



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

September 29, 2009

Addendum No. 2

RE: Contract Number: C 202255
TIP Number: R-2632AA
County: Mecklenburg
Project Description: NC 73 (Sam Furr Road) from west of US 21 (Statesville Avenue)
to east of NC 115

October 20, 2009 Letting

To Whom It May Concern:

Reference is made to the Request for Proposal recently furnished to you on the above project. The following revisions have been made to the Request for Proposal:

The second page of the *Table of Contents* has been revised. Please void the second page in your proposal and staple the revised second page thereto.

Page Nos. 118 and 119 of the *Utilities Coordination Scope of Work* have been revised. Please void Page Nos. 118 and 119 in your proposal and staple the revised Page Nos. 118 and 119 thereto.

Page Nos. 126 and 127 of the *Signals Scope of Work* have been revised. Please void Page Nos. 126 and 127 in your proposal and staple the revised Page Nos. 126 and 127 thereto.

If you have any questions or need additional information, I can be reached by telephone at (919) 250-4124.

Sincerely,

A handwritten signature in black ink, appearing to read "R.A. Garris".

R.A. Garris, P.E.
Contract Officer

RAG/kaa

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NC DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROGRAM MANAGEMENT
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RALEIGH NC 27699-1595

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WEBSITE:
WWW.NCDOT.GOV

LOCATION:
CENTURY CENTER COMPLEX
ENTRANCE B-1
1020 BIRCH RIDGE DRIVE
RALEIGH NC

cc: Mr. Jon Nance, PE
Ms. Deborah Barbour, PE (w/)
Mr. Victor Barbour, PE (w/)
Mr. Art McMillan, PE (w/)
Mr. Ellis Powell, PE
Mr. Jay Bennett, PE
Mr. Scott Allen, PE (w/)
Mr. Calvin Leggett, PE
Mr. Kevin Lacy, PE
Mr. Barry Moose, PE
Mr. Richard Hancock, PE
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Mr. Dave Henderson, PE
Mr. Ron King, PE
Mr. Don Lee
Mr. Greg Thorpe, Ph.D.
Mr. Stuart Bourne, PE
Mr. Ron Hancock, PE (w/)
Mr. Robert Memory
Mr. Brad Hibbs (w/3)
Mr. Phillip Harris, PE
Mr. Ed Lewis
Mr. David Harris, PE
Mr. Ron Davenport, PE (w/)
Mr. Van Argabright, PE
Mr. Tawana Brooks, PE (w/2)
Mr. Scott Cole, PE (w/)

Ms. Anne Gamber, PE (Hydraulics) (w/)
Mr. John L. Pilipchuk, LG, PE (Geotechnical) (w/)
Dr. Clark Morrison, PE (Pavement) (w/)
Mr. Barney Blackburn, PE (Erosion & Sed. Control) (w/2)
Mr. David Boyd (Utility Coordination) (w/)
Ms. Tammy Stewart (Public Information) (w/)
Mr. Larry Thompson, PWS, LSS (w/)
Mr. Rodger Rochelle, PE (w/)
Mr. Ayman Alqudwah, PE (w/)
Ms. Stacy Oberhausen, PE (w/)
Ms. Theresa Ellerby (w/)
Mr. Roger Worthington, PE (w/)
Ms. Teresa Bruton, PE (w/7)
Ms. Marsha Sample (w/)
Ms. Judith Corley-Lay, Ph.D., PE
Mr. Neal Strickland (w/)
Mr. Fred Adams (w/)
Mr. Lawrence Gettier, PE (w/)
Mr. Tony Houser, PE (w/)
Mr. Kirby Warrick (w/)
Ms. Meredith McLamb (w/)
Mr. A.R. (Drew) Thomas, PE (w/)
Mr. David Hinnant (w/)
Mr. M. Pate Butler, PE (w/)
Mr. Jeff D'Arruda (w/)
TRC Members (w/)
File (w/)

