



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 11, 2021
 Sent Via Email

Attn: Sabrina Baglieri

Re: West Ave 091 – North

Subj: Change Order Review – RMCF Submission dated April 21, 2021
 CMA Comment Sheet Received 4/28/21

Revision #1	
10 Year Storm Piping & Structures	\$ <u>2,801,335</u>
WTS Relocation	\$ <u>3,290,898</u>
Water Quality	\$ <u>11,180,539</u>
Commodity & Subcontractor Escalation	\$ <u>1,486,952</u>
RMCF Labor Escalation	\$ <u>416,765</u>
Time Extension	1961 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 of 2.1B pricing from the 8/7/19 proposal in the evaluation, 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 - RMCF provided detailed cost and support documentation in its 4/21/21 submittal. However, as discussed, we can re-organize the submission to the City's format (template) at your direction upon approval of the Change order amount including scope clarifications contained therein.

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



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

Item 3 - RMCF offered in lieu of a fixed escalation adjustment that the City consider an escalation clause to protect RMCF and the City from volatile swings in material pricing, particularly steel and lumber.

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.)

Item 5 - The credits provided are identified on the revised spread sheets attached with back-up from the CO # 3B approved amounts. See item E below for further clarification.

Item 6 - All available back-up has been provided. RMCF's HCSS estimating and summary sheets with full costing breakouts and work hour/equipment calculations were provided. Certain old CES proposals were included for reference in the correspondence section of the submission as referenced in the cover letter.

Item 7 - Not applicable.

Item 8 - 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 9 - 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 mark-up and 10% RMCF mark up, accordingly.
- B- RMCF attaches back-up for the Bond and Insurance premium re-calculation of actual = 1.44%.
- C- RMCF includes the engineering fee adder for the 17th street sea wall and Lincoln road sea wall re-design. Construction costs for both Seawalls is included in the proposal.
- D- 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.



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E- 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. Therefore, no credit for the 96" pipe is forth coming. The final changes have been adjusted off of CO 3B item 17. (see attached documentation package)

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
- CES Proposals dated 5/7/21 (2 Ea.)
- Commodity and Subcontractor Escalation Rev 1 - 5/11/21
- Escalation RMCF Direct Labor Rev 1 - 5/11/21
- Revised Cost Spread Sheet and HCSS Summaries (WQ, WTS Relo & Drainage) Rev 1 - 5/10/21
- Quantity Comparison - 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

1. 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).
2. 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?
3. 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.
4. 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**

1. 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.
2. 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.
3. 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.

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

5. Some of the credits for the new "Drainage" spreadsheet (10yr increase + WTS) are not identified. Please identify.
6. 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**

1. In the narrative, please clarify conflict structures as required by 60% design drawings and specifically excluded by August 7, 2019 correspondence.
2. In the narrative for subcontractor commodity escalation, complete backup must be provided to justify the proposed cost.
3. 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?



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

C91
North
CO Value
19,155

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

1. 1080 100,000
 2. 18144 2,400,000
 3. 16,200 2,500,000
 4. 28,200 5,000,000
 5. 71,746 19,155,000

 106,370

$$106,370 \mid 19,155,000 = 0.56\%$$

Confidence. For What's Next.™



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.

<u>Policy Year</u>	<u>W/ Labor</u>		<u>W/ Labor</u>	
	<u>General Liability</u>	<u>Automobile</u>	<u>Umbrella</u>	<u>Installation/Equipment</u>
2019-2020	\$222,560 (\$51.74 rate)	\$90,000	\$123,000	\$19,828
2020-2021	\$368,869 (\$67.21 rate)	\$150,660	\$167,514	\$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.

North 091

Sincerely,

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

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

 $\% \text{ Inc} = 38\% - \text{Contract Completion 1/2025}$
 $\text{Allow 3 Years @ 15\% Inc} = 45\% \text{ Inc}$
 $0.44\% \times 1.38 = 0.61 + 45\% \text{ Escal} = 0.88$

Carry 0.88

City of Miami Beach
Design / Build Services for West Avenue Improvements
Phase II North of 14th Street

2016-091-KB

Lincoln Road Bulkhead Redesign

Scope of Services

May 7, 2021

Prepared By:



880 SW 145th Avenue, Suite 106
Pembroke Pines, Florida 3302

INTRODUCTION

At the request of the City of Miami Beach, CES Consultants, Inc. (CES) is pleased to submit this proposal to perform a redesign of the Lincoln Road Bulkhead. Due to the relocation of the Lincoln Road Pump Station, the bulkhead at the west end of Lincoln Road requires a complete redesign to remove the bulkhead and rework the connection between the Baywalk and the bulkhead.

DESCRIPTION OF SERVICES

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

1. Project Coordination and Meetings.

CES will host or participate in meetings with the Project Team to coordinate and review the design approach. Additionally, CES will manage communication between its subconsultant and the client.

2. Lincoln Road Bulkhead Improvement Redesign.

CES's subconsultant will redesign the waterfront bulkhead improvements to raise the bulkhead at Lincoln Road from the existing elevation at +3.0 NAVD up to the minimum elevation required by the City which is +5.70' NAVD. Based on design plans for the existing wall dated 2008 (constructed in 2010 timeframe), CES's subconsultant envisions a retaining wall concept to raise the elevation. Alternatively, a new sheet pile wall could be driven landward of the existing bulkhead. An 18-inch and a 36-inch culvert penetrate the bulkhead, both with backflow preventors that are currently located in drainage structures behind the bulkhead. If needed, the concrete retaining wall concept will facilitate accommodating these structures unless the Right of Way construction will abandon these culverts. In addition, an FPL duct bank extends under the existing bulkhead. This scope of work does not address a new sheet pile wall waterward of the existing wall. Connections to the proposed Baywalk will be coordinated. Additionally, this scope of work is to provide design services from 0% to 100%. The original task was 100% complete prior to this modification.

3. Lincoln Road Bulkhead – Baywalk Connection.

CES's subconsultant will design connection details for the proposed overwater Baywalk segment coming into the south end of the Lincoln Road shoreline from the first pile bent, over the existing bulkhead to the top of the wall landward of the existing bulkhead. This additional design work will be completed concurrently with the Baywalk Design.

4. Lincoln Road Bulkhead Design Coordination Meetings.

CES's subconsultant will participate or attend virtual meetings with the Project Team to coordinate and review the design approach. Due to COVID 19, CES's subconsultant will conduct these meetings with on-line collaboration tools such as WebEx, etc. Approximately ten (10) hours are budgeted. The Client will be advised if additional meetings are required for any reason.



City of Miami Beach
D/B Services for West Avenue Improvements
2016-091-KB
Lincoln Road Bulkhead Redesign
Scope of Services

5. Lincoln Road Bulkhead Building Permitting Consulting.

CES's subconsultant will review and respond to comments from the City building department as the Client processes the plans through the building department. Approximately ten (10) hours are budgeted for this effort to include some CAD design hours for revisions to drawings.

COMPENSATION

Compensation for this activity will be based on required effort. The total compensation for this effort will be \$44,217.04. Please see attached spreadsheet for details and individual amounts for each task.

Detailed Breakdown of Proposed Lincoln Road Bulkhead Change Order

<i>C.O. Task No.</i>	<i>C.O. Task Name</i>	<i>C.O. Contract Amount</i>
1	Project Coordination and Meetings	\$13,217.04
2	Lincoln Road Bulkhead Improvement Redesign	\$18,000.00
3	Lincoln Road Bulkhead – Baywalk Connection	\$10,000.00
4	Lincoln Road Bulkhead Design Coordination Meetings	\$1,500.00
5	Lincoln Road Bulkhead Building Permitting Consulting	\$1,500.00
	TOTAL	\$44,217.04

West Avenue Phase II - North Contract (091) - Baywalk and Lincoln Road Bulkhead Redesign

TITLES	Principal	Project Manager / EDR	QA/QC	Engineering Manager	Senior Civil Engineer	Structural Engineer	Electrical Engineer	Mechanical Engineer	Project Engineer	Civil Engineer II	Staff Engineer	Designer / CAD Manager	CAD Designer	Inspector	Public Relations Coordinator	Accounting	Admin.	Total Hours	Total Loaded Labor
CONTRACT RATES	\$ 362.50	\$ 267.93	\$ 233.54	\$ 209.15	\$ 226.93	\$ 217.50	\$ 180.80	\$ 190.97	\$ 145.00	\$ 130.00	\$ 104.02	\$ 116.00	\$ 90.00	\$ 180.00	\$ 162.26	\$ 116.71	\$ 78.10		
Change Order																			
Management, Quality Control, and Coordination																		60	\$ 13,317.04
1	Project Coordination and Meetings																	60	\$ 13,317.04
SUB-TOTAL																			
Sub-Consultants																			
2	Lincoln Road Bulkhead Improvement Redesign																	18	\$ 18,000.00
3	Lincoln Road Bulkhead - Baywalk Connection																	10	\$ 10,000.00
4	Lincoln Road Bulkhead Design Coordination Meetings																	1	\$ 1,500.00
5	Lincoln Road Bulkhead Building Permitting Consulting																	1	\$ 1,500.00
SUB-TOTAL																			
TOTAL HOURS PER TITLE:																		60	\$ 44,217.04
TOTAL FEE PER TITLE:																		60	\$ 44,217.04

City of Miami Beach

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

2016-091-KB

**17th Street Bulkhead, Dissipator,
Discharge Piping, and Junction Box Structures Design**

Scope of Services

May 7, 2021

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 a design of the 17th Street Bulkhead, discharge piping, and junction boxes. Due to the relocation of the Lincoln Road Pump Station, the bulkhead at the west end of Lincoln Road requires a complete redesign to remove the bulkhead and rework the connection between the Baywalk and the bulkhead. Additionally, due to the relocation of the Lincoln Road Pump Station, the bulkhead located at the Northwest corner of the intersection of West Avenue and 17th Street requires a complete design to incorporate discharge piping and a dissipator.

DESCRIPTION OF SERVICES

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

1. Project Coordination and Meetings.

CES will host or participate in meetings with the Project Team to coordinate and review the design approach. Additionally, CES will manage communication between its subconsultant and the client.

2. 17th Street and 1671 West Avenue Junction Box Structures.

CES will complete the engineering/structural design of the 17th Street and 1671 West Avenue junction box structures. CES will incorporate review comments as the design progresses. Technical specifications will be incorporated into the construction plans, with City details incorporated as appropriate.

3. 17th Street Engineering Site Visit.

CES's subconsultant will visit the site to obtain field measurements of the existing bulkhead along Dade Canal. The system is most likely a concrete pile/panel wall system with batter piles in lieu of tie backs. Field measurements will be obtained to verify as-built conditions. Existing utilities will be noted, and the utility routing design will be reviewed. Field notes and photographs will be taken, and the topographic survey will be reviewed in the field.

4. 17th Street Preliminary Dissipator Design.

CES's subconsultant will design a concrete dissipator box that will generally align with the back side (landward) of the existing bulkhead. The depth of the invert will be coordinated with the outfall pipes. CES will provide the maximum flow and velocity of the pumped discharge entering the dissipator box for CES's subconsultant to evaluate hydraulic forces on the structures. The dissipator box will be designed to be either cast-in-place or precast concrete. The existing bulkhead will be reviewed in terms of potential loads induced on the existing wall from the dissipator box, as support piling may be required so as not to overload the existing wall. Calculations will be performed, as the City will require these checks so the existing structure is



City of Miami Beach
D/B Services for West Avenue Improvements
2016-091-KB
17th Street Bulkhead, Dissipator, Discharge Piping, and Junction Box Structures Design
Scope of Services

not impacted. This design approach assumes the existing bulkhead is a concrete pile/panel bulkhead, and CES's subconsultant will design penetrations through the panels to connect the dissipator box. These penetrations will likely be 2 feet tall by 4 feet wide (or possibly wider), assuming the king piles are spaced on 10-foot centers. Structural detailing will be required to modify the concrete panels, and manatee grates will be specified, as applicable to comply with regulatory requirements. A riprap apron will be designed at the toe of the bulkhead to protect the adjacent channel from erosion. If an alternative design is required due to environmental impact concerns, the Client will be advised of any additional design effort required to be addressed under an addendum scope of work. CES's subconsultant will provide the number of dissipator penetrations, and the Client will evaluate the estimated flow and velocity from the 120,000 gpm pumps to ensure hydraulic performance of the dissipator system.

5. 17th Street Final Dissipator Design.

CES's subconsultant will complete the engineering design of the marine structure and advance the plans to 100% design. CES will provide review as the design progresses, and comments will be incorporated. Technical specifications will be incorporated into the construction plans with FDOT standard specifications and City details incorporated as appropriate.

6. 17th Street Design Coordination Meetings.

CES's subconsultant will participate or attend virtual meetings with the Project Team to coordinate and review the design approach. Due to COVID 19, CES's subconsultant will conduct these meetings with on-line collaboration tools such as WebEx, etc. Approximately ten (10) hours are budgeted. The Client will be advised if additional meetings are required for any reason.

7. 17th Street Building Permitting Consulting.

CES's subconsultant will review and respond to comments from the City building department as the CES processes the plans through the building department. Approximately twenty (20) hours are budgeted for this effort to include some CAD design hours for revisions to drawings.

8. Analysis and Revision of Maintenance of Traffic (MOT) Plans, due to the Pump Station Relocation.

CES's subconsultant will analyze and revise the Maintenance of Traffic (MOT) plans to address relocation of the proposed pump station. Two (2) additional MOT phases will be added: Phase #10 and Phase #11. Phase #10 will include a roadway closure along West Ave (from Lincoln Road to south of 17th Street), to allow for the installation of the proposed pump station and discharge piping. Phase #11 will include a roadway closure along 17th Street (from Dade Boulevard to just east of West Ave), to allow for the installation of the proposed discharge piping.

9. MOT Permit Processing and Meetings.

CES's subconsultant will represent the Project before agency staff, confer with staff to further advise them of the details of the Project, answer questions and address staff comments or requests for additional information. The Miami-Dade County Maintenance of Traffic (MOT) permit

City of Miami Beach
D/B Services for West Avenue Improvements
2016-091-KB
17th Street Bulkhead, Dissipator, Discharge Piping, and Junction Box Structures Design
Scope of Services

was issued on 2/18/2020; this permit can be extended by submitting the revised MOT plans. The FDOT General Use permit for MOT was issued on 9/25/2019 and expired on 9/24/2020. Since this permit cannot be extended, a new FDOT permit application and processing is required to obtain the MOT permit. CES's subconsultant will prepare the FDOT permit application and process the revised plans approvals. Miami Beach Public Works Department approved the MOT plans on 9/25/2019; reprocessing will be needed once the revised MOT plans are finalized.

10. Additional Survey for Discharge Piping and MOT Temporary Signalization

CES's subconsultant will provide a topographic survey for the following survey limits: Along West Avenue (between Lincoln Road and Dade Boulevard), along 17th Street (between Dade Boulevard and West Avenue), and along Dade Boulevard (between Sunset Harbour Drive and West Avenue). Survey information along Dade Boulevard is required to develop temporary signal plans and additional detours for street closures. Horizontal and vertical control points will be set, and right-of-way information will be collected within the survey limits. CES's subconsultant will locate the following aboveground improvements: trees, palms, concrete slabs, sidewalks, signs, fire hydrants, aboveground utilities, poles, catch basins, manholes, overhead lines, etc. CES's subconsultant will collect elevations equivalent to a fifty (50) foot grid and will include crown-of-road, back of sidewalk, edge of pavement, and lowest adjacent/highest adjacent elevations. CES's subconsultant will also collect existing drainage and sanitary sewer information such as: rim elevation, pipe size, pipe material, pipe direction and inverts. The Survey will be referenced to the Florida State Plane Coordinate System based on the North American Datum of 1983/2011 (NAD83/11) and elevations will be referenced to the North American Vertical Datum of 1988 (NAVD88).

11. Bathymetric Survey

CES's subconsultant collect five (5) cross-sections within Collins Canal using a Single-Beam Sonar Scanner. Spot elevations will be collected throughout the canal and will include top of bank, edge of water and top of sediment. Additionally, CES's subconsultant will attempt to collect the bottom of the canal. The Survey will be referenced to the Florida State Plane Coordinate System based on the North American Datum of 1983/2011 (NAD83/11) and elevations will be referenced to the North American Vertical Datum of 1988 (NAVD88).

12. 17th Street Dissipator Environmental Permitting.

CES's subconsultant has not yet consulted with the environmental agencies regarding this redesign of the pumped stormwater discharge into Dade Canal. Based on the services outlined in the Dissipator Design, the existing pile/panel wall will be modified, and a scour apron will be placed along the seabed within the canal such that a Miami-Dade County Division of Environmental Resources Management (DERM) Class I Permit will be required. This scope assumes that no seagrasses are present in the Project area, or that the scour apron can be sited to avoid seagrass impacts, such that the Project will qualify for a State Environmental Resource Permit (ERP) "de minimus" exemption and DERM and the U.S. Army Corps of Engineers (Corps) will not require any mitigation. It is assumed that National Marine Fisheries Service (NMFS) individual project consultation, scour or water quality studies, elevated authorizations, and/or mitigation calculations/design will not be required and that NMFS/Corps Jacksonville District



City of Miami Beach
D/B Services for West Avenue Improvements
2016-091-KB
17th Street Bulkhead, Dissipator, Discharge Piping, and Junction Box Structures Design
Scope of Services

Statewide Programmatic Biological Opinion (JaxBO) compliance can be verified without significant debate. It is assumed that there will be no submerged lands use issues, special easement considerations, separate/additional land use authorization requirements or water quality concerns raised in the context of the marine structures permit applications.

CES's subconsultant will provide for the permit application packages Construction Plans, a construction methodology narrative, turbidity control plan, and information regarding the project design and construction details, as appropriate. It is assumed that the Project does not require County Commission approval or Environmentally Sensitive Lands review for any reason and there will be no public comments/objections.

While we make every effort to keep our fees within estimates quoted, additional costs may be incurred due to circumstances beyond our immediate control, including but not limited to, rule or procedural changes, agency staff changes/delays, or legal actions. Please note that we cannot guarantee a particular outcome with agency staff in permitting negotiations.

13. Environmental Permit Consultations / Strategy.

CES's subconsultant will review Project background documents provided by the City and advise regarding any concerns or additional data collection needs. CES's subconsultant will draft a DERM Biological Assessment (BA) request and agent authorization letter for signature by the City and provide to the Client for execution. The City will directly provide payment of the BA fee in the amount of \$854.63 electronically or via check; please note that a \$530 credit toward the permit application fee will be provided if a Class I Permit application is submitted while the biological assessment is still valid. CES's subconsultant will submit the Biological Assessment request to DERM and follow up relative to scheduling the site visit. It is assumed that the DERM BA will be completed within the federally recognized seagrass growing season between June 1 and September 30 and that an additional/independent biological assessment will not be required for any reason. The location of any seagrasses within the Project vicinity will be used to inform the Project design.

CES's subconsultant will coordinate and conduct initial remote (online or telephone format) pre-application consultation discussions with Corps, State and Miami-Dade County DERM staff regarding the proposed Project scope and schedule. Florida Department of Environmental Protection (FDEP) versus South Florida Water Management District (SFWMD) jurisdiction will be discussed/confirmed based on site permitting history or other factors. Key regulatory compliance criteria will be discussed with agency staff, such as direct and secondary environmental impact avoidance/minimization. CES's subconsultant will provide to the Client a summary of initial environmental permitting agency feedback and advise regarding any concerns, recommendations and/or action items. Environmental permitting scope assumptions will be reviewed and confirmed or refined at this early point in the Project. Approximately sixteen (16) hours are budgeted for this effort; the Client will be advised if additional scope/budget is required for any reason.

14. Corps Permit Application.

CES's subconsultant will prepare a draft Corps permit application package and submit it for City review and signature prior to submittal to the agency. This scope of work assumes that a request for Nationwide Permit (NWP) verification will be submitted and that the Project design will meet all NWP conditions, including 1 cy/foot maximum volume for scour protection. It is assumed that no permit fee will be required.

15. ERP Exemption Application.

CES's subconsultant will prepare an Environmental Resource Permit (ERP) exemption verification request package and will submit it to the Client for City review and signature prior to submittal to the agency. The City will directly provide payment of the permit application and issuance fees electronically or via check upon agency confirmation of the amount due. This scope of work assumes that the Project will qualify for an exemption.

16. DERM Class I Permit Application.

CES's subconsultant will prepare a DERM Class I Coastal Construction Permit application package for the proposed Project and submit it to the Client for City review and signature. The City shall provide signed application forms and recorded warranty deeds or other property ownership evidence. The City will directly provide payment of the permit application and issuance fees electronically or via check upon agency confirmation of the amount due. CES's subconsultant will submit the permit application package to DERM. This scope of work assumes that the Project will qualify for a short form permit.

17. Environmental Permit Processing.

CES's subconsultant will represent the Project before agency staff, confer with staff to further advise them of the details of the Project, answer questions and address staff comments or requests for additional information. CES's subconsultant will maintain communications with agency staff to expedite their review and processing of the permit applications. CES's subconsultant will draft NMFS JAXBO consultation forms, if requested by the Corps or DERM project manager. CES's subconsultant will confer with the Client, and/or other Project team members as to questions, revisions, or additional items that may be required by agency staff. CES's subconsultant will submit the construction drawings for DERM Class I preliminary stamp of approval and provide these plans to the Client to process for City Structural and Zoning approval, which is required prior to DERM Class I permit issuance. The Client will provide a DERM Class I Permit contractor letter noting contact and license information prior to permit issuance, if required, or in satisfaction of permit conditions.

18. Environmental Permitting Meetings.

CES's subconsultant will coordinate and participate in meetings with the Client, City and/or regulatory agency staff, as appropriate, to discuss environmental permitting strategy, review permit-related documents, review agency requests for additional information and draft responses,



City of Miami Beach
D/B Services for West Avenue Improvements
2016-091-KB
**17th Street Bulkhead, Dissipator, Discharge Piping, and Junction Box Structures Design
Scope of Services**

or to address other permitting matters. Approximately sixteen (16) hours are budgeted for this effort; the Client will be advised if additional scope/budget is required for any reason.

COMPENSATION

Compensation for this activity will be based on required effort. The total compensation for this effort will be \$174,468.32. Please see attached spreadsheet for details and individual amounts for each task. Additionally, a credit will be issued to City of Miami Beach for the following tasks from the original agreement:

Detailed Breakdown of Proposed Lincoln Road Bulkhead Redesign and 17th Street Bulkhead Design Change Order

C.O. Task No.	C.O. Task Name	C.O. Contract Amount
1	Project Coordination and Meetings	\$27,014.08
2	17th Street and 1671 West Avenue Junction Box Structures	\$34,704.24
3	17th Street Engineering Site Visit	\$1,800.00
4	17th Street Preliminary Dissipator Design	\$8,900.00
5	17th Street Final Dissipator Design	\$13,400.00
6	17th Street Design Coordination Meetings	\$1,500.00
7	17th Street Building Permitting Consulting	\$3,000.00
8	Analysis and Revision of Maintenance of Traffic (MOT) Plans, due to the Pump Station Relocation	\$13,800.00
9	MOT Permit Processing and Meetings	\$19,600.00
10	Additional Survey for Discharge Piping and MOT Temporary Signalization	\$15,950.00
11	Bathymetric Survey	\$5,000.00
12	17th Street Dissipator Environmental Permitting	
13	Environmental Permit Consultations / Strategy	\$2,800.00
14	Corps Permit Application	\$3,000.00
15	ERP Exemption Application	\$3,000.00
16	DERM Class I Permit Application	\$3,000.00
17	Environmental Permit Processing	\$15,000.00
18	Environmental Permitting Meetings	\$3,000.00
	TOTAL	\$174,468.32

West Avenue Phase II Storm Drainage - North Contract (091) - 17th Street Bulkhead, Dissipator, Discharge Piping, and Junction Box Structures Design

TITLES	Principal	Project Manager EOR	QA/QC	Engineering Manager	Senior Civil Engineer	Structural Engineer	Electrical Engineer	Hydraulic Engineer	Project Engineer	Civil Engineer	Staff Engineer	Designer / CAD Manager	CAD Designer	Inspector	Public Relations Coordinator	Accounting	Admin.	Total Hours	Total Loaded Labor	
CONTRACT RATES	\$ 362.50	\$ 207.93	\$ 232.04	\$ 209.10	\$ 226.93	\$ 217.50	\$ 188.50	\$ 188.97	\$ 145.00	\$ 130.50	\$ 104.52	\$ 115.00	\$ 90.60	\$ 109.50	\$ 102.26	\$ 115.71	\$ 70.10			
Change Order																				
1 Project Coordination and Meetings																		124	\$ 27,014.08	
Management, Quality Control, and Coordination																				
SUB-TOTAL																			\$ 27,014.08	
17th Street Bulkhead, Dissipator, Discharge Piping, and Junction Box Structures Design																				
2 17th Street and 1671 West Avenue Junction Box Structures						40			40	40	40	40	40					7	250	\$ 34,704.24
SUB-TOTAL						40			40	40	40	40	40					7	250	\$ 34,704.24
Sub-Consultants																				
3 17th Street Engineering Site Visit																				\$ 1,600.00
4 17th Street Preliminary Dissipator Design																				\$ 8,500.00
5 17th Street Final Dissipator Design																				\$ 13,400.00
6 17th Street Design Coordination Meetings																				\$ 1,200.00
7 17th Street Building Permitting Consulting																				\$ 3,000.00
8 Analysis and Revision of Maintenance of Traffic (MOT) Plans, due to the Pump Station Relocation																				\$ 1,800.00
9 MOT Permit Processing and Meetings																				\$ 19,600.00
10 Additional Survey for Discharge Piping and MOT Temporary Signation																				\$ 15,950.00
11 Bathymetric Survey																				\$ 5,000.00
17th Street Dissipator Environmental Permitting																				
13 Environmental Permit Consultations / Strategy																				\$ 2,800.00
14 Corps Permit Application																				\$ 3,000.00
15 ERP Exemption Application																				\$ 3,000.00
16 CERL Class 1 Permit Application																				\$ 3,000.00
17 Environmental Permit Processing																				\$ 15,000.00
18 Environmental Permitting Meetings																				\$ 3,000.00
SUB-TOTAL						40			64	40	40	40	40					2	124	\$ 112,260.00
TOTAL HOURS PER TITLE:						40			64	40	40	40	40					2	124	
TOTAL FEE PER TITLE:	\$	\$ 22,697.49	\$	\$	\$ 8,700.00	\$	\$	\$ 12,180.00	\$ 5,220.00	\$ 4,180.00	\$ 4,540.00	\$ 3,644.00	\$	\$	\$	\$	\$	\$ 150.19	\$	\$ 174,466.32

Pump Station Relocation, page 1

Feb. 8, 2021, Rev 3/15/21, Rev 3/30/21, Rev 5/03/2021

CES Consultants, Inc.

14361 Commerce Way, Suite 103

Miami Lakes, FL 33016

Attn: Jose Caraballo, P.E.

Email to: jcaraballo@cesconsult.com

Email to: Erik Alcantara <ealcantara@cesconsult.com>

Re: Change Order for Pump Station relocation and West Avenue (North) Water Quality Wells
RFP No. 2016-090-KB, CWI No. 17102.00

Dear Jose:

Civil Works, Inc. (CWI) is pleased to submit this change order to your firm CES (the Client, and RIC-MAN FL, RCFL) for Selective Civil Engineering Design Services for the above project. The selective engineering design services will include improvements for the Maintenance of Traffic that will be modified to include the new work in West Ave between Lincoln Road and 17 St and at the 17 St and West Ave intersection. The water quality wells along the side streets between West Ave and Alton Road will modify the MOT segments. These include 7 locations on the side streets on 14 Ct/ Bay Road, 15 Terr/ Bay Road, 15 Terr/ West Ave, 16 St/ Bay Road, 16 St/ West Ave, Lincoln Road/ Bay Road, Lincoln Road/Bay Road.

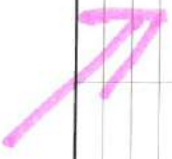
This change order is based on the plans received 1/29/2021, Drainage Wells and Revised Pump Station plans. As background, the previous submitted plans showed the Storm water pump station in Lincoln Road west of Lincoln Court. This revision is to move the pump station off of West Ave into a City owned parking lot and add storm water quality wells to 7 locations. The Signing and Marking Plans and lighting will require revisions to remove the pump station from Lincoln Road and revise the base plans for Lighting and signing and marking. Therefore, CWI will revise the affected civil engineer sheets.

Task 1 – Lincoln Rd Stormwater Pump Station and addition of Water Quality Wells.

Under this Task, CWI will revise the following items based on the revised roadway base files of Lincoln Rd, West Ave, Bay Rd and Alton Rd.

Sheet No	Description
M-1	The MOT phases will be renumbered based on the coordination with The Team Members due to the new location of the pump station at 1671 West Ave between Lincoln Road and 17 St. The pump station was Phase 1 in the previous schedule.
M-3	Revise the MOT signage based on the revised roadway base plan and moving the pump station to the 1671 West Ave parking lot.
M-4	Revise the MOT based on the additional phase at 17 St and West Avenue
M-6	Add an additional phase 10 in the MOT to include the West Ave from Lincoln Road to south of 17 St pump station and discharge pipes.

Item	West Ave North -091 Commodity and Subcontractor Escalation		5/11/2021		Total Impact	Notes
	New Total	CO 3B total	Delta Material	Delta Subcontract		
Quoted Escalator						
Flygt Pumps w/tax	\$ 2,202,075.00	\$ 2,899,219.00	\$ 697,144.00			See attached quotes US Pipe
DI Pipe	\$ 704,608.00	\$ 526,924.00	\$ 177,684.00			
Tax 7%			\$ 12,438.00			
3.6% Escalator						See Producer Price Index Graph
Trench drains	\$ 81,681.00	\$ 78,843.00	\$ 2,838.00			
Aggregates	\$ 592,834.00	\$ 572,234.00	\$ 20,600.00			
Landscaping/Irrigation	\$ 665,630.00	\$ 642,500.00	\$ 23,130.00			
Pipe Commodities	\$ 935,877.00	\$ 903,356.00	\$ 32,521.00			
PVC Pipe,Fittings	\$ 81,427.00	\$ 78,598.00	\$ 2,829.00			
Taxes - 7% on \$120,897			\$ 8,463.00			
Subcontractor Adjustments						
Asphalt						
Electrical- So FI Elect				\$ 26,016.00		See Quote Comparison and Proportioning to 090 See unit Pricing spread sheet from So FI Elect See quote comparison
Electrical- Benson -WTS				\$ 301,288.00		
				\$ 40,824.00		
Total			\$ 977,647.00	\$ 368,128.00		
OH- 10/5			\$ 101,663.00	\$ 18,406.00		
Subtotal			\$ 1,079,310.00	\$ 386,534.00		
1.44% Bond & Ins			\$ 15,542.00	\$ 5,566.00		
			\$ 1,094,852.00	\$ 392,100.00	\$ 1,486,952.00	



West Ave 090/091		Escalation RMCF Direct labor		5/11/2021		91		Comments	
Item	Hours	Cost	Hours	Cost	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	7,361	\$ 372,194.00	12,150	\$ 610,694.00					
#16- Alton Ct	1028	\$ 16,865.00							
#15- Rear to Front			939	\$ 45,862.00					
#6/18		0 \$	2453	\$ 141,781.00					
# 1/14- Gen sets	3433	\$ 199,037.00	3433	\$ 200,101.00					
#14- Lincoln Rd PS			323	\$ 16,865.00					
#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					June 2022- January 2025 March 9, 2021 - July 4, 2023
30 Months at 3% per year (0.25% per month)= 7.5%) -091				\$ 246,554.00					
27 Months at 3% per year (0.25% per Month=6.75%- 090									
New CO Escalation									
24 Months at 3% per year= 6%- 091			53,725	\$ 2,736,752.00					Jan 2023- Jan 2025
6 months at 3% per year (0.25% per month = 1.5%)- 090				\$ 164,295.00					Jan 2023- July 2023
Total Escalation									
1.44% N/1.55%\$						\$ 410,849.00		\$ 5,916.00	
Grand Total						\$ 416,765.00			



West Avenue North - 091

Drainage Pipe & Structures

5/10/2021

Item	Qty	Unit	Subcontractor	Material	Labor			Equipment	NewTotal	Original Total	Delta	Notes
					MH	Rate	Total					
Drainage Pipe												
Lincoln Court												
24" RCP	301	LF		\$ 17,654.00	200.66	\$ 47.06	\$ 9,443.00	\$ 8,341.00	\$ 35,438.00		\$ 35,438.00	All material reflects current pricing
30" RCP	8	LF		\$ 1,644.00	6.4	\$ 47.03	\$ 301.00	\$ 266.00	\$ 2,211.00		\$ 2,211.00	All material reflects current pricing
Haul out of Muck	4	CY		\$ 225.00	2.42	\$ 49.17	\$ 119.00	\$ 162.00	\$ 506.00		\$ 506.00	All material reflects current pricing
Dewatering	8	LF		\$ 112.00	1.34	\$ 48.51	\$ 65.00	\$ 31.00	\$ 208.00		\$ 208.00	All material reflects current pricing
14th Terrace												
24" RCP	372	LF		\$ 21,820.00	248	\$ 47.06	\$ 11,671.00	\$ 10,310.00	\$ 43,801.00		\$ 43,801.00	All material reflects current pricing
14th Court												
24" RCP	377	LF		\$ 22,113.00	251.34	\$ 47.06	\$ 11,829.00	\$ 10,450.00	\$ 44,392.00		\$ 44,392.00	All material reflects current pricing
Flamingo Way												
24" RCP	196	LF		\$ 11,499.00	130.66	\$ 47.06	\$ 6,149.00	\$ 5,431.00	\$ 23,079.00		\$ 23,079.00	All material reflects current pricing
15th Street												
24" RCP	505	LF		\$ 29,623.00	336.66	\$ 47.06	\$ 15,844.00	\$ 13,995.00	\$ 59,462.00		\$ 59,462.00	All material reflects current pricing
15th Terrace												
24" RCP	888	LF		\$ 52,089.00	592	\$ 47.06	\$ 27,861.00	\$ 24,611.00	\$ 104,561.00		\$ 104,561.00	All material reflects current pricing
36" RCP	357	LF		\$ 66,315.00	285.6	\$ 47.06	\$ 13,441.00	\$ 11,873.00	\$ 91,629.00		\$ 91,629.00	All material reflects current pricing
16th Street												
24" RCP	461	LF		\$ 27,026.00	307.34	\$ 47.06	\$ 14,464.00	\$ 12,778.00	\$ 54,268.00		\$ 54,268.00	All material reflects current pricing
Lincoln Terrace												
24" RCP	133	LF		\$ 7,803.00	88.66	\$ 47.07	\$ 4,173.00	\$ 3,685.00	\$ 15,661.00		\$ 15,661.00	All material reflects current pricing
Lincoln Road												
24" RCP	510	LF		\$ 29,915.00	340	\$ 47.06	\$ 16,001.00	\$ 14,135.00	\$ 60,051.00		\$ 60,051.00	All material reflects current pricing
36" RCP	149	LF		\$ 27,678.00	119.2	\$ 47.06	\$ 5,610.00	\$ 4,955.00	\$ 38,243.00		\$ 38,243.00	All material reflects current pricing
48" RCP	188	LF		\$ 40,643.00	136.72	\$ 47.06	\$ 6,434.00	\$ 5,684.00	\$ 52,761.00		\$ 52,761.00	All material reflects current pricing
72" RCP	370	LF		\$ 163,219.00	493.34	\$ 47.06	\$ 23,218.00	\$ 20,510.00	\$ 206,947.00		\$ 206,947.00	All material reflects current pricing
Bay Road (Lincoln Rd to 14th St.)												
24" RCP	818	LF		\$ 47,979.00	545.34	\$ 47.06	\$ 25,665.00	\$ 22,672.00	\$ 96,316.00		\$ 96,316.00	All material reflects current pricing
48" RCP	906	LF		\$ 186,948.00	1132.5	\$ 47.06	\$ 53,298.00	\$ 47,080.00	\$ 287,326.00		\$ 287,326.00	All material reflects current pricing
60" RCP	495	LF		\$ 160,748.00	660	\$ 47.06	\$ 31,061.00	\$ 27,438.00	\$ 219,247.00		\$ 219,247.00	All material reflects current pricing
72" RCP	288	LF		\$ 126,543.00	382.66	\$ 47.06	\$ 18,009.00	\$ 15,907.00	\$ 160,459.00		\$ 160,459.00	All material reflects current pricing
West Avenue (North of Lincoln Rd.)												
24" RCP	50	LF		\$ 2,933.00	33.34	\$ 47.06	\$ 1,569.00	\$ 1,387.00	\$ 5,889.00		\$ 5,889.00	All material reflects current pricing
48" RCP	313	LF		\$ 78,778.00	227.63	\$ 47.06	\$ 10,713.00	\$ 9,462.00	\$ 98,953.00		\$ 98,953.00	All material reflects current pricing
96" RCP	435	LF		\$ 256,355.00	1271.25	\$ 50.41	\$ 64,084.00	\$ 76,895.00	\$ 397,334.00		\$ 397,334.00	All material reflects current pricing
Haul out of Muck	359	CY		\$ 4,840.00	162.6	\$ 49.35	\$ 8,025.00	\$ 10,874.00	\$ 23,739.00		\$ 23,739.00	All material reflects current pricing
Dewatering	435	LF		\$ 33,373.00	33.9	\$ 48.29	\$ 1,637.00	\$ 783.00	\$ 35,793.00		\$ 35,793.00	All material reflects current pricing
West Avenue (Lincoln Rd. to 14th St.)												
24" RCP	224	LF		\$ 13,139.00	149.34	\$ 47.06	\$ 7,028.00	\$ 6,209.00	\$ 26,376.00		\$ 26,376.00	All material reflects current pricing
60" RCP	93	LF		\$ 30,207.00	124	\$ 47.06	\$ 5,836.00	\$ 5,155.00	\$ 41,198.00		\$ 41,198.00	All material reflects current pricing
72" RCP	1826	LF		\$ 812,081.00	2434.66	\$ 47.06	\$ 114,580.00	\$ 101,214.00	\$ 1,027,875.00		\$ 1,027,875.00	All material reflects current pricing
Pipe Credit												
24" RCP	865	LF							\$ (118,780.53)		\$ (118,780.53)	Pipe Under Contract (Base Bid & CO 3-B)
36" RCP	28	LF							\$ (3,277.90)		\$ (3,277.90)	Pipe Under Contract (Base Bid & CO 3-B)
48" RCP	3492	LF							\$ (636,760.00)		\$ (636,760.00)	Pipe Under Contract (Base Bid & CO 3-B)
60" RCP	584	LF							\$ (164,078.37)		\$ (164,078.37)	Pipe Under Contract (Base Bid & CO 3-B)
72" RCP	370	LF							\$ (172,606.25)		\$ (172,606.25)	Pipe Under Contract (Base Bid & CO 3-B)
78" RCP	260	LF							\$ (227,282.53)		\$ (227,282.53)	Pipe Under Contract (Base Bid & CO 3-B)
Drainage Structures												
Structures 4'x2.5' - 4'x4' - 4'x5'												
Structures Type 1, 2, 4, 5, 6J, J7, F and V	87	EA		\$ 218,610.00	3480	\$ 47.06	\$ 163,776.00	\$ 144,672.00	\$ 527,058.00		\$ 527,058.00	All material reflects current pricing
Round 3.5' & 4'												
Structures Type 4, 6 and 10	7	EA		\$ 23,982.00	280	\$ 47.06	\$ 13,177.00	\$ 11,640.00	\$ 48,799.00		\$ 48,799.00	All material reflects current pricing
Structures 4'x8' - 8'x6' - 8'x5' - 8'x8'												
Structures Type 5, 6J and J7	26	EA		\$ 145,539.00	2340	\$ 48.76	\$ 114,098.00	\$ 110,232.00	\$ 369,869.00		\$ 369,869.00	All material reflects current pricing
Round 6', 7', 8' & 10'												
Structures Type 5, 6J and J7	6	EA		\$ 37,138.00	320	\$ 47.06	\$ 15,060.00	\$ 13,303.00	\$ 65,501.00		\$ 65,501.00	All material reflects current pricing
Structures 6'x4' - 6'x6' - 6'x7'												
Structures Type 6J, J7 & G	21	EA		\$ 78,740.00	1680	\$ 47.06	\$ 79,065.00	\$ 69,842.00	\$ 227,647.00		\$ 227,647.00	All material reflects current pricing
Structures 7'x4'												
Structures Type 6J, J7 & F	8	EA		\$ 34,638.00	720	\$ 48.76	\$ 35,107.00	\$ 33,918.00	\$ 103,663.00		\$ 103,663.00	All material reflects current pricing
Structures 12'x8' - 12'x12'												
Structures Type J7	4	EA		\$ 67,735.00	360	\$ 48.76	\$ 17,554.00	\$ 16,959.00	\$ 102,248.00		\$ 102,248.00	All material reflects current pricing
Structures Credit												
P-9 Catch Basin	25	EA							\$ (230,236.19)		\$ (230,236.19)	Pipe Under Contract (Base Bid & CO 3-B)
Catch Basin	2	EA							\$ (19,690.05)		\$ (19,690.05)	Pipe Under Contract (Base Bid & CO 3-B)
I-7 Catch Basin	13	EA							\$ (132,329.64)		\$ (132,329.64)	Pipe Under Contract (Base Bid & CO 3-B)
I-9 Catch Basin	13	EA							\$ (155,722.33)		\$ (155,722.33)	Pipe Under Contract (Base Bid & CO 3-B)
J-7 Catch Basin	4	EA							\$ (53,949.23)		\$ (53,949.23)	Pipe Under Contract (Base Bid & CO 3-B)
J-9 Catch Basin	7	EA							\$ (38,490.97)		\$ (38,490.97)	Pipe Under Contract (Base Bid & CO 3-B)
Type P Inlet	9	EA							\$ (52,257.00)		\$ (52,257.00)	Pipe Under Contract (Base Bid & CO 3-B)
MH Round	15	EA							\$ (109,963.47)		\$ (109,963.47)	Pipe Under Contract (Base Bid & CO 3-B)
Manhole	2	EA							\$ (36,878.53)		\$ (36,878.53)	Pipe Under Contract (Base Bid & CO 3-B)
				\$ 1,431,014.00	8138.9		\$ 387,712.00	\$ 365,924.00	\$ 2,184,650.00		\$ 2,546,205.01	
									5% Subcontractor Markup	\$	-	
									10% Markup	\$	218,465.00	
									1.44% Bond & Insurance	\$	36,665.35	
									TOTAL	\$	2,801,335.36	

