DAY	
C-G4-210	COMMISSIONING /ATS TESTING - 5TH ST GEN SET	1	1	0% 28-Jan-22	28-Jan-22	-235	KB90 - 5 DAY	
C-G4-220	TRAINING - 5TH ST GEN SET	1	1	0% 31-Jan-22	31-Jan-22	-235	KB90 - 5 DAY	
C-G4-230	PLACE IN OPERATION - 5TH ST GEN SET	1	1	0% 01-Feb-22	01-Feb-22	-235	KB90 - 5 DAY	
SEGMENT 7	CONSTRUCTION							
C2-SEG7-1010	MOBILIZE & MATERIAL DELIVERY - SEG 7	2	2	0% 15-Jun-23	16-Jun-23	-605	KB90 - 5 DAY	
C2-SEG7-1030	ESTABLISH MOT - SEG 7	1	1	0% 19-Jun-23	19-Jun-23	-605	KB90 - 5 DAY	
C2-SEG7-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 7	1	1	0% 20-Jun-23	20-Jun-23	-605	KB90 - 5 DAY	
C2-SEG7-1150	MILL & PAVE - SEG 7	10	10	0% 21-Jun-23	04-Jul-23	-605	KB90 - 5 DAY	
C2-SEG7-1230	SEGMENT 7 SUBSTANTIAL COMPLETION	0	0	0%	04-Jul-23	-847	KB90 - 7 DAY	
FINAL COMP	PLETION							
C5-1010	PUNCH LIST SUBMITTAL	3	3	0% 05-Jul-23	07-Jul-23	-603	KB90 - 5 DAY	
C5-1020	PUNCH LIST COMPLETION	10	10	0% 10-Jul-23	21-Jul-23	-603	KB90 - 5 DAY	
C5-1000	UTILITY ADJUSTMENTS	15	15	0% 05-Jul-23	25-Jul-23	-605	KB90 - 5 DAY	
C5-1030	FINAL LIFT OF ASPHALT	10	10	0% 26-Jul-23	08-Aug-23	-605	KB90 - 5 DAY	
C5-1050	FINAL STRIPING	8	8	0% 09-Aug-23	18-Aug-23	-605	KB90 - 5 DAY	
C5-1060	SUBMISSION OF CLOSING DOCUMENTS	30	30	0% 21-Aug-23		-605	KB90 - 5 DAY	
C5-1070	FINAL COMPLETION	0	0	0%	29-Sep-23	-605	KB90 - 5 DAY	



		DEERFIELD BEACH, FLORIDA				SAIN BALL. OF AD		
ty ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023
8-90 WEST	AVENUE NEIGHBORHOOD IMPROVEMENT SOUTH MARCH 31, 2021 UPDATE	3 + NEW DESIGN				St. Part I		A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul
ILESTONE								
NS-03	SUBSTANTIAL COMPLETION (NTP 1 + 545 DAYS 1/26/2019 TIA 01 2/25/2019 + RBL 3/9/2021)	0	0	0%	04-Jul-23*	-847	KB90 - 7 DAY	
AS-04	FINAL COMPLETION (SC + 90 DAYS 4/26/2019 TIA 01 5/23/2019 + RBL 6/4/2021)	0	0	0%	29-Sep-23*	-847	KB90 - 7 DAY	
ESIGN	111 C OM CC 101 (00 1 00 B110 4/20/2010 1910 1 0/20/2010 1 10/20/2010	0	U	076	29-Sep-23	-047	KB90 - 7 DAY	
Charles of the Control of the Contro	MANUEDAINACE (CTDEET LICHTICIONALIZATION DEGION/DEDICITINO							
	WAY/DRAINAGE/STREET LIGHT/SIGNALIZATION DESIGN/PERMITTING							
D4-040	HARMONIZATION PLANS DESIGN - SEGMENT 1	00	0.0	00/ 04 Dec 40 A	27 h = 24	075	1/200 T DAY	
		88	88	0% 21-Dec-18 A	27-Jun-21	-875	KB90 - 7 DAY	
ONSTRUC								
	CONSTRUCTION							
2-SEG1-1000	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 1	71		0% 28-Jun-21	04-Oct-21	-605	KB90 - 5 DAY	
2-SEG1-1010	MOBILIZE & MATERIAL DELIVERY - SEG 1	2	2	0% 05-Oct-21	06-Oct-21	-605	KB90 - 5 DAY	
2-SEG1-1030	ESTABLISH MOT - SEG 1	1	1	0% 07-Oct-21	07-Oct-21	-605	KB90 - 5 DAY	
2-SEG1-1050	PROTECT EXISTING TREES TO REMAIN - SEG 1	2	2	0% 08-Oct-21	11-Oct-21	-605	KB90 - 5 DAY	
2-SEG1-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 1	5	5	0% 12-Oct-21	18-Oct-21	-605	KB90 - 5 DAY	0
2-SEG1-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 1	3	3	0% 19-Oct-21	21-Oct-21	-605	KB90 - 5 DAY	
2-SEG1-1090	STRIP PAVEMENT - SEG 1	3	3	0% 22-Oct-21	26-Oct-21	-605	KB90 - 5 DAY	
2-SEG1-1110	DEWATERING SET-UP - SEG 1	2	2	0% 27-Oct-21	28-Oct-21	-605	KB90 - 5 DAY	
2-SEG1-1120	INSTALL STORM DRAINS - SEG 1	12	12	0% 29-Oct-21	15-Nov-21	-605	KB90 - 5 DAY	
2-SEG1-1130	REPLACE SAN, MAIN AND LATERALS - SEG 1	7	7	0% 16-Nov-21	24-Nov-21	-605	KB90 - 5 DAY	
2-SEG1-1140	INSTALL WM LINES - SEG 1	8	8	0% 25-Nov-21	06-Dec-21	-605	KB90 - 5 DAY	
2-SEG1-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 1	12	12	0% 07-Dec-21	22-Dec-21	-605	KB90 - 5 DAY	
-SEG1-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 1	12	12	0% 07-Dec-21	22-Dec-21	-605	KB90 - 5 DAY	
2-SEG1-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 1	4	4	0% 17-Dec-21	22-Dec-21	-605	KB90 - 5 DAY	
-SEG1-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 1	4	4	0% 23-Dec-21	28-Dec-21	-605	KB90 - 5 DAY	
2-SEG1-1190	INSTALL NEW SIDEWALK - SEG 1	5	5	0% 29-Dec-21	04-Jan-22	-605	KB90 - 5 DAY	
2-SEG1-1200	INSTALL ASPHALT BASE 1ST LIFT - SEG 1	2	2	0% 05-Jan-22	06-Jan-22	-605	KB90 - 5 DAY	
2-SEG1-1210	The profit of the second of th	5	5	0% 07-Jan-22	13-Jan-22	-605	KB90 - 5 DAY	
	SEGMENT 1 SUBSTANTIAL COMPLETION	0	0	0%	13-Jan-22	-870	KB90 - 7 DAY	
	CONSTRUCTION							
2-SEG2-1010	MOBILIZE & MATERIAL DELIVERY - SEG 2	2	2	0% 14-Jan-22	17-Jan-22	-605	KB90 - 5 DAY	
2-SEG2-1030	ESTABLISH MOT - SEG 2	1	1	0% 18-Jan-22	18-Jan-22	-605	KB90 - 5 DAY	
-SEG2-1020	SURVEY LAY-OUT - SEG 2	2	2	0% 18-Jan-22	19-Jan-22	-605	KB90 - 5 DAY	
-SEG2-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 2	1	1	0% 20-Jan-22	20-Jan-22	-605	KB90 - 5 DAY	
-SEG2-1050	PROTECT EXISTING TREES TO REMAIN - SEG 2	2	2	0% 19-Jan-22	20-Jan-22	-605	KB90 - 5 DAY	
-SEG2-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 2	5	5	0% 21-Jan-22	27-Jan-22	-605	KB90 - 5 DAY	
2-SEG2-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 2	3	3	0% 28-Jan-22	01-Feb-22	-605	KB90 - 5 DAY	
2-SEG2-1090	STRIP PAVEMENT - SEG 2	2	2	0% 02-Feb-22	03-Feb-22	-605	KB90 - 5 DAY	
-SEG2-1110	DEWATERING SET-UP - SEG 2	2	2	0% 04-Feb-22	07-Feb-22	-605	KB90 - 5 DAY	
-SEG2-1120	INSTALL STORM DRAINS - SEG 2	25	25	0% 08-Feb-22	14-Mar-22	-605	KB90 - 5 DAY	
-SEG2-1130	REPLACE SAN. MAIN AND LATERALS - SEG 2	12	12	0% 15-Mar-22	30-Mar-22	-605	KB90 - 5 DAY	
-SEG2-1140	INSTALL VM LINES - SEG 2	8	8	0% 31-Mar-22	11-Apr-22	-605	KB90 - 5 DAY	
-SEG2-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 2	20	20	0% 12-Apr-22	09-May-22	-605	KB90 - 5 DAY	
2-SEG2-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 2	5	5	0% 03-May-22	09-May-22	-605	KB90 - 5 DAY	
2-SEG2-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 2	20	20	0% 12-Apr-22	09-May-22	-605	KB90 - 5 DAY	
	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 2	10	10	0% 10-May-22	23-May-22	-605	KB90 - 5 DAY	
2-SEG2-1190	INSTALL NEW SIDEWALK - SEG 2	10	10	0% 24-May-22	06-Jun-22	-605	KB90 - 5 DAY	

KB-90 WEST AVENUE NEIGHBORHOOD IMPROVEMENT SOUTH MARCH 31, 2021 UPDATE 43 + NEW DESIGN BAR CHART - CRITICAL PATH



RUN DATE: 19-Apr-21 DATA DATE:01-Apr-21

			1	DEERFIELD BEACH, FLORIDA				
ctivity ID	Activity Name	00	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023
C2-SEG2-1200	INSTALL ASPHALT BASE 1ST LIFT - SEG 2	3	3	0% 07-Jun-22	09-Jun-22	-605	KB90 - 5 DAY	A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S
C2-SEG2-1210	LANDSCAPING & IRRIGATION - SEG 2	4	4	0% 10-Jun-22	15-Jun-22	-605	KB90 - 5 DAY	
C2-SEG2-1220	SEGMENT 2 SUBSTANTIAL COMPLETION	0	0		15-Jun-22	-860	KB90 - 7 DAY	
SEGMENT 3	CONSTRUCTION						The second second	
	MOBILIZE & MATERIAL DELIVERY - SEG 3	2	2	0% 16-Jun-22	17-Jun-22	-605	KB90 - 5 DAY	
C2-SEG3-1030	ESTABLISH MOT - SEG 3	1	1	0% 20-Jun-22	20-Jun-22	-605	KB90 - 5 DAY	
C2-SEG3-1020	SURVEY LAY-OUT - SEG 3	3	2		21-Jun-22	-605		
C2-SEG3-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 3	1	1	0% 22-Jun-22	22-Jun-22	-605	KB90 - 5 DAY	
C2-SEG3-1050	PROTECT EXISTING TREES TO REMAIN - SEG 3	2	2		22-Jun-22	-605	KB90 - 5 DAY	
C2-SEG3-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 3	5	5	0% 23-Jun-22	29-Jun-22	-605	KB90 - 5 DAY	
C2-SEG3-1090	ESTABLISH PEDESTRIAN ACCESS - SEG 3	3	3	0% 30-Jun-22	04-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1100	STRIP PAVEMENT - SEG 3	3	2	0% 05-Jul-22	06-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1110	DEWATERING SET-UP - SEG 3	4	4	0% 07-Jul-22	12-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1120	INSTALL STORM DRAINS - SEG 3	10	10		26-Jul-22	-605	KB90 - 5 DAY	
C2-SEG3-1130	REPLACE SAN, MAIN AND LATERALS - SEG 3	8	8	0% 27-Jul-22	05-Aug-22	-605	KB90 - 5 DAY	
C2-SEG3-1140	INSTALL VM LINES - SEG 3	8		0% 08-Aug-22		-605		
C2-SEG3-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 3	20	20	Victoria Constitution Constitution		-605	KB90 - 5 DAY	
C2-SEG3-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 3	4	4	0% 09-Sep-22			KB90 - 5 DAY	
C2-SEG3-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 3	20	20	1		-605 -605	KB90 - 5 DAY	
C2-SEG3-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 3	20	8	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	0.00200000000	10.000	KB90 - 5 DAY	
C2-SEG3-1190	INSTALL NEW SIDEWALK - SEG 3	10	10	0% 15-Sep-22		-605	KB90 - 5 DAY	
C2-SEG3-1200	INSTALL ASPHALT BASE 1ST LIFT - SEG 3	10			10-Oct-22	-605	KB90 - 5 DAY	
C2-SEG3-1210	LANDSCAPING & IRRIGATION - SEG 3	2	2		12-Oct-22	-605	KB90 - 5 DAY	
C2-SEG3-1230	SEGMENT 3 SUBSTANTIAL COMPLETION	4	4		18-Oct-22	-605	KB90 - 5 DAY	
		0	0	0%	18-Oct-22	-856	KB90 - 7 DAY	
	CONSTRUCTION							
144-1554-1545-1545-1545-1545-1545-1	MOBILIZE & MATERIAL DELIVERY - SEG 4	2	2		20-Oct-22	-605	KB90 - 5 DAY	
C2-SEG4-1030	ESTABLISH MOT - SEG 4	1	1	0% 21-Oct-22	21-Oct-22	-605	KB90 - 5 DAY	
C2-SEG4-1050	PROTECT EXISTING TREES TO REMAIN - SEG 4	2	2		25-Oct-22	-605	KB90 - 5 DAY	
C2-SEG4-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 4	4	4	0% 26-Oct-22	31-Oct-22	-605	KB90 - 5 DAY	
C2-SEG4-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 4	3	3	0% 01-Nov-22	03-Nov-22	-605	KB90 - 5 DAY	
C2-SEG4-1090 C2-SEG4-1110	STRIP PAVEMENT - SEG 4 DEWATERING SET-UP - SEG 4	2	2	0% 04-Nov-22	07-Nov-22	-605	KB90 - 5 DAY	
		1	1	0% 08-Nov-22	08-Nov-22	-605	KB90 - 5 DAY	
	INSTALL STORM DRAINS - SEG 4 REPLACE SAN, MAIN AND LATERALS - SEG 4	20	20		06-Dec-22	-605	KB90 - 5 DAY	
	INSTALL WM LINES - SEG 4	5	5	0% 07-Dec-22	13-Dec-22	-605	KB90 - 5 DAY	
	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 4	5	5	0% 14-Dec-22	20-Dec-22	-605	KB90 - 5 DAY	
	INSTALL STREET LIGHT CONDUIT/ BOXES - SEG 4	/	-	0% 21-Dec-22	29-Dec-22	-605	KB90 - 5 DAY	
C2-SEG4-1170	MANAGEMENT OF THE PROPERTY OF	5	5	0% 23-Dec-22	29-Dec-22	-605	KB90 - 5 DAY	
	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 4	7	7	0% 21-Dec-22	29-Dec-22	-605	KB90 - 5 DAY	
Secretary and the second	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 4	1	1	0% 30-Dec-22	09-Jan-23	-605	KB90 - 5 DAY	
	INSTALL NEW SIDEWALK - SEG4	10	10	0% 10-Jan-23	23-Jan-23	-605	KB90 - 5 DAY	
	INSTALL ASPHALT BASE 1ST LIFT - SEG 4 LANDSCAPING & IRRIGATION - SEG 4	2	2	0% 24-Jan-23	25-Jan-23	-605	KB90 - 5 DAY	
	The state of the s	5	5	0% 26-Jan-23	01-Feb-23	-605	KB90 - 5 DAY	
	SEGMENT 4 SUBSTANTIAL COMPLETION BAVEDS AT STREET ENDS DAISE DOADS, ADDED AMENITIES, SEC 4 10TH ST.	0	0	0%	10-Feb-23	-851	KB90 - 7 DAY	
	PAVERS AT STREET ENDS RAISE ROADS - ADDED AMENITIES - SEG 4 10TH ST	7	7	0% 02-Feb-23	10-Feb-23	-605	KB90 - 5 DAY	
	CONSTRUCTION					PIESE T		
	MOBILIZE & MATERIAL DELIVERY - SEG 5	2	2	200-000 12-000-000-000-000	14-Feb-23	-605	KB90 - 5 DAY	
	ESTABLISH MOT - SEG 5	1	1	0% 15-Feb-23	15-Feb-23	-605	KB90 - 5 DAY	
G2-SEG5-1020	SURVEY LAY-OUT - SEG 5	2	2	0% 15-Feb-23	16-Feb-23	-605	KB90 - 5 DAY	

Remaining Level of Effort Remaining Work Actual Work

Critical Remaining Work

♦ Milestone

Page 2 of 3

TASK filter: LONGEST PATH.

EXHIBIT B

KB-90 WEST AVENUE NEIGHBORHOOD IMPROVEMENT SOUTH MARCH 31, 2021 UPDATE 43 + NEW DESIGN BAR CHART - CRITICAL PATH



RUN DATE: 19-Apr-21 DATA DATE:01-Apr-21

			OFF	REFIELD BEACH, FLORIUM				
tivity ID	Activity Name	OD	RD	PCT Start	Finish	Total Float	Calendar	2021 2022 2023 A M J Jul A S O N D J F M A M J Jul A S O N D J F M A M J Jul A S
C2-SEG5-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 5	1	1	0% 17-Feb-23	17-Feb-23	-605	KB90 - 5 DAY	A III 3 301 A 3 0 14 D 3 7 III A III 3 301 A 3 0 14 D 3 7 III A III 3 301 A 3
C2-SEG5-1050	PROTECT EXISTING TREES TO REMAIN - SEG 5	2	2	0% 16-Feb-23	17-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1070	DEMO CURB / GUTTER / SIDEWALK - SEG 5	4	4	0% 20-Feb-23	23-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 5	2	2	0% 24-Feb-23	27-Feb-23	-605	KB90 - 5 DAY	
C2-SEG5-1090	STRIP PAVEMENT - SEG 5	2	2	0% 28-Feb-23	01-Mar-23	-605	KB90 - 5 DAY	
C2-SEG5-1110	DEWATERING SET-UP - SEG 5	2	2	0% 02-Mar-23	03-Mar-23	-605	KB90 - 5 DAY	
C2-SEG5-1120	INSTALL STORM DRAINS - SEG 5	8	8	0% 06-Mar-23	15-Mar-23	-605	KB90 - 5 DAY	
C2-SEG5-1130	REPLACE SAN. MAIN AND LATERALS - SEG 5	7	7	0% 16-Mar-23	24-Mar-23	-605	KB90 - 5 DAY	
C2-SEG5-1140	INSTALL WM LINES - SEG 5	7	7	0% 27-Mar-23	04-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1150	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 5	10	10	0% 05-Apr-23	18-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1170	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 5	4	4	0% 13-Apr-23	18-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1160	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 5	10	10	0% 05-Apr-23	18-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 5	6	6	0% 19-Apr-23	26-Apr-23	-605	KB90 - 5 DAY	
C2-SEG5-1190	INSTALL NEW SIDEWALK - SEG 5	7	7	0% 27-Apr-23	05-May-23	-605	KB90 - 5 DAY	
C2-SEG5-1200	INSTALL ASPHALT BASE 1ST LIFT - SEG 5	3	3	0% 08-May-23	10-May-23	-605	KB90 - 5 DAY	
C2-SEG5-1210	LANDSCAPING & IRRIGATION - SEG 5	4	4	0% 11-May-23	16-May-23	-605	KB90 - 5 DAY	
C2-SEG5-1220	SEGMENT 5 SUBSTANTIAL COMPLETION	0	0	0%	16-May-23	-847	KB90 - 7 DAY	
SEGMENT 6	CONSTRUCTION							
C2-SEG6-1010	MOBILIZE & MATERIAL DELIVERY - SEG 6	2	2	0% 17-May-23	18-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1020	SURVEY LAY-OUT - SEG 6	1	1	0% 19-May-23	19-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1030	ESTABLISH MOT - SEG 6	1	1	0% 19-May-23	19-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1080	ESTABLISH PEDESTRIAN ACCESS - SEG 6	3	3	0% 22-May-23	24-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1100	MILL & PAVE - SEG 6	5	5	0% 25-May-23	31-May-23	-605	KB90 - 5 DAY	
C2-SEG6-1180	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 6	5	5	0% 01-Jun-23	07-Jun-23	-605	KB90 - 5 DAY	
C2-SEG6-1190	INSTALL NEW SIDEWALK - SEG 6 AT N SIDE OF 6TH ST	5	5	0% 08-Jun-23	14-Jun-23	-605	KB90 - 5 DAY	
C2-SEG6-1220	SEGMENT 6 SUBSTANTIAL COMPLETION	0	0	0%	14-Jun-23	-847	KB90 - 7 DAY	
SEGMENT 7	CONSTRUCTION		RES					
C2-SEG7-1010	MOBILIZE & MATERIAL DELIVERY - SEG 7	2	2	0% 15-Jun-23	16-Jun-23	-605	KB90 - 5 DAY	
C2-SEG7-1030	ESTABLISH MOT - SEG 7	1	1	0% 19-Jun-23	19-Jun-23	-605	KB90 - 5 DAY	
C2-SEG7-1040	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 7	1	1	0% 20-Jun-23	20-Jun-23	-605	KB90 - 5 DAY	
C2-SEG7-1150	MILL & PAVE - SEG 7	10	10	0% 21-Jun-23	04-Jul-23	-605	KB90 - 5 DAY	
C2-SEG7-1230	SEGMENT 7 SUBSTANTIAL COMPLETION	0	0	0%	04-Jul-23	-847	KB90 - 7 DAY	
FINAL COMP	PLETION	STATES OF THE STATES						
C5-1000	UTILITY ADJUSTMENTS	15	15	0% 05-Jul-23	25-Jul-23	-605	KB90 - 5 DAY	
C5-1030	FINAL LIFT OF ASPHALT	10	10	0% 26-Jul-23	08-Aug-23	-605	KB90 - 5 DAY	
C5-1050	FINAL STRIPING	8	8	0% 09-Aug-23	18-Aug-23	-605	KB90 - 5 DAY	rita in indicata di la casa di la della di la casa di la casa di la casa di la casa di la casa di la casa di l
C5-1060	SUBMISSION OF CLOSING DOCUMENTS	30	30	0% 21-Aug-23	29-Sep-23	-605	KB90 - 5 DAY	
C5-1070	FINAL COMPLETION	0	0	0%	29-Sep-23	-605	KB90 - 5 DAY	/



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221

Fax:(954)426-1226

City of Miami Beach 1700 Convention Center Drive Miami Beach, FL 33139

February 14, 2019 Sent Via Email

Attn: Jorge Rodriguez

RE: West Ave South - 090

Subject: 10-Year Storm Drain CO - Item 5

Jorge,

Enclosed please find our formal proposal with back-up in support of our reduced price of \$1,227,983 for the 10-year Storm Drainage as submitted originally in our June 28, 2018 correspondence. The reduction in price is mainly due to the new information obtained that approximately 1,310 LF of 48" Drainage pipe is already installed between 5^{th} and 8^{th} St along West Ave.

As you are aware, the AECOM drainage map dated May 4, 2017 provided to RMCF on May 3, 2018 by the City to form the basis of our pricing included this piping as new. RMCF and its consultant CES confirmed via as-builts that this piping is existing.

It should be understood the piping and elevations assumed are based on the AECOM Map provided to us on May 3,2018. Absent a fully certified drainage report, any changes in invert elevations due to pipe size changes will require an additional change in pricing.

Please review the documentation and contact me with any questions you may have.

Sincerely

Michael R. Fischer, COO.

Ric-Man Construction Florida, Inc.

