

# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE

GOVERNOR

SECRETARY

SECRETARY

January 6, 2010

#### Addendum No. 1

Contract No.: C 202384

TIP No.: R-2633AA & AB

County: Brunswick

Project Description: Wilmington Bypass (Future I-140) from NC 87 to US 74 / US 76

RE: Addendum No. 1 to Final RFP

#### March 4, 2010 Letting

To Whom It May Concern:

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

Page No. 80 of the *Roadway Scope of Work* has been revised. Please void Page No. 80 in your proposal and staple the revised Page No. 80 thereto.

Page No. 87 of the *Structures Scope of Work* has been revised. Please void Page No. 87 in your proposal and staple the revised Page No. 87 thereto.

Page Nos. 106 and 107 of the *Environmental Permits Scope of Work* have been revised. Please void Page Nos. 106 and 107 in your proposal and staple the revised Page Nos. 106 and 107 thereto.

Page Nos. 126 and 127 of the *Utilities 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,

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

RAG/jmg

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROGRAM MANAGEMENT
1595 MAIL SERVICE CENTER
RALEIGH NC 27699-1595

TELEPHONE: 919-250-4234 FAX: 919-212-5711 WEBSITE:

WWW.NCDOT.GOV

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

#### TIP R-2633AA & AB Addendum No. 1 to Final RFP

Page 2 of 2

cc: Mr. Jon Nance, PE

Ms. Deborah Barbour, PE (w/)

Mr. Victor Barbour, PE (w/)

Mr. Art McMillan, PE (w/)

Mr. Brad Hibbs, PE (w/3)

Mr. Ellis Powell, PE (w/)

Mr. Kevin Lacy, PE

Mr. Phillip Harris, PE

Mr. Ron Hancock, PE (w/)

Mr. Jay Bennett, PE (w/)

Ms. Judith Corley-Lay, Ph.D., PE

Mr. Virgil Pridemore

Mr. Calvin Leggett, PE

Mr. Allen Pope, PE

Mr. Njoroge Wainana, PE

Mr. Dave Henderson, PE

Mr. Ron King, PE

Mr. Greg Perfetti, PE

Mr. Don Lee

Mr. Greg Thorpe, Ph.D.

Mr. Stuart Bourne, PE

Mr. Buddy Murr, PE

Mr. Robert Memory

Mr. Ed Lewis

Mr. David Harris, PE

Mr. Randy Garris, PE (w/)

Mr. Ron Davenport, PE (w/)

Ms. BenJetta Johnson, PE (w/)

Mr. Jackson Provost, PE (w/2)

Mr. Joseph Chance (w/)

Mr. Wayne Currie (w/)

Ms. Pate Butler, PE (w/)

Mr. Derrick Weaver, PE

Mr. Vincent Rhea, PE (w/)

Mr. John Wolf, Jr., PE (w/)

Ms. Anne Gamber PE (Hydraulics) (w/)

Dr. K.J. Kim, PE (Geotechnical) (w/)

Dr. Clark Morrison, PE (Pavement Design) (w/)

Mr. Barney Blackburn, PE (Erosion & Sed. Control)(w/2)

Mr. Steve Kite, PE (Traffic Control) (w/)

Mr. David Boyd (Utility Coordination) (w/)

Mr. Lonnie Brooks, PE (Structures) (w/)

Mr. Cyrus Parker, PE (Geo-Environmental) (w/)

Ms. Tammy Stewart (Public Information) (w/)

Mr. Neal Strickland (Right-of-Way) (w/)

Ms. Elizabeth Lusk (Environmental Permits) (w/)

Ms. Leilani Paugh (On-Site Mitigation) (w/)

Ms. Pam Alexander, PE (Signal Design) (w/)

Mr. Doug Taylor, PE (w/)

Mr. Mason Herndon (w/)

Mr. David Hinnant (w/)

Mr. Allen Raynor, PE (w/)

Mr. Drew Thomas, PE (w/)

Ms. Jessica Kuse, PE (w/)

Mr. Marshall Clawson, PE (w/)

Mr. Ayman Algudwah, PE (w/)

Mr. Roger Worthington, PE (w/)

Ms. Teresa Bruton, PE (w/7)

Mr. Wayne Johnson, PE (w)

Ms. Marsha Sample (w/)

Mr. Brian Mayhew, PE (w/)

Mr. Mike Robinson, PE (w/)

Mr. Ray McIntyre, PE (w/)

TRC Members (w/)

File (w/)

