



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

June 12, 2009

Addendum No. 2

Contract No.: C 202238
TIP No.: I-4744
County: Wake
Project Description: I-40 Widening from west of Wade Avenue to east of Jones Franklin Road

I-40 / I-440 / US 64 Signing Improvements from Wade Avenue eastward to Sunnybrook Road

RE: Addendum No. 2 to Final RFP

July 2, 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. 129, 130 and 131 of the *Pavement Management Scope of Work* have been revised. Please void Page Nos. 129, 130 and 131 in your proposal and staple the revised Page Nos. 129, 130 and 131 thereto.

Page No. 179 of the *ITS Scope of Work* has been revised. Please void Page No. 179 in your proposal and staple the revised Page No. 179 thereto.

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

Sincerely,

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

RAG/jmg

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PAVEMENT MANAGEMENT SCOPE OF WORK (6/12/09)

NOTE: Unless noted otherwise elsewhere in this RFP, the Pavement Management Scope of Work pertains only to the I-40 widening project limits.

The pavement design for the mainline widening and median mainline paved shoulder shall consist of the following:

- 3.0" S9.5D
- 3.0" I19.0D
- 16.5" B25.0C
- 12" Shallow Undercut with Stone and Geogrid

The Design-Build Team shall design and construct paved shoulders along the US 1 / US 64 southbound to I-40 westbound ramp that consist of 3.0" S9.5B and 9.5" B25.0C. (Reference Roadway Scope of Work)

Unless noted otherwise elsewhere in this RFP, the Design-Build **Team** shall be responsible for the following west of the Wade Avenue bridges:

- From the end of the five-lane section at approximately Station 56+00 –LREVEX- to the bridge over Wade Avenue, the Design-Build Team shall completely resurface all existing I-40 westbound travel lanes, including all acceleration, deceleration and auxiliary lanes / ramps to the back of the gore (12-foot width), with a uniform 1.5-inch S9.5D surface course overlay.
- From the back of the Harrison Avenue eastbound entrance ramp gore (12-foot width) to the bridge over Wade Avenue, the Design-Build Team shall uniformly mill 2.5 inches of pavement on all existing I-40 eastbound travel lanes, including all acceleration, deceleration and auxiliary lanes / ramps / loops to the back of the gore (12-foot width). The Design-Build Team shall fill the milled areas with 2.5 inches of I19.0D and completely resurface the milled areas with a uniform 1.5-inch S9.5D surface course overlay.
- The Design-Build Team shall completely resurface all existing paved shoulders, including those for all I-40 acceleration, deceleration and auxiliary lanes / ramps / loops to the back of the gore (12-foot width), with a uniform 1.5-inch S9.5C or S9.5D surface course overlay.

Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall be responsible for the following east of the Wade Avenue bridges:

- The Design-Build Team shall completely and uniformly resurface all existing and proposed I-40 travel lanes, including all acceleration, deceleration and auxiliary lanes / ramps / loops to the back of the gore (12-foot width), with an Ultra-thin Bonded Wearing Course.

