



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

May 2, 2012

Addendum No. 1

Contract No. C 203048
TIP No. 17BP.5.R.45
County: Wake
Project Description: Seven (7) Express Design-Build Bridge Replacements in Division 5

RE: Addendum No. 1 to Final RFP

May 15, 2012 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated April 12, 2012 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 1 for your information. Please note that all revisions have been highlighted in gray and are as follows:

Pages 1, 4, 6 and 9 of the *Project Special Provisions* have been revised. Please void Pages 1, 4, 6, and 9 in your proposal and staple the revised Page Nos. 1, 4, 6 and 9 thereto.

Page 49 of the *Structures Scope of Work* has been revised. Please void Page 49 in your proposal and staple the revised Page No. 49 thereto.

Page 56 of the *Geotechnical Engineering Scope of Work* has been revised. Please void Page 56 in your proposal and staple the revised Page No. 56 thereto.

Page 59 of the *Pavement Management Scope of Work* has been revised. Please void Page 59 in your proposal and staple the revised Page No. 59 thereto.

Pages 61 and 63 of the *Traffic Engineering Scope of Work* have been revised. Please void Pages 61 and 63 in your proposal and staple the revised Page Nos. 61 and 63 thereto.

Pages 64, 65 and 66 of the *Environmental Permits Scope of Work* have been revised. Please void Pages 64, 65 and 66 in your proposal and staple the revised Page Nos. 64, 65 and 66 thereto.

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

TELEPHONE: 919-707-6600

FAX: 919-212-5711

WEBSITE:

WWW.NCDOT.GOV

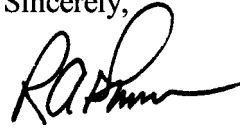
LOCATION:
CENTURY CENTER COMPLEX
ENTRANCE B-1
1020 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Page 68 of the *Erosion and Sedimentation Control Scope of Work* have been revised. Please void Page 68 in your proposal and staple the revised Page No. 68 thereto.

Page 74 of the *Right of Way Scope of Work* has been revised. Please void Page 74 in your proposal and staple the revised Page No. 74 thereto.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'R. A. Garris', written in a cursive style.

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

Attachments
RAG/cwh

cc: Mr. Victor Barbour, PE
Mr. Rodger Rochelle, PE
Ms. Teresa Bruton, PE

Mr. Wally Bowman, PE
Ms. Virginia Mabry

***** PROJECT SPECIAL PROVISIONS *****

CONTRACT TIME AND LIQUIDATED DAMAGES

07/12/07

DB1 G04A

The date of availability for this contract is June 25, 2012, except that the Design-Build Team shall not begin ground disturbing activities, including utility relocations (this does not include permitted investigative borings covered under a Nationwide Permit No. 6) until a meeting is held between the NCDOT, the regulatory agencies and the Design-Build Team.

The Design-Build Team shall not begin ground disturbing activities at any given site, until the applicable permits have been acquired for that site, as stipulated in the Environmental Permits Scope of Work contained elsewhere in this Request for Proposals (RFP).

The completion date for this contract is June 1, 2015.

When observation periods are required by the special provisions, they are not a part of the work to be completed by the completion date and/or intermediate contract times. Should an observation period extend beyond the final completion date, the acceptable completion of the observation period shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **One Thousand Dollars (\$1,000.00)** per calendar day.

INTERMEDIATE CONTRACT TIME NUMBER 1-7 AND LIQUIDATED DAMAGES

(3-22-07)

DB G07

Intermediate Contract Times #1 through # 7 are for the duration of road closure to complete all work at Bridge Nos. 910237, 910285, 910338, 910363, 910410, 910467 and 910485, including but not limited to the construction of all bridge, roadway, and approach slab components, without the need for subsequent lane closures. Liquidated Damages for Intermediate Contract Times #1 through 7 are as below.

