

PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY

Meeting Date: September 11, 2012

Consent [X]
Public Hearing []

Regular []

Department : Water Utilities Department

I. EXECUTIVE BRIEF

Motion and Title: Staff recommends motion to approve: Consultant Services Authorization No. 12 to the Electrical, Instrumentation and Telemetry Engineering/Professional Services Contract with Hillers Electrical Engineering, Inc. (R2011-0637) for the Water Treatment Plant No. 9 (WTP 9) Programmable Logic Controller (PLC) Programming in the amount not to exceed \$149,536.40.

Summary: On May 3, 2011, the Palm Beach County Board of County Commissioners approved the continuing Contract for Electrical, Instrumentation and Telemetry Consulting Services with Hillers Electrical Engineering, Inc. (R2011-0637) to obtain engineering/professional service for utility related projects. The existing WTP 9 PLC's are becoming obsolete and are being upgraded to a newer version which is necessary to assure uninterrupted water treatment in the event of a PLC system failure. This Consultant Services Authorization will provide for re-programming of all plant functions controlled by the PLC's. The new PLC system will also improve operational efficiency through enhanced monitoring of electric power consumption. The Small Business Enterprise (SBE) participation goal established by the SBE Ordinance (R2002-0064) is 15% overall. The Contract with Hillers Electrical Engineering, Inc. provides for SBE participation of 80% overall. This authorization includes 100% overall participation. The cumulative SBE participation, including this Consultant Services Authorization is 100% overall. Hillers Electrical Engineering, Inc. is a Palm Beach County and Certified SBE Company. (WUD Project No. 12-014) District 5 (JM)

Background and Justification: WTP 9 was constructed over ten (10) years ago. The Allen-Bradley Series 5 PLC's are no longer manufactured. Replacing the existing PLC's with the newer ControlLogix Series provides for continual support and replacement parts. PLC's are industrial computers which interface between the personnel computers used by the plant staff and the instruments, motor controllers and motorized valves that control the various plant functions. This Authorization provides the funding for Hillers Electrical Engineering, Inc. to program the replacement ControlLogix PLC's.

Attachments:

1. Location Map
2. Two (2) Original Consultant Service Authorization No. 12

Recommended By:  8/22/12
Department Director Date

Approved By:  9/6/12
Assistant County Administrator Date

II. FISCAL IMPACT ANALYSIS

A. Five Year Summary of Fiscal Impact:

Fiscal Years	2012	2013	2014	2015	2016
Capital Expenditures	<u>\$149,536.40</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>
NET FISCAL IMPACT	<u>\$149,536.40</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
# 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 W005 Object 6541

Is Item Included in Current Budget? Yes No

Reporting Category N/A

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

One (1) time operating expenditure from the user fees and balance brought forward