CC:

Danny Mancini Tyson DiPetrillo Chris Mancini Sabrina Baglieri

Attachments:

- RMCF Spread Sheet of Costs



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221 Fax:(954)426-1226

- HCSS Activity Report
- CES Scope and Clarifications
- CES Pricing Sheet
- Supplier Quotations



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221

Fax:(954)426-1226

City of Miami Beach 1700 Convention Center Drive Miami Beach, FL 33139

August 7, 2019 Sent Via Email

Attn: Jorge Rodriguez

Re: West Avenue South 090

Subj: Model Study 2.1B Price Proposal

Dear Jorge,

Referencing RMCF's email dated July 23, 2019 and the recent directive received from the CMB in the form of an email dated August 2, 2019 wherein option 2.1B was selected as the required drainage approach for the West Avenue Project, we include a detailed breakdown of the proposal in the amount of \$1,071,000 for your review and approval.

RMCF has reviewed in detail the differences between the 10 year storm drainage piping and structures pricing for the South 090 project contained within CO #3B and as recommended in CES's June 2019 Technical Memorandum presented to the City on June 28, 2019. RMCF performed a street by street re-analysis of the proposed work. The pricing is based on Model 2.1B (South to North - Appendices 16 and 17).

The following notes and clarifications apply to the proposed Change Order:

- The \$ presented above represents additions to current approved CO #3B.
- Credits have been provided where applicable.
- Conflict structures are not included in this estimate these issues will be priced based on finalization of the Utility Master Plan currently in progress.
- Additional cost has been added to account for Pipe sizing increases, impacts to production and equipment needs.
- Added structures and side street drainage particularly at the Alton Court interfaces to account for differences between AECOM (DCP) and CO #3B Model and the new CES Model concepts have been accounted for.
- Duration impacts have not been analyzed nor are a part of Change Order #4 time
 extension. RMCF will do everything in its power to hold the CO # 4 dates. However, the
 critical path remains through the drainage work and the approval of DERM. RMCF expects
 to submit 60% drainage design drawings by August 30, 2019.
- Segmented Construction Approach has been included in the added costs above.

RMCF would appreciate an expedited review and approval of this Change Order since the design work has commenced and the critical path of the project is through the design, permitting and construction of the drainage system.



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221

Fax:(954)426-1226

Please contact me if you require any additional information.

Sincerely,

Michael R. Fischer

CC:

Danny Mancini Tyson Di Petrillo Sabrina Baglieri

Attachments:

- RMCF Email Dated July 23, 2019
- CMB Email Dated August 2, 2019
- RMCF Spread Sheet and HCSS Detailed Estimate.



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221 Fax:(954)426-1226

City of Miami Beach Capital Improvement Projects Office 1700 Convention Center Drive Miami Beach, FL 33139

November 19, 2020 Sent Via Email

Attn: Sabrina Baglieri

Re: West Ave 090/091

Subj: Budget Estimate for Commission Approvals

Option 3A - WTS at 1671 West Ave

Water Quality Wells and Pumping Systems

Sabrina,

Enclosed find the work sheets representing Ric-man Construction Florida, Inc. (RMCF) estimates for the upcoming work at the West Ave South (090) and North (091) projects.

As you are aware the Engineering fees for the above referenced design Change Orders were approved by the Commission as follows:

DESIGN FEES - Approved

- 091 North Option 3A WTS at 1671 West Ave \$275,000. It is noted that 50% of the value is being processed under #3 RCD by the City. The balance of \$137,500 will be funded under the Construction CO below.
- 090 Water Quality Design-\$542,056 will be processed via a separate RCO #4
- 091 Water Quality Design \$1,001,781 will be processed via a separate RCO #4

CONSTRUCTION ESTIMATE - For Commission Approval

- 091 North Option 1671 3A WTS at West Ave \$2,827,054 (Attachment 1)
- 091 North Water Quality Construction \$9,177,000 (Attachment 2)
- 090 South Water Quality Construction \$3,028,000 (Attachment 3)



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221

Fax:(954)426-1226

Further, it is our understanding that the Model 2.1 B 10 - year Storm Water Upgrade – RCO #5 in the amount of \$2,858,000 for 090/091 is under submission for formal Change Order Approval as of November 17, 2020. The proposal was submitted on August 7, 2019.

In summary RMCF is anticipating formal additions to the Contract in the form of Contingency Draws and Change Orders as follows:

090 South

Water Quality Design -	\$542,056
* Water Quality Construction -	\$3,028,000
Model 2.1B - 10-Year Storm Upgrades	\$1,070,000
Total 090 South	\$4.640.056

091 North

Water Quality Design * Water Quality Construction Model 2.1B - 10-Year Storm Upgrades	\$1,001,781 \$9,177,000 \$1,788,000	
Option 3A WTS - 1671 West Ave Option 3A WTS - 1671 West Ave	\$137,500 \$2,827,054	(Contingency Draw)
Total 091 North	\$14,931,335	

It should be understood a time impact analysis is yet to be finalized based on the delays experienced since December 2019. And referencing RMCF's letter to the City dated January 29, 2020, remaining outstanding elements of change - over and above the foregoing items are:

- Bay walk Removable sections dictated by 1450 Lincoln RD easement terms.
- Harmonization identification for ROW and private property encroachments, completed on 11/16/20.
- Encroachment/Harmonization relief for residents as determined by the City.
- Harmonization effort and re-designs as dictated by current Resolution and future revisions.
- Inverted crown between 16th St and Lincoln at Alton Ct.
- Inverted crown at Lincoln Ct.
- Re-design Lincoln Rd West of Bay Rd due to Option 3A WTS changes.

^{*} Pricing subject to finalization of Geotechnical survey and report of secant pile locations, a function of the Water Quality Design Change Order.



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221

Fax:(954)426-1226

Please contact me with any questions or additional information required.

Sincerely,

Michael R. Fischer, COO.

Ric-Man Construction Florida, Inc.

CC:

Danny Mancini Tyson DiPetrillo Jorge Rodriguez Jose Caraballo

Attachments:

#1: 091 North Option 3A at 1671 West Ave – Estimate Summary #2: 090/091 North & South Water Quality Construction – Estimate Summary

- January 29, 2020 RMCF Letter to City of Miami Beach

- Map of 090/091 See Cont. Pile & Well Layout (2 ea.)

			Alemak Alemak	CONST.	Notes	SCAPIELD BEACH, FLORIUM	Currently DiD reservational AO" 12 and	Precise with flan values	OK. BCD. include valves	20 NOT THE BIT DOOM OF WORK AND PESTON ATION	Include mana channel	merce pare changes, with cit	To account for 17th or discharge	concount of 17th 31 documes wheres into canal		Incl FPI vault & harrier wall	Bubble streen 3/16"		Included in Bace bid-increase to C 2NAVD		50 % of balance - rest with contineency draws	Needed to confirm Cofferdam /tremie and structural design	Sign and the same of the same
					Amount		\$ 525,000.00	\$ 145,000.00			1	\$ 50,000,00		\$ 125,000,00		61	\$ 122,554.00	\$ 291,000,00	\$	\$ 2,659,554.00	\$ 137,500.00	\$ 30,000.00	
		Oi.			Description		Force Main- 1671 west to 17th St	Transition Box at Pump discharge	Drainage Upgrade - Lincoln to 1671	Landscaping/Renovations at parking lot and 17th St	Pump Motor change to 150 HP	Mill and pave parking lot	Dissipator size increase	Sea Wall mods at 17th st- for Dissipator	MOT at 17th and West ave	Structural and Framing for Screening w/FND, et al	Aluminum screen	Field supprt costs and Supervision	Lincoln RD Wall Upgrade		Engineering	Borings/SUE	
		11/15/2020			Item		1	2	3	4	S	9	7	80	6	10	11	12	13		14	15	
Attachment 1	West Ave 091	WTS Option 3A																					

1	Matter Dundling Bronners March A And Con-						
-	water guanty Proposal - West Ave - 090/091					11/17/2020	6
=	ltem			090- South		091 North	COURT IN 190
++			Quantity		Quantity		
2	Mobilization / Demobilization/Site set up		ю	\$ 258,600.00	7	\$ 739,200.00	
17	15' Dia Secant pile Structures		9	5 1,582,400.00	10	\$ 2,644,000.00	
3(20' Diameter Secant Pile Structures		0		4	\$ 2,596,000.00	
Σ	Mechanical - Fit out/ structures/Misc items		6	\$ 378,000.00	7	\$ 584,200.00	
P	Pumping units - 25 HP with Control Panels		3	\$ 375,000.00	2	\$ 625,000.00	
P	Pumping Units 60 HP with Control Panels		0	S	3	\$ 437,000.00	
0	Platforms/Landscaping, Fencing		6	\$ 55,000.00	7	\$ 114,000.00	
<u>=</u>	Electrical & Controls		3	\$ 135,000.00	7	\$ 327,900.00	
H	100' Wells		3	\$ 244,000.00	13	\$ 1,109,700.00	
۴	Total Budget Price			\$ 3,028,000.00		\$ 9,177,000.00	
ž	Notes						
Bu	Budget pricing based on current 30% drawings utilizing Secant circular construction for Settling and Wet well structures. Pricing cubiners to change uses	Secant circular construct	on for Settli	ng and Wet well stru	cturec. Prici	on carbinet to change	
S .	Continuous operation anticipated separate from Segment	ented construction approach for base price as necessary	ach for base	price as necessary,		n Summarian or and con or	completion of deolectinical rep
A C	Anticipated sequence of Construction:	Dur in Cal days					
Se	Segment 2 North- 2 loc	74					
Se Se	Segment 2 South 1 Loc	40					
Se	Seement 3 North- 2 Loc	040					
Se	Segment 6 North- 2 Loc	00 08					
Se	Segment 5 South- 1 Loc	40					
Se	Segment 9 North- 1 Loc	74					
š	Well pricing based on 100' depth						
Se	Segments of Roadway (full width) will be closed to thru traffic at each location. 80 'L.x SO' W spacing required at each location for Secant construction	traffic at each location-	30 'L x 50' W	spacing required at e	ach locatio	n for Secant construction	S
5	Critical path impacts will be evaluated for overall time extension request pending finalization of CO pricing in concert with 3a MTS CO	xtension request pending	finalization	of CO pricing in conc	Per with 3A	WTS CO	
Pric	Pricing based exclusively on 16 well design per CES February 2020 report and subject to DERM approval	uary 2020 report and sub	ject to DERA	A approval.			
2	RMCF/CES assumes no liability for meeting water quality requirements in excess of the well capacity detailed in the February	y requirements in excess	of the well o	capacity detailed in the	ne February	CES Report	
Ele	Electrical Service to 10 Panel locations provided by FPL within 10' of new panel locations	within 10' of new panel lo	ocations			10000	
A	Allowance for landscaping screening of raised panels and passive relief system, only only	d passive relief system, o	niy only.				
18.00	Account to the contract of the						



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221

Fax:(954)426-1226

City of Miami Beach Capital Improvement Projects Office 1700 Convention Center Drive Miami Beach, FL 33139

January 29, 2020 Sent Via Email

Attn: Sabrina Baglieri

Re: West Ave 090/091

Subj: CO Status and Path Forward

Dear Sabrina,

In conjunction with the upcoming Change Order Request we are preparing for the 15 well water quality issue (DERM) directed by Public Works, we provide below the status of pending changes and comment on the project overall. This information is compiled for three (3) reasons; (1) to ensure we remain on an expedited path to issuing the necessary documents for billing purposes, (2) to communicate to City leadership of the impacts in both time and cost as a result of these requests and, (3) to suggest a reasonable, doable path forward.

Pending Changes:

Change Order 5 North and South Non-Compensable

Time impact through December 2019 CPM update - re-submitted on 1/8/20 for 986 and 1,265 calendar days for 090 and 091, respectively.

Change Order 6 North and South \$2,858,000

Model 2.1B Drainage System Upgrades - Submitted on 8/7/19. The further upgrades in pipe sizes and structures are required pursuant to the CES 10-year model study (completed in June 2019) to AECOM's 10-year drainage map which recommended increases in pipe sizes under CO 3B. The original DCP specified pipe sizes and structures per 5-year criteria.

Change Order 7 North

\$1,398,554+



3100 SW 15th Street Deerfield Beach, Florida 33442

Office:(954)426-1221 Fax:(954)426-1226

Median Concept at Lincoln Rd for the pump station power and control facilities and addition of emergency generator. Added features include a Plant wall, Screening, Garden/Park concept at Lincoln Road End and the movement of the structures 200 feet or 1,000 feet to the west along Lincoln road between Lincoln Court and Bay Road or at the Alton Road intersection, respectively. - Budget pricing was submitted on 9/20/19.

Change Order 8 North and South \$11M-\$17M

Addition of 15 Water Quality Wells and settling basins with pumping systems to improve water quality along the West Avenue corridor per DERM.

The range in pricing for the 15 well design is due to the various methods we are currently vetting. The primary cost is not the well itself but the 90 second retention time required before pumping into the 100-foot-deep wells translates to extensive and deep settling structures to meet DERM criteria for water quality, and protection of the wells long term functionality. (15 wells with 11 settlement structures - 9 at 2,000 GPM and 2 at 6,000 GPM = 30,000 GPM). Also explored was a single deep well with Youngquist Bros. – a deep well specialist. We discussed the possibility of a single 3,000 foot 36" well capable of handling 30,000 GPM. Their budget estimate is in the \$17M range.

RMCF and CES are looking for ways to optimize the well design by analyzing circular settlement structures using "in the wet" Secant pile or "dig and sink" methods as an alternative to conventional Cofferdams w/ tremie seals for the rectangular structure design. The current settlement structures (11EA) are 30' deep with a footprint between 31' and 40' long x 11' wide-all contained within the ROW. The size and complexity of a sealed cofferdam at 11 locations is daunting.

Change Order 9 North

\$ TBD

Inverted crown at Lincoln Ct as requested by DPW to re-design road elevations to deal with the dip and its effects on the low property at 1441 Lincoln Ct.

Change Order 10 North

\$ TBD



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Fax:(954)426-1226

Inverted crown between 16th St and Lincoln at Alton Ct to adjust elevations and drainage design to accommodate the new commercial development along Alton court outside of DCP requirements.

Change Order 11 North and South \$TBD

Harmonization Effort - resolution of drainage issues and encroachment (licensing Agreements) – reference CIP memo dated 1/16/20.

New requirements over and above agreements under the DCP and CO 3B include:

1. Mapping Encroachments within ROW on Harmonization drawings.

2. FFE studies of individual properties above and below new crown of roadway.

 Developing criteria for identifying potential flooding scenarios based on new crown elevation of roadway and its effect on individual properties such as pools, elevator entry, garage entry, green areas, storage facilities, parking lots, electrical rooms, etc.

 Individual analysis and information gathering of individual property Storm Water existing drainage conditions, rain leaders, wells, piping, etc.

 Future costs to relocate/remove encroachments within ROW and add or correct drainage within properties based on Licensing Agreements and past City practices or waivers outside of DCP requirements.

 Adjust harmonization designs to permit encroachments within and without ROW such as parking, structures, gates, fencing walkways, trees, etc. or other elements to stay within the ROW or properties and the added work, if any, associated therewith.

Notwithstanding the implications of water quality issues City wide, it is important to understand and communicate that the current pending Change Order status is approaching another \$20M+ to put all these change requests into effect.

As we approach 100% billing capacity for the current design concepts RMCF and CES are continuing to design and develop these added concepts (as directed by the City) without a formal CO from which to bill under. A method of dealing with this reality should be determined to ensure momentum on these issues is not compromised in any way.

Also considering the delays we are about to experience with gaining full segment approval from homeowners due to harmonization (Licensing Agreements), drainage, flooding concerns and directives for dealing with single and multiple family hook-ups, we recommend a limited NTP to commence the installation of the Lincoln Road Pump Station and Generator Sets at 5th, 6th, 10th, 14th and 17th St while the harmonization and water quality issues are worked out.



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The logic here is that all these installations are within City ROW (6th may be an exception) and the Lincoln Road PS location will not change. Impacts to private property will not be affected i.e. road raising and harmonization issues. Access will be provided at all times. Proceeding without a Class 2 permit at the Pump Station would require DERM permission but, considering the 15 well water quality concession negotiated by the City, a conditional permit may be arranged. In this way the City and its residents may see progress shortly as opposed to a longer drawn out approval process.

We are happy to meet with you, David, Nelson and Roy at any time to review these matters and look to your guidance on timing and approach.

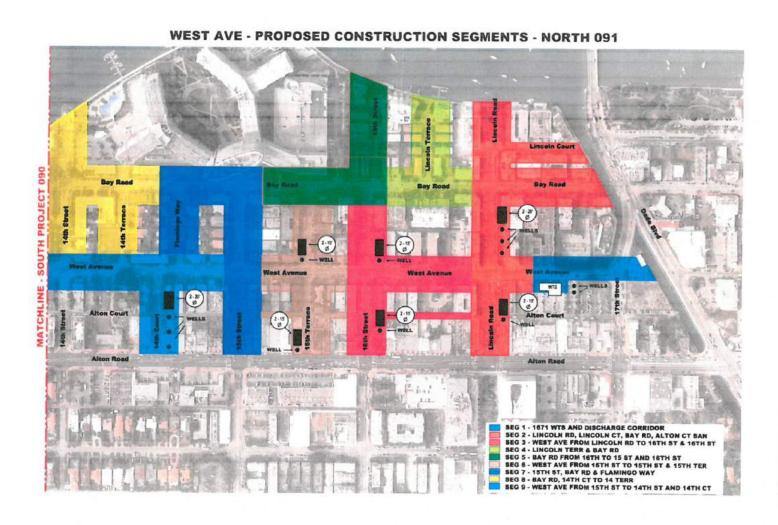
Regards,

Michael R. Fischer, COO.

Ric-Man Construction Florida, Inc.

CC;

Danny Mancini Tyson DiPetrillo Nelson Perez-Jacome David Martinez Roy Coley Jose Caraballo - CES Jorge Rodriguez



WEST AVE - PROPOSED CONSTRUCTION SEGMENTS - SOUTH 090

Ric-Man Construction Florida, Inc 3100 SW 15th Street Deerfield Beach, FL 33442



(954) 426-1221 (954) 426-1226



From:

Michael Fischer

Perez-Jacome, Nelson < NelsonPerez-Jacome@miamibeachfl.gov>

Sent:

Friday, November 15, 2019 4:19 PM

To:

Tyson DiPetrillo

Cc:

Evora, Mariana; Pena, Giancarlo; Soto, Luis; Michael Fischer; Jose A. Caraballo, P.E.;

Baglieri, Sabrina; Rodriguez, Jorge

Subject:

Re: 100% Drainage Design Submittal

Hi Tyson,

We appreciate all the work the team has put in to date. However, last week I had a conversation with Danny and Mike regarding certain changes to the scope of the contract. Specifically, changes that would address DERMs permitting requirements and improve water quality for the basin.

Our team at city is working out the conceptual details so we can provide them to you and your design engineer to further elaborate. Please hold off on any formal submittals, as we will not proceed to permitting without these changes.

Thank you.

Nelson Perez-Jacome, PE City Engineer PUBLIC WORKS DEPARTMENT MIAMIBEACH 1700 Convention Center Drive, Miami Beach, FL 33139

Tel: 305.673.7080 www.miamibeachfl.gov

On Nov 15, 2019, at 4:10 PM, Tyson DiPetrillo <tdipetrillo@ric-manfl.com> wrote:

THIS MESSAGE COMES FROM AN EXTERNAL EMAIL - USE CAUTION WHEN REPLYING AND OPENING LINKS OR ATTACHMENTS]

Good afternoon Team-

RMCF has addressed the 90% drainage comments received and submitted the 100% Drainage Design (Permit Set) via e-builder for approval. We are prepared to bring the hard copies for CMBPW stamps and pick-up the signed permit application to make a formal submission to DERM and ERP...please advise when the PW team is available to review and stamp the drawings, thank you.

Tyson DiPetrillo

Project Manager

<image001.jpg><image002.jpg>

RIC-MAN Construction Florida, Inc.

3100 SW 15th Street, Deerfield Beach, Fl 33442 Office: (954) 426-1221 | Fax: (954) 426-1226

Cell: (954) 448-6994 www.ric-manfl.com tdipetrillo@ric-manfl.com

CES Consultants, Inc. West Avenue Phase II, Miami Beach



Meeting Type: Drainage Meeting

Date: Wednesday, October 30th, 2019

Attendees: Nelson Perez-Jacome - CMB PW

Luis Soto – CMB PW Mariana Evora – CMB PW Sabrina Baglieri – CMB CIP Tyson DiPetrillo – RMCF Jose Caraballo – CES

Erik M. Alcantara – CES

Location: City of Miami Beach - Public Works Department

1700 Convention Center Drive, Miami Beach, FL 33139

Discussion Items:

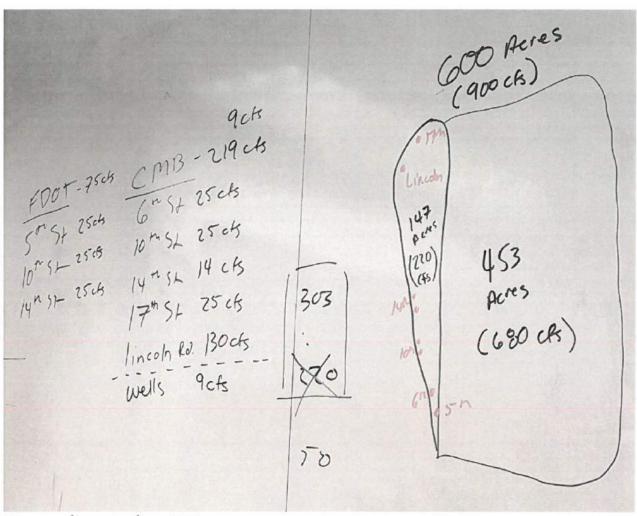
Meeting to discuss drainage design and the approach towards DERM permitting

2) Current Issues:

- RMCF / CES were directed through the DCP to provide yard drains for all properties within the project area.
- ii. A resolution from the CMB Commission established providing yard drains for those residential properties which will at the end of the project have a FFE below the crown of the road. RMCF / CES received this directive and proceeded to design the drainage system under this directive. RMCF / CES performed additional surveying services to capture all FFE within the project area and compare them with the proposed crown of the road. Once this was established, RMCF / CES performed additional investigation of existing private property drainage permits to further reduce the number of properties that will require yard drains. The final tally was 68 properties. The RMCF / CES analysis did not distinguish between commercial and residential properties, only a comparison between FFE and Crown.
- iii. A new directive has been issued today to include a yard drain to all properties within the West Avenue Basin. RMCF / CES pointed out that the West Avenue project does not have enough water quality to handle the Right of Way and all private properties. CMB requested that we combine all treatment capacity from all nearby pump stations.