ICT Number	County	Str #	Route	Intermediate Contract Time (calendar days)	Liquidated Damages
1	Wake	910237	SR 2555	430	\$ 1,000
2	Wake	910285	SR 2751	195	\$ 800
3	Wake	910338	SR 1100	120	\$ 800
4	Wake	910363	SR 1160	150	\$ 500
5	Wake	910410	SR 1386	150	\$ 800
6	Wake	910467	SR 1348	390	\$ 400
7	Wake	910485	SR 2782	130	\$ 350

The Department will allow a maximum of five days of additional lane closure at each bridge site to solely address punch list items identified by the Engineer. The additional five days are not included in ICT #1 through #7, and not subject to associated liquidated damages. As approved by the Engineer, lane closures will also be allowed for geotechnical borings and the relocation of utilities prior to the road closure at each bridge site, and therefore not included in the ICT #1

The Itemized Proposal Sheet provides the quantity of parcels from which easement or right of way will be required across all bridge sites. By submitting this Price Proposal, the Design-Build Team acknowledges that this quantity is intended for bidding purposes and may or may not be the final quantity. In the event that the final quantity of impacted parcels differs from that shown in the Itemized Proposal Sheet, adjustment will be made to the partial payments made to the Design-Build Team per the unit price bid per Each for *Right of Way Acquisition*.

All contract pay items for this contract are considered minor contract items.

No adjustments to the pay quantities will be made until such time that all pertinent design submittals are approved and all permits and FEMA compliance for a given bridge site have been obtained.

In the event of any increase in any of the above quantities, the Design-Build Team will be required to demonstrate through the pertinent design submittals the need for the additional quantities.

In the event of any decrease in any of the above quantities, the Design-Build Team will be eligible for an incentive for such reduction (reference the Project Special Provision entitled "Value Analysis." This incentive and special provision do not apply to the line item for *Right of Way Acquisition*.

If during the course of the design phase, the Design-Build Team proposes a span arrangement that eliminates the contract line item for *Interior Bent Caps* for that bridge, then the provisions of Article 104-12 of the Standard Specifications will apply.

If during the course of the design, the Design-Build Team demonstrates to the Department's satisfaction that a bridge that is proposed as a one span bridge herein must be revised to a multiple span bridge such that a new line item for Interior Bent Caps is required, then the provisions of Article 104-7 of the Standard Specifications will apply.

The Structure Scope of Work does not specify a size of superstructure (e.g. 21" deep cored slab) or foundation pile size (e.g. 12 x 53); instead the determination of these sizes is the responsibility of the Design-Build Team. No additional compensation will be provided for any increase in specific size of superstructure or foundation type. However, if during the course of the design or permitting phase, the Design-Build Team demonstrates to the Department's satisfaction that the foundation type (e.g. steel piles) or superstructure type (e.g. cored slab), as specified in the Structures Scope of Work will not be adequate, then the provisions of Article 104-7 of the Standard Specifications will apply. Cored slabs and box beams are considered to be the same superstructure type for this purpose.

If during the course of the design or permitting phase, the Design-Build Team proposes a more economical foundation type or superstructure type from those specified in the Structures Scope of Work, then the provisions of Article 104-12 of the Standard Specifications will apply.

In the event, that the width of superstructure specified in the Structures Scope of Work is inadequate, as demonstrated through the pertinent approved design submittals, then provisions of

At Bridge No. 910467 the Department anticipates entering into a Municipal Agreement with the City of Raleigh. It is anticipated to be executed by July 15, 2013, but may be pursued earlier if circumstances will allow. The Design-Build Team shall not begin any work (design or construction) at this site prior to the execution of the Municipal Agreement. In the event that a Municipal Agreement is not executed, the Department may proceed with the original typical section which will allow for future expansion by the City of Raleigh.

SUBMITTAL OF QUANTITIES, FUEL BASE INDEX PRICE AND OPT-OUT OPTION

(06-08-11)

DB1 G43

(A) Submittal of Quantities

Submit quantities on the *Fuel Usage Factor Chart and Estimate of Quantities* sheet, located in the back of this RFP, following the Itemized Proposal Sheet.

The Design-Build Team shall prepare an Estimate of Quantities that they anticipate incorporating into the completed project and upon which the Price Proposal was based. The quantity breakdown shall include all items of work that appear in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet. Only those items of work which are specifically noted in the Fuel Usage Factor Chart will be subject to fuel price adjustments. The quantity estimate submitted in the Price Proposal shall be the final total quantity limit for which fuel price adjustments will be made for each item, regardless of supplemental agreements. The Department will review the Estimate of Quantities to ensure its reasonableness. Agreement of quantities will be a prerequisite prior to execution of the contract.