- The Design-Build Team shall completely and uniformly resurface all I-40 paved shoulders, including all acceleration, deceleration and auxiliary lanes / ramps / loops to the back of gore (12-foot width), from the edge of travel lane to the beginning of the rumble strip with an Ultra-thin Bonded Wearing Course.
- On all concrete ramps and loops, with the exception of the Wade Avenue and US 1 / US 64 interchange ramps and loops, the Design-Build Team shall extend the Ultra-thin Bonded Wearing Course from the back of gore (12-foot width) to the -Y- Line radius points or the subsequent -Y- Line back of gore (12-foot width), excluding the US 1 / US 64 collector – distributor gore. The Ultra-thin Bonded Wearing Course shall completely and uniformly resurface all ramp and loop travel lanes and all paved shoulders from the edge of travel lane to the beginning of the rumble strip or 12 inches from the edge of travel lane in the absence of rumble strips.
- On all asphalt ramps and loops, with the exception of the Wade Avenue and US 1 / US 64 interchange ramps and loops, the Design-Build Team shall uniformly mill 1.5 inches of all travel lanes and paved shoulders from the back of gore (12-foot width) to the -Y- Line radius points or the subsequent -Y- line back of gore (12-foot width) excluding the US 1 / US 64 collector – distributor gore. The Design-Build Team shall fill the milled areas with 1.5 inches of S9.5C surface course.
- At the US 1 / US 64 interchange, the Design-Build Team shall completely and uniformly resurface all ramp, loop and I-40 collector-distributor lanes and shoulders with an Ultra-thin Bonded Wearing Course. Along all ramps and loops, the Ultra-thin Bonded Wearing Course shall extend to the US 1 / US 64 back of gore (12-foot width).
- Prior to placing the Ultra-thin Bonded Wearing Course on the ramp from northbound US 1 to eastbound I-40 as noted above, the Design-Build Team shall mill the existing asphalt on all travel lanes and shoulders to a depth and length necessary to completely remove the asphalt overlay over the existing concrete pavement. The Design-Build Team shall provide smooth profile transitions, including but not limited to the tie-ins. The Design-Build Team shall grade the inside and outside turf shoulders to accommodate the resulting lower ramp pavement surface.

Ultra-thin Bonded Wearing Course shall be Type B. Milling will not be required for flush longitudinal Ultra-thin Bonded Wearing Course tie-ins at gutters.

The eastbound median lane that starts at approximately Station 50+00 -LREVEX- and extends westward was built under Project I-3800. This median lane is currently signed and marked to prohibit truck traffic. The Design-Build Team shall completely remove the median lane pavement (12-foot width) and shoulder through the entire existing lane shift located from approximately Station 34+00 -LREVEX- to Station 50+00 -LREVEX-, and construct the mainline pavement design noted above. (Reference No Truck Median Lane Sketch provided by the Department for approximate pavement removal limits.)

Before placing Ultra-thin Bonded Wearing Course on concrete pavement, seal all cracks greater than ¼-inch wide or cracks that have associated spalling, and on all spalls at joints greater than two inches wide and repair pot holes in accordance with Sealing Existing Pavement Cracks – Polymer Patch Project Special Provision located elsewhere in this RFP.

Along the NC 54 to I-40 eastbound loop, the Design-Build Team shall repair the gap between the existing concrete slabs and curb and gutter in accordance with the Sealing

Existing Pavement Cracks - Polymer Patch Project Special Provision found elsewhere in this RFP.

Within all impact attenuator limits, the Design-Build Team shall pave the entire median width with 4" of B25.0B or B25.0C, a split seal and at least one lift of surface course. NOTE: Deleted Reference to Guardrail Placement at Median Sign Support Detail

Through the areas requiring 12-foot full-depth median shoulders designed and constructed as future lanes, the Design-Build Team shall completely remove and dispose of the I-40 median paved shoulders. (Reference the Roadway Scope of Work) The Design-Build Team shall completely remove and dispose of all temporary median widening pavement structures.

At approximately Station 76+00 -LREV- westbound, the Department has made asphalt repairs to five adjacent concrete slabs. At this location only, the Design-Build Team shall completely remove, dispose of and replace, in their entirety, these slabs and the associated asphalt repair work in accordance with the Repair of Jointed Concrete Pavement Slabs Project Special Provision found elsewhere in this RFP.

The Design-Build Team shall be responsible for the design of all temporary pavements and for the evaluation of existing shoulders and roadways regarding their suitability for carrying traffic during construction, if necessary. In the event that the existing shoulders and roadways are found to be inadequate for the proposed temporary traffic volumes and duration, the Design-Build Team shall be responsible for upgrading the pavement to an acceptable level. Prior to placing traffic on existing shoulders, the Design-Build Team shall remove the existing rumble strips. Upon removal of temporary traffic on existing shoulders, the Design-Build Team shall be responsible for repairing the damaged shoulders and restoring the rumble strips. The Design-Build Team shall repair all damaged shoulders by milling 4" of pavement, compacting the existing ABC, and constructing 2.5" I19.0B and 1.5" S9.5B. The Design-Build Team shall not be responsible for the repair of existing damaged shoulders unless they are exposed to temporary traffic during construction. Using the 2007 / 2035 Build AADT, temporary pavements shall be designed in accordance with the most recent version of the North Carolina DOT Pavement Design Procedure. Temporary pavement designs shall be submitted for review and acceptance using the contract submittal process prior to incorporation. The expected duration for traffic on temporary pavement must be included as part of the submittal.

