

**PALM BEACH COUNTY  
BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY**

**Meeting Date:** March 13, 2018

**Consent**  **Public Hearing**

**Regular**

**Department:** Water Utilities Department

**I. EXECUTIVE BRIEF**


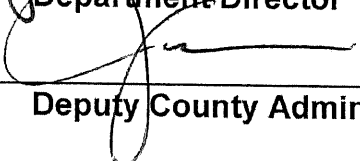
**Motion and Title:** Staff recommends motion to approve: Consultant Services Authorization (CSA) No. 4 for the Water Treatment Plant 11 (WTP 11) High Service Pump Station Electrical Room Improvements with Kimley-Horn and Associates, Inc., (R2017-0903) in an amount not to exceed \$183,829.20

**Summary:** On July 11, 2017 the Board of County Commissioners (BCC) approved the Contract for Consulting/Professional Services for Water Treatment and Water Resources Engineering Services (Contract) with Kimley-Horn and Associates, Inc., (R2017-0903). CSA No. 4 will provide for professional/engineering services related to the WTP 11 High Service Pump Station Electrical Building Improvements (Project). WTP 11 is the sole source of drinking water for the Cities of Pahokee, Belle Glade, South Bay and unincorporated Canal Point. During Hurricane Irma, the high service pump station electrical building was close to inundation. Flooding of the high service pump station electrical building would cause failure of the high service pump and result in loss of drinking water to the service area. CSA No. 4 will provide for the design of a new electrical building primarily to mitigate the risk of future flooding. The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance is 15% overall. The Contract with Kimley-Horn and Associates, Inc., provides for SBE participation of 28% overall and Minority/Women Business Enterprise (M/WBE) participation of 7%. CSA No. 4 includes an overall SBE and M/WBE participation of 50.49% and 0% respectively. The cumulative SBE and M/WBE participation including CSA No. 4 is 54.89% and 5.32% overall. Kimley-Horn and Associates, Inc., is headquartered in Raleigh, North Carolina but maintains an office in Palm Beach County from which the majority of the work under CSA No. 4 will be undertaken. The Project is in the FY18 Capital Improvement Plan adopted by the BCC. (WUD Project No. 18-005) District 6 (MJ)

**Background and Justification:** WTP 11 serves the Cities of Belle Glade, South Bay and Pahokee, in addition to unincorporated Palm Beach County. WTP 11 is the sole water treatment facility supplying drinking water to the service area and therefore, it is a critical that WTP 11 can reliably and effectively treat and distribute drinking water to Water Utilities Department's (WUD's) customers. During Hurricane Irma, the high service pump station electrical building was close to inundation. If the high service pump station electrical room were to flood, WTP 11 would be unable to supply drinking water to customers within WUD's service area. Subsequent investigations have shown the electrical building was constructed more than two feet lower than the established flood elevation for the WTP 11 site. CSA No. 4 will design a new high service pump station electrical room above the established flood elevation mitigating risks associated with flooding. In addition, the Project will increase operation efficiency by providing variable frequency drives (VFDs) to all high service pumps and clearwell transfer pumps. CSA No. 4 provides for professional engineering services to design, permit and bid the new high service pump station electrical building.

**Attachments:**

1. Four (4) Originals of CSA No. 4
2. Location Map
3. Proof of Insurance from Insurance Tracking Service (ITS)

Recommended By:	 Department Director	2-7-18 Date
Approved By:	 Deputy County Administrator	2/26/18 Date

**II. FISCAL IMPACT ANALYSIS**

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

Fiscal Years	2018	2019	2020	2021	2022
Capital Expenditures	<u>\$183,830</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
External Revenues	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Program Income (County)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
In-Kind Match County	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>NET FISCAL IMPACT</b>	<b><u>\$183,830</u></b>	<b><u>0</u></b>	<b><u>0</u></b>	<b><u>0</u></b>	<b><u>0</u></b>
# ADDITIONAL FTE POSITIONS (Cumulative)	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>

**Budget Account No.:** Fund 4011 Dept 721 Unit W026 Object 6541

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:** \_\_\_\_\_


**III. REVIEW COMMENTS**

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

 2/14/18  
 OFMB 2/14/18

 2/16/18  
 Contract Development and Control 2/16/18

**B. Legal Sufficiency:**

 2/22/18  
 Assistant County Attorney

**C. Other Department Review:**

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

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

**CONSULTANT SERVICES AUTHORIZATION NO. 4**

**Project Title: High Service Pump Station Electrical Building Improvements**

**Project No. WUD: WUD 18-005**

**Budget Line Item No. 4011-721-W026-6541**

**District No.: 6**

**THIS AUTHORIZATION No. 4** to the Contract for Consulting/Professional Services dated July 11, 2017 (R2017-0903), by and between Palm Beach County and the Consultant identified herein, is for the Consultant Services described in Item 3 of this Authorization. The Contract provides for 28% SBE participation and 7% M/WBE overall. This Consultant Services Authorization includes 50.49% SBE participation and 0.00% M/WBE participation. The cumulative SBE participation, including this authorization is 54.89% and 5.32% respectively. Additional authorization will be utilized to meet or exceed the stated overall participation goal.

1. CONSULTANT: Kimley-Horn and Associates, Inc.
2. ADDRESS: 1920 Wekiva Way #200, West Palm Beach, FL 33411
3. Description of Services to be provided by the Consultant:  
Water Treatment Plant 11 High Service Pump Electrical Building Improvements.  
**See ATTACHMENT A.**
4. Services completed by the Consultant to date (Summary and Status of Authorizations):  
**See ATTACHMENT E.**
5. Consultant shall begin work upon receipt of Notice to Proceed correspondence.
6. 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 \$183,829.20
  - B. Fixed price of \$ 0.00
7. 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.

