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CLIENT: City of Hallandale Beach
400 South Federal Highway
Hallandale Beach, FL 33009

RE: FY 2013-2014-006 Continuing Professional Services

DISCIPLINE: Civil Engineering

CONSULTANT: Calvin, Giordano & Associates, Inc.

WORK AUTHORIZATION NO.:

PROJECT: Three Islands Reuse Pipeline

CGA NO.: 19-3026

DATE: October 4, 2019

ATTENTION: Peter A. Kunen, P.E.
Assistant Director of Public Works/City Engineer

In accordance to resolution #2014-138, RFP# FY 2013-2014-006 Continuing Professional Services, the following scope of services is provided by Calvin, Giordano & Associates, Inc. (CGA) as requested by the City of Hallandale Beach (CITY) for the above reference project. This proposal, when executed, shall be incorporated in and become an integral part of the Agreement for professional services between CITY and CGA, the Continuing Contract, hereafter referred to as the Agreement.

Background

The CITY desires the design, permitting & bidding plans for approx. 4,500 LF of new 8" irrigation reuse water pipeline from the existing pump station to the proposed median landscape improvements (designed by others) within the Three Islands Boulevard neighborhood. Reuse water pipeline construction limits include a portion of Three Islands Boulevard (median just south of Atlantic Shore Boulevard to median just south of Parkview Drive intersection), and entire lengths of Parkview Drive and Leslie Drive roadways. Limited Surveying, Geotechnical Engineering, Utility Coordination, Electrical Engineering, Pump Station pump selection, and Instrumentation & Controls are also included in this proposal. The specific scope of service included is detailed below.

1) Task 1 – Project Management

- A. CGA shall provide project management and project coordination services throughout the design, permitting, and bidding process. This will include monthly status updates to the CITY, coordination with the design team and Craven Thompson & Associates, and adherence of design to the City of Hallandale Beach's goals and objectives, and interactions with City of Hallandale Beach Staff. This task will also include the prompt resolutions of any issues which may arise during the design and/or permitting process.

2) Task 2 – Data Collection, Utility Coordination and Subsurface Investigation

- A. CGA, in conjunction with US Utility Potholing & Air Excavation, shall perform an investigation of the utilities within the project area and in locations determined to have a high probability of potential utility conflicts. This task shall provide information on the construction plans meeting Subsurface Utility Engineering Quality Level A as described by ASCE "Standard Guidelines for Depiction and Collection of Existing Subsurface Utility Data". Data Acquisition is limited to the number of soft digs as noted below.

B. Utility Coordination

- 1. Create an 811 Design Ticket.
- 2. Submit Initial Utility Request Letters to applicable utility owners.
- 3. Create a utility matrix for tracking.
- 4. Log and input utility information into AutoCAD.
- 5. The CITY will provide water and sewer in pdf and AutoCAD.
- 6. Submit Confirmation Letters to applicable utility owners.
- 7. Follow up responses and confirmation from the applicable utility owners.

C. Subsurface Utility Exploration (SUE)

- 1. Utility Investigation of the proposed 8" reuse water line from pump station to median improvements throughout Three Islands neighborhood. Air vacuum excavation (utility potholing) will be performed by US Utility Potholing & Air Excavation in order to locate and confirm potential conflicts with the new reuse water pipeline.
- 2. 15 Utility Potholes are included. CGA Surveying services will identify and stake proposed soft dig locations and as-built soft dig locations with measure down distances and other pertinent as-built utility information as identified by subsurface utility locations.
- 3. Add and properly annotate field verified utility information into AutoCAD.
- 4. Perform a site visit to verify results of the utility subsurface investigation.

3) Task 3 – Limited Surveying Services

- A. This surveying task includes conducting an as-built survey of the pump station located on the east side of Three Island Boulevard south of Atlantic Shores and obtaining bathymetric data (soundings) each side of the Parkview Drive bridge located between Three Island Boulevard and Leslie Drive.

B. Data Gathering

1. Review all City, County or other records as necessary to define survey limits for each right-of-way included in this task order and any published horizontal and vertical survey control.

C. Bathymetric (Sounding) Data

1. Obtain canal cross section measurements of canal depth along each side of the Parkview Drive bridge, with one cross section being adjacent to the roadway and the second cross-section spaced 50 ft. apart.

D. As-Built Survey Pump Station

1. Prepare an as-built of the pump station to include location of all above ground improvements within the pump station site, locate any trees or vegetation and obtain measurements for wet wells, valve pits, manholes and other pump station infrastructure.

E. Subsurface Utility Exploration Data

1. Obtain horizontal locations of utility potholes softdigs (potholing provided by others) which will be inserted into the existing survey data file as completed by others and provided by the City to CGA for use in this engineer design project.

