



Date: September 3, 2019

To: Thomas J. Bonfield, City Manager
Through: W. Bowman Ferguson, Deputy City Manager
From: Donald F. Greeley, Director, Water Management
Subject: Old Chapel Hill Road New Hope Creek Crossing Waterline Replacement – Professional Services Contract Award to Highfill Infrastructure Engineering, P.C.

Executive Summary

In October of 2019, the Department of Water Management (DWM) issued a Request for Qualifications (RFQ) for professional engineering services to replace an existing waterline along Old Chapel Hill Road. The project area, shown in the Attachment 1 map, consists of the replacing approximately 1,250 linear feet (LF) of 12-inch water main and 1,100 LF of sanitary sewer force main.

The proposed project's scope includes data collection, public outreach, preliminary and final design, permitting, bidding services and construction administration services. The DWM received five (5) responses to the RFQ. Highfill Infrastructure Engineering, P.C. was selected and a scope of services for the project has been negotiated in the amount of \$294,100.

Recommendation

To authorize the City Manager to execute a contract with Highfill Infrastructure Engineering, P.C. for professional engineering services in the amount not to exceed \$294,100 for Old Chapel Hill Road New Hope Creek Crossing Waterline Replacement Project;

To establish a contingency fund for the contract with Highfill Infrastructure Engineering, P.C., in the amount not to exceed \$29,900; and

To authorize the City Manager to negotiate change orders for the contract with Highfill Infrastructure Engineering, P.C., provided that the total contract cost does not exceed \$324,000.

Background

An aerial crossing of the water main along Old Chapel Hill road was washed away during heavy flooding in September of 2018. Hydraulic modeling and field testing confirmed that the waterline is needed to provide adequate fire flow and pressure in the affected area. In order to protect surface water quality and ensure the new waterline is not similarly impacted by a future flood event, the replacement waterline will be installed in a trenchless crossing under New Hope Creek, thus making the overall length of the replacement approximately 1,250 LF. Extending the length of the waterline replacement will minimize excavation required within the floodplain. Also, an existing sanitary sewer force main for the Githens LS will be realigned and upsized at the same crossing to accommodate future development in the Patterson Place area.

The proposed project will include data collection, initial public outreach, preliminary and final design, permitting, bidding services and construction related services for approximately 1,250 LF of trenchless water main and 1,100 LF of sanitary sewer force main along Old Chapel Hill Road. Condition assessment of the existing gravity sewer line at this location will also be included.

Issues and Analysis

In November of 2018, the DWM received Statements of Qualifications (SOQs) in response to a Request for Qualifications (RFQ) for professional engineering services to design a trenchless replacement waterline along Old Chapel Hill Road to. In response to the RFQ, the DWM received five (5) SOQs:

- Freese and Nichols
- Highfill
- K. F. Carter Engineering
- Kimley Horn
- Timmons

The selection committee was comprised of staff from the DWM and the Equal Opportunity/Equity Assurance Department. The selection committee was impressed with Highfill’s overall approach to the project, extensive background in trenchless crossings and availability to complete the work on an aggressive timetable. Based on their SOQ, the committee selected Highfill Infrastructure Engineering, P.C. Recommendation of award to Highfill was delayed while additional field evaluation took place and staff resources for contract management were identified.

Alternatives

Alternative #1 – Do not move forward with the contract and perform all work in-house. The DWM staff does not have the resources or availability to perform the field services needed and prepare design plans for this project. This alternative would result in delayed construction and reduced fire flow availability.

Alternative #2 – Do not move forward with the installation of a new water main in Old Chapel Hill Road. This alternative would likely result in deteriorating water quality and available fire flow in the vicinity.

Financial Impact

Funding for this project is available in the following account:

Organization Code	Object Code	Project Code	Amount
4100 P002	731004	POBCH	\$224,000
4100P002	731900	POBCH	\$22,425
4100P002	731004	P28CH	\$70,400
4100P002	731900	P28CH	\$7,475

The project includes the following task items:

Lump Sum

Task	Phase	Total Fee
30	Preliminary Design Phase	\$100,300
40	Final Design Phase	\$23,400
50	Permitting Phase	\$4,200
60	Bidding & Award Phase	\$5,700
70	Construction Administration	\$28,900
80	Construction Observation	\$74,000
90	Miscellaneous Technical Services (Hourly Not-To-Exceed)	\$57,600
		\$294,100

Equal Business Opportunity Summary

The Equity & Inclusion Department reviewed the proposal submitted by Highfill Infrastructure Engineering P.C. of Cary, NC and determined that they are in compliance with the Ordinances to Promote Equal Business Opportunities in City Contracting. **The goals for this project are MUBE 8% and WUBE 6%.**

UBE REQUIREMENTS:

Highfill Infrastructure Engineering, P.C. has exceeded the goals for this Project. Highfill Infrastructure Engineering, P.C. will subcontract the following:

Firm	ID	City/State	Amount	%of Contract
CriTek Engineering Group P.C.	MUBE	Greensboro, NC	\$54,000	18%
Froehling & Robertson	MUBE	Raleigh, NC	\$22,020	7%
CH Engineering	WUBE	Raleigh, NC	\$64,545	22%

WORKFORCE STATISTICS

Total Workforce:

Employment Category	Total Employees	Total Males	Total Females
Project Manager	5	4	1
Professional	1	0	1

Technical	4	3	1
Clerical	3	0	3
Labor	0	0	0
Total	13	7	6

Male:

Employment Category	White	Black	Hispanic	Asian or Pacific Islander	Indian or Alaskan Native
Project Manager	4	0	0	0	0
Professional	0	0	0	0	0
Technical	3	0	0	0	0
Clerical	0	0	0	0	0
Labor	0	0	0	0	0
Total	7	0	0	0	0

Female:

Employment Category	White	Black	Hispanic	Asian or Pacific Islander	Indian or Alaskan Native
Project Manager	1	0	0	0	0
Professional	1	0	0	0	0
Technical	0	0	0	1	0
Clerical	3	0	0	0	0
Labor	0	0	0	0	0
Total	5	0	0	1	0