**Project No. WUD: 18-005 Consultant Services Authorization No. 4**

**Project Title: High Service Pump Station Electrical Building Improvements**

8. SBE participation is included in Attachment D under this Authorization. The attached Schedule 1 defines the SBE applied to this Authorization and Schedule 2 establishes the SBE contribution from each subconsultant (Letter of Intent to perform as an SBE).
9. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated July 11, 2017, remain in full force and effect.

Rev. 11-27-17

Project No. WUD: 18-005 Consultant Services Authorization No. 4

Project Title: High Service Pump Station Electrical Building Improvements

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

Sharon R. Bock, Clerk & Comptroller,  
Palm Beach County

Palm Beach County,  
Board of County Commissioners

ATTEST:

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

Signed: \_\_\_\_\_  
Melissa McKinlay, Mayor *JCS*

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

\_\_\_\_\_ Date  
*Sub*

Approved as to Form and Legal  
Sufficiency

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

Typed Name: \_\_\_\_\_  
County Attorney

CONSULTANT: \_\_\_\_\_

*KS*  
\_\_\_\_\_  
(Signature)

Kevin Schanen, P.E., Vice President  
\_\_\_\_\_  
(Name and Title)

*12/13/17*  
\_\_\_\_\_  
Date



## LIST OF ATTACHMENTS

**Project No. WUD: 18-005 Consultant Services Authorization No. 4**

**Project Title: High Service Pump Station Electrical Building Improvements**

ATTACHMENT - A	Scope of Work
ATTACHMENT - B	Budget Summary
ATTACHMENT - C	Project Schedule
ATTACHMENT - D	SBE Schedule 1, 2, 3a and 4
ATTACHMENT - E	Authorization Status Report - Summary and Status of Authorizations
ATTACHMENT - F	Authorization Status Report – Summary of SBE Tracking
ATTACHMENT - G	Location Map

## ATTACHMENT A

### CONSULTANT SERVICES AUTHORIZATION NO. 4

#### PALM BEACH COUNTY WATER UTILITIES DEPARTMENT ENGINEERING/PROFESSIONAL SERVICES

#### SCOPE OF WORK FOR HIGH SERVICE PUMP STATION ELECTRICAL BUILDING IMPROVEMENTS

### INTRODUCTION

Palm Beach County (COUNTY) entered into an agreement entitled Contract for Engineering/ Professional Services - Palm Beach County Water Utilities Department Project No. WUD 17-007 (CONTRACT) with Kimley-Horn and Associates, Inc. (CONSULTANT) to provide engineering services for various general activities on (Reference Document R2017-0903). This Consultant Service Authorization will be performed under that CONTRACT.

This Consultant Services Authorization #4 encompasses providing services related to the addition of Water Treatment Plant 11 (WTP11) new high service pump (HSP) electrical building.

### BACKGROUND

The existing electrical building that provides electrical service, power, and control to the high service pumps and transfer pumps is susceptible to flooding under severe weather and hurricane events. The intent is to replace the existing electrical building with a new electrical and demolish the existing one. In order to reduce construction costs and constructability, one approach is to maintain the existing HSP electrical building structure while building a new HSP electrical building adjacent to the existing one. This approach would allow the staged transfer of electrical equipment which can be re-used. The existing HSP building could then be demolished as a flood elevation certificate cannot be issued without raising the building finished floor. Alternate approaches to constructing a new electrical building will be evaluated.

To simplify the electrical change over to the new high service electrical building, new motor control centers (MCC's) will be designed along with new VFD's for the two constant speed HSP variable frequency drives (VFD's). The two existing VFD's for the high service pumps will then be relocated to the new HSP electrical building. The existing PLC panel is running out of space for new I/O extension rack and the design will include a new PLC panel with additional future spaces. The transfer pumps currently are constant speed and the County has requested VFD's be used in the new HSP electrical building.

The HSP building will be concrete masonry unit construction and will include air conditioning. The HSP building will have a dedicated water quality analyzer room similar to the WTP 8 anion exchange project. The drain will be routed to the process lift station.

The following scope assumes no increase in MCC and feeder capacity is necessary.

### SCOPE OF SERVICES

CONSULTANT shall perform the engineering Scope of Services as described herein and as consists of the following:

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- Evaluate the phasing, implementation, constructability, costs, siting, and options to constructing a new electrical building and preferred demolition of the existing electrical building. Although splicing of existing conductors is not preferred, this approach will be evaluated.
- Design a new high service pump electrical building adjacent to the existing one.
- Provide finish water sampling/analyzer room separate from electrical room with drain to process lift station.
- Evaluate existing pumps and pump selection at the HSPs. If the existing pumps are found to be undesirable, recommend a revised pump selection with control strategy. The pump recommendation should include a condition assessment of the existing pumps and a net present value analysis comparing the options of retaining the existing pumps and replacing the high service pumps with the recommended pump selection.
- Re-use existing 2 HSP VFD's and design 2 new VFD's for the remaining existing constant speed pumps.
- Modify the constant speed transfer pumps starters to VFD's.
- Design new MCC arrangement with main/tie/main arrangement.
- Design generator receptacle or generator connection box for MCC arrangement.
- Concrete masonry unit building matching WTP 11 architectural style and designed in accordance with Building Code.
- Air conditioning system, lightning protection, site lighting and video cameras. Separate air conditioning systems are to be used for electrical room and the analyzer room.
- Perform 60% and 90% design reviews. Prepare 100% design bid ready documents, inclusive of civil, structural, mechanical, electrical and instrumentation documents and technical specifications. Technical specifications will use the County's standard specifications which will then be marked with track changes for the Consultants revision.
- Provide signed and sealed plans for submittal to the Palm Beach County Building Department. Respond to comments on the building permit review and submit revise drawings as necessary.
- Bidding assistance. Attend pre-bid meeting and answer bidders questions forwarded by the Owner in writing.

