STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 6

PROPOSAL

| DATE AND TIME OF BID OPENING: | JULY 20, 2016 AT 2:00 PM |
|----------------------------------|--|
| WBS ELEMENT NO.: | 17BP.6.R.80 |
| COUNTY: | ROBESON |
| ROUTE NO.: | SR 1107 & SR 2203 |
| LOCATION: | PIPE #2009 – 0.2 MI. NORTH OF SR 1127 PIPE #443 – 0.2 MI. EAST OF SR 2204 |
| | |

TYPE OF WORK: PIPE REPLACEMENTS

NOTICE:

ALL BIDDERS 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 BIDDER 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. BIDDERS 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. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A <u>ROADWAY</u> PROJECT.

BID BONDS ARE REQUIRED.

NAME OF BIDDER

ADDRESS OF BIDDER

PROPOSAL

NC DEPARTMENT OF TRANSPORTATION

RALEIGH, NORTH CAROLINA

The Bidder has carefully examined the location of the proposed work; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Department of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with *the 2012 Standard Specifications for Roads and Structures* by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete this contract, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2012 with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

If the proposal is accepted and the award is made, 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 over the signature of the said Contract Officer or Division Engineer.

The quantities shown in the itemized proposal for the project are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient.

An increase or decrease in the quantity of an item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for the contract.

Accompanying this bid is 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 Bidder 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 him, as provided in the Standard Specifications; otherwise said deposit will be returned to the Bidder.

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INSTRUCTIONS TO BIDDERS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE PREPARING AND SUBMITTING YOUR BID.

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement may cause the bid to be considered irregular and may be grounds for rejection of the bid.

TRADITIONAL PAPER BIDS:

- 1. Download the entire proposal from the **Connect NCDOT website** and **return the entire proposal with your bid**.
- 2. All entries on the itemized proposal sheet (bid form) shall be written in ink or typed.
- **3.** The Bidder shall submit a unit price for every item on the itemized proposal sheet. The unit prices for the various contract items shall be written in figures. Unit prices shall be rounded off by the Bidder to contain no more than FOUR decimal places.
- 4. An amount bid shall be entered on the itemized proposal sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount" column of the form.
- 5. The total amount bid shall be written in figures in the proper place on the bid form. The total amount bid shall be determined by adding the amounts bid for each item.
- 6. Changes to 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 Bidder shall initial the change in ink. Do not use correction fluid, correction tape or similar product to make corrections.
- 7. The bid shall be properly executed on the included **Execution of Bid Non-collusion Affidavit, Debarment Certification and Gift Ban Certification** form. All bids shall show the following information:
 - a. Name of corporation, partnership, limited liability company, joint venture, individual or firm, submitting bid. Corporations that have a corporate seal should include it on the bid.
 - b. Name of individual or representative submitting bid and position or title held on behalf of the bidder.
 - c. Name, signature, and position or title of witness.
 - d. Completed attestation by Notary Public

Note: Signer, Witness and Notary Public must be different individuals.

- 8. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- 9. The Bidder 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 Form entitled "LISTING OF DBE SUBCONTRACTORS", or "LISTING OF MBE/WBE SUBCONTRACTORS", must be filled out for Subcontractors submitting quotes for work on this contract. The Contractor shall then submit this form with the bid package.
- 11. <u>THE PROPOSAL WITH THE ITEMIZED PROPOSAL SHEET ATTACHED</u> SHALL BE PLACED IN A <u>SEALED</u> ENVELOPE AND SHALL BE DELIVERED TO AND RECEIVED IN THE NCDOT DIVISION PROPOSALS ENGINEER'S OFFICE AT 558 GILLESPIE STREET, FAYETTEVILLE, N. C. 28301 BY 2:00 PM, JULY 20, 2016.
- 12. The sealed bid envelope must display the bidding Contractor's name and address on the front.
- **13.** The sealed bid must display the following statement on the front of the sealed envelope:

QUOTATION FOR 17BP.6.R.80 PIPE REPLACEMENTS – SR 1107 & 2203 - ROBESON TO BE OPENED AT 2:00 PM ON WEDNESDAY, JULY 20, 2016.

14. If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

N. C. DEPARTMENT OF TRANSPORTATION R. ALLEN WADDELL, P.E. P.O. BOX 1150 FAYETTEVILLE, NC 28302

GENERAL:

This contract is for the removal of existing Pipe Culverts and their replacement with Aluminum Pipe Culverts and Headwalls in Robeson County.

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All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of Transportation Standard Specifications for Roads and Structures 2012, the North Carolina Department of Transportation Roadway Standards Drawings, and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD). The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the Standard Specifications.

BIDS OVER LIMIT:

(01-30-14)

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds \$2.5 million, the bid will not be considered for award.

DIVISION LET CONTRACT PREQUALIFICATION:

(07-01-14)(6-1-15)

Any firm that wishes to bid as a prime contractor shall be prequalified as a Bidder or PO Prime Contractor prior to submitting a bid. Information regarding pregualification can be found at:

https://connect.ncdot.gov/business/Prequal/Pages/default.aspx.

In addition, the prime contractor and/or subcontractor(s) shall be prequalified in the work code(s) for which they identify as work items in the prime contractor's construction progress schedule that they will complete themselves. Any contractor identified as working outside their expertise may be considered in default of contract.

BOND REOUIREMENTS:

(06-01-16)

A **Bid Bond** is required in accordance with Article 102-10 of the 2012 Standard Specifications for Roads and Structures.

102-8, 102-10

Contract Payment and Performance Bonds shall be required in lieu of Article 103-7 of the 2012 Standard Specifications for Roads and Structures.

AUTHORITY OF THE ENGINEER:

(01-30-14)

The Engineer for this project shall be the Division Engineer, Division 6, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representative.

The Engineer will decide all questions which may arise as to the quality and acceptability of work performed and as to the rate of progress of the work; all questions which may arise as to the interpretation of the contract; and all questions as to the acceptable fulfillment of the contract on the part of the Contractor. His decision shall be final and he shall have executive authority to enforce and make effective such decisions and orders as the Contractor fails to carry out promptly.

CONTRACT TIME AND LIQUIDATED DAMAGES:

The date of availability for this project shall be the Date of Purchase Order Issue. The Contractor may begin work prior to these dates upon approval of the Engineer or his duly authorized representative. If such approval is given, and the Contractor begins work prior to the date of availability, the Department of Transportation will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date.

No work will be permitted and no purchase order will be issued until all required bonds and prerequisite conditions and certifications have been satisfied.

SPD 01-410

SPD 01-460

SPD 01-400

SPD 01-420A

105-1

The completion date for this project shall be December 16, 2016.

The Contractor shall request a Pre-Construction Conference prior to beginning construction. To schedule the conference contact the Division Bridge Engineer at (910) 829-6345, to request a Pre-Construction Conference date and time.

Liquidated damages for this contract shall be One Thousand Dollars (\$1000.00) per calendar day.

INTERMEDIATE CONTRACT TIME AND LIQUIDATED DAMAGES: (2-20-07)

The Contractor shall be limited to **four (4) weeks** for the road closure. All work requiring a road closure shall be completed during this time. The liquidated damages for this intermediate completion date are One Thousand Dollars (\$1000.00) per calendar day. Liquidated damages chargeable due to failure to complete this work by the intermediate completion date will be additional to any liquidated damages that may become chargeable due to failure to complete the remaining work on time.

