

PROJECT AGREEMENT

Between

THE CITY OF SUNRISE

And

HAZEN & SAWYER, P.C.

For

Project Agreement No. 16-005-HS

Business Case Evaluation of Enhanced Anaerobic Digestion Alternatives At Sawgrass WWTP

Pursuant to the provisions contained in the Continuing Services Agreement between the City of Sunrise and Hazen & Sawyer, P.C. for General Professional Engineering Services (hereinafter referred to "CONTINUING SERVICES AGREEMENT") dated **October 28, 2010**, this Project Agreement authorizes the CONSULTANT to provide the services as set forth below:

The CITY and the CONSULTANT agree as follows:

SECTION 1 DEFINITIONS

1.1 **Change Order**: Change Order shall mean a written order to the CONSULTANT executed by the CITY, issued after execution of a Project Agreement or other agreement, authorizing and directing an addition, deletion or revision in the Work or an adjustment in the Contract Price or Contract Times, issued on the effective date of the Agreement.

1.2 **Contract Documents**: The Contract Documents establish the Rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Contract Documents), Contractor's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders, and Engineer's written interpretations and clarifications issued on or after the Effective Date of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Contract Documents. Only printed or hard copies of the items listed in this paragraph are Contract Documents. Files in electronic format of text, data, graphics, and the like that may be furnished by the CITY, the CONSULTANT or the Engineer to the Contractor are not Contract Documents.

1.3 **Defective Work**: The word "Defective", when modifying the word "Work", refers to Work that is unsatisfactory, faulty, or deficient in that it does not conform to the Contract Documents or does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by the CITY).

1.4 **Drawings**: That part of the Contract Documents prepared or approved by the CONSULTANT which graphically shows the scope, extent, and character of the Work to be performed by the Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.

1.5 **Field Order**: A written order issued by the CONSULTANT which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.

1.6 **Specifications**: That part of the Contract Documents consisting of written technical descriptions of materials, equipment, systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.

1.7 **Subconsultant**: An entity having a direct contract with the CONSULTANT or with any other Subconsultant for the performance of a part of the Work.

1.8 **Work**. The entire completed construction or the various separately identifiable parts thereof required to be provided under this Project Agreement. Work includes and is the result of performing or providing all labor, services, and documentation necessary to complete the Work, all as required by this Project Agreements.

SECTION 2 SCOPE OF SERVICES

2.1 The CONSULTANT shall provide engineering services to the CITY for the Project as described in the "Project Description" attached as **EXHIBIT "1"**.

2.2 The "Scope of Services" and tasks to be provided by the CONSULTANT for this Project are those services and tasks as listed in **EXHIBIT "2"**.

2.3 The CITY may request changes that would increase, decrease, or otherwise modify the Scope of Services. Such changes must be contained in a written change order executed by the parties in accordance with the provisions of the Continuing Services Agreement, prior to any deviation from the terms of the Project Agreement, including the initiation of any extra Work.

SECTION 3 DELIVERABLES

As part of the Scope of Services the CONSULTANT shall provide to the CITY the Deliverables as listed in **EXHIBIT "5"**.

SECTION 4 TERM / TIME OF PERFORMANCE / DAMAGES

4.1 **Term**. This Project Agreement shall commence on the date this instrument is fully executed by all parties and shall continue in full force and effect through **February 28, 2017**, unless otherwise terminated pursuant to Section 7 or other applicable provisions of this Project Agreement. The CITY'S City Manager, in his sole discretion may extend the term of this Project Agreement through written notification to the CONSULTANT. Such extension shall not exceed **180** days. No further extensions of this Project Agreement shall be effective unless authorized by the City Commission.