#### **Task 1 – Preliminary Evaluation**

Consultant will evaluate alternative approaches to the construction of a new electrical building while maintaining continuous service to the clearwell, injection well, and high service pumping facilities, with the intent of complete demolition of the existing electrical building. This will consist of reviewing options for phasing, implementation, constructability, costs, and siting of a new electrical building.

Consultant will coordinate and attend a meeting with the Palm Beach County building department to discuss the new electrical building and compliance with the new code.

Consultant will attend up to three (3) review meetings with PBCWUD staff to discuss findings and establish the design and implementation approach to the new high service pump electrical building. Consultant will prepare a summary outline of the key elements to use in the implementation of the new electrical building.

#### **Task 2 – Design and Preparation of Bid Documents**

The design shall comply with the Palm Beach County Water Utilities Minimum Engineering Standards (latest edition), Palm Beach County Environmental Control Rule II, and applicable provisions of the Florida Administrative Code. It is assumed the recently available and new Florida Building Code (FBC) 6<sup>th</sup> Edition to be effective December 31, 2017, will be used in the



design of this building and facilities. Consultant will review the new FBC code and incorporate the adopted code requirements into the design. A coordination meeting will be held with the Palm Beach County Building Department prior to the 60% design.

Consultant will prepare 60%, 90%, and final design drawings and specifications for review by PBCWUD. Consultant will review and respond to PBCWUD comments and utilize agreed upon adjustments for the 60%, 90%, and 100% review sets. Meetings will be held for the 60% and 90% design review.

Consultant will prepare design drawings for the site civil, building layout, elevations, and sections, electrical room layout, instrumentation and control diagrams, high service pump mechanical modifications, and demolition plans. It is assumed that up to 57 drawings (18-20 civil, mechanical, structural; 37 electrical) will be prepared as part of the final set of drawings. The 60% and 90% sets may contain fewer drawings.

Consultant will perform a condition assessment of the existing HSPs. Consultant will evaluate the existing high service pump curves, capacity, and performance, and make a recommendation to either retain or replace the existing pumps. The HSP recommendation will include a net present value analysis comparing the options to retaining the existing pumps and replacing HSP with new more efficient pumps. If the County selects to replace the HSPs the Consultant will design replacement pumps and associate modifications that maintains current rated capacity and include variable frequency drives (VFD's) on all four of the pumps. Consultant will also evaluate the existing check valve arrangement and design a valving arrangement that will operate more efficiently with all four pumps on VFD's. The Consultant will prepare an operating strategy for the high service pump station.

The design drawings will be based on survey and geotechnical information available and provided by the County.

Site drainage will be provided and be limited to the area surrounding the new electrical building. Consultant will prepare and fill-out an Elevation Certificate for the new building (FEMA Form 086-0-33) in order to provide elevation information for post-FIRM (Flood insurance Rate Map) buildings, and provide to PBCWUD for their use.

Hillers Electrical Engineering, Inc. (HEE) will provide the electrical design for the electrical room, including MCC, high service pump VFDs, transfer pump VFD's, PLC panel, generator receptacle, and water quality analyzers.

Consultant will prepare and provide a Class 3 Opinion of Probable Construction Cost (OPCC) based on final design documents and in accordance with the Association for the Advancement of Cost Engineering (AACE) International Recommended Practice No. 18R-97. Consultant will coordinate with HEE in preparation of the Class 3 OPCC.

### **Task 3 - Permitting Phase**

Consultant will include the following permitting phase services:

- Site drainage with SFWMD permitting.
- Submit 3 sets of 11" x 17" signed and sealed plans for Palm Beach County Building Department review and approval.
- Permitting with PBC Health Department for relocation of finished water analyzers including signed and sealed plans and brief engineering report.

#### **Task 4 – Bidding Phase**

Consultant will prepare bid documents for PBCWUD to advertise. Front-end documents will be prepared and provided by the County. Consultant will provide specifications and plans for bidding, in pdf format, 20 MB maximum file size.

Consultant will attend pre-bid meeting. Consultant will provide written responses to contractor requests for information (RFIs) and issue drawing and specification modifications if necessary. Consultant will review submitted contractor bids and coordinate with HEE to prepare a written award recommendation to the COUNTY.

Consultant will review bids and provide an award recommendation of the project construction contract.

#### **ITEMS PROVIDED BY OWNER**

1. Front end contract documents.
2. PBC Standard Technical Specifications which shall be modified by the Engineer.
3. All permit application fees.
4. Zoning site plan approval.
5. Color scheme for building exterior.

#### **DELIVERABLES**

1. 60% Review documents – drawings and specifications (PDF)
2. 90% Review documents – drawings and specifications (PDF)
3. 100% Final documents for permitting to include drawings and specifications (PDF) and 3 signed and sealed sets 11" x 17" plans.
4. Bid Documents – (PDF) max file size 20 MB per file.
5. Conformed bid documents incorporating addendums. Provide six (6) hardcopy sets of plans signed and sealed in 24x36 format and CADD and PDF on CD.