- Unless noted otherwise elsewhere in this RFP, all guardrail and cable guiderail placement shall be in accordance with the July 2006 NCDOT *Roadway Standard Drawings* and / or approved details in lieu of standards. Along all 3:1 fill slopes, constructed at fill heights that are equal to or greater than 12 feet, the Design-Build Team shall install guardrail. The guardrail / guiderail design shall be submitted for review with the Preliminary Plans submittal.
- 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. Bridge rail offsets for the NC87 bridge may be reduced to 4 feet provided the Design-Build Team can demonstrate that the spread of water does not intrude on the travel lanes.
- The Department has followed the Merger 01 Process used by the environmental agencies and the Department to obtain environmental permits for this highway project. Any variations in the Department's proposed design and / or construction methods that nullify any concurrence points obtained or decisions reached between the Department and the environmental agencies; and / or require additional coordination with the Environmental Agencies shall be the sole responsibility of the Design-Build Team. The Department shall not allow any contract time extensions or additional compensation associated with any coordination or approval process resulting from design and / or construction modifications.
- A resurfacing grade is not required for US 74 / US 76 or for that portion of -SVRD2- that lies atop existing US 17, if adequate drainage is provided. The Design-Build Team shall design and construct resurfacing grades for all other roadways impacted by construction, excluding haul roads. At a minimum, the Design-Build Team shall resurface all lanes and shoulders of an undivided facility throughout the limits of proposed widening and construction. At a minimum, the Design-Build Team shall resurface each one-way roadway of a divided facility throughout the limits of the one-way roadway widening and construction, allowing varying resurfacing limits for the opposing directions of travel. At a minimum, for both divided and undivided facilities, the Design-Build Team shall resurface all lanes and shoulders within the outermost construction limits of all proposed widening and construction, including any gaps along the facility where construction activities are not required. Additionally, the Design-Build Team shall resurface all existing facilities to the limits of pavement marking obliterations / revisions. The Design-Build Team shall design and construct grades that adhere to the design criteria and standards, providing all required pavement wedging. (Reference the Pavement Management Scope of Work)
- The maximum allowable cut and fill slope shall be 3:1, unless noted otherwise 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. Inside the interchange quadrants the maximum slope allowed shall be 4:1.

# Structures Scope of Work

## STRUCTURES SCOPE OF WORK (01-05-10)

## **Project Details:**

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

- Bridge on -L- over US17 Ocean Highway
- Bridges on -L- over 1st Swale to Unnamed Tributary of Morgan Branch
- Bridges on –L- over 2<sup>nd</sup> Swale to Unnamed Tributary of Morgan Branch
- Bridges on –L- over Tributary to Morgan Branch
- Bridges on –L- over 1<sup>st</sup> Wildlife Crossing
- Bridges on –L- over 2<sup>nd</sup> Wildlife Crossing
- Bridge on –Y04- over Bishop Branch
- Bridges on -L- over CSX Railroad and US74-76
- Replacement of culverts in the vicinity of the US17 interchange and one new reinforced concrete boxed culvert along the L line

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

Reinforced concrete box culverts shall be in accordance with approved Culvert Survey Reports or as modified by the Design-Build Team and accepted by the Department. The existing reinforced concrete box culverts at the US 17 interchange shall be removed or completely filled with flowable fill and shall not be retained for any hydraulic purposes.

No cored slab, deck girder, or box beam bridges are allowed on the mainline or ramp structures. Cored slabs and box beams are permissible on NC 87 regardless of length; however a concrete overlay of 5" minimum thickness is required. In addition, grout for these bridge types shall have a minimum 28 day compressive strength of 5000 psi and the hold down method for the void forms shall be internal with no external penetrations of the slab unit.

This project is deemed to be in a Highly Corrosive environment. All bridges shall include appropriate corrosion mitigation measures in accordance with the Structure Design Manual and appropriate policy memos. Wildlife crossing bridges are deemed stream crossings for the purpose of determining corrosion mitigation measures.

Bridge lengths for all stream crossings and wildlife crossings were established by an interagency team. The toe-to-toe distance shown in the electronic Right-of-Way plans for these bridges shall be considered a minimum. Reference Commitment #4 of the Record of Decision.

A minimum vertical clearance of 8' shall apply to all stream crossings and wildlife crossings. This 8' vertical clearance applies for a distance of 25' from each toe of fill. The Design-Build Team may excavate the existing ground line down to 1' above the Q100 elevation for stream crossings to assist in obtaining the 8' vertical clearance. If the Design-Build Team elects to perform such excavation, the excavation shall extend outside the lateral limits of the bridges to provide a gradual slope to promote ingress and egress of wildlife.

