

-- STATE OF NORTH CAROLINA--
DEPARTMENT OF TRANSPORTATION
RALEIGH, N.C.

INDUSTRY DRAFT RFP

DESIGN-BUILD PROJECT

TIP EB-4993

January 19, 2010



VOID FOR BIDDING

DATE AND TIME OF TECHNICAL AND PRICE PROPOSAL SUBMISSION: **March 10, 2010 BY 4:00 PM**

DATE AND TIME OF PRICE PROPOSAL OPENING: **March 23, 2010 AT 2:00 PM**

CONTRACT ID: C202381

WBS ELEMENT NO. 40892.3.ST1

FEDERAL-AID NO. STM-000S(533)

COUNTY: Johnston

ROUTE NO. N/A

MILES: 3.7

LOCATION: Neuse River Greenway from Wake/Johnston County Line to Sam's Branch Creek in Johnston County

TYPE OF WORK: DESIGN-BUILD AS SPECIFIED IN THE SCOPE OF WORK
CONTAINED IN THE REQUEST FOR PROPOSALS

NOTICE:

ALL PROPOSERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE PROPOSER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. PROPOSERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOT WITHSTANDING THESE LIMITATIONS ON BIDDING, THE PROPOSER WHO IS AWARDED ANY PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING, REGARDLESS OF FUNDING SOURCES.

5% BID BOND OR BID DEPOSIT REQUIRED

**PROPOSAL FORM FOR THE CONSTRUCTION OF CONTRACT NO. C202381
IN JOHNSTON COUNTY, NORTH CAROLINA**

Date _____ 20 _____

**DEPARTMENT OF TRANSPORTATION,
RALEIGH, NORTH CAROLINA**

The Design-Build Team herein acknowledges that it has carefully examined the location of the proposed work to be known as Contract No. C202381; has carefully examined the Final Request for Proposals (RFP) and all addendums thereto, specifications, special provisions, the form of contract, and the forms of contract payment bond and contract performance bonds, which are acknowledged to be part of the Contract; and thoroughly understands the stipulations, requirements and provisions. The undersigned Design-Build Team agrees to be bound upon their execution of the Contract and including any subsequent award to them by the Board of Transportation in accordance with this Contract to provide the necessary contract payment bond and contract performance bond within fourteen calendar days after the written notice of award is received by them.

The undersigned Design-Build Team further agrees to provide all necessary materials, machinery, implements, appliances, tools, labor, and other means of construction, except as otherwise noted, to perform all the work and required labor to design, construct and complete all the work necessary for State Highway Contract No. C202381 in Johnston County by no later than the dates(s) specified in the Final RFP or Technical Proposal, whichever is earlier, and in accordance with the requirements of the Engineer, the Final RFP and Addenda thereto, the *2006 Standard Specifications for Roads and Structures*, specifications prepared by the Department, the Technical Proposal prepared by the Design-Build Team, at the lump sum price(s) bid by the Design-Build Team in their Price Proposal.

The Design-Build Team shall provide signed and sealed documents prepared by the Design-Build Team, which specifications and plans show the details covering this project and adhere to the items noted above.

The Design-Build Team acknowledges that project documents furnished by the Department are preliminary and provided solely to assist the Design-Build Team in the development of the project design. Unless otherwise noted herein, the Department does not warrant or guarantee the sufficiency or accuracy of any information furnished by the Department.

The Department does not warrant or guarantee the sufficiency or accuracy of any investigations made, nor the interpretations made or opinions of the Department as to the type of materials and conditions to be encountered at the project site. The Design-Build Team is advised to make such independent investigations, as they deem necessary to satisfy their self as to conditions to be encountered on this project. The Design-Build Team shall have no claim for additional compensation or for an extension of contract time for any reason resulting from the actual conditions encountered at the site differing from those indicated in any of the information or documents furnished by the Department except as may be allowed under the provisions of the Standard Specifications.

Although the Department has furnished preliminary designs for this project, unless otherwise noted herein, the Design-Build Team shall assume full responsibility, including liability, for the

project design, including the use of portions of the Department design, modification of such design, or other designs as may be submitted by the Design-Build Team.

The Design-Build Team shall be fully and totally responsible for the accuracy and completeness of all work performed under this contract, and shall indemnify and hold the Department harmless for any additional costs and all claims against the Department or the State which may arise due to errors or omissions of the Department in furnishing the preliminary project designs and information, and of the Design-Build Team in performing the work.

The published volume entitled *North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, JULY 2006*, as well as, all design manuals, policy and procedures manuals, and AASHTO publications and guidelines referenced in the Request For Proposals, with all amendments and supplements thereto, are by reference, incorporated and made part of this contract; that, except as herein modified, all the design, construction and Construction Engineering Inspection included in this contract is to be done in accordance with the documents noted above and under the direction of the Engineer.

If the Design-Build Proposal is accepted and the award is made, the Technical Proposal submitted by the Design-Build Team is by reference, incorporated and made part of this contract. The contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except by written approval as allowed by the Request for Proposals.

Accompanying the Design-Build Proposal shall be a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Design-Build Team shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by them, as provided in the Standard Specifications; otherwise said deposit will be returned to the Design-Build Team.

TO
BE
SEALED
IN
FINAL
RFP

*Transportation Program
Management Director*

TO
BE
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IN
FINAL
RFP

State Contract Officer

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PROPOSAL FORMS - ITEMIZED SHEET, ETC.

Itemized Proposal Sheet (WHITE SHEET)
 Fuel Usage Factor Chart and Estimate of Quantities (WHITE SHEET)
 Listing of DBE Subcontractors (YELLOW SHEET)
 Execution of Bid, Non-Collusion Affidavit, Debarment Certification and Gift Ban
 Certification (YELLOW SHEETS)
 Signature Sheet (YELLOW SHEET)

***** PROJECT SPECIAL PROVISIONS *******CONTRACT TIME AND LIQUIDATED DAMAGES**

07/12/07

DB1 G04A

The date of availability for this contract is [REDACTED], except that the Design-Build Team shall not begin ground disturbing activities, including utility relocations and tree harvesting, (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; and the required permits have been acquired, as stipulated in the Environmental Permits Scope of Work contained elsewhere in this Request for Proposals (RFP). The Design-Build Team shall consider this factor in determining the proposed completion date for this project.

The completion date for this contract is defined as the date proposed in the Technical Proposal by the proposer who is awarded the project. The completion date thus proposed shall not be later than [REDACTED].

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 [REDACTED] **Thousands Dollars (\$ [REDACTED].00)** per calendar day.

OTHER LIQUIDATED DAMAGES AND INCENTIVES

(3/22/07) (Rev. 02/14/08)

DB1 G11

Refer to the Traffic Management Scope of Work for more information on the following time restrictions and liquidated damages:

Liquidated Damages for Intermediate Contract Time #1 for lane narrowing, lane closure, holiday and special event time restrictions for SR 1700 are \$500 per hour or any portion thereof.

PROGRESS SCHEDULE

(07/29/09)

DB1 G12

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 1-72, Article 108-2 Progress Schedule, delete in its entirety and replace with the following:

The Design-Build Team shall prepare and submit for review and approval a schedule of proposed working progress. This schedule shall be submitted on forms supplied by the Engineer or in a format that is approved by the Engineer. A detailed Critical Path

Method (CPM) schedule shall not be submitted to replace the progress schedule details required below.

The Design-Build Team shall submit a Progress Schedule for review within thirty (30) calendar days of receiving Notice of Award. The Department will review the Progress Schedule within twenty-one (21) calendar days of receipt. The Design-Build Team shall make any necessary corrections and adjustments to the Progress Schedule as necessitated by the Department's review within seven (7) calendar days. The Department will review the revised Progress Schedule within seven (7) calendar days of receipt.

When the Engineer has extended the completion date the Design-Build Team shall submit a revised progress schedule to the Engineer for review and approval. If plan revisions are anticipated to change the sequence of operations in such a manner as will effect the progress but not the completion date, then the Design-Build Team may submit a revised progress schedule for review and approval but the completion date shall remain unchanged.

The proposed progress schedule shall contain the following items:

- (A) A time scale diagram with major work activities and milestone dates clearly labeled.
- (B) A cash curve corresponding to the milestones and work activities established above.
- (C) A written narrative that explains the sequence of work, the controlling operation(s), intermediate completion dates, milestones, project phasing, anticipated work schedule, and estimated resources. In addition, explain how permit requirements, submittal tracking, and coordination with subcontractors, utility companies and other entities will be performed.

Major work activities are defined as components comprising more than 5% of the total project cost or occupying more than 10% of total contract time and shall include, if applicable, the following:

- Clearing and grubbing
- Grading
- Drainage
- Soil stabilization
- Aggregate base course
- Pavement
- Culverts
- Bridges

Major Milestones are derived from the project construction phasing and shall include, if applicable, the following:

- Critical design submittal dates
- Critical permitting dates
- Completion of right of way acquisition
- Completion of Utility Conflicts
- Start of construction
- Seasonal limitation /observation periods/ moratoriums
- Beginning and end of each traffic control phase or work area
- Greenway opening
- Completion date

The Design-Build Team shall provide a written narrative each month detailing the work and percentage of work completed, anticipated sequence of upcoming work (2 month forecast), controlling operation(s), intermediate completion dates, and milestones. If any milestones are exceeded or will not be achieved, the Design-Build Team shall provide in the written narrative details of the delay; controlling operation affected, impacts to other operations, revisions to

MOBILIZATION

(10-31-05) (Rev 01-3-07)

DB1 G15B

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 8-1, Subarticle 800-2, MEASUREMENT AND PAYMENT

Delete this subarticle in its entirety and replace with the following:

800-2 MEASUREMENT AND PAYMENT

5 percent of the “Total Amount of Bid for Entire Project” shall be considered the lump sum amount for Mobilization. Partial payments for Mobilization will be made beginning with the first partial pay estimate paid on the contract. Payment will be made at the rate of 50 percent of the lump sum amount calculated for Mobilization. The remaining 50 percent will be paid with the partial pay estimate following approval of all permits required in the Environmental Permits Scope of Work for this project.

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

(07-21-09)

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 to the proposed design. Agreement of quantities will be a prerequisite prior to execution of the contract.

Submittal The submittal shall be signed and dated by an officer of the Design-Build Team. The information shall be copied and submitted in a separate sealed package with the outer wrapping clearly marked “Fuel Price Adjustment” and shall be delivered at the same time and location as the Technical and Price Proposal. The original shall be submitted in the Price Proposal.

Trade Secret Information submitted on the *Fuel Usage Factor Chart and Estimate of Quantities* sheet will be considered “Trade Secret” in accordance with the requirements of G.S. 66-152(3) until such time as the Price Proposal is opened.

(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 \$ 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.

(E) **Failure to submit** the completed *Fuel Usage Factor Chart and Estimate of Quantities* sheet separately and in the Price Proposal will result in the Technical and Price Proposal being considered irregular by the Department and the Technical and Price Proposal may be rejected.

EXECUTION OF BID, NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

(12/10/09)

DB1 G52

The Proposer's attention is directed to the various sheets in the Request for Proposals which are to be signed by the Proposer. A list of these sheets is shown below. The signature sheets are located behind the Itemized Proposal Sheet in this Request for Proposal. The NCDOT bid bond form is available on-line at: <http://ncdot.org/doh/forms/files/bidbond.pdf> or by contacting the Records and Documents office at 919-250-4124.

1. Applicable Signature Sheets: 1, 2, 3, 4, 5, or 6 (Bid)
2. Bid Bond

The Proposer shall certify to the best of his knowledge all subcontractors, material suppliers and vendors utilized herein current status concerning suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency, in accordance with the "Debarment Certification" located behind the *Execution of Bid Non-Collusion Affidavit, Debarment Certification and Gift Ban Certification* signature sheets in this RFP. Execution of the bid signature sheets in conjunction with any applicable statements concerning exceptions, when such statements have been made on the "Debarment Certification", constitutes the Proposer's certification of "status" under penalty of perjury under the laws of the United States.

SUBMISSION OF DESIGN-BUILD PROPOSAL

09/25/09

DB1 G55A

The Proposer's attention is directed that each Proposer's Design-Build Proposal shall comply with the following requirements in order for that Design-Build Proposal to be responsive and considered for award.

1. The Proposer shall be prequalified with the Department prior to submitting a Design-Build Proposal.
2. The Proposer shall deliver the Design-Build Proposal to the place indicated, and prior to the time indicated in this Request for Proposals.
3. The Design-Build Proposal documents shall be signed by an authorized employee of the Proposer.
4. The Design-Build Proposal shall be accompanied by Bid surety in the form of a Bid bond or Bid deposit.
5. If Disadvantaged Business Enterprises (DBE) goals are established for this contract, the Proposer shall complete the form Listing of DBE Subcontractors contained elsewhere in this RFP in accordance with the Project Special Provision entitled Disadvantaged Business Enterprises.

6. The Design-Build Proposal shall address all the requirements as specified in this Request for Proposals.

In addition to the above requirements, failure to comply with any of the requirements of Article 102-8 of the Standard Special Provisions, Division One (found elsewhere in this RFP) or Articles 102-10 or 102-11 of the 2006 *Standard Specifications for Roads and Structures* may result in a Design-Build Proposal being rejected.

CONFIDENTIAL QUESTIONS

(1-5-07)

DB1 G56

The Design-Build Team will be permitted to ask confidential questions of the Department, which neither the question nor answer will be shared with other proposing teams. For the purpose of this provision, “confidential question” is defined as a private inquiry containing information whose disclosure could alert others to certain details of doing business in a particular manner. The Department will determine if the question is considered a confidential question.

- I. Confidential questions arising prior to issuance of the Final Request for Proposals will be allowed at the External RFP review with the individual teams.

The Department will answer the confidential question verbally at the meeting if possible. If not answered verbally during the meeting, the Department will answer the confidential question by subtle changes in the Final Request for Proposals, which will clarify the scope by either allowing or disallowing the request. The revision will be made in such a manner as to not disclose the confidential question.

- II. After the issuance of the Final Request for Proposals, confidential questions may be asked by requesting a meeting with the Contract Officer. The request shall be in writing and provide sufficient detail to evaluate the magnitude of the request. Questions shall be of such magnitude as to warrant a special meeting. Minor questions will not be acknowledged or answered.

After evaluation, the Contract Officer will respond to the question in writing to the Design-Build Team only. Other teams will not be notified of the question or answer.

If the Design-Build Team includes work based on the confidential questions and answers, the work shall be included and discussed in the Technical Proposal. The Technical Proposal will be evaluated in accordance with existing policies.

VALUE ANALYSIS

(1-5-07)

DB1 G57

Value Engineering Construction Proposals (VECP), as identified in Article 104-12 of 2006 *Standard Specifications for Roads and Structures* will be accepted. Only proposals, which alter the requirements of the RFP issued by the Department, will be considered as Value Engineering Construction Proposals.

SCHEDULE OF ESTIMATED COMPLETION PROGRESS

(07-15-08)

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>
2009 (07/01/08 – 06/30/09)	% of Total Amount Bid
2010 (07/01/09 – 06/30/10)	% of Total Amount Bid
2011 (07/01/10 – 06/30/11)	% of Total Amount Bid
2012 (07/01/11 – 06/30/12)	% of Total Amount Bid

The Design-Build Team shall also furnish its own progress schedule in accordance with Project Special Provision entitled “Progress Schedule” (found elsewhere in this RFP). 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.

REVISION TO FHWA-1273 CONCERNING PERSONAL INFORMATION ON PAYROLL SUBMISSIONS:

(1-20-09)

DB1G59

Revise the *Standard Special Provision FHWA-1273 Required Contract Provisions Federal-Aid Construction Contracts* as follows:

Section V, Paragraph 2b is replaced with the following:

The payroll records shall contain the name, and the last four digits of the social security number of each such employee, his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid.

DISADVANTAGED BUSINESS ENTERPRISE

(10-29-09)

DB1 G61

Policy

It is the policy of the North Carolina Department of Transportation that Disadvantaged Business Enterprises (DBEs) as defined in *49 CFR Part 26* shall have the equal opportunity to compete fairly for and to participate in the performance of contracts financed in whole or in part by Federal Funds.

Obligation

The Design-Build Team, subcontractor, and sub-recipient shall not discriminate on the basis of race, religion, color, national origin, age, disability or sex in the performance of this contract. The Design-Build Team shall comply with applicable requirements of *49 CFR Part 26* in the award and administration of federally assisted contracts. Failure by the Design-Build Team to comply with these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the Department deems necessary.

Definitions

Commitment - The approved DBE participation submitted by the Design-Build Team during the bidding process.

Committed DBE - Any DBE listed on the DBE commitment list approved by the Department at the time of Price Proposal submission or any DBE utilized as a replacement for a DBE firm listed on the commitment list.

Department - North Carolina Department of Transportation

Disadvantaged Business Enterprise (DBE) – A firm certified as a Disadvantaged Business Enterprise through the North Carolina Unified Certification Program.

Goal - The DBE participation specified herein

Letter of Intent – Written documentation of the Design-Build Team’s commitment to use a DBE subcontractor and confirmation from the DBE that it is participating in the contract.

Manufacturer - A firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Design-Build Team.

Regular Dealer - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns or operates distribution equipment. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

Form RS-1-D - Form for subcontracts involving DBE subcontractors attesting to the agreed upon unit prices and extensions for the affected contract items.

North Carolina Unified Certification Program - A program that provides comprehensive information to applicants for certification, such that an applicant is required to apply only once for a DBE certification that will be honored by all recipients of USDOT funds in the state and

not limited to the Department of Transportation only. The Certification Program is in accordance with *49 CFR Part 26*.

USDOT - United States Department of Transportation, including the Office of the Secretary, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Aviation Administration (FAA).

Contract Goal

The following goal for participation by Disadvantaged Business Enterprises is established for this contract:

Disadvantaged Business Enterprises **12 %**

- (A) *If the goal is more than zero*, the Design-Build Team shall exercise all necessary and reasonable steps to ensure that Disadvantaged Business Enterprises participate in at least the percent of the contract as set forth above as the goal.
- (B) *If the goal is zero*, the Design-Build Team shall continue to recruit the DBEs and report the use of DBEs during the construction of the project. A good faith effort will not be required with a zero goal.

This goal is to be met through utilization of highway construction contractors and / or right-of-way acquisition firms. Utilization of DBE firms performing design, other preconstruction services, or Construction Engineering and Inspection are not included in this goal.

Contract Requirement

The approved DBE participation submitted by the Design-Build Team shall be the **Contract Requirement**.

Certified Transportation Firms Directory

Real-time information about firms doing business with the Department and firms that are certified through North Carolina's Unified Certification Program is available in the Directory of Transportation Firms. The Directory can be accessed by the link on the Department's homepage or by entering <https://apps.dot.state.nc.us/vendor/directory/> in the address bar of your web browser. Only firms identified as DBE certified in the Directory can be utilized to meet the contract goals.

The listing of an individual firm in the Department's directory shall not be construed as an endorsement of the firm's capability to perform certain work.

Listing of DBE Subcontractors in Contract

Only those DBE firms with current certification are acceptable for listing in the Proposer's submittal of DBE participation. The Design-Build Team shall indicate the following required information:

- (1) *If the goal is more than zero*, Proposers at the time the Price Proposal is submitted, shall submit a listing of DBE participation on the appropriate form (or facsimile thereof) contained elsewhere in the RFP in order for the Price Proposal to be considered responsive. Proposers shall indicate the total dollar value of the DBE participation for the contract. If Proposers have no DBE participation, they shall indicate this on the form "Listing of DBE Subcontractors" by entering the word or number zero. This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Price Proposals submitted that do not have DBE participation indicated on the appropriate form will not be read publicly during the opening of Price Proposals. The Department will not consider these Price Proposals for award and the Price Proposal will be returned to the Proposer.
- (2) *If the goal is zero*, Proposers at the time the Price Proposal is submitted, the Proposer shall enter the word "zero" or number "0" or if there is participation, add the value on the "Listing of DBE Subcontractors" (or facsimile thereof) contained elsewhere in the RFP.

Written Documentation – Letter of Intent

The Proposer shall submit written documentation of the Proposer's commitment to use a DBE subcontractor whose participation it submits to meet a contract goal and written confirmation from each DBE, listed in the proposal, indicating their participation in the contract. This documentation shall be submitted on the Department's form titled "Letter of Intent to Perform as a Subcontractor". This letter of intent form is available at:

<http://www.ncdot.org/doh/preconstruct/ps/contracts/letterofintent.pdf>.

It shall be received in the office of the State Contractor Utilization Engineer no later than 12:00 noon of the sixth calendar day following opening of Price Proposals.

If the Proposer fails to submit the letter of intent from each committed DBE listed in the proposal indicating their participation in the contract, the DBE participation will not count toward meeting the goal.

Counting DBE Participation toward Meeting DBE Goal of Zero or More

- (A) If a firm is determined to be an eligible DBE firm, the total dollar value of the participation by the DBE will be counted toward the contract requirement. The total dollar value of participation by a certified DBE will be based upon the value of work actually performed by the DBE and the actual payments to DBE firms by the Design-Build Team.

- (B) When a DBE performs as a participant in a joint venture, the Design-Build Team may count toward its DBE goal a portion of the total value of participation with the DBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the DBE performs with its forces.
- (C) (1) The Design-Build Team may count toward its DBE requirement only expenditures to DBEs that perform a commercially useful function in the work of a contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.
- (2) A DBE may enter into subcontracts. Work that a DBE subcontracts to another DBE firm may be counted toward the contract requirement. Work that a DBE subcontracts to a non-DBE firm does not count toward the contract requirement. If a DBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, the DBE shall be presumed not to be performing a commercially useful function. The DBE may present evidence to rebut this presumption to the Department for commercially useful functions. The Department's decision on the rebuttal of this presumption is subject to review by the Federal Highway Administration but is not administratively appealable to USDOT.
- (3) The following factors will be used to determine if a DBE trucking firm is performing a commercially useful function.
- (a) The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting DBE goals.
- (b) The DBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.

- (c) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
 - (d) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (e) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of transportation services provided by non-DBE lessees not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE lessees receives credit only for the fee or commission it receives as a result of the lease arrangement. The value of services performed under lease agreements between the DBE and the Design-Build Team shall not count towards the contract requirement.
 - (f) For purposes of this paragraph, a lease shall indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks shall display the name and identification number of the DBE.
- (D)** A Design-Build Team may count toward its DBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from DBE regular dealer and 100 percent of such expenditures to a DBE manufacturer.
- (E)** A Design-Build Team may count toward its DBE requirement the following expenditures to DBE firms that are not manufacturers or regular dealers:
- (1) The fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
 - (2) The fees or commissions charged for assistance in the procurement of the materials and supplies, or for transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are not from a manufacturer or regular dealer and provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

Good Faith Effort for Projects with Goals More than Zero

If the DBE participation submitted in the Price Proposal by the Proposer with the apparent adjusted low price does not meet or exceed the DBE contract goal, this Proposer shall submit to the Department documentation of its good faith efforts made to reach the contract goal. One complete set and 9 copies of this information shall be received in the office of the State Contractor Utilization Engineer no later than 12:00 noon of the sixth calendar day following opening of Price Proposals. Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Department considers in judging good faith efforts. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

The following factors will be used to determine if the Proposer has made adequate good faith effort:

- (A) Whether the Proposer attended any pre-bid meetings that were scheduled by the Department to inform DBEs of subcontracting opportunities.
- (B) Whether the Proposer provided solicitations through all reasonable and available means (e.g. advertising in newspapers owned and targeted to the Disadvantaged at least 10 calendar days prior to Price Proposal opening). Whether the Proposer provided written notice to all DBEs listed in the NCDOT Directory of Transportation Firms, within the Divisions and surrounding Divisions where the project is located, that specialize in the areas of work (as noted in the DBE Directory) that the Proposer will be subletting.
- (C) Whether the Proposer followed up initial solicitations of interests by contacting DBEs to determine with certainty whether they were interested. If a reasonable amount of DBEs within the targeted Divisions do not provide an intent to quote or no DBEs specialize in the subcontracted areas, the Proposer shall notify DBEs outside of the targeted Divisions that specialize in the subcontracted areas, and contact the Director of Business and Opportunity Workforce Development to give notification of the Proposer's inability to get DBE quotes.
- (D) Whether the Proposer selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goals. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Proposer might otherwise perform these work items with its own forces.
- (E) Whether the Proposer provided interested DBEs with adequate and timely information about the plans, specifications and requirements of the contract.

- (F) Whether the Proposer negotiated in good faith with interested DBEs without rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities. Any rejection should be noted in writing with a description as to why an agreement could not be reached.
- (G) Whether quotations were received from interested DBE firms but rejected as unacceptable without sound reasons why the quotations were considered unacceptable. The fact that the DBE firm's quotation for the work is not the lowest quotation received will not in itself be considered as a sound reason for rejecting the quotation as unacceptable. The fact that the Proposer has the ability and / or desire to perform the contract work with its own forces will not be considered as sound reason for rejecting a DBE quote. Nothing in this provision shall be construed to require the Proposer to accept unreasonable quotes in order to satisfy contract goals.
- (H) Whether the Proposer specifically negotiated with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be sublet includes potential for DBE participation.
- (I) Whether the Proposer made any efforts and / or offered assistance to interested DBEs in obtaining the necessary equipment, supplies, materials, insurance, and / or bonding to satisfy the work requirements in the RFP.
- (J) Any other evidence that the Proposer submits which show that the Proposer has made reasonable good faith efforts to meet the contract goal.

If a Proposer is the Proposer with the apparent adjusted low price or apparent lowest responsive bidder on more than one project within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the Proposer to combine the DBE participation as long as the overall DBE goal value of the combined projects is achieved.

If the Department does not award the contract to the Proposer with the apparent adjusted low price, the Department reserves the right to award the contract to the Proposer with the next apparent adjusted low price that can satisfy the Department that the contract goal can be met or that adequate good faith efforts have been made to meet the goal.

DBE Replacement

The Design-Build Team shall not terminate a committed DBE subcontractor for convenience or perform the work with its own forces or those of an affiliate. If the Design-Build Team fails to demonstrate reasonable efforts to replace a committed DBE firm that does not perform as intended with another committed DBE firm or completes the work with its own forces without the Engineer's approval, the Design-Build Team and any of its affiliated companies may be disqualified from further bidding for a period of up to 6 months.

The Design-Build Team shall comply with the following for replacement of committed DBE.

(A) Performance Related Replacement

When a DBE is terminated or fails to complete its work on the contract for any reason, the Design-Build Team shall take all necessary, reasonable steps to replace the DBE subcontractor with another DBE subcontractor to perform at least the same amount of work as the DBE that was terminated. The Design-Build Team is encouraged to first attempt to find another DBE firm to do the same work as the DBE that was being terminated.

To demonstrate necessary, reasonable good faith efforts, the Design-Build Team shall document the steps they have taken to replace any DBE subcontractor who is unable to perform successfully with another DBE subcontractor. Such documentation shall include but not be limited to the following:

- (1) Copies of written notification to DBEs that their interest is solicited in subcontracting the work defaulted by the previous DBE subcontractor or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with DBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of DBEs who were contacted.
 - (b) A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.
- (3) For each DBE contacted but rejected as unqualified, the reasons for the Design-Build Team's conclusion.
- (4) Efforts made to assist the DBEs contacted, if needed, in obtaining bonding or insurance required by the Design-Build Team.

(B) Decertification Replacement

- (1) When a committed DBE is decertified by the Department after a Request for Subcontract has been received by the Department, the Department will not require the Design-Build Team to solicit replacement DBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract requirement.
- (2) When a committed DBE is decertified prior to the Department receiving a Request for Subcontract for the named DBE firm, the Design-Build Team shall take all necessary and reasonable steps to replace the DBE subcontractor with another DBE subcontractor to perform at least the same amount of work to meet the contract goal or demonstrate that it has made a good faith effort to do so.

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed DBE, the Design-Build Team will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a DBE based upon the Design-Build Team's commitment, the DBE shall participate in additional work to the same extent as the DBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Design-Build Team shall seek additional participation by DBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction and a portion or all of work had been expected to be performed by a committed DBE, the Design-Build Team shall seek participation by DBEs unless otherwise approved by the Engineer.

When the Design-Build Team requests changes in the work that result in the reduction or elimination of work that the Design-Build Team committed to be performed by a DBE, the Design-Build Team shall seek additional participation by DBEs equal to the reduced DBE participation caused by the changes.

Reports

All requests for subcontracts involving DBE subcontractors shall be accompanied by a certification executed by both the Design-Build Team and the DBE subcontractor attesting to the agreed upon unit prices and extensions for the affected contract items. This information shall be submitted on the Department Form RS-1-D, located at:

<http://www.ncdot.org/doh/forms/files/FORMRS-1-D.doc>

unless otherwise approved by the Engineer. The Department reserves the right to require copies of actual subcontract agreements involving DBE subcontractors.

Within 30 calendar days of entering into an agreement with a DBE for materials, supplies or services, not otherwise documented by a Request for Subcontract as specified above, the Design-Build Team shall furnish the Engineer a copy of the agreement. The documentation should also indicate the percentage (60% or 100%) of expenditures claimed for DBE credit.

All certifications will be considered a part of the project records, and consequently will be subject to penalties under Federal Law associated with falsifications of records related to projects.

Reporting Disadvantaged Business Enterprise Participation

- (A) The Design-Build Team shall provide the Engineer with an accounting of payments made to Disadvantaged Business Enterprise firms, including material suppliers, contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be

furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

- (1) Withholding of money due in the next partial pay estimate; or
 - (2) Removal of any affiliated company of the Design-Build Team from the Department's appropriate prequalified list or the removal of other entities from the approved subcontractors list.
- (B)** The Design-Build Team shall report the accounting of payments through the Department's DBE Payment Tracking System, which is located at:
<https://apps.dot.state.nc.us/Vendor/PaymentTracking/>.
- The Design-Build Team shall also provide the Engineer an affidavit attesting the accuracy of the information submitted in the Payment Tracking System. This too shall be submitted for any given month by the end of the following month.
- (C)** Design-Build Teams reporting transportation services provided by non-DBE lessees shall evaluate the value of services provided during the month of the reporting period only.

Prior to payment of the final estimate, the Design-Build Team shall furnish an accounting of total payment to each DBE. A responsible fiscal officer of the payee contractor, subcontractor, or second tier subcontractor who can attest to the date and amounts of the payments shall certify that the accounting is correct.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to DBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Design-Build Team to submit the required information in the time frame specified may result in the disqualification of that Design-Build Team and any of its affiliated companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from working on any DOT project until the required information is submitted.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Article 102-16(J) of the *Standard Specifications* may be cause to disqualify the Design-Build Team.

CERTIFICATION FOR FEDERAL-AID CONTRACTS

(3-21-90)

DB1 G85

The Proposer certifies, by signing and submitting a Design-Build Proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by *Section 1352, Title 31, U.S. Code*. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Proposer also agrees by submitting a Design-Build Proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such sub-recipients shall certify and disclose accordingly.

REQUIRED CONTRACT PROVISIONS FOR ARRA:

(3-17-09) (Rev 3-31-09)

DB1 G86

Reporting Requirements

The Contractor is hereby notified that this project will be financed with *American Recovery and Reinvestment Act of 2009 (ARRA)* Funds. The Contractor shall assure that all subcontracts, and other contracts for services for an ARRA funded project shall also have these provisions in their contracts. As such the Department may require that the Contractor provide reports and other employment information as evidence to document the number of jobs created and/or sustained by this project for the Contractor's own workforce and any sub-contractors. No direct payment will be made for providing said reports as the cost for same shall be included in the various items in the contract.

