

December 4, 2018

Leighton Walker
Acting Executive Director
City of Riviera Beach Utility District
600 West Blue Heron Boulevard
Riviera Beach, FL 33404

Subject: C Solutions Additional Cost

**Engineering Services During Construction** 

(Replacement Contractor Services during Construction)

City PO No. 116545

Mr. Walker:

As requested by the Utility Special District of the City of Riviera Beach, C Solutions has been performing additional work to assist in the completion of the Construction of LS10 and LS50. This includes additional work that was required during the entire duration of the project as well as additional work required due to the extension of the Contract past the original completion date.

C Solutions' Contract Amendment, for Construction Administration for the replacement contractor Wharton-Smith, was limited to a construction period of 7 months and to specified quantities for certain items of work (e.g. reviews of RFIs). The 210 consecutive day period for services during construction as specified in our contract amendment ended on September 27, 2017.

The contract for the replacement Contractor has been complicated by the special exemptions allowed in the bidding services that were administered by the Surety Company. These special conditions, not in the original bid documents nor available to C Solutions when the scope for Amendment No. 3-2 was provided, have significantly increased the work required by the C Solutions in its reviews of submittals, RFIs and contract changes and finally time for management and inspection services. An example to illustrate this point is that the original Contract Documents (technical specifications and drawings) required the Contractor to provide all equipment specified. However, the replacement contractor was partially exempted from this requirement by the Surety Company which allowed conflicting terms as part of the bid. This change required C Solutions take extra steps and review that the cost for all equipment being claimed as an extra was legitimate while in the original Contract it would not have been required since all equipment specified in Contract Documents was required to be provided by Contractor.

Additionally, uncertainty as to the division of labor between previous subconsultants and the replacement general Contractor has been a factor adding to additional work (e.g. additional RFIs, change orders, etc.). It was understood from discussions with Wharton-Smith, that the replacement Contractor did not originally

involve subcontractor's in the preparation of the bid but was directed in bidding to use estimated cost for completion of the subcontractor's work as provided by the Surety Company.

Finally, C Solutions was asked to provide continued project management and a resident inspector for the extended period of the project past September 2017. Much of this extended period was due to materials that were missing from the site or materials that were onsite but damaged due to poor storage conditions between contractors. Table 1-1 provides a summary of contract exceedances from Amendment No. 3-2.

Table 1-1 Summary of C Solutions Additional Work - LS10 and LS50 (Wharton-Smith)

Task Description	Unit Description	Total Budgeted	# Completed	% Exceedance
General Management (Task 6-1) <sup>1</sup>	Time (Months)	7	13	186%
Meetings (Task 6-2)	Number of Meetings	9	29	322%
Contract Interpretation & Clarifications (Task 6-4)	RFIs	10	50	500%
Contract Document Submittals (Task 6-5)	Submittals	26	80	308%
Review Applications for Payment (Task 6-6)	App for Payment	7	17	243%
Change Orders (Task 6-7)	Change Orders	3	43	1433%
Resident Project Representative (Task 7-1) <sup>1</sup>	Time (Months)	7	13	186%
Discipline Specific Inspection (Task 7-2) <sup>2</sup>	Time (hours)	64	246	384%

#### Notes:

We appreciate RBUD resolving this matter for the negotiated cost of \$258,782. We have included the Scope of Services for Amendment No. 3-2 as background information that specifies the total budgeted time frames and quantities.

Regards,

Mark Drummond, P.E., BCEE

President

C Solutions Inc.