(B) Base Index Price

The Design-Build Team's Estimate of Quantities will be used on the various partial payment estimates to determine fuel price adjustments. The Design-Build Team shall submit a payment request for quantities of work completed based on the work completed for that estimate period. The quantities requested for partial payment shall be reflective of the work actually accomplished for the specified period. The Design-Build Team shall certify that the quantities are reasonable for the specified period. The base index price for DIESEL #2 FUEL is \$ **3.3877** per gallon.

(C) Opt Out of Fuel Price Adjustment

If the Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments, a quantity of zero shall be entered for all quantities in the *Fuel Usage Factor Chart and Estimate of Quantities* and the declination box shall be checked. Failure to complete this form will mean that the Design-Build Team is declining the Fuel Price Adjustments for this project.

(D) Change Option

The proposer will not be permitted to change the option after the Price Proposal and the copy of the *Fuel Usage Factor Chart and Estimate of Quantities* sheet are submitted.

The \$10,000 threshold for consideration of a Value Engineering Proposal, as specified in Article 104-12 applies; however, this threshold will be satisfied if a Value Engineering Proposal similarly affects multiple bridges, resulting in a cumulative savings of more than \$10,000 across those multiple bridges.

Value Engineering Proposals will not be required or allowed for the sole purposes of reducing the depth of foundations or to shorten the bridge length unless a change to the foundation type (drilled piers versus piles) or a change to the superstructure type is proposed and accepted. Instead, such reduction in foundation depth or bridge length will result in an adjustment in partial payments to the Design-Build Team in accordance with the Project Special Provision entitled "Measurement and Payment." However, as an incentive to the Design-Build Team to provide an economical structural design, the Design-Build Team will be paid a lump sum of 15% of the total partial payment adjustment attributable to the reduced pay item quantities for Foundation Depth and/or Bridge Length, as applicable. Said lump sum payment will be made upon approval of all design submittals, and receipt of all permits and FEMA compliance for a given bridge site. The 15% incentive will not apply to a bridge if the total partial payment adjustments noted above for that bridge are less than \$5,000.00.

SCHEDULE OF ESTIMATED COMPLETION PROGRESS

(9-1-11)

DB1 G58

The Design-Build Team's attention is directed to the Standard Special Provision entitled "Availability of Funds - Termination of Contracts" included elsewhere in this RFP. The Department of Transportation's schedule of estimated completion progress for this project as required by that Standard Special Provision is as follows:

<u>Fiscal Year</u>	<u>Progress (Dollar Value)</u>
2013 (07/01/12 – 06/30/13)	47% of Total Amount Bid
2014 (07/01/13 – 06/30/14)	34% of Total Amount Bid
2015 (07/01/14 – 06/30/15)	19% of Total Amount Bid

The Design-Build Team shall also furnish its own progress schedule in accordance with Article 108-2 of the 2012 *Standard Specifications for Roads and Structures*. Any acceleration of the progress as shown by the Design-Build Team's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE:

(9-1-11)

SP1 G67

Description

The purpose of this Special Provision is to carry out the North Carolina Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with State funds.

Bridge Removal:

The Design-Build team is responsible for the removal and disposal of all existing bridges, piles, abutments and existing bridge substructure remnants per NCDOT's *Best Management Practices of Maintenance and Construction Activities*.

The Design-Build Team shall salvage all steel beams for Bridge Nos. 910285 and 910363 for the Department. Contact Mr. Neal Vaughn, Bridge Maintenance Supervisor at 919-733-4699 during normal business hours at least two weeks prior to removal to coordinate a specific day and time for the Contractor to load and transport the salvaged materials to the Wake County Bridge Maintenance Yard at 4809 Beryl Road, Raleigh, NC 27611. The Department will unload the salvage materials upon delivery. For existing bridges that have paint systems containing red lead paint, the Design-Build Team is responsible for handling, removing, shipping, and disposing of these materials in accordance with the 2012 NCDOT Standard Specifications for Roads and Structures. The existing bridges shall be removed in accordance with Subarticle 402-2(A) and (B) of the 2012 Standard Specifications for Roads and Structures. Red lead paint, if present on the stockpiled items, need not be removed by the Design-Build Team.

At Bridge No. 910237, the Design-Build Team shall remove old abutments from the previous structure as well as completely remove the concrete footings of the existing bridge a minimum of 5-feet below the lowest streambed/ground line point at each bent.

At Bridge No. 910285, the Design-Build Team shall cut existing columns 1 foot below stream bed and keep existing rip rap.

At Bridge No. 910338, the Design-Build Team shall leave the old concrete in the stream bed.