NO MAJOR CONTRACT ITEM:

(2-19-02)

None of the items included in this contract will be major items.

NO SPECIALTY ITEMS:

(7 - 1 - 95)

None of the items included in this contract will be specialty items (see Article 108-6 of the 2012 Standard Specifications).

104

108-6

108

PROSECUTION AND PROGRESS:

(3-16-10)

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods as may be required to complete the work described in the contract by the completion date and in accordance with the 2012 Standard Specifications.

The Contractor's operations are restricted to daylight hours. No work may be performed on Saturdays, Sundays and legal State holidays, unless otherwise approved by the Engineer. Work shall only be performed when weather and visibility conditions allow safe operations.

DIVISION CONTACT:

The Bridge Maintenance contact will be Mr. Darren K Pittman - Bridge Engineer, and he may be reached at (910) 829-6345.

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS): 102-15(J) SP1 G67

(10-16-07)(Rev. 7-19-16)

Description

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

Definitions

Additional MBE/WBE Subcontractors - Any MBE/WBE submitted at the time of bid that will not be used to meet either the MBE or WBE goal. No submittal of a Letter of Intent is required.

Committed MBE/WBE Subcontractor - Any MBE/WBE submitted at the time of bid that is being used to meet either the MBE or WBE goal by submission of a Letter of Intent. Or any MBE or WBE used as a replacement for a previously committed MBE or WBE firm.

Contract Goals Requirement - The approved MBE and WBE participation at time of award, but not greater than the advertised contract goals for each.

SPD 1-700

SP1 G14 B

SP1 G34

SP1 G31

Goal Confirmation Letter - Written documentation from the Department to the bidder confirming the Contractor's approved, committed MBE and WBE participation along with a listing of the committed MBE and WBE firms.

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

MBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed MBE subcontractor(s).

Minority Business Enterprise (MBE) - A firm certified as a Disadvantaged Minority-Owned Business Enterprise through the North Carolina Unified Certification Program.

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 and operates distribution equipment for the products. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for MBE/WBE certification. The MBE/WBE program follows the same regulations as the federal Disadvantaged Business Enterprise (DBE) program in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

WBE Goal - A portion of the total contract, expressed as a percentage, that is to be performed by committed WBE subcontractor(s).

Women Business Enterprise (WBE) - A firm certified as a Disadvantaged Women-Owned Business Enterprise through the North Carolina Unified Certification Program.

Forms and Websites Referenced in this Provision

Payment Tracking System - On-line system in which the Contractor enters the payments made to MBE and WBE subcontractors who have performed work on the project. https://apps.dot.state.nc.us/Vendor/PaymentTracking/

DBE-IS *Subcontractor Payment Information* - Form for reporting the payments made to all MBE/WBE firms working on the project. This form is for paper bid projects only. http://www.ncdot.org/doh/forms/files/DBE-IS.xls

RF-1 *MBE/WBE Replacement Request Form* - Form for replacing a committed MBE or WBE. http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Request %20Form.pdf

SAF *Subcontract Approval Form* - Form required for approval to sublet the contract. http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20Approval%20Form%20Rev.%202012.z ip

JC-1 *Joint Check Notification Form* - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks. http://connect.ncdot.gov/projects/construction/Construction%20Forms/Joint%20Check%20Notification%20Form.pdf

Letter of Intent - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the amount listed at the time of bid. http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf

Listing of MBE and WBE Subcontractors Form - Form for entering MBE/WBE subcontractors on a project that will meet this MBE and WBE goals. This form is for paper bids only.

http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-WBE%20Subcontractors%20(State).docx *Subcontractor Quote Comparison Sheet* - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and

WBEs quoted on the project. This sheet is submitted with good faith effort packages. http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.

http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.xls

MBE and WBE Goal

The following goals for participation by Minority Business Enterprises and Women Business Enterprises are established for this contract:

- (A) Minority Business Enterprises 2%
 - (1) *If the MBE goal is more than zero*, the Contractor shall exercise all necessary and reasonable steps to ensure that MBEs participate in at least the percent of the contract as set forth above as the MBE goal.
 - (2) *If the MBE goal is zero*, the Contractor shall make an effort to recruit and use MBEs during the performance of the contract. Any MBE participation obtained shall be reported to the Department.
- (B) Women Business Enterprises 2 %
 - (1) *If the WBE goal is more than zero*, the Contractor shall exercise all necessary and reasonable steps to ensure that WBEs participate in at least the percent of the contract as set forth above as the WBE goal.
 - (2) *If the WBE goal is zero*, the Contractor shall make an effort to recruit and use WBEs during the performance of the contract. Any WBE participation obtained shall be reported to the Department.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as MBE and WBE certified shall be used to meet the MBE and WBE goals respectively. The Directory can be found at the following link. https://partner.ncdot.gov/VendorDirectory/default.html

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

Listing of MBE/WBE Subcontractors

At the time of bid, bidders shall submit <u>all</u> MBE and WBE participation that they anticipate to use during the life of the contract. Only those identified to meet the MBE goal and the WBE goal will be considered committed, even though the listing shall include both committed MBE/WBE subcontractors and additional MBE/WBE subcontractors. Any additional MBE/WBE subcontractor participation submitted at the time of bid will be used toward overall race-neutral goals. Only those firms with current MBE and WBE certification at the time of bid opening will be acceptable for listing in the bidder's submitted of MBE and WBE participation. The Contractor shall indicate the following required information:

- (A) If either the MBE or WBE goal is more than zero,
 - (1) Bidders, at the time the bid proposal is submitted, shall submit a listing of MBE/WBE participation, including the names and addresses on *Listing of MBE and WBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the MBE and WBE participation for the contract.
 - (2) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety. Blank forms will not be deemed to represent zero participation. Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.

- (3) The bidder shall be responsible for ensuring that the MBE/WBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that MBE's or WBE's participation will not count towards achieving the corresponding goal.
- (B) *If either the MBE or WBE goal is zero*, entries on the *Listing of MBE and WBE Subcontractors* are not required for the zero goal, however any MBE or WBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

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MBE or WBE Prime Contractor

When a certified MBE or WBE firm bids on a contract that contains MBE and WBE goals, the firm is responsible for meeting the goals or making good faith efforts to meet the goals, just like any other bidder. In most cases, a MBE or WBE bidder on a contract will meet one of the goals by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the MBE or WBE bidder and any other similarly certified subcontractors will count toward the goal. The MBE or WBE bidder shall list itself along with any MBE or WBE subcontractors, if any, in order to receive credit toward the goals.

For example, on a proposed contract, the WBE goal is 10%, and the MBE goal is 8%. A WBE bidder puts in a bid where they will perform 40% of the contract work and have a WBE subcontractor which will perform another 5% of the work. Together the two WBE firms submit on the *Listing of MBE and WBE Subcontractors* a value of 45% of the contract which fulfills the WBE goal. The 8% MBE goal shall be obtained through MBE participation with MBE certified subcontractors or documented through a good faith effort. It should be noted that you cannot combine the two goals to meet an overall value. The two goals shall remain separate.

MBE/WBE prime contractors shall also follow Sections A or B listed under *Listing of MBE/WBE Subcontractors* just as a non-MBE/WBE bidder would.