3) Resolution to Issues:

- a. CMB and RMCF / CES were all in agreement that the model and subsequent design provides sufficient conveyance for the 10-year / 24-hour storm event for the entire West Avenue basin (106 Acres for West Avenue and 41 Acres for Alton Road). The issue at hand and the reason for the meeting is to discuss the water quality approach during permitting.
- During the meeting, RMCF/CES were instructed to evaluate water quality for the entire project area.
 - i. RMCF / CES were instructed to combine all of the water quality treatment capacity (6th Street, 10th Street, 14th Street, and 17th Street; CMB and FDOT pump stations) so as to prove that in a worst case scenario, there is enough treatment capacity to manage the water quality for the entire West Avenue Basin (Right of way and all private property parcels). CMB will provide information regarding the basin for each pump station. In the event that there is not sufficient information to define the basins for each pump station, CMB will provide RMCF / CES with a letter defining each basin for each pump station. Everybody was in agreement that the information required is for the basins as per the design of each pump station, and not the influence of everything to the east of Alton Road (The Flamingo Basin Area). Everything to the east of Alton Road will be included in future improvements.
 - ii. RMCF / CES were instructed to incorporate yard drains to all properties within the project area. Additionally, CMB requested to include yard drains at all sides of a property that face a right of way. It was made clear in the meeting that CMB does not intend to provide a yard drain to all properties. They will only provide yard drains for those properties impacted negatively by these stormwater improvements. The reason for all the yard drains is to present DERM with the worst case scenario, and assure them that there will be enough water quality for any unforeseen cases.
 - iii. CMB directed RMCF to address the CMB PW comments, incorporate all yard drains (as discussed above), and address the water quality (as defined above) and quickly submit to DERM to begin to receive feedback. They also requested to conduct as many meetings with DERM as DERM will permit to keep an open dialogue and information flowing in both directions.
 - iv. CMB also mentioned that they have a meeting with DERM today about a separate topic. But, they will discuss this project with DERM and relay any new directive to the RMCF / CES team.
 - CMB requested that the RMCF / CES team provide an elevation for the HGL for each property.
 - vi. CMB requested that RMCF / CES prepare an additional permit application with a CMB signature line for Eric Carpenter.
 - vii. All of these requests are outside of our original scope of work and as such RMCF / CES will execute



Water quality notes from CMB



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221 Fax:(954)426-1226

City of Miami Beach 1700 Convention Center Drive Miami Beach, FL 33139

October 31, 2019 Sent Via Email & U.S. Mail

Attn: Sabrina Baglieri

Re:

West Avenue 090/091

Subj: Water Quality and DERM Class 2 Drainage Permit

Dear Sabrina,

Ric-Man Construction Florida, Inc. (RMCF) and its Lead Design Consultant, CES met with CIP and Public Works on October 29, 2019 and again on October 30, 2019 to discuss the submission of the 90% drawings to DERM to commence the Class 2 Drainage permit process. The minutes of the October 30 meeting are attached as well as a letter from CES dated October 31, 2019 detailing the deliverables needed by CES to complete the calculations requested by the City on water quality for the West Avenue project. Details were reviewed relative to comments made by the City and changes proposed/requested involving water quality on the 90% drawings as well as general corrections/comments to the drawings which have been deemed necessary before making the formal Permit application to DERM.

As the City is aware, the contract DCP removed any responsibility for Drainage design from RMCF's contract. Pump Station capacity, treatment structure sizing, piping sizes and routing were provided based on a drainage report supplied by others. The DCP clearly stated "The CMB will be responsible for this report and any changes that are required during the permit process" (DCP21 - Para 5). Moreover, the City continued "The size of the proposed storm water trunk lines along West Ave. Bay Rd and Lincoln Rd is fixed and shall not change unless approved by the City Engineer after the project is awarded" (DCP21 - Para - 5). The Water Quality issue was locked in as detailed under Para 6 - "Storm Water Pump Stations" of the DCP wherein it states on page 26 of the DCP "The treatment structure designed to treat a minimum of 50 CFS" solidifies the water quality requirements RMCF was obligated to provide at that time.

RMCF's sole responsibility relative to Drainage was to finalize the drainage profile to create a positive system with slopes designed to provide a minimum velocity of 2 feet per second based on full pipe flow at a value of 0.012 (Manning's Equation). Consequently, drainage volume and water quality were carved out of RMCF's original Design Build scope. As we now know the criteria specified by the City in the DCP was based on a 5-year design storm event formulated by its consultant AECOM (Later revised to 10-year for RMCF pricing).

Subsequent to the "Pause" (December 2017 - December 2018) which was initiated by the City to study additional measures and recommendations from the Commission sponsored ULI effort, RMCF was requested to provide a full and complete hydrologic/hydraulic (H&H) model based on a 10year, 24 hour storm event and provide recommendations to the City for any changes to the current proposed design In March 2019. In RMCF's proposal under Appendix 1 "Project Requirements



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221

Fax: (954) 426-1226

and Assumptions," Item 8 – water quality modeling or design was excluded (See Attachment). The City accepted RMCF's proposal in the form of Change Order 3A for both 090 and 091. In June 2019 RMCF issued its Technical Report with several options or alternatives the City could undertake to deal with volume of water, only. Water quality analyses were not included in the study. The City elected Alternate 2.1B in August of 2019 and RMCF provided proposals for the changes to the AECOM 10-year Model dated February 20, 2019 (the subject of items 5 and 17 of CO 3B for 090 and 091) resulting in a proposal dated August 7, 2019 for added upsizing of drainage pipe sizes, and additional structures. This proposal is pending a formal Change Order.

RMCF and CES are proceeding in good faith to assist the City in addressing the "water quality" issues which have now come to light based on DERM representations to RMCF, CES and the City in various forums.

Consequently, RMCF hereby notifies the City that pursuant to Contract Article 11 "Changes in the Work" the effort underway and potential resultant design and construction changes constitutes extra work. As such RMCF specifically reserves its right to added time and cost, the full implications of which, are not known at this time.

Current anticipated/known changes include:

- Water quality calculations and analysis as documented in CES Memo dated October 30, 2019.
- Design and Construction of a Jockey Pump and Well System at the Lincoln Road Pump Station.
- Capacity increase of the CDS Treatment Units includes equipment and depth changes at the structures.

As additional work items become known RMCF will notify the City accordingly.

Please contact me with any questions you may have

Sincerely,

Michael R. Fischer, COO.

Ric-Man Construction Florida, Inc.

CC:

Danny Mancini Tyson DiPetrillo Jose Caraballo Jorge Rodriguez

Attachments:

- Meeting Minutes dated 10/30/19
- CES Letter dated 10/31/19



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221 Fax:(954)426-1226

- DCP Pages 21 and 26
- CES March 2019 Modeling Proposal.

Michael Fischer

From:

Michael Fischer

Sent:

Friday, March 27, 2020 3:34 PM

To:

Perez-Jacome, Nelson

Cc:

Evora, Mariana; Baglieri, Sabrina; Rodriguez, Jorge; Danny Mancini; Tyson DiPetrillo

Subject:

West Ave Wells Proposal Detail

Attachments:

Water Quality- Proposal Detail - West Ave.docx

Nelson

Per our meeting yesterday enclosed find an expanded proposal for design of the Water Quality Well systems pursuant to RMCF's February 10, 2020 detailed submission as revised on February 18, 2020 and modified on March 5, 2020. As discussed RMCF will wait for formal direction from CIP to proceed with the design development .

Upon release to design we anticipate 90 days to complete the effort but will submit 30% and 60% designs to DERM as deemed necessary by the City to secure approvals by the Agencies on our approach. At the 30% mark (approximately 45 days from NTP) RMCF will provide a firm lump sum price along with schedule impacts via CPM analysis for the construction of the well systems.

Please advise on the acceptability of our proposal and provide direction to move forward as soon as practicable.

Regards,

Michael R. Fischer, COO.



RIC-MAN Construction Florida, Inc.

3100 SW 15th Street, Deerfield Beach, Fl 33442 Office: (954) 426-1221 | Fax: (954) 426-1226 Cell: (703) 732-7717

www.ric-manfl.com MFischer@Ric-manFL.com

rds

Mike

City of Miami Beach

Design / Build Services for West Avenue Improvements Phase II North and South of 14th Street

2016-090-KB

2016-091-KB

Water Quality Drainage Wells Design
Scope of Services

March 27, 2020

Prepared By:



880 SW 145th Avenue, Suite 106 Pembroke Pines, Florida 33027

EXHIBIT B



City of Miami Beach D/B Services for West Avenue Improvements 2016-090-KB; 2016-091-KB Water Quality Drainage Wells Design Scope of Services

INTRODUCTION

At the request of the City of Miami Beach, CES Consultants, Inc. (CES) is pleased to submit this proposal to perform the design of 11 water quality facilities throughout the West Avenue project area. The design is based on discussions with City staff, an analysis performed by the RMCF DB Team, and a directive provided by the City of Miami Beach.

The design will expand on the conceptual design prepared during the analysis phase of this effort. The water quality design is for 11 individual stormwater lift stations that will pump stormwater into 15 shallow drainage wells. The shallow drainage well depth will be approximately 100 feet, and the pumps will simply produce a pressure similar to four (4) feet of head.

The system will collect a portion of the stormwater from the main lines on West Avenue and Bay Road and convey it to an underground settling tank. These tanks will be designed to retain the stormwater for 90 seconds, at which point, the stormwater flows into a wet well. A single pump will be located inside each wet well and pump the stormwater into drainage wells. The discharge piping will have a passive relief system to assure that the pressure equivalent to four (4) feet of head is not exceeded.

Each of the 11 systems that will be located throughout the project area. Each system will have unique features due to the variation in above and below ground features at each location, as well as, the varying connection points along the main system on West Avenue and Bay Road. Due to these factors, each system will require a complete design.

DESCRIPTION OF SERVICES

Services to be provided shall include, but are not limited to, the following activities:

- Perform soil borings at each location.
- Development of complete engineering plans for each of the 11 systems. Plans will be submitted to CMB at 30%, 60% and 90% for review, including informal reviews with DERM. IFC package will be prepared once all permits are issued.
- 3. Preparation of permit package, and all necessary meetings and revisions to attain a permit. **Permit fees are not included.**
- 4. Preparation of IFC plans once all permits are issued by the regulatory agencies.
- 5. Revision to the stormwater model to incorporate this water quality component.
- 6. Revision to the drainage report to incorporate this water quality component.
- Revision to stormwater drainage plans. Adjustment to the stormwater plan to make connections to the water quality systems.
- 8. Revision to landscaping plans. Adjustment to the landscaping plan to make space for the control panels.



- 9. Revision to potable watermain plans. Relocating a segment of watermain along Lincoln Road to make space for the water quality system.
- 10. Revision to sanitary sewer plans. Relocating a segment of sanitary sewer along Lincoln Road to make space for the water quality system.
- 11. Engineering Services During Construction

GEOTECHNICAL INVESTIGATION

CES Consultants, Inc. shall prepare a listing of the specific geotechnical investigation requirements specific to the scope of work. The Design Consultant will manage the geotechnical task. The goals and objectives of the geotechnical investigation may include the following:

- 1. Identify soil types within the project area
- Identify the characteristics and properties of the soils present
- Use available soil characteristics, properties and potential project geometrics to identify possible geotechnical concerns
- 4. Provide geotechnical recommendations for engineering design
- Evaluate groundwater conditions

Upon completion of the geotechnical investigation, a report will be prepared and submitted with the 30%. The report shall include the following:

- Brief description of soil conditions observed in the field and in the laboratory
- Conclusions and recommendations regarding:
 - a. Primary geotechnical engineering concerns and mitigating measures, as applicable
 - Site preparation and grading including treatment of weak, porous, compressible and expansive surface soils and the construction of fills.
 - c. Preparation of subgrade and aggregate base for pavement areas
 - Pavement sections (if required)

One (1) soil boring to a depth of 100 feet below the top of ground elevation at the location of the proposed wet well. If additional soil borings are required, CES will request additional funds to obtain soil information.

DESIGN AND PLANS PERMITTING

CES Consultants, Inc. will prepare and submit design plans to CMB for the following phases:

1. 30% Design Submittal

For the development of this sub-task, CES Consultants, Inc. will provide the following services:

- Perform a water quality analysis of the site.
- Participate in one (1) informal meeting with DERM to discuss conceptual design.
- Develop alternative options to satisfy the water quality needs.
- · Develop conceptual drawings of the system, and identify locations for installation.



- Revise the drainage model utilizing ICPR4.
- Perform engineering calculations to define the size of structures and pumping requirements.
- Preparation of system curve and pump selection.
- Perform a utility conflict evaluation and coordination. Identify possible conflicts and necessary resolutions.
- Develop 30% plans for each of the 11 independent water quality systems.

The water quality system design to be presented will include the following drawings sheets (min. 35 sheets per system; 385 total sheets) for each of the 11 systems:

· General:

- G1 Cover and Index
- o G2 General Notes

Civil:

- C1 Existing Conditions and Demolition Plan
- C2 Proposed Site Plan
- o C3 Proposed Section Plan
- o C4 Grading and Restoration Plan
- C5 Standard Details
- o C6 Well Drill Plan (Not part of this submittal)

Mechanical:

- o M1 Mechanical Notes
- o M2 General Plan
- o M3 General Profile
- o M4 Settling Tank Plan and Sections
- o M5 Wet Well Plan and Sections
- M6 Drainage Well Plan and Sections
- o M7 Drainage Pipe and Force Main Profiles
- M8 Passive Relief System Profile
- M9 Mechanical Details

Structural:

- S1 Structural Notes
- S2 General Plan
- S3 General Profile
- S4 Settling Tank Plan
- S5 Settling Tank Section (Not part of this submittal)
- o S6 Wet Well Plan
- o S7 Wet Well Sections (Not part of this submittal)
- o S8 Drainage Well Plan and Sections
- S9 Control Slab (Not part of this submittal)
- o S10 Secant Piles Details (Not part of this submittal)
- o S11 Structural General Details

Electrical:

- o E1 Electrical Notes
- o E2 General Plan and Grounding
- E3 Equipment Layout and Sections (Not part of this submittal)
- E4 One-Line Diagram and Schedules (Not part of this submittal)



- E5 Controls Diagram (Not part of this submittal)
- E6 RTU Installation (Not part of this submittal)
- E7 Electrical Details

2. 30% Deliverables:

Provide 30% Design Plans as follows:

- One (1) Copy, 11" x 17" Design Plans.
- One (1) Copy of Draft Drainage Report
- One (1) Draft Geotechnical Report
- Electronic Submittal of Design Plans, Drainage Report, and Geotechnical Report (Uploaded to E-Builder)

3. 60% Design Submittal

For the development of this sub-task, CES Consultants, Inc. will provide the following services:

- Review and incorporate comments from CMB.
- Participate in one (1) informal meeting with DERM to discuss progress and direction of design.
- Develop a well drill plan.
- Prepare structural settling tank and wet well section plans.
- Develop secant pile details.
- Develop control panel slab.
- Finalize electrical equipment selection.
- Develop electrical equipment layout and sections.
- Develop controls diagram, one-line diagram, electrical schedule, and RTU installation.
- Develop 60% plans for each of the 11 independent water quality systems.

The water quality system design to be presented will include the following drawings sheets for each of the 11 systems:

- General:
 - G1 Cover and Index
 - G2 General Notes
- Civil:
 - C1 Existing Conditions and Demolition Plan
 - o C2 Proposed Site Plan
 - o C3 Proposed Section Plan
 - o C4 Grading and Restoration Plan
 - C5 Standard Details
 - o C6 Well Drill Plan
- Mechanical:
 - M1 Mechanical Notes



- o M2 General Plan
- o M3 General Profile
- o M4 Settling Tank Plan and Sections
- o M5 Wet Well Plan and Sections
- M6 Drainage Well Plan and Sections
- M7 Drainage Pipe and Force Main Profiles
- M8 Passive Relief System Profile
- M9 Mechanical Details

Structural:

- o S1 Structural Notes
- S2 General Plan
- o S3 General Profile
- S4 Settling Tank Plan
- S5 Settling Tank Section
- o S6 Wet Well Plan
- S7 Wet Well Sections
- o S8 Drainage Well Plan and Sections
- o S9 Control Slab
- S10 Secant Piles Details
- S11 Structural General Details

Electrical:

- E1 Electrical Notes
- E2 General Plan and Grounding
- E3 Equipment Layout and Sections
- E4 One-Line Diagram and Schedules
- o E5 Controls Diagram
- o E6 RTU Installation
- o E7 Electrical Details

4. 60% Deliverables:

Provide 60% Design Plans as follows:

- One (1) Copy, 11" x 17" Design Plans.
- One (1) Copy of the Revised Drainage Report
- · One (1) Signed and Sealed Geotechnical Report
- Electronic Submittal of Design Plans, Drainage Report, and Geotechnical Report (Uploaded to E-Builder)

5. 90% Design Submittal

For the development of this sub-task, CES Consultants, Inc. will provide the following services:

- Review and incorporate comments from CMB.
- Finalize all aspects of design in preparation for permitting.
- Participate in one (1) informal meeting with DERM to discuss progress and direction of design.



Develop 90% plans for each of the 11 independent water quality systems.

The water quality system design to be presented will include the following drawings sheets for each of the 11 systems:

- General:
 - G1 Cover and Index
 - o G2 General Notes
- Civil:
 - C1 Existing Conditions and Demolition Plan
 - o C2 Proposed Site Plan
 - o C3 Proposed Section Plan
 - o C4 Grading and Restoration Plan
 - o C5 Standard Details
 - o C6 Well Drill Plan
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 - o M2 General Plan
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 - M4 Settling Tank Plan and Sections
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 - M7 Drainage Pipe and Force Main Profiles
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 - o M9 Mechanical Details
- Structural:
 - S1 Structural Notes
 - S2 General Plan
 - S3 General Profile
 - S4 Settling Tank Plan
 - S5 Settling Tank Section
 - o S6 Wet Well Plan
 - S7 Wet Well Sections
 - S8 Drainage Well Plan and Sections
 - o S9 Control Slab
 - S10 Secant Piles Details
 - S11 Structural General Details
- Electrical:
 - E1 Electrical Notes
 - o E2 General Plan and Grounding
 - E3 Equipment Layout and Sections
 - E4 One-Line Diagram and Schedules
 - E5 Controls Diagram
 - o E6 RTU Installation
 - E7 Electrical Details
- 6. 90% Deliverables:

EXHIBIT B



City of Miami Beach D/B Services for West Avenue Improvements 2016-090-KB; 2016-091-KB Water Quality Drainage Wells Design Scope of Services

Provide 90% Design Plans as follows:

- One (1) Copy, 11" x 17" Design Plans
- · One (1) Signed and Sealed Drainage Report
- Completed permit applications
- Electronic Submittal of Design Plans and Drainage Report (Uploaded to E-Builder)

ASSUMPTIONS

This scope of work and deliverables are based on the following assumptions:

- At the end of each design deliverable (30%, 60%, and 90%), CMB will review the plans and forward review comments to the RMCF DB Team within 14 calendar days.
- The design team will use the existing project survey provided by CMB.
- · Permitting fees are not part of this scope of work or fee proposal.
- This scope of work and fee is based on the design of 11 independent water quality systems and a total of 15 drainage wells with a depth of 100 feet.



3100 SW 15th Street Deerfield Beach, Florida 33442 Office: (954) 426-1221 Fax: (954) 426-1226

City of Miami Beach Capital Improvement Projects Office 1700 Convention Center Drive Miami Beach, FL 33139

May 14, 2020 Sent Via Email

Attn: Sabrina Baglieri

Re:

West Avenue 090 - South West Avenue 091 - North

Subj: Water Quality Design Fee

Sabrina,

Enclosed find the revised Scope of Services proposal from CES based on comments received during our May 4, 2020 negotiation session. The write up has been expanded to include a more detailed scope of work, a Permitting Section (7), IFC Deliverable Section (8) and an expanded Assumption Section (9).

RMCF provided a draft Scope with drawings on February 10, 2020, a formal proposal with preliminary conceptual designs and well locations on February 18, 2020, a breakout proposal for 30% design development on March 5, 2020, an initial negotiation meeting on March 26, 2020 followed by an expanded proposal submission on March 27, 2020 and a final formal proposal on May 4, 2020 precipitated by the Commission's approval to proceed with the design development. Our price proposal remains as follows:

090 - \$542,056 091 - \$1,001,781

Notwithstanding the potential relocation of the Lincoln Road Pump Station to 1671 West Ave and pending a full Commission vote on June 26, 2020, RMCF strongly recommends the City release RMCF to proceed with at least the South Water Quality design effort since the south will not be affected by the relocation of the pump station. We also recommend proceeding with the North since the drainage south of Lincoln Road will not be affected. We will ensure no overlap of design when and if the pump station is in fact relocated. The effort will save time overall.

Please contact me if you have any questions or require additional information. We request the issuance of a formal Change order and NTP to commence this important effort.

Sincerely

Michael R. Fischer, COO.

Ric-Man Construction Florida, Inc.



3100 SW 15th Street Deerfield Beach, Florida 33442 Office:(954)426-1221 Fax:(954)426-1226

CC:

Danny Mancini Tyson DiPetrillo Jose Caraballo Jorge Rodriguez Nelson Jacome Perez

Attachments:

- May 13, 2020 CES Scope of Services
- RMCF Formal Pricing Submitted on 5/4/20

City of Miami Beach

Design / Build Services for West Avenue Improvements Phase II North and South of 14th Street

2016-090-KB

2016-091-KB

Water Quality Drainage Wells Design Scope of Services

May 13, 2020

Prepared By:



880 SW 145th Avenue, Suite 106 Pembroke Pines, Florida 33027



INTRODUCTION

At the request of the City of Miami Beach, CES Consultants, Inc. (CES) is pleased to submit this proposal to perform the design of 11 water quality facilities throughout the West Avenue project area. The design is based on discussions with City staff, an analysis performed by the RMCF DB Team, and a directive provided by the City of Miami Beach.

The design will expand on the conceptual design prepared during the analysis phase of this effort. The water quality design is for 11 individual stormwater lift stations that will pump stormwater into 15 shallow drainage wells. The shallow drainage well depth will be approximately 100 feet, and the pumps will simply produce a pressure similar to four (4) feet of head.

The system will collect a portion of the stormwater from the main lines on West Avenue and Bay Road and convey it to an underground settling tank. These tanks will be designed to retain the stormwater for 90 seconds, at which point, the stormwater flows into a wet well. A single pump will be located inside each wet well and pump the stormwater into drainage wells. The discharge piping will have a passive relief system to assure that the pressure equivalent to four (4) feet of head is not exceeded.

Each of the 11 systems that will be located throughout the project area. Each system will have unique features due to the variation in above and below ground features at each location, as well as, the varying connection points along the main system on West Avenue and Bay Road. Due to these factors, each system will require a complete design.

It is important to note that each of the 11 individual systems requires a unique design for the sedimentation tank, the wet well, the passive relief system, and the associated piping. The uniqueness is due to variations in depth of the drainage systems, variations of above ground features, and the variations in existing utilities. All of these factors introduce complexities that require specific designs. Additionally, these individual designs require modifications to some existing utilities, and redesign of items that have completed designs. For example, we have identified the need to redesign the sanitary sewer line and the water main along Lincoln Road between the street end and West Avenue. We also need to modify the already completed stormwater drainage design in order to connect these water quality systems to the main drainage line. These individual designs, in conjunction with the redesign of other utilities, requires a significant amount of manpower and a significant amount of engineering to assure that the system will work safely and effectively.

DESCRIPTION OF SERVICES

Services to be provided shall include, but are not limited to, the following activities:



Perform soil borings at each location.

- Development of complete engineering plans for each of the 11 systems. Plans will be submitted to CMB at 30%, 60% and 90% for review, including informal reviews with DERM.
- Preparation of permit package, and all necessary meeting and revisions to attain a permit. Permit fees are not included.
- 4. Preparation of IFC plans once a permit is issued by the regulatory agencies.
- 5. Revision to the stormwater model to incorporate this water quality component.
- Revision to the drainage report to incorporate this water quality component.
- Revision to stormwater drainage plans. Adjustment to the stormwater plan to make connections to the water quality systems.
- Revision to landscaping plans. Adjustment to the landscaping plan to make space for the control panels.
- Revision to potable watermain plans. Relocating a segment of watermain along Lincoln Road to make space for the water quality system.
- Revision to sanitary sewer plans. Relocating a segment of sanitary sewer along Lincoln Road to make space for the water quality system.
- 11. Engineering Services During Construction

GEOTECHNICAL INVESTIGATION

CES Consultants, Inc. shall prepare a listing of the specific geotechnical investigation requirements specific to the scope of work. The Design Consultant will manage the geotechnical task. The goals and objectives of the geotechnical investigation may include the following:

- Identify soil types within the project area
- Identify the characteristics and properties of the soils present
- Use available soil characteristics, properties and potential project geometrics to identify possible geotechnical concerns
- Provide geotechnical recommendations for engineering design
- Evaluate groundwater conditions

Upon completion of the geotechnical investigation, a report will be prepared and submitted with the 30%. The report shall include the following:

- Brief description of soil conditions observed in the field and in the laboratory
- Conclusions and recommendations regarding:
 - Primary geotechnical engineering concerns and mitigating measures, as applicable
 - Site preparation and grading including treatment of weak, porous, compressible and expansive surface soils and the construction of fills.
 - c. Preparation of subgrade and aggregate base for pavement areas
 - d. Pavement sections (if required)

One (1) soil boring to a depth of 100 feet below the top of ground elevation at the location of the proposed wet well. If additional soil borings are required, CES will request additional funds to obtain soil information.