Posting with the Local Employment Security Commission

In addition to any other job postings the Contractor normally utilizes, the Contractor shall post with the local Employment Security Commission Office, all positions for which he intends to hire workers as a result of being awarded this contract.

Required Contract Provision to Implement ARRA Section 902

Section 902 of the American Recovery and Reinvestment Act (ARRA) of 2009 requires that each contract awarded using ARRA funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to:

- (1) Examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
- (2) Interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

Accordingly, the Comptroller General and his representatives shall have the authority and rights as provided under Section 902 of the ARRA with respect to this contract, which is funded with funds made available under the ARRA. Section 902 further states that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

Authority of the Inspector General

Section 1515(a) of the ARRA provides authority for any representatives of the Inspector General to examine any records or interview any employee or officers working on this contract. The contractor is advised that representatives of the inspector general have the authority to examine any record and interview any employee or officer of the contractor, its subcontractors or other firms working on this contract. Section 1515(b) further provides that nothing in this section shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

U.S. DEPARTMENT OF TRANSPORTATION HOTLINE

(11-22-94)

DB1 G100

To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free *hotline* Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the *hotline* to report such activities.

The *hotline* is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse. It is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

SUBSURFACE INFORMATION

(3-22-07)

DB1 G119

Available subsurface information will be provided on this project. The Design-Build Team shall be responsible for additional investigations and for verifying the accuracy of the subsurface information supplied by the Department.

BID DOCUMENTATION

(7/18/06)

DB1 G142

General

The successful Design-Build Team shall submit the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation used to prepare the Price Proposal for this contract to the Department. Such documentation shall be placed in escrow with a banking institution or other bonded document storage facility selected by the Department and preserved by that institution or facility as specified in the following sections of this provision.

Bid Documentation

The terms "bid documentation" as used in this provision means all written information, working papers, computer printouts and electronic media, charts, and all other data compilations which contain or reflect information, data, and calculations used by the Proposer in the preparation of their Price Proposal. The term "bid documentation" includes, but is not limited to, Design-Build Team equipment rates, Design-Build Team overhead rates, labor rates, efficiency or productivity factors, arithmetical calculations, and quotations from subcontractors and material suppliers to the extent that such rates and quotations were used by the Proposer in formulating and determining the Price Proposal. The term "bid documentation" also includes any manuals, which are standard to the industry used by the Proposer in determining the Price Proposal. Such manuals may be included in the bid documentation by reference. Such reference shall include the name and date of the publication and the publisher. The term does not include bid documents provided by the Department for use by the Proposer in bidding on this project.

Submittal of Bid Documentation

A representative of the Proposer shall deliver the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation to the Department, in a container suitable for sealing, within ten (10) days after the notice of award is received by the Proposer. Bid documentation will be considered a certified copy if the Proposer includes a letter to the Department from a chief officer of the company stating that the enclosed documentation is an EXACT copy of the original documentation. The letter must be signed by a chief officer of the company, have the person's name and title typed below the signature, and the signature shall be notarized at the bottom of the letter. The Department will not execute the contract until the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation has been received by the Department. The container shall be clearly marked "Bid Documentation" and shall also show on the face of the container the Proposer's name, Proposer's address, the date of submittal, the Project Number, and the County.

Affidavit

In addition to the bid documentation, an affidavit signed under oath by an individual authorized by the Proposer to execute the bid shall be included. The affidavit shall list each bid document with sufficient specificity so a comparison may be made between the list and the bid documentation to ensure that all of the bid documentation listed in the affidavit has been enclosed. The affidavit shall attest that the affiant has personally examined the bid documentation, that the affidavit lists all of the documents used by the Proposer to determine the Price Proposal for this project, and that all such bid documentation has been included.

Verification

Upon delivery of the bid documentation, the Department's Contract Officer and the Proposer's representative will verify the accuracy and completeness of the bid documentation compared to the affidavit. Should a discrepancy exist, the Proposer's representative shall immediately furnish the Department's Contract Officer with any other needed bid documentation. The Department's Contract Officer upon determining that the bid documentation is complete will, in the presence of the Proposer's representative, immediately place the complete bid documentation and affidavit in the container and seal it. Both parties will deliver the sealed container to a banking institution or other bonded document storage facility selected by the Department for placement in a safety deposit box, vault, or other secure accommodation.

Duration and Use

The bid documentation and affidavit shall remain in escrow until 60 calendar days from the time the Design-Build Team receives the final estimate; or until such time as the Design-Build Team gives written notice of intent to file a claim, files a written claim, files a written and verified claim, or initiates litigation against the Department related to the contract; or until authorized in writing by the Design-Build Team. Upon the giving of written notice of intent to file a claim, filing a written claim, filing a written and verified claim, or the initiation of litigation by the Design-Build Team against the Department, or receipt of a letter from the Design-Build Team authorizing release, the Department may obtain the release and custody of the bid documentation. If the bid documentation remains in escrow 60 calendar days after the time the Design-Build Team receives the final estimate and the Design-Build Team has not filed a written claim, filed a written and verified claim, or has not initiated litigation against the Department related to the contract, the Department shall instruct the banking institution or other bonded document storage facility to release the sealed container to the Design-Build Team.

The Proposer certifies and agrees that the sealed container placed in escrow contains all of the bid documentation used to determine the Price Proposal and that no other bid documentation shall be relevant or material in litigation over claims brought by the Design-Build Team arising out of this contract.

Failure to Provide Bid Documentation

The Proposer's failure to provide the original, unaltered bid documentation or a certified copy of the original, unaltered bid documentation within 10 days after the notice of award is received by the Proposer may be just cause for rescinding the award of the contract and may result in the removal of the Proposer from the Department's appropriate prequalified list for a period up to 180 days. Award may then be made to the Proposer with the next lowest adjusted price or the work may be readvertised and constructed under the contract or otherwise, as the Board of Transportation may decide.

Escrow Agreement

The Proposer will be required to sign an Escrow Agreement within 10 days after the Proposer receives the notice of award. A copy of this Escrow Agreement document will be mailed to the Proposer with the notice of award for informational purposes. The Proposer and Department will sign the Escrow Agreement at the time that the bid documentation is delivered to a Banking Institution or other facility as outlined above. The Proposer's failure to sign the Escrow Agreement at the time the bid documentation is delivered may be just cause for rescinding the award of the contract and may result in the removal of the Proposer from the Department's appropriate prequalified list for a period up to 180 days. Award may then be made to the Proposer with the next lowest adjusted price or the work may be readvertised and constructed under the contract or otherwise, as the Board of Transportation may decide.

Confidentiality of Bid Documentation

The bid documentation and affidavit in escrow are, and will remain, the property of the Proposer. The Department has no interest in, or right to, the bid documentation and affidavit other than to verify the contents and legibility of the bid documentation unless the Design-Build Team gives written notice of intent to file a claim, files a written claim, files a written and verified claim, or initiates litigation against the Department. In the event of such written notice of intent to file a claim, filing of a written claim, filing a written and verified claim, or initiation of litigation against the Department, or receipt of a letter from the Design-Build Team authorizing release, the bid documentation and affidavit may become the property of the Department for use in considering any claim or in litigation as the Department may deem appropriate.

Any portion or portions of the bid documentation designated by the Proposer as a "trade secret" at the time the bid documentation is delivered to the Department's Contract Officer shall be protected from disclosure as provided by G.S. 132-1.2.

Cost and Escrow Instructions

The cost of the escrow will be borne by the Department. The Department will provide escrow instructions to the banking institution or other bonded document storage facility consistent with this provision.

Payment

There will be no separate payment for all costs of compilation of the data, container, or verification of the bid documentation. Payment at the lump sum price for the Design-Build project will be full compensation for all such costs.

TWELVE MONTH GUARANTEE

(7-15-03)

DB1 G145

- (A) The Design-Build Team shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Design-Build Team will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.
- (B) Where items of equipment or material carry a manufacturer's guarantee for any period in excess of twelve months, then the manufacturer's guarantee shall apply for that particular piece of equipment or material. The Department's first remedy shall be through the manufacturer although the Design-Build Team shall be responsible for invoking the warranted repair work with the manufacturer. The Design-Build Team's responsibility shall be limited to the term of the manufacturer's guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Design-Build Team would be wholly responsible for under the terms of the contract. Examples would include pavement structures and bridge components. This provision will not be used as a mechanism to force the Design-Build Team to return to the project to make repairs or perform additional work that the Department would normally compensate the Design-Build Team for. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project. In addition, failure on the part of the responsible entity(ies) of the Design-Build Team to perform guarantee work within the terms of this provision shall be just cause to remove the responsible entity(ies) from the Department's corresponding prequalified list. The Design-Build Team will be removed for a minimum of 6 months and will be reinstated only after all work has been corrected and the Design-Build Team requests reinstatement in writing.

To ensure uniform application statewide the Division Engineer will forward details regarding the circumstances surrounding any proposed guarantee repairs to the Chief Engineer for review and approval prior to the work being performed.

OUTSOURCING OUTSIDE THE USA

(5-16-06)

DB1 G150

All work on consultant contracts, services contracts, and construction contracts shall be performed in the United States of America. No work shall be outsourced outside of the United States of America.

Outsourcing for the purpose of this provision is defined as the practice of subcontracting labor, work, services, staffing, or personnel to entities located outside of the United States.

The North Carolina Secretary of Transportation shall approve exceptions to this provision in writing.

SHPO DOCUMENTATION FOR BORROW/WASTE SITES

(12-18-07)

DB8 R02

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Division 2 Earthwork

Page 2-16, Subarticle 230-1(D), add the words: *The Contractor specifically waives* as the first words of the sentence.

Page 2-17, Subarticle 230-4(B) Contractor Furnished Sources, first paragraph, first sentence replace with the following:

Prior to the approval of any borrow sources developed for use on any project, obtain certification from the State Historic Preservation Officer of the State Department of Cultural Resources certifying that the removal of the borrow material from the borrow sources(s) will have no effect on any known district, site building, structure, or object, architectural and / or archaeological that is included or eligible for inclusion in the National Register of Historic Places.

Division 8 Incidentals

Page 8-9, Article 802-2 General Requirements, add the following as the 1st paragraph:

Prior to the removal of any waste from any project, obtain certification from the State Historic Preservation Officer of the State Department of Cultural Resources certifying that the deposition of the waste material to the proposed waste area will have no effect on any known district, site building, structure, or object, architectural and / or archaeological that is included or eligible for inclusion in the National Register of Historic Places. Furnish a copy of this certification to the Engineer prior to performing any work in the proposed waste site.

Page 8-10, Article 802-2, General Requirements, 4th paragraph, add the following as the 2nd sentence:

The Department's borrow and waste site reclamation procedures for contracted projects is available on the NCDOT website and shall be used for all borrow and waste sites on this project.

EROSION & SEDIMENT CONTROL/STORMWATER CERTIFICATION

1-15-08

DB1 G180

General

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollutant Discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the *Erosion and Sediment Control / Stormwater Pollution Prevention Plan* is implemented and maintained over the life of the contract.

- (A) *Certified Supervisor* – Provide a certified Erosion and Sediment Control / Stormwater (E&SC/SW) Supervisor to manage the Design-Build Team and subcontractor(s) operations, ensure compliance with Federal, State and Local ordinances and regulations, and to manage the Quality Control Program.
- (B) *Certified Foreman* – Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.
- (C) *Certified Installer* – Provide a certified installer to install or direct the installation for erosion and sediment control / stormwater practices.
- (D) *Certified Designer* – Provide a certified designer for the design of the erosion and sediment control / stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control / stormwater plan.

In the case of difference of opinion or interpretation of plan or contract requirements between the Design-Build Team and the Engineer, the Engineer's determination and decision will be final.

Roles and Responsibilities

- (A) *Certified Supervisor* - The Certified Supervisor shall be responsible for ensuring erosion and sediment control / stormwater is adequately implemented and maintained on the project and conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours from initial exposure of an erodible surface to the project's final acceptance when questions or concerns arise with erosion and sedimentation control / stormwater issues. Perform the following duties:

- (1)
 - (a) Manage Operations - Coordinate and schedule the work of subcontractors so that erosion and sediment control / stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.
 - (b) Oversee the work of subcontractors so that appropriate erosion and sediment control / stormwater preventive measures are conformed to at each stage of the work.
 - (c) Prepare the required weekly erosion control punchlist and submit to the Engineer.
 - (d) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
 - (e) Implement the erosion and sediment control / stormwater site plans requested.
 - (f) Provide for erosion and sediment control / stormwater methods for the Design-Build Team's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
 - (g) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Design-Build Team in jurisdictional areas.
 - (h) Conduct all erosion and sediment control / stormwater work in a timely and workmanlike manner.
 - (i) Fully install erosion and sediment control / stormwater work prior to suspension of the work.
 - (j) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control / stormwater issues due to the Design-Build Team's operations.
 - (k) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces and / or any location where sediment leaves the Right-of-Way.
 - (l) Have available a set of erosion control plans that has been properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.

- (2) Requirements set forth under the NPDES Permit – The Department's NPDES permit outlines certain objectives and management measures pertaining to construction activities. The permit references *NCG010000, General Permit to Discharge Stormwater* under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program. Some of the requirements are, but are not limited to:
 - (a) Control project site waste to prevent contamination of surface or ground waters of the state (i.e. construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste).

- (b) Inspect erosion and sediment control / stormwater devices at least once every 7 calendar days, twice weekly for 303(d) impaired streams, and within 24 hours after a significant rainfall event of 0.5 inches within 24 hours.
 - (c) Maintain an onsite rain gauge and a record of rainfall amounts and dates.
 - (d) Maintain erosion and sediment control / stormwater inspection records for review by Department and Regulatory personnel upon request.
 - (e) Implement approved reclamation plans on all borrow pits and waste sites.
 - (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
 - (g) Provide secondary containment for bulk storage of liquid materials.
 - (h) Provide training for employees concerning general erosion and sediment control / stormwater awareness, the NPDES Permit requirements, and the requirements of the *General Permit, NCG010000*.
 - (i) Report violations of the NPDES permit to the Engineer who will notify the DWQ Regional Office within 24 hours.
- (3) Quality Control Program - Maintain a quality control program to control erosion, prevent sedimentation and follow provisions of permits. The quality control program shall:
- (a) Follow permit requirements related to the Design-Build Team and subcontractors' construction activities.
 - (b) Ensure that all operators and / or subcontractor(s) on site have the proper erosion and sediment control / stormwater certification.
 - (c) Notify the Engineer when the required certified erosion and sediment control / stormwater personnel are not available on the job site when needed.
 - (d) Conduct the inspections required by the NPDES permit.
 - (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
 - (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch / seed or vegetative cover on a section-by-section basis.
 - (g) Maintain temporary erosion and sediment control devices.
 - (h) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
 - (i) The Design-Build Team's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.
- (B) *Certified Foreman* - At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
- (1) Foreman in charge of grading activities

- (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
- (3) Foreman in charge of utility activities

The Design-Build Team may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Design-Build Team may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

- (C) *Certified Installers* - Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control / stormwater crew:

- (1) Seeding and Mulching
- (2) Temporary Seeding
- (3) Temporary Mulching
- (4) Sodding
- (5) Silt fence or other perimeter erosion / sediment control device installations
- (6) Erosion control blanket installation
- (7) Hydraulic tackifier installation
- (8) Turbidity curtain installation
- (9) Rock ditch check / sediment dam installation
- (10) Ditch liner / matting installation
- (11) Inlet protection
- (12) Riprap placement
- (13) Stormwater BMP installations (such as but not limited to level spreaders, retention / detention devices)
- (14) Pipe installations within jurisdictional areas

If a *Certified Installer* is not onsite, the Design-Build Team may substitute a Level I Installer with a Level II Foreman, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

- (D) *Certified Designer* – Include the certification number of the Level III-B Certified Designer on the erosion and sediment control / stormwater component of all reclamation plans and if applicable, the certification number of the Level III-A Certified Designer on the design of the project erosion and sediment control / stormwater plan.

Preconstruction Meeting

Furnish the names of the *Certified Supervisor, Certified Foremen, Certified Installers and Certified Designers* and notify the Engineer in writing of changes in certified personnel over the life of the contract within 2 days of change.

Ethical Responsibility

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

Revocation or Suspension of Certification

Upon recommendation of the Chief Engineer - Operations to the certification entity, certification for Supervisor, Certified Foreman, Certified Installer and Certified Designer may be revoked or suspended with the issuance of a Continuing Immediate Corrective Action (Continuing ICA), Notice of Violation (NOV), or Cease and Desist Order for erosion and sediment control / stormwater related issues.

Should any of the following circumstances occur, the Chief Engineer may suspend or permanently revoke such certification.

- (A) Failure to adequately perform the duties as defined within the certification program
- (B) Issuance of a Continuing ICA, NOV, or Cease and Desist Order
- (C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications
- (D) Demonstration of erroneous documentation or reporting techniques
- (E) Cheating or copying another candidate's work on an examination
- (F) Intentional falsification of records
- (G) Directing a subordinate under direct or indirect supervision to perform any of the above actions
- (H) Dismissal from a company for any of the above reasons
- (I) Suspension or revocation of one's certification within another state

Suspension or revocation of a certification will be sent by certified mail to the registrant and the Corporate Head of the company that employs the registrant.

A registrant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

Chief Engineer - Operations
1537 Mail Service Center
Raleigh, NC 27699-1537

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The registrant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. The decision of the Chief Engineer will be final and will be made in writing to the registrant.

If a certification is temporarily suspended, the registrant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

Measurement and Payment

Certified Supervisor, Certified Foremen, Certified Installers and Certified Designer will be incidental to the project for which no direct compensation will be made.

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE

(2-20-07)

DB1 G181

Water discharge from borrow pit sites shall not cause surface waters to exceed 50 NTUs (nephelometric turbidity unit) in streams not designated as trout waters and 10 NTUs in streams, lakes or reservoirs designated as trout waters. For lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTUs. If the turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.

If during any operating day, the downstream water quality exceeds the standard, the Design-Build Team shall do all of the following:

- (A) Either cease discharge or modify the discharge volume or turbidity levels to bring the downstream turbidity levels into compliance, or
- (B) Evaluate the upstream conditions to determine if the exceedance of the standard is due to natural background conditions. If the background turbidity measurements exceed the standard, operation of the pit and discharge can continue as long as the stream turbidity levels are not increased due to the discharge.
- (C) Measure and record the turbidity test results (time, date and sampler) at all defined sampling locations 30 minutes after startup and at a minimum, one additional sampling of all sampling locations during that 24-hour period in which the borrow pit is discharging.
- (D) Notify DWQ within 24 hours of any stream turbidity standard exceedances that are not brought into compliance.

During the Environmental Assessment required by Article 230-4 of the *Standard Specifications*, the Design-Build Team shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

The discharge shall be closely monitored when water from the dewatering activities is introduced into jurisdictional wetlands. Any time visible sedimentation (deposition of sediment) on the wetland surface is observed, the dewatering activity shall be suspended until turbidity levels in the stilling basin can be reduced to a level where sediment deposition does not occur. Staining of wetland surfaces from suspended clay particles, occurring after evaporation or infiltration, does not constitute sedimentation. No activities shall occur in wetlands that adversely affect the functioning of a wetland. Visible sedimentation shall be considered an indication of possible adverse impacts on wetland use.

The Engineer shall perform independent turbidity tests on a random basis. These results shall be maintained in a log within the project records. Records will include, at a minimum, turbidity test results, time, date and name of sampler. Should the Department's test results exceed those of the Design-Build Team's test results, an immediate test shall be performed jointly with the results superseding the previous test results of both the Department and the Design-Build Team.

The Design-Build Team shall use the *NCDOT Turbidity Reduction Options for Borrow Pits Matrix*, available at <http://www.ncdot.org/doh/preconstruct/ps/contracts/letting.html> to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Design-Build Team exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Design-Build Team may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the Price Proposal for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.

CULVERT PIPE

(1-19-10)

DB10R32

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 10-67, Article 1032-1, replace (A), (B), (C), (E) and (F) with the following:

- (A) Coated corrugated metal culvert pipe and pipe arches.
- (B) Coated corrugated metal end sections, coupling band and other accessories
- (C) Corrugated aluminum alloy structural plate pipe and pipe arches
- (D) Corrugated aluminum alloy end sections, coupling band and other accessories
- (E) Welded steel pipe

Page 10-69, Subarticle 1032-3(A)(5) Coating Repair, replace with the following:

Repair shall be in accordance with Section 1076-6 of the 2006 *Standard Specifications for Roads and Structures*.

Subarticle 1032-3(A)(7) Aluminized Pipe, replace with the following:

Aluminized pipe shall meet all requirements herein, except that the pipe and coupling bands shall be fabricated from aluminum coated steel sheet meeting the requirements of AASHTO M274.

Page 10-71, Article 1032-4 Coated Culvert Pipe, replace (A), (1), (2), (3), (4), (B), (C), (D), (E), (F) and (G) with the following:

(A) Coatings for Steel Culvert Pipe or Pipe Arch

The below coating requirements apply for steel culvert pipe, pipe arch, end sections, tees, elbows and eccentric reducers.

- (1) Steel Culvert Pipe shall have an aluminized coating, meeting the requirement of AASHTO M274.
- (2) When shown on the plans developed by the Design-Build Team, and as approved by the Engineer, a polymeric coating meeting the requirements of AASHTO M246 for Type B coating may be substituted for aluminized coating.

(B) Acceptance

Acceptance of coated steel culvert pipe, and its accessories, shall be based on, but not limited to, visual inspections, classification requirements, check samples taken from material delivered to the project, and conformance to the annual Brand Registration.

Page 10-73, Article 1032-5, sixth paragraph, third sentence, remove the word "spelter"

Page 10-74, 1032-7 Vitrified Clay Culvert Pipe, delete section in its entirety.

Page 10-75, Article 1032-8 Welded Steel Pipe, change title to WELDED STEEL PIPE FOR DRAINAGE

Subarticle 1032-9(B) Plain Concrete Culvert Pipe, delete section in its entirety.

Page 10-77, Article 1032-10 Corrugated Polyethylene Culvert Pipe, change title to CORRUGATED POLYETHYLENE (HDPE) CULVERT PIPE

Add the following: Article 1032-11 Polyvinyl Chloride (PVC) Pipe

Polyvinyl Chloride pipe shall conform to AASHT M 304 or ASTM 949. When rubber gaskets are to be installed in the pipe joint, the gasket shall be the sole element relied on to maintain a tight joint. Test pipe joints at the plant hydrostatically using test methods in ASTM D 3212. Soil tight joints shall be watertight to 13.8 kPA. Watertight joints shall be watertight to 34.5 kPA unless a higher pressure rating is specified in the plans developed by the Design-Build Team.

DRAINAGE PIPE

(1-19-10)

DB3 R36

Description

Where shown in the plans developed by the Design-Build Team, the Contractor shall use Reinforced Concrete Pipe, Corrugated Aluminum Alloy Pipe, Aluminized Corrugated Steel Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe) in accordance with the following requirements:

Material

Item	Section
Corrugated Aluminum Alloy Pipe	1032-2(A)
Aluminized Corrugated Steel Pipe	1032-3(A)(7)
Corrugated Polyethylene Pipe (HDPE)	1032-10
Reinforced Concrete Pipe – Class II or III	1032-9(C)
Polyvinyl-Chloride (PVC)	1032-11

Corrugated Steel Pipe shall not be permitted in counties listed in the Pipe Installation and Pipe Culverts Special Provision. In other counties, Corrugated Steel Pipe requires an acceptable coating in accordance with Section 1032-4 of the 2006 *Standard Specifications for Roads and Structures*.

Only pipe with smooth inside walls shall be allowed for storm drain systems. Storm drain systems are defined as pipe under curb and gutter, expressway gutter, and shoulder berm gutter that connects drainage structures and is not open ended.

The appropriate Reinforced Concrete Pipe class and the appropriate gage thickness for Corrugated Aluminum Alloy Pipe and Aluminized Corrugated Steel Pipe shall be selected based on fill height.

Site specific conditions may limit a particular material beyond what is identified in this Special Provision. These conditions include, but are not limited to, abrasion, environmental, soil resistivity and pH, high ground water and special loading conditions. The Design-Build Team shall determine if additional restrictions are necessary.

Allowable side drain pipe material is outlined in Article 310-4 of the Pipe Installation and Pipe Culverts Special Provision.

Slope drains shall be Corrugated Aluminum Alloy Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe).

Transverse median drains and open-ended cross drains shall be Reinforced Concrete Pipe, Corrugated Aluminum Alloy Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe).

Storm drain system pipes shall be Reinforced Concrete Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe).

Construction Methods

Pipe Culverts shall be installed in accordance with the plans developed by the Design-Build Team, this RFP and the 2006 *Standard Specifications for Roads and Structures*.

Where allowed by the plans developed by the Design-Build Team, use any of the several alternate pipes shown herein, but only one type of pipe shall be permitted between drainage structures or for the entire length of a cross line pipe.

PIPE INSTALLATION AND PIPE CULVERTS

(1-19-10)

DB3R40

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Replace Section 300 and Section 310 with the following:

SECTION 300 PIPE INSTALLATION

300-1 DESCRIPTION

Excavate, undercut, provide material, condition foundation, lay pipe, joint and couple pipe sections, and furnish and place all backfill material as necessary to install the various types of pipe culverts and fittings required to complete the project.

Do not waste excavation unless permitted. Use suitable excavated material as backfill; or in the formation of embankments, subgrades, and shoulders; or as otherwise directed. Furnish disposal areas for the unsuitable material. The Engineer will identify excavated materials that are unsuitable.

Where traffic is to be maintained, install pipe in sections so that half the width of the roadway is available to traffic.

300-2 MATERIALS

Refer to Division 10:

Item	Section
Flowable Fill	1000
Select Materials	1016
Joint Materials	1032-9(G)
Engineering Fabric	1056-1

Provide foundation conditioning material meeting the requirements of Article 1016-3 for Class V or VI as shown on the plans developed by the Design-Build Team.

Provide bedding material meeting the requirements of Article 1016-3 for Class II (Type 1 only) or Class III as shown on the plans developed by the Design-Build Team.

Provide backfill material meeting the requirements of Article 1016-3 for Class II (Type 1 only) or Class III material as shown on the plans developed by the Design-Build Team.

Do not use corrugated steel pipe in the following counties:

Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chowan, Columbus, Craven, Currituck, Dare, Gates, Hertford, Hyde, Jones, Martin, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrrell and Washington.

300-3 UNLOADING AND HANDLING

Unload and handle pipe with reasonable care. Do not roll or drag metal pipe or plates over gravel or rock during handling. Take necessary precautions to ensure the method used in lifting or placing the pipe does not induce stress fatigue in the pipe. Use a lifting device that uniformly distributes the weight of the pipe along its axis or circumference. Repair minor damage to pipe when permitted. Remove pipe from the project that is severely damaged or is rejected as being unfit for use. Undamaged portions of a joint or section may be used where partial lengths are required.

300-4 PREPARATION OF PIPE FOUNDATION

Prepare the pipe foundation in accordance with the applicable method as shown on the plans developed by the Design-Build Team, true to line and grade, and uniformly firm.

Camber invert grade an amount sufficient to prevent the development of sag or back slope in the flow line. The Contractor shall determine the amount of camber required and submit to the Engineer for approval.

Where material is found to be of poor supporting value or of rock and when the Engineer cannot make adjustment in the location of the pipe, undercut existing foundation material within the limits established on the plans developed by the Design-Build Team. Backfill the undercut with foundation conditioning material, Class V or VI select material. Encapsulate the foundation conditioning material with Type 4 engineering fabric prior to placing bedding material. Overlap all transverse and longitudinal joints in the fabric at least 18 inches.

Maintain the pipe foundation in a dry condition.

300-5 INVERT ELEVATIONS

No adjustment in contract time or compensation shall be granted for pipe field adjustments.

300 -6 LAYING PIPE

The Department reserves the right to perform forensic testing on any installed pipe.

(A) Rigid Pipe

Concrete and welded steel pipe shall be considered rigid pipe. Lay pipe on prepared foundation, bell or groove end upgrade with the spigot or tongue fully inserted. Check each joint for alignment and grade as the work proceeds.

Use flexible plastic joint material except when material of another type is specified on the plans developed by the Design-Build Team. Joint material of another type may be used when permitted.

Repair lift holes in concrete pipe, if present. Thoroughly clean and soak the lift hole and completely fill the void with an approved non-shrink gout. Submit alternate details for repairing lift holes to the engineer for review and approval.

For all pipes 42 inches in diameter and larger, wrap filter fabric around all pipe joints. Use Type 2 Class B fabric. Extend fabric at least 12 inches beyond each side of the joint. Secure the filter fabric against the outside of the pipe by methods approved by the Engineer.

(B) Flexible Pipe (Except Structural Plate Pipe)

Corrugated steel, corrugated aluminum, corrugated polyethylene (HDPE), and polyvinylchloride (PVC) pipe shall be considered flexible pipe. Place flexible pipe carefully on the prepared foundation starting at the downstream end with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points.

Handle coated corrugated steel pipe with special care to avoid damage to coatings.

Join pipe sections with coupling band, fully bolted and properly sealed. Provide coupling bands for annular and helical corrugated metal pipe with circumferential and longitudinal strength sufficient to preserve the alignment, prevent separation of the sections, and prevent backfill infiltration. Match-mark all pipe 60 inches or larger in diameter at the plant for proper installation on the project.

At locations indicated on the plans developed by the Design-Build Team, corrugated steel pipe sections shall be jointed together with rod and lug coupling bands, fully bolted. Sleeve gaskets shall be used in conjunction with rod and lug couplings and the joints properly sealed. Coupling bands shall provide circumferential and longitudinal strength sufficient to preserve the alignment, prevent separation of the sections and prevent infiltration of backfill material.

300-7 BEDDING AND BACKFILLING

Loosely place bedding material, in a uniform layer, a depth equal to the inside diameter of the pipe divided by six or six inches, whichever is greater. Leave bedding material directly beneath the pipe uncompacted and allow pipe seating and backfill to accomplish compaction. Excavate recesses to receive the bells where bells and spigot type pipe is used.

Place fill around the pipe in accordance with the applicable method shown on the plans developed by the Design-Build Team in layers not to exceed 6 inches loose unless otherwise permitted. Compact to the density required by Subarticle 235-4(C). Approval of the backfill material is required prior to its use. Use select material as shown on the plans developed by the Design-Build Team.

Take care during backfill and compaction operations to maintain alignment and prevent damage to the joints. Keep backfill free from stones, frozen lumps, chunks of highly plastic clay, or other objectionable material.

Grade and maintain all pipe backfill areas in such a condition that erosion or saturation will not damage the pipe foundation or backfill.

Excavatable flowable fill may be used for backfill when approved by the Engineer. When using excavatable flowable fill, ensure that the pipe is not displaced and does not float during backfill.

Submit methods for supporting the pipe and material placement to the Engineer for review and approval.

Do not operate heavy equipment over any pipe until it has been properly backfilled with a minimum three feet of cover. Place, maintain, and finally remove the required cover that is above the proposed finished grade at no cost to the Department. Remove and replace, at no cost to the Department, pipe that becomes misaligned, shows excessive settlement, or has been otherwise damaged by the Contractor's operations.