General:

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

Design shall be in accordance with AASHTO *LRFD Bridge Design Specifications, 4th Edition with 2008 Interim Revisions or more recent edition*, NCDOT *Structure Design Manual* (including policy memos), NCDOT *Bridge Policy Manual* and, as applicable, NCDOT *Sub Regional Tier Design Guidelines for Bridge Projects* dated February 2008.

If the NCDOT's Standard Bridge Plans are used, then the Design-Build Team shall analyze and seal the plans.

A live load rating chart for proposed girders shall be included with the bridge plans and shall state design assumptions and methodology used in the load rating calculations. The load rating shall be in accordance with the NCDOT *Structure Design Manual* (including policy memos) and *AASHTO's Manual for Bridge Evaluation*. If Standard Bridge Plans and the corresponding rating sheets are not used, the Design-Build Team shall submit an initial live load rating chart concurrently with the Preliminary Bridge Survey Report submittal.

III. CONSTRUCTION REQUIREMENTS:

All construction and materials shall be in accordance with the NCDOT 2012 *Standard Specifications for Roads and Structures* and current NCDOT *Project Special Provisions* unless noted otherwise elsewhere in this RFP. The Design-Build Team shall be responsible for investigating, proposing and incorporating remedial measures for any construction problems related to foundations, retaining walls, subgrades, settlement, slopes, and construction vibrations. Submit the proposed remedial measures to the Geotechnical Engineering Unit for review and acceptance prior to incorporation.

The Design-Build Team shall be responsible for any damage or claim caused by construction, including damage caused by vibration (see 2012 *Standard Specifications for Roads and Structures* Article 107-14). The Design-Build Team shall be responsible for deciding what, if any, pre and post-construction monitoring and inventories need to be conducted to satisfy their liability concerns. Any monitoring and inventory work shall be performed by a qualified private engineering firm experienced in the effects of construction on existing structures.

The geotechnical firm that prepared the foundation designs shall review and approve all pile driving hammers and drilled pier construction sequences. After the geotechnical firm has approved these submittals, the Design-Build Team shall submit to the NCDOT for review prior to beginning construction.

Perform hammer approvals with GRLWEAP Version 2002 or later and in accordance with the NCDOT LRFD Driven Pile Foundation Design Policy. Provide pile driving inspection charts or tables for all approved pile hammers.

Limit driving stresses in accordance with the AASHTO LRFD *Bridge Design Specifications*. If a tip elevation is noted on the plans, drive piles to the minimum required driving resistance and tip elevation.

The minimum required driving resistance is equal to the factored resistance noted on the plans divided by a resistance factor plus any additional resistance for downdrag and scour if applicable. When performing PDA testing in accordance with the AASHTO LRFD Bridge Design Specifications, the resistance factor is 0.75. Otherwise, the resistance factor for the wave equation analysis is 0.60.

Drive piles to the minimum required driving resistance and a penetration into natural ground of at least 10 ft. Unless otherwise approved, stop driving piles when refusal is reached. Refusal is defined as 240 blows per foot or any equivalent set.

PDA testing is not required unless the proposed Required Driving Resistance of HP12x53 piles exceed 175 tons, the proposed Required Driving Resistance of HP14x73 piles exceed 250 tons, or if a pile type other than HP 12x53 or HP 14x73 is used. Otherwise, perform Pile Driving Analyzer (PDA) testing on at least one pile per bridge using a NCDOT prequalified company to develop pile driving inspection charts or tables. Additional PDA tests may be required based upon the AASHTO LRFD Bridge Design Specifications. Provide additional PDA testing for any revisions to pile type, size or

PAVEMENT MANAGEMENT SCOPE OF WORK

For projects without shoulder berm gutter, the pavement design for the mainline and mainline shoulders is as follows:

LINE	Surface	Intermediate	Base
Structure 910237	3.0" S9.5B	-	8.0" B25.0B
Structure 910285	3.0" S9.5B	-	9.0" B25.0B
Structure 910338	3.0" S9.5B	-	7.5" B25.0B
Structure 910363	3.0" S9.5B	-	7.0" B25.0B
Structure 910410	3.0" S9.5B	-	9.5" B25.0B
Structure 910467	3.0" S9.5B	-	11.0" B25.0B
Structure 910485	3.0" S9.5B	-	7.0" B25.0B

For projects without shoulder berm gutter, if wedging is equal to or greater than the full thickness of the surface course as provided in the table above plus 3.0", then wedging shall consist of the full thickness of surface course as provided in the table above, and the remainder shall be B25.0B.