#### **ITEMS NOT INCLUDED**

1. FDEP permitting is not anticipated to be required.

#### **COMPENSATION**

Compensation will be based on a not to exceed basis in the amount of \$183,829.20 and billed on a computation of time charges plus expenses (see **Attachment B**).

#### **SBE PARTICIPATION**

##### **1. SCHEDULE 3(A) – Professional Services Activity Report**

This form shall be submitted by the prime contractor with each payment application when SBE and/or M/WBE sub-consultants are utilized in the performance of the contract. This form shall contain the names of all SBE and M/WBE sub-consultants, specify the sub-consultants' dollar amount for each sub-consultants and show amount drawn and payments to date issued to sub-consultants.

## **2. SCHEDULE 4 – SBE-M/WBE Payment Certification**

A schedule 4 for each SBE and/or M/WBE sub-consultant shall be completed and signed by the proposed SBE and/or M/WBE after receipt of payment from the prime. When applicable, the prime shall submit this form with each application submitted to the county for payment to document payment issued to a sub-consultant in the performance of the contract.

SBE participation is included in the **ATTACHMENT F** under this authorization. The attached Schedule 1 defines the SBE applied to this CSA/Contract and Schedule 2 establishes the SBE contribution from each subcontractor (Letter of Intend to perform as an SBE).

**ATTACHMENT - B**

BUDGET SUMMARY												
Task	Task Description	Labor Classification and Hourly Rate									Total	Sub
		Principal	Senior Prof		Intern							
			Pr. Mgr	Professional	Engineer/ Analyst	Designer	Tech Support	Snr Support Staff	Support Staff			
Number	Task Description									Labor	Services	
1	<b>Preliminary Evaluation</b>											
	Evaluate options (phasing, siting, constructibility, costs)		12		12	12			6	\$6,084.00		
	Bldg Dept Mtg/Coordination		6		8				4	\$2,532.00		
	Meetings to discuss		8		10				4	\$3,192.00		
	HEE Subconsultant									\$0.00	16,903.68	
	Subtotal Task 1	0	26	0	30	12	0	0	14	\$11,808.00	16,903.68	
2	<b>PREPARATION OF DESIGN DOCUMENTS</b>											
	Review current code		4		4			2		\$1,554.00		
	Site Visits and Data Collection		8		6	10				\$3,774.00		
	Prepare 60% Building & Siting layout		8		40	50				\$12,846.00		
	Prepare 60% HSP layout		12		20	24				\$8,064.00		
	Prepare 90% Building & Siting layout		6		22	24				\$6,948.00		
	Prepare 90% HSP layout		6		20	24				\$6,732.00		
	Prepare 100% Building & Siting layout		6		18	12				\$4,896.00		
	Prepare 100% HSP layout		6		18	12				\$4,896.00		
	Prepare specifications (90%, 100%)		4		8				12	\$2,760.00		
	Meetings with staff & Responses		8		12				12	\$4,080.00		
	Prepare OPC (60%,90%, 100%)		4		8					\$1,752.00		
	HVAC Design		4	12		30				\$6,846.00		
	Project Management and Administration		6					6	6	\$2,538.00		
	HEE Subconsultant									\$0.00	71,858.08	
	Subtotal Task 2	0	82	12	176	186	0	8	30	\$67,686.00	71,858.08	
3	<b>Permitting</b>											
	Drainage/Site Permitting (SFWMD)/Elev Cert		12		20				8	\$5,496.00		
	FDEP Permitting (Water)		4		10					\$1,968.00		
	HEE Subconsultant									\$0.00	0.00	
	Subtotal Task 3	0	16	0	30	0	0	0	8	\$7,464.00	0.00	
4	<b>Bidding</b>											
	Prepare and submit FINAL bid documents		4		8	12			8	\$4,044.00		
	HEE Subconsultant									\$0.00	4,065.44	
	Subtotal Task 4	0	4	0	8	12	0	0	8	\$4,044.00	4,065.44	
	Labor Subtotal Hours	0	128	12	244	210	0	8	60		662.00	
	Labor Raw Costs	\$84.00	\$74.00	\$53.00	\$36.00	\$45.00	\$36.00	\$39.00	\$28.00			
	Labor Multiplier	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			
	Labor SubTotal	252.00	222.00	159.00	108.00	135.00	108.00	117.00	84.00			
	Labor Total	\$0.00	\$28,416.00	\$1,908.00	\$26,352.00	\$28,350.00	\$0.00	\$936.00	\$5,040.00	\$91,002.00		
	Subcontract Labor Total	\$ -									92,827.20	
	Subcontract Multiplier										1.0	
	Subcontract Total	\$ -									\$92,827.20	
	Out of Pocket Expenses (mileage, copies, printing, etc)										\$0.00	
	TOTAL	\$ -									\$183,829.20	



*HILLERS ELECTRICAL ENGINEERING, INC.*

November 20, 2017

Mark Miller, P.E.  
Kimley-Horn  
1920 Wekiva Way, Suite 200  
West Palm Beach, FL 33411

Subject: WTP11 High Service Pump Electrical Building Replacement

Dear Mark:

Hillers Electrical Engineering, Inc. (HEE) is pleased to provide Kimley-Horn a proposal for the electrical and I&C design services associated with the above referenced project. We recommend the following:

- In order to bring the cost of construction significant down and not tear up the whole site we recommend to keep the existing high service pump electrical building structure and build a new structure near it. This way we can make junction boxes with water proof splices where the existing MCC's, lighting panels, and C and I panels are located. The existing structure can be used for storage if feasible.
- In the interest of reducing and simplifying electrical change over to the new high service electrical building we will design new MCC's.
- Existing PLC panel is running out of space for new I/O extension rack and will design new PLC panel with additional future spaces.