F. Survey Information

1. Survey data as obtained in Tasks C and D will be inserted into the existing survey data file as completed by others and provided by the City to CGA for use in this engineering design project.

4) Task 4 - Geotechnical Engineering Services (performed by Nutting Engineers)

- A. Perform six (6) Standard Penetration Test (SPT) borings to a depth of 15 feet every 500 feet along the alignment of the new 8" reuse water pipeline.
- B. Prepare a Geotechnical Report including a description of the findings, general site preparation, and pipeline design bedding criteria recommendations.

5) Task 5 – Design Submission

A. 60% Design Submission.

1. Prepare 60% plans based on the landscape median improvements conceptual plans provided by CTA dated January 10, 2019.
2. Coordinate with Craven Thompson & Associates design plans regarding irrigation zones and connection information.
3. Prepare 60% Opinion of Probable Construction Cost, Class 2 (as defined by Association for the Advancement of Cost Engineering International).

4. CGA shall submit 60% design plans to the City of Hallandale Beach Staff for review. The submittal will include one (1) 24" x 36" set of plans, and one (1) Opinion of Probable Construction Cost, as well as pdf's of the above items.
5. Attend one (1) meeting with the CITY to discuss and coordinate 60% Submission comments. Review, respond and address comments from the CITY.

B. 90% Design Submission

1. Prepare 90% plans.
2. Prepare 90% Opinion of Probable Construction Cost, Class 1 (as defined by Association for the Advancement of Cost Engineering International).
3. Prepare 90% Technical Specifications.
4. CGA shall submit 90% design plans to the City of Hallandale Beach Staff for review. The submittal will include one (1) 24" x 36" set of plans, one (1) Opinion of Probable Construction Cost and one (1) Technical Specifications Documents, as well as pdf's of the above items.
5. Attend one (1) meeting with the CITY to discuss and coordinate 90% Submission comments. Review, respond and address comments from the CITY.

C. 100% Design Submission

1. Prepare 100% plans.
2. Prepare 100% Opinion of Probable Construction Cost, Class 1 (as defined by Association for the Advancement of Cost Engineering International).
3. Prepare 100% Technical Specifications. CITY will provide the Front End Specifications.
4. CGA shall submit 100% design plans to the City of Hallandale Beach Staff for review. The submittal will include one (1) 24" x 36" set of plans, one (1) Opinion of Probable Construction Cost and one (1) Technical Specifications Documents, as well as pdf's of the above items.

6) Task 6 – Electrical Engineering Services

- A. Prepare construction documents for the upgrade of the existing single pump with two new pumps. The new pumps will be sized to run one at a time, both pumps will not run at the same time. Each pump will alternate run time. The electrical service will remain as is, changes inside the control panel will be indicated (change of the pumps breakers and starters). Coordinate with existing control panel manufacture for the required changes and control of the new pumps. It is anticipated that the existing electrical service will accommodate the new pumps sizes. Upgrade to the existing electrical service is not part of this contract.
- B. Coordinate with control panel manufacture for the implementation of remotely located irrigation zone controllers for the start/stop of the pumps. Coordinate information of compatible irrigation controllers to client for future purchase and installation for the median landscaping. Indicate location of empty conduits with pull strings and pull boxes

for each irrigation controller zone location. Empty conduits will be terminated at the existing control panel location.

- C. Provide 90% and 100% construction documents with electrical specifications. Review and response to client 90% construction documents comments, revise construction documents as required. Review and response to building department 100% construction documents comments, revise construction documents as required.

7) Task 7 – Permitting

- A. Prepare and process permit applications through the following entities:
 - 1. Florida Department of Environmental Protection Agency - Southeast District West Palm Offices (Reuse Permit)
 - 2. Florida Department of Environmental Protection Agency - Southeast District West Palm Offices (Water Permit)
 - 3. Broward County Environmental Protection and Growth Management Division (Environmental permitting associated with canal crossing)
 - 4. City of Hallandale Beach – Building Department Permit (Dry-Run)
- B. It is anticipated that no Army Corp of Engineering (ACOE) permitting is required, as no waterbody or wetland impacts are anticipated. If design constraints are modified and this additional permitting is required additional scope and budget will be required.
- C. Digital copies of any packages submitted for permitting will be provided to the CITY.

8) Task 8 – Bidding Services

- A. Submit Bid Package to the City of Hallandale Beach Staff. One (1) CD or thumb drive containing pdf's of the plans and Technical Specifications will be provided.
- B. Attend one (1) pre-bid meeting for the project, respond to prospective bidder RFI(s), assist with addenda as needed during the bid process.
- C. CITY will run and record minutes for the pre-bid meeting.
- D. CITY will perform bid evaluation.