Written Documentation – Letter of Intent

The bidder shall submit written documentation for each MBE/WBE that will be used to meet the MBE and WBE goals of the contract, indicating the bidder's commitment to use the MBE/WBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed MBE and WBE to be used toward the MBE and WBE goals, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the MBE/WBE goal. If the lack of this participation drops the commitment below either the MBE or WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the Engineer no later than 12:00 noon of the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Submission of Good Faith Effort

If the bidder fails to meet or exceed either the MBE or the WBE goal, the apparent lowest responsive bidder shall submit to the Department documentation of adequate good faith efforts made to reach that specific goal(s).

One complete set and 6 copies of this information shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Note: 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 MBE/WBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Consideration of Good Faith Effort for Projects with MBE/WBE Goals More Than Zero

Adequate good faith efforts mean that the bidder took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient MBE/WBE participation. Adequate good faith efforts also mean that the bidder actively and aggressively sought MBE/WBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the goals and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified MBEs/WBEsthat are also prequalified subcontractors. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the MBEs/WBEs to respond to the solicitation. Solicitation shall provide the opportunity to MBEs/WBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the MBEs/WBEs are interested by taking appropriate steps to follow up initial solicitations.
- (B) Selecting portions of the work to be performed by MBEs/WBEs in order to increase the likelihood that the MBE and WBE goals will be achieved.
 - (1) Where appropriate, break out contract work items into economically feasible units to facilitate MBE/WBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract MBE/WBE goals when the work to be sublet includes potential for MBE/WBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested certified MBEs/WBEs that are also prequalified subcontractors with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D) MBEs/WBEs. (1)Negotiating in good faith with interested It is the bidder's responsibility to make a portion of the work available to MBE/WBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/WBE subcontractors and suppliers, so as to facilitate MBE/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of MBEs/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for MBEs/WBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using MBEs/WBEs is not in itself sufficient reason for a bidder's failure to meet the contract MBE or WBE goals, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from MBEs/WBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting MBEs/WBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of MBEs/WBEs. Contact within 7 days from the bid opening NCDOT's Business Development Manager in the Business Opportunity and Work Force Development Unit to give notification of the bidder's inability to get MBE or WBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the MBE and WBE goal.

In addition, the Department may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the MBE and WBE goals.
- (2) The bidders' past performance in meeting the MBE and WBE goals.
- (3) The performance of other bidders in meeting the MBE and WBE goals. For example, when the apparent successful bidder fails to meet the goals, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goals. If the apparent successful bidder fails to meet the MBE and WBE goals, but meets or exceeds the average MBE and WBE participation obtained by other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the MBE and WBE goals can be met or that an adequate good faith effort has been made to meet the MBE and WBE goals.

Non-Good Faith Appeal

The Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting MBE/WBE Participation Toward Meeting MBE/WBE Goals

(A) Participation

The total dollar value of the participation by a committed MBE/WBE will be counted toward the contract goal requirements. The total dollar value of participation by a committed MBE/WBE will be based upon the value of work actually performed by the MBE/WBE and the actual payments to MBE/WBE firms by the Contractor.

(B) Joint Checks

Prior notification of joint check use shall be required when counting MBE/WBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 (*Joint Check Notification Form*) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

(C) Subcontracts (Non-Trucking)

A MBE/WBE may enter into subcontracts. Work that a MBE subcontracts to another MBE firm may be counted toward the MBE contract goal requirement. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE subcontracts to a non-MBE firm does <u>not</u> count toward the MBE contract goal requirement. Again, the same holds true for the work that a WBE subcontracts to a non-WBE firm. If a MBE or WBE contractor or subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the MBE or WBE is not performing a commercially useful function. The MBE/WBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption may be subject to review by the Office of Inspector General, NCDOT.

(D) Joint Venture

When a MBE or WBE performs as a participant in a joint venture, the Contractor may count toward its contract goal requirement a portion of the total value of participation with the MBE or WBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the MBE or WBE performs with its forces.

(E) Suppliers

A contractor may count toward its MBE or WBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from a MBE or WBE regular dealer and 100 percent of such expenditures from a MBE or WBE manufacturer.

(F) Manufacturers and Regular Dealers

A contractor may count toward its MBE or WBE requirement the following expenditures to MBE/WBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a MBE/WBE 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) With respect to materials or supplies purchased from a MBE/WBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or 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 determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

Commercially Useful Function

(A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE 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 MBE/WBE 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 MBE/WBE 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 MBE/WBE credit claimed for its performance of the work, and any other relevant factors.

(B) MBE/WBE Utilization in Trucking

The following factors will be used to determine if a MBE or WBE trucking firm is performing a commercially useful function:

- (1) The MBE/WBE 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 the MBE or WBE goal.
- (2) The MBE/WBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The MBE/WBE 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.

- (4) The MBE may subcontract the work to another MBE firm. including an owner-operator who is certified as a MBE. The same holds true that a WBE may subcontract the work to another WBE firm, including an owner-operator who is certified as a WBE. When this occurs, the MBE or WBE who subcontracts work receives credit for the total value of the transportation services the subcontracted MBE or WBE provides on the contract. It should be noted that every effort shall be made by MBE and WBE contractors to subcontract to the same certification (i.e., MBEs to MBEs and WBEs to WBEs), in order to fulfill the goal requirement. This, however, may not always be possible due to the limitation of firms in the area. If the MBE or WBE firm shows a good faith effort has been made to reach out to similarly certified transportation service providers and there is no interest or availability, and they can get assistance from other certified providers, the Engineer will not hold the prime liable for meeting the goal.
- (5) The MBE/WBE may also subcontract the work to a non-MBE/WBE firm, including from an owner-operator. The MBE/WBE who subcontracts the work to a non-MBE/WBE is entitled to credit for the total value of transportation services provided by the non-MBE/WBE subcontractor not to exceed the value of transportation services provided by MBE/WBE-owned trucks on the contract. Additional participation by non-MBE/WBE subcontractors receives credit only for the fee or commission it receives as a result of the subcontract arrangement. The value of services performed under subcontract agreements between the MBE/WBE and the Contractor will not count towards the MBE/WBE contract requirement.
- (6) A MBE/WBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the MBE/WBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the MBE/WBE, so long as the lease gives the MBE/WBE absolute priority for use of the leased truck. This type of lease may count toward the MBE/WBE's credit as long as the driver is under the MBE/WBE's payroll.
- (7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the MBE/WBE that they are subcontracted/leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

MBE/WBE Replacement

When a Contractor has relied on a commitment to a MBE or WBE firm (or an approved substitute MBE or WBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another MBE/WBE subcontractor, a non-MBE/WBE subcontractor, or with the Contractor's own forces or those of an affiliate. A MBE/WBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the termination. The prime contractor must give the MBE/WBE firm five (5) calendar days to respond to the prime contractor's notice of termination and advise the prime contractor and the Department of the reasons, if any, why the firm objects to the proposed termination of its subcontract and why the Department should not approve the action.

All requests for replacement of a committed MBE/WBE firm shall be submitted to the Engineer for approval on Form RF-1 *(Replacement Request).* If the Contractor fails to follow this procedure, the Contractor may be disqualified from further bidding for a period of up to 6 months.

The Contractor shall comply with the following for replacement of a committed MBE/WBE:

(A) Performance Related Replacement

When a committed MBE is terminated for good cause as stated above, an additional MBE that was submitted at the time of bid may be used to fulfill the MBE commitment. The same holds true if a committed WBE is terminated for good cause, an additional WBE that was submitted at the time of bid may be used to fulfill the WBE goal. A good faith effort will only be required for removing a committed MBE/WBE if there were no additional MBEs/WBEs submitted at the time of bid to cover the same amount of work as the MBE/WBE that was terminated.

