



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

November 2, 2011

Addendum No. 2

Contract No.: C202771
TIP No.: R-2554BB & C
Counties: Wayne & Lenoir
Project Description: US 70 (Goldsboro Bypass) from east of SR 1556 (Wayne Memorial Drive) to east of SR 1323 (Promise Land Road)

RE: Addendum No. 2 to Final RFP

December 20, 2011 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals with Addendum No. 1 dated October 14, 2011 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 2 for your information. Please note that all revisions have been highlighted in gray and are as follows:

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 No. 90 of the *Roadway Scope of Work* has been revised. Please void Page No. 90 in your proposal and staple the revised Page No. 90 thereto.

Page No. 100 of the *Pavement Management Scope of Work* has been revised. Please void Page No. 100 in your proposal and staple the revised Page No. 100 thereto.

Page No. 102 of the *Structures Scope of Work* has been revised. Please void Page No. 102 in your proposal and staple the revised Page No. 102 thereto.

If you have any questions or need additional information, I can be reached by telephone at (919) 707-6900.

Sincerely,

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

RAG/apy

Cc: Mr. Victor Barbour, PE
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- The Design-Build Team shall provide milled rumble strips along the mainline and -Y30- outside and inside paved shoulders, including acceleration, deceleration and auxiliary lanes, and ramps to the back of the gore (12-foot width).
- Excluding ramps -Y8RPA- and -Y8RPD-, the Design-Build Team shall design and construct one-lane ramps that provide a minimum 16-foot lane width. The Design-Build Team shall design and construct two lane ramps that provide minimum 12-foot lanes. Excluding ramps -Y8RPA- and -Y8RPD-, one-lane and two-lane ramps shall have 14-foot outside shoulders, four-foot of which shall be full depth paved shoulders and 12-foot inside shoulders, four-foot of which shall be full depth paved shoulders.
- Loop C at the US 70 Bypass / existing US 70 interchange shall be considered a ramp and adhere to the ramp requirements noted above.
- The Design-Build Team shall design and construct ramps -Y8RPA- and -Y8RPD- to provide a minimum 14-foot lane width with 12-foot outside and inside shoulders, four-foot of which shall be full depth paved shoulders.
- The Design-Build Team shall design and construct all ramps to meet a 55 mph design speed and use a 50 mph ramp speed to determine the required acceleration and deceleration lengths for the entrance and exit termini, respectively.
- The Design-Build Team shall design and construct loops that adhere to Exhibit 3-51, *Design Widths of Pavements for Turning Roadways*, shown in AASHTO's *A Policy on Geometric Design of Highways and Streets* (2004) - Case II / Condition C for one-lane loops; Case III / Condition C for two-lane loops. All loops shall have 12-foot outside shoulders, four-foot of which shall be full depth paved shoulders. All loops shall have 2'-6" curb and gutter along the inside edge of pavement, with a 14-foot berm. Unless noted otherwise elsewhere in this RFP, the minimum loop design shall be 30-mph with a minimum 250-foot radius.
- Unless accommodated on the R-2554BB Preliminary Plans or R-2554C Right of Way Plans provided by the Department, the Design-Build Team will not be required to design or construct ramps or bridges to accommodate future loops.
- The Design-Build Team shall design and construct the Wayne Memorial Drive eastbound entrance ramp such that the full ramp width extends to beyond the east end of the bridge over Reedy Branch. The Reedy Branch eastbound bridge rail offset shall be a minimum of six feet wide.
- Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall design and construct at-grade intersections with the lane configurations noted in the R-2554BB & C Capacity Analysis Review Report dated July 8, 2011. All turn lane lengths shall meet the current NCDOT standards where vehicle storage does not govern or the lengths required by the aforementioned Congestion Management Recommendations, whichever is greater. This determination shall be made by calculating the recommended treatment for turn lanes, incorporating the minimum deceleration lengths as defined in the NCDOT Roadway Design Manual, (Reference Section 9-1, Figure F-4A) and comparing the calculated values with the NCDOT minimum turn lane lengths. The Design-Build Team shall accommodate the right turn maneuver at all intersections in accordance with the NCDOT Roadway Design Manual

Shoulder drains shall be required for all mainline pavement options.