4.2 **Commencement**. The CONSULTANT'S services under this Project Agreement and the time frames applicable to this Project Agreement shall commence upon the date provided in a written

Notification of Commencement (“Commencement Date”) and receipt of a fully executed Purchase Order provided to the CONSULTANT from the CITY. The CONSULTANT shall not incur any expenses or obligations for payment to third parties prior to the issuance of the Notification of Commencement. The CONSULTANT must receive written notice from the CITY’S Director of Utilities or designee prior to beginning the performance of services in any subsequent phases of this Agreement. Prior to granting notice for the CONSULTANT to proceed to a subsequent phase, the CITY’S Director of Utilities or designee may, at its sole option, require the CONSULTANT to submit the itemized deliverables/documents identified in **EXHIBIT "5"** of this Agreement for the Director’s review.

4.3 **Contract Time.** Upon receipt of the Notification of Commencement and the fully executed Purchase Order, the CONSULTANT shall commence services to the CITY on the Commencement Date, and shall continuously perform services to the CITY, without interruption, in accordance with the time frames set forth in the “Project Schedule,” a copy of which is attached and incorporated into this Agreement as **EXHIBIT "3"**. The number of calendar days from the Commencement Date, through the date set forth in the Project Schedule for completion of the Project or the date of actual completion of the Project, whichever shall last occur, shall constitute the Contract Time.

4.4 **No Damages For Delay.** The CONSULTANT shall not be entitled to any claim for damages including, but not limited to, loss of profits, loss of use, home office overhead expenses, equipment rental and similar costs, on account of delays in the progress of the Project from any cause whatsoever including an act or neglect of the CITY, adverse weather conditions, an act of God, strike, war or national disaster or emergency, unusual delay in deliveries, unusual delay in procuring permits, differing site conditions, unavoidable casualties or other causes beyond the CONSULTANT’S control, or by delay authorized or caused by the CITY, or by other causes which the CONSULTANT determines may justify delay. The CONSULTANT’S sole remedy for any such delay shall be a reasonable extension of time and a revision to the Project Schedule as determined by the CITY. The CONSULTANT will not be entitled to damages for delay, howsoever caused. However, additional costs to the CONSULTANT or delays in the CONSULTANT’S performance caused by improperly timed activities shall not be the basis for granting a time extension. If the CONSULTANT wishes to make a claim for an increase in time of performance, written notice of such claim shall be made to the CITY within thirty (30) calendar days after the occurrence of the event, or the first appearance of the condition giving rise to such claim. The CITY’S representative, shall determine whether or not the CONSULTANT is entitled to a time extension for the delay. The failure of the CONSULTANT to give such notice shall constitute a waiver of any claim under this section.

4.5 Notwithstanding the provisions of Paragraph 4.4, in the event that the Contractor fails to substantially complete the Project on or before the substantial completion date specified in the Contract for Construction or the Contractor is granted an extension of the time to complete performance under the Contract for Construction, and the CONSULTANT’S contract administration services are materially extended by the CITY as a direct result thereof and through no fault of the CONSULTANT, the CONSULTANT shall be entitled to additional compensation at the rates shown in the Continuing Services Agreement **EXHIBIT "A"**, Salary Costs. The amount of compensation due by the CONSULTANT under this paragraph shall be pursuant to an approved Change Order.

4.6 All limitations of time set forth in this Agreement are of the essence.

SECTION 5 AMOUNT, BASIS AND METHOD OF COMPENSATION

5.1 The basis and method of compensation to the CONSULTANT for the services rendered pursuant to this Project Agreement shall be in conformance with **EXHIBIT "E"** of the Continuing Services Agreement.

5.2 **Not Used**

5.3 **Lump Sum Compensation.** CITY agrees to pay CONSULTANT as compensation for performance of all services as related to the Project a Lump Sum of **\$34,199.00**. It is understood that the method of compensation is that of Lump Sum which means that CONSULTANT shall perform all services set forth for total compensation in the amount stated above. Said Lump Sum includes but is not limited to, compensation for all fees, expenses, and out-of-pocket costs of the CONSULTANT.