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Utility Owner	Utility Type	Cost Responsibility
Charlotte – Mecklenburg Utilities Department	Water and Sewer	NCDOT and Utility Owner *
AT&T	Telephone (two switch cabinets and manhole located within the Southern Bell Telephone & Telegraph Company Right of Way Site Easement provided by the Department and aerial only)	NCDOT
AT&T	Telephone (underground)	Utility Owner
Quest Fiber Optic	Fiber Optic	Utility Owner
Sprint Fiber Optic	Fiber Optic	Utility Owner
Time Warner CATV	Cable Television	Utility Owner
Energy United	Power Distribution (aerial only)	NCDOT (Prior Rights)
Energy United	Power Distribution (Underground and Cabinets)	Utility Owner **
Town of Huntersville managed by Electrocities	Power Distribution	NCDOT (Joint Use)
Duke Energy	Power Distribution	NCDOT (Prior Rights)
Piedmont Natural Gas	Natural Gas	Utility Owner
Spirit Telecom	Fiber Optic	Utility Owner
Duke Net	Fiber Optic	Utility Owner
CSI	Fiber Conduit	Utility Owner
Windstream	Telephone	NCDOT (Joint Use)

* Only preconstruction charges for this work shall be included in the lump sum bid for the project. See the Water and Sewer Section below for cost responsibilities.

** Energy United underground facilities are as yet to be determined as having prior rights or compensable interest. Therefore, the Design-Build Team shall not include the cost of the underground and cabinet relocation/adjustment in their Price Proposal, but instead shall outline clearly in the Technical Proposal the design and construction details that the Design-Build Team proposes to minimize/avoid impact on the Energy United underground facilities and cabinets.

Water and Sewer

If the Design-Build Team's design and / or construction requires the relocation of existing water or sewer facilities, including but not limited to any appurtenances, designs shall be coordinated with the NCDOT Utility Coordination Unit. The costs for all engineering charges associated with the design for relocation of these existing water and / or sewer facilities shall be the responsibility of the Design-Build Team and shall be included in the lump sum bid for the project. The Design-Build Team shall develop designs; prepare all plans for needed agreements and permits; submit permits directly to the agencies and obtain approval from the agencies. The Design-Build Team shall be responsible for all permit fees.

For all other costs, other than those engineering and permitting costs noted above, the Design-Build Team shall be compensated in accordance with Article 104-8(a) of the Standard Specifications. The Design-Build Team shall be responsible for relocating all Charlotte-Mecklenburg Utilities Department (CMU) facilities, including but not limited to all appurtenances (water valves, water meters, fire hydrants, etc.), impacted by the project's construction. The Design-Build Team's utility relocation responsibilities shall include, but not be limited to the facilities' design and construction. The Design-Build Team shall negotiate a lump sum cost for all work associated with relocating the aforementioned Charlotte-Mecklenburg Utilities Department facilities impacted by the project's construction with CMU. The engineering costs that are the responsibility of the NCDOT shall be differentiated from all other costs by the Design-Build Team. Once the Design-Build Team and CMU agree on a plan and a lump sum estimated cost for the utility construction, the Design-Build Team shall be responsible for submitting five (5) sets of 11 x 17 utility construction drawings to the State Utility Agent, via the Transportation Program Management Director, for further handling. Each set shall include a title sheet, plan sheets, profiles and special provisions if required. Also, a letter from CMU agreeing to the plans and lump sum cost must accompany this package. The necessary Utility Agreement with CMU for reimbursement to the NCDOT shall be a two party agreement between the NCDOT and CMU; and will be developed and executed by the Department. Should the Design-Build Team and CMU fail to reach an agreement through these negotiations, the Design-Build Team shall allow CMU to relocate its facilities and the Design-Build Team shall not be granted contract time extensions or receive additional compensation.

The relocation of all CMU facilities shall be done in accordance with the latest CMU design requirements. The Design-Build Team may obtain the CMU design requirements / specifications from the website noted below or by calling 704-336-7600.

<http://www.charmeck.org/Departments/Utilities/Home.htm>

CMU has requested that their 36" water-line remain in place. This water service shall not be interrupted. The NCDOT will not allow appurtenances to be constructed under the pavement after project completion, including but not limited to stub-outs, meter boxes or valves. Therefore, the Design-Build Team shall design and build as necessary, all appurtenances CMU requires for the existing 36" water-line.

The existing VC pipe may remain in place provided minimal construction occurs in the immediate area and the pipe is not located under the final pavement structure. The Design-Build Team will be responsible for any damage to the existing VC pipe. The Department will not require that relocated water lines be located outside the clear recovery zone except for those portions of the line and appurtenances create an above ground hazard.