DESIGN AND PLANS PERMITTING

CES Consultants, Inc. will prepare and submit design plans to CMB for the following phases:

1. 30% Design Submittal

For the development of this sub-task, CES Consultants, Inc. will provide the following services:

- Perform a water quality analysis of the site.
- Participate in one (1) informal meeting with DERM to discuss conceptual design.
- Develop alternative options to satisfy the water quality needs.
- Develop conceptual drawings of the system, and identify locations for installation.
- Revise the drainage model utilizing ICPR4.
- Perform engineering calculations to define the size of structures and pumping requirements.
- Preparation of system curve and pump selection.
- Perform a utility conflict evaluation and coordination. Identify possible conflicts and necessary resolutions.
- Develop 30% plans for each of the 11 independent water quality systems.

The water quality system design to be presented will include the following drawings sheets for each of the 11 systems:

General:

- o G1 Cover and Index
- o G2 General Notes

Civil:

- o C1 Existing Conditions and Demolition Plan
- o C2 Proposed Site Plan
- o C3 Proposed Section Plan
- o C4 Grading and Restoration Plan
- C5 Standard Details
- o C6 Well Drill Plan (Not part of this submittal)

Mechanical:

- o M1 Mechanical Notes
- o M2 General Plan
- o M3 General Profile
- M4 Settling Tank Plan and Sections
- o M5 Wet Well Plan and Sections
- M6 Drainage Well Plan and Sections
- o M7 Drainage Pipe and Force Main Profiles
- M8 Passive Relief System Profile
- o M9 Mechanical Details

Structural:

- o S1 Structural Notes
- o S2 General Plan
- o S3 General Profile



- S4 Settling Tank Plan
- S5 Settling Tank Section (Not part of this submittal)
- o S6 Wet Well Plan
- o S7 Wet Well Sections (Not part of this submittal)
- S8 Drainage Well Plan and Sections
- S9 Control Slab (Not part of this submittal)
- o S10 Secant Piles Details (Not part of this submittal)
- S11 Structural General Details

· Electrical:

- o E1 Electrical Notes
- o E2 General Plan and Grounding
- E3 Equipment Layout and Sections (Not part of this submittal)
- o E4 One-Line Diagram and Schedules (Not part of this submittal)
- E5 Controls Diagram (Not part of this submittal)
- o E6 RTU Installation (Not part of this submittal)
- o E7 Electrical Details

2. 30% Deliverables:

Provide 30% Design Plans as follows:

- One (1) Copy, 11" x 17" Design Plans.
- One (1) Copy of Draft Drainage Report
- One (1) Draft Geotechnical Report
- Electronic Submittal of Design Plans, Drainage Report, and Geotechnical Report (Uploaded to E-Builder)

3. 60% Design Submittal

For the development of this sub-task, CES Consultants, Inc. will provide the following services:

- Review and incorporate comments from CMB.
- Participate in one (1) informal meeting with DERM to discuss progress and direction of design.
- Develop a well drill plan.
- Prepare structural settling tank and wet well section plans.
- Develop secant pile details.
- Develop control panel slab.
- Finalize electrical equipment selection.
- Develop electrical equipment layout and sections.
- Develop controls diagram, one-line diagram, electrical schedule, and RTU installation.
- Develop 60% plans for each of the 11 independent water quality systems.

The water quality system design to be presented will include the following drawings sheets for each of the 11 systems:



General:

- o G1 Cover and Index
- o G2 General Notes

· Civil:

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- o S9 Control Slab
- o S10 Secant Piles Details
- S11 Structural General Details

Electrical:

- o E1 Electrical Notes
- o E2 General Plan and Grounding
- E3 Equipment Layout and Sections
- o E4 One-Line Diagram and Schedules
- o E5 Controls Diagram
- o E6 RTU Installation
- o E7 Electrical Details

4. 60% Deliverables:

Provide 60% Design Plans as follows:

- One (1) Copy, 11" x 17" Design Plans.
- One (1) Copy of the Revised Drainage Report



- One (1) Signed and Sealed Geotechnical Report
- Electronic Submittal of Design Plans, Drainage Report, and Geotechnical Report (Uploaded to E-Builder)

5. 90% Design Submittal

For the development of this sub-task, CES Consultants, Inc. will provide the following services:

- Review and incorporate comments from CMB.
- Finalize all aspects of design in preparation for permitting.
- Participate in one (1) informal meeting with DERM to discuss progress and direction of design.
- Develop 90% plans for each of the 11 independent water quality systems.

The water quality system design to be presented will include the following drawings sheets for each of the 11 systems:

- General:
 - o G1 Cover and Index
 - o G2 General Notes
- · Civil:
 - o C1 Existing Conditions and Demolition Plan
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 - o C3 Proposed Section Plan
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- Structural:
 - o S1 Structural Notes
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 - o S4 Settling Tank Plan
 - S5 Settling Tank Section
 - o S6 Wet Well Plan
 - o S7 Wet Well Sections
 - S8 Drainage Well Plan and Sections
 - o S9 Control Slab
 - o S10 Secant Piles Details



- o S11 Structural General Details
- · Electrical:
 - o E1 Electrical Notes
 - o E2 General Plan and Grounding
 - o E3 Equipment Layout and Sections
 - E4 One-Line Diagram and Schedules
 - o E5 Controls Diagram
 - o E6 RTU Installation
 - o E7 Electrical Details

6. 90% Deliverables:

Provide 90% Design Plans as follows:

- One (1) Copy, 11" x 17" Design Plans
- One (1) Signed and Sealed Drainage Report
- Completed permit applications
- Electronic Submittal of Design Plans and Drainage Report (Uploaded to E-Builder)

7. Permitting

For the development of this sub-task, CES Consultants, Inc. will provide the following services:

- Preparation of signed and sealed plans with CMB approval.
- Preparation of signed and sealed drainage report.
- Participate in one (1) meeting with DERM at the 30%, 60%, and 90% design phases.
- Participate in three (3) meetings with DERM once the permit application is submitted. (This will include a meeting with a brief presentation of the project.).

8. IFC Deliverables:

IFC (Issued For Construction) plans are those that are issued once all necessary permits have been acquired. For the development of this sub-task, CES Consultants, Inc. will provide the following services.

- One (1) Copy, 11" x 17" Design Plans
- One (1) Signed and Sealed Drainage Report
- All necessary active permits
- Electronic Submittal of permitted Design Plans and Drainage Report (Uploaded to E-Builder)



9. Assumptions

For the completion of this effort, CES Consultants, Inc. has the following limitations and assumptions:

- Based on conversations with experienced drainage well contracts, we are assuming a capacity of 500 GPM per foot of head for each drainage well. Utilizing this historical data, we are estimating a total capacity of 2,000 GPM per well (4 feet of head).
- Due to space limitations within the right of way, we have maximized the number of drainage wells that can be incorporated into the project to 15 wells. This scope of work assumes 15 total drainage wells.
- We are estimating a total of six (6) meetings with DERM. In order to maximize the
 effectiveness of these meetings, we will participate in one (1) meeting per phase
 (30%, 60%, and 90%), and three (3) meetings once the permit application has
 been submitted.

Michael Fischer

From:

Michael Fischer

Sent:

Monday, May 04, 2020 12:18 PM

To:

'Baglieri, Sabrina'; Rodriguez, Jorge

Cc:

Tyson DiPetrillo

Subject:

Water Quality CO

Attachments:

Alternate 2- Wells For Water Quality- cost.xlsx; West Ave WELL design direct Cost.xlsx

Sabrina

Enclosed find RMCF work sheets in support of the Change Request. The submission from CES on 2/10/20 has not changed Total cost is:

090 \$542,056 091 \$ 1,001,781

Total \$ 1,543,837

ALTERNATE 2- CYLINDRICAL								
Feb-20	-50							
Kev 1-4/30/20	West Ave Project							
The second secon	Alternate 2 Water Quality Wells - Cylindrical settlement and Separate pumping structure with shallow wells Budget Pricing	Wells - Cylindrical settle	nent and Separate	pumping structu	re with shallow wells			
Description	South 090 South	South-090	Total- 090	North 091	North 091		Total 091	Comments
Design and Construction inspection		5476,112.00		RMCF	oes S	883.459.00		
Pre-design investigation-revise drainage model		-						
Storm Water WM and despt								
Concept development								
30%,60%,90% Design - civil, elect, mach'l Subsurface investmations	8,408.00			5 13	13.480.00			
Surveying, Utility Interferences		A Personal Property and Associated						Spread sheet item 3. Design /Constructability reviews
Permitting - DERM, SFWMD, etc.	3,332.00			\$	4,696.00			1
MOT development				e v	6,240.00			Spread Sheet item 84- permitting Support
Construction Inspection, well certification Meetings, Misc expenses						!		CONTRACT STATE OF THE STATE OF
As-built documentation								
Estimating/Pricing& Scoping	\$ 8,666.00			\$ 16.	16.458.00	1 4 4		
Subtotal	\$ 23,954.00 \$	476,112.00		\$ 40,	40,834.00 \$	883 458 00		Spread Sheet Item # 2- Estimating/Pricing? Scoping
Ins & Bond- 3%	\$ 719.00 \$	14,283.00		\$ 1,	1,227.00 \$	26,503.00		
Subtotal	\$ 24,673.00 \$	490,395.00		\$ 42,	42,111.00 S	00198'606	-	
RMCF Mark-up 10/5	\$ 2,468.00 \$	24,520.00	-	\$ 8,	6,211.00 \$	45,498.00		
Subtotal Design and Coordination	\$ 27,141.00 \$	514,915.00		\$ 46,	46,322.00 \$	955,459.00		
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Project	90 91	16 06	Estimator 90 91	Sr Estimator	Superintendent	STREET	Total Hours
Survey Support	60	24 40		1 1	16	90 91	
2 Estimating/ Pricing & Scoping	16 24		40 80	90	- 5		
3 Design/Constructability Reviews	24 40		16 24			01	
A Permit Support	24 40				90		
Totals	72 113	H		91		4	
Rate		575 678	-		38 64	, ,,	***
Total	\$6,984.00 \$10,864.00	\$ 00	\$4,760.00 \$8,840.00	\$105 \$105 \$4,620.00 \$8,400.00	5100 5100 53,800,00 56,400,00	530 530 530 5 210 00 5 210 00 5 210 00 5 4 20 00	ê
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West Avenue South - 090

Drainage

Item	Qty	Unit	Subcon	ntractor	Material		Labor		Equipment	NewTotal	Original Total	Delta	Notes
						МН	Rate	Total					
13th Street													
24" RCP	150	LF	\$	-	\$ 2,022.00	37.1	\$ 49.49	\$ 1,836.00	\$ 1,543.00	\$ 5,401.00		\$ 5,401.00	
Haul out of Muck	41	CY	\$		\$ 500.00	10.02	\$ 53.59	\$ 537.00	\$ 670.00	\$ 1,707.00		\$ 1,707.00	
Dewatering	150	LF			\$ 668.00	5.1	\$ 50.59	\$ 258.00	\$ 118.00	\$ 1,044.00		\$ 1,044.00	
Mud Work (New Connection to Structure)	1	EA			\$ 209.00	75	\$ 50.65	\$ 3,799.00	\$ 714.00	\$ 4,722.00		\$ 4,722.00	
Miscellaneous Items	1	LS	\$	-	\$ 11,565.00	120	\$ 49.48	\$ 5,938.00	\$ 4,989.00	\$ 22,492.00		\$ 22,492.00	
12th Street													
24" RCP	96	LF	\$	-	\$ 4,187.00		\$ 49.48			\$ 10,545.00		\$ 10,545.00	
Haul out of Muck	29	CY	\$	750.00			\$ 53.63			\$ 2,938.00		\$ 2,938.00	
Dewatering	96	LF			\$ 1,335.00		\$ 50.63			\$ 2,043.00		\$ 2,043.00	
Precast Type J 7 (MH-12TH)	1	EA	\$	- 5	\$ 5,524.00		\$ 49.43			\$ 14,213.00		\$ 14,213.00	
Mud Work	1	EA			\$ 70.00		\$ 50.66			\$ 3,079.00		\$ 3,079.00	
Miscellaneous Items	1	LS	\$	-	\$ 11,565.00	120	\$ 49.48	\$ 5,938.00	\$ 4,989.00	\$ 22,492.00		\$ 22,492.00	
			-										
9th Street			-		4 0 100 00		A	4					
24" RCP	56	LF	\$		\$ 2,427.00		\$ 49.48			\$ 6,135.00	-	\$ 6,135.00	
Haul out of Muck	17	CY	\$	500.00	4		\$ 53.57			\$ 1,782.00		\$ 1,782.00	
Dewatering	56	LF	-		\$ 770.00		\$ 50.71			\$ 1,183.00		\$ 1,183.00	
Precast Type J 7 (MH-9TH)	1	EA	\$	•	\$ 5,524.00		\$ 49.43			\$ 14,213.00		\$ 14,213.00	
Mud Work	1	EA			\$ 70.00		\$ 50.66	\$ 2,533.00	\$ 476.00	\$ 3,079.00		\$ 3,079.00	
Miscellaneous Items	1	LS	\$		\$ 11,565.00	120	\$ 49.48	\$ 5,938.00	\$ 4,989.00	\$ 22,492.00		\$ 22,492.00	
W. A. Kall S. Oles I												-	
West Avenue (14th St 8th St.)		15			ć 2.542.00	50.63	¢ 40.40	ć 2.0F1.00	ć 2.470.00	6 0072.00		A 0.070.00	
24" RCP Haul out of Muck	82	LF CY	\$	750.00	\$ 3,543.00		\$ 49.49 \$ 53.60			\$ 8,972.00		\$ 8,972.00	
	25 82	LF	۶	750.00	\$ 4,815.00		\$ 53.60			\$ 3,697.00		\$ 3,697.00 \$ 6.025.00	
Dewatering Precast Type 4 J 7'x 4' (ST-12C, ST-12D)	2	EA	\$		\$ 11,047.00		\$ 49.49			\$ 6,025.00 \$ 18,332.00	-	\$ 6,025.00 \$ 18,332.00	
Mud Work	2	EA	3		\$ 139.00		\$ 50.66	\$ 2,533.00		\$ 3,148.00			
Miscellaneous Items	1	LS	ć		\$ 11,565.00		\$ 49.48	\$ 5,938.00		\$ 3,148.00		\$ 3,148.00 \$ 22,492.00	
iviscenarieous items	1	LS	2	-	\$ 11,363.00	120	\$ 45.40	\$ 5,936.00	\$ 4,989.00	\$ 22,492.00		\$ 22,492.00	
963-784-77			\$ 2	2,000.00	\$ 89,110.00	1272.25		\$ 63.515.00	\$ 47,601.00	\$ 202,226.00		\$ 202,226.00	
											ontractor Markup		
											Markup		
											Bond & Insurance		
												\$ 228,415.38	