SECTION 6 BILLING AND PAYMENTS TO THE CONSULTANT

Billing and payments to the CONSULTANT shall be in accordance with **EXHIBIT "E"** of the Continuing Services Agreement and Exhibit 4 of this Project Agreement.

SECTION 7 TERMINATION / SUSPENSION

7.1 Termination shall be in accordance with Section 6 of the Continuing Services Agreement.

7.2 Suspension in accordance with Section 43 of the Continuing Services Agreement.

7.3 **Assignment Upon Termination.** Upon termination of this Project Agreement, the work product of the CONSULTANT shall become the property of the CITY and the CONSULTANT shall within ten (10) working days of receipt of written direction from the CITY, transfer to either the CITY or its authorized designee, all work product in its possession, including but not limited to, designs, specifications, drawings, studies, reports and all other documents and data in the possession of the CONSULTANT pertaining to this Project Agreement. Upon the CITY’S request, the CONSULTANT shall additionally assign its rights, title and interest under any subcontractor’s agreements to the CITY. All Work product provided under this Section shall be used solely for its intended purpose.

SECTION 8 PERSONNEL ASSIGNED TO PROJECT

8.1 The CONSULTANT shall assign only qualified personnel to perform any services concerning this Project Agreement. At the time of execution of this Agreement, the parties anticipate that the following named individuals will perform those supervisory or primary functions indicated:

<u>NAME</u>	<u>FUNCTION</u>
Kurt Pfeffer	Senior Principal Professional
Rob Taylor	Company Officer
Michael Bullard	Technical Expert
Caitlin Klug	Senior Professional

<u>NAME</u>	<u>FUNCTION</u>
Monique Durand	Senior Professional
Jean Paul Silva	Principal Professional
Brad Pickett	Professional
Fran Bennett	Senior CAD Designer
Teresa McNally	Administrative Assistant

So long as the individuals named above remain actively employed or retained by the CONSULTANT, they shall perform the functions indicated next to their names. Furthermore, the CITY reserves the right to reject any proposed substitution for any of the above named individuals, and the CITY shall have the further right to require that any individual assigned to the Project by the CONSULTANT be removed from the Project and reassigned for good cause.

SECTION 9 INCORPORATION OF CONTINUING SERVICES AGREEMENT

All terms and conditions of the "Continuing Service Agreement" between the CITY and the CONSULTANT dated **October 28, 2010** not specifically modified by this Project Agreement shall remain in full force and effect and are incorporated into and made a part of this Project Agreement by this reference as though set forth in full.

SECTION 10 SEVERABILITY

If any term or provision of this Project Agreement or its application thereof to any person or circumstances shall, to any extent, be held invalid or unenforceable, the remainder of this Project Agreement or the application of such terms or provisions to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected, and every other term and provision of this Project Agreement shall be deemed valid and enforceable to the extent permitted by law.

SECTION 11 GOVERNING LAW

This Agreement shall be governed by the laws of the State of Florida. Should the Parties be involved in legal action against each other arising under, or connected to, this Agreement, each party will be responsible for their own attorney's fees and costs. The venue for any litigation will be Broward County, Florida. Both Parties hereby agree to waive a jury trial, and will proceed to a trial by judge if necessary.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature: The CITY, signing by and through its Mayor, attested to by its City Clerk, duly authorized to execute same and by Hazen & Sawyer, P.C. by and through its Vice President, duly authorized to execute same.

CITY

CITY OF SUNRISE, FLORIDA

By: _____

Mayor Michael J. Ryan

_____ day of _____, 2016.

AUTHENTICATION:

Felicia M. Bravo
City Clerk

(SEAL) Seal

Approved as to form:


Kimberly A. Kisslan, City Attorney
City of Sunrise
10770 W. Oakland Park Blvd.
Sunrise, Florida 33351
Telephone: (954) 746-3300

By: _____

Kimberly A. Kisslan
City Attorney

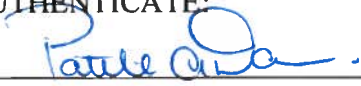
CONSULTANT

Hazen & Sawyer, P.C.