9) Task 9 – Limited Construction Services *(Additional Services Alternative)*

- A. The proposed effort shall include providing limited Construction Engineering Services including limited Construction / Observation services for the Hallandale Beach Three Island Reuse Water Main project. Overall Construction Management will be performed by the City's Consultant Craven Thompson & Associates, while Calvin, Giordano & Associates will over provide limited Construction Engineering Services associated with the reuse water main installation and pump replacement. The following scope is based on pre-construction activities, and 180 calendar days of Construction Time / Contract Time (six (6) months), and on total hours specified within. Any additional time beyond this will require an approved agreement. The anticipated scope of services includes limited pre-construction activities and coordination; and Construction Engineering and Observation services.

- 1. Attend one (1) pre-construction meeting, conducted and recorded by the CITY.

2. Receive, review and respond to Shop Drawings, samples and other data associated with reuse water main design, which the Contractor is required to submit.
3. Receive, review and respond to interpretations and clarifications of the Contract Documents (RFI responses, plan revisions, and Work (Change) Directives) associated with reuse water main design. In connection therewith, assist in the review and processing of any work change directives or change orders requested by the CITY. All instructions to the Contractor will be issued through the CITY's Project Administrator or Inspector, in writing on an as-needed basis.
4. Attend limited monthly construction progress meetings at Municipality location for up to two (2) months during the duration of the construction project (assumed effort at 2 meetings @ 3 hours per meeting). The Craven Thompson & Associates Construction Manager will prepare minutes.
5. Attend and participate in field reviews/meeting with the CITY, Contractor and appropriate regulatory agencies when requested by the CITY and necessary for consultation and conferences in regard to construction of the reuse water main portion of the project (includes 15 hours each for the EOR and Field / Resident Project Representative). This task does not include conducting or distributing minutes.
6. Perform initial and final reviews of reuse water main as-builts supplied by the Contractor, prepare and submit permit close-out documents and certification(s) associated with the reuse water main portion of the project.
7. Observe electrical system start-up upon completion of work and certify electrical system.
8. It is our understanding that Craven Thompson & Associates' Construction Manager will be onsite and will provide periodic daily inspections with observation reports and photos to CGA.
9. Perform limited and scheduled observations (estimated at one hundred eighty (104) hours of effort) of Field / Resident Project Representative services for compliance with plans and specifications; provide copies of observation reports to the EOR and CITY on a weekly basis. Make interim inspections for Substantial and Final completion(s) to determine, in general, if the work has been completed in conformance with the intent of the Contract Documents. Additionally, the CITY shall furnish and assign a Construction Project Administrator and / or Project Inspector(s) during the course of the project construction activities to supplement CGA's efforts, as noted in #8 above.
10. Perform observations and recording of required testing (pressure, density, chlorination, etc.), and connection(s) to the existing water main(s).
11. Attend close-out inspections with CITY, Contractor and permitting agencies; prepare and distribute punch-list(s).

10) Other Services

- A. The only services included in this contract are those identified above. No other Services are included in this contract.
- B. City Engineering Permit is not required and not included in this Contract.


- C. Design of medians is not included in this contract.
- D. Reuse water main size has been provided by the City. Analysis or modelling associated with the water main size is not included in this contract.
- E. Construction Inspection, Construction Management, and Engineering During Construction services are not included in this contract.

The table below gives the budget breakdown by task for the subject professional services; lump sum totals given below. The attached table provides the staff hour estimates by task.

Task	Task Subtotal
1 – Project Management	\$6,600.00
2 – Utility Coordination and Subsurface Investigation	\$5,020.00
Subsurface Utility Exploration Services (performed by US Utility)	\$7,575.00
3 – Route Survey	\$ 3,435.00
4 – Geotechnical Engineering Services (performed by Nutting Engineers)	\$3,075.00
5 – Design Submission	\$37,620.00
6 – Electrical Engineering Services	\$9,300.00
7 – Permitting	\$12,040.00
8 – Bidding Services	\$3,280.00
Task 1 thru 8	
Total Amount	\$87,945.00
Optional Services	
9 – Limited Construction Services (Additional Services Alternative)	\$29,670.00
Total Amount (plus add service)	\$117,615.00

AUTHORIZATION

By:

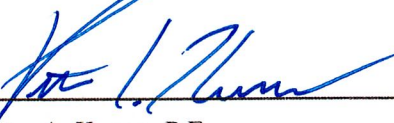


Chris Giordano
Senior Vice President,
Calvin, Giordano & Associates, Inc.

Date:

10/4/19

By:



Peter A. Kunen, P.E.
Assistant Director of Public Works/
City Engineer
City of Hallandale Beach

Date:

10/17/19