

**Work Authorization No. HS0745**  
**NRWWTP SCADA System Replacement**  
**Under**  
**Agreement between Broward County and Hazen and Sawyer, P.C.**  
**for**  
**General Consultant Services for Water and Wastewater Services**

1. This Work Authorization is issued pursuant to the Agreement between Broward County (hereinafter referred to as "COUNTY") and Hazen and Sawyer, P.C. for General Consultant Services for Water and Wastewater Services (hereinafter "the Agreement"), which was approved by the Board of County Commissioners on June 24, 2008.

2. This Work Authorization permits Hazen and Sawyer, P.C. (hereinafter referred to as "CONSULTANT") to provide the services described in Exhibit "A" to this Work Authorization. These services are authorized pursuant to Article 3 of the Agreement.

3. Compensation and Method of Payment.

3.1 Payment for the services authorized by this Work Authorization shall be in accordance with Article 5 of the Agreement and the agreed method of compensation shall be as follows:

**Maximum Amount Not-To-Exceed Compensation.** COUNTY agrees to pay CONSULTANT as compensation for performance of all services set forth in Exhibit "A" to this Work Authorization, and as required under the terms of the Agreement, Salary Costs as described in Section 5.2 of the Agreement, up to a maximum amount not-to-exceed **Seven Hundred Twenty Four Thousand Seven Hundred Eighty Four Dollars (\$724,784.00)** for Tasks 1 through 6 and **Forty Thousand Dollars (\$40,000.00)** for Task 7 and to reimburse CONSULTANT for Reimbursables as described in Section 5.3 of the Agreement, up to a maximum amount not-to-exceed **Ten Thousand One Hundred Dollars (\$10,100.00)**, for a total maximum amount not-to-exceed **Seven Hundred Seventy Four Thousand Eight Hundred Eighty Four Dollars (\$774,884.00)**. It is understood that the method of compensation is that of "maximum amount not-to-exceed" which means that CONSULTANT shall perform all services set forth herein for total compensation in the amount of or less than that stated above. The maximum hourly rates payable by COUNTY for each of CONSULTANT's employee categories shall be as shown on Exhibit "A" to the Agreement.

**Lump Sum Compensation.** COUNTY agrees to pay CONSULTANT as compensation for performance of all services set forth in Exhibit "A" to this Work Authorization, as required under the terms of the Agreement, a Lump Sum of \$\_\_\_\_\_. It is understood that the method of compensation is that of Lump Sum which means that CONSULTANT shall perform all services set forth

herein for total compensation in the amount stated above. The maximum hourly rates payable by COUNTY for each of the CONSULTANT's employee categories shall be as shown on Exhibit "A" to the Agreement.

3.2 Payments for this Work Authorization shall be charged against:

Budget No. 4620-126-9184-6510

3.3 If this box is checked, COUNTY shall pay CONSULTANT within thirty (30) calendar days from receipt of CONSULTANT's proper statement, as defined by COUNTY's Prompt Payment Ordinance, ninety percent (90%) of the total shown to be due on such statement. When the services to be performed on each phase of the Project are fifty percent (50%) complete and upon written request by CONSULTANT and written approval by the Contract Administrator that the Project is progressing in a satisfactory manner, the Contract Administrator, in his or her sole discretion, may authorize that subsequent payments for each phase may be increased to ninety-five percent (95%) of the total shown to be due on subsequent statements. No amount shall be withheld from payments for reimbursables or for services performed during the construction phase. Upon CONSULTANT's satisfactory completion of each phase and after the Contract Administrator's review and approval, COUNTY shall remit to CONSULTANT that ten percent (10%) or five percent (5%) portion of the amounts previously withheld. Final payment for the Project must be approved by the Director of the Broward County Purchasing Division.

4. All services to be performed pursuant to this Work Authorization shall be completed within **One Thousand One Hundred Fifty (1150)** calendar days of the issuance of the Notice to Proceed ("Time for Performance").

4.1 If this box is checked, liquidated damages shall be applicable. In the event CONSULTANT fails to complete the services identified in Exhibit "A" to this Work Authorization, on or before the Time for Performance set forth in section 4 above, CONSULTANT shall pay to COUNTY the sum of \$ \_\_\_\_\_ for each calendar day after the applicable Time for Performance, plus approved time extensions thereof, until completion of the project. These amounts are not penalties but are liquidated damages to COUNTY for its inability to proceed with, and complete, the Project in a timely manner pursuant to the agreed upon Project Schedule. Liquidated damages are hereby fixed and agreed upon by the parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by COUNTY as a consequence of such delay, and both parties desiring to obviate any question or dispute concerning the amount of said damages and the cost and effect of the failure of CONSULTANT to complete the services within the applicable Time for Performance. This provision shall not affect the rights and obligations of either party as set forth in Section 10.7 of the Agreement.

5. CBE Goals.

5.1 In an effort to assist COUNTY in achieving its overall goal as set forth in the Agreement, CONSULTANT agrees to meet the following CBE participation goals by utilizing the CBE firms for the work and dollar values described in subsection 5.2: 10.1%.

5.2 In performing services for this Project, COUNTY and CONSULTANT hereby incorporate CONSULTANT's participating CBE firms, addresses, scope of work, and dollar value identified in the Schedule of CBE Participation (attached hereto and incorporated herein as Exhibit "B").

6. The terms and conditions of the Agreement are hereby incorporated into this Work Authorization. Nothing contained in this Work Authorization shall alter, modify, or change in any way the terms and conditions of the Agreement.

[Remainder of This Page Is Intentionally Left Blank.]

IN WITNESS WHEREOF, the parties hereto have made and executed this Work Authorization on the respective dates under each signature: BROWARD COUNTY, through its BOARD OF COUNTY COMMISSIONERS, signing by and through its Mayor or Vice-Mayor, authorized to execute same by Board action on the 8<sup>th</sup> day of May, 2012, and Hazen and Sawyer, signing by and through its Vice President, duly authorized to execute same.

ATTEST:




For

Broward County Administrator,  
Ex-officio Clerk of the Broward  
County Board of County Commissioners

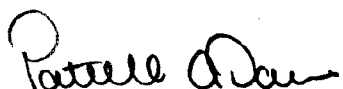


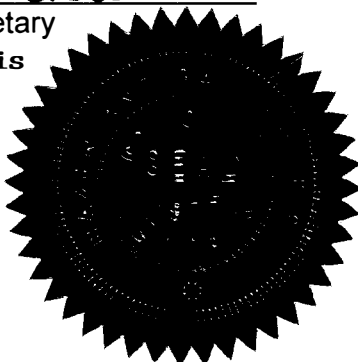
BROWARD COUNTY, by and through its  
BOARD OF COUNTY COMMISSIONERS

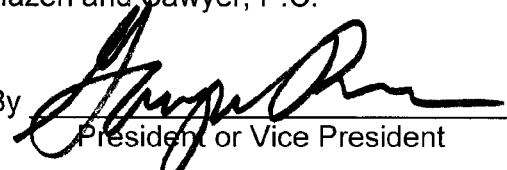
By   
Mayor  
8<sup>th</sup> day of May, 2012

CONSULTANT

ATTEST:

  
Corporate Secretary  
Patrick A. Davis  
(SEAL)



Hazen and Sawyer, P.C.  
By   
President or Vice President  
Gary W. Bors, Vice President  
(Print Name & Title)

19<sup>th</sup> day of March, 2012

## EXHIBIT "A"

### SCOPE OF SERVICES

#### NRWWTP SCADA System Replacement

**BCWWS PROJECT NO.  
WORK AUTHORIZATION HS0745  
February 29, 2012**

#### PREAMBLE

In the late 1980's the **COUNTY** installed a Supervisory Control and Data Acquisition (SCADA) system to serve the North Regional Wastewater Treatment Plant (NRWWTP). The system was assembled, configured, programmed and installed by Johnson Controls of Dallas, Texas as part of the WWTP improvements program. Over time, the control system division of Johnson Controls was sold to a number of companies. The original hardware and software is no longer manufactured. Over the same period of time, additional WWTP improvements were implemented, and the system was expanded to serve the additional facilities. To facilitate the WWTP improvements completed since installation of the original system, programmable logic controllers (PLC's) were added to the system; resulting in a hybrid of existing Johnson Controls equipment and newer "open architecture" PLC equipment manufactured by Allen Bradley.

Maverick Controls, the firm currently providing system support to the **COUNTY**, will no longer provide system support services. The system, now approaching thirty years of service, will no longer be supported by the vendor, and is physically and functionally obsolete. Replacement is necessary.

Recognizing the need to replace the system while continuing to provide uninterrupted process control functionality to WWTP operations during the system transition process, the **COUNTY** proposed a multiple phase construction contract utilizing open architecture hardware and software technologies together with a two-step qualified competitive bid process. Implementation in multiple phases under a single construction contract will ensure minimal interruption to plant operations as process areas are transitioned from the old system to the new system and placed back in service.

The **CONSULTANT's** detailed knowledge of prior facility improvement projects, the existing process, process constraints and parameters as well as on going and planned facility improvements is a critical requirement for a successful transition design.

The proposed SCADA system "open architecture" approach accomplishes the following: it utilizes the **COUNTY's** existing PLC hardware and programming investments, together with new hardware and software that is available and supported by multiple sources. The goal of the project is to replace the Johnson Controls SCADA system while also ensuring the **COUNTY**, that long term services will be available to the NRWWTP to support the system without reliance on a single source vendor.

**CONSULTANT** shall provide professional engineering services to **COUNTY** under the General Consultant Services for Water and Wastewater Services Agreement (RLI No. 20060911-0-EED-

1) for the design, permitting, procurement assistance, and construction management services related to the SCADA system replacement project.

The scope of the services to be performed under this work authorization includes, but is not limited to: operations / software needs assessment, process control system hardware requirements, software functional evaluation, Basis of Design Technical Memorandum, detailed design including hardware, software and process control system and phased transition planning. Services also include permitting assistance, assistance with bidder qualifications, bid proposal evaluation and award process. Construction phase services include factory acceptance testing of the system prior to delivery together with construction management and startup services as required for completing the SCADA system replacement project. Refer to the following Scope of Work for further detail.