Attachments:

C Solutions Scope of Services for Amendment 3-2

<sup>&</sup>lt;sup>1</sup> Assumes time only up to substantial completion on 3/30/2017

<sup>&</sup>lt;sup>2</sup> Assumes Discipline Specific Inspection Hours for Wharton-Smith Contract (time following 3/1/2017)

# Exhibit A City of Riviera Beach Utility District Scope of Services - Amendment No. 3 [3.2] (RFQ. No. 371-12) LS No. 10 and 50 — Construction Administration Services (Replacement Contractor Services during Construction)

# **Scope of Services**

# I. BACKGROUND

The Riviera Beach Utility Special District (RBUD) has commenced with the rehabilitation / replacement of Lift Station No. 10 (LS 10) located on Singer Island and Lift Station No. 50 (LS 50) located at the Avenue U repump station site. On February 6, 2013 the RBUD entered into an agreement with C Solutions, Inc. (CONSULTANT) for Professional Engineering Services associated with the design, permitting and bidding for the rehabilitation / replacement of LS 10 and LS 50. CONSULTANT has completed the design, permitting and bidding services and the RBUD received bids for the construction of the project entitled "Rehabilitation and Replacement of Lift Stations No. 10 and No. 50" on May 6, 2015. The Construction contract was awarded to Close Construction who was terminated for default on October 25, 2016 at which time the Contractor's surety company was contacted to complete the Contract. RBUD has been in negotiations with the surety company and selected Wharton-Smith as the replacement Contractor to complete the construction of LS 10 and LS50.

For the construction contract with Wharton-Smith, RBUD has requested the CONSULTANT to provide construction administration and field engineering services for the completion of construction of the project entitled "Rehabilitation and Replacement of Lift Stations No. 10 and No. 50".

Request for qualifications to retain a professional engineering consultant(s) to provide engineering services for the rehabilitation / replacement of LS 10 and LS 50 was advertised in RFQ. No. 371-12 and C Solutions, Inc. (CONSULTANT) was selected to provide these services. Under the original work authorization, additional services for construction were identified as a future amendments.

#### II. SCOPE OF SERVICES

The CONSULTANT will perform the engineering scope of services as described herein for the completion of the construction project (project).

#### Task 1 Construction Contract Administration Services

The CONSULTANT will perform the following tasks associated with administration activities related to the construction of the project:

#### 1.1 General Management

CONSULTANT will provide services for the management of engineering tasks during construction. Such management activities will include project coordination with the RBUD and the RBUD's inspector, general coordination with the contractor, scheduling, and general correspondence with the RBUD and the Contractor.



It is assumed general management services will be provided throughout the entire duration of the project (210 consecutive days).

## 1.2 Pre-construction Conference and Progress Meetings

CONSULTANT will attend meetings with the RBUD and the Contractor. As a minimum, one representative of CONSULTANT will attend the project progress meetings (i.e., the Project Manager) together with the Resident Project Representative (RPR) to discuss the project progress. CONSULTANT will chair the progress meeting and prepare and issue meeting minutes. Additional CONSULTANT or sub-consultant team members will attend, as appropriate, to address specific subject matter as issues arise during the course of the construction work.

It is assumed that these project progress meetings will be held monthly during the 7 months of the construction period; plus one project kick-off and one project close out meeting. A total of 9 meetings are assumed.

# 1.3 Inventory Review and Assistance with Project Startup

CONSULTANT will provide assistance to the newly selected Contractor in performing the inventory of existing material and equipment onsite to help determine what additional material and equipment will be required for completion. CONSULTANT will also assist the Contractor to get up to speed on the construction activities that have been performed to date and be available to answer any questions, to the best of the CONSULTANT's ability, which the Contractor may have in planning for the completion of the project. Finally the CONSULTANT will provide basic assistance (provision of any required historical data) to the Contractor for procuring the renewal of dewatering permits from SFWMD and FDEP. The Contractor is entirely responsible for properly inventorying the existing equipment and materials and procuring replacement or missing material or equipment to properly complete the project as well as obtaining dewatering permits with an independent engineer as specified in the technical specifications.

