



Date: April 2, 2018

To: Thomas J. Bonfield, City Manager
Through: Keith Chadwell, Deputy City Manager
From: Terry Bellamy, Director of Transportation
Subject: Installation of Signalized Pedestrian Upgrades in Durham

Executive Summary

The City of Durham Department of Transportation is requesting authorization to award a construction contract for the installation of signalized pedestrian crossing upgrades at eight locations in Durham.

The Department of Transportation recommends City Council authorize the City Manager to execute a contract with Carolina Power and Signalization, Inc. to install the pedestrian improvements for the amount of \$367,535.00 with a contingency of \$36,753.50 (10%). This results in a total project amount of \$404,288.50. Funds are budgeted for these improvements in the Capital Improvement Program's Miscellaneous Thoroughfares and Street Improvements project.

Upon completion of the project, the City Department of Transportation will operate and maintain the infrastructure.

Recommendation

The Department of Transportation recommends that the City Council:

1. Authorize the City Manager to execute a contract with Carolina Signals and Lighting, Inc. in the amount of \$367,535.00 for the installation of signalized pedestrian crossing upgrades;
2. Establish a project contingency fund in the amount of \$36,753.50; and
3. Authorize the City Manager to negotiate change orders to the project provided the cost of the contract, including all change orders, does not exceed the total project cost of \$404,288.50.

Background

Since 2013, Transportation staff has addressed signalized pedestrian crossing improvements through an annual design/construction project. Staff completed the design of eight pedestrian improvements in the fall of 2017. The current construction contract includes the following intersections:

- Hillsborough Road and Main Street;
- Lakewood Avenue and Blackwell Street;
- Hillsborough Road and Trent Drive;

- Martin Luther King Junior Parkway and Shannon Road;
- Trinity Avenue and Washington Street;
- Trinity Avenue and Foster Street;
- Traffic Signal Removal at Foster Street and Corporation Street; and
- Rapid Flashing Rectangular Beacon Installation at Club Boulevard and Glendale Avenue (Club Boulevard Elementary School and Ellerbe Creek Trail Crossing)

The project will upgrade existing infrastructure and permit staff to take advantage of emerging traffic signal technologies. The improvements will result in a decrease in traffic congestion, facilitate traffic signal operations maintenance, reduce vehicle fuel consumption, reduce vehicle emissions, improve transit reliability, and improve safety for motorists, bicyclists, and pedestrians

Issues/Analysis

City Transportation analyzed the physical constraints of each intersection and determined the appropriate location for each pedestrian crossing and traffic signal improvement. Transportation concludes that each signal upgrade offers the most cost effective, safe, low maintenance traffic control measure to the traveling public.

The first project advertisement was deemed non-responsive due to a lack of participation. The following is a summary of bids from the second advertisement received and opened on February 23, 2018:

- | | |
|--|----------------|
| • Carolina Power and Signalization, Inc. | \$338,395.00 |
| • Fulcher Electric of Fayetteville, Inc. | \$363,236.00 |
| • Traffic Control Devices, Inc. | Non-Responsive |
| • ALS of North Carolina, Inc. | Non-Responsive |

Based on the bid prices, Transportation expanded the project to include pedestrian improvements at Trinity Avenue and Washington Street and Trinity Avenue and Foster Street to the project for an additional \$29,140.00. The Department of Transportation recommends awarding the contract to the low bidder, Carolina Power and Signalization, Inc. in the amount \$367,535.00. The total revised project construction costs align with the \$400,000.00 estimated engineer’s probable cost of construction.

Alternatives

- Approve the Construction Agreement with Carolina Signals and Lighting, Inc. for \$367,535.00 to install the signalized pedestrian crossing upgrades. Recommended
- Reject all bids and retain the current pedestrian amenities at each of the noted intersections.

Financial Impact

The cost to construct the signalized pedestrian crossing upgrades is \$367,535.00 with a contingency of \$36,753.50 (10%). This results in a total project amount of \$404,288.50. The City is responsible for 100% of the total costs. The City funding source is the in the Capital Improvement Program’s Miscellaneous Thoroughfares and Street Improvements project.

UBE Summary

The Equal Opportunity/Equity Assurance Department reviewed the bid submitted by Carolina Power and Signalization, Inc. of Fayetteville, NC and determined that they are in compliance with the Ordinance to Promote Equal Business Opportunities in City of Durham Contracting.

The goals for this project are MUBE 11% and WUBE 7%. It was determined that Carolina Power and Signalization, Inc. was in compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.
UBE REQUIREMENTS

Carolina Power and Signalization, Inc. will subcontract to the following certified firm:

Firm	ID	City/State	Amount	% of Contract
Cruz Brothers Concrete, Inc.	MUBE	Graham, NC	\$28,525.00	8%

There was no WUBE goal set and the MUBE goal was not met. Carolina Power and Signalization, Inc. was able to demonstrate good faith efforts in meeting the MUBE goal.

WORKFORCE STATISTICS

Total Workforce:

Employment Category	Total Employees	Total Males	Total Females
Project Manager	2	2	0
Professional	0	0	0
Technical	0	0	0
Clerical	1	0	1
Labor	13	13	0
Total	16	15	1

Male:

Employment Category	White	Black	Hispanic	Asian or Pacific Islander	Indian or Alaskan Native
Project Manager	2	0	0	0	0
Professional	0	0	0	0	0
Technical	0	0	0	0	0
Clerical	0	0	0	0	0
Labor	6	2	5	0	0
Total	8	2	5	0	0

Female:

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

Attachments

Exhibit A – Project Provisions

Exhibit B – Traffic Signal Plans

Exhibit C – Construction Contract