The scope of services is as follows:

- Construct a new high service pump electrical building adjacent to the existing one, provide finish water sampling/analyzer room separate from electrical room
- Perform site visits and field data collection for a preliminary evaluation and feasibility study of keeping existing HSP structure, test the existing feeder wires, provide finding in a technical memorandum. Attend up to 3 review meetings for preliminary evaluation with Owner.
- Re-use existing 2 HSP VFD's and design 2 new VFD's for the remaining constant speed pumps
- Modify the constant speed transfer pumps starters to VFD's
- Design new MCC arrangement with main/tie/main arrangement
- Design generator receptacle or generator connection box for MCC arrangement
- Design fire alarm system, site and building lighting system, access control system, security camera system associated with new high service pump electrical building.
- Perform 60%, 90% and 100% design bid ready electrical and instrumentation documents
- Provide bidding assistance

Page 2  
Mark Miller, P.E.

Our proposed electrical and instrumentation design, permitting, and bidding services fee is \$ 92,827.20 as per attached fee breakdown sheet. Preliminary drawing list is also attached.

Assumptions;  
-the fees are based on no increase in MCC capacity and feeder capacity.

If you have any questions, please do not hesitate to call me.

Sincerely,

A handwritten signature in black ink, appearing to read "Thein Win". The signature is written in a cursive style with a horizontal line underneath the name.

Thein Win, P.E.

PBCWUD WTP11 HIGH SERVICE PUMP STATION ELECTRICAL ROOM - DESIGN								
HILLERS ELECTRICAL ENGINEERING, INC.								
Scope Fee Breakdown								
11/20/2017								
	Rate	\$210.16	\$153.36	\$114.80	\$96.20	\$113.60	\$65.32	
	Project Manager	Professional Eng	Engineer	CADD	Construction Coord.	Secretarial	Total	TOTAL
PHASE OF WORK	Hours	Hours	Hours	Hours	Hours	Hours	Hours	TASK COST
Preliminary Evaluation								
Site Visits and Data Collection			24	16			40	\$5,517.44
Feeder Wires Testing			16	16			32	\$4,290.56
Tech Memo	2		24		12		38	\$5,255.36
3 Review Meetings			12				12	\$1,840.32
<b>Design</b>								<b>\$71,858.08</b>
60% Design Elec. Drawings	2		36		32		70	\$9,019.68
60% Design I&C Drawings	2		28		24		54	\$7,023.20
60% Design Fire & Access Drawings	2		16		24		42	\$5,182.88
60% Design Specifications	2		16				18	\$2,874.08
60% Cost Estimate	1		12				13	\$2,050.48
60% Review Meeting and Excel Responses			6				6	\$920.16
90% Design Elec. Drawings	4		36		32		72	\$9,440.00
90% Design I&C Drawings	4		28		20		50	\$6,752.00
90% Design Fire & Access Drawings	2		24		24		50	\$6,409.76
90% Design Specifications	2		16				18	\$2,874.08
90% Cost Estimate	1		8				9	\$1,437.04
90% Review Meeting and Excel Responses			6				6	\$920.16
100%/Bid Design Elec. Drawings	4		24		24		52	\$6,830.08
100%/Bid Design I&C Drawings	4		18		12		34	\$4,755.52
100% Design Fire & Access Drawings	2		12		12		26	\$3,415.04
100%/Bid Design Specifications	1		6				7	\$1,130.32
100%/Bid Cost Estimate	1		4				5	\$823.60
<b>Permitting and Bidding</b>								<b>\$4,065.44</b>
Permitting Sign & Seal			4		4		8	\$998.24
Building Depart. Comments-responses			8				8	\$1,226.88
Pre-Bid Meeting			4				4	\$613.44
Bidding RFI's - responses			8				8	\$1,226.88
<b>Total Hours</b>	<b>34</b>		<b>310</b>		<b>206</b>		<b>548</b>	
<b>Total Labor Cost</b>	<b>\$7,145.44</b>		<b>\$47,541.60</b>		<b>\$20,009.60</b>			<b>\$92,827.20</b>

<b>Preliminary Drawing List:</b>	
E-1	ELECTRICAL LEGEND AND SYMBOLS
E-2	ELECTRICAL GENERAL NOTES
E-3	ELECTRICAL SITE PLAN - KEYED PLAN
E-4	ENLARGED ELECTRICAL SITE PLAN - SHEET 1
E-5	ENLARGED ELECTRICAL SITE PLAN - SHEET 2
E-6	EXISTING SWGR ONE LINE DIAGRAM AND ELEVATION
E-7	MCC-3 DEMOLITION ONE LINE AND ELEVATION
E-8	MCC-4 DEMOLITION ONE LINE AND ELEVATION
E-9	PROPOSED MCC-3 ONE LINE AND ELEVATION
E-10	PROPOSED MCC-4 ONE LINE AND ELEVATION
E-11	ELECTRICAL SCHEMATIC - SHEET 1
E-12	ELECTRICAL SCHEMATIC - SHEET 2
E-13	COMMUNICATION RISER DIAGRAM
E-14	RISER DIAGRAMS - SHEET 1
E-15	RISER DIAGRAMS - SHEET 2
E-16	PANEL SCHEDULE - SHEET 1
E-17	PANEL SCHEDULE - SHEET 2
E-18	LUMINAIRE SCHEDULE AND CIRCUIT SCHEDULES
E-19	YARD CONDUIT SCHEDULES
E-20	DEMOLITION PHOTOS - SHEET 1
E-21	DEMOLITION PHOTOS - SHEET 2
E-22	EXISTING HSP ELECTRICAL ROOM - DEMOLITION PLAN
E-23	NEW ELECTRICAL ROOM - LIGHTING PLAN
E-24	NEW ELECTRICAL ROOM - POWER PLAN
E-25	NEW ELECTRICAL ROOM - GROUNDING PLAN
E-26	ELECTRICAL DETAILS - SHEET 1
E-27	ELECTRICAL DETAILS - SHEET 2
E-28	ELECTRICAL DETAILS - SHEET 3
E-29	SITE LIGHTING - PHOTOMETRIC PLAN
F-1	FIRE ALARM LEGEND AND NOTES
F-2	FIRE ALARM PLAN
F-3	FIRE ALARM RISER AND SCHEDULES
F-4	FIRE ALARM DETAILS
I-1	INSTRUMENTATION LEGEND AND SYMBOLS
I-2	COMMUNICATION BLOCK DIAGRAM
I-3	P&ID - HIGH SERVICE PUMP STATION
I-4	P&ID - MISCELLANEOUS SIGNALS TO RIO-8
I-5	EXISTING I-3 AND C-3 PANEL TERMINAL SCHEDULE
I-6	DEMOLITION PHOTOS
I-7	NEW RIO-8 PANEL DETAIL
I-8	INSTRUMENTATION DETAILS - SHEET 1
I-9	INSTRUMENTATION DETAILS - SHEET 2



