

# CITY OF HIGH POINT

## AGENDA ITEM



### **Title: Model Farm Road Bridge Replacement Construction Administration**

**From:** Terry Houk – Public Services Director  
Robby Stone – Public Services Asst. Director  
Trevor Spencer – Projects Engineer

**Meeting Date:** September 18, 2017

**Public Hearing:** N/A

**Advertising Date:** Aug. 26, 2016 – Sept. 12, 2016  
**Advertised By:** Purchasing

**Attachments:** Attachment A – CEI Scope  
Attachment B – Costs/Rates Approval by NCDOT

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### **PURPOSE:**

The existing bridge on Model Farm Road is scheduled to be replaced due to structural deficiencies and functional obsolescence. The Federal Highway Administration (FHWA) has authorized federal funding through the City's Municipal Agreement with NCDOT for construction of this project, including construction administration services, at 80% reimbursement to the City. Wetherill Engineering, Inc. is a prequalified on-call engineering firm with the City, and has been recommended to provide construction administration for the project.

### **BACKGROUND:**

Per FHWA requirements, a Request for Letters of Interest (LOI) was advertised for construction administration of the Model Farm Road Bridge Replacement project. Two letters of interest were submitted by A. Mortan Thomas & Associates, Inc., and Wetherill Engineering, Inc. Public Services recommends Wetherill Engineering, Inc. based on the experience the proposed inspectors and project managers have with bridge and culvert projects. Wetherill also designed the construction plans for the project, which will streamline project management during the construction process. Since the project includes federal funding, NCDOT is required to provide oversight to the City during construction. NCDOT has reviewed and approved the proposed rates for Wetherill's engineering services (see Attachment B).

### **BUDGET IMPACT:**

Funds for this project are available in the FY 2017-2018 budget.

### **RECOMMENDATION / ACTION REQUESTED:**

The Public Services Department recommends approval and asks for the Council to award the construction administration services to Wetherill Engineering, Inc. with a cost not to exceed \$95,432.06.



**FORMAL BID RECOMMENDATION  
REQUEST FOR COUNCIL APPROVAL**

DEPARTMENT: **Public Services**

COUNCIL AGENDA DATE: **Sep 18, 2017**

BID NO.: **Request for LOI** CONTRACT NO.:  DATE OPENED: **Sep 14, 2016**

**DESCRIPTION:**

**Model Farm Road Bridge Replacement Construction Administration**

**PURPOSE:**

**The City has budgeted for construction administration to be provided for the Model Farm Road Bridge Replacement project.**

**COMMENTS:**

**A Request for Letters of Interest was advertised for construction administration of the Model Farm Road Bridge Replacement project. Wetherill Engineering, Inc. is recommended based on the experience the proposed inspectors and project managers have with bridge and culvert projects.**

RECOMMEND AWARD TO: **Wetherill Engineering, Inc.** AMOUNT: **\$95,432.06**

**JUSTIFICATION:**

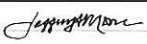
**Wetherill Engineering's proposed project staff was the most qualified and experienced of the received letters of interest. Wetherill also designed the construction plans, which will streamline project management during the construction process.**

| ACCOUNTING UNIT       | ACCOUNT | ACTIVITY     | CATEGORY | BUDGETED AMOUNT |
|-----------------------|---------|--------------|----------|-----------------|
| 401710                | 527105  | 401001000120 | 40206    | \$95,432.06     |
|                       |         |              |          |                 |
|                       |         |              |          |                 |
| TOTAL BUDGETED AMOUNT |         |              |          | \$95,432.06     |

DEPARTMENT HEAD: **Terry Houk** Digitally signed by Terry Houk  
DN: cn=Terry Houk, o=City of High Point, ou=Public Services, email=terry.houk@highpointnc.gov, c=US  
Date: 2017.09.06 11:19:37 -0400 DATE: **Sep 6, 2017**

**The Purchasing Division concurs with recommendation submitted by the **Public Services** and recommends award to the lowest responsible, responsive bidder **Wetherill Engineering** in the amount of \$ **95,432.06**.**

PURCHASING MANAGER: **Erik Conti** Digitally signed by Erik Conti  
DN: cn=Erik Conti, o=ou, email=erik.conti@highpointnc.gov, c=US  
Date: 2017.09.06 11:36:41 -0400 DATE: **Sep 6, 2017**

Approved for Submission to Council  
FINANCIAL SERVICES DIRECTOR:  Digitally signed by Jeffrey A. Moore  
DN: cn=Jeffrey A. Moore, o=City of High Point, NC, ou=Financial Services Director, email=jfmoore@highpointnc.gov, c=US  
Date: 2017.09.07 16:42:58 -0400 DATE: **Sep 7, 2017**

