



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

ANTHONY J. TATA
SECRETARY

March 25, 2015

Addendum No. 3

Contract No.: C 203609
TIP No.: R-2250
County: Pitt
Project Description: ~~Greenville Southwest Bypass from south of Old NC 11 to US 264~~

RE: Addendum No. 3 to Final RFP

April 21, 2015 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated February 24, 2015 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 3 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 Nos. 154 and 160 of the *Roadway Scope of Work* have been revised. Please void Page Nos. 154 and 160 in your proposal and staple the revised Page Nos. 154 and 160 thereto.

Page No. 183 of the *Geotechnical Engineering Scope of Work* has been revised. Please void Page No. 183 in your proposal and staple the revised Page No. 183 thereto.

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

Sincerely,

R.A. Garris, PE
Contract Officer

Cc: Rodger Rochelle, PE

John Rouse, PE

Teresa Bruton, PE

File

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LOCATION:
CENTURY CENTER COMPLEX
ENTRANCE B-2
1020 BIRCH RIDGE DRIVE
RALEIGH NC

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- The Design-Build Team shall prepare functional horizontal and vertical designs for a future full cloverleaf interchange (ramps and loops in all quadrants). The loops shall be designed for a minimum 30 mph design speed. The minimum loop radius shall be 230 feet, or the length required to adhere to the turn lane length requirements noted elsewhere in this RFP, whichever is greater.
- The Design-Build Team shall design and construct all bridges (at interchanges and grade separations for required future continuous auxiliary lanes, if necessary) to allow / accommodate the aforementioned future full cloverleaf interchange. (Reference the Structures Scope of Work found elsewhere in this RFP)
- The Design-Build Team shall make a determination of, and acquire, the additional right of way required for the aforementioned future full cloverleaf interchange. (Reference the Right of Way Scope of Work found elsewhere in this RFP)
- The Design-Build Team shall relocate / coordinate the relocation of utilities in conflict with the aforementioned future full cloverleaf interchange. (Reference the Utilities Coordination Scope of Work found elsewhere in this RFP)
- The Design-Build Team shall design and construct NC 102 as an arterial with a 50 mph design speed. From NC 11 westward to the furthest Quadrant A or B ramp, the Design-Build Team shall install 2'-6" curb and gutter with a ten-foot berm along both sides of NC 102.
- Beneath all mainline bridges over -Y- Lines that are not otherwise improved, the Design-Build Team shall design and construct a typical section equal to the lane and shoulder widths required by design criteria that is based on the 2040 traffic volumes in the October 2014 *Traffic Forecast Report* and the NCDOT *Functional Classification Maps*. The Design-Build Team will not be required to design or construct a resurfacing grade for the aforementioned -Y- Lines.
- Excluding the ramps in Quadrants A and D of the US 264 interchange (Ramps -Y21RPA- and -Y21RPD-), the Design-Build Team shall design and construct ramps that adhere to the following:
 - One-lane ramps shall have a minimum 16-foot lane width
 - Two lane ramps shall have a minimum 12-foot lane width
 - 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
- The Design-Build Team shall include 1) all preconstruction costs required to modify the ramps in Quadrants A and D of the US 264 interchange (Ramps -Y21RPA- and -Y21RPD-) to adhere to all design criteria noted herein and 2) all resurfacing construction costs for Ramps -Y21RPA- and -Y21RPD- in the lump sum price bid for the entire project. All other construction costs associated with the aforementioned ramp modifications will be paid for as extra work in accordance with Subarticle 104-8(A) of the 2012 *Standard Specifications for Roads and Structures*. (Reference the Pavement Scope of Work found elsewhere in this RFP)
- If the end of the taper on an entrance ramp is within 2,500 feet of the beginning of the taper for an exit ramp, the Design-Build Team shall design and construct a continuous auxiliary lane between the entrance and exit ramps.
- Excluding the ramps in Quadrants B and C of the US 264 interchange, the Design-Build Team shall design and construct all directional ramps with a minimum of two 12-foot lanes from back of gore to back of gore (12-foot width). The minimum design speed for all directional ramps shall adhere to the middle range design speed noted in Table 10-1, *Guide Values for Ramp Design Speed as Related to Highway Design Speed* shown in AASHTO's *A Policy on Geometric Design of Highways and Streets* (2011). The Design-Build Team shall design and construct all directional ramp structures with a four-foot outside bridge rail offset and a 12-foot inside bridge rail offset.
- The Design-Build Team shall design and construct loops that adhere to Table 3-29, *Design Widths of Pavements for Turning Roadways*, shown in AASHTO's *A Policy on Geometric Design of Highways and Streets* (2011) - Case II / Condition C for one-lane loops; Case III /

- After the Department has reviewed and accepted the Design-Build Team's design submittals, the Design-Build Team shall inform the Design-Build Unit, in writing, of any changes to previously reviewed submittals.
- Excluding the horizontal clearance beneath the MacGregor Downs Road bridge, design exceptions will not be allowed for the -L- Line, including all ramps and loops. NCDOT prefers not to have design exceptions for the -Y- Lines and service roads. If the Design-Build Team anticipates any design exceptions, they shall be clearly noted in the Technical Proposal. Prior to requesting / incorporating a design exception into the Final Plans, the Design-Build Team must obtain prior conceptual approval from the Design-Build Unit. If conceptual approval is obtained, the Design-Build Team shall be responsible for the development and approval of all design exceptions.