## **SCOPE OF WORK**

### **TASK 1 – PROJECT INITIATION**

#### **Project Kickoff Meeting**

The purpose of this task is to initiate the project including identifying project protocols and establishing the necessary coordination between the **CONSULTANT** and **COUNTY** staff. The kick-off meeting shall be scheduled within 2 weeks of the notice to proceed. The purposes of the kickoff meeting are as follows:

1. Introduce **COUNTY** staff members and the **CONSULTANT**'s key team members who will be involved during the project.
2. Identify key **COUNTY** staff who will act as technical reviewers of the **CONSULTANT**'s design submittals.
3. **CONSULTANT** shall review the overall project scope with the **COUNTY**.
4. **CONSULTANT** shall provide a preliminary schedule for the project.

#### **Current System Inventory**

**CONSULTANT** shall conduct a site visit to determine the current condition of the NRWTP SCADA system, and to obtain documentation of modifications to the system since installation. **COUNTY** shall attend the visit with **CONSULTANT**. **CONSULTANT** shall prepare and electronically distribute a summary list of items discussed during the site visit including any additional documentation requests and submit to **COUNTY** for **COUNTY**'s approval and action. **COUNTY** shall provide the requested documentation to **CONSULTANT** within 2 weeks.

#### **Existing System Inspections**

**CONSULTANT** shall perform five days of detailed follow up site visits to inspect the system and verify documentation received. **CONSULTANT** shall prepare a summary memorandum describing all documentation materials received; including receipt of documentation of potential interim improvements planned (or on-going) before the system is replaced.

## **TASK 2 – PRELIMINARY DESIGN**

**COUNTY** staff determined that a SCADA system replacement preliminary design study is needed to provide an appropriate implementation path for maintaining the long term reliability of the system. **COUNTY** staff expressed that in developing such a study the following objectives would need to be achieved:

1. Determine features and functions supported by **COUNTY**'s existing WWTP SCADA system and solicit input from staff relative to additional operational needs that could potentially be provided by the SCADA system.
2. Based upon the assessment of operational needs, develop a matrix of key features and functions and needs for the proposed SCADA system for subsequent evaluation of available SCADA system software packages. See software functional evaluation below.
3. Review existing overall utility operations/administration data network data management needs. Develop approach to incorporate data management function portals into the SCADA system design to accommodate future expansion and sharing of real time and historical data between the NRWTP SCADA system replacement project and other existing and/or planned utility data management systems (i.e. billing meters, master pump stations, historical data reporting, lab data, etc.).
4. Review and identify “best practices” for software implementation and system configuration in terms of graphic displays, tag names, color conventions, security requirements and determine available methods for addressing them. Utilize existing graphic display formats to the fullest extent practical to facilitate operator familiarity with the replacement system.
5. Provide an overall design concept and transition plan that would incorporate existing PLC's, workstations, servers and communications equipment/software, protocols, and network topology as part of the new SCADA system.
6. Summarize existing process control system control strategies resident in Johnson Controls equipment that will require re-development in the new replacement system equipment, as well as the control strategies resident in the existing PLC equipment that will be reused and re-integrated into the new system.
7. Summarize existing discrete and analog field inputs and outputs; divided by process area; including tag names, ranges and descriptions. **COUNTY** to provide data to **CONSULTANT** in electronic spreadsheet format.
8. Summarize existing control system database discrete and analog virtual variables and calculated data tag names, ranges and descriptions. **COUNTY** to provide data to **CONSULTANT** in electronic spreadsheet format.
9. Provide a preliminary estimate of overall system upgrade cost.
10. Provide a preliminary implementation schedule and phasing plan.

Evaluation of existing and/or new field instrumentation is excluded from the scope of services.

### **Software Functional Evaluation**

Based upon the features and functions identified hereinabove, **CONSULTANT** shall develop an evaluation matrix of up to 5 human-machine interface (HMI) software products commonly used in the water/wastewater industry. The products reviewed will be based on Microsoft Windows® and the industry standard OPC (Object linking and embedding for Process Control) connectivity.

The matrix will summarize key features of each product to facilitate evaluation. **CONSULTANT** shall electronically distribute the list to **COUNTY** for review. Within 2 weeks, **CONSULTANT** shall review with **COUNTY** staff and determine a short-list of up to 3 software product packages considered appropriate to support the desired system functionality.

The product package short-list will be listed in the Design Documents. Potential system integration contractors will be required to select any of the listed products upon which to prepare their qualification / cost proposal submittal to purchasing for the development and deployment of the SCADA system replacement in accordance with the Design Documents.

### **Draft Basis of Design Technical Memorandum**

**CONSULTANT** will prepare a Draft Basis of Design Technical Memorandum which will be based on information collected from **COUNTY**, equipment and software manufacturers, regulatory agencies, and research by **CONSULTANT**. The Draft Memorandum will address each of the objectives described above.

**CONSULTANT** will submit the Draft Basis of Design Technical Memorandum electronically to **COUNTY** for review and comment. **COUNTY** will return comments to **CONSULTANT** within two weeks. Upon receipt of **COUNTY'S** comments, **CONSULTANT** will schedule a one-day workshop for discussing **COUNTY'S** comments for incorporation into the Final Basis of Design Technical Memorandum.

**CONSULTANT** will convene the workshop within two weeks following receipt of **COUNTY'S** comments.

### **Final Basis of Design Technical Memorandum**

**CONSULTANT** will prepare and submit 8 copies of the Final Basis of Design Technical Memorandum to **COUNTY** within 2 weeks of the Comments Workshop.

### **TASK 3 – DETAILED DESIGN**

Based on the Final Basis of Design Technical Memorandum approved by the **COUNTY**, **CONSULTANT** shall prepare construction contract documents including request for proposal (RFP) documents, general and supplementary conditions, technical specifications and drawings that detail the character and extent of the project.

At each design milestone as identified in Subtasks 1 and 2, **CONSULTANT** shall provide **COUNTY** with one unbound copy and one electronic copy (PDF format) of construction contract documents for that milestone. **CONSULTANT** shall meet with **COUNTY** to receive and discuss **COUNTY'S** review comments. **CONSULTANT** shall incorporate into the construction contract



documents the review comments of **COUNTY** as required. Meeting notes shall be prepared by **CONSULTANT** and distributed electronically to attendees.

***Subtask 1 - 50% Design***

The 50% design milestone submittal shall consist of preliminary drawings (11-inch by 17-inch) for general, instrumentation, and electrical disciplines. Draft technical specifications (Divisions 1 – 17) shall also be included in the submittal. Twenty calendar days of review time for **COUNTY** have been provided for in **CONSULTANT**'s time of performance.

***Subtask 2 - 90% Design***

The 90% design milestone submittal shall consist of the entire contract document set including **COUNTY** front end documents, Proposer qualification requirements, technical specifications and construction drawings (11-inch by 17-inch) for all work proposed. Twenty calendar days of review time for the **COUNTY** have been provided for in **CONSULTANT**'s time of performance.

***Subtask 3 - Preparation of Opinion of Probable Construction Cost***

**CONSULTANT** shall develop an opinion of probable cost of construction based on the 50% and 90% design milestone stages of the project.

***Subtask 4 - Final Check Documents (Purchasing Review Submittal)***

**CONSULTANT** shall provide **COUNTY** with four copies of the technical specifications and drawings that incorporate final comments received from **COUNTY** during the 90% design review meeting and information required from the **COUNTY** to finalize the front end documents. Two sets of specifications will be provided by **CONSULTANT** in a three-ring binder. This task will be completed within twenty calendar days from receipt of the required information from the **COUNTY**.

**TASK 4 – PERMITTING SERVICES**

At the 90% stage of design, **CONSULTANT** shall submit the 90% design documents to the permitting agencies listed below for review or permit issuance as noted.

City of Pompano Beach Building Department

**CONSULTANT** shall submit the contract documents for a preliminary review to the City of Pompano Beach Building Department. All technical comments received in a timely manner will be addressed by inclusion into the RFP Documents or by inclusion through an addendum to the RFP Documents. **CONSULTANT** shall participate in one meeting with the Building Department to resolve outstanding issues.

Since the project is primarily an equipment upgrade type of project with no change in WWTP capacity, a permit from the State of Florida Department of Environmental Protection is not anticipated; based upon the scope of services described herein. In the event it is determined that permitting will be required additional services shall be provided as described under Task 7.

## **TASK 5 – PROPOSAL, VENDOR QUALIFICATION AND AWARD PHASE SERVICES**

The purpose of this task is to provide assistance during the procurement and award services. It is intended that the Request for Proposal (RFP) process will consist of two steps. The two step process is intended to provide the **COUNTY** with bids from proposers specifically qualified and experienced in the execution of this highly complex and specialized type of work.

**Step 1:** Proposal packages will be solicited from all interested system integration vendors. The vendors will be instructed to submit their proposal packages in two parts; part one - vendor qualifications and part two - bid price.

A team consisting of **COUNTY** staff and the **CONSULTANT** will evaluate, score and rank the proposers.

**Step 2:** Upon completion and acceptance of the scoring, the priced proposals will be opened from the highest scoring proposer(s) based upon the scoring criteria and cut-off score established.

**CONSULTANT** services are described in the subtasks described herein below:

### **Subtask 1 – Preparation of Final Specifications and Drawings**

**CONSULTANT** shall make final revisions to the documents based on review comments received by permitting agencies and the **COUNTY** Purchasing Department. **CONSULTANT** shall provide documents electronically to the **COUNTY** for inclusion in the Request for Proposal (RFP) package.

**CONSULTANT** shall participate with **COUNTY** Purchasing Department in the preparation of proposed vendor qualification submittal package requirements, vendor scoring system and vendor instructions for inclusion in the RFP package.

### **Subtask 2 – Pre-submittal Conference and Job Walk Through**

**CONSULTANT** shall attend one conference and job walk through prior to the advertised RFP submittal date. **CONSULTANT** shall prepare meeting minutes and distribute to attendees.

### **Subtask 3 – Issue RFP Documents and Addenda**

**NOT USED (RFP issued by COUNTY Purchasing Department)**

### **Subtask 4 – Proposal Evaluation Assistance**

The proposal package will be submitted in two parts; part one - vendor qualifications and part two - bid price. **COUNTY** shall forward copies of the qualifications packages to **CONSULTANT**. **COUNTY** shall retain unopened, all priced proposals.

A team consisting of **COUNTY** staff and the **CONSULTANT** will evaluate, score and rank the vendor proposals. **CONSULTANT** shall assist the **COUNTY** in evaluating the proposals for

technical compliance and shall make a recommendation to the **COUNTY** in regard to the scoring of the proposals received and determination of qualified vendors. **COUNTY** shall then open priced proposals from the qualified vendors.

**CONSULTANT** shall assist the **COUNTY** in evaluating the priced proposals received and opened for technical compliance and shall make a recommendation to the **COUNTY** in regard to the award of the contract.