By: 
Robert B. Taylor, Jr. P.E.
Vice President

22 day of January, 2016.

AUTHENTICATE:


Secretary

Patrick A. Davis, P.E.
(Please type name of Secretary)



WITNESSES:

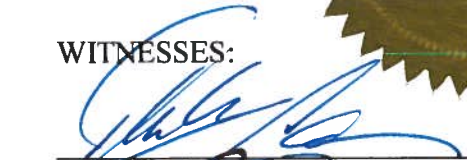






EXHIBIT "1"

TO

PROJECT AGREEMENT

**Business Case Evaluation of Enhanced Anaerobic Digestion Alternatives
At Sawgrass WWTP**

PROJECT DESCRIPTION

The feasibility of various biosolids management alternatives, applicable to the City for the Sawgrass and Springtree WWTPs, are discussed in Chapter 12 of the City of Sunrise Water and Wastewater Facilities Master Plan (2008). The key aspects of concern to the CITY when evaluating biosolids treatment alternatives were determined to be low odor potential, high possible carbon credits, Class A/AA product, a regional approach for end product, and existing technology experience. The Master Plan provided an evaluation of the regulatory requirements and considerations, the existing biosolids treatment processes, treatment alternatives, disposal methods, and costs associated with alternatives that meet the CITY's objectives. The Master Plan recommended the implementation of phased biosolids treatment process improvements in the following order:

- Bid Package A (now under construction):
 - Sawgrass Centrifuge Dewatering
 - Springtree Centrifuge Dewatering
 - Springtree Sludge Holding Tank Improvements
- Bid Package B (design ongoing, scheduled for completion in February 2016):
 - Springtree Anaerobic Digestion
 - Springtree Thickening Reliability Improvements
- Bid Package C (design scheduled to follow Bid Package B):
 - Sawgrass Gravity Belt Thickening
 - Sawgrass Anaerobic Digestion
 - Sawgrass Sludge Storage and Pumping Modifications
 - Sawgrass Odor Control Improvements
- Bid Package D (no implementation schedule defined):
 - Sawgrass Thermal Drying Facility

Existing and Master-Planned Facilities – Sawgrass WWTP

Currently, the biosolids treatment facilities at the Sawgrass WWTP (SGWWTP) consist of dissolved air flotation (DAF) thickening, followed by either stabilization in autothermal aerobic digesters (ATAD) or direct dewatering by a single belt filter press. Under Bid Package A, dewatering centrifuges have been retrofitted into the existing belt press dewatering facility to increase cake solids concentration and further reduce biosolids quantities and related hauling and disposal costs. Centrifuge dewatering facilities were placed into service in October 2015. The CITY has discontinued operation of the ATAD stabilization process due to performance and odor issues. Therefore, under Bid Package C, the 2008 Master Plan recommended that the ATAD facility be replaced by a new anaerobic digestion facility preceded by a new sludge thickening facility. The proposed upgrades would result in the ability to dispose stabilized and dewatered biosolids meeting Class B requirements by land application. Longer term phasing under the 2008 Master Plan included potential consideration of a regional thermal sludge drying facility at the Sawgrass WWTP to process dewatered biosolids from the Sawgrass and Springtree WWTPs to meet Class A biosolids requirements for the marketing of a pelletized fertilizer for sale/distribution.

Purpose of Business Case Evaluation

Over the seven (7) years since the 2008 Master Plan was accepted by the CITY, conceptual (30%) design of Bid Package A, B and C facilities have been completed; Bid Package A (centrifuge dewatering facilities) has been fully designed and entered construction; and Bid Package B design is underway to implement conventional anaerobic digestion at the Springtree WWTP. During that time there have been continued developments in technology to process and treat municipal wastewater biosolids to both Class B and Class A regulatory standards. Therefore, before proceeding with design and construction of Bid Package C to implement conventional anaerobic digestion at the larger Sawgrass WWTP, the CITY and CONSULANT have mutually agreed that Class B options be should re-evaluated to include consideration of enhanced anaerobic digestion technologies that have been further developed since adoption of the 2008 Master Plan.