If a replacement MBE/WBE is not found that can perform at least the same amount of work as the terminated MBE/WBE, the Contractor shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

- (1) Copies of written notification to MBEs/WBEs that their interest is solicited in contracting the work defaulted by the previous MBE/WBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with MBEs/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBEs/WBEs who were contacted.
 - (b) A description of the information provided to MBEs/WBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why MBE/WBE quotes were not accepted.
- (4) Efforts made to assist the MBEs/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.
- (B) Decertification Replacement
 - (1) When a committed MBE/WBE is decertified by the Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department will not require the Contractor to solicit replacement MBE/WBE 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 goal requirement.
 - (2) When a committed MBE/WBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another similarly certified MBE/WBE subcontractor to perform at least the same amount of work to meet the MBE/WBE goal requirement. If a MBE/WBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

Changes in the Work

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed MBE/WBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a MBE/WBE based upon the Contractor's commitment, the MBE/WBE shall participate in additional work to the same extent as the MBE/WBE 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 Contractor shall seek additional participation by MBEs/WBEs 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 the work had been expected to be performed by a committed MBE/WBE, the Contractor shall seek participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a MBE/WBE, the Contractor shall seek additional participation by MBEs/WBEs equal to the reduced MBE/WBE participation caused by the changes.

Reports and Documentation

A SAF (*Subcontract Approval Form*) shall be submitted for all work which is to be performed by a MBE/WBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving MBE/WBE subcontractors.

When using transportation services to meet the contract commitment, the Contractor shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a MBE/WBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for MBE/WBE credit.

Reporting Minority and Women Business Enterprise Participation

The Contractor shall provide the Engineer with an accounting of payments made to all MBE and WBE firms, including material suppliers and 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:

- (A) Withholding of money due in the next partial pay estimate; or
- **(B)** Removal of an approved contractor from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to MBEs/WBEs, 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 Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate 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 being approved for further work on future projects until the required information is submitted.

Contractors reporting transportation services provided by non-MBE/WBE lessees shall evaluate the value of services provided during the month of the reporting period only.

At any time, the Engineer can request written verification of subcontractor payments.

The Contractor shall report the accounting of payments through the Department's DBE Payment Tracking System.

Failure to Meet Contract Requirements

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the 2012 Standard Specifications may be cause to disqualify the Contractor.

SUBSURFACE INFORMATION:

(7 - 1 - 95)

There is no subsurface information available on this project. The Contractor shall make his own investigation of subsurface conditions.

450

LOCATING EXISTING UNDERGROUND UTILI

Revise the 2012 Standard Specifications as follows:

Page 1-43, Article 105-8, line 28, after the first sentence, add the following:

Identify excavation locations by means of pre-marking with white paint, flags, or stakes or provide a specific written description of the location in the locate request.

RESOURCE CONSERVATION AND ENV. SUSTAINABLE PRACTICES: 104-13

(5-21-13) (Rev. 5-19-15)

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(3), and NCGS 136-28.8, it is the objective of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, to find ways to recycle and reuse materials, to consider and minimize, where economically feasible, the environmental impacts associated with agency land use and acquisition, construction, maintenance and facility management for the benefit of the Citizens of North Carolina.

SP1 G115

SP1 G118

SP1 G112 A

To achieve the mission of reducing environmental impacts across the state, the Department is committed to supporting the efforts to initiate, develop and use products and construction methods that incorporate the use of recycled, solid waste products and environmentally sustainable practices in accordance with Article 104-13 of the *Standard Specifications*.

Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills and any practice that minimizes the environmental impact on the project annually on the Project Construction Reuse and Recycling Reporting Form. The Project Construction Reuse and Recycling Reporting Form and a location tool for local recycling facilities are available at:

http://connect.ncdot.gov/resources/Environmental/Pages/North-Carolina-Recycling-Locations.aspx.

Submit the Project Construction Reuse and Recycling Reporting Form by August 1 annually to <u>valuemanagementunit@ncdot.gov</u>. For questions regarding the form or reporting, please contact the State Value Management Engineer at 919-707-4810.

DOMESTIC STEEL:

(4-16-13)

106

SP1 G120

Revise the 2012 Standard Specifications as follows:

Page 1-49, Subarticle 106-1(B) Domestic Steel, lines 2-7, replace the first paragraph with the following:

All steel and iron products that are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel and iron products may be used provided the combined material cost of the items involved does not exceed 0.1% of the total amount bid for the entire project or \$2,500, whichever is greater. If invoices showing the cost of the material are not provided, the amount of the bid item involving the foreign material will be used for calculations. This minimal amount of foreign produced steel and iron products permitted for use is not applicable to high strength fasteners. Domestically produced high strength fasteners are required.

TWELVE MONTH GUARANTEE:

(7-15-03)

108

SP1 G145

- (A) The Contractor 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 Contractor 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 Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor'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 Contractor would be wholly responsible for under the terms of the contract. Examples would include pavement structures, bridge components, and sign structures. This provision will not be used as a mechanism to force the Contractor to return to the project to make repairs or perform additional work that the Department would normally compensate the Contractor 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.

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:

(9-21-04) (Rev. 5-16-06)

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.

IRAN DIVESTMENT ACT:

(5-17-16)

As a result of the Iran Divestment Act of 2015 (Act), Article 6E, N.C. General Statute § 147-86.55, the State Treasurer published the Final Divestment List (List) which includes the Final Divestment List-Iran, and the Parent and Subsidiary Guidance-Iran. These lists identify companies and persons engaged in investment activities in Iran and will be updated every 180 days. The List can be found at https://www.nctreasurer.com/inside-the-department/OpenGovernment/Pages/Iran-Divestment-Act-Resources.aspx

By submitting the Offer, the Contractor certifies that, as of the date of this bid, it is not on the then-current List created by the State Treasurer. The Contractor must notify the Department immediately if, at any time before the award of the contract, it is added to the List.

As an ongoing obligation, the Contractor must notify the Department immediately if, at any time during the contract term, it is added to the List. Consistent with § 147-86.59, the Contractor shall not contract with any person to perform a part of the work if, at the time the subcontract is signed, that person is on the then-current List.

During the term of the Contract, should the Department receive information that a person is in violation of the Act as stated above, the Department will offer the person an opportunity to respond and the Department will take action as appropriate and provided for by law, rule, or contract.

GIFTS FROM VENDORS AND CONTRACTORS: 107-1

(12-15-09)

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:

- (A) Have a contract with a governmental agency; or
- (B) Have performed under such a contract within the past year; or
- (C) 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 N.C.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.

SP1 G150

SP01 G151

SP1 G152

LIABILITY INSURANCE:

(5-20-14)

Revise the 2012 Standard Specifications as follows:

Page 1-60, Article 107-15 LIABILITY INSURANCE, line 16, add the following as the second sentence of the third paragraph:

Prior to beginning services, all contractors shall provide proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured subcontractors, irrespective of whether having regularly in service fewer than three employees.

108, 102

EMPLOYMENT:

(11-15-11) (Rev. 1-17-12)

Revise the 2012 Standard Specifications as follows:

Page 1-20, Subarticle 102-15(O), delete and replace with the following:

 $(\mathbf{0})$ Failure to restrict a former Department employee as prohibited by Article 108-5.