The Design-Build Team shall be responsible for the design and construction of shoulder drains and outlets for the mainline. Shoulder drains shall be provided on low side of cross slopes and / or low side of superelevation throughout all sag vertical curves. Where installed on the median shoulder, outlets shall be provided at drainage structures at increments not to exceed 500 feet. Where installed on the outside shoulder, outlets shall be provided approximately every 300 feet. Shoulder drains shall be placed to drain the entire pavement structure. The shoulder drain design and outlet locations shall be submitted to the Transportation Program Management Director for review and acceptance.

The Design-Build Team shall pave from the edge of the proposed paved shoulder to the face of all guardrails with 6.0" of ABC (or 4.0" B25.0B or B25.0C), prime coat at the normal application rate and at least one lift of surface course. In these areas, the Design-Build Team's installation of ABC or black base shall be consistent with the pavement type for the specific roadway. As an alternative to the above pavement design for paving the shoulders to the face of the guardrail, the Design-Build Team may use the adjacent travel lane pavement design.

When a resurfacing grade ties to existing pavement, the Design-Build Team shall perform incidental milling, such that the new pavement ties flush with the existing pavement. When tying to the existing pavement, the Design-Build Team shall not reduce the minimum required surface layer pavement thickness noted above. The Design-Build Team shall not perform incidental milling more than 72 hours prior to placement of the asphalt surface layer.

Alternate Technical Concepts – Mainline Pavement Design Only

Alternative Technical Concepts that provide an alternate mainline pavement design will be considered subject to the following restrictions:

- ATCs on pavement design will only be permitted on the mainline and shall not be submitted until after the issuance of the Final Request for Proposals.
- Proposed pavement designs must have at least a 30 year design life.
- The use of the Mechanistic Empirical Pavement Design Guide (MEPDG) is permitted provided that the following parameters are used:
 - The Design-Build Team shall use the national input parameters with Darwin ME Version 1.0, Build 1.0.07.
 - The Design-Build Team shall use the local input parameters provided by the Department or the national input parameters with Darwin ME Version 1.0, Build 1.0.18.
- The design in the ATC must be sealed by a professional engineer who has experience in pavement design. The ATC submittal shall include a brief resume or description of the designer's pavement design experience.

STRUCTURES SCOPE OF WORK (10-28-11)**Project Details**

The Design-Build Team shall be responsible for all structures necessary to complete the project, including the following:

Grade separation crossings intersecting the mainline (-L-):

- Hare Road (SR 1570)
- US 13
- Hood Swamp Road (SR 1705)
- Corbett Road (SR 1708)
- Parkstown Road (SR 1714)
- Beston Road (SR 1719)
- New Hope Road (SR 1003) and Norfolk Southern Railway / NC Railroad Company
- Washington Street (SR 1603)
- Flyover to existing US 70 Westbound
- Loop from existing US 70 Eastbound

Stream crossings:

- Dual Bridges on -L- over Reedy Branch – The Design-Build Team shall set the Reedy Branch bridge toe of fill slopes to adhere to all stream set-back requirements and shall be located outside the limits between Station 153+03 -L- and Station 154+05 -L-.
- Dual Bridges on -L- over West Bear Creek

At other sites, the Design-Build Team is also responsible for all culvert design and construction.

All bridges shall meet approved roadway typical sections and grades. Bridge geometry (width, length, skew, span arrangement, etc.) shall be in accordance with the accepted Structure Recommendations and Hydraulic Bridge Survey Reports prepared by the Design-Build Team.

The minimum vertical clearance required for bridges over -L- shall be 17'-0" for both concrete and asphalt pavements. The minimum vertical clearance over the railroad (existing and future tracks) shall be 23'-0". The Design-Build Team shall be responsible for all required railroad coordination, including but not limited to securing Railroad Agreements. (Reference the Railroad Coordination Scope of Work found elsewhere in this RFP)

On the north side of the existing track, the Design-Build Team shall accommodate an additional freight track at 15-foot centers and an eight-foot maintenance road. On the **south side** of the existing track, the Design-Build Team shall accommodate an additional freight track at 15-foot centers. The Design-Build Team's bridge design and construction shall also accommodate a possible future relocation of New Hope Road (SR 1003), including the associated slope stake line, outside the associated railway 200-foot right of way, which is centered about the existing track. The Design-Build Team shall indicate in their Technical Proposal how the future tracks and maintenance road, as well as the future possible relocation of New Hope Road, will be accommodated. Ends bent slopes that may be removed and replaced with walls in the future is