Business Case Evaluation Alternatives

Under the “Part 503 Rule”, the U.S. Environmental Protection Agency (EPA) has developed standards for the use and disposal of sewage sludge (biosolids). Under the Part 503 rule, EPA has identified “Processes to Significantly Reduce Pathogens” (PSRP) to meet Class B biosolids standards, and “Processes to Further Reduce Pathogens” (PFRP) to meet Class A biosolids standards. Although not strictly bound, state agencies including FDEP generally adopt EPA approvals of PSRPs and PFRPs. The 2008 Master Plan recommendations were based on evaluations of PSRPs and PFRPs applicable to and appropriate for the City of Sunrise. In addition to PFRPs and PSRPs, EPA’s “Pathogen Equivalency Committee” continues to evaluate innovative and/or alternative sewage sludge disinfection processes for “equivalency” to processes to significantly (Class B) or further (Class A) reduce pathogens. The CITY has requested an updated evaluation of Class B alternatives to capture the latest treatment technology developments. After joint discussions between the CITY and the CONSULTANT, it has been mutually agreed that the following Class B treatment technologies will not be considered in the Business Case Evaluation (BCE):

- Chemical Oxidation (BCR Neutralizer Process) – no installations at scale of Sawgrass WWTP
- Temperature-phased anaerobic digestion – not practical to implement with only two digesters
- Co-digestion of hauled high strength wastes – to avoid materials handling and odor control issues

Therefore, the CONSULTANT will re-evaluate the following PSRPs/PFRPs for implementation under Bid Package C. These alternatives shall be defined as “BCE Alternatives” in the “Scope of Services” section that follows:

Process Evaluations at Sawgrass WWTP (20-mgd) – Bid Package C

- Conventional Mesophilic Anaerobic Digestion (recommended in 2008 Master Plan)
- Anaerobic Digestion with Thermal Hydrolysis Pretreatment

EXHIBIT "2"

TO

PROJECT AGREEMENT

**Business Case Evaluation of Enhanced Anaerobic Digestion
At Sawgrass WWTP**

SCOPE OF SERVICES

SECTION 1 DESIGN SERVICES - DELETED

SECTION 2 BIDDING SERVICES - DELETED

SECTION 3 CONSTRUCTION CONTRACT ADMINISTRATION SERVICES - DELETED

SECTION 4 THE INSPECTION PROJECT REPRESENTATIVE - DELETED

SECTION 5 SPECIAL SERVICES OF THE CONSULTANT - DELETED

SECTION 6 SERVICE SCHEDULE - DELETED

SECTION 7 MISCELLANEOUS SERVICES

The Business Case Evaluation will consist of (1) gathering of information from manufacturers of thermal hydrolysis pretreatment system manufacturers, (2) preparation of a draft letter report summarizing the evaluation of alternatives and providing a final process recommendation, and (3) preparation of a final letter report incorporating the CITY's review comments related to the draft letter report.

Task 1 Gather Information from Thermal Hydrolysis Pretreatment System Manufacturers

Solicit and gather technical information from manufacturers of the following innovative/alternative equivalent PSRP/PFRP processes:

1. Thermal Hydrolysis (pretreatment step upstream of anaerobic digestion)

Technical information will include design criteria, process flow diagrams, general arrangement drawings, construction and O&M costs; and operating/performance data for proven installations of similar size as facilities to be evaluated at the Sawgrass WWTP.