For projects with shoulder berm gutter, the pavement design for the mainline and mainline shoulders is as follows:

LINE	Surface	Intermediate	Base
Structure 910237	1.5" S9.5B	3.5" I19.0B	5.0" B25.0B
Structure 910285	1.5" S9.5B	3.5" I19.0B	5.5" B25.0B
Structure 910338	1.5" S9.5B	3.5" I19.0B	4.5" B25.0B
Structure 910363	1.5" S9.5B	3.5" I19.0B	4.0" B25.0B
Structure 910410	1.5" S9.5B	3.5" I19.0B	7.0" B25.0B
Structure 910467	1.5" S9.5B	3.5" I19.0B	8.0" B25.0B
Structure 910485	1.5" S9.5B	3.5" I19.0B	4.0" B25.0B

For projects with shoulder berm gutter, if wedging is equal to or greater than the full thickness of the surface course as provided in the table above plus 2.5", then wedging shall consist of the full thickness of surface course as provided in the table above, and the remainder shall be I19.0B.

The minimum depth for overlaying the existing pavement shall be equal to the full thickness of surface course as provided in the table above. The minimum depth of bituminous surface course on cored slabs or box beams shall be 1.5" at the gutter line.

The Design-Build Team shall provide incidental milling 25 feet in length for each inch of new surface course where tying to the existing pavement to provide a smooth transition to the proposed pavement. If the full depth pavement limits are the outer limits of construction, this milling will not be necessary.

Driveways impacted by the Design-Build Team's construction shall be repaired to the pre-construction condition or better.

1101.03, sheet 1 of 9. Ensure the development of the Traffic Control Plan is in compliance with the North Carolina Department of Transportation *January 2012 Roadway Standard Drawings*, NCDOT *January 2012 Standard Specifications for Roads and Structures*, and the latest edition of the *Manual on Uniform Traffic Control Devices (M.U.T.C.D.)*.

- c) Use traffic control devices that conform to all NCDOT requirements and are listed on the Department's Approved Products List as shown on NCDOT's Traffic Control Website.
- d) The NCDOT's Traffic Control Website should be utilized when developing the Traffic Control Plan. The Traffic Control Website is updated and provides key information necessary in preparing the Traffic Control Plan. The Traffic Control Website Address:

<http://ncdot.org/doh/preconstruct/wztc/>

- e) The Design-Build Team shall supply and install warning signs for recreational users upstream on the Neuse River for Bridge No. 910237 as well as warning and detour signing for recreational users of the greenway at this site.

B. PROJECT REQUIREMENTS

1. The Design-Build Team shall select a Private Engineering Firm (PEF) that has experience designing and sealing Traffic Management Plans for the North Carolina Department of Transportation (NCDOT) on comparable projects.
2. The Traffic Management Plans shall adhere to the "Express Design-Build Submittal Guidelines", and the "Guidelines for Preparation of Traffic Control and Pavement Marking Plans for Design-Build Projects", *January 2012 NCDOT Roadway Standard Drawings*, *January 2012 Standard Specifications for Roads and Structures*, and the latest edition of the *Manual for Uniform Traffic Control Devices*.
3. Adapt the traffic control plans, when directed by the engineer, to meet field conditions to provide safe and efficient traffic movement. Changes may be required when physical dimensions in the detail drawings, standard details and roadway details are not attainable or result in duplicate or undesired overlapping of devices. Modification may include: moving, supplementing, covering or removal of devices.
4. The Design-Build Team shall provide one month notice to the Engineer, County EMS and County school officials prior to road closures.
5. The Design-Build Team will be allowed five additional days of lane closure per bridge site to complete punch list items identified by the Engineer. The Design-Build Team shall notify the Engineer 15 days prior to installation of a lane closure and submit details for approval by the Engineer.

with the Americans with Disabilities Act of 1990 (ADA), Title II, Paragraph 35.130) as defined by the *Manual for Uniform Traffic Control Devices (MUTCD)*.

NCDOT’s *January 2012 Roadway Standard Drawings* – Section 1200 pertains to pavement markings and markers and shall be utilized.