Other non-technical proposal requirements shall be evaluated by **COUNTY**.

This Scope of Services does not include time for **CONSULTANT** to assist **COUNTY** in the event of a proposal protest.

#### **Subtask 5 – Preparation of Contract Documents for Execution**

**CONSULTANT** shall provide eight sets of RFP documents and addenda for execution by **COUNTY** and Construction Contractor within seven calendar days of request by **COUNTY**.

#### **TASK 6 – CONSTRUCTION MANAGEMENT SERVICES (LIMITED)**

**CONSULTANT** shall perform the following tasks associated with office administration and field observation activities related to the construction of the project.

#### **Subtask 1 – Assistance to Contractor for Procuring Agency Permit and Approval**

Building Department: The **CONSULTANT** shall provide assistance to the Contractor for procuring the Building Department permit from the City of Pompano Beach. **CONSULTANT** shall participate in up to two meetings with the Building Department to resolve outstanding issues. **CONSULTANT** shall address up to two sets of comments from the Building Department and prepare drawing modifications in response to these comments as required.

#### **Subtask 2 – Construction Oversight Services**

Construction Administration - **CONSULTANT** shall provide limited construction administration services during the construction phase, including:

General Management – **CONSULTANT** shall provide necessary services for the management of the project during the construction phase. Such management activities shall include limited coordination and general correspondence with the **COUNTY**, Construction Contractor and subcontractors as well as handling and processing of submittals. This task also includes requests for contract interpretations and clarifications required by the Contractor which do not result in the submittal of formal Requests for Information. For purposes of estimating the level of effort associated with this task, four hours per month for a period of 15 months are anticipated. Although the construction duration is limited to 12 months, it is anticipated that approximately three months will pass between the Contractor's initial Notice to Proceed and the Notice to Proceed for Construction.

Contract Interpretations and Clarifications – **CONSULTANT** shall log requests for information and issue necessary technical interpretations and clarifications of the Construction Contract Documents in a timely manner. For purposes of estimating level of effort associated with this sub task, it is assumed that 24 requests for information will be addressed by **CONSULTANT**. Non-technical administrative interpretations will be issued by **COUNTY**.

Change Orders - **CONSULTANT** shall provide technical input for requests for routine project cost and/or schedule changes from the Contractor. Changes may be the result of unforeseen conditions or interferences arising during routine progress of work or additional improvements requested by **COUNTY** after the project proposal date. **CONSULTANT** shall evaluate the impact of the change request in terms of project cost and schedule. **CONSULTANT** shall prepare a recommendation of the change order request and if accepted, a statement noting that the requested cost / schedule impacts are fair and reasonable. **CONSULTANT'S** analysis of the change request shall be forwarded to **COUNTY** for processing. This Scope of Services has been based upon the preparation of two Requests for Proposal and two change orders. It is noted that **CONSULTANT'S** Scope of Services does not include "schedule analysis", claims analysis or litigation support.

### **Subtask 3 – Submittal Review**

**CONSULTANT** shall perform the submittal review tasks detailed below.

Pay Requests – The **CONSULTANT** shall review applications for payment and accompanying data, determine the amounts owed, and recommend approval of payments due the Contractor. It is understood that the **CONSULTANT's** recommendation of any payment requested in an application for payment constitutes a representation by the **CONSULTANT** to the **COUNTY**, based on **CONSULTANT's** on-site observations of construction in progress as an experienced and qualified professional and on the **CONSULTANT's** review of the application for payment and the accompanying data and schedules, that construction has progressed to the point indicated. In addition, it is understood that to the best of the **CONSULTANT's** knowledge, information and belief, the quality of construction is in substantial accordance with the Contract Documents; subject to an evaluation of construction upon substantial completion, to the results of any subsequent tests called for in the Contract Documents, and any qualifications stated in the recommendation; and that the Contractor is due the amount recommended. For the purposes of estimating the level of effort associated with this subtask, it is assumed that the **CONSULTANT** shall review 13 pay requests.

Shop Drawings – **CONSULTANT** shall log, track, review and process shop drawings and any other submittals which the Construction Contractor is required to submit within twenty-one working days of receipt of the submittal except for special items requiring longer review time if so noted in the Construction Contract Documents. The review shall be for conformance with the design intent and compliance with the information presented in the Construction Contract Documents. **CONSULTANT** shall determine the acceptability of materials and equipment proposed by the Construction Contractor. This Scope of Services has been based upon the review and processing of a maximum of 30 submittals, including resubmittals.

### **Subtask 4 – Construction Meetings**

**CONSULTANT** shall attend meetings as follows:

Preconstruction Conference – **CONSULTANT's RPR** shall conduct a preconstruction conference attended by representatives of **COUNTY** and by the construction contractor. **CONSULTANT** shall provide the attendees with a written summary of the meeting which will be distributed electronically.

Construction Progress Meetings – Once per month (up to a maximum of 12 meetings), **CONSULTANT's RPR** shall conduct a progress meeting with the Construction Contractor and the **COUNTY** to review project status and identify issues that may affect the project schedule. **CONSULTANT** shall provide **COUNTY** with a written summary of each progress meeting which will be distributed electronically to the attendees, including updated versions of submittal and RFI logs.

### **Subtask 5 – Field Observation Services**

The **CONSULTANT** shall provide a Resident Project Representative (RPR) to provide field observation services of the proposed Work. This Scope of Services has been based upon a maximum full-time observation for six months and part-time observation for three months.

The RPR will perform the following duties and responsibilities:

- Attend pre-construction conference, progress meetings and other job conferences.
- Serve as the construction liaison, working primarily with the Contractor(s) superintendent(s) and plant staff.
- Assist in obtaining additional details or information when required at the job site.
- Conduct on-site observations of construction in progress (including specialized field tests) to assist in determining if construction is proceeding in substantial accordance with the Contract Documents.
- Inform the Contractor whenever the RPR believes that construction is unsatisfactory, faulty or defective, does not conform to the Contract Documents, does not meet the requirements of any inspections, tests or approval required to be made, or has been damaged before final payment.
- Immediately inform the Contractor upon the commencement of any construction requiring a submittal, if the submittal has not been accepted.
- Visually review suitability and method of storage of materials, equipment and supplies delivered to the construction site.
- Verify that operating and maintenance procedures have been approved by the **CONSULTANT** and are available to the **COUNTY** before equipment start-up and operator training is conducted by the Contractor.
- Observe, record, and report appropriate details relative to loop testing, control strategy testing and control system start-up procedures. **COUNTY** shall provide inspector to assist RPR during testing and startup activities.
- Prepare reports and maintain a diary or log book, recording hours on the job site, weather conditions, data pertaining to questions of extras or deductions, list of

visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail as in observing test procedures. Record names, addresses and telephone numbers of Contractor, subcontractor and major supplier personnel.

- Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project(s), and document the outcome of these inspections.
- Review applications for payment with the Contractor for accuracy, back-up detail and completeness.
- During the course of construction, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by the Contractor are applicable to the items actually installed.
- Before issuance of a determination of substantial completion, prepare a list of items requiring completion or correction, in concert with the COUNTY. Participate in the final inspection.
- Coordinate with the COUNTY and Contractor for necessary shutdowns and interruptions of COUNTY facilities.

It is important to note that in performance of the duties noted herein, the RPR shall not:

- Undertake any of the responsibilities of Contractor or its subcontractors, nor direct any of their work.
- Advise on or issue directions pertaining to any aspect of the means, method, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents.
- Advise on, or issue directions about, safety precautions and programs related to the Contractor's Work.
- Approve any interruptions or modification of COUNTY's facilities without the approval of COUNTY.

#### **Subtask 6 – On-Site Startup Services**

**CONSULTANT** shall monitor startup activities and shall participate during the startup of each phase of the control system cut-over. Participation shall include but not be limited to: review of testing logs; review of as-built documentation; monitor coordination of new signals with existing SCADA system; and participate in process tuning during startup. This Scope of Services has been based upon a maximum of four weeks of onsite participation during scheduled system cut-overs.

#### **Subtask 7 - Specialty Discipline Site Reviews**

**CONSULTANT** shall undertake periodic site reviews sufficient for all Engineers of Record to certify completion of the project. 80 hours are estimated for specialty site reviews over the duration of the construction project.

### **Subtask 8 – Factory Witness Testing**

**CONSULTANT** shall observe record and report appropriate details relative to factory testing required in the Contract Documents. This testing includes out of town factory demonstrations of control panels, network equipment, servers, workstations, and associated software. **CONSULTANT** shall attend two factory witness test sessions of up to 5 days duration each. Out of pocket reimbursable costs shall include travel and expenses associated with attendance at the witness test site.

### **Subtask 9 – Project Closeout**

Upon receiving notice from the Contractor that the project is substantially complete, **CONSULTANT**, in conjunction with appropriate **COUNTY** staff, shall develop a “punch list” of the project. The “punch list” shall include items needing completion or correction prior to consideration of final acceptance. **CONSULTANT** shall develop the list with assistance from **COUNTY**. The list shall be forwarded to the Contractor by the **CONSULTANT**. Upon notification from the Contractor that all remaining “punch list” items have been resolved, **CONSULTANT**, in conjunction with appropriate **COUNTY** staff, shall perform a final review of the finished project. Based on successful completion of all outstanding work items by the Contractor, **CONSULTANT** shall assist in closing out the construction contract by certifying final construction to jurisdictional agencies, where required.

### **Subtask 10 – Record Drawings**

**CONSULTANT** shall prepare and distribute to the **COUNTY** within thirty days of the date of receipt of marked-up, red-lined field drawings from the Construction Contractor and **COUNTY**, two sets of 22” x 34” signed and sealed prints. **CONSULTANT** shall also deliver the AutoCAD and PDF electronic versions of the record drawings on compact disk. The record drawings shall incorporate those changes made during the construction process, based on the marked-up prints, drawings and other data furnished by the Construction Contractor and **COUNTY** to **CONSULTANT**.

### **TASK 7 – OPTIONAL ADDITIONAL SERVICES**

**CONSULTANT** shall assist the **COUNTY**, if requested, to address issues that may arise from outside agencies or **COUNTY** reviews during the design, permitting, bidding / award and construction phases. These services shall include but not be limited to:

- The design of replacing up to six existing Allen Bradley PLC units with new Allen Bradley PLC units.
- The design of multiple screen control consoles and computer workstations at the Secondary Treatment Observation Building (STOB), Solids Thickening Dewatering DAFTs (STDD), and Dewatering /Belt Press Building.
- Additional permits that may be required for the project over and above those listed under Task 4.