## 1.4 Contract Interpretation and Clarifications

CONSULTANT shall issue necessary technical interpretations and clarifications of the Contract Documents in a timely manner, as specified in the Contract Documents, unless otherwise authorized by the RBUD. CONSULTANT shall issue necessary interpretations and clarifications of the Construction Drawings and specifications, and in connection therewith prepare work change directives as required or requested by the RBUD. CONSULTANT may issue additional instructions, by means of drawings, minor change orders or otherwise, necessary to illustrate changes in the Work. CONSULTANT will notify the RBUD of any such requested deviations or substitutions, and when reasonably necessary, provide the RBUD with a recommendation concerning same.

A total of 10 Request for Information (RFI) are assumed.



#### 1.5 Shop Drawings and Contract Document Submittals

CONSULTANT shall review shop drawings, diagrams, illustrations, catalog data, schedules and samples, the results of laboratory tests and inspections, manufacturer's operations and maintenance manuals, and other data that the Contractor is required to submit for conformance with the design concept of the Project and compliance with the provisions of the Contract Documents. In addition, CONSULTANT will receive and review all items to be delivered by the Contractor(s) pursuant to the Contract Documents, including but not limited to all maintenance and operating instructions, schedules, guarantees, warranties, bonds and certificates of inspection, tests and approvals. CONSULTANT shall provide written comments and recommendations concerning their completeness under the Contract Document. CONSULTANT shall complete its review of submittals, shop drawings, samples and other data so as not to delay progression of the work, and in any event within fourteen (14) business days of receipt.

The projected quantity of remaining shop drawings and manufacturer's O&M manuals is 26 submittals and is based on the estimated resubmittals or new submittals of shop drawings required in the Contract drawings and specifications, and the contract specifications' requirement that the Contractor submit complete submittals for equipment by specification section. This number of submittals assumes that 23 submittals will be reviewed with remaining funds in Amendment No. 2 of this contract (total of 49 submittals to be reviewed from new Contractor). If the Contractor submits partial or piecemeal submittals and/or manufacturer's O&M manuals, the CONSULTANT will reject such submittals without review and return those submittals to the Contractor in accordance with the contract documents. Should the actual quantities of shop drawings or manufacturer's O&M manuals exceed the quantity identified, the CONSULTANT shall be entitled to additional compensation through a negotiated amendment with the RBUD.

#### 1.6 Review and Approval of Contractor Applications for Payment

Based upon the Project records (including but not limited to delivery schedules, inventories and construction reports), as well as the RPR's observations at the site and evaluations of the data reflected in Contractor's application for payment, CONSULTANT shall render a recommendation to the RBUD concerning the amount owed to the Contractor and shall forward the Contractor's application for such amount to the RBUD. Such approval of the application for payment shall constitute a representation by CONSULTANT to the RBUD, based on observations and evaluations, that:

- (a) The work has progressed to the point indicated.
- (b) The work is substantial, in accordance with the Contract Documents.
- (c) The Contractor is entitled to payment in the recommended amount.

#### 1.7 Change Orders

CONSULTANT shall receive and log all requests for project cost and/or schedule changes from the Contractor. Changes may be the result of unforeseen conditions or interferences identified by the Contractor during the progress of work, inadvertent omissions (betterment) issues in the Contract Documents, or additional improvements requested by the RBUD after the project bid date. CONSULTANT will provide a response to the contractor and the RBUD with respect to a request for change order within a reasonable amount of time after receipt of contractor's



notice and all necessary backup information required by CONSULTANT to formulate a response. CONSULTANT will have authority to make minor changes in the work not involving extra cost, and not inconsistent with the purpose of the work. CONSULTANT is not authorized to bind the RBUD to changes in contract price or time.

Regardless of the source, CONSULTANT shall evaluate the impact of the change request in terms of project cost and schedule. CONSULTANT shall prepare an analysis of the change request indicating reasons for acceptance, references to applicable sections of the contract documents that validate or disclaim the change request, and if accepted, a statement noting that the requested cost / schedule impacts are fair and reasonable. If requested cost impacts are not considered by CONSULTANT to be fair and reasonable, CONSULTANT shall advise the RBUD and assist the RBUD to negotiate with the Contractor the scope and cost of any necessary contract change orders, using as a basis for such negotiations data or other information, emanating from the Contract Documents, including but not limited to the bid sheet, technical specifications, plans, shop drawings, material specifications, and proposed material and labor costs. If requested schedule impacts are not considered reasonable by CONSULTANT, CONSULTANT advise the RBUD and shall assist the RBUD to jointly negotiate with the Contractor a fair and reasonable schedule impact based on analysis of the Contractor's CPM schedule. CONSULTANT's analysis of the change request shall be forwarded to the RBUD.