# ATTACHMENT - C

## PROJECT SCHEDULE

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

### Engineering Services

### Completion Date from Notice to Proceed

Preliminary Evaluation of Options	8 weeks
Prepare 60% Documents	16 weeks
60% Review	18 weeks
Prepare 90% Documents	24 weeks
90% Review	26 weeks
Prepare 100% Documents	28 weeks
Bid Documents	32 weeks

Note schedule assumes that County's comments will be provided in 2 weeks.

**ATTACHMENT D  
SCHEDULE 1**

**LIST OF PROPOSED SBE-M/WBE CONSULTANT/SUBCONSULTANTS**

PROJECT NAME: Water Treatment Plant 11 High Service Pump Electrical Building Replacement PROJECT NO. WUD 18-005  
 NAME OF PRIME CONSULTANT: Kimley-Horn and Associates, Inc. ADDRESS: 1920 Wekiva Way, Suite 200, West Palm Beach, FL 33411  
 CONTACT PERSON: Mark Miller, P.E . PHONE NO.: 561-840-0258 FAX NO.: 561-863-8175  
 DESCRIPTION OF SERVICES: Design Phase Services

PLEASE LIST THE DOLLAR AMOUNT AND PERCENTAGE OF WORK TO BE COMPLETED BY THE PRIME ON THIS PROJECT.  
 PLEASE ALSO LIST THE DOLLAR AMOUNT AND PERCENTAGE OF WORK TO BE COMPLETED BY ALL SUB-CONSULTANTS ON THIS  
 PROJECT. IDENTIFY ALL APPLICABLE CATEGORIES OF CONSULTANT/SUBCONSULTANTS

Name, Address and Phone Number	(Check one or both Categories)		Consultant/Sub-consultant Dollar Amount and Percentage of Services					
	<u>M/WBE</u>	<u>SBE</u>	Black	Hispanic	Women	Caucasian	Other (Please Specify)	
	Minority Business	Small Business						
1. Hillers Electrical Engineering	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____	_____	\$92,827.20 50.49%	_____	
2.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____	
3.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____	
4.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____	
5.	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____	
(Please use additional sheets if necessary)								
Total SBE Participation 50.49%		Total M/WBE Participation 50.49%		Total	_____	_____	\$92,827.20	_____

NOTE: 1. The percentages listed on this form must be supported by the sub-consultant included on Schedule 2 in order to be counted toward goal attainment.  
 2. Firms may be certified by Palm Beach County as an SBE and/or M/WBE  
 Rev. 11-27-17

**OSBA SCHEDULE 2  
LETTER OF INTENT TO PERFORM AS AN SBE-M/WBE CONSULTANT/SUBCONSULTANT**

This document must be completed by ALL SBE-M/WBE's and submitted with this CSA. Specify in detail, the particular consulting services to be performed and the dollar amount and/or percentage for each services. SBE credit will only be given for services which the SBE-M/WBE's is certified to perform. Failure to properly complete Schedule 2 will result in your SBE participation not being counted.

PROJECT NUMBER: WUD 18-005 PROJECT NAME: Water Treatment Plant 11 High Service Pump Electrical Building

TO: \_\_\_\_\_  
(Name of Prime Consultant)

The undersigned is certified by Palm Beach County as a - (check one or more, as applicable):

Small Business Enterprise  X  Minority Business Enterprise \_\_\_\_\_

Black \_\_\_\_\_ Hispanic \_\_\_\_\_ Women \_\_\_\_\_ Caucasian \_\_\_\_\_ Other (Please Specify) \_\_\_\_\_

Date of Palm Beach County Certification: \_\_\_\_\_

The undersigned is prepared to perform the following described consulting services in connection with the above project and will enter into a formal agreement for work with you, conditioned upon execution of a contract with Palm Beach County.

Additional Sheets May Be Used As Necessary

(Specify in detail the particular consulting services thereof to be performed)

Electrical Engineering and I&C Design  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total SBE-M/WBE Participation 50.49%

If undersigned intends to sub-subcontract any portion of this job to a certified SBE-M/WBE or a non-SBE sub-consultant, please list the name of that sub-consultant and the amount below.