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
*** 100	Lincoln Court					Takeoff:	1.00 LS		Bid:	1.00 LS	
100.01	24" RCP Installation	301.00	LF	F6319A	50 10.00	9,443	15,879	1,775	8,341		35,438
Mh:	200.66	Shifts: 2.5	Mh/Un: 0.6666	Un/Sh: 120.0159		31.37	52.75	5.90	27.71		117.73
380.10	30" RCP Installation	8.00	LF	F6319A	50 10.00	301	1,595	49	266		2,212
Mh:	6.40	Shifts: 0.1	Mh/Un: 0.8000	Un/Sh: 100.0000		37.65	199.39	6.15	33.26		276.45
380.11	Haul Out Muck	4.00	CY	F6319A	50 10.00	119		225	162		506
Mh:	2.42	Shifts:	Mh/Un: 0.6050	Un/Sh:		29.86		56.25	40.46		126.57
380.12	Dewatering	8.00	LF	F6319A	50 10.00	65	112		31		208
Mh:	1.34	Shifts: 0.0	Mh/Un: 0.1675	Un/Sh: 307.6923		8.11	14.04		3.90		26.05
*****Biditem/Category	100	*****				9,929	17,586	2,049	8,800		38,364
Mh:	210.82	Mh/Un: 210.8200				9,928.99	17,586.01	2,049.00	8,800.15		38,364.15
*** 110	14th Terrace					Takeoff:	1.00 LS		Bid:	1.00 LS	
110.01	24" RCP Installation	372.00	LF	F6319A	50 10.00	11,671	19,624	2,196	10,310		43,802
Mh:	248.00	Shifts: 3.1	Mh/Un: 0.6667	Un/Sh: 120.0000		31.37	52.75	5.90	27.71		117.75
*****Biditem/Category	110	*****				11,671	19,624	2,196	10,310		43,802
Mh:	248.00	Mh/Un: 248.0000				11,671.43	19,624.47	2,196.00	10,309.95		43,801.85
*** 120	14th Court					Takeoff:	1.00 LS		Bid:	1.00 LS	
120.01	24" RCP Installation	377.00	LF	F6319A	50 10.00	11,829	19,888	2,225	10,450		44,391
Mh:	251.34	Shifts: 3.1	Mh/Un: 0.6667	Un/Sh: 120.0255		31.38	52.75	5.90	27.72		117.75
*****Biditem/Category	120	*****				11,829	19,888	2,225	10,450		44,391
Mh:	251.34	Mh/Un: 251.3400				11,828.65	19,887.99	2,224.80	10,449.63		44,391.07
*** 130	Flamingo Way					Takeoff:	1.00 LS		Bid:	1.00 LS	
130.01	24" RCP Installation	196.00	LF	F6319A	50 10.00	6,149	10,340	1,159	5,431		23,080
Mh:	130.66	Shifts: 1.6	Mh/Un: 0.6666	Un/Sh: 120.0245		31.37	52.76	5.91	27.71		117.75
*****Biditem/Category	130	*****				6,149	10,340	1,159	5,431		23,080
Mh:	130.66	Mh/Un: 130.6600				6,149.12	10,340.29	1,159.20	5,431.02		23,079.63
*** 140	15th Street					Takeoff:	1.00 LS		Bid:	1.00 LS	
140.01	24" RCP Installation	505.00	LF	F6319A	50 10.00	15,844	26,641	2,982	13,995		59,461
Mh:	336.66	Shifts: 4.2	Mh/Un: 0.6667	Un/Sh: 120.0095		31.37	52.75	5.90	27.71		117.75
*****Biditem/Category	140	*****				15,844	26,641	2,982	13,995		59,461
Mh:	336.66	Mh/Un: 336.6600				15,843.93	26,640.51	2,982.00	13,994.94		59,461.38
*** 150	15th Terrace					Takeoff:	1.00 LS		Bid:	1.00 LS	
150.01	24" RCP Installation	888.00	LF	F6319A	50 10.00	27,861	46,845	5,244	24,611		104,561
Mh:	592.00	Shifts: 7.4	Mh/Un: 0.6667	Un/Sh: 120.0000		31.37	52.75	5.91	27.71		117.75
*****Biditem/Category	150	*****				27,861	46,845	5,244	24,611		104,561
Mh:	592.00	Mh/Un: 592.0000				27,860.82	46,845.49	5,244.00	24,610.85		104,561.16
*** 160	16th Street					Takeoff:	1.00 LS		Bid:	1.00 LS	
160.01	24" RCP Installation	461.00	LF	F6319A	50 10.00	14,464	24,322	2,704	12,778		54,267
Mh:	307.34	Shifts: 3.8	Mh/Un: 0.6667	Un/Sh: 120.0208		31.38	52.76	5.86	27.72		117.72
380.10	36" RCP Installation	357.00	LF	F6319A	50 10.00	13,441	64,142	2,173	11,873		91,629
Mh:	285.60	Shifts: 3.6	Mh/Un: 0.8000	Un/Sh: 100.0000		37.65	179.67	6.09	33.26		256.66
*****Biditem/Category	160	*****				27,905	88,464	4,877	24,651		145,896
Mh:	592.94	Mh/Un: 592.9400				27,905.07	88,463.58	4,876.80	24,650.76		145,896.21
*** 170	Lincoln Terrace					Takeoff:	1.00 LS		Bid:	1.00 LS	
170.01	24" RCP Installation	133.00	LF	F6319A	50 10.00	4,173	7,016	787	3,685		15,661
Mh:	88.66	Shifts: 1.1	Mh/Un: 0.6666	Un/Sh: 120.0361		31.37	52.76	5.92	27.71		117.75
*****Biditem/Category	170	*****				4,173	7,016	787	3,685		15,661
Mh:	88.66	Mh/Un: 88.6600				4,172.50	7,016.49	787.20	3,684.98		15,661.17

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
*** 380	38	Lincoln Road				Takeoff:	1.00 LS		Bid:	1.00 LS	
380.01	24" RCP Installation	510.00	LF	F6319A	50 10.00	16,001	26,904	3,011	14,135		60,051
Mh:	340.00	Shifts: 4.3	Mh/Un: 0.6667	Un/Sh: 120.0000		31.37	52.75	5.90	27.71		117.75
380.10	36" RCP Installation	149.00	LF	F6319A	50 10.00	5,610	26,771	907	4,955		38,243
Mh:	119.20	Shifts: 1.5	Mh/Un: 0.8000	Un/Sh: 100.0000		37.65	179.67	6.09	33.26		256.67
380.20	48" RCP Installation	188.00	LF	F6319A	50 10.00	6,434	39,797	846	5,684		52,761
Mh:	136.72	Shifts: 1.7	Mh/Un: 0.7272	Un/Sh: 110.0059		34.23	211.68	4.50	30.23		280.64
380.30	72" RCP	370.00	LF	F6319A	50 10.00	23,218	161,474	1,745	20,510		206,947
Mh:	493.34	Shifts: 6.2	Mh/Un: 1.3334	Un/Sh: 60.0065		62.75	436.42	4.72	55.43		559.32
*****Biditem/Category		380	*****			51,263	254,946	6,509	45,284		358,002
Mh:	1,089.26	Mh/Un: 1,089.2600				51,262.99	254,945.71	6,509.10	45,283.98		358,001.78
*** 390	39	Bay Rd. (Lincoln Rd. to 14th St.)				Takeoff:	1.00 LS		Bid:	1.00 LS	
395.01	60" RCP Installation	495.00	LF	F6319A	50 10.00	31,061	158,569	2,179	27,438		219,247
Mh:	660.00	Shifts: 8.3	Mh/Un: 1.3333	Un/Sh: 60.0000		62.75	320.34	4.40	55.43		442.92
395.10	72" RCP Installation	287.00	LF	F6319A	50 10.00	18,009	125,251	1,292	15,907		160,459
Mh:	382.66	Shifts: 4.8	Mh/Un: 1.3333	Un/Sh: 60.0042		62.75	436.42	4.50	55.43		559.09
395.20	24" RCP Installation	818.00	LF	F6319A	50 10.00	25,665	43,153	4,826	22,672		96,316
Mh:	545.34	Shifts: 6.8	Mh/Un: 0.6667	Un/Sh: 120.0117		31.38	52.75	5.90	27.72		117.75
395.40	48" RCP	906.00	LF	F6319A	50 10.00	53,298	182,838	4,110	47,080		287,326
Mh:	1,132.50	Shifts: 14.2	Mh/Un: 1.2500	Un/Sh: 64.0011		58.83	201.81	4.54	51.96		317.14
*****Biditem/Category		390	*****			128,033	509,812	12,407	113,097		763,348
Mh:	2,720.50	Mh/Un: 2,720.5000				128,032.62	509,811.74	12,407.10	113,096.83		763,348.29
*** 395	395	West Ave. (North of Lincoln Rd.)				Takeoff:	1.00 LS		Bid:	1.00 LS	
390.01	24" RCP Installation	50.00	LF	F6319A	50 10.00	1,569	2,638	295	1,387		5,889
Mh:	33.34	Shifts: 0.4	Mh/Un: 0.6668	Un/Sh: 120.1923		31.38	52.75	5.90	27.74		117.78
390.05	48" RCP Installation	313.00	LF	F6319A	50 10.00	10,713	77,369	1,409	9,462		98,952
Mh:	227.63	Shifts: 2.8	Mh/Un: 0.7273	Un/Sh: 110.0176		34.23	247.19	4.50	30.23		316.14
390.10	96" RCP Installation	339.00	LF	F6319A	50 10.00	64,084	252,939	3,416	76,895		397,335
Mh:	1,271.25	Shifts: 14.1	Mh/Un: 3.7500	Un/Sh: 24.0000		189.04	746.13	10.08	226.83		1,172.08
390.11	Haul Out Muck	271.00	CY	F6319A	50 10.00	8,025		4,840	10,874		23,739
Mh:	162.60	Shifts:	Mh/Un: 0.6000	Un/Sh:		29.61		17.86	40.12		87.60
390.12	Dewatering	339.00	LF	F6319A	50 10.00	1,637	33,373		783		35,793
Mh:	33.90	Shifts: 0.7	Mh/Un: 0.1000	Un/Sh: 500.0000		4.83	98.45		2.31		105.58
*****Biditem/Category		395	*****			86,028	366,320	9,960	99,400		561,708
Mh:	1,728.72	Mh/Un: 1,728.7200				86,027.91	366,319.73	9,960.10	99,399.80		561,707.54
*** 400	40	West Ave. (Lincoln Rd. to 14th St.)				Takeoff:	1.00 LS		Bid:	1.00 LS	
390.01	24" RCP Installation	224.00	LF	F6319A	50 10.00	7,028	11,817	1,322	6,209		26,377
Mh:	149.34	Shifts: 1.9	Mh/Un: 0.6667	Un/Sh: 120.0429		31.38	52.75	5.90	27.72		117.75
390.11	60" RCP Installation	93.00	LF	F6319A	50 10.00	5,836	29,792	415	5,155		41,197
Mh:	124.00	Shifts: 1.6	Mh/Un: 1.3333	Un/Sh: 60.0000		62.75	320.34	4.46	55.43		442.98
400.12	72" RCP Installation	1,826.00	LF	F6319A	50 10.00	114,580	796,896	15,185	101,214		1,027,875
Mh:	2,434.66	Shifts: 30.4	Mh/Un: 1.3333	Un/Sh: 60.0007		62.75	436.42	8.32	55.43		562.91
*****Biditem/Category		400	*****			127,444	838,504	16,922	112,578		1,095,449
Mh:	2,708.00	Mh/Un: 2,708.0000				127,444.44	838,504.17	16,922.10	112,578.00		1,095,448.71
*** 501	32c	Additional Structures				Takeoff:	1.00 LS		Bid:	1.00 LS	
501.01	Structures 4'x2.5', 4'x4' & 4'x5'	87.00	EA	F6319A	50 10.00	163,776	202,950	15,660	144,672		527,058
Mh:	3,480.00	Shifts: 43.5	Mh/Un: 40.0000	Un/Sh: 2.0000		1,882.49	2,332.75	180.00	1,662.90		6,058.14
501.02	Round 3.5 & 4'	7.00	EA	F6319A	50 10.00	13,177	22,722	1,260	11,640		48,800
Mh:	280.00	Shifts: 3.5	Mh/Un: 40.0000	Un/Sh: 2.0000		1,882.49	3,246.01	180.00	1,662.90		6,971.39
501.03	Structures 4'x8', 8'x6', 8'x5' & 26.00	EA	F6319A	50 10.00		114,098	140,859	4,680	110,232		369,870
Mh:	2,340.00	Shifts: 26.0	Mh/Un: 90.0000	Un/Sh: 1.0000		4,388.38	5,417.67	180.00	4,239.71		14,225.76
501.04	Round 6', 7' 8' & 10'	6.00	EA	F6319A	50 10.00	15,060	36,058	1,080	13,303		65,501
Mh:	320.00	Shifts: 4.0	Mh/Un: 53.3333	Un/Sh: 1.5000		2,509.98	6,009.59	180.00	2,217.19		10,916.77
501.05	Structures 6'x4', 6'x6', & 6'x7'	21.00	EA	F6319A	50 10.00	79,065	74,960	3,780	69,842		227,646
Mh:	1,680.00	Shifts: 21.0	Mh/Un: 80.0000	Un/Sh: 1.0000		3,764.98	3,569.50	180.00	3,325.79		10,840.27
501.06	Structures 7'x4'	8.00	EA	F6319A	50 10.00	35,107	33,198	1,440	33,918		103,663

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total	
Mh:	720.00	Shifts:	8.0	Mh/Un:	90.0000	Un/Sh:	1.0000	4,388.38	4,149.80	180.00	4,239.71	12,957.89
501.07	Structures 12'x8 and 12'x12"	4.00	EA	F6319A	50	10.00	17,554	67,015	720	16,959	102,247	
Mh:	360.00	Shifts:	4.0	Mh/Un:	90.0000	Un/Sh:	1.0000	4,388.38	16,753.73	180.00	4,239.71	25,561.81
*****Biditem/Category		501	*****				437,837	577,762	28,620	400,566	1,444,784	
Mh:	9,180.00	Mh/Un:	9,180.0000				437,836.68	577,761.55	28,620.00	400,565.87	1,444,784.10	
Mh:	19,877.56	***REPORT TOTALS***					945,965	2,783,748	95,937	872,857	4,698,507	

N = Activity not adjusted to bid quantity



West Avenue North - 091

Pump Station - Rev 1

5/10/2021

Item	Qty	Unit	Subcontractor	Material	Labor			Equipment	NewTotal	Original Total	Delta	Notes
					MH	Rate	Total					
Pump Station Engineering												
Redesign of Pump Station	1	LS	\$ 152,500.00	\$ -			\$ -	\$ -	\$ 152,500.00	\$ 152,500.00	\$ -	50% Balance
Lincoln Road Bulkhead Redesign	1	LS	\$ 44,217.04						\$ 44,217.04	\$ 44,217.04	\$ -	
17th St. Bulkhead	1	LS	\$ 174,468.32						\$ 174,468.32	\$ 174,468.32	\$ -	
Sidewalk/Tree Removal/Landscaping/Fencing												
Fence 7' high	420	LF	\$ 8,400.00	\$ -			\$ -	\$ -	\$ 8,400.00	\$ 8,400.00	\$ -	
Double Gate	1	EA	\$ 10,000.00	\$ -			\$ -	\$ -	\$ 10,000.00	\$ 10,000.00	\$ -	
Landscaping 17th St. & Parking Area	1	LS	\$ 35,000.00	\$ -			\$ -	\$ -	\$ 35,000.00	\$ 35,000.00	\$ -	
Irrigation	1	LS	\$ 5,000.00	\$ -			\$ -	\$ -	\$ 5,000.00	\$ 5,000.00	\$ -	
Sidewalk - 6' wide	3000	SF	\$ 30,000.00	\$ -			\$ -	\$ -	\$ 30,000.00	\$ 30,000.00	\$ -	
Tree Removal	1	LS	\$ 5,000.00	\$ -			\$ -	\$ -	\$ 5,000.00	\$ 5,000.00	\$ -	
Utility Relocation												
Utility Relocation	1	LS	\$ -	\$ 1,200.00	300	\$ 48.68	\$ 14,604.00	\$ 13,886.00	\$ 29,690.00	\$ 29,690.00	\$ -	
Utility Removal												
Utility Removal	1	LS	\$ -	\$ 960.00	240	\$ 48.68	\$ 11,683.00	\$ 11,109.00	\$ 23,752.00	\$ 23,752.00	\$ -	
Paving Parking Lot												
Paving Parking Lot	1611	SY	\$ 24,926.00	\$ -			\$ -	\$ -	\$ 24,926.00	\$ 24,926.00	\$ -	
Existing Asphalt Removal & Stone Base Installation	1000	SY	\$ -	\$ 5,675.00	180	\$ 48.68	\$ 8,762.00	\$ 8,331.00	\$ 22,768.00	\$ 22,768.00	\$ -	
MOT 17th St. & West Ave.												
MOT 17th St. & West Ave.	1	LS	\$ 7,500.00	\$ 10,300.00	880	\$ 38.79	\$ 34,139.00	\$ 13,200.00	\$ 65,139.00	\$ 65,139.00	\$ -	
Platform Screening & Support												
Platform Screening & Support	3400	SF	\$ -	\$ 277,478.00	1200	\$ 48.68	\$ 58,416.00	\$ 17,051.00	\$ 352,945.00	\$ 352,945.00	\$ -	
Curb & Gutter	420	LF	\$ 14,700.00	\$ -			\$ -	\$ -	\$ 14,700.00	\$ 14,700.00	\$ -	
FPL Vault												
FPL Vault	1	LS	\$ -	\$ 171,600.00			\$ -	\$ -	\$ 171,600.00	\$ 171,600.00	\$ -	
Transition Box												
Cofferdam 60' x 30'	5400	SF	\$ 170,000.00	\$ 13,375.00	1760	\$ 48.28	\$ 84,968.00	\$ 112,915.00	\$ 381,258.00	\$ 381,258.00	\$ -	
Excavate/Backfill extra at deep section	800	CY	\$ -	\$ 3,852.00	300	\$ 48.68	\$ 14,604.00	\$ 13,886.00	\$ 32,342.00	\$ 32,342.00	\$ -	
Backfill Perimeter	320	TON	\$ -	\$ 13,136.00	180	\$ 48.68	\$ 8,762.00	\$ 8,331.00	\$ 30,229.00	\$ 30,229.00	\$ -	
Dewatering	1	LS	\$ -	\$ 16,374.00	200	\$ 50.66	\$ 10,131.00	\$ 4,617.00	\$ 31,122.00	\$ 31,122.00	\$ -	
Dissipator Receiver Box												
Dissipator Receiver Box	4200	SF	\$ 100,000.00	\$ 13,375.00	640	\$ 48.28	\$ 30,897.00	\$ 35,857.00	\$ 180,129.00	\$ 180,129.00	\$ -	
Tremie Seal	200	CY	\$ -	\$ 2,782.00	144	\$ 48.68	\$ 7,010.00	\$ 7,200.00	\$ 16,992.00	\$ 16,992.00	\$ -	
Backfill - Stone Base	800	CY	\$ -	\$ 2,889.00	300	\$ 48.68	\$ 14,604.00	\$ 13,886.00	\$ 31,379.00	\$ 31,379.00	\$ -	
Backfill Perimeter	400	TON	\$ -	\$ 11,670.00	180	\$ 48.68	\$ 8,762.00	\$ 8,331.00	\$ 28,763.00	\$ 28,763.00	\$ -	
Dewatering	1	LS	\$ -	\$ 16,374.00	126.61	\$ 50.66	\$ 6,414.00	\$ 2,922.00	\$ 25,710.00	\$ 25,710.00	\$ -	
17th Sea Wall & Lincoln Rd.												
Credits	1	LS	\$ -	\$ (19,000.00)	0		\$ -	\$ -	\$ (19,000.00)	\$ (19,000.00)	\$ -	Tie-Back System
Sea Wall Removal (17th St.)	80	LF	\$ 3,500.00	\$ 11,000.00	240	\$ 48.68	\$ 11,683.00	\$ 8,331.00	\$ 34,514.00	\$ 34,514.00	\$ -	
Pile Cap Replacement	12	CY	\$ 15,600.00	\$ 43,228.00	640	\$ 48.08	\$ 30,769.00	\$ 21,761.00	\$ 111,358.00	\$ 111,358.00	\$ -	
Tremie Seal	20	CY	\$ -	\$ 2,782.00	144	\$ 48.68	\$ 7,010.00	\$ 6,665.00	\$ 16,457.00	\$ 16,457.00	\$ -	
Dewatering	1	LS	\$ -	\$ 6,634.00	50	\$ 50.66	\$ 2,533.00	\$ 1,154.00	\$ 10,321.00	\$ 10,321.00	\$ -	
84" Hobas Pipe												
84" Hobas Pipe	450	LF		\$ 647,948.00	1312.5	\$ 52.50	\$ 68,909.00	\$ 89,892.00	\$ 806,749.00	\$ 806,749.00	\$ -	
Haul out of Muck	359	CY		\$ 6,475.00	211.86	\$ 53.57	\$ 11,349.00	\$ 14,168.00	\$ 31,992.00	\$ 31,992.00	\$ -	
Dewatering	450	LF		\$ 44,191.00	45	\$ 50.67	\$ 2,280.00	\$ 1,039.00	\$ 47,510.00	\$ 47,510.00	\$ -	
Flap Valves												
Credits	4	EA	\$ -	\$ (10,000.00)			\$ -	\$ -	\$ (10,000.00)	\$ (10,000.00)	\$ -	60" Flap Valves
8" AV Butterfly Valves												
			\$ -	\$ -	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	
Hatches												
			\$ -	\$ -	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	
Platform												
Platform	48	SF	\$ -	\$ -	80	\$ 49.54	\$ 3,963.00	\$ 1,791.00	\$ 5,754.00	\$ 5,754.00	\$ -	
Restoration West Ave. from Lincoln Rd. to 17th												
Milling Existing Asphalt	3310	SY	\$ 9,930.00	\$ -			\$ -	\$ -	\$ 9,930.00	\$ 9,930.00	\$ -	
Road Grading	3310	SY	\$ -	\$ 6,698.00	132	\$ 51.06	\$ 6,740.00	\$ 5,563.00	\$ 19,001.00	\$ 19,001.00	\$ -	
Paving	3310	SY	\$ 49,650.00	\$ -			\$ -	\$ -	\$ 49,650.00	\$ 49,650.00	\$ -	
Striping and Signage	1	LS	\$ 12,500.00	\$ -			\$ -	\$ -	\$ 12,500.00	\$ 12,500.00	\$ -	
Header Pipe System												
Credits	1	LS	\$ -	\$ (62,534.00)			\$ -	\$ -	\$ (62,534.00)	\$ (62,534.00)	\$ -	Header Pipe System
			\$ 872,891.36	\$ 1,238,462.00	9485.97		\$ 458,992.00	\$ 421,886.00	\$ 2,992,231.36	\$ 2,992,231.36	\$ -	
									5% Subcontractor Markup	\$ 43,644.57		
									10% RMCF Markup	\$ 211,934.00		
									1.44% Bond & Insurance	\$ 43,088.13		
									TOTAL	\$ 3,290,898.06		

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
*** 11	CES Engineering					Takeoff:	1.00 LS		Bid:	1.00 LS	
11.01	CES Engineering	1.00	LS	F6319A	50	10.00		152,500			152,500
Mh:	Shifts:	Mh/Un:		Un/Sh:				152,500.00			152,500.00
11.02	CES Engineering	1.00	LS	F6319A	50	10.00		44,217			44,217
Mh:	Shifts:	Mh/Un:		Un/Sh:				44,217.04			44,217.04
11.03	CES Engineering	1.00	LS	F6319A	50	10.00		174,468			174,468
Mh:	Shifts:	Mh/Un:		Un/Sh:				174,468.32			174,468.32
*****	Biditem/Category	11	*****					371,185			371,185
Mh:	Mh/Un:							371,185.36			371,185.36
*** 12	Sidewalk/tree removal/Landscaping/Fencing					Takeoff:	1.00 LS		Bid:	1.00 LS	
12.01	Fence 7' high	420.00	LF	F6319A	50	10.00				8,400	8,400
Mh:	Shifts:	Mh/Un:		Un/Sh:						20.00	20.00
12.02	Double Gate	1.00	EA	F6319A	50	10.00				10,000	10,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						10,000.00	10,000.00
12.03	Landscaping 17th St. & Parkin	1.00	LS	F6319A	50	10.00				35,000	35,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						35,000.00	35,000.00
12.04	Irrigation	1.00	LS	F6319A	50	10.00				5,000	5,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						5,000.00	5,000.00
12.05	Sidewalk - 6' wide	3,000.00	SF	F6319A	50	10.00				30,000	30,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						10.00	10.00
12.06	Tree Removal	1.00	LS	F6319A	50	10.00				5,000	5,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						5,000.00	5,000.00
*****	Biditem/Category	12	*****							93,400	93,400
Mh:	Mh/Un:									93,400.00	93,400.00
*** 13	Utility Relocatopn					Takeoff:	1.00 LS		Bid:	1.00 LS	
13.01	Utility Relocatopn	1.00	LS	F6319A	50	10.00	14,604	1,200	13,886		29,690
Mh:	300.00	Shifts:	5.0	Mh/Un:	300.0000	Un/Sh:	0.2000	14,603.93	1,200.00	13,885.80	29,689.73
*****	Biditem/Category	13	*****				14,604	1,200	13,886		29,690
Mh:	300.00	Mh/Un:	300.0000				14,603.93	1,200.00	13,885.80		29,689.73
*** 14	Utility Removals					Takeoff:	1.00 LS		Bid:	1.00 LS	
14.01	Utility Removals	830.00	LF	F6319A	50	10.00	11,683	960	11,109		23,752
Mh:	240.00	Shifts:	4.0	Mh/Un:	0.2892	Un/Sh:	207.5000	14.08	1.16	13.38	28.62
*****	Biditem/Category	14	*****				11,683	960	11,109		23,752
Mh:	240.00	Mh/Un:	240.0000				11,683.14	960.00	11,108.64		23,751.78
*** 15	Paving Parking Lot					Takeoff:	1.00 LS		Bid:	1.00 LS	
15.01	Paving Parking Lot	1,611.00	SY	F6319A	50	10.00				24,926	24,926
Mh:	Shifts:	Mh/Un:		Un/Sh:						15.47	15.47
15.02	Aphalt Removal & Stone Base	1,000.00	SY	F6319A	50	10.00	8,762	2,675	3,000	8,331	22,769
Mh:	180.00	Shifts:	3.0	Mh/Un:	0.1800	Un/Sh:	333.3333	8.76	2.68	3.00	8.33
*****	Biditem/Category	15	*****				8,762	2,675	3,000	8,331	24,926
Mh:	180.00	Mh/Un:	180.0000				8,762.38	2,675.00	3,000.00	8,331.48	24,926.30
										47,695	47,695.16
*** 16	MOT 17th St. & West Ave.					Takeoff:	1.00 LS		Bid:	1.00 LS	
16.01	MOT 17th St. & West Ave.	1.00	LS	F6319A	50	10.00	34,139	10,300	13,200	7,500	65,139
Mh:	880.00	Shifts:		Mh/Un:	880.0000	Un/Sh:		34,139.46	10,300.00	13,200.00	7,500.00
*****	Biditem/Category	16	*****				34,139	10,300	13,200	7,500	65,139
Mh:	880.00	Mh/Un:	880.0000				34,139.46	10,300.00	13,200.00	7,500.00	65,139.46
*** 17	Platform Screening & Support					Takeoff:	1.00 LS		Bid:	1.00 LS	
17.01	Platform Screening & Support	3,400.00	SF	F6319A	50	10.00	58,416	277,478	17,051		352,945
Mh:	1,200.00	Shifts:	20.0	Mh/Un:	0.3529	Un/Sh:	170.0000	17.18	81.61	5.02	103.81
17.02	Curb & Gutter	420.00	LF	F6319A	50	10.00				14,700	14,700
Mh:	Shifts:	Mh/Un:		Un/Sh:						35.00	35.00

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
*****Biditem/Category		17	*****			58,416	277,478		17,051	14,700	367,645
Mh:	1,200.00	Mh/Un:	1,200.0000			58,415.76	277,477.75		17,051.20	14,700.00	367,644.71
***	18	FPL Vault				Takeoff:	1.00	LS	Bid:	1.00	LS
18.01	FPL Vault	1.00	LS	F6319A	50 10.00					171,600	171,600
Mh:		Shifts:	Mh/Un:	Un/Sh:						171,600.00	171,600.00
*****Biditem/Category		18	*****							171,600	171,600
Mh:		Mh/Un:								171,600.00	171,600.00
***	19	Transition Box				Takeoff:	1.00	LS	Bid:	1.00	LS
19.01	Cofferdam 60' x 30'	5,400.00	SF	F6319A	50 10.00	84,968	13,375		112,915	170,000	381,258
Mh:	1,760.00	Shifts:	22.0	Mh/Un:	0.3259	Un/Sh:	245.4545		15.73	2.48	20.91 31.48 70.60
19.02	Excavate/Backfill extra at deep	800.00	CY	F6319A	50 10.00	14,604	3,852		13,886		32,342
Mh:	300.00	Shifts:	5.0	Mh/Un:	0.3750	Un/Sh:	160.0000		18.25	4.82	17.36 40.43
19.03	Backfill Perimeter	320.00	TON	F6319A	50 10.00	8,762	5,136	8,000	8,331		30,230
Mh:	180.00	Shifts:	3.0	Mh/Un:	0.5625	Un/Sh:	106.6667		27.38	16.05	25.00 26.04 94.47
19.04	Dewatering	1.00	LS	F6319A	50 10.00	10,131	16,374		4,617		31,122
Mh:	200.00	Shifts:	4.0	Mh/Un:	200.0000	Un/Sh:	0.2500		10,131.36	16,374.36	4,616.68 31,122.40
*****Biditem/Category		19	*****			118,466	38,737	8,000	139,749	170,000	474,952
Mh:	2,440.00	Mh/Un:	2,440.0000			118,465.60	38,737.36	8,000.00	139,749.19	170,000.00	474,952.15
***	20	Dissipator Receiver Box				Takeoff:	1.00	LS	Bid:	1.00	LS
20.01	Dissipator Receiver Box	4,200.00	SF	F6319A	50 10.00	30,897	13,375		35,857	100,000	180,129
Mh:	640.00	Shifts:	8.0	Mh/Un:	0.1524	Un/Sh:	525.0000		7.36	3.18	8.54 23.81 42.89
20.02	Tremie Seal	20.00	CY	F6319A	50 10.00	7,010	2,782		7,200		16,992
Mh:	144.00	Shifts:	2.4	Mh/Un:	7.2000	Un/Sh:	8.3333		350.50	139.10	360.01 849.60
20.03	Backfill - Stone Base	800.00	CY	F6319A	50 10.00	14,604	2,889		13,886		31,379
Mh:	300.00	Shifts:	5.0	Mh/Un:	0.3750	Un/Sh:	160.0000		18.25	3.61	17.36 39.22
20.04	Backfill Perimeter	400.00	TON	F6319A	50 10.00	8,762	6,420	5,250	8,331		28,764
Mh:	180.00	Shifts:	3.0	Mh/Un:	0.4500	Un/Sh:	133.3333		21.91	16.05	13.13 20.83 71.91
20.05	Dewatering	1.00	LS	F6319A	50 10.00	6,414	16,374		2,922		25,710
Mh:	126.61	Shifts:	2.5	Mh/Un:	126.6100	Un/Sh:	0.3949		6,413.53	16,374.36	2,922.36 25,710.25
*****Biditem/Category		20	*****			67,687	41,840	5,250	68,197	100,000	282,974
Mh:	1,390.61	Mh/Un:	1,390.6100			67,687.16	41,840.36	5,250.00	68,196.54	100,000.00	282,974.06
***	21	17th Sea Wall & Lincoln Rd.				Takeoff:	1.00	LS	Bid:	1.00	LS
21.01	Credits	-1.00	LS	F6319A	50 10.00					-19,000	-19,000
Mh:		Shifts:		Mh/Un:		Un/Sh:				19,000.00	19,000.00
21.02	Sea Wall Removal (17th St.)	80.00	LF	F6319A	50 10.00	11,683	10,700	300	8,331	3,500	34,515
Mh:	240.00	Shifts:	4.0	Mh/Un:	3.0000	Un/Sh:	20.0000		146.04	133.75	3.75 104.14 43.75 431.43
21.03	Pile Cap Replacement	12.00	CY	F6319A	50 10.00	30,769	43,228		21,761	15,600	111,358
Mh:	640.00	Shifts:	5.0	Mh/Un:	53.3333	Un/Sh:	2.4000		2,564.12	3,602.33	1,813.40 1,300.00 9,279.85
21.04	Tremie Seal	20.00	CY	F6319A	50 10.00	7,010	2,782		6,665		16,457
Mh:	144.00	Shifts:	2.4	Mh/Un:	7.2000	Un/Sh:	8.3333		350.50	139.10	333.26 822.85
21.05	Dewatering	1.00	LS	F6319A	50 10.00	2,533	6,634		1,154		10,321
Mh:	50.00	Shifts:	1.0	Mh/Un:	50.0000	Un/Sh:	1.0000		2,532.82	6,634.00	1,154.17 10,320.99
*****Biditem/Category		21	*****			51,995	63,344	-18,700	37,912	19,100	153,651
Mh:	1,074.00	Mh/Un:	1,074.0000			51,995.25	63,344.00	-18,700.00	37,911.63	19,100.00	153,650.88
***	22	84" Hobas Pipe				Takeoff:	1.00	LS	Bid:	1.00	LS
22.01	84" PCCP	450.00	LS	F6319A	50 10.00	68,909	647,948		89,892		806,750
Mh:	1,312.50	Shifts:	18.8	Mh/Un:	2.9167	Un/Sh:	24.0000		153.13	1,439.88	199.76 1,792.78
380.02	Haul Out Muck	80.00	CY	F6319A	50 10.00	11,349		6,475	14,168		31,992
Mh:	211.86	Shifts:		Mh/Un:	2.6483	Un/Sh:			141.86	80.94	177.10 399.90
380.03	Dewatering	450.00	LF	F6319A	50 10.00	2,280	44,191		1,039		47,509
Mh:	45.00	Shifts:	0.9	Mh/Un:	0.1000	Un/Sh:	500.0000		5.07	98.20	2.31 105.58
*****Biditem/Category		22	*****			82,538	692,139	6,475	105,099		886,251
Mh:	1,569.36	Mh/Un:	1,569.3600			82,537.65	692,139.13	6,475.00	105,099.06		886,250.84

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
*** 23		60" Flap Valves				Takeoff:	1.00 LS		Bid:	1.00 LS	
23.01	Credits	-4.00	EA	F6319A	50 10.00			-10,000			-10,000
Mh:	Shifts:	Mh/Un:		Un/Sh:				2,500.00			2,500.00
*****	Biditem/Category	23	*****					-10,000			-10,000
Mh:	Mh/Un:							-10,000.00			-10,000.00
*** 26		PLatform				Takeoff:	1.00 LS		Bid:	1.00 LS	
26.01	PLatform	48.00	SF	F6319A	50 10.00	3,963			1,791		5,754
Mh:	80.00 Shifts:	Mh/Un:	1.6667	Un/Sh:		82.56			37.31		119.87
*****	Biditem/Category	26	*****			3,963			1,791		5,754
Mh:	80.00 Mh/Un:	80.0000				3,962.68			1,790.88		5,753.56
*** 27		Restoration West Ave. from Lincoln Rd. to 17				Takeoff:	1.00 LS		Bid:	1.00 LS	
27.01	Milling Existing Asphalt	3,310.00	SY	F6319A	50 10.00					9,930	9,930
Mh:	Shifts:	Mh/Un:		Un/Sh:						3.00	3.00
27.02	Road Grading	3,300.00	SY	F6319A	50 10.00	6,740	6,698		5,563		19,001
Mh:	132.00 Shifts: 3.3	Mh/Un: 0.0400		Un/Sh: 1,000.0000		2.04	2.03		1.69		5.76
27.03	Paving	3,310.00	SY	F6319A	50 10.00					49,650	49,650
Mh:	Shifts:	Mh/Un:		Un/Sh:						15.00	15.00
27.04	Striping and Signage	1.00	LS	F6319A	50 10.00					12,500	12,500
Mh:	Shifts:	Mh/Un:		Un/Sh:						12,500.00	12,500.00
*****	Biditem/Category	27	*****			6,740	6,698		5,563	72,080	91,081
Mh:	132.00 Mh/Un:	132.0000				6,740.05	6,698.20		5,562.97	72,080.00	91,081.22
*** 28		Header Pipe System				Takeoff:	-1.00 LS		Bid:	-1.00 LS	
28.01	Header Pipe System	-1.00	LS	F6319A	50 10.00			-62,534			-62,534
Mh:	Shifts:	Mh/Un:		Un/Sh:				62,534.00			62,534.00
*****	Biditem/Category	28	*****					-62,534			-62,534
Mh:	Mh/Un:							62,534.00			62,534.00
Mh:	9,485.97	***REPORT TOTALS***				458,993	1,122,912	315,136	421,887	673,306	2,992,235

N = Activity not adjusted to bid quantity

NBG Sets / Flanges	24	EA	\$ -	\$ 111,194.00	400	\$ 48.64	\$ 19,456.00	\$ 23,400.00	\$ 154,050.00	\$ 154,050.00
24" x 12" Cross w/ Cap	3	EA	\$ -	\$ 12,840.00	150	\$ 48.64	\$ 7,296.00	\$ 8,775.00	\$ 28,911.00	\$ 28,911.00
24" Well	700	LF	\$ 525,000.00	\$ 226,086.00	125	\$ 48.64	\$ 6,080.00	\$ 7,312.00	\$ 764,478.00	\$ 764,478.00
48" x 100" HS 20 Hatch & Frame	2	EA	\$ -	\$ -	50	\$ 48.64	\$ 2,432.00	\$ 2,925.00	\$ 5,357.00	\$ 5,357.00
75" x 86" HS 20 Hatch & Frame	2	EA	\$ -	\$ -	30	\$ 48.63	\$ 1,459.00	\$ 1,755.00	\$ 3,214.00	\$ 3,214.00
56" x 112" HS 20 Hatch & Frame	2	EA	\$ -	\$ -	120	\$ 48.64	\$ 5,837.00	\$ 7,020.00	\$ 12,857.00	\$ 12,857.00
55" x 51" HS 20 Hatch & Frame	3	EA	\$ -	\$ -	75	\$ 48.64	\$ 3,648.00	\$ 4,387.00	\$ 8,035.00	\$ 8,035.00
36" x 60" HS 20 Hatch & Frame	2	EA	\$ -	\$ -	50	\$ 48.64	\$ 2,432.00	\$ 2,925.00	\$ 5,357.00	\$ 5,357.00
11'-8" x 8' x 7" Vault	3	EA	\$ -	\$ 101,115.00	600	\$ 48.64	\$ 29,184.00	\$ 35,100.00	\$ 165,399.00	\$ 165,399.00
Concrete Cover (15' Dia.)	2	EA	\$ -	\$ 38,520.00	45	\$ 48.64	\$ 2,189.00	\$ 2,632.00	\$ 43,341.00	\$ 43,341.00
Platform (8.44 NAVD)	2	EA	\$ 5,000.00	\$ -	40	\$ 48.65	\$ 1,946.00	\$ 2,340.00	\$ 9,286.00	\$ 9,286.00
Landscaping Screening	1	LS	\$ 15,000.00	\$ -	0	\$ -	\$ -	\$ -	\$ 15,000.00	\$ 15,000.00
Grout / Seal / Coatings	2	LS	\$ -	\$ 16,050.00	75	\$ 48.64	\$ 3,648.00	\$ 4,387.00	\$ 24,085.00	\$ 24,085.00
Start up / Commissioning	2	EA	\$ -	\$ 1,070.00	30	\$ 48.67	\$ 1,460.00	\$ 1,755.00	\$ 4,285.00	\$ 4,285.00
Warranty Allowance	1	LS	\$ -	\$ 10,700.00	40	\$ 48.65	\$ 1,946.00	\$ 2,340.00	\$ 14,986.00	\$ 14,986.00
14th Ct. & Bay Rd. Set Up	2	EA	\$ -	\$ -	985	\$ 48.64	\$ 47,912.00	\$ 57,622.00	\$ 105,534.00	\$ 105,534.00
24" Well Credit	1	LS	\$ (281,750.00)	\$ -			\$ -	\$ -	\$ (281,750.00)	\$ (281,750.00)
Electrical / I&C										
Control Pannels w/ Floats	2	EA	\$ 422,493.00	\$ -			\$ -	\$ -	\$ 422,493.00	\$ 422,493.00
Ductbank - Civil	920	LF	\$ -	\$ 23,433.00	1380	\$ 46.66	\$ 64,391.00	\$ 67,274.00	\$ 155,098.00	\$ 155,098.00
Rock Anchors										
Rock Anchors	8	EA		\$ 299,600.00					\$ 299,600.00	\$ 299,600.00
24" Interconnecting Pipping										
Sheet Piling - Shoring	110	LB5	\$ 1,000.00	\$ 8,507.00	840	\$ 47.64	\$ 40,019.00	\$ 47,628.00	\$ 97,154.00	\$ 97,154.00
Dewatering	1	LS	\$ -	\$ 10,138.00	240	\$ 51.61	\$ 12,387.00	\$ 8,904.00	\$ 31,429.00	\$ 31,429.00
Excavation	300	CY	\$ 60,000.00	\$ 5,350.00	300	\$ 46.66	\$ 13,998.00	\$ 13,175.00	\$ 92,523.00	\$ 92,523.00
Set up/Down & Install	1	LS	\$ -	\$ -	500	\$ 48.64	\$ 24,320.00	\$ 11,550.00	\$ 35,870.00	\$ 35,870.00
Seal, Grout & Backfill	360	TN	\$ -	\$ 10,165.00	100	\$ 48.64	\$ 4,864.00	\$ 2,950.00	\$ 17,979.00	\$ 17,979.00
Utility Relocation & Removals										
Utility Relocation & Removals	1	LS	\$ -	\$ 7,000.00	2450	\$ 47.64	\$ 116,723.00	\$ 83,885.00	\$ 207,608.00	\$ 207,608.00
			\$ 1,489,512.50	\$ 4,038,618.66	36101.59		\$ 1,847,450.00	\$ 2,724,037.00	\$ 10,099,618.16	\$ 10,099,618.16
									5% Subcontractor Markup	\$ 74,475.63
									10% RMCF Markup	\$ 861,010.57
									1.44% Bond & Insurance	\$ 145,434.50
									TOTAL	\$ 11,180,538.85