300-8 INSPECTION AND MAINTENANCE

Prior to final acceptance, the Engineer will perform random video camera and or mandrel inspections to ensure proper jointing and that deformations do not exceed allowable limits. Replace pipes having cracks greater than 0.1 inches or deflections greater than 7.5 percent. Repair or replace pipes with cracks greater than 0.01 inches, exhibiting displacement across a crack, exhibiting bulges, creases, tears, spalls, or delamination. Maintain all pipe installations in a condition such that they shall function continuously from the time the pipe is installed until the project is accepted.

300-9 MEASUREMENT AND PAYMENT

No separate payment will be made for any costs incurred for compliance with this Special Provision. All material and labor, including but not limited to foundation conditioning material, foundation conditioning fabric, select bedding and backfill material, pavement repair, and removal and disposal of existing pavement shall be included in the lump sum price bid for the entire project.

SECTION 310 PIPE CULVERTS

310-1 DESCRIPTION

Furnish and install drainage pipe at locations and size called for in the plans developed by the Design-Build Team. The work includes construction of joints and connections to other pipes, endwalls and drainage structures.

310-2 MATERIALS

Refer to Division 10:

Item	Section
Plain Concrete Pipe Culvert	1032-9(B)
Reinforced Concrete Pipe Culvert	1032-9(C)
Precast Concrete Pipe End Sections	1032-9(D)
Concrete Pipe Tees and Elbows	1032-9(E)
Corrugated Aluminum Alloy Pipe Culvert	1032-2(A)

Corrugated Aluminum Alloy Pipe Tees and Elbows	1032-2(B)
Corrugated Steel Culvert Pipe and Pipe Arch	1032-3(A)
Prefabricated Corrugated Steel Pipe End Sections	1032-3(B)
Corrugated Steel Pipe Tees and Elbows	1032-3(C)
Corrugated Steel Eccentric Reducers	1032-3(D)
HDPE Smooth Lined Corrugated Plastic Pipe	1032-10B
Polyvinylchloride (PVC) Pipe	1032-11(B)

Suppliers that provide metal pipe culverts, fittings and all other accessories covered by this section shall meet the requirements of the Department's Brand Certification program for metal pipe culverts, and be listed on the Department's pre-approved list for suppliers of metal pipe culvert.

Do not use corrugated steel pipe in the following counties:

Beaufort, Bertie, Bladen, Brunswick, Camden, Carteret, Chowan, Columbus, Craven, Currituck, Dare, Gates, Hertford, Hyde, Jones, Martin, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrell and Washington.

310-3 PIPE INSTALLATION

Install pipe, pipe tees and elbows in accordance with Section 300 above.

310-4 SIDE DRAIN PIPE

Side drain pipe shall be defined as storm drain pipe running parallel to the roadway, to include pipe in medians, outside ditches, driveways, and under shoulder berm gutter along outside shoulders greater than four feet wide.

Where shown in the plans developed by the Design-Build Team, side drain pipe may be class II reinforced concrete pipe, aluminized corrugated steel pipe, corrugated aluminum alloy pipe, HDPE pipe or PVC pipe. Corrugated steel pipe shall be restricted in the counties listed in Article 310-2 above. Install side drain pipe in accordance with Section 300 above. Cover for side drain pipe shall be at least one foot.

310-5 PIPE END SECTIONS

Choose which material to use for the required end sections. Both corrugated steel and concrete pipe end sections will be allowed on concrete pipe, corrugated steel pipe and HDPE smooth lined corrugated plastic pipe.

310-6 MEASUREMENT AND PAYMENT

No separate payment will be made for items covered by this Special Provision. All material and labor, including but not limited to linear feet of pipe, select bedding, backfill material, pipe end

sections, tees, elbows and eccentric reducers, shall be included in the lump sum price bid for the entire project.

PRICE ADJUSTMENTS FOR ASPHALT BINDER

(7-21-09)

DB6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2006 *Standard Specifications for Roads and Structures*.

When it is determined that the monthly selling price of asphalt binder on the first business day of the calendar month during which the last day of the partial payment period occurs varies either upward or downward from the Base Price Index, the partial payment for that period will be adjusted. The partial payment will be adjusted by adding the difference (+ or -) of the base price index subtracted from the monthly selling price multiplied by the total theoretical quantity of asphalt binder authorized for use in the plant mix placed during the partial payment period involved.

The base price index for asphalt binder for plant mix is \$ **PRICE TO BE INCLUDED IN THE FINAL RFP** per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **_____**.

PRICE ADJUSTMENTS - ASPHALT CONCRETE PLANT MIX

(04-03-07)

DB6 R26

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 6-27, Article 609-8 and Page 6-49, Article 610-13

Add the following paragraph before the first paragraph:

The "Asphalt Price" used to calculate any price adjustments set forth in this section shall be \$35 per theoretical ton. This price shall apply for all mix types.

PREFABRICATED PEDESTRIAN BRIDGE

General

This project special provision is for a fully engineered clear span bridge of steel construction and shall be regarded as minimum standards for design and construction. This provision applies only for the pedestrian bridge that crosses the Neuse River.

Qualified Suppliers

The Design-Build Team is required to obtain a pedestrian bridge from a manufacturer that is pre-qualified with the Department at the time of submission of the Technical and Price Proposals and shall identify the manufacture in their Technical Proposal. Below is a list of currently pre-approved manufacturers the Design-Build Team may use:

Continental Bridge 8301 State Highway 29 North Alexandria, MN 56308 800-328-2047	Wheeler Consolidated 9330 James Avenue South Bloomington, MN 55431 800-328-3986
US Bridge 201 Wheeling Avenue P.O. Box 757 Cambridge, OH 43725 888-872-7434	Steadfast Bridges 4021 Gault Avenue South Fort Payne, AL 35967 800-749-7515

Design Features

The bridge shall be of sufficient length and width to span the Neuse River. The bridge shall be designed as a truss system for which the manufacturer has been approved. All members of the vertical trusses shall be fabricated from structural steel shapes or square or rectangular steel tubing. Unless the fastenings are specifically designed to provide adequate lateral support to the top flange of open shape members (w-shapes and channels), a minimum of one stiffener shall be provided in each member at every attachment to another member.

The bridge shall be provided with a continuous pedestrian/ bicycle railing on each side of the bridge. Design the vertical and/ or horizontal members of this railing to meet all geometric and loading requirements for pedestrian and bicycle bridge rails, as outlined in Section 2.7.2 of *AASHTO Standard Specifications for Highway Bridges*.

As a minimum, three rails shall be provided:

- A top rail at the height indicated above.
- A bottom rail mounted at a height adequate to provide a 2" gap between the bottom of the rail and the top of the deck.
- A rail at mid-height between the top and bottom rails.

The bridge shall be provided with continuous handrails on each side of the bridge. Handrails shall be provided with a minimum 1-1/2" knuckle space between the railing and the truss verticals and diagonals, fencing, or other portions of the rail assembly. The rails shall be located 36" above the deck surface. The handrails shall be secure and shall not rotate in their fittings. The mounting of the handrails shall be such that the completed handrail and supports are capable of withstanding standard AASHTO loadings. The handrail shall deflect no more than 1/4" under this loading. The end of the railing shall be capped with a flush end cap.

Handrail attachment brackets shall be of steel, matching the bridge superstructure.

The bridge shall have a vertical camber dimension at midspan equal to 100% of the full dead load deflection.

Unless indicated otherwise in this RFP, pedestrian bridge design shall be in accordance with all requirements of *AASHTO Guide Specifications for Design of Pedestrian Bridges*. More specific requirements are listed below.

Design loads, pedestrian, vehicular, wind, and combinations shall be in accordance with the *AASHTO Guide Specifications for Design of Pedestrian Bridges*. Deflections, vibrations, fatigue, and other design details shall adhere to AASHTO requirements.

The minimum thickness of all structural steel members shall be ¼" nominal and be in accordance with the AISC Manual of Steel Construction's "Standard Mill Practice Guidelines." For ASTM A500 and ASTM A847 tubing, the section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structure Sections "Dimension and Section Properties."

Construction

Structural Members shall be designed in accordance with recognized engineering practices and principles as follows:

Structural Steel Allowable Stresses

American Association of State Highway and Transportation Officials (AASHTO)

Allowable Design Stresses shall be in accordance with the AASHTO "Standard Specifications for Highway Bridges," latest addition.

Welded Connections

American National Standards Institute/ American Welding Society (ANSI/ AWS)

All welded connections shall be checked, when within applicable limits, for the limiting failure modes outlined in the latest ANSI/ AWS D1.1 Structural Welding Code.

When outside the "validity range" defined in these design guidelines, the following limit states or failure modes must be checked:

- Chord face plastification
- Punching shear (through main member face)

- Material failure
 - Tension failure of the web member
 - Local buckling of a compression web member
- Weld failure
 - Allowable stress based on “effective lengths”
 - “Ultimate” capacity
 -
- Local buckling of a main member face
- Main member failure:
 - Web or sidewall yielding
 - Web or sidewall crippling
 - Web or sidewall buckling
 - Overall shear failure

All tubular joints shall be plain unstiffened joints (made without the use of reinforcing plates) except as follows:

- Floor beams hung below the lower chord of the structure may be constructed with or without stiffener (or gusset) plates, as required by design.
- Floor beams that frame directly into the truss verticals (H-section bridges) may be designed with or without end stiffening plates as required by design.
- Where chords, end floor beams, and, in high profiles, the top end struts weld to the end verticals, the end verticals (or connections) may require stiffening to transfer the forces from these members into the end vertical.
- Truss vertical to chord connections.

NOTE: The effects of fabrication tolerances shall be accounted for in the design of the structure. Special attention shall be given to the actual fit-up gap at welded truss joints.

All welded splices shall be in accordance with the *American National Standards Institute/ American Welding Society (ANSI/ AWS)* and *American Institute of Steel Construction (AISC)*.

No welded field splices will be allowed. If shop welded splices are necessary, they shall be indicated on the submitted shop drawings.

All bolted splices shall be in accordance with the *American Institute of Steel Construction (AISC)*.

Bolted field splices shall be located on the bridge to produce a bridge that can be economically shipped and erected. Splices along the length of the bridge (in chords and diagonals) shall be placed at the approximately mid-point of a bay (between two panel points). Splices across the

width of the bridge (in floor beams and wind braces) may be used, when necessary, to keep the overall structure width within reasonable limits for shipping.

Materials and Inspection

Unless noted otherwise, all materials, construction, and inspection shall be in accordance with Section 1072 of the 2006 *NCDOT Standard Specifications for Roads and Structures*.

Within seven (7) days after contract execution, the fabricator shall notify the NCDOT Materials and Test Unit (919-733-7411) to allow for communication between the fabricator and Materials and Tests regarding certification, material sampling and testing, and other items stated in Section 1072 of the 2006 *NCDOT Standard Specifications for Roads and Structures*.

Bridges shall be fabricated from high-strength, low-alloy, atmospheric corrosion resistant ASTM A847 cold-formed, welded square and rectangular tubing and atmospheric corrosion resistant ASTM A588, ASTM A242, and ASTM A606 plate and structural steel shapes ($F_y = 50,000$ psi). The minimum corrosion index of the atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0.

Bolts, nuts, and washers shall be in accordance with Section 1072-7(F) of the 2006 *NCDOT Standard Specifications for Roads and Structures*. Painting shall be in accordance Article 442 of the 2006 *NCDOT Standard Specifications for Roads and Structures*.

If necessary for a cast-in-place concrete deck, the prefabricated pedestrian bridge shall come equipped with galvanized metal stay-in-place forms to accommodate a reinforced concrete deck. The forms shall be designed and fabricated to conform to Section 420-3 of the 2006 *NCDOT Standard Specifications for Roads and Structures*.

Wood decking for the prefabricated pedestrian bridge shall conform to Section 1082 of the 2006 *NCDOT Standard Specifications for Roads and Structures*. Wood decking that is of lesser grade than that specified in the Standard Specifications shall be justified through design calculations and noted on the project plans.

Submittals

Schematic drawings, diagrams and Project Special Provisions (e.g. metallization, erection, etc.) shall be submitted to the NCDOT Structure Design Unit (SDU) for their review after receipt of order. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the work to be done. All relative design information such as member sizes, bridge reactions, and general notes shall be clearly specified on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be signed and sealed by a Professional Engineer who is licensed as outlined in Section 3.0

Structural calculations and special provisions for the bridge superstructure shall be submitted by the bridge manufacturer and reviewed by NCDOT SDU. All calculations and special provisions shall be signed and sealed by a Professional Engineer who is licensed as outlined in Section 3.0.

The calculations shall include all design information necessary to determine the structural adequacy of the bridge. The calculations shall include, but are not limited to, the following:

- All AASHTO allowable stress checks for axial, bending, and shear forces in the critical member of each truss member type (i.e., top chord, bottom chord, floor beam, etc.).
- Checks for the critical connection failure modes for each truss member type (i.e., diagonal, floor beam, etc.). Special attention shall be given to all welded tube-on-tube connections.
- All bolted splice connections.
- Main truss deflection checks.
- U-Frame stiffness checks (used to determine “K” factors for out-of-plane buckling of the top chord) for all half through or “pony” truss bridges.
- Deck design.

The analysis and design of triangulated truss bridges shall account for moments induced in members due to joint fixity where applicable. Moments due to both truss deflection and joint eccentricity must be considered.

Fabrication

When the collection of water inside a structural tube is a possibility, either during construction or during service, the tube shall be provided with a drain hole at its lowest point.

Special attention shall be given to developing sufficient weld throats on tubular members. Fillet weld details shall be in accordance with AWS D1.1, Section 3.9 (See AWS Figure 3.2). Unless determined otherwise by testing, the loss factor “Z” for heel welds shall be in accordance with AWS Table 2.8. Fillet welds that run onto the radius of a tube shall be built up to obtain the full throat thickness. The maximum root openings of fillet welds shall not exceed 3/16” in conformance with AWS D1.1, Section 5.22. Weld size or effective throat dimensions shall be increased in accordance with this same section when applicable (i.e., fit-up gaps > 1/16”).

The fabricator shall have verified that the thickness of partial joint penetration groove welds (primarily matched edge welds or the flare-bevel-groove welds on underhung floor beams) shall be obtainable with their fit-up and weld procedures. Matched edge welds shall be “flushed” out when required, to obtain the full throat or branch member wall thickness.

For full penetration butt welds of tubular members, the backing material shall be fabricated prior to installation in the tube, so as to be continuous around the full tube perimeter, including corners. Backing may be of four types:

- A “box” welded up from four (4) plates.
- Two “channel” sections, bent to fit the inside radius of the tube, welded together with full penetration welds.
- A smaller tube section that slides inside the spliced tube.
- A solid plate cut to fit the inside radius of the tube.

Corners of the “box” backing, made from four plates, shall be welded and ground to match the inside corner radii of the chords. The solid plate option shall require a weep hole either in the chord wall above the “high side” of the plate or in the plate itself. In all types of backing, the minimum fit-up tolerances for the backing must be maintained at the corners of the tubes, as well as across the “flats.”

All welds shall be visually inspected. A minimum ten percent (10%) of all fillet welds shall be tested by Magnetic Particle Testing (MT). All (100%) full penetration welds shall be subject to Radiographic Testing (RT). Welding inspection and testing shall be subject to the requirements of AWS D1.1 or AWS 1.5, whichever is applicable and more stringent. Also, please refer to Section 1072 of the 2006 *NCDOT Standard Specifications for Roads and Structures*.

Bridge shall be fabricated by a fabricator that is currently certified by the American Institute of Steel Construction to have the personnel, organization, experience, capability, and commitment to produce fabricated structural steel for the category “Simple Steel Bridges,” as set forth in then AISC Certification Program. Quality control shall be in accordance with procedures outlined for AISC certification.

Delivery and Erection

Delivery is made to a location nearest the site that is easily accessible to normal over-the-road tractor-trailer equipment. All trucks delivering bridge materials shall be unloaded at the time of arrival.

The manufacturer shall provide detailed, written instruction in the proper lifting procedures and splicing procedures (if required). The method and sequence of erection shall be the responsibility of the Design-Build Team, unless specifically directed by the manufacturer in such matters.

The bridge manufacturer shall provide written inspection and maintenance procedures to be followed by the bridge owner.

Foundations

Unless specified otherwise, the bridge manufacturer shall determine the number, location and layout, diameter, minimum grade, finish, and embedment of all anchor bolts. The anchor bolts shall be designed to resist all horizontal and uplift forces to be transferred by the superstructure to the supporting foundations. Engineering design of the bridge supporting foundations (abutment, pier, bracket, and/or footings) shall be the responsibility of the Design-Build Team’s foundation engineer. The Design-Build Team shall provide all material (including anchor bolts) for the construction of the bridge supporting foundations. The Design-Build Team shall install anchor bolts in accordance with the bridge manufacturer’s anchor bolt plans and requirements.

Information as to bridge support reactions and anchor bolt locations and requirements shall be furnished by the bridge manufacturer after receipt of order and after the bridge design is complete.

Warranty

The bridge manufacture shall warrant their steel structure(s) to be free of design, material, and workmanship defects for a period of ten (10) years from the date of delivery. This guarantee is not a condition of the Contract Performance Bond.

This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading, accident, improper maintenance, alteration, or any other cause not the result of defective materials or workmanship.

This warranty shall be void unless owner's maintenance records can be supplied. Such records shall indicate compliance with minimum guidelines specified in the inspection and maintenance procedures.

Repair or replacement shall be the exclusive remedy for defects under this warranty. The bridge manufacturer shall not be liable for any consequential or incidental damages for breach of any express or implied warranty on their structures.

TIMBER STRUCTURES

General

These specifications are for fully engineered prefabricated wood bridges or boardwalks of timber construction and shall be regarded as minimum standards for design and construction. Prefabricated wood bridges are typically used for spans greater than 16 feet in length and boardwalks are typically used for spans less than 16 feet in length.

Unless otherwise noted herein, prefabricated wood bridge suppliers shall be pre-approved by NCDOT at the time of the submission of the Technical and Price Proposal. Current pre-approved wood bridge suppliers are:

Enwood Structures
P.O. Box 2002
5724 McCrimmon Parkway
Morrisville, North Carolina 27560
(919) 467-6155

Suppliers other than those listed above may be used, provided the engineer approves the supplier. The Design-Build Team shall allow 30 days for approval of the proposed bridge supplier. Within 21 days after the execution of the contract by the Department, the Design-Build Team must provide to the Engineer the following documentation for any proposed supplier who is not pre-approved:

- All documentation to ensure the proposed substitution will be in compliance with these specifications. This shall include:
 - Representative design calculations

- Representative drawings
- Splicing and erection procedures
- Warranty information
- Documentation that the proposed supplier has at least 5 years experience designing and fabricating this type structure and a minimum of 5 successful bridge projects, of similar construction, each of which has been in service at least 3 years.

Multiple-span boardwalks may be constructed by any sufficiently experienced and qualified contractor.

Design

The boardwalk shall be designed in accordance with the latest AASHTO Guide Specifications for Design of Pedestrian Bridges.

Unless stated otherwise, lumber, timber, posts, and piles shall meet all requirements of NCDOT Standard Specification Section 1082.

All steel and hardware required for completed assembly, including anchor bolts and/or leveling pads shall be hot-dipped galvanized in accordance with NCDOT Standard Specifications.

Approach rails to the bridge shall be provided. See Figure 7-14 of NCDOT Bicycle Facilities Planning and Design Guidelines for recommended layout.

Prefabricated wood bridges shall be designed as prefabricated laminated wood bridges and shall consist of two main girders per span, with interior stringers resting on diaphragms. Each girder shall have a ledger attached to help support the floor deck. There shall be tie-rods in between diaphragms for stability. The bridge shall be manufactured in accordance with the latest American National Standard for Structural Glued Laminated Timber -ANSI AITC A 190.1. The bridge deck shall be treated Southern Pine Lumber, #1 Grade per SPIB and pressure treated in accordance with AWWA Standard C2 for the above ground use. The bridge manufacturer, based upon structural and/or shipping requirements, shall determine the distance from the top of the deck to the top and bottom of girder members. The bridge shall have a vertical camber dimension at midspan equal to 100% of the dead load deflection.

Boardwalks shall be designed as wood boardwalks of sawn lumber, glued laminated timber, and/or timber piles and poles. Typical construction should consist of beams between foundation piles or poles, with joists that span between the beams, along the length of the boardwalk. Decking is attached to the joists and beams. Boardwalks are anticipated to be “stick-built” on site, although portions may be prefabricated and set in place on site.

The vertical deflection of the members due to service pedestrian live load shall not exceed 1/500 of the span. The vertical deflection of cantilever spans of the structure due to service pedestrian live load shall not exceed 1/300 of the cantilever arm length. The deflection of the floor system secondary members (stringers, etc.) due to service pedestrian live load shall not exceed 1/360 of their respective spans. The horizontal deflection of the structure due to lateral wind loads shall not exceed 1/500 of the span.

Structural members shall be designed in accordance with recognized engineering practices, principles, and codes as follows:

Allowable Design Stresses shall be in accordance with the "Standard Specifications for Highway Bridges" latest edition (AASHTO).

American National Standards Institute / American Institute of Timber Construction (ANSI/AITC) National Design Specification (NDS) for Wood Construction.

American National Standards Institute / American Institute of Timber Construction (ANSI/AITC) National Design Specification (NDS) for Wood Construction.

Materials and Inspection

Within seven (7) days after receiving approval of the prefabricated wood bridge supplier, the Fabricator shall notify the Materials and Tests Unit (919) 733-7411 to allow for communications between the Fabricator and Material and Tests regarding certifications, material sampling and testing, and other inspection requirements.

Wood decking for prefabricated wood bridges shall be Southern Pine Lumber, #1 Grade per SPIB, pressure treated in accordance with AWPA Standard C2 for above ground use. All planks shall be supplied with the end sealed with "Anchorseal" Mobil CER-M or an equal aquious six log sealer.

At time of installation, planks are to be placed tight together with no gaps. Every plank must be attached with at least one fastener at each end. All fasteners shall be galvanized as per NCDOT Standard Specifications. Self-tapping screws or hex-head bolts, with a steel plank hold-down, are to be used at the ends of planks. Self-tapping screws or carriage bolts are to be used as interior connection fasteners when required. Power actuated fasteners will not be allowed. Planks are to be drilled prior to installation of bolts and/or screws to prevent splitting. In addition to at least one fastener at each end of every plank (typical for all installations), planks for bridges are to have two fasteners located at a minimum of two interior stringer locations, approximately at the third points of the bridge width. Attachments at the ends of the planks may be modified as required when obstructions, such as interior safety system elements, prevent installation of the specified hold-down system.

Foundations

Design for boardwalks shall include foundation design. As required by boardwalk loads, subsurface geotechnical information, and surrounding conditions, foundations may be shallow foundations or driven or drilled piles.

Engineering design of the prefabricated wood bridge supporting foundations (abutment, pier, bracket and/or footings), including design of anchor bolt embedments, shall be part of a separate design submittal. Information as to bridge support reactions and anchor bolt locations will be furnished by the bridge manufacturer after receipt of order and after the bridge design is

complete. Unless specified otherwise, the bridge manufacturer shall determine the number, diameter, minimum grade, and finish of all anchor bolts. The anchor bolts shall be designed to resist all horizontal and uplift forces to be transferred by the superstructure to the supporting foundations. The Design-Build Team shall provide all materials for (including anchor bolts) and construction of the bridge supporting foundations. The Design-Build Team shall install the anchor bolts in accordance with the manufacturer's anchor bolt spacing dimensions.

Submittals

Schematic drawings and diagrams for the bridge/boardwalk superstructure, substructure, and foundations shall be submitted to the NCDOT for review. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the work to be done. All relative design information such as member sizes, bridge reactions, and general notes shall be clearly specified on the drawings. Drawings shall have cross-referenced details and sheet numbers. All drawings shall be signed and sealed by a Professional Engineer who is licensed in North Carolina.

Structural calculations and special provisions for the bridge/boardwalk superstructure, substructure, and foundations shall be submitted to the NCDOT for review. All calculations shall be signed and sealed by a Professional Engineer who is licensed in North Carolina. The calculations shall include all design information necessary to determine the structural adequacy of the bridge and all of its components.

Delivery and Erection

The prefabricated wood bridge manufacturer shall provide detailed, written instruction in the proper lifting procedures and splicing procedures (if required). The method and sequence of erection shall be the responsibility of the Design-Build Team. The bridge manufacturer shall provide written inspection and maintenance procedures to be followed by the bridge owner.

Bearings

Bridge bearings, as required, shall consist of a steel setting or slide plate placed on the abutment or grout pad. The bridge bearing plate, which is welded to the bridge structure, shall bear on this setting plate. One end of the bridge will be fixed by fully tightening the nuts on the anchor bolts at that end. The opposite end will have finger tight only nuts to allow movement under thermal expansion or contraction.

The bridge bearings shall sit in a recessed pocket on the concrete abutment. Minimum 28-day strength for the abutment concrete shall be 3,000 PSI. The bearing seat shall be a minimum of 16" wide. The step height (from bottom of bearing to top-of-deck) shall be determined by the bridge manufacturer.

Warranty

The bridge manufacturer shall warrant their prefabricated wood bridge timber structure(s) to be free of design, material, and workmanship defects for a period of ten years from the date of

delivery. Naturally durable hardwood decking and hardwood attachments shall carry a ten-year warranty against rot, termite damage, or fungal decay. Other types of wood are excepted under this warranty. This guarantee is not a condition of the Contract Performance Bond.

This warranty shall not cover defects in the bridge caused by abuse, misuse, overloading, accident, improper maintenance, alteration, or any other cause not the result of defective materials or workmanship.

This warranty shall be void unless owner's records can be supplied which shall indicate compliance with the minimum guidelines specified in the inspection and maintenance procedures.

Repair or replacement shall be the exclusive remedy for defects under this warranty. The bridge manufacturer shall not be liable for any consequential or incidental damages for breach of any express or implied warranty on their structures.

GENERAL

The State will not be bound by oral explanations or instructions given at any time during the bidding process or after award. Only information that is received in response to this RFP will be evaluated; reference to information previously submitted will not suffice as a response to this solicitation.

NO CONTACT CLAUSE

To ensure that information is distributed equitably to all short-listed Design-Build Teams, all questions and requests for information shall be directed to the State Contract Officer through the Design-Build e-mail address. This precludes any Design-Build Team Member, or representative, from contacting representatives of the Department, other State Agencies or Federal Agencies either by phone, e-mail or in person concerning the Design-Build Project.

USE OF TERMS

Throughout this RFP and all manuals, documents and standards referred to in the RFP the terms Contractor, Bidder, Design-Builder, Design-Build Team, Team, Firm, Company, and Proposer are synonymous.

Throughout this RFP and all manuals, documents and standards referred to in the RFP, the terms NCDOT, Department, Engineer, and State are synonymous.

Throughout this RFP and all documents referred to in the RFP, references to the Technical Proposal include all Technical Proposal supplemental information that may be submitted in response to a Best and Final Offer RFP.

DESIGN REFERENCES

Design references developed and published by NCDOT and those developed and published by other agencies and adopted for use by NCDOT which are to be used in the design of this project may be obtained by contacting Contract Standards and Development within the Technical Services Division. Standard prices for materials, which the Department normally sells for a fee, will be in effect. The Design-Build Team shall be responsible for designing in accordance with the applicable documents and current revisions and supplements thereto.

REVIEW OF SUBMITTALS

Major design milestones and required design submittals shall be identified as activities on a CPM, bar chart, or other scheduling tool. This schedule shall be submitted to the Transportation Program Management Director and Resident Engineer concurrently with the first design submittal, or within 30 days of the contract award, whichever is earlier. The schedule shall be revised and resubmitted as design milestones change or as directed by the Transportation Program Management Director. Submittals will be reviewed within 10 working days (15 days for temporary structures, MSE walls, FEMA compliance documents, pedestrian bridges and temporary shoring) from the date of receipt by NCDOT unless otherwise stipulated in the scope of work. All submittals shall be prepared and submitted in accordance with the "*Design-Build*

Submittal Guidelines”, which by reference are incorporated and made a part of this contract. All submittals shall be made simultaneously to the Transportation Program Management Director and the Resident Engineer. The Department will not accept subsequent submittals until prior submittal reviews have been completed for that item. The Design-Build Team shall inform the Transportation Program Management Director in writing of any proposed changes to the NCDOT preliminary designs, Technical Proposal and / or previously reviewed submittals and obtain approval prior to incorporation. The Design-Build Team shall prioritize submittals in the event that multiple submittals are made based on the current schedule. All submittals shall include pertinent Special Provisions. No work shall be performed prior to Department review of the design submittals.

OVERVIEW

The Design-Build Project, EB-4993, is the Neuse River Greenway Project in Johnston County. The project extends from the Wake/Johnston County Line to Sam’s Branch Creek on new location parallel to the Neuse River and is approximately 3.7 miles in length. The proposed improvements consist of a ten-foot wide paved multi-use greenway. One pedestrian crossing of the Neuse River shall be required.

Project services shall include, but are not limited to:

- **Design Services** – completion of construction plans, including Record Drawings
- **Construction Services** – necessary to build and ensure workmanship of the designed facility
- **Permit Preparation / Application** - development of all documents for required permits
- **Right of Way** – Town of Clayton will acquire Right of Way

The Categorical Exclusion was approved on September 28, 2009

Construction Engineering Inspection will be provided by the NCDOT Division personnel.

GENERAL SCOPE

The scope of work for this project includes design, construction and management of the project. The design work includes all aspects to construct a new 3.7 mile greenway facility along the Neuse River, including one pedestrian crossing of the river. The designs shall meet all appropriate latest versions of *AASHTO Policy on Geometric Design of Highways and Streets*, *Manual of Uniform Traffic Control Devices*, *NCDOT Structure Design Manual*, *NCDOT Roadway Design Manual* and all NCDOT design policies that are current as of the Technical and Price Proposal submission date or the Best and Final Offer submission date.

Construction shall include, but not be limited to, all necessary clearing, grading, greenway, drainage, structures, and erosion and sediment control work items for the proposed multi-use facility. Construction engineering and management shall be the responsibility of the Design-Build Team. Construction shall comply with 2006 *NCDOT Standard Specifications for Roads and Structures* and any special provisions.

Areas of work required for this project shall include, but are not limited to the following items:

Greenway Design
Structure Design
Hydraulic Design
Permit Application
Foundation Design for Structures and Greenway
Erosion and Sediment Control Design and Implementation
Traffic Control and Pavement Marking Design
Traffic Management
Construction
Project Management
Design and Construction Management
Construction Surveying

All designs shall be in Microstation format using Geopak software (current version used by the Department).

DESIGN AND CONSTRUCTION PERFORMED BY DESIGN-BUILD TEAM

The design work consists of the preparation of all construction documents for constructing approximately 3.7 miles of a greenway facility as outlined in the Scope of Work section of this RFP. The Design-Build Team shall prepare final designs, construction drawings and special provisions.

The Design-Build Team shall acknowledge that project documents furnished by the Department are preliminary and provided solely to assist the Design-Build Team in the development of the project design. The Design-Build Team shall be fully and totally responsible for the accuracy and completeness of all work performed under this contract and shall save the State harmless and shall be fully liable for any additional costs and all claims against the State which may arise due to errors, omissions and negligence of the Design-Build Team in performing the work required by this contract.

There shall be no assignment, subletting or transfer of the interest of the Design-Build Team in any of the work covered by the Contract without the written consent of the State, except that the Design-Build Team may, with prior written notification of such action to the State, sublet property searches and related services without further approval of the State.