- Services associated with additional upgrades or modifications at the site as may be requested by **COUNTY**.

**CONSULTANT** shall further provide as required construction management services if the construction duration extends beyond a period of twelve months for Substantial Completion or if the estimated level of effort associated with previous tasks is exceeded. These services shall include but not be limited to:

- Additional meetings and/or submittals to the Building Department or other agencies as described in Task 6, Subtask 1.
- Submittal review in excess of the anticipated number of submittals described in Task 6, Subtask 3.
- Construction administration activities described in Task 6, Subtask 2.
- Field observation services as described in Task 6, Subtask 5.
- Special Inspector services if requested by the City of Pompano Beach Building Department.

Services provided under Task 7 shall be billed on an hourly basis up to an amount of \$40,000. Services performed under this task must be initiated by a separate authorization from the Contract Administrator.

### **Time of Performance**

The estimated schedule for activities to be performed under this scope of services is presented below.

	<b>Time</b>
Project Initiation	30 days
Preliminary Design	90 days
Design Phase Services	245 days
RFP/Award Services	180 days
Limited CMS	
Contractor's First NTP to Construction NTP	180 days
Construction NTP to Substantial Completion	365 days
Substantial Completion to Final Completion	30 days
Record Drawings	30 days
<b>Total</b>	<b>1150 days</b>

### **Key Assumptions**

1. Planning and Zoning approval is not included.
2. A single proposal package shall be prepared with no owner furnished equipment.



3. The **COUNTY** will prepare Request for Proposal package.
4. The Construction Period is anticipated to last approximately twelve months from the Contractor's construction Notice-to-Proceed to Substantial Completion.
5. The **COUNTY** shall perform all required modifications to Operations and Maintenance Manual.
6. The **CONSULTANT** shall not be responsible for the acts or omissions of any Construction Contractor, any construction subcontractor or any other person (except **CONSULTANT's** own employees, subconsultants or other agents) at the project site.
7. The **CONSULTANT** shall not be responsible for Construction Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto. **CONSULTANT** shall issue all technical instructions to the Construction Contractor and shall interpret all technical requirements of the Construction Contract documents.
8. The scope of services is based on the replacement of the existing JC5000 control panels: UCM-1, UCM-2, UCM-3, UCM-4, UCM-6A/B, UCM-8 and UCM-10. Existing Allen Bradley PLC control panels and equipment therein will be reused and integrated into the new system. Existing Allen Bradley PLCs replaced under Task 7 will be integrated into the new system.
9. The scope of services is based on using existing fiber optic cable between buildings.
10. The scope of services is based on using existing signal wiring from the JC5000 control panels and existing PLC process control system panels to process instruments and equipment.
11. The scope of services does not include replacement of existing field instrumentation.
12. The scope of services does not include the addition of new field instrumentation or controls in areas or processes not currently served by the existing SCADA system.
13. The **COUNTY** shall provide all records and documentation of the existing system.

# BR WARD


**FLORIDA**

## Exhibit B Schedule of CBE Participation

Bid/RLI/RFP #: 20060911-0-EED-1		Project Location: Broward County		Date Form Submitted: 3/19/12	
Project Name: General Consulting Services for Water & Wastewater Services – HS0745				Project Start Date: April 2012	
Prime Contractor: Hazen and Sawyer, P.C.			Address: 4000 Hollywood Blvd, 750N Hollywood, FL 33021		
Contact Person: Patrick A. Davis, P.E. or Janeen M. Wietgreffe, P.E.		Telephone #: (954) 987-0066		Fax#: (954) 987-2949	
CBE Subcontractor	CBE Expiration Date	Address	Phone	Type of Work to be Performed	Sub-contract Amount Agreed Price (\$) or Percentage (%)
Hillers Electrical Engineering	3/25/2014	3440 Hollywood Blvd, Ste 415 Hollywood, FL 33021	954 - 927-9696	Electrical engineering	\$78,325
<b>Total CBE Participation</b>					NTE \$78,325
<b>Total Contract Amount</b>					NTE \$774,884
<b>CBE Subcontractor Participation Percentage (Total Amount Allocated To CBEs Divided By Total Contract Amount)</b>					10.1%

The listing of a firm shall constitute a representation by the bidder/responder to Broward County that such CBE firm has been contacted and properly apprised of the upcoming County project. Bidders/Responders are advised that the information contained herein is subject to verification by the Small Business Development Program and that submission of said information is an assertion of its accuracy, per the requirements of the Small Business Development Program.

I certify that the above information is true to the best of my knowledge:

Signature: 	Title: Vice President	Date: 3/19/12
---	--------------------------	------------------

THIS DOCUMENT MUST BE PROVIDED WITH THE SUBMITTAL AND SIGNED BY THE PERSON SIGNING THE SUBMITTAL

SBDD Compliance Form 2007-3



**LETTER OF INTENT**

**To Utilize a County Business Enterprise (CBE) Subcontractor/Subconsultant**

From: Hazen and Sawyer, P.C.  
(Name of Proposer/Bidder)

To: BCWWS

Project Description: HS0745 – SCADA System Replacement

In response to Broward County's RLI/Bid No. RLI 20060911-0-EED-1, the undersigned hereby agrees to utilize the CBE firm listed below, if awarded the contract. The undersigned further certifies that the firm has been contacted and properly apprised of the projected work assignment(s) upon execution of the contract with Broward County.

Name of Firm: Hillers Electrical Engineering, Inc.  
(Proposed CBE Subcontractor/Subconsultant)

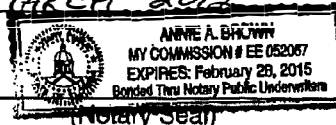
Work Assignment:  
Electrical engineering design and construction management assistance

Percentage of Prime's Contract Fees to be awarded: \$78,325  
(Dollar Amount or Percentage %)

Patrick A. Davis  
(Signature of Authorized Rep.) Patrick A. Davis, Vice President  
3.16.12  
(Date)

Subscribed and sworn to before me this 16<sup>th</sup> day of MARCH 2012

Annie A. Brown  
(Notary's Signature) Annie A. Brown



**(ACKNOWLEDGEMENT BY THE PROPOSED CBE FIRM)**

The undersigned intends to perform work in connection with the above Contract as (check one) an individual a partnership x a corporation a joint venture. The undersigned agrees with the prime contractor's/consultant's proposal and further certifies that all information provided herein is true and correct.

Y. Hiller  
(Signature of Owner)  
3/19/12  
(Date)

Subscribed and sworn to before me this 19<sup>th</sup> day of March, 2012

Jacki Usher-Yasin  
(Notary's Signature)

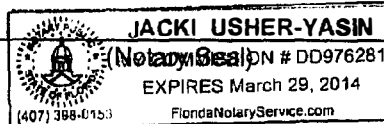


TABLE 1 - FEE PROJECTION

**General Professional Consultant Services**  
**Work Authorization No. HS0745**  
**SCADA System Replacement**  
**February 27, 2012**

Work Element	Vice President	Associate	Principal	Professional	Designer/Drafter	Support	Total Hours	Labor Cost
<b>Task 1 - Project Initiation</b>	20	68	12	20		18	138	\$22,516
Project Kickoff	4	12	4			2	22	\$3,864
Current System Inventory	16	16	4			8	44	\$7,796
Detailed Inspections		40	4	20		8	72	\$10,856
<b>Task 2 - Preliminary Design</b>	68	135	35		80	24	342	\$55,018
Software Evaluation	20	35	15			10	80	\$13,970
Draft Preliminary Design	24	80	20		40	12	166	\$24,184
Final Preliminary Design	24	40			40	2	106	\$18,864
<b>Task 3 - Detailed Design</b>	88	472	160		328	30	1078	\$164,080
Subtask 1 - 50% Design	40	208	40		144	12	444	\$68,024
Subtask 2 - 90% Design	40	208	40		144	12	444	\$68,024
Subtask 3 - Preparation of Probable Construction Cost Estimate		16	40			2	58	\$8,904
Subtask 4 - Final Check Documents (Purchasing Review Submittal)	8	40	40		40	4	132	\$19,128
<b>Task 4 - Pre-Proposal Permitting</b>	4	8	20		20	8	60	\$7,776
<b>Task 5 - Proposal and Award</b>	94	104	40	28	56	36	358	\$57,792
Subtask 1 - Preparation of Final Specs and Drawings	40	40			40	4	124	\$20,688
Subtask 2 - Conference and Job Walk Through	4	12		4			20	\$3,800
Subtask 3 - NOT USED								
Subtask 4 - Proposal Evaluation Assistance	48	48	40			24	160	\$27,448
Subtask 5 - Preparation of Contract Documents for Execution	2	4		24	16	8	54	\$8,056
<b>Task 6 - Construction Management Services</b>	68	726	1258	15	60		2127	\$339,776
Subtask 1 - Assistance to Contractor for Procuring Agency Permit and Approval		4		15	15		34	\$3,890
Subtask 2 - Construction Oversight Services	52	244					296	\$57,100
General Management/Coordination	52	156					208	
Contract Clarifications (RFIs)		72					72	
Change Orders		16					16	
Subtask 3 - Submittal Review		141	207				348	\$58,100
Subtask 4 - Construction Meetings		56	24				80	\$13,840
Subtask 5 - Periodic On-Site Observations		101	907				1008	\$150,192
Subtask 6 - On-Site Startup Services		40	40				80	\$13,200
Subtask 7 - Speciality Discipline Site Reviews	8	32					40	\$7,760
Subtask 8 - Witness Testing		80	80				160	\$26,400
Subtask 9 - Project Closeout	4	20					24	\$4,620
Subtask 10 - Record Drawings	4	8			45		57	\$6,675
<b>Task 7 - Optional Additional Services</b>								\$40,000
<b>Total Hours</b>	<b>342</b>	<b>1513</b>	<b>1525</b>	<b>63</b>	<b>544</b>	<b>116</b>	<b>4103</b>	<b>\$686,959</b>
<b>Subconsultants</b>								
Hillers Electrical (CBE)								\$77,825
<b>Total Salary (Labor)</b>								\$764,784
<b>Reimbursable Costs</b>								
Hillers Reimbursables								\$500
Permitting Fees								\$1,000
Reproductions through ACE (CBE)								\$2,500
Communication and Reproduction								\$8,100
Witness Testing Expenses								\$10,100
<b>Total Reimbursables</b>								\$24,200
<b>TOTAL FEE</b>								<b>\$774,884</b>
						CBE =	10.2%	
AVERAGE OF ACTUAL RATES USED TO DEVELOP THIS FEE:	230.00	185.00	145.00	115.00	95.00	72.00		
<MAXIMUM NOT TO EXCEED RATES AS OF JANUARY 2009 BASED ON CONTRACT WITH COUNTY ARE SHOWN IN THIS ROW >	252.56	237.05	163.17	138.24	163.17	102.88		