Page 1-65, Article 108-5 Character of Workmen, Methods, and Equipment, line 32, delete all of line 32, the first sentence of the second paragraph and the first word of the second sentence of the second paragraph.

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:

(9-18-12)

Revise the 2012 Standard Specifications as follows:

Replace all references to "State Highway Administrator" with "Chief Engineer".

SUBLETTING OF CONTRACT:

(11-18-2014)

Revise the 2012 Standard Specifications as follows:

Page 1-66, Article 108-6 Subletting of Contract, line 37, add the following as the second sentence of the first paragraph:

All requests to sublet work shall be submitted within 30 days of the date of availability or prior to expiration of 20% of the contract time, whichever date is later, unless otherwise approved by the Engineer.

Page 1-67, Article 108-6 Subletting of Contract, line 7, add the following as the second sentence of the fourth paragraph:

Purchasing materials for subcontractors is not included in the percentage of work required to be performed by the Contractor. If the Contractor sublets items of work but elects to purchase material for the subcontractor, the value of the material purchased will be included in the total dollar amount considered to have been sublet.

SUPERVISION BY CONTRACTOR:

At all times during the life of the project the Contractor shall provide one permanent employee who shall have the authority and capability for overall responsibility of the project and who shall be personally available at the work site within 24 hours notice. Such employee shall be fully authorized to conduct all business with the Subcontractors, to negotiate and execute all supplemental agreements, and to execute the orders or directions of the Engineer.

SP1 G184

SP1 G185

SP1 G186

108-6

18

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

The Contractor may, at his option, designate one employee to meet the requirements of both positions. However, whenever the designated employee is absent from the work site, an authorized individual qualified to act in a supervisory capacity on the project shall be present.

EQUIPMENT:

The Contractor shall furnish all equipment in good operating condition, and shall be operated by properly trained and qualified personnel. The Contractor shall be responsible for all costs or charges incurred in the operation and maintenance of the equipment during the performance of this contract. Upon request, the contractor shall provide any and all state and federal certifications for equipment safety.

Payment for equipment and labor required to perform bid items is included in the bid item price provided by the contractor. Mobilization of labor and equipment shall be included in the bid item price provided by the contractor.

PAYMENT:

The **INVOICE** along with – **SUBCONTRACTOR PAYMENT INFORMATION** shall be completed for each month work is performed and shall be submitted to the Department. Upon verification, the Engineer will submit the invoice for payment.

Invoices shall be submitted to:

N.C. Department of Transportation Division 6 – Bridge Maint. ATTENTION: Darren Pittman P.O. Box 1150 Fayetteville, N.C. 28302

Invoices shall not be processed for payment without the accompanying **FORM DBE-IS**. If there is no participation at the time of a planned pay request, enter "zero" or "no participation this period" and submit the form with the invoice.

PROJECT SPECIAL PROVISIONS

ROADWAY

INTERPRETATION OF QUANTITIES IN PROPOSAL FORM:

The quantities appearing in the proposal form are approximate only and are to be used for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of the various items that are completed and accepted in accordance with the terms of the contract.

DRIVEWAYS AND PRIVATE PROPERTY:

The Contractor shall maintain access to driveways for all residents and property owners throughout the duration of the project.

The Contractor shall not perform work for private citizens or agencies in conjunction with this project or within the project limits of this contract.

PRESERVATION OF PROPERTY:

Permanent traffic signs and mailboxes that interfere with the road construction operations are to be removed during the course of a day's work, and be reinstalled at the conclusion of each work day. The Contractor shall mark the proper location of the signs and mailboxes by placing an offset stake behind the ditch line to ensure proper replacement.

Any damage to properties, such as, but not limited to, mailboxes, fences, gates, vehicles, driveways, etc. shall immediately be restored to the previously existing condition by the contractor. No payment will be made to the Contractor for such restorative work.

DAMAGE TO EXISTING PAVEMENT, BASE, SUBGRADE, AND PROPOSED PAVEMENT

In addition to the requirements of the <u>Standard Specifications</u> concerning this subject, the Contractor is cautioned that he will be held responsible for all damages to the pavement, base, and subgrade caused by his operations, including but not limited to, rutting and shoving of the existing or proposed pavement and yielding or rutting of the existing base and subgrade.

The Contractor is cautioned to limit the weight of his equipment and the frequency of hauls so as to not damage the existing pavement, base, subgrade and the proposed pavement.

Any subgrade or base failures which the Contractor finds prior to the beginning of his operations or during the conditioning of the existing base are to be brought to the attention of the Engineer in writing. Repairs to those areas will be made by DOT forces. Once these deficient areas have been repaired, the requirements of this Special Provision will fully apply.

PLAN, DETAIL, AND QUANTITY ADJUSTMENTS

The Department reserves the right to make, at any time during the progress of the work, such alterations in plans or the details of construction as may be found necessary or desirable by the Engineer to complete the project.

SUBMITTALS

The Contractor shall submit an Erosion & Sediment Control Plan, Disposal Plan, Dewatering Plan and Borrow Material source within fourteen (14) calendar days prior to construction. All submittals shall be provided to the Engineer in written form.

MOBILIZATION

Mobilization shall be compensated as allowed in accordance with Article 800-2 of the Standard Specifications.

Basis of payment for "Mobilization" shall be the contract unit price for lump sum.

SP2 R45 A

SHOULDER AND FILL SLOPE MATERIAL

(5-21-02)

235, 560

Description

Perform the required shoulder and slope construction for this project in accordance with the applicable requirements of Section 560 and Section 235 of the 2012 Standard Specifications.

Measurement and Payment

Where the material has been obtained from an authorized stockpile or from a borrow source no direct payment will be made for this work, as the cost of this work will be part of the work being paid at the contract lump sum price for *Grading*.

It shall be in the best interest of the Contractor to utilize material generated for each site as a result of the work being performed.

No additional payment shall be made for Borrow Excavation for this task, as this item shall be considered incidental to the lump sum price for *Grading*.

COMPREHENSIVE GRADING

The Contractor is to grade this project to the typical sections and details shown. Grading shall be comprehensive grading as defined in Section 226 of the <u>Standard Specifications</u>, and shall include excavation for removal of existing pipes and end walls; excavation for the new end wall and pipe construction; compacting roadway embankment section in conformance with Section 235 of the <u>Standard Specifications</u>, and grading / reshaping of shoulders and ditches.

No earth material may be wasted or removed from the project unless deemed as unsuitable by the Engineer. Material may be stored on the existing roadway provided that adequate clearance is allowed.

The Contractor shall shape, compact, and grade the embankment, ditches, and shoulders to the lines, grades, and typical sections established by the plans or as directed by the Engineer. The contractor is advised to make a detailed investigation of the original state of such features prior to commencing operations.

The contractor may utilize whatever methods deemed most efficient for the project provided that the work methods comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation and that the contractor will maintain slopes of 1.5:1 or flatter in the course of excavating the existing embankment. The contractor shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect property in connection with the performance of the work covered by the contract.

Basis of payment for "Grading" shall be the contract unit price for lump sum.

STOCKPILE AREAS

The Contractor shall install and maintain erosion control devices sufficient to contain sediment around any erodible material stockpile areas as directed by the Engineer. Stockpile areas shall remain within existing NCDOT Right-of-Way.