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total	
*** 10	General Conditions					Takeoff:	1.00 LS		Bid:		1.00 LS	
10.1	Mobilization	1.00	LS	F6319A	50	10.00		196,580			196,580	
Mh:	Shifts:	Mh/Un:		Un/Sh:				196,580.00			196,580.00	
10.2	General Conditions	1.00	LS	F6319A	50	10.00	208,275	229,650	72,000		509,925	
Mh:	600.00	Shifts:	Mh/Un:	600.0000	Un/Sh:		208,275.10	229,650.00	72,000.00		509,925.10	
*****	Biditem/Category	10	*****				208,275	426,230	72,000		706,505	
Mh:	600.00	Mh/Un:	600.0000				208,275.10	426,230.00	72,000.00		706,505.10	
*** 31	Template					Takeoff:	1.00 LS		Bid:		1.00 LS	
31.01	Excavate and Haul	170.00	CY	F6319A	50	10.00	6,670		9,110	835	16,615	
Mh:	140.00	Shifts:	2.0	Mh/Un:	0.8235	Un/Sh:	85.0000	39.23	53.59	4.91	97.73	
31.02	Concrete Template (5% Waste)	115.00	CY	F6319A	50	10.00	7,226	16,082	9,871		33,179	
Mh:	151.67	Shifts:	2.2	Mh/Un:	1.3189	Un/Sh:	53.0933	62.83	139.84	85.83	288.51	
31.03	Forms - Sonotube	120.00	EA	F6319A	50	10.00	40,019	7,790	54,660		102,469	
Mh:	840.00	Shifts:	12.0	Mh/Un:	7.0000	Un/Sh:	10.0000	333.49	64.91	455.50	853.91	
31.04	Forms - Exterior	5.00	EA	F6319A	50	10.00	6,670	6,433	9,110		22,213	
Mh:	140.00	Shifts:	2.0	Mh/Un:	28.0000	Un/Sh:	2.5000	1,333.98	1,286.57	1,821.99	4,442.54	
31.05	Blocking	5.00	EA	F6319A	50	10.00	1,667		2,278		3,945	
Mh:	35.00	Shifts:	0.5	Mh/Un:	7.0000	Un/Sh:	10.0000	333.50	455.50		789.00	
31.06	Survey	5.00	EA	F6319A	50	10.00		9,750			9,750	
Mh:		Shifts:		Mh/Un:		Un/Sh:		1,950.00			1,950.00	
31.07	Pump Concrete	5.00	EA	F6319A	50	10.00			3,574		3,574	
Mh:		Shifts:		Mh/Un:		Un/Sh:			714.76		714.76	
31.08	Haul Old Template Debris	5.00	EA	F6319A	50	10.00	3,335	6,722	4,555		14,612	
Mh:	70.00	Shifts:	1.0	Mh/Un:	14.0000	Un/Sh:	5.0000	666.99	1,344.35	911.00	2,922.34	
*****	Biditem/Category	31	*****				65,588	16,082	30,694	93,157	835	206,355
Mh:	1,376.67	Mh/Un:	1,376.6700				65,587.54	16,082.10	30,694.19	93,156.62	835.00	206,355.45
*** 32	Drill and PLace Grout					Takeoff:	1.00 LS		Bid:		1.00 LS	
32.01	Drill and Place Grout	120.00	EA	F6319A	50	10.00	160,359		415,160		575,519	
Mh:	3,600.00	Shifts:	40.0	Mh/Un:	30.0000	Un/Sh:	3.0000	1,336.33	3,459.67		4,796.00	
32.02	Grout	750.00	CY	F6319A	50	10.00		116,595			116,595	
Mh:		Shifts:		Mh/Un:		Un/Sh:		155.46			155.46	
32.03	Rebar	119,400.00	LBS	F6319A	50	10.00		57,636		35,910	93,546	
Mh:		Shifts:		Mh/Un:		Un/Sh:		0.48		0.30	0.78	
32.04	Spoils Disposal	750.00	CY	F6319A	50	10.00		8,454			8,454	
Mh:		Shifts:		Mh/Un:		Un/Sh:		11.27			11.27	
32.05	Concrete Pump	750.00	CY	F6319A	50	10.00			10,721		10,721	
Mh:		Shifts:		Mh/Un:		Un/Sh:			14.30		14.30	
*****	Biditem/Category	32	*****				160,359	174,232	8,454	425,881	35,910	804,836
Mh:	3,600.00	Mh/Un:	3,600.0000				160,359.42	174,231.59	8,453.54	425,881.40	35,910.00	804,835.95
*** 33	Mass Excavation and Tremie					Takeoff:	1.00 LS		Bid:		1.00 LS	
33.01	Excavation	740.00	CY	F6319A	50	10.00	17,674		22,775		40,449	
Mh:	400.00	Shifts:	5.0	Mh/Un:	0.5405	Un/Sh:	148.0000	23.88	30.78		54.66	
33.02	Excavation (Last 8')	110.00	CY	F6319A	50	10.00	7,659		9,871		17,530	
Mh:	173.34	Shifts:	2.2	Mh/Un:	1.5758	Un/Sh:	50.7849	69.63	89.73		159.36	
33.03	Clean Sides	5.00	EA	F6319A	50	10.00	5,302		6,832		12,135	
Mh:	120.00	Shifts:	1.5	Mh/Un:	24.0000	Un/Sh:	3.3333	1,060.44	1,366.50		2,426.94	
33.04	Tremie Pour	125.00	CY	F6319A	50	10.00	11,488	16,853	14,804		43,144	
Mh:	260.00	Shifts:	3.3	Mh/Un:	2.0800	Un/Sh:	38.4615	91.90	134.82	118.43	345.15	
33.05	Tremie Rebar	10,000.00	LBS	F6319A	50	10.00		5,337		2,993	8,329	
Mh:		Shifts:		Mh/Un:		Un/Sh:		0.53		0.30	0.83	
33.06	Dewater and Seal	5.00	EA	F6319A	50	10.00	8,837		11,387		20,224	
Mh:	200.00	Shifts:	2.5	Mh/Un:	40.0000	Un/Sh:	2.0000	1,767.40	2,277.49		4,044.90	
33.07	Leveling Course	50.00	CY	F6319A	50	10.00	9,449	6,701	12,904		29,054	
Mh:	198.33	Shifts:	2.8	Mh/Un:	3.9666	Un/Sh:	17.6491	188.98	134.02	258.09	581.08	
33.08	Trucking	5.00	LS	F6319A	50	10.00		9,582			9,582	
Mh:		Shifts:		Mh/Un:		Un/Sh:		1,916.49			1,916.49	
33.09	Tremie Pump and Level Cours	5.00	EA	F6319A	50	10.00			3,216		3,216	
Mh:		Shifts:		Mh/Un:		Un/Sh:			643.28		643.28	

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip-ment	Sub-Contract	Total
33.10	Poly Tube Injection / Seal	5.00	EA	F6319A	50	10.00	8,935				8,935
Mh:	Shifts:	Mh/Un:		Un/Sh:			1,786.90				1,786.90
*****Biditem/Category		33	*****			60,409	37,825	9,582	81,790	2,993	192,599
Mh:	1,351.67	Mh/Un:	1,351.6700			60,409.32	37,824.51	9,582.46	81,789.89	2,992.50	192,598.68
***	51	Template				Takeoff:	1.00	LS	Bid:	1.00	LS
51.01	Excavate and Haul	170.00	CY	F6319A	50	10.00	6,670		9,110	835	16,615
Mh:	140.00	Shifts:	2.0	Mh/Un:	0.8235	Un/Sh:	85.0000	39.23	53.59	4.91	97.73
51.02	Concrete Template (5% Waste	115.00	CY	F6319A	50	10.00	7,226	16,082	9,871		33,179
Mh:	151.67	Shifts:	2.2	Mh/Un:	1.3189	Un/Sh:	53.0933	62.83	85.83		288.51
51.03	Forms - Sonotube	120.00	EA	F6319A	50	10.00	40,019	7,790	54,660		102,469
Mh:	840.00	Shifts:	12.0	Mh/Un:	7.0000	Un/Sh:	10.0000	333.49	64.91	455.50	853.91
51.04	Forms - Exterior	5.00	EA	F6319A	50	10.00	6,670	6,433	9,110		22,213
Mh:	140.00	Shifts:	2.0	Mh/Un:	28.0000	Un/Sh:	2.5000	1,333.98	1,286.57	1,821.99	4,442.54
51.05	Blocking	5.00	EA	F6319A	50	10.00	1,667		2,278		3,945
Mh:	35.00	Shifts:	0.5	Mh/Un:	7.0000	Un/Sh:	10.0000	333.50	455.50		789.00
51.06	Survey	5.00	EA	F6319A	50	10.00		9,750			9,750
Mh:		Shifts:		Mh/Un:		Un/Sh:		1,950.00			1,950.00
51.07	Pump Concrete	5.00	EA	F6319A	50	10.00			3,574		3,574
Mh:		Shifts:		Mh/Un:		Un/Sh:			714.76		714.76
51.08	Haul Old Template Debris	5.00	EA	F6319A	50	10.00	3,335	6,722	4,555		14,612
Mh:	70.00	Shifts:	1.0	Mh/Un:	14.0000	Un/Sh:	5.0000	666.99	1,344.35	911.00	2,922.34
*****Biditem/Category		51	*****			65,588	16,082	30,694	93,157	835	206,355
Mh:	1,376.67	Mh/Un:	1,376.6700			65,587.54	16,082.10	30,694.19	93,156.62	835.00	206,355.45
***	52	Drill and PLace Grout				Takeoff:	1.00	LS	Bid:	1.00	LS
52.01	Drill and Place Grout	120.00	EA	F6319A	50	10.00	212,031		548,935		760,966
Mh:	4,760.00	Shifts:	52.9	Mh/Un:	39.6667	Un/Sh:	2.2689	1,766.92	4,574.46		6,341.38
52.02	Grout	810.00	CY	F6319A	50	10.00		135,725			135,725
Mh:		Shifts:		Mh/Un:		Un/Sh:		167.56			167.56
52.03	Rebar	113,400.00	LBS	F6319A	50	10.00	60,987			34,190	95,177
Mh:		Shifts:		Mh/Un:		Un/Sh:		0.54		0.30	0.84
52.04	Spoils Disposal	750.00	CY	F6319A	50	10.00		9,394			9,394
Mh:		Shifts:		Mh/Un:		Un/Sh:		12.53			12.53
52.05	Concrete Pump	810.00	CY	F6319A	50	10.00			10,721		10,721
Mh:		Shifts:		Mh/Un:		Un/Sh:		13.24			13.24
*****Biditem/Category		52	*****			212,031	196,712	9,394	559,656	34,190	1,011,983
Mh:	4,760.00	Mh/Un:	4,760.0000			212,030.85	196,711.90	9,393.75	559,656.35	34,190.10	1,011,982.95
***	53	Mass Excavation and Tremie				Takeoff:	1.00	LS	Bid:	1.00	LS
53.01	Excavation	810.00	CY	F6319A	50	10.00	16,437		21,181		37,618
Mh:	372.00	Shifts:	4.7	Mh/Un:	0.4593	Un/Sh:	174.1935	20.29	26.15		46.44
53.02	Excavation (Last 8')	235.00	CY	F6319A	50	10.00	16,362		21,085		37,447
Mh:	370.31	Shifts:	4.6	Mh/Un:	1.5758	Un/Sh:	50.7779	69.63	89.72		159.35
53.03	Clean Sides	5.00	EA	F6319A	50	10.00	6,480		8,349		14,829
Mh:	146.66	Shifts:	1.8	Mh/Un:	29.3320	Un/Sh:	2.7278	1,296.01	1,669.86		2,965.86
53.04	Tremie Pour	125.00	CY	F6319A	50	10.00	8,745	19,363	11,269		39,377
Mh:	197.92	Shifts:	2.5	Mh/Un:	1.5834	Un/Sh:	50.5459	69.96	154.90		315.01
53.05	Tremie Rebar	10,000.00	LBS	F6319A	50	10.00		5,393		3,024	8,417
Mh:		Shifts:		Mh/Un:		Un/Sh:		0.54		0.30	0.84
53.06	Dewater and Seal	5.00	EA	F6319A	50	10.00	7,659		9,871		17,530
Mh:	173.34	Shifts:	2.2	Mh/Un:	34.6680	Un/Sh:	2.3084	1,531.84	1,974.13		3,505.97
53.07	Leveling Course	35.00	CY	F6319A	50	10.00	5,558	4,691	7,593		17,842
Mh:	116.67	Shifts:	1.7	Mh/Un:	3.3334	Un/Sh:	21.0084	158.81	134.02	216.95	509.78
53.08	Trucking	5.00	LS	F6319A	50	10.00			9,582		9,582
Mh:		Shifts:		Mh/Un:		Un/Sh:		1,916.49			1,916.49
53.09	Tremie Pump and Level Cours	5.00	LS	F6319A	50	10.00			3,216		3,216
Mh:		Shifts:		Mh/Un:		Un/Sh:			643.28		643.28
53.10	Poly Tube Injection / Seal	5.00	LS	F6319A	50	10.00				8,350	8,350
Mh:		Shifts:		Mh/Un:		Un/Sh:			1,670.00		1,670.00

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
*****Biditem/Category		53	*****			61,242	29,446	9,582	82,564	11,374	194,209
Mh:	1,376.90	Mh/Un:	1,376.9000			61,241.80	29,446.13	9,582.46	82,564.24	11,374.00	194,208.63
***	54	Mechanical Work				Takeoff:	1.00 LS		Bid:	1.00 LS	
54.01	Baffle Skimmer	5.00	EA	F6319A	50 10.00	4,864	53,500		5,850		64,214
Mh:	100.00	Shifts:	2.0	Mh/Un:	20.0000	Un/Sh:	2.5000		1,169.99		12,842.80
54.05	25 HP Flygt Pump	5.00	EA	F6319A	50 10.00	27,996	693,997		29,250		751,243
Mh:	600.00	Shifts:	10.0	Mh/Un:	120.0000	Un/Sh:	0.5000		5,849.94		150,248.50
54.06	12" DIP Discharge	550.00	LF	F6319A	50 10.00	7,133	17,770		8,579		33,482
Mh:	146.66	Shifts:	2.9	Mh/Un:	0.2667	Un/Sh:	187.5213		12.97		32.31
54.08	12" Check Valve	5.00	EA	F6319A	50 10.00	2,189	31,828		2,632		36,649
Mh:	45.00	Shifts:	0.9	Mh/Un:	9.0000	Un/Sh:	5.5556		437.76		6,365.55
54.09	NBG Sets / Flanges	100.00	EA	F6319A	50 10.00	14,592	46,331		17,550		78,473
Mh:	300.00	Shifts:	6.0	Mh/Un:	3.0000	Un/Sh:	16.6667		145.92		463.31
54.10	24 x 12 Cross w/Cap	5.00	EA	F6319A	50 10.00	1,946	11,140		2,340		15,425
Mh:	40.00	Shifts:	0.8	Mh/Un:	8.0000	Un/Sh:	6.2500		389.12		2,227.95
54.11	24" Well	500.00	LF	F6319A	50 10.00	1,216	9,095		1,462	375,000	386,774
Mh:	25.00	Shifts:	0.5	Mh/Un:	0.0500	Un/Sh:	1,000.0000		2.43	18.19	2.92
54.12	36"x 78" HS 20 Hatch & Fram	5.00	EA	F6319A	50 10.00	1,216			1,462		2,679
Mh:	25.00	Shifts:	0.5	Mh/Un:	5.0000	Un/Sh:	10.0000		243.21		292.50
54.13	52"x 60" HS 20 Hatch & Fram	5.00	EA	F6319A	50 10.00	1,216			1,462		2,679
Mh:	25.00	Shifts:	0.5	Mh/Un:	5.0000	Un/Sh:	10.0000		243.21		292.50
54.14	56"x 112" HS 20 Hatch & Fra	5.00	EA	F6319A	50 10.00	1,946			2,340		4,286
Mh:	40.00	Shifts:	0.8	Mh/Un:	8.0000	Un/Sh:	6.2500		389.12		468.00
54.15	11'-8" x 8' x 7' Vault	5.00	EA	F6319A	50 10.00	12,160	48,150		14,625		74,935
Mh:	250.00	Shifts:	5.0	Mh/Un:	50.0000	Un/Sh:	1.0000		2,432.02		9,630.00
55.01	Concrete Cover (15' Dia.)	5.00	EA	F6319A	50 10.00	2,918	56,175		3,510		62,603
Mh:	60.00	Shifts:	1.2	Mh/Un:	12.0000	Un/Sh:	4.1667		583.69		11,235.00
55.02	Platform (8.44 NAVD)	5.00	EA	F6319A	50 10.00	1,459			1,755	40,000	43,214
Mh:	30.00	Shifts:	0.6	Mh/Un:	6.0000	Un/Sh:	8.3333		291.84		351.00
55.03	Landscaping Screening	5.00	LS	F6319A	50 10.00						37,500
Mh:		Shifts:		Mh/Un:		Un/Sh:					7,500.00
55.04	Grout / Seal / Coatings	5.00	LS	F6319A	50 10.00	10,944	26,750		13,162		50,856
Mh:	225.00	Shifts:	4.5	Mh/Un:	45.0000	Un/Sh:	1.1111		2,188.82		5,350.00
55.05	Start-up / Commissioning	5.00	EA	F6319A	50 10.00	2,432	1,605		2,925		6,962
Mh:	50.00	Shifts:	1.0	Mh/Un:	10.0000	Un/Sh:	5.0000		486.40		321.00
55.06	Warranty Allowance	5.00	EA	F6319A	50 10.00	4,864	10,700		5,850		21,414
Mh:	100.00	Shifts:	2.0	Mh/Un:	20.0000	Un/Sh:	2.5000		972.81		2,140.00
55.07	24" Well Credit	-1.00	LS	F6319A	50 10.00						-201,250
Mh:		Shifts:		Mh/Un:		Un/Sh:					201,250.00
*****Biditem/Category		54	*****			99,092	1,007,040		114,755	251,250	1,472,137
Mh:	2,061.66	Mh/Un:	2,061.6600			99,091.89	1,007,040.16		114,755.39	251,250.00	1,472,137.44
***	55	Electrical / I&C				Takeoff:	1.00 LS		Bid:	1.00 LS	
55.1	Control Pannels w/ Floats	5.00	EA	F6319A	50 10.00					170,000	170,000
Mh:		Shifts:		Mh/Un:		Un/Sh:					34,000.00
55.2	Ductbank - Civil	1,650.00	LF	F6319A	50 10.00	103,936	26,322		108,590		238,847
Mh:	2,227.50	Shifts:	37.1	Mh/Un:	1.3500	Un/Sh:	44.4444		62.99	15.95	65.81
*****Biditem/Category		55	*****			103,936	26,322		108,590	170,000	408,847
Mh:	2,227.50	Mh/Un:	2,227.5000			103,935.71	26,322.00		108,589.52	170,000.00	408,847.23
***	71	Template				Takeoff:	1.00 LS		Bid:	1.00 LS	
71.01	Excavate and Haul	98.00	CY	F6319A	50 10.00	4,002			5,466		9,468
Mh:	84.00	Shifts:	1.2	Mh/Un:	0.8571	Un/Sh:	81.6667		40.84		55.78
71.02	Concrete Template (5% Waste)	78.00	CY	F6319A	50 10.00	4,669	13,375		6,377		24,421
Mh:	98.00	Shifts:	1.4	Mh/Un:	1.2564	Un/Sh:	55.7143		59.86		171.47
71.03	Forms - Sonotube	64.00	EA	F6319A	50 10.00	21,344			4,109		29,152
Mh:	448.00	Shifts:	6.4	Mh/Un:	7.0000	Un/Sh:	10.0000		333.50		64.20
71.04	Forms - Exterior	2.00	EA	F6319A	50 10.00	2,668			5,350		3,644
Mh:	56.00	Shifts:	0.8	Mh/Un:	28.0000	Un/Sh:	2.5000		1,333.98		2,675.00
71.05	Blocking	2.00	EA	F6319A	50 10.00	2,001	1,070		2,733		5,804
Mh:	42.00	Shifts:	0.6	Mh/Un:	21.0000	Un/Sh:	3.3333		1,000.48		535.00

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
71.06	Survey	2.00	EA	F6319A	50 10.00			7,800			7,800
Mh:	Shifts:	Mh/Un:		Un/Sh:				3,900.00			3,900.00
71.07	Pump Concrete	2.00	EA	F6319A	50 10.00				2,333		2,333
Mh:	Shifts:	Mh/Un:		Un/Sh:					1,166.30		1,166.30
71.08	Haul Old Template Debris	2.00	EA	F6319A	50 10.00	1,000		800	1,367		3,167
Mh:	21.00 Shifts:	0.3 Mh/Un:	10.5000	Un/Sh:	6.6667	500.25		400.00	683.25		1,583.50
*****Biditem/Category		71	*****			35,684	14,445	18,059	51,071		119,259
Mh:	749.00	Mh/Un:	749.0000			35,683.93	14,445.00	18,058.80	51,070.89		119,258.62
***	72	Drill and Place Grout				Takeoff:	1.00	LS	Bid:	1.00	LS
72.01	Drill and Place Grout	64.00	EA	F6319A	50 10.00	85,391			221,073		306,464
Mh:	1,917.00	Shifts:	21.3	Mh/Un:	29.9531	Un/Sh:	3.0047		1,334.24	3,454.26	4,788.50
72.02	Grout	384.00	CY	F6319A	50 10.00		59,578				59,578
Mh:		Shifts:		Mh/Un:		Un/Sh:	155.15				155.15
72.03	Rebar	67,200.00	LBS	F6319A	50 10.00		36,046			34,361	70,407
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.54			0.51	1.05
72.04	Spoils Disposal	300.00	CY	F6319A	50 10.00			5,062			5,062
Mh:		Shifts:		Mh/Un:		Un/Sh:		16.87			16.87
72.05	Concrete Pump	384.00	CY	F6319A	50 10.00				4,815		4,815
Mh:		Shifts:		Mh/Un:		Un/Sh:		12.54			12.54
*****Biditem/Category		72	*****			85,391	95,623	5,062	225,888	34,361	446,326
Mh:	1,917.00	Mh/Un:	1,917.0000			85,391.36	95,623.23	5,062.00	225,887.70	34,361.25	446,325.54
***	73	Mass Excavation and Tremie				Takeoff:	1.00	LS	Bid:	1.00	LS
73.01	Excavation	558.00	CY	F6319A	50 10.00	16,260			20,953		37,213
Mh:	368.00	Shifts:	4.6	Mh/Un:	0.6595	Un/Sh:	121.3043		29.14	37.55	66.69
73.02	Excavation (Last 8')	186.00	CY	F6319A	50 10.00	13,079			16,853		29,932
Mh:	296.00	Shifts:	3.7	Mh/Un:	1.5914	Un/Sh:	50.2703		70.32	90.61	160.93
73.03	Clean Sides	2.00	EA	F6319A	50 10.00	5,656			7,288		12,944
Mh:	128.00	Shifts:	1.6	Mh/Un:	64.0000	Un/Sh:	1.2500		2,827.84	3,643.99	6,471.82
73.04	Tremie Pour	90.00	CY	F6319A	50 10.00	5,485	9,619		7,069		22,174
Mh:	124.14	Shifts:	1.6	Mh/Un:	1.3793	Un/Sh:	58.0271		60.95	106.88	246.38
73.05	Tremie Rebar	11,000.00	LBS	F6319A	50 10.00		5,865			5,481	11,346
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.53			0.50	1.03
73.06	Dewater and Seal	2.00	EA	F6319A	50 10.00	3,535			4,555		8,090
Mh:	80.00	Shifts:	1.0	Mh/Un:	40.0000	Un/Sh:	2.0000		1,767.41	2,277.49	4,044.90
73.07	Leveling Course	24.00	CY	F6319A	50 10.00	2,668	3,210		3,644		9,522
Mh:	56.00	Shifts:	0.8	Mh/Un:	2.3333	Un/Sh:	30.0000		111.16	133.75	396.75
73.08	Trucking	2.00	LS	F6319A	50 10.00			10,547			10,547
Mh:		Shifts:		Mh/Un:		Un/Sh:		5,273.50			5,273.50
73.09	Tremie Pump and Level Cours	2.00	EA	F6319A	50 10.00				2,140		2,140
Mh:		Shifts:		Mh/Un:		Un/Sh:			1,070.00		1,070.00
73.10	Poly Tube Injection / Seal	2.00	EA	F6319A	50 10.00		5,350				5,350
Mh:		Shifts:		Mh/Un:		Un/Sh:	2,675.00				2,675.00
*****Biditem/Category		73	*****			46,683	24,044	10,547	62,503	5,481	149,257
Mh:	1,052.14	Mh/Un:	1,052.1400			46,682.57	24,043.97	10,547.00	62,502.60	5,481.00	149,257.14
***	91	Template				Takeoff:	1.00	LS	Bid:	1.00	LS
91.01	Excavate and Haul	123.00	CY	F6319A	50 10.00	5,022			6,860		11,882
Mh:	105.42	Shifts:	1.5	Mh/Un:	0.8571	Un/Sh:	81.6733		40.83	55.77	96.60
91.02	Concrete Template (5% Waste	98.00	CY	F6319A	50 10.00	5,866	16,853		8,012		30,731
Mh:	123.13	Shifts:	1.8	Mh/Un:	1.2564	Un/Sh:	55.7452		59.86	171.96	313.58
91.03	Forms - Sonotube	64.00	EA	F6319A	50 10.00	21,344		5,136	29,152		55,632
Mh:	448.00	Shifts:	6.4	Mh/Un:	7.0000	Un/Sh:	10.0000		333.50	80.25	455.50
91.04	Forms - Exterior	2.00	EA	F6319A	50 10.00	2,668		5,350	3,644		11,662
Mh:	56.00	Shifts:	0.8	Mh/Un:	28.0000	Un/Sh:	2.5000		1,333.98	2,675.00	5,830.97
91.05	Blocking	2.00	EA	F6319A	50 10.00	2,001	1,070		2,733		5,804
Mh:	42.00	Shifts:	0.6	Mh/Un:	21.0000	Un/Sh:	3.3333		1,000.48	535.00	1,366.50
91.06	Survey	2.00	EA	F6319A	50 10.00			7,800			7,800
Mh:		Shifts:		Mh/Un:		Un/Sh:		3,900.00			3,900.00
91.07	Pump Concrete	2.00	EA	F6319A	50 10.00				3,745		3,745

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
Mh:	Shifts:	Mh/Un:		Un/Sh:					1,872.50		1,872.50
91.08	Haul Old Template Debris	2.00	EA	F6319A	50 10.00	1,000		800	1,367		3,167
Mh:	21.00	Shifts:	0.3	Mh/Un:	10.5000	Un/Sh:	6.6667	500.25	400.00	683.25	1,583.50
*****Biditem/Category		91	*****			37,902	17,923	19,086	55,512		130,423
Mh:	795.55	Mh/Un:	795.5500			37,901.69	17,922.50	19,086.00	55,512.35		130,422.54
***	92	Drill and PLace Grout				Takeoff:	1.00	LS	Bid:	1.00	LS
92.01	Drill and Place Grout	64.00	EA	F6319A	50 10.00	83,387			215,883		299,270
Mh:	1,872.00	Shifts:	20.8	Mh/Un:	29.2500	Un/Sh:	3.0769	1,302.92	3,373.18		4,676.10
92.02	Grout	480.00	CY	F6319A	50 10.00		74,472				74,472
Mh:		Shifts:		Mh/Un:		Un/Sh:	155.15				155.15
92.03	Rebar	67,200.00	LBS	F6319A	50 10.00		36,046			34,361	70,407
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.54			0.51	1.05
92.04	Spoils Disposal	375.00	CY	F6319A	50 10.00			6,328			6,328
Mh:		Shifts:		Mh/Un:		Un/Sh:		16.87			16.87
92.05	Concrete Pump	384.00	CY	F6319A	50 10.00				6,019		6,019
Mh:		Shifts:		Mh/Un:		Un/Sh:			15.67		15.67
*****Biditem/Category		92	*****			83,387	110,518	6,328	221,902	34,361	456,495
Mh:	1,872.00	Mh/Un:	1,872.0000			83,386.89	110,517.63	6,327.50	221,901.95	34,361.25	456,495.22
***	93	Mass Excavation and Tremie				Takeoff:	1.00	LS	Bid:	1.00	LS
93.01	Excavation	698.00	CY	F6319A	50 10.00	20,340			26,209		46,549
Mh:	460.33	Shifts:	5.8	Mh/Un:	0.6595	Un/Sh:	121.3069	29.14	37.55		66.69
93.02	Excavation (Last 8')	232.00	CY	F6319A	50 10.00	16,313			21,021		37,334
Mh:	369.20	Shifts:	4.6	Mh/Un:	1.5914	Un/Sh:	50.2709	70.32	90.61		160.92
93.03	Clean Sides	2.00	EA	F6319A	50 10.00	4,595			5,921		10,517
Mh:	104.00	Shifts:	1.3	Mh/Un:	52.0000	Un/Sh:	1.5385	2,297.62	2,960.74		5,258.36
93.04	Tremie Pour	90.00	CY	F6319A	50 10.00	5,485	12,102		7,069		24,656
Mh:	124.14	Shifts:	1.6	Mh/Un:	1.3793	Un/Sh:	58.0271	60.95	134.46		273.96
93.05	Tremie Rebar	11,000.00	LBS	F6319A	50 10.00		5,865			5,481	11,346
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.53			0.50	1.03
93.06	Dewater and Seal	2.00	EA	F6319A	50 10.00	3,535			4,555		8,090
Mh:	80.00	Shifts:	1.0	Mh/Un:	40.0000	Un/Sh:	2.0000	1,767.41	2,277.49		4,044.90
93.07	Leveling Course	24.00	CY	F6319A	50 10.00	2,668	3,210		3,644		9,522
Mh:	56.00	Shifts:	0.8	Mh/Un:	2.3333	Un/Sh:	30.0000	111.16	133.75	151.83	396.75
93.08	Trucking	2.00	LS	F6319A	50 10.00			8,437			8,437
Mh:		Shifts:		Mh/Un:		Un/Sh:		4,218.50			4,218.50
93.09	Tremie Pump and Level Cours	2.00	EA	F6319A	50 10.00				2,140		2,140
Mh:		Shifts:		Mh/Un:		Un/Sh:			1,070.00		1,070.00
93.10	Poly Tube Injection / Seal	2.00	EA	F6319A	50 10.00		5,350				5,350
Mh:		Shifts:		Mh/Un:		Un/Sh:	2,675.00				2,675.00
*****Biditem/Category		93	*****			52,936	26,526	8,437	70,560	5,481	163,941
Mh:	1,193.67	Mh/Un:	1,193.6700			52,936.01	26,526.37	8,437.00	70,560.39	5,481.00	163,940.77
***	94	Mechanical Work				Takeoff:	1.00	LS	Bid:	1.00	LS
94.01	Baffle Skimmer	2.00	EA	F6319A	50 10.00	3,891	53,500		4,680		62,071
Mh:	80.00	Shifts:	1.6	Mh/Un:	40.0000	Un/Sh:	1.2500	1,945.62	26,750.00	2,339.98	31,035.60
94.05	60 HP Flygt Pump	2.00	EA	F6319A	50 10.00	33,595	699,266		35,100		767,961
Mh:	720.00	Shifts:	12.0	Mh/Un:	360.0000	Un/Sh:	0.1667	16,797.70	349,633.20	17,549.82	383,980.72
94.06	18" DIP Discharge	500.00	LF	F6319A	50 10.00	8,106	38,988		9,749		56,843
Mh:	166.66	Shifts:	3.3	Mh/Un:	0.3333	Un/Sh:	150.0150	16.21	77.98	19.50	113.69
94.08	12" Check Valve	6.00	EA	F6319A	50 10.00	9,728	79,608		11,700		101,036
Mh:	200.00	Shifts:	4.0	Mh/Un:	33.3333	Un/Sh:	1.5000	1,621.35	13,268.00	1,949.98	16,839.33
94.09	NBG Sets / Flanges	24.00	EA	F6319A	50 10.00	19,456	111,194		23,400		154,050
Mh:	400.00	Shifts:	8.0	Mh/Un:	16.6667	Un/Sh:	3.0000	810.67	4,633.10	974.99	6,418.76
94.10	24 x 12 Cross w/Cap	3.00	EA	F6319A	50 10.00	7,296	12,840		8,775		28,911
Mh:	150.00	Shifts:	3.0	Mh/Un:	50.0000	Un/Sh:	1.0000	2,432.02	4,280.00	2,924.97	9,636.99
94.11	24" Well	700.00	LF	F6319A	50 10.00	6,080	226,086		7,312	525,000	764,478
Mh:	125.00	Shifts:	2.5	Mh/Un:	0.1786	Un/Sh:	280.0000	8.69	322.98	10.45	750.00
94.12	48"x 100" HS 20 Hatch & Fra	2.00	EA	F6319A	50 10.00	2,432			2,925		5,357
Mh:	50.00	Shifts:	1.0	Mh/Un:	25.0000	Un/Sh:	2.0000	1,216.01	1,462.49		2,678.50

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
94.13	75"x 86" HS 20 Hatch & Fram	2.00	EA	F6319A	50 10.00	1,459			1,755		3,214
Mh:	30.00 Shifts: 0.6	Mh/Un:	15.0000	Un/Sh:	3.3333	729.61			877.50		1,607.11
94.14	56"x 112" HS 20 Hatch & Fra	2.00	EA	F6319A	50 10.00	5,837			7,020		12,857
Mh:	120.00 Shifts: 2.4	Mh/Un:	60.0000	Un/Sh:	0.8333	2,918.43			3,509.96		6,428.39
94.15	55"x 51" Hatch & Frame	3.00	EA	F6319A	50 10.00	3,648			4,387		8,036
Mh:	75.00 Shifts: 1.5	Mh/Un:	25.0000	Un/Sh:	2.0000	1,216.01			1,462.49		2,678.50
94.16	36"x 60" Hatch & Frame	2.00	EA	F6319A	50 10.00	2,432			2,925		5,357
Mh:	50.00 Shifts: 1.0	Mh/Un:	25.0000	Un/Sh:	2.0000	1,216.01			1,462.49		2,678.50
94.20	11'-8" x 8' x 7' Vault	3.00	EA	F6319A	50 10.00	29,184	101,115		35,100		165,399
Mh:	600.00 Shifts: 12.0	Mh/Un:	200.0000	Un/Sh:	0.2500	9,728.10	33,705.00		11,699.88		55,132.98
95.01	Concrete Cover (20' Dia.)	2.00	EA	F6319A	50 10.00	2,189	38,520		2,632		43,341
Mh:	45.00 Shifts: 0.9	Mh/Un:	22.5000	Un/Sh:	2.2222	1,094.41	19,260.00		1,316.24		21,670.65
95.02	Platform (8.44 NAVD)	2.00	EA	F6319A	50 10.00	1,946			2,340	5,000	9,286
Mh:	40.00 Shifts: 0.8	Mh/Un:	20.0000	Un/Sh:	2.5000	972.81			1,169.99	2,500.00	4,642.80
95.03	Landscaping Screening	2.00	LS	F6319A	50 10.00					15,000	15,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						7,500.00	7,500.00
95.04	Grout / Seal / Coatings	2.00	LS	F6319A	50 10.00	3,648	16,050		4,387		24,086
Mh:	75.00 Shifts: 1.5	Mh/Un:	37.5000	Un/Sh:	1.3333	1,824.02	8,025.00		2,193.73		12,042.75
95.05	Start-up / Commissioning	2.00	EA	F6319A	50 10.00	1,459	1,070		1,755		4,284
Mh:	30.00 Shifts: 0.6	Mh/Un:	15.0000	Un/Sh:	3.3333	729.61	535.00		877.50		2,142.11
95.06	Warranty Allowance	2.00	EA	F6319A	50 10.00	1,946	10,700		2,340		14,986
Mh:	40.00 Shifts: 0.8	Mh/Un:	20.0000	Un/Sh:	2.5000	972.81	5,350.00		1,169.99		7,492.80
95.07	14th Ct. & Bay Rd. Set Up	2.00	EA	F6319A	50 10.00	47,911			57,622		105,533
Mh:	985.00 Shifts: 19.7	Mh/Un:	492.5000	Un/Sh:	0.1015	23,955.42			28,810.96		52,766.38
95.08	24" Well Credit	-1.00	LS	F6319A	50 10.00					-281,750	-281,750
Mh:	Shifts:	Mh/Un:		Un/Sh:						281,750.00	281,750.00
*****Biditem/Category		94	*****			192,244	1,388,937		225,904	263,250	2,070,335
Mh:	3,981.66	Mh/Un:	3,981.6600		192,243.95	1,388,937.00		225,904.25	263,250.00	2,070,335.20	
***	95	Electrical / I&C				Takeoff:	1.00	LS	Bid:	1.00	LS
55.1	Control Pannels w/ Floats	2.00	EA	F6319A	50 10.00				422,493		422,493
Mh:	Shifts:	Mh/Un:		Un/Sh:					211,246.50		211,246.50
55.2	Ductbank - Civil	920.00	LF	F6319A	50 10.00	64,391	23,433		67,274		155,098
Mh:	1,380.00 Shifts: 23.0	Mh/Un:	1.5000	Un/Sh:	40.0000	69.99	25.47		73.12		168.59
*****Biditem/Category		95	*****			64,391	23,433		67,274	422,493	577,591
Mh:	1,380.00	Mh/Un:	1,380.0000		64,391.17	23,433.00		67,274.31	422,493.00	577,591.48	
***	96	Rock Anchors				Takeoff:	1.00	LS	Bid:	1.00	LS
96.01	Rock Anchors	8.00	EA	F6319A	50 10.00		299,600				299,600
Mh:	Shifts:	Mh/Un:		Un/Sh:			37,450.00				37,450.00
*****Biditem/Category		96	*****				299,600				299,600
Mh:	Mh/Un:					299,600.00					299,600.00
***	100	24" Interconnecting Pipping				Takeoff:	1.00	LS	Bid:	1.00	LS
100.01	Sheet Plating - Shoring	110.00	LBS	F6319A	50 10.00	40,019	856	7,651	47,628	1,000	97,154
Mh:	840.00 Shifts: 12.0	Mh/Un:	7.6364	Un/Sh:	9.1667	363.81	7.78	69.55	432.98	9.09	883.22
100.02	Dewatering	1.00	LS	F6319A	50 10.00	12,387	10,138		8,904		31,429
Mh:	240.00 Shifts: 6.0	Mh/Un:	240.0000	Un/Sh:	0.1667	12,386.57	10,138.21		8,904.42		31,429.20
100.03	Excavation	300.00	CY	F6319A	50 10.00	13,998	5,350		13,175	60,000	92,523
Mh:	300.00 Shifts: 5.0	Mh/Un:	1.0000	Un/Sh:	60.0000	46.66	17.83		43.92	200.00	308.41
100.04	Set up / Down & Install	1.00	LS	F6319A	50 10.00	24,320			11,550		35,871
Mh:	500.00 Shifts: 10.0	Mh/Un:	500.0000	Un/Sh:	0.1000	24,320.22			11,550.30		35,870.52
100.05	Seal & Grout	600.00	TON	F6319A	50 10.00	4,864	10,165		2,950		17,979
Mh:	100.00 Shifts: 2.0	Mh/Un:	0.1667	Un/Sh:	300.0000	8.11	16.94		4.92		29.96
*****Biditem/Category		100	*****			95,588	26,509	7,651	84,207	61,000	274,955
Mh:	1,980.00	Mh/Un:	1,980.0000		95,588.29	26,509.21	7,650.50	84,207.34	61,000.00	274,955.34	
***	120	Utility Relocations and Removal				Takeoff:	1.00	LS	Bid:	1.00	LS
120.1	Utility Relocations and Remov	1.00	LS	F6319A	50 10.00	116,723		7,000	83,885		207,608
Mh:	2,450.00 Shifts: 35.0	Mh/Un:	2,450.0000	Un/Sh:	0.0286	116,723.20		7,000.00	83,884.85		207,608.05

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
*****Biditem/Category		120	*****			116,723		7,000	83,885		207,608
Mh:	2,450.00	Mh/Un:	2,450.0000			116,723.20		7,000.00	83,884.85		207,608.05
Mh:	36,102.09	***REPORT TOTALS***				1,847,448	3,531,298	606,799	2,780,257	1,333,814	10,099,617

N = Activity not adjusted to bid quantity



091 - North Structure Comparison

Structure Type	Unit	Dimensions	Base Bid & CO 3B	60% Drawings Qty	Delta
P-9 Catch Basin	EA	48" Round	25	0	-25
Catch Basin	EA	60" Round	2	0	-2
J-7 Catch Basin	EA	48" x 84"	11	0	-11
J-9 Catch Basin	EA	48" x 84"	13	0	-13
J-7 Catch Basin	EA	84" x 84"	4		
J-9 Catch Basin	EA	84" x 84"	7	0	-7
Type P Inilet	EA	48" Round	9	0	-9
MH Round	EA	60" Round	15	0	-15
Manhole	EA	120" x 84"	2	0	-2
Type 1	EA	4' x 4'	0	1	1
Type 2	EA	5' x 4'	0	1	1
Type 4	EA	4' x 4'	0	4	4
Type 4 Round	EA	4'	0	1	1
Type 5	EA	4' x 4'	0	7	7
Type 5	EA	4' x 8'	0	1	1
Type 5 Round	EA	4'	0	1	1
Type 5 Round	EA	8'	0	1	1
Type 6 J Bottom	EA	4' x 4'	0	14	14
Type 6 J Bottom	EA	6' x 6'	0	1	1
Type 6 J Bottom	EA	7' x 4'	0	1	1
Type 6 J Bottom	EA	8' x 6'	0	1	1
Type 6 J Bottom	EA	8' x 8'	0	1	1
Type 6 Round	EA	4'	0	4	4
Type 6 Round	EA	6'	0	2	2
Type 6 Round	EA	8'	0	1	1
Type 10	EA	3.5'	0	1	1
Type J7	EA	3.5' x 8'	0	1	1
Type J7	EA	4' x 4'	0	9	9
Type J7	EA	5' x 5'	0	1	1
Type J7	EA	5' x 8'	0	1	1
Type J7	EA	6' x 4'	0	17	17
Type J7	EA	6' x 6'	0	1	1
Type J7	EA	7' x 4'	0	6	6
Type J7	EA	7' x 6'	0	1	1
Type J7	EA	8' x 4'	0	18	18
Type J7	EA	8' x 6'	0	2	2
Type J7	EA	8' x 8'	0	1	1
Type J7	EA	12' x 8'	0	1	1
Type J7	EA	12' x 12'	0	3	3
Type J7 Round	EA	7'	0	1	1
Type J7 Round	EA	10'	0	1	1
Type F	EA	4' x 2.5'	0	39	39
Type F	EA	4' x 4'	0	1	1
Type F	EA	7' x 4'	0	1	1
Type G	EA	7' x 6'	0	1	1
Type V	EA	4' x 4'	0	10	10

Structure Type	Dimensions	Base Bid & CO 3B	60% Drawings Qty	Delta
P-9 Catch Basin	48" Round	\$ 230,236.19	\$ -	\$ (230,236.19)
Catch Basin	60" Round	\$ 19,690.05	\$ -	\$ (19,690.05)
J-7 Catch Basin	48" x 84"	\$ 132,329.64	\$ -	\$ (132,329.64)
J-9 Catch Basin	48" x 84"	\$ 155,722.33	\$ -	\$ (155,722.33)
J-7 Catch Basin	84" x 84"	\$ 53,949.23	\$ -	\$ (53,949.23)
J-9 Catch Basin	84" x 84"	\$ 38,490.97	\$ -	\$ (38,490.97)
Type P Inilet	48" Round	\$ 52,257.00	\$ -	\$ (52,257.00)
MH Round	60" Round	\$ 109,963.47	\$ -	\$ (109,963.47)
Manhole	120" x 84"	\$ 36,878.53	\$ -	\$ (36,878.53)
Structures Type 1, 2, 4, 5, 6J, J7, F and V	4'x2.5', 4'x4' & 4'x5'	\$ -	\$ 527,057.95	\$ 527,057.95
Round Type 4, 6 and 10	3.5' & 4'	\$ -	\$ 48,799.75	\$ 48,799.75
Structures Type 5, 6J and J7	4'x8', 8'x6', 8'x5' & 8'x8'	\$ -	\$ 369,869.80	\$ 369,869.80
Round Type 5, 6 and J7	6', 7' 8' & 10'	\$ -	\$ 65,500.59	\$ 65,500.59
Structures Type 6J, J7 and G	6'x4', 6'x6', & 6'x7'	\$ -	\$ 227,645.68	\$ 227,645.68
Structures Type 6J, J7 and F	7'x4'	\$ -	\$ 103,663.08	\$ 103,663.08
Structures Type J7	12'x8 and 12'x12"	\$ -	\$ 102,247.25	\$ 102,247.25



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

WEST AVE 091 NORTH
 April 21, 2021
 Sent Via Email

Attn: Sabrina Baglieri

Re: West Ave 091 – North

Subj: Change Order Submission	
10-Year Storm Piping and Structures & WTS Relocation	\$ <u>4,305,203</u>
Water Quality	\$ <u>11,738,751</u>
Commodity and Subcontractor Escalation	\$ <u>1,549,967</u>
RMCF Labor Escalation	\$ <u>386,952</u>
Time Extension	1,961 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 & WTS relocation - \$4,305,203

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 26 in RMCF’s proposal dated February 26, 2019)



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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 \$1,787,000 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.