CITY MANAGER: **Greg Demko** Digitally signed by Greg Demko  
DN: cn=Greg Demko, o=High Point, ou=High Point, email=greg.demko@highpointnc.gov, c=US  
Date: 2017.09.11 09:33:04 -0400 DATE: **Sep 11, 2017**



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**SCOPE OF SERVICES FOR  
CONSTRUCTION ENGINEERING AND INSPECTION  
State Project:46072.1.1, B-5358, Model Farm Road over a Branch of  
Richland Creek, City of High Point**

Description of Work Required

This statement of work describes and defines the SERVICES which are required for construction inspection, materials sampling and testing, verification of construction stakeout and contract administration for construction projects

- 1|.A The Wetherill Engineering, Inc. (WEI) shall be responsible for all construction inspection and field materials sampling and testing, assisting the City of High Point and North Carolina Department of Transportation (NCDOT)'S Resident Engineer with contract administration for the construction of project listed above.
- 2.A The WEI shall be responsible for all construction administrative functions as defined in this Scope of Services and referenced NCDOT's manuals and procedures.
- 3.A The WEI shall utilize effective control procedures such that the construction of this project is performed in reasonably close conformity with the plans, specifications, and contract provisions.
- 4.A The WEI shall be responsible for providing technical personnel in appropriate numbers at the proper times such that the responsibilities assigned under this AGREEMENT are effectively carried out.
- 5.A All SERVICES shall be performed in accordance with the established standard procedures and practices of the NCDOT. Prior to furnishing any SERVICES, the WEI shall be familiar with those departmental standard procedures and practices as set forth in the Construction Manual, and associated manuals and with informal procedures and practices for construction contract administration used by the NCDOT.
- 6.A The WEI shall maintain close coordination with the City of High Point, NCDOT and the CONTRACTOR in order to minimize rescheduling of the WEI 'S activities due to construction delays or changes in scheduling of the CONTRACTOR'S activities.

Work Standards

The WEI will perform the work in accordance with all applicable City of High Point, NCDOT and Federal regulations and safety guidelines.

- 1.B It shall be the responsibility of the WEI to provide SERVICES as necessary such that the project is constructed in reasonably close conformity with the plans, specifications, and contract provisions.
- 2.B The WEI shall advise the City of High Point and NCDOT'S Resident Engineer of observed omissions, substitutions, defects, and deficiencies noted in the work of the CONTRACTOR and any corrective action taken. The SERVICES provided by the WEI shall, in no way, relieve the CONTRACTOR of responsibility for the satisfactory performance of the construction contracts.
- 3.B The WEI shall work under the general guidance and direction of the City of High Point, NCDOT'S Resident Engineer and Assistant Resident Engineers. The WEI shall make normal and routine project decisions consistent with the City of High Point and NCDOT'S policies, procedures, and general guidance provided by the City of High Point, NCDOT'S Resident Engineer and Assistant Resident Engineers.
- 4.B The WEI shall make and record such measurements as are necessary to calculate and document quantities for pay items, except for measurement of earthwork quantities that requires the services of a survey crew, and perform incidental engineering surveys as may be necessary to carry out the SERVICES.
- 5.B The WEI shall provide SERVICES to monitor the CONTRACTOR'S on site construction operation and to inspect all materials entering into the work as required such that the quality of workmanship and materials is such that the project will be completed in reasonably close conformity with the plans, specifications, and other contract provisions. The WEI shall keep detailed, accurate records of the CONTRACTOR'S daily operations and significant events that affect the work.
- 6.B The standard procedures and practices of the NCDOT for inspection of construction projects are set out in the NCDOT'S Construction Manual. The WEI shall perform inspection SERVICES in accordance with these standard procedures and practices and other accepted practices as may be appropriate.
- 7.B The WEI shall perform field sampling and testing of component materials and completed work items such that the materials and workmanship incorporated into the project are in reasonably close conformity with the plans, specifications, and contract provisions.
- 8.B The WEI shall perform all necessary surveillance and inspection of the asphalt roadway operations.
- 9.B The WEI shall attend the Preconstruction Conference.
- 10.B The WEI shall maintain on a daily basis a complete and accurate record of all activities and events relating to the project and a record of all work completed by the CONTRACTOR, including quantities of pay items in conformity with the NCDOT'S policies and procedures. The WEI shall immediately report apparent significant changes in quantity, time, or cost to the City of High Point and NCDOT'S Resident Engineer as they are observed.
- 11.B The WEI shall prepare inspector's daily reports of the CONTRACTOR'S operations in accordance with the NCDOT'S Construction Manual.