The Design-Build Team shall certify all plans, specifications, estimates and engineering data furnished by the Team.

All work by the Design-Build Team shall be performed in a manner satisfactory to the State and in accordance with the established customs, practices, and procedures of the North Carolina Department of Transportation, and in conformity with the standards adopted by the American Association of State Highway Transportation Officials, and approved by the U.S. Secretary of Transportation as provided in Title 23, U.S. Code, Section 109 (b). The decision of the Engineer / State / Department shall control in all questions regarding location, type of design, dimension of design, and similar questions.

Alternate designs, details, or construction practices (such as those employed by other states, but not standard practice in NC) are subject to Department review and will be evaluated on a case by case basis.

The Design-Build Team shall not change team members, subconsultants or subcontractors identified in the Statement of Qualifications (SOQ) or Technical Proposal without written consent of the Engineer or the State Contract Officer. In addition, subconsultants and subcontractors not identified in the SOQ or Technical Proposal shall not perform any work without written consent by the Engineer. Individual offices of the Design-Build Team not identified in the Statement of Qualifications or the Technical Proposal submitted shall not perform any work without written consent by the Engineer. Failure to comply with this requirement may be justification for removing the Team from further consideration for this project and disqualification from submitting on future Design-Build Projects.

The Department shall prequalify all firms for the work they are identified to perform. Design firms and Natural Systems firms are prequalified by the particular office performing the work. If the work shall be performed by an office other than the one that is prequalified, that office shall be prequalified prior to any design submittals.

ETHICS POLICY

Employees employed by the Design-Build Team or employees employed by any subconsultant for the Design-Build Team to provide services for this project shall comply with the Department's ethics policy. Failure to comply with the ethics policy will result in the employee's removal from the project and may result in removal of the Company from the Department's appropriate prequalified list.

APPROVAL OF PERSONNEL

The Department will have the right to approve or reject any personnel, assigned to a project by the Design-Build Team.

The Design-Build Team or any subcontractor for the Design-Build Team which are employed to provide services for this project shall not discuss employment opportunities or engage the services of any person or persons, now in the employment of the State during the time of this contract, without written consent of the State.

In the event of engagement, the Design-Build Team or their subcontractors shall restrict such person or persons from working on any of the Design-Build Team's contracted projects in which the person or persons were "formerly involved" while employed by the State. The restriction period shall be for the duration of the contracted project with which the person was involved. *Former Involvement* shall be defined as active participation in any of the following activities:

- Drafting the contract
- Defining the contract scope of the contract
- Design-Build Team selection
- Negotiation of the contract cost (including calculating manhours or fees); and

Contract administration

An exception to these terms may be granted when recommended by the Secretary and approved by the Board of Transportation.

Failure to comply with the terms stated above in this section shall be grounds for termination of this contract and / or not being considered for selection of work on future contracts for a period of one year.

SUBMITTAL OF TECHNICAL AND PRICE PROPOSALS

Technical and / or Price Proposals that do not adhere to all the requirements noted below may be considered non-responsive and may result in the Department not considering the Design-Build Team for award of the contract or reading their Price Proposal publicly.

GENERAL

Technical and Price Proposals will be accepted until **4:00 p.m. Local Time on Wednesday, March 10, 2010**, at the office of the State Contract Officer:

Mr. Randy A. Garris, PE
Contract Standards and Development Unit
1020 Birch Ridge Drive
Century Center Complex - Building B
Raleigh, NC 27610

No Proposals will be accepted after the time specified.

Proposals shall be submitted in 2 separate, sealed parcels containing the Technical Proposal in one and the Price Proposal in the other parcel.

TECHNICAL PROPOSAL

Technical Proposals shall be submitted in a sealed package. The outer wrapping shall clearly indicate the following information:

Technical Proposal
Submitted By: (Design-Build Team's Name)
Contract Number C202381
TIP Number EB-4993
Johnston County

Neuse River Greenway Project from Wake/Johnston County Line to Sam's Branch Creek

Technical Proposal Requirements

12 Copies

8 ½ inch by 11 inch pages

No fold-out sheets allowed

Printed on one side only

Double-spaced

Font size 12

No more than 30 pages, excluding the introductory letter to Mr. Randy Garris, P.E. (two-page maximum length) and the 11 inch by 17 inch appropriate plan sheets

Key Project Team members, identified in the Statement of Qualifications, shall not be modified in the Technical Proposal without written approval of the Department. Any such request should be sent to the attention of Mr. Randy Garris, PE, at the address below:

NCDOT- Contract Standards and Development Unit
Century Center Complex -Building B
1020 Birch Ridge Drive
Raleigh, NC 27610

PRICE PROPOSAL

Price Proposals shall be submitted in a sealed package. The outer wrapping will clearly indicate the following information:

Price Proposal
Submitted by (Design-Build Team's Name)
Contract Number C202381
TIP Number EB-4993
Johnston County

Neuse River Greenway Project from Wake/Johnston County Line to Sam's Branch Creek

The Price Proposal shall be submitted by returning the Request for Proposals with the item sheets completed, and all required signatures and bonds. Failure to execute the required documents may render the proposal non-responsive.

EVALUATIONS

Decisions based on cost alone will not establish the design standards for the project. Technical Proposals shall address the technical elements of the design and construction of the project. The Technical Review Committee will consider the understanding of the project, the anticipated problems and the solutions to those problems, in addition to other evaluation criteria identified herein.

The Design-Build Team's Technical Proposal shall be developed using narratives, tables, charts, plots, drawings and sketches as appropriate. The purpose of the Technical Proposal is to document the firm's understanding of the project, demonstrate the Team's capabilities to

complete the project, document their selection of appropriate design criteria, and state their approach and schedule for completing all design and construction activities.

The review of design plans by the Department is not intended to reflect a reviewer's personal preferences, but rather to ensure that all contract requirements are met, sound engineering judgment is exercised by the Design-Build Team, and that the Design-Build Team adheres to all referenced documents, including but not limited to, design standards, codes, memos and manuals. As such, the award of the Design-Build contract does not in any way imply that the NCDOT accepts the details of the Technical Proposal submitted by the Design-Build Team.

The Technical Proposal will be evaluated in each of the following major categories:

	EVALUATION FACTORS	POINTS
1.	Management	15
2.	Responsiveness to Request for Proposal	30
3.	Long Term Maintenance	5
4.	Schedule and Milestones	25
5.	Innovation	15
6.	Maintenance of Traffic and Safety Plan	5
7.	Oral Interview	5

TECHNICAL PROPOSAL EVALUATION CRITERIA

1. Management – 15 points

Design-Build Team Management

- Describe the Design-Build Team's concept of design management. The proposal shall identify key positions and subordinate organizational units.
- Describe the plan for the coordination of civil / structural, utilities, traffic maintenance, constructability and environmental responsibility.
- Provide a narrative description of the proposed location of the design office(s) and their respective responsibilities.
- Describe how the designs developed by different firms and offices will be integrated.
- Describe how design personnel will interface with the construction personnel.
- Describe the overall strengths of the Design Team and their ability to fulfill the design requirements of this project.

Quality Management

- Describe how the Design-Build Team will comply with the quality control requirements for both design and construction.
- The Design-Build Team should detail the number of inspectors they expect the Department to furnish, during various phases, to allow satisfactory progress of project construction.
- Describe any significant quality control issues experienced on NCDOT projects in the last ten years and how those issues will be addressed for this project.

Construction Management

- Describe the Design-Build Team’s concept of the project construction management organization and how it interrelates with the other elements of the Design-Build Team’s organization for the project.
- Provide a brief narrative description of the Design-Build Team’s proposed plan for performing construction on the project. This description shall include at least the following:
 - A construction organization chart for the project, showing the relationships between functions shown on the chart and the functional relationships with subcontractors.
 - The chart shall indicate how the Design-Build Team intends to divide the project into work segments to enable optimum construction performance.
 - Descriptions of those categories of work that the Design-Build Team anticipates will be performed by the Design-Build Team’s own direct labor force and those categories that will be performed by subcontractors.
 - The Design-Build Team’s plans and procedures to insure timely deliveries of materials to achieve the project schedule.
 - 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 – 30 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.
- Identify innovative approaches to minimize any impacts in environmentally sensitive areas. Describe any temporary impacts and associated minimization approaches.
- Describe the Design-Build Team’s understanding of the overall approach to permitting and the Team’s comfort level with obtaining the required permits within the allowed timeframe.
- Identify methods of construction in wetlands, streams, and buffers.
- Describe any Notice of Violations (NOVs) or Immediate Corrective Actions (ICAs) the Design-Build Team members have received and the disposition of any NOVs or ICAs.
- Describe the Design-Build Teams approach to Sedimentation and Erosion Control for the project.

Design Features

- Show plan view of design concepts with key elements noted.
- Identify preliminary horizontal and vertical alignments of all greenway elements.
- Show typical sections for the project.
- Identify how impacts to property outside the existing sewer easement will be minimized.
- Identify drainage features and designs to be implemented.
- Identify all bridge types to be constructed, including any special design features or construction techniques needed.
- Describe any geotechnical investigations to be performed by the Design-Build Team.
- Describe how design will meet ADA compliance.
- Identify any special aesthetics considerations that will be part of the design, including a visual representation of the pedestrian river crossing bridge.
- Describe how the design will affect the Town of Clayton's right-of-way costs.

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.
- Describe any special designs or construction methods that would reduce future maintenance costs to the Department.

4. Schedule and Milestones – 25 points

- Provide a detailed schedule for the project including both design and construction activities. The schedule shall show the sequence and continuity of operations, as well as the month of delivery of usable segments of the project.
- The schedule shall also include the Design-Build Team's final completion date. **This date shall be clearly indicated on the Project Schedule and labeled "Final Completion Date"**.

5. Innovation – 15 points

- Identify any aspects of the design or construction elements that the Design-Build Team considers innovative. Include a description of alternatives that were considered whether implemented or not.

6. Maintenance of Traffic and Safety Plan – 5 points

Maintenance of Traffic

- Describe any traffic control requirements that will be used for each construction phase.
- Describe how traffic will be maintained as appropriate and describe the Design-Build Team's understanding of any time restrictions noted in the RFP.

- Address how hauling will be conducted and how egress and ingress will occur.
- Note the type of material to be installed for the Final Pavement Markings.

Safety Plan

- Describe the safety considerations specific to the project.
- Discuss the Design-Build Team's overall approach to safety.
- Describe any proposed improvements that will be made prior to or during construction that will enhance the safety of the work force and/or travelling public both during and after the construction of the project.

7. Oral Interview – 5 points

- The Design-Build Team's Project Management Team shall present a brief introduction of the project team and design / construction approach.
- Introductory comments shall be held to no more than 25 minutes.
- The Department will use this interview to ask specific questions about the Team's Technical Proposal, background, philosophies, and approach to the project.
- Presentation, questions, and answers shall not exceed 75 minutes. No more than 10 people from the Design-Build Team may attend.

The Department will use the information presented in the oral interview to assist in the evaluation of the Technical Proposal.

SELECTION PROCEDURE

There will be a Technical Review Committee (TRC) composed of five or more senior personnel from involved engineering groups that will evaluate the Technical Proposal on the basis of the criteria provided in the Request for Proposals.

The selection of a Design-Build Team will involve both technical quality and price. The Technical Proposals will be presented to the TRC for evaluation. The TRC shall first determine whether the proposals are responsive to the requirements of the Request for Proposals. The Department reserves the right to ask for clarification on any item in the Technical Proposal. A written response to this request for clarification shall be provided to the Department prior to the opening of the Price Proposals. The contents of the written response may affect the Technical Review Committee's determination of the Technical Proposal's responsiveness and/or the overall evaluation of the Technical Proposal. If any commitments or clarifications provided in the written response conflict with the contents of the Technical Proposal, the contents of the written response will govern and be incorporated into the contract.

Each responsive Technical Proposal shall be evaluated based on the rating criteria provided in the Request for Proposals. The TRC will submit an overall consensus Technical Proposal score for each Design-Build Team to the State Contract Officer.

Quality Credit Evaluation Factors for Technical Proposals

Management	15
Responsiveness to Request for Proposal	30
Long Term Maintenance	5
Schedule and Milestones	25
Innovation	15
Maintenance of Traffic and Safety Plan	5
Oral Interview	5
Maximum Score	100

The State Contract Officer will use a table based on the maximum quality credit percentage to assign a Quality Credit Percentage to each proposal based on the proposal's overall technical score. The maximum quality credit percentage for this project will be **10%**.

Quality Credit Percentage for Technical Proposals

Technical Score	Quality Credit (%)	Technical Score	Quality Credit (%)
100	10.00	84	4.67
99	9.67	83	4.33
98	9.33	82	4.00
97	9.00	81	3.67
96	8.67	80	3.33
95	8.33	79	3.00
94	8.00	78	2.67
93	7.67	77	2.33
92	7.33	76	2.00
91	7.00	75	1.67
90	6.67	74	1.33
89	6.33	73	1.00
88	6.00	72	0.67
87	5.67	71	0.33
86	5.33	70	0.00
85	5.00		

If any of the Technical Proposals are considered non-responsive, the State Contract Officer will notify those Design-Build Teams of that fact. The State Contract Officer shall publicly open the sealed Price Proposals and multiply each Design-Build Team's Price Proposal by the Quality Credit Percentage earned by the Design-Build Team's Technical Proposal to obtain the Quality Value of each Design-Build Team's Technical Proposal. The Quality Value will then be subtracted from each Design-Build Team's Price Proposal to obtain an Adjusted Price based upon Price and Quality combined. Unless all Proposals are rejected or the Department elects to proceed with the Best and Final Offer process, the Department will recommend to the State Transportation Board that the Design-Build Team having the lowest adjusted price be awarded the contract. The cost of the design-build contract will be the amount received as the Price Proposal.

The following table shows an example of the calculations involved in this process.

An Example of Calculating Quality Adjusted Price Ranking

Proposal	Technical Score	Quality Credit (%)	Price Proposal (\$)	Quality Value (\$)	Adjusted Price (\$)
A	95	8.33	3,000,000	249,900	2,750,100
B	90	6.67	2,950,000	196,765	2,753,235
C *	90	6.67	2,900,000	193,430	2,706,570
D	80	3.33	2,850,000	94,905	2,755,095
E	70	0.00	2,800,000	0	2,800,000
* Successful Design-Build Team – Contract Cost \$2,900,000					

Opening of Price Proposals

Prior to opening the Price Proposals, the State Contract Officer will provide to each Design-Build Team their technical score in a sealed envelope. The sealed envelope will contain that Team's score only.

At the time and date specified, the State Contract Officer will open the Price Proposals and calculate the percentage difference between the Price Proposals submitted and the Engineer's Estimate.

Should all of the Price Proposals be within an acceptable range or below the Engineer's Estimate the State Contract Officer will proceed to calculate the quality credit and publicly read the Price Proposal, technical score, and adjusted price as outlined in the selection procedure above.

Should any one or more of the Price Proposals be within an acceptable range or below the Engineer's Estimate and the remaining Price Proposals exceed an acceptable range of the Engineer's Estimate the State Contract Officer will go to a separate location to calculate the quality credit and determine if the Design-Build Team with the lowest adjusted price is within an acceptable range of the Engineer's Estimate. Should the Price Proposal of the Design-Build Team with the lowest adjusted price be within an acceptable range of the Engineer's Estimate or below the Engineer's Estimate the State Contract Officer will proceed to publicly read the Price Proposals, technical scores, and adjusted prices. Should the Price Proposal of the Design-Build Team with the lowest adjusted price exceed an acceptable range of the Engineer's Estimate the State Contract Officer will publicly read the Price Proposals only and the Department will then determine whether to proceed to request a Best and Final Offer (BAFO) as outlined below.

Should all Price Proposals submitted exceed an acceptable range of the Engineer's Estimate the State Contract Officer will publicly read the Price Proposals only. The Department will then determine whether to proceed to request a Best and Final Offer (BAFO) as outlined below.

In the event that the Department elects to not proceed with a Best and Final Offer (BAFO), then the State Contract Officer will schedule a date and time to publicly reiterate all Price Proposals, and read all technical scores and adjusted prices.

Provided the Department elects to proceed to request a Best and Final Offer (BAFO), at the date and time specified, the State Contract Officer will open the Best and Final Offer Price Proposals and proceed to publicly read all Price Proposals, technical scores and adjusted prices.

Best and Final Offer

In the event initial Price Proposals exceed an acceptable range of the Engineer's Estimate or if the Department feels it is necessary for any reason the Department may choose to make amendments to the details of the RFP and request a Best and Final Offer from all of the previously short-listed teams. Alternately, the Department may choose to redistribute to the short-listed Design-Build Teams another RFP for the project with no amendments to the RFP scope.

After receipt of the redistributed RFP, the Design-Build Team has the option of changing their Technical Proposal details. If the Design-Build Team changes any component of the Technical Proposal, the TRC will review those amended components of the Technical Proposal and reevaluate the scores accordingly. The Design-Build Team shall highlight the changes to bring them to the Department's attention. A revised total score will be calculated, if appropriate, based on these amendments to the Technical Proposal.

Additional oral interviews will not be held. The Design-Build Teams shall submit both a revised Price Proposal and a revised Technical Proposal (if applicable) at the time, place, and date specified in the redistributed RFP. A revised Quality Credit Percentage (if required) and Adjusted Price will be determined. This will constitute the Design-Build Team's Best and Final Offer. Award of the project may be made to the Design-Build Team with the lowest adjusted price on this Best and Final Offer for the project.

Stipend

A stipulated fee of **\$10,000** will be awarded to each short-listed Design-Build Team that provides a responsive, but unsuccessful, Design-Build Proposal. If a contract award is not made, all short-listed Design-Build Teams that provide a responsive Design-Build Proposal shall receive the stipulated fee. Once award is made, or a decision is made not to award, unsuccessful Design-Build Teams will be notified of the opportunity to apply for the stipulated fee. If the Design-Build Team accepts the stipulated fee, the Department reserves the right to use any ideas or information contained in the Design-Build Proposals in connection with any contract awarded for the project, or in connection with any subsequent procurement, with no obligation to pay additional compensation to the unsuccessful Design-Build Team. The stipulated fee shall be paid to eligible Design-Build Teams within ninety days after the award of the contract or the decision not to award. Unsuccessful Design-Build Teams may elect to refuse payment of the stipulated fee and retain any rights to its Design-Build Proposal and the ideas and information contained therein.

In the event that the Department suspends or discontinues the procurement process prior to the Design-Build Proposal submittal date current at the time of the suspension, no stipulated fee will be paid.

GREENWAY SCOPE OF WORK (1-13-10)

- For the purposes of this scope, greenways and multi-use paths shall be considered synonymous.
- The Design-Build Team shall design and construct a ten-foot wide paved multi-use greenway, parallel to the Neuse River, from the Wake/Johnston County Line to Sam's Branch Creek. One pedestrian crossing of the Neuse River shall be required. This greenway shall be designed in compliance with the Americans with Disabilities Act of 1990 (ADA). The Design-Build Team shall design the greenway in accordance with the most current version of NCDOT's Planning and Designing Local Pedestrian Facilities and NCDOT's North Carolina Bicycle Facilities Planning and Design Guidelines.
- The Design-Build Team shall provide an ADA compliant access ramp to the Greenway from the existing pump station drive off Covered Bridge Road.
- Perform clearing and grubbing on this project for a distance of five feet on either side of the Greenway. A 10-foot vertical clearance from the Greenway to the tree canopy shall also be provided. The Greenway shoulders shall be graded to drain and seeded in accordance with the 2006 NCDOT *Standard Specifications for Roads and Structures* and this RFP.
- The Design-Build Team shall be responsible for all permits and fees (unless otherwise stated herein), and shall adhere to all environmental permit requirements.
- To the greatest extent practicable, the greenway shall be designed and constructed within the easements noted herein.
- The Design-Build Team shall tie to the existing greenway at Riverwood on the Neuse LLC Property.
- The Design-Build Team shall include in their Price Proposal resurfacing/replacing approximately 200' of the existing Greenway at the Riverwood subdivision at the Engineer's discretion. This shall include, but not be limited to, fine grading shoulders to drain, and seeding in accordance with the 2006 NCDOT *Standard Specifications for Roads and Structures* and this RFP.
- The Design-Build Team shall not haul or move equipment on the existing Greenway at Riverwood subdivision except to the extent necessary to rehabilitate the existing greenway. Any damage to the existing Greenway caused by the Design-Build Team shall be repaired by the Design-Build Team at no cost to the Department.
- A minimum of four sets of bollards shall be provided and installed in locations on the Greenway as directed by the Engineer. Each set shall contain two wood bollards and one hinged metal bollard as shown in the detail provided by the Department. The external surfaces of the bollard shall be painted in accordance with Section 442, System 3 of the *NCDOT Standard Specifications*, except that the color of the two topcoats shall be safety yellow. Field touch-up any damaged paint once installed. Installation of the bollards shall be in accordance with manufacturer provided instructions and drawings, and special provisions submitted by the Design-Build Team for the Department's review. The required footing shall be as specified by the manufacturer. Only cast-in-place or precast concrete footings shall be used. The base of the

bollard shall have a hole for rebar or other anchor to prevent the bollard from being removed once installed. Bollards shall be installed plumb vertically.

PAVEMENT DESIGN

- The pavement design for the project shall consist of 6.0” of ABC with prime coat and 2.0” of SF9.5A.
- The rate of application and the maximum and minimum thickness per application and layer shall be in accordance with the NCDOT Roadway Design Manual.
- Driveways impacted by the Design-Build Team’s construction shall be repaired to the pre-construction condition.
- Pavement structure shall be placed on top of compacted subgrade and Type 4 engineering fabric.

RIGHT OF WAY

- The Town of Clayton has acquired the following in anticipation of this project:
 1. Option to Purchase Agreement, Parcel #16I03027 (Dupree Property): Option to convert the existing 20’ sewer easement to greenway use, plus a 10’ Temporary Construction Easement (TCE) was executed on August 10, 2009. The greenway shall be constructed within this existing easement to the greatest extent possible.
 2. Option to Purchase Agreement, Parcel #16I03028 (House Property): Option to convert the existing 20’ sewer easement to greenway use, plus a 10’ TCE was executed on October 26, 2009. The greenway shall be constructed within this existing easement to the greatest extent possible.

It is expected that additional right of way will be needed on the two parcels shown above in order to route the greenway around existing raised manholes within the current 20’ sewer easement. The Design-Build Team shall delineate the additional takes for the Town of Clayton and the Department’s review and acceptance. The Town of Clayton will then acquire this right of way as necessary.

- The Town of Clayton has also acquired the following:
 1. Option to Purchase Agreement, Parcel #16I03028C (Sorrell Property): Option to acquire a 40’ easement (10’ additional width on each side of the existing sewer easement) plus a 10’ TCE, was executed November 16, 2009.
- The Town of Clayton is currently pursuing five other properties as shown below:

1. Parcel #16I02018WC (Romaine/Watkins/Chin Property): In negotiation with Wake County to have the easement rights assigned to the Town of Clayton. A Right of Entry signed January 5, 2010 has been issued in the interim.
2. Parcel # 16I02027 (State of North Carolina Property): A blanket easement agreement has been approved by the Town of Clayton and is currently being processed by NCDENR for approval by Council of State. A Right of Entry signed December 10, 2009 has been issued in the interim.
3. Parcel # 16I02028L (Riverwood on the Neuse LLC Property): Agreement to grant an easement over the existing greenway section is held by the Town of Clayton and is awaiting approval.
4. Parcel #16I03029 (Massey Property): Option to Purchase Agreement underway for an 80' easement parallel to the river bank.
5. Parcel # 05H02015 (Adams Property): The Town Attorney has prepared and tendered a final offer.

SIGNING AND PAVEMENT MARKINGS

The Design-Build Team shall be responsible for designing fabricating and installing signing and pavement markings along the greenway and, if applicable, -Y- lines in accordance with Part 9 of the *2003 Manual on Uniform Traffic Control Devices*. The Design-Build Team shall include in their Technical Proposal the signing and pavement markings that will be furnished and installed.

NCDOT INFORMATION SUPPLIED

- The NCDOT will provide copies of the NRTR, Programmatic Categorical Exclusion and the latest list of environmental commitments, municipal agreements and all pertinent approvals and correspondence. Unless noted otherwise in this RFP, the Design-Build Team shall adhere to all commitments stated in the environmental documents.
- NCDOT will provide electronic surveys to the Design-Build Team. Any supplemental surveys, including but not limited to additional topography, existing and proposed greenway, structure sites, existing and proposed drainage, and wetland and stream delineation shall be the responsibility of the Design-Build Team.
- NCDOT will provide a Geotechnical Subsurface Investigation for the river crossing on EB-4993. The Design-Build Team shall be responsible for any additional geotechnical information, all geotechnical recommendations, as well as supplemental structural and greenway investigations. (Reference the Geotechnical Engineering Scope of Work).
- NCDOT will provide copies of the executed Option to Purchase Agreements, Right of Entry letters, and all other pertinent right-of-way correspondence.

STRUCTURES SCOPE OF WORK (1-07-10)**Project Details:**

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

The Design-Build Team shall design, supply and construct a pedestrian bridge over the Neuse River in accordance with the Prefabricated Pedestrian Bridge Project Special Provision. The Design-Build Team shall design, supply and construct all other pedestrian bridges/boardwalks in accordance with Timber Structures Project Special Provision. The pedestrian bridge shall have one steel H-truss span which clears the Neuse River. Approach spans may be either timber or steel.

All bridges shall have a minimum ten-foot clear width between rails. Design loads are to include pedestrian and vehicular loads as required by AASHTO (H-10). The minimum rail height shall be 54 inches, with rail geometries, spacings, and loadings as required by NCDOT and AASHTO. The safety system shall extend the full length of all bridges/boardwalks.

General:

The Design-Build Team's primary structural design firm shall be on the Highway Design Branch list of firms qualified for Structure Design and maintain an office in North Carolina. Structural design of the bridge structure shall be performed by or under the direct supervision of a licensed Professional Engineer and done in accordance with recognized engineering practices and principles. The engineer shall be licensed to practice in North Carolina.

The bridge shall meet approved greenway typical sections and grades. Bridge geometry (width, length, skew, span arrangement, etc.) shall be in accordance with an approved Hydraulic Bridge Survey Report prepared by the Design-Build Team.

Design shall be in accordance with the AASHTO *Guide Specifications for Design of Pedestrian Bridges*, Latest Edition; AASHTO *Standard Specifications for Highway Bridges*, Latest Edition; NCDOT *Structure Design Manual* (including policy memos); NCDOT *North Carolina Bicycle Facilities Planning and Design Guidelines*; and NCDOT Structure Design Unit Project Special Provisions.

Construction and materials shall be in accordance with the 2006 NCDOT *Standard Specifications for Roads and Structures*, NCDOT Structure Design Unit Project Special Provisions, and NCDOT Structure Design Unit Standard Drawings.

Alternate designs, details, or construction practices (such as those employed by other states, but not standard practice in North Carolina) are subject to Department review, will be evaluated on a case by case basis, and may not be accepted.

HYDRAULICS SCOPE OF WORK (1-15-10)

The Design-Build Team shall be required to do the following:

- Employ a private engineering firm to perform hydraulic design for all work required under this contract. The private engineering firm must be prequalified for Hydraulic Design work under the Hydraulic Unit's normal prequalification procedures.
- Hold a pre-design meeting with the Transportation Program Management Director and Hydraulic Review Engineer upon acceptance of the Preliminary Greenway Plans.
- Design the Storm Drainage using Geopak Drainage.
- Provide Bridge Survey Reports for FEMA submittal.
- Prepare a CLOMR or MOA package as applicable for any regulated streams impacted by the design for the Department's submittal to FEMA. No construction activity shall occur in FEMA regulated floodplains prior to the CLOMR approval by FEMA or the MOA package accepted review by NCFMP. The Department will be responsible for all associated fees.
- Prepare LOMR packages for any regulated CLOMRs for the Department's submittal to FEMA after the project is completed or after construction in the impacted floodplains is completed. The Department will be responsible for all associated fees.
- Provide sealed As-Built Plans after construction of structures in FEMA regulated floodplains.
- Prepare the permit drawings and impact summary sheets for submittal of the USACE 404 Permit and NCDWQ Section 401 applications.

General

- Design in accordance with criteria provided in the North Carolina Division of Highways *Guidelines for Drainage Studies and Hydraulics Design-1999* and the addendum *Handbook of Design for Highway Drainage Studies-1973*, North Carolina Department of Transportation "Stormwater Best Management Practices Toolbox – 2008" and the North Carolina Division of Highways Hydraulics Unit website:

<http://www.ncdot.org/doh/preconstruct/highway/hydro/>

GEOTECHNICAL ENGINEERING SCOPE OF WORK (1-15-10)**I. GENERAL:**

Obtain the services of a firm prequalified for geotechnical work by the Highway Design Branch List. The prequalified geotechnical firm shall prepare foundation design recommendation reports for use in designing structure foundations, retaining walls, greenway and temporary structures.

The prequalified geotechnical firm shall determine if additional subsurface information is required based upon the subsurface information provided by the NCDOT and the final roadway and structure designs. If a determination is made that additional subsurface information is required; the Design-Build Team shall use a prequalified geotechnical firm to perform all additional subsurface investigation and laboratory testing in accordance with the current NCDOT Geotechnical Engineering Unit *Guidelines and Procedures Manual for Subsurface Investigations*. Submit additional information collected by the Design-Build Team to the NCDOT Geotechnical Engineering Unit for review. The Design-Build Team shall provide the final Subsurface Investigation report in electronic and hardcopy format to the NCDOT Geotechnical Engineering Unit via the NCDOT Design-Build Office.

II. DESCRIPTION OF WORK:

The Design-Build Team shall design foundations, embankments, slopes, and retaining walls in accordance with the current edition of the AASHTO *Standard Specifications for Highway Bridges*, all applicable NCDOT Geotechnical Engineering Unit Standard Provisions, NCDOT *Structure Design Manual*, NCDOT *Roadway Design Manual* and the NCDOT Geotechnical Engineering Unit *Roadway and Structure Foundation Guidelines*, unless noted otherwise in this RFP.

Temporary structures shall be designed in accordance with the allowable strength design AASHTO Standard Specifications for Highway Bridges and all applicable NCDOT design manuals and specifications.

For the *Geotechnical Guidelines for Design-Build Projects*, the Design-Build Team shall adhere to the guidelines located at the following website:

http://www.ncdot.org/doh/preconstruct/altern/design_build/default.html

A. Structure Foundations

End bent fill slopes up to 35 feet in height (defined as the difference between grade point elevation and finished grade at toe of slope) shall be 1.5:1 (H:V) or flatter. All end bent cut slopes shall be 2:1 or flatter. Design all end bent fill slopes to have a minimum factor of safety of 1.3 for global stability. Design all end bent cut slopes to have a minimum factor of safety of 1.5 for global stability. Extend end bent slope protection from the toe of slope to berm and to 2.5:1 (H:V) slope.

All bents shall be pile bents designed for the 100-year scour from the structure survey report accepted by the NCDOT Hydraulics Unit. Analyze pile bent foundations using either LPile or FB-Pier computer program. Default soil lateral strength parameters in LPile and FB-Pier shall be utilized unless the use of alternative strength parameters is supported by laboratory or field test data that is accepted by the Department. Design piles with a sufficient embedment in soil and/or rock to achieve “fixity”. Provide minimum pile tip elevations for lateral stability for all interior bent piles at water crossings.