Use pavement marking and pavement marker products that conform to all NCDOT’s requirements and specifications and are listed on the Department’s Approved Products List. The use of any devices that are not shown on the Approved Product List shall require written approval from the Signing and Delineation Unit.

The Design-Build Team shall install pavement markings and markers in accordance with NCDOT’s *January 2012 Standard Specifications for Roads and Structures*, the manufacturer’s procedures and specifications.

Install pavement markings and pavement markers on the final surface as follows:

<u>Road Name</u>	<u>Marking</u>	<u>Marker</u>
-L- lines	Match Existing Roadway	Match Existing Roadway
**Bridge Decks (Asphalt)	Match Existing Roadway	Match Existing Roadway
**Bridge Decks (Concrete)	Cold Applied Plastic (Type II or III)	Raised Reflective

Tie proposed pavement marking lines to existing pavement marking lines.

** Remove all residue and surface laitance by acceptable method prior to placing pavement marking material.

ENVIRONMENTAL PERMITS SCOPE OF WORK (2011)

General

The Design-Build Team shall be responsible for preparing permit drawings necessary for the Department to obtain all required environmental permits for construction for each bridge site contained in this contract. The Design-Build Team is responsible for determining the appropriate permits that will apply to each site. The Design-Build Team is encouraged to gain the Department's concurrence on the permits needed prior to beginning permit application work for each bridge. The Design-Build Team shall determine the schedule for submission of each bridge's permit documentation.

Bridge No. 910363 lies within the Jordan Lake Impoundment Area and will require a special permit through the U. S. Army Corps of Engineers (USACE) for construction.

The Design-Build Team shall not begin ground-disturbing activities, including utility relocations in jurisdictional areas, at a given bridge site, until the environmental permits have been issued for that bridge. This restriction does not include investigative borings covered under a NW #6 permit.

The Design-Build Team may begin utility relocation work prior to obtaining the aforementioned permits provided that (1) the Department is notified in writing prior to these activities; (2) such activities are outside jurisdictional resources. Upon consultation with the Division Environmental Officer, a meeting may be required with the permitting agencies prior to beginning work.

The Department will allow no direct contact between the Design-Build Team and representatives of the environmental agencies. No contact between the Design-Build Team and the environmental agencies shall be allowed either by phone, e-mail or in person, without representatives of the Division's Environmental Officer present. A representative from the Transportation Program Management shall be included on all correspondence.

Once the Department has obtained the applicable permits based upon the approved Design-Build Team's proposed design and / or construction methods, the Design-Build Team will be responsible for any change in the proposed design and / or construction methods that nullifies any permit. The Department shall not allow any contract time extensions associated with these changes.

The Design-Build Team shall meet all permit conditions. The Design-Build Team shall be required to staff any personnel necessary to provide permit compliance.

Permit Process

It is the Design-Build Team's responsibility to acquire information and prepare permit drawings that reflect the impacts and minimization efforts from the project as designed by the Design-

Build Team. The Department will provide the Data Sheet for each bridge site. The Design-Build Team shall be responsible for entering impact determinations on the Data Sheet. Further it is the Design-Build Team's responsibility to provide the design and construction details to the Department to be included as part of the permit process. At a minimum the associated permit drawings shall consist of the following:

- Roadway Plan and Profile Sheets (half size 11" x 17") shall contain all environmental impacts in a table with calculated proposed stream / wetland / open water impacts, buffer impacts by type such as road fill, bridging, etc.
- In addition the Roadway Plan Sheet shall specifically identify buffer zones, wetland boundaries, all erosion control measures, structures, pier locations, riprap, causeways and other impacts including utility relocation.

The Department will re-verify and update, as needed, the required environmental data that expires prior to the completion of the activity causing the impact in the jurisdictional areas. These include, but are not limited to, federally protected species, re-verification of wetland jurisdictional areas, historic and archaeological sites, and 303d (impaired) streams.

Direct coordination between the Design-Build Team, the Department's Transportation Program Management Director, Division Environmental Officer (DEO), Division Bridge Program Manager and the Resident Engineer shall be necessary to ensure proper permit drawing development. Upon completion of the permit drawings, the Design-Build Team shall concurrently forward the package to the Transportation Program Management Director, Resident Engineer, Division Bridge Program Manager, Division Environmental Officer, and Hydraulics Unit for review and approval. After all revisions are complete, the Department will subsequently forward the package to the appropriate agencies and the cover letter describing the project.