C. Department Fiscal Review: dehumist

III. REVIEW COMMENTS

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

[Signature]
OFMB
8/22/12
JB
aw/12

[Signature] 9/5/12
Contract Development and Control

B. Legal Sufficiency:

[Signature] 9/6/12
Assistant County Attorney

C. Other Department Review:

Department Director

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

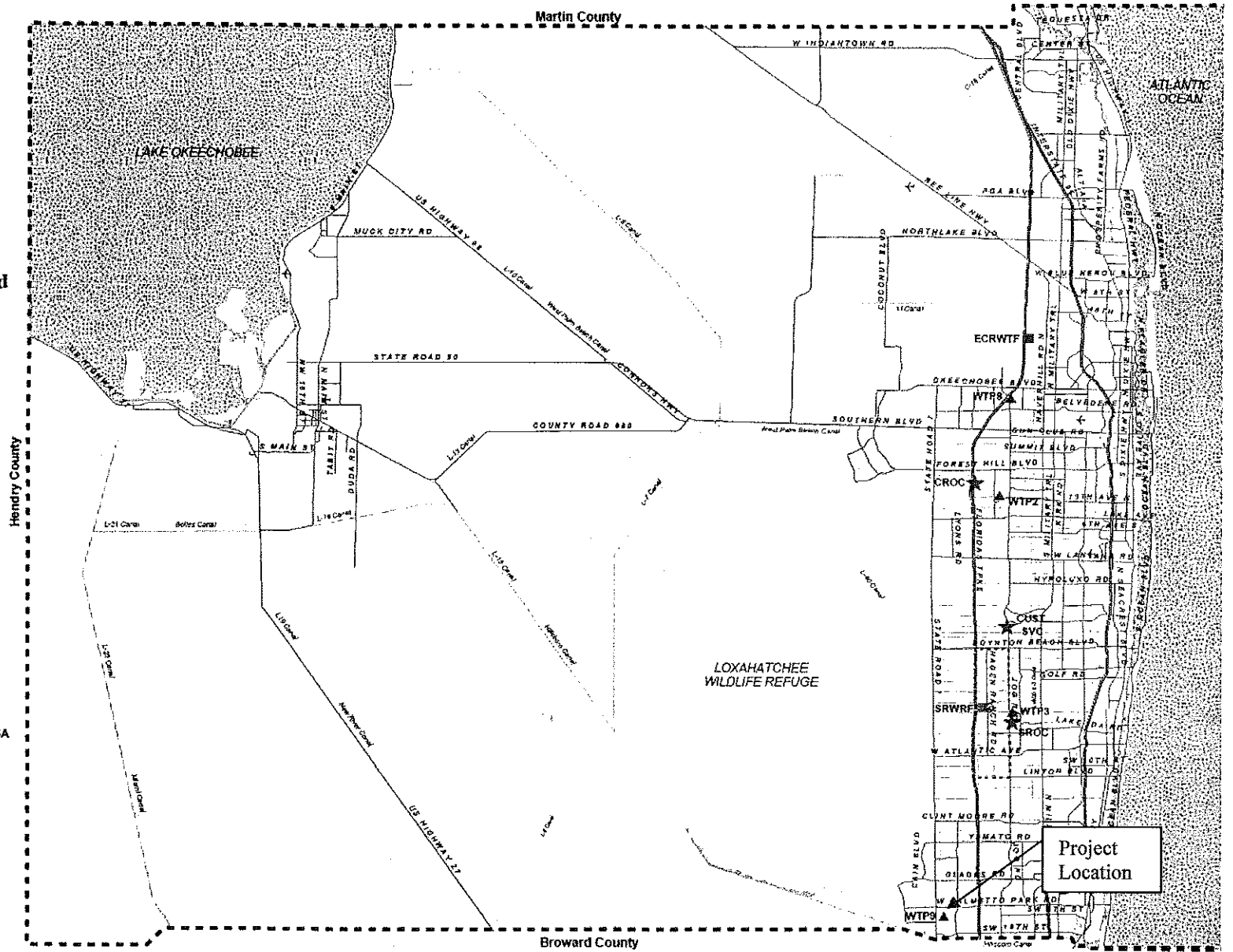
ATTACHMENT-D



**Palm Beach County
Water Utilities
Department
Service Area (SA) and
Major Facilities**

Legend

- P.B.C.W.U.D. SA
- MANDATORY RECLAIMED SA
- COUNTY LIMITS
- ★ Administration
- Water Reclamation Plant
- ▲ Water Treatment Plant
- Wetlands



**Project
Location**

WTP 9 PLC Replacement Programming WUD 12-014

CONSULTANT SERVICES AUTHORIZATION NO. 12

Project No. WUD 12-014

Budget Line Item No. 4001-720-2532-4615

Project Title: WTP 9 PLC Replacement Programming

District No.: 5

THIS AUTHORIZATION No. 12 to the Contract for Consulting/Professional Services dated May 3, 2011 with an effective date of June 3, 2011(Resolution/Document R2011 0637), 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 80.00% SBE participation overall. This Consultant Services Authorization includes 100.00% overall. The cumulative SBE participation, including this authorization is 100.00% overall. Additional authorization will be utilized to meet or exceed the stated overall participation goal.

1. **CONSULTANT: Hillers Electrical Engineering, Inc. (HEE)**
2. **ADDRESS: 23257 State Rd 7, Suite 100, Boca Raton, FL 33428**
3. Description of Services to be provided by the Consultant:

The existing Allen Bradley PLC 5 including CPU programming card, process input and output cards and communication cards are old and obsolete. The County is in the process of replacing obsolete PLC 5 hardware with new Allen Bradley Control Logix PLC family. Consequently, the PLC software program needs to be re-written for the new Allen Bradley Control Logix family.