B. Greenway Foundations

Design all non-reinforced fill and cut slopes except bridge end bent slopes (see Section A) for a slope of 2:1 (H:V) or flatter. Design all greenway fill slopes to have a minimum factor of safety of 1.3 for global stability. Design all greenway cut slopes to have a minimum factor of safety of 1.5 for global stability. Use limiting equilibrium methods, such as Modified Bishop, Simplified Janbu, Spencer, or any other generally accepted method for slope stability analysis. Submit detailed design calculations and slope stability analysis for all reinforced slopes and any non-reinforced slopes higher than ten feet for review and acceptance by the Geotechnical Engineering Unit prior to construction.

C. Permanent Retaining Wall Structures

For design and construction of mechanically stabilized earth (MSE) retaining walls, refer to the *NCDOT Policy for Mechanically Stabilized Earth Retaining Walls* which can be found at the NCDOT Geotechnical Engineering Unit's website at:

http://www.ncdot.org/doh/preconstruct/highway/geotech/msewalls/07-12-18_MSE_Retaining_Walls_Policy.pdf

For MSE walls, the Design-Build Team shall encapsulate the entire volume of the reinforced zone of washed stone with a non-woven filter fabric.

Design and construct permanent retaining walls in accordance with the applicable NCDOT Geotechnical Engineering Unit *Standard Provisions* and Notes which can be found at the NCDOT Geotechnical Engineering Unit's website at:

<http://www.ncdot.org/doh/preconstruct/highway/geotech/provnote/>

For each retaining wall, with the exception of gravity walls, submit a wall layout and design. The wall layout submittal shall include the following:

- Wall envelope with top of wall, bottom of wall, existing ground and finished grade elevations at incremental stations.
- Wall alignment with stations and offsets.
- Typical sections showing top and bottom of wall, drainage, embedment, slopes, barriers, fences, etc.
- Calculations for bearing capacity, global stability and settlement.
- Details of conflicts with utilities and drainage structures.
- Roadway plan sheets showing the wall (half size).
- Roadway cross sections showing the wall (half size).
- Traffic control plans showing the wall (half size).

Submit a wall layout for gravity walls and the design and construction of gravity walls shall be in accordance with the NCDOT Structure Standard Drawings and the NCDOT *2006 Standard Specifications*. Gravity walls shall be identified in the roadway foundation design recommendation report. Cast-in-place cantilever walls shall be designed and constructed in accordance with the NCDOT *2006 Standard Specifications*.

Deep foundations shall be used for end bents when abutment retaining walls are employed.

D. Temporary Structures

Design temporary retaining structures, which include earth retaining structures and cofferdams, in accordance with current allowable stress design AASHTO *Guide Design Specifications for Bridge Temporary Works* and the NCDOT Geotechnical Engineering Unit *Temporary Shoring Special Provision*. The only submittal required to use the standard sheeting design is the "Standard Shoring Selection Form".

III. CONSTRUCTION REQUIREMENTS:

All construction and materials shall be in accordance with the NCDOT *2006 Standard Specifications* and current NCDOT *Project Special Provisions* unless otherwise stated in this scope of work. Geotechnical special provisions can be found on the Geotechnical Engineering Unit website at the following address:

<http://www.ncdot.org/doh/preconstruct/highway/geotech/>

The Design-Build Team shall be responsible for investigating, proposing and incorporating remedial measures for any construction problems related to foundations and retaining walls. The NCDOT Geotechnical Engineering Unit will review these proposals.

The prequalified geotechnical firm that prepared the foundation designs shall review and approve all pile driving hammers. After the prequalified geotechnical firm has approved these submittals, then the Design-Build Team shall submit to the NCDOT Geotechnical Engineering Unit for review and acceptance prior to beginning construction.

Perform hammer approvals with GRLWEAP Version 2002 or later and in accordance with the NCDOT 2006 *Standard Specifications for Roads and Structures*. The required pile bearing capacity shall be verified with a pile driving system capable of providing a driving resistance of between 30 and 180 blows per feet.

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. Otherwise, drive piles to the minimum required driving resistance and a penetration into natural ground of at least 10 ft.

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.

Unless otherwise approved, stop driving piles when refusal is reached. Refusal is defined as 240 blows per foot or any equivalent set.

Perform Pile Driving Analyzer (PDA) testing to develop pile driving inspection charts or tables. Provide PDA testing, and pile driving inspection charts or tables by a NCDOT pre-approved company. Analyze data with the Case Pile Wave Analysis Program (CAPWAP), version 2006 or later. At a minimum, analysis is required for a hammer blow near the end of initial drive and for each restrike and redrive. Additional CAPWAP analysis may be required as determined by the Engineer.

Meet the guidelines for NCDOT PDA reports from the Geotechnical Engineering Testing Contract for PDA test reports. To obtain a list of pre-approved Geotechnical Engineering Testing Contract companies to perform PDA testing and guidelines for PDA test report, contact the Geotechnical Engineering Unit at 919-250-4088. PDA testing must be performed in accordance with the Department's Pile Special Provision. Submit a complete PDA report sealed by the professional engineer who performed the test to the foundation design firm. The foundation design firm shall develop pile driving inspection charts or tables for acceptance by the NCDOT prior to pile installation.

For each permanent bridge that includes driven pile bents or driven pile footings, perform a minimum of one (1) PDA test (dual bridges are counted as one structure) for each pile

size, pile type (material or shape) and pile driving hammer combination. Additional PDA tests may be required based upon the AASHTO *LFRD Bridge Design Specifications*. If the bridge length with driven pile foundation is longer than 400 feet, perform additional PDA test at every 400 feet interval. Provide additional PDA testing for any revisions to pile type, size or hammer previously approved. The locations of specific piles to be tested must be accepted by the NCDOT prior to any PDA test. Perform PDA tests in accordance with ASTM D 4945-89, Standard Test Method for High Strain Dynamic Testing of Piles and this scope of work.

Send copies of any inspection forms related to foundations to the NCDOT for review.

TRAFFIC MANAGMENT SCOPE OF WORK (1-06-10)**I. Traffic Management Plans****A. Design Parameters**

The Design-Build Team shall prepare the Traffic Control Plans for this project following the parameters listed below:

1. Maintain existing lane and shoulder widths on all two-lane roadways.
2. All traffic control devices shall be placed / located a minimum 2-foot offset (shy distance) from the edge of travel lane.
3. Maintain access to all residences, schools, emergency services and businesses at all times.
4. Minimize the construction equipment required to be on the existing Greenway Path. Repair any damaged pathway caused by construction equipment.

B. Traffic Management Plan requirements:

The Design-Build Team shall select a Private Engineering Firm (PEF) that has experience designing and sealing Traffic Management Plans (TMP) for the North Carolina Department of Transportation (NCDOT) and is on the prequalified list to design TMPs.

The Design-Build Team shall develop Traffic Management Plans that maintain all types of traffic (motorists, bicyclists, and pedestrians within the highway, including persons with disabilities in accordance 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)*.

The Traffic Management Plans shall adhere to the “Design-Build Submittal Guidelines” and the “Guidelines for Preparation of Traffic Control and Pavement Marking Plans for Design-Build Projects”, which by reference are incorporated herein and are a part of the contract. These documents are available on the Design-Build website.

The Work Zone Traffic Control web site contains useful information that may be needed for the design of the Traffic Management Plans.

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

II. Project Operations Requirements

The following are Time Restrictions and notes that shall be included with the Traffic Control Plans General Notes, unless noted otherwise elsewhere in this RFP:

A. Time Restrictions

1. Intermediate Contract Times #1 for Lane Narrowing, Closure, Holiday and Special Event Restrictions.

As a minimum, the Design-Build Team shall maintain existing traffic patterns and shall not close or narrow a lane during the times below.

Road Name	Time Restrictions
SR 1700 (Covered Bridge Road)	Monday through Friday 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.

Maximum lane closure duration shall be thirty minutes and may only be used for loading and unloading materials and/or equipment.

The Design-Build Team shall not install, reset, and / or remove any traffic control device during the times listed above.

In addition to the lane narrowing and closure restrictions stated above for all roads, during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy on the roadways listed herein as directed by the Engineer, the Design-Build Team shall not close or narrow a lane of traffic, detain the traffic flow or alter the traffic flow on the aforementioned facilities. As a minimum, these requirements / restrictions apply to the following schedules:

- (a) Weekends from (and including) Memorial Day Weekend to (and including) Labor Day Weekend, between the hours of 6:00 a.m. Friday to 6:00 p.m. Monday.
- (b) For New Year's between the hours of 6:00 a.m. December 31st to 6:00 p.m. January 3rd. If New Year's Day is on a Friday, Saturday, Sunday or Monday then until 6:00 p.m. the following Tuesday.
- (c) For Easter, between the hours of 6:00 a.m. the Friday before Easter and 6:00 p.m. the Tuesday after Easter.
- (d) For Memorial Day, between the hours of 6:00 a.m. the Friday before Memorial Day to 6:00 p.m. the Wednesday after Memorial Day.

- (e) For Independence Day, between the hours of 6:00 a.m. July 3rd and 6:00 p.m. July 6th. If Independence Day is on a Friday, Saturday or Sunday, between the hours of 6:00 p.m. the Thursday before Independence Day and 6:00 p.m. the Tuesday after Independence Day.
- (f) For Labor Day, between the hours of 6:00 a.m. the Friday before Labor Day to 6:00 p.m. the Wednesday after Labor Day.
- (g) For Thanksgiving, between the hours of 6:00 a.m. the Tuesday before Thanksgiving to 6:00 p.m. the Tuesday of the following week.
- (h) For Christmas, between the hours of 6:00 a.m. the Friday before the week of Christmas Day and 6:00 p.m. the following Tuesday after the week of Christmas Day.

Liquidated Damages for Intermediate Contract Time #1 for the above lane narrowing, lane closure, holiday and special event time restrictions for SR 1700 are \$500 per hour or any portion thereof.

2. Hauling Restrictions

The Design-Build Team shall adhere to the hauling restrictions noted in the NCDOT 2006 *Standard Specifications for Roads and Structures*.

The Design-Build Team shall conduct all hauling operations as follows:

- The Design-Build Team shall not haul against the flow of traffic of an open travelway unless an approved temporary traffic barrier or guardrail protects the work area.
- The Design-Build Team shall address how hauling will be conducted in the Technical Proposal, including but not limited to, hauling of materials to and from the site and hauling of materials within NCDOT right of way.
- Hauling time restrictions for multi vehicle hauling operations are:

Monday – Friday	6:00am to 9:00am
	4:00pm to 6:00pm

B. Lane and Shoulder Closure Requirements

The Design-Build Team shall remove lane closure devices from the lane when work is not being performed behind the lane closure or when a lane closure is no longer needed.

When personnel and / or equipment are working within 15 feet of an open travel lane, the Design-Build Team shall close the nearest open shoulder using NCDOT 2006 *Roadway Standard Drawing* No. 1101.04, unless the work area is protected by an approved temporary traffic barrier or guardrail.

When personnel and / or equipment are working on the shoulder adjacent to an undivided facility and within 5 feet of an open travel lane, the Design-Build Team shall close the nearest open travel lane using NCDOT 2006 *Roadway Standard Drawing* No. 1101.02, unless the work area is protected by an approved temporary traffic barrier or guardrail.

When personnel and / or equipment are working within a lane of travel of an undivided or divided facility, the Design-Build Team shall close the lane using the appropriate roadway standard drawing from the NCDOT 2006 *Roadway Standard Drawings*. The Design-Build Team shall conduct the work so that all personnel and / or equipment remain within the closed travel lane.

The Design-Build Team shall not perform work involving heavy equipment within 15 feet of the edge of travelway when work is being performed behind a lane closure on the opposite side of the travelway.

C. Pavement Edge Drop off Requirements

Within the project limits on SR 1700, the Design-Build Team shall backfill at a 6:1 slope up to the edge and elevation of the existing pavement and / or use proper traffic control setup to protect traffic from the drop off as follows:

- Elevation differences that exceed 2 inches on roadways with posted speed limits of 45 mph or greater and a paved shoulder four-foot wide or less.
- Refer to the 2002 *AASHTO Roadside Design Guide* for proper treatment of all other conditions.
- Any drop offs created by construction equipments shall be backfilled.

D. Traffic Pattern Alterations

The Design-Build Team shall notify the Engineer in writing at least twenty-one (21) calendar days prior to any traffic pattern alteration. In addition, the Design-Build Team should coordinate appropriate Public Information outreach as required by Engineer to ensure public is aware of construction affecting the existing Greenway and SR 1700.

E. Signing

The Design-Build Team shall install advance work zone warning signs when work is within 30 feet from the edge of travel lane and no more than three days prior to the beginning of construction.

When no work is being conducted for a period longer than one week, the Design-Build Team shall remove or cover all advance work zone warning signs, as directed by the Engineer unless the signs are necessary to provide warning of a hazard. Stationary work

zone warning signs shall be covered with an opaque material that prevents reading of the sign at night by a driver traveling in either direction.

When portable signs are not in use for periods longer than 30 minutes, the Design-Build Team shall lay the portable work zone sign flat on the ground and collapse the sign stand and lay it flat on the ground.

The Design-Build Team shall ensure proper signing (including but not limited to guide signs) are in place at all times during construction, as required by the *MUTCD* and the *Roadway Standard Drawings*.

F. Traffic Barrier/Positive Protection

The Design-Build Team may use NCDOT approved temporary traffic barrier system/ Positive Protection. If used, it must follow NCDOT requirements and be approved by the Work Zone Traffic Control Section. NCDOT can provide additional information regarding the requirements if the Design-Build Team chooses to use positive protection

G. Traffic Control Devices

The Design-Build Team shall use traffic control devices that conform to all NCDOT requirements and are listed on the NCDOT's Approved Products List. The Approved Products List is shown on NCDOT's Work Zone Traffic Control website. The use of any devices that are not shown on the Approved Product List shall require written approval from the Transportation Program Management Director.

In tangent sections, channelizing device spacing shall not exceed a distance in feet equal to twice the posted speed limit. At intersections and driveway radii, channelization devices shall be spaced 10 feet on-center and 3 feet off the edge of an open travelway, when lane closures are not in effect. Skinny drums shall only be allowed as defined in Section 1180 of the 2006 *NCDOT Standard Specifications for Roads and Structures*.

Place Type II barricades, with "GREENWAY CLOSED" signs attached, of sufficient length to close entire greenway. Stagger or overlap barricades to allow for ingress or egress.

H. Things to Consider When Developing a TMP for Maintenance of Pedestrians

The Americans with Disabilities Act of 1990 (Title II, Paragraph 35.130) and the MUTCD (Sections 6D.01 and 6D.02) require that the needs and control of pedestrians, including persons with disabilities, through a work zone be an essential part of roadway construction, utility work, and maintenance operations. The Design-Build Team is responsible for meeting the requirements of the MUTCD and the ADA. NCDOT will provide a checklist of items to consider to the shortlisted Design Build Teams.

EROSION AND SEDIMENTATION CONTROL SCOPE OF WORK (12-8-09)

The NCDOT REU shall review and accept all Erosion and Sedimentation Control Plans. Clearing & Grubbing and Final Grade Release for Construction (RFC) Erosion Control Plans shall be submitted to all NCDOT Personnel listed in the Design-Build Submittal Guidelines before **any** land disturbing activities, including clearing and grubbing, can commence. If the Design-Build Team chooses to perform the work in discrete sections, then a complete set of Clearing & Grubbing and Final Grade RFC Erosion Control Plans shall be submitted, accepted, and distributed as noted above prior to land disturbing activities, including clearing and grubbing, commencing in that section. No land disturbing activities, including clearing and grubbing, shall occur in any location that does not have accepted Clearing & Grubbing and Final Grade RFC Erosion Control Plans. Refer to the most recent version of the *NC DENR - Erosion and Sediment Control Planning and Design Manual* for erosion control design guidelines not addressed in this Scope of Work.

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

I. Complete Set of Plans**A. Clearing and Grubbing Phase**

1. Use correct NCDOT symbology
2. Protect existing 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 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 drainage outlets
5. Take into account existing topography and show contour lines
6. Show 50-foot Environmentally Sensitive Area (ESA) around all jurisdictional streams with Neuse River Buffer Zones on Clearing & Grubbing EC Plans only
7. Sediment basins shall not be placed inside Neuse River Buffer Zones unless permitted in the Division of Water Quality Section 401 Water Quality and Neuse River Buffer Certifications
8. Utilize Temporary Rock Silt Checks Type 'B' (TRSC-B) to reduce velocity in existing 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)
9. Protect existing streams; do not place erosion control devices in live streams
10. 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, Q25, using 25-year peak rainfall data (*NC DENR - 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.
11. Skimmer Basins shall provide adequate silt storage for 1800 cubic feet per disturbed acre with surface area equal to 325 square feet per cubic foot per second (cfs) of the peak inflow rate, Q25, using the 25-year peak rainfall data (*NC DENR - 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 Skimmer Basin Designer Spreadsheet will be provided by the NCDOT Roadside Environmental Unit (REU) upon request.
 12. The minimum and maximum length to width ratio of all Sediment Basins shall be 2:1 and 6:1, respectively.
 13. Coir Fiber Baffles shall be installed in all silt basins and sediment dams at drainage outlets. For silt basins with a 20-foot or longer length, three Coir Fiber Baffles shall be installed with a spacing of 1/4 the basin length. For silt basins with a length less than 20 feet, a minimum of two Coir Fiber Baffles shall be installed, with a spacing of 1/3 the basin length. The Design-Build Team will not be required to show the individual baffles on the Erosion Control Plans, but shall be required to incorporate the Coir Fiber Baffle Detail on the Erosion Control Plans.
 14. Include any culvert and / or pipe construction sequence plan sheets in the Clearing & Grubbing Erosion Control Plans; all pipes 48" or larger, or any combination of pipes that total 48" or more require a construction sequence. Prior to installation of pipes smaller than 48 inches in jurisdictional areas, the Design Build Team shall submit a phasing plan for managing the watercourse to the Resident Engineer for review and acceptance. The phasing plan shall be in accordance with the Best Management Practices for Construction and Maintenance Activities.
 15. Incorporate temporary sediment basins into permanent stormwater devices.
 16. Utilize Wattles with Polyacrylamide (PAM) and/or TRSC-A's with Matting and PAM in temporary and permanent, existing and proposed ditches at a spacing of 50 feet in areas where sediment basins are not feasible at drainage outlets with sediment traps (i.e. PIST-A, RIST-A, etc.), and in areas where sediment basins at drainage outlets cannot be properly sized to surface area and / or sediment storage requirements due to safety concerns, right of way restrictions, utility conflicts or other construction limitations approved by the Roadside Environmental Unit. Erosion control devices with PAM shall not be used at drainage outlets.

B. Final Grade Phase

1. Use correct NCDOT symbology
2. Protect existing and proposed drainage structure inlets with RIST-A, RIST-C, PIST-A, etc.
3. Utilize adequate perimeter controls (TSD, TSF, etc.)
4. Utilize TRSC-B's 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 TD's

5. Utilize temporary slope drains and earth berms at top of fill slopes 8 feet or higher and a fill slope grade of 3:1 or steeper, or where there are superelevations above 0.04 and fills are greater than 5 feet. Maximum slope drain spacing shall be 200 feet.
6. Utilize rock energy dissipater and / or silt basin at outlet of slope drain
7. Devices at all drainage turnouts shall utilize sediment control stone (TRSD-B, TRSC-A, etc.) and a spillway with an adequately designed base length to distribute outflow
8. Sediment basins shall not be placed inside Neuse River Buffer Zones unless permitted in the Division of Water Quality Section 401 Water Quality and Neuse River Buffer Certifications
9. 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, Q25, using 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 NCDOT REU upon request
10. Provide matting for erosion control in all ditch lines where the velocity is greater than 2.0 ft/s, and the shear stress is 1.55 psf or less. For ditch lines with a shear stress above 1.55 psf, Permanent Soil Reinforcement Mat or Rip Rap shall be utilized
11. Provide matting for erosion control on all fill slopes 2:1 or steeper
12. Skimmer Basins shall provide adequate silt storage for 1800 cubic feet per disturbed acre with surface area equal to 325 square feet per cubic foot per second (cfs) of the peak inflow rate, Q25, using the 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
13. The minimum and maximum length to width ratio of all Sediment Basins shall be 2:1 and 6:1, respectively
14. Coir Fiber Baffles shall be installed in all silt basins and sediment dams at drainage outlets. For silt basins with a 20-foot or longer length, three Coir Fiber Baffles shall be installed with a spacing of 1/4 the basin length. For silt basins with a length less than 20 feet, a minimum of two Coir Fiber Baffles shall be installed, with a spacing of 1/3 the basin length. The Design-Build Team will not be required to show the individual baffles on the Erosion Control Plans, but shall be required to incorporate the Coir Fiber Baffle Detail on the Erosion Control Plans
15. Incorporate temporary sediment basins into permanent stormwater devices
16. Utilize Wattles with Polyacrylamide (PAM) and/or TRSC-A's with Matting and PAM in temporary and permanent, existing and proposed ditches at a spacing of 50 feet in areas where sediment basins are not feasible at drainage outlets with sediment traps (i.e. PIST-A, RIST-A, etc.), and in areas where sediment basins at drainage outlets cannot be properly sized to surface area and / or sediment storage requirements due to safety concerns, right of way restrictions, utility conflicts or other construction limitations approved by the Roadside Environmental Unit. Erosion control devices with PAM shall not be used at drainage outlets.

C. Intermediate Phase

Intermediate Erosion Control Plans shall only be required if design modifications and / or site conditions require additional erosion control design or design revisions to the RFC Clearing and Grubbing and / or RFC Final Grade Erosion Control Plans. Intermediate Plans shall be submitted for review and shall be accepted prior to construction of any aspect impacted by the revised erosion control design. For any intermediate phase, comply with Section B, "Final Grade Phase" above.

II. Detail Sheets and Notes

- A. Provide project specific special notes and details such as temporary rock silt check type B, coir fiber baffle, skimmer basin, wattle with Polyacrylamide (PAM), etc.
- B. Provide matting summary sheet(s): matting for erosion control and permanent soil reinforcement mat
- C. Provide reforestation sheet(s): regular, wetland, streambank and / or buffer showing appropriate species

III. Title Sheet

- A. Show correct notes: HQW, ESA, clearing and grubbing, etc.
- B. Show correct standards for project
- C. List of standard NCDOT symbology
- D. Show name and certification number of Level IIIA certified individual responsible for designing and / or reviewing Erosion and Sedimentation Control Plans

IV. Special Provisions

- A. Erosion Control Special Provisions are available at the following website:
http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/soil_water/special_provisions/
- B. References in Erosion Control Special Provisions from the aforementioned website to Method of Measurement, Basis of Payment, or any other statement regarding direct payment for Erosion & Sediment Control measures shall be disregarded
- C. Erosion Control / Stormwater Certification found elsewhere in this RFP

V. Miscellaneous

- A. Plan submittals shall include all pertinent design information required for review, such as design calculations, drainage areas, etc.
- B. The NCDOT REU will provide a sample set of Erosion and Sedimentation Control Plans (including any special details or special provisions used by the NCDOT REU) and MicroStation Erosion Control Workspace to the Design-Build Team for reference upon request.
- C. Plans shall address any environmental issues raised during the permitting process.

- D. Sufficient time shall be allowed for the Design-Build Team to make any changes to the Erosion and Sedimentation Control Plans deemed necessary by the NCDOT REU.
- E. Temporary access and haul roads, other than public roads, constructed or used in connection with the project shall be considered a part of the project and addressed in the Erosion and Sedimentation Control Plans.
- F. Borrow or waste areas that are part of the project shall require a separate Reclamation Plan, unless the borrow or waste activity is regulated under the *Mining Act of 1971*, or is a landfill regulated by the Division of Solid Waste Management (NCDENR). The Design-Build Team shall submit the permit number for waste / borrow sites covered by the Mining Act or regulated by DSWM (DENR) concurrently to the Transportation Program Management Director and the Resident Engineer. For Reclamation Procedures, see:

http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/fieldops/downloads/Files/ContractedReclamationProcedures.pdf

- G. Whenever the Engineer determines that significant erosion and sedimentation continues despite the installation of approved protective practices, the Design-Build Team shall be required to and shall take additional protective action.
- H. An accepted Erosion and Sedimentation Control Plan does not exempt the Design-Build Team from making every effort to contain sediment onsite.
- I. Any Erosion Control Design revisions made during the construction of the project shall be submitted to NCDOT REU by the 15th of the month via the Transportation Program Management Director. At anytime requested by the Engineer or the Roadside Environmental Unit, the Design-Build Team shall provide an updated version of the Erosion and Sedimentation Control Plans for distribution to all parties involved in the construction process.
- J. The Design-Build Team shall comply with the *North Carolina Administrative Code Title 15 A Department of Environment and Natural Resources Chapter 4, Sediment Control*.
- K. A pre-design meeting shall take place between the NCDOT REU Soil & Water Engineering Section, the Design-Build Team, and any other pertinent NCDOT personnel before any Erosion and Sedimentation Control Designs are submitted to NCDOT REU. Erosion and Sedimentation Control Plan submittals shall only be reviewed and accepted by NCDOT REU after the Erosion Control Pre-Design Meeting. The Design Build Team shall be required to submit a tentative Erosion and Sedimentation Control Plan submittal schedule at the pre-design meeting.
- L. At minimum, the Design-Build Team shall bring one erosion control plan sheet with a Clearing & Grubbing erosion control design to the Erosion and Sedimentation Control Plan pre-design meeting.
- M. All RFC Erosion and Sedimentation Control Plans, including any red line revisions, shall be kept on site at all times throughout the duration of the project.
- N. Erosion Control / Stormwater Certification shall be required according to the Project Special Provision found elsewhere in this RFP.
- O. Prior to installation of any erosion control devices, the Design-Build Team shall verify boundaries of jurisdictional areas in the field and delineated with Safety Fence.

EROSION CONTROL LIQUIDATED DAMAGES

The Design-Build Team shall observe and comply with Federal and State Laws, Local Laws, Ordinances, and Regulations; as well as Orders and Decrees of Bodies having any jurisdiction or authority in accordance with Section 107 of the 2006 *Standard Specifications for Roads and Structures*.

The Design-Build Team shall take all reasonable precautions to comply with all regulations of all authorities having jurisdiction over public and private land governing the protection of erosion and sedimentation. Any fines, remediation required or charges levied against the Department for failing to comply with all rules and regulations concerning erosion and sediment control, due to the Design-Build Team's negligence, carelessness, or failure to implement the Erosion and Sedimentation Control Plans and Specifications; or failure to maintain an approved Storm Water Pollution Prevention Plan (SWPPP), regardless of absence of neglect, shall be deducted from monies due the Design-Build Team. In addition to said fines, remediation required, or charges levied, any associated engineering costs or actions taken by the Department in order for the Department to comply with rules and regulations, as a result of the Design-Build Team's negligence, carelessness, or failure to implement the Erosion and Sedimentation Control Plans and Specifications; and / or the SWPPP, regardless of absence of neglect, shall be deducted from the monies due to the Design-Build Team.

ENVIRONMENTAL PERMITS SCOPE OF WORK (01-07-10)**General**

The Department shall 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 Department's PDEA Branch and/or the DEO present. A representative from the NCDOT Design-Build Office shall be included on all correspondence.

The Design-Build Team shall be responsible for preparing all documents necessary for the Department to obtain the environmental permits for this project. A Permit application shall be needed for a US Army Corps of Engineers Nationwide Section 404 Permit and a NC Department of Natural Resources (DENR), Division of Water Quality (DWQ) Water Quality Certification to be complete under the same cover. The Design-Build Team shall also be responsible for preparing the Neuse River Buffer Certification. The Design-Build Team shall not begin ground-disturbing activities on the project until the required permits have been issued.

The Design-Build Team shall adhere to an in-water work moratorium between February 15 and September 30 in the Neuse River due to its status as an inland primary nursery area.

Unless otherwise noted in this RFP, the Design-Build Team shall be bound by the terms of all signed planning documents and shall be held accountable for meeting all permit conditions. The Design-Build Team shall staff any personnel necessary to provide permit compliance. If the Design-Build Team discovers any previously unknown historic or archeological remains while accomplishing the authorized work, the team shall immediately notify the Transportation Program Management Director.

Major Permit Application Process

It shall be the Design-Build Team's responsibility to acquire information and prepare permit drawings that reflect the impacts and minimization efforts as designed. Further it shall be the Design-Build Team's responsibility to provide these permit impact sheets (drawings) depicting the design and construction details to the Department as part of the permit application. The Design-Build Team shall be responsible for developing the permit application for all jurisdictional impacts. The permit application shall include all borrow or waste sites. The permit application shall consist of, at a minimum, the following:

- Cover Letter
- Permit drawings
- Permit drawing displaying topography
- Half-size plans
- Vicinity Map
- Impact Summary Table

Upon completion of the permit application package, the Design-Build Team shall forward the package to the Design-Build Office, Resident Engineer, Division Environmental Officer (DEO)

and PDEA-NEU concurrently for review and acceptance. The Department will subsequently forward the package to the appropriate agencies for approval.

Any temporary construction measures, including de-watering, construction access, etc. shall be addressed in the permit application. Impacts that result from so-called temporary measures may not be judged to be temporary impacts by the agencies.

Agency review time will be approximately 60 days from receipt of a “complete” package.

Mitigation Responsibilities

The Department will acquire compensatory mitigation for unavoidable impacts to wetlands and surface waters due to project construction from the Ecosystem Enhancement Program (EEP).

Should additional jurisdictional impacts result from revised design / construction details, suitable compensatory mitigation for wetlands and / or streams shall be the sole responsibility of the Design-Build Team.

If any staging areas are located outside the project right-of-way, the Design-Build Team shall 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.

Commitments

All work by the Design-Build Team shall be accomplished in strict compliance with the plans submitted with the Section 404 and 401 permit applications and in compliance with all conditions of all 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.

***** STANDARD SPECIAL PROVISIONS *******LIABILITY INSURANCE:**

(11-18-08)

DB1 G80

Page 1-68, Article 107-16 is amended to include the following as the first, second, third and fourth paragraphs:

The Design-Build Team shall be liable for any losses resulting from a breach of the terms of this contract. The Design-Build Team shall be liable for any losses due to the negligence or willful misconduct of its agents, assigns and employees including any sub-contractors which causes damage to others for which the Department is found liable under the Torts Claims Act, or in the General Courts of Justice, provided the Department provides prompt notice to the Design-Build Team and that the Design-Build Team has an opportunity to defend against such claims. The Design-Build Team shall not be responsible for punitive damages.

The Design-Build Team shall at its sole cost and expense obtain and furnish to the Department an original standard ACORD form certificate of insurance evidencing commercial general liability with a limit for bodily injury and property damage in the amount of \$5,000,000.00 per occurrence and general aggregate, covering the Design-Build Team from claims or damages for bodily injury, personal injury, or for property damages which may arise from operating under the contract by the employees and agents of the Design-Build Team. The required limit of insurance may be obtained by a single general liability policy or the combination of a general liability and excess liability or umbrella policy. The State of North Carolina shall be named as an additional insured on this commercial general liability policy. The policy may contain the following language as relates to the State as an additional insured: "This insurance with respect to the additional insured applies only to the extent that the additional insured is held liable for your or your agent's acts or omissions arising out of and in the course of operations performed for the additional insured."

The Design-Build Team shall maintain all legally required insurance coverage, including without limitation, worker's compensation and vehicle liability, in the amounts required by law. Providing and maintaining adequate insurance coverage is a material obligation of the Design-Build Team and is of the essence of this contract. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The Design-Build Team shall at all times comply with the terms of such insurance policies.

