

PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS

AGENDA ITEM SUMMARY

Meeting Date: November 16, 2021

Consent [X]  
Public Hearing [ ]

Regular [ ]

Department: Water Utilities Department

I. EXECUTIVE BRIEF

**Motion and Title:** Staff recommends motion to approve: Consultant Services Authorization (CSA) No. 4 to the Contract for Consulting/Professional Services Water Treatment and Water Resources Engineering Services (Contract) with CDM Smith Inc., (Consultant) for the Belle Glade Water Treatment Plant (BGWTP) Demolition (Project) for a not to exceed amount of \$286,495.20.

**Summary:** On November 17, 2020, the Board of County Commissioners approved the Palm Beach County Water Utilities Department (PBCWUD) Contract (R2020-1719) with Consultant. CSA No. 4 provides for professional consulting services relating to survey, design, permitting and bidding of improvements at the former BGWTP site, namely the demolition and restoration of the site and upgrades to water distribution piping including the South Bay master meter.

This Contract was procured under the requirements of the Equal Business Opportunity Ordinance. On September 18, 2019, the Goal Setting Committee applied an Affirmative Procurement Initiative (API) of a minimum mandatory 20% Small Business Enterprise (SBE) subcontracting goal and an evaluation preference for up to 15 points based upon the relative level of dollar participation by certified African American owned firms were the API applied to the Contract. The Contract provides for 21.00% SBE participation which includes 19.00% MBE participation, 19.00% MBE (B). CSA No. 4 includes 68.68% SBE participation, which includes 68.68% MBE participation, 68.68% MBE (B). The cumulative SBE participation including CSA No. 4 is 43.65% SBE participation, which includes 19.07% MBE participation, 19.07% MBE (B). Consultant is headquartered in Boston, Massachusetts, but maintains an office in Palm Beach County from which the majority of the work will be performed. The Project is included in the PBCWUD FY22 budget. (PBCWUD Project No. 21-051) District 6 (MJ)

**Background and Justification:** After construction of Water Treatment Plant No. 11 the BGWTP was decommissioned and partially demolished with two (2) of the ground storage tanks and pump station being converted into a remote storage and pump station. Shortly after the conversion to a remote storage and pump station the remaining facilities were not needed and the entire site was decommissioned. Since this time, the site has remained relatively unchanged with structures, piping, and equipment related to the remote storage and pump station remaining in place. PBCWUD has elected to complete the demolition of the site to address safety concerns related to the existing facilities and reconfigure water distribution piping within the site. The project will also make improvements to the South Bay master water meter to address existing deficiencies and plug, abandon, and demolish an existing 16-inch water main and aerial crossing over the L-14 (Hillsborough) Canal. CSA No. 4 provides for the consulting/professional services to perform surveying, subsurface utility exploration, design, permitting, and bid support services for the Project.

**Attachments:**

1. Two (2) Originals of Consultant Services Authorization No. 4
2. Location Map
3. Certificate of Liability Insurance

Recommended By:

Ali Bryant  
Department Director

10/19/21  
Date

Approved By:

Wesley Balen  
Assistant County Administrator

10/27/2021  
Date

## II. FISCAL IMPACT ANALYSIS

### A. Five Year Summary of Fiscal Impact:

Fiscal Years	2022	2023	2024	2025	2026
Capital Expenditures	\$286,496	0	0	0	0
Operating Costs	0	0	0	0	0
External Revenues	0	0	0	0	0
Program Income (County)	0	0	0	0	0
In-Kind Match County	0	0	0	0	0
NET FISCAL IMPACT	\$286,496	0	0	0	0
# ADDITIONAL FTE POSITIONS (Cumulative)	0	0	0	0	0

Budget Account No.: Fund 4001 Dept 720 Unit 1GUA Object 4615

Is Item Included in Current Budget? Yes X No     

Does this item include the use of federal funds? Yes      No X

Reporting Category N/A

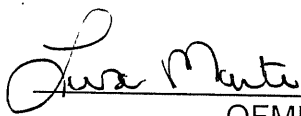
### B. Recommended Sources of Funds/Summary of Fiscal Impact:

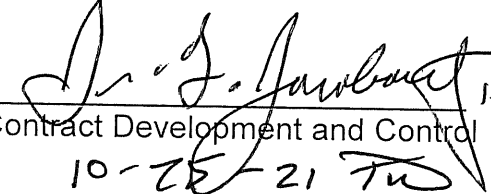
One (1) time expenditure from user fees, connection fees and balance brought forward.

C. Department Fiscal Review:  GE

## III. REVIEW COMMENTS

### A. OFMB Fiscal and/or Contract Development and Control Comments:

 10/21/21  
OFMB 10-21-21 BE 10/21

 10/25/21  
Contract Development and Control 10-25-21 TW

### B. Legal Sufficiency:

 10/26/21  
Assistant County Attorney

### C. Other Department Review:

\_\_\_\_\_  
Department Director

This summary is not to be used as a basis for payment.

Palm Beach County Water Utilities Department  
Contract for Consulting/Professional Services  
Water Treatment and Water Resources Engineering Services  
Resolution No. R2020-1719 Contract Dated November 17, 2020

**Project Title:** Belle Glade Water Treatment Plant Demolition

**PBCWUD Project No.:** 21-051

**Consultant:** CDM Smith Inc.

**Address:** 621 NW 53<sup>rd</sup> Street, Suite 265, Boca Raton, Florida 33487

**Budget Line Item No.:** 4001-720-1GUA-4615

**District No.:** 6

This Consultant Services Authorization provides for: Palm Beach County Water Utilities Department (PBCWUD) to restore the former Belle Glade Water Treatment Plant (BGWTP) site and make improvements to the master flow meter. To this end, the CONSULTANT will provide consultant/professional services related to permitting, design, and bidding services for the demolition and disposal of existing infrastructure, and improvements to water distribution piping and master flow meter located at the former BGWTP site (Project).

(See **ATTACHMENT A** for detailed scope of services)

The Contract provides for 21.0% SBE participation which includes 19.0% M/WBE participation, 19.0% MBE(B). This Consultant Services Authorization includes 68.68% overall participation which includes 68.68% M/WBE participation, 68.68% MBE(B). The cumulative SBE participation, including this authorization is 43.65% which includes 19.07% M/WBE participation, 19.07% MBE(B).

1. Services completed by the Consultant to date :

**See ATTACHMENT B.**

2. Consultant shall begin work upon receipt of Notice to Proceed correspondence.
3. The compensation to be paid to the Consultant for providing the requested services shall be:
  - A. Computation of time charges plus expenses, not to exceed \$286,495.20
  - B. Fixed price of \$0
  - C. Total \$286,495.20
4. This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed through the date of termination, together with reimbursable expenses (if applicable) then due.

CONSULTANT SERVICES AUTHORIZATION NO. 04

Palm Beach County Water Utilities Department  
Contract for Consulting/Professional Services  
Water Treatment and Water Resources Engineering Services  
Resolution No. R2020-1719 Contract Dated November 17, 2020

**Project Title:** Belle Glade Water Treatment Plant Demolition

**PBCWUD Project No.:** 21-051

5. SBE participation is included in **ATTACHMENT C** under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each Sub-Consultant (Letter of Intent).
6. This Authorization does not amend, change, or modify the Contract dated November 17, 2020, which remains in full force and effect.
7. All Attachments to this Authorization are incorporated herein and made a part of this Consultant Services Authorization.



CONSULTANT SERVICES AUTHORIZATION NO. 04

Palm Beach County Water Utilities Department  
Contract for Consulting/Professional Services  
Water Treatment and Water Resources Engineering Services  
Resolution No. R2020-1719 Contract Dated November 17, 2020

**Project Title:** Belle Glade Water Treatment Plant Demolition

**PBCWUD Project No.:** 21-051

IN WITNESS WHEREOF, this Authorization is accepted, subject to the terms, conditions and obligations of the aforementioned Contract.

PALM BEACH COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF FLORIDA

Joseph Abruzzo, Clerk of the Circuit Court  
& Comptroller, Palm Beach County

Palm Beach County, Board  
of County Commissioners

ATTEST:

Signed: \_\_\_\_\_

Signed: \_\_\_\_\_  
CI. Mayor  
A13

Typed Name: \_\_\_\_\_  
Deputy Clerk

\_\_\_\_\_  
(Date)

Approved as to Form and Legal  
Sufficiency

CONSULTANT: CDM Smith Inc.

Signed: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

Typed Name: Michael W. Jones  
County Attorney

Suzanne E. Mechler, PE, BCEE, Associate  
(Name and Title)

10/05/2021  
(Date)

STATE OF FLORIDA

COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me by means of ☒ physical presence or ☐ online notarization,  
this 5 day of Oct, 21, by Suzanne Mechler who is ☐ personally  
known to me or ☒ has produced FL - DL as identification.

\_\_\_\_\_  
(Signature of Notary Public - State of Florida)

\_\_\_\_\_  
(Print, Type, or Stamp Commissioned Name of Notary Public)





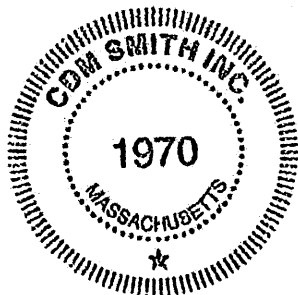
75 State Street, Suite 701  
Boston, Massachusetts 02109  
tel: 617 452-6000

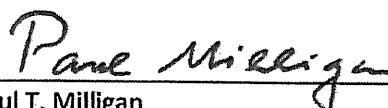
## CERTIFICATE

I, Paul T. Milligan, Secretary/Clerk of CDM Smith Inc., a Massachusetts corporation, do hereby certify that Suzanne E. Mechler, PE, BCEE and Associate holds the position of Client Service Leader, which entitles Ms. Mechler to execute and deliver proposals, contracts and agreements for the performance of professional services in the name and on behalf of CDM Smith Inc. with a value of up to \$1 million. Further, Ms. Mechler has authority to execute and deliver proposals, contracts, agreements and amendments and has been delegated authority up to \$3 million specifically for the performance of professional services for Palm Beach County Water Utilities Department (PBCWUD) Water Treatment and Water Resources Engineering Services.

I further certify that the foregoing is consistent with the Contract Signing Authority Policy and with the By-laws of the said corporation.

IN WITNESS WHEREOF, I have executed this certificate and have caused the corporate seal of CDM Smith Inc. to be hereunder affixed on this 5<sup>th</sup> day of February 2020.



  
Paul T. Milligan  
Secretary/Clerk of the Corporation



Palm Beach County Water Utilities Department  
Contract for Consulting/Professional Services  
Water Treatment and Water Resources Engineering Services  
Resolution No. R2020-1719 Contract Dated November 17, 2020

## LIST OF ATTACHMENTS

<b>ATTACHMENT A</b>	Scope of Services
<b>ATTACHMENT B</b>	Summary and Status of Consultant Services Authorizations
<b>ATTACHMENT C</b>	OEBO Schedules 1 and 2
<b>ATTACHMENT D</b>	Project Schedule
<b>ATTACHMENT E</b>	Budget Summary
<b>ATTACHMENT F</b>	Summary of SBE-M/WBE Business Tracking
<b>ATTACHMENT G</b>	Location Map

Revised 04/26/2021

**ATTACHMENT A**  
**SCOPE OF SERVICES**

**PBCWUD Project No: 21-051**

**Project Title: Belle Glade Water Treatment Plant Demolition**

CONSULTANT shall perform:

**PROJECT BACKGROUND**

Palm Beach County (COUNTY) entered into an agreement entitled Consulting/Professional Services Water Treatment and Water Resources Engineering Services (R2020-1719) (CONTRACT), with CDM Smith Inc., (CONSULTANT) to provide engineering services in support of its water treatment plants and water resources. This Consultant Service Authorization (CSA) No. 04 will be performed under that CONTRACT.