In areas where the existing paved shoulder is proposed to be incorporated into a permanent travel lane, including but not limited to use of the existing eastbound shoulder between Harrison Avenue and Wade Avenue, the Design-Build Team shall be responsible for evaluating the existing paved shoulder regarding its suitability for carrying the projected traffic volumes. In the event that the existing paved shoulder is found to be inadequate, the Design-Build Team shall be responsible for removing, and disposing of, the existing paved shoulder. The Design-Build Team shall submit their evaluation and proposed use of existing paved shoulders to the Transportation Program Management Director for review and acceptance or rejection. As a minimum, all paved shoulders incorporated into a permanent travel lane shall be resurfaced and / or milled

ITS SCOPE OF WORK (6-12-09)

NOTE: An existing Traffic.com traffic detector, located between exits 290 and 291 in the median, is not shown on the I-4744 Preliminary Plans. If impacted by the project, the Design-Build Team shall coordinate the relocation of this traffic detector with the NCDOT Regional ITS Engineer and Traffic.com. If the Design-Build Team's design or construction requires the Traffic.com traffic detector to be relocated, the Design-Build Team shall notify the Transportation Program Management Director in writing and allow 30 days from receipt of this notification for the relocation to occur. The Design-Build Team shall be responsible for the relocation of all other existing ITS devices impacted by the project. (Reference the Utilities Coordination Scope of Work found elsewhere in this RFP)

I. GENERAL REQUIREMENTS

The Design-Build Team shall design, furnish and install the following ITS devices along I-40 from the Triangle Regional Transportation Management Center (TRTMC), located at 101 Roscoe Trail, Raleigh, NC (near the Wade Avenue Split), to the I-40 interchange at US 1 / US 64:

- Multi-duct conduit system (two - 1.25 inch conduits)
- 144 fiber single-mode fiber optic cable
- Junction boxes
- New CCTV camera at I-40 near Wade Avenue - The new CCTV camera shall be installed east of the I-40 / Wade Avenue interchange at a location that views both I-40 and Wade Avenue.
- New CCTV camera at I-40 and Cary Towne Boulevard – The new CCTV camera shall be installed at a location that views both I-40 and Cary Towne Boulevard.
- Integrate two (2) existing CCTV cameras at the I-40 interchange with US 1 / US 64 with the new fiber optic communication system
- New Dynamic Message Sign (DMS) and structure on I-40 westbound, approximately 1000 feet east of the Avent Ferry Road Overpass.

The Design-Build Team shall integrate, and make fully functional, the conduit system, fiber optic cable, new CCTVs, existing CCTVs, and DMS at the TRTMC. The CCTV operating software is Protronix VideoPro and the DMS operating software is Daktronics Vanguard.

The Design-Build Team shall connect the new and existing CCTV cameras to the new fiber optic communication system. The Design-Build Team shall connect a communication medium to the DMS. Acceptable options for communication to the DMS include dial-up, cellular or high speed internet.

No construction on the underground conduit system, junction boxes, and / or fiber optic communications system on this project shall begin prior to the Department's written acceptance of the 100% plans and specifications. The Design-Build Team shall allow NCDOT a minimum 20 working-day review period for all submittals.

As part of the plan submittal, the Design-Build Team shall provide product information sheets that contain manufacturer and model numbers for all components. The Design-Build Team shall depict proposed device locations in the plan package and provide detailed drawings for each component, indicating types of materials proposed, installation details, layout of components, and fiber optic splicing details.

Unless otherwise stated in this Scope of Work, the Design-Build Team shall furnish new equipment, materials and hardware that meet the requirements of the 2006 *Standard Specifications for Roads and Structures*.