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 January 2025.
- 84" discharge piping from WTS to 17th St Dissipator.
- Drainage distribution piping from mains to water quality settlement basins.



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 Deerfield Beach, Florida 33442
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- 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.
- 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.

WTS Relocation

The original capacity of the WTS, 60,000 GPM was situated at the end of Lincoln Road as required by the DCP. The capacity was based on a 5- year flood event. Based on a request from the City under Change Order # 3B, item 17, the result of the Resiliency effort which took place in 2018, one (1) additional 20,000 GPM pump and one (1) Vortex unit was added, for volume and water quality, respectively. In March 2019, a 1250 KW Generator was added to the scope (item 14 CO #3B). In May 2019 as final designs were being formulated negative feedback from local Lincoln Road residents were conveyed relative to the location of the WTS, its size and the perceived impact to the neighborhood. The City requested RMCF investigate alternate locations for the WTS and after examining no less than ten (10) locations, in November 2019, recommended what is now termed the “Median Concept” at Lincoln Road between Lincoln Ct and Bay Road. RMCF was directed to develop the concept, include elaborate screening, added green park like space and roadway enhancements while initiating public interaction on final development of the concept and pricing. Weekly meetings with residents to answer questions and take suggestions on the enhancements and development of the Median Concept were held commencing in December 2019.

Based on resident feedback and recommendations made on May 6, 2020 by the Land Use and Sustainability Committee, RMCF was formally requested by the Commission on June 24, 2020 to perform a feasibility study to seek out a new set of alternate locations.

On July 1, 2020, the City issued Contingency Draw #1 in the amount of \$207,776 to study no less than ten (10) alternatives for the WTS including the preferred location (Median Concept), produce a comparison of pros and cons with budget pricing and rate each alternate location from the preferred spot for review by the public and Commission. Based on the CES report dated June 29, 2020, RMCF provided a detailed proposal of Budget costs and time impacts for eleven (11) alternatives culminating in a public presentation of these alternates. The Commission on October 28, 2020, following a virtual presentation, selected Option 3A. Option 3A places the WTS at 1671 West Ave parking lot with discharge to the Collins Canal at 17th St. Option 3A was budgeted at the time to cost \$2,875,000.



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Borne out of that approval, the City issued Contingency Draw #2 for \$137,500 on December 4, 2020 based on RMCF's proposal and summary of Change letter dated November 19, 2020 for 50% of the total re-design fee of \$275,000 for the design of the relocated WTS.

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

- Parking lot at 1671 West Ave removals, relocation of utilities, new fencing and gates and re-paving as required to reinstate remaining parking spaces.
- West Ave milling and paving between Lincoln Road and through the 17th St intersection.
- Cofferdam/support of excavation increases to accommodate new structures at WTS Junction Box and Dissipater Receiver Box.
- New Effluent Discharge Box.
- New Dissipater Receiver box.
- 8" Air vacuum valve assemblies.
- Upgraded Contech Vortex units to 65 CFS from 63 CFS.
- Duct bank and Structures from West Ave to New FPL vault.
- FPL Vault- supply and install.
- Added MOT considerations – ODP and roadway/signalization changes at 17th St & West Ave.
- Landscaping/ fencing at 17th St.
- Striping and signage at West Ave between Lincoln Road and 17th St.
- Screening system at WTS.
- Added hatches due to additional structures.
- Sea Wall Modifications at 17th St.
- Sea Wall Modifications at Lincoln Rd end.
- 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 date.
- 50% of the WTS Relocation Design Fee.

A. Credits included:

- 60" Bypass System with manifold and 32" discharge to dissipater
- 60" Flap Valves
- Bypass hatches
- Dissipator tie back system.

B. Items not included:

- General Conditions (priced with Water Quality CO)



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II- Water Quality Enhancements - \$11,738,751

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. 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. 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 \$1,101,869 was subsequently issued on January 21, 2021.

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



3100 SW 15th Street
 Deerfield Beach, Florida 33442
 Office:(954)426-1221
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- RMCF will install, make operational and test- two (2) settlement basins 20' OD, two (2) Pumping stations 20' OD servicing six (6) 24" diameter wells with structures including all mechanical, electrical and controls to divert drainage water at two (2) locations within the West Avenue basin (Lincoln/Bay Rd & 14th Ct/West Ave) utilizing primarily Secant pile construction methodology.
- RMCF will install, make operational and test – five (5) settlement basins 15' OD, five (5) Pumping stations 15' OD servicing five (5) 24" diameter wells with structures including all mechanical, electrical and controls to divert drainage water at five (5) locations within the West Avenue basin (2-15th Terr, 2- 16th St, 1- Lincoln Rd) utilizing primarily Secant pile construction methodology.
- Provide one (1) 24" diameter well and structure located at the new WTS at 1671 West Ave including 2-7.5 HP pumping systems housed within the WTS for Water Quality purposes. Power and control scheme will be integrated within the WTS overall design.
- Provide control panel platforms at seven (7) 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 – \$1,549,967

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



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 Deerfield Beach, Florida 33442
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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 \$1,549,967 (see attached Spreadsheet) RMCF will accept the risk of escalation for the period of construction through February 1, 2025 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- \$386,952

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 January 11, 2025 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 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 June 21, 2022 (the expected completion date under CO#3B) and January 2025 (the current projected completion date) or 30 months. (see attached spread sheet).



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In addition, the new change order labor has been escalated from January 2023 thru January 2025, the new projected completion date amounting to 24 months of added escalation.

VI- Time Extension 194 Calendar Days

The original contract duration was 730 calendar days.

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

Original Contract Duration	730 Days
1- Previous CO - Hurricane Irma -	30
2- Shut down delay #1-12/18/17- 12/20/18- Resiliency ULI.	368
3- Design & Const. add Jan 2019 CPM Update – CO 3B	659
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.	252
8- Construction Impacts due to Water Quality additions.	150
Total Contract Days	2,721 Days
Total Days Requested $(2,721 - 730 + 30 = 1,961)$	1,961 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.



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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+) which may be impacted by a 10-year flood event when considering the impact of all 600 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,

A handwritten signature in blue ink, appearing to read "M. Fischer", with a long horizontal flourish extending to the right.

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. 091 CPM Critical Path and Impacted Schedule, All Activities
2. February 26, 2019 Proposal Letter, Item # 26
3. August 7, 2019 Proposal Letter – Model 2.1B
4. March 6, 2019 Proposal Letter, Item # 14
5. November 19, 2020 Summary of Changes
6. November 15, 2020 Jacome-Perez Email
7. October 30, 2019 Meeting Minutes
8. October 31, 2019 RMCF Letter
9. March 27, 2020 Email, RMCF
10. May 14, 2020 Proposal Letter
11. 10-Year Storm and WTS Relocation Pricing Sheets w/HCSS Reports
12. Water Quality Pricing Sheets w/ HCSS Reports



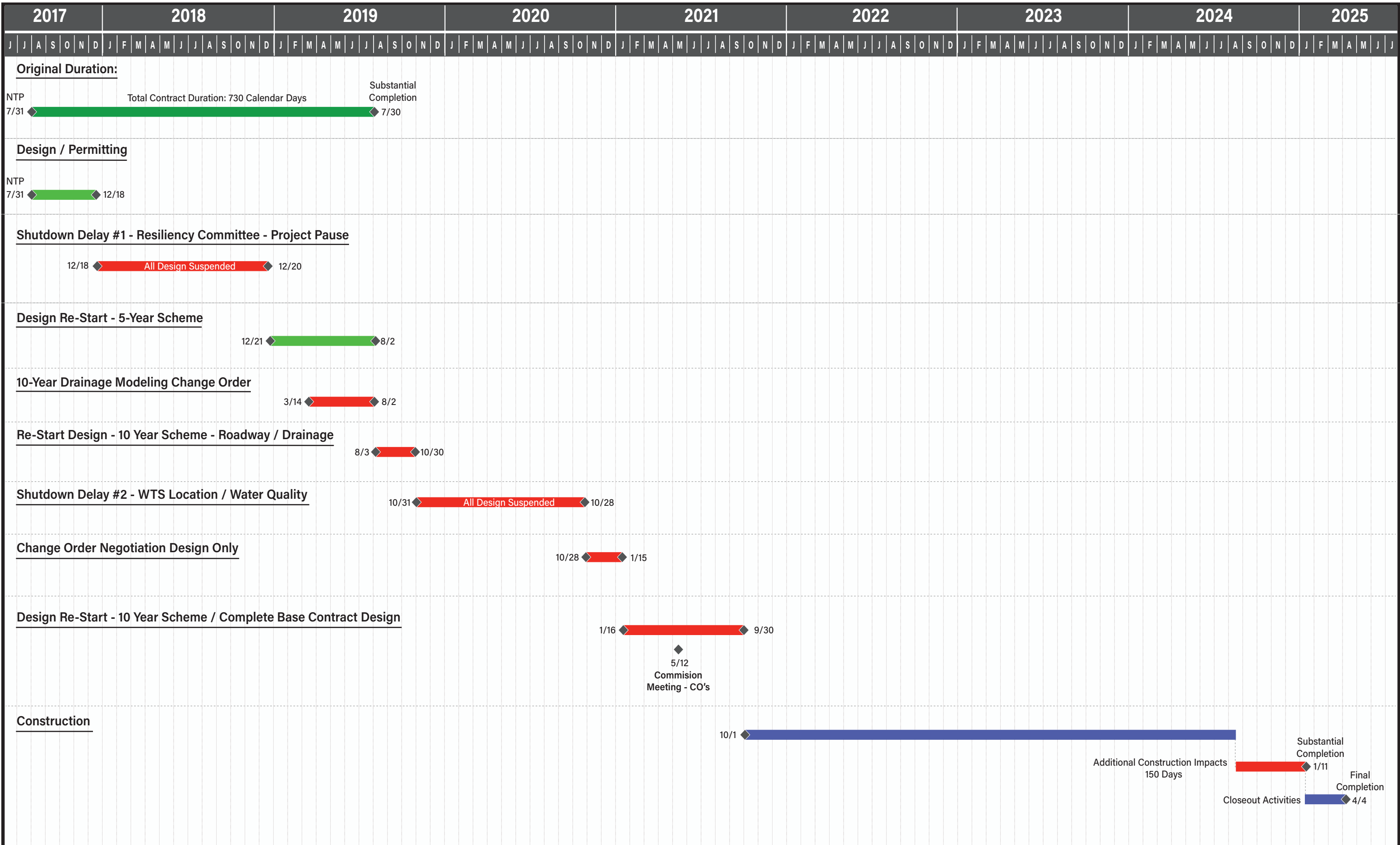
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13. Vendor/Subcontractor Back-up Documentation
14. Steel Price Forecast – IHS Markit
15. Commodity & Subcontractor Escalation Spread Sheet
16. Escalation RMCF Direct Labor Spread Sheet w/ Index Charts



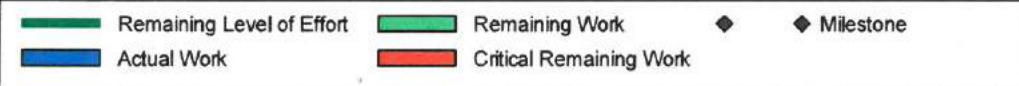
KB 91 West Avenue Neighborhood Improvement North - Delay Summary

Exhibit A





Activity ID	Activity Name	OD	RD	PCT	Start	Finish	Total Float	Calendar	2021												2022												2023												2024												2025																							
									A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M																								
C2-SEG9-1010	MOBILIZE & MATERIAL DELIVERY - SEG 9	2	2	0%	12-Aug-24	13-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1040	ESTABLISH MOT - SEG 9	1	1	0%	14-Aug-24	14-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1020	SURVEY LAY-OUT - SEG 9	2	2	0%	14-Aug-24	15-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1030	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 9	1	1	0%	16-Aug-24	16-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1050	PROTECT EXISTING TREES TO REMAIN - SEG 9	2	2	0%	15-Aug-24	16-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1150	ESTABLISH ELECTRIC SERVICE POINTS - SEG 9	2	2	0%	16-Aug-24	19-Aug-24	-594	KB91 - 5 DAY																																																																								
C2-SEG9-1060	DEMO CURB / GUTTER / SIDEWALK - SEG 9	4	4	0%	19-Aug-24	22-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1190	INSTALL SIGNALIZATION / LIGHTING / WIRE & TERMINATE / TRAFFIC LOOPS - SEG 9	5	5	0%	20-Aug-24	26-Aug-24	-584	KB91 - 5 DAY																																																																								
C2-SEG9-1070	ESTABLISH PEDESTRIAN ACCESS - SEG 9	3	3	0%	23-Aug-24	27-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1080	STRIP PAVEMENT - SEG 9	2	2	0%	28-Aug-24	29-Aug-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1090	DEWATERING SET-UP - SEG 9	3	3	0%	30-Aug-24	03-Sep-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1120	INSTALL STORM DRAINS - SEG 9	25	25	0%	04-Sep-24	08-Oct-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1100	REPLACE SAN. MAIN AND LATERALS - SEG 9	15	15	0%	09-Oct-24	29-Oct-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1110	INSTALL WM LINES - SEG 9	11	11	0%	30-Oct-24	13-Nov-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1130	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 9	15	15	0%	14-Nov-24	04-Dec-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1140	INSTALL STREET LIGHT CONDUIT / BOXES - SEG 9	5	5	0%	28-Nov-24	04-Dec-24	-666	KB91 - 5 DAY																																																																								
C2-SEG9-1210	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 9	18	18	0%	14-Nov-24	09-Dec-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1160	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 9	10	10	0%	10-Dec-24	23-Dec-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1170	INSTALL NEW SIDEWALK - SEG 9	5	5	0%	24-Dec-24	30-Dec-24	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1180	INSTALL ASPHALT BASE 1ST LIFT - SEG 9	2	2	0%	31-Dec-24	01-Jan-25	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1200	LANDSCAPING & IRRIGATION - SEG 9	8	8	0%	02-Jan-25	13-Jan-25	-669	KB91 - 5 DAY																																																																								
C2-SEG9-1220	SEGMENT 9 SUBSTANTIAL COMPLETION	0	0	0%		13-Jan-25	-669	KB91 - 5 DAY																																																																								
WATER QUALITY WELLS																																																																																
A1060	WATER QUALITY WELLS AT 14TH CT & WEST AVENUE (3 EA)	65	65	0%	15-Aug-24	13-Nov-24	-636	KB91 - 5 DAY																																																																								
BAY WALK CONSTRUCTION (SC #3)																																																																																
C5-1010	SURVEY LAY OUT	2	2	0%	23-May-22	24-May-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1000	MOBILIZATION AND MATERIAL DELIVERY	10	10	0%	25-May-22	07-Jun-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1020	INSTALLATION OF PILES	15	15	0%	08-Jun-22	28-Jun-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1030	CONSTRUCTION OF PILE CAPS	15	15	0%	29-Jun-22	19-Jul-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1040	INSTALLATION OF BEAMS AND SLABS	20	20	0%	20-Jul-22	16-Aug-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1050	INSTALLATION OF GRATING	5	5	0%	17-Aug-22	23-Aug-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1060	INSTALLATION RAILINGS AND FINISHES	15	15	0%	24-Aug-22	13-Sep-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1070	INSTALLATION OF ELECTRICAL COMPONENTS	10	10	0%	14-Sep-22	27-Sep-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1080	WALK THROUGH INSPECTIONS AND PUNCH LIST	2	2	0%	28-Sep-22	29-Sep-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1100	SUBSTANTIAL COMPLETION #3	0	0	0%		29-Sep-22	-464	KB91 - 5 DAY WEATHER																																																																								
C5-1110	TOTAL DURATION (FROM SEAWALL / PUMP STA. PERMIT MAX 180 DAYS)	130	130	0%	23-May-22	29-Sep-22	-651	KB91 - 7 DAY																																																																								
C5-1090	PUNCHLIST COMPLETION	15	15	0%	30-Sep-22	20-Oct-22	-62	KB91 - 5 DAY WEATHER																																																																								
GENERATOR SETS																																																																																
LINCOLN RD GENERATOR SET																																																																																
C-G4-120	PREPARE UTILITIES / REMOVALS - LINCOLN RD GEN SET	20	20	0%	12-Jul-21	06-Aug-21	94	KB91 - 5 DAY																																																																								
C-G4-130	FOUNDATION - LINCOLN RD GEN SET	5	5	0%	09-Aug-21	13-Aug-21	152	KB91 - 5 DAY																																																																								
C-G4-140	DUCTBANK - LINCOLN RD GEN SET	5	5	0%	16-Aug-21	20-Aug-21	152	KB91 - 5 DAY																																																																								
C-G4-150	STRUCTURE / PLATFORM - LINCOLN RD GEN SET	15	15	0%	23-Aug-21	10-Sep-21	152	KB91 - 5 DAY																																																																								
C-G4-160	SET EQUIPMENT - LINCOLN RD GEN SET	2	2	0%	13-Sep-21	14-Sep-21	167	KB91 - 5 DAY																																																																								
C-G4-165	INSTALL GAS PIPING - LINCOLN RD GEN SET	5	5	0%	15-Sep-21	21-Sep-21	170	KB91 - 5 DAY																																																																								
C-G4-170	WIRING AND TERMINATIONS - LINCOLN RD GEN SET	10	10	0%	15-Sep-21	28-Sep-21	167	KB91 - 5 DAY																																																																								
C-G4-190	PRE-START-UP - LINCOLN RD GEN SET	1	1	0%	29-Sep-21	29-Sep-21	174	KB91 - 5 DAY																																																																								
C-G4-200	LOAD BANK TESTING - LINCOLN RD GEN SET	2	2	0%	30-Sep-21	01-Oct-21	174	KB91 - 5 DAY																																																																								





Activity ID	Activity Name	OD	RD	PCT	Start	Finish	Total Float	Calendar	2021					2022					2023					2024					2025																											
									A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
KB-91 WEST AVENUE NEIGHBORHOOD IMPROVEMENT NORTH MARCH 31, 2021 UPDATE 43 + NEW DESIGN																																																								
MILESTONES																																																								
MS-03	SUBSTANTIAL COMPLETION #1 (NTP 1 + 730 DAYS 7/30/2019 TIA 01 8/29/2019 + RBL 6/21/2022)	0	0	0%		13-Jan-25*	-937	KB91 - 7 DAY																																																
MS-06	FINAL COMPLETION (SC #1 + 90 DAYS 10/28/2019 TIA 01 11/27/2019 + RBL 9/13/2022)	0	0	0%		07-Apr-25*	-937	KB91 - 7 DAY																																																
DESIGN																																																								
ROADWAY/DRAINAGE/STREET LIGHT/SIGNAL/LANDSCAPING DESIGN/PERMITTING																																																								
HARMONIZATION PLANS																																																								
D4-040	HARMONIZATION PLANS - SEGMENT 1	130	130	0%	21-Dec-18 A	08-Aug-21	-970	KB91 - 7 DAY																																																
CONSTRUCTION (NTP 2)																																																								
SEGMENT 1 1671 WEST AVENUE WTS																																																								
1671 WEST AVENUE WTS CONSTRUCTION/SEA WALL RECONSTRUCTION (SC #2)																																																								
CONSTRUCTION																																																								
C3-1105	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - 1671 WEST AVENUE WTS	41	41	0%	09-Aug-21	04-Oct-21	-669	KB91 - 5 DAY																																																
SEGMENT 2 CONSTRUCTION																																																								
C2-SEG2-1000	HARMONIZATION PLANS & LICENSE AGREEMENT SIGNED OFF BY RESIDENTS - 100% - SEG 2	10	10	0%	21-Sep-21	04-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1010	MOBILIZE & MATERIAL DELIVERY - SEG 2	2	2	0%	05-Oct-21	06-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1040	ESTABLISH MOT - SEG 2	1	1	0%	07-Oct-21	07-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1020	SURVEY LAY-OUT - SEG 2	2	2	0%	07-Oct-21	08-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1030	CONFIRM ENCROACHMENTS ARE REMOVED - SEG 2	1	1	0%	11-Oct-21	11-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1050	PROTECT EXISTING TREES TO REMAIN - SEG 2	2	2	0%	08-Oct-21	11-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1060	DEMO CURB / GUTTER / SIDEWALK - SEG 2	4	4	0%	12-Oct-21	15-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1070	ESTABLISH PEDESTRIAN ACCESS - SEG 2	3	3	0%	18-Oct-21	20-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1080	STRIP PAVEMENT - SEG 2	2	2	0%	21-Oct-21	22-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1090	DEWATERING SET-UP - SEG 2	3	3	0%	25-Oct-21	27-Oct-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1120	INSTALL STORM DRAINS - SEG 2	45	45	0%	28-Oct-21	29-Dec-21	-669	KB91 - 5 DAY																																																
C2-SEG2-1100	REPLACE SAN. MAIN AND LATERALS - SEG 2	22	22	0%	30-Dec-21	28-Jan-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1110	INSTALL WM LINES - SEG 2	15	15	0%	31-Jan-22	18-Feb-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1130	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 2	35	35	0%	21-Feb-22	08-Apr-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1210	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 2	38	38	0%	21-Feb-22	13-Apr-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1160	INSTALL NEW CURB / GUTTER / RETAINING WALLS / ETC - SEG 2	12	12	0%	14-Apr-22	29-Apr-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1170	INSTALL NEW SIDEWALK - SEG 2	7	7	0%	02-May-22	10-May-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1180	INSTALL ASPHALT BASE 1ST LIFT - SEG 2	4	4	0%	11-May-22	16-May-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1200	LANDSCAPING & IRRIGATION - SEG 2	5	5	0%	17-May-22	23-May-22	-669	KB91 - 5 DAY																																																
C2-SEG2-1220	SEGMENT 2 SUBSTANTIAL COMPLETION	0	0	0%		23-May-22	-669	KB91 - 5 DAY																																																
SEGMENT 3 CONSTRUCTION																																																								
C2-SEG3-1010	MOBILIZE & MATERIAL DELIVERY - SEG 3	2	2	0%	24-May-22	25-May-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1040	ESTABLISH MOT - SEG 3	1	1	0%	26-May-22	26-May-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1050	PROTECT EXISTING TREES TO REMAIN - SEG 3	2	2	0%	27-May-22	30-May-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1060	DEMO CURB / GUTTER / SIDEWALK - SEG 3	4	4	0%	31-May-22	03-Jun-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1070	ESTABLISH PEDESTRIAN ACCESS - SEG 3	3	3	0%	06-Jun-22	08-Jun-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1080	STRIP PAVEMENT - SEG 3	2	2	0%	09-Jun-22	10-Jun-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1090	DEWATERING SET-UP - SEG 3	3	3	0%	13-Jun-22	15-Jun-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1120	INSTALL STORM DRAINS - SEG 3	30	30	0%	16-Jun-22	27-Jul-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1100	REPLACE SAN. MAIN AND LATERALS - SEG 3	15	15	0%	28-Jul-22	17-Aug-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1110	INSTALL WM LINES - SEG 3	12	12	0%	18-Aug-22	02-Sep-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1130	ROADWAY CONSTRUCTION ELEV 3.7 NAVD - SEG 3	20	20	0%	05-Sep-22	30-Sep-22	-669	KB91 - 5 DAY																																																
C2-SEG3-1210	HARMONIZE PROPERTIES - EARTHWORK / YARD DRAIN & PIPING - SEG 3	23	23	0%	05-Sep-22	05-Oct-22	-669	KB91 - 5 DAY																																																

■ Remaining Level of Effort
 ■ Remaining Work
 ◆ Milestone
■ Actual Work
 ■ Critical Remaining Work



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

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

February 26, 2019
Sent Via Email

Re: West Ave North - 091

Subj: 10-year Storm Drainage and Lincoln Road PS-6 Pump Option
Item 26

Jorge,

Enclosed please find our formal proposal with supporting back-up in the amount of \$3,082,308 for the 10-year Storm Drainage upgrades as originally submitted in our June 28, 2019 correspondence. The final pricing is \$237,000 below the budget estimate due to the elimination of the upsizing for the Generator to 1,250 KW from 500KW. This pricing is now housed in item 14- Generator sets.

Please be advised that the pricing submitted is based on the following assumptions:

- AECOM drainage map as supplied by the CMB on May 3, 2018 dated January 17, 2018.
- The Pumping units are based on 6 - 20,000 GPM - 135 HP units with VFD's. (2 units Added)
- Generator pricing is based on 1,250 KW a bi-fuel unit with full 40 DBA sound enclosure with ATS included and 48 hours of fuel. Generator dimensions are 18' above ground elevation x 34' long and 11' wide.
- The CDS treatment units are based on 63 CFS max treated flow. (2 units added)
- Invert elevations are based on 84" diameter connection to the trash rack and sit at approximately elevation - 11.25'
- Pump station at Generator set along with Pump Panels will be located within the ROW
- FPL will provide power source to within 20' or less of the new pump station.
- No special permitting is included for height of the facilities or from the City's building department.
- Seawall repair will be expanded to suit the added length of the Dissipater boxes to accommodate the additional flow to the bay from the added pumping capacity.
- Gas main provided by TECO to within 20' of Gen Set

It should be understood, absent a fully certified drainage report, any changes in invert elevations, pipe and pump sizes, etc. will require changes in the pricing as presented herein.

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

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
Chris Mancini
Sabrina Baglieri

Attachments:

- RMCF Re-Cap Report
- RMCF Spread Sheets of Cost
- HCSS Activity Report
- CES Scope and Clarifications
- CES Pricing Sheet
- Supplier Quotations



3100 SW 15th Street
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City of Miami Beach
1700 Convention Center Drive
Miami Beach, FL 33139

August 7, 2019
Sent Via Email

Attn: Jorge Rodriguez
Re: West Avenue North 091
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 \$1,787,000 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.



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Deerfield Beach, Florida 33442
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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.



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Deerfield Beach, Florida 33442
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City of Miami Beach
1700 Convention Center Drive
Miami Beach, FL 33139

March 6, 2019
Sent Via Email

Attn: Jorge Rodriguez

Re: West Avenue North - 091

Subj: Generator Sets – 14th, Lincoln Road Pump Station
Item 14

Jorge,

Enclosed find our proposal to provide 4 - Generator Set located at Lincoln Road for your review and approval in the amount of \$1,044,168. The detailed proposal is a supplement to the budgeting proposal provided on May 24, 2018. The pricing for the Generator Set is \$94,000 higher than budget due to price increases realized by Pantropic, the proposed Generator supplier and the escalation of certain materials and labor costs for RMCF and our subcontractors and vendors.

Formal clarifications are contained within the CES proposal and RMCF's specific assumptions and clarifications are included below:

- Landscaping, MOT as required, platforms, fencing and gates were included under item 26 Lincoln Road Pump Station.
- TECO will provide the gas main to within 20 feet of the Generator location
- Utility relocations are included for CMB utilities only as required under Item 26
- Architectural screening is not included
- The Gen Set is assumed to be within the ROW- no provision has been made for CMB building permits or acquisition of additional property.
- Generator is sized for six (6) 20,000 GPM pumps – RMCF is proposing a Model C-32, 1250 KW.
- Pricing includes setting the Gen Set on the North side of Lincoln Road – No provision to bridge the FPL ductbank on the South side of Lincoln Road is included.

Please contact me with any questions or if additional information is required.



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Sincerely,

Michael R. Fischer, COO.
Ric-Man Construction Florida, Inc.

CC:

Tyson DiPetrillo
Chris Mancini
Sabrina Baglieri

Attachments:

- CES Proposal
- Pantropic Quotation
- RMCF Costing - Activity Report Summary



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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)



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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	 <u>\$4,640,056</u>

091 North

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

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.



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Please contact me with any questions or additional information required.

Sincerely,

A handwritten signature in blue ink, appearing to read 'M. Fischer', is written over a horizontal line.

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.)

Attachment 1		11/15/2020					
West Ave 091							
WTS Option 3A							
Item	Description	Amount	Notes				
1	Force Main- 1671 west to 17th St	\$ 525,000.00	Currently DIP restrained - 48" (3 ea)				
2	Transition Box at Pump discharge	\$ 145,000.00	Precast with flap valves				
3	Drainage Upgrade - Lincoln to 1671	\$ 495,000.00	96" RCP - incl all roadway work and restoration				
4	Landscaping/Renovations at parking lot and 17th St	\$ 65,000.00	Includes panel changes, wiring etc				
5	Pump Motor change to 150 HP	\$ 175,000.00					
6	Mill and pave parking lot	\$ 50,000.00					
7	Dissipator site increase	\$ 50,000.00					
8	Sea Wall mods at 17th st- for Dissipator	\$ 125,000.00	To account for 17th st discharge volumes into canal				
9	MOT at 17th and West ave	\$ 5,000.00					
10	Structural and Framing for Screening w/FND, et al	\$ 610,000.00	Incl FPL vault & barrier wall				
11	Aluminum screen	\$ 122,554.00	Bubble screen 3/15"				
12	Field support costs and Supervision	\$ 291,000.00					
13	Lincoln RD Wall Upgrade	\$	Included in Base bid- increase to 5.7NAVD				
14	Engineering	\$ 2,659,554.00					
15	Borings/SUE	\$ 137,500.00	50 % of balance - rest with contingency draw				
		\$ 30,000.00	Needed to confirm Cofferdam /tremie and structural design				
	Total	\$ 2,827,054.00					





Attachment 2 Water Quality Proposal - West Ave - 090/091		11/17/2020	
Item	090- South	091 North	
	Quantity	Quantity	
Mobilization / Demobilization/Site set up	3 \$ 258,600.00	7 \$ 739,200.00	
15' Dia Secant pile Structures	6 \$ 1,582,400.00	10 \$ 2,644,000.00	
20' Diameter Secant Pile Structures	0 \$ -	4 \$ 2,596,000.00	
Mechanical - Fit out/ structures/Misc items	3 \$ 378,000.00	7 \$ 584,200.00	
Pumping units - 25 HP with Control Panels	3 \$ 375,000.00	5 \$ 625,000.00	
Pumping Units 60 HP with Control Panels	0 \$ -	3 \$ 437,000.00	
Platforms/Landscaping, Fencing	3 \$ 55,000.00	7 \$ 114,000.00	
Electrical & Controls	3 \$ 135,000.00	7 \$ 327,900.00	
100' Wells	3 \$ 244,000.00	13 \$ 1,109,700.00	
Total Budget Price	\$ 3,028,000.00	\$ 9,177,000.00	
Notes			
1 Budget pricing based on current 30% drawings utilizing Secant circular construction for Settling and Wet well structures- Pricing subject to change upon completion of Geotechnical report			
2 Continuous operation anticipated separate from Segmented construction approach for base price as necessary.			
3 Anticipated sequence of Construction:			
	Dur in Cal Days		
Segment 2 North- 2 loc	74		
Segment 2 South- 1 Loc	40		
Segment 3 South - 1 Loc	40		
Segment 3 North- 2 Loc	80		
Segment 6 North- 2 Loc	80		
Segment 5 South- 1 Loc	40		
Segment 9 North- 1 Loc	74		
4 Well pricing based on 100' depth			
5 Segments of Roadway (full width) will be closed to thru traffic at each location- 80' L x 50' W spacing required at each location for Secant construction			
6 Critical path impacts will be evaluated for overall time extension request pending finalization of CO pricing in concert with 3A WTS CO.			
7 Pricing based exclusively on 16 well design per CES February 2020 report and subject to DERM approval.			
8 RMCF /CES assumes no liability for meeting water quality requirements in excess of the well capacity detailed in the February CES Report			
9 Electrical Service to 10 Panel locations provided by EPL within 10' of new panel locations			
10 Allowance for landscaping screening of raised panels and passive relief system, only only.			
11 Access hatches are standard HS-20 traffic loading			



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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+**



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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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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.
3. 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.
4. Individual analysis and information gathering of individual property Storm Water existing drainage conditions, rain leaders, wells, piping, etc.
5. 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.
6. 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,

A handwritten signature in blue ink, appearing to read 'M. Fischer', with a long horizontal stroke extending to the right.

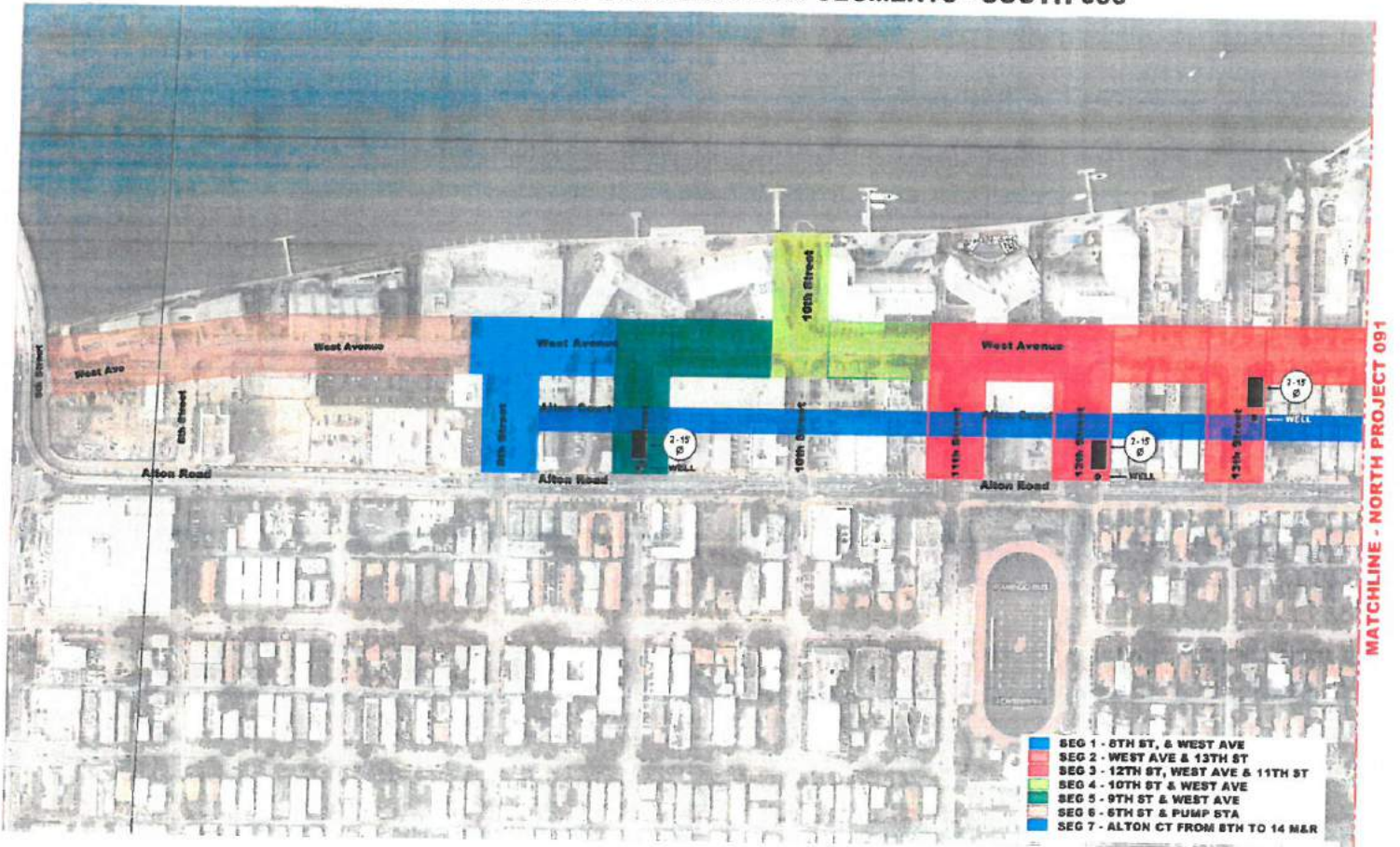
Michael R. Fischer, COO.
Ric-Man Construction Florida, Inc.