Activity	Description		Quantity	Unit	Calen WC	dar Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract Tota
*** 500	50		13th Street				Takeoff:	1.00	1.6	Bid:	1.00 LS
500.10	24" RCP Installati		51.00	IF	F6319A	50 10.00	1,836	1,932	90	1.543	5,40
Mh:	37.10 Shifts:	0.5	Mh/Un:	0.7275		7.5	36.00	37.88	1.76	30.26	105.90
500.11	Haul Out Muck	0.5	16.00		F6319A		537	37.00	500	670	1,70
Mh:	10.02 Shifts:		Mh/Un:	- T	Un/Sh:	20 10.00	33.57		31.25	41.88	106.70
500.12	Dewatering		51.00		F6319A	50 10.00	258	668	21.22	118	1,044
Mh:	5.10 Shifts:	0.1	Mh/Un:	0.1000			5.07	13.09		2.31	20.4
500.22	Mud Work (New o			EA	F6319A		3,799	209		714	4,722
Mh:	75.00 Shifts:	1.5	Mh/Un:	25.0000		2.0000	1,266.42	69.55		238.13	1,574.10
500.23	Miscellaneous Iter			LS	F6319A		5,938	11,565		4,989	22,493
Mh:	120.00 Shifts:	1.5	Mh/Un:	120.0000		0.6667		11,565.37		4,988.69	22,492.50
*****	****Biditem/Categor	y 50	00 ****	****			12,369	14,373	590	8,034	35,36
Mh:	247.22 Mh/Ur	i.	247.2200				12,369.23	14,373.40	590.00	8,034.04	35,366.67
*** 510	51		12th Street	-112-12-5	- Japanya 2 0 4 140 a 1		Takeoff:	1.00	LS	Bid;	1.00 LS
510.10	24" RCP Installati	on	96.00	LF.	F6319A	50 10.00	3,455	4,007	180	2,903	10,545
Mh:	69.82 Shifts:	0.9	Mh/Un:	0.7273			35.99	41.74	1.88	30.24	109.85
510.11	Haul Out Muck		29.00		F6319A	50 10.00	974		750	1,214	2,938
Mh:	18.16 Shifts:		Mh/Un:	0.6262			33.57		25.86	41.88	101.3
510.12	Dewatering		96.00	-	F6319A		486	1,335	NAME OF TAXABLE	222	2,043
Mh:	9.60 Shifts:	0.2	Mh/Un:	0.1000			5.07	13.91		2.31	21.28
510.20	Precast Type J7 7'	11,4		EA	F6319A		4,449	5,524	ALL MANAGEMENT	4,240	14,213
Mh:	90.00 Shifts:	1.0	Mh/Un:	90.0000		1.0000	4,449.10	5,523.74		4,239.71	14,212.55
510.22	Mud Work			EA	F6319A		2,533	70		476	3,079
Mh:	50.00 Shifts:	1.0	Mh/Un:	50.0000		1.0000	2,532.82	69.55		476.25	3,078.62
510.23	Miscellaneous Iter		1.00		F6319A		5,938	11,565		4,989	22,493
Mh:	120.00 Shifts:	1.5	Mh/Un:	120.0000	Un/Sh:	0.6667	5,938.44	11,565.37		4,988.69	22,492.50
***** Mh:	****Biditem/Categor; 357.58 Mh/Ur		0 ***** 357.5800	*****			17,835 17,835.42	22,501 22,500.68	930 930.00	14,044 14,044.07	55,310.17 55,310.17
*** 540	54		th Street				Takeoff:	1.00	LS	Bid:	1.00 LS
540.01	24" RCP Installati		56.00	LS	F6319A		2,015	2,337	90	1,693	6,135
Mh:	24 ICI Installati	VIII.	2000000					2,000			0,100
	40 72 Shifts:	0.5	Mh/I In		Lin/Sh:		35.98	41 74	1.61	100000000000000000000000000000000000000	109.50
540 02	40.72 Shifts:	0.5	Mh/Un:	0.7271 CY			35.98 570	41.74	1.61 500	30.23	109.50 1.782
540.02 Mh	Haul Out Muck	0.5	17.00	CY	F6319A		570	41.74	500	30.23 712	1,782
Mh:	Haul Out Muck 10.64 Shifts:	0.5	17.00 Mh/Un;	0.6259	F6319A Un/Sh:	50 10.00	570 33.55			30.23 712 41.86	1,782 104.82
Mh: 540.03	Haul Out Muck 10.64 Shifts: Dewatering		17.00 Mh/Un: 56.00	0.6259 LF	F6319A Un/Sh: F6319A	50 10.0050 10.00	570 33.55 284	770	500	30.23 712 41.86 129	1,782 104.82 1,183
Mh: 540.03 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts:	0.1	17.00 Mh/Un; 56.00 Mh/Un;	0.6259 0.1000	F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000	570 33.55 284 5.07	770 13.76	500	30.23 712 41.86 129 2.31	1,782 104.82 1,183 21.13
Mh: 540.03 Mh: 540.21	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6	0.1 'x 4" (M	17.00 Mh/Un: 56.00 Mh/Un: (H-9 1.00	0.6259 0.6259 0.1000 0.1000	F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 50 10.00 500.0000 50 10.00	570 33.55 284 5.07 4,449	770 13.76 5 ,524	500	30.23 712 41.86 129 2.31 4,240	1,782 104.82 1,183 21.13 14,213
Mh: 540.03 Mh: 540.21 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts:	0.1	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un:	0.6259 0.6259 0.1000 0.1000 0.EA 90.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000	570 33.55 284 5.07 4,449 4,449.10	770 13.76 5,524 5,523.74	500	30.23 712 41.86 129 2.31 4,240 4,239.71	1,782 104.82 1,183 21.13 14,213 14,212.53
Mh: 540.03 Mh: 540.21 Mh: 540.22	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work	0.1 'x 4" (M 1.0	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00	0.6259 0.1000 0.1000 0.1000 0.1000 0.10000 0.10000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00	570 33.55 284 5.07 4,449 4,449.10 2,533	770 13.76 5,524 5,523.74 70	500	30.23 712 41.86 129 2.31 4,240 4,239.71 476	1,782 104.82 1,183 21.13 14,213 14,212.53 3,079
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts:	0.1 'x 4" (M 1.0	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00 Mh/Un:	0.6259 0.6259 0.1000 0.1000 0.1000 0.1000 0.1000 0.1000 0.10000 0.10000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 1.0000	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82	770 13.76 5,524 5,523.74	500	30.23 712 41.86 129 2.31 4,240 4,239.71	1,782 104.82 1,183 21.13 14,213 14,212.53 3,078 3,078.62
Mh: 540.03 Mh: 540.21 Mh: 540.22	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work	0.1 'x 4" (M 1.0	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00 Mh/Un:	0.6259 0.1000 0.1000 0.1000 0.1000 0.10000 0.10000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 1.0000	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938	770 13.76 5,524 5,523.74 70 69.55	500	30.23 712 41.86 129 2.31 4,240 4,239.71 476	1,782 104.82 1,183 21.13 14,213 14,212.53 3,079
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts:	0.1 'x 4" (M 1.0 1.0 ns	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un:	0.6259 0.6259 0.1000 0.1000 0.EA 90.0000 0.EA 50.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 50 10.00	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37	500 29.41	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69	1,782 104.82 1,183 21.13 14,213 14,212.53 3,079 3,078.62 22,492
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter	0.1 2x 4" (M 1.0 1.0 ms 1.5	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 50 10.00	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37	500	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989	1,782 104.82 1,183 21.13 14,213 14,212.53 3,079 3,078.62 22,493
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Category	0.1 'x 4" (M 1.0 1.0 1.5 y 54	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266	500 29.41 590 590.00	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69	1,782 104.82 1,183 21.13 14,213 14,212.53 3,078.62 22,492.50 48,884 48,884.14
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ****** Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur	0.1 x 4" (M 1.0 1.0 ms 1.5 y 54	17.00 Mh/Un: 56.00 Mh/Un: (H-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 316.9600	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31	500 29.41 590 590.00	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28	1,782 104.82 1,183 21.13 14,213 14,212.53 3,075 3,078.62 22,492 22,492.50 48,884
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ***** Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor 316.96 Mh/Ur	0.1 x 4" (M 1.0 1.0 ms 1.5 y 54	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 316.9600 West Ave. (14	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 tx*****	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31	500 29.41 590 590.00	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28	1,782 104.82 1,183 21.13 14,213 14,212.53 3,078.62 22,492.50 48,884 48,884.14
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ****** Mh: ****** Mh: **** **** **	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur	0.1 2x 4" (M 1.0 1.0 1.5 1.5 y 54	17.00 Mh/Un: 56.00 Mh/Un: IH-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 316.9600 West Ave. (14	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 tx*****	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 500.0000 50 10.00 1.0000 50 10.00 1.0000 50 10.00 0.6667	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31	500 29.41 590 590.00 LS	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478	1,782 104.82 1,183 21.13 14,213 14,212.53 3,075 3,078.62 22,492.50 48,884 48,884.14
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ***** Mh: ***** Mh: **** **** **** **** **** **** ****	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24" RCP Installati 59.63 Shifts:	0.1 2x 4" (M 1.0 1.0 1.5 1.5 y 54	17.00 Mh/Un: 56.00 Mh/Un: H-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 316.9600 West Ave. (14 82.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 tx*****	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: St.) F6319A Un/Sh:	50 10.00 500.0000 50 10.00 1.0000 50 10.00 1.0000 50 10.00 0.6667	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31	500 29.41 590 590.00 LS 121 1.47	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478 30.22	1,782 104.82 1,183 21.13 14,213 14,212.53 3,075 3,078.62 22,492.50 48,884 48,884.14
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ****** Mh: **** 560 560.01 Mh: 560.02 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24" RCP Installati 59.63 Shifts: Haul Out Muck	0.1 2x 4" (M 1.0 1.0 1.5 1.5 y 54	17.00 Mh/Un: 56.00 Mh/Un: H-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 316.9600 West Ave. (14 82.00 Mh/Un: 25.00	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 1 LS 120.0000 1 th St 8th 0 LF 0.7272 0 CY 0.9784	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: St.) F6319A Un/Sh: F6319A	50 10.00 500.0000 50 10.00 1.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478 30.22 1,636	1,782 104.82 1,183 21.13 14,213 14,212.53 3,075 3,078.62 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.41 3,697
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ****** Mh: **** 560 560.01 Mh: 560.02 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24" RCP Installati 59.63 Shifts: Haul Out Muck 24.46 Shifts:	0.1 2x 4" (M 1.0 1.0 1.5 1.5 y 54	17.00 Mh/Un: 56.00 Mh/Un: (H-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 316.9600 West Ave. (14 82.00 Mh/Un: 25.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 tx***** 1 LF 0.7272 0 CY 0.9784	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: St.) F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 500.0000 50 10.00 1.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311 52.45	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31 1.00 3,422 41.73	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478 30.22 1,636 65.43	1,782 104.82 1,183 21.13 14,213 14,212.53 3,075 3,078.62 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.41 3,697 147.88
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ***** Mh: **** 560 560.01 Mh: 560.02 Mh: 560.03 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24" RCP Installati 59.63 Shifts: Haul Out Muck 24.46 Shifts: Dewatering	0.1 2x 4" (M 1.0 1.0 1.5 1.5 y 54 t:	17.00 Mh/Un: 56.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 25.00 Mh/Un: 25.00 Mh/Un: 82.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 tx***** 1 LF 0.7272 0 CY 0.9784	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: St.) F6319A Un/Sh: F6319A Un/Sh: F6319A	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00 250.0000	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311 52.45 831	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31 1.00 3,422 41.73	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238.28 Bid: 2,478 30.22 1,636 65.43 379	1,782 104.82 1,183 21.13 14,213 14,212.53 3,075 3,078.62 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.41 3,697 147.88 6,024
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ***** Mh: **** 560 560.01 Mh: 560.02 Mh: 560.03 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24" RCP Installati 59.63 Shifts: Haul Out Muck 24.46 Shifts: Dewatering 16.40 Shifts:	0.1 2x 4" (M 1.0 1.0 1.5 1.5 y 54 t:	17.00 Mh/Un: 56.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 25.00 Mh/Un: 25.00 Mh/Un: 82.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 this st 8th 0 LF 0.7272 0.9784 0 LF 0.2000 0 EA	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: St.) F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00 250.0000	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311 52.45 831 10.13	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31 1.00 3,422 41.73 4,815 58.72 11,047	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238.28 Bid: 2,478 30.22 1,636 65.43 379 4.62	1,782 104.82 1,183 21.13 14,212.55 3,078.62 22,493 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.41 3,697 147.88 6,024 73.47
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ******* Mh: **** 560 560.01 Mh: 560.02 Mh: 560.03 Mh: 560.21 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor 316.96 Mh/Ur 56 24* RCP Installati 59.63 Shifts: Haul Out Muck 24.46 Shifts: Dewatering 16.40 Shifts: Catch Basin Type	0.1 1.0 1.0 1.5 1.5 y 54 1.7 0.7	17.00 Mh/Un: 56.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 25.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 this st 8th 0 LF 0.7272 0.9784 0 LF 0.2000 0 EA	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00 250.0000 50 10.00	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311 52.45 831 10.13 3,959	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31 1.00 3,422 41.73 4,815 58.72 11,047	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478 30.22 1,636 65.43 379 4.62 3,326	1,782 104.82 1,183 21.13 14,212.53 3,078.62 22,492 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.41 3,697 147.88 6,024 73.47
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ******* Mh: **** 560 560.01 Mh: 560.02 Mh: 560.03 Mh: 560.21 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24* RCP Installati 59.63 Shifts: Haul Out Muck 24.46 Shifts: Dewatering 16.40 Shifts: Catch Basin Type 80.00 Shifts:	0.1 1.0 1.0 1.5 1.5 y 54 1.7 0.7	17.00 Mh/Un: 56.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 25.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un: 82.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 LS	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00 250.0000 50 10.00 250.0000	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311 52.45 831 10.13 3,959 1,979.48	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31 1.00 3,422 41.73 4,815 58.72 11,047 5,523.74	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478 30.22 1,636 65.43 379 4.62 3,326 1,662.90	1,782 104.82 1,183 21.13 14,212.55 3,078.62 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.41 3,697 147.88 6,024 73.47 18,332 9,166.11
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ******* Mh: **** 560 560.01 Mh: 560.02 Mh: 560.03 Mh: 560.21 Mh: 560.22 Mh:	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24" RCP Installati 59.63 Shifts: Haul Out Muck 24.46 Shifts: Dewatering 16.40 Shifts: Catch Basin Type 80.00 Shifts: Mud Work	0.1 x 4" (M 1.0 1.0 ms 1.5 y 54 i: on 0.7	17.00 Mh/Un: 56.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 25.00 Mh/Un: 82.00	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 k***** 10 LF 0.7272 0 CY 0.9784 0 LF 0.2000 0 EA 40.0000 0 EA 25.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00 250.0000 50 10.00 250.0000 50 10.00	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311 52.45 831 10.13 3,959 1,979.48 2,533	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31 1.00 3,422 41.73 4,815 58.72 11,047 5,523.74 139	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478 30.22 1,636 65.43 379 4.62 3,326 1,662.90 476	1,782 104.82 1,183 21.13 14,212 14,212.55 3,079 3,078.62 22,492 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.44 3,699 147.88 6,024 73.47 18,332 9,166.11 3,148
Mh: 540.03 Mh: 540.21 Mh: 540.22 Mh: 540.23 Mh: ******* Mh: **** 560 560.01 Mh: 560.02 Mh: 560.03 Mh: 560.21 Mh: 560.22	Haul Out Muck 10.64 Shifts: Dewatering 5.60 Shifts: Precast Type J7 6' 90.00 Shifts: Mud Work 50.00 Shifts: Miscellaneous Iter 120.00 Shifts: ****Biditem/Categor; 316.96 Mh/Ur 56 24" RCP Installati 59.63 Shifts: Haul Out Muck 24.46 Shifts: Dewatering 16.40 Shifts: Catch Basin Type 80.00 Shifts: Mud Work 50.00 Shifts:	0.1 x 4" (M 1.0 1.0 ms 1.5 y 54 i: on 0.7	17.00 Mh/Un: 56.00 Mh/Un: (H-9 1.00 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un: 316.9600 West Ave. (14 82.00 Mh/Un: 82.00 Mh/Un: 65T 2.00 Mh/Un: 2.00 Mh/Un:	0 CY 0.6259 0 LF 0.1000 0 EA 90.0000 0 EA 50.0000 0 LS 120.0000 0 k***** 10 LF 0.7272 0 CY 0.9784 0 LF 0.2000 0 EA 40.0000 0 EA 25.0000	F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh: F6319A Un/Sh:	50 10.00 50 10.00 500.0000 50 10.00 1.0000 50 10.00 0.6667 50 10.00 110.0671 50 10.00 250.0000 50 10.00 250.0000 50 10.00 2.0000 50 10.00 2.0000	570 33.55 284 5.07 4,449 4,449.10 2,533 2,532.82 5,938 5,938.44 15,790 15,789.55 Takeoff: 2,951 35.98 1,311 52.45 831 10.13 3,959 1,979.48 2,533 1,266.41 5,938	770 13.76 5,524 5,523.74 70 69.55 11,565 11,565.37 20,266 20,266.31 1.00 3,422 41.73 4,815 58.72 11,047 5,523.74 139 69.55	500 29.41 590 590.00 LS 121 1.47 750	30.23 712 41.86 129 2.31 4,240 4,239.71 476 476.25 4,989 4,988.69 12,238 12,238.28 Bid: 2,478 30.22 1,636 65.43 379 4.62 3,326 1,662.90 476 238.13	1,782 104.82 1,183 21.13 14,212 14,212.55 3,079 3,078.62 22,493 22,492.50 48,884 48,884.14 1.00 LS 8,971 109.41 3,697 147.88 6,024 73.47 18,332 9,166.11 3,148 1,574.05

040620218

West Ave 090 South - 60% Drainage 2021



Biditem					Cale	ndar		Perm	Constr	Equip-	Sub-	
Activity	Description		Quantity	Unit	WC	Hrs/Shift	Labor	Material	Matl/Exp	Ment	Contract	Total
Mh:	350.49	Mh/Un:	350.4900				17,523.02	30,989.20	870.60	13,282.76	62,	665.58
Mh:	1,272.25	***REPO	RT TOTALS***				63,517	88,130	2,981	47,599	2	02,227

N = Activity not adjusted to bid quantity

TOTAL \$ 3,640,929.02



West Avenue South - 090

Water Quality

tem	Qty	Unit	Subcontractor	Material		Labor		Equipment	NewTotal	Original Total Delta	Notes
Consul Conditions					MH	Rate	Total				
General Conditions General Conditions		LS	\$ -	\$ 128,168.00	240	\$ 414 53	\$ 99,487.00	\$ 3,600.00	\$ 231,255.00	\$ - \$ 231,255.00	
		10	T	Ţ 110,100.00		ψ 12 1133	φ σσ, ιστισσ	φ σ,σσσ.σσ	¥ 252)255105	+ =====================================	
Settelment Tank Drill 30'											
Template xacavate and Haul	102	CY	\$ 500.00	\$ -	84	\$ 48.01	\$ 4,033.00	\$ 5,466.00	\$ 9,999.00	\$ 9,999.00	,——
oncrete Template	69	CY	\$ 500.00	\$ 9,630.00	91	•		·	\$ 19,920.00		
orms (Sonotube)	66	EA	\$ -	\$ 4,280.00	462				\$ 56,522.00		
orms (Exterior)	3	EA	\$ -	\$ 3,852.00	84	•		,	\$ 13,351.00		
locking urvey	1	LS LS	\$ - \$ 5,850.00	\$ - \$ -	21	\$ 48.00	\$ 1,008.00	\$ 1,366.00	\$ 2,374.00 \$ 5,850.00		
oncrete Pump	1	LS	\$ 2,140.00	\$ -			\$ -	\$ -	\$ 2,140.00		
aul Old Template Debris	1	LS	\$ -	\$ 4,025.00	42	\$ 48.00	\$ 2,016.00	\$ 2,733.00	\$ 8,774.00	\$ 8,774.00	ı
Drill and Place Grout			<u></u>	<u> </u>	24.60	ć 45.02	ć 07.240.00	¢ 240 005 00	¢ 246 245 00	, , , , , , , , , , , , , , , , , , ,	,—
orill and Place Grout Grout			\$ - \$ -	\$ 69,818.00	2160	\$ 45.02	\$ 97,249.00	\$ 249,096.00	\$ 346,345.00 \$ 69,818.00		
ebar			\$ 23,625.00	\$ 37,919.00			\$ -	\$ -	\$ 61,544.00		
poils Disposal			\$ 5,062.00	\$ -			\$ -	\$ -	\$ 5,062.00	· · · ·	_
oncrete Pump			\$ 6,420.00	\$ -			\$ -	\$ -	\$ 6,420.00	\$ 6,420.00	1
Mass Excavation and Tremie xcavation	444	CY	\$ -	\$ -	240	\$ 44.73	\$ 10,734.00	\$ 13,665.00	\$ 24,399.00	\$ 24,399.00)
xcavation (Last 4')	66	CY	\$ -	\$ -	104				\$ 10,572.00		
lean Sides	1	LS	\$ -	\$ -	72	<u> </u>	· · · · · · · · · · · · · · · · · · ·		\$ 7,319.00		
remie Pour remie Rebar/Bottom Slab	150 26250	CY LB	\$ - \$ 7,875.00	\$ 20,063.00 \$ 14,044.00	312	\$ 44.72 #DIV/0!	\$ 13,954.00	\$ 17,764.00	\$ 51,781.00 \$ 21,919.00		
Dewater and Seal	1	LS	\$ 7,875.00	\$ 14,044.00	120	,	\$ 5,367.00	\$ 6,832.00	\$ 21,919.00		
eveling Course	30	CY	\$ -	\$ 4,013.00	119	•	\$ 5,713.00	\$ 7,743.00	\$ 17,469.00		
rucking			\$ 5,738.00	\$ -			\$ -	\$ -	\$ 5,738.00		
remie Pump and Leveling Course			\$ 1,926.00	\$ - \$ 5,350.00			\$ - \$ -	\$ - \$	\$ 1,926.00 \$ 5,350.00		
oly Tube Injection / Seal			- ب	2,350.00 ب			- ب	- ب	ş 5,350.00	, 5,350.00	+
Wet Well Drill 33'											
Template	400	61	ć 500.00	<u> </u>		ć 40.0°	ć 4000 T	ć <u> </u>	<u> </u>		, <u> </u>
xacavate and Haul Concrete Template	102 69	CY CY	\$ 500.00 \$ -	\$ - \$ 9,630.00	84 91	•			\$ 9,999.00 \$ 19,920.00		
orms (Sonotube)	66	EA	\$ -	\$ 4,280.00	462	·	<u> </u>		\$ 19,920.00		_
orms (Exterior)	3	EA	\$ -	\$ 3,852.00	84	\$ 48.01	\$ 4,033.00	\$ 5,466.00	\$ 13,351.00	\$ 13,351.00)
locking	1	LS	\$ -	\$ -	21	\$ 48.00	\$ 1,008.00	\$ 1,366.00	\$ 2,374.00		
urvey oncrete Pump	1	LS LS	\$ 5,850.00 \$ 2,140.00	\$ - \$ -			\$ -	\$ - \$ -	\$ 5,850.00 \$ 2,140.00		_
laul Old Template Debris	1	LS	\$ -	\$ 4,025.00	42	\$ 48.00	\$ 2,016.00	\$ 2,733.00	\$ 8,774.00		
Drill and Place Grout											
orill and Place Grout			\$ -	\$ -	2855	\$ 45.04	\$ 128,584.00	\$ 329,357.00	\$ 457,941.00		
rout ebar			\$ - \$ 25,515.00	\$ 81,435.00 \$ 45,512.00			\$ -	\$ -	\$ 81,435.00 \$ 71,027.00		
poils Disposal			\$ 5,625.00	\$ -			\$ -	\$ -	\$ 5,625.00		_
oncrete Pump			\$ 6,420.00	\$ -			\$ -	\$ -	\$ 6,420.00	\$ 6,420.00	,
Mass Excavation and Tremie	486	CY	\$ -	<u> </u>	200	¢ 44.72	¢ 0.045.00	ć 11 207 00	\$ 20,332.00	\$ 20,332.00	,
xcavation xcavation (Last 8')	141	CY	\$ -	\$ - \$ -	222.18	•		\$ 11,387.00 \$ 12,649.00	\$ 20,332.00		_
lean Sides	1	LS	\$ -	\$ -		\$ 44.73			\$ 8,946.00	. ,	_
remie Pour	96	CY	\$ -	\$ 14,894.00	152			\$ 8,654.00	\$ 30,346.00		
remie Rebar/Bottom Slab Dewater and Seal	16800 1	LB LS	\$ 5,040.00 \$ -	\$ 8,988.00	104	#DIV/0! \$ 44.72	<u> </u>	\$ - \$ 5,921.00	\$ 14,028.00 \$ 10,572.00		_
eveling Course	21	CY	\$ -	\$ 2,809.00	70	•		\$ 4,555.00	\$ 10,724.00		
rucking			\$ 5,738.00	\$ -		,	\$ -	\$ -	\$ 5,738.00		
remie Pump and Leveling Course			\$ 1,926.00	\$ -			\$ -	\$ -	\$ 1,926.00		
oly Tube Injection / Seal Mechanical Work			\$ -	\$ 5,000.00			\$ -	\$ -	\$ 5,000.00	\$ 5,000.00	1
affle Skimmer	3	EA	\$ -	\$ 32,100.00	60	\$ 49.03	\$ 2,942.00	\$ 3,510.00	\$ 38,552.00	\$ 38,552.00)
5 HP Flygt Pump	3	EA	\$ -	\$ 416,395.00	360	\$ 47.12			\$ 450,907.00	\$ 450,907.00	_
2" DIP Discharge	225	LF	\$ -	\$ 13,924.00	60				\$ 20,376.00		_
2" Check Valve IBG Sets / Flanges	3 60	EA EA	\$ - \$ -	\$ 35,085.00 \$ 27,799.00	18 120			,	\$ 37,021.00 \$ 40,703.00		
4" x 12" Cross w/ Cap	3	EA	\$ -	\$ 27,799.00	24				\$ 40,703.00	. ,	
4" Well	300	LF	\$ 225,000.00	\$ 6,011.00	15	\$ 49.00	\$ 735.00	\$ 877.00	\$ 232,623.00	\$ 232,623.00)
6" x 78" HS 20 Hatch & Frame	3	EA		\$ -		\$ 49.00			\$ 1,612.00	- i	_
6" x 60" HS 20 Hatch & Frame 6" x 112" HS 20 Hatch & Frame	3	EA EA	\$ - \$ -	\$ - \$ -	15 25	\$ 49.00 \$ 49.04	• '	•	\$ 1,616.00 \$ 2,688.00		
1'-8" x 8' x 7' Vault	3	EA	\$ -	\$ 28,890.00	150		• ' '		\$ 45,020.00		
oncrete Cover (15' Dia.)	6	EA	\$ -	\$ 33,705.00	60	\$ 49.03	\$ 2,942.00	\$ 3,510.00	\$ 40,157.00	\$ 40,157.00)
latform (8.44 NAVD)	3	EA	\$ 24,000.00	\$ -	30	\$ 49.03	\$ 1,471.00	\$ 1,755.00	\$ 27,226.00		_
andscaping Screening Grout / Seal / Coatings	3	LS LS	\$ 22,500.00	\$ - \$ 16,050.00	150	\$ 49.03	\$ - \$ 7,355.00	\$ - \$ 8,775.00	\$ 22,500.00 \$ 32,180.00		
tart up / Commissioning	1	LS	\$ -	\$ 16,050.00	30			,	\$ 32,180.00		
Varranty Allowance	1	LS	\$ -	\$ 6,420.00	60				\$ 12,872.00	\$ 12,872.00)
4" Well Credit	1	LS	\$ (120,750.00)	\$ -			\$ -	\$ -	\$ (120,750.00	\$ (120,750.00)
Electrical / I&C Control Pannels w/ Floats	3	EA	\$ 102,000.00	\$ -			\$ -	\$ -	\$ 102,000.00	\$ 102,000.00	,
out of Families wy Floats outtbank - Civil	700	LF	\$ -	\$ 12,733.00	1084.99	\$ 47.12	\$ 51,121.00		\$ 116,746.00		
									· ,		
24" Interconnecting Pipping		1.0	\$ -	\$ 1,335.00	600		\$ 28,019.00		\$ 55,491.00		
5 5	1	LS LS	\$ - \$ 36,000.00	\$ 2,690.00 \$ 5,350.00	40 180	\$ 51.90 \$ 47.12	• ' '	,	\$ 6,250.00 \$ 56,838.00		
4" Interconnecting Pipping	1 1	LJ	\$ 36,000.00	\$ 5,350.00	300			\$ 14,014.00	\$ 28,724.00		
5 5	300	CY	ا - ب				· · · · · ·			<u> </u>	_
4" Interconnecting Pipping Dewatering	_	CY LS	\$ -	\$ 8,988.00	72	\$ 47.11	\$ 3,392.00	\$ 2,383.00	\$ 14,763.00	7 14,703.00	<u>'</u>
4" Interconnecting Pipping Dewatering Excavation	300		\$ -	\$ -	72	#DIV/0!	\$ -	\$ -	\$ -	\$ -	
4" Interconnecting Pipping Dewatering Excavation et up/Down & Install eal, Grout & Backfill	300	LS	\$ -	\$ - \$ -	72	#DIV/0! #DIV/0!	\$ -	\$ 2,383.00	\$ - \$ -	\$ -	
4" Interconnecting Pipping Dewatering Excavation Set up/Down & Install Seal, Grout & Backfill Utility Relocation & Removals	300	LS TN	\$ - \$ - \$ - \$ -	\$ - \$ - \$ -		#DIV/0! #DIV/0! #DIV/0!	\$ - \$ - \$ -	\$ - \$ - \$ -	\$ - \$ - \$ -	\$ - \$ - \$ -	
4" Interconnecting Pipping Dewatering Excavation et up/Down & Install eal, Grout & Backfill	300 1 360	LS	\$ -	\$ - \$ -		#DIV/0! #DIV/0! #DIV/0!	\$ -	\$ - \$ - \$ -	\$ - \$ -	\$ - \$ - \$ -	
4" Interconnecting Pipping Dewatering Excavation Set up/Down & Install Seal, Grout & Backfill Utility Relocation & Removals	300 1 360	LS TN	\$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ 3,000.00	980	#DIV/0! #DIV/0! #DIV/0! \$ 48.01	\$ - \$ - \$ - \$ 47,046.00	\$ - \$ - \$ - \$ 30,194.00	\$ - \$ - \$ - \$ 80,240.00	\$ - \$ - \$ - \$ 80,240.00)
4" Interconnecting Pipping Dewatering Excavation Set up/Down & Install Seal, Grout & Backfill Utility Relocation & Removals	300 1 360	LS TN	\$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ -	980	#DIV/0! #DIV/0! #DIV/0! \$ 48.01	\$ - \$ - \$ - \$ 47,046.00	\$ - \$ - \$ -	\$ - \$ - \$ 80,240.00 \$ 3,240,054.00	\$ - \$ - \$ 80,240.00 \$ 3,240,054.00	
4" Interconnecting Pipping Dewatering Excavation Set up/Down & Install Seal, Grout & Backfill Utility Relocation & Removals	300 1 360	LS TN	\$ - \$ - \$ - \$ - \$ -	\$ - \$ - \$ - \$ 3,000.00	980	#DIV/0! #DIV/0! #DIV/0! \$ 48.01	\$ - \$ - \$ - \$ 47,046.00	\$ - \$ - \$ - \$ 30,194.00	\$ - \$ - \$ 80,240.00 \$ 3,240,054.00	\$ - \$ - \$ - \$ 80,240.00	0