General

- The design shall be in accordance with the 2011 AASHTO *A Policy on Geometric Design of Highways and Streets*, 2002 NCDOT *Roadway Design Manual*, including all revisions effective on the Technical Proposal submittal date, January 2012 NCDOT Roadway Standard Drawings, or as superseded by detail sheets located at <https://connect.ncdot.gov/resources/Specifications/Pages/2012-Roadway-Drawings.aspx>, *Roadway Design Policy and Procedure Manual*, *Roadway Design Guidelines for Design-Build Projects*, 2012 *North Carolina Standard Specifications for Roads and Structures* and the 2011 AASHTO *Roadside Design Guide*, 4th Edition and 2012 *Errata*.
- If the NCDOT *Roadway Design Manual*, the 2011 AASHTO *A Policy on Geometric Design of Highways and Streets*, the 2012 *Roadway Standard Drawings* and / or any other guidelines, standards or policies have desirable and / or minimum values, the Design-Build Team shall use the desirable values unless otherwise noted elsewhere in this RFP. Similarly, in case of conflicting design parameters, and / or ranges, in the various resources, the proposed design shall adhere to the most conservative values, unless noted otherwise elsewhere in this RFP.
- At all intersections, the Design-Build Team shall provide a maximum 0.05 roll-over between the outside edge of travel lane of the primary roadway and the beginning of the proposed grade for the secondary roadway.
- Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall design and construct bridge rail offsets as indicated in the NCDOT *Roadway Design Manual* or that are equal to the approach roadway paved shoulders, whichever is greater. Narrower bridge rail offsets based on bridge length will not be allowed.
- Unless noted otherwise elsewhere in this RFP, the maximum allowable cut and fill slope shall be 3:1. (Reference the Geotechnical Scope of Work found elsewhere in this RFP) The slopes in the interchange area shall follow the requirements set forth in the *Roadway Design Guidelines for Design-Build Projects* located on the Design-Build web site.

other approved methods. Submit documentation describing the method and procedures to the Geotechnical Engineering Unit, via Design-Build Unit, for review and acceptance prior to construction of the embankment. Roadway embankment waiting periods shall not be ended until less than two (2) inches of settlement is anticipated following pavement construction and less than 0.10 inch of settlement is measured over a period of four weeks.

Soil improvement techniques to mitigate long term settlement problems or to transfer embankment load to a deeper bearing stratum are allowed at bridge approach and roadway embankments. Soil improvement techniques shall follow the current industry standard practices and the guidelines of *Ground Improvement Methods FHWA publication NHI-04-001 or Geosynthetic Design and Construction Guidelines FHWA-HI-95-038*.

Material that does not meet the requirements of Table 1018-2 of the NCDOT 2012 *Standard Specifications for Roads and Structures* shall be considered unsuitable material. Unsuitable unclassified excavation material may be used within embankments under medians of divided highways between the inside edges of pavements and not within the top six feet of embankments or to flatten slopes beyond a theoretical 3:1 (H:V) slope starting at the embankment shoulder point. All earth materials within the entire embankment cross-section shall be compacted in accordance of Section 235 of the NCDOT 2012 *Standard Specifications for Roads and Structures*, regardless of source of material. The Design-Build Team may propose an Alternative Technical Concept to chemically modify unsuitable unclassified excavation material for use at locations other than outlined above.

Except where existing pavement sections will be retained, undercut all unsuitable or unstable soils to the extent required to improve the stability of embankments or pavement subgrades. At a minimum, undercut unsuitable or unstable soils to two feet outside edge of pavement to two feet outside edge of pavement and to a depth of three feet below proposed pavement subgrade or use Aggregate Subgrade in accordance with Section 505 of the NCDOT 2012 *Standard Specifications for Roads and Structures* except with a minimum **Select Material, Class IV** thickness of 12 inches from two feet outside edge of pavement to two feet outside edge of pavement. The Design-Build Team shall undercut or increase Aggregate Subgrade to deeper depths and / or wider dimensions, or incorporate higher strength geosynthetics, as necessary, to adhere to embankment and pavement subgrade stability requirements.

Except where existing pavement sections will be retained, at a minimum, undercut the locations listed below from two feet outside edge of pavement to two feet outside edge of pavement; and to three feet below the proposed pavement subgrade or use Aggregate Subgrade in accordance with Section 505 of the NCDOT 2012 *Standard Specifications for Roads and Structures* except with a minimum **Select Material, Class IV** thickness of 12 inches from two feet outside edge of pavement to two feet outside edge of pavement. At the locations listed