3,864. +  
7,796. +  
10,856. +  
1) 22,516. T

13,970. +  
24,184. +  
16,864. +  
2) 55,018. T

68,024. +  
68,024. +  
8,904. +  
19,123. +  
3) 164,080. T

20,688. +  
3,600. +  
27,448. +  
6,056. +  
4) 57,792. T

3,8390. +  
57,100. +  
56,100. +  
13,840. +  
150,192. +  
13,200. +  
7,760. +  
26,400. +  
4,620. +  
6,575. +  
5) 339,777. T

22,516. +  
55,018. +  
164,080. +  
7,776. +  
57,792. +  
339,777. +  
40,000. +  
4) 686,959. T  
686,959. +  
77,825. +  
7) 764,784. S  
10,100. +  
8) 774,884. T

**Broward County Water and Wastewater Services  
 General Professional Consultant Services  
 Work Authorization No. HS0745  
 SCADA System Replacement  
 Approved Fee Estimate as negotiated on February 27, 2012  
 HEE Fee Estimate- Electrical Discipline**

20,860 • +  
 22,280 • +  
 1,960 • +  
 1,560 • +  
 46,660 • T

Work Element	Project Manager	Professional Engineer	CADD/Technician	Field Inspector	Total Hours	Labor Cost
Task 1 - Project Initiation	4	8			12	\$1,480
Task 2 Preliminary Design	8	20	12		40	\$4,460
Task 3 - Detailed Design	78	208	136	0	422	\$46,660
Subtask 1 - 50% Design	40	88	60		188	\$20,860
Subtask 2 - 90% Design	32	100	72		204	\$22,280
Subtask 3 - Preparation of Probable Construction Cost Estimate	4	12			16	\$1,960
Subtask 4- Final Check Documents (Purchasing Review Submittal)	2	8	4		14	\$1,560
Task 4 - Pre-Bid Permitting		20	20		40	\$4,100 (added by reducing H&S fees)
Task 5 - Bidding and Award	4	16	8	0	28	\$3,120
Subtask 1 - Preparation of Final Bid Documents						
Subtask 2 - Pre-Bid Conference and Job Walk Through						
Subtask 3 - NOT USED						
Subtask 4 - Bid Evaluation Assistance	4	16	8		28	\$3,120
Subtask 5 - Preparation of Contract Documents for Execution						
Task 6 - Limited Construction Management Services	22	118	12	0	124	\$18,005
Subtask 1 - Assistance to Contractor for Procuring Agency Permit and Approval						
Subtask 2 - Construction Oversight Services						
General Management/Coordination					24	\$2,980
Contract Clarifications (RFIs)					4	\$500
Change Orders	2	2			4	\$500
Subtask 3 - Submittal Review		22	2.6		24.6	\$2,860
Subtask 4 - Construction Meetings		24			24	\$2,880
Subtask 5- Periodic On-Site Observations						
Subtask 6 - On-Site Startup Services	2	8			10	\$1,220
Subtask 7 - Speciality Discipline Site Reviews		24			24	\$2,880
Subtask 8 - Witness Testing						
Subtask 9- Project Closeout	4	12			16	\$1,960
Subtask 10 - Record Drawings	4	12	9		25	\$2,725
<b>Total HEE Salary (Labor)</b>						<b>\$77,825</b>
Other Direct Costs (HEE)						\$500
Communications, Reproduction						\$500
<b>Total HEE Reimbursables</b>						<b>\$500</b>
<b>TOTAL</b>						<b>\$78,325</b>

2,980 • +  
 500 • +  
 2,860 • +  
 2,880 • +  
 1,220 • +  
 2,880 • +  
 1,960 • +  
 2,725 • +  
 8,005 • T  
 1,480 • +  
 4,460 • +  
 46,660 • +  
 4,100 • +  
 3,120 • +  
 18,005 • +  
 77,825 • S  
 500 • +  
 78,325 • T

AVERAGE OF ACTUAL RATES USED TO DEVELOP THE FEE	130.00	120.00	85.00	105.00
<MAXIMUM NOT TO EXCEED RATES AS OF JUNE 2008 BASED ON CONTRACT WITH COUNTY ARE SHOWN IN THIS ROW >	130.51	120.91	86.04	105.06







Project # WA H50745

**Work Authorization/Amendment Checklist**

Item #	Checked	
1	✓	Record in the CMS Log
2	✓	Check budget in Advantage
3	✓	Check insurance & insert in to package
4	✓	Check that all pieces of the WA are present by checking samples in Agreement. Backup; Fee Schedule, sunshine meeting minutes are required for all and Schedule of CBE Participation and Letter of Intent are required if CBE goals are part of the WA.
5	✓	Review backup, verify math in supporting material, if CBE memo required send latest CBE report and copy of page from WA that shows CBE% and Letters of Intent. Will need CBE Memo of concurrence to forward package out of WWED
		Follow 6 & 7 if agenda required, Go to 8 if not
6		If it needs an agenda have PM provide info for the Summary section on the Agenda template.doc
7		Upon receipt fill out the rest of the agenda and proceed under the agenda checklist
8	✓	Enter RQS
9	✓	Fill out routing slip
10	✓	Send for final review and signatures
11	✓	Upon return, have witnesses sign if required.
12	✓	If WWED Director signs, prepare a package for purchasing which includes the totals awarded by year, copies from the agreement which includes Cover, Execution page and page that shows why this is processed the way it is. Insurance copy of RQS.
13	✓	If purchasing director, send all originals to purchasing along with items in item 12
14	✓	Prepare cover letter for purchasing, include in package
15	✓	Enter in PMIS
16	✓	Enter on CMS log for tracking
17	✓	Send to Purchasing or PWD
18	✓	Upon receipt of SC distribute copies to appropriate parties
19	✓	Update CMS Log
20	✓	Verify that all info is in Contracts Central, add anything that is missing
21	✓	Send to File

**DATE:** 3/26/12


**TO:** Alan Garcia P.E., Director  
Water and Wastewater Services

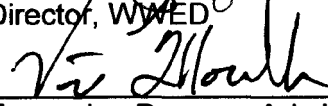
**FROM:** Byrone LoCasale, Construction Management Specialist - X0971  
Water and Wastewater Engineering Division

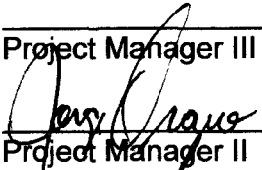
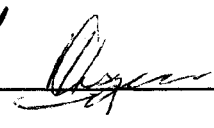
**RE:** Project No.: 9184  
Project Name: NRWTP SCADA SYSTEM REPLACEMENT  
Document(s): WA HS0745  
Dollars: \$774,884 & 1150 DAYS  
Vendor: HAZEN AND SAWYER

The attached contractual document is for your preliminary review.

APPROVED:

  
\_\_\_\_\_  
Director, WWED Date 4/9/12

  
\_\_\_\_\_  
Expansion Program Administrator/ PM IV Date 3/30/12

\_\_\_\_\_  
Project Manager III Date \_\_\_\_\_  
 /   
\_\_\_\_\_  
Project Manager II Date 3/28/12

Please return this package to my attention when approved. Thank you.

File:

H:\word docs\WWS prelim.doc  
Rev. 12/29/08



Public Works Department • Water and Wastewater Services  
**WATER AND WASTEWATER ENGINEERING DIVISION**  
2555 West Copans Road • Pompano Beach, Florida 33069 • 954-831-0745 • FAX 954-831-0798/0925

**MEMORANDUM**

**DATE:** 5/10/12

**TO:** Ilyse Valdivia, Purchasing Agent III  
Purchasing Division

**FROM:** *BLC*  
Byrone LoCasale, Construction Management Specialist  
Environmental Engineering Division

**RE:** **REQUEST FOR ISSUANCE OF A PURCHASE ORDER  
HS0745 NRWTP SCADA SYSTEM REPLACEMENT  
ADVANTAGE RQS NO. WED0412120000000070 FOLDER 1033010  
BCWW PROJECT NO. 9184 CONTRACTS CENTRAL 9184**

Please issue a Purchase Order for the attached executed contractual document, and keep the attachment for the official Purchasing File.

**TYPE OF DOCUMENT:**

Work Authorization

Consultant Name: HAZEN AND SAWYER, P. C.

Vendor ID: VC0000005519

FUND-DEPT-UNIT-OBJ: 4620-126-9184-6510

Dollar Amount: \$774,884

Project Manager: Oscar Asgar Telephone: (954)831-0983

**DESCRIPTION:**

This document will provide engineering services for the SCADA System Replacement at the NRWTP.

Should you require additional information, please contact Byrone LoCasale at (954)831-0971 or, if unavailable, the Project Manager listed above. Please return the Purchase Order to Byrone LoCasale at Water and Wastewater Engineering Division. The Notice to Proceed will be issued by the Contract Administrator.

BLC\

Attachment(s)

cc: J Orozco / File: 9184 7.1/7.03



**SERVICE CONTRACT**  
Version 1  
**BOARD OF COUNTY COMMISSIONERS**  
Broward County, Florida  
www.broward.org

SC 126 WED05111200000000018

The above number must be shown on all Invoices and References

47807-45/9184 7.01/7.03

Mail proper invoice and copy of purchase order to:

**Billing Location:**

WATER AND WASTEWATER SERVICES

**Ship To:**

WATER AND WASTEWATER SERVICES

2555 W COPANS ROAD

(954) 831-0971 B LOCASALE

POMPANO BEACH, FL 33069

**Date:** 05/11/12 2555 W. Copans Road  
Pompano Beach, FL 33069

VC0000005519  
HAZEN & SAWYER,PC  
4000 HOLLYWOOD BLVD STE 750 NORTH

HOLLYWOOD, FL 33021

**Delivery Due Date:**

FOB Dest, Freight Prepaid

**Contact:**

Jorge Orozco

954-831-3239

**Vendor** LAUREN N. ORMEROD  
**Contact:** 954-987-0066

Project 9184; Work Authorization No. HS0745 for North Regional Wastewater Treatment Plant SCADA System Replacement approved by the Board of County Commissioners (Item 5) on May 8, 2012.