BORROW

The work covered by this item consists of the furnishing and excavation of an approved material from a contractor supplied location for use as a backfill material. Payment will be on cubic yard basis by truck measurement. The quantity of borrow excavation to be paid will be the actual number of cubic yards of approved material, measured in trucks, which has been excavated from the borrow source and incorporated into the completed and accepted work. The recorded capacity of any truck used to transport the material will be adjusted by making a 25% deduction to allow for shrinkage and the adjusted capacity will be the quantity paid for. Contractor furnished borrow and waste sites shall comply with section 230 of the Standard Specifications. A copy of the borrow source permit shall be provided to the inspector prior to hauling any materials.

Basis of payment for "Borrow Excavation" shall be the unit bid price per cubic yard.

AGGREGATE BASE COURSE

The Contractor shall furnish and place aggregate base course in accordance with the provisions of Section 520 of the Standard Specifications. The base shall be compacted to a density equal to that obtained by compacting a sample of the material in accordance with AASHTO T180 as modified by the Department. The Contractor shall dry or add moisture to the material when required to provide a uniformly compacted and acceptable base. When completed, the base course shall be smooth, hard, dense, unyielding, and well bonded.

The Aggregate Base Course shall be placed, within the roadway section over the arch pipe, on top of the backfill material to the top of the subgrade of the roadway at an approximate depth of twelve (12) inches. The aggregate base course shall extend one (1) foot beyond the existing roadway width on each side.

Payment will be made under the item "Aggregate Base Course" and shall include, but not be limited to, furnishing aggregate and water, mixing, hauling, spreading materials, compacting, shaping, and maintaining the base course.

Basis of payment for "Aggregate Base Course" shall be the unit bid price per ton.

#57 STONE / BACKFILL

7-18-06

Description

The Contractor shall place #57 stone in accordance with the details within the details of the proposal and the following provision. Backfill material shall be #57 stone placed one (1) foot below the pipe invert to approximately two (2) foot above the top of the pipe. An NCDOT approved soil engineering fabric shall be required on top of the #57 stone prior to placing the Aggregate Base Course. The contractor shall thoroughly and carefully backfill the pipe in accordance with plans.

Materials

| Item | Section |
|------------|---------|
| # 57 Stone | 1005 |

Construction Methods

The stone shall be placed and compacted as directed by the Engineer.

Measurement and Payment

#57 Stone will be measured and paid in tons that are completed and accepted. The stone will be measured by being weighed in trucks on certified platform scales or other certified weighing devices. The price and payment will be full compensation for furnishing, hauling, placing, and all incidentals necessary to complete the work.

Payment will be made under:

Pay Item #57 Stone Ton

PIPE REMOVAL

All existing corrugated metal pipe and associated headwalls shall be removed. All pipe removal will be considered waste material. It shall be the responsibility of the Contractor to dispose of waste to an approved construction landfill site or other waste disposal site provided by the contractor. A copy of the waste site permit shall be provided to the inspector prior to hauling off any materials.

Payment will be for all labor, material, equipment, removing, hauling, and disposal of removed pipe

Basis of payment for "Pipe Removal" shall be the contract unit bid price per linear foot.

Pay Unit

SPI0 -1

SP6 R01

PAVING

The open cut shall require full depth patching with three (3) inches of Asphalt Concrete Intermediate Course, Type I19.0B, and an overlay of one and one-half (1.5) inches of Asphalt Concrete Surface Course, Type SF9.5A. The surface course shall extend one hundred (100) feet beyond the open cut on both sides not to exceed a total length of two-hundred fifty (250) feet.

Basis of payment for "Paving" will be the contract unit price for Asphalt Concrete Intermediate Course, Type I19.0B and Asphalt Concrete Surface Course, Type SF9.5A per ton.

ASPHALT PAVEMENTS - SUPERPAVE:

(6-19-12) (Rev. 8-16-16)

605, 609, 610, 650

Revise the 2012 Standard Specifications as follows:

Page 6-3, Article 605-7, APPLICATION RATES AND TEMPERATURES, replace this article, including Table 605-1, with the following:

Apply tack coat uniformly across the existing surface at target application rates shown in Table 605-1.

| TABLE 605-1 APPLICATION RATES FOR TACK COAT | | | | | | | | |
|--|--------------------|--|--|--|--|--|--|--|
| Target Rate (gal/sy) | | | | | | | | |
| Existing Surface | Emulsified Asphalt | | | | | | | |
| New Asphalt | 0.04 ± 0.01 | | | | | | | |
| Oxidized or Milled Asphalt | 0.06 ± 0.01 | | | | | | | |
| Concrete | 0.08 ± 0.01 | | | | | | | |

Apply tack coat at a temperature within the ranges shown in Table 605-2. Tack coat shall not be overheated during storage, transport or at application.

| TABLE 605-2 APPLICATION TEMPERATURE FOR TACK COAT | | | | | | | | |
|--|-------------------|--|--|--|--|--|--|--|
| Asphalt Material | Temperature Range | | | | | | | |
| Asphalt Binder, Grade PG 64-22 | 350 - 400°F | | | | | | | |
| Emulsified Asphalt, Grade RS-1H | 130 - 160°F | | | | | | | |
| Emulsified Asphalt, Grade CRS-1 | 130 - 160°F | | | | | | | |
| Emulsified Asphalt, Grade CRS-1H | 130 - 160°F | | | | | | | |
| Emulsified Asphalt, Grade HFMS-1 | 130 - 160°F | | | | | | | |
| Emulsified Asphalt, Grade CRS-2 | 130 - 160°F | | | | | | | |

Page 6-6, Subarticle 607-5(A), Milled Asphalt Pavement, line 25, add the following to the end of the paragraph:

Areas to be paid under these items include mainline, turn lanes, shoulders, and other areas milled in conjunction with the mainline and any additional equipment necessary to remove pavement in the area of manholes, water valves, curb, gutter and other obstructions.

Page 6-6, Subarticle 607-5(C), Incidental Milling, lines 42-48, replace the paragraph with the following:

Incidental Milling to be paid will be the actual number of square yards of surface milled where the Contractor is required to mill butt joints, irregular areas and intersections milled as a separate operation from mainline milling and re-mill areas that are not due to the Contractor's negligence whose length is less than 100 feet. Measurement will be made as provided in Subarticle 607-5(A) for each cut the Contractor is directed to perform. Where the Contractor elects to make multiple cuts to achieve the final depth, no additional measurement will be made. Compensation will be made at the contract unit price per square yard for *Incidental Milling*.

Page 6-7, Article 609-3, FIELD VERIFICATION OF MIXTURE AND JOB MIX FORMULA ADJUSTMENTS, lines 35-37, delete the second sentence of the second paragraph.

Page 6-18, Article 610-1 DESCRIPTION, lines 40-41, delete the last sentence of the last paragraph.

Page 6-19, Subarticle 610-3(A), Mix Design-General, line 5, add the following as the first paragraph:

Warm mix asphalt (WMA) is allowed for use at the Contractor's option in accordance with the NCDOT Approved Products List for WMA Technologies available at:

https://connect.ncdot.gov/resources/Materials/MaterialsResources/Warm%20Mix%20Asphalt%20Appr oved%20List.pdf

Page 6-20, Subarticle 610-3(C), Job Mix Formula (JMF), lines 47-48, replace the last sentence of the third paragraph with the following:

The JMF mix temperature shall be within the ranges shown in Table 610-1 unless otherwise approved.