C 202384 (R-2633AA & AB) Environmental Permits Scope of Work

**Brunswick County** 

is located on the Roadway Preliminary Plans provided by the Department on Plan Sheets 7 and 33. The site is located within the wetland boundaries of the NC 87 (Maco Road) pavement removal, beginning at approximately Station 51+20 –Y1-, 175' LT and ending at approximately Station 14+77 -SVRD4- Sta. 14+77.

The NCDOT Natural Environment Unit will provide the Design-Build Team a conceptual Mitigation Plan for the NC 87 on-site wetland restoration area. The Design-Build Team shall be responsible for all design plan sheets, specifications, cross-sections and permit drawings necessary to obtain the state and federal environmental permits and shall construct the site accordingly. Details of construction, including planting density, are available under the links for Reforestation and Stream Reforestation at:

## http://www.ncdot.org/doh/operations/dp\_chief\_eng/roadside/soil\_water/details/

The Design-Build Team shall also generate As-Built Plans through construction and planting and shall be responsible for any remediation activities necessary until the end of the Twelve Month Guarantee. The Department will be responsible for all post-construction monitoring activities associated with this site as stated in the mitigation plan. All revisions to the aforementioned Mitigation Plan provided by the Department shall be submitted to the Transportation Program Management Director for review and acceptance prior to inclusion in the permit application. All construction costs associated with the wetland construction / wetland restoration shall be included in the Design-Build Team's lump sum bid for the entire project. Prior to beginning any wetland restoration ground-disturbing activities, the Design-Build Team shall hold a preconstruction meeting with the Division Environmental Officer, Resident Engineer, Natural Environment Unit, Environmental Agencies and the Transportation Program Management Director.

As designed by the Department, the NCDOT has acquired the right of way necessary for the wetland restoration. The Design-Build Team shall be responsible for all costs associated with additional right of way acquisition required by design modifications and / or construction methods, including but not limited to the right of way cost. (Reference the Right of Way Scope of Work found elsewhere in this RFP)

The Ecosystem Enhancement Program (EEP) will provide the remaining compensatory mitigation for unavoidable impacts to wetlands and surface waters resulting from project construction based on the electronic Right of Way plans provided by the Department.

Should additional jurisdictional impacts (beyond those in the electronic Right-of-Way plans) result from revised design/construction details, obtaining suitable compensatory mitigation for wetlands and/or streams shall be the sole responsibility of the Design-Build Team. Therefore, additional mitigation will have to be approved by the agencies and such approval shall require, at a minimum, the preparation and approval of a mitigation plan before permits are approved and before construction may commence. In the absence of suitable on-site mitigation to mitigate for these additional jurisdictional impacts, the Design-Build Team shall be responsible for the cost of acquiring additional mitigation from the EEP.

C 202384 (R-2633AA & AB)

Any new areas to be impacted that have not been analyzed during the NEPA process and preparation of permit applications or any staging areas are located outside the project right-ofway shall be analyzed. This analysis shall include performing all environmental assessments. These assessments require the Design-Build Team to engage the services of a competent environmental consultant to conduct a full environmental investigation to include, but not be limited to, Federally listed Threatened and Endangered Species, wetlands, streams, avoidance and minimization in jurisdictional areas, compensatory mitigation, FEMA compliance, and historical, archaeological, and cultural resources surveys in these areas. The environmental consultant shall obtain concurrence through PDEA-NEU from the United States Fish and Wildlife Service to document compliance with Section 7 of the Endangered Species Act for those species requiring such concurrence. In addition the Design-Build Team shall identify additional mitigation required, identify the amount of time the modification will take beyond the 10-month period, and the fulfillment of any other requirements that may be imposed by the permitting agencies to obtain the permit modification.

#### **Commitments**

The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize wetland impacts and to provide full compensatory mitigation of all remaining wetland impacts. Avoidance measures were taken during the planning and NEPA phases and minimization measures were incorporated as part of the preliminary project design. The Design-Build Team shall incorporate these avoidance and minimization features plus any minimization identified during the 4B (if revisited) and 4C process into the design.

The Department will update the recently expired Jurisdictional Determination for the project.

All work by the Design-Build Team must be accomplished in strict compliance with the plans submitted with the Section 404, and 401 permit applications and in compliance with all conditions of the permits and certifications issued by the agencies. The Design-Build Team shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of the permits.

