



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

December 9, 2010

Addendum No. 2

Contract No.: C 202382
TIP No.: I-2304AD
County: Davidson
Project Description: Reconstruction of I-85 from north of NC 150 to just north of I-85 Business
RE: Addendum No. 2 to Final RFP

January 18, 2011 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated November 10, 2010 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 of the Table of Contents in your proposal and staple the revised second page of Table of Contents thereto.

Page No. 126 of the *General Section* has been revised. Please void Page No. 126 in your proposal and staple the revised Page No. 126 thereto.

Page Nos. 133, 134 and 138 of the *Roadway Scope of Work* have been revised. Please void Page Nos. 133, 134 and 138 in your proposal and staple the revised Page Nos. 133, 134 and 138 thereto.

Page No. 187 of the *Utilities Coordination Scope of Work* has been revised. Please void Page No. 187 in your proposal and staple the revised Page No. 187 thereto.

If you have any questions or need additional information, I can be reached at (919) 250-4128.

Sincerely,

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

Cc: Mr. Victor Barbour, PE
Mr. Rodger Rochelle, PE

Mr. Pat Ivey, PE
Mr. Tim McFadden

Ms. Teresa Bruton, PE
File

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1020 BIRCH RIDGE DRIVE
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- Describe the overall strengths of the construction team and their ability to fulfill the construction and construction management requirements of this project.
- Describe the Design-Build Team's approach to site access and material staging.

2. Responsiveness to RFP – 20 points

Natural Environmental Responsibility

- Describe the Design-Build Team's approach to addressing environmental concerns within the project boundaries.
- Identify efforts to minimize impacts on wetlands, streams, riparian buffers, and other environmentally sensitive areas.
- Describe any Notice of Violations (NOV's) the Design-Build Team members have received from regulatory agencies in North Carolina or any other State and the disposition of each listed NOV.
- Describe the Design-Build Teams approach to Sedimentation and Erosion Control for the project.
- Describe efforts to minimize or avoid any contaminated sites.

Design Features

- Show plan view of design concepts with key elements noted.
- Identify preliminary horizontal and vertical alignments of all roadway elements.
- Show typical sections for the mainline of the project.
- Identify drainage modifications and designs to be implemented.
- Identify the appropriate design criteria for each feature if not provided.
- Identify all bridge types to be constructed, including any special design features or construction techniques needed.
- Identify any deviations, including proposed design exceptions, from the established design criteria that will be utilized. Explain why the deviation is necessary.
- Describe any geotechnical investigations to be performed by the Design-Build Team.
- Identify any special aesthetics considerations that will be part of the design.
- Describe how any utility conflicts will be addressed and any special utility design considerations. Describe how the Design-Build Team's design and construction methods minimize the Department's utility relocation costs.
- Describe if the design will require any additional right-of-way or easements beyond that already acquired by the Department, and if so, to what extent.
- Identify types of any retaining walls and / or sound barrier walls if applicable.
- Identify the pavement base option chosen, ABC or asphalt, for all -Y- Lines.
- Indicate the lane configuration for Belmont Road between Ramps -B- and -C-.
- Indicate the design speed of all Belmont Road design elements.

3. Long Term Maintenance – 5 points

- Describe any special materials, not referenced elsewhere in the contract, incorporated into the project that would result in long term reduction in maintenance.

ROADWAY SCOPE OF WORK (12-9-10)

It should be noted that TIP Project I-2304AD, as referenced herein, represents a project formerly designated as I-2304AB. All references to project I-2304AB in material provided by the Department shall apply to this project.

The plans referred to herein as the I-2304AB Right of Way Plans provided [or developed] by the Department are the hard copy of the Right of Way Plans distributed on October 21, 2010.