Upon execution of the contract, provide evidence of the above insurance requirements to the Engineer.

PLANT AND PEST QUARANTINES**(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)**

(3-18-03)

DB1 G130

Within Quarantined Area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Design-Build Team's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

Originating in a Quarantined County

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-733-6932, or <http://www.ncagr.com/plantind/> to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
2. Plants with roots including grass sod.
3. Plant crowns and roots.
4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
5. Hay, straw, fodder, and plant litter of any kind.
6. Clearing and grubbing debris.
7. Used agricultural cultivating and harvesting equipment.
8. Used earth-moving equipment.
9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

CONTRACTOR CLAIM SUBMITTAL FORM:

(9-16-08)

DB1 G140

If the Design-Build Team elects to file a written claim or requests an extension of contract time, it shall be submitted on the *Contractor Claim Submittal Form (CCSF)* available through the Construction Unit or

http://ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/.

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09)

DB1 G152

By Executive Order 24, issued by Governor Perdue, and *N.C. G.S. § 133-32*, it is unlawful for any vendor or contractor (i.e. architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's Cabinet Agencies (i.e. Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and *G.S. § 133-32*.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

EMBANKMENTS:

(5-16-06) (Rev 7-21-09)

DB2 R018

Revise the *Standard Specifications* as follows:

Page 2-22, Article 235-3 Materials, add the following as the second sentence of the second paragraph:

Aerate and dry material containing moisture content in excess of what is required to achieve embankment stability and specified density.

Page 2-22, Subarticle 235-4(B) Embankment Formation, add the following:

- (16) Do not place rock or broken pavement in embankment areas where piles or drilled shaft foundations are to be constructed. This shall include but not be limited to piles and foundations for structures, metal signal poles, overhead sign structures, and high mount lighting.

SHALLOW UNDERCUT

(9-18-07)

DB2 R35

Description

Perform undercut excavation and place a combination of fabric for soil stabilization and Class IV Subgrade Stabilization at locations as directed. Work includes performing undercut excavation, disposing of unsuitable material, furnishing and placing fabric for soil stabilization; and furnishing, placing and compacting Class IV Subgrade Stabilization.

Materials

Refer to Division 10 of the 2006 *Standard Specifications for Roads and Structures*:

Item	Section
Select Material, Class IV	1016
Fabric for Soil Stabilization, Type 4	1056

Use Class IV Select Material for Class IV Subgrade Stabilization. If Class IV Subgrade Stabilization does not meet the requirements of Article 1010-2 of the 2006 *Standard Specifications for Roads and Structures*, the Engineer, at his discretion, may consider the material reasonably acceptable in accordance with Article 105-3 of the 2006 *Standard Specifications for Roads and Structures*.

Construction Methods

Perform undercut excavation in accordance with Section 225 of the 2006 *Standard Specifications for Roads and Structures*. Place fabric for soil stabilization in accordance with Article 270-3 of the 2006 *Standard Specifications for Roads and Structures* before backfilling. Backfill with Class IV Subgrade Stabilization by end dumping subgrade stabilization material on the fabric. Do not operate heavy equipment on the fabric until it is covered with Class IV Subgrade Stabilization. Compact subgrade stabilization material to 92% of AASHTO T180 as modified by the Department or to the highest density that can be reasonably obtained.

Maintain Class IV Subgrade Stabilization in an acceptable condition and minimize the use of heavy equipment on subgrade stabilization material in order to avoid damaging the backfill. Provide and maintain drainage ditches and drains as required to prevent entrapment of water in backfill.

AGGREGATE BASE COURSE

12-19-06

DB5 R03

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 5-11, Article 520-5 Hauling and Placing Aggregate Base Material, 6th paragraph, replace the first sentence with the following:

Base course that is in place on November 15 shall have been covered with a subsequent layer of pavement structure or with a sand seal. Base course that has been placed between November 16 and March 15 inclusive shall be covered within 7 calendar days with a subsequent layer of pavement structure or with a sand seal.

ASPHALT PAVEMENTS - SUPERPAVE

(09-14-09)

DB6 R01

Revise the *2006 Standard Specifications* as follows:

Page 6-2, Article 600-9 Measurement and Payment, delete the second paragraph.

Page 6-12, Subarticle 609-5(C)2, Required Sampling and Testing Frequencies, first partial paragraph at the top of the page, delete last sentence and add the following:

If the Engineer allows the mix to remain in place, payment will be made in accordance with Article 105-3.

Page 6-12, Subarticle 609-5(C)2, QUALITY CONTROL MINIMUM SAMPLING AND TESTING SCHEDULE

First paragraph, delete and replace with the following.

Sample and test the completed mixture from each mix design per plant per year at the following minimum frequency during mix production:

Second paragraph, delete the fourth sentence, and replace with the following

When daily production of each mix design exceeds 100 tons and a regularly scheduled full test series random sample location for that mix design does not occur during that day's production, perform at least one partial test series consisting of Items A and B in the schedule below.

Page 6-12, Subarticle 609-5(C)2(c) Maximum Specific Gravity, add after (AASHTO T 209):

or ASTM D 2041

Page 6-13, last line and on Page 6-14, Subarticle 609-5(C)(2)(e) Retained Tensile Strength, add a heading before the first paragraph as follows:

(i) Option 1

Insert the following immediately after the first paragraph:

(ii) Option 2

Mix sampled from truck at plant with one set of specimens prepared by the Contractor and then tested jointly by QA and QC at a mutually agreed upon lab site within the first 7 calendar days after beginning production of each new mix design.

Second paragraph, delete and replace with the following:

Test all TSR specimens required by either option noted above on either a recording test press or a test press that maintains the peak load reading after the specimen has broken.

Subarticle 609-5(C)(3) Control Charts, delete the second sentence of the first paragraph and replace with the following:

For mix incorporated into the project, record full test series data from all regularly scheduled random samples or directed samples that replace regularly scheduled random samples, on control charts the same day the test results are obtained.

Page 6-15, Subarticle 609-5(C)(3) Control Charts, first paragraph on this page, delete the last sentence and substitute the following:

Denote the moving average control limits with a dash green line and the individual test limits with a dash red line.

Subarticle 609-5(C)(3)(a), (b) and (c), replace (a) (b) and (c) with the following:

- (a) A change in the binder percentage, aggregate blend, or G_{mm} is made on the JMF, or,
- (b) When the Contractor elects to stop or is required to stop production after one or two moving average values, respectively, fall outside the moving average limits as outlined in subarticle 609-5(C)6 or,
- (c) If failure to stop production after two consecutive moving averages exceed the moving average limits occurs, but production does stop at a subsequent time, re-establish a new moving average beginning at the actual production stop point.

Subarticle 609-5(C)(4) Control Limits, replace the first paragraph and the CONTROL LIMITS Table on page 6-16 with the following.

The following are established as control limits for mix production. Apply the individual limits to the individual test results. Control limits for the moving average limits are based on a moving average of the last 4 data points. Apply all control limits to the applicable target source.

CONTROL LIMITS

Mix Control Criteria	Target Source	Moving Average Limit	Individual Limit
2.36 mm Sieve	JMF	± 4.0 %	± 8.0 %
0.075 mm Sieve	JMF	± 1.5 %	± 2.5 %
Binder Content	JMF	± 0.3 %	± 0.7 %
VTM @ N _{des}	JMF	± 1.0 %	± 2.0 %
VMA @ N _{des}	Min. Spec. Limit	Min. Spec. Limit	- 1.0%
P _{0.075} / P _{be} Ratio	1.0	± 0.4	± 0.8
%G _{mm} @ N _{ini}	Max. Spec. Limit	N/A	+ 2.0%
TSR	Min. Spec. Limit	N/A	- 15%

Page 6-16, Subarticle 609-5(C)(5) Warning Bands, delete this subarticle in its entirety.

Pages 6-16 through 6-19, Subarticle 609-5(C)(6), delete the word "warning" and substitute the words "moving average".

Page 6-16, Subarticle 609-5(C)(6) Corrective Actions, first paragraph, first sentence, delete and replace with the following:

Immediately notify the Engineer when moving averages exceed the moving average limits.

Page 6-17, third full paragraph, delete and replace with the following:

Failure to stop production when required due to an individual mix test not meeting the specified requirements will subject all mix from the stop point tonnage to the point when the next individual test is back on or within the moving average limits, or to the tonnage point when production is actually stopped, whichever occurs first, to being considered unacceptable.

Sixth full paragraph, delete the first, second, and third sentence and replace with the following:

Immediately notify the Engineer when any moving average value exceeds the moving average limit. If two consecutive moving average values for any one of the mix control criteria fall outside the moving average limits, cease production of that mix, immediately notify the Engineer of the stoppage, and make adjustments. The Contractor may elect to stop production after only one moving average value falls outside the moving average limits.

Page 6-18, Subarticle 609-5(C)(6) Corrective Actions second full paragraph, delete and replace with the following:

If the process adjustment improves the property in question such that the moving average after four additional tests is on or within the moving average limits, the Contractor may continue production with no reduction in payment.

Page 6-18, delete the third and fourth full paragraphs, including the Table for Payment for Mix Produced in the Warning Bands and substitute the following:

If the adjustment does not improve the property in question such that the moving average after four additional individual tests is outside the moving average limits, the mix will be evaluated for acceptance in accordance with Article 105-3. Reduced payment for or removal of the mix in question will be applied starting from the plant sample tonnage at the stop point to the sample tonnage when the moving average is on or within the moving average limits. In addition, any mix that is obviously unacceptable will be rejected for use in the work.

Page 6-19, First paragraph, delete and replace with the following:

Failure to stop production and make adjustments when required due to two consecutive moving average values falling outside the moving average limits will subject all mix produced from the stop point tonnage to the tonnage point when the moving average is back on or within the moving average limits or to the tonnage point when production is actually stopped, whichever occurs first, to being considered unacceptable. Remove this material and replaced with materials that comply with the Specifications at no additional costs to the Department, unless otherwise approved. Payment will be made for the actual quantities of materials required to replace the removed quantities, not to exceed the original amounts.

Page 6-20, Subarticle 609-5(D)(1) General, delete the third full paragraph, and replace with the following:

Perform the sampling and testing at the minimum test frequencies as specified above. Should the density testing frequency fail to meet the minimum frequency as specified above, all mix without the required density test representation will be considered unsatisfactory. If the Engineer allows the mix to remain in place, payment will be made in accordance with Article 105-3.

Page 6-22, Subarticle 609-5(D)(4) Nuclear Gauge Density Procedures, third paragraph, insert the following as the second sentence:

Determine the Daily Standard Count in the presence of the QA Roadway Technician or QA Nuclear Gauge Technician on days when a control strip is being placed.

Page 6-23, Subarticle 609-5(D)(5) Limited Production Procedure, delete the first paragraph including (a), (b), (c) and substitute the following:

Proceed on limited production when, for the same mix type and on the same contract, one of the following conditions occur (except as noted in the first paragraph below).

- (a) Two consecutive failing lots, except on resurfacing*
- (b) Three consecutive failing lots on resurfacing*
- (c) Two consecutive failing nuclear control strips.

* Resurfacing is defined as the first new uniform layer placed on an existing pavement.

Page 6-25, Article 609-6 Quality Assurance, Density Quality Assurance, insert the following items after item (E):

- (F) By retesting Quality Control core samples from control strips (either core or nuclear) at a frequency of 100% of the frequency required of the Contractor;
- (G) By observing the Contractor perform all standard counts of the Quality Control nuclear gauge prior to usage each nuclear density testing day; or
- (H) By any combination of the above

Page 6-28, Subarticle 610-3(A) Mix Design-General, delete the fourth and fifth paragraphs and replace with the following:

Reclaimed Asphalt Pavement (RAP) or Reclaimed Asphalt Shingles (RAS) may be incorporated into asphalt plant mixes in accordance with Article 1012-1 and the following applicable requirements.

Reclaimed asphalt pavement (RAP) may constitute up to 50% of the total material used in recycled mixtures, except for mix Type S12.5D, Type S9.5D, and mixtures containing reclaimed asphalt shingle material (RAS). Reclaimed asphalt shingle (RAS) material may constitute up to 6% by weight of total mixture for any mix. When both RAP and RAS are used, do not use a combined percentage of RAS and RAP greater than 20% by weight of total mixture, unless otherwise approved. When the percent of binder contributed from RAS or a combination of RAS and RAP exceeds 20% but not more than 30% of the total binder in the completed mix, the virgin binder PG grade shall be one grade below (both high and low temperature grade) the binder grade specified in Table 610-2 for the mix type, unless otherwise approved. When the percent of binder contributed from RAS or a combination of RAS and RAP exceeds 30% of the total binder in the completed mix, the Engineer will establish and approve the virgin binder PG grade. Use approved methods to determine if any binder grade adjustments are necessary to achieve the performance grade for the specified mix type.

For Type S12.5D and Type S9.5D mixes, the maximum percentage of reclaimed asphalt material is limited to 20% and shall be produced using virgin asphalt binder grade PG 76-22. For all other recycled mix types, the virgin binder PG grade shall be as specified in Table 610-2A for the specified mix type.

When the percentage of RAP is greater than 20% but not more than 30% of the total mixture, use RAP meeting the requirements for processed or fractionated RAP in accordance with the requirements of Section 1012-1.

When the percentage of RAP is greater than 30% of the total mixture, use an approved stockpile of RAP in accordance with Section 1012-1(C). Use approved test methods to determine if any binder grade adjustments are necessary to achieve the performance grade for the specified mix type. The Engineer will establish and approve the virgin asphalt binder grade to be used.

Page 6-34, Subarticle 610-3(C)

Delete Table 610-2 and associated notes. Substitute the following:

**TABLE 610-2
SUPERPAVE MIX DESIGN CRITERIA**

Mix Type	Design ESALs Millions (a)	Binder PG Grade (b)	Compaction Levels No. Gyration @		Max. Rut Depth (mm)	Volumetric Properties (c)			
			N _{ini}	N _{des}		VMA % Min.	VTM %	VFA Min. - Max.	%G _{mm} @ N _{ini}
S4.75A(e)	< 0.3	64 -22	6	50	-----	20.0	7.0 - 15.0	-----	-----
SF9.5A	< 0.3	64 -22	6	50	11.5	16.0	3.0 - 5.0	70 - 80	≤ 91.5
S9.5B	0.3 - 3	64 -22	7	65	9.5	15.5	3.0 - 5.0	65 - 80	≤ 90.5
S9.5C	3 - 30	70 -22	7	75	6.5	15.5	3.0 - 5.0	65 - 78	≤ 90.5
S9.5D	> 30	76 -22	8	100	4.5	15.5	3.0 - 5.0	65 - 78	≤ 90.0
S12.5C	3 - 30	70 -22	7	75	6.5	14.5	3.0 - 5.0	65 - 78	≤ 90.5
S12.5D	> 30	76 -22	8	100	4.5	14.5	3.0 - 5.0	65 - 78	≤ 90.0
I19.0B	< 3	64 -22	7	65	-----	13.5	3.0 - 5.0	65 - 78	≤ 90.5
I19.0C	3 - 30	64 -22	7	75	-----	13.5	3.0 - 5.0	65 - 78	≤ 90.0
I19.0D	> 30	70 -22	8	100	-----	13.5	3.0 - 5.0	65 - 78	≤ 90.0
B25.0B	< 3	64 -22	7	65	-----	12.5	3.0 - 5.0	65 - 78	≤ 90.5
B25.0C	> 3	64 -22	7	75	-----	12.5	3.0 - 5.0	65 - 78	≤ 90.0
All Mix Types	Design Parameter 1. Dust to Binder Ratio (P _{0.075} / P _{be}) 2. Retained Tensile Strength (TSR) (AASHTO T283 Modified)					Design Criteria 0.6 – 1.4 85% Min. (d)			

- Notes:
- (a) Based on 20 year design traffic
 - (b) When Recycled Mixes are used, select the binder grade to be added in accordance with Subarticle 610-3(A)
 - (c) Volumetric Properties based on specimens compacted to N_{des} as modified by the Department

- (d) AASHTO T 283 Modified (No Freeze-Thaw cycle required). TSR for Type S 4.75A, Type B 25.0B, and Type B 25.0C mixes is 80% minimum
- (e) Mix Design Criteria for Type S 4.75A may be modified subject to the approval of the Engineer

Page 6-34, Insert the following immediately after Table 610-2:

**TABLE 610-2A
SUPERPAVE MIX DESIGN CRITERIA**

	Percentage of RAP in Mix		
	Category 1	Category 2	Category 3
Mix Type	% RAP ≤ 20%	20.1% ≤ %RAP ≤ 30.0%	%RAP > 30.0%
All A and B Level Mixes, I19.0C, B25.0C	PG 64 -22	PG 64 -22	TBD
S9.5C, S12.5C, I19.0D	PG 70 -22	PG 64-22	TBD
S9.5D and S12.5D	PG 76-22	N/A	N/A

Note: (1) Category 1 RAP has been processed to a maximum size of 2 inches.

(2) Category 2 RAP has been processed to a maximum size of 1 inch by either crushing and / or screening to reduce variability in the gradations.

(3) Category 3 RAP has been processed to a maximum size of 1 inch, fractionating the RAP into 2 or more sized stockpiles

Page 6-35, Table 610-3 delete and replace with the following:

**TABLE 610-3
ASPHALT PLACEMENT- MINIMUM TEMPERATURE REQUIREMENTS**

Asphalt Concrete Mix Type	Minimum Air Temperature	Minimum Surface Temperature
ACBC, Type B25.0B, C, B37.5C	35° F	35° F
ACIC, Type I19.0B, C, D	35° F	35° F
ACSC, Type S4.75A, SF9.5A, S9.5B	40° F	50° F*
ACSC, Type S9.5C, S12.5C	45° F	50° F
ACSC, Type S9.5D, S12.5D	50° F	50° F

* 35° F if surface is soil or aggregate base for secondary road construction.

Page 6-44, Article 610-8 Spreading and Finishing, third full paragraph, replace the first sentence with the following:

Use the 30 foot minimum length mobile grade reference system or the non-contacting laser or sonar type ski *with at least four referencing stations mounted on the paver at a minimum length of 24 feet* to control the longitudinal profile when placing the initial lanes and all adjacent lanes of all layers, including resurfacing and asphalt in-lays, unless otherwise specified or approved.

Page 6-50, Article 610-13 Density Acceptance, delete the second paragraph and replace with the following:

As an exception, when the first layer of mix is a surface course and is being placed directly on an unprimed aggregate or soil base, the layer will be included in the "Other" construction category.

Page 6-50, Article 610-13 Density Acceptance, delete the formula and description in the middle of the page and replace with the following:

$$PF = 100 - 10(D)^{1.465}$$

where: PF = Pay Factor (computed to 0.1%)
 D = the deficiency of the lot average density, not to exceed 2.0%

Page 6-53, Article 620-4 Measurement and Payment

Sixth paragraph, delete the last sentence.

Seventh paragraph, delete the paragraph and replace with the following:

The adjusted contract unit price will then be applied to the theoretical quantity of asphalt binder authorized for use in the plant mix placed during the partial payment period involved, except that where recycled plant mix is used, the adjusted unit price will be applied only to the theoretical number of tons of additional asphalt binder materials required by the job mix formula.

Page 6-54, Article 620-4 Measurement and Payment, add the following pay item:

Pay Item	Pay Unit
Asphalt Binder for Plant Mix, Grade PG 70-28	Ton

Page 6-69, Table 660-1 Material Application Rates and Temperatures, add the following:

Type of Coat	Grade of Asphalt	Asphalt Rate Gal / yd²	Application Temperature °F	Aggregate Size	Aggregate Rate lb. / sq. yd. Total
Sand Seal	CRS-2 or CRS-2P	0.22-0.30	150-175	Blotting Sand	12-15

Page 6-75, Subarticle 660-9(B), add the following as sub-item (5)**(5) Sand Seal**

Place the fully required amount of asphalt material in one application and immediately cover with the seal coat aggregate. Uniformly spread the fully required amount of aggregate in one application and correct all non-uniform areas prior to rolling.

Immediately after the aggregate has been uniformly spread, perform rolling.

When directed, broom excess aggregate material from the surface of the seal coat.

When the sand seal is to be constructed for temporary sealing purposes only and will not be used by traffic, other grades of asphalt material meeting the requirements of Articles 1020-6 and 1020-7 may be used in lieu of the grade of asphalt required by Table 660-1 when approved.

Page 6-76, Article 661-1 Description, add the following as the 2nd paragraph:

Provide and conduct the quality control and required testing for acceptance of the UBWC in accordance with "Quality Management System for Asphalt Pavements (OGAFC, PADL, and Ultra-Thin HMA Version)", included in the contract.

Page 6-80, Subarticle 661-3(A) Equipment, add the following as the first paragraph:

Use asphalt mixing plants in accordance with Article 610-5.

Page 10-41, Table 1012-1, delete the last row of entries for OGAFC and add the following:

Mix Type	Course Aggregate Angularity^(b) ASTM D5821	Fine Aggregate Angularity % Minimum AASHTO T304 Method A	Sand Equivalent % Minimum AASHTO T176	Flat & Elongated 5:1 Ratio % Maximum ASTM D4791 Section 8.4
S9.5 D	100/100	45	50	10
OGAFC	100/100	N/A	N/A	10
UBWC	100/85	40	45	10

Delete Note (c) under the Table 1012-1 and replace with the following:

(c) Does not apply to Mix Types SF9.5A and S9.5B.

Page 10-43, Subarticle 1012-1(F): Reclaimed Asphalt Shingle Material (RAS), insert the following immediately following the first paragraph:

(1) Mix Design RAS

Incorporate RAS from stockpiles that have been tested for uniformity of gradation and binder content prior to use in an asphalt mix design.

(2) Mix Production RAS

New Source RAS is defined as acceptable material which was not included in the stockpile when samples were taken for mix design purposes. Process new source RAS so that all materials will pass a 1/2" inch sieve prior to introduction into the plant mixer unit.

After a stockpile of processed RAS has been sampled and mix designs made from these samples, do not add new source RAS to the original stockpile without prior field testing to insure gradation and binder uniformity. Sample and test new source RAS before blending with the existing stockpile.

Store new source RAS in a separate stockpile until the material can be sampled and tested for comparison with the original recycled mix design data. New source RAS may also be placed against the existing stockpile in a linear manner provided it is sampled for mix design conformity prior to its use in the recycled mix.

RAS contamination including but not limited to excessive dirt, debris, clean stone, concrete will not be allowed.

Field approval of new source RAS will be based on Table 1012-3 below and volumetric mix properties on the mix with the new source RAS included. Provided the Table 1012-3 tolerances are met, volumetric properties of the new mix will then be performed. If all volumetric mix properties meet the mix design criteria for that mix type, the new source RAS may continue to be used.

If the gradation, binder content, or any of the volumetric mix properties are not within the allowable tolerances of Table 1012-3, do not use the new source RAS unless approved by the Engineer. The Contractor may elect to either not use the stockpile, to request an adjustment to the JMF, or to redesign the mix.

TABLE 1012-3
NEW SOURCE RAS GRADATION and BINDER TOLERANCES
(Apply Tolerances to Mix Design Data)

0-6% RAS	
P _b %	± 1.6%
Sieve Size (mm)	Tolerance
9.5	± 1
4.75	± 5
2.36	± 4
1.18	± 4
0.300	± 4
0.150	± 4
0.075	± 2.0

Page 10-43 through 10-45, Subarticle 1012-1(G), delete this in its entirety and replace with the following:

(G) Reclaimed Asphalt Pavement (RAP)

(1) Mix Design RAP

Incorporate RAP from stockpiles or other sources that have been tested for uniformity of gradation and binder content prior to use in an asphalt mix design. Use reclaimed asphalt pavement that meets all requirements specified for *one of* the following *two* classifications.

(a) Millings

Existing reclaimed asphalt pavement (RAP) that is removed from its original location by a milling process as specified in Section 607. Millings should be such that it has a uniform gradation and binder content and all materials will pass a 2" sieve prior to introduction into the plant mixer unit.

(b) Processed RAP

RAP that is processed in some manner (possibly by crushing and / or use of a blending method) to produce a uniform gradation and binder content in the RAP prior to use in a recycled mix. Process RAP so that all materials have a uniform gradation and binder content and will pass a 1" sieve prior to introduction into the plant mixer unit.

(c) Fractionated RAP

Fractionated RAP is defined as having two or more RAP stockpiles, where the RAP is divided into coarse and fine fractions. Grade RAP so that all materials will pass a 1" sieve. The coarse RAP stockpile shall only contain material retained on a 3/8 inch screen, unless otherwise approved. The fine RAP stockpile shall only contain material passing the 3/8" screen, unless otherwise approved. The Engineer may allow the Contractor to use an alternate to the 3/8 inch screen to fractionate the RAP. The maximum percentages of fractionated RAP may be comprised of coarse, fine, or the combination of both. Utilize a separate cold feed bin for each stockpile of fractionated RAP used.

(d) Approved Stockpiled RAP

Approved Stockpiled RAP is defined as fractionated RAP which has been isolated and tested for asphalt content, gradation, and asphalt binder characteristics with the intent to be used in mix designs with greater than 30% RAP materials. Fractionate the RAP in accordance with Section 1012-1(G)(c). Utilize a separate cold feed bin for each approved stockpile of RAP used.

Perform extraction tests at a rate of 1 per 1000 tons of RAP, with a minimum of 5 tests per stockpile to determine the asphalt content and gradation. Separate stockpiles of RAP material by fine and coarse fractions. Erect and maintain a sign satisfactory to the Engineer on each stockpile to identify the material. Assure that no deleterious material is allowed in any stockpile. The Engineer may reject by visual inspection any stockpiles that are not kept clean, separated, and free of foreign materials.

Submit requests for RAP stockpile approval to the Engineer with the following information at the time of the request:

- (1) Approximate tons of materials in stockpile
- (2) Name or Identification number for the stockpile
- (3) Asphalt binder content and gradation test results
- (4) Asphalt characteristics of the Stockpile.

For the Stockpiled RAP to be considered for approval, the gradation and asphalt content shall be uniform. Individual test results, when compared to the target, will be accepted if within the tolerances listed below:

**APPROVED STOCKPILED RAP GRADATION
and BINDER TOLERANCES
(Apply Tolerances to Mix Design Data)**

P_b %	$\pm 0.3\%$
Sieve Size (mm)	Percent Passing
25.0	$\pm 5\%$
19.0	$\pm 5\%$
12.5	$\pm 5\%$
9.5	$\pm 5\%$
4.75	$\pm 5\%$
2.36	$\pm 4\%$
1.18	$\pm 4\%$
0.300	$\pm 4\%$
0.150	$\pm 4\%$
0.075	$\pm 1.5\%$

Note: If more than 20% of the individual sieves are out of the gradation tolerances, or if more than 20% of the asphalt binder content test results fall outside the appropriate tolerances, the RAP shall not be used in HMA unless the RAP representing the failing tests is removed from the stockpile.

Do not add additional material to any approved RAP stockpile, unless otherwise approved by the Engineer.

Maintain at the plant site a record system for all approved RAP stockpiles. Include at a minimum the following: Stockpile identification and a sketch of all stockpile areas at the plant site; all RAP test results (including asphalt content, gradation, and asphalt binder characteristics).

(2) Mix Production RAP

During mix production, use RAP that meets the criteria for one of the following categories:

(a) Mix Design RAP

RAP contained in the mix design stockpiles as described above may be used in all applicable JMFs. These stockpiles have been pretested; however, they are subject to required QC / QA testing in accordance with Subarticle 609-5(C)(2).

(b) New Source RAP

New Source RAP is defined as any acceptable material that was not included in the stockpile or other source when samples were taken for mix design purposes. Process new source RAP so that all materials have a uniform gradation and binder content and will pass a 2" sieve prior to introduction into the plant mixer unit.

After a stockpile of millings, processed RAP, or fractionated RAP has been sampled and mix designs made from these samples, do not add new source RAP to the original stockpile without prior field testing to insure gradation and binder uniformity. Sample and test new source RAP before blending with the existing stockpile.

Store new source RAP in a separate stockpile until the material can be sampled and tested for comparison with the original recycled mix design data. New source RAP may also be placed against the existing stockpile in a linear manner provided it is sampled for mix design conformity prior to its use in the recycled mix.

Unprocessed RAP is asphalt material that was not milled and/ or has not been processed to obtain a uniform gradation and binder content and is not representative of the RAP used during the applicable mix design. Unprocessed RAP shall not be incorporated into any JMFs prior to processing. Different sources of unprocessed RAP may be stockpiled together provided it is generally free of contamination and will be processed prior to use in a recycled mix. RAP contamination in the form of excessive dirt, debris, clean stone, concrete, etc. will not be allowed. Incidental amounts of dirt, concrete, and clean stone may be acceptable. Unprocessed RAP may be processed and then classified as a new source RAP as described above.

Field approval of new source RAP will be based on Table 1012-2 below and volumetric mix properties on the mix with the new source RAP included. Provided the Table 1012-2 tolerances are met, volumetric properties of the new mix will then be performed. If all volumetric mix properties meet the mix design criteria for that mix type, the new source RAP may continue to be used.

If the gradation, binder content, or any of the volumetric mix properties are not within the allowable tolerances of Table 1012-2, do not use the new source RAP unless approved by the Engineer. The Contractor may elect to either not use the stockpile, to request an adjustment to the JMF, or to redesign the mix.

TABLE 1012-2 NEW SOURCE RAP GRADATION and BINDER TOLERANCES (Apply Tolerances to Mix Design Data)									
Mix Type	0 - 20% RAP			20 ⁺ - 30 % RAP			30 ⁺ % RAP		
Sieve (mm)	Base	Inter.	Surf.	Base	Inter.	Surf.	Base	Inter.	Surf.
P _b %	± 0.7%			± 0.4%			± 0.3%		
25.0	± 10	-	-	± 7	-	-	± 5	-	-
19.0	± 10	± 10	-	± 7	± 7	-	± 5	± 5	-
12.5	-	± 10	± 10	-	± 7	± 7	-	± 5	± 5
9.5	-	-	± 10	-	-	± 7	-	-	± 5
4.75	± 10	-	± 10	± 7	-	± 7	± 5	-	± 5
2.36	± 8	± 8	± 8	± 5	± 5	± 5	± 4	± 4	± 4
1.18	± 8	± 8	± 8	± 5	± 5	± 5	± 4	± 4	± 4
0.300	± 8	± 8	± 8	± 5	± 5	± 5	± 4	± 4	± 4
0.150	-	-	± 8	-	-	± 5	-	-	± 4
0.075	± 4	± 4	± 4	± 2	± 2	± 2	± 1.5	± 1.5	± 1.5

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES

(10-6-05)

DB6 R15

The approximate asphalt binder content of the asphalt concrete plant mixtures used on this project will be as follows:

Asphalt Concrete Base Course	Type B 25.0_	4.3%
Asphalt Concrete Intermediate Course	Type I 19.0_	4.7%
Asphalt Concrete Surface Course	Type S 4.75_	7.0%
Asphalt Concrete Surface Course	Type SF 9.5_	6.5%
Asphalt Concrete Surface Course	Type S 9.5_	6.0%
Asphalt Concrete Surface Course	Type S 12.5_	5.5%

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the *2006 Standard Specifications* or Project Special Provisions.