Any temporary construction measures, including de-watering, construction access, etc. shall be addressed in the permit drawings. Impacts that result from so-called temporary measures may not be judged to be temporary impacts by the agencies. These issues shall be addressed and resolved with the agencies and reviewed by the Division Environmental Officer prior to submission of the permit drawings and environmental impacts to the respective agencies.

The Design-Build Team shall clearly indicate the location of utility relocations in jurisdictional areas. The Design-Build Team shall also identify all proposed borrow and waste sites. Further, the Design-Build Team shall describe the methods of construction of all structures. The description of the temporary impacts (utility relocations, etc.) shall include restoration plans, schedules and disposal plans. This information shall be included in the permit drawings and environmental impacts.

The NCDOT hereby commits to ensuring, to the greatest extent possible, that the footprint of the impacts in areas under the jurisdiction of the federal Clean Water Act will not be increased during the Design-Build effort. All fill material shall be immediately stabilized and maintained to prevent sediment from entering adjacent waters or wetlands. The Design-Build Team shall be responsible for ensuring that the design and construction of the project will not impair the movement of aquatic life.

Requests made for modifications to the permits obtained by the Division Environmental Officer shall only be allowed if the Engineer determines it to be in the best interest of the Department and will be strongly discouraged. The Design-Build Team shall not take an iterative approach to hydraulic design issues. The design shall be complete prior to permit modification application.

Permit Timeframe

The Design-Build Team should expect it to take up to 60 days for the Department to acquire the permits necessary for each bridge. The 60 days shall begin at the date an accepted package has been supplied by the Department to the Agencies. No requests for additional contract time or compensation will be allowed if the permits are obtained within this 60-day period. With the exception of location and survey work and permitted investigative borings covered under a Nationwide #6, no mobilization of men, materials, or equipment for site investigation or construction of the project shall occur prior to obtaining the permits. This limitation does not preclude the off-site fabrication of bridge members or equipment. The Department will not honor any requests for additional contract time or compensation, including idle equipment or mobilization or demobilization costs, for the Design-Build Team mobilizing men, materials (or ordering materials), or equipment prior to obtaining all permits. The Department will consider requests for contract time extensions for obtaining the permits only if the Design-Build Team has pursued the work with due diligence, the delay is beyond the Team's control, and the 60-day period has been exceeded. If time were granted it would be only for that time exceeding the 60-day period.

Commitments

The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize impacts to wetland, stream, open water and regulated riparian buffers. Additionally the NCDOT will provide full compensatory mitigation of all stream, wetland and riparian buffer impacts as required by the regulatory agencies..

The Design-Build Team shall strictly adhere to these commitments, as well as others, including but not limited to Neuse River and Jordan Lake Buffer Rules.

The Design-Build Team shall adhere to the moratorium for in-water work at Bridge No. 910237 from February 15th to September 30th of any given year. Stream Crossing Guidelines for Anadromous Fish will be implemented in the design and construction of this project.

Bridge No. #910363 is located in the Jordan Lake Impoundment Area. Therefore, the Design-Build Team shall design and construct this bridge site to avoid and minimize impacts to this area. The Design-Build Team shall provide limits of any additional right of way or easement, as well as the amount of cut and fill material within the construction limits at this bridge site, to the Transportation Program Management Director. (Reference Right of Way Scope of Work) The Design-Build team shall be responsible for cutting any trees flagged by the USACE for removal. It is anticipated that it will require approximately 4 months to acquire a permit from the USACE at this location.

EROSION AND SEDIMENTATION CONTROL SCOPE OF WORK (2-1-12)

The NCDOT REU shall review and accept all Erosion and Sedimentation Control Plans. Erosion Control Plans shall be designed for the grading phase of the Low Impact Bridge construction. Release for Construction (RFC) Erosion Control Plans shall be submitted to all NCDOT Personnel listed in the Express Design-Build Submittal Guidelines, before **any** land disturbing activities, including clearing and grubbing, can commence. No land disturbing activities, including clearing and grubbing, shall occur in any location that does not have accepted RFC Erosion Control Plans. Refer to the most recent version of the *NCDENR - Erosion and Sediment Control Planning and Design Manual* for erosion control design guidelines not addressed in this Scope of Work.

The Design-Build Team shall be responsible for determining the Bridge Projects located in Environmentally Sensitive Areas and use the higher Peak Inflow Rate and Peak Rainfall Data (25 year).

