



Date: September 6, 2016

To: Thomas J. Bonfield, City Manager

Through: W. Bowman Ferguson, Deputy City Manager

From: Steven W. Hicks, Director, General Services Department

Subject: Police Headquarters Complex, Special Inspections and Construction Material Testing Contract with Falcon Engineering, Inc

Executive Summary

In May of 2016 a Request for Qualifications (RFQ) was advertised for Engineering Services for Environmental, Geotechnical, Special Inspections and Construction Materials Testing for the new Police Headquarters Complex and Fire Station 17 projects. The projects were combined into one RFQ for efficiency. Written submittals were received June 17, 2016. Firms were shortlisted and interviewed on July 8, 2016, and from that process Falcon Engineering was determined to be the top ranked firm. This agenda item requests City Council approval for professional engineering services with Falcon Engineering, Inc (Falcon) for Environmental Engineering, Special Inspections and Construction Materials Testing for the new Police Headquarters Project ("the Project"). The City will enter into a separate contract with Falcon Engineering for the Fire Station 17 project.

Recommendation

The Department of General Services recommends City Council:

To authorize the City Manager to execute a contract with Falcon Engineering, Inc. for an amount not to exceed \$578,500.00;

To establish a contingency in the amount of \$57,850.00; and,

To authorize the City Manager to negotiate and execute amendments to the contract with Falcon Engineering, Inc. provided the total cost does not exceed \$636,350.00.

Background

Construction Materials testing and special inspections is a required component for the Project. Comprehensive documentation and daily observation along with field testing and laboratory reports will ensure a high quality and technically sound finished product.

The required services provided in this contract include:

Special Inspections

Special inspections on all structural elements as specified in Chapter 17 of the latest version of National Building Code duly modified by the State of North Carolina. These elements could include: foundations, retaining walls, concrete slabs, any light weight concrete, precast concrete, masonry work, steel structures and steel connections, welding inspections, water proofing of foundation walls, roofing, fire proofing, reinforcement steel, form work and mechanical connections inspections and documentation.

Construction Engineering Inspections and Material Testing

Construction engineering and inspections of all construction activities including erosion control measures, drainage systems, proof roll inspections, retaining walls, footing base bearing capacity, construction materials testing for soils, rock, ABC stone, concrete, asphalt, masonry blocks, grout and mortar, welds on steel structures, asphalt pavements, soil backfill density testing, spray on fire retardants during the construction process.

Overview of the RFQ Process

Request for Qualifications (RFQs) for Design Services were advertised on May 18, 2016. Eleven proposals were received from respondent firms on June 17, 2016. Upon receipt, City staff forwarded the proposals to the Equal Opportunity and Equity Assurance (EOEA) Department for compliance determination with the City's Equal Business Opportunity Program Ordinance. Eleven Engineering Services proposals were deemed compliant and were distributed to members of the interdepartmental review team for evaluation. Members of the evaluation committee independently reviewed and scored the proposals based on criteria outlined in the RFQs for Engineering Services.

The evaluation team's individual scoring sheets were compiled by General Services. The team met to discuss the cumulative RFQs and scoring results, and a "shortlist" was developed of the respondent firms. Finalist interviews for the Engineering Services firms were held on July 8, 2016. The interview panel included: Angela Henderson (EO/EA Specialist); Trish Creta (GSD-PM Senior Construction Project Manager); John Paces-Wiles (GSD-PM Team Leader/Project PM); Roger Thomerson (City of Durham Fire Department); and Richard McNeil (LeChase Superintendent for the Project). This process resulted in the following:

Ranking for Engineering Firms

1. Falcon Engineering
2. Terracon
3. Froehling & Robertson, Inc

Staff notified the firms of the ranking results and that fee negotiations were proceeding with the top ranked firm. Firms were notified that should negotiations be unsuccessful, Staff would move to the number 2 ranked firm. Thereafter, staff received draft fee proposals from Falcon Engineering, meetings and negotiations regarding fee, scope of services and contract terms has been ongoing, as well as other pre- contract meetings and planning.