Palm Beach County Water Utilities Department (PBCWUD) has retained CONSULTANT to provide consultant/professional services related to permitting, design and bidding services for the:

- (i) demolition and disposal of existing infrastructure on the former Belle Glade Water Treatment Plant (BGWTP) site
- (ii) restoration of the former BGWTP site
- (iii) improvements to water distribution piping on and around the former BGWTP site
- (iv) improvements to the South Bay master flow meter

The former BGWTP consists of the following structures, facilities, conduit, and piping to be demolished and disposed of as part of the Project:

- Rectangular ground storage water tanks No. 1 and No. 2
- Booster pump station No. 1: An electrical/pump building containing the following items:
  - Electrical panels (interior and exterior)
  - Four (4) pumps and motors
  - Piping and valving installed with each pump
  - Various chemical containers (such as Kochkleen P-02)
  - Piping and Bermad pressure sustaining valves
  - One (1) manual crane system
  - One (1) diesel generator, insulated muffler and monitoring system
  - Jaegar plastic packing
- One (1) Florida Power & Light Company (FPL) transformer on a concrete pad
- One (1) aboveground diesel storage tank on a concrete pad
- One (1) concrete antenna pole
- Remnants of paved access roads
- Aboveground piping and valves
- Below ground piping and valves
- Below ground conduits

- Miscellaneous debris (for example, concrete vaults, stormwater catch basins, metals, and vegetative soil mounds)

The water distribution master flow meter and piping improvements are as follows:

- Replacement of the existing inline Sensus flowmeter with a new flow meter
- Replacement of limit switch, solenoid switch, and instrumentation tubing on the existing pressure sustaining valve to automate the remote control of the pressure sustaining valve
- Addition of two (2) pressure transmitters upstream and downstream of the pressure sustaining valve
- Addition of concrete pad and fencing for the master flow meter and remote telemetry unit (RTU)
- Addition of a new radio antenna pole, new radio antenna and concrete pad for radio panel supports (CONSULTANT to coordinate with COUNTY's radio customer service center) The height of the antenna will be determined via a radio path survey
- Addition of PBCWUD standard RTU system that communicates with PBCWUD's Water Treatment Plant No. 11 (WTP11)
- Provide a permanent power connection for the RTU and flow meter installation. The CONSULTANT will be responsible for coordination with FPL
- Simplify/consolidate interconnecting the 20-inch and 14-inch diameter water mains north to south within the property, and 12-inch and 8-inch diameter water mains along the north side of the property adjacent to West Canal Street South such that each pipe flow is metered at one location
- Modify the Northwest Avenue D right-of-way water distribution piping with a 6-inch to 16-inch and 16-inch to 24-inch diameter pipe connections west of the flow meter
- The existing 16-inch diameter airport/mill water main along West Canal Street South and West Canal Street North will be grout filled and abandoned in place. The existing 16-inch diameter airport/mill water main aerial crossing over the L-14 Canal will be removed. The existing 16-inch diameter airport/mill water main along Northwest Avenue D will be removed
- Provide a legal sketch and description for a new easement

**TASK 1 – PROJECT AND SUBCONSULTANT MANAGEMENT**

**Subtask 1.1 Project Management**

Project management includes activities related to initiating, planning, executing, controlling, and closing the Project. Quality Management includes maintaining a Quality Management System (QMS) on each project. The CONSULTANT will perform a technical review of deliverables, in accordance with QMS, prior to transmitting them to the PBCWUD. Under this Task, the CONSULTANT will be responsible for overall coordination and oversight of the project execution. The CONSULTANT will enroll project financials upon receiving the Notice to Proceed. The CONSULTANT will invoice monthly.

Deliverable:

- a) Monthly invoice (application for payment) with project status report

**Subtask 1.2 Subconsultant Management**

The CONSULTANT will administer and manage each of the subconsultants and coordinate the actions required to implement the Project’s activities and tasks. The CONSULTANT will execute agreements with each of the three (3) subconsultants that will include similar flow down terms and conditions as in the CONTRACT including compliance with insurance requirements set by the PBCWUD. CONSULTANT will review and process payment to the subconsultants in a timely fashion. The CONSULTANT will coordinate the work of the various subconsultants in the field to minimize delays and interruptions in the work area. The CONSULTANT will coordinate the work of the various technical professional subconsultants and review the work products to meet the requirements of the PBCWUD. The CONSULTANT will confirm that the various subconsultants have a quality management system for their deliverables and will expect each subconsultant to abide by their corresponding internal quality management system requirements. The CONSULTANT will hold periodic, progress status coordination calls with subconsultants to assist in maintaining project schedules. If appropriate, the CONSULTANT will maintain an internal action items list for following up with the various subconsultants and team members.

Deliverable:

- a) COUNTY Schedule 4 form with each monthly invoice for each subconsultant

**TASK 2 – PREPARARTION OF DEMOLITION AND DESIGN DRAWINGS AND SPECIFICATIONS**

**Subtask 2.1 Data Collection**

Review record drawings for the structures, facilities, conduit and piping, and water distribution flow meter and piping at the former BGWTP.

Deliverable:

- a) List of the record drawings the CONSULTANT references to advance the design

**Subtask 2.2 Preparation of Drawings and Specifications**

**Subtask 2.2.1 Site Survey**

The CONSULTANT will prepare a site survey to establish horizontal and vertical controls, existing boundary corners ties and monuments. The CONSULTANT will prepare topographic and tree survey within the confined area between the three (3) structures to be demolished. The CONSULTANT will survey accessible pipe inverts elevations leading out of sanitary and storm structures. The CONSULTANT

will survey underground utilities around the existing flow meter. The CONSULTANT will provide soft digs and survey of fittings along the 20-inch diameter water main and the 14-inch diameter water main within the property and along the north side of the property adjacent to West Canal Street South. If necessary, the CONSULTANT will prepare a parcel sketch and legal description; therefore, for the PBCWUD can use them in obtaining utility easements for the proposed flow meter and distribution piping improvements. The survey will be used as the base drawing for removal and disposal design, and water distribution improvements design.

The CONSULTANT will prepare a topographic survey of the right-of-way along the path of the existing 16-inch diameter airport/mill water main with aerial crossing over the L-14 Canal. The CONSULTANT will prepare a topographic survey of the Northwest Avenue D right-of-way along the path of the existing 16-inch diameter airport/mill water main. The existing 16-inch diameter airport/mill water main along West Canal Street South and West Canal Street North will be grout filled and abandoned in place. The existing 16-inch diameter airport/mill water main aerial crossing over the L-14 Canal will be removed. The existing 16-inch diameter airport/mill water main along Northwest Avenue D will be removed.

Deliverables:

- a) Survey drawing(s)
- b) Legal sketch and description for PBCWUD to obtain easements

**Subtask 2.2.2 Site Civil**

The CONSULTANT will prepare demolition drawings and descriptive specifications for the removal and disposal of below and aboveground structures and foundations, removal and disposal of below and aboveground conduit and piping, and removal and disposal of miscellaneous site debris. The specification will include requirements for the Contractor to re-register the aboveground diesel storage tank and then complete the Closure Integrity Evaluation Report Form for ASTs 62-762.901(7) (Closure Integrity Report) via specifications. The specifications will also include requirements for the Contractor to render the aboveground diesel storage tank free of regulated substances. CONSULTANT will provide structural design for fencing around the new flow meter area and the concrete equipment pad within the new fencing area. The CONSULTANT will provide civil design for the flow meter and interconnecting the 24-inch, 16-inch, 12-inch, and 6-inch diameter water mains along the south side of the property adjacent to Northwest Avenue D. CONSULTANT will provide civil design to simplify/consolidate interconnecting the 20-inch and 14-inch diameter water mains north to south within the property, and 12-inch and 8-inch diameter water mains along the north side of the property adjacent to West Canal Street South such that each pipe flow is metered at one (1) location. An asphalt driveway will connect the flow meter's fenced area to the existing site access apron.

The CONSULTANT will prepare demolition drawings and descriptive specifications for the removal of the existing 16-inch diameter water main aerial crossing over the L-14 Canal. The CONSULTANT will prepare demolition drawings and descriptive specifications for the existing 16-inch diameter airport/mill water main along West Canal Street South and West Canal Street North to be grout filled and abandoned in place. CONSULTANT will prepare demolition drawings and descriptive specifications for the existing 16-inch diameter airport/mill water main along Northwest Avenue D to be removed.

Deliverables:

- a) Preliminary water main routing drawings for civil scope

- b) Design development demolition drawings and specifications for civil scope
- c) Design development design review minutes for civil scope
- d) Ninety (90) percent design drawings and specifications for civil scope
- e) Ninety (90) percent design review minutes for civil scope
- f) One hundred (100) percent design drawings and specifications for civil scope

#### **Subtask 2.2.3 Site Electrical**

The CONSULTANT will provide structural design for a new radio antenna pole and RTU mounting supports. The CONSULTANT will provide the electrical and instrumentation design for a new RTU system, new flowmeter with grounding rings, new field instrumentation, and new FPL direct power connected to the flowmeter/RTU installation. The CONSULTANT will provide demolition plans and descriptive specifications for the removal and disposal of electrical conduit, wire, panels, lighting, antenna, FPL transformer, pad, motor, and backup power generator system.

The CONSULTANT will prepare ninety (90) percent design drawings and technical specifications for the removal and disposal design, and water distribution improvements design package. The CONSULTANT will incorporate agreed upon review comments into the one hundred (100) percent drawings and specifications documents.

The CONSULTANT will provide electronic copies of deliverables in portable document format (PDF).

#### Deliverables:

- a) Design development demolition drawings and specifications for electrical scope
- b) Design development design review minutes for electrical scope
- c) Ninety (90) percent design drawings and specifications for electrical scope
- d) Ninety (90) percent design review minutes for electrical scope
- e) One hundred (100) percent design drawings and specifications for electrical scope

#### **Subtask 2.3 Quality Review**

The CONSULTANT's Project Manager will be the primary point of contact and will lead the project execution during the project execution, focusing on quality completion of the project tasks on schedule and budget. The CONSULTANT will technically review the conceptual survey drawing (the ten (10) percent phase). The CONSULTANT will technically review the preliminary water main routing drawing (the thirty (30) percent phase). The CONSULTANT will technically review the design development demolition drawings (the sixty (60) percent phase). The CONSULTANT will inter-discipline review the ninety (90) percent drawings and specification. The CONSULTANT will intra-discipline review the one hundred (100) percent drawings and specifications.

The CONSULTANT will provide electronic copies of deliverables in PDF.

#### Deliverables:

- a) Quality reviewed Conceptual survey drawings
- b) Quality reviewed Preliminary water main routing drawings with Class 5 Opinion of Probable Construction Costs (OPCC) from subtask 2.3
- c) Quality reviewed Design Development demolition drawings and specifications with Class 5 OPCC from subtask 2.3



- d) Quality reviewed ninety (90) percent design drawings and specifications with Class 4 OPCC from subtask 2.3
- e) Ninety (90) percent design review minutes
- f) Quality reviewed one hundred (100) percent design drawings and specifications with Class 3 OPCC from subtask 2.3

#### **Subtask 2.4 Opinion of Probable Construction Costs**

The CONSULTANT will prepare and provide an OPCC based on the preliminary, design development, and ninety (90) percent design documents. OPCCs shall be developed in accordance with the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97.

The CONSULTANT will provide electronic copies of deliverables in PDF.

#### **Deliverables:**

- a) Class 5 Opinion of OPCC for the Preliminary water main routing drawings
- b) Class 5 OPCC based on the Design Development demolition drawings
- c) Class 4 OPCC based on the ninety (90) percent design drawings
- d) Class 3 OPCC based on the one hundred (100) percent design drawings

### **TASK 3 – PERMITTING ASSISTANCE**

The CONSULTANT will prepare the Application for Notification for Use of General Permit for Constructions of an Extension to a Public Drinking Water Distribution System (Florida Department of Environmental Protection (FDEP) form 62.555.900(7)) for new or altered water mains. A draft application package will be submitted to PBCWUD with the ninety (90) percent deliverable set for review and comments. A formal application package will be submitted to FDEP after the one hundred (100) percent deliverable review comments are incorporated into the design drawings.