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

WEST AVE - PROPOSED CONSTRUCTION SEGMENTS - NORTH 091



WEST AVE - PROPOSED CONSTRUCTION SEGMENTS - SOUTH 090





Michael Fischer

From: 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
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tdipetrillo@ric-manfl.com

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



Meeting Type: Drainage Meeting

Date: Wednesday, October 30th, 2019

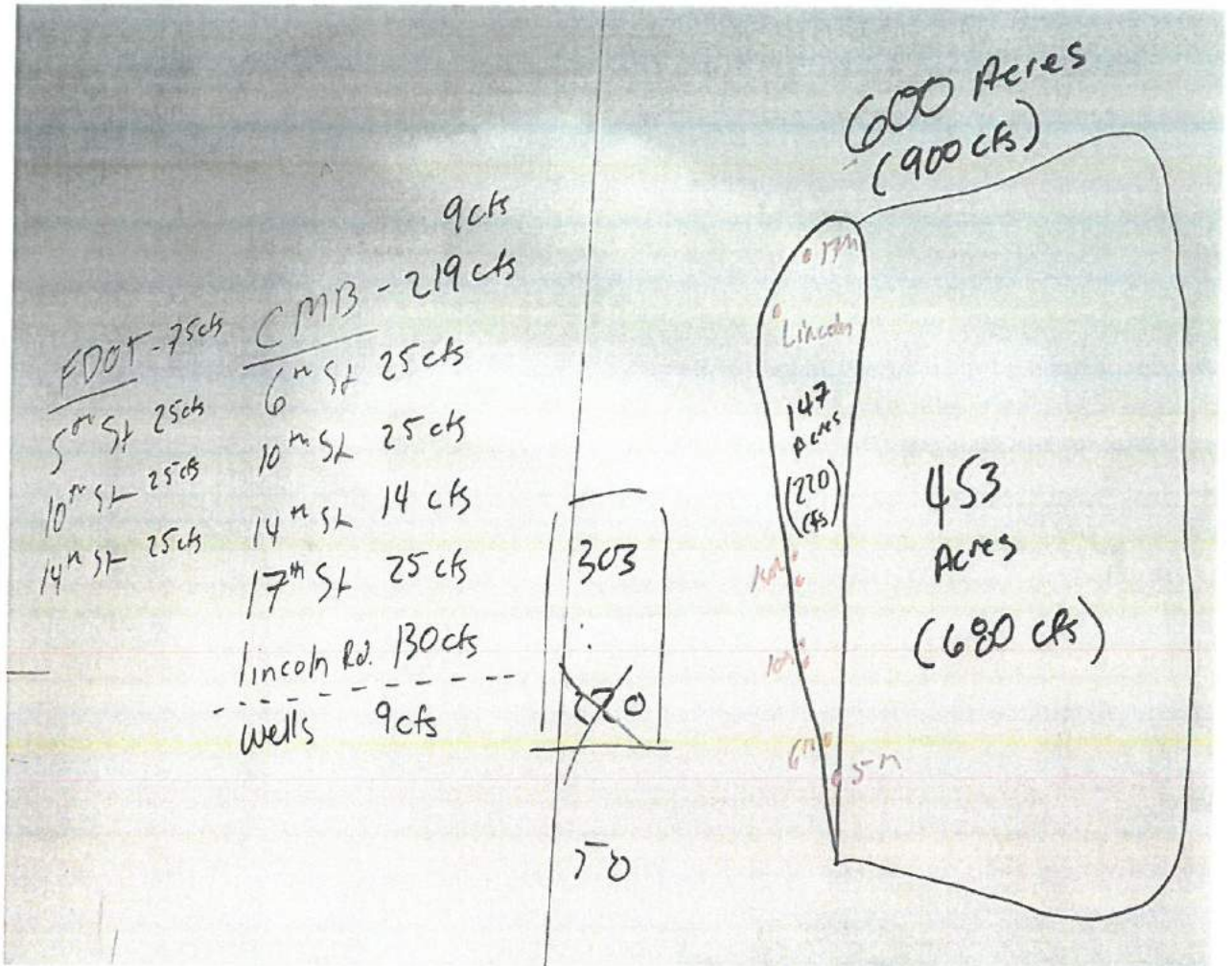
Attendees: Nelson Perez-Jacome – CMB PW
Luis Soto – CMB PW
Mariana Evora – CMB PW
Sabrina Baglieri – CMB CIP
Tyson DiPetrillo – RMCF
Jose Caraballo – CES
Erik M. Alcantara – CES

Location: City of Miami Beach – Public Works Department
1700 Convention Center Drive, Miami Beach, FL 33139

Discussion Items:

- 1) Meeting to discuss drainage design and the approach towards DERM permitting
- 2) Current Issues:
 - i. 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.
 - b. 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.
 - v. 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 10-year, 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**



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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



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Deerfield Beach, Florida 33442
Office:(954)426-1221
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- 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.



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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



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:

1. Perform soil borings at each location.
2. 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.
7. 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.

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

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
2. Identify the characteristics and properties of the soils present
3. Use available soil characteristics, properties and potential project geometrics to identify possible geotechnical concerns
4. Provide geotechnical recommendations for engineering design
5. 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:

1. Brief description of soil conditions observed in the field and in the laboratory
2. Conclusions and recommendations regarding:
 - a. Primary geotechnical engineering concerns and mitigating measures, as applicable
 - b. 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.

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

- 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
 - G2 - General Notes
- **Civil:**
 - C1 - Existing Conditions and Demolition Plan
 - C2 - Proposed Site Plan
 - C3 - Proposed Section Plan
 - C4 - Grading and Restoration Plan
 - C5 - Standard Details
 - C6 - Well Drill Plan (Not part of this submittal)
- **Mechanical:**
 - M1 - Mechanical Notes
 - M2 - General Plan
 - M3 - General Profile
 - M4 - Settling Tank Plan and Sections
 - 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:**
 - S1 - Structural Notes
 - S2 - General Plan
 - S3 - General Profile
 - S4 - Settling Tank Plan
 - S5 - Settling Tank Section (Not part of this submittal)
 - S6 - Wet Well Plan
 - S7 - Wet Well Sections (Not part of this submittal)
 - S8 - Drainage Well Plan and Sections
 - S9 - Control Slab (Not part of this submittal)
 - S10 - Secant Piles Details (Not part of this submittal)
 - S11 - Structural General Details
- **Electrical:**
 - E1 - Electrical Notes
 - 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)

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

- 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**
 - **C2 - Proposed Site Plan**
 - **C3 - Proposed Section Plan**
 - **C4 - Grading and Restoration Plan**
 - **C5 - Standard Details**
 - **C6 - Well Drill Plan**
- **Mechanical:**
 - **M1 - Mechanical Notes**

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

- M2 - General Plan
- M3 - General Profile
- M4 - Settling Tank Plan and Sections
- M5 - Wet Well Plan and Sections
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- M7 - Drainage Pipe and Force Main Profiles
- M8 – Passive Relief System Profile
- M9 – Mechanical Details
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 - 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
 - E5 – Controls Diagram
 - E6 – RTU Installation
 - 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.

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

- 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
 - G2 - General Notes
- **Civil:**
 - C1 - Existing Conditions and Demolition Plan
 - C2 - Proposed Site Plan
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 - E5 - Controls Diagram
 - E6 - RTU Installation
 - E7 - Electrical Details

6. 90% Deliverables:



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.



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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



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.

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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:



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

1. Perform soil borings at each location.
2. 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.
3. 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.
6. Revision to the drainage report to incorporate this water quality component.
7. 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
2. Identify the characteristics and properties of the soils present
3. Use available soil characteristics, properties and potential project geometrics to identify possible geotechnical concerns
4. Provide geotechnical recommendations for engineering design
5. 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:

1. Brief description of soil conditions observed in the field and in the laboratory
2. Conclusions and recommendations regarding:
 - a. Primary geotechnical engineering concerns and mitigating measures, as applicable
 - b. 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:**
 - **G1 - Cover and Index**
 - **G2 - General Notes**
- **Civil:**
 - **C1 - Existing Conditions and Demolition Plan**
 - **C2 - Proposed Site Plan**
 - **C3 - Proposed Section Plan**
 - **C4 - Grading and Restoration Plan**
 - **C5 - Standard Details**
 - C6 - Well Drill Plan (Not part of this submittal)
- **Mechanical:**
 - **M1 - Mechanical Notes**
 - **M2 - General Plan**
 - **M3 - General Profile**
 - **M4 - Settling Tank Plan and Sections**
 - **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:**
 - **S1 - Structural Notes**
 - **S2 - General Plan**
 - **S3 - General Profile**

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

- **S4 – Settling Tank Plan**
- S5 – Settling Tank Section (Not part of this submittal)
- **S6 – Wet Well Plan**
- S7 – Wet Well Sections (Not part of this submittal)
- **S8 – Drainage Well Plan and Sections**
- S9 – Control Slab (Not part of this submittal)
- S10 – Secant Piles Details (Not part of this submittal)
- **S11 – Structural General Details**
- **Electrical:**
 - **E1 – Electrical Notes**
 - **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:

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

- **General:**
 - G1 - Cover and Index
 - G2 - General Notes
- **Civil:**
 - C1 - Existing Conditions and Demolition Plan
 - C2 - Proposed Site Plan
 - C3 - Proposed Section Plan
 - C4 - Grading and Restoration Plan
 - C5 - Standard Details
 - C6 - Well Drill Plan
- **Mechanical:**
 - M1 - Mechanical Notes
 - M2 - General Plan
 - M3 - General Profile
 - M4 - Settling Tank Plan and Sections
 - 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:**
 - S1 - Structural Notes
 - S2 - General Plan
 - S3 - General Profile
 - S4 - Settling Tank Plan
 - S5 - Settling Tank Section
 - S6 - Wet Well Plan
 - S7 - Wet Well Sections
 - S8 - Drainage Well Plan and Sections
 - 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
 - E5 - Controls Diagram
 - E6 - RTU Installation
 - 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

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

- 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
 - G2 - General Notes
- **Civil:**
 - C1 - Existing Conditions and Demolition Plan
 - C2 - Proposed Site Plan
 - C3 - Proposed Section Plan
 - C4 - Grading and Restoration Plan
 - C5 - Standard Details
 - C6 - Well Drill Plan
- **Mechanical:**
 - M1 - Mechanical Notes
 - M2 - General Plan
 - M3 - General Profile
 - M4 - Settling Tank Plan and Sections
 - 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:**
 - S1 - Structural Notes
 - S2 - General Plan
 - S3 - General Profile
 - S4 - Settling Tank Plan
 - S5 - Settling Tank Section
 - S6 - Wet Well Plan
 - S7 - Wet Well Sections
 - S8 - Drainage Well Plan and Sections
 - 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
 - E5 – Controls Diagram
 - E6 – RTU Installation
 - 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)



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

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		West Ave Project		Alternate & Water Quality Wells - Cylindrical settlement and Separate pumping structure with shallow wells		Budget Pricing	
Description	South-090 RMCF	South-090 CES	Total-090	North-091 RMCF	North-091 CES	Total-091	Comments		
Design and Construction Inspection		\$476,117.00				883,458.00			
Pre-design Investigation- revise drainage model									
Revise drainage report									
Storm Water WM re-designs									
Concept development									
30%, 60%, 90% Design - civil, elect, mech'l	\$ 8,408.00			\$ 13,480.00					
Subsurface investigations									
Surveying, Utility Interferences	\$ 3,332.00			\$ 4,696.00					
Permitting - DERM, SFWMD, etc.	\$ 3,548.00			\$ 6,240.00					
MOT development									
Construction Inspection, well certification									
Meetings, Misc expenses									
As-built documentation									
Estimating/Pricing & Scoping	\$ 8,666.00			\$ 16,468.00					
Subtotal	\$ 23,954.00	\$ 476,117.00		\$ 40,884.00	\$ 883,458.00				
Inv & Bond- 2%	\$ 719.00	\$ 14,283.00		\$ 1,227.00	\$ 26,503.00				
Subtotal	\$ 24,673.00	\$ 490,395.00		\$ 42,111.00	\$ 909,961.00				
RMCF Mark-up 10/5	\$ 2,468.00	\$ 24,520.00		\$ 4,211.00	\$ 45,498.00				
Subtotal Design and Coordination	\$ 27,141.00	\$ 514,915.00		\$ 46,322.00	\$ 955,459.00				
Total Change Request		\$ 542,056.00			\$ 1,001,781.00				

Spread sheet Item 3- Design /Constructability reviews
 Spread Sheet Item #1- Survey field Support
 Spread Sheet Item #4- permitting Support

Spread Sheet Item # 2- Estimating/Pricing/ Scoping

West Avenue Phase II Storm Drainage - South Contract (090) - Drainage Wells																				
CES	TITLES	Principal	Project Manager/COM	QA/QC	Engineering Manager	Senior Civil Engineer	Structural Engineer	Electrical Engineer	Hydraulic Engineer	Project Engineer	Civil Engineer	Staff Engineer	Designer/CAD Manager	CAD Designer	Inspector	Public Relations Coordinator	Accounting	Admin.	Total Hours	Total Loads of Labor
Change Order																				
Design and Permitting Services for the Storm Drainage System (Drainage Wells)																				
1	Water Quality Analysis	8																		
2	Preliminary Evaluation and Development of Well Concepts	14																		
3	Revises ICRP Drainage Report	18																		
4	Revises Drainage Report	18																		
5	Perform Engineering Calculations	2																		
6	URBY Conflicts Evaluation and Coordination	2																		
7	Storm Drainage Redesign and submit 80% Well Design Packages to City for Review	12																		
8a	Civil Design	2																		
8b	Structural Design	2																		
8c	Mechanical Design	2																		
8d	Electrical Design	2																		
9	Prepare and submit 100% Well Design Packages to CMB for Review	2																		
10a	Civil Design	2																		
10b	Structural Design	2																		
10c	Mechanical Design	2																		
10d	Electrical Design	2																		
11	Permitting	2																		
11a	DEAM Class V Permit Preparation and Submit	12																		
11b	DEAM Class II Permit Modification and Submit	8																		
11c	SPWMD CDP Permit Modification and Submit	8																		
11d	Coordination with Permitting Agencies	8																		
11e	Well Certification Inspections	8																		
SUB-TOTAL																				
12	Attend Project Coordination Meetings	32																		
SUB-TOTAL																				
Sub-Consultants																				
Geotechnical Investigation - Langan																				
Engineering																				
SUB-TOTAL																				
TOTAL HOURS PER TITLE:																				
TOTAL FEES PER TITLE:																				

West Avenue Phase II Storm Drainage - North Contract (091) - Drainage Wells

CES

TITLES	Principal	Project Manager EOR	QA/QC	Engineering Manager	Senior Civil Engineer	Structural Engineer	Electrical Engineer	Hydraulic Engineer	Project Engineer	Civil Engineer	SM	Engineer	CAD Manager / Designer	CAD Designer	Inspector	Public Relations Coordinator	Accounting	Admin.	Total Hours	Total Loaded Labor
<p>1 Winter Quality Analysis and Development of Preliminary Evaluation and Development of WWT Concepts</p> <p>2 WWT Concepts</p> <p>3 Review EOPR Drainage Model</p> <p>4 Review Drainage Report</p> <p>5 Perform Engineering Calculations</p> <p>6 Utility Conflicts Evaluation and Coordination</p> <p>7 Storm Drainage Re-design</p> <p>8 WWT Main Redesign</p> <p>9 Prepare and submit 60% WWS Design Package to CMB for Review</p> <p>10a Civil Design</p> <p>10b Structural Design</p> <p>10c Mechanical Design</p> <p>10d Electrical Design</p> <p>10e Packets to CMB for Review</p> <p>10f Civil Design</p> <p>10g Structural Design</p> <p>10h Mechanical Design</p> <p>10i Electrical Design</p> <p>10j Packets to CMB for Review</p> <p>11 Prepare and submit 100% WWS Design Package to CMB for Review</p> <p>11a Civil Design</p> <p>11b Structural Design</p> <p>11c Mechanical Design</p> <p>11d Electrical Design</p> <p>11e Promotion</p> <p>12a DERM Class V Permit Preparation and Submittal</p> <p>12b DERM Class II Permit Modification and Submittal</p> <p>12c SFWD EOPR Permit Modification and Submittal</p> <p>12d Coordination with Farming Agencies</p> <p>12e Well Certification Inspections</p> <p>SUB-TOTAL</p>																				
<p>13 Attend Project Coordination Meetings</p> <p>SUB-TOTAL</p>																				
<p>14 Geotechnical Investigation - Logan Engineering</p> <p>SUB-TOTAL</p>																				
<p>TOTAL HOURS PER TITLE:</p> <p>TOTAL FEE PER TITLE:</p>																				



West Avenue North - 091

Drainage

Table with columns: Item, Qty, Unit, Subcontractor, Material, Labor (MH, Rate, Total), Equipment, New Total, Original Total, Delta, Notes. Includes sections for Pump Station Engineering, Sidewalk/Tree Removal, Paving Parking Lot, Platform Screening & Support, FPL Vault, Discharger Receiver Box, 17th Sea Wall & Lincoln Rd., 8" AV Butterfly Valves, Header Pipe System, and various streets (Lincoln Ct, Lincoln Terrace, 14th St, 15th Street, 14th Court, Lincoln Road, West Avenue).

Summary row with values: \$ 3,840,308.00, Subcontractor Markup \$ 34,345.05, Bond & Insurance \$ 115,200.00, TOTAL \$ 4,389,853.05

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
*** 11	CES Engineering					Takeoff:	1.00 LS		Bid:	1.00 LS	
11.01	CES Engineering	1.00	LS	F6319A	50	10.00		152,500			152,500
Mh:	Shifts:	Mh/Un:		Un/Sh:				152,500.00			152,500.00
*****	Biditem/Category	11	*****					152,500			152,500
Mh:	Mh/Un:							152,500.00			152,500.00
*** 12	Sidewalk/tree removal/Landscaping/Fencing					Takeoff:	1.00 LS		Bid:	1.00 LS	
12.01	Fence 7' high	420.00	LF	F6319A	50	10.00				8,400	8,400
Mh:	Shifts:	Mh/Un:		Un/Sh:						20.00	20.00
12.02	Double Gate	1.00	EA	F6319A	50	10.00				10,000	10,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						10,000.00	10,000.00
12.03	Landscaping 17th St. & Parkin	1.00	LS	F6319A	50	10.00				35,000	35,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						35,000.00	35,000.00
12.04	Irrigation	1.00	LS	F6319A	50	10.00				5,000	5,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						5,000.00	5,000.00
12.05	Sidewalk - 6' wide	3,000.00	SF	F6319A	50	10.00				30,000	30,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						10.00	10.00
12.06	Tree Removal	1.00	LS	F6319A	50	10.00				5,000	5,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						5,000.00	5,000.00
*****	Biditem/Category	12	*****							93,400	93,400
Mh:	Mh/Un:									93,400.00	93,400.00
*** 13	Utility Relocatopn					Takeoff:	1.00 LS		Bid:	1.00 LS	
13.01	Utility Relocatopn	1.00	LS	F6319A	50	10.00	14,604	1,200	13,886		29,690
Mh:	300.00	Shifts:	5.0	Mh/Un:	300.0000	Un/Sh:	0.2000	14,603.93	1,200.00	13,885.80	29,689.73
*****	Biditem/Category	13	*****					14,604	1,200	13,886	29,690
Mh:	300.00	Mh/Un:	300.0000					14,603.93	1,200.00	13,885.80	29,689.73
*** 14	Utility Removals					Takeoff:	1.00 LS		Bid:	1.00 LS	
14.01	Utility Removals	830.00	LF	F6319A	50	10.00	11,683	960	11,109		23,752
Mh:	240.00	Shifts:	4.0	Mh/Un:	0.2892	Un/Sh:	207.5000	14.08	1.16	13.38	28.62
*****	Biditem/Category	14	*****					11,683	960	11,109	23,752
Mh:	240.00	Mh/Un:	240.0000					11,683.14	960.00	11,108.64	23,751.78
*** 15	Paving Parking Lot					Takeoff:	1.00 LS		Bid:	1.00 LS	
15.01	Paving Parking Lot	1,611.00	SY	F6319A	50	10.00				24,926	24,926
Mh:		Shifts:		Mh/Un:		Un/Sh:				15.47	15.47
15.02	Aphalt Removal & Stone Base	1,000.00	SY	F6319A	50	10.00	8,762	2,675	3,000	8,331	22,769
Mh:	180.00	Shifts:	3.0	Mh/Un:	0.1800	Un/Sh:	333.3333	8.76	2.68	3.00	8.33
*****	Biditem/Category	15	*****					8,762	2,675	3,000	8,331
Mh:	180.00	Mh/Un:	180.0000					8,762.38	2,675.00	3,000.00	8,331.48
										24,926.30	47,695.16
*** 16	MOT 17th St. & West Ave.					Takeoff:	1.00 LS		Bid:	1.00 LS	
16.01	MOT 17th St. & West Ave.	1.00	LS	F6319A	50	10.00	34,139	10,300	13,200	7,500	65,139
Mh:	880.00	Shifts:		Mh/Un:	880.0000	Un/Sh:		34,139.46	10,300.00	13,200.00	7,500.00
*****	Biditem/Category	16	*****					34,139	10,300	13,200	7,500
Mh:	880.00	Mh/Un:	880.0000					34,139.46	10,300.00	13,200.00	7,500.00
										65,139.46	65,139.46
*** 17	Platform Screening & Support					Takeoff:	1.00 LS		Bid:	1.00 LS	
17.01	Platform Screening & Support	3,400.00	SF	F6319A	50	10.00	58,416	277,478	17,051		352,945
Mh:	1,200.00	Shifts:	20.0	Mh/Un:	0.3529	Un/Sh:	170.0000	17.18	81.61	5.02	103.81
17.02	Curb & Gutter	420.00	LF	F6319A	50	10.00				14,700	14,700
Mh:		Shifts:		Mh/Un:		Un/Sh:				35.00	35.00
*****	Biditem/Category	17	*****					58,416	277,478	17,051	14,700
Mh:	1,200.00	Mh/Un:	1,200.0000					58,415.76	277,477.75	17,051.20	14,700.00
										367,644.71	367,644.71
*** 18	FPL Vault					Takeoff:	1.00 LS		Bid:	1.00 LS	

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total		
18.01	FPL Vault	1.00	LS	F6319A	50	10.00				171,600	171,600		
Mh:	Shifts:	Mh/Un:		Un/Sh:						171,600.00	171,600.00		
*****Biditem/Category		18	*****							171,600	171,600		
Mh:	Mh/Un:									171,600.00	171,600.00		
*** 19	Transition Box					Takeoff:	1.00	LS	Bid:	1.00	LS		
19.01	Cofferdam 60' x 30'	5,400.00	SF	F6319A	50	10.00	84,968	13,375	112,915	170,000	381,258		
Mh:	1,760.00	Shifts:	22.0	Mh/Un:	0.3259	Un/Sh:	245.4545	15.73	2.48	20.91	31.48	70.60	
19.02	Excavate/Backfill extra at deep	800.00	CY	F6319A	50	10.00	14,604	3,852	13,886		32,342		
Mh:	300.00	Shifts:	5.0	Mh/Un:	0.3750	Un/Sh:	160.0000	18.25	4.82	17.36	40.43		
19.03	Backfill Perimeter	320.00	TON	F6319A	50	10.00	8,762	5,136	8,000	8,331	30,230		
Mh:	180.00	Shifts:	3.0	Mh/Un:	0.5625	Un/Sh:	106.6667	27.38	16.05	25.00	26.04	94.47	
19.04	Dewatering	1.00	LS	F6319A	50	10.00	10,131	16,374		4,617	31,122		
Mh:	200.00	Shifts:	4.0	Mh/Un:	200.0000	Un/Sh:	0.2500	10,131.36	16,374.36	4,616.68	31,122.40		
*****Biditem/Category		19	*****				118,466	38,737	8,000	139,749	170,000	474,952	
Mh:	2,440.00	Mh/Un:	2,440.0000				118,465.60	38,737.36	8,000.00	139,749.19	170,000.00	474,952.15	
*** 20	Dissipator Receiver Box					Takeoff:	1.00	LS	Bid:	1.00	LS		
20.01	Dissipator Receiver Box	4,200.00	SF	F6319A	50	10.00	30,897	13,375	35,857	100,000	180,129		
Mh:	640.00	Shifts:	8.0	Mh/Un:	0.1524	Un/Sh:	525.0000	7.36	3.18	8.54	23.81	42.89	
20.02	Tremie Seal	20.00	CY	F6319A	50	10.00	7,010	2,782	7,200		16,992		
Mh:	144.00	Shifts:	2.4	Mh/Un:	7.2000	Un/Sh:	8.3333	350.50	139.10	360.01	849.60		
20.03	Backfill - Stone Base	800.00	CY	F6319A	50	10.00	14,604	2,889	13,886		31,379		
Mh:	300.00	Shifts:	5.0	Mh/Un:	0.3750	Un/Sh:	160.0000	18.25	3.61	17.36	39.22		
20.04	Backfill Perimeter	400.00	TON	F6319A	50	10.00	8,762	6,420	5,250	8,331	28,764		
Mh:	180.00	Shifts:	3.0	Mh/Un:	0.4500	Un/Sh:	133.3333	21.91	16.05	13.13	20.83	71.91	
20.05	Dewatering	1.00	LS	F6319A	50	10.00	6,414	16,374		2,922	25,710		
Mh:	126.61	Shifts:	2.5	Mh/Un:	126.6100	Un/Sh:	0.3949	6,413.53	16,374.36	2,922.36	25,710.25		
*****Biditem/Category		20	*****				67,687	41,840	5,250	68,197	100,000	282,974	
Mh:	1,390.61	Mh/Un:	1,390.6100				67,687.16	41,840.36	5,250.00	68,196.54	100,000.00	282,974.06	
*** 21	17th Sea Wall & Lincoln Rd.					Takeoff:	1.00	LS	Bid:	1.00	LS		
21.01	Credits	-1.00	LS	F6319A	50	10.00			-19,000		-19,000		
Mh:		Shifts:		Mh/Un:		Un/Sh:			19,000.00		19,000.00		
21.02	Sea Wall Removal (17th St.)	80.00	LF	F6319A	50	10.00	11,683	10,700	300	8,331	3,500	34,515	
Mh:	240.00	Shifts:	4.0	Mh/Un:	3.0000	Un/Sh:	20.0000	146.04	133.75	3.75	104.14	43.75	431.43
21.03	Pile Cap Replacement	12.00	CY	F6319A	50	10.00	30,769	43,228		21,761	15,600	111,358	
Mh:	640.00	Shifts:	5.0	Mh/Un:	53.3333	Un/Sh:	2.4000	2,564.12	3,602.33	1,813.40	1,300.00	9,279.85	
21.04	Tremie Seal	20.00	CY	F6319A	50	10.00	7,010	2,782		6,665		16,457	
Mh:	144.00	Shifts:	2.4	Mh/Un:	7.2000	Un/Sh:	8.3333	350.50	139.10	333.26		822.85	
21.05	Dewatering	1.00	LS	F6319A	50	10.00	2,533	6,634		1,154		10,321	
Mh:	50.00	Shifts:	1.0	Mh/Un:	50.0000	Un/Sh:	1.0000	2,532.82	6,634.00	1,154.17		10,320.99	
*****Biditem/Category		21	*****				51,995	63,344	-18,700	37,912	19,100	153,651	
Mh:	1,074.00	Mh/Un:	1,074.0000				51,995.25	63,344.00	-18,700.00	37,911.63	19,100.00	153,650.88	
*** 22	84" PCCP					Takeoff:	1.00	LS	Bid:	1.00	LS		
22.01	84" PCCP	450.00	LS	F6319A	50	10.00	79,286	747,663		89,892		916,841	
Mh:	1,500.00	Shifts:	18.8	Mh/Un:	3.3333	Un/Sh:	24.0000	176.19	1,661.47	199.76		2,037.42	
22.02	Joint Testing & Grouting	25.00	EA	F6319A	50	10.00	2,910	13,108		818		16,835	
Mh:	75.00	Shifts:		Mh/Un:	3.0000	Un/Sh:		116.38	524.30	32.71		673.39	
22.03	Clean & Inspect	450.00	LF	F6319A	50	10.00	7,108			525		7,633	
Mh:	150.00	Shifts:	3.0	Mh/Un:	0.3333	Un/Sh:	150.0000	15.80		1.17		16.96	
*****Biditem/Category		22	*****				89,304	760,770		91,235		941,309	
Mh:	1,725.00	Mh/Un:	1,725.0000				89,303.57	760,770.00		91,235.35		941,308.92	
*** 23	60" Flap Valves					Takeoff:	1.00	LS	Bid:	1.00	LS		
23.01	Credits	-4.00	EA	F6319A	50	10.00			-10,000		-10,000		
Mh:		Shifts:		Mh/Un:		Un/Sh:			2,500.00		2,500.00		

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
*****Biditem/Category		23	*****					-10,000			-10,000
Mh:	Mh/Un:							-10,000.00			-10,000.00
***	26	Platform				Takeoff:	1.00 LS		Bid:	1.00 LS	
26.01	Platform	48.00	SF	F6319A	50 10.00	3,963			1,791		5,754
Mh:	80.00	Shifts:	Mh/Un:	1.6667	Un/Sh:	82.56			37.31		119.87
*****Biditem/Category		26	*****			3,963			1,791		5,754
Mh:	80.00	Mh/Un:	80.0000			3,962.68			1,790.88		5,753.56
***	27	Restoration West Ave. from Lincoln Rd. to 17				Takeoff:	1.00 LS		Bid:	1.00 LS	
27.01	Milling Existing Asphalt	3,310.00	SY	F6319A	50 10.00					9,930	9,930
Mh:		Shifts:	Mh/Un:		Un/Sh:					3.00	3.00
27.02	Road Grading	3,300.00	SY	F6319A	50 10.00	6,740	6,698		5,563		19,001
Mh:	132.00	Shifts:	3.3	Mh/Un:	0.0400	Un/Sh:	1,000.0000	2.04	2.03	1.69	5.76
27.03	Paving	3,310.00	SY	F6319A	50 10.00					49,650	49,650
Mh:		Shifts:	Mh/Un:		Un/Sh:					15.00	15.00
27.04	Striping and Signage	1.00	LS	F6319A	50 10.00					12,500	12,500
Mh:		Shifts:	Mh/Un:		Un/Sh:					12,500.00	12,500.00
*****Biditem/Category		27	*****			6,740	6,698		5,563	72,080	91,081
Mh:	132.00	Mh/Un:	132.0000			6,740.05	6,698.20		5,562.97	72,080.00	91,081.22
***	28	Header Pipe System				Takeoff:	-1.00 LS		Bid:	-1.00 LS	
28.01	Header Pipe System	-1.00	LS	F6319A	50 10.00				-62,534		-62,534
Mh:		Shifts:	Mh/Un:		Un/Sh:				62,534.00		62,534.00
*****Biditem/Category		28	*****						-62,534		-62,534
Mh:		Mh/Un:							62,534.00		62,534.00
***	290	29	Lincoln Ct.				Takeoff:	1.00 LS		Bid:	1.00 LS
290.01	Connect 12" Drain to Existing	7.00	EA	F6319A	50 10.00	9,437	407	187	3,606	2,800	16,437
Mh:	175.00	Shifts:	3.5	Mh/Un:	25.0000	Un/Sh:	2.0000	1,348.19	58.09	26.75	515.15
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80	Shifts:	2.1	Mh/Un:	168.8000	Un/Sh:	0.4739	8,353.39	19,154.04	7,017.42	34,524.85
*****Biditem/Category		290	*****			17,791	19,561	187	10,623	2,800	50,962
Mh:	343.80	Mh/Un:	343.8000			17,790.75	19,560.64	187.25	10,623.48	2,800.00	50,962.12
***	300	30	Lincoln Terrace				Takeoff:	1.00 LS		Bid:	1.00 LS
300.01	Connect 12" Drain to Existing	8.00	EA	F6319A	50 10.00	10,786	464	214	4,121	3,200	18,784
Mh:	200.00	Shifts:	4.0	Mh/Un:	25.0000	Un/Sh:	2.0000	1,348.19	57.94	26.75	515.15
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80	Shifts:	2.1	Mh/Un:	168.8000	Un/Sh:	0.4739	8,353.39	19,154.04	7,017.42	34,524.85
*****Biditem/Category		300	*****			19,139	19,618	214	11,139	3,200	53,309
Mh:	368.80	Mh/Un:	368.8000			19,138.92	19,617.56	214.00	11,138.62	3,200.00	53,309.10
***	310	31	16th Street West of Bay Rd.				Takeoff:	1.00 LS		Bid:	1.00 LS
310.01	Connect 12" Drain to Existing	9.00	EA	F6319A	50 10.00	12,134	522	241	4,636	3,600	21,133
Mh:	225.00	Shifts:	4.5	Mh/Un:	25.0000	Un/Sh:	2.0000	1,348.19	58.05	26.75	515.15
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80	Shifts:	2.1	Mh/Un:	168.8000	Un/Sh:	0.4739	8,353.39	19,154.04	7,017.42	34,524.85
*****Biditem/Category		310	*****			20,487	19,677	241	11,654	3,600	55,658
Mh:	393.80	Mh/Un:	393.8000			20,487.14	19,676.52	240.75	11,653.78	3,600.00	55,658.19
***	320	32	16th Street				Takeoff:	1.00 LS		Bid:	1.00 LS
320.01	Connect 12" Drain to Existing	4.00	EA	F6319A	50 10.00	5,393	232	107	2,061	1,600	9,392
Mh:	100.00	Shifts:	2.0	Mh/Un:	25.0000	Un/Sh:	2.0000	1,348.19	57.94	26.75	515.15
320.10	24" RCP Installation	150.00	LF	F6319A	50 10.00	5,399	24,203	720	4,536		34,858
Mh:	109.09	Shifts:	1.4	Mh/Un:	0.7273	Un/Sh:	110.0514	35.99	161.35	4.80	30.24
320.11	Haul Out Muck	41.00	CY	F6319A	50 10.00	1,318		2,250	1,645		5,213
Mh:	24.60	Shifts:	Mh/Un:	0.6000	Un/Sh:	32.14		54.88	40.12		127.14

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
320.12	Dewatering	150.00	LF	F6319A	50 10.00	760	2,022		346		3,128
Mh:	15.00 Shifts: 0.3	Mh/Un: 0.1000	Un/Sh: 500.0000			5.07	13.48		2.31		20.86
320.13	36" RCP Installation	360.00	LF	F6319A	50 10.00	12,955	71,780	1,620	10,882		97,237
Mh:	261.79 Shifts: 3.3	Mh/Un: 0.7272	Un/Sh: 110.0244			35.99	199.39	4.50	30.23		270.10
320.14	Haul Out Muck	162.00	CY	F6319A	50 10.00	5,266		9,000	6,574		20,840
Mh:	98.30 Shifts:	Mh/Un: 0.6068	Un/Sh:			32.51		55.56	40.58		128.64
320.16	Dewatering	360.00	LF	F6319A	50 10.00	3,647	4,869		1,662		10,178
Mh:	72.00 Shifts: 1.4	Mh/Un: 0.2000	Un/Sh: 250.0000			10.13	13.52		4.62		28.27
320.20	Precast Type J (MH-16WA, M	2.00	EA	F6319A	50 10.00	8,898	11,021		8,479		28,398
Mh:	180.00 Shifts: 2.0	Mh/Un: 90.0000	Un/Sh: 1.0000			4,449.09	5,510.45		4,239.71		14,199.24
320.30	Mud Work	2.00	EA	F6319A	50 10.00	5,066	139		953		6,157
Mh:	100.00 Shifts: 2.0	Mh/Un: 50.0000	Un/Sh: 1.0000			2,532.84	69.55		476.25		3,078.64
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80 Shifts: 2.1	Mh/Un: 168.8000	Un/Sh: 0.4739			8,353.39	19,154.04		7,017.42		34,524.85
*****Biditem/Category		320	*****			57,054	133,420	13,697	44,155	1,600	249,926
Mh:	1,129.58	Mh/Un: 1,129.5800				57,054.41	133,419.50	13,697.00	44,155.38	1,600.00	249,926.29
***	330	33	15th Terrace			Takeoff:	1.00	LS	Bid:	1.00	LS
330.10	24" RCP Installation	250.00	LF	F6319A	50 10.00	8,997	13,376	1,125	7,560		31,057
Mh:	181.81 Shifts: 2.3	Mh/Un: 0.7272	Un/Sh: 110.0352			35.99	53.50	4.50	30.24		124.23
330.11	Haul Out Muck	107.00	CY	F6319A	50 10.00	3,439		6,500	4,293		14,232
Mh:	64.20 Shifts:	Mh/Un: 0.6000	Un/Sh:			32.14		60.75	40.12		133.01
330.12	Dewatering	250.00	LF	F6319A	50 10.00	2,533	3,371		1,154		7,057
Mh:	50.00 Shifts: 1.0	Mh/Un: 0.2000	Un/Sh: 250.0000			10.13	13.48		4.62		28.23
330.21	Precast Type J (MH-15WA, M	2.00	EA	F6319A	50 10.00	8,898	11,021		8,479		28,398
Mh:	180.00 Shifts: 2.0	Mh/Un: 90.0000	Un/Sh: 1.0000			4,449.09	5,510.45		4,239.71		14,199.24
330.22	Catch Basin Type F (ST-145A	1.00	EA	F6319A	50 10.00	1,979	2,690		1,663		6,332
Mh:	40.00 Shifts: 0.5	Mh/Un: 40.0000	Un/Sh: 2.0000			1,979.49	2,689.93		1,662.90		6,332.32
330.23	Precast Type J (ST-145B)	1.00	EA	F6319A	50 10.00	3,959	2,786		3,326		10,071
Mh:	80.00 Shifts: 1.0	Mh/Un: 80.0000	Un/Sh: 1.0000			3,958.96	2,786.23		3,325.79		10,070.98
330.30	Mud Work	4.00	EA	F6319A	50 10.00	10,131	1,113		1,905		13,149
Mh:	200.00 Shifts: 4.0	Mh/Un: 50.0000	Un/Sh: 1.0000			2,532.84	278.20		476.25		3,287.29
330.40	Removal of Existing 16" RCP	100.00	LF	F6319A	50 10.00	7,918		450	6,007		14,375
Mh:	160.00 Shifts: 2.0	Mh/Un: 1.6000	Un/Sh: 50.0000			79.18		4.50	60.07		143.75
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,357	19,154		7,021		34,532
Mh:	168.88 Shifts: 2.1	Mh/Un: 168.8800	Un/Sh: 0.4737			8,357.36	19,154.04		7,020.76		34,532.16
*****Biditem/Category		330	*****			56,213	53,510	8,075	41,408		159,205
Mh:	1,124.89	Mh/Un: 1,124.8900				56,212.53	53,509.96	8,075.00	41,407.96		159,205.45
***	340	34	15th Street			Takeoff:	1.00	LS	Bid:	1.00	LS
340.01	Exiting Inlet Riser Installation	1.00	EA	F6319A	50 10.00	1,157	1,070		917		3,144
Mh:	23.33 Shifts: 0.3	Mh/Un: 23.3300	Un/Sh: 3.0030			1,157.21	1,070.00		916.93		3,144.14
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80 Shifts: 2.1	Mh/Un: 168.8000	Un/Sh: 0.4739			8,353.39	19,154.04		7,017.42		34,524.85
*****Biditem/Category		340	*****			9,511	20,224		7,934		37,669
Mh:	192.13	Mh/Un: 192.1300				9,510.60	20,224.04		7,934.35		37,668.99
***	360	36	14th Court			Takeoff:	1.00	LS	Bid:	1.00	LS
360.01	30" RCP Installation	80.00	LF	F6319A	50 10.00	2,879	15,951	360	2,418		21,608
Mh:	58.17 Shifts: 0.7	Mh/Un: 0.7271	Un/Sh: 110.0413			35.98	199.39	4.50	30.22		270.10
360.02	Haul Out Muck	36.00	CY	F6319A	50 10.00	1,170		2,023	1,461		4,653
Mh:	21.84 Shifts:	Mh/Un: 0.6067	Un/Sh:			32.50		56.18	40.57		129.25
360.03	Dewatering	80.00	LF	F6319A	50 10.00	405	1,086		185		1,676
Mh:	8.00 Shifts: 0.2	Mh/Un: 0.1000	Un/Sh: 500.0000			5.07	13.58		2.31		20.95
360.20	Catch Basin Type F (ST-121A	1.00	EA	F6319A	50 10.00	1,979	2,690		1,663		6,332
Mh:	40.00 Shifts: 0.5	Mh/Un: 40.0000	Un/Sh: 2.0000			1,979.49	2,689.93		1,662.90		6,332.32
360.30	Mud Work	1.00	EA	F6319A	50 10.00	1,266	278		238		1,783
Mh:	25.00 Shifts: 0.5	Mh/Un: 25.0000	Un/Sh: 2.0000			1,266.45	278.20		238.13		1,782.78
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80 Shifts: 2.1	Mh/Un: 168.8000	Un/Sh: 0.4739			8,353.39	19,154.04		7,017.42		34,524.85