Project Details

- The Design-Build Team shall design and construct an eight-lane divided freeway with a minimum 46-foot median from north of NC 150 to south of I-85 Business in Davidson County. Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall design and construct the -L- Line providing the same or better access, widening and improvements included in the I-2304AB Right of Way Plans provided by the Department. The northern limits of -L- Line construction shall be of sufficient length to tie to existing based upon the current NCDOT guidelines and standards. The mainline shall be designed and constructed to meet a 70-mph design speed for a rolling rural freeway designed to Interstate standards. The Design-Build Team shall provide all other design criteria in the Technical Proposal.
- At the project's southern terminus, the reconstructed and new I-85 northbound lanes shall begin at Station 980+00 -L- and extend to at least Station 1169+68.50 -L- of the I-2304AB Right of Way Plans provided by the Department. From the aforementioned southern terminus northward, the Design-Build Team shall design and construct northbound I-85 such that the ultimate improvements, including but not limited to four through lanes and auxiliary lanes, are provided to at least Station 1161+28.5 -L- of the I-2304AB Right of Way Plans provided by the Department.
- At the project's southern terminus, the reconstructed and new I-85 southbound lanes shall begin at Station 980+00 -L- and extend to the southern limits of the Hargrave Road southbound on-ramp merge taper. From the aforementioned southern terminus northward, the Design-Build Team shall design and construct southbound I-85 such that the ultimate improvements, including but not limited to four through lanes and auxiliary lanes, are provided to the I-85 Business southbound on-ramp. From the I-85 Business southbound on-ramp northward, the Design-Build Team shall design and reconstruct three I-85 southbound through lanes to the northern terminus for the I-85 southbound lanes noted above.
- The Design-Build Team shall coordinate with Project I-2304AC design and construction to ensure accurate hydrology, capacity, and horizontal and vertical ties that adhere to the design criteria. The Design-Build Team shall not make any design or construction changes that affect the design or construction of Project I-2304AC without prior written approval from the Transportation Program Management Director. (Reference the Cooperation Between Contractors Project Special Provision found elsewhere in this RFP)

- Along the -L- Line, the Design-Build Team shall provide minimum 14-foot outside and median shoulders, 12-foot of which shall be full depth concrete paved shoulders. The median shoulders shall be designed and constructed to accommodate a future travel lane with appropriate cross slope.
- Along the I-85 travel lanes, the Design-Build Team shall provide milled rumble strips along the outside paved shoulders, including acceleration, deceleration, and auxiliary lanes / ramps to the back of the gore (12-foot width). Along the -L- Line, the Design-Build Team shall provide thermoplastic rumble strips along the median paved shoulders in accordance with the detail provided by the Department.
- 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. The Design-Build Team shall provide the following ramp shoulders:
 - Belmont Road - All ramps shall have 12-foot inside shoulders, four-foot of which shall be full depth paved shoulders. All ramps shall have 14-foot outside shoulders, four-foot of which shall be full depth paved shoulders and eight-foot of which shall be partial depth paved shoulders.
 - I-85 Business - All ramps shall have 14-foot inside and outside shoulders, 12-foot of which shall be full depth paved shoulders.
- The Design-Build Team shall design and construct one-lane 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. All loops shall have a 12-foot outside shoulders, four-foot of which shall be full depth paved shoulders and 2'-6" curb and gutter along the inside edge of pavement, with a 14-foot berm. The minimum loop design speed shall be 30-mph with a minimum 260-foot radius.
- The Department will provide an approved Interchange Modification Report (IMR). If the Design-Build Team revises the roadway designs such that the approved IMR is nullified, the Design-Build Team shall re-analyze the interchange(s) and complete a revised IMR, if necessary, for NCDOT and FHWA review and acceptance.
- **** NOTE ** Deleted bullet on the Hargrave Road southbound on-ramp**
- At Old Salisbury Road (Old US 29 – US 70), Belmont Road and Englewood Drive (extending into a new subdivision) shall not be offset.

obtained, the Design-Build Team shall be responsible for the development and approval of all design exceptions.