See EXHIBIT "A".

4. Services completed by the Consultant to date:
See EXHIBIT "B" and "C".
5. Consultant shall begin work promptly on the requested services.
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: \$149,536.40
 - B. Fixed price of \$
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.

- 8. EXCEPT AS HEREBY AMENDED, CHANGED OR MODIFIED, all other terms, conditions and obligations of the Contract dated May 3, 2011 with an effective date of June 3, 2011 remain in full force and effect.
- 9. This project will be designed in accordance with the Palm Beach County Water Utilities Department Manual of Minimum Engineering Standards.

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

ATTEST:

SHARON R. BOCK
CLERK AND COMPTROLLER

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

By: _____
Shelley Vana, Chair

APPROVED AS TO FORMAND LEGAL
SUFFICIENCY

APPROVED AS TO TERMS AND
CONDITIONS

Assistant County Attorney

Bevin A. Beudet

Bevin A. Beudet, Director
Water Utilities Department

HILLERS ELECTRICAL ENGINEERING, INC.

Paul Hillers

By: _____
Title: President *Paul Hillers*

Jacki Yasin

(Witness signature)

Florida
(Insert state of corporation)

Jacki Yasin

(Witness name printed)

7/30/12

(Date of execution)

[Signature]

(Witness signature)

Amy L. Champagne + Baker

(Witness name printed)

23257 State Rd 7, Suite 100
Boca Raton, FL 33428

Subcontractor's City, State, Zip Code

EXHIBIT A

CONSULTANT SERVICE AUTHORIZATION NO. 12

PALM BEACH COUNTY WATER UTILITIES DEPARTMENT ENGINEERING/PROFESSIONAL SERVICES

SCOPE OF WORK FOR WTP 9 PLC Replacement Programming

INTRODUCTION

Palm Beach County (COUNTY) entered into an agreement entitled Contract for Engineering/ Professional Services - Palm Beach County Utilities Department Project No. WUD 11-006 (CONTRACT) with Hillers Electrical Engineering, Inc. (CONSULTANT) to provide engineering services for various general activities (Reference Document R2011 0637). This Consultant Service Authorization will be performed under that CONTRACT.

SCOPE OF SERVICES

Currently WTP 9 is controlled by Allen Bradley PLC 5 family, which is a 25 years old technology PLC which is now obsolete and in the near future will not be supported by Allen Bradley technical support.

WTP 9 consists of the Wells, Pretreatment System that includes wells and pretreatment chemicals, NF system that includes NF Feed pumps and eight trains, Post Treatment System including clearwell, transfer pumps and post treatment chemicals, and Distribution system that includes storage tanks and high-service pumps.

The entire existing PLC logic will be rewritten to accommodate the new PLC processors.

The new PLC processors will be Allen Bradley Control Logix.

The control logic will be rewritten according to the original operation and in coordination with the Plant staff.

The scope of the work includes:

1. PLC programming for entire WTP 9 including all the systems respectively:
 - Wells
 - Pretreatment System
 - NF System
 - Post Treatment System
 - Distribution System
 - Chemical Systems

2. Produce a new iFIX database
3. Coordination with PBC iFIX group
4. Testing and Start-up services for a bump-less software transition to the new family of processors.
5. PLC program documentation
6. Operation Training

M/WBE PARTICIPATION

EXHIBIT A

As prescribed under Section 7.5 of the CONTRACT, SBE participation is included in Attachment C under this Authorization. The attached Schedule 1 defines the SBE participation.