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
*****Biditem/Category		360	*****			16,053	39,159	2,383	12,982		70,577
Mh:	321.81 Mh/Un:	321.8100				16,053.11	39,159.38	2,382.50	12,981.51		70,576.50
***	380	38	Lincoln Road			Takeoff:	1.00 LS		Bid:	1.00 LS	
380.01	24" RCP Installation	265.00	LF	F6319A	50 10.00	9,537	42,758	1,193	8,012		61,499
Mh:	192.71 Shifts: 2.4	Mh/Un: 0.7272	Un/Sh: 110.0498			35.99	161.35	4.50	30.23		232.07
380.02	Haul Out Muck	80.00	CY	F6319A	50 10.00	2,571		4,705	3,210		10,486
Mh:	48.00 Shifts:	Mh/Un: 0.6000	Un/Sh:			32.14		58.81	40.12		131.08
380.03	Dewatering	265.00	LF	F6319A	50 10.00	2,685	3,520		1,223		7,429
Mh:	53.00 Shifts: 1.1	Mh/Un: 0.2000	Un/Sh: 250.0000			10.13	13.28		4.62		28.03
380.10	24" RCP Installation (Credit)	-183.00	LF	F6319A	50 10.00	-6,585	-27,264	-824	-5,531		-40,203
Mh:	-133.07 Shifts: -1.7	Mh/Un: 0.7272	Un/Sh: 110.0487			35.98	148.98	4.50	30.22		219.69
380.11	Haul Out Muck (Credit)	-55.00	CY	F6319A	50 10.00	-1,768		-3,235	-2,207		-7,210
Mh:	-33.00 Shifts:	Mh/Un: 0.6000	Un/Sh:			32.14		58.82	40.12		131.08
380.12	Dewatering (Credit)	-183.00	LF	F6319A	50 10.00	-1,854	-2,434		-845		-5,133
Mh:	-36.60 Shifts: -0.7	Mh/Un: 0.2000	Un/Sh: 250.0342			10.13	13.30		4.62		28.05
380.13	84" RCP Installation (Credit)	-366.00	LF	F6319A	50 10.00	-51,611	-168,620	-2,230	-54,947		-277,408
Mh:	-1,029.39 Shifts: -11.4	Mh/Un: 2.8125	Un/Sh: 32.0017			141.01	460.71	6.09	150.13		757.95
380.14	Haul Out Muck (Credit)	-283.00	CY	F6319A	50 10.00	-8,947		-5,103	-11,169		-25,219
Mh:	-167.02 Shifts:	Mh/Un: 0.5902	Un/Sh:			31.62		18.03	39.47		89.11
380.15	Dewatering (Credit)	-366.00	LF	F6319A	50 10.00	-1,854	-35,984		-845		-38,683
Mh:	-36.60 Shifts: -0.7	Mh/Un: 0.1000	Un/Sh: 500.0683			5.07	98.32		2.31		105.69
380.16	96" RCP Installation (Credit)	-229.00	LF	F6319A	50 10.00	-43,056	-126,674	-2,308	-51,945		-223,984
Mh:	-858.76 Shifts: -9.5	Mh/Un: 3.7500	Un/Sh: 24.0019			188.02	553.16	10.08	226.84		978.09
380.17	Haul Out Muck (Credit)	-183.00	CY	F6319A	50 10.00	-5,882		-3,250	-7,343		-16,475
Mh:	-109.80 Shifts:	Mh/Un: 0.6000	Un/Sh:			32.14		17.76	40.12		90.03
380.18	Dewatering (Credit)	-229.00	LF	F6319A	50 10.00	-1,160	-15,938		-529		-17,626
Mh:	-22.90 Shifts: -0.5	Mh/Un: 0.1000	Un/Sh: 500.1092			5.07	69.60		2.31		76.97
380.20	Precast Type V (ST-134,134A)	4.00	EA	F6319A	50 10.00	15,836	11,145		13,303		40,284
Mh:	320.00 Shifts:	Mh/Un: 80.0000	Un/Sh: 1.0000			3,958.95	2,786.23		3,325.79		10,070.97
380.21	Precast Type J (MH-LRWA,L)	2.00	EA	F6319A	50 10.00	8,898	11,021		8,479		28,398
Mh:	180.00 Shifts: 2.0	Mh/Un: 90.0000	Un/Sh: 1.0000			4,449.09	5,510.45		4,239.71		14,199.24
380.25	Mud Work	6.00	EA	F6319A	50 10.00	15,197	1,669		2,858		19,724
Mh:	300.00 Shifts: 6.0	Mh/Un: 50.0000	Un/Sh: 1.0000			2,532.84	278.20		476.25		3,287.29
380.30	Precast Type J (Credit)	-2.00	EA	F6319A	50 10.00	-7,918	-11,021		-6,652		-25,590
Mh:	-160.00 Shifts: -2.0	Mh/Un: 80.0000	Un/Sh: 1.0001			3,958.94	5,510.45		3,325.79		12,795.18
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80 Shifts: 2.1	Mh/Un: 168.8000	Un/Sh: 0.4739			8,353.39	19,154.04		7,017.42		34,524.85
*****Biditem/Category		380	*****			-67,558	-298,668	-11,051	-97,909		-475,186
Mh:	-1,324.63 Mh/Un:	-1,324.6300				-67,558.38	-298,667.76	-11,050.70	-97,908.99		-475,185.83
***	400	40	West Ave. (Lincoln Rd. to 14th St.)			Takeoff:	1.00 LS		Bid:	1.00 LS	
400.01	18" RCP Installation	40.00	LF	F6319A	50 10.00	1,440	6,341	180	1,211		9,171
Mh:	29.09 Shifts: 0.4	Mh/Un: 0.7273	Un/Sh: 110.1928			35.99	158.53	4.50	30.26		229.28
400.02	Haul Out Muck	11.00	CY	F6319A	50 10.00	354		648	441		1,442
Mh:	6.60 Shifts:	Mh/Un: 0.6000	Un/Sh:			32.14		58.86	40.12		131.13
400.03	Dewatering	40.00	LF	F6319A	50 10.00	824	524		375		1,723
Mh:	16.26 Shifts: 0.3	Mh/Un: 0.4065	Un/Sh: 123.0769			20.59	13.11		9.38		43.07
400.11	24" RCP Installation	123.00	LF	F6319A	50 10.00	4,426	19,846	554	3,718		28,544
Mh:	89.44 Shifts: 1.1	Mh/Un: 0.7272	Un/Sh: 110.0179			35.98	161.35	4.50	30.23		232.07
400.12	Haul Out Muck	39.00	CY	F6319A	50 10.00	1,254		2,293	1,565		5,111
Mh:	23.40 Shifts:	Mh/Un: 0.6000	Un/Sh:			32.14		58.78	40.12		131.05
400.13	Dewatering	123.00	LF	F6319A	50 10.00	2,533	1,648		1,154		5,335
Mh:	50.00 Shifts: 1.0	Mh/Un: 0.4065	Un/Sh: 123.0000			20.59	13.40		9.38		43.37
400.20	48" RCP Installation	274.00	LF	F6319A	50 10.00	9,862	67,729	1,233	8,285		87,108
Mh:	199.28 Shifts: 2.5	Mh/Un: 0.7273	Un/Sh: 110.0402			35.99	247.19	4.50	30.24		317.91
400.21	Haul Out Muck	165.00	CY	F6319A	50 10.00	5,303		3,055	6,621		14,979
Mh:	99.00 Shifts:	Mh/Un: 0.6000	Un/Sh:			32.14		18.52	40.12		90.78
400.22	Dewatering	274.00	LF	F6319A	50 10.00	2,776	3,708		1,265		7,749
Mh:	54.80 Shifts: 1.1	Mh/Un: 0.2000	Un/Sh: 250.0000			10.13	13.53		4.62		28.28
400.30	96" RCP Installation	339.00	LF	F6319A	50 10.00	63,738	252,939	3,416	76,895		396,988
Mh:	1,271.25 Shifts: 14.1	Mh/Un: 3.7500	Un/Sh: 24.0000			188.02	746.13	10.08	226.83		1,171.06
400.31	Haul Out Muck	272.00	CY	F6319A	50 10.00	8,742		4,858	10,914		24,514

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
Mh:	163.20	Shifts:	Mh/Un:	0.6000	Un/Sh:	32.14		17.86	40.12		90.12
400.32	Dewatering	339.00	LF	F6319A	50 10.00	1,717	33,373		783		35,873
Mh:	33.90	Shifts:	0.7	Mh/Un:	0.1000	Un/Sh:	500.0000	5.07	98.45	2.31	105.82
400.5	Manhole J-7 12' x 12' (ST-146	2.00	EA	F6319A	50 10.00	17,796	43,056		19,863		80,715
Mh:	360.00	Shifts:	4.0	Mh/Un:	180.0000	Un/Sh:	0.5000	8,898.19	21,527.91	9,931.58	40,357.68
400.52	Curb Inlet Type 6 8' Dia. (ST-1	3.00	EA	F6319A	50 10.00	15,008	16,618		12,719		44,345
Mh:	300.00	Shifts:	3.0	Mh/Un:	100.0000	Un/Sh:	1.0000	5,002.55	5,539.34	4,239.71	14,781.60
400.53	Catch Basin Type 10 Round (S	1.00	EA	F6319A	50 10.00	1,979	2,407		1,663		6,050
Mh:	40.00	Shifts:	0.5	Mh/Un:	40.0000	Un/Sh:	2.0000	1,979.49	2,407.45	1,662.90	6,049.84
400.54	Curb Inlet Type 6 6'x6' (ST-14	1.00	EA	F6319A	50 10.00	5,003	6,745		4,240		15,987
Mh:	100.00	Shifts:	1.0	Mh/Un:	100.0000	Un/Sh:	1.0000	5,002.54	6,745.23	4,239.71	15,987.48
400.70	Exiting Inlet Riser Installation	3.00	EA	F6319A	50 10.00	3,472	3,210		2,754		9,436
Mh:	70.00	Shifts:	1.0	Mh/Un:	23.3333	Un/Sh:	3.0000	1,157.43	1,070.00	917.85	3,145.28
410.1	Miscellaneous Items	1.00	LS	F6319A	50 10.00	8,353	19,154		7,017		34,525
Mh:	168.80	Shifts:	2.1	Mh/Un:	168.8000	Un/Sh:	0.4739	8,353.39	19,154.04	7,017.42	34,524.85
*****Biditem/Category		400	*****			154,579	477,299	16,235	161,481		809,595
Mh:	3,075.02	Mh/Un:	3,075.0200			154,579.35	477,299.18	16,235.40	161,481.46		809,595.39
Mh:	15,266.81	***REPORT TOTALS***				749,027	1,675,342	119,957	611,491		684,506 3,840,324

N = Activity not adjusted to bid quantity

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total	
*** 10	General Conditions					Takeoff:	1.00 LS		Bid:		1.00 LS	
10.1	Mobilization	1.00	LS	F6319A	50	10.00		196,580			196,580	
Mh:	Shifts:	Mh/Un:		Un/Sh:				196,580.00			196,580.00	
10.2	General Conditions	1.00	LS	F6319A	50	10.00	208,275	229,650	72,000		509,925	
Mh:	600.00	Shifts:	Mh/Un:	600.0000	Un/Sh:		208,275.10	229,650.00	72,000.00		509,925.10	
	*****Biditem/Category	10	*****				208,275	426,230	72,000		706,505	
Mh:	600.00	Mh/Un:	600.0000				208,275.10	426,230.00	72,000.00		706,505.10	
*** 31	Template					Takeoff:	1.00 LS		Bid:		1.00 LS	
31.01	Excavate and Haul	170.00	CY	F6319A	50	10.00	6,670		9,110	835	16,615	
Mh:	140.00	Shifts:	2.0	Mh/Un:	0.8235	Un/Sh:	85.0000	39.23	53.59	4.91	97.73	
31.02	Concrete Template (5% Waste)	115.00	CY	F6319A	50	10.00	7,226	16,082	9,871		33,179	
Mh:	151.67	Shifts:	2.2	Mh/Un:	1.3189	Un/Sh:	53.0933	62.83	139.84	85.83	288.51	
31.03	Forms - Sonotube	120.00	EA	F6319A	50	10.00	40,019	7,790	54,660		102,469	
Mh:	840.00	Shifts:	12.0	Mh/Un:	7.0000	Un/Sh:	10.0000	333.49	64.91	455.50	853.91	
31.04	Forms - Exterior	5.00	EA	F6319A	50	10.00	6,670	6,433	9,110		22,213	
Mh:	140.00	Shifts:	2.0	Mh/Un:	28.0000	Un/Sh:	2.5000	1,333.98	1,286.57	1,821.99	4,442.54	
31.05	Blocking	5.00	EA	F6319A	50	10.00	1,667		2,278		3,945	
Mh:	35.00	Shifts:	0.5	Mh/Un:	7.0000	Un/Sh:	10.0000	333.50	455.50		789.00	
31.06	Survey	5.00	EA	F6319A	50	10.00		9,750			9,750	
Mh:		Shifts:		Mh/Un:		Un/Sh:		1,950.00			1,950.00	
31.07	Pump Concrete	5.00	EA	F6319A	50	10.00			3,574		3,574	
Mh:		Shifts:		Mh/Un:		Un/Sh:			714.76		714.76	
31.08	Haul Old Template Debris	5.00	EA	F6319A	50	10.00	3,335	6,722	4,555		14,612	
Mh:	70.00	Shifts:	1.0	Mh/Un:	14.0000	Un/Sh:	5.0000	666.99	1,344.35	911.00	2,922.34	
	*****Biditem/Category	31	*****				65,588	16,082	30,694	93,157	835	206,355
Mh:	1,376.67	Mh/Un:	1,376.6700				65,587.54	16,082.10	30,694.19	93,156.62	835.00	206,355.45
*** 32	Drill and PLace Grout					Takeoff:	1.00 LS		Bid:		1.00 LS	
32.01	Drill and Place Grout	120.00	EA	F6319A	50	10.00	160,359		415,160		575,519	
Mh:	3,600.00	Shifts:	40.0	Mh/Un:	30.0000	Un/Sh:	3.0000	1,336.33	3,459.67		4,796.00	
32.02	Grout	750.00	CY	F6319A	50	10.00		116,595			116,595	
Mh:		Shifts:		Mh/Un:		Un/Sh:		155.46			155.46	
32.03	Rebar	131,250.00	LBS	F6319A	50	10.00		63,324		39,454	102,778	
Mh:		Shifts:		Mh/Un:		Un/Sh:		0.48		0.30	0.78	
32.04	Spoils Disposal	750.00	CY	F6319A	50	10.00		8,454			8,454	
Mh:		Shifts:		Mh/Un:		Un/Sh:		11.27			11.27	
32.05	Concrete Pump	750.00	CY	F6319A	50	10.00			10,721		10,721	
Mh:		Shifts:		Mh/Un:		Un/Sh:			14.30		14.30	
	*****Biditem/Category	32	*****				160,359	179,919	8,454	425,881	39,454	814,068
Mh:	3,600.00	Mh/Un:	3,600.0000				160,359.42	179,919.39	8,453.54	425,881.40	39,453.75	814,067.50
*** 33	Mass Excavation and Tremie					Takeoff:	1.00 LS		Bid:		1.00 LS	
33.01	Excavation	740.00	CY	F6319A	50	10.00	17,674		22,775		40,449	
Mh:	400.00	Shifts:	5.0	Mh/Un:	0.5405	Un/Sh:	148.0000	23.88	30.78		54.66	
33.02	Excavation (Last 8')	110.00	CY	F6319A	50	10.00	7,659		9,871		17,530	
Mh:	173.34	Shifts:	2.2	Mh/Un:	1.5758	Un/Sh:	50.7849	69.63	89.73		159.36	
33.03	Clean Sides	5.00	EA	F6319A	50	10.00	5,302		6,832		12,135	
Mh:	120.00	Shifts:	1.5	Mh/Un:	24.0000	Un/Sh:	3.3333	1,060.44	1,366.50		2,426.94	
33.04	Tremie Pour	250.00	CY	F6319A	50	10.00	22,976	33,504	29,607		86,088	
Mh:	520.00	Shifts:	6.5	Mh/Un:	2.0800	Un/Sh:	38.4615	91.90	134.02	118.43	344.35	
33.05	Tremie Rebar	43,750.00	LBS	F6319A	50	10.00		23,453		13,151	36,604	
Mh:		Shifts:		Mh/Un:		Un/Sh:		0.54		0.30	0.84	
33.06	Dewater and Seal	5.00	EA	F6319A	50	10.00	8,837		11,387		20,224	
Mh:	200.00	Shifts:	2.5	Mh/Un:	40.0000	Un/Sh:	2.0000	1,767.40	2,277.49		4,044.90	
33.07	Leveling Course	50.00	CY	F6319A	50	10.00	9,449	6,701	12,904		29,054	
Mh:	198.33	Shifts:	2.8	Mh/Un:	3.9666	Un/Sh:	17.6491	188.98	134.02	258.09	581.08	
33.08	Trucking	5.00	LS	F6319A	50	10.00		9,582			9,582	
Mh:		Shifts:		Mh/Un:		Un/Sh:		1,916.49			1,916.49	
33.09	Tremie Pump and Level Cours	5.00	EA	F6319A	50	10.00			3,216		3,216	
Mh:		Shifts:		Mh/Un:		Un/Sh:			643.28		643.28	

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip-ment	Sub-Contract	Total	
33.10	Poly Tube Injection / Seal	5.00	EA	F6319A	50	10.00	8,935				8,935	
Mh:	Shifts:	Mh/Un:		Un/Sh:			1,786.90				1,786.90	
*****Biditem/Category		33	*****				71,897	72,593	9,582	96,594	13,151	263,818
Mh:	1,611.67	Mh/Un:	1,611.6700				71,897.42	72,592.82	9,582.46	96,593.58	13,151.25	263,817.53
***	51	Template				Takeoff:	1.00	LS	Bid:	1.00	LS	
51.01	Excavate and Haul	170.00	CY	F6319A	50	10.00	6,670		9,110	835	16,615	
Mh:	140.00	Shifts:	2.0	Mh/Un:	0.8235	Un/Sh:	85.0000	39.23	53.59	4.91	97.73	
51.02	Concrete Template (5% Waste	115.00	CY	F6319A	50	10.00	7,226	16,082	9,871		33,179	
Mh:	151.67	Shifts:	2.2	Mh/Un:	1.3189	Un/Sh:	53.0933	62.83	139.84	85.83	288.51	
51.03	Forms - Sonotube	120.00	EA	F6319A	50	10.00	40,019		7,790	54,660	102,469	
Mh:	840.00	Shifts:	12.0	Mh/Un:	7.0000	Un/Sh:	10.0000	333.49	64.91	455.50	853.91	
51.04	Forms - Exterior	5.00	EA	F6319A	50	10.00	6,670		6,433	9,110	22,213	
Mh:	140.00	Shifts:	2.0	Mh/Un:	28.0000	Un/Sh:	2.5000	1,333.98	1,286.57	1,821.99	4,442.54	
51.05	Blocking	5.00	EA	F6319A	50	10.00	1,667			2,278	3,945	
Mh:	35.00	Shifts:	0.5	Mh/Un:	7.0000	Un/Sh:	10.0000	333.50		455.50	789.00	
51.06	Survey	5.00	EA	F6319A	50	10.00			9,750		9,750	
Mh:		Shifts:		Mh/Un:		Un/Sh:			1,950.00		1,950.00	
51.07	Pump Concrete	5.00	EA	F6319A	50	10.00			3,574		3,574	
Mh:		Shifts:		Mh/Un:		Un/Sh:			714.76		714.76	
51.08	Haul Old Template Debris	5.00	EA	F6319A	50	10.00	3,335		6,722	4,555	14,612	
Mh:	70.00	Shifts:	1.0	Mh/Un:	14.0000	Un/Sh:	5.0000	666.99	1,344.35	911.00	2,922.34	
*****Biditem/Category		51	*****				65,588	16,082	30,694	93,157	835	206,355
Mh:	1,376.67	Mh/Un:	1,376.6700				65,587.54	16,082.10	30,694.19	93,156.62	835.00	206,355.45
***	52	Drill and PLace Grout				Takeoff:	1.00	LS	Bid:	1.00	LS	
52.01	Drill and Place Grout	120.00	EA	F6319A	50	10.00	212,031		548,935		760,966	
Mh:	4,760.00	Shifts:	52.9	Mh/Un:	39.6667	Un/Sh:	2.2689	1,766.92	4,574.46		6,341.38	
52.02	Grout	810.00	CY	F6319A	50	10.00			135,725		135,725	
Mh:		Shifts:		Mh/Un:		Un/Sh:			167.56		167.56	
52.03	Rebar	141,750.00	LBS	F6319A	50	10.00			76,006		42,610	118,616
Mh:		Shifts:		Mh/Un:		Un/Sh:			0.54		0.30	0.84
52.04	Spoils Disposal	750.00	CY	F6319A	50	10.00			9,394		9,394	
Mh:		Shifts:		Mh/Un:		Un/Sh:			12.53		12.53	
52.05	Concrete Pump	810.00	CY	F6319A	50	10.00			10,721		10,721	
Mh:		Shifts:		Mh/Un:		Un/Sh:			13.24		13.24	
*****Biditem/Category		52	*****				212,031	211,731	9,394	559,656	42,610	1,035,422
Mh:	4,760.00	Mh/Un:	4,760.0000				212,030.85	211,731.01	9,393.75	559,656.35	42,610.05	1,035,422.01
***	53	Mass Excavation and Tremie				Takeoff:	1.00	LS	Bid:	1.00	LS	
53.01	Excavation	810.00	CY	F6319A	50	10.00	16,437		21,181		37,618	
Mh:	372.00	Shifts:	4.7	Mh/Un:	0.4593	Un/Sh:	174.1935	20.29	26.15		46.44	
53.02	Excavation (Last 8')	235.00	CY	F6319A	50	10.00	16,362		21,085		37,447	
Mh:	370.31	Shifts:	4.6	Mh/Un:	1.5758	Un/Sh:	50.7779	69.63	89.72		159.35	
53.03	Clean Sides	5.00	EA	F6319A	50	10.00	6,480		8,349		14,829	
Mh:	146.66	Shifts:	1.8	Mh/Un:	29.3320	Un/Sh:	2.7278	1,296.01	1,669.86		2,965.86	
53.04	Tremie Pour	160.00	CY	F6319A	50	10.00	11,194	24,874	14,426		50,493	
Mh:	253.34	Shifts:	3.2	Mh/Un:	1.5834	Un/Sh:	50.5370	69.96	155.46		315.58	
53.05	Tremie Rebar	28,000.00	LBS	F6319A	50	10.00			15,010		8,417	23,427
Mh:		Shifts:		Mh/Un:		Un/Sh:			0.54		0.30	0.84
53.06	Dewater and Seal	5.00	EA	F6319A	50	10.00	7,659		9,871		17,530	
Mh:	173.34	Shifts:	2.2	Mh/Un:	34.6680	Un/Sh:	2.3084	1,531.84	1,974.13		3,505.97	
53.07	Leveling Course	35.00	CY	F6319A	50	10.00	5,558	4,691	7,593		17,842	
Mh:	116.67	Shifts:	1.7	Mh/Un:	3.3334	Un/Sh:	21.0084	158.81	134.02	216.95	509.78	
53.08	Trucking	5.00	LS	F6319A	50	10.00			9,582		9,582	
Mh:		Shifts:		Mh/Un:		Un/Sh:			1,916.49		1,916.49	
53.09	Tremie Pump and Level Cours	5.00	LS	F6319A	50	10.00			3,216		3,216	
Mh:		Shifts:		Mh/Un:		Un/Sh:			643.28		643.28	
53.10	Poly Tube Injection / Seal	5.00	LS	F6319A	50	10.00				8,350	8,350	
Mh:		Shifts:		Mh/Un:		Un/Sh:				1,670.00	1,670.00	

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip-Ment	Sub-Contract	Total
*****Biditem/Category		53	*****			63,691	44,574	9,582	85,721	16,767	220,335
Mh:	1,432.32	Mh/Un:	1,432.3200			63,690.69	44,574.22	9,582.46	85,720.84	16,766.80	220,335.01
***	54	Mechanical Work				Takeoff:	1.00 LS		Bid:	1.00 LS	
54.01	Baffle Skimmer	5.00	EA	F6319A	50 10.00	4,864	53,500		5,850		64,214
Mh:	100.00	Shifts:	2.0	Mh/Un:	20.0000	Un/Sh:	2.5000		1,169.99		12,842.80
54.05	25 HP Flygt Pump	5.00	EA	F6319A	50 10.00	27,996	693,997		29,250		751,243
Mh:	600.00	Shifts:	10.0	Mh/Un:	120.0000	Un/Sh:	0.5000		5,849.94		150,248.50
54.06	12" DIP Discharge	550.00	LF	F6319A	50 10.00	7,133	17,770		8,579		33,482
Mh:	146.66	Shifts:	2.9	Mh/Un:	0.2667	Un/Sh:	187.5213		12.97		32.31
54.08	12" Check Valve	5.00	EA	F6319A	50 10.00	2,189	31,828		2,632		36,649
Mh:	45.00	Shifts:	0.9	Mh/Un:	9.0000	Un/Sh:	5.5556		437.76		6,365.55
54.09	NBG Sets / Flanges	100.00	EA	F6319A	50 10.00	14,592	46,331		17,550		78,473
Mh:	300.00	Shifts:	6.0	Mh/Un:	3.0000	Un/Sh:	16.6667		145.92		463.31
54.10	24 x 12 Cross w/Cap	5.00	EA	F6319A	50 10.00	1,946	11,140		2,340		15,425
Mh:	40.00	Shifts:	0.8	Mh/Un:	8.0000	Un/Sh:	6.2500		389.12		2,227.95
54.11	24" Well	500.00	LF	F6319A	50 10.00	1,216	9,095		1,462	375,000	386,774
Mh:	25.00	Shifts:	0.5	Mh/Un:	0.0500	Un/Sh:	1,000.0000		2.43	18.19	2.92
54.12	36"x 78" HS 20 Hatch & Fram	5.00	EA	F6319A	50 10.00	1,216			1,462		2,679
Mh:	25.00	Shifts:	0.5	Mh/Un:	5.0000	Un/Sh:	10.0000		243.21		292.50
54.13	52"x 60" HS 20 Hatch & Fram	5.00	EA	F6319A	50 10.00	1,216			1,462		2,679
Mh:	25.00	Shifts:	0.5	Mh/Un:	5.0000	Un/Sh:	10.0000		243.21		292.50
54.14	56"x 112" HS 20 Hatch & Fra	5.00	EA	F6319A	50 10.00	1,946			2,340		4,286
Mh:	40.00	Shifts:	0.8	Mh/Un:	8.0000	Un/Sh:	6.2500		389.12		468.00
54.15	11'-8" x 8' x 7' Vault	5.00	EA	F6319A	50 10.00	12,160	48,150		14,625		74,935
Mh:	250.00	Shifts:	5.0	Mh/Un:	50.0000	Un/Sh:	1.0000		2,432.02		9,630.00
55.01	Concrete Cover (15' Dia.)	5.00	EA	F6319A	50 10.00	2,918	56,175		3,510		62,603
Mh:	60.00	Shifts:	1.2	Mh/Un:	12.0000	Un/Sh:	4.1667		583.69		11,235.00
55.02	Platform (8.44 NAVD)	5.00	EA	F6319A	50 10.00	1,459			1,755	40,000	43,214
Mh:	30.00	Shifts:	0.6	Mh/Un:	6.0000	Un/Sh:	8.3333		291.84		351.00
55.03	Landscaping Screening	5.00	LS	F6319A	50 10.00						37,500
Mh:		Shifts:		Mh/Un:		Un/Sh:					7,500.00
55.04	Grout / Seal / Coatings	5.00	LS	F6319A	50 10.00	10,944	26,750		13,162		50,856
Mh:	225.00	Shifts:	4.5	Mh/Un:	45.0000	Un/Sh:	1.1111		2,188.82		5,350.00
55.05	Start-up / Commissioning	5.00	EA	F6319A	50 10.00	2,432	1,605		2,925		6,962
Mh:	50.00	Shifts:	1.0	Mh/Un:	10.0000	Un/Sh:	5.0000		486.40		321.00
55.06	Warranty Allowance	5.00	EA	F6319A	50 10.00	4,864	10,700		5,850		21,414
Mh:	100.00	Shifts:	2.0	Mh/Un:	20.0000	Un/Sh:	2.5000		972.81		2,140.00
55.07	24" Well Credit	-1.00	LS	F6319A	50 10.00						-201,250
Mh:		Shifts:		Mh/Un:		Un/Sh:					201,250.00
*****Biditem/Category		54	*****			99,092	1,007,040		114,755	251,250	1,472,137
Mh:	2,061.66	Mh/Un:	2,061.6600			99,091.89	1,007,040.16		114,755.39	251,250.00	1,472,137.44
***	55	Electrical / I&C				Takeoff:	1.00 LS		Bid:	1.00 LS	
55.1	Control Pannels w/ Floats	5.00	EA	F6319A	50 10.00					170,000	170,000
Mh:		Shifts:		Mh/Un:		Un/Sh:					34,000.00
55.2	Ductbank - Civil	1,650.00	LF	F6319A	50 10.00	103,936	26,322		108,590		238,847
Mh:	2,227.50	Shifts:	37.1	Mh/Un:	1.3500	Un/Sh:	44.4444		62.99		15.95
*****Biditem/Category		55	*****			103,936	26,322		108,590	170,000	408,847
Mh:	2,227.50	Mh/Un:	2,227.5000			103,935.71	26,322.00		108,589.52	170,000.00	408,847.23
***	71	Template				Takeoff:	1.00 LS		Bid:	1.00 LS	
71.01	Excavate and Haul	98.00	CY	F6319A	50 10.00	4,002			5,466		9,468
Mh:	84.00	Shifts:	1.2	Mh/Un:	0.8571	Un/Sh:	81.6667		40.84		55.78
71.02	Concrete Template (5% Waste)	78.00	CY	F6319A	50 10.00	4,669	13,375		6,377		24,421
Mh:	98.00	Shifts:	1.4	Mh/Un:	1.2564	Un/Sh:	55.7143		59.86		171.47
71.03	Forms - Sonotube	64.00	EA	F6319A	50 10.00	21,344			4,109		29,152
Mh:	448.00	Shifts:	6.4	Mh/Un:	7.0000	Un/Sh:	10.0000		333.50		64.20
71.04	Forms - Exterior	2.00	EA	F6319A	50 10.00	2,668			5,350		3,644
Mh:	56.00	Shifts:	0.8	Mh/Un:	28.0000	Un/Sh:	2.5000		1,333.98		2,675.00
71.05	Blocking	2.00	EA	F6319A	50 10.00	2,001	1,070		2,733		5,804
Mh:	42.00	Shifts:	0.6	Mh/Un:	21.0000	Un/Sh:	3.3333		1,000.48		535.00

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
71.06	Survey	2.00	EA	F6319A	50 10.00			7,800			7,800
Mh:	Shifts:	Mh/Un:		Un/Sh:				3,900.00			3,900.00
71.07	Pump Concrete	2.00	EA	F6319A	50 10.00				2,333		2,333
Mh:	Shifts:	Mh/Un:		Un/Sh:					1,166.30		1,166.30
71.08	Haul Old Template Debris	2.00	EA	F6319A	50 10.00	1,000		800	1,367		3,167
Mh:	21.00 Shifts:	0.3 Mh/Un:	10.5000	Un/Sh:	6.6667	500.25		400.00	683.25		1,583.50
*****Biditem/Category		71	*****			35,684	14,445	18,059	51,071		119,259
Mh:	749.00	Mh/Un:	749.0000			35,683.93	14,445.00	18,058.80	51,070.89		119,258.62
***	72	Drill and Place Grout				Takeoff:	1.00	LS	Bid:	1.00	LS
72.01	Drill and Place Grout	64.00	EA	F6319A	50 10.00	85,391			221,073		306,464
Mh:	1,917.00	Shifts:	21.3	Mh/Un:	29.9531	Un/Sh:	3.0047		1,334.24	3,454.26	4,788.50
72.02	Grout	384.00	CY	F6319A	50 10.00		59,578				59,578
Mh:		Shifts:		Mh/Un:		Un/Sh:	155.15				155.15
72.03	Rebar	134,750.00	LBS	F6319A	50 10.00		72,091			69,127	141,218
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.54			0.51	1.05
72.04	Spoils Disposal	300.00	CY	F6319A	50 10.00			5,062			5,062
Mh:		Shifts:		Mh/Un:		Un/Sh:		16.87			16.87
72.05	Concrete Pump	384.00	CY	F6319A	50 10.00			4,815			4,815
Mh:		Shifts:		Mh/Un:		Un/Sh:		12.54			12.54
*****Biditem/Category		72	*****			85,391	131,669	5,062	225,888	69,127	517,137
Mh:	1,917.00	Mh/Un:	1,917.0000			85,391.36	131,668.85	5,062.00	225,887.70	69,126.75	517,136.66
***	73	Mass Excavation and Tremie				Takeoff:	1.00	LS	Bid:	1.00	LS
73.01	Excavation	558.00	CY	F6319A	50 10.00	16,260			20,953		37,213
Mh:	368.00	Shifts:	4.6	Mh/Un:	0.6595	Un/Sh:	121.3043		29.14	37.55	66.69
73.02	Excavation (Last 8')	186.00	CY	F6319A	50 10.00	13,079			16,853		29,932
Mh:	296.00	Shifts:	3.7	Mh/Un:	1.5914	Un/Sh:	50.2703		70.32	90.61	160.93
73.03	Clean Sides	2.00	EA	F6319A	50 10.00	5,656			7,288		12,944
Mh:	128.00	Shifts:	1.6	Mh/Un:	64.0000	Un/Sh:	1.2500		2,827.84	3,643.99	6,471.82
73.04	Tremie Pour	145.00	CY	F6319A	50 10.00	8,837	15,515		11,387		35,739
Mh:	200.00	Shifts:	2.5	Mh/Un:	1.3793	Un/Sh:	58.0000		60.94	107.00	246.48
73.05	Tremie Rebar	20,300.00	LBS	F6319A	50 10.00		10,861			10,150	21,011
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.54			0.50	1.04
73.06	Dewater and Seal	2.00	EA	F6319A	50 10.00	3,535			4,555		8,090
Mh:	80.00	Shifts:	1.0	Mh/Un:	40.0000	Un/Sh:	2.0000		1,767.41	2,277.49	4,044.90
73.07	Leveling Course	24.00	CY	F6319A	50 10.00	2,668	3,210		3,644		9,522
Mh:	56.00	Shifts:	0.8	Mh/Un:	2.3333	Un/Sh:	30.0000		111.16	133.75	396.75
73.08	Trucking	2.00	LS	F6319A	50 10.00			10,547			10,547
Mh:		Shifts:		Mh/Un:		Un/Sh:		5,273.50			5,273.50
73.09	Tremie Pump and Level Cours	2.00	EA	F6319A	50 10.00			2,140			2,140
Mh:		Shifts:		Mh/Un:		Un/Sh:		1,070.00			1,070.00
73.10	Poly Tube Injection / Seal	2.00	EA	F6319A	50 10.00		5,350				5,350
Mh:		Shifts:		Mh/Un:		Un/Sh:	2,675.00				2,675.00
*****Biditem/Category		73	*****			50,034	34,936	10,547	66,821	10,150	172,488
Mh:	1,128.00	Mh/Un:	1,128.0000			50,034.30	34,935.50	10,547.00	66,820.75	10,150.00	172,487.55
***	91	Template				Takeoff:	1.00	LS	Bid:	1.00	LS
91.01	Excavate and Haul	123.00	CY	F6319A	50 10.00	5,022			6,860		11,882
Mh:	105.42	Shifts:	1.5	Mh/Un:	0.8571	Un/Sh:	81.6733		40.83	55.77	96.60
91.02	Concrete Template (5% Waste	98.00	CY	F6319A	50 10.00	5,866	16,853		8,012		30,731
Mh:	123.13	Shifts:	1.8	Mh/Un:	1.2564	Un/Sh:	55.7452		59.86	171.96	313.58
91.03	Forms - Sonotube	64.00	EA	F6319A	50 10.00	21,344		5,136	29,152		55,632
Mh:	448.00	Shifts:	6.4	Mh/Un:	7.0000	Un/Sh:	10.0000		333.50	80.25	455.50
91.04	Forms - Exterior	2.00	EA	F6319A	50 10.00	2,668		5,350	3,644		11,662
Mh:	56.00	Shifts:	0.8	Mh/Un:	28.0000	Un/Sh:	2.5000		1,333.98	2,675.00	5,830.97
91.05	Blocking	2.00	EA	F6319A	50 10.00	2,001	1,070		2,733		5,804
Mh:	42.00	Shifts:	0.6	Mh/Un:	21.0000	Un/Sh:	3.3333		1,000.48	535.00	1,366.50
91.06	Survey	2.00	EA	F6319A	50 10.00			7,800			7,800
Mh:		Shifts:		Mh/Un:		Un/Sh:		3,900.00			3,900.00
91.07	Pump Concrete	2.00	EA	F6319A	50 10.00				3,745		3,745

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
Mh:	Shifts:	Mh/Un:		Un/Sh:					1,872.50		1,872.50
91.08	Haul Old Template Debris	2.00	EA	F6319A	50 10.00	1,000		800	1,367		3,167
Mh:	21.00	Shifts:	0.3	Mh/Un:	10.5000	Un/Sh:	6.6667	500.25	400.00	683.25	1,583.50
*****Biditem/Category		91	*****			37,902	17,923	19,086	55,512		130,423
Mh:	795.55	Mh/Un:	795.5500			37,901.69	17,922.50	19,086.00	55,512.35		130,422.54
***	92	Drill and PLace Grout				Takeoff:	1.00	LS	Bid:	1.00	LS
92.01	Drill and Place Grout	64.00	EA	F6319A	50 10.00	83,387			215,883		299,270
Mh:	1,872.00	Shifts:	20.8	Mh/Un:	29.2500	Un/Sh:	3.0769	1,302.92	3,373.18		4,676.10
92.02	Grout	480.00	CY	F6319A	50 10.00		74,472				74,472
Mh:		Shifts:		Mh/Un:		Un/Sh:	155.15				155.15
92.03	Rebar	168,438.00	LBS	F6319A	50 10.00		90,114			86,510	176,624
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.53			0.51	1.05
92.04	Spoils Disposal	375.00	CY	F6319A	50 10.00			6,328			6,328
Mh:		Shifts:		Mh/Un:		Un/Sh:		16.87			16.87
92.05	Concrete Pump	384.00	CY	F6319A	50 10.00				6,019		6,019
Mh:		Shifts:		Mh/Un:		Un/Sh:			15.67		15.67
*****Biditem/Category		92	*****			83,387	164,586	6,328	221,902	86,510	562,712
Mh:	1,872.00	Mh/Un:	1,872.0000			83,386.89	164,586.06	6,327.50	221,901.95	86,509.50	562,711.90
***	93	Mass Excavation and Tremie				Takeoff:	1.00	LS	Bid:	1.00	LS
93.01	Excavation	698.00	CY	F6319A	50 10.00	20,340			26,209		46,549
Mh:	460.33	Shifts:	5.8	Mh/Un:	0.6595	Un/Sh:	121.3069	29.14	37.55		66.69
93.02	Excavation (Last 8')	232.00	CY	F6319A	50 10.00	16,313			21,021		37,334
Mh:	369.20	Shifts:	4.6	Mh/Un:	1.5914	Un/Sh:	50.2709	70.32	90.61		160.92
93.03	Clean Sides	2.00	EA	F6319A	50 10.00	4,595			5,921		10,517
Mh:	104.00	Shifts:	1.3	Mh/Un:	52.0000	Un/Sh:	1.5385	2,297.62	2,960.74		5,258.36
93.04	Tremie Pour	145.00	CY	F6319A	50 10.00	8,837	19,394		11,387		39,618
Mh:	200.00	Shifts:	2.5	Mh/Un:	1.3793	Un/Sh:	58.0000	60.94	133.75		273.23
93.05	Tremie Rebar	25,375.00	LBS	F6319A	50 10.00		13,576			12,688	26,263
Mh:		Shifts:		Mh/Un:		Un/Sh:	0.54			0.50	1.04
93.06	Dewater and Seal	2.00	EA	F6319A	50 10.00	3,535			4,555		8,090
Mh:	80.00	Shifts:	1.0	Mh/Un:	40.0000	Un/Sh:	2.0000	1,767.41	2,277.49		4,044.90
93.07	Leveling Course	24.00	CY	F6319A	50 10.00	2,668	3,210		3,644		9,522
Mh:	56.00	Shifts:	0.8	Mh/Un:	2.3333	Un/Sh:	30.0000	111.16	133.75	151.83	396.75
93.08	Trucking	2.00	LS	F6319A	50 10.00			8,437			8,437
Mh:		Shifts:		Mh/Un:		Un/Sh:		4,218.50			4,218.50
93.09	Tremie Pump and Level Cours	2.00	EA	F6319A	50 10.00				2,140		2,140
Mh:		Shifts:		Mh/Un:		Un/Sh:			1,070.00		1,070.00
93.10	Poly Tube Injection / Seal	2.00	EA	F6319A	50 10.00		5,350				5,350
Mh:		Shifts:		Mh/Un:		Un/Sh:	2,675.00				2,675.00
*****Biditem/Category		93	*****			56,288	41,529	8,437	74,879	12,688	193,820
Mh:	1,269.53	Mh/Un:	1,269.5300			56,287.74	41,529.38	8,437.00	74,878.54	12,687.50	193,820.16
***	94	Mechanical Work				Takeoff:	1.00	LS	Bid:	1.00	LS
94.01	Baffle Skimmer	2.00	EA	F6319A	50 10.00	3,891	53,500		4,680		62,071
Mh:	80.00	Shifts:	1.6	Mh/Un:	40.0000	Un/Sh:	1.2500	1,945.62	26,750.00	2,339.98	31,035.60
94.05	60 HP Flygt Pump	2.00	EA	F6319A	50 10.00	33,595	699,266		35,100		767,961
Mh:	720.00	Shifts:	12.0	Mh/Un:	360.0000	Un/Sh:	0.1667	16,797.70	349,633.20	17,549.82	383,980.72
94.06	18" DIP Discharge	500.00	LF	F6319A	50 10.00	8,106	38,988		9,749		56,843
Mh:	166.66	Shifts:	3.3	Mh/Un:	0.3333	Un/Sh:	150.0150	16.21	77.98	19.50	113.69
94.08	12" Check Valve	6.00	EA	F6319A	50 10.00	9,728	79,608		11,700		101,036
Mh:	200.00	Shifts:	4.0	Mh/Un:	33.3333	Un/Sh:	1.5000	1,621.35	13,268.00	1,949.98	16,839.33
94.09	NBG Sets / Flanges	24.00	EA	F6319A	50 10.00	19,456	111,194		23,400		154,050
Mh:	400.00	Shifts:	8.0	Mh/Un:	16.6667	Un/Sh:	3.0000	810.67	4,633.10	974.99	6,418.76
94.10	24 x 12 Cross w/Cap	3.00	EA	F6319A	50 10.00	7,296	12,840		8,775		28,911
Mh:	150.00	Shifts:	3.0	Mh/Un:	50.0000	Un/Sh:	1.0000	2,432.02	4,280.00	2,924.97	9,636.99
94.11	24" Well	700.00	LF	F6319A	50 10.00	6,080	226,086		7,312	525,000	764,478
Mh:	125.00	Shifts:	2.5	Mh/Un:	0.1786	Un/Sh:	280.0000	8.69	322.98	10.45	750.00
94.12	48"x 100" HS 20 Hatch & Fra	2.00	EA	F6319A	50 10.00	2,432			2,925		5,357
Mh:	50.00	Shifts:	1.0	Mh/Un:	25.0000	Un/Sh:	2.0000	1,216.01	1,462.49		2,678.50