Following approval and/or negotiation of Contractor change order requests, CONSULTANT shall prepare, recommend and submit for the RBUD's approval such change orders. CONSULTANT's services do not include litigation support.

A total of 3 change orders are assumed.

#### 1.8 Substantial and Final Construction Completion and Project Close-Out Reviews

These services are being provided as specified under the original Construction Services Amendment (Amendment No. 1) since the terminated contractor did not achieve substantial completion. No additional monies are added to this amendment for these services.

#### 1.9 Record Drawings

These services are being provided as specified under the original Construction Services Amendment (Amendment No. 1) since the terminated contractor did not achieve substantial completion. No additional monies are added to this amendment for these services.

It is assumed that the new contractor will be able to provide record drawing markups, as specified in the Contract Documents, to the Engineer for the completion of these services as intended in the original scope of services.

## Task 2 - Field Services During Construction

The CONSULTANT will provide field services during construction as specified below.

#### 2.1 Resident Project Representative

CONSULTANT shall provide a part-time RPR throughout the duration of construction activities for the project (assumed to be 7 months). It is assumed that the part-time RPR will be



provided for 30 hours per week throughout the duration of construction activities. The RPR's duties and responsibilities shall include the following:

- Attend pre-construction conference, construction progress meetings and other construction conferences.
- Serve as CONSULTANT 's construction liaison with the Contractor and provide assistance in interpreting the Contract Documents.
- 3) Assist in obtaining from the RBUD staff additional details or information at the job site.
- 4) 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, and that completed construction conforms to the Contract Documents. Inform the Contractor whenever the RPR believes that any construction is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or 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 inspect and review suitability and method of storage of materials, equipment and supplies delivered to the construction site in accordance with the Contract Documents.
- 5) Keep a daily diary and / or log book recording hours on the job site, weather conditions, data pertaining to questions of extras or deductions, daily activities, decisions, observations in general and specific observations in more detail as in observing test procedures.
- 6) Prepare daily reports of the progress of construction in sufficient detail to determine the progress of all activities. The report shall record the number of personnel on the job site, the number and type of active and inactive equipment on the job site and materials stored on the job site. The report shall record the impact, if any, of weather or other causes for delays at the job site.
- 7) Review monthly applications for payment with the Contractor for accuracy, back-up detail and completeness and coordinate final recommendation for payment with the RBUD.
- 8) Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, and record the outcome of these inspections in the daily reports.
- 9) Review Contractor measurements and notations on the Contractor's set of record drawings indicating field changes in construction and "as-built" conditions.
- Advise the RBUD before scheduled major tests, inspections or start of important phases of construction.
- 11) Coordinate with the RBUD and the Contractor necessary shutdowns and interruptions of the RBUD's facilities.
- 12) During the course of construction, verify that certificates, operating and maintenance manuals and other data required to be assembled and furnished by the Contractor are available to the RBUD before equipment start-up and operator training is conducted by the Contractor as required by the Contract Documents and, in the presence of the required personnel; observe, record, and report appropriate details relative to the test procedures and start-ups.