- 12.B The WEI shall maintain records of all sampling and testing accomplished and analyze such records required such that acceptability of materials and completed work items can be determined.
- 13.B The WEI shall, at a minimum, each month prepare a comprehensive tabulation of the quantity of each pay item satisfactorily completed to date. Quantities shall be based on daily records or calculations. Calculations shall be retained. The tabulation will be submitted to the City of High Point and NCDOT'S Resident Engineer who shall prepare and submit the progress payment estimate.
- 14.B The WEI shall provide to the CONTRACTOR interpretations of the plans, specifications, and contract provisions. The WEI shall consult with the City of High Point and NCDOT'S Resident Engineer when an interpretation involves complex issues or may have an impact on the cost of performing the work or is known to be an area of dispute with the CONTRACTOR.
- 15.B The WEI shall analyze changes to the plans, specifications, or contract provisions and extra work which appear to be necessary to carry out the intent of the construction contract. When it is determined that a change or extra work is necessary and such work is not within the scope and intent of the original contract, WEI with the City of High Point and NCDOT'S Resident Engineer concurrence, shall initiate any change necessary to cause the CONTRACTOR to perform the extra work.
- 16.B When it is determined that a modification to the original contract for the project is required due to a necessary change in the character of the work, WEI and the City of High Point with NCDOT'S Resident Engineer concurrence shall negotiate prices with the CONTRACTOR and prepare and submit for approval a Supplemental Agreement in accordance with applicable NCDOT rules.
- 17.B In the event that the CONTRACTOR gives notice in writing that he deems certain work to be performed is beyond the scope of the construction contract and he intends to claim additional compensation, the WEI shall maintain accurate force account records of the costs involved in such work. These records shall include manpower, equipment times and materials installed (temporary or permanent) in the portion of the work in dispute.
- 18.B In the event that the CONTRACTOR for the project gives notice of intent to file a claim for additional compensation, the WEI shall maintain complete, accurate force account and other records of work involved in the claims.
- 19.B The WEI shall monitor each construction operation to the extent necessary to determine whether construction activities violate the requirements of any permits. The WEI shall notify the CONTRACTOR of any violations or potential violations and require his immediate resolution of the problem. Permit violations must be reported to the City of High Point and NCDOT'S Resident Engineer immediately.
- 20.B The WEI shall monitor the installation of erosion control devices for compliance with contract documents. Further, the WEI shall monitor the erosion control devices for their effectiveness during the life of the project. The WEI shall ensure that the CONTRACTOR completes the NPDES Forms and shall review the forms to ensure they are completed thoroughly. The WEI shall notify the CONTRACTOR and the City of High Point and NCDOT'S Resident Engineer in writing of any deficiencies noted, the corrective action required and the time frame to complete the corrective action. The WEI shall maintain an as-built set of erosion control plans.

21.B The WEI shall interface with the CONTRACTOR and utility companies to coordinate the timely removal, adjustment, or protection of in situ utilities which may conflict with the construction plans.

### Deliverables

The WEI will be required to satisfactorily verify all pay records and materials received information in accordance with the NCDOT'S policies and procedures and submit same together with a set of plans with all field revisions noted in red thereon to the City of High Point within forty- five (45) days after completion of the construction project(s).

### 1.C Guidelines

All work under this contract shall be performed in accordance with all applicable guidelines published by the NCDOT, and in accordance with the SCOPE OF WORK.

2.C When performing field work on or adjacent to public streets or highways, it shall be the responsibility of the WEI to provide traffic control including flagmen and/or any other necessary devices in accordance with the "Manual on Uniform Traffic Control Devices" (Current Edition), the "N. C. Department of Transportation - Construction and Maintenance Operations Supplement to the M.U.T.C.D." and the "North Carolina Survey Crew Safety Supplement" to protect workers, equipment, and the traveling public.

## **ARTICLE II - DATA AND SERVICES TO BE PROVIDED BY THE NCDOT**

### II.A. Data and Services

II.A.1. The staff person assigned the proposed project in the respective Branch, Unit, or Division shall serve as the NCDOT's Project Manager for this AGREEMENT.

II.A.2. The NCDOT shall provide available data and information, as applicable to the detailed SCOPE OF WORK, which may include but is not limited to, the following:

- Guidelines for any applicable discipline; and
- All data in the hands of the NCDOT that can be released that would assist the WEI in the accomplishment of the work.