The CONSULTANT will prepare the Utility Application with Florida Department of Transportation (FDOT) to grout the existing 16-inch diameter airport/mill water main along West Canal Street South and West Canal Street North (State Road 880).

The CONSULTANT will prepare a right-of-way Permit Application with South Florida Water Management District (SFWMD) for the removal of the existing 16-inch diameter water main aerial canal crossing over the L-14 Canal.

The CONSULTANT will prepare a permit with the City of Belle Glade to remove the existing 16-inch diameter airport/mill water main along the Northwest Avenue D right-of-way and the flow meter installation.

The CONSULTANT will provide electronic copies of deliverables in PDF.

#### **Deliverables:**

- a) Draft Permit Applications with ninety (90) percent design deliverable
- b) Permit Applications with one hundred (100) percent design drawings

#### **TASK 4 – BIDDING ASSISTANCE**

The CONSULTANT will revise the one hundred (100) percent design documents with permitting comments and prepare the Bid Set bidding documents (drawings and technical specifications). The CONSULTANT will deliver electronic copies of the Bid Set bidding documents to post on the COUNTY's web site. The CONSULTANT will attend the pre-bid meeting and attend a pre-bid site visit. The CONSULTANT will prepare responses to written technical questions from bidders and issue revisions to drawings and technical specifications for addenda. The CONSULTANT will assist in determining the lowest, responsive bidder and make a recommendation to the PBCWUD on award of the contract. The CONSULTANT will conform the drawings and technical specifications after award to a bidder.

The CONSULTANT will provide electronic copies of deliverables in PDF.

#### **Deliverables:**

- a) Bid set of completed construction documents (one hundred (100) percent documents with permit comments and purchasing comments, drawing and technical specifications)
- b) Pre-Bid meeting notes
- c) Recommendation of Award Letter
- d) Responses to bidder questions
- e) Revised drawings and technical specifications for addenda

#### **DATA OR ASSISTANCE TO BE PROVIDED BY THE COUNTY**

- Provide a copy of facilities and underground utilities record drawings
- Provide a copy of the three-structures lead-based paint, asbestos, and polychlorinated Biphenyls (PBC) survey report prior to the ninety (90) percent design submittal
- Provide a draft copy of front-end documents
- Obtain utility easement using the CONSULTANT provided legal sketch and description
- Pay permitting application fees

#### **ASSUMPTIONS**

- At the time of developing the proposal for this Project, meetings are anticipated to be held face to face under social distancing guidelines and other COUNTY, or CONSULTANT, mandated precautions, as allowable under COUNTY rules and CONSULTANT's Health and Safety policy in effect at the time of the actual meetings. Virtual options for the meetings and attendees will be made available
- A separate Consultant Services Authorization will be issued to support with the continuing effort to support the construction phase services
- A separate Consultant Services Authorization will be issued to support with environmental site assessment, or monitoring well closure, or site development review and building department permitting, or Landscape Architect
- Building permit documentation beyond that utilized to develop these drawings and specifications is not included in this scope of work

**PRELIMINARY**  
**LIST OF DRAWINGS**

**WUD Project No:** 21-051

**Project Title:** Belle Glade Water Treatment Plant Demolition

Sheet No.	Count	Description
G-0, 1, 2	3	Title Sheet, Drawing List, General Notes
V-1, 2, 3	6	Topographic Survey
C-1, 2, 3, 4	10	Proposed Site Plan – Key Plan, Sheet 1, Sheet 2, Staging Area
C-5, 6, 7	13	Proposed Paving and Grading and Drainage – Key Plan, Sheet 1, Sheet 2
C-8, 9, 10	16	Demolition Site Plan – Key Plan, Sheet 1, Sheet2
C-11, 12, 13, 14, 15, 16, 17	23	Demolition of Existing 16" Water Main to Canal Crossing Plan & Profile – Sheet 1 to 7
C-18, 19	25	Demolition Details and Sections – Sheet 1, Sheet 2
C-20, 21, 22, 23	29	Civil Standard Details – Sheet 1, Sheet 2, Sheet 3, Sheet 4
M-1, 2	31	Distribution Piping – Existing Plan, Existing Section
M-3, 4	33	Distribution Piping – Demolition Plan, Demolition Section
M-5, 6	35	Distribution Piping – Proposed Plan, Proposed Section
M-7, 8	37	Mechanical Standard Details – Sheet 1, Sheet 2
S-1	38	General Notes and Abbreviations, Symbols
S-2	39	Distribution Piping Slab Modifications – Plan & Sections
S-3	40	Antenna Pole Foundation – Plan, Section and Details
S-4	41	Structural Standard Details – Sheet 1
S-5	42	Structural Standard Details – Sheet 2
E-1	43	Electrical Symbols and Abbreviations I
E-2	44	Electrical Symbols and Abbreviations II
E-3	45	Demolition and Modification Site Plan
E-4	46	Electrical Riser Diagrams

E-5	47	Flow Meter Control Panel and Elementary Control Diagrams
E-6	48	Flow Meter Electrical Modification Plan
E-7	49	Electrical Details
I-1	50	Instrumentation Legend
I-2	51	Block Diagram Instrumentation
I-3	52	Process and Instrumentation Diagram
I-4	53	Instrumentation Details

## ATTACHMENT B

## SUMMARY AND STATUS OF CONSULTANT SERVICES AUTHORIZATIONS

[illegible]

**ATTACHMENT C**

**OEBO SCHEDULE 1**

Office of Equal Business Opportunity Compliance Programs

OEBO SCHEDULE 1

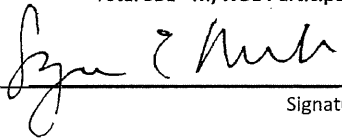
LIST OF PROPOSED CONTRACTOR/CONSULTANT AND SUBCONTRACTOR/SUBCONSULTANT PARTICIPATION

SOLICITATION/PROJECT/BID NAME: Belle Glade Water Treatment Plant Demolition  
NAME OF PRIME RESPONDENT/BIDDER: CDM Smith Inc.  
CONTACT PERSON: Suzanne E. Mechler, PE, BCEE  
SOLICITATION OPENING/SUBMITTAL DATE: December 23, 2020

SOLICITATION/PROJECT/BID No.: PBCWUD Project No. 21-051  
ADDRESS: 621 NW 53rd Street, Suite 265, Boca Raton, FL 33487  
PHONE NO.: 561.571.3800 E-MAIL: mechlerse@cdmsmith.com  
DEPARTMENT: Palm Beach County Water Utilities Department

PLEASE LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY THE PRIME CONTRACTOR/CONSULTANT ON THIS PROJECT.  
PLEASE ALSO LIST THE DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY ALL SUBCONTRACTORS/SUBCONSULTANTS ON THE PROJECT.

Name, Address and Phone Number	(Check all Applicable Categories)			DOLLAR AMOUNT OR PERCENTAGE OF WORK				
	Non-SBE	M/WBE	SBE					
		Minority/Women Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
1. CDM Smith Inc. 621 NW 53rd Street, Suite 265 Boca Raton, FL 33487	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					\$84,960.00
2. Brown & Phillips, Inc. 1860 Old Okeechobee Road, Suite 509 West Palm Beach, FL 33409	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	\$26,448.56				
3. C Solutions, Inc. 4152 West Blue Heron, Suite 225 Riviera Beach, FL 33404	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	\$144,646.64				
4. Engineered Design Services LLC 560 Village Boulevard, Suite 260 West Palm Beach, FL 33409	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	\$25,690.00				
5. Advantage Communications, Inc. 515 South Highlands Drive Hollywood, FL 33021	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					\$4,750.00
(Please use additional sheets if necessary)				Total	\$196,785.20			\$89,710.00
Total Bid Price \$ 286,495.20				Total SBE - M/WBE Participation 68.68%				

I hereby certify that the above information is accurate to the best of my knowledge:  Signature  
Suzanne E. Mechler, Associate Title

- Note:
- The amount listed on this form for a Subcontractor/subconsultant must be supported by price or percentage listed on the properly executed Schedule 2 or attached signed proposal.
  - Firms may be certified by Palm Beach County as an SBE and/or an M/WBE. If firms are certified as both an SBE and/or M/WBE, please indicate the dollar amount under the appropriate category.
  - Modification of this form is not permitted and will be rejected upon submittal.

**ATTACHMENT C**

**OEBO SCHEDULE 2**

**Office of Equal Business Opportunity Compliance Programs**

Revised 04/26/2021



OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2, both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: PBCWUD Project No. 21-051  
SOLICITATION/PROJECT NAME: Belle Glade Water Treatment Plant Demolition

Prime Contractor: CDM Smith Inc. Subcontractor: C Solutions, Inc.

(Check box(s) that apply)

☒SBE ☐WBE ☒MBE ☐M/WBE ☐Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 2/10/2020-2/09/2023

The undersigned affirms they are the following (select one from each column if applicable):

Column 1 Column 2 Column 3  
☒Male ☐Female ☒African-American/Black ☐Asian American ☐Caucasian American ☐Supplier  
☐Hispanic American ☐Native American

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2.

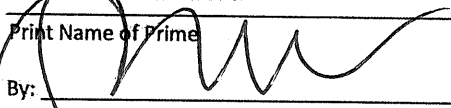
Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
8.04	Mechanical Engineering - Water Distribution Systems				\$144,646.64

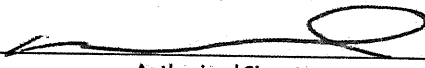
The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$144,646.64

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

N/A  
Name of 2<sup>nd</sup>/3<sup>rd</sup> tier Subcontractor/subconsultant

Price or Percentage: N/A

CDM Smith Inc.  
Print Name of Prime  
By:   
Authorized Signature  
Suzanne E. Mechler, PE, BCEE  
Print Name  
Associate  
Title  
Date: July 27, 2021

C Solutions, Inc.  
Print Name of Subcontractor/subconsultant  
By:   
Authorized Signature  
Mark Drummond, PE, BCEE  
Print Name  
President  
Title  
Date: July 27, 2021

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2, both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: PBCWUD Project No. 21-051  
SOLICITATION/PROJECT NAME: Belle Glade Water Treatment Plant Demolition

Prime Contractor: CDM Smith Inc. Subcontractor: Engineered Design Services LLC

(Check box(s) that apply)

☒SBE ☐WBE ☒MBE ☐M/WBE ☐Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 10/1/2021-9/30/2024

The undersigned affirms they are the following (select one from each column if applicable):

Column 1 Column 2 Column 3  
☒Male ☐Female ☒African-American/Black ☐Asian American ☐Caucasian American ☐Supplier  
☐Hispanic American ☐Native American

S/M/WBE PARTICIPATION – S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
9.03	Electrical Engineering				30,440.00

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$25,690.00

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

Advantage Communications, Inc.

Name of 2<sup>nd</sup>/3<sup>rd</sup> tier Subcontractor/subconsultant

Price or Percentage: \$4,750.00

CDM Smith Inc.

Print Name of Prime

By:

Authorized Signature

Suzanne E. Mechler, PE, BCEE

Print Name

Associate

Title

Date: October 1, 2021

Engineered Design Services LLC

Print Name of Subcontractor/subconsultant

By:

Authorized Signature

Craig McKenzie, PE

Print Name

Authorized Member

Title

Date: October 1, 2021

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2, both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: PBCWUD Project No. 21-051

SOLICITATION/PROJECT NAME: Belle Glade Water Treatment Plant Demolition

Prime Contractor: Engineered Design Services LLC Subcontractor: Advantage Communications, Inc.