The Design-Build Team shall strictly adhere to these commitments, as well as others, including but not limited to, those made as part of the EIS, ROD, all permits, and Merger 01 meetings.

If the Design-Build Team discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he shall immediately notify NCDOT Staff Archaeologist and/or NCDOT Project Development Engineer, as listed below, who will initiate the required State/Federal coordination. All questions regarding these sites should be addressed to Mr. Matthew Wilkerson, NCDOT Archaeology (919) 715-1561, or Mr. Vincent Rhea, PE, NCDOT Consultant Engineer (919) 733-7844, ext. 261.

# UTILITIES SCOPE OF WORK (01-04-10)

The Design-Build Team shall obtain the services of a Private Engineering Firm (PEF) knowledgeable in the NCDOT Utility Coordination Process involved with utility relocation / installation and highway construction. The Design-Build Team shall be responsible for coordinating all utility relocations, removals, and / or adjustments where the Design-Build Team and Utility Company, with concurrence from the Department, determine that such work is essential for highway safety and performance of the required highway construction. Coordination shall be for all utilities whether or not they are specifically identified in this scope of work and shall include any necessary utility agreements when applicable. NCDOT will be the approving authority for all utility agreements and approval of plans.

#### **Cost Responsibility**

The Design-Build Team shall be responsible for all costs associated with relocating water and sewer facilities.

The NCDOT will be responsible for all other non-betterment utility relocation cost when the utility company has prior rights of way / compensable interest. The utility company shall be responsible for the relocation costs if they can not furnish evidence of prior rights of way or a compensable interest in their facilities. The Design-Build Team shall be responsible for determining the cost responsibility for the utility relocations. The Design-Build Team shall be responsible for all costs associated with utility relocations due to haul roads and / or any other temporary conditions resulting from the Design-Build Team's methods of operation or sequence of work. NCDOT will be the approving authority for all utility agreements and approval of plans.

# **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:

<b>Utility Owner</b>	<b>Utility Type</b>	Cost Responsibility
Brunswick Electrical	Power / Fiber Optic	NCDOT (Prior Rights)
Membership Co-op		
Progress Energy	Power	NCDOT (Prior Rights)
Atlantic Telephone	Telephone	Utility Owner / Prior Rights
		(Joint use on NC 87)
AT&T	Telephone	Utility Owner
Time Warner Cable	CATV (US 74 / 76)	Utility Owner
BTI Delta Com	Fiber Optic	Utility Owner
Piedmont Natural Gas	Natural Gas	Utility Owner
Brunswick County Water	Water / Sewer on US 74 /	NCDOT (G.S. 136-27)
	76	
Brunswick Regional	Sanitary Sewer / Water	NCDOT (G.S. 136-27)
Water and Sewer H2Go		
City of Northwest	Sanitary Sewer at US 74/76	NCDOT (G.S. 136-27)

Utilities Scope of Work

#### Water and Sewer

The Design-Build Team shall be responsible for relocating the Brunswick County Water, Brunswick Regional Water and Sewer H2Go, and City of Northwest facilities impacted by the project's construction, including but not limited to the facilities' design and construction. 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. 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 Brunswick County Water, Brunswick Regional Water and Sewer H2Go, and City of Northwest for their review and concurrence.

Design and construction shall be in accordance with Brunswick County Water and Brunswick Regional Water and Sewer H2Go specifications which may be found at:

http://www.brunswickcountync.gov/Departments/Utilities/SpecsCADFiles/tabid/280/Default.aspx

http://www.h2goonline.com/waterspecs.cfm

http://www.h2goonline.com/wastewaterspecs.cfm

## **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.

If the Design-Build Team determines the cost to be borne by NCDOT, then the Design-Build Team shall be required to submit three (3) copies of a detailed utility relocation estimate and copies of verification of compensable interest. The Design-Build Team shall submit (3) three copies of the Utility Relocation Plans to the NCDOT State Utility Agent, via the Transportation Program Management Director, for review and approval prior to relocation work beginning. The Design-Build Team shall also be responsible for submitting the appropriate agreements to be used with the Utility Relocation Plans (See Agreements found elsewhere in this scope of work). After the review process is complete, the NCDOT Utility Coordination Unit will submit one (1) copy of the Utility Relocation Plans, executed agreements and any necessary comments back to the Design-Build Team. The NCDOT Utility Coordination Unit will also submit a copy of the approved Utility Relocation Plans to the Department's Resident Engineer. If the Utility