



Date: October 11, 2011

To: Thomas J. Bonfield, City Manager
Through: Theodore L. Voorhees, Deputy City Manager
From: Donald F. Greeley, Director, Water Management
Jerry F. Morrone, Utility Engineering Supervisor
Subject: Hillandale Road Dual Waterline Replacement, Phase II

Executive Summary

On August 24, 2011, eight bids were opened for Hillandale Road Dual Waterline Replacement, Phase II project. The project consists of installing 5,400 linear feet of 36" diameter water transmission main, beginning at the intersection of Main St. and Rutherford St. and ending on Main St., near Peabody St. This project is the second phase of the replacement of two mains which are more than 100 years old. Phase I of this project, approved by Council on April 19, 2010, was recently completed. Replacement of these mains was identified in a City-wide hydraulic analysis, performed in 2002, with subsequent updates. The Department recommends that the City of Durham award this project to Park Construction of North Carolina, Inc., of Morrisville, North Carolina. It is the Department's opinion that Park Construction is the lowest responsive and responsible bidder, and that this award is in the best interest of the City of Durham. Their bid amount is \$4,327,606.26. The Department is also recommending a contingency fund (~10%) be established for the construction.

Recommendations

The Department of Water Management recommends that the City Council:

1. Authorize the City Manager to execute a contract with Park Construction of North Carolina, inc., for Hillandale Road Dual Waterline Replacement, Phase II project for an amount of \$4,327,606.26; and
2. Establish a contingency fund for the contract in the amount of \$432,393.74; and
3. Authorize the City Manager to negotiate change orders for the contract provided that the cost of all change orders does not exceed \$432,393.74 and the total project cost does not exceed \$4,760,000.00.

Background

As part of an on-going effort to strengthen the reliability of the City's water transmission system, the City hired the engineering firm of Kimley-Horn and Associates, Inc. to design the installation of 5,400 lf, of 36-inch waterline, as a replacement of portions of two 1900's era transmission mains. The Hillandale Road Dual Waterline Replacement project was identified in a City-wide hydraulic analysis, performed in 2002. Phase I consisted of replacing these two lines from the Williams Water Treatment Plant to Rutherford Street. Phase I of this project was completed in June 2011, and is online. Phase II of the project consists of installing the 36" diameter water transmission main from the intersection of Main Street and

Rutherford Street and ending on Main Street, near Peabody Street. Phase II will allow the City to continue the project, while abandoning long sections of the old mains, which increases system reliability and addresses concerns regarding access to critical infrastructure. Later phases will continue the replacement through the downtown area, and connecting to the transmission system along Pettigrew St., near the East Durham Elevated Water Tank. Design of these future phases has not yet begun.

Issues and Analysis

Competitively bid projects are subject to North Carolina bidding statues, which provide that awards are to be made to the lowest responsive and responsible bidder, in the best interest of the project Owner. A 'responsive bidder' is one which has complied with the Invitation to Bid and Instructions to Bidders. A 'responsible bidder' is one which has the skill, integrity, past acceptable work experience and financial and technical capabilities to complete the work in a satisfactory manner.

Below is a summary of the eight bids received. The Department and its consultant analyzed the bid information submitted and all bidders were deemed 'responsive'.

Triangle Grading and Paving, Inc.	\$4,325,796.26
Park Construction of N.C., Inc.	\$4,327,606.26
Sullivan Eastern, Inc.	\$4,369,728.26
Moffat Pipe	\$4,479,678.26
D.H. Griffin Infrastructure	\$5,660,411.26
T.A. Loving Co.	\$5,913,176.26
Dellinger	\$6,088,847.26
J.F. Wilkerson	\$6,966,342.26

The Department and its consultant performed a due diligence investigation on the three lowest bidders, to determine the most responsible. This, in part, included interviews with current and past clients and references, licensing boards, and financial and bonding companies. Based on this investigation, it is the Department's opinion that Park Construction of North Carolina, Inc. is the lowest responsible bidder, and it is in the City's best interest to award this project to them.