Price or Percentage \$92,827.20

Hillers Electrical Engineering, Inc.  
(Name of Sub-consultant)

The Prime Consultant affirms that it will monitor the SBE-M/WBE listed to ensure the SBE-M/WBE perform the services with their own work force. The undersigned SBE-M/WBE Prime or SBE-M/WBE sub-consultant affirms that it has the resources necessary to perform the work listed without subcontracting to a non-certified SBE or any other certified SBE sub-consultants except as noted above.

The undersigned sub-consultant understands that the provision of this form to the Prime Consultant does not prevent sub-consultant from providing quotations to other.

Hillers Electrical Engineering, Inc.  
Print name of  
SBE-M/WBE Sub-consultant

By: \_\_\_\_\_  
(Signature)

Paul Hillers, P.E., President  
Print name/title of person executing on behalf  
of SBE-M/WBE

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



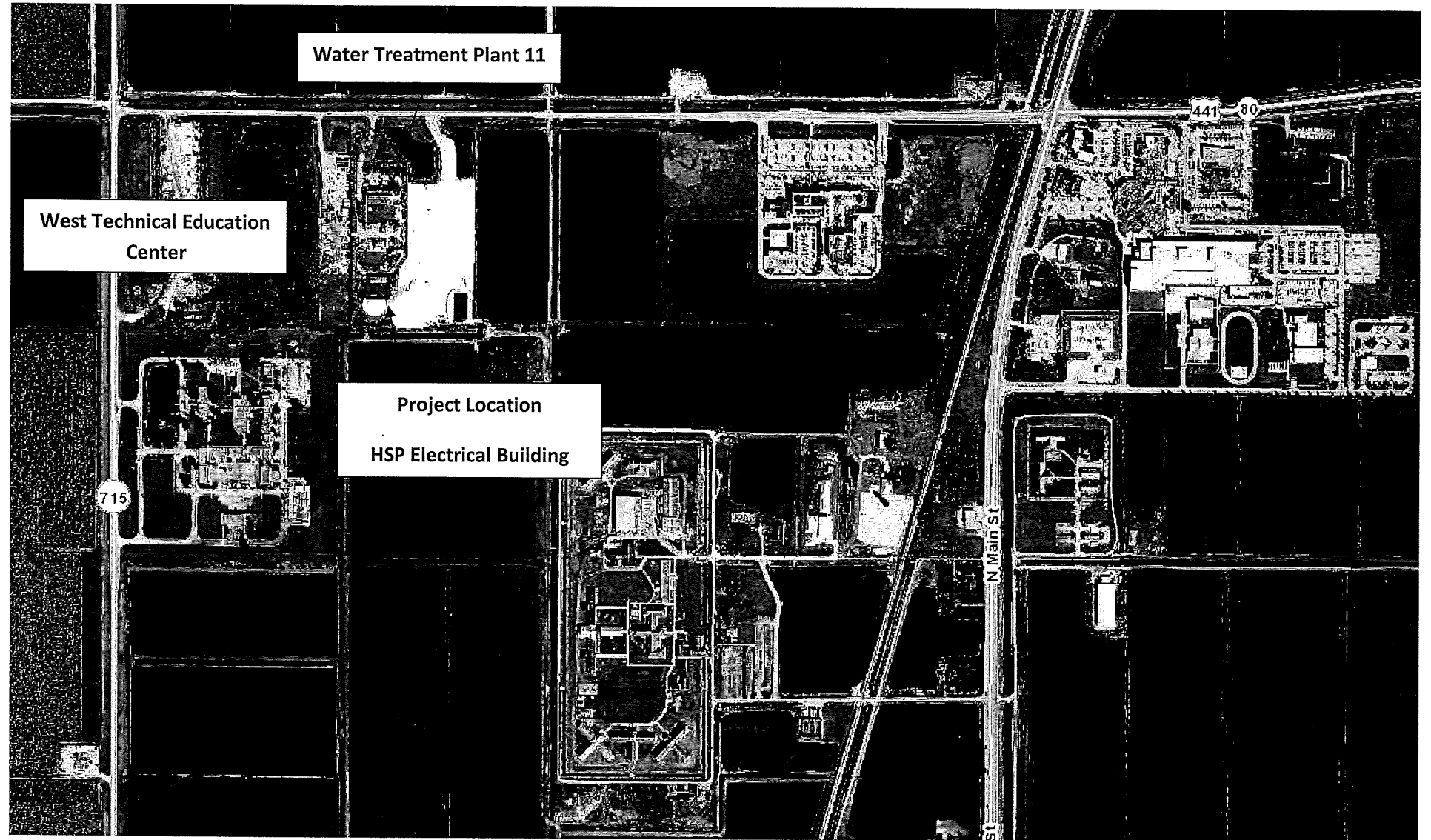
# ATTACHMENT - F

## AUTHORIZATION STATUS REPORT

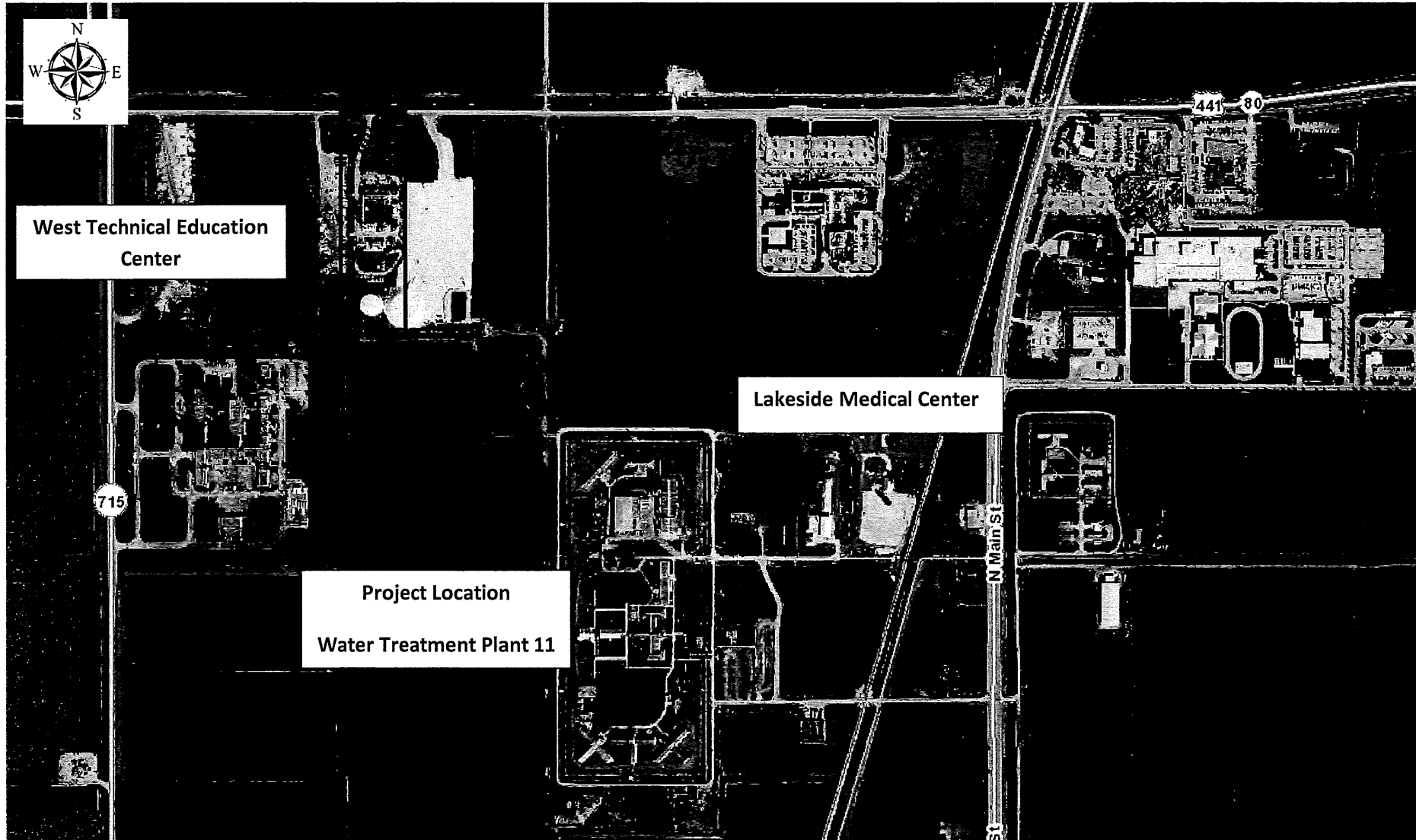
### SUMMARY OF SBE / MINORITY BUSINESS TRACKING

	Total	SBE	M/WBE
<b>Current Proposal</b>			
Value of Authorization No. 4	\$183,829.20		
Value of SBE - M/WBE Letters of Intent	\$92,827.20	\$92,827.20	\$0.00
Actual Percentage	50.49%	50.49%	0.00%
<b>Signed Authorizations</b>			
Total Value of Authorizations	\$233,384.47		
Total Value of SBE - M/WBE Signed Subcontracts	\$136,187.47	\$136,187.47	\$22,203.12
Actual Percentage	58.35%	58.35%	9.51%
<b>Signed Authorizations Plus Current Proposal</b>			