Task 2 Technical Evaluation of BCE Alternatives

Conduct technical evaluations of the BCE Alternatives. Evaluations shall include the following information/analysis for each BCE alternative:

1. Narrative descriptions of process facilities. Descriptions shall incorporate information gathered from manufacturers of innovative/alternatives technologies and provide an overall description of how the proposed process facilities would be incorporated into the existing and master-planned biosolids processing facilities at the Sawgrass WWTP.
2. Conceptual sizing and design criteria for new process facilities. Design and sizing criteria will include allowable hydraulic and solids loading rates, size of proposed process tankage, estimated chemical and electrical power consumption, and other parameters as required to develop conceptual life-cycle costs.
3. Conceptual site plans and process flow diagrams for new process facilities and support facilities
4. Conceptual life-cycle costs (capital, operations and maintenance); operations and maintenance costs to be analyzed include electrical power consumption, chemical usage, operations labor, maintenance labor, replacement parts and other consumables; analysis of operations and maintenance costs associated with the thermal hydrolysis pretreatment option will also address anticipated reductions in centrifuge dewatering costs and potential recovery of additional digester gas for beneficial use and the potential operational cost savings associated with use of the digester gas.

Task 3 Letter Report

Prepare and submit draft and final letter reports as follows:

1. Prepare a draft letter report to present findings, conclusions and recommendations based on results of Task 2 – Technical Evaluation of BCE Alternatives. Submit one (1) electronic (PDF) copy and ten (10) hard copies of the draft letter report for the CITY's review.
2. Attend a meeting to review the draft letter report with the CITY and prepare and distribute meeting minutes to document the CITY's comments.
3. Prepare the final letter report to incorporate the CITY's review comments. Submit one (1) electronic (PDF) copy and ten (10) hard copies of the final letter report for the CITY's records.

Task 4 Project Management

Project management will include quality control review of deliverables by senior technical personnel, monitoring and control of project schedule, direct coordination with CITY staff and administrative tasks required to complete the project.

ASSUMPTIONS:

- This scope of services DOES NOT include evaluation of biosolids processing technologies/alternatives not specifically indicated herein.

EXHIBIT "3"

TO

PROJECT AGREEMENT

**Business Case Evaluation of Enhanced Anaerobic Treatment Alternatives
At Sawgrass WWTP**

PROJECT SCHEDULE

CONSULTANT will submit deliverables to the CITY as follows:

Task/Description	Task/Completion In Weeks Following Authorization
Task 1 – Gather Information from Thermal Hydrolysis Pretreatment System Manufacturers	3 (no deliverable)
Task 2 – Technical Evaluation of BCE Alternatives	11 (no deliverable)
Task 3 – Draft Letter Report	13
Task 3 – Final Letter Report	18*

*Assuming that the CITY issues comments two weeks after receipt of draft deliverables

EXHIBIT "4"

TO

PROJECT AGREEMENT

**Business Case Evaluation of Enhanced Anaerobic Treatment Alternatives
At Sawgrass WWTP**

PAYMENT SCHEDULE

Task/Description	Percent of Total Fee	Fee
Task 1 – Gather Information from Manufacturers of Innovative/Alternative Technologies	13.2	\$4,500
Task 2 – Technical Evaluation of BCE Alternatives	47.3	\$16,182
Task 3 – Letter Report	29.9	\$10,217
Task 4 – Project Management	7.7	\$2,629
Expenses	2.0	\$671
Total	100.0	\$34,199

EXHIBIT "5"

TO

PROJECT AGREEMENT

**Business Case Evaluation of Enhanced Anaerobic Treatment Alternatives
At Sawgrass WWTP**

DELIVERABLES

- Draft Letter Report - ten printed copies and one electronic copy (PDF format).
- Final Letter Report - ten printed copies and one electronic copy (PDF format).

EXHIBIT "D"

TO

PROJECT AGREEMENT

**Business Case Evaluation of Enhanced Anaerobic Treatment Alternatives
At Sawgrass WWTP**

SUBCONSULTANTS LIST

Subconsultants will not be used on this project.