Utility Relocation Plans

In the event of a utility conflict, the Design-Build Team shall request that the utility company submit relocation plans (Highway Construction Plans to be provided by the Design-Build Team to Utility Owners) that show existing utilities and proposed utility relocations for approval by the NCDOT.

II. TRAFFIC SIGNALS

The Design-Build Team shall replace FOUR (4) existing traffic signals located within the construction limits and connect / reconnect them to the NC 73 Closed Loop Signal System. In addition, the Design-Build Team shall revise SIX (6) existing traffic signals located outside the construction limits (along NC 73, west of I-77) and connect / reconnect them to the NC 73 Closed Loop Signal System. The Design-Build Team shall provide volume density traffic signal detection for all signals on this project. **Unless noted otherwise elsewhere in this RFP,** the traffic signal detection for the final traffic patterns shall be inductive loop detection. The Design-Build Team may provide video loop detection only for temporary traffic patterns during construction. The traffic signal work required at each intersection is listed below.

Existing Signals Located INSIDE the Construction Limits (4)		
Signal Number	Intersection Description	Work Requirements
10-1304	NC 73 at I-77 northbound ramps	<p>The Design-Build Team shall replace the existing traffic signals, and install a new 2070L controller, new 170 signal cabinet Model 332, with auxiliary file installed, closed loop system detectors and system interconnection equipment.</p> <p>The Design-Build Team shall upgrade the signal heads at all protected / permissive left turns to Flashing Yellow Arrow signal heads. The Design-Build Team shall coordinate all Flashing Yellow Arrow signal recommendations with the Division Traffic Engineer and the Regional Traffic Engineer prior to incorporation.</p>
10-0610	NC 73 at US 21	
10-2018	NC 73 at Rich Hatchett Road	Vehicle detection, as noted above, shall be maintained for all movements throughout the life of the project.
10-0953	NC 73 at NC 115	<p>The Design-Build Team may use wood poles as signal supports during the construction phases. Unless noted otherwise elsewhere in this RFP, Metal Strain poles shall be required for the all final signal designs. If the project construction does not impact the existing Metal Strain pole signal supports at the NC 73 / I-77 northbound ramps intersection (Signal No. 10-1304), the Design-Build Team may retain these existing Metal Strain poles as signal supports for the final signal design.</p> <p>The Design-Build Team shall design the signal and intersection to include crosswalks and pedestrian signals at all intersection quadrants.</p>

		The Design-Build Team shall interconnect the traffic signal at the NC 73 / NC 115 intersection (Signal No. 10-0953) to the proposed railroad grade crossing signals for preemption. (Reference the Railroad Coordination Scope of Work found elsewhere in this RFP)
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Existing Signals located OUTSIDE the Construction Limits (6)		
Signal Number	Intersection Description	Work Requirements
10-1503	NC 73 at Catawba Avenue	<p>The Design-Build Team shall revise the existing traffic signals by installing a new 2070L controller and a new 170 signal cabinet Model 332, with auxiliary file installed.</p> <p>The Design-Build Team shall upgrade the signal heads at all protected / permissive left turns to Flashing Yellow Arrow signal heads. The Design-Build Team shall coordinate all Flashing Yellow Arrow signal recommendations with the Division Traffic Engineer and the Regional Traffic Engineer prior to incorporation.</p> <p>If required, the Design-Build Team shall be responsible for implementing all signal phasing changes. The Design-Build Team shall coordinate all signal phasing changes with the Division Traffic Engineer and the Regional Traffic Engineer prior to incorporation.</p> <p>The Design-Build Team is not responsible for upgrading existing traffic detection methods.</p>
10-1939	NC 73 at Kenton Drive / Glenfurness Drive	
10-1774	NC 73 at Birkdale Commons Parkway	
10-1839	NC 73 at Lindholm Drive	
10-1686	NC 73 at SR 2316 / Northcross Drive (SR 2141)	
10-1662	NC 73 at I-77 southbound ramps	

III. SIGNAL COMMUNICATIONS PLANS

The Design-Build Team shall be responsible for installing and / or maintaining a spread spectrum wireless communication system which serves as the communications medium between existing traffic signals as required below to form a Closed Loop Traffic Signal System. The traffic signal communication requirements for each intersection are listed below.