Total Value of Authorizations	\$417,213.67		
Total Value of Subcontracts & Letters of Intent	\$229,014.67	\$229,014.67	\$22,203.12
Actual Percentage	54.89%	54.89%	5.32%
<b>GOAL</b>		<b>28.00%</b>	<b>7.00%</b>

**ATTACHMENT G**  
*Location Map*



ATTACHMENT 2  
Location Map



**ATTACHMENT 3**

**Summary of Certificates**

**This report displays detailed Certificate of Insurance information for a selected Insured. Any items shown in red are deficient.**

Thursday, February 01, 2018

Insured: Kimley-Horn and Associates, Inc. Insured ID: 17-007-PBC

Status: Compliant

ITS Account Number: PLC2681

Project(s): Palm Beach County - Water Utilities

Insurance Policy	Required	Provided	Override
<u>General Liability</u>			
Expiration: 4/1/2018			
General Aggregate:	\$500,000	\$2,000,000	
Products - Completed Operations Aggregate:	\$0	\$0	
Personal And Advertising Injury:	\$0	\$0	
Each Occurrence:	\$500,000	\$1,000,000	
Fire Damage:	\$0	\$0	
Medical Expense:	\$0	\$0	
<u>Automobile Liability</u>			
Expiration: 4/1/2018			
	All Owned Autos	Any Auto not provided	X
	Hired Autos	not provided	X
	Non-Owned Autos	not provided	X
Combined Single Limit:	\$500,000	\$1,000,000	
<u>Workers Compensation/Employers Liability</u>			
Expiration: 4/1/2018			
<u>Professional Liability</u>			
Expiration: 4/1/2018			
Each Occurrence:	\$3,000,000	\$3,000,000	
Aggregate Limit:	\$3,000,000	\$3,000,000	

**Notifications**

There were no deficiency letters issued.

Do you have an updated Certificate? Click the button below to submit a Certificate.