

**Memorandum
Public Works Department**



To: City Manager
Subject: LTCP – 6th Avenue Relief Sewer Project
Date: September 12, 2014
Number: 2014-194

Attached is an Engineering Services Proposal from Symbiont for engineering services during the construction of the 6th Avenue Relief Sewer Project. This project is part of the Long Term Control Project.

The scope of work to be covered by this proposal is to include construction inspection services for this project. This project was designed by Symbiont and will include construction of a large diameter relief sewer, water mains, roadway, sidewalk and driveways. The limits of this project extend along 6th Avenue from 6th Street to 24th Street.

Symbiont proposes to provide these engineering services at their standard hourly rates for an estimated cost of \$619,820.

Recommendation

The Public Works Department recommends that the City Council approve the Engineering Services proposal from Symbiont in the amount of \$619,820 and authorize the City Manager to execute the contract documents.

Vendor:	Symbiont	
Payment Amount:	\$619,820	
Fund:	506	Wastewater Operation & Maintenance
Department:	619	Utilities Maintenance
Cost Center:	346	Wastewater Collection Maintenance
Object Code:	56501	Engineering Services
Project	2688	LTCP- 6 th Avenue Relief Sewer
Grant	256	IDCEO IKE PW Grant

Requisition #: R004843

Submitted by: Randall D. Tweet, Public Works Director
Michael J. Kane, P.E., City Engineer

Approved by: Thomas Thomas, City Manager



Mr. Michael J. Kane, P.E.
City Engineer
City of Rock Island
1309 Mill Street
Rock Island, IL 61201-3261

September 8, 2014

**RE: Proposal for Engineering Services during Construction
6th Avenue Relief Sewer
Rock Island, Illinois
City Job No. 2688
Symbiont Proposal No. 33604**

Dear Mike:

Symbiont is pleased to submit this proposal to the City of Rock Island (City) Public Works Department for engineering services during construction (ESDC) of the 6th Avenue Relief Sewer project. This is a proposal to amend the project design contract, dated September 21, 2011, which indicated that Symbiont would develop a separate scope of work and revise the existing design contract for ESDC.

PROJECT UNDERSTANDING AND APPROACH

Symbiont completed the design of the 6th Avenue Relief Sewer project, which includes a new relief sewer, water main, roadway, sidewalk, and driveways in the 6th Avenue right-of-way from 6th Street to 24th Street. The City opened bids for the project on July 25, 2014. This project is configured for the City to enter into an agreement with a single General Contractor for the construction of all of the included improvements. We understand that the City desires to award the contract to the low, responsive bidder immediately following the Illinois Environmental Protection Agency (IEPA) review and approval of the bid results, and issuance of an SRF loan. Site construction activities would begin immediately following notice-to-proceed, and the project has a substantial completion date of October 30, 2015. The following sections outline the specific engineering services to be performed during the construction of this project.

This proposal also includes additional costs for the 6th Avenue Relief Sewer design. As we discussed in April, Symbiont has been unable to complete the additional services requested by the City for the 6th Avenue Relief Sewer project utilizing the currently contracted design fee. During our April discussion, we agreed to include the additional design fees in our ESDC proposal amendment. These design fees cover the following work:

- **6th Avenue Water Main Upgrade Design** – Design of new 8-inch and 10-inch water mains on 6th Avenue to replace all existing 4-inch and 6-inch water mains (Drawings WM-1 to WM-17 and related specifications).

- **Individual Curb Ramp Designs** – Design of each curb ramp along 6th Avenue to ensure compliance with the Illinois Department of Transportation (IDOT) standards (Drawings R-16 to R-21).
- 11th Street (Highway 67) IDOT Variance Request, Permit, and Traffic Control Plan (Drawings TC-1 to TC-12).
- **6th Avenue Storm Water System Analysis** – Storm water modeling and spreadsheet calculations to determine if the project area currently complies with the Quad Cities Subdivision Ordinance drainage requirements.
- Police Station and Center for Independent Living Project Coordination.
- Incorporating “IKE” grant requirements into the project specifications.

SCOPE OF WORK

Project Meetings

Symbiont will attend a pre-construction meeting with the General Contractor and City personnel prior to the beginning of construction activities.