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- ment	Sub- Contract	Total
94.13	75"x 86" HS 20 Hatch & Fram	2.00	EA	F6319A	50 10.00	1,459			1,755		3,214
Mh:	30.00 Shifts: 0.6	Mh/Un: 15.0000		Un/Sh: 3.3333		729.61			877.50		1,607.11
94.14	56"x 112" HS 20 Hatch & Fra	2.00	EA	F6319A	50 10.00	5,837			7,020		12,857
Mh:	120.00 Shifts: 2.4	Mh/Un: 60.0000		Un/Sh: 0.8333		2,918.43			3,509.96		6,428.39
94.15	55"x 51" Hatch & Frame	3.00	EA	F6319A	50 10.00	3,648			4,387		8,036
Mh:	75.00 Shifts: 1.5	Mh/Un: 25.0000		Un/Sh: 2.0000		1,216.01			1,462.49		2,678.50
94.16	36"x 60" Hatch & Frame	2.00	EA	F6319A	50 10.00	2,432			2,925		5,357
Mh:	50.00 Shifts: 1.0	Mh/Un: 25.0000		Un/Sh: 2.0000		1,216.01			1,462.49		2,678.50
94.20	11'-8" x 8' x 7' Vault	3.00	EA	F6319A	50 10.00	29,184	101,115		35,100		165,399
Mh:	600.00 Shifts: 12.0	Mh/Un: 200.0000		Un/Sh: 0.2500		9,728.10	33,705.00		11,699.88		55,132.98
95.01	Concrete Cover (20' Dia.)	2.00	EA	F6319A	50 10.00	2,189	38,520		2,632		43,341
Mh:	45.00 Shifts: 0.9	Mh/Un: 22.5000		Un/Sh: 2.2222		1,094.41	19,260.00		1,316.24		21,670.65
95.02	Platform (8.44 NAVD)	2.00	EA	F6319A	50 10.00	1,946			2,340	5,000	9,286
Mh:	40.00 Shifts: 0.8	Mh/Un: 20.0000		Un/Sh: 2.5000		972.81			1,169.99	2,500.00	4,642.80
95.03	Landscaping Screening	2.00	LS	F6319A	50 10.00					15,000	15,000
Mh:	Shifts:	Mh/Un:		Un/Sh:						7,500.00	7,500.00
95.04	Grout / Seal / Coatings	2.00	LS	F6319A	50 10.00	3,648	16,050		4,387		24,086
Mh:	75.00 Shifts: 1.5	Mh/Un: 37.5000		Un/Sh: 1.3333		1,824.02	8,025.00		2,193.73		12,042.75
95.05	Start-up / Commissioning	2.00	EA	F6319A	50 10.00	1,459	1,070		1,755		4,284
Mh:	30.00 Shifts: 0.6	Mh/Un: 15.0000		Un/Sh: 3.3333		729.61	535.00		877.50		2,142.11
95.06	Warranty Allowance	2.00	EA	F6319A	50 10.00	1,946	10,700		2,340		14,986
Mh:	40.00 Shifts: 0.8	Mh/Un: 20.0000		Un/Sh: 2.5000		972.81	5,350.00		1,169.99		7,492.80
95.07	14th Ct. & Bay Rd. Set Up	2.00	EA	F6319A	50 10.00	47,911			57,622		105,533
Mh:	985.00 Shifts: 19.7	Mh/Un: 492.5000		Un/Sh: 0.1015		23,955.42			28,810.96		52,766.38
95.08	24" Well Credit	-1.00	LS	F6319A	50 10.00					-281,750	-281,750
Mh:	Shifts:	Mh/Un:		Un/Sh:						281,750.00	281,750.00
*****Biditem/Category		94	*****			192,244	1,388,937		225,904	263,250	2,070,335
Mh:	3,981.66	Mh/Un: 3,981.6600			192,243.95	1,388,937.00		225,904.25	263,250.00	2,070,335.20	
***	95	Electrical / I&C				Takeoff:	1.00	LS	Bid:	1.00	LS
55.1	Control Pannels w/ Floats	2.00	EA	F6319A	50 10.00				422,493		422,493
Mh:	Shifts:	Mh/Un:		Un/Sh:					211,246.50		211,246.50
55.2	Ductbank - Civil	920.00	LF	F6319A	50 10.00	64,391	23,433		67,274		155,098
Mh:	1,380.00 Shifts: 23.0	Mh/Un: 1.5000		Un/Sh: 40.0000		69.99	25.47		73.12		168.59
*****Biditem/Category		95	*****			64,391	23,433		67,274	422,493	577,591
Mh:	1,380.00	Mh/Un: 1,380.0000			64,391.17	23,433.00		67,274.31	422,493.00	577,591.48	
***	96	Rock Anchors				Takeoff:	1.00	LS	Bid:	1.00	LS
96.01	Rock Anchors	8.00	EA	F6319A	50 10.00		299,600				299,600
Mh:	Shifts:	Mh/Un:		Un/Sh:			37,450.00				37,450.00
*****Biditem/Category		96	*****				299,600				299,600
Mh:	Mh/Un:					299,600.00					299,600.00
***	100	24" Interconnecting Pipping				Takeoff:	1.00	LS	Bid:	1.00	LS
100.01	Sheet Plating - Shoring	110.00	LBS	F6319A	50 10.00	40,019	856	7,651	47,628	1,000	97,154
Mh:	840.00 Shifts: 12.0	Mh/Un: 7.6364		Un/Sh: 9.1667		363.81	7.78	69.55	432.98	9.09	883.22
100.02	Dewatering	1.00	LS	F6319A	50 10.00	12,387	10,138		8,904		31,429
Mh:	240.00 Shifts: 6.0	Mh/Un: 240.0000		Un/Sh: 0.1667		12,386.57	10,138.21		8,904.42		31,429.20
100.03	Excavation	300.00	CY	F6319A	50 10.00	13,998	5,350		13,175	60,000	92,523
Mh:	300.00 Shifts: 5.0	Mh/Un: 1.0000		Un/Sh: 60.0000		46.66	17.83		43.92	200.00	308.41
100.04	Set up / Down & Install	1.00	LS	F6319A	50 10.00	24,320			11,550		35,871
Mh:	500.00 Shifts: 10.0	Mh/Un: 500.0000		Un/Sh: 0.1000		24,320.22			11,550.30		35,870.52
100.05	Seal & Grout	600.00	TON	F6319A	50 10.00	4,864	10,165		2,950		17,979
Mh:	100.00 Shifts: 2.0	Mh/Un: 0.1667		Un/Sh: 300.0000		8.11	16.94		4.92		29.96
*****Biditem/Category		100	*****			95,588	26,509	7,651	84,207	61,000	274,955
Mh:	1,980.00	Mh/Un: 1,980.0000			95,588.29	26,509.21	7,650.50	84,207.34	61,000.00	274,955.34	
***	120	Utility Relocations and Removal				Takeoff:	1.00	LS	Bid:	1.00	LS
120.1	Utility Relocations and Remov	1.00	LS	F6319A	50 10.00	116,723		7,000	83,885		207,608
Mh:	2,450.00 Shifts: 35.0	Mh/Un: 2,450.0000		Un/Sh: 0.0286		116,723.20		7,000.00	83,884.85		207,608.05

Activity Unit Price Summary

Biditem Activity	Description	Quantity	Unit	Calendar WC	Hrs/Shift	Labor	Perm Material	Constr Matl/Exp	Equip- Ment	Sub- Contract	Total
*****Biditem/Category		120	*****			116,723		7,000	83,885		207,608
Mh:	2,450.00	Mh/Un:	2,450.0000			116,723.20		7,000.00	83,884.85		207,608.05
Mh:	36,569.23	***REPORT TOTALS***				1,868,089	3,717,910	606,799	2,806,853	1,460,119	10,459,770

N = Activity not adjusted to bid quantity



Xylem Water Solutions USA Inc. / Flygt Products
 15132 Park of Commerce Blvd. Suite 102
 Jupiter, Florida 33478
 Phone: 561-848-1200 • Fax: 561-848-1299

091 20,000 GPM

April 16, 2021

RIC-MAN CONSTRUCTION FL INC
 3100 SW 15TH ST
 DEERFIELD BEACH FL 33442

Quote # 2019-WEP-0815
 Project Name: (1) Lincoln Road
 Xylem Water Solutions USA, Inc. is pleased to provide a quote for the following Flygt equipment.

West Ave PS

Qty	Description
6	PL7065, 63, 840, 523mm 22 deg, 43-30-8AA, 135HP, 715 drive unit, 460V, 60Hz, Mas 711, S3x70+3x35/3+2S92x.,5)175ft , S12, 1,5 175ft Shaft: AISI 431 Stainless Steel Zinc anodes attached on pump & drive unit
6	FW3S620G 20"X5/8" LIFT CHAIN+ 316SS
1	Fully Integrated VFD Control Panel for 6 pumps. Includes NEMA 4X 316SS Modular enclosure. MultiSmart Pump Station Manager for control & future SCADA. Primary Level Pressure transducers with back up Float logic. Air Conditioned enclosure with separate Emergency Backup Generator Receptacle.
6	BASE UNIT/PANEL ASSEMBLY MAS
6	TRANSFORMER,CURRENT 300:1
12	SENSOR,ENM-10 0.95-1.1 65'
6	HOLDER,CABLE HEAVY DUTY 316SS
10	60" X 60" Frame Opening Alum AHD Hatches
6	48" X 60" Frame Opening Alum AHD Hatches
2	78" X 78" Frame Opening Alum AHD Hatches
6	USF 230-AA 41 1/2" Ring w/Cover
7	48" X 84" Frame Opening Alum AHD Hatches
1	56" X 88" Frame Opening Alum AHD Hatches
1	50" X 51" Frame Opening Alum AHD Hatches
3	USF 230-AA 49 1/2" Ring w/Cover
4	START UP,FLYGT,NO TAX 1-TP MODELS: 3000,7000,8000
6	SS316 Pump Tube 32" OD x 23' - 6" LG with Side Discharge 32" OD x 34" LG from Tube CL
6	SS316 Formed Suction Intake for 32" Pump Tube
6	Wall Brackets SS 316 Pump Tube Wall bracket
6	CABLE ENTRY UNIT
6	GRIP,CABLE SS 19-24MM
6	GRIP,CABLE SS 25-36MM
6	HOLDER,CABLE 304
6	PIPE,SQUARE 304 L=860MM
12	EYE,LIFTING UNIT
6	EYE,LIFTING UNIT
6	WIRE UNIT
12	PIPE UNIT


**Xylem Water Solutions USA Inc. /
Flygt Products**

15132 Park of Commerce Blvd. Suite 102
Jupiter, Florida 33478
Phone: 561-848-1200 • Fax: 561-848-1299

Total Price	\$ 2,709,550.05	
Tax 770	189,669	
	<u>2,899,219</u>	4/19/21

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.

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

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

Terms of delivery: PP/Add Order Position

Delivery lead-times may be impacted by the current COVID-19 virus pandemic relative to transportation logistics.

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 the 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 45 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.xylem.com/en-us/Pages/terms-conditions-of-sale.aspx> 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.

Please feel free to call if you have any questions or if you require assistance.

Sincerely,

Deborah S. Stanton

Paul Ryan



**Xylem Water Solutions USA Inc. /
Flygt Products**
15132 Park of Commerce Blvd. Suite 102
Jupiter, Florida 33478
Phone: 561-848-1200 • Fax: 561-848-1299

Deborah Scanlon
Inside Sales Engineer

Rick Reyes
Sales Representative

deborah.scanlon@xylem.com

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: _____

Address: _____

Accepted By: _____

Print Name: _____

Date: _____



RIC-MAN Construction Florida, Inc.
 3100 SW 15th Street, Deerfield Beach, Florida 33442
 Office: (954)426-1221 | Fax: (954)426-1226

PURCHASE ORDER No.17KB91- 021R

Project: West Avenue Neighborhood (North)

Today Date: 8/26/2019	Seller: Xylem Water Solutions USA, Inc.
Date of General Contract: 1/17/2017	15132 Park of Commerce Building./102, Jupiter, FL, 33478
Date Materials Required: 3/10/2020	Owner: City of Miami Beach
F.O.B.:	1755 Meridan Ave, 3rd Floor, Miami Beach, FL 33139
	Engineer: CES

Item	Description	Quantity	Unit	Unit Price	Extension
6	Pumps, Cables, Hangers, tubes and Control Panels as listed in August 7, 2019* Quote attached. Start-up support and warranty as required by Client Contract Shop Drawing delivery time 4 weeks Panels delivery time 12 weeks from approved shop drawings Pumps delivery time 12 weeks from approved shop drawings	1.00	units	\$ 2,000,427.00	\$ 2,000,427.00
	Optional Add to PO			\$ 97,209.80	
	AS PER QUOTE ATTACHED				

This agreement is made between Ric-Man Construction Florida, Inc. (Contractor) and Xylem WS USA (Seller). The General Conditions on back govern this Purchase Order. Seller's form of acceptance, sales order or other like document shall not govern the relationship between the parties, and any contradictory terms and conditions contained in Seller's document shall not affect Contractor's rights and remedies and Seller's obligations. Reference in this Purchase Order to Seller's quotation, sales literature, or other documents are for purposes of description and price only.	SubTotal	\$	2,000,427.00
	Tax	\$	120,025.62
	Freight	\$	76,377.00
	Site Service	\$	5,196.00
	Surtax	\$	50.00
	Total	\$	2,202,075.62

RIC-MAN Construction Florida, Inc.
 Correspondence To: Tyson DiPetrillo 954-448-6994
 Site Superintendent: Brian Baribeault 954-495-7820


 Approved By Contractor


 Date

*Accepted by Xylem
Susan M. Button
 Digitally signed by Susan M. Button
 DN: cn=Susan M. Button, o=508-207-0966, ou=Xylem Water Solutions USA, Inc., email=susan.button@xylem.com, c=US
 Date: 2019.09.12 13:25:48 -04'00'

Accepted By Seller

Date

NOTE: PO # KB91-021R replaces KB91-021 dated 11/13/2017 which is now null and void

*Accepted by Xylem as modified by original terms agreement modifications dated November 7, 2017 attached

Susan M. Button
National Contracts Manager
204 Harrington Circle
East Brockfield, MA 01515
Susan.button@xyleminc.com
508-207-0966 (Cell)



November 7, 2017

Mr. Michael Fischer, COO
Ric-Man Const. FL, Inc.
3100 SW 15th Street
Deerfield Beach, FL 33442
mfischer@ric-man.com

SUBJECT: KB-91 West Avenue Neighborhood (North)
Your P.O. # 16-KB91-021
FLYGT PRODUCTS Quotation dated January 11, 2016

Dear Mike,

Thank you for this order. I have modeled this after our recent agreement on Miami 19th Ave.

Scope of Supply

As detailed in and attached to your Purchase Order, the scope of equipment supply for this purchase order shall be as outlined in FLYGT'S quotation dated January 11, 2016, technical Specification, applicable addenda and general conditions as they specifically pertain to the equipment being provided hereunder. The proposal shall be incorporated as a binding part of the order. In addition, the terms and conditions of the FLYGT proposal shall be made a part of this purchase order. However, in the event of a conflict between Xylem's (FLYGT) terms and the Purchaser's terms, the Purchaser's terms shall govern except as modified herein.

Schedule

Submission of Submittals	week of November 20, 2017
Approval	week of December 18, 2017
Settables & Hatches	week of January 29, 2018
Panel (10 weeks)	week of February 26, 2018
Pumps (14 weeks)	week of March 26, 2018
Flow Pump Tube / Suction Intake	week of April 2, 2018

General Conditions

Item 1 – Line 2 – please add: “...of the Project insofar and to the extent applicable to the equipment being provided under this Purchase Order...”

Item 5 – Please delete as written and replace as follows:

Seller will provide invoices on our standard invoice form and agrees to provide partial and final waivers upon receipt of Contractor.

Payment terms shall be:

- 90% N60 following delivery of material to the jobsite
- 10% upon start-up, not to exceed 180 days after final delivery

We can offer the following SOV for invoicing:

Settables	\$ 31,083.00
Hatch	\$ 34,000.00
Panels & MAS Unit	\$325,087.60
Pumps	\$305,132.40
Flow Pump Tube	\$210,000.00
Suction Intake	\$100,500.00
Freight	\$ 18,722.00
Site Service	\$ 3,513.00

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

Item 6 – Line 2 – please add: “...date of cancellation, or in the event of specialty items, for payment of goods which have been completed as of the date of cancellation.”

Item 7 – Please delete as written and replace as follows:

Seller acknowledges that time is a material element to the delivery of the equipment and agrees to furnish the materials in accordance with a mutually agreeable schedule. Upon failure to do so, Seller agrees to reimburse the Contractor for the proven portion of actual liquidated damages that may be assessed against and collected from the Purchaser which are attributable to or caused by Seller's failure to furnish the materials within the time or times as mutually agreed to. Liquidated damages shall not be assessed unless shipment occurs later than number of weeks outlined above for each deliverable after Seller's receipt of written approval to release for fabrication or Contractor's requested delivery date (whichever is later). Seller will not be assessed any liquidated damages by the Contractor unless the Contractor is specifically assessed damages. If more than one party is responsible for assessment of liquidated damages against the Purchaser, then the Seller shall be liable for only its portion of the total liquidated damages. Should Seller's performance be late and the delay does not affect Contractor's overall schedule, no liquidated damages shall be assessed. Liquidated damages shall be limited to \$1,000 / day and a maximum of 15% of the contract value.

The sell price includes freight allowed to the jobsite. Shipment will be handled by FLYGT and will be in accordance with Incoterm 2010 DAP Jobsite (FOB jobsite UCC).

Item 9 - Please delete the first sentence as written and replace as follows:

Seller represents and expressly warrants that the goods and services delivered pursuant to this Purchase Order conform to the applicable plan and specifications, the requirements of this Purchase Order, conform to descriptions and affirmations of fact contained in Seller's applicable sales literature, are new and of quality construction and will function in the manner specified.

Item 11 - Please delete as written and replace as follows:

Seller's failure to deliver in accordance with the mutually agreed upon schedule or good and services that do not conform to the applicable specifications and warranties stated above shall constitute a material breach of contract. In the event of a breach, Contractor shall notify Seller and provide Seller five (5) working days to correct or diligently pursue to the reasonable satisfaction of Contractor such breach. If Seller is unable to correct with the time or times mutually agreed upon, Contractor shall be entitled to cancel all or part of the order and be reimbursed for actual costs incurred as a result of Seller's breach.

Item 12 - Please delete as written and replace as follows:

Seller agrees to indemnify, defend (at own expense) and hold harmless Contractor its directors, officers, agents and employees from and against any and all claims, demands, losses and expenses, arising out of a) suits, claims and demands by reason of injury or death of any person(s) or damage to any property attributable to the willful misconduct or negligent acts or omissions of Seller, its subcontractors and their officers, agents or employees, except to the proportionate extent that such actions, claims, demands, proceedings, losses and expenses were caused by the Indemnified Parties or any of them.

It is the expressed intention of the parties, that each of them shall be liable for the consequences of their own negligent acts or omissions whether those acts or omission are the sole, joint, or concurring causes of any claims, demands, proceedings, losses or other liabilities; b) to hold Contractor harmless from and to protect, defend (at own expense) and indemnify Contractor against any and all loss, liability, damage and costs arising out of the use of equipment as provided under this order for infringement of any patent, copyright, trademark, trade name, brand or slogan. Seller will promptly defend and shall have control over such claim or suit.

If the use of any Product of any part thereof should be enjoined, Seller shall have the right at its own expense to procure for the Purchaser the right to continue using such Product, or to replace said Product with a non-infringing item or to modify said Product so that it becomes non-infringing.

Notwithstanding the foregoing, Supplier's indemnification obligations shall not apply to (i) compliance with designs, plans or specifications furnished by the Purchaser, (ii) use of the goods in a manner for which they were never designed or contemplated; (iii) Buyer combines Supplier's goods with something else unknown by Supplier wherein that combination infringes (contributory or inducing) or (iv) infringement of any patent in which the Purchaser or any affiliate have any direct or indirect interest.

Contractor and Seller waive against each other, and against the other's officers, directors, members, partners, and employees any and all claims for or entitlement to special, incidental, indirect, punitive, or consequential damages arising out of, resulting from, or related to the Contract. The parties further agree that the total liability of each party to the other for claims, costs, losses, and damages arising from this Contract shall be limited to the amount established in the Agreement as the Contract Price. The terms of this overall Limitation of Liability (but not the waiver) **do not apply to or limit any claim** by either party against the other **based on the following**: (a) costs, losses, or damages asserted by third parties for bodily injury, sickness, disease, or death, or to injury to or destruction of the tangible property; or (b) gross negligence or willful misconduct. **Seller represents that it has adequate coverage and policy limits to insure the above indemnification of the Contractor.**

Item 13 – Please add: “Both parties irrevocably agree to waive their rights to a trial by jury.”

Back charges

Contractor shall not make purchases nor shall **Contractor** incur any labor that would result in a back charge to Seller without prior written consent of an authorized employee of Seller.

Xylem will not be responsible for shipment shortages or damages incurred in shipment that are not reported within two weeks from delivery to the 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.

In addition, we will need the following information to finalize your order.

1. Complete jobsite shipping address
2. Required invoice submission date (cut-off)
3. A copy of your payment bond for this project

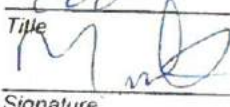
We would appreciate it if you would execute this letter so that it becomes a binding part of your purchase order and our formal contractual obligations. Please sign and return to me via e-mail at Susan.Button@xyleminc.com with the above requested items at your earliest possible convenience so that we may adhere to the above schedule. Failure to respond to this letter in a timely manner may delay submittals. If you have any questions or concerns, please do not hesitate to contact me at (508-207-0966).

Sincerely,

Susan M. Button (signed electronically)

Susan M. Dufault Button
National Contracts Manager

Accepted by: (authorized party to bind company)

Michael Fischer
Printed Name
COO
Title

Signature
11/10/17
Date



RIC-MAN Construction Florida, Inc.
3100 SW 15th Street, Deerfield Beach, Florida 33442
Office: (954)426-1221 | Fax: (954)426-1226

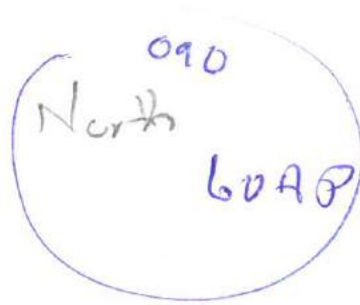
PURCHASE ORDER

No.17KB91- 021R

Project: West Avenue Neighborhood (North)

GENERAL CONDITIONS

- 1 **ACCEPTANCE OR ACKNOWLEDGMENT.** This order becomes a contract when Contractor receives written acceptance thereto or upon Seller delivering goods to Contractor. It is agreed that Seller shall furnish to Contractor the above listed materials and equipment in strict accordance with the general contract documents of the Project and this Purchase Order, subject to approval of the Owner, Owner's Engineer & Contractor, the quantities furnished shall be as required by Contractor. The quantities listed are estimates only. Final quantities are as required.
- 2 **COMPLIANCE WITH PRIME CONTRACT AND LAWS.** All applicable technical Specifications and plans of the Prime contract documents, state or federal statutes, rules and regulations are deemed to be incorporated in this Purchase Order by reference as though expressly repeated and binding upon the Seller. Seller agrees to furnish all shop drawings, samples, test data, manuals, instruction and warranties, required by prime contract documents, at its own expense.
- 3 **TAXES.** Seller assumes all liability for taxes of every type, applicable to the goods and services specified in this Purchase Order, unless expressly provided for in this Purchase Order.
- 4 **PRICE.** Seller may charge only the prices indicated in the Purchase Order, and shall not charge interest, service charges or any additional charges.
- 5 **PAYMENT.** The invoice shall be on a form provided by Contractor or acceptable to Contractor, and shall be accompanied by waivers of lien effective through the date of the application and such other documents as Contractor may reasonably require to support or verify the request for payment. In full consideration for the complete and timely performance of all obligations required of the Seller under this Purchase Order, Contractor shall pay to Seller the lump sum(s) or unit prices indicated on the face of this order. Determinations by the project owner of quantities of materials and equipment for which payment is due shall be final and binding upon Seller. The balance of the amount of the invoice, as approved by Contractor, shall be paid by Contractor to Seller within 3 days after Contractor receives payment from the Owner for the goods and services included in the invoice. Seller agrees that as a condition precedent to Contractor's obligation to make any payment, Contractor must first have received payment from the Owner in respect of the materials, equipment and services for which Seller seeks payment.
- 6 **CANCELLATION.** Contractor reserves the right to cancel this order as to non-special order goods, at any time, upon written notice to Seller without penalty. Contractor will remain obligated to pay only for those goods and services which have been received at the job site as of the date of cancellation. If at that time of notice of cancellation Seller has placed goods in the hands of a carrier for delivery to Contractor or its consignee, Contractor will be responsible only for the delivery charges. The exercise of this right of cancellation shall not constitute a waiver by Contractor or of any of its other rights or remedies.
- 7 **DELIVERY.** Time is of the essence in this Purchase Order. All goods and services are to be delivered on or before the "date required" specified above, unless otherwise indicated in this Purchase Order. Where goods and services are to be delivered in installments, delivery must be timely and as needed by Contractor. Unless otherwise specified, delivery shall be to the job site and off-loaded at the locations and according to the instructions of Contractor's authorized employee. Delivery shall be FOB on the ground at project site.
- 8 **QUANTITIES.** Seller shall deliver the quantity required by Contractor. The quantity may not be changed without Contractor's written consent. Contractor may change the quantity ordered. Such change shall not cause modification of the unit price unless Owner grants a corresponding change to Contractor. Any unauthorized quantity is subject to Contractor's rejection and return at Seller's expense.
- 9 **REPRESENTATION AND WARRANTIES.** Seller represents and expressly warrants that the goods and services delivered pursuant to this Purchase Order conform to Contractor's specifications and the requirements of the Purchase Order conform to descriptions and affirmations of fact contained in all of Seller's sales literature, are of merchantable quality and are fit for the purpose for which they are designed. Seller also represents and expressly warrants title to the goods and that the goods covered by this order do not infringe on any patents granted by the United States, or copyright, trademark or trade secret protection. These representations and warranties shall not be deemed waived by acceptance of the goods and services or payment for them. There are no implied warranties, including any implied warranty of merchantability or fitness for a particular purpose, with the exception of the manufacturer's standard warranty, and those warranties set forth above.
- 10 **INSPECTION, ACCEPTANCE OR REJECTION.** All goods and services shall be received subject to Contractor's right of inspection and rejection and owner's final acceptance. Goods and services which do not conform precisely to Owner's or Contractor's specifications, defective goods and services, and goods which do not conform to Seller's representations or warranties may be rejected by Contractor upon reasonable notices and returned to Seller or held pending Seller's instructions, at Seller's expense. Contractor's right of rejection shall apply to all or any part of the goods and services. Payment of goods and services prior to inspection shall not constitute a waiver of the right of rejection if the goods and services are found to be in breach of this order at a later time. Payment for goods and services or failure to reject shall not constitute a waiver of any other remedies available to Contractor in respect of such goods and services.
- 11 **BREACH AND REMEDIES OF BUYER.** Seller's failure to timely deliver all or any part of goods and services which conform strictly Contractor's specifications and warranties stated above constitute a material breach of contract, excusing Contractor from further performance. Seller shall have no right to cure the breach unless and to the extent allowed in writing by Contractor. In the event of any breach by Seller, Contractor shall be entitled to recover its actual damages Contractor shall have a right of setoff. In addition to the above, Contractor shall be entitled to recover from Seller all costs, disbursements and reasonable attorney fees incurred in connection with the enforcement of this Purchase Order.
- 12 **INDEMNIFICATION.** To the extent permitted by applicable law and this purchase order, Seller agrees to indemnify and save Contractor harmless against any and all claims, causes of action, charges, losses and expenses (including reasonable legal and expert fees) which may be asserted against Contractor or which Contractor might incur in respect of (a) personal injury or death or damages or losses to property to the extent caused by Seller's negligent acts or omissions or willful misconduct, except those resulting from Contractor's sole negligence; or (b) arising out of any defect in title and actual or alleged infringement of any patent, copyright, trademark or trade secret asserted against Contractor in respect of the delivery of goods and services covered by this order; or (c) arising out of any breach of this Purchase Order. Seller represents that it has adequate insurance coverage and policy limits to insure the above indemnification of Contractor.
- 13 **MISCELLANEOUS.** This Purchase Order constitutes the entire agreement between the parties and all prior oral and written communications shall be superseded by this document. No provisions of this document may be waived, changed, terminated, modified, discharged or rescinded, except by writing signed by an officer or authorized agent of the Contractor. Failure to assert a breach of any provision of this document shall not constitute a waiver of any rights or remedies available to Contractor. The titles of paragraphs are provided for convenience and shall not be deemed to limit the content of substance of any provision. If any provision of this document shall be held to be unenforceable or inapplicable in any respect, such determination shall not affect the enforceability of any other provision. The provisions of this document shall bind and inure to the benefit of the parties, their assigns and successors in interest. The parties agree that all disputes, controversies or claims arising out of or related to this Purchase Order, including allegations of fraud, shall be settled in accordance with the rules of the American Arbitration Association. The award rendered by the arbitrators shall be final and judgement may be entered upon it in accordance with applicable law in any court having jurisdiction. The validity, interpretation and performance of the Purchase Order shall be governed by the laws of the State of Florida. The parties accept jurisdiction of the State of Florida and agree to accept service of process as if it were personally served within such jurisdiction. Notwithstanding the terms of any other agreement between the parties, in no event and under no circumstances shall either party be liable for incidental, indirect, special, or consequential damages, whether the theory be breach of warranty, breach of contract, negligence, or strict liability. Further, in no event will contractors total liability under this purchase order exceed the total dollar value of this purchase order.



Xylem Water Solutions USA, Inc.
Flygt Products

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

To: Ric-Man Construction FL, Inc.
 Attention: Michael Fischer

Date: April 16, 2021

Subject: 14th CT 60HP Well Pump
 Quote Number: 14C60WP

We are pleased to offer the following equipment:

- | Qty | Description |
|-----|---|
| 1 | Flygt Model NP-3400/716 1270 16" volute Submersible pump equipped with a 460 Volt / 3 phase / 60 Hz 60 HP 585 RPM motor, 525MM impeller, 1 x 100 Ft. length of submersible cable, FLS leakage detector, volute is prepared for Flush Valve, Explosion proof Including Zinc anodes |
| 1 | START UP,FLYGT,NO TAX 1-TP MODELS: 3000,7000,8000 |
| 1 | CONNECTION,DISCH 16"X 16" CI |
| 1 | ¾ 316SS Standard Mounting plate for 16X16 base elbow |
| 40 | CHAIN 5/8" 316SS (1 X 40') |
| 1 | KIT,CHAIN FITTING 316SS+ FLYGT |
| 2 | Heavy Duty anchor kits |
| 70 | TS3163 FEET 3"GUIDE RAIL 316SS (2 X 15' + 2 X 20') |
| 1 | BRACKET,GUIDE BAR UPPER 3" 316 |
| 1 | 3" 316SS Intermediate Guide Bar Bracket (16" Riser Pipe) |
| 1 | HOLDER,CABLE HEAVY DUTY 316SS |
| 3 | 56" X 112" Frame Opening Drainage Well Hatches Galv Steel DT-AHD |
| 1 | 75" X 86" Frame Opening Wet Well Hatch Galv Steel DT-AHD |
| 1 | 48" X 100" Frame Opening Settling Tank Hatch Galv Steel DT-AHD |
| 1 | 36" X 60" Frame Opening Settling Tank Hatch Galv Steel DT-AHD |
| 4 | SENSOR,ENM-10 0.95-1.1 65' |
| 1 | Simplex Control Panel 460V 3Ph 60hp NEMA 3R12 316 SS enclosure w/ VFD, 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: \$326,760.00 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.

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





**Xylem Water Solutions USA, Inc.
Flygt Products**

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

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: _____

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

To: Ric-Man Construction FL, Inc.
Attention: Michael Fischer

Date: April 16, 2021

Subject: Lincoln & Bay 60HP Well Pump
Quote Number: LB60WP

We are pleased to offer the following equipment:

Qty	Description
1	Flygt Model NP-3400/716 1270 16" volute Submersible pump equipped with a 460 Volt / 3 phase / 60 Hz 60 HP 585 RPM motor, 525MM impeller, 1 x 100 Ft. length of submersible cable, FLS leakage detector, volute is prepared for Flush Valve, Explosion proof Including Zinc anodes
1	START UP,FLYGT,NO TAX 1-TP MODELS: 3000,7000,8000
1	CONNECTION,DISCH 16"X 16" CI
1	¾ 316SS Standard Mounting plate for 16X16 base elbow
40	CHAIN 5/8" 316SS (1 X 40')
1	KIT,CHAIN FITTING 316SS+ FLYGT
2	Heavy Duty anchor kits
70	TS3163 FEET 3"GUIDE RAIL 316SS (2 X 15' + 2 X 20')
1	BRACKET,GUIDE BAR UPPER 3" 316
1	3" 316SS Intermediate Guide Bar Bracket (16" Riser Pipe)
1	HOLDER,CABLE HEAVY DUTY 316SS
3	56" X 112" Frame Opening Drainage Well Hatches Galv Steel DT-AHD
1	75" X 86" Frame Opening Wet Well Hatch Galv Steel DT-AHD
1	48" X 100" Frame Opening Settling Tank Hatch Galv Steel DT-AHD
1	36" X 60" Frame Opening Settling Tank Hatch Galv Steel DT-AHD
4	SENSOR,ENM-10 0.95-1.1 65'
1	Simplex Control Panel 460V 3Ph 60hp NEMA 3R12 316 SS enclosure w/ VFD, 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: \$326,760.00 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.

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



Xylem Water Solutions USA, Inc. Flygt Products

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

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: _____

Address: _____

Accepted By: _____

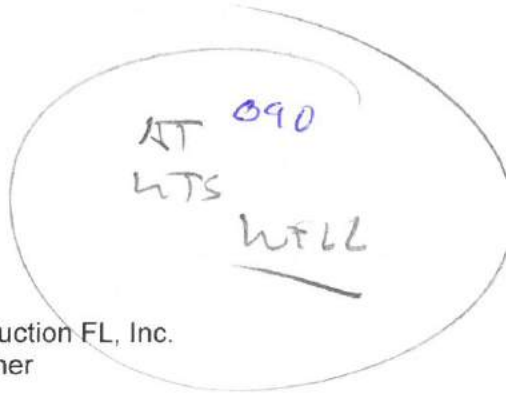
Print Name: _____

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



To: Ric-Man Construction FL, Inc.
Attention: Michael Fischer

Date: April 16, 2021

Subject: Sedimentation Tank 25HP Well Pump
Quote Number: ST25WP

We are pleased to offer the following equipment:

- | Qty | Description |
|-----|--|
| 1 | Flygt Model NP-3171.095 <u>LT 10"</u> 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 | 1/2 X 316SS Standard Mounting plates (For 10" Base Elbow) |
| 20 | CHAIN 5/16" 316SS SWL2750# (1 X 20') |
| 1 | KIT, CHAIN FITTING 316SS+ FLYGT |
| 8 | ROD, THREADED 3/4"-10X12" 316SS |
| 4 | PPAC AC100PLUS ADHESIVE+ ANCHORING SYSTEM |
| 30 | TS3163 FEET 3" GUIDE RAIL 316SS (2 X 10' + 2 X 15") |
| 1 | BRACKET, GUIDE BAR UPPER 3" 316 |
| 1 | HOLDER, CABLE HEAVY DUTY 316SS |
| 1 | 56" X 88" Frame Opening Drainage Well Hatches Galv Steel DT-AHD |
| 1 | 52" X 51" Frame Opening Wet Well Hatch Galv Steel DT-AHD |
| 3 | Storm Water Manhole Cover USF385 Ring |
| 4 | SENSOR, ENM-10 0.95-1.1 65' |
| 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: \$117,735.54 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.

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





**Xylem Water Solutions USA, Inc.
Flygt Products**

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

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.xylem.com/en-us/Pages/terms-conditions-of-sale.aspx> 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: _____

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

091

To: Ric-Man Construction FL, Inc. Attention: Michael Fischer

Date: April 17, 2021

Subject: Dual 7.5 HP Sump Pumps Quote Number: D7.5HPSP

WTS Jockey Pumps

We are pleased to offer the following equipment:

- Qty Description
2 Flygt Model NP-3127.070-MT6" volute Submersible pump equipped with a 460 Volt / 3 phase / 60Hz 7.5 HP 1745 RPM motor, 439 impeller, 1 x 175 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
2 CONNECTION, DISCH 6" X 6" CI
2 1/2 X 316SS Standard Mounting plates (For 6" Base Elbow)
60 CHAIN 3/16" 316SS (2 X 30')
2 KIT, CHAIN FITTING 316SS+ FLYGT
16 ROD, THREADED 3/4"-10X12" 316SS
8 PPAC AC100PLUS ADHESIVE+ ANCHORING SYSTEM
100 TS3162 FEET 2" GUIDE RAIL 316SS (4 X 10' + 4 X 15")
2 BRACKET, GUIDE BAR UPPER 2" 316
2 2" 316SS Intermediate Guide Bar Bracket (6" Riser Pipe)
2 HOLDER, CABLE HEAVY DUTY 316SS
4 SENSOR, ENM-10 0.95-1.1 65'
1 Duplex Control Panel 460V 3Ph 7.5hp 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: \$78,559.38 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.

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

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





**Xylem Water Solutions USA, Inc.
Flygt Products**

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

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.xylem.com/en-us/Pages/terms-conditions-of-sale.aspx> 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: _____

Address: _____

Accepted By: _____

Print Name: _____

Date: _____



Xylem Water Solutions USA Inc. / Flygt Products
15132 Park of Commerce Blvd. Suite 102
Jupiter, Florida 33478
Phone: 561-848-1200 • Fax: 561-848-1299

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.aspx> 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.

Please feel free to call if you have any questions or if you require assistance.

Sincerely,

Deborah Scanlon
Inside Sales Engineer

Rick Reyes
Sales Representative

deborah.scanlon@xyleminc.com

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: _____

Address: _____

Accepted By: _____

Print Name: _____

Date: _____



North 091
25HP

Exhibit A

Xylem Water Solutions USA, Inc.
Flygt Products

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

To: Ric-Man Construction FL, Inc.
Attention: Michael Fischer

Date: April 16, 2021

Subject: 15 Ter & Bay 25HP Well Pump
Quote Number: 15TB25WP

We are pleased to offer the following equipment:

- | Qty | Description |
|-----|---|
| 1 | 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' |
| 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

Taxes: 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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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.xylem.com/en-us/Pages/terms-conditions-of-sale.aspx> 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.

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Xylem Water Solutions USA, Inc.

Company Name: _____

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

To: Ric-Man Construction FL, Inc.
Attention: Michael Fischer

Date: April 16, 2021

Subject: 15 Ter & West 25HP Well Pump
Quote Number: 15TW25WP

We are pleased to offer the following equipment:

Qty	Description
1	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'
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.

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Flygt Products

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Address: _____

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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

To: Ric-Man Construction FL, Inc.
Attention: Michael Fischer

Date: April 16, 2021

Subject: 16 St 25HP Well Pump
Quote Number: 16ST25WP

We are pleased to offer the following equipment:

Qty	Description
1	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')
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1	56" X 112" Frame Opening Drainage Well Hatches Galv Steel DT-AHD
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1	Storm Water Manhole Cover USF385 Ring
4	SENSOR,ENM-10 0.95-1.1 65'
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.

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Address: _____

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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

To: Ric-Man Construction FL, Inc.
Attention: Michael Fischer

Date: April 16, 2021

Subject: Lincoln & Bay 25HP Well Pump
Quote Number: LB25WP

We are pleased to offer the following equipment:

Qty	Description
1	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
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1	HOLDER,CABLE HEAVY DUTY 316SS
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1	Motor/ Float Connection Box
1	SHIPPING AND HANDLING-NO TAX

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

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Company Name: _____

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

To: Ric-Man Construction FL, Inc.
Attention: Michael Fischer

Date: April 16, 2021

Subject: Lincoln & West 25HP Well Pump
Quote Number: LW25WP

We are pleased to offer the following equipment:

Qty	Description
1	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
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1	SHIPPING AND HANDLING-NO TAX

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Flygt Products**

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Xylem Water Solutions USA, Inc.

Company Name: _____

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 Job Name:
To: RIC-MAN Construction Job Address: Location: along West Ave. from Lincoln Rd.
3100 SW 15th Street, down to 8th street. Miami Beach, FL
Deerfield Beach, Fl 33442 Temp. dewatering well
954-426-1221

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 Signature:
Print & Date:

Authorized 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.

WQ NORTH ELECTRICAL AVUTE
 SOUTH FL ELECTRIC ←

4/19/21

	Wire, Conduit install total	Pump Install Cost	Total
North			
Lin BR	\$97,200.00	\$34,000.00	\$131,200.00
Lin Wst	\$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
14th Crt	\$19,449.00	\$34,000.00	\$53,449.00
South			
13th St	\$7,574.40	\$34,000.00	\$41,574.40
12th St	\$8,629.20	\$34,000.00	\$42,629.20
9th St	\$8,438.40	\$34,000.00	\$42,438.40
			\$549,134.30

922,993 (091)
 126,641 (090)



[← 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 following months. All products are rising rapidly construction and industrial recovery from COVID outpaced sluggish capacity restarts, so supply is temporarily tight.