Line	Quantity	Unit	Commodity Code/Description	Unit Price	Extended Price
1			<p>92535 Environmental Engineering</p> <p>This Service Contract is issued to effect Work Authorization No. HS0745 for the provision of North Regional Wastewater Treatment Plant SCADA System Replacement. The issuance of this Work Authorization is in full accordance with the Agreement with Hazen and Sawyer, P.C., for General Consultant Services for Water and Wastewater Services, Request for Letters of Interest (RLI) No. 20060911-0-EED-1, approved by the Board of County Commissioners on June 24, 2008., Agenda Item NO. 28.A. This Work Authorization was approved by the Board of County Commissioners (Item No. 5) on May 8, 2012.</p> <p>Scope of Work Provide professional engineering services for the design, permitting, procurement assistance, and construction management services related to the SCADA system replacement project. All work shall be in full accordance with the Scope of Services as delineated in Exhibit "A" of the Work Authorization.</p>		774,884.00

Florida Sales Tax Exemption Number - 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.

APPROVED

AUTHORIZED SIGNATURE

DATE

*[Handwritten Signature]* 5/15/12



**SERVICE CONTRACT**  
Version 1  
**BOARD OF COUNTY COMMISSIONERS**  
Broward County, Florida  
www.broward.org

SC 126 WED0511120000000018

The above number must be shown on all Invoices and References

Line	Quantity	Unit	Commodity Code/Description	Unit Price	Extended Price
			Maximum Amount Not-to-Exceed Compensation: For Tasks 1 thru 6: \$724,784.00 For Task 7: \$40,000.00 Reimbursables: \$10,100.00  Total Maximum Amount Not-To-Exceed Compensation: \$774,884.00  Time for performance: 1150 calendar days of the issuance of the Notice to Proceed.  The issuance of this Service Contract authorizes the Contract Administrator to issue a notice to proceed.  Project Manager: Jorge Orozco, Tel: 954-831-3239 Purchasing Agent: Ilyse S. Valdivia, Tel: 954-357-6078 RQS 126 WED0412120000000070		
<b>Procurement Folder #</b>			1033010	<b>Contract #</b>	
				<b>Total Cost</b>	774,884.00

For inquiry regarding payment please call the Broward County Accounting Division 954-357-7193. To help expedite payment please include a copy of this purchase order with your invoice.

**PROPER INVOICE**

The Florida Prompt Payment Act provides that the County may set forth the requirements for an invoice to be a proper invoice. The requirements of a proper invoice shall be as set forth in the agreement or contract governing the purchase; however, in addition, no invoice submitted by a vendor shall be considered a proper invoice unless the invoice is an original invoice, is delivered to the County in accordance with the purchase order, and sets forth the following and additional information: a) The invoice shall set forth the County purchase order number, and the invoice shall correlate to the County purchase order number under which the purchase was made; and b) The invoice shall set forth the name of the business organization that is recited in the County purchase order; and c) The invoice shall set forth the date of its preparation; and d) The invoice shall set forth an identifying number to facilitate identification of the invoice; and e) The invoice shall set forth the vendor's federal identification number; and f) The invoice shall set forth a description of the goods or services or property provided to the County; and g) The invoice shall set forth the County's part or item number for each item or part delivered; and h) The invoice shall set forth the delivery terms set forth within the County purchase order; and i) The invoice shall set forth the location and date of delivery of the goods or services or property to the County; and j) The invoice shall set forth the quantity of the goods or services or property provided to the County; and k) The invoice shall set forth the unit price of the goods or services or property provided to the County; and l) The invoice shall set forth the extended total price of the goods or services or property provided to the County; and m) The invoice shall set forth applicable discounts.

Florida Sales Tax Exemption Number - 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.

APPROVED

AUTHORIZED SIGNATURE

DATE

*Ilyse S. Valdivia* 5/15/16

**First Amendment to Work Authorization No. HS0745  
NRWWTP SCADA System Replacement  
Under  
Agreement between Broward County and Hazen and Sawyer, P.C.  
for  
General Consultant Services for Water and Wastewater Services**

This is a First Amendment to Work Authorization No. HS0745 for engineering services under the General Consultant Services Agreement between: BROWARD COUNTY, a political subdivision of the State of Florida, its successors and assigns, hereinafter referred to as "COUNTY," and Hazen and Sawyer, P.C., hereinafter referred to as "CONSULTANT."

WHEREAS, COUNTY and CONSULTANT entered into an Agreement (the "Agreement") for general consultant services, from which Work Authorization No.HS0745 (the "Work Authorization") was issued on May 8, 2012; and

WHEREAS, COUNTY and CONSULTANT have met and negotiated a reallocation in funding for this project, and this First Amendment to the Work Authorization incorporates the results of such negotiation; NOW, THEREFORE

IN CONSIDERATION of the mutual promises and covenants contained herein, and other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto hereby agree to amend the Work Authorization as follows:

1. Each and every whereas clause set forth above is a true and correct recital and representation and is incorporated herein as if set forth fully.
2. Section 3, Compensation and Method of Payment, subsection 3.1 of the Work Authorization is hereby amended, in part, to read as follows:

3.1 Payment for the services authorized by this Work Authorization shall be in accordance with Article 5 of the Agreement and the agreed method of compensation shall be as follows:

**[X]** Maximum Amount Not-To-Exceed Compensation. COUNTY agrees to pay CONSULTANT as compensation for performance of all services set forth in Exhibit "A" and "A-1" to this Work Authorization, and as required under the terms of the Agreement, Salary Costs as described in Section 5.2 of the Agreement, up to a maximum amount not-to-exceed ~~Seven Hundred Twenty Four Thousand Seven Hundred Eighty Four Dollars (\$724,784.00) for Tasks 1 through 6~~ **Seven Hundred Forty Eight Thousand Eight Hundred Thirty One Dollars and Eighty Cents (\$748,831.80)** for Tasks 1 through 6 and Forty Thousand Dollars

(\$40,000.00) for Task 7 and to reimburse CONSULTANT for Reimbursables as described in Section 5.3 of the Agreement, up to a maximum amount not-to-exceed Ten Thousand One Hundred Dollars (\$10,100.00), for a total maximum amount not-to-exceed ~~Seven Hundred Seventy Four Thousand Eight Hundred Eighty Four Dollars (\$774,884.00)~~ **Seven Hundred Ninety Eight Thousand Nine Hundred Thirty One Dollars and Eighty Cents (\$798,931.80)**. It is understood that the method of compensation is that of "maximum amount not-to-exceed" which means that CONSULTANT shall perform all services set forth herein for total compensation in the amount of or less than that stated above. The maximum hourly rates payable by COUNTY for each of CONSULTANT's employee categories shall be as shown on Exhibit "A" to the Agreement.

\* \* \*

3. Section 4 of the Work Authorization is hereby amended to read as follows:

All services to be performed pursuant to this Work Authorization shall be completed within ~~1150~~ **1330** calendar days of the issuance of the Notice to Proceed ("Time for Performance").

4. Preparation of this First Amendment has been a joint effort of COUNTY and CONSULTANT, and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than any other.

5. Except to the extent modified herein, the Work Authorization shall remain in full force and effect. In the event of a conflict between the terms and conditions of this First Amendment and the terms and conditions set forth in the Work Authorization, the parties hereto hereby agree that this document shall control. Nothing contained in this Amendment to the Work Authorization shall alter, modify, or change in any way the terms and conditions of the contract with the County.

6. This First Amendment to the Work Authorization shall be effective upon execution by the parties, and may be fully executed in multiple copies by all parties, each of which, bearing original signatures, shall have the force and effect of an original document.

[Remainder of This Page Is Intentionally Left Blank.]

Coding: Words in ~~struck-through~~ type are deletions from existing text. Words in **underlined** type are additions to existing text.

IN WITNESS WHEREOF, the parties hereto have made and executed this First Amendment to Work Authorization HS0745 on the respective dates under each signature: BROWARD COUNTY, through its Contract Administrator, as authorized pursuant to Section 4.4 of the Agreement, and HAZEN AND SAWYER, P.C., signing by and through its Vice President, duly authorized to execute same.

COUNTY

WITNESS:

BROWARD COUNTY, through its  
Contract Administrator

*Nancy Beylorce*  
Witness

By *[Signature]*  
Contract Administrator

*[Signature]*  
Witness

3<sup>rd</sup> day of June, 2014

CONSULTANT

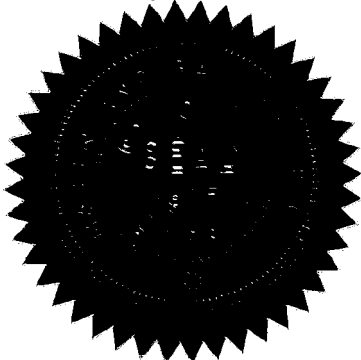
ATTEST:

Hazen and Sawyer P.C.

*[Signature]*  
Corporate Secretary

By *[Signature]*  
President or Vice President

(SEAL)



Gary W Bos Vice President  
(Print Name and Title)

20<sup>th</sup> day of May, 2014

04/5/14  
HS0745 Amend 1.doc



**EXHIBIT "A-1"**  
**SCOPE OF SERVICES**  
**NRWWTP SCADA System Replacement**  
**AMENDMENT No. 1**  
**BCWWS Project No. 9184**  
**WORK AUTHORIZATION HS0745**  
**April 24, 2014**

**SCOPE OF WORK - AMENDED**

**ADD:**

***Task 3, Subtask 5 – Updated Final Check Documents (Purchasing Review Re-submittal)***

**CONSULTANT** shall update the previously submitted purchasing review submittal to include recommendations from the separately conducted SCADA Security Review of the documents and the recently conducted analysis by staff utilizing the Cyber Security Evaluation Tool (CSET). The update shall include revisions to drawings and specifications to incorporate the following items, related to the two evaluations:

- Revise firewall configurations and how alarms are relayed
- Add an offline SCADA and web based server as a "test system"

This update shall also include revisions necessary for the COUNTY requested separation into three bid packages: SCADA Upgrades, software procurement, and post construction onsite assistance. This update includes coordination with the COUNTY for incorporating revisions into bidding documents and preparing for issuance to bidders.

**Time of Performance**

The estimated schedule for activities to be performed under this amendment is presented below.