Erosion and Sedimentation Control Plans shall at a minimum address the following:

I. Complete Set of Plans

A. RFC Plans

1. Use correct NCDOT symbology.
2. Protect existing and proposed drainage structure inlets with Rock Inlet Sediment Trap Type 'A' (RIST-A), Rock Inlet Sediment Trap Type 'C' (RIST-C), Rock Pipe Inlet Sediment Trap Type 'A' (PIST-A), etc.
3. Utilize adequate perimeter controls (temporary silt ditches (TSD), temporary silt fence (TSF), etc.)
4. Utilize infiltration basins, skimmer basins and rock measures with sediment control stone (Temporary Rock Sediment Dam Type 'B' (TRSD-B), Temporary Rock Silt Check Type 'A' (TRSC-A), etc.) at all drainage outlets with a spillway with an adequately designed base length to distribute outflow.
5. Take into account existing topography and show contour lines.
6. Utilize Temporary Rock Silt Checks Type 'B' (TRSC-B) to reduce velocity in existing and proposed ditches with spacing of 250 feet divided by percentage of ditch grade. Also utilize TRSC-B's in proposed TSD's and temporary diversions (TD).
7. Protect existing streams; do not place erosion control devices in live streams.
8. Provide adequate silt storage for 3600 cubic feet per disturbed acre and sediment basins shall be sized with surface area equal to 435 square feet per cubic foot per second (cfs) of the peak inflow rate, Q10 or Q25, using 10-year or 25-year peak rainfall data (*NCDENR - Erosion and Sediment Control Planning and Design Manual* or NOAA's National Weather Service web site http://hdsc.nws.noaa.gov/hdsc/pfds/orb/nc_pfds.html for partial duration (ARI) time series type). A Sediment Basin Designer Spreadsheet will be provided by the NCDOT Roadside Environmental Unit (REU) upon request.

RIGHT OF WAY SCOPE OF WORK

It is expected that the Design-Build Team, to the greatest extent practicable, perform construction activities within existing DOT right of way or maintenance limits as applicable. If additional right of way or easements are required, the Design-Build Team shall follow the procedures contained in this scope of work. The Design-Build Team shall be responsible for all right of way staking, supplying iron pins and caps and setting of pins.

No additional contract time will allowed for project designs that require the acquisition of additional ROW or easements.

The Design-Build Team shall employ qualified, competent personnel who are currently **approved by the NCDOT Right of Way Branch**, herein after referred to as the Department, to provide all services necessary to perform all appraisal, appraisal review, negotiation and relocation services required for all right of way and easements, including but not limited to permanent utility easements, necessary for completion of the project in accordance with G.S. 136-28.1 of the General Statutes of North Carolina, as amended, and in accordance with the requirements set forth in the *Uniform Appraisal Standards and General Legal Principles for Highway Right of Way*, the *North Carolina Department of Transportation's Right of Way Manual*, the *North Carolina Department of Transportation's Rules and Regulations for the Use of Right of Way Consultants*, the *Code of Federal Regulations*, and *Chapter 133 of the General Statutes of North Carolina from Section 133-5 through 133-18*, hereby incorporated by reference, including the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. For a list of firms currently approved, the Design-Build Team should contact Mr. Neal Strickland, in the NCDOT Right of Way Branch, at 919-707-7464. The Design-Build Team shall perform the services as set forth herein and furnish and deliver to the Department reports accompanied by all documents necessary for the settlement of claims and the recordation of deeds, or necessary for condemnation proceedings covering said properties. The Design-Build Team, acting as an agent on behalf of the State of North Carolina shall provide right of way acquisition services for all bridge replacement sites.

The Design-Build Team shall carry out the responsibilities as follows:

- With respect to the payments, costs and fees associated with the acquisition of right of way in this contract, the Department will be responsible for only direct payments to property owners for negotiated settlements, recording fees, any relocation benefits, and deposits and fees involved in the filing of condemnation of any claims. The Department will assume responsibility for all costs associated with the litigation of condemned claims, including testimony by the appraiser(s). The Design-Build Team shall be responsible for all other acquisition related payments, costs and fees, including but not limited to attorney fees required for all non-condemnation acquisitions.
- A Department representative will be available to provide technical guidance on right of way acquisition procedures and to make timely decisions on approving relocation benefits and