Symbiont’s Project Manager will attend biweekly progress meetings to be held by the General Contractor. Attendance at these meeting will allow the design team to stay informed of current construction issues and schedule status. These meetings will be combined with the site visits described below.

Visits to Site by Design Engineers

Representatives of the various design disciplines utilized by Symbiont for preparing the Contract Documents will make visits to the site at intervals appropriate to the various stages of construction. Such visits will be as necessary in order to observe, as an experienced and qualified design professional, the progress and quality of various aspects of the Contractors’ work. Based on information obtained during these visits and observations, Symbiont will determine if, in general, the work is proceeding in accordance with the Contract Documents. Symbiont anticipates that up to 30 site visits will be required during the construction of this project which includes attending the bi-weekly project meetings.

Symbiont will not, during such visits or as a result of such observations of contractors’ work in progress, supervise, direct, or have control over contractor’s work, nor shall Symbiont have authority over, or responsibility for, the means, methods, techniques, sequences, or procedures of construction selected by contractors; for safety precautions and programs incident to the work of contractors; or for any failure of contractors to

comply with laws, rules, regulations, ordinances, codes, or orders applicable to contractors' furnishing and performing the work.

Observations made during the site visits will be communicated with the General Contractor and the City of Rock Island project manager via a field trip report that will be issued as soon as possible after the site visit is complete.

Defective Work and Follow Up

During site visits, and on the basis of on-site observations, Symbiont will have authority to disapprove of or reject contractors' work while it is in progress if we believe that such work will not produce a completed project that conforms to the Contract Documents, or that the work will impact the integrity of the design concept and its ability to function as a whole as indicated in the Contract Documents. Symbiont will address disapprovals or rejections of contractors' work to the General Contractor through the use of a written defective work description. For budgeting purposes, Symbiont has assumed 5 instances of preparing contractor notices requiring 8 hours of document preparation per instance.

Clarifications, Interpretations, and Field Orders

Symbiont will issue necessary clarifications and interpretations of the Contract Documents as appropriate to the orderly completion of the work. Such clarifications and interpretations will be consistent with the intent of and reasonably inferable from the Contract Documents. We anticipate that the General Contractor will utilize the electronic request for information (RFI) form and communicate the request directly to Symbiont.

As a means of documenting project changes for record purposes, Symbiont may also issue field orders authorizing minor variations from the requirements of the Contract Documents where no contractual dollar amount or schedule adjustments are required. Symbiont will communicate with the General Contractor on a regular basis to confirm the intent of the design. The effort required to respond to contractor RFI requests will be addressed by Symbiont and our subconsultants, as appropriate.

Submittal Review

Symbiont will review and comment on product certifications, shop drawings, and other data that contractors are required to submit. Submittal reviews will conform to the information given in the Contract Documents, and be compatible with the design concept of the completed project as a functioning whole as indicated in the Contract Documents.

Such reviews and review comments will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto. Symbiont's proposed level of effort is based on 390 submittals, including testing reports, reviewed in 220 hours with the majority of the submittals successfully reviewed and returned to the Contractor in the original submittal.

Symbiont will receive and process the Contractor's submittals including maintaining a submittal log, transmitting submittal review comments to the Contractor, and transmitting reviewed submittals to City personnel and field inspection staff.

Substitutes

Symbiont will evaluate and determine the acceptability of substitute or "or-equal" materials proposed by subcontractors for conformance with the contract document requirements. Substitution requests will be evaluated as part of the shop drawing review process.

Applications for Payment

Based on Symbiont's on-site observations as experienced and qualified design professionals and on a review of the Contractor's Applications for Payment which includes the accompanying data and schedules, Symbiont will recommend amounts to be paid. Such recommendations of payment will be in writing and will constitute Symbiont's representation to the City, based on such observations and review that, to the best of Symbiont's knowledge, information and belief the work has progressed to the point indicated, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation), and the conditions precedent to Contractors' being entitled to such payment appear to have been fulfilled in so far as it is Symbiont's responsibility to observe the work. In the case of unit price work, Symbiont's recommendations of payment will include final determinations of quantities and classifications of such work (subject to any subsequent adjustments allowed by the Contract Documents).