(Check box(s) that apply)

☐SBE ☐WBE ☐MBE ☐M/WBE ☒Non-S/M/WBE Date of Palm Beach County Certification (if applicable): N/A

The undersigned affirms they are the following (select one from each column if applicable):

Column 1	Column 2	Column 3
<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	<input type="checkbox"/> African-American/Black <input type="checkbox"/> Asian American <input checked="" type="checkbox"/> Caucasian American	<input type="checkbox"/> Supplier
	<input type="checkbox"/> Hispanic American <input type="checkbox"/> Native American	

**S/M/WBE PARTICIPATION** – S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
2.2.3	RF Radio Path Survey				\$4,750.00

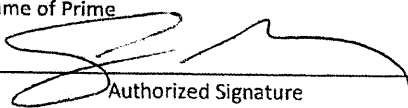
The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$4,750.00

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

N/A  
Name of 2<sup>nd</sup>/3<sup>rd</sup> tier Subcontractor/subconsultant

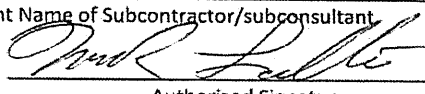
Price or Percentage: N/A

Engineered Design Services LLC

Print Name of Prime  
By:   
Authorized Signature  
Craig McKenzie, PE

Print Name  
Authorized Member  
Title  
Date: October 1, 2021

Advantage Communications, Inc.

Print Name of Subcontractor/subconsultant  
By:   
Authorized Signature  
Mark Lavallee

Print Name  
President  
Title  
Date: October 1, 2021

OEBO LETTER OF INTENT – SCHEDULE 2

A completed Schedule 2 is a binding document between the Prime Contractor/consultant and a Subcontractor/subconsultant (for any tier) and should be treated as such. The Schedule 2 shall contain bolded language indicating that by signing the Schedule 2, both parties recognize this Schedule as a binding document. All Subcontractors/subconsultants, including any tiered Subcontractors/subconsultants, must properly execute this document. Each properly executed Schedule 2 must be submitted with the bid/proposal.

SOLICITATION/PROJECT NUMBER: PBCWUD Project No. 21-051  
SOLICITATION/PROJECT NAME: Belle Glade Water Treatment Plant Demolition

Prime Contractor: CDM Smith Inc. Subcontractor: Brown & Phillips, Inc.

(Check box(s) that apply)

☒SBE ☐WBE ☒MBE ☐M/WBE ☐Non-S/M/WBE Date of Palm Beach County Certification (if applicable): 1/31/2019-1/30/2022

The undersigned affirms they are the following (select one from each column if applicable):

Column 1	Column 2	Column 3
<input checked="" type="checkbox"/> Male <input type="checkbox"/> Female	<input checked="" type="checkbox"/> African-American/Black <input type="checkbox"/> Asian American <input type="checkbox"/> Caucasian American	<input type="checkbox"/> Supplier
	<input type="checkbox"/> Hispanic American <input type="checkbox"/> Native American	

**S/M/WBE PARTICIPATION** – S/M/WBE Primes must document all work to be performed by their own work force on this form. Failure to submit a properly executed Schedule 2 for any S/M/WBE participation may result in that participation not being counted. Specify in detail, the scope of work to be performed or items supplied with the dollar amount and/or percentage for each work item. S/M/WBE credit will only be given for the areas in which the S/M/WBE is certified. A detailed proposal may be attached to a properly executed Schedule 2.

Line Item	Item Description	Unit Price	Quantity/ Units	Contingencies/ Allowances	Total Price/Percentage
5.02	Topography - Engineering Surveying				\$26,448.56

The undersigned Subcontractor/subconsultant is prepared to self-perform the above-described work in conjunction with the aforementioned project at the following total price or percentage: \$26,448.56

If the undersigned intends to subcontract any portion of this work to another Subcontractor/subconsultant, please list the business name and the amount below accompanied by a separate properly executed Schedule 2.

N/A  
Name of 2<sup>nd</sup>/3<sup>rd</sup> tier Subcontractor/subconsultant

Price or Percentage: N/A

CDM Smith Inc.

Print Name of Prime

By: 

Authorized Signature

Suzanne E. Mechler, PE, BCEE

Print Name

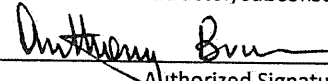
Associate

Title

Date: July 27, 2021

Brown & Phillips, Inc.

Print Name of Subcontractor/subconsultant

By: 

Authorized Signature

Anthony Brown

Print Name

CEO

Title

Date: July 27, 2021

ATTACHMENT D

PROJECT SCHEDULE

The completion dates for this work will be as follows (starting from CONSULTANT'S receipt of Notice-to-Proceed).

<u>Engineering Services</u>	<u>Completion Date from Notice to Proceed</u>
Task 1 Project and Subconsultant Management	553 Calendar Days
Task 2 Preparation of Demolition and Design Drawings and Specifications	371 Calendar Days
- Site Survey (10%)	78 Calendar Days
- Site Water Main Design (30%)	130 Calendar Days
- Site Demolition Documents and Specifications (60%)	238 Calendar Days
- Design Documents and Specifications (90%)	317 Calendar Days
- Design Documents and Specifications (100%)	371 Calendar Days
Task 3 Permitting Assistance	371 (Calendar Days)
Task 4 Bidding Assistance	553 (Calendar Days)

ATTACHMENT E  
BUDGET SUMMARY

Palm Beach County Water Utilities Department  
Contract for Consulting /Professional Services Water Treatment and Water Resources Engineering Services  
Resolution No. R2020-1719 Contract Dated November 17, 2020  
Consultant Services Authorization No.: 04  
Consultant: CDM Smith Inc.  
Project Title: Belle Glade Water Treatment Plant Demolition Design and Bidding Services  
PBCWUD Project No.: 21-051

		Labor Classification and Hourly Rate																				
Task		Senior Officer	Senior Technical Expert	Officer	Associate	Principal	Senior Professional	Professional II	Professional I	Senior GIS Specialist	Staff GIS Specialist	Senior Support Services	Staff Support Services	Senior Field Representative/T	Field Representative/T	Senior Contract Administration	Project Administration	Document Control Specialist	Total Labor	Sub Consultant Services	Total by Subtask	
Number	Task Description	[\$89.50-102.50]	[\$86.00-95.50]	[\$83.50-92.50]	[\$73.00-82.50]	[\$71.00-80.50]	[\$56.50-67.50]	[\$46.00-54.50]	[\$38.50-47.00]	[\$45.00-77.00]	[\$38.00-54.00]	[\$45.00-54.00]	[\$38.00-47.00]	[\$45.00-53.50]	[\$27.00-43.50]	[\$36.50-44.50]	[\$32.50-39.50]	[\$28.50-36.00]				
Task 1	Project and Subconsultant Management																					
1.1	Project Management					30	11					26					9		25	\$ 18,195.00	\$ 8,888.00	\$ 27,083.00
1.2	Subconsultant Management					12											9			\$ 4,171.50		\$ 4,171.50
Task 2	Preparation of Demolition and Design Drawings and Specifications																					
2.1	Data Collection					4			4	4										\$ 2,208.00	\$ 3,750.00	\$ 5,958.00
2.2	Preparation of Drawings and Specifications					4														\$ 990.00		\$ 990.00
2.2.1	Site Survey																			\$ -	\$ 26,448.56	\$ 26,448.56
2.2.2	Site Civil																			\$ -	\$ 117,078.00	\$ 117,078.00
2.2.3	Site Electrical																			\$ -	\$ 23,400.00	\$ 23,400.00
2.3	Quality Review					10			180										20	\$ 34,065.00		\$ 34,065.00
2.4	Opinion of Probable Construction Costs					4						83								\$ 14,436.00		\$ 14,436.00
Task 3	Permitting Assistance					8			8	3										\$ 3,711.00	\$ 13,522.00	\$ 17,233.00
Task 4	Bidding Assistance					8			20	6			4						4	\$ 7,176.00	\$ 7,172.00	\$ 14,348.00
	Subtotal					80	11		212	13			113				18		49			
	Labor Subtotal Hours					80	11		212	13			113				18		49	496		
	Labor Raw Costs	\$ 102.50	\$ 95.50	\$ 92.50	\$ 82.50	\$ 80.50	\$ 67.50	\$ 54.50	\$ 47.00	\$ 77.00	\$ 54.00	\$ 54.00	\$ 47.00	\$ 53.50	\$ 43.50	\$ 44.50	\$ 39.50	\$ 36.00				
	Labor Multiplier	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3				
	Labor Sub Total				\$ 19,800.00	\$ 2,656.50		\$ 34,662.00	\$ 1,833.00			\$ 18,306.00				\$ 2,403.00		\$ 5,292.00				
	Labor Total																			\$ 84,952.50		
	Out-of-Pocket Expenses (black and white printing (8.5"x11") x Rate \$0.25 x 30 pages = \$7.50)																			\$ 7.50	\$ 1,276.64	\$ 1,284.14
	Sub Consultant Labor Total																					
	Sub Consultant Multiplier																					
	Subcontract Total (C-Solutions, BPI, EDS)																				\$ 201,535.20	
	Project Total																				\$ 286,495.20	



April 16, 2021

Timothy J O'Neil, P.E.  
CDM Smith  
621 NW 53 Street, Suite 265  
Boca Raton, Florida 33487

Subject: Proposal for PBC WUD Water General - Belle Glade Water Treatment Plant Demolition Design and Bidding Services

Dear Mr. O'Neil,

C Solutions, Inc (C Solution) is pleased to provide the following scope of services.

**Task 1 – Project and Subconsultant Management**

Subtask 1.1 Project Management

Project management includes activities related to initiating, planning, executing, controlling, and closing the Project. Under this Task, the C Solutions will be responsible for overall coordination and oversight of the project execution.

Deliverable: Monthly invoice and project status.

**Task 2 - Preparation of Demolition, and Design Drawings and Specifications**

Subtask 2.1 Data Collection

Review record drawings for the adjacent various structures, facilities, conduit and piping, and water distribution flow meter and piping at the former Belle Glade Water Treatment Plant

Subtask 2.2.2 Site Civil

C Solutions will provide demolition plans and descriptive specifications for the removal and disposal of below and above ground structures and foundations, removal and disposal of below and above ground conduit and piping. Miscellaneous site debris shall be removed and disposed. C Solutions will instruct the contractor to re-register the aboveground diesel storage tank and then complete the Closure Integrity Evaluation Report Form for ASTs 62-762.901(7) (Closure Integrity Report) via specifications. Including the rendering of the aboveground diesel storage tank free of regulated substances and vapors via specifications. C Solutions will provide structural design for fencing around the new flow meter area and concrete equipment pad within the new fencing area. C Solutions will provide civil design for flow meter and interconnecting the 24-inch, 16-inch, 12-inch, 6-inch water distribution mains along the south side of the property adjacent to Northwest Avenue D. C Solutions will provide civil design to simplify interconnecting the 20-inch and 14-inch water distribution mains north-south within the property, and 12-inch and 8-inch water distribution mains along the north side of the property adjacent to West Canal Street South such that each pipe flow is metered at one location.