	<b>Time</b>
Design Phase Services	180 days



**SERVICE CONTRACT**  
Version 4  
**BOARD OF COUNTY COMMISSIONERS**  
Broward County, Florida  
www.broward.org

SC 126 WED0511120000000018

The above number must be shown on all Invoices and References

9184; HS0745  
7.03 € 7.05

Mail proper invoice and copy of purchase order to:

**Billing Location:**  
WATER AND WASTEWATER SERVICES

**Ship To:**  
WATER AND WASTEWATER SERVICES  
2555 W COPANS ROAD  
(954) 838-0792 NADJA HORTON  
POMPANO BEACH, FL 33069

**Date:** 06/19/14 2555 W. Copans Road  
Pompano Beach, FL 33069

VC0000005519  
HAZEN & SAWYER.PC  
4000 HOLLYWOOD BLVD STE 750 NORTH

**Delivery Due Date:**  
FOB Dest, Freight Prepaid

HOLLYWOOD, FL 33026

**Contact:**  
Jorge Orozco

954-831-3239

**Vendor** LAUREN N. ORMEROD  
**Contact:** 954-987-0066

Project 9184; Work Authorization No. HS0745 for North Regional Wastewater Treatment Plant SCADA System Replacement. This Service Contract is modified to effect Amendment No. 1 which adds \$24,047.80 and 180 calendar days to the WA. Approved by the delegated authority of the Contract Administrator on 06/03/14.

Line	Quantity	Unit	Commodity Code/Description	Unit Price	Extended Price
1			92535 Environmental Engineering **This Service Contract is modified to effect Amendment No. 1 which adds a total of \$24,047.80 and 180 calendar days to WA HS0745.**  The issuance of this service contract authorizes the Contract Administrator to issue the notice to proceed.  Project Manager: Jorge Orozco, Tel: 954-838-3239 Purchasing Agent: Marie Williams Tel: 954-357-5856  <hr/> This Service Contract is issued to effect Work Authorization No. HS0745 for the provision of North Regional Wastewater Treatment Plant SCADA System Replacement. The issuance of this Work Authorization is in full accordance with the Agreement with Hazen and Sawyer, P.C., for General Consultant Services for Water and Wastewater Services, Request for Letters of Interest		774,884.00

Florida Sales Tax Exemption Number - 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.

APPROVED

AUTHORIZED SIGNATURE

DATE

*Marie Williams - 6/20/14*



**SERVICE CONTRACT**  
Version 4  
**BOARD OF COUNTY COMMISSIONERS**  
Broward County, Florida  
www.broward.org

SC 126 WED0511120000000018

The above number must be shown on all Invoices and References

Line	Quantity	Unit	Commodity Code/Description	Unit Price	Extended Price
			<p>(RLI) No. 200609114-EED-1, approved by the Board of County Commissioners on June 24, 2008., Agenda Item NO. 28.A. This Work Authorization was approved by the Board of County Commissioners (Item No. 5) on May 8, 2012.</p> <p>Scope of Work Provide professional engineering services for the design, permitting, procurement assistance, and construction management services related to the SCADA system replacement project. All work shall be in full accordance with the Scope of Services as delineated in Exhibit "A" of the Work Authorization.</p> <p>Maximum Amount Not-to-Exceed Compensation: For Tasks 1 thru 6: \$724,784.00 For Task 7: \$40,000.00 Reimbursables: \$10,100.00</p> <p>Total Maximum Amount Not-To-Exceed Compensation: \$774,884.00</p> <p>Time for performance: 1150 calendar days of the issuance of the Notice to Proceed.</p> <p>The issuance of this Service Contract authorizes the Contract Administrator to issue a notice to proceed.</p> <p>Project Manager: Jorge Orozco, Tel: 954-831-3239 Purchasing Agent: Ilyse S. Valdivia, Tel: 954-357-6078 RQS 126 WED0412120000000070</p>		
2			<p>92535 Environmental Engineering WA HS0745, Project 9016, Amendment 1 - Add \$24,047.80 in salaries and 180 calendar days.</p> <p>RQS 126 WED0610140000000098</p>		24,047.80

Florida Sales Tax Exemption Number - 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.

APPROVED Marie W. A. - 6/20/14  
AUTHORIZED SIGNATURE DATE



**SERVICE CONTRACT**  
Version 4  
**BOARD OF COUNTY COMMISSIONERS**  
Broward County, Florida  
www.broward.org

SC 126 WED0511120000000018  
The above number must be shown  
on all Invoices and References

<b>Procurement Folder #</b>	1033010	<b>Contract #</b>		<b>Total Cost</b>	798,931.80
-----------------------------	---------	-------------------	--	-------------------	------------

For inquiry regarding payment please call the Broward County Accounting Division 954-357-7193. To help expedite payment please include a copy of this purchase order with your invoice.

**PROPER INVOICE**

The Florida Prompt Payment Act provides that the County may set forth the requirements for an invoice to be a proper invoice. The requirements of a proper invoice shall be as set forth in the agreement or contract governing the purchase; however, in addition, no invoice submitted by a vendor shall be considered a proper invoice unless the invoice is an original invoice, is delivered to the County in accordance with the purchase order, and sets forth the following and additional information: a) The invoice shall set forth the County purchase order number, and the invoice shall correlate to the County purchase order number under which the purchase was made; and b) The invoice shall set forth the name of the business organization that is recited in the County purchase order; and c) The invoice shall set forth the date of its preparation; and d) The invoice shall set forth an identifying number to facilitate identification of the invoice; and e) The invoice shall set forth the vendor's federal identification number; and f) The invoice shall set forth a description of the goods or services or property provided to the County; and g) The invoice shall set forth the County's part or item number for each item or part delivered; and h) The invoice shall set forth the delivery terms set forth within the County purchase order; and i) The invoice shall set forth the location and date of delivery of the goods or services or property to the County; and j) The invoice shall set forth the quantity of the goods or services or property provided to the County; and k) The invoice shall set forth the unit price of the goods or services or property provided to the County; and l) The invoice shall set forth the extended total price of the goods or services or property provided to the County; and m) The invoice shall set forth applicable discounts.

Florida Sales Tax Exemption Number- 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.

APPROVED

*Mavis Will* 6/20/14  
\_\_\_\_\_  
AUTHORIZED SIGNATURE

DATE



**DATE:** 05/30/2014

**TO:** Gregory M. Balicki, P.E., Director  
Water and Wastewater Services

**FROM:** Luz Sanchez, <sup>AS</sup> Construction Management Specialist - X0971  
Water and Wastewater Engineering Division

**RE:** Project No.: 9184

Project Name: NRWTP SCADA System Replacement

Document(s): WA HS0745, First Amendment

Dollars: \$24,047.80 and 180 calendar days

Vendor: Hazen and Sawyer, P.C.

The attached contractual document is for your preliminary review.

APPROVED:

  
\_\_\_\_\_  
Project Manager IV

Date 5/30/14

  
\_\_\_\_\_  
Expansion Project Administrator

Date 5/30/14

  
\_\_\_\_\_  
Project Manager I/II

Date 5/30/14

Please return this package to my attention when approved. Thank you.

File:

H:\WWED\Templates\WED Prelimreview.doc

View All (1 of 2) : Document submitted successfully - Pending Approval

RQS - 126- WED0610140000000098- 1- New- Pending

Action Menu

Load Vendor List Ship/Bill To Lines

General Information

Document Name	Project 9184; WA HS0745; WA Amendment 1; SCADA System	Accounting Profile	
Record Date		PCard ID	
Budget FYe		PCard Expe	
Fiscal Year		Procurement Folder	
Period		Procurement Type ID	1
Document Description	Project 9184; WA HS0745; WA Amendment 1; SCADA System	Tracking Number	Unclassified
Document Short Description		Warehouse	
Actual Amount	\$24,047.80	Total of Header Attachments	1
Closed Amount	\$0.00	Total of All Attachments	1
Closed Date			
Open Amount	\$24,047.80		
Referenced Amount	\$0.00		

Contact

Extended Description

Extended Description: Project 9184; WA HS0745; WA Amendment 1; SCADA System Replacement. Scope of Work: Revise firewall configurations and how alarms are relayed. Add an offline SCADA and web based server as a "test system". Add \$24,047.80 and 180 calendar days to SC

Additional Information

Default Shipping/Billing

Document Information

Top

Print	Approve	Reject	Close
-------	---------	--------	-------

Menu

*Handwritten initials: JWS 6/10*

*Greg,  
Please approve in Advantage, also sign attached memo to PUR.*

*Abhianu*

**Second Amendment to Work Authorization No. HS0745  
Under  
Agreement between Broward County and Hazen and Sawyer, P.C.  
for  
General Consultant Services for Water and Wastewater Services**

This is a Second Amendment to Work Authorization No. HS0745 for engineering services under the General Consultant Services Agreement between: BROWARD COUNTY, a political subdivision of the State of Florida, its successors and assigns, hereinafter referred to as "COUNTY," and Hazen and Sawyer, P.C., hereinafter referred to as "CONSULTANT."

WHEREAS, COUNTY and CONSULTANT entered into an Agreement (the "Agreement") for general consultant services, from which Work Authorization No. HS0745 (the "Work Authorization") was issued on May 8, 2012, and

WHEREAS, COUNTY and CONSULTANT have met and negotiated an extension of time for this project, and this Second Amendment to the Work Authorization incorporates the results of such negotiation; NOW, THEREFORE

IN CONSIDERATION of the mutual promises and covenants contained herein, and other good and valuable consideration, receipt of which is hereby acknowledged, the parties hereto hereby agree to amend the Work Authorization as follows:

1. Each and every whereas clause set forth above is a true and correct recital and representation and is incorporated herein as if set forth fully.
2. Section 4 of the Work Authorization is hereby amended to read as follows:
  4. All services to be performed pursuant to this Work Authorization shall be completed within ~~1330~~ 2240 calendar days of the issuance of the Notice to Proceed ("Time for Performance").
3. Preparation of this Second Amendment has been a joint effort of COUNTY and CONSULTANT, and the resulting document shall not, solely as a matter of judicial construction, be construed more severely against one of the parties than any other.
4. Except to the extent modified herein, the Work Authorization shall remain in full force and effect. In the event of a conflict between the terms and conditions of this Second Amendment and the terms and conditions set forth in the Work Authorization, the parties hereto hereby agree that this document shall control. Nothing contained in this Amendment to the Work Authorization shall alter, modify, or change in any way the terms and conditions of the contract with the County.



5. This Second Amendment to the Work Authorization shall be effective upon execution by the parties, and may be fully executed in multiple copies by all parties, each of which, bearing original signatures, shall have the force and effect of an original document.

Coding: Words in ~~struck-through~~ type are deletions from existing text. Words in **underlined** type are additions to existing text.

[Remainder of This Page Is Intentionally Left Blank.]