STREET SIGNS AND MARKERS AND ROUTE MARKERS

(7-1-95)

DB9 R01

Move any existing street signs, markers, and route markers out of the construction limits of the project and install the street signs and markers and route markers so that they will be visible to the traveling public if there is sufficient right of way for these signs and markers outside of the construction limits.

Near the completion of the project and when so directed by the Engineer, move the signs and markers and install them in their proper location in regard to the finished pavement of the project.

Stockpile any signs or markers that cannot be relocated due to lack of right of way, or any signs and markers that will no longer be applicable after the construction of the project, at locations directed by the Engineer for removal by others.

The Design-Build Team shall be responsible to the owners for any damage to any street signs and markers or route markers during the above described operations.

STEEL U-CHANNEL POSTS

(7-18-06)

DB9 R02

Amend the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 9-15 Subarticle 903-3(D) first paragraph, last sentence, delete the last sentence and add the following:

Use posts of sufficient length to permit the appropriate sign mounting height. Spliced posts are not permitted on new construction.

GALVANIZED HIGH STRENGTH BOLTS, NUTS AND WASHERS

(02-17-09)

DB10 R02

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 10-126, Subarticle 1072-7(F)(3) Change the AASHTO reference to B 695 Class 55

Page 10-247, Table 1092-2, Steel Sign Materials, Change High Strength Bolts, Nuts & Washers ASTM Specifications for Galvanizing to B695 Class 55.

Page 10-259, Subarticle 1094-1(A) Breakaway or Simple Steel Beam Sign Supports, replace the third paragraph with the following:

Fabricate high strength bolts, nuts, and washers required for breakaway supports from steel in accordance with ASTM A325 and galvanize in accordance with AASHTO B 695 Class 55.

Page 10-261, Article 1096-2 Steel Overhead Sign Structures, replace the last sentence with the following:

The galvanizing shall meet the requirement of AASHTO B 695 Class 55 for fasteners and of ASTM A123 for other structural steel.

AGGREGATE PRODUCTION

(11-20-01)

DB10 R05

Provide aggregate from a producer who utilizes the new Aggregate Quality Control / Quality Assurance Program that is in effect at the time of shipment.

No price adjustment is allowed to Design-Build Team or producers who utilize the new program. Participation in the new program does not relieve the producer of the responsibility of complying with all requirements of the 2006 *Standard Specifications for Roads and Structures*. Copies of this procedure are available upon request from the Materials and Test Unit.

PORTLAND CEMENT CONCRETE (Alkali-Silica Reaction)

(2-20-07)

DB10 R16

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Article 1024-1(A), replace the 2nd paragraph with the following:

Certain combinations of cement and aggregate exhibit an adverse alkali-silica reaction. The alkalinity of any cement, expressed as sodium-oxide equivalent, shall not exceed 1.0 percent. For mix designs that contain non-reactive aggregates and cement with an alkali content less than 0.6%, straight cement or a combination of cement and fly ash, cement and ground granulated blast furnace slag or cement and microsilica may be used. The pozzolan quantity shall not exceed the amount shown in Table 1024-1. For mixes that contain cement with an alkali content between 0.6% and 1.0%, and for mixes that contain a reactive aggregate documented by the Department, regardless of the alkali content of the cement, use a pozzolan in the amount shown in Table 1024-1.

Obtain the list of reactive aggregates documented by the Department at:

<http://www.ncdot.org/doh/operations/materials/pdf/quarrysrprob.pdf>

Table 1024-1	
Pozzolans for Use in Portland Cement Concrete	
<i>Pozzolan</i>	<i>Rate</i>
Class F Fly Ash	20% by weight of required cement content, with 1.2 lbs Class F fly ash per lb of cement replaced
Ground Granulated Blast Furnace Slag	35%-50% by weight of required cement content with 1 lb slag per lb of cement replaced
Microsilica	4%-8% by weight of required cement content, with 1 lb microsilica per lb of cement replaced

CONCRETE BRICK AND BLOCK PRODUCTION

(11-20-01)

DB10 R10

Provide concrete brick and block from a producer who utilizes the new Solid Concrete Masonry Brick / Unit Quality Control / Quality Assurance Program that is in effect on the date that material is received on the project.

No price adjustment is allowed to Design-Build Team or producers who utilize the new program. Participation in the new program does not relieve the producer of the responsibility of complying with all requirements of the 2006 *Standard Specifications for Roads and Structures*. Copies of this procedure are available upon request from the Materials and Test Unit.

ENGINEERING FABRICS TABLE 1056-1

(7-18-06)

DB10 R40

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 10-100, Table 1056-1, replace the values for Trapezoidal Tear Strength with the following:

Physical Property	ASTM Test Method	Type 1	Type 2	Type 3		Type 4
				Class A	Class B	
Typical Applications		Shoulder Drain	Under Riprap	Temporary Silt Fence		Soil Stabilization
Trapezoidal Tear Strength	D4533	45 lb	75 lb	--	--	75 lb

QUALIFICATION OF WELDS AND PROCEDURES

(6-3-09)

DB 10 R43

Page 10-143, Subarticle 1072-20(D) Qualification of Welds and Procedures, replace the third sentence of the first paragraph with the following:

For all prequalified field welds, submit Welding Procedure Specifications (WPS) for each joint configuration for approval at least 30 days prior to performing any welding. In lieu of this, use the WPS provided and preapproved by the Department. These preapproved WPS are available from the Materials and Tests Unit or at:

http://www.ncdot.org/doh/operations/materials/structural/appr_proc.html.

Use non-prequalified welds only if approved by the Engineer. Submit WPS for all non-prequalified welds to the Engineer for approval. At no cost to the Department, demonstrate their adequacy in accordance with the requirements of the Bridge Welding Code.

PAINT SAMPLING AND TESTING

(8-15-06)

DB10 R 45

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 10-190, Article 1080-4, Delete the first paragraph and replace with the following:

All paint will be sampled, either at the point of manufacture or at the point of destination. Inspection and sampling will be performed at the point of manufacture wherever possible. The

Design-Build Team shall not begin painting until the analysis of the paint has been performed, and the paint has been accepted.

PORTABLE CONCRETE BARRIER

(2-20-07)

DB10 R50

The 2006 *Standard Specifications for Roads and Structures* is revised as follows:

Page 10-245, Article 1090-1(A) General, add the following after the first sentence:

The requirement for approved galvanized connectors will be waived if the barrier remains the property of the Design-Build Team.

CHANGEABLE MESSAGE SIGNS

(11-21-06)

DB11 R 11

Revise the 2006 *Standard Specifications for Roads and Structures* as follows:

Page 11-9, Article 1120-3, Replace the 3rd sentence with the following:

Sign operator will adjust flash rate so that no more than two messages will be displayed and be legible to a driver when approaching the sign at the posted speed.

ON-THE-JOB TRAINING

(10-16-07) (Rev 6-3-09)

Z-10

Description

The North Carolina Department of Transportation will administer a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternate OJT Program. All contractors (existing and newcomers) will be automatically placed in the Alternate Program. Standard OJT requirements typically associated with individual projects will no longer be applied at the project level. Instead, these requirements will be applicable on an annual basis for each contractor administered by the OJT Program Manager.

On the Job Training shall meet the requirements of 23 CFR 230.107 (b), 23 USC – Section 140, this provision and the On-the-Job Training Program Manual.

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority must be given to training employees on NCDOT Federal-Aid funded projects.

Minorities and Women

Developing, training and upgrading of minorities and women toward journeymen level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not

be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Assessing Training Goals

The Department through the OJT Program Manager, will assign training goals for a calendar year based on the contractors' past three years' activity and the contractors' anticipated upcoming year's activity with the Department. At the beginning of each year, all contractors eligible will be contacted by the Department to determine the number of trainees that will be assigned for the upcoming calendar year. At that time, the Contractor shall enter into an agreement with the Department to provide a self-imposed on-the-job training program for the calendar year. This agreement will include a specific number of annual training goals agreed to by both parties. The number of training assignments may range from 1 to 15 per contractor per calendar year. The Contractor shall sign an agreement to fulfill their annual goal for the year. A sample agreement is available at www.ncdot.org/business/ocs/ojt/.

Training Classifications

The Contractor shall provide on-the-job training aimed at developing full journeyman level workers in the construction craft / operator positions. Preference shall be given to providing training in the following skilled work classifications:

Equipment Operators	Office Engineers
Truck Drivers	Estimators
Carpenters	Iron / Reinforcing Steel Workers
Concrete Finishers	Mechanics
Pipe Layers	Welders

The Department has established common training classifications and their respective training requirements that may be used by the contractors. However, the classifications established are not all-inclusive. Where the training is oriented toward construction applications, training will be allowed in lower-level management positions such as office engineers and estimators. Contractors shall submit new classifications for specific job functions that their employees are performing. The Department will review and recommend for acceptance to FHWA the new classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

Proposed training classifications are reasonable and realistic based on the job skill classification needs, and

The number of training hours specified in the training classification is consistent with common practices and provides enough time for the trainee to obtain journeyman level status.

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to

the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

Records and Reports

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information, as requested, shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

Trainee Interviews

All trainees enrolled in the program shall receive an initial and Trainee / Post graduate interview conducted by the OJT program staff.

Trainee Wages

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NCDOL and the Department.

Achieving or Failing to Meet Training Goals

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

Measurement and Payment

No compensation will be made for providing required training in accordance with these contract documents.

STANDARD SPECIAL PROVISION**AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS**

(05-20-08)

Z-2

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

“(h) Amounts Encumbered – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.”

Payment will be made on any contract terminated pursuant to the special provision in accordance with Article 108-13(E), of the *North Carolina Department of Transportation Standard Specifications for Roads and Structures*, dated July 1, 2006.

***** STANDARD SPECIAL PROVISIONS *******NCDOT GENERAL SEED SPECIFICATIONS FOR SEED QUALITY**

(11-18-08)

Z-3

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the found pure seed and found germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

<u>Restricted Noxious Weed</u>	<u>Limitations per Lb. Of Seed</u>	<u>Restricted Noxious Weed</u>	<u>Limitations per Lb. of Seed</u>
Blessed Thistle	4 seeds	Cornflower (Ragged Robin)	27 seeds
Cocklebur	4 seeds	Texas Panicum	27 seeds
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds
Morning-glory	8 seeds	Broadleaf Dock	54 seeds
Corn Cockle	10 seeds	Curly Dock	54 seeds
Wild Radish	12 seeds	Dodder	54 seeds
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds
Canada Thistle	27 seeds	Quackgrass	54 seeds
Field Bindweed	27 seeds	Wild Mustard	54 seeds
Hedge Bindweed	27 seeds		

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed

shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza
Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)	Bermudagrass
Kobe Lespedeza	Browntop Millet
Korean Lespedeza	German Millet - Strain R
Weeping Lovegrass	Clover - Red/White/Crimson
Carpetgrass	

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties)
Kentucky Bluegrass (all approved varieties)
Hard Fescue (all approved varieties)
Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass

Crownvetch

Pensacola Bahiagrass

Japanese Millet

Reed Canary Grass

Zoysia

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass

Big Bluestem

Little Bluestem

Bristly Locust

Birdsfoot Trefoil

Indiangrass

Orchardgrass

Switchgrass

Yellow Blossom Sweet Clover

***** STANDARD SPECIAL PROVISIONS *****

ERRATA

(07-21-09)

Z-4

Revise the *Standard Specifications for Roads and Structures July 2006* on all projects as follows:

Division 1

- Page 1-1, replace AREA - American Railway Engineering Association with ***American Railway Engineering and Maintenance of Way Association***.
- Page 1-7, remove **-L-** in middle of page after INVITATION TO BID and before LABORATORY.
- Page 1-25, 102-16(R), move 2nd paragraph to left margin. It is not a part of this subarticle, but part of the entire article.

Division 2

- Page 2-9, Subarticle 225-1(C), 1st paragraph, 2nd line, last word, add a “d” to make the word grade become **graded**
- Page 2-15, Subarticle 226-3, 5th paragraph, first line, replace the word *in* with the word **is**.
- Page 2-23, Subarticle 235-4(B)(9), at the end of the sentence, replace finished greater with finished **grade**.
- Page 2-28, Article 260-3, First paragraph, second line, remove the word *foot*.

Division 3

- Page 3-13, Article 340-4, Second paragraph, change Flowable Backfill to Flowable **Fill**

Division 4

- Page 4-29, Article 420-13(A) Description, change reference from Section 1082 to **Article 1081-6**.
- Page 4-40, Subarticle 420-17(F) first line, change Subarticle 420-17(B) to **(B) herein**.
- Page 4-70, 442-13(B) Second sentence, change SSPC Guide 6I to SSPC Guide **6**.
- Pages 4-72, 4-74, 4-76, at the top of the page, substitute the heading Section 452 with Section **450**.
- Page 4-79, at the top of the page, substitute the heading Section 450 with Section **452**
- Page 4-80, change 452-7 to 452-**6** at the top of the page.
- Page 4-80, change Pay Item ___ Steel Pile Retaining Walls, to **Sheet** Pile Retaining Walls.
- Page 4-88, 462-4, Title, Replace last word Measurement with the word **PAYMENT**

Division 5

- Page 5-8, Article 501-15 Measurement and Payment, delete the 4th paragraph that begins The quantity of lime, measured as provided ...

- Page 5-14, Article 520-11 Measurement and Payment, first paragraph, second line, delete *will be*.

Division 6

- Page 6-3, Article 600-9, 2nd Paragraph on this page, replace 818-5 with 818-4.
- Pages 6-30 and 31, Subarticle 610-3(A)(13) Move 2 paragraphs from the margin to the right under the number (13).
- Page 6-43, Article 610-8, 4th paragraph, remove the first *the*
- Page 6-44, 2nd full paragraph, 1st sentence, delete the first *and* and add *transverse* just before cross-slope control.
- Page 6-51, at the top of the page, add **610-14** on the same line, and just before the heading MAINTENANCE.
- Page 6-53, Article 620-4 sixth paragraph, second line; the word that should be *which*.
- Page 6-66, title, Replace EXISTNG with **EXISTING**
- Page 6-66, Article 657-1, Description, first sentence, replace PS/AR (hot-poured rubber asphalt with *hot applied joint sealer*.
- Page 6-66, Article 657-2, replace PS/AR (Hot-Poured Rubber Asphalt with the following:

Item	Section
<i>Hot Applied Joint Sealer</i>	1028-2

- Page 6-67, at the top of the page, substitute the heading Section 654 with Section **657**.
- Page 6-67, Article 657-3 Construction Methods, 2nd paragraph, replace PS/AR sealant with *hot applied joint sealer*.
- Page 6-71, 660-9(B)(1), Replace the first sentence of the first paragraph with the following:

Using the quantities shown in *Table 660-1*, apply asphalt material to the existing surface followed by an application of No. 78 M or lightweight aggregate.

- Page 6-89, Add a period at the end of the last sentence at the bottom of the page.
- Page 6-90, Article 663-5, first paragraph, first sentence, change 50oF to **50°F**; third paragraph, fourth sentence change 325oF to **325°F**.

Division 7

- Page 7-12, at the top of the page, substitute the heading Section 710 with Section **700**.
- Page 7-15, Article 710-9, 4th paragraph, last line, change 710-11(B) to 710-10(B).

Division 8

- Page 8-13, Article 808-3, 4th Paragraph, third line, replace the word Eexcavation with the word ***Excavation***
- Page 8-35, Article 848-2, Item: Replace Cncrete with ***Concrete***

Division 9

- Page 9-2, add ***901-3*** just before CONSTRUCTION METHODS

Division 10

- Page 10-12, near bottom of page add ***(C)*** before Proportioning and Mixing of Modified Compositions, which should be bold type.
- Page 10-28, at the top of the page, substitute Section 100***6*** for 1005.
- Page 10-54, Subarticle 1018-2A), First line, substitute ***(B)*** for II, third line, substitute ***(B)(2)*** for II-b.
- Pages 10-56, 10-58, 10-60 at the top of the page, substitute Section 1018 with Section ***1020***.
- Page 10-84, Table 1042-1, Class 2, Maximum, change from 23r to ***23***.
- Page 10-84, Article 1042-2 Testing, last sentence, replace the word alterations with the word ***cycles***.
- Page 10-100, Table 1056-1, replace on the line for Trapezoidal Tear Strength:

Type 1	Type 2	Type 3		Type 4
		Class A	Class B	Soil Stabilization
<i>45 lb</i>	<i>75 lb</i>	--	--	<i>75 lb</i>

- Page 10-116, Subarticle 1070-10, first paragraph, second sentence, add ***or*** just before cold-forged sleeve.
- Pages 10-136 through 10-147, at the top of the page, substitute Section 1074 with Section ***1072***.
- Page 10-157, Article 1077-11, first paragraph, change the reference from Subarticle 420-18(B) to Subarticle 420-***17(B)***.
- Page 10-200, Subarticle 1080-14(B), change reference to ASTM D33***59***
- Page 10-211, at the top of the page, substitute Section 1081 with Section ***1082***.
- Page 10-229, add ***1088-6 BLANK*** on the line above 1088-7 TUBULAR MARKERS.
- Page 10-244, add ***1089-10 BLANK*** and ***1089-11 BLANK*** on the lines just above 1089-12 FLAGGER.
- Page 10-272, delete Article 1098-6 in its entirety. Renumber Articles 1098-7 through 1098-17 as Articles 1098-6 through 1098-16 consecutively.

Division 12

- Page 12-21 Add **1266-2** just before the heading MATERIALS.

Division 14

- Page 14-33, Article 1413-6, first paragraph, first sentence, first line, replace the word made with the words *paid for*.

Division 15

- Page 15-2 add **1500-4** just before the heading WEEKEND, NIGHT AND HOLIDAY WORK.
- Page 15-4, Subarticle 1505-3(A)(2), replace the 2nd line with the following: *Provide shielding or shoring as required under Section 150 or as required elsewhere in the contract.*
- Page 15-5, add **1505-6** on the same line and just before the heading MEASUREMENT AND PAYMENT. (Remove the period after PAYMENT.)
- Page 15-6, Article 1505-6(3), delete *in Section 1175* and replace it with *elsewhere in the contract*.
- Page 15-8, add **1510-4** on the same line and just before the heading MEASUREMENT AND PAYMENT.
- Page 15-10, substitute **BLANK** for CONSTRUCTION REQUIREMENTS on the same line and just before 1515-4.
- Page 15-10, substitute **CONSTRUCTION REQUIREMENTS** for General Requirements
- Page 15-10, Article 1515-4, add **(D)** just before the bolded Fire Hydrants.
- Page 15-13, Article 1520-3, 8th paragraph, add *pipe* after diameter.
- Page 15-22, add **1540-3** on the same line and just before the heading CONSTRUCTION REQUIREMENTS
- Page 15-28, Replace 1550-6 METHOD OF MEASUREMENT with **MEASUREMENT AND PAYMENT**.

Division 16

- Page 16-12, Subarticle 1632-1(C) ¼ Inch hardware cloth, change the minimum width from 24 inches to **48** inches.

Division 17

- Page 17-19, Subarticle 1725-2 Material, Second paragraph, change Article 1098-7 to 1098-8
- Page 17-20, Subarticle 1726-2 Material, Second paragraph, change Article 1098-8 to 1098-9

END

***** STANDARD SPECIAL PROVISIONS *******AWARD OF CONTRACT**

(6-28-77)

Z-6

“The North Carolina Department of Transportation, in accordance with the provisions of *Title VI of the Civil Rights Act of 1964* (78 Stat. 252) and the Regulations of the Department of Transportation (*49 C.F.R., Part 21*), issued pursuant to such act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin”.

***** STANDARD SPECIAL PROVISIONS *******MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS**

(12-18-07)

Z-7

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (*EXECUTIVE NUMBER 11246*)

1. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, see as shown on the attached sheet entitled "Employment Goals for Minority and Female Participation".

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in *41 CFR Part 60-4* shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in *41 CFR 60-4.3(a)*, and its effort to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project or the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the executive Order and the regulations in *41 CFR Part 60-4*. Compliance with the goals will be measured against the total work hours performed.

2. As used in this Notice and in the contract resulting from this solicitation, the "covered area" is the county or counties shown on the cover sheet of the proposal form and contract.

**EMPLOYMENT GOALS FOR MINORITY
AND FEMALE PARTICIPATION**

Economic Areas

Area 023 29.7%

Bertie County
Camden County
Chowan County
Gates County
Hertford County
Pasquotank County
Perquimans County

Area 024 31.7%

Beaufort County
Carteret County
Craven County
Dare County
Edgecombe County
Green County
Halifax County
Hyde County
Jones County
Lenoir County
Martin County
Nash County
Northampton County
Pamlico County
Pitt County
Tyrrell County
Washington County
Wayne County
Wilson County

Area 025 23.5%

Columbus County
Duplin County
Onslow County
Pender County

Area 026 33.5%

Bladen County
Hoke County
Richmond County
Robeson County
Sampson County
Scotland County

Area 027 24.7%

Chatham County
Franklin County
Granville County
Harnett County
Johnston County
Lee County
Person County
Vance County
Warren County

Area 028 15.5%

Alleghany County
Ashe County
Caswell County
Davie County
Montgomery County
Moore County
Rockingham County
Surry County
Watauga County
Wilkes County

Area 029 15.7%

Alexander County
Anson County
Burke County
Cabarrus County
Caldwell County
Catawba County
Cleveland County
Iredell County
Lincoln County
Polk County
Rowan County
Rutherford County
Stanly County

Area 0480 8.5%

Buncombe County
Madison County

Area 030 6.3%

Avery County
Cherokee County
Clay County
Graham County
Haywood County
Henderson County
Jackson County
McDowell County
Macon County
Mitchell County
Swain County
Transylvania County
Yancey County

SMSA Areas

Area 5720 26.6%

Currituck County

Area 9200 20.7%

Brunswick County

New Hanover County

Area 2560 24.2%

Cumberland County

Area 6640 22.8%

Durham County

Orange County

Wake County

Area 1300 16.2%

Alamance County

Area 3120 16.4%

Davidson County

Forsyth County

Guilford County

Randolph County

Stokes County

Yadkin County

Area 1520 18.3%

Gaston County

Mecklenburg County

Union County

Goals for Female

Participation in Each Trade

(Statewide) 6.9%

***** STANDARD SPECIAL PROVISIONS *****

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS (FHWA-1273)

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Payment of Predetermined Minimum Wage
- V. Statements and Payrolls
- VI. Record of Materials, Supplies, and Labor
- VII. Subletting or Assigning the Contract
- VIII. Safety: Accident Prevention
- IX. False Statements Concerning Highway Projects
- X. Implementation of Clean Air Act and Federal Water Pollution Control Act
- XI. Certification Regarding Debarment, Suspension Ineligibility, and Voluntary Exclusion
- XII. Certification Regarding Use of Contract Funds for Lobbying

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:
 - Section I, paragraph 2;
 - Section IV, paragraphs 1, 2, 3, 4, and 7;
 - Section V, paragraphs 1 and 2a through 2g.
5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
6. **Selection of Labor:** During the performance of this contract, the contractor shall not:
 - a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
 - b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

- b. The contractor will accept as his operating policy the following statement:
- "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."
2. **EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
- c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.
6. **Training and Promotion:**
- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
 - d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
- a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
 - d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
8. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
- a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
 - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
 - c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
9. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
- a. The records kept by the contractor shall document the following:
 - 1. The number of minority and non-minority group members and women employed in each work classification on the project;
 - 2. The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
 - 3. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
 - 4. The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
 - b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

- a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.
- b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
1. the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
 2. the additional classification is utilized in the area by the construction industry;
 3. the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
 4. with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

- a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
4. **Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:**
- a. Apprentices:
1. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
 2. The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
 3. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
 4. In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.
- b. Trainees:
1. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
 2. The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
 3. Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.
 4. In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- c. Helpers:
- Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.
5. **Apprentices and Trainees (Programs of the U.S. DOT):**
- Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements

of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof of the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing

Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 1. that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
 2. that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
 3. that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR THIS SECTION DELETED JUNE 4, 2007.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
 - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).
3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety

and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
 - d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

GENERAL DECISION NC20080010 NC10

Z-11

Date: October 23, 2009

General Decision Number NC20080010 10/23/2009

Superseded General Decision No. NC20070010

State: North Carolina

Construction Type: HIGHWAY

COUNTIES:

Alleghany	Granville	Pasquotank
Anson	Greene	Pender
Ashe	Halifax	Perquimans
Avery	Harnett	Person
Beaufort	Haywood	Pitt
Bertie	Henderson	Polk
Bladen	Hertford	Richmond
Brunswick	Hoke	Robeson
Caldwell	Hyde	Rockingham
Camden	Iredell	Rutherford
Carteret	Jackson	Sampson
Caswell	Johnston	Scotland
Chatham	Jones	Stanly
Cherokee	Lee	Surry
Chowan	Lenoir	Swain
Clay	Macon	Transylvania
Cleveland	Madison	Tyrrell
Columbus	Martin	Vance
Craven	McDowell	Warren
Currituck	Mitchell	Washington
Dare	Montgomery	Watauga
Duplin	Moore	Wayne
Edgecombe	Nash	Wilkes
Gates	Northampton	Wilson
Graham	Pamlico	Yancey

HIGHWAY CONSTRUCTION PROJECTS (does not include tunnels, building structures in rest area projects, railroad construction, and bascule, suspension, and spandrel arch bridges, bridges designed for commercial navigation, and bridges involving marine construction, and other major bridges).

Modification Number

Publication Date

0

02/08/2008

1

07/25/2008

2

07/24/2009

3

10/23/2009

SUNC1990-002 02/12/1990

	Rates	Fringes
CARPENTER	7.71	
CONCRETE FINISHER	7.64	
IRONWORKER (Reinforcing)	9.27	
LABORER		
General	7.25	
Asphalt Raker	7.25	
Form Setter (Road)	7.25	
Mason (Brick, Block, Stone)	7.76	
Pipe Layer	7.25	
Power Tool Operator	7.25	
POWER EQUIPMENT OPERATORS		
Asphalt Distributor	7.25	
Asphalt Paver	7.25	
Bulldozer	7.25	
Bulldozer (utility)	7.25	
Concrete Finishing Machine	9.48	
Concrete Grinder	8.13	
Crane, Backhoe, Shovel, & Dragline (Over 1 yd.)	8.53	
Crane, Backhoe, Shovel, & Dragline (1 yd. & under)	7.25	
Drill Operator	7.65	
Grade Checker	7.25	
Grease person	7.25	
Hydroseeder	7.25	
Loader	7.25	
Mechanic	8.27	
Milling Machine	8.00	
Motor Grader (Fine Grade)	8.01	
Motor Grader (Rough Grade)	7.42	
Oiler	7.25	
Piledriver	11.00	
Roller (Finish)	7.25	
Roller (Rough)	7.25	
Scraper	7.25	
Screed Asphalt	7.25	
Stone Spreader	7.25	
Stripping Machine Operator	7.25	
Subgrade Machine	9.00	
Sweeper	7.25	
Tractor (utility)	7.25	
TRUCK DRIVERS		
Single Rear Axle Trucks	7.25	
Multi Rear Axle Trucks	7.25	
Heavy Duty trucks	7.25	
Welder	9.07	
WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.		

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

- 4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

***** STANDARD SPECIAL PROVISIONS *****

(12-18-07)

DIVISION ONE OF STANDARD SPECIFICATIONS

Division One of the 2006 NCDOT Standard Specifications for Roads and Structures (Standard Specifications) shall apply except as follows:

Definitions: Throughout Division One of the *Standard Specifications*, the term “Contractor” is replaced with “Design-Build Team”, the term “Bidder” is replaced with “Proposer,” the term “Bid” is replaced by “Price Proposal,” and the phrase “lowest Responsible Bidder” is replaced with “responsible Proposer with the lowest adjusted price.” The replacement of “Contractor” with “Design-Build Team” does not apply to Article 102-2. The replacement of the above terms also does not apply when the terms are part of a phrase (e.g. bid bond, prime contractor, total amount bid, etc.)

Deletions: Articles 102-4, 102-10(C)(2), 102-11(A), 103-2(B), 103-4(B), 104-13, and 108-2 of the *Standard Specifications* are deleted from Design-Build Contracts.

Modifications: The remainder of this Standard Special Provision includes modifications to Division One of the *Standard Specifications*.

**SECTION 101
DEFINITION OF TERMS**

Page 1-2, Article 101-3, replace and add certain definitions as follows:

ADDITIONAL WORK

Additional work is that which results from a change or alteration in the contract and for which there are contract unit prices in the original contract or an executed supplemental agreement.

ADVERTISEMENT

The public advertisement inviting Statements of Qualifications for the design and construction of specific projects.

AWARD

The decision of the Board of Transportation to accept the proposal of the selected Design-Build Team for work which is subject to the furnishing of payment and performance bonds, and such other conditions as may be otherwise provided by law, the Request for Proposals, and the *Standard Specifications*.

CONTRACT

The executed agreement between the Department of Transportation and the successful proposer, covering the performance of the work and the compensation therefor.

The term contract is all inclusive with reference to all written agreements affecting a contractual relationship and all documents referred to therein. The contract shall specifically

include, but not be limited to, the Request for Proposals, the Technical Proposal, the Price Proposal, the printed contract form and all attachments thereto, the contract bonds, the plans and associated special provisions prepared by the Design-Build Team, the standard specifications and all supplemental specifications thereto, the standard special provisions and the project special provisions contained in the Request for Proposals, and all executed supplemental agreements, all of which shall constitute one instrument.

DATE OF AVAILABILITY

That date set forth in the Request for Proposals, by which it is anticipated that the Contract will be executed and sufficient design efforts or work sites within the project limits will be available for the Design-Build Team to begin his controlling operations or design.

DESIGN-BUILD

A form of contracting in which the successful proposer undertakes responsibility for both the design and construction of a project.

DESIGN-BUILD TEAM

An individual, partnership, joint venture, corporation or other legal entity that furnishes the necessary design and construction services, whether by itself or through subcontracts.

DESIGN-BUILD PROPOSAL

A proposal to contract consisting of a separately sealed Technical Proposal and a separately sealed Price Proposal submitted in response to a Request for Proposals on a Design-Build project.

PLANS

The project plans, Standard Drawings, working drawings and supplemental drawings, or reproductions thereof, accepted by the Engineer, which show the location, character, dimensions and details of the work to be performed.

(A) Standard Drawings:

Drawings approved for repetitive use, showing details to be used where appropriate. All Standard Drawings approved by the Department plus subsequent revisions and additions. Standard Drawings are available for purchase from:

Randy A. Garris, PE
State Contract Officer
1591 Mail Service Center
Raleigh, NC 27699-1591

(B) Preliminary Plans:

Department-furnished drawings included along with a Request for Proposals, or as developed by the Design-Build Team.

(C) Project Plans:

Construction drawings prepared, sealed and completed by the Design-Build Team, or as provided by the Department, that contain specific details and dimensions peculiar to the work.

(D) Working Drawings and Supplemental Drawings:

Supplemental design sheets, shop drawings, or similar data which the Design-Build Team is required to submit to the Engineer.

(E) As-Constructed Drawings:

Final drawings prepared by the Design-Build Team, documenting the details and dimensions of the completed work.

PRICE PROPOSAL

The offer of a Proposer, submitted on the prescribed forms, to perform the work and furnish the labor and materials at the price quoted.

PROPOSAL (OR REQUEST FOR PROPOSALS)

The paper document provided by the Department that the proposer uses to develop his paper offer to perform the work at designated bid prices.

PROPOSER

An individual, partnership, firm, corporation, LLC, or joint venture formally submitting a Technical Proposal and Price Proposal in response to a Request for Proposals.