ATTACHMENT – A	Budget Summary
ATTACHMENT – B	Project Schedule
ATTACHMENT – C	SBE Schedules 1 & 2
ATTACHMENT – D	Location Map

ATTACHMENT - A

Authorization No. 12

WTP 9 PLC Replacement Programming

LABOR CATEGORY	RAW HOURLY RATE				TOTAL HOURS	LABOR @ 2.6 MULT
		Programming	Task	Task		
Project Manager	68.00	60			60	\$10,608.00
Project Engineer	50.00	675			675	\$87,750.00
Engineer	37.00	532			532	\$51,178.40
Construction Coordinator	37.00				0	\$0.00
Secretarial	21.00				0	\$0.00
TOTAL LABOR HOURS		1,267	0	0	1,267	
TOTAL LABOR DOLLARS		\$149,536.40	\$0.00	\$0.00		\$149,536.40
SUBCONTRACTORS						
EXPENSES						
Travel						\$0
Copies, Production, Postage						\$0
TOTAL EXPENSES						\$0
TOTAL FEE FOR AUTHORIZATION						\$149,536.40

ATTACHMENT - B

PROJECT SCHEDULE

SCHEDULE

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

<i>Engineering Services</i>	<i>Completion Date From Notice to Proceed</i>	<i>Deliverables</i>
PLC Programming	6 months	Programming Files

ATTACHMENT C

SCHEDULE #1

LIST OF PROPOSED SBE-M/WBE PRIME/SUBCONTRACTORS

PROJECT NAME: WTP 9 PLC Replacement Programming PROJECT NUMBER: WUD 12-014

NAME OF PRIME BIDDER: Hillers Electrical Engineering, Inc. ADDRESS: 23257 State Rd 7, Suite 100, Boca Raton, FL 33428

CONTACT PERSON: Paul Hillers PHONE NO. 561-451-9165 FAX NO. 561-451-4886

BID OPENING DATE: _____ DEPARTMENT: Engineering

PLEASE IDENTIFY ALL APPLICABLE CATEGORIES

Name, Address and Telephone Number of Minority Contractor	(Check one or both Categories)		Dollar Amount				
	Minority Business	Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
Hillers Electrical Engineering, Inc. 23257 State Rd 7, Suite 100 Boca Raton, FL 33428 (561) 451-9165	<input checked="" type="checkbox"/>	<input type="checkbox"/>	\$	\$149,536.40	\$	\$	\$
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
	<input type="checkbox"/>	<input type="checkbox"/>	\$	\$	\$	\$	\$
PRIME CONTRACTOR TO COMPLETE:	TOTAL		\$ -	\$149,536.40	\$ -	\$ -	\$ -
BID PRICE: <u>\$149,536.40</u>			Total Value of SBE Participation: <u>\$149,536.40</u>				

- NOTE:**
1. The amount listed on this form for a Subcontractor must be supported by price or percentage included on Schedule 2 or a proposal from each Subcontractor listed in order to be counted toward goal attainment.
 2. 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 M/WBE, please indicate the dollar amount under the appropriate category.
 3. M/WBE information is being collected for tracking purposes only.