- The Design-Build Team shall submit Structure Recommendations and Design Criteria for NCDOT and FHWA review and acceptance prior to submittal of the Preliminary Plans. The Design-Build Team shall develop Structure Recommendations that adhere to the format noted in the March 25, 2003 and September 1, 2004 memos from Mr. Jay Bennett, PE, State Roadway Design Engineer. Unless noted otherwise elsewhere in this RFP, the design speed for all roadways shall be the greater of the minimum design speed for the facility type or the anticipated / actual posted speed plus five-mph. The Design-Build Team shall not lower the design speed of any Belmont Road design element from that shown on the I-2304AB Right of Way Plans provided by the Department. The Design-Build Team shall indicate the design speed of all Belmont Road design elements in the Technical Proposal.
- As currently designed, there are no sound barrier walls required on this project. If the Design-Build Team revises the horizontal and / or vertical alignments such that greater noise impacts are possible on surrounding receptors, the Design-Build Team shall re-analyze and complete a revised noise report, if necessary, for NCDOT and FHWA review and acceptance. The original Final Design Noise Report will be provided to the Design-Build Team to assist in their determination of anticipated additional noise impact on current receptors due to a design change. If sound barrier walls are required as a result of design deviations, the Design-Build Team shall be responsible for all costs associated with the walls, including but not limited to public involvement, wall envelope details, geotechnical investigation, shaft and wall designs, and construction.
- The Design-Build Team shall be responsible for the evaluation of the algebraic difference in rates of cross slope (roll-over) between existing shoulders and roadways and the associated suitability for carrying traffic during construction, if necessary. In the event that the roll-over is found to be unacceptable for the proposed temporary traffic patterns, the Design-Build Team shall be responsible for providing cross slopes that meet design standards and eliminate roll-over concerns.
- Within the vehicle recovery area, the Design-Build Team shall design and construct single face concrete barrier in front of all sound barrier walls located on the outside shoulder in fill sections, retaining walls and all elements acting as a retaining wall.

General

- The design shall be in accordance with the 2004 AASHTO *A Policy on Geometric Design of Highways and Streets*, 2002 NCDOT *Roadway Design Manual*, July 2006 NCDOT *Roadway Standard Drawings* (or as superseded by detail sheets at http://www.ncdot.gov/doh/preconstruct/std_draw/06details/default.html), *Roadway Design Policy and Procedure Manual*, *Roadway Design Guidelines for Design-Build Projects*, 2006 *North Carolina Standard Specifications for Roads and Structures* and the 2002 AASHTO *Roadside Design Guide, 3rd Edition* and 2006 *Chapter 6 Update*.
- If the NCDOT *Roadway Design Manual*, the 2004 AASHTO *A Policy on Geometric Design of Highways and Streets*, the 2006 *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

Project Details

The Design-Build Team shall be responsible for verifying the utility locations, type of facilities, and identifying the utility owners in order to coordinate the relocation of any utilities, known and unknown, in conflict with the project. The following utilities are known to be located within the project construction limits:

Utility Owner	Utility Type	Cost Responsibility
Duke Energy (Trans.)	Power	NCDOT (Prior Rights)
Duke Energy (Dist.)	Power	NCDOT (Prior Rights)
Windstream Communications	Telephone (Buried)	Utility Owner
Windstream Communications	Telephone (Aerial)	NCDOT (Prior Rights)
Energy United	Power	NCDOT (Prior Rights)
Piedmont Cable	CATV	Utility Owner
Davidson County Water	Water and Sewer	NCDOT (G. S. 136-27)

Water and Sewer

The Design-Build Team shall provide all design, testing, certification and construction services required to adjust the existing sewer system for the Walser Enterprises property (Bill's Truck Stop – Parcel No. 21) such that all associated manholes are located outside of the Department's right of way. The Design-Build Team shall design and construct all elements of the adjusted sewer system to be functionally similar to the existing facility and in accordance with current DENR requirements. The Design-Build Team shall be responsible for all DENR coordination, approvals, fees and permits associated with the adjusted sewer system.

If the Design-Build Team's design and / or construction requires the relocation of existing water or sewer facilities, designs shall be coordinated with the NCDOT Utility Coordination Unit. All costs associated with the design and construction 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.

Designs shall be coordinated with the NCDOT Utility Coordination Unit. 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. Once approved by the State Utility Agent, the plans, with the appropriate agreement, will be sent out to Davidson County Water for their review and concurrence.

The relocation of all water and sewer facilities shall be done in accordance with the NCDOT policies and the latest Davidson County Water Inc. water and sewer design requirements / specifications. In the event of conflicting design parameters in the requirements noted above, the proposed design shall adhere to the most conservative values. The Design-Build Team may obtain the design requirements / specifications from the website noted below:

<http://www.davidsonwater.com/sitemap/sitemap.asp>