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), replace Table 610-1 with the following:

| TABLE 610-1 MIXING TEMPERATURE AT THE ASPHALT PLANT | | | | | | | | | |
|--|---------------------|--|--|--|--|--|--|--|--|
| Binder Grade | JMF Mix Temperature | | | | | | | | |
| PG 58-28; PG 64-22 | 250 - 290°F | | | | | | | | |
| PG 70-22 | 275- 305°F | | | | | | | | |
| PG 76-22 | 300- 325°F | | | | | | | | |

Page 6-21, Subarticle 610-3(C) Job Mix Formula (JMF), lines 1-2, in the first sentence of the first paragraph, delete "and compaction". Lines 4-7, delete the second paragraph and replace with the following:

When RAS is used, the JMF mix temperature shall be established at 275°F or higher.

Page 6-22, Article 610-4, WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, lines 15-17, replace the second sentence of the first paragraph with the following:

Do not place asphalt material when the air or surface temperatures, measured at the location of the paving operation away from artificial heat, do not meet Table 610-5.

Page 6-23, Article 610-4, WEATHER, TEMPERATURE AND SEASONAL LIMITATIONS FOR PRODUCING AND PLACING ASPHALT MIXTURES, replace Table 610-5 with the following:

| TABLE 610-5 PLACEMENT TEMPERATURES FOR ASPHALT | | | | | | | |
|---|-------------------------------------|--|--|--|--|--|--|
| Asphalt Concrete Mix Type | Minimum Surface and Air Temperature | | | | | | |
| B25.0B, C | 35°F | | | | | | |
| I19.0B, C, D | 35°F | | | | | | |
| SF9.5A, S9.5B | $40^{\circ}F^{A}$ | | | | | | |
| \$9.5C, \$12.5C | 45°F ^A | | | | | | |
| \$9.5D, \$12.5D | 50°F | | | | | | |

A. For the final layer of surface mixes containing recycled asphalt shingles (RAS), the minimum surface and air temperature shall be 50°F.

Page 6-23, Subarticle 610-5(A), General, lines 33-34, replace the last sentence of the third paragraph with the following:

Produce the mixture at the asphalt plant within ± 25 °F of the JMF mix temperature. The temperature of the mixture, when discharged from the mixer, shall not exceed 350°F.

Page 6-26, Article 610-7, HAULING OF ASPHALT MIXTURE, lines 22-23, in the fourth sentence of the first paragraph replace "so as to overlap the top of the truck bed and" with "to". Line 28, in the last paragraph, replace "+15 °F to -25 °F of the specified JMF temperature." with "±25 °F of the specified JMF mix temperature."

Page 6-26, Article 610-8, SPREADING AND FINISHING, line 34, add the following new paragraph:

As referenced in Section 9.6.3 of the *HMA/QMS Manual*, use the automatic screed controls on the paver to control the longitudinal profile. Where approved by the Engineer, the Contractor has the option to use either a fixed or mobile string line.

Page 6-29, Article 610-13, FINAL SURFACE TESTING AND ACCEPTANCE, line 39, add the following after the first sentence in the first paragraph:

Smoothness acceptance testing using the inertial profiler is not required on ramps, loops and turn lanes.

Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 15-16, replace the fourth sentence of the fourth paragraph with the following:

The interval at which relative profile elevations are reported shall be 2".

Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 25-28, replace the ninth paragraph with the following:

Operate the profiler at any speed as per the manufacturer's recommendations to collect valid data.

Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 30-31, delete the third sentence of the tenth paragraph.

Page 6-31, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 11-13, replace the first sentence of the third paragraph with the following:

After testing, transfer the profile data from the profiler portable computer's hard drive to a write once storage media (Flash drive, USB, DVD-R or CD-R) or electronic media approved by the Engineer.

Page 6-31, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 17-18, replace the first sentence of the fourth paragraph with the following:

Submit a report with the documentation and electronic data of the evaluation for each section to the Engineer within 10 days after completion of the smoothness testing. The report shall be in the tabular format for each 0.10 segment or a portion thereof with a summary of the MRI values and the localized roughness areas including corresponding project station numbers or acceptable reference points. Calculate the pay adjustments for all segments in accordance with the formulas in Sections (1) and (2) shown below. The Engineer shall review and approval all pay adjustments unless corrective action is required.

Page 6-31, Subarticle 610-13(A)(1), Acceptance for New Construction, lines 36-37, replace the third paragraph with the following:

The price adjustment will apply to each 0.10-mile section or prorated for a portion thereof, based on the Mean Roughness Index (MRI), the average IRI values from both wheel paths.

Page 6-32, Subarticle 610-13(A)(2), Localized Roughness, lines 12-16, replace the first paragraph with the following:

Areas of localized roughness shall be identified through the "Smoothness Assurance Module (SAM)" provided in the ProVAL software. Use the SAM report to optimize repair strategies by analyzing the measurements from profiles collected using inertial profilers. The ride quality threshold for localized roughness shall be 165 in/mile for any sections that are 15 ft. to 100 ft. in length at the continuous short interval of 25 ft. Submit a continuous roughness report to identify each section with project station numbers or reference points outside the threshold and identify all localized roughness, with the signature of the Operator included with the submitted IRI trace and electronic files.

Page 6-32, Subarticle 610-13(A)(2), Localized Roughness, line 21, add the following new paragraph:

If the Engineer does not require corrective action, the pay adjustment for each area of localized roughness shall be based on the following formula:

PA = (165 - LR#) 5

Where:

| PA | = | Pay Adjustment (dollars) |
|-----|---|--|
| LR# | = | The Localized Roughness number determined from SAM report for the ride quality threshold |

| | TABLE | | | | | | | | | |
|--------------------------|-----------|--------------------|--------------------|--|--|--|--|--|--|--|
| OGAFC GRADATION CRITERIA | | | | | | | | | | |
| Sieve Size (mm) | Type FC-1 | Type FC-1 Modified | Type FC-2 Modified | | | | | | | |
| 19.0 | - | - | 100 | | | | | | | |
| 12.5 | 100 | 100 | 80 - 100 | | | | | | | |
| 9.50 | 75 - 100 | 75 - 100 | 55 - 80 | | | | | | | |
| 4.75 | 25 - 45 | 25 - 45 | 15 - 30 | | | | | | | |
| 2.36 | 5 - 15 | 5 - 15 | 5 - 15 | | | | | | | |
| 0.075 | 1.0 - 3.0 | 1.0 - 3.0 | 2.0 - 4.0 | | | | | | | |

Page 6-41, Subarticle 650-3(B), Mix Design Criteria, replace Table 650-1 with the following:

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

| (11-21-00) | |
|------------|--|
|------------|--|

20

SP6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2012 Standard Specifications.

The base price index for asphalt binder for plant mix is \$ 332.86 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on June 1, 2016.

CONTRACTOR SUPPLIED PIPE AND HEADWALL (ASSEMBLE AND INSTALL)

Purchasing, assembling and placing the new structure will be the responsibility of the contractor. The manufacturer's representative, with at least two (2) years of experience in the installation of this type of structure, will be required to be onsite during assembly, placement and backfilling of the structure. The Contractor's responsibility shall be to excavate the streambed for placement of the toe wall of both headwalls.