By recommending any payment, Symbiont shall not thereby be deemed to have represented that on-site observations made to check the quality or quantity of Contractors' work as it is performed and furnished have been exhaustive, extended to every aspect of the work in progress, or involved detailed inspections of the work beyond the responsibilities specifically assigned to Symbiont in this Agreement and the Contract Documents.

Change Order Review

Symbiont will review change order and contractor claims along with the City of Rock Island to evaluate the technical and commercial merits of contractor and/or Rock Island initiated change orders. We will evaluate and make recommendations regarding the merit of proposed changes.

We will provide an independent cost estimate and recommendations relative to the cost of the change as submitted by the contractor for negotiating purposes.

Specification and/or drawing revisions will be provided to the City such that formal change orders can be executed with the Contractor. Symbiont will prepare short-form change orders for concurrence by City personnel and execution with the Contractor.

Contractors' Completion Documents

Symbiont will receive the following documents from the General Contractor, review those documents, and then transmit them back to the General Contractor with written comments: maintenance and operating manuals, schedules, certificates of inspection, and tests and approvals which are to be assembled by contractors in accordance with the Contract Documents to obtain final payment. Symbiont's review of such documents is limited to determining that, in general, the content complies with the requirements of the Contract Documents. In the case of certificates of inspections, tests, and approvals, Symbiont will determine if the results certified indicate compliance with the Contract Documents. The General Contractor will be responsible for tracking the completion and submittal of all testing, inspection, and similar documentation. Review of the General Contractor's progress will be monitored as part of the biweekly progress meetings.

Substantial Completion

Following notice from the General Contractor confirming that they consider the entire work ready for its intended use, Symbiont, the City of Rock Island, and the General Contractor shall conduct an inspection to determine if the work is substantially complete. If, after this inspection, Symbiont considers the work substantially complete, Symbiont will prepare a certificate of substantial completion for signature by the City and Contractor.

Following substantial completion inspection, Symbiont will prepare a draft punch list of items to be completed and distribute it to all inspection participants. Symbiont will prepare a Substantial Completion Package that includes the following:

- Contractor's Request for Substantial Completion Inspection
- Substantial Completion Inspection Report
- Punch List
- Statement regarding responsibilities pending final completion concerning security, maintenance, and insurance
- Statement regarding warranties and guarantees
- Certificates of Substantial Completion
- Request for Reduction of Retainer

Based on the design sequence of construction, Symbiont anticipates several substantial completion reviews and inspections could be executed as part of the construction contract. Symbiont believes that a portion of the reviews can be completed as part of the biweekly progress meetings.

Contract Completion and Closeout

Symbiont, along with the City of Rock Island and the General Contractor, will conduct a final inspection to determine if the completed work of the Contractor is acceptable so that Symbiont may recommend, in writing, final payment for the Contractor.

Accompanying the recommendation for final payment, Symbiont will also provide documentation confirming that, to the best of Symbiont's knowledge and information, the contract has been satisfied and is ready for final payment. Symbiont will provide a Final Completion Package that includes the following:

- Final Completion Certificate
- Final Pay Application
- Documentation of Maintenance Bond
- Waiver of Public Improvements Lien
- Consent of Surety to Final Payment

Record Drawings

During construction progress meetings and construction site visits, Symbiont, in conjunction with the Missman site inspectors, will monitor the Contractor's record drawings markups. Following completion of the construction work, Symbiont will prepare an electronic set of record drawings showing record information received from the General Contractor, change order modifications, field orders, and other record documents furnished by the General Contractor to Symbiont, which were annotated by the General Contractor to show all changes made during construction.

Symbiont shall not be responsible for the acts or omissions of any Contractor, or of any subcontractor, any supplier, or for any other person or organization performing or furnishing any of the work. Symbiont shall not be responsible for Contractors' failure to perform or furnish the work in accordance with the Contract Documents. Upon preparation of the record drawings and review by the City, Symbiont will provide the City with electronic files of all the drawings.