RIGHT OF WAY

The land area shown on the plans as right of way within which the project is to be constructed.

SCHEDULE OF VALUES

A schedule of work items necessary to complete work, along with the progress of each work item, primarily for the purpose of partial payments.

TABLE OF QUANTITIES

A listing of work items (corresponding to the items in the Trns*port pay item list) that contributes to a project completion. The table shall include estimated quantities for each work item.

TECHNICAL PROPOSAL

A submittal from a proposer, in accordance with requirements of the Request for Proposals, for the purpose of final selection.

SECTION 102 PROPOSAL REQUIREMENTS AND CONDITIONS

Page 1-11, delete Article 102-1 and replace with the following:

102-1 INVITATION TO BID

After the advertisement has been made, an invitation to bid will be mailed to known prequalified contractors and any other contracting firms, material suppliers, and other interested parties who have requested they be placed on the invitation to bid mailing list informing them that bids will be received for the construction of specific projects. Such invitation will indicate the contract identification number, length, locations, and descriptions; a general summary of the items of work to be performed; and information on how to receive a Request for Qualifications.

All projects will be advertised in daily newspapers throughout the state prior to the bid opening.

Page 1-15, delete Article 102-3 and replace with the following:

102-3 CONTENTS OF REQUEST FOR PROPOSALS

A Request for Proposals will be furnished by the Department to the selected proposers from among the respondents to the Request for Qualifications. Each Request for Proposals will be marked on the front cover by the Department with an identifier of the Proposer to whom it is being furnished. This Request for Proposals will state the location of the project and will show a schedule of contract items for which Technical and Price Proposals are invited. It will set forth the date and time Technical and Price Proposals are to be submitted and will be opened. The Request for Proposals will also include any special provisions or requirements that vary from or are not contained in any preliminary design information or standard specifications.

The Request for Proposals will also include the printed contract forms and signature sheets for execution by both parties to the contract. In the event the Proposer is awarded the contract, execution of the Request for Proposals by the Proposer is considered the same as execution of the contract.

Standard specifications, sealed plans specifically identified as the Department's responsibility and other documents designated in the Request for Proposals shall be considered a part of the Request for Proposals whether or not they are attached thereto. All papers bound with the proposal are necessary parts thereof and shall not be detached, taken apart, or altered.

The names and identity of each prospective Proposer that receives a copy of the Request for Qualifications for the purposes of submitting a Statement of Qualifications shall be made public, except that a potential Proposer who obtains a Request for Qualifications may, at the time of ordering, request that his name remain confidential.

Up to three copies of the Request for Proposals will be furnished to each prospective Proposer. Additional copies may be purchased for the sum of \$25 each. The copy marked with the Proposer's name and prequalification number shall be returned to the Department.

Page 1-16, Article 102-6, replace the first paragraph with the following:

The Proposer shall examine carefully the site of the work contemplated, the preliminary plans and specifications, and the Request for Proposals. The submission of a Technical Proposal and a Price Proposal shall be conclusive evidence that the Proposer has investigated and is satisfied as to the conditions to be encountered; as to the character, quality, and scope of work to be performed; the quantities of materials to be furnished; and as to the conditions and requirements of the proposed contract.

Page 1-17, delete Article 102-7 and replace with following:**102-7 SUBSURFACE INVESTIGATION REPORT**

The Subsurface Investigation and report was made for the purpose of information only.

If a subsurface investigation report is available on this project, a copy may be obtained by the prospective proposers upon request.

The subsurface investigation on which the report is based was made for the purpose of information only. The various field boring logs, rock cores, and soil test data available may be reviewed or inspected in Raleigh at the office of the Geotechnical Unit. Neither the subsurface investigation report nor the field boring logs, rock cores, or soil test data is part of the contract.

General soil and rock strata descriptions and indicated boundaries are based on a geotechnical interpretation of all available subsurface data and may not necessarily reflect the actual subsurface conditions between borings or between sampled strata within the borehole. The laboratory sample data and the in situ (in-place) test data can be relied on only to the degree of reliability inherent in the standard test method. The observed water levels or soil moisture conditions indicated in the subsurface investigations are as recorded at the time of the investigation. These water levels or soil moisture conditions may vary considerably with time according to climatic conditions including temperature, precipitation, and wind, as well as other nonclimatic factors.

The Proposer is cautioned that details shown in the subsurface investigation report are preliminary only. The Department does not warrant or guarantee the sufficiency or accuracy of the investigation made, nor the interpretations made or opinions of the Department as to the type of materials and conditions that may be encountered. The proposer is cautioned to make such independent subsurface investigations, as he deems necessary to satisfy himself as to conditions to be encountered on this project. The Design-Build Team shall have no claim for additional compensation or for an extension of time for any reason resulting from the actual conditions encountered at the site differing from those indicated in the subsurface investigation.

Pages 1-17, delete Article 102-8 and replace with the following:**102-8 PREPARATION AND SUBMISSION OF BIDS**

All Price Proposals shall be prepared and submitted in accordance with the following requirements:

1. The Request for Proposals provided by the Department shall be used and shall not be taken apart or altered. The Price Proposal shall be submitted on the same form, which has

been furnished to the Proposer by the Department as identified by the Proposer's name marked on the front cover by the Department.

2. All entries including signatures shall be written in ink.
3. The Proposer shall submit a lump sum or unit price for every item in the Price Proposal. The lump sum or unit prices bid for the various contract items shall be written in figures.
4. An amount bid shall be entered in the Request for Proposals for every item and the price shall be written in figures in the "Amount Bid" column in the Request for Proposals.
5. The total amount bid shall be written in figures in the proper place in the Request for Proposals. The total amount bid shall be determined by adding the amounts bid for each lump sum item.
6. Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Proposer shall initial the change in ink.
7. The Price Proposal shall be properly executed. In order to constitute proper execution, the Price Proposal shall be executed in strict compliance with the following:
 - a. If a Price Proposal is by an individual, it shall show the name of the individual and shall be signed by the individual with the word "Individually" appearing under the signature. If the individual operates under a firm name, the bid shall be signed in the name of the individual doing business under the firm name.
 - b. If the Price Proposal is by a corporation, it shall be executed in the name of the corporation by the President, Vice President, or Assistant Vice President. It shall be attested by the Secretary or Assistant Secretary. The seal of the corporation shall be affixed. If the Price Proposal is executed on behalf of a corporation in any other manner than as above, a certified copy of the minutes of the Board of Directors of said corporation authorizing the manner and style of execution and the authority of the person executing shall be attached to the Price Proposal or shall be on file with the Department.
 - c. If the Price Proposal is made by a partnership, it shall be executed in the name of the partnership by one of the general partners.
 - d. If the Price Proposal is made by a Limited Liability Company (LLC), it shall be signed by the manager and notarized.
 - e. If the Price Proposal is made by a joint venture, it shall be executed by each of the joint venturers in the appropriate manner set out above. In addition, the execution by the joint venturers shall appear below their names.
 - f. The Price Proposal execution shall be notarized by a notary public whose commission is in effect on the date of execution. Such notarization shall be applicable both to the Price Proposal and to the non-collusion affidavit which is part of the signature sheets.
8. The Price Proposal shall not contain any unauthorized additions, deletions, or conditional bids.

9. The Proposer shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
10. The Price Proposal shall be accompanied by a bid bond on the form furnished by the Department or by a bid deposit. The bid bond shall be completely and properly executed in accordance with the requirements of Article 102-11. The bid deposit shall be a certified check or cashier check in accordance with Article 102-11.
11. The Price Proposal shall be placed in a sealed envelope and shall have been delivered to and received by the Department prior to the time specified in the Request for Proposals.

Page 1-22, delete Article 102-12 and replace with the following:

102-12 DELIVERY OF BIDS

All Price Proposals shall be placed in a sealed envelope having the name and address of the Proposer, and the statement " Price Proposal for the Design/Build of State Highway Project No. _____ in _____ County(ies)" on the outside of the envelope. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope addressed to the Contract Officer as stated in the Request for Proposals. The outer envelope shall also bear the statement "Price Proposal for the Design/Build of State Highway Project No. _____". All Technical Proposals shall be placed in a sealed envelope having the name and address of the Proposer, and the statement "Technical Proposal for the Design/Build of State Highway Project No. _____ in _____ County(ies)" on the outside of the envelope. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope addressed to the Contract Officer as stated in the Request for Proposal. The outer envelope shall also bear the statement "Technical Proposal for the Design/Build of State Highway Project No. _____". If delivered in person on or before the due date, the sealed envelope shall be delivered to the office of the Contract Officer as indicated in the Request for Proposals. Price Proposals and Technical Proposals shall be submitted in accordance with the project special provision "Submittal of Proposals" contained elsewhere in this Request for Proposals.

All Price Proposals and Technical Proposals shall be delivered prior to the time specified in the Request for Proposals. Price proposals and Technical Proposals received after such time will not be accepted and will be returned to the Proposer unopened.

Pages 1-22, delete Article 102-13 and replace with the following:

102-13 WITHDRAWAL OR REVISION OF BIDS

A Design-Build Team will not be permitted to withdraw its Technical and Price Proposals after they have been submitted to the Department, unless allowed under Article 103-3 or unless otherwise approved by the State Highway Administrator.

Page 1-23, delete Article 102-14 and replace with the following:

102-14 RECEIPT AND OPENING OF BIDS

Price Proposals will be opened and read publicly at the time and place indicated in the Request for Proposals. The scores of the previously conducted evaluation of the Technical Proposals will also be read publicly in accordance with the procedures outlined in the Request

for Proposals. Proposers, their authorized agents, and other interested parties are invited to be present.

Page 1-23, Article 102-15, Replace the 1st paragraph with the following:

102-15 REJECTION OF BIDS

Any Price Proposal submitted which fails to comply with any of the requirements of Articles 102-8, 102-10 or 102-11, or with the requirements of the project scope and functional specifications shall be considered irregular and may be rejected. A Price Proposal that does not contain costs for all proposal items shall be considered irregular and may be rejected.

**SECTION 103
AWARD AND EXECUTION OF CONTRACT**

Page 1-25, delete Article 103-1 and replace with the following:

103-1 CONSIDERATION OF PRICE PROPOSALS

After the Price Proposals are opened and read, they will be tabulated. The Price Proposal and score of the Technical Proposal will be made available in accordance with procedures outlined in the Request for Proposals. In the event of errors, omissions, or discrepancies in the costs, corrections to the Price Proposal will be made in accordance with the provisions of Article 103-2. Such corrected costs will be used to determine the lowest adjusted price.

After the reading of the Price Proposals and technical scores, the Department will calculate the lowest adjusted price as described in the “Selection Procedure” section of the Request for Proposals.

The right is reserved to reject any or all Price Proposals, to waive technicalities, to request the Proposer with the lowest adjusted price to submit an up-to-date financial and operating statement, to advertise for new proposals, or to proceed to do the work otherwise, if in the judgment of the Board, the best interests of the State will be promoted thereby.

Page 1-26, Subarticle 103-2(A), add items (7) and (8) as follows:

- (7) Discrepancy in the “Total Amount Bid” and the addition of the “Amount Bid” for each line Item**

In the case of the Total Amount Bid does not equal the summation of each Amount Bid for the line items, the summation of each Amount Bid for the line items shall be deemed to be the correct total for the entire project.

- (8) Omitted Total Amount Bid –Amount Bid Completed**

If the Total Amount Bid is not completed and the Amount Bid for all line items is completed the Total Amount Bid shall be the summation of the Amount Bid for all line items.

Page 1-29, delete Article 103-6 and replace with the following:

103-6 RETURN OF BID BOND OR BID DEPOSIT

Checks that have been furnished as a bid deposit will be retained until after the contract bonds have been furnished by the successful proposer, at which time Department of Transportation warrants in the equivalent amount of checks that were furnished as a bid deposit will be issued.

Paper bid bonds will be retained by the Department until the contract bonds are furnished by the successful proposer, after which all such bid bonds will be destroyed unless the individual bid bond form contains a note requesting that it be returned to the proposer or the Surety.

Page 1-30, delete Article 103-9 and replace with the following:

103-9 FAILURE TO FURNISH CONTRACT BONDS

The successful proposer's failure to file acceptable bonds within 14 calendar days after the notice of award is received by him shall be just cause for the forfeiture of the bid bond or bid deposit and rescinding the award of the contract. Award may then be made to the responsible proposer with the next lowest adjusted price or the work may be readvertised and constructed under contract or otherwise, as the Board of Transportation may decide.

**SECTION 104
SCOPE OF WORK**

Page 1-30, delete Article 104-1 and replace with the following:

104-1 INTENT OF CONTRACT

The intent of the contract is to prescribe the work or improvements that the Design-Build Team undertakes to perform, in full compliance with the contract. In case the method or character of any part of the work is not covered by the contract, this section shall apply. The Design-Build Team shall perform all work in accordance with the contract or as may be modified by written orders, and shall do such special, additional, extra, and incidental work as may be considered necessary to complete the work to the full intent of the contract. Unless otherwise provided elsewhere in the contract, the Design-Build Team shall furnish all implements, machinery, equipment, tools, materials, supplies, transportation, and labor necessary for the design, prosecution and completion of the work.

Page 1-31, Article 104-3, replace “plans or details of construction” with “contract” in all instances within this Article.

Page 1-40, Article 104-10, replace the first paragraph with the following:

104-10 MAINTENANCE OF THE PROJECT

The Design-Build Team shall maintain the project from the date of beginning construction on the project until the project is finally accepted. All existing and constructed guardrail / guiderail

within the project limits shall be included in this maintenance. This maintenance shall be continuous and effective and shall be prosecuted with adequate equipment and forces to the end that all work covered by the contract is kept in satisfactory and acceptable conditions at all times. The Design-Build Team shall perform weekly inspections of guardrail and guiderail and shall report damages to the Engineer on the same day of the weekly inspection. Where damaged guardrail or guiderail is repaired or replaced as a result of maintaining the project in accordance with this Article, such repair or replacement shall be performed within 7 consecutive calendar days of such inspection report.

Page 1-41, Article 104-10, add the following after the last paragraph:

The Design-Build Team will not be compensated for performance of weekly inspections and damage reports for the guardrail / guiderail. Other maintenance activities for existing guardrail / guiderail will be handled in accordance with Articles 104-7 and 104-8.

SECTION 105 CONTROL OF WORK

Pages 1-46, delete Article 105-2 and replace with the following:

105-2 PLANS AND WORKING DRAWINGS

All plans shall be supplemented by such approved working drawings as are necessary to adequately control the work. Working drawings furnished by the Design-Build Team and approved by the Engineer shall consist of such detailed drawings as may be required to adequately control the work. They may include stress sheets, shop drawings, erection drawings, falsework drawings, cofferdam drawings, bending diagrams for reinforcing steel, catalog cuts, or any other supplementary drawings or similar data required of the Design-Build Team. When working drawings are approved by the Engineer, such approval shall not operate to relieve the Design-Build Team of any of his responsibility under the contract for the successful completion of the work.

Changes on shop drawings after approval and/or distribution shall be subject to the approval of the Engineer and he shall be furnished a record of such changes.

Page 1-47, Article 105-3, add the following after the 3rd paragraph:

The Design-Build Team shall bear all the costs of providing the burden of proof that the nonconforming work is reasonable and adequately addresses the design purpose. The Design-Build Team shall bear all risk for continuing with nonconforming work in question until it is accepted.

The Engineer may impose conditions for acceptance of the nonconforming work. The Design-Build Team shall bear all costs for fulfilling the conditions.

The decisions whether the product satisfies the design purpose, whether the nonconforming work is reasonably acceptable and the conditions for acceptance are at the sole discretion of the Engineer.

Pages 1-47, delete Article 105-4 and replace with the following:

105-4 COORDINATION OF PLANS, SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND SPECIAL PROVISIONS

The Request for Proposals, all Plans, the Standard Specifications, and all supplementary documents are essential parts of the contract and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work.

In case of discrepancy or conflict, the order in which they govern shall be as follows:

- (A) Request for Proposals
- (B) Technical Proposal from the Design-Build Team
- (C) Accepted Plans and Details from the Design-Build Team, or sealed plans provided by the Department, as applicable
- (D) Standard Drawings
- (E) Standard Specifications

Where dimensions on the plans are given or can be computed from other given dimensions they shall govern over scaled dimensions.

The Design-Build Team shall take no advantage of any error or omission in the plans, estimated quantities, or specifications. In the event the Design-Build Team discovers an error or omission, he shall immediately notify the Engineer.

Page 1-50, delete Article 105-9 and replace with the following:

105-9 CONSTRUCTION STAKES, LINES, AND GRADES

The Design-Build Team shall be responsible for any surveying, construction staking and layout required in the performance of the work. He will be responsible for the accuracy of lines, slopes, grades and other engineering work which he provides under this contract. Unless otherwise specified in the Request for Proposals, no measurement or direct payment will be made for this work. The cost shall be considered as included in other contract items.

**SECTION 106
CONTROL OF MATERIAL**

Page 1-56, Article 106-2, add the following after the second paragraph:

Prior to beginning construction, the Design-Build Team shall provide a Table of Quantities as described in Article 101-3 of these specifications.

The Table of Quantities Work Items shall correspond to Pay Items as defined in the Standard Specifications. These Work Items have associated Materials and Conversion Factors. For non-standard Work Items, a Generic Work Item with the correct Unit of Measure and in an appropriate category will be used. For example, "GENERIC TRAFFIC CONTROL ITEM – EA" or "GENERIC RETAINING WALL ITEM – LF". For these Generic Work Items, Materials must be defined and appropriate conversion factors submitted

An initial Table of Quantities shall be submitted no later than 30 calendar days after the date of award. The Table of Quantities shall be updated and resubmitted within 14 days of when a set of Plans is sealed as Release for Construction (RFC) Plans, and whenever there are substantial changes to the Quantities on previously incorporated RFC Plans.

Page 1-58, Article 106-6, replace “specifications” with “contract” as the last word of the 1st paragraph.

Page 1-58, Article 106-6(C), replace the 2nd paragraph with the following:

Where the Department agrees to inspect or test materials during their production or at the source of supply, the Design-Build Team shall bear the cost of testing performed on materials ordered by him but not incorporated into the project. For items normally pretested by the Department, the Design-Build Team shall provide a minimum of 30 days notice prior to the beginning of production of the items for this project along with final approved shop drawings.

SECTION 107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

Page 1-69, Article 107-18, in the last sentence of the first paragraph, replace the word “legally” with the word “contractually”.

Page 1-69, delete Article 107-19 and replace with the following:

107-19 FURNISHING RIGHT OF WAY

The responsibility for coordinating the securing of all necessary rights of way is as outlined in the Request for Proposals.

SECTION 108 PROSECUTION AND PROGRESS

Page 1-71, Article 108-1, add the following sentence to the end of the 1st paragraph:

The Design-Build Team shall not commence work prior to execution of the contract by both the Department and the Design-Build Team.

Page 1-72, delete Article 108-3 and replace with the following:

108-3 PRECONSTRUCTION AND PRE-DESIGN CONFERENCES

The selected Design-Build Team shall meet with the Engineer for a pre-design conference concerning the design phase of the work. This conference shall be held prior to the commencement of work, as it is determined according to Article 108-1, and will be scheduled by the Engineer. At the predesign conference, the Design-Build Team shall furnish authorized signature forms and a list of any proposed subcontractors associated with the design of the project.

A preconstruction conference shall be held at least 10 working days before construction activity begins. This second conference, concerning the construction phase, shall also be scheduled by the Engineer. The Design-Build Team shall give the Engineer a minimum of 45 days notice before he plans to begin construction activities. This will allow the Engineer time for any environmental agency representatives involved in the permitting process, as well as any other pertinent entities, to be scheduled to attend the preconstruction conference. If the Design-Build Team is responsible for utilities in accordance with Article 105-8 and the Request for Proposals, he shall be responsible for coordinating with the Engineer in scheduling their attendance and for notifying them. The Design-Build Team shall also be responsible for coordinating with the Engineer in scheduling the attendance of subcontractors and others deemed appropriate, and for notifying them.

At the preconstruction conference, a list of any proposed subcontractors and major material suppliers associated with the construction of the project will be submitted.

If the contract has a DBE requirement, the Design-Build Team shall submit copies of completed and signed DBE subcontracts, purchase orders, or invoices to the Department.

The Design-Build Team shall submit a traffic control plan in accordance with Article 1101-5 and the Request for Proposals. The Design-Build Team shall designate an employee who is competent and experienced in traffic control to implement and monitor the traffic control plan. The qualifications of the designated employee must be satisfactory to the Engineer.

The Design-Build Team shall submit a safety plan and designate an employee as Safety Supervisor.

Both plans shall be submitted at the preconstruction conference and must be satisfactory to the Engineer. Should the design plan include activities that would place personnel on the work site, traffic control and safety plans for those activities shall be submitted at the predesign conference.

During the preconstruction conference, the Engineer will designate a Department employee or employees who will be responsible to see that the traffic control plans and any alterations thereto are implemented and monitored to the end that traffic is carried through the work in an effective manner. If approved by the Engineer, the Design-Build Team may designate one employee to be responsible for both the traffic control and safety plans. The Design-Build Team shall not designate its superintendent as the responsible person for either the traffic control plan or the safety plan, unless approved by the Engineer.

If the project requires that Design-Build Team or State personnel work from falsework, within shoring, or in any other hazardous area the Design-Build Team shall submit, as part of the Design-Build Team's safety plan, specific measures it will use to ensure worker safety.

The Design-Build Team shall also submit a program for erosion control and pollution prevention on all projects involving clearing and grubbing, earthwork, structural work, or other construction, when such work is likely to create erosion or pollution problems.

If the Design-Build Team fails to provide the required submissions, the Engineer may order the preconstruction conference suspended until such time as they are furnished. Work shall not begin until the preconstruction conference has been concluded and the safety plan has been approved, unless authorized by the Engineer. The Design-Build Team shall not be entitled to

additional compensation or an extension of contract time resulting from any delays due to such a suspension.

The Design-Build Team shall designate a qualified employee as Quality Control Manager. The Quality Control Manager shall be responsible for implementing and monitoring the quality control requirements of the project.

Page 1-72, Article 108-4, add the following sentence to the end of this article:

The Design-Build Team shall record the proceedings of these conferences and distribute the final minutes of the conferences to all attendees.

Page 1-74, Article 108-6, replace “40 percent” with “30 percent” in the 1st paragraph.

Page 1-74, Article 108-6, delete the second paragraph and replace with the following:

In any event, the Contractor shall perform with his own organization work amounting to not less than 25% of the difference between the total amount bid and the value of specialty items that have been sublet.

Pages 1-75, delete Article 108-8 and replace with the following:

108-8 FAILURE TO MAINTAIN SATISFACTORY PROGRESS

The Engineer will check the Design-Build Team's progress at the time each partial pay request is received. The Design-Build Team's progress may be considered as unsatisfactory if, according to the Progress schedule, the projected finish date for all work exceeds the scheduled finish date by more than 10%.

When the Design-Build Team's progress is found to be unsatisfactory as described above, the Engineer may make written demand of the Design-Build Team to state in writing the reason for the unsatisfactory progress and produce such supporting data as the Engineer may require or the Design-Build Team may desire to submit. The Engineer will consider the justifications submitted by the Design-Build Team and extensions of the completion date that have or may be allowed in accordance with Article 108-10(B).

When the Design-Build Team cannot satisfactorily justify the unsatisfactory progress the Engineer may invoke one or more of the following sanctions:

1. Withhold anticipated liquidated damages from amounts currently due or which become due.
2. Remove the Design-Build Team and individual managing firms of the Design-Build Team and/or prequalified design firms from the Department's Prequalified Bidders List.

When any of the above sanctions have been invoked, they shall remain in effect until rescinded by the Engineer.

Page 1-79, Article 108-10(B), add the following as the first paragraph:

Only delays to activities which affect the completion date or intermediate contract date will be considered for an extension of contract time. No extensions will be granted until a delay

occurs which impacts the project's critical path and extends the work beyond the contract completion date or intermediate completion date. Any extension to the completion date or intermediate contract date will be based on the number of calendar days the completion date or intermediate completion date is impacted as determined by the Engineer's analysis.

Pages 1-79, delete Subarticle 108-10(B)(1) in its entirety.

Page 1-83, Article 108-13, delete bullet (E)(2) in its entirety.

SECTION 109 MEASUREMENT AND PAYMENT

Page 1-85, Article 109-2, delete the last sentence of the 1st paragraph and replace with the following:

Payment to the Design-Build Team will be made only for the work completed, certified and accepted in accordance with the terms of the contract.

Pages 1-90, delete Article 109-4(A) and replace with the following:

109-4 PARTIAL PAYMENTS

(A) General:

Partial payments will be based upon progress estimates prepared by the Engineer at least once each month on the date established by the Engineer. Partial payments may be made twice each month if in the judgment of the Engineer the amount of work performed is sufficient to warrant such payment. No partial payment will be made when the total value of work performed since the last partial payment amounts to less than \$10,000.00. Partial payments will be approximate only and will be subject to correction in the final estimate and payment.

When the contract includes one lump sum price for the entire work required by the contract, partial payments for the lump sum design-build price shall be based on a certified Schedule of Values submitted by the successful Design-Build Team and approved by the Engineer. The certification shall indicate the Design-Build Team has reviewed the information submitted and the information accurately represents the work performed for which payment is requested. The certified Schedule of Values shall be submitted no later than 30 calendar days after the date of award. Each item on the certified Schedule of Values shall be assigned a cost and quantity and shall be identified as an activity on the progress schedule. A revised certified Schedule of Values shall be submitted with each update of the Progress schedule as described in Article 108-2 or when requested by the Engineer. A certified copy of the Table of Quantities shall also be submitted with each payment request. The certification of the Table of Quantities shall indicate the Design-Build Team has reviewed the information submitted and the information accurately represent the materials for the work performed for which payment is requested.

When the contract includes lump sum items for portions of the work required by the contract, and the applicable section of the Specifications or Request for Proposals specify the means by which the total amount bid be included in the partial pay estimates, the Engineer will determine amounts due on the partial pay estimate in accordance with the applicable portion of the Specifications or Request for Proposals.

The Engineer will withhold an amount sufficient to cover anticipated liquidated damages as determined by the Engineer.

Page 1-92, Subarticle 109-5(D), delete the 4th and 5th paragraphs and replace with the following:

Partial payments will not be made on seed or any living or perishable plant materials.

Partial payment requests shall not be submitted by the Design-Build Team until those items requested have corresponding signed and sealed RFC plans accepted by the Department.

Pages 1-94, Article 109-10, add the following as bullets (E) and (F) under the 1st paragraph.

- (E) As-constructed plans or other submittals as required by the Contract.
- (G) Documents or guarantees to support any warranty provided by the Design Build Team.

ITEMIZED PROPOSAL FOR CONTRACT No. C202381

County: Johnston

Line #	Item Number #	Sec #	Description	Quantity	Unit Cost	Amount
ROADWAY ITEMS						
0001	0000900000-N	SP	GENERIC MISCELLANEOUS ITEM DESIGN, CONSTRUCTION	Lump Sum	L.S.	

Total Amount Of Bid For Entire Project: _____

FUEL USAGE FACTOR CHART AND ESTIMATE OF QUANTITIES

Description of Work	Units	Fuel Usage Factor Diesel #2	Estimate of Quantities
Unclassified Excavation	Gal / CY	0.29	_____ CY
Borrow Excavation	Gal / CY	0.29	_____ CY
Aggregate Base Course Aggregate for Cement Treated Base Course Portland Cement for Cement Treated Base Course	Gal / Ton	0.55	_____ Tons
Asphalt Concrete Base Course Asphalt Concrete Intermediate Course Asphalt Concrete Surface Course Open-Graded Asphalt Friction Course Sand Asphalt Surface Course, Type F-1	Gal / Ton	2.90	_____ Tons
Portland Cement Concrete Pavement Structural Concrete (cast-in-place only) Concrete Shoulders Adjacent to Pavement	Gal / CY	0.98	_____ CY

The above quantities represent a reasonable estimate of the total quantities anticipated, for each item, as pertaining to fuel price adjustments, and is representative of the design proposed in the Technical Proposal submitted under separate cover.

Or

The Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments on this project.

The information submitted on this sheet is claimed as a “Trade Secret” in accordance with the requirements of G.S. 66-152(3) until such time as the Price Proposal is opened.

Signature, Title

Dated

Print Name, Title

(Submit a copy of this sheet in a separate sealed package with the outer wrapping clearly marked “Fuel Price Adjustment” and deliver with the Technical and Cost Proposal.)

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION**

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Full name of Corporation

Address as prequalified

Attest _____
Secretary/Assistant Secretary
Select appropriate title

By _____
President/Vice President/Assistant Vice President
Select appropriate title

Print or type Signer's name

Print or type Signer's name

CORPORATE SEAL

AFFIDAVIT MUST BE NOTARIZED

NOTARY SEAL

Subscribed and sworn to before me this the
_____ day of _____, 20_____

Signature of Notary Public
Of _____ County

State of _____

My Commission Expires _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION**

PARTNERSHIP

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Full Name of Partnership

Address as Prequalified

By

Signature of Witness

Signature of Partner

Print or type Signer's name

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

day of _____, 20____.

NOTARY SEAL

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION**

LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

_____ Full Name of Firm

_____ Address as Prequalified

_____ Signature of Manager

_____ Signature of Witness

_____ Individually

_____ Print or type Signer's name

_____ Print or type Signer's Name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

NOTARY SEAL

_____ day of _____ 20__.

_____ Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION
JOINT VENTURE (2) or (3)

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Instructions: 2 Joint Venturers Fill in lines (1), (2) and (3) and execute. 3 Joint Venturers Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1) Name of Joint Venture

(2) Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal and

(3) Name of Contractor

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal and

(4) Name of Contractor (for 3 Joint Venture only)

Address as prequalified

Signature of Witness or Attest By Signature of Contractor

Print or type Signer's name Print or type Signer's name

If Corporation, affix Corporate Seal

NOTARY SEAL
Affidavit must be notarized for Line (2)
Subscribed and sworn to before me this
day of 20

Signature of Notary Public
of County
State of
My Commission Expires:

NOTARY SEAL
Affidavit must be notarized for Line (3)
Subscribed and sworn to before me this
day of 20

Signature of Notary Public
of County
State of
My Commission Expires:

NOTARY SEAL
Affidavit must be notarized for Line (4)
Subscribed and sworn to before me this
day of 20

Signature of Notary Public
of County
State of
My Commission Expires:

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION**

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor

Individual name

Trading and doing business as

Full name of Firm

Address as Prequalified

Signature of Witness

Signature of Contractor, Individually

Print or type Signer's name

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the
_____ day of _____ 20__.

NOTARY SEAL

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

**EXECUTION OF BID
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION**

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor _____
Print or type Individual name

Address as Prequalified

Signature of Contractor, Individually

Print or type Signer's Name

Signature of Witness

Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the _____ day of _____ 20__.

NOTARY SEAL

Signature of Notary Public

of _____ County

State of _____

My Commission Expires: _____

DEBARMENT CERTIFICATION

Conditions for certification:

1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file with the Department, or has become erroneous because of changed circumstances.
2. The terms *covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded*, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273)* provided by the Department, without subsequent modification, in all lower tier covered transactions.
5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

Contract No **C202381**

County (ies): **Johnston**

ACCEPTED BY THE
DEPARTMENT OF TRANSPORTATION

Contract Officer

Date

Execution of Contract and Bonds
Approved as to Form:

Attorney General