Activity	Description	Quantity	Unit	Calenda WC	ar Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
*** 10	M I II. 4.	General Cond		F(210A 5	0 10.00	Takeoff:	1.00		Bid:	1.	.00 LS
10.1 Mh:	Mobilization Shifts:	1.00 Mh/Un:	LS	F6319A 5 Un/Sh:	0 10.00			63,588 63,588.00			63,588 63,588.00
10.2	General Conditions		DAY	F6319A 5	0 10.00	99,487		64,580	3,600		167,667
	1,920.00 Shifts:	Mh/Un:	32.0000			1,658.11		1,076.33	60.00		2,794.45
	****Biditem/Category 1,920.00 Mh/Un:	10 ****** 1,920.0000	****			99,487 99,486.72		128,168 128,168.00	3,600 3,600.00	2	231,255 31,254.72
*** 31	F	Template	CV	EC2104 5		Takeoff:	1.00	LS	Bid:		.00 LS
31.01 Mh:	Excavate and Haul 84.00 Shifts:	102.00 1.2 Mh/Un:	0.8235	F6319A 5 Un/Sh:	0 10.00 85.0000	4,033 39.53			5,466 53.59	500 4.90	9,998 98.02
31.02	Concrete Template (F6319A 5		4,369	9,630		5,921	4.90	19,920
Mh:	91.00 Shifts:	1.3 Mh/Un:		Un/Sh:	53.0769	63.31	139.57		85.82		288.70
31.03	Forms - Sonotube	66.00		F6319A 5		22,179	107.07	4,280	30,063		56,522
Mh:	462.00 Shifts:	6.6 Mh/Un:	7.0000	Un/Sh:	10.0000	336.04		64.85	455.50		856.39
31.04	Forms - Exterior	3.00	EA	F6319A 5	0 10.00	4,033		3,852	5,466		13,350
Mh:	84.00 Shifts:	1.2 Mh/Un:	28.0000	Un/Sh:	2.5000	1,344.17		1,284.00	1,821.99		4,450.16
31.05	Blocking	1.00	LS	F6319A 5	0 10.00	1,008			1,367		2,375
Mh:	21.00 Shifts:	0.3 Mh/Un:		Un/Sh:	3.3333	1,008.12			1,366.50		2,374.62
31.06	Survey	1.00	LS	F6319A 5	0 10.00			5,850			5,850
Mh:	Shifts:	Mh/Un:		Un/Sh:				5,850.00			5,850.00
31.07	Pump Concrete	1.00	LS	F6319A 5	0 10.00				2,140		2,140
Mh:	Shifts:	Mh/Un:	1.0	Un/Sh:	0 10.00	2.016		1.025	2,140.00		2,140.00
31.08 Mh:	Haul Old Template 3 42.00 Shifts:	Debris 1.00 0.6 Mh/Un:		F6319A 5 Un/Sh:	0 10.00 1.6667	2,016 2,016.25		4,025 4,025.00	2,733 2,732.99		8,774 8,774.24
***** Mh:	****Biditem/Category 784.00 Mh/Un:	31 ****** 784.0000	****			37,637 37,636.62	9,630 9,630.00	18,007 18,007.00	53,156 53,155.78		118,929 118,929.40
*** 32		Drill and PLac	no Cwout			Takeoff:	1.00	IC	Bid:	1	.00 LS
32		Drill and r Lac	e Grout							1.	
32.01	Drill and Place Grou		FΔ	F6319A 5			1.00	25		-	
32.01 Mh: 2	Drill and Place Grou	ut 72.00		F6319A 5	0 10.00	97,249	1.00		249,096		346,345
Mh: 2	2,160.00 Shifts:	ut 72.00 24.0 Mh/Un:	30.0000	Un/Sh:	0 10.00 3.0000						346,345 4,810.34
		ut 72.00	30.0000		0 10.00 3.0000	97,249	69,818 155.15		249,096		346,345
Mh: 2	2,160.00 Shifts: Grout	ut 72.00 24.0 Mh/Un: 450.00	30.0000 CY	Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00	97,249	69,818		249,096	23,625	346,345 4,810.34 69,818
Mh: 2 32.02 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts:	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un:	30.0000 CY	Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00	97,249	69,818 155.15		249,096		346,345 4,810.34 69,818 155.15
Mh: 2 32.02 Mh: 32.03	2,160.00 Shifts: Grout Shifts: Rebar	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00	30.0000 CY LBS	Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00	97,249	69,818 155.15 37,919	5,062	249,096	23,625	346,345 4,810.34 69,818 155.15 61,544
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts:	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un:	30.0000 CY LBS	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00	97,249	69,818 155.15 37,919		249,096 3,459.67	23,625	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25
Mh: 32.02 Mh: 32.03 Mh: 32.04	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal	ut 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00	30.0000 CY LBS	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00	97,249	69,818 155.15 37,919	5,062	249,096	23,625	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un:	30.0000 CY LBS CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00	97,249 1,350.68	69,818 155.15 37,919 0.48	5,062 11.25	249,096 3,459.67 6,420 14.27	23,625 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un:	30.0000 CY LBS CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00	97,249	69,818 155.15 37,919 0.48	5,062	249,096 3,459.67	23,625 0.30 23,625	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 *******	30.0000 CY LBS CY CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00	97,249 1,350.68	69,818 155.15 37,919 0.48	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 4***** Mh: 2	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ******* 2,160.0000	30.0000 CY LBS CY CY cy ion and T	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00	97,249 97,249 97,248.60	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** *** 33	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati	30.0000 CY LBS CY CY CY CY CY CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00	97,249 97,249 97,248.60	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid:	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 4***** Mh: 2 *** 33 33.01	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un:	30.0000 CY LBS CY CY CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 148.0000	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh:	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 660.00 1.3 Mh/Un:	30.0000 CY LBS CY CY CY 0.5405 CY 1.5758	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 148.0000 0 10.00 50.7692	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 660.00 1.3 Mh/Un: 1.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: ********	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un:	30.0000 CY LBS CY CY CY 0.5405 CY 1.5758 LS 72.0000	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06	69,818 155.15 37,919 0.48 107,736 107,736.16	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00	30.0000 CY LBS CY CY CY 0.5405 CY 1.5758 LS 72.0000 CY	Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54,95 10,573 160.19 7,320 7,319.54 51,780
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ****** Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.04	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800	D Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: **** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: ****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 1.00 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800	O Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954	107,736 107,736.16 1.00 20,063 133.75 14,044	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764	23,625 0.30 23,625 23,625.00 1.	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: **** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.05 Mh: 33.05	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: om Slab 26,250.00 Mh/Un:	30.0000 CY LBS CY CY ***** On and T CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	O Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh:	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 1.00 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00 Mh/Un: 150.00	30.0000 CY LBS CY CY ***** ion and T CY 0.5400 CY 1.5758 LS 72.0000 CY 2.0800 LBS	O Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02	107,736 107,736.16 1.00 20,063 133.75 14,044	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.06 Mh: 33.06	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 100 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 Mh/Un: 150.00 1.5 Mh/Un: 1.00 1.5 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00 0 .6667	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 30.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00 0.6667 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76 5,713	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43 6,832 6,832.49 7,743	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05 Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07 Mh: 33.07 Mh: 33.07	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course 119.00 Shifts:	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 0 150.00 Mh/Un: 150.00 1.5 Mh/Un: 1.00 1.5 Mh/Un: 30.00 1.7 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 1.111 0 10.00 38.4615 0 10.00 0.6667 0 10.00 17.6471	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00 LS	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469 582.29
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: ******* Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 0 66.00 1.3 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 30.00	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS	Permie F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 1.111 0 10.00 38.4615 0 10.00 0.6667 0 10.00 17.6471	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76 5,713	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43 6,832 6,832.49 7,743	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469
Mh: 2 32.02 Mh: 32.03 Mh: 32.04 Mh: 32.05 Mh: 32.05 Mh: 2 *** 33 33.01 Mh: 33.02 Mh: 33.03 Mh: 33.04 Mh: 33.05 Mh: 33.06 Mh: 33.07 Mh: 33.08	2,160.00 Shifts: Grout Shifts: Rebar Shifts: Spoils Disposal Shifts: Concrete Pump Shifts: *****Biditem/Category 2,160.00 Mh/Un: Excavation 240.00 Shifts: Excavation (Last 4') 104.00 Shifts: Clean Sides 72.00 Shifts: Tremie Pour 312.00 Shifts: Tremie Rebar/Botto Shifts: Dewater and Seal 120.00 Shifts: Leveling Course 119.00 Shifts: Trucking	att 72.00 24.0 Mh/Un: 450.00 Mh/Un: 78,750.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 450.00 Mh/Un: 32 ****** 2,160.0000 Mass Excavati 444.00 3.0 Mh/Un: 1.00 0.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 3.9 Mh/Un: 150.00 1.5 Mh/Un: 1.00 1.7 Mh/Un: 1.00 Mh/Un: 1.00 Mh/Un:	30.0000 CY LBS CY CY CY 0.5403 CY 1.5758 LS 72.0000 CY 2.0800 LBS LS 120.0000 CY 3.9667 LS	F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5 Un/Sh: F6319A 5	0 10.00 3.0000 0 10.00 0 10.00 0 10.00 0 10.00 0 10.00 148.0000 0 10.00 50.7692 0 10.00 1.1111 0 10.00 38.4615 0 10.00 0.6667 0 10.00 17.6471 0 10.00	97,249 1,350.68 97,249 97,248.60 Takeoff: 10,734 24.17 4,651 70.47 3,220 3,220.06 13,954 93.02 5,367 5,366.76 5,713	69,818 155.15 37,919 0.48 107,736 107,736.16 1.00 20,063 133.75 14,044 0.54	5,062 11.25 5,062 5,062.00 LS	249,096 3,459.67 6,420 14.27 255,516 255,516.00 Bid: 13,665 30.78 5,921 89.72 4,099 4,099.48 17,764 118.43 6,832 6,832.49 7,743	23,625 0.30 23,625 23,625.00 1. 7,875 0.30	346,345 4,810.34 69,818 155.15 61,544 0.78 5,062 11.25 6,420 14.27 489,188 489,187.76 .00 LS 24,398 54.95 10,573 160.19 7,320 7,319.54 51,780 345.20 21,919 0.84 12,199 12,199.25 17,469 582.29 5,738



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Biditem Activity	Description			Quantity	Unit	Calen WC		rs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
33.10 Mh:	Poly Tub	e Injection Shifts:	/ Seal	1.00 Mh/Un:	LS	F6319A Un/Sh:		10.00		5,350 5,350.00				5,350 5,350.00
***** Mh:	**** Biditem / 967.00	Category Mh/Un:	33	***** 57.0000	****				43,638 43,637.81	43,469 43,468.75	5,738 5,738.00	57,952 57,952.28	7,875 7,875.00	158,672 158,671.84
*** 51	F '	1 77 1	Te	emplate	CV	E(210 A	50		Takeoff:	1.00	LS	Bid:		.00 LS
51.01 Mh:	84.00	and Haul Shifts:	1.2	102.00 Mh/Un:		F6319A Un/Sh:		10.00	4,033 39.53			5,466 53.59	500 4.90	9,998 98.02
51.02		Template				F6319A		10.00	4,369	9,630		5,921	4.90	19,920
Mh:	91.00	Shifts:	1.3	Mh/Un:		Un/Sh:		53.0769	63.31	139.57		85.82		288.70
51.03	Forms - S			66.00		F6319A		10.00	22,179		4,280	30,063		56,522
Mh:	462.00	Shifts:	6.6	Mh/Un:	7.0000	Un/Sh:		10.0000	336.04		64.85	455.50		856.39
51.04	Forms - I	Exterior		3.00	EA	F6319A	50	10.00	4,033		3,852	5,466		13,350
Mh:	84.00	Shifts:	1.2	Mh/Un:	28.0000	Un/Sh:		2.5000	1,344.17		1,284.00	1,821.99		4,450.16
51.05	Blocking			1.00		F6319A		10.00	1,008			1,367		2,375
Mh:	21.00	Shifts:	0.3	Mh/Un:		Un/Sh:		3.3333	1,008.12			1,366.50		2,374.62
51.06	Survey			1.00	LS	F6319A		10.00			5,850			5,850
Mh:		Shifts:		Mh/Un:		Un/Sh:					5,850.00			5,850.00
51.07	Pump Co			1.00	LS	F6319A		10.00				2,140		2,140
Mh:	111 014	Shifts:	D-1	Mh/Un:	IC	Un/Sh:		10.00	2.016		4.025	2,140.00		2,140.00
51.08 Mh:	42.00	Template Shifts:	0.6	1.00 Mh/Un:	42.0000	F6319A Un/Sh:		10.00	2,016 2,016.25		4,025 4,025.00	2,733 2,732.99		8,774 8,774.24
****	****Biditem/	Category	51	****	****				37,637	9,630	18,007	53,156	500	118,929
Mh:	784.00	Mh/Un:	78	34.0000					37,636.62	9,630.00	18,007.00	53,155.78	500.00	118,929.40
*** 52			Dr	rill and PLac	e Grout				Takeoff:	1.00	LS	Bid:	1.	.00 LS
52.01	Drill and	Place Grou	at	72.00	EA	F6319A	50	10.00	128,584			329,357		457,941
Mh:	2,855.99	Shifts:	31.7	Mh/Un:	39.6665	Un/Sh:		2.2689	1,785.88			4,574.40		6,360.29
52.02	Grout			486.00	CY	F6319A	50	10.00		81,435				81,435
Mh:		Shifts:		Mh/Un:		Un/Sh:				167.56				167.56
52.03	Rebar			85,050.00	LBS	F6319A		10.00		45,512			25,515	71,027
Mh:		Shifts:		Mh/Un:	GVI	Un/Sh:		10.00		0.54			0.30	0.84
52.04	Spoils Di	•		450.00	CY	F6319A		10.00			5,625			5,625
Mh:	C	Shifts:		Mh/Un:	CV	Un/Sh:		10.00			12.50	(120		12.50
52.05 Mh:	Concrete			486.00 Mh/Un:	CY	F6319A Un/Sh:		10.00				6,420 13.21		6,420 13.21
		Shifts:		Min/Un:		Un/Sn:						13.21		13.21
	****Biditem/		52	****	****				128,584		5,625	335,777		622,448
Mh:	2,855.99	Mh/Un:	2,85	55.9900					128,583.65	126,947.58	5,625.00	335,776.98	25,515.00	622,448.21
*** 53			M	ass Excavati					Takeoff:	1.00	LS	Bid:	1.	.00 LS
53.01	Excavatio		2.5	486.00		F6319A			8,945			11,387		20,332
Mh:	200.00	Shifts:	2.5	Mh/Un:		Un/Sh:			18.40			23.43		41.84
53.02 Mh:	222.18	on (Last 8') Shifts:	2.8	141.00 Mh/Un:		F6319A Un/Sh:		50.7742	9,936 70.47			12,649 89.71		22,586 160.18
53.03	Clean Sic		2.0	1.00		F6319A		10.00	3,936			5,010		8,946
Mh:	88.00	Shifts:	1.1	Mh/Un:		Un/Sh:		0.9091	3,935.62			5,010.49		8,946.11
53.04	Tremie P		1.1	96.00		F6319A			6,798	14,894		8,654		30,347
Mh:	152.00	Shifts:	1.9	Mh/Un:		Un/Sh:		50.5263	70.81	155.15		90.15		316.11
53.05				16,800.00		F6319A		10.00	. 0.01	8,988		20.13	5,040	14,028
Mh:		Shifts:		Mh/Un:		Un/Sh:				0.54			0.30	0.84
53.06	Dewater	and Seal		1.00	LS	F6319A		10.00	4,651			5,921		10,573
Mh:	104.00	Shifts:	1.3	Mh/Un:	104.0000	Un/Sh:		0.7692	4,651.20			5,921.48		10,572.68
53.07	Leveling			21.00		F6319A		10.00	3,360	2,809		4,555		10,724
Mh:	70.00	Shifts:	1.0	Mh/Un:		Un/Sh:		21.0000	160.02	133.75		216.90		510.67
53.08	Trucking			1.00	LS	F6319A		10.00			5,738			5,738
Mh:		Shifts:		Mh/Un:		Un/Sh:					5,738.00			5,738.00
53.09	Tremie P	ump and L	evel Cou		LS	F6319A		10.00				1,926		1,926
Mh:	D 1 77 1	Shifts:	/ C 1	Mh/Un:	1.0	Un/Sh:		10.00				1,926.00	- F 000	1,926.00
53.10	Poly Tub	e Injection	Seal	1.00 Mb/Up:	LS	F6319A		10.00					5,000	,
Mh:		Shifts:		Mh/Un:		Un/Sh:							5,000.00	5,000.00



Biditem Activity	Description	Quantity	Unit	Calendar WC Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
***** Mh:	*****Biditem/Category 836.18 Mh/Un:	3 ***** 836.1800	****		37,626 37,626.18	26,691 26,691.15	5,738 5,738.00	50,104 50,104.06	10,040 10,040.00 1	130,199
*** 54		Mechanical W	ork		Takeoff:	1.00	LS	Bid:	1 (00 LS
54.01	Baffle Skimmer	3.00		F6319A 50 10.00		32,100	L 5	3,510	1.0	38,552
Mh:	60.00 Shifts: 1.2	Mh/Un:	20.0000		,	10,700.00		1,169.99	1	2,850.63
54.05	25 HP Flygt Pump	3.00		F6319A 50 10.00		416,395		17,550		450,907
Mh:	360.00 Shifts: 6.0	Mh/Un:		Un/Sh: 0.5000		138,798.26		5,849.94	15	0,302.25
54.06	12" DIP Discharge 60.00 Shifts: 1.2	225.00	0.2667	F6319A 50 10.00	,	13,924		3,510		20,376
Mh: 54.08	60.00 Shifts: 1.2 12" Check Valve	Mh/Un: 3.00		Un/Sh: 187.5000 F6319A 50 10.00		61.88 35,085		15.60 1,053		90.56
Mh:	18.00 Shifts: 0.4	Mh/Un:		Un/Sh: 8.3333		11,695.10		350.99	1	2,340.29
54.09	NBG Sets / Flanges	60.00		F6319A 50 10.00		27,799		7,020		40,702
Mh:	120.00 Shifts: 2.4	Mh/Un:	2.0000	Un/Sh: 25.0000	98.06	463.31		117.00		678.37
54.10	24 x 12 Cross w/Cap	3.00		F6319A 50 10.00		17,201		1,404		19,782
Mh:	24.00 Shifts: 0.5	Mh/Un:		Un/Sh: 6.2500		5,733.77		467.99		6,594.03
54.11 Mh:	24" Well 15.00 Shifts: 0.3	300.00 Mh/Un:		F6319A 50 10.00 Un/Sh: 1,000.0000		6,011 20.04		877 2.92	225,000 750.00	232,624 775.41
54.12	36"x 78" HS 20 Hatch &			F6319A 50 10.00		20.04		877	/30.00	1,613
Mh:	15.00 Shifts: 0.3	Mh/Un:	5.0000					292.50		537.65
54.13	56"x 60" HS 20 Hatch &			F6319A 50 10.00				881		1,617
Mh:	15.00 Shifts: 0.3	Mh/Un:	5.0000	Un/Sh: 10.0000	245.16			293.71		538.86
54.14	56"x 112" HS 20 Hatch &			F6319A 50 10.00	,			1,462		2,688
Mh:	25.00 Shifts: 0.5	Mh/Un:	8.3333			20.000		487.50		896.11
54.15	11'-8" x 8' x 7' Vault 150.00 Shifts: 3.0	3.00 Mh/Un:		F6319A 50 10.00 Un/Sh: 1.0000	,	28,890 9,630.00		8,775 2,924.97	1	45,020 5,006.59
Mh: 55.01	Concrete Cover (15' Dia.)			F6319A 50 10.00	,	33,705		3,510	1	40,157
Mh:	60.00 Shifts: 1.2	Mh/Un:		Un/Sh: 5.0000	,	5,617.50		584.99		6,692.82
55.02	Platform (8.44 NAVD)	3.00		F6319A 50 10.00		-,,,,,,,,,,		1,755	24,000	27,226
Mh:	30.00 Shifts: 0.6	Mh/Un:	10.0000	Un/Sh: 5.0000	490.33			585.00	8,000.00	9,075.32
55.03	Landscaping Screening	3.00	LS	F6319A 50 10.00	1				22,500	22,500
Mh:	Shifts:	Mh/Un:		Un/Sh:		4 6 0 = 0			7,500.00	-
55.04	Grout / Seal / Coatings	1.00		F6319A 50 10.00	,	16,050		8,775	2	32,180
Mh: 55.05	150.00 Shifts: 3.0 Start-up / Commissioning	Mh/Un: 1.00		Un/Sh: 0.3333 F6319A 50 10.00		16,050.00 1,070		8,774.91 1,755	3	4,296
Mh:	30.00 Shifts: 0.6	Mh/Un:	30.0000			1,070.00		1,754.99		4,295.97
55.06	Warranty Allowance	1.00		F6319A 50 10.00	,	6,420		3,510		12,872
Mh:	60.00 Shifts: 1.2	Mh/Un:	60.0000	Un/Sh: 0.8333	2,941.94	6,420.00		3,509.96	1	2,871.90
55.07	24" Well Credit	-1.00	LS	F6319A 50 10.00					-120,750	
Mh:	Shifts:	Mh/Un:		Un/Sh:					120,750.00 1	20,750.00
***	******D: 1:4/C-4	4 ****			57.757	(24 (50		(())5	150.750	000 202
		,192.0000				634,650 634,650.17		66,225 66,224.93	150,750 150,750.00 9	
*** 55		Electrical / I&			Takeoff:	1.00	LS	Bid:		00 LS
55.1	Control Pannels w/ Floats		EA	F6319A 50 10.00						102,000
Mh:	Shifts:	Mh/Un:		Un/Sh:	51 101	10.722		52,002	34,000.00 3	-
55.2 Mh:	Ductbank - Civil 1,084.99 Shifts: 18.1	700.00 Mh/Un:		F6319A 50 10.00 Un/Sh: 38.7104		12,733 18.19		52,892 75.56		116,747
		55 ***** ,084.9900	****		51,121 51,121.46	12,733 12,733.00		52,892 52,892.24	102,000 102,000.00 ²	
*** 70		24" Interconn	ecting Pin	ping	Takeoff:	1.00	LS	Bid:	1.0	00 LS
70.01	24" Interconnecting Pippi			F6319A 50 10.00		535	800	26,137		55,491
Mh:	600.00 Shifts: 7.5	Mh/Un:		Un/Sh: 0.1333	,	535.00	800.00	26,137.29	5	5,490.93
70.02	Dewatering	1.00		F6319A 50 10.00		2,690		1,484		6,250
Mh:	40.00 Shifts: 1.0	Mh/Un:		Un/Sh: 1.0000		,		1,484.07		6,249.96
70.03	Excavation	300.00		F6319A 50 10.00		5,350		7,007	36,000	56,838
Mh: 70.04	180.00 Shifts: 3.0 Set up / Down & Install	Mh/Un: 1.00		Un/Sh: 100.0000 F6319A 50 10.00		17.83		23.36 14,014	120.00	189.46 28,724
Mh:	300.00 Shifts: 6.0	Mh/Un:		F6319A 50 10.00 Un/Sh: 0.1667				14,014.02	?	28,724
70.05	Seal, Grout & Backfill	360.00		F6319A 50 10.00		8,988		2,383		14,763
Mh:	72.00 Shifts: 1.2	Mh/Un:		Un/Sh: 300.0000		24.97		6.62		41.01



Biditem	1			Calendar			Perm	Constr	Equip-	Sub-
Activity	Description	Quantity	Unit	WC H	Irs/Shift	Labor	Material	Matl/Exp	Ment	Contract Total
****	****Biditem/Category	70 ****	****			56,678	17,563	800	51,025	36,000 162,066
Mh:	1,192.00 Mh/Un	: 1,192.0000				56,678.04	17,562.69	800.00	51,025.19	36,000.00 162,065.92
*** 90		Utility Reloca	tions & Ren	novals		Takeoff:	1.00	LS	Bid:	1.00 LS
90.01	Utility Relocations	& Removal 1.00	0 LS	F6319A 50	10.00	47,046		3,000	30,194	80,240
Mh:	980.00 Shifts:	14.0 Mh/Un:	980.0000	Un/Sh:	0.0714	47,045.74		3,000.00	30,193.80	80,239.54
****	*****Biditem/Category	90 ****	****			47,046		3,000	30,194	80,240
Mh:	980.00 Mh/Un	: 980.0000				47,045.74		3,000.00	30,193.80	80,239.54
Mh:	14,756.16 ***RE	PORT TOTALS***	:			694,458	989,050	190,145	1,009,597	356,805 3,240,055

N = Activity not adjusted to bid quantity





Xylem Water Solutions USA, Inc. Flygt Products

15132 Park of Commerce Blvd./102 Jupiter, FL 33478 Tel (561) 848-1200 Fax (561) 848-1299

Date: April 16, 2021

To: Ric-Man Construction FL, Inc.