Construction Observation

Symbiont, through Missman, will provide qualified technical personnel for the purpose of observing and recording construction details, including: equipment, materials, workers, weather, contractors, progress, and other information for future reference. The observation services shall include the following:

- Screen contractor questions regarding plan and specification interpretations and assist in determining if an ambiguity or apparent omission exists.
- Contractor conformance with the contract plans, specifications and schedules

- Note work performed
- Take notes and measurements for record drawings
- Record weather
- Photographic documentation
- Note any special conditions, material deliveries, number of people working and arrival and departure of major equipment
- Note discussions and important visitors
- Record opening and closing of roads and detours
- Note suspension of work, resumption of work, time spent on disputed items, or delays
- Record any high water levels
- Record presence of testing personnel on site
- Note any accidents or injuries
- Note time of placing/removing erosion controls

The following services will NOT be performed as part of the observation services:

- Surveying and/or construction layout
- Title research or expert testimony
- Engineering services and/or coordination regarding Archaeological, Environmental, or Historic issues
- Soils investigations, geotechnical or environmental reports or studies
- Erosion control monitoring or reporting

All daily reports, diaries, and photography will be made available to the City on a regular basis.

The construction observation level of effort assumes 10 hours each weekday, 8 hours every Saturday during the regular construction season, and half time weekdays during the winter season (mid-November through March). A dedicated construction vehicle will be provided at the jobsite for use by the construction observation personnel. The vehicle will be billed at the rate of \$20 per day.

IEPA Loan Coordination

As part of the City's SRF loan with IEPA, various documents and information will need to be coordinated with IEPA. Symbiont will assist the City with IEPA pay applications, change orders, and record drawings.

It is assumed that the City will collect contractor and subcontractor payroll records and perform interviews as required for Davis Bacon Act compliance.

IDOT Permit Coordination

Before construction is started on 11th Street (US67), a permit must be obtained from the IDOT. The IDOT currently has all of the information required to obtain a permit except for a few final traffic control drawing markups that are currently being reviewed. These drawings will be submitted in the next two weeks.

The IDOT does not want to issue the permit until about a month before the 11th Street work begins. Since the permit will likely not be issued until next year, the IDOT indicated that plan details related to 11th Street that are updated by the IDOT at the start of the new year will have to be updated in the plan set. Our proposal includes drawing detail updates required to receive the IDOT permit for this project.

Project Management

Symbiont will provide project management to coordinate the above scope of work with the design team, City staff, and outside stakeholders.

FEE AND SCHEDULE

Symbiont proposes to perform the engineering services during construction described herein on a time and materials basis as follows:

Task	Fee
Engineering Services During Construction	\$277,230
Construction Observation Services	\$256,590
Additional Design & Permitting Services	\$ 86,000
TOTAL	\$619,820

Symbiont's current design and bidding contract totals \$409,800. With the addition of this amendment, the revised contract amount will be \$1,029,620. All services will be billed on a time and materials basis according to the rate schedule in effect when the work is completed.

The construction phase for this project is anticipated to begin in October 2014, and is scheduled to be completed in December of 2015.

PROJECT TEAM

Symbiont plans to maintain the same team of highly qualified personnel that designed the 6th Avenue Relief Sewer project.

TERMS AND CONDITIONS

Symbiont's Standard Terms and Conditions of Agreement, as previously executed for the 6th Avenue Relief Sewer project and agreed to by the City on September 21, 2011, apply to this contract amendment. Please indicate your acceptance of this contract amendment by having an authorized representative sign the attached and return one copy to Symbiont.

Symbiont appreciates the opportunity to provide the City with the above engineering services. The work scope, cost, and schedule can be further modified as necessary to better meet the needs of the City. Please call at your earliest convenience if you have any questions regarding this proposal.

Sincerely,

SYMBIONT®

Amy L Post
Amy L. Post, P.E.
Project Manager

SYMBIONT®

Brian A. Till, P.E.
Group Manager

PROPOSAL NO. 33604 ACCEPTED BY:

CLIENT: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

Symbiont considers the project approach, design, pricing, data, and other business considerations contained in this proposal to be proprietary and confidential business information to be used solely for the purpose of evaluating the proposal. This document and the information contained herein shall not be used for any purpose other than as stated above and shall not be used, duplicated, or disclosed to any other party without Symbiont's prior written consent.