With respect to selecting the second-low bidder, the Department has justification to deem the low bidder, Triangle, 'non-responsible'. Currently Triangle is working on two City projects, US 70 Raleigh Interconnection and SW-25 2009 Sidewalk and Curb Cut Ramp Installation. The level of attention and progress on both projects is inadequate, and both of these projects are behind schedule, one significantly. Both projects have resulted in citizen complaints regarding time, inconveniences, and poor workmanship.

In the opinions of City engineers and project managers, Triangle has not taken satisfactory actions to demonstrate their willingness to finish that work in a timely manner. The US 70 project is into liquidated damages and Triangle intends to file a claim against the City for additional time.

Additionally, the City has received numerous complaints from homeowners, relative to frustrations regarding the quality of restoration of yards and driveways. Furthermore, Triangle has provided poor justification and reasoning to support requests for additional monies or time. The increased schedules have resulted in increased City staff time and construction administration and inspection costs.

Lastly, a significant point of concern is construction safety. The City has not heard the results of the yet-to-be completed investigations by the NC Department of Labor (Occupational Safety and Health Division) and the NC Licensing Bureau of General Contractors into the fatalities which occurred on June 7, 2011, on the US 70 project. However, recent City staff research on the two lowest bidding firms found the following OSHA data for the past three years:

Firm	# Open Cases	# Open Violations	# Closed Cases	#Closed Violations
Triangle*	1	3	12	16
Park	1	3	0	0

(*data do not include the investigation on the US 70 project)

Also not reflected in this data is a separate incident that occurred on the US 70 project. Triangle was the cause of a non-injury motor vehicle accident involving a downed wire and a commuter. Though the accident resulted in only minor damage to the citizen's vehicle, our inspector's account of the event differs from that of the contractor's written report in a sufficient amount as to question Triangle's regard to follow adequate safety procedures.

Again, in summary, in the best interest of the City of Durham, the Department concludes that Park Construction as the lowest responsive and responsible bidder, and recommends award to them.

Alternatives

Alternate 1

One alternative would be to Award the contract to Triangle Grading and Paving despite their poor performance outlined above. The project is located in a high traffic area adjacent to Duke University. This alternative will likely lead to citizen complaints and added staff time similar to the two current projects with this bidder.

Alternate 2

Another alternative would be to reject all the bids and re-bid the project. This will result in a delay of approximately 5-6 months. As the design has progressed, we have work with several large stakeholders, including NCDOT, Duke University and Erwin Square offices, to accommodate their project schedules. This delay will would impact their projects.

Financial Impacts

Funds for this project are available in the Capital Improvements Program, Water Distribution System Rehabilitation fund.

SDBE Summary

The Equal Opportunity/Equity Assurance Department reviewed the bid submitted by Park Construction of North Carolina, Inc., Morrisville, North Carolina to determine compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting. The goals for this project are MSDBE 6% and WSDBE 2%. It was determined that Park Construction of North Carolina, Inc. was in compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

M/WBE REQUIREMENTS

Park Construction of North Carolina, Inc. will subcontract to the following certified firms:

Firm	ID	City/State	Amount	% of Contract
Carolina Pipe	DBE,MBE	Garner, NC	\$ 275,000	6%
Calamar, Inc.	WSDBE	, NC	\$ 113,500	2%

The MSDBE and WSDBE goals were both met.

*Carolina Pipe is a certified DBE, MBE with the North Carolina Department of Transportation and can therefore be used to meet the minority goal.

WORKFORCE STATISTICS

The workforce statistics for Park Construction of North Carolina, Inc. are as follows:

Total Workforce	37	
Total Females	1	3%
Total Males	36	97%
Black Males	0	0%
White Males	14	38%
Other Males	22	59%
Black Females	0	0%
White Females	1	3%
Other Females	0	0%