Attention: Michael Fischer

Subject: 9 St 25HP Well Pump Quote Number: 9ST25WP

We are pleased to offer the following equipment:

Qty Description

- Flygt Model NP-3171.095 LT 10" volute Submersible pump equipped with a 460 Volt / 3 phase / 60 Hz 25 HP 1160 RPM motor, 614 impeller, 1 x 50 Ft. length of submersible cable, FLS leakage detector, volute is prepared for Flush Valve, Explosion proof
- 1 START UP, FLYGT, NO TAX 1-TP MODELS: 3000,7000,8000
- 1 CONNECTION, DISCH 10"X 10" CI
- 1 ½ X 316SS Standard Mounting plates (For 10" Base Elbow)
- 30 CHAIN 5/16" 316SS SWL2750# (1 X 30')
- 1 KIT, CHAIN FITTING 316SS+ FLYGT
- 8 ROD, THREADED 3/4"-10X12" 316SS
- 4 PPAC AC100PLUS ADHESIVE+ ANCHORING SYSTEM
- 50 TS3163 FEET 3"GUIDE RAIL 316SS (2 X 10' + 2 X 15")
- 1 BRACKET, GUIDE BAR UPPER 3" 316
- 3" 316SS Intermediate Guide Bar Bracket (10" Riser Pipe)
- 1 HOLDER, CABLE HEAVY DUTY 316SS
- 1 √ 56" X 112" Frame Opening Drainage Well Hatches Galv Steel DT-AHD
- 1 \ 52" X 60" Frame Opening Wet Well Hatch Galv Steel DT-AHD
- 1 36" X 78" Frame Opening Settling Tank Hatch Galv Steel DT-AHD
- 1 Storm Water Manhole Cover USF385 Ring
- 4 SENSOR, ENM-10 0.95-1.1 65'
- Simplex Control Panel 460V 3Ph 25hp NEMA 3R12 316 SS enclosure w/ MultiSmart Primary control & LTU 801 pressure transducer and back up Float control & Gen receptacle
- 1 Motor/ Float Connection Box
- 1 SHIPPING AND HANDLING-NO TAX

Price: \$129,718.50 plus taxes, freight included

Exclusions: WE DO NOT SUPPLY, PIPING, VALVES, GUIDE BARS, PRESSURE GAUGES, DISCONNECTS, JUNCTION

BOXES, KELLUMS GRIPS, SURGE PROTECTION EQUIPMENT, SPARE PARTS, LABOR OR ANY OTHER

ITEM NOT SPECIFICALLY LISTED ABOVE.

PLEASE MAKE PURCHASE ORDERS OUT TO: XYLEM WATER SOLUTIONS USA, INC.

Validity: THIS QUOTE IS VALID FOR NINETY (90) DAYS UNLESS LONGER TIME AGREED TO IN WRITING.





Xylem Water Solutions USA, Inc. Flygt Products

15132 Park of Commerce Blvd./102 Jupiter, FL 33478 Tel (561) 848-1200 Fax (561) 848-1299

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State, local, and other applicable taxes are not included in this quotation.

Freight Terms:

DAP; Jobsite - Full Freight Allowed (per Incoterms 2020)

Shortages:

Xylem will not be responsible for apparent shipment shortages or damages incurred in shipment that are not reported within two weeks from delivery to jobsite. Damages should be noted on the receiving slip and the truck driver advised of the damages. Please contact our office as soon as possible to report damages or shortages so that replacement items can be shipped and the appropriate claims made.

Payment Terms: 100% NET 90 DAYS AFTER SHIPMENT DATE.

(Note: Partial billing will be made on partial shipments)

Xylem's payment shall not be dependent upon Purchaser being paid by any third party unless Owner denies payment due to reasons solely attributable to items related to the equipment being provided by FLYGT.

Schedule:

Please consult your local Flygt branch for submittals and fabrication lead-times.

Back Charges:

Buyer shall not make purchases nor shall Buyer incur any labor that would result in a back charge to

Seller without prior written consent of an authorized employee of seller.

Terms & Conditions: This order is subject to the Standard Terms and Conditions of Sale - Xylem Americas effective on the date the order is accepted which terms are available at http://www.xyleminc.com/en-us/Pages/terms-conditions-of-sale.apx and incorporated herein by reference and made part of the agreement between the parties.

We thank you for your interest in our equipment and look forward to being of service to you in the near future.

IN THE ABSENCE OF A FORMAL ISSUED PURCHASE ORDER, A SIGNED COPY OF THIS PROPOSAL IS ACCEPTABLE AS A BINDING CONTRACT.

Xylem Water Solutions USA, Inc.	Company Name:	
Rul Ru	Address:	1
	Accepted By:	
	Print Name:	
	Date:	





Xylem Water Solutions USA, Inc. Flygt Products

15132 Park of Commerce Blvd./102 Jupiter, FL 33478 Tel (561) 848-1200 Fax (561) 848-1299

Date: April 16, 2021

To:

Ric-Man Construction FL, Inc.

Attention: Michael Fischer

Subject: 12 St 25HP Well Pump Quote Number: 12ST25WP

We are pleased to offer the following equipment:

Qty Description

Flygt Model NP-3171.095 LT 10" volute Submersible pump equipped with a 1 460 Volt / 3 phase / 60 Hz 25 HP 1160 RPM motor, 614 impeller, 1 x 50 Ft. length of submersible cable, FLS leakage detector, volute is prepared for Flush Valve, Explosion proof

- 1 START UP,FLYGT,NO TAX 1-TP MODELS: 3000,7000,8000
- 1 CONNECTION, DISCH 10"X 10" CI
- 1 ½ X 316SS Standard Mounting plates (For 10" Base Elbow)
- 30 CHAIN 5/16" 316SS SWL2750# (1 X 30')
- 1 KIT, CHAIN FITTING 316SS+ FLYGT
- 8 ROD, THREADED 3/4"-10X12" 316SS
- 4 PPAC AC100PLUS ADHESIVE+ ANCHORING SYSTEM
- 50 TS3163 FEET 3"GUIDE RAIL 316SS (2 X 10' + 2 X 15")
- 1 BRACKET, GUIDE BAR UPPER 3" 316
- 1 3" 316SS Intermediate Guide Bar Bracket (10" Riser Pipe)
- 1 HOLDER, CABLE HEAVY DUTY 316SS
- 1 56" X 112" Frame Opening Drainage Well Hatches Galv Steel DT-AHD
- 1 52" X 60" Frame Opening Wet Well Hatch Galv Steel DT-AHD
- 1 36" X 78" Frame Opening Settling Tank Hatch Galv Steel DT-AHD
- 1 Storm Water Manhole Cover USF385 Ring
- 4 SENSOR, ENM-10 0.95-1.165'
- 1 Simplex Control Panel 460V 3Ph 25hp NEMA 3R12 316 SS enclosure w/ MultiSmart Primary control & LTU 801 pressure transducer and back up Float control & Gen receptacle
- 1 Motor/ Float Connection Box
- 1 SHIPPING AND HANDLING-NO TAX

Price: \$129,718.50 plus taxes, freight included

Exclusions:

WE DO NOT SUPPLY, PIPING, VALVES, GUIDE BARS, PRESSURE GAUGES, DISCONNECTS, JUNCTION BOXES, KELLUMS GRIPS, SURGE PROTECTION EQUIPMENT, SPARE PARTS, LABOR OR ANY OTHER

ITEM NOT SPECIFICALLY LISTED ABOVE.

PLEASE MAKE PURCHASE ORDERS OUT TO: XYLEM WATER SOLUTIONS USA, INC.

Validity:

THIS QUOTE IS VALID FOR NINETY (90) DAYS UNLESS LONGER TIME AGREED TO IN WRITING.





Xylem Water Solutions USA, Inc. Flygt Products

15132 Park of Commerce Blvd./102 Jupiter, FL 33478 Tel (561) 848-1200 Fax (561) 848-1299

State, local, and other applicable taxes are not included in this quotation.

Freight Terms:

DAP; Jobsite - Full Freight Allowed (per Incoterms 2020)

Shortages:

Xylem will not be responsible for apparent shipment shortages or damages incurred in shipment that are not reported within two weeks from delivery to jobsite. Damages should be noted on the receiving slip and the truck driver advised of the damages. Please contact our office as soon as possible to report damages or shortages so that replacement items can be shipped and the appropriate claims made.

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Payment Terms: 100% NET 90 DAYS AFTER SHIPMENT DATE.

(Note: Partial billing will be made on partial shipments)

Xylem's payment shall not be dependent upon Purchaser being paid by any third party unless Owner denies payment due to reasons solely attributable to items related to the equipment being provided by

FLYGT.

Schedule:

Please consult your local Flygt branch for submittals and fabrication lead-times.

Back Charges:

Buyer shall not make purchases nor shall Buyer incur any labor that would result in a back charge to

Seller without prior written consent of an authorized employee of seller.

<u>Terms & Conditions</u>: This order is subject to the Standard Terms and Conditions of Sale – Xylem Americas effective on the date the order is accepted which terms are available at http://www.xyleminc.com/en-us/Pages/terms-conditions-of-sale.apx and incorporated herein by reference and made part of the agreement between the parties.

We thank you for your interest in our equipment and look forward to being of service to you in the near future.

IN THE ABSENCE OF A FORMAL ISSUED PURCHASE ORDER, A SIGNED COPY OF THIS PROPOSAL IS ACCEPTABLE AS A BINDING CONTRACT.

Xylem Water Solutions USA, Inc.	Company Name:	
Rul Ru	Address:	
	Accepted By:	
	Print Name:	
	Date:	





Xylem Water Solutions USA, Inc. Flygt Products

15132 Park of Commerce Blvd./102 Jupiter, FL 33478 Tel (561) 848-1200 Fax (561) 848-1299

Date: April 16, 2021

To: Ric-Man Construction FL, Inc.

Attention: Michael Fischer

Subject: 13 St 25HP Well Pump Quote Number: 13ST25WP

We are pleased to offer the following equipment:

Qty Description

- Flygt Model NP-3171.095 LT 10" volute Submersible pump equipped with a 460 Volt / 3 phase / 60 Hz 25 HP 1160 RPM motor, 614 impeller, 1 x 50 Ft. length of submersible cable, FLS leakage detector, volute is prepared for Flush Valve, Explosion proof
- 1 START UP,FLYGT,NO TAX 1-TP MODELS: 3000,7000,8000
- 1 CONNECTION, DISCH 10"X 10" CI
- 1 ½ X 316SS Standard Mounting plates (For 10" Base Elbow)
- 30 CHAIN 5/16" 316SS SWL2750# (1 X 30')
- 1 KIT, CHAIN FITTING 316SS+ FLYGT
- 8 ROD,THREADED 3/4"-10X12" 316SS
- 4 PPAC AC100PLUS ADHESIVE+ ANCHORING SYSTEM
- 50 TS3163 FEET 3"GUIDE RAIL 316SS (2 X 10' + 2 X 15")
- 1 BRACKET, GUIDE BAR UPPER 3" 316
- 1 3" 316SS Intermediate Guide Bar Bracket (10" Riser Pipe)
- 1 HOLDER, CABLE HEAVY DUTY 316SS
- 1 56" X 112" Frame Opening Drainage Well Hatches Galv Steel DT-AHD
- 1 52" X 60" Frame Opening Wet Well Hatch Galv Steel DT-AHD
- 1 36" X 78" Frame Opening Settling Tank Hatch Galv Steel DT-AHD
- 1 Storm Water Manhole Cover USF385 Ring
- 4 SENSOR,ENM-10 0.95-1.1 65'
- Simplex Control Panel 460V 3Ph 25hp NEMA 3R12 316 SS enclosure w/ MultiSmart Primary control & LTU 801 pressure transducer and back up Float control & Gen receptacle
- 1 Motor/ Float Connection Box
- 1 SHIPPING AND HANDLING-NO TAX

Price: \$129,718.50 plus taxes, freight included

Exclusions: WE DO NOT SUPPLY, PIPING, VALVES, GUIDE BARS, PRESSURE GAUGES, DISCONNECTS, JUNCTION

BOXES, KELLUMS GRIPS, SURGE PROTECTION EQUIPMENT, SPARE PARTS, LABOR OR ANY OTHER

ITEM NOT SPECIFICALLY LISTED ABOVE.

PLEASE MAKE PURCHASE ORDERS OUT TO: XYLEM WATER SOLUTIONS USA, INC.

Validity: THIS QUOTE IS VALID FOR NINETY (90) DAYS UNLESS LONGER TIME AGREED TO IN WRITING.





Xylem Water Solutions USA, Inc. Flygt Products

15132 Park of Commerce Blvd./102 Jupiter, FL 33478 Tel (561) 848-1200 Fax (561) 848-1299

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State, local, and other applicable taxes are not included in this quotation.

Freight Terms:

DAP; Jobsite - Full Freight Allowed (per Incoterms 2020)

Shortages:

Xylem will not be responsible for apparent shipment shortages or damages incurred in shipment that are not reported within two weeks from delivery to jobsite. Damages should be noted on the receiving slip and the truck driver advised of the damages. Please contact our office as soon as possible to report damages or shortages so that replacement items can be shipped and the appropriate claims

made.

Payment Terms:

100% NET 90 DAYS AFTER SHIPMENT DATE.

(Note: Partial billing will be made on partial shipments)

Xylem's payment shall not be dependent upon Purchaser being paid by any third party unless Owner denies payment due to reasons solely attributable to items related to the equipment being provided by

FLYGT.

Schedule:

Please consult your local Flygt branch for submittals and fabrication lead-times.

Back Charges:

Buyer shall not make purchases nor shall Buyer incur any labor that would result in a back charge to

Seller without prior written consent of an authorized employee of seller.

<u>Terms & Conditions</u>: This order is subject to the Standard Terms and Conditions of Sale – Xylem Americas effective on the date the order is accepted which terms are available at http://www.xyleminc.com/en-us/Pages/terms-conditions-of-sale.apx and incorporated herein by reference and made part of the agreement between the parties.

We thank you for your interest in our equipment and look forward to being of service to you in the near future.

IN THE ABSENCE OF A FORMAL ISSUED PURCHASE ORDER, A SIGNED COPY OF THIS PROPOSAL IS ACCEPTABLE AS A BINDING CONTRACT.

Xylem Water Solutions USA, Inc.	Company Name:	
Rul Ru	Address:	
	Accepted By:	
	Print Name:	
	Date:	





234 NE 3rd Street Suite 1101 Miami, FL 33132 (305) 992-5415 Office www.AtlanticCoastDrilling.com

April 15, 2021

WELL PROPOSAL

Attn:

Rafael Vega

To:

RIC-MAN Construction 3100 SW 15th Street,

Deerfield Beach, Fl 33442

954-426-1221

Job Name:

Job Address:

Location: along West Ave. from Lincoln Rd.

down to 8th street. Miami Beach, FL

Temp. dewatering well

We hereby propose to furnish all necessary materials and labor- complete in accordance with Florida Department of Environmental Protection (FDEP) requirements and South Florida building codes as follows:

Installation of:

Fifteen (15) - 24" dia. Temp. Dewatering Well (class V) at \$23,000.00 (Each)

Up to 100' feet, additional depth at \$195.00 per foot.

TOTAL: \$345,000.00

Price Includes:

- 1. Mobilization of drill rig equipment, tools, & labor. Two (2) Man Drilling Crew.
- 2. Containment of Development water
- 3. Made in America Steel Pipe (New, No Mids, No Mill SPECS.)
- 4. Each well will be capped with a lid.
- 5. Well Completion reports.
- 6. Specific capacity drawdown test concurrent with well development.

Exclusions:

- 1). Structure over well, manhole ring and covers, lateral piping to the well, & pumps.
- 2). Civil plans, Site access, MOT & locations / well layout should be completed by a surveyor.
- 3). Underground clearances, aside from 811 Call Sunshine.
- 4). Site restorations, disposition of well cuttings.
- 5). Payment performance bonds.
- 6). Permit Fees, FDEP, County & City well construction permits.
- 7). Reasonable Assurance Report by PG for FDEP review.

Note: Atlantic Coast Drilling cannot guarantee Well Capacity

This proposal is good for 30 days - These prices are For Your Eyes Only
Payment to be made upon Requisition - Interest accrues @ 1 1/2% monthly on unpaid balance

Acceptance of Proposal

The above prices, specifications and conditions are satisfactory; payment will be made as outlined above.

Atlantic Coast Drilling, Inc.
Marcos Aleman - President

Authorized	Authorized		
Signature:		200 10	
Print & Date:	Signature:	Marcos Aleman	
	Date:	04/15/2021	

Terms and Conditions: All work to be completed in workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra cost will be executed only upon written orders, and will become extra charge over and above this estimate. Client agrees to pay all collection costs on all unpaid balances. Atlantic Coast Drilling Inc. shall not be held responsible for capacity of well due to geographic formation, ACD shall not be held responsible damage to underground utilities or structures not identified prior to work commencement. ACD cannot be held responsible for delays caused by bad weather, supplier shorts, strikes, or acts of God. This contract may be terminated at the option of ACD for any reason.

			1	#
M	wire, conduit install total	Pump Install Cost	Total	
	\$97,200.00	\$34,000.00	\$131,200.00	4 19 21
	\$12,994.20	\$34,000.00	\$46,994.20	
16th Bay rd	\$28,938.60	\$34,000.00	\$62,938.60	
16th Wst	\$6,386.04	\$34,000.00	\$40,386.04	
15th Terr - BR	\$11,387.52	\$34,000.00	\$45,387.52	
15th Terr - Wst	\$8,136.94	\$34,000.00	\$42,136.94	
	\$19,449.00	\$34,000.00	\$53,449.00	
			922,493	183
	\$7,574.40	\$34,000.00	\$41,574.40	
	\$8,629.20	\$34,000.00	\$42,629.20	
	\$8,438.40	\$34,000.00	\$42,438.40	126



Commodity Coverage - Metals

Steel Price Forecast and Market Outlook

Steel price forecast for 2021

The spike in steel prices is extraordinary. Many products are up 50–100% since late summer 2020, with the bulk of the increases occurring in November and December 2020. Sheet price in the United States has more than doubled since mid-2020 and just set a new all-time-record high.

Looking at some global prices, Chinese hot-rolled coil (HRC) averaged \$465 per metric ton in the fourth quarter of 2019 (pre-COVID-19). It dropped to \$440 for the second quarter and briefly approached \$420. By late December 2020, Chinese HRC price reached \$775 (an 85% increase) but quickly retreated 10%. European HRC was at \$506 in the fourth quarter of 2019, stayed below \$450 over much of the summer in 2020, then shot up to \$840 in January 2021. This is an increase of more than 90%. The United States was at \$505 in August; now in mid-January, there are unofficial reports at \$1,240, a 146% increase.

Learn more, visit Commodity Coverage - Metals

Prices are spiking to unsustainable peaks in 2021

Steel prices will spike in the first quarter but 'l following months. All products are rising rapidly construction and industrial recovery from COVIE

Welcome! How can we help you today?

outpaced sluggish capacity restarts, so supply is temporarily tight.

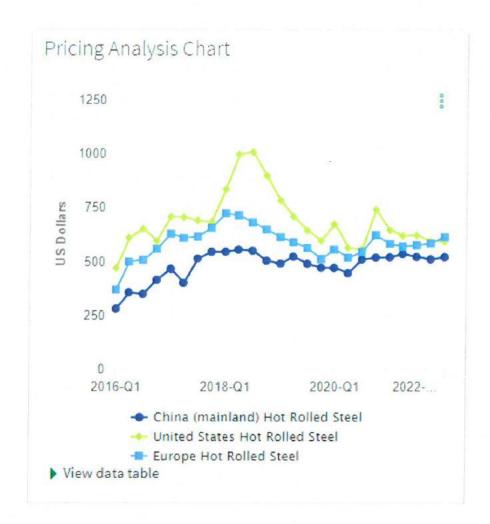
Mills have restarted in most regions, so shortages will not last and prices will retreat quickly over the second quarter.

Sheet prices are spiking in the United States at one of the fastest rates in history, despite ample (but idle) capacity. Despite the high prices, buyers should worry more about supply than price for the first quarter of 2021, but should avoid locking prices for the remainder of the year. Other products and regions have high prices for the first quarter of 2021 but are not experiencing shortages.

- The buying advice for steel is "wait." Prices spiked in the fourth quarter of 2020 and are carrying over into January. Prices are above fundamentals and will fall back in the second and third quarters. The exception is sheet, which is on allocation in the United States. Ensuring availability is more of a concern than price. Furnace restarts will alleviate supply and then price by the second quarter. Lead times are long in Europe but there is no allocation so far.
- Downside risk is high if the second wave of COVID-19 grows worse. However, if manufacturing and construction are idled, then steel demand and prices will fall.
- Upside risk from Australian cyclones is worth watching. Ore mines are at full capacity, so any disruption would be magnified. If cyclones disrupt delivery, ore would spike and with it, steel prices.

Bottom line: Steel forecast for 2021

We continue to hold that steel prices will peak globally in the first quarter of 2021 and then retreat. Sheet is on allocation in the United States and tight in Europe, so work to ensure supply even if you have to pay too much in first quarter 2021.



Experts



Mark Ulmer

The group specializes in monitoring...

Coal, Metals and Mi

Oil & Gas Upstream



Laura Hodges

Ms. Hodges is responsible for the manageme...

Economics
Country / Territor

John Anton

Mr. Anton has expertise in the ferrous metals...

Coal, Metals and Mi

Commodity Price F

Amanda Eglinton

Ms. Eglinton has been a part of the Pricing an...

Commodities

Sourcing and Supp

VIEW PROFILE

VIEW

VIEV. PROFILE

Welcome! How can we help you today?



Commodity Price Watch Monthly



15 Apr 2020 - Pricing and Purchasing | Scheduled Update

Commodity Price Monthly

Steel

Change from previous forecast: The forecast is lowered with only slight adjustments across products.

The general trend: Steel prices fall in the second quarter of 2020 but do not reach bottom until the third quarter. Prices challenge their 2015–16 lows but generally do not fall quite so far because input costs are now higher. Mills lose money nonetheless, so prices start to recover late in 2020 only because firms are forced to idle capacity.

Risk: Risk aligns on the downside and centers on the possibility that the global pandemic hits economies outside mainland China harder. The most immediate risk is to delivery, not price. Mills have closed in many countries, so alternate sources may become

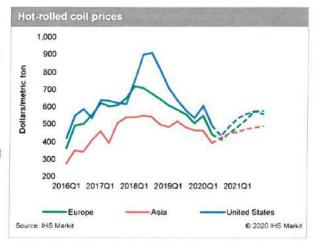


IHS Markit. 2020

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mandatory. The market is mentioning upside risk that we acknowledge but believe is overblown. The fear is that deep production cuts will set up shortages once demand comes roaring back. We do not think demand roars back, but if it does then the risk is real.

Iron ore: Iron ore prices have eased from March to April, falling around \$5/metric ton (5.6%) as demand concerns finally hit the market. Prices for iron ore have outperformed many other raw materials in 2020, however, owing to a combination of supply and demand factors. On the supply side, iron ore shipments through the first quarter, from both Australia and Brazil, have fallen 9.9% year on year (y/y) because of strong seasonal rains. As a result, iron ore inventories at Chinese ports have fallen to around 115 million metric tons (MMt), just above the 2019 low of 114 MMt at the height of the iron ore supply crunch last year. In terms of



demand, we saw the temporary shutdown of Chinese manufacturing, but blast furnace capacity utilization in mainland China fell only 7 percentage points to 73% at the lowest point of the shutdown. As mainland China opened up again through March, iron ore demand has increased with blast furnace utilization returning to 77% in mid-April.