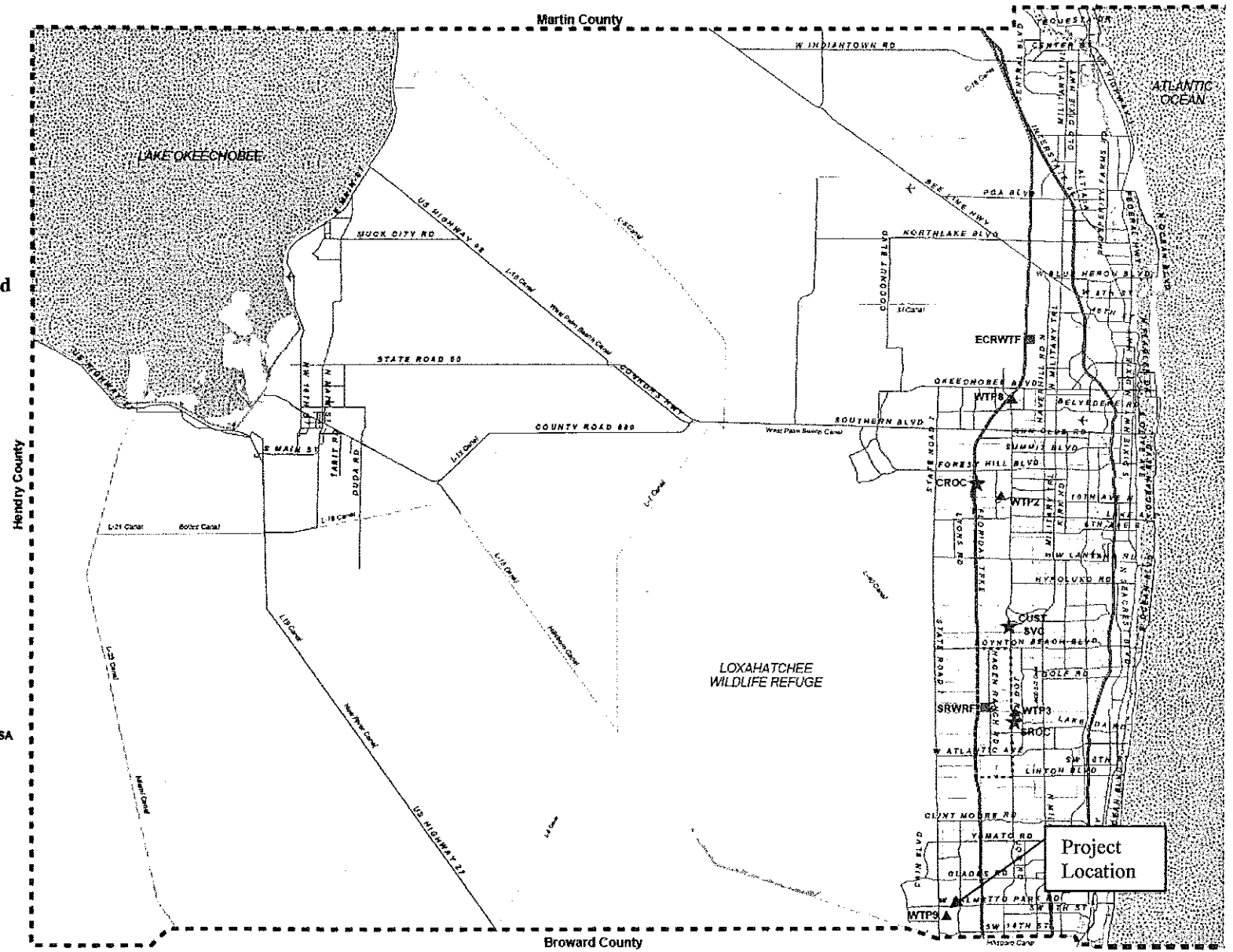
ATTACHMENT-D



Palm Beach County
Water Utilities
Department
Service Area (SA) and
Major Facilities

Legend

- P.B.C.W.U.D. SA
- MANDATORY RECLAIMED SA
- COUNTY LIMITS
- ★ Administration
- Water Reclamation Plant
- ▲ Water Treatment Plant
- Wetlands



WTP 9 PLC Replacement Programming WUD 12-014

EXHIBIT - C

AUTHORIZATION STATUS REPORT SUMMARY OF SMALL BUSINESS TRACKING SYSTEM

	TOTAL	SBE
<u>Current Proposal</u>		
Value of Authorization No.12	\$ 149,536.40	\$ 149,536.40
Value of SBE Letters of Intent	\$ 149,536.40	\$ 149,536.40
Actual Percentage	100.00%	
<u>Signed Authorizations</u>		
Authorization No. 1	\$ 22,079.00	\$ 22,079.00
Authorization No. 2	\$ 49,327.00	\$ 49,327.00
Authorization No. 3	\$ 24,232.00	\$ 24,232.00
Authorization No. 4	\$ 71,289.00	\$ 71,289.00
Authorization No. 5	\$ 4,997.00	\$ 4,997.00
Authorization No. 6	\$ 25,085.00	\$ 25,085.00
Authorization No. 7	\$ 60,190.00	\$ 60,190.00
Authorization No. 8	\$ 8,015.80	\$ 8,015.80
Authorization No. 9	\$ 16,772.60	\$ 16,772.60
Authorization No. 10	\$ 47,023.60	\$ 47,023.60
Total Value of Signed Authorizations	\$ 329,011.00	\$ 329,011.00
Total Value of SBE Letters of Intent	\$ 329,011.00	
Actual Percentage	100.00%	
<u>Signed Authorizations Plus Current Proposal</u>		
Total Value of Authorizations	\$ 478,547.40	
Total Value of Subcontracts & Letters of Intent	\$ 478,547.40	
Actual Percentage	100.00%	
GOAL		
	80.00%	