Welcome! How can we help you today?

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

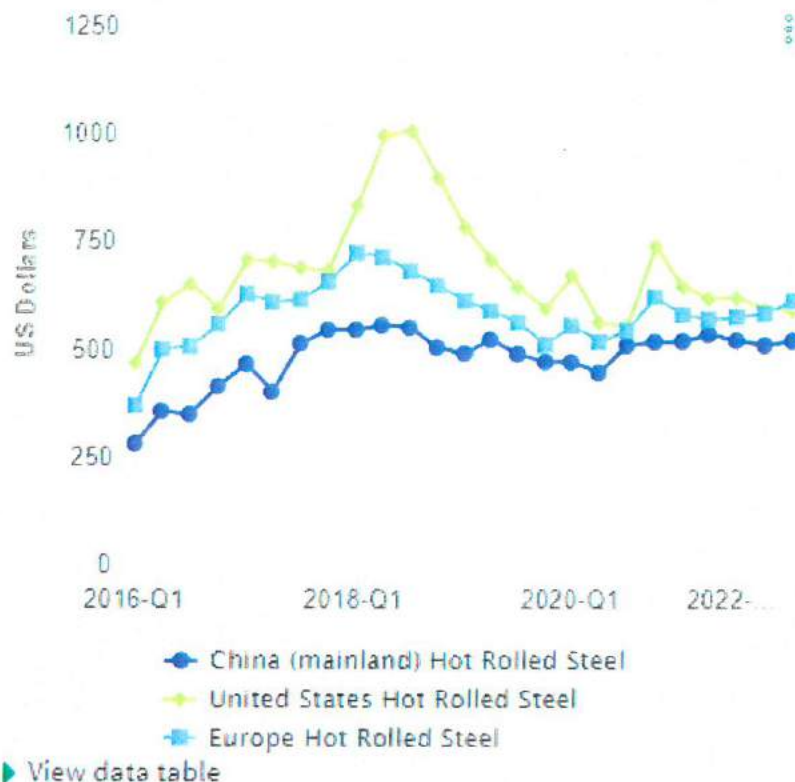
Sheet prices are spiking in the United States at one of the fastest rates in history, despite ample (but idle) capacity. Despite the high prices, buyers should worry more about supply than price for the first quarter of 2021, but should avoid locking prices for the remainder of the year. Other products 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.

Pricing Analysis Chart



Experts



Mark Ulmer

The group specializes in monitoring...

Coal, Metals and Mi
Oil & Gas Upstream

[VIEW PROFILE](#)



Laura Hodges

Ms. Hodges is responsible for the manage...

Economics
Country / Territory

[VIEW PROFILE](#)



John Anton

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

Coal, Metals and Mi
Commodity Price E

[VIEW PROFILE](#)



Amanda Eglinton

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

Commodities
Sourcing and Supp

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

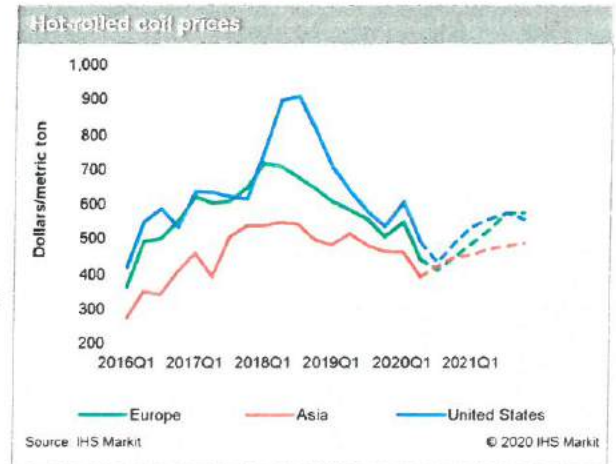


IHS Markit, 2020

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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 is 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

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2020	2021	Forecast change*
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, \$/metric ton												

IHS Markit steel price forecast, April 2020

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2020	2021	Forecast change*
Heavy melt steel scrap China, \$/metric ton												
Metallurgical coal Australia, \$/metric ton												
Metallurgical coal China, \$/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, \$/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, \$/metric ton												
Steel long product prices												
Merchant bar US, \$/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												

* 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

Source: IHS Markit

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Nonferrous metals

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.

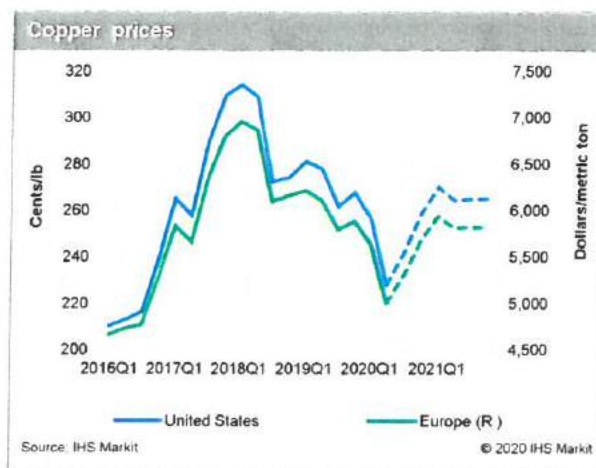
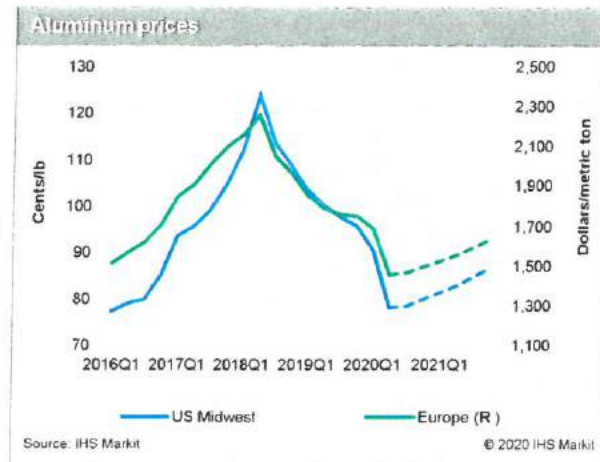
There are signs that prices may finally be nearing a bottom. Futures prices show a widening contango, which makes carry trades (buying spot metal and selling it forward) increasingly attractive, especially with low interest rates minimizing financing costs. Scrap discounts are also narrowing as a lack 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 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.

IHS Markit nonferrous price forecast, April 2020

	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2020	2021	Forecast change*
Aluminum												
Aluminum Midwest US Delivery, cents/lb												
Aluminum LME, \$/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, \$/metric ton												
Stainless steel												
Stainless sheet (304) US, \$/short ton												
Stainless sheet (304) Europe, \$/metric ton												
Stainless sheet (304) China, \$/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.

**Historical price sources: MEPS (stainless steel)

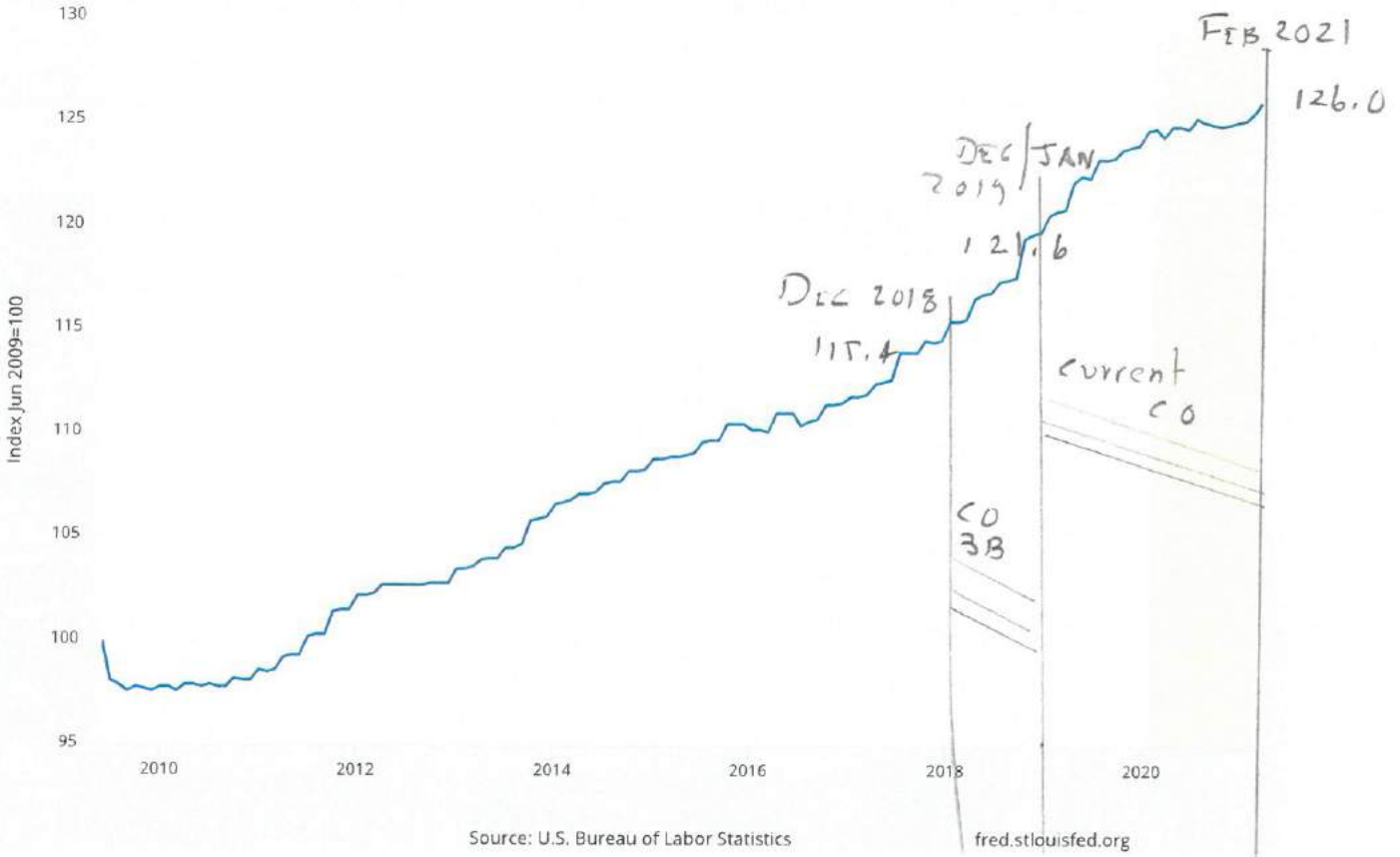
Source: IHS Markit

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Ric-Man Construction Florida, Inc.
 3100 SW 15th Street
 Deerfield Beach, FL 33442
 (954) 426-1221
 (954) 426-1226

Item	West Ave North -091 Commodity and Subcontractor Escalation		4/17/2021		Notes	
	New Total	CO 3B total	Delta Material	Delta Subcontract		Total Impact
Quoted Escalator						
Flgdt Pumps w/tax	\$ 2,202,075.00	\$ 2,899,219.00	\$ 697,144.00		See attached quotes US Pipe	
DI Pipe	\$ 704,608.00	\$ 526,924.00	\$ 177,684.00			
Tax 7%			\$ 12,438.00			
3.6% Escalator						
Precast Structures	\$ 1,121,725.00	\$ 1,082,746.00	\$ 38,979.00		See Producer Price Index Graph	
Trench drains	\$ 81,681.00	\$ 78,843.00	\$ 2,838.00			
Aggregates	\$ 592,834.00	\$ 572,234.00	\$ 20,600.00			
Landscaping/Irrigation	\$ 665,630.00	\$ 642,500.00	\$ 23,130.00			
Pipe Commodities	\$ 935,877.00	\$ 903,356.00	\$ 32,521.00			
PVC Pipe,Fittings	\$ 81,427.00	\$ 78,598.00	\$ 2,829.00			
Taxes - 7% on \$120,897			\$ 8,453.00			
Subcontractor Adjustments						
Asphalt				\$ 26,016.00		See Quote Comparison and Proportioning to 090 See unit Pricing spread sheet from So Fl Elect See quote comparison
Electrical- So Fl Elect				\$ 301,288.00		
Electrical- Benson -WTS				\$ 40,824.00		
Total			\$ 1,016,626.00	\$ 368,128.00		
OH- 10/5			\$ 101,663.00	\$ 18,406.00		
Subtotal			\$ 1,118,289.00	\$ 386,534.00		
3% Bond & Ins			\$ 33,548.00	\$ 11,596.00		
			\$ 1,151,837.00	\$ 398,130.00	\$ 1,549,967.00	



$$\text{INDEX } \Delta \quad \frac{126.0}{121.6} = 3.67\%$$

CONSTRUCTION Commodity Avg
CHANGE



Databases, Tables & Calculators by Subject

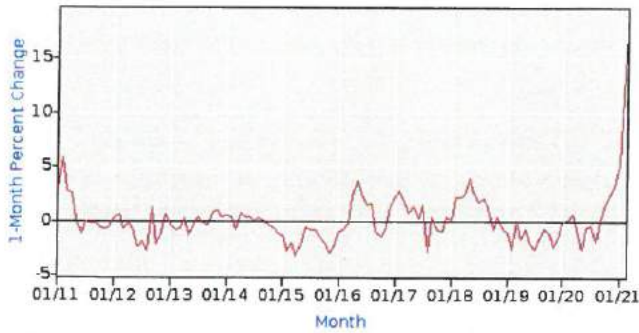
Change Output Options: From: 2011 To: 2021 [GO](#)
 include graphs include annual averages [More Formatting Options](#) →

Data extracted on: April 15, 2021 (12:52:37 PM)

PPI Commodity Data

1-Month Percent Change

Series Id: WPU1017
 Not Seasonally Adjusted
Series Title: PPI Commodity data for Metals and metal products-Steel mill products, not seasonally adjusted
Group: Metals and metal products
Item: Steel mill products
Base Date: 198200



Download: [xls](#)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	3.1	5.9	2.9	2.6	0.2	-1.1	0.0	-0.1	-0.1	-0.5	-0.6	-0.5
2012	0.3	0.7	-0.6	-0.2	-0.6	-2.3	-1.8	-2.7	1.3	-2.1	-1.0	0.7
2013	-0.3	-0.8	-0.6	0.3	-1.2	-0.2	0.4	-0.1	-0.3	0.8	1.0	0.4
2014	0.6	0.4	-0.7	0.8	0.5	0.4	0.1	0.3	0.1	-0.3	-0.5	-1.0
2015	-1.2	-2.7	-1.9	-3.1	-2.1	-0.5	-0.7	-0.8	-1.3	-2.0	-2.9	-2.3
2016	-0.9	-0.8	-0.1	2.4	3.7	2.2	1.5	1.7	-0.9	-1.4	-0.4	1.4
2017	2.4	2.8	1.8	0.8	1.4	0.3	1.5	-2.8	0.5	-0.8	-0.9	0.5
2018	0.2	2.2	2.2	2.5	4.0	2.6	1.8	2.1	1.3	-0.8	0.4	-0.6
2019	-1.0	-2.5	0.1	-1.6	-0.8	-1.9	-2.6	-1.4	-0.6	-1.1	-2.3	-1.5
2020	-0.1	0.1	0.7	-0.7	-2.6	-0.6	-0.4	-1.8	0.1	1.6	2.4	3.4(P)
2021	5.2(P)	11.8(P)	17.6(P)									

P: Preliminary. All indexes are subject to revision four months after original publication.



Databases, Tables & Calculators by Subject

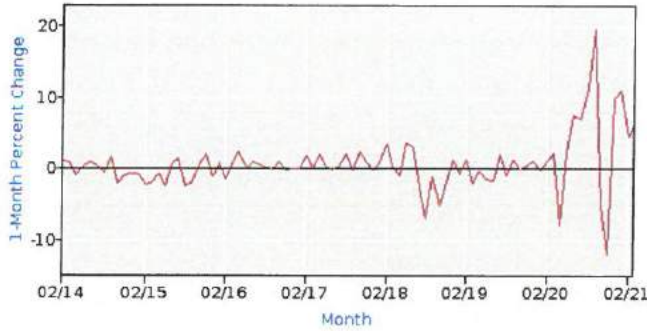
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 include graphs include annual averages [More Formatting Options](#)

Data extracted on: April 15, 2021 (12:53:27 PM)

PPI Commodity Data

1-Month Percent Change

Series Id: WPS081
 Seasonally Adjusted
Series Title: PPI Commodity data for Lumber and wood products-Lumber, seasonally adjusted
Group: Lumber and wood products
Item: Lumber
Base Date: 198200



Download: [xlsx](#)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2014		1.2	1.0	-0.8	0.3	0.9	0.6	-0.5	1.7	-1.9	-0.9	-0.7
2015	-0.6	-2.1	-2.0	-0.6	-2.4	0.8	1.6	-2.3	-1.9	0.7	2.0	-1.1
2016	0.8	-1.5	0.7	2.5	0.1	1.0	0.6	0.3	0.0	0.9	-0.1	0.1
2017	0.0	1.9	0.0	2.0	0.4	-0.1	0.4	2.0	-0.2	2.5	1.0	-0.1
2018	0.7	3.6	0.5	-0.8	3.8	3.0	-2.6	-6.9	-1.1	-5.0	-1.8	1.3
2019	-0.6	1.3	-1.9	-0.4	-1.5	-1.6	2.1	-0.9	1.4	0.1	0.5	1.2
2020	-0.2	1.1	2.2	-7.8	2.5	7.6	7.0	11.5	19.8	-5.1	-11.8	10.0(P)
2021	11.1(P)	4.6(P)	6.2(P)									

P : Preliminary. All indexes are subject to revision four months after original publication.



Databases, Tables & Calculators by Subject

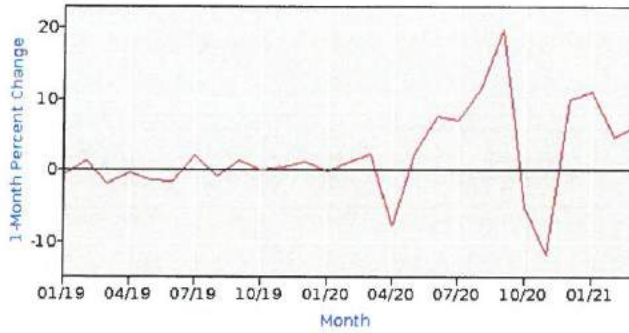
Change Output Options: From: 2019 ▼ To: 2021 ▼ [GO](#)
 include graphs include annual averages [More Formatting Options](#) →

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PPI Commodity Data

1-Month Percent Change

Series Id: WPS081
 Seasonally Adjusted
Series Title: PPI Commodity data for Lumber and wood products-Lumber, seasonally adjusted
Group: Lumber and wood products
Item: Lumber
Base Date: 198200



Download: [xlsx](#)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	-0.6	1.3	-1.9	-0.4	-1.5	-1.6	2.1	-0.9	1.4	0.1	0.5	1.2
2020	-0.2	1.1	2.2	-7.8	2.5	7.6	7.0	11.5	19.8	-5.1	-11.8	10.0(P)
2021	11.1(P)	4.6(P)	6.2(P)									

P : Preliminary. All indexes are subject to revision four months after original publication.

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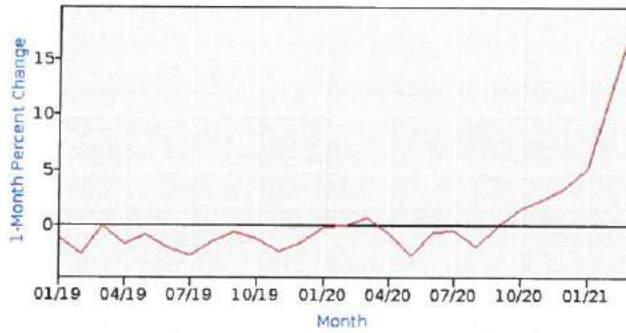
Change Output Options: From: 2019 ▼ To: 2021 ▼ [GO](#)
 include graphs include annual averages [More Formatting Options](#) ➔

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PPI Commodity Data

1-Month Percent Change

Series Id: WPU1017
 Not Seasonally Adjusted
Series Title: PPI Commodity data for Metals and metal products-Steel mill products, not seasonally adjusted
Group: Metals and metal products
Item: Steel mill products
Base Date: 198200



Download: [xlsx](#)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019	-1.0	-2.5	0.1	-1.6	-0.8	-1.9	-2.6	-1.4	-0.6	-1.1	-2.3	-1.5
2020	-0.1	0.1	0.7	-0.7	-2.6	-0.6	-0.4	-1.8	0.1	1.6	2.4	3.4(P)
2021	5.2(P)	11.8(P)	17.6(P)									

P : Preliminary. All indexes are subject to revision four months after original publication.

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4/14/21

South Florida Electrical Consultant, Inc.

WEST AVENUE - NORTH PROJECT - SIGNALIZATION AND LIGHTING QUANTITIES

SIGNALIZATION					
ITEM NUMBER	DESCRIPTION	UNIT	QTY EST.	INCREASE	AMOUNT
0630-2-12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE FOR SIGNALS, INCLUDES OPEN TRENCH INSTALLATION	LF	4500	\$2,64	\$11,680.00
0635-2-11	PULL & JUNCTION BOXES, F&I, 13" X 24" FOR SIGNALS	EA	78	\$27.83	\$2,170.74
0649-31-103	MAST ARM, F&I, WIND SPEED, SINGLE ARM, W/O LUMINAIRE	EA	12	\$9,100.00	\$109,200.00
0670-5-120	TRAFFIC CONTROLLER ASSEMBLY, F&I, 170	AS	3	\$2,500.00	\$7,500.00
Not included:					
Rectangular Rapid Flashing Beacon (AC powered or Solar)					
Vehicle Detection system					
LIGHTING					
ITEM NUMBER	DESCRIPTION	UNIT	QUANTITY		
0715-1-12	LIGHTING CONDUCTORS, F&I, INSULATED, NO. 6	LF	62100	\$0.90	\$55,690.00
0715-1-14	LIGHTING CONDUCTORS, F&I, INSULATED, NO 1	LF	1500	\$0.98	\$1,470.00
0630-2-12	CONDUIT, FURNISH & INSTALL, INCLUDES OPEN TRENCH INSTALLATION	LF	40,667	\$2.64	\$107,360.88
0635-2-11	PULL & JUNCTION BOXES, F&I, 13" X 24" FOR LIGHTING	EA	209	\$27.83	\$5,816.47
Notes:					
1) Assumes the loop assemblies for the EB approach to Alton Rd at 15th St. & Lincoln Rd will require replacement.					
				DELTA	\$301,288.09



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 #: 162962

Revision #: 0

Bid Date: 9/30/2019

City, St: FL

Engineer:

Addendums:

Location:

Project: West Ave. North

RFQ ID:

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

Qty	Description	Length	Weight	Price	Total Price
1	670 FT 06" TYTON DIP CL52 20' NOM BCL/AC (D)		13,635	\$13.38	\$8,964.60
2	248 FT 08" TYTON DIP CL52 20' NOM BCL/AC (D)		7,093	\$18.80	\$4,662.40
3	7030 FT 12" TYTON DIP CL52 20' NOM BCL/AC (D)		332,519	\$31.10	\$218,633.00
4	3106 FT 20" TYTON DIP CL52 20' NOM BCL/AC (D)		276,434	\$58.52	\$181,763.12
5	33 EA 06" FIELD LOK 350 GASKET (I)		20	\$51.68	\$1,705.44
6	12 EA 08" FIELD LOK 350 GASKET (I)		13	\$69.99	\$839.88
7	351 EA 12" FIELD LOK 350 GASKET (I)		737	\$101.65	\$35,679.15
8	155 EA 20" FIELD LOK 350 GASKET (I)		649	\$329.29	\$51,039.95
Quote Totals:			631,099		\$503,287.54

33 722 526,924
 ESCA



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 #: 162962

Revision #: 1

Bid Date: 9/30/2019

City, St: FL

Engineer:

Addendums:

Location:

Project: West Ave. North

RFQ ID:

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

	Qty	Description	Length	Weight	Price	Total Price
1	670 FT	06" TYTON DIP CL52 20' NOM BCL/AC (D)		13,635	\$19.28	\$12,917.60
2	248 FT	08" TYTON DIP CL52 20' NOM BCL/AC (D)		7,093	\$27.21	\$6,748.08
3	7030 FT	12" TYTON DIP CL52 20' NOM BCL/AC (D)		332,519	\$45.17	\$317,545.10
4	3106 FT	20" TYTON DIP CL52 20' NOM BCL/AC (D)		276,434	\$85.44	\$265,376.64
5	33 EA	06" FIELD LOK 350 GASKET (I)		20	\$59.06	\$1,948.98
6	12 EA	08" FIELD LOK 350 GASKET (I)		13	\$79.99	\$959.88
7	351 EA	12" FIELD LOK 350 GASKET (I)		737	\$116.18	\$40,779.18
8	155 EA	20" FIELD LOK 350 GASKET (I)		649	\$376.34	\$58,332.70
Quote Totals:				631,099		\$704,608.16



3200 W 84 Street, Hialeah, FL 33018
Office 305.364.8200 | Fax 305.882.1577
Toll Free 800.258.6873
www.usfab.com

March 15, 2021

Dear Valued customer

As you may already be aware, pricing for steel and stainless steel of all types has been rising steadily for the past year. We have been able to absorb much of these increased material costs through our purchasing of futures contracts on material used for the higher volume products we produce. Unfortunately, due to the unprecedented spike in steel material cost in the past 4 months, along with longer long lead times for these same materials, we have no other option but to increase pricing on Steel and Stainless Steel Products.

Effective immediately all quotes for steel and stainless steel products will be held for 30 days only. Any existing quotes will be honored through their expiration date or the end of April 2021 whichever is sooner.

We will continue to closely monitor the metals markets in the coming weeks and determine the best way forward with regard to price increases on steel and stainless steel products in order to minimize the impact of these increases. Prices for the aluminum hatches and other aluminum items will remain the same at this time.

As an important USF Fabrication partner we are committed to working with you to provide you with the best combination of service, quality products and competitive pricing in the industry, and insure the continued growth of both of our companies in these challenging times.

Sincerely,

USF Fabrication, Inc.

Jeff Allen

Jeff Allen – Operations and Sales Manager



Xylem Water Solutions USA Inc. / Flygt Products
 15132 Park of Commerce Blvd. Suite 102
 Jupiter, Florida 33478
 Phone: 561-848-1200 • Fax: 561-848-1299

April 16, 2021

RIC-MAN CONSTRUCTION FL INC
 3100 SW 15TH ST
 DEERFIELD BEACH FL 33442

Quote # 2019-WEP-0815
 Project Name: (1) Lincoln Road
 Xylem Water Solutions USA, Inc. is pleased to provide a quote for the following Flygt equipment.

West Ave PS		
Qty	Description	
6	PL7065, 63, 840, 523mm 22 deg, 43-30-8AA, 135HP, 715 drive unit, 460V, 60Hz, Mas 711, S3x70+3x35/3+2S92x.,5)175ft , S12, 1,5 175ft Shaft: AISI 431 Stainless Steel Zinc anodes attached on pump & drive unit	New quote 2709,550 P.O. 2,202,075 91-021 R 507,475
6	FW3S620G 20'X5/8" LIFT CHAIN+ 316SS	
1	Fully Integrated VFD Control Panel for 6 pumps. Includes NEMA 4X 316SS Modular enclosure. MultiSmart Pump Station Manager for control & future SCADA. Primary Level Pressure transducers with back up Float logic. Air Conditioned enclosure with separate Emergency Backup Generator Receptacle.	
6	BASE UNIT/PANEL ASSEMBLY MAS	
6	TRANSFORMER,CURRENT 300:1	
12	SENSOR,ENM-10 0.95-1.1 65'	
6	HOLDER,CABLE HEAVY DUTY 316SS	
10	60" X 60" Frame Opening Alum AHD Hatches	
6	48" X 60" Frame Opening Alum AHD Hatches	
2	78" X 78" Frame Opening Alum AHD Hatches	
6	USF 230-AA 41 1/2" Ring w/Cover	
7	48" X 84" Frame Opening Alum AHD Hatches	
1	56" X 88" Frame Opening Alum AHD Hatches	
1	50" X 51" Frame Opening Alum AHD Hatches	
3	USF 230-AA 49 1/2" Ring w/Cover	
4	START UP,FLYGT,NO TAX 1-TP MODELS: 3000,7000,8000	
6	SS316 Pump Tube 32" OD x 23' - 6" LG with Side Discharge 32" OD x 34" LG from Tube CL	
6	SS316 Formed Suction Intake for 32" Pump Tube	
6	Wall Brackets SS 316 Pump Tube Wall bracket	
6	CABLE ENTRY UNIT	
6	GRIP,CABLE SS 19-24MM	
6	GRIP,CABLE SS 25-36MM	
6	HOLDER,CABLE 304	
6	PIPE,SQUARE 304 L=860MM	
12	EYE,LIFTING UNIT	
6	EYE,LIFTING UNIT	
6	WIRE UNIT	
12	PIPE UNIT	



Xylem Water Solutions USA Inc. / Flygt Products
15132 Park of Commerce Blvd. Suite 102
Jupiter, Florida 33478
Phone: 561-848-1200 • Fax: 561-848-1299

Total Price \$ 2,709,550.05

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.

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

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

Terms of delivery: PP/Add Order Position

Delivery lead-times may be impacted by the current COVID-19 virus pandemic relative to transportation logistics.

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 the 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 45 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.aspx> 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.

Please feel free to call if you have any questions or if you require assistance.

Sincerely,





**Xylem Water Solutions USA Inc. /
Flygt Products**
15132 Park of Commerce Blvd. Suite 102
Jupiter, Florida 33478
Phone: 561-848-1200 • Fax: 561-848-1299

Deborah Scanlon
Inside Sales Engineer

Rick Reyes
Sales Representative

deborah.scanlon@xylem.com

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: _____

Address: _____

Accepted By: _____

Print Name: _____

Date: _____



GENERAL ASPHALT CO., INC.
4850 NORTHWEST 72ND AVENUE
MIAMI, FLORIDA 33166
TELEPHONE: (305) 592-3480
FAX: (305) 477-4675

To:	Ric Man Construction	Contact:	Dan
Address:	3100 SW 15th Street Deerfield Beach, FL 33442	Phone:	(954) 426-1221
Project Name:	West Ave Design Builds	Bid Number:	
Project Location:		Bid Date:	1/4/2017

Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
1	MOBILIZATION	4.00	EACH	\$3,500.00	\$14,000.00
2	1 Inch SP 9.5 Asphalt Roadway First Lift (NORTH)	39,388.00	SY	\$6.00	\$236,328.00
3	1 Inch SP 9.5 Asphalt Roadway Final Lift (NORTH)	39,388.00	SY	\$6.25	\$246,175.00
4	1 Inch SP 9.5 Asphalt Roadway First Lift (SOUTH)	19,945.00	SY	\$6.00	\$119,670.00
5	1 Inch SP 9.5 Asphalt Roadway Final Lift (SOUTH)	19,945.00	SY	\$6.25	\$124,656.25
Total Bid Price:					\$740,829.25

Notes:

- The above prices do not include Performance and Payment Bond. Add 2% if bond is required.
- The above price does not include MOT.
- The above price does not include any Layout.
- The above price does not include Sawcutting
- The above price does not include any Testing.
- The above price does not include As Builts.
- The above price does not include Striping
- The above prices do not include Permits.
- The above prices do not include Protection of Brick Pavers or Stamped Concrete
- The above prices do not include Quality Control (QC)
- The above prices are good until
- New asphalt pavement is subject to tire tracks and marking. GAC is not responsible for these issues.
- Unless indicated otherwise, this proposal is based on average thickness of asphalt, not minimum thickness.
- This proposal is may be withdrawn by GAC if not accepted within (30) days.
- Final payment will be based upon actual quantities installed as determined by field measurement after completion.
- GAC shall not be responsible for reflective cracking, birdbaths, drainage problems, or settlement of new asphalt overlay due to the existing asphalt.
- Any Punch List items must be submitted in writing. No repairs will be made until 90% of the invoice amount has been paid.
- GAC shall not be responsible for birdbaths or water flow when projects are designed with less than 1% fall.
- Customer agrees to pay asphalt over-runs at a price of \$ 100.00 per ton
- Customer agrees to pay for asphalt leveling at a price of \$ 125.00 per ton
- This quote is based on the bituminous and materials index from the Florida Department of Transportation for liquid asphalt. GAC shall be compensated for any increase in excess of the current month's index at the time of the asphalt placement.
- No Under Roof paving is included unless specifically stated in the proposal!
- No behind the curb paving is included unless specifically stated in the proposal!

C035

(Escal (49,86) South
Escal (56,297) North

Value → 781,479
Orig A 740,829

→ 40,650
Escal

MP
4/19/21

Prop Calc 266/740

367 TO 090
647 TO 091

MP



GENERAL ASPHALT CO., INC.
4850 NORTHWEST 72ND AVENUE
MIAMI, FLORIDA 33166
TELEPHONE: (305) 592-3480
FAX: (305) 477-4675

To:	Ric Man Construction	Contact:	Tyson
Address:	3100 SW 15th Street Deerfield Beach, FL 33442	Phone:	(954) 426-1221
Project Name:	West Ave Design Builds	Bid Number:	
Project Location:		Bid Date:	4/19/2021

Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
1	MOBILIZATION	6.00	EACH	\$3,500.00	\$21,000.00
1.1	Prime And Sand	59,333.00	SY	\$0.55	\$32,633.15
2	1 Inch SP 9.5 Asphalt Roadway First Lift (NORTH)	39,388.00	SY	\$6.50	\$256,022.00
3	1 Inch SP 9.5 Asphalt Roadway Final Lift (NORTH)	39,388.00	SY	\$6.80	\$267,838.40
4	1 Inch SP 9.5 Asphalt Roadway First Lift (SOUTH)	19,945.00	SY	\$6.50	\$129,642.50
5	1 Inch SP 9.5 Asphalt Roadway Final Lift (SOUTH)	19,945.00	SY	\$6.80	\$135,626.00

Total Bid Price: \$842,762.05

Notes:

- The above prices do not include Performance and Payment Bond. Add 2% if bond is required.
- The above price does not include MOT.
- The above price does not include any Layout.
- The above price does not include Sawcutting
- The above price does not include any Testing.
- The above price does not include As Builts.
- The above price does not include Striping
- The above prices do not include Permits.
- The above prices do not include Protection of Brick Pavers or Stamped Concrete
- The above prices do not include Quality Control (QC)
- The above prices are good until
- New asphalt pavement is subject to tire tracks and marking. GAC is not responsible for these issues.
- Unless indicated otherwise, this proposal is based on average thickness of asphalt, not minimum thickness.
- This proposal is may be withdrawn by GAC if not accepted within (30) days.
- Final payment will be based upon actual quantities installed as determined by field measurement after completion.
- GAC shall not be responsible for reflective cracking, birdbaths, drainage problems, or settlement of new asphalt overlay due to the existing asphalt.
- Any Punch List items must be submitted in writing. No repairs will be made until 90% of the invoice amount has been paid.
- GAC shall not be responsible for birdbaths or water flow when projects are designed with less than 1% fall.
- Customer agrees to pay asphalt over-runs at a price of \$ 100.00 per ton
- Customer agrees to pay for asphalt leveling at a price of \$ 125.00 per ton
- This quote is based on the bituminous and materials index from the Florida Department of Transportation for liquid asphalt. GAC shall be compensated for any increase in excess of the current month's index at the time of the asphalt placement.
- No Under Roof paving is included unless specifically stated in the proposal!
- No behind the curb paving is included unless specifically stated in the proposal!

Change Order #1

Exhibit A

Benson Electric, Inc.

10475 SW 186th Street

Miami, Florida 33157

(305) 235-06741 Fax (305) 235-4690

**RicMan
Construction**

Project: West Avenue Pump Station
West Avenue & 17St
Miami Beach, Fla

April 19, 2021

Original Lincoln Road Pump Station \$ 297,673.00

Updated West Avenue Pump Station \$ 190,651.00

Update total \$ 488,324.00

Base Bid	160,000
3 B #17	60,000
#26	140,000
#14	87,500
	<hr/>
	447,500

$\Delta = + 40,824$

~~AK~~ 4/19/21

We propose to furnish materials and labor in accordance with the specification above for the sum of \$ 488,324.00

Payment same as existing proposal, due as per billing.

All materials are guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from the above specification involving extra costs will be executed only upon the issuance of written change orders, and will become an extra charge over and above the estimate. All agreements are contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workman's Compensation Insurance

Authorized Signature

Acceptance Signature

James H. Clark, Jr.
Benson Electric, Inc.

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are hereby authorized to proceed with the work as described. Payment shall be as specified.

City of Miami Beach
West Avenue Pump Station
Electrical Scope

Ric-Man Construction,

April 19, 2021

We are pleased to provide your firm with a proposal to perform electrical work for the project referenced above. Our proposal is based on the 60% project plans and specification package, Division 160000, and any addendum prior to bid date with the following conditions applicable:

- 1) Bond premium is not included.
- 2) Site, surface, pavement, concrete, landscaping, sodding, seeding, finish restoration and/or patching and painting shall be by others.
- 3) Equipment housekeeping pads removal, install and conduit protection curbs shall be by others.
- 4) Any Utility fees and consumption for this project are excluded.
- 5) Does not include temporary power
- 6) All trenching and backfilling to be by others.
- 7) Includes removal of 4 street lights.
- 8) Does not include removal of Comcast Utility Box.
- 9) Includes removal of existing meter & concrete pole, does not include reinstallation.
- 10) Pump Station Control Panels, MCC, VFD's, pump motor term boxes, control term boxes to be furnished by others installed by B.E.I.
- 11) All Instrumentation, PLC, FIT's, PIT's, FSL's, Floats, special mounting hardware, sun shade or any other related items to be furnished and installed by others.
- 12) Generator, ATS, E-stop to be furnished by others, B.E.I. to install ATS & E-stop, generator to be installed by others.
- 13) B.E.I. to furnish and install Main Disconnect Switch, Meter Can, and transformer T-1.
- 14) Does not include furnishing or installing any street light(s), signalization or FPL duct bank relocations.
- 15) Site cleanup for our operations is included to an on site dumpster provided by others.
- 16) Does not include wind load calcs.
- 17) Does not include permit fees / costs
- 18) Does not include prevailing wages.
- 19) All work to be done during normal working hours.

We appreciate the opportunity of providing you with this proposal. Please do not hesitate to call if you have any questions regarding our proposed scope.



James H. Clark Jr.

President

Benson Electric, Inc.

Updated Bid Total.....\$ 488,324.00

Ric-Man Construction Florida, Inc.
 3100 SW 15th Street
 Deerfield Beach, FL 33442
 (954) 426-1221
 (954) 426-1226

West Ave 090/091		Escalation RMCF Direct labor		4/13/2021		91		Comments	
Item	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Comments
Base Contract	23,762	\$ 1,019,810.00			50,573	\$ 2,157,261.00			
C03B									
#11/23- labor escalation		\$ 66,028.00				\$ 114,825.00			
#5/17- 10 year Storm water	7,361	\$ 372,194.00			12,150	\$ 610,694.00			
#16- Alton Ct	1028	\$ 16,865.00							
#15- Rear to Front					939	\$ 45,862.00			
#6/18	0	\$ -			2453	\$ 141,781.00			
# 1/14- Gen sets	3433	\$ 199,037.00			3433	\$ 200,101.00			
#14- Lincoln Rd PS					323	\$ 16,865.00			
#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			June 2022- January 2025
30 Months at 3% per year (0.25% per month)= 7.5%) -091						\$ 246,554.00			March 9,2021 - July 4,2023
27 Months at 3% per year (0.25% per Month=6.75%- 090									
New CO Escalation									
24 Months at 3% per year= 6%- 091	14,347	\$ 747,978.00			42,242	\$ 2,152,147.00			Jan 2023- Jan 2025
6 months at 3% per year (0.25% per month = 1.5%) - 090		\$ 11,370.00				\$ 129,128.00			Jan 2023- July 2023
Total Escalation		\$ 127,531.00				\$ 375,682.00			
3% Bond & Ins		\$ 3,826.00				\$ 11,270.00			
Grand Total		\$ 131,357.00				\$ 386,952.00			

Employment, Hours, and Earnings from the Current Employment Original Data Value

Series Id: CES2000000003
 Seasonally Adjusted
 Series Title: Average hourly earnings of all employees, construction,
 Super Sector: Construction
 Industry: Construction
 NAICS Code: 23
 Data Type: AVERAGE HOURLY EARNINGS OF ALL
 Years: 2011 to 2021

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2011	25.46	25.44	25.34	25.38	25.35	25.35	25.36	25.46	25.49	25.49	25.44	25.49
2012	25.50	25.55	25.66	25.65	25.69	25.71	25.75	25.77	25.86	25.84	25.95	25.95
2013	25.96	26.03	25.98	26.03	26.04	26.09	26.17	26.19	26.17	26.18	26.25	26.38
2014	26.41	26.76	26.48	26.56	26.61	26.67	26.66	26.73	26.81	26.86	26.92	26.87
2015	27.07	27.12	27.24	27.28	27.32	27.34	27.36	27.44	27.35	27.52	27.67	27.62
2016	27.66	27.75	27.87	27.97	28.08	28.12	28.20	28.20	28.21	28.42	28.35	28.43
2017	28.53	28.52	28.61	28.61	28.73	28.89	28.95	29.00	29.16	29.12	29.22	29.30
2018	29.39	29.54	29.49	29.66	29.71	29.78	29.95	30.02	30.19	30.25	30.28	30.46
2019	30.33	30.43	30.50	30.63	30.70	30.74	30.76	30.88	30.89	31.00	31.12	31.16
2020	31.23	31.36	31.37	31.38	31.50	31.63	31.74	31.82	31.82	31.87	31.97	32.09
2021	32.22	32.33										

$\frac{32.33}{30.33} = 6\% \text{ Inc in } 3\% \text{ YEAR}$
 A