- 13) Before issuance of a determination of substantial completion, prepare a written list of items requiring completion or correction. Coordinate and participate in a review of the project with the RBUD upon receipt of Contractor's request for substantial completion. Provide verification that all items have been completed and properly corrected prior to final inspection. Coordinate and participate in the final inspection with the RBUD.
- 14) Report to the RBUD as soon as possible any environmental concerns and the occurrence of any accident.
- 15) In addition, the RPR:
  - a. Shall not undertake any of the responsibilities of the Contractor or subcontractors.
  - b. Shall not 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.
  - c. Shall not advise on or issue directions about safety precautions and programs about the Contractor's Work.
  - d. Shall not approve any interruptions or modification of the RBUD's facilities without the approval of the RBUD.
  - e. RPR shall not be responsible for the acts or omissions of the Contractor, any construction subcontractor or any other person (except CONSULTANT's own employees and agents) at the Project site.

#### 2.2 Discipline Specific Inspections

CONSULTANT will furnish the services of discipline specific (instrumentation, electrical, and structural) inspectors for construction of the project to supplement the RPR throughout the duration of the construction period. The following estimated hours are assumed for discipline specific inspections over the duration of construction:

Structural: 24 hours
 Geotechnical (pile installation) 8 hours
 Electrical: 16 hours
 Instrumentation and Control: 16 hours

#### 2.3 Startup and Testing Services

These services are being provided as specified under the original Construction Services Amendment (Amendment No. 1) since the terminated contractor did not achieve substantial completion. No additional monies are added to this amendment for these services.

#### 2.4 Operator Training

These services are being provided as specified under the original Construction Services Amendment (Amendment No. 1) since the terminated contractor did not achieve substantial completion. No additional monies are added to this amendment for these services.



#### **ASSUMPTIONS**

This Authorization scope of services is based on the following:

- A. The total duration of the project is 210 consecutive days. CONSULTANT will provide part-time inspection services as specified above for the majority of the 210 consecutive day construction duration. Any additional efforts beyond the 210 day project construction phase duration will be compensated as amended to this Professional Engineering Services Agreement.
- B. This Scope of Services and specified fee represent services and monies for additional work to be performed by the CONSULTANT for the management of Construction to be performed by Wharton-Smith, Inc. and assumes that the compensation for additional services (Amendment No. 3: Exhibit A Services Previously Completed Relating to Contractor Default) previously provided by the CONSULTANT prior to the performance of construction administration for the newly selected contractor have been approved by RBUD and paid to the CONSULTANT.
- C. During part-time on-site observations and/or during limited field checks of materials and equipment, CONSULTANT may endeavor to provide protection for the RBUD against defects and deficiencies in the work of the construction contractor. The furnishing of such services; however, will not make CONSULTANT responsible for (or give CONSULTANT control over) construction means, methods, techniques, sequences or procedures; for safety precautions or programs; or for the responsibility of construction contractor's failure to perform the work.
- D. CONSULTANT will not undertake any responsibilities of the contractor, subcontractor, or contractor's superintendent, or expedite the work.
- E. Record Drawings will be prepared based upon information provided by Contractor and assumes Contractor will provide all record drawing information as required in the specifications.

# III. Time of Completion

The Notice to Proceed (NTP) defines the official commencement of the CONSULTANT's amendment to the original contract. NTP will be defined as having an approved amendment for the services specified herein and start the business day following receipt of an official letter from RBUD specifying the direction to commence with services for the Contractor Wharton-Smith. The following schedule is based on the notice to proceed (NTP). All days are defined as calendar days.

Task Description	Completion (Days from NTP)	
Task 1 - Construction Contract Administration Services	210	
Task 2 - Field Services During Construction	210	

It is estimated that the construction phase of this project will be completed within 210 consecutive calendar days as identified in the Contractor's initial Notice to Proceed.



# **IV.** Proposed Compensation

The CONSULTANT shall perform the services defined in this scope of work for a lump sum fee of as specified below. Invoices will be submitted to RBUD monthly and define the current percent complete for the project tasks. The breakdown of fees per task is estimated below.

Task Description	Lump Sum Amount
Task 1 - Construction Contract Administration Services	\$120,768
Task 2 - Field Services During Construction	\$136,665
Other Direct Cost (ODCs)	\$7,427
TOTAL	\$264,860