Shipments and domestic iron ore production are improving with the second quarter, typically the year's strongest, which has helped pull prices down to around \$82/metric ton and should pull prices lower. With the rest of the world's steel production at a standstill in the second quarter, we are forecasting prices to fall to \$72/metric ton. Steady Chinese steel production, however, will prevent prices crashing to 2016 levels as we have seen in other commodities.

Scrap: Scrap prices have tanked over the past month as the steel industries throughout the West shut down. Turkish prices for heavy melt scrap (HMS) 80:20, the most heavily traded grade, fell 32.5% to \$210/metric ton before rebounding a little to \$238 on opportunistic buying. The Turkish response to COVID-19 has been less draconian and thus steel plants are still operating. Elsewhere, scrap prices look much worse. US buying has dried up so much that quoted prices on actual transactions are hard to find. There are indications that prices have fallen to \$140 or lower. These prices are designed to be so low that people stop bringing scrap to yards because no one is buying.

Electric arc mills in Europe and the US are either closed or set to close until social isolation measures are lifted. This creates an interesting dynamic in scrap markets because a few mills will continue to operate. These mills will continue to consume inventory at a time when little scrap generation in taking place. Manufacturing is no longer producing bushelling scrap, demolition has ceased, reducing heavy melt supply and a financial crisis will discourage consumers from trading in old vehicles to buy a new one, thereby reducing shredded scrap supply. This may provide some support to prices during this crisis. We are however forecasting demand to dominate and forecast prices of US HMS to average \$163/metric ton in the second quarter with US bushel prices to fall to \$212/metric ton, \$2 above our US shredded scrap forecast.

Coking coal: Prices have fallen as expected moving into April, as COVID-19 caused the shutdown of the majority of blast furnace capacity in Europe, Brazil, North America, and now, more critically for coking coal, India. There is also concern in the market that the Chinese fiscal stimulus will not drive growth in Chinese steel production over the 1 billion metric tons produced in 2019. We are forecasting imports into mainland China to fall by 6 MMt y/y in 2020 and as Indian steel is shut down, a similar volume will be lost there too. Coking coal production has in fact suffered in the first quarter, falling 4.8% y/y, which explained the rally in prices above \$160. Supply is now improving again which, combined with a near-shutdown of Western demand at least in the second quarter, has caused prices to fall to around \$132/metric ton for benchmark coking coal. We are forecasting prices to average \$124/metric ton in the second quarter before rallying again to around \$147 in the third quarter as more steel capacity comes back online.

Sheet: Sheet and plate have almost the same outlook. Sheet prices are dropping, and most regions have more downside to go. Association of Southeast Asian Nations (ASEAN) prices are down to \$380/metric ton, and it is likely mainland China will hit the same lows. We expect mills to sell sheet below cost in every region but the United States, and even profits



there will be very low. Because of the losses, an effective floor is placed under sheet. Otherwise we would likely fall to near late 2015 levels. Mainland China was hit first with the COVID-19 outbreak and so has been the first to recover. We thus expect a rapid rebound in mainland China, but a slow recovery to prices and production in almost every other region, including Europe and the United States.

Demand for both sheet and plate will be impacted severely by the crash in petroleum prices. New drilling will be curtailed and possibly face a temporary halt. Pipeline projects have longer construction duration, so should not be halted for a (hopefully) temporary disruption. However, as energy company cash flow becomes strained, there could be slowdowns even for long-term projects. Sheet suffers additional harm from hits to consumer demand, which may be the last sector to recover. Shipments to automotive and appliances will likely be weak for all of 2020, although rising off the floor by the fourth quarter.

Plate: Prices will drop sharply, limited only by cost of production. Like sheet, we expect mills to sell below cost in every region but the United States, and even there profits will be very low. Because of the losses there is an effective price floor. Otherwise we would likely fall to near late 2015 levels. Mainland China, hit first with the COVID-10 outbreak, has been the first to recover. We thus expect a fairly rapid rebound in mainland China but a slow recovery to prices and production in almost every other region, including Europe and the United States.

Demand for both sheet and plate will be impacted severely by the crash in petroleum prices. New drilling will be curtailed and possibly temporarily stop. Pipeline projects have a longer construction period, so should not be halted for a (hopefully) temporary disruption. However, as more energy companies' cash flow becomes strained there could be slowdowns even for long-term projects. Plate is stronger than sheet in that construction is a major end market, so there should be benefit as government stimulus programs are instituted.

Bar and rod: Bar and rod prices are weak but will fall even more as demand contracts because of COVID-19. Mainland China will hit bottom in the second quarter, but the rest of the world will not until the third quarter. Prices will be the lowest since late 2015/early 2016 and will be downside limited only because mills will be losing money and so will be forced to cut output. Grades that serve construction will recover more strongly than grades serving machinery and consumer durables. Government stimulus normally goes toward construction, so rebar will benefit more than merchant bar.

Steel pipe: The outlook for pipe prices has been revised lower on falling steel input costs and much weaker oil and gas sector demand. We had previously anticipated pipe prices were at or near bottom early in the first quarter, but now forecast prices to move lower over the second and third quarters as competition picks up among suppliers and buyers benefit from improved leverage in the weaker demand environment. At this time, we do not expect pipe prices to fall to the lows experienced during the 2015/16 downturn; however, pricing risk is squarely on the downside over the next two quarters.

IHS Markit steel price forecast, April 2020

Forecast change*

2021

2020

2019Q4 2020Q1 2020Q2 2020Q3 2020Q4 2021Q1 2021Q2 2021Q3 2021Q4

Steel raw materials prices

Iron ore, \$/dmtu

#1 busheling scrap US, \$/long ton

Shredded scrap US, \$/long ton

Shredded scrap Europe, \$/metric ton

Heavy melt scrap US, \$/long ton

Heavy melt scrap Europe, S/metric

ton

IHS Markit steel price forecast, April 2020

Forecast

change*

2019Q4 2020Q1 2020Q2 2020Q3 2020Q4 2021Q1 2021Q2 2021Q3 2021Q4 2020 2021

Heavy melt steel scrap China,

\$/metric ton

Metallurgical coal Australia, \$/metric

ton

Metallurgical coal China, S/metric ton

Steel flat product prices

Hot-rolled coil US, \$/short ton

Hot-rolled coil Europe, \$/metric ton

Hot-rolled coil China, \$/metric ton

Cold-rolled coil US, \$/short ton

Cold-rolled coil Europe, S/metric ton

Cold-rolled coil China, \$/metric ton

Galvanized sheet US, \$/short ton

Plate, cut to length US, \$/short ton

HDG steel Europe, \$/metric ton

HDG steel China, \$/metric ton

Discrete plate, Europe, \$/metric ton

Discrete plate, Asia, S/metric ton

Steel long product prices

Merchant bar US, S/short ton

Merchant bar Europe, \$/metric ton

Merchant bar Asia, \$/metric ton

Special quality bar US, \$/short ton

Rebar US, \$/short ton

Rebar Europe, \$/metric ton

Rebar China, \$/metric ton

Wire rod US, \$/short ton

Wire rod Europe, \$/metric ton

Wire rod (mesh quality) China,

\$/metric ton

Structurals US, \$/short ton

Structural steel Europe, \$/metric ton

Structural steel Asia, \$/metric ton

Source: IHS Markit

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Nonferrous metals

^{*} Up and down arrow signals if the price forecast is more than 5% higher or lower than the previous forecast. Please note that the forecast is available for download in the Costs and Prices Research section of Connect, Data presented in the Commodity Price Watch are often interim updates to our forecast, and as such may differ from the forecast in the spreadsheet tables.

^{**}Historical price sources: Argus

Changes to the forecast: The base metal forecasts have been lowered over the near term to reflect the rapid deterioration in conditions since January. All prices hit a low in the second quarter; all but copper are lower in the first quarter of 2021 than the average price recorded in the first quarter of 2020.

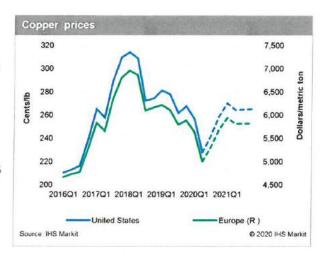
Aluminum: Lack of any meaningful production cuts to date make aluminum look the weakest of all base metals through 2021. London Metal Exchange (LME) prices have fallen under \$1,500 per metric ton, more than \$200 below our estimate of average smelter operating costs and therefore unsustainable in our view. This said, primary smelter production has not seen any sizable cuts since January. We expect announcements shortly.

There are signs that prices may finally be nearing a bottom. Futures prices show a widening contango, which makes carry trades (buying spot metal and selling it forward) increasingly attractive, especially with low interest rates minimizing financing costs. Scrap discounts are also narrowing as a lack of scrap generation and scrap collection tightens conditions, which may soon prompt secondary producers into the market for primary metal. The bottom line, however, is that while we believe the downside is limited, aluminum looks well supplied with only a slow rise in prices over the near term. We see little risk in a buy as needed strategy over the next quarter.

Copper: The market will record a surplus in 2020 because of plunging consumption in the first half of the year. While this shift in the market has undercut prices, our caution is that a quick supply-side reaction on top of an existing weakness in mine

production sets prices up for a rebound in the second half of the year once the global economy reboots.





Even though LME prices recently dropped as low as \$4,618 per metric ton in March, based on mine operating costs, we believe a sustained floor is probably closer to \$4,700 to \$4,800 per metric ton. Prices have recently moved closer to \$5,000 per metric ton on the wave of temporary mine and port closures, which are disrupting the flow of concentrates into the market. Visible inventory has risen since January but is still lower than it was at this time last year. Even modest physical consumption growth, if accompanied by a degree of inventory restocking later this year, will tighten the market. Our bottom line is that we see prices above \$5,600 by the end of this year and above \$5,800 per metric ton in early 2021. Current prices look attractive.

Nickel: The forecast for prices in the second quarter of 2020 has been lowered to reflect recent softness. However, we

Nickel: The forecast for prices in the second quarter of 2020 has been lowered to reflect recent softness. However, we believe prices have already bottomed out and will slowly move higher over the second quarter and second half of 2020 as Chinese demand improves and production is curtailed. Prices fell to nearly \$11,000/metric ton in late March, but stabilized and inched higher in early April. While upside risk to prices is limited given the current weakness in global demand, supply disruptions are large and mounting. Indonesia, the largest source of nickel ore to mainland China, implemented a ban on ore exports that took effect in January 2020, and other key producing countries are temporarily closing mines and facing other supply disruptions due to the COVID-19 outbreak, helping to put a floor under prices above the level reached during the 2015/16 market downturn. Tightening supply and slowly improving demand in mainland China will cause prices to move higher over the second quarter and the second half of the year. Our view is that prices below \$12,000/metric ton on the LME present a good buying opportunity.

Zinc: Prices under \$2,000/metric ton are buying opportunity. While zinc demand will decline in the coming months, supply-side disruptions limit further price declines in the second quarter. With Peru now implementing martial law to

contain the spread of COVID-19, mine production from a country representing about 10% of global supply remains challenged in 2020. Visible inventory on the London and Shanghai exchanges started April at 207,000 metric tons, which is well below the historical five-year average of 425,000 metric tons. The coverage ratio (inventory expressed in weeks of consumption) currently stands at 2.8 weeks in December, well below the five-year average of 4.6 weeks. Low inventory will continue to create upside price risk through year-end. Global consumption registered 1.6% y/y growth in January, its sixth consecutive monthly increase. The pace will decelerate in the coming months and IHS Markit expects near-zero growth in apparent global consumption for 2020. Prices average \$1,819/metric ton in the second half of 2020 with potential delays, mine closures, and slower Chinese refined zinc capacity restarts being an upside risk to the near-term outlook.

	2019Q4	2020Q1	2020 Q 2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2020	change*
Aluminum			100								
Aluminum Midwest US Delivery,											
cents/lb											
Aluminum LME, S/metric ton											
Aluminum SHFE, yuan/metric ton											
Copper											
Copper COMEX, cents/lb											
Copper LME, \$/metric ton											
Copper SHFE, yuan/metric ton											
Zinc											
Zinc Special High Grade, cents/lb											
Zinc LME, \$/metric ton											
Zinc SHFE, yuan/metric ton											
Other											
Nickel LME, \$/metric ton											
Nickel SHFE spot price, yuan/metric											
ton											
Tin LME, \$/metric ton											
Lead LME, S/metric ton											
Stainless steel											
Stainless sheet (304) US, S/short ton											
Stainless sheet (304) Europe,											
\$/metric ton											
Stainless sheet (304) China, S/metric											
ton											
Ferro-alloys											
Molybdenum, United States, \$/lb											
Charge chrome. Europe, \$/lb											
Cobalt, United States \$/lb											

^{*} Up and down arrow signals if the price forecast is more than 5% higher or lower than the previous forecast. Please note that the forecast is available for download in the Costs and Prices Research section of Connect. Data presented in the Commodity Price Watch are often interim updates to our forecast, and as such may differ from the forecast in the spreadsheet tables.

Source: IHS Markit

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^{**}Historical price sources: MEPS (stainless steel)

Ric-Man Construction Florida, Inc.
3100 SW 15th Street

Deerfield Beach, FL 33442

(954) 426-1226

Deerfield Beach, FL 33442

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			Total														14.634.00	159,019.00		173,653,00	8,683.00	5,470.00	102 000 00
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	4/17/2021		Delta	Material			\$ 7,982.00		6746.00		01	\$ 7,644.00		\$ 1,556.00	\$ 1,945.00				\$ 151 751 00	\$ 15,75,00		\$ 5,007,00	\$ 171 933 00 \$
		tractor Escalation	CO 38 total			359.455.00			185.448.00	14,489.00	274,491.00	267,900.00	40,000.00	43,229.00									
	West Ave South -090	Commodity and Subcontractor Escalation	New Total CO 38			\$ 473,490,00 \$			\$ 192,194.00 \$	15,010.00	284,373.00	\$ 275,544.00 \$	\$ 41,440.00 \$	44,785.00									
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					Quoted Escalator		%	alator	Precast Structures	rains	bes	Landscaping/Irrigation	Pipe Commodities	PVC Pipe, Fittings	Taxes 7% on \$27,789	Subcontractor Adjustments		Electrical- So FI Elect				& Ins	
			Item		Quoted	DI Pipe	Taxes - 7%	3.6% Escalator	Precast	Trench drains	Aggregates	Landsca	Pipe Cor	PVC Pipe	Taxes 79	Subcont	Asphalt	Electrica	Total	OH- 10/5	Subtotal	3% Bond & Ins	

	South Florida Electrical Consultant, Inc.				
	WEST AVENUE - SOUTH PROJECT - SIGNALIZATION AND LIGHTING QUANTITIES				
022	SIGNALIZATION				
ITEM NUMBER	DESCRIPTION	INS	OTV FST	INCREACE	THIOTHY
0630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE FOR SIGNALS, INCLUDES OPEN TRENCH INSTALLATION	1	3000	- CONTRACT	AMOONI
0635-2-11	PULL & JUNCTION BOXES FRI 13" X 24" FOR SIGNALS	1	2000	97.04	\$7,320,00
0640 34 403	MACTADLE CONTROL OF THE CONTROL OF T	EA	40	\$27.83	\$1,113.20
0048-01-100	MAST ARM, F&I, WIND SPEED-150, SINGLE ARM, W/O LUMINAIRE	EA	9	\$9.100.00	\$54 BOO OO
0670-5-120	TRAFFIC CONTROLLER ASSEMBLY, F&I, 170	AC		000000000000000000000000000000000000000	00,000,00
Not included:		OU	7	\$2,500,00	\$5,000,00
Vokielo Detroites					\$68,633.20
venicle Detection system					
	LIGHTING				
ITEM NUMBER	DESCRIPTION				
0715-1-12	LIGHTING CONDICTORS EXLINISH ATED NO A	20	GUANITI		AMOUNT
0745 4 44	I TOTAL CONTROL OF THE PROPERTY OF THE PROPERT	LF.	29300	\$0.90	\$26,370,00
41 -1 -61 10	LIGHTING CONDOCTORS, F&I, INSULATED, NO 1	LF	006	\$0.08	00 000
0630-2-12	CONDUIT, FURMISH & INSTALL, INCLUDES OPEN TRENCH INSTALLTION	4	20200	79 69	2002.00
0635-2-11	PULL 8. HUNCHON BOXES F81 43" X 24" FOR LIGHTING	-	76137	57.D4	\$60,184,08
Notae:	Dolar child dietikulian seriasisi dan	EA	106	\$27.83	\$2,949,98
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					Balance Control
					100000000000000000000000000000000000000



U.S. Pipe & Foundry Company, LLC Two Chase Corporate Drive, Suite 200 Birmingham, AL 35244



Sales Manager: Allred, Sean

Phone: 727-249-8809

Email: sallred@uspipe.com

Attn: Chris Bottome

Date: 9/17/2019

Quote #: 162963

Revision #: 0

Bid Date: 9/30/2019

City, St: FL

Engineer:

Addendums:

Location:

Project: West Ave. South

RFQ ID:

The EXPIRATION date for this quote is: 10/17/2019

	Qty		Description	Length	Weight	Price	Total Price
1	20	FT	04" TYTON DIP CL52 20' NOM BCL/AC (D)		261	\$17.29	\$345.80
2	445	FT	06" TYTON DIP CL52 20' NOM BCL/AC (D)		9,056	\$13.38	\$5,954.10
3	245	FT	08" TYTON DIP CL52 20' NOM BCL/AC (D)		7,007	\$18.80	\$4,606.00
4	4024	FT	12" TYTON DIP CL52 20' NOM BCL/AC (D)		190,335	\$31.10	\$125,146.40
5	2401	FT	20" TYTON DIP CL52 20' NOM BCL/AC (D)		213,689	\$58.52	\$140,506.52
6	1	EA	04" FIELD LOK 350 GASKET (I)		1	\$36.40	\$36.40
7	23	EA	06" FIELD LOK 350 GASKET (I)		14	\$51.68	\$1,188.64
8	13	EA	08" FIELD LOK 350 GASKET (I)		14	\$69.99	\$909.87
9	200	EA	12" FIELD LOK 350 GASKET (I)		420	\$101.65	\$20,330.00
10	120	EA	20" FIELD LOK 350 GASKET (I)		503	\$329.29	\$39,514.80
			Quote Totals:		421,299		\$338,538.53





U.S. Pipe & Foundry Company, LLC Two Chase Corporate Drive, Suite 200 Birmingham, AL 35244



Sales Manager: Allred, Sean

Phone: 727-249-8809

Email: sallred@uspipe.com

Attn: Chris Bottome

Date: 3/30/2021

Quote #: 162963

Revision #: 1

Bid Date: 9/30/2019

City, St: FL

Engineer:

Location:

Addendums:

Project: West Ave. South

RFQ ID:

The EXPIRATION date for this quote is: 9/26/2021

	Qty		Description	Length	Weight	Price	Total Price
1	20	FT	04" TYTON DIP CL52 20' NOM BCL/AC (D)		261	\$25.10	\$502.00
2	445	FT	06" TYTON DIP CL52 20' NOM BCL/AC (D)		9,056	\$19.28	\$8,579.60
3	245	FT	08" TYTON DIP CL52 20' NOM BCL/AC (D)		7,007	\$27.21	\$6,666.45
4	4024	FT	12" TYTON DIP CL52 20' NOM BCL/AC (D)		190,335	\$45.17	\$181,764.08
5	2401	FT	20" TYTON DIP CL52 20' NOM BCL/AC (D)		213,689	\$85.44	\$205,141.44
6	1	EΑ	04" FIELD LOK 350 GASKET (I)		1	\$41.60	\$41.60
7	23	EΑ	06" FIELD LOK 350 GASKET (I)		14	\$59.06	\$1,358.38
8	13	EΑ	08" FIELD LOK 350 GASKET (I)		14	\$79.99	\$1,039.87
9	200	EΑ	12" FIELD LOK 350 GASKET (I)		420	\$116.18	\$23,236.00
10	120	EA	20" FIELD LOK 350 GASKET (I)		503	\$376.34	\$45,160.80
			Quote Totals:		421,299		\$473,490.22

Ric-Man Construction Florida, Inc. 3100 SW 15th Street Deerfield Beach, FL 33442

West Ave 090/091				
Escalation RMCF Direct labor	4/13/2021			
	06		91	
Item	Hours	Cost	Hours Cost	Comments
Base Contract	23,762 \$	1,019,810.00	50,573 \$ 2,157,261.00	
CO38				
#11/23- labor escalation	S	66,028.00	\$ 114.825.00	
#5/1/- 10 year Storm water	7,361 \$	372,194.00		
#15. Rear to Errort	1028 \$	16,865.00		
#17 Near to Florit	_		939 \$ 45,862.00	
#1/14 Con cote			2453 \$ 141,781.00	
#14- Lincoln Rd DS	3433 \$	199,037.00	3433 \$ 200,101.00	
#2 -Alton CT			323 \$ 16,865.00	
#4 -6th St Side walk				
#3- Alton CT re-surfacing				
Q. Land Co.	385 \$	37,714.00		
Sub Totals	36.117 \$	1 720 909 00	20 000 100 0 4 100 00	
30 Months at 3% per year (0.25% per month)= 7.5% 1-091	7		n .	
27 Months at 3% per year (0.25% per Month=6.75%- 090	•	116,161.00	\$ 246,554.00	June 2022- January 2025 March 9,2021 - July 4,2023
New CO Escalation				
24 Months at 3% per year= 6%- 091	14,347 \$	747,978.00	42,242 \$ 2.152.147.00	2000 act 2000 act
6 months at 3% per year (0.25% per month = 1 cw), ood	4		S	2072 - 1017 - C707
OCO 1000 I DOUBLE TO TO THE TOTAL THE TOTAL TO THE TOTAL	^	11,370.00		Jan 2023- July 2023
Total Escalation	S	127,531.00	\$ 375,682.00	
3% Bond & Ins	\$	3,826.00	\$ 11,270.00	
Grand Total				

Employment, Hours, and Earnings from the Current Employmen

Original Data Value

CES2000000003

Series Id: Seasonally Adjusted

Series Title:

Construction

Average hourly earnings of all employees, construction, Super Sector:

Construction

NAICS Code: Industry:

AVERAGE HOURLY EARNINGS OF ALL

Data Type:

Years:

2011 to 2021

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep) to	N	200
-	25.46	25.44	25.34	25.38	25.35	25.35	25.36	25.46	25.40	25.40	200	290
12	25.50	25.55	25.66	25.65	25 69	25.71	25.25	25.72	64.04	27.04	44.07	25.49
13	25.96	26.03	25.98	26.03	28.04	00.90	0.00	77.07	98.67	25.84	25.95	25.95
4	26.41	26.76	26.40	0000	10.02	20.03	71.07	20.19	71.97	26.18	26.25	26.38
ш	1 0	0.10	20.40	20.30	10.07	79.97	26.66	26.73	26.81	26.86	26.92	26.87
0 (27.07	27.12	27.24	27.28	27.32	27.34	27.36	27.44	27.35	27.52	27.67	27 63
9 !	27.66	27.75	27.87	27.97	28.08	28.12	28.20	28.20	28.21	28.42	28.35	28.42
	28.53	28.52	28.61	28.61	28.73	28.89	28.95	29.00	29 16	20 12	20.00	4.04
2018	29.39	29.54	29.49	29.66	29.71	29.78	29.95	30.02	30.19	30.25	30.28	20.30
<u> </u>	30.33	30.43	30.50	30.63	30.70	30.74	30.76	30.88	30.89	31.00	31.12	31 16
2. :	31.23	31.36	31.37	31.38	31.50	31.63	31.74	31.82	31.82	31.87	31 97	32.00
Σ.	32.22	(32.33)										0.4.0

32.33