Issues/Analysis

As described above, negotiations with Falcon have resulted in a fee for engineering services in an amount not to exceed \$578,500. The fee is based on estimated amounts including hours of field services, field vehicles, field testing equipment, laboratory equipment, project

management, administration, reports and meetings. The attached engineering contract describes the routine contractual requirements.

Falcon Engineering’s scope of work is based on requirements set forth by the Structural Engineer of Record in the plans and specifications, including the Statement of Special Inspections. The program of Special Inspection is a system intended to ensure that the work is performed in accordance with the contract documents and that the work complies with the NC Building Code. Falcon will need to perform inspections in a timely manner to avoid delay of work. Throughout the project, Falcon will submit inspection and testing reports to the project team. If there are nonconforming items, Falcon issues a discrepancy notice to the immediate attention of the Contractor and/or Construction Manager for correction, then, if uncorrected after a reasonable period of time, to the attention of the Structural Engineer of Record, the Building Official, and to the Owner. At the end of the Project, Falcon will submit a final signed report stating whether the work requiring Special Inspection was, to the best of the Special Inspector’s knowledge, in conformance with the Contract Documents and applicable workmanship provisions of the NC Building Code.

Alternatives

Proceeding with execution of engineering services contract is recommended as the only viable alternative for consideration. The services are required and budgeted.

Financial Impacts

Project Funding		
	TOTAL PROJECT FUNDING – CURRENT	\$62,434,057
	ADDITIONAL PROJECT FUNDING REQUIRED	\$8,918,194
	TOTAL PROJECT FUNDING – FUTURE	\$71,352,251
Funding Uses Prior and Budgeted		
Land Acquisition Phase:		
Land Acquisition Costs		\$5,726,089
Design Phase:		
Environmental/Geotechnical/Asbestos Services (Terracon – Contract, Amendment 1 and 2)		\$206,133
Architecture Services Contract (O'Brien/Atkins Associates, P.A.)		\$5,205,642
CMAR Preconstruction Contract (Lend Lease (US) Construction Inc.)		\$215,000
Asbestos Design, Air Monitoring Services, and Geotechnical Borings for Structural Design (Terracon Contract)		\$23,000

Design Contingency (O'Brien Atkins)		\$163,855
Design Contingency (Terracon)		\$11,784
Construction Phase:		
Remaining Construction Costs Budget for PGMP #3		\$32,250,269
GMP #1 - Executed		\$2,145,853
PGMP #2 - Pending		\$14,978,310
Soft Costs Budget (FFE, IT, Low Voltage, Computers, Software, Connections)		\$6,232,393
Remaining Construction Contingency Budget for PGMP #3		\$2,271,802
GMP #1 Contingency		\$107,292
PGMP #2 Contingency		\$748,915
Owners Other Expenses:		
Other Owner Expenses		\$429,564
	TOTAL	\$70,715,901
Funding Uses Current		
Falcon Engineering, Inc Special Inspections and Construction Material Testing Contract	3505K002-731000-CK002	\$578,500
Falcon Engineering, Inc Special Inspections and Construction Material Testing Contingency	3505K002-731900-CK002	\$57,850
	TOTAL	\$636,350
	FUNDING USES TOTAL	\$71,352,251

UBE REQUIREMENTS

No MUBE or WUBE goals were set.

Falcon Engineering, Inc. is a certified DBE WBE firm.

WORKFORCE STATISTICS

Workforce statistics for Falcon Engineering, Inc. are as follows:

Total Workforce	31	
Total Females	8	(26%)
Total Males	23	(74%)
Black Males	0	(0%)
White Males	22	(71%)
Other Males	1	(3%)
Black Females	0	(0%)

White Females	8	(26%)
Other Females	0	(0%)