IN WITNESS WHEREOF, the parties hereto have made and executed this Second Amendment to Work Authorization HS0745 on the respective dates under each signature: BROWARD COUNTY, through its Contract Administrator, as authorized pursuant to Section 4.4 of the Agreement, and HAZEN AND SAWYER, P.C., signing by and through its Vice President, duly authorized to execute same.

COUNTY

ATTEST:

BROWARD COUNTY, through its  
Contract Administrator

Erica Richards  
Witness

By [Signature]  
Gregory M. Balicki, P. E., Director

[Signature]  
Witness

26 day of October, 2015

CONSULTANT

WITNESS:

Hazen and Sawyer, P.C.

[Signature]  
Witness

By [Signature]  
President or Vice President

[Signature]  
Witness

Robert B. Taylor, Jr. P.E., Vice President  
(Print Name and Title)

16<sup>th</sup> day of October, 2015



# CERTIFICATE OF LIABILITY INSURANCE

Exhibit 3  
Page 43 of 46  
DATE (MM/DD/YYYY)  
03/30/2015

**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 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).**

<b>PRODUCER</b> Marsh USA, Inc. 1166 Avenue of the Americas New York, NY 10036 Attn: NewYork.certs@Marsh.com Fax: (212) 948-0500  700402-GAUWP-15-16	<b>CONTACT NAME:</b> PHONE (A/C, No, Ext): E-MAIL ADDRESS:	<b>FAX (A/C, No):</b>													
	<table border="1"> <thead> <tr> <th>INSURER(S) AFFORDING COVERAGE</th> <th>NAIC #</th> </tr> </thead> <tbody> <tr> <td>INSURER A : Hartford Fire Insurance Co</td> <td>19682</td> </tr> <tr> <td>INSURER BE : Hartford Casualty Ins Co</td> <td>29424</td> </tr> <tr> <td>INSURER C : N/A</td> <td>N/A</td> </tr> <tr> <td>INSURER D : Twn City Fire Insurance Co</td> <td>29459</td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </tbody> </table>		INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A : Hartford Fire Insurance Co	19682	INSURER BE : Hartford Casualty Ins Co	29424	INSURER C : N/A	N/A	INSURER D : Twn City Fire Insurance Co	29459	INSURER E :		INSURER F :
INSURER(S) AFFORDING COVERAGE	NAIC #														
INSURER A : Hartford Fire Insurance Co	19682														
INSURER BE : Hartford Casualty Ins Co	29424														
INSURER C : N/A	N/A														
INSURER D : Twn City Fire Insurance Co	29459														
INSURER E :															
INSURER F :															

**COVERAGES**                      **CERTIFICATE NUMBER:** NYC-005574536-32                      **REVISION NUMBER:** 8

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.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<b>GENERAL LIABILITY</b> <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 type="checkbox"/> LOC	X		10UUN UU0890	03/29/2015	03/29/2016	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000 \$
B	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS	X		10UENUU0960 (AOS) 10UENAN2667 (MA)	03/29/2015 03/29/2015	03/29/2016 03/29/2016	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ Comp./Coll. Deductible \$ 1,000
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE DED <input type="checkbox"/> RETENTIONS						EACH OCCURRENCE \$ AGGREGATE \$ \$
D	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	10WBAJ 7349	03/29/2015	03/29/2016	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ 1,000,000 E.L. DISEASE - POLICY LIMIT \$ 1,000,000

**DESCRIPTION OF OPERATIONS / LOCATIONS/ VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)**  
 RE: CONTRACT: RLI #20080911.0-EED-1 GENERAL CONSULTANT SERVICES FOR WATER AND WASTEWATER SERVICES (WWS).  
 BROWARD COUNTY AND THE BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS IS HEREBY INCLUDED AS ADDITIONAL INSURED.

<b>CERTIFICATE HOLDER</b>  BROWARD COUNTY BOARD OF COUNTY COMMISSIONERS 115 S. ANDREWS AVE, SUITE 210 FORT LAUDERDALE, FL 33301	Digitally signed by FRANCISCO VASQUEZ Date: 2015.04.08 14:15:57 -04'00'	<b>CANCELLATION</b>  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 of Marsh USA Inc. Manashi Mukherjee
---	--	---



**SERVICE CONTRACT**  
Version 7  
**BOARD OF COUNTY COMMISSIONERS**  
Broward County, Florida  
www.broward.org

SC 126 WED 05/11/15 200000000018  
Page 44 of 46

The above number must be shown  
on all Invoices and References

Mail proper invoice and copy of purchase  
order to:

**Billing Location:**

WATER AND WASTEWATER SERVICES

**Ship To:**

WATER AND WASTEWATER SERVICES

2555 W COPANS ROAD  
(954) 831-0792 NADJA HORTON

POMPANO BEACH, FL 33069

**Date:** 11/25/15 2555 W. Copans Road  
Pompano Beach, FL 33069

VC0000005519  
HAZEN & SAWYER,PC  
4000 HOLLYWOOD BLVD STE 750 NORTH

HOLLYWOOD, FL 33021

**Delivery Due Date:**  
FOB Dest, Freight Prepaid

**Contact:**  
Jorge Orozco

954-831-3239

**Vendor** LAUREN N. ORMEROD  
**Contact:** 954-987-0066

Project 9184; Work Authorization No. HS0745 for North Regional Wastewater Treatment Plant SCADA System Replacement. This Service Contract is modified to effect Amendment No. 2 which adds \$0 and 910 calendar days to the WA. Approved by the delegated authority of the Contract Administrator on 10/26/15.

Line	Quantity	Unit	Commodity Code/Description	Unit Price	Extended Price
1			<p align="center">92535</p> <p>Environmental Engineering</p> <p>**This Service Contract is modified to effect Amendment No. 2 which adds \$0 (zero) and an additional 910 calendar days.</p> <p>-----</p> <p>-----</p> <p>**This Service Contract is modified to effect Amendment No. 1 which adds a total of \$24,047.80 and 180 calendar days to WA HS0745.**</p> <p>The issuance of this service contract authorizes the Contract Administrator to issue the notice to proceed.</p> <p>Project Manager: Jorge Orozco, Tel: 954-831-3239 Purchasing Agent: Marie Williams Tel: 954-357-5856</p> <p>-----</p> <p>-----</p> <p>This Service Contract is issued to effect Work Authorization No. HS0745 for the provision of North Regional Wastewater</p>		774,884.00

Florida Sales Tax Exemption Number - 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.

APPROVED

AUTHORIZED SIGNATURE

DATE

*Marie Williams* 11/25/15

The above number must be shown on all Invoices and References

Line	Quantity	Unit	Commodity Code/Description	Unit Price	Extended Price
			<p>Treatment Plant SCADA System Replacement. The issuance of this Work Authorization is in full accordance with the Agreement with Hazen and Sawyer, P.C., for General Consultant Services for Water and Wastewater Services, Request for Letters of Interest (RLI) No. 20060911-0-EED-1, approved by the Board of County Commissioners on June 24, 2008., Agenda Item NO. 28.A. This Work Authorization was approved by the Board of County Commissioners (Item No. 5) on May 8, 2012.</p> <p>Scope of Work Provide professional engineering services for the design, permitting, procurement assistance, and construction management services related to the SCADA system replacement project. All work shall be in full accordance with the Scope of Services as delineated in Exhibit "A" of the Work Authorization.</p> <p>Maximum Amount Not-to-Exceed Compensation: For Tasks 1 thru 6: \$724,784.00 For Task 7: \$40,000.00 Reimbursables: \$10,100.00</p> <p>Total Maximum Amount Not-To-Exceed Compensation: \$774,884.00</p> <p>Time for performance: 1150 calendar days of the issuance of the Notice to Proceed.</p> <p>The issuance of this Service Contract authorizes the Contract Administrator to issue a notice to proceed.</p> <p>Project Manager: Jorge Orozco, Tel: 954-831-3239 Purchasing Agent: Ilyse S. Valdivia, Tel: 954-357-6078 RQS 126 WED0412120000000070</p>		
2			<p>92535 Environmental Engineering WA HS0745, Project 9016, Amendment 1 - Add \$24,047.80 in salaries and 180 calendar days. RQS 126 WED0610140000000098</p>		24,047.80

Florida Sales Tax Exemption Number - 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.

APPROVED *Marie W. U. - 11/25/15*  
AUTHORIZED SIGNATURE DATE

The above number must be shown on all Invoices and References

Line	Quantity	Unit	Commodity Code/Description	Unit Price	Extended Price
3			92535 Environmental Engineering Second Amendment to Work Authorization HS07-45, Project 9184, NRWTP SCADA System Replacement, for zero dollars and an additional 910 days. RQS 126 WED1102150000000004		
<b>Procurement Folder #</b>		1033010	<b>Contract #</b>	<b>Total Cost</b>	798,931.80

For inquiry regarding payment please call the Broward County Accounting Division 954-357-7193. To help expedite payment please include a copy of this purchase order with your invoice.

**PROPER INVOICE**

The Florida Prompt Payment Act provides that the County may set forth the requirements for an invoice to be a proper invoice. The requirements of a proper invoice shall be as set forth in the agreement or contract governing the purchase; however, in addition, no invoice submitted by a vendor shall be considered a proper invoice unless the invoice is an original invoice, is delivered to the County in accordance with the purchase order, and sets forth the following and additional information: a) The invoice shall set forth the County purchase order number, and the invoice shall correlate to the County purchase order number under which the purchase was made; and b) The invoice shall set forth the name of the business organization that is recited in the County purchase order; and c) The invoice shall set forth the date of its preparation; and d) The invoice shall set forth an identifying number to facilitate identification of the invoice; and e) The invoice shall set forth the vendor's federal identification number; and f) The invoice shall set forth a description of the goods or services or property provided to the County; and g) The invoice shall set forth the County's part or item number for each item or part delivered; and h) The invoice shall set forth the delivery terms set forth within the County purchase order; and i) The invoice shall set forth the location and date of delivery of the goods or services or property to the County; and j) The invoice shall set forth the quantity of the goods or services or property provided to the County; and k) The invoice shall set forth the unit price of the goods or services or property provided to the County; and l) The invoice shall set forth the extended total price of the goods or services or property provided to the County; and m) The invoice shall set forth applicable discounts.

Florida Sales Tax Exemption Number - 85-8013924140C-7  
Federal Tax Exemption Number - 59-6000531

**IMPORTANT: NO C.O.D.'S OR COLLECT SHIPMENTS WILL BE ACCEPTED.**

**APPROVED** Mari W. C. 11/25/15  
AUTHORIZED SIGNATURE DATE