A. C Solutions will design for the following structures, facilities, and piping to be demolished:

- Rectangular ground storage water tanks No. 1 and No. 2
- Booster pump station No.1: A pump building containing the following items (but not limited to):
  - Four (4) pumps
  - Piping and valving installed with each pump.
  - Various chemical containers (such as Kochkleen P-02)
  - Piping and Bermad pressure sustaining valves.
  - One (1) manual crane system
  - One (1) diesel generator, insulated muffler, and monitoring system
  - Jaegar plastic packing
- One (1) aboveground diesel storage tank on a concrete pad
- One (1) radio antenna pole
- Remnants of paved access roads
- Aboveground piping and valves
- Below ground piping and valves
- Miscellaneous debris (i.e., metal, and vegetative soil mounds)

B. C Solutions will design for water distribution flow meter and piping improvements as follows:

- Replace the existing inline Sensus flowmeter with a new flowmeter.
- Replace limit switch, solenoid switch, and instrumentation tubing on the existing pressure sustaining valve to automate the remote control of the pressure sustaining valve.
- Add two (2) pressure transmitters upstream and downstream of the pressure sustaining valve.
- Add fencing around the water distribution piping site and add a concrete pad around the distribution piping arrangement.
- Modify the on-site water distribution piping. The 16-inch diameter to airport/mill can be abandoned. The 14-inch running north to south on the west side of water storage tank No. 1 needs to remain or be re-feed within right-of -ways. The 20-inch running north to south on the east side of water storage tank No. 1 needs to remain or be re-feed within right-of -ways.
- Modify the Northwest Avenue D right-of-way water distribution piping with a 6-inch to 16-inch and 16-inch to 24-inch diameter pipe connections west of the flow meter.

C Solutions will prepare preliminary water main routing drawings, design development drawings and specification, and 90 percent design drawings and technical specifications for the removal and disposal design, and water distribution improvements design package for review by Palm Beach County Water Utility Department (COUNTY). C Solutions will review comments and incorporate agreed upon changes into the 100 percent drawings and specifications documents. C Solutions will prepare for and attend two (2) design related meetings, kick-off, and 90 percent design review. C Solutions will prepare and distribute meeting agenda materials and meeting minutes to attendees.

C Solutions will prepare demolition drawings and descriptive specifications for the removal of the existing 16-inch diameter water main (WM) aerial canal crossing over the Hillsborough Canal for the WM depicted by yellow dashed line in the Figure No. 1. C Solutions will prepare demolition drawings and descriptive specifications to grout and abandon in place the existing 16-inch diameter WM that is within the right-of-way of the West Canal Street South depicted by red dashed line in the Figure No. 1. C Solutions will prepare demolition drawings and descriptive specifications to grout and abandon in place the existing 16-inch diameter WM that is within the right-of-way of the Northwest Avenue D depicted by red dashed line in the Figure No. 1. C Solutions will prepare demolition drawings and descriptive specifications to grout and abandon in place the existing 16-inch diameter WM that crosses the West Lake Road depicted by red dashed line in the Figure No. 1.



C Solutions will provide electronic copies of deliverables in Portable Document Format (PDF) format (and original word or AutoCAD files).

**Deliverables:**

- Preliminary water main routing drawings
- Design Development demolition drawings and specifications
- Design Development Design Review Minutes
- 90 Percent Design drawings and specifications
- 90 percent Design Review Minutes
- 100 Percent Design drawings and specifications

**Task 3 – Permitting Assistance**

C Solutions will prepare the Application for Notification for Use of General Permit for Constructions of an Extension to a Public Drinking Water Distribution System [Florida Department of Environmental Protection (FDEP) form 62.555.900(7)]. A draft application package will be submitted to COUNTY with the 90 percent deliverable set for review and comments. A formal application package will be submitted to FDEP on behalf of the COUNTY after COUNTY's 100 percent deliverable review comments are incorporated into the final design documents.

C Solutions will prepare the Utility Application with Florida Department of Transportation (FDOT) to grout and abandon in place the existing 16-inch diameter WM that is within the right-of-way depicted by red dashed line in the Figure No. 1. C Solutions will prepare a Right-of-way Permit Application with South Florida Water Management District (SFWMD) for the removal of the existing 16-inch diameter WM aerial canal crossing over the Hillsborough Canal depicted by yellow dashed line in the Figure No. 1. C Solutions will prepare an Engineering permit with the City of Belle Glade Engineering Department to grout and abandon in place the existing 16-inch diameter WM along the Northwest Avenue D right-of-way depicted by red dashed line in the Figure No. 1.

C Solutions will provide electronic copies of deliverables in PDF format (and original MS Word or AutoCAD files).

**Deliverables:**

- Draft Permit Application with 90 Percent Design Deliverable
- Permit Application with 100 Percent Design drawings

**Task 4 –Bidding Assistance**

C Solutions will revise the 100 percent design documents with permitting comments and coordinate with the COUNTY Purchasing Division to prepare the Bid Set bidding documents. C Solutions will deliver electronic copies of the Contract Documents for the COUNTY to post on the COUNTY's web site. C Solutions will attend the pre-bid meeting with the COUNTY remotely via Zoom or other. C Solutions will prepare responses to written questions from registered holders of bidding documents during the bid phase to be issued by the COUNTY via addenda. After bids are received, the C Solutions will make a recommendation to the COUNTY on award of the contract.

C Solutions will provide electronic copies of deliverables in PDF format.

**Deliverables:**

- Bid set of completed construction documents (100 percent documents with permit comments and purchasing comments, drawing and technical specifications)
- Pre-Bid Meeting Notes
- Recommendation of Award Letter

#### **DATA OR ASSISTANCE TO BE PROVIDED BY THE COUNTY**

- Provide a copy of facilities and underground utilities record drawings.
- Provide a copy of the three-structures lead-based paint, asbestos, and polychlorinated Biphenyls (PBC) survey report.
- Provide a draft copy of front-end documents.
- Obtain utility easement using CDM Smith provided legal sketch and description.
- Provide acoustic leak detection of existing post-construction pipes.
- Provide model runs of C Solutions proposed pipe interconnects for flow directions or flow reductions.

#### **Assumptions**

- Permitting application fees shall be paid for by the COUNTY.
- A separate Consultant Services Authorization will be issued to support the COUNTY with the continuing effort to support the construction phase services or
- A separate Consultant Services Authorization will be issued to support the COUNTY with environmental site assessment, or monitoring well closure, or site development review and building department permitting, or health department permitting or Landscape Architect.

#### **Time of Completion**

The Notice to Proceed (NTP) will be provided by the CDM Smith and defines the official commencement of the C Solutions' contract for this task authorization. The time of completion will match the schedule provided by the C Solutions for these named tasks.

#### **Proposed Compensation**

The C Solutions shall perform the services defined in this scope of work for the Not to Exceed fee as shown in Attachment A (attached).

Should you have any questions or require additional information please feel free to contact us.

Regards,



Mark Drummond  
President  
C Solutions Inc.



Figure No. 1 - 16-inch diameter Water Main

ATTACHMENT A - BUDGET SUMMARY

Palm Beach County Water Utilities Department -- Belle Glade Water Treatment Plant Decommissioning

Task	Task Description	Project Director	Senior Project Manager	Senior Engineer	Engineer	Senior Designer	Administrative Assistant	Total Labor Hours	Total Labor Effort	Total Expenses	Total Effort
	Raw Labor Rate	\$ 85	\$ 75	\$ 58	\$ 32	\$ 35	\$ 27				
	Labor Rate with 3.0 Multiplier	\$ 255.00	\$ 225.00	\$ 174.00	\$ 96.00	\$ 105.00	\$ 81.00				
1.0	Project and Subconsultant Management	8	8	0	0	0	8	24	\$ 4,488.00	\$ -	\$ 4,488.00
2.0	Preparation of Demolition, and Design Drawings and Specifications	144	168	100	97	182	6	697	\$ 120,828.00	\$ -	\$ 120,828.00
2.1	Data Collection	4	8		8		2	22	\$ 3,750.00		
2.2	Site Civil	140	160	100	89	182	4	675	\$ 117,078.00		
3.0	Permitting Assistance	8	16	16	24	4	4	72	\$ 11,472.00	\$ -	\$ 11,472.00
4.0	Bidding Assistance	8	8	2	16	2	8	44	\$ 6,582.00	\$ -	\$ 6,582.00
	ODCs	0	0	0	0	0	0	0	\$ -	\$ 1,276.64	\$ 1,276.64
	Mileage (IRS Mileage Rate in 2021 is \$0.56 per mile)							Rate	Amount		
								\$0.56	744	\$ 416.64	
	Black and White Printing ( 8.5"X11")							\$0.25	2400	\$ 600.00	
	Color Printing (8.5"X11")							\$2.00	10	\$ 20.00	
	Black and White Printing (11"X17")							\$0.50	480	\$ 240.00	
GRAND TOTAL		168	200	118	137	188	26	837	\$ 143,370.00	\$ 1,276.64	\$ 144,646.64

**Palm Beach Water Utility Department  
Belle Glade Water Treatment Plant Demolition**

**Anticipated Drawing List**

<b>GENERAL</b>	
1	Title Sheet
2	Drawing List
3	General Notes
4	Symbol and Abbreviations
<b>CIVIL</b>	
5	Proposed Site Plan - Key Plan
6	Proposed Site Plan - Sheet 1
7	Proposed Site Plan - Sheet 2
8	Staging Area
9	Proposed Paving, Grating and Drainage - Key Plan
10	Proposed Paving, Grating and Drainage - Sheet 1
11	Proposed Paving, Grating and Drainage - Sheet 2
12	Demolition Site Plan - Key Plan
13	Demolition Site Plan - Sheet 1
14	Demolition Site Plan - Sheet 2
15	Demolition of Existing 16" Water Main & Canal Crossing - Plan Profile - Sheet 1
16	Demolition of Existing 16" Water Main & Canal Crossing - Plan Profile - Sheet 2
17	Demolition of Existing 16" Water Main & Canal Crossing - Plan Profile - Sheet 3
18	Demolition of Existing 16" Water Main & Canal Crossing - Plan Profile - Sheet 4
19	Demolition of Existing 16" Water Main & Canal Crossing - Plan Profile - Sheet 5
20	Demolition of Existing 16" Water Main & Canal Crossing - Plan Profile - Sheet 6
21	Demolition of Existing 16" Water Main & Canal Crossing - Plan Profile - Sheet 7
22	Demolition Details and Sections - Sheet 1
23	Demolition Details and Sections - Sheet 2
24	Civil Standard Details - Sheet 1
25	Civil Standard Details - Sheet 2
26	Civil Standard Details - Sheet 3
27	Civil Standard Details - Sheet 4
<b>MECHANICAL</b>	
28	Distribution Piping - Existing Plan
29	Distribution Piping - Existing Section
30	Distribution Piping - Demolition Plan
31	Distribution Piping - Demolition Section
32	Distribution Piping - Propose Plan
33	Distribution Piping - Propose Section
34	Mechanical Standard Details - Sheet 1
35	Mechanical Standard Details - Sheet 2

**Palm Beach Water Utility Department  
Belle Glade Water Treatment Plant Demolition**

**Anticipated Drawing List**

<b>STRUCTURAL</b>	
36	General Notes and Abbreviation, Symbols and Legends
37	Distribution Piping Slab Modifications - Plan & Sections
38	Antenna Foundation - Plan, Section and Details
39	Structural Standard Details - Sheet 1
40	Structural Standard Details - Sheet 2



# Proposal to: CDM Smith

**PBCWUD**

**Belle Glade Water Treatment Plant Demolition  
Electrical Engineering Services**

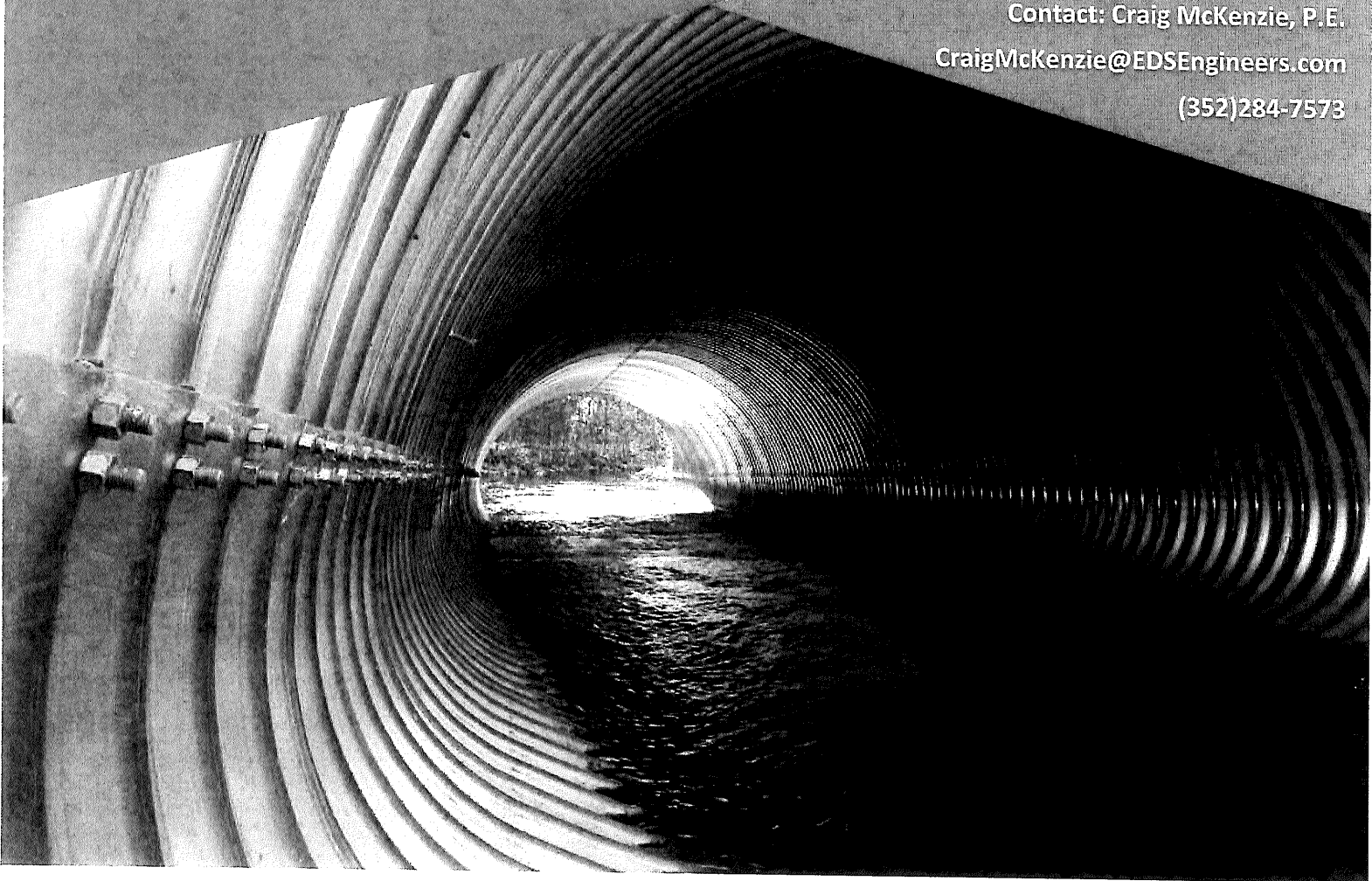
Revised October 1, 2021

Engineered Design Services LLC

Contact: Craig McKenzie, P.E.

CraigMcKenzie@EDSEngineers.com

(352)284-7573



October 1, 2021

Timothy J. O'Neil, P.E., BCEE  
Principal  
CDM Smith  
621 NW 53rd Street, Suite 265  
Boca Raton, Florida 33487

RE: Proposal for PBCWUD Water General - Belle Glade WTP Demo and New Flow Meter

Dear Mr. O'Neil:

Engineered Design Services (EDS) is pleased to support CDM Smith (CDM) in the design phase of for the demolition and new flow meter addition at the Former Belle Glade WTP location. As a sub-contractor to CDM, EDS proposes the following design services.

### **DESIGN PHASE SCOPE OF SERVICES:**

Our proposed scope of services will include the following services :

#### **Project Management:**

Project management includes activities related to initiating, planning, executing, controlling, and closing the Project. Under this Task, EDS will support CDM in the overall coordination and oversight of the project execution. The EDS Project Manager will be the primary point of contact with CDM and will support the Consultant Team during the project execution, focusing on quality completion of the project tasks on schedule and budget.

#### **Preparation of Demolition and Design Drawings and Specifications**

EDS will provide demolition plans and descriptive specifications will be developed for the demolition of all the electrical fixtures and wiring within the limits of the BGWTP site with the exception of the existing distribution piping, flowmeter, and pressure sustaining valve located on the south side of the site.

EDS will provide design criteria for a new radio antenna, electrical and instrumentation design for a new RTU system and add direct power to the new flowmeter. EDS will also design the new RTU panel, and relocation of the AMI radio concrete antenna.

The electrical demolition plan documents will also include restoration of the BGWTP site. It is assumed that there are no existing as-built drawings or documents that reflect the layout of all remaining structures, piping

#### **Permitting and Bidding Assistance**

EDS will provide assistance in the permitting and bidding of the project for construction. EDS will prepare a construction bid package to the requirements of CDM for the County. EDS will provide responses to contractor RFIs during the bidding process, and will assist in reviewing all submitted bids for award.

#### **RF Path Survey & FCC Radio License**

EDS will provide an RF path survey for the site.

CONSULTANT will provide electronic copies of deliverables in \*.PDF format.

#### **Deliverables:**

- a) Design Development demolition drawings and specifications for electrical scope
- b) Design Development Design Review Minutes for electrical scope
- c) 90 Percent Design drawings and specifications for electrical scope
- d) 90 percent Design Review Minutes for electrical scope
- e) 100 Percent Design drawings and specifications for electrical scope

#### **Exclusions**

- *Site Survey, Site Planning Services, CA Services, construction estimate, LEED Services, As-Built Set, and owner requested changes are not included in scope of services.*



# Project Specific Quality Control Plan

*EDS intends to ensure the quality of our projects in the following manner:*

## JOB SAFETY ANALYSIS

- At Engineered Design Services, we believe that safety is the key to success in all construction projects. As a result, we carefully plan out our activities prior to the site visit, and perform a safety review before each site visit. Craig McKenzie, P.E. will be in charge of safety for the project team.

## PERSONAL PROTECTIVE EQUIPMENT

- EDS provides all staff with the required safety equipment for the project including, but not limited to, eye protection, steel toe boots, hi-viz vests, hearing protection, etc.
- During our JSA, we will identify any additional equipment or procedures to ensure safe working activities.

## PROJECT DOCUMENTATION

- Project documentation created will be checked internally by Craig and other project professionals prior to submission to JSA.
- All project documentation will be memorialized in a Project QA/QC Book, per EDS standards.

### KEY ADVANTAGES:

- Flexibility
- Attention to Detail
- Local Knowledge of Site

### KEY PERSONNEL:

- Craig McKenzie, P.E., CGC
- Ricardo Rennalls
- Sancho Barrett

# Project Pricing

We have developed a time and materials budget for the Belle Glade WTP project based on our understanding of the scope provided.

The T&M not-to exceed fee for EDS to provide the scope of work tasks and services shall be \$30,440, based on the task breakdown below.

## PAYMENT SCHEDULE

BUDGET SUMMARY - TASK 2.2.3							
DESCRIPTION	HOURS	RAW COST	MULTIPLIER	RATE	LABOR \$	EXPENSE \$	TOTAL \$
Task 1 - Project and Subconsultant Management	28				\$4,400	\$0	\$4,400
Senior Engineer	20	62.50	2.72	170	\$3,400		
Project Engineer	8	45.96	2.72	125	\$1,000		
Task 2 - Demolition and Design Drawings	160				\$18,650	\$0	\$18,650
Senior Engineer	36	62.50	2.72	170	\$6,120		
Project Engineer	70	45.96	2.72	125	\$8,750		
Designer I	54	25.74	2.72	70	\$3,780		
Task 3 - Permitting	16				\$2,050	\$0	\$2,050
Senior Engineer	6	62.50	2.72	170	\$1,020		
Project Engineer	6	45.96	2.72	125	\$750		
Designer I	4	25.74	2.72	70	\$280		
Task 4 - Bidding Assistance	4				\$590	\$0	\$590
Senior Engineer	2	62.50	2.72	170	\$340		
Project Engineer	2	45.96	2.72	125	\$250		
RF Radio Path Survey (Advantage Communications)					\$0	\$4,750	\$4,750
TOTALS	208				\$25,690	\$ 4,750	\$30,440

We appreciate the opportunity to provide this proposal and look forward to working with you. Should you have any questions, please do not hesitate to contact us.

Respectfully Submitted,

Craig McKenzie, P.E.  
President/Principal Engineer  
Engineered Design Services LLC

Offer Accepted by:

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# ADVANTAGE COMMUNICATIONS, INC.

*Excellence in Mission Critical and Life Safety Radio Networks*

## PROPOSAL

RF Consulting, Radio Network Design, FCC Licensing

Office Phone: 954-961-2642

Facsimile: 954-894-8900

Fed. Tax ID #: 65-0456787

Email POs to: [po@advantage-com.com](mailto:po@advantage-com.com)

Specializing in: Government, Healthcare, and Industrial Solutions

Mailing address: 515 South Highlands Drive  
Hollywood, FL 33021

Internet Address: [www.advantage-com.com](http://www.advantage-com.com)

Customer: Engineered Design Services LLC

Date: Wednesday, February 3<sup>rd</sup> 2021

Project Name: Palm Beach RF Services SCADA Radio

Proposal Number: Engineered Design Services PBC RF Services

### Description

RF Consulting to include a radio path survey, for the two following sites:

39700 Hooker Highway, Belle Glade, FL (base station at WTP11);

1016 W Canal Street South, Belle Glade, FL (new antenna at remote site, Belle Glade WTP)

Cost for above is \$ 4,750.00

Terms: a late charge of 1.5% per month will be applied to any unpaid balance after 30 days from the invoice date.

*Thank you for the opportunity to quote this project.*

April 16, 2021

Mr. Timothy O'Neil  
CDM Smith  
621 NW 53<sup>rd</sup> Street, Suite 265  
Boca Raton, FL 33487

**Re: PBCWUD Belle Glade Water Treatment Plant at 1016 W. Canal Street South  
(PCN 04374331010110070)  
Boundary and Topographic Survey for Plant Demolition Design and Bidding Services**

Dear Tim:

Thank you for the opportunity to provide you with the following services for the subject site. This proposal is based on documentation and information provided by your office. The scope of services is as follows:

### **SCOPE OF SERVICES**

#### **I. HORIZONTAL PROJECT NETWORK CONTROL**

A traverse will be run through the site and all found monumentation will be tied in. The survey will be oriented to Palm Beach County horizontal control (NAD 83/11 Adjustment). We will obtain the sectional and geodetic control information from the Palm Beach County Survey Department.

#### **II. VERTICAL PROJECT NETWORK CONTROL**

A level run will be performed onsite using the existing Palm Beach County benchmarks (NAVD 1988). At least two benchmarks will be set onsite.

#### **III. BOUNDARY TIES AND MONUMENTATION**

We will search for and tie in any existing boundary corners. These will be added to the drawing and will aid in controlling the survey. We will set a monument at all corners of the boundary, where missing, as required by law. We will then prepare a boundary survey in accordance with the Standards of Practice in Rule 5J-17.050 – 0.53, Florida Administrative Code, pursuant to Chapter 472.027 of the Florida Statutes. We will review any title work supplied by you. In addition, we will flag the adjoining property corners clouded in red on Attachment 'B'

#### **IV. TIE IN IMPROVEMENTS AND CROSS SECTIONS**

A complete topographic survey (limits outlined in red on Attachment 'B') will be done at the site tying in all above ground features. This will include but not be limited to buildings, pavement, walks, utilities, and drainage structures. We will obtain elevations on the site on an approximate 50' grid. We will locate sufficient points to give an accurate representation of the lay of the land, and we will extend the survey to the south edge of pavement of Northwest Avenue D.

1860 Old Okeechobee Road • Suite 509 • West Palm Beach, Florida 33409  
(561) 615-3988 • Fax (561) 615-3991

\\Fell.mall\ls\docs\PROPOSALS\BRY COMPANY\CDM Smith\Belle Glade WTP\Belle Glade Water Treatment Plant Boundary & Topographic Survey.doc

In addition, we will perform a topographic survey for the right-of-way (1,600'±) along the path of the existing 16-inch diameter airport/mill water main with aerial canal crossing over the Hillsborough Canal (shown in red and yellow on Attachment 'E'). The survey will include the Northwest Avenue D right-of-way along the path of the existing 16-inch diameter airport/mill water main shown as a red-font dashed line on Attachment 'E'.

#### **V. AS-BUILT**

We will attempt to get as-built information on all the pipes leading out of any storm or sanitary sewer structures found. We will show invert elevations, pipe sizes and materials for all pipes located including outfall pipes.

#### **VI. UNDERGROUND UTILITIES**

We will designate the underground utilities within the area marked in purple on Attachment 'C' and not the entire site. In addition, we will locate lines marked in red on Attachment 'D' and perform six (6) test holes at the requested locations shown on Attachment 'D'. We will then add the designates and test hole information (top of pipe x-y-z coordinates) to the survey.

#### **VII. TREE SURVEY**

We will locate and tag trees 4 inches in diameter or larger. Trees will be measured at breast height. Hedges and ground cover will not be located or shown on the survey. Exotic trees such as Melaleuca, Brazilian pepper and Australian pine will not be located or shown on the survey. We will identify the various types of trees located on this site based on common knowledge of tree species. A qualified landscape architect should be employed for positive identification of tree species. We will then produce a drawing showing all the trees located. We will provide you with signed and sealed hard copies and an AutoCAD file of the trees located.

#### **VIII. PARCEL SKETCHES AND LEGAL DESCRIPTIONS**

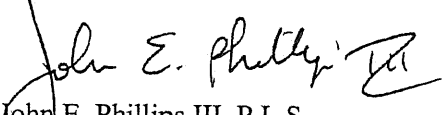
We will prepare legal descriptions and sketches for utility easements as needed. These sketches will be based on record ownership data and record plats provided by Palm Beach County. All sketches will be consistent with the requirements of Palm Beach County and Florida Minimum Technical Standards. We have estimated up to four (4) legal descriptions and sketches for this project.

#### **IX. CLOSURE**

A drawing will be produced which will show all the features located. We propose to provide CDM Smith with hard copies, a digitally signed PDF file, and an AutoCAD file in the version requested. Any additional work will be done on an hourly basis as approved by you. We will perform the scope of services for an **hourly, not to exceed fee of \$26,448.56** (\$22,348.56 for the Survey and Legal Descriptions and Sketches, \$2,000.00 for Underground Utility Locations and \$2,100.00 for six test holes), see Attachment 'A' for an hourly breakdown.

Please do not hesitate to call me with any questions you might have regarding this proposal. We look forward to working with you on this project.

**Brown & Phillips, Inc.**

  
John E. Phillips III, P.L.S.  
Principal

Attachment

JEP/mb

This Proposal accepted this \_\_\_\_ day of \_\_\_\_\_, 2021

By: \_\_\_\_\_  
CDM Smith

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

ATTACHMENT 'A'

PBCWUD Belle Glade Water Treatment Plant at 1016 W. Canal Street South  
(PCN 04374331010110070)

Type of Survey: Boundary, Topographic and Tree  
Size:  
Date: April 16, 2021

TASK - 2.2.1	SURVEY CREW	CADD TECH	SURVEY TECH	Professional Land Surveyor	COMMENTS
Meetings and Coordination				4	
Horizontal Project Network Control	4		10	2	Review title package. Set control points, work up boundary
Vertical Project Network Control	6		1		Establish onsite benchmarks
Section/Boundary Ties	6		2	1	Find and locate existing monumentation
Boundary Monumentation	10		3	1	Set property corners and flag adjoining property corners
Tie In Improvements and Cross Sections	16		3	1	All above ground features, 50' cross sections & spot elevs.
Topographic Survey along the path of 16-inch airport/mill WM	32	16	20	4	Limits outlined in yellow and red on Attachment 'E' (1600'±), work up R/W
As-builts	1				Obtain as-built data
Underground Utilities	8		2		Field locate flagged utilities and test holes
Trees	1				Locate trees over 3" in diameter (not exotics) number and label
Drawing		20	5	3	Prepare boundary, topographic and tree survey
Legal Descriptions & Sketches			20	4	
Total Hours:	84	36	66	20	
Rate/Hour	\$42.17	\$30.12	\$30.12	\$41.75	unloaded rates
Subtotal:	\$3,542.28	\$1,084.32	\$1,987.92	\$835.00	
Total Labor Cost (unloaded):					\$7,449.52
Multiplier:					3.00
Total Labor Cost (loaded):					\$22,348.56

Other Direct Costs:	quantity	unit	cost/unit	total	
SUE Utility Locations	1	LS	\$2,000.00	\$2,000.00	
SUE Test Holes	6	each	\$350.00	\$2,100.00	
Other				\$0.00	
Total Other Direct Costs:					\$4,100.00
TOTAL PRICE					\$26,448.56

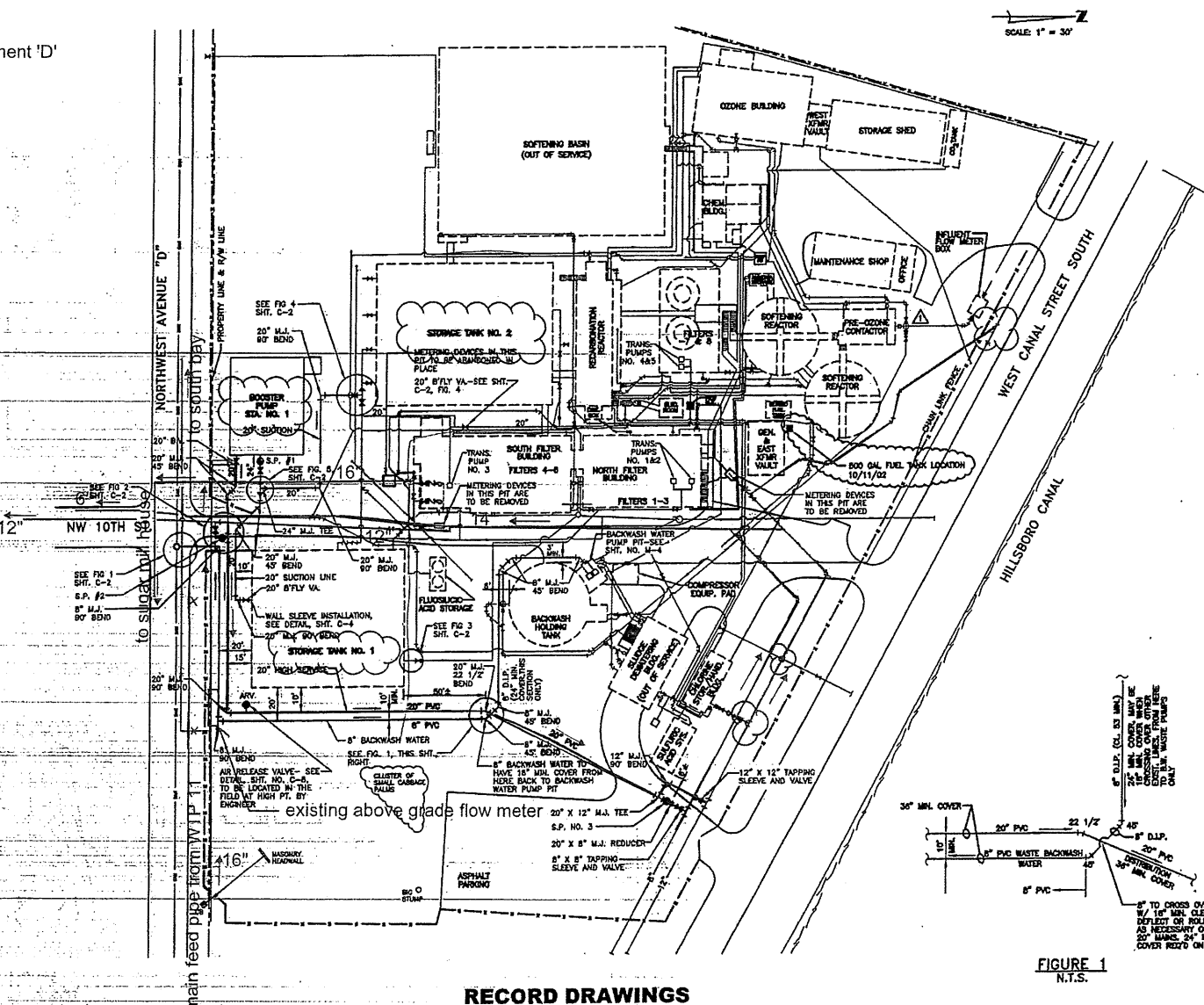


Attachment 'B'





Attachment 'C'



SCALE: 1" = 30'

1. THE NOTATION ABANDON IN PLACE MEANS THAT THE UNDERGROUND PORTION OF THE PIPE (TO 12" BELOW GRADE) IS TO BE PLACED AND THEN ABANDONED. ANY ABOVE GROUND PORTIONS OF THE PIPE ARE TO BE REMOVED.
2. BURIED PIPE IS TO HAVE 30" OF COVER UNLESS OTHERWISE NOTED OR APPROVED BY THE ENGINEER.
3. AT ALL PRESSURE PIPING JOINTS, 90°-ELBOWS, WYE BRANCHES, OR OTHER POINTS REQUIRING RESTRAINT OF THRUST DUE TO INTERNAL PRESSURE, THE PIPE AND FITTINGS SHALL HAVE RESTRAINT JOINTS SIMILAR TO METALLIC RESTRAINTS, AS MANUFACTURED BY ESM FROM, INC. OF EASTLAND, TEXAS OR APPROVED EQUAL.
4. RESTRAINT JOINTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND SHALL BE GUARANTEED TO PROVIDE FULL RESTRAINT FOR A 150 PSI INTERNAL PRESSURE.
5. ANY ADDITIONAL PIPING AND/OR APPURTENANCES DEEMED NECESSARY BY THE CONTRACTOR TO PERFORM THE INTENDED WORK SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
6. ANY FIELD DETERMINED CHANGES IN THE PIPING LOCATIONS AND/OR PIPING ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
7. YARD PIPING MATERIAL - ALL YARD PIPING MATERIAL SHALL BE AS STATED BELOW.

- A. ABOVE GROUND**
- (1) PRESSURE OR GRAVITY PIPE 4" AND LARGER SHALL BE COUPLER-ENDED DUCTILE IRON PIPE (DIP), CL. 35, IN ACCORDANCE WITH ANSI/AWWA C151/A21.51. EXTERIOR SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS.
  - (2) PIPE PAINT COLORS SHALL BE: POTABLE OR FRESH WATER - DARK BLUE; BACKWASH WATER - LIGHT BROWN. SEE OWNER FOR EXACT SHADES.
  - (3) PRESSURE OR GRAVITY PIPES 3" AND SMALLER SHALL BE ASTM A192, SCH. 40, GALVANIZED IRON PIPE (GIP). EXTERIOR SHALL BE PAINTED IN ACCORDANCE WITH THE SPECIFICATIONS.
- B. BURIED**
- (1) PRESSURE PIPE 4" AND LARGER SHALL BE POLYVINYL CHLORIDE (PVC) IN ACCORDANCE WITH AWWA C-900 OR-1A, UNLESS NOTED OTHERWISE.
  - (2) PRESSURE PIPE 3" AND SMALLER SHALL BE POLYETHYLENE (PE) IN ACCORDANCE WITH ASTM D2737, SCH. 8, 180 PSI, CTS.
  - (3) PRESSURIZED CHEMICAL FEED PIPING SHALL BE SCHEDULE 80, POLYVINYL CHLORIDE (PVC).
  - (4) GRAVITY PIPE 3" AND SMALLER SHALL BE SCHEDULE 80, POLYVINYL CHLORIDE (PVC).
  - (5) GRAVITY PIPE 4" THROUGH 12" SHALL BE POLYVINYL CHLORIDE (PVC) IN ACCORDANCE WITH ASTM D3034, SDR 35.
  - (6) STORMWATER DRAINAGE PIPE SHALL BE CORRUGATED ALUMINUM PIPE (CAP), 18 GAUGE.
  - (7) IF REQUIRED, ALL BURIED PIPING UNDER TANKS AND WITHIN 8 FT. OF THE OUTER LIMITS OF A TANK, BUILDING OR STRUCTURE SHALL BE DIP, 350 PSI, CL. 50 MIN. UNLESS OTHERWISE SPECIFIED. BEYOND FIVE (5) FEET FROM THE OUTSIDE LIMITS THE CONTRACTOR MAY CHANGE TO THE ALTERNATE PIPE MATERIAL STATED.
8. ALL CONCRETE FOOTINGS/FOUNDATIONS, LINERS, GROUTS, PROTECTIVE PARTS AND COATINGS SHALL BE IN CONFORMANCE WITH ANSI/ASTM STANDARD 80-1999 AND DEEMED ACCEPTABLE FOR CONTACT WITH POTABLE WATER.
9. USE FULL FACE GASKETS ON ALL FLANGED PIPING.
10. CAUTION: ELECTRICAL CONDUITS ARE NOT SHOWN.
11. ALL NEW MAINS SHALL BE PRESSURE TESTED AND DESPENDED. SEE SHEET C-3 & TECHNICAL SPECS. FOR REQUIREMENTS.
12. SEE SHEET NO. C-3 FOR W.W.'S CROSSING WASTEWATER MAIN OR STORMWATER MAIN.

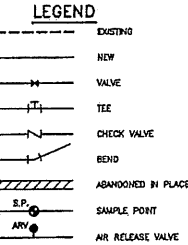


FIGURE 1  
N.T.S.

**RECORD DRAWINGS**

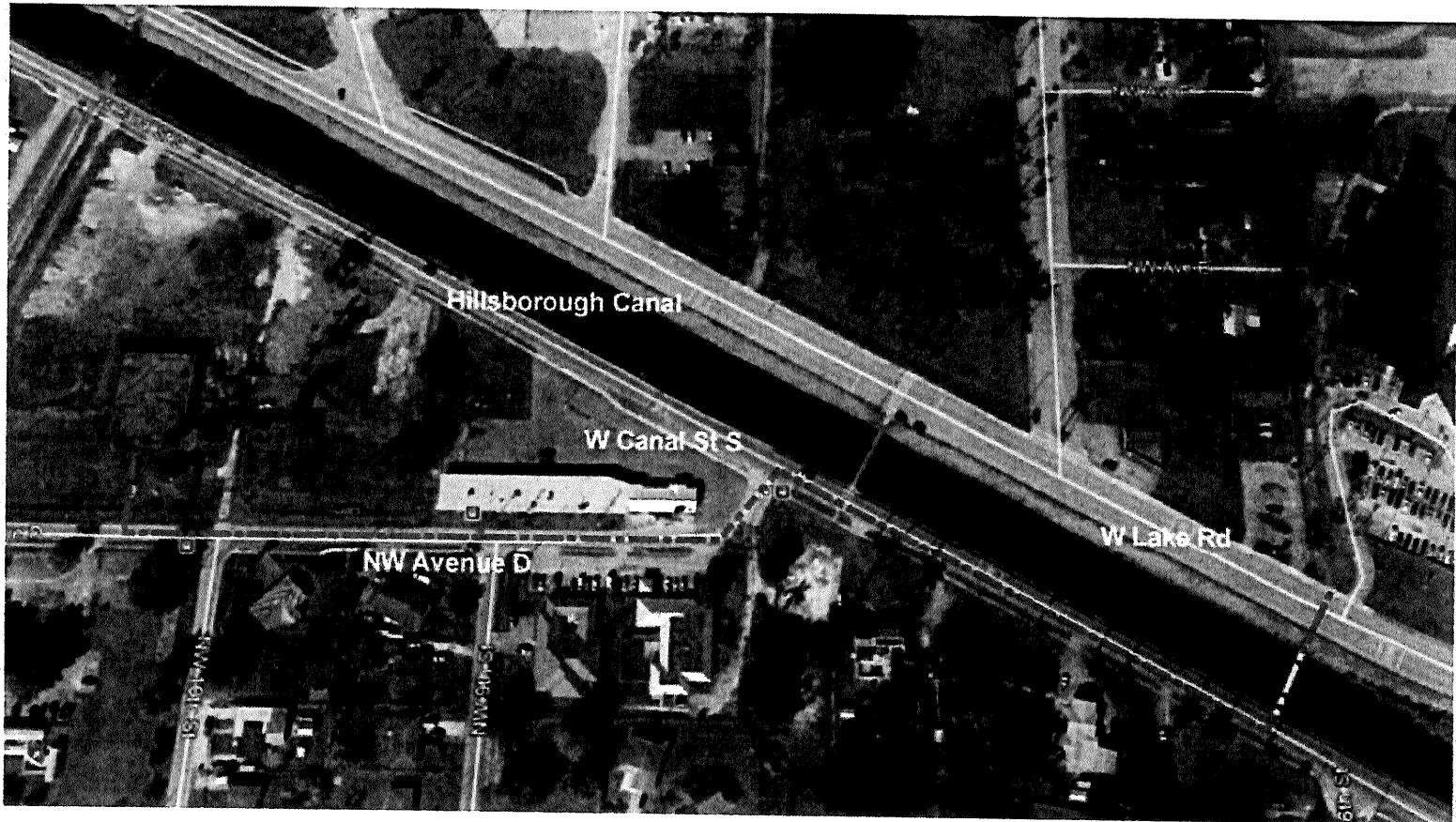
RECORD DRAWINGS  
THESE RECORD DRAWINGS HAVE BEEN PREPARED BY THE ENGINEER ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY INTRAVATE CONSTRUCTION CORPORATION, 4445 S.W. 84 AVENUE, FORT LAUDERDALE, FLORIDA, AS TO THE LOCATION AND DETAILS OF THE FACILITIES ACTUALLY CONSTRUCTED. THE ENGINEER HAS PROVIDED CONTINUOUS SUPERVISION SERVICES DURING CONSTRUCTION. THE ENGINEER HAS NOT MADE AS-BUILT MEASUREMENTS, BUT HAS OBSERVED THAT THE PROJECT HAS BEEN REASONABLY CONSTRUCTED IN ACCORDANCE WITH THE DRAWINGS. INFORMATION ON AS-BUILT ELECTRICAL AND INSTRUMENTATION IS ALSO PROVIDED IN THE SEPARATE DOCUMENT ENTITLED "INSTRUMENTATION DRAWINGS FOR BELLE GLADE WTP IMPROVEMENTS" BY CONTROL INSTRUMENTS INC. OF ATLANTA, GEORGIA.

DATE	DESCRIPTION	REVISIONS
02/06/02	RECORD DRAWINGS	RDK
02/06/02	REFERENCE ADDENDUM #1 (10/22/01) FOR CHANGES ON THIS SHEET	CMA

JOHN M. LESS, P.E.  
CERTIFICATION NO. 44037  
*John M. Less*  
02/16/05  
SEAL

DESIGN	C.B.S.
DRAWN	C.M.A.
CHECKED	R.E.R.
APPROVED	WOG, Inc. Professional Engineers 8855 N. Military Trail, Suite 107-B Palm Beach Gardens, Florida 32410 561-420-4653 (fax) 561-626-4655 CA8440
NOT TO BE USED FOR CONSTRUCTION UNLESS APPROVED	DATE OCTOBER 2001

YARD PIPING MODIFICATIONS	PROJECT NO. P01007.02
WATER TREATMENT PLANT IMPROVEMENTS PROCESS MODIFICATIONS FOR THE CITY OF BELLE GLADE, FLORIDA	SCALE AS NOTED SHEET C-1 OF 65 FILE NO. D-3325-042



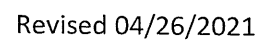
**Figure No. 1 - 16-inch diameter Water Main**

**ATTACHMENT F**  
**Palm Beach County Water Utilities Department**  
**Contract for Consulting/Professional Services**  
**Water Treatment and Water Resources Engineering Services**  
**Resolution No. R2020-1719                      Contract Dated November 17, 2020**

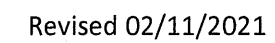
**SUMMARY OF  
SBE-M/WBE BUSINESS TRACKING**

Master Contract Goals	SBE:	MBE(B):
	21.00%	19.00%
Current Proposal		
Value of Authorization No. 4	\$286,495.20	\$286,495.20
Value of SBE-M/WBE Letters of Intent	\$196,785.20	\$196,785.20
Actual Percentage	68.68%	68.68%
Signed/Approved Authorizations		
Total Value of Authorizations	\$745,401.90	\$745,401.90
Total Value of SBE-M/WBE Signed Subcontracts	\$253,682.40	\$0.00
Actual Percentage	34.03%	0.00%
Signed/Approved Authorizations Plus Current Proposal		
Total Value of Authorization	\$1,031,897.10	\$1,031,897.10
Total Value of Subcontractors & Letters of Intent	\$450,467.60	\$196,785.20
Actual Percentage	43.65%	19.07%

**LOCATION MAP**  
**PBCWUD Project No. 21-051**



## Location Map 20-051





ATTACHMENT 3



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
12/29/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services Northeast, Inc. Boston MA Office 53 State Street Suite 2201 Boston MA 02109 USA	CONTACT NAME: PHONE (A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): 800-363-0105 E-MAIL ADDRESS:  INSURER(S) AFFORDING COVERAGE  NAIC #
INSURED CDM Smith Inc. 75 State Street Suite 701 Boston MA 02109 USA	INSURER A: Commerce & Industry Ins Co 19410 INSURER B: Liberty Mutual Fire Ins Co 23035 INSURER C: Liberty Insurance Corporation 42404 INSURER D: LM Insurance Corporation 33600 INSURER E: ACE Property & Casualty Insurance Co. 20699 INSURER F: Lloyd's Syndicate No. 2623 AA1128623

COVERAGES CERTIFICATE NUMBER: 570085457598 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
C	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input type="checkbox"/> OTHER:			TB7611B8T8Z6041	01/01/2021	01/01/2022	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000
B	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			AS2-611-B8T8Z6-061	01/01/2021	01/01/2022	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY ( Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
E	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION			XEUG28194687005	01/01/2021	01/01/2022	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000
D	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	WA561DB8T8Z6011 AOS WC5611B8T8Z6021 WI	01/01/2021 01/01/2021	01/01/2022 01/01/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE-EA EMPLOYEE \$1,000,000 E.L. DISEASE-POLICY LIMIT \$1,000,000
F	Archit&Eng Prof			PSDEF2100033 Professional/Claims Made	01/01/2021	01/01/2022	Each Claim \$2,000,000 Aggregate \$3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
RE: Professional Services - Water Treatment and Water Resources Engineering Services - WUD No. 19-076R. Palm Beach County, Board of County Commissioners, a Political Subdivision of the State of Florida, its Officers, Employees and Agents are included as Additional Insured in accordance with the policy provisions of the General Liability and Automobile Liability policies. Umbrella Liability policy is follow-form.

CERTIFICATE HOLDER	CANCELLATION
Palm Beach County Water Utilities Department Attn: Ali Bayat, P.E., PMP 8100 Forest Hill Blvd. West Palm Beach FL 33413 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE  Aon Risk Services Northeast Inc