The pipe is required to be buried one foot below the streambed, unless specified otherwise. The Department will provide invert pipe elevations. The contractor will then be responsible for backfilling in accordance with the NCDOT <u>Standard Specifications</u>, and as directed by the Engineer. Backfill material shall be #57 stone from one (1) foot below the pipe invert to two foot above the top and beyond the sides of the pipe. All #57 stone backfill materials shall be encapsulated with engineering fabric (Foundation Conditioning Geotextile). Provide engineering fabric meeting the requirements of Article 1056-2 of the <u>Standard Specifications</u> for any type of engineering fabric. In addition to the engineering fabric the Contractor will be required to place one layer of geogrid (TX160 or equivalent) approximately 6" above and below the structure from headwall. All engineering fabric and geogrid will be considered incidental to "Pipe and Headwall" line items.

The Contractor shall thoroughly and carefully backfill the pipe in accordance with the pipe assembly plans. Backfilled areas shall be graded and maintained in such a condition that erosion or saturation will not erode or damage the pipe foundation or backfill. Heavy equipment shall not be operated over the pipe until it has been properly backfilled and minimum cover as shown on the plans or as approved by the Engineer has been placed over the pipe.

All material shall be inspected and approved by the Engineer after delivery to the project and prior to installation.

Basis of payment for "Pipe and Headwall" will be the contract unit price per each.

DEWATERING

All sites shall require dewatering. The preferred method for dewatering will be bypass pumping. All pumps shall be enclosed within a noise dampening apparatus to eliminate as much noise pollution as possible that results from the bypass pumping operation. The cost of the enclosure shall be incidental to the Bypass Pumping line item.

Materials used in impervious dikes include but are not limited to steel sheet piles, Aqua Barriers, etc. This will include all material, labor and equipment needed to satisfy the OSHA safety standards and also to satisfy the guidelines of the attached environmental permits. A copy of the environmental permits shall be onsite during construction activities. Any violation of the permits could result in fines. The Contractor's work shall be halted if the turbidity reaches in excess of 50 NTU's. The Contractor shall not resume work until corrections are made.

Included in this contract is a typical section for bypass pumping. The guidelines to be used for this activity can be found in the Best Management Practices for Construction and Maintenance Activities which are available as a down load on our web site. The link can be found at <u>http://www.ncdot.org/doh/operations/BMP_manual/</u>.

The Contractor shall furnish an Erosion Control Plan for each site, prior to beginning any work, for approval by our Roadside Environmental Specialist. The plan shall include the Level III Certification number of the designer.

Basis of payment for "Dewatering" will be the contract unit price for lump sum.

UTILITY RELOCATIONS

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 72 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

Compensation for the "Utility Relocation" Line Item will be based on when the contractor is required to compensate the utility owner for relocation expenses due to existing encroachment agreements. All utility coordination (relocating phone, television, etc.) will be considered incidental to the contract.

The Contractor shall make a reasonable effort to prevent utility relocations. The Engineer shall be notified for approval prior to any utility relocation. The Utility Relocation Line Item will be paid per each utility (i.e., water, sewer, gas, etc.) relocated at each site.

Basis of payment for "Utility Relocations" will be the contract unit price per each.

CRANE SAFETY

(8-15-05)

Comply with the manufacturer specifications and limitations applicable to the operation of any and all cranes and derricks. Prime contractors, sub-contractors, and fully operated rental companies shall comply with the current Occupational Safety and Health Administration regulations (OSHA).

Submit all items listed below to the Engineer prior to beginning crane operations involving critical lifts. A critical lift is defined as any lift that exceeds 75 percent of the manufacturer's crane chart capacity for the radius at which the load will be lifted or requires the use of more than one crane. Changes in personnel or equipment must be reported to the Engineer and all applicable items listed below must be updated and submitted prior to continuing with crane operations.

Crane Safety Submittal List

<u>Competent Person</u>: Provide the name and qualifications of the "Competent Person" responsible for crane safety and lifting operations. The named competent person will have the responsibility and authority to stop any work activity due to safety concerns.

<u>Riggers:</u> Provide the qualifications and experience of the persons responsible for rigging operations. Qualifications and experience should include, but not be limited to, weight calculations, center of gravity determinations, selection and inspection of sling and rigging equipment, and safe rigging practices.

Crane Inspections: Inspection records for all cranes shall be current and readily accessible for review upon request.

<u>Certifications</u>: By July 1, 2006, crane operators performing critical lifts shall be certified by NC CCO (National Commission for the Certification of Crane Operators), or satisfactorily complete the Carolinas AGC's Professional Crane Operator's Proficiency Program. Other approved nationally accredited programs will be considered upon request. All crane operators shall also have a current CDL medical card. Submit a list of anticipated critical lifts and corresponding crane operator(s). Include current certification for the type of crane operated (small hydraulic, large hydraulic, small lattice, large lattice) and medical evaluations for each operator.

GENERAL ALUMINUM STRUCTURE REQUIREMENTS

All items are incidental to Pipe and Headwalls

- 1. ALL MATERIALS SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION, <u>STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES</u>, LATEST EDITION.
- 2. Pipe material shall either be made of aluminum alloy and in dimensions per the standard specifications and hydraulic recommendations.
- 3. Poor quality of workmanship of any materials supplied will constitute grounds for the structure being rejected.
- 4. Manufacturer's representative, with at least two (2) years of experience in the installation of the type of structure, is required to provide technical assistance with the assembly of structure and headwalls as well as being on site during the installation and backfilling of pipe with headwalls through completion.
- 5. Detailed shop drawings and design calculations shall be submitted for acceptance. The supplier shall provide a design that meets the requirements of AASHTO and is sealed by a NC registered Professional Engineer.
- 6. Headwall locations shall be at or beyond the shoulder point.
- 7. Headwalls will be required on the inlet and outlet of all pipes.
- 8. All headwalls shall be parallel to the roadway.
- 9. Bottom of headwall elevation shall be 1' below invert.
- 10. Headwall invert elevations shall be 1' below streambed.
- 11. Headwall foundation shall be undercut and backfilled with #57 stone 1' below bottom of headwall elevation.
- 12. An NCDOT approved soil engineering fabric shall be required on top of the #57 stone prior to backfilling of the roadbed.
- 13. Pipe is to be fully welded inside and out to headwalls using two root welds and two finish welds on either side of the wall. All finish welds are to be ground to a smooth finish.
- 14. Headwall and pipe are to be reinforced per AASHTO specifications and structural engineer's requirements.
- 15. All hardware including nuts, bolts, washers, rods, etc. shall be hot dipped galvanized.
- 16. A 2' wide band and a continuous 3/8" thick x 2' wide flat gasket made of closed cell neoprene rubber which upon assembly provides a watertight seal at each joint will be required.
- 17. All holes or tears in the pipe must be repaired prior to backfilling.
- 18. Pipe bed will be undercut and backfilled with #57 stone 1' below pipe invert elevations.
- 19. Backfill material shall be #57 stone from 2' below streambed elevation to 2' above the top and sides.
- 20. SUPPLIER TO INCLUDE ALL NECESSARY WALE BEAMS, HEADWALL CAP, CONTINUOUS FLAT GASKETS AND GALVANIZED STEEL TIEBACK RODS WITH DMA PLATES AND ADJUSTABLE HOT DIP GALVANIZED TURNBUCKLES.
- 21. Material Quality and Workmanship
- 22. Pipe sections and bands shall be assembled and alphanumerically / alignment match-marked at the plant site before shipping to verify fit.

- 23. Bands shall be installed onto the pipe sections prior to shipping.
- 24. Pipe manufacturer must provide certification of the measured dimensions of the pipe, bands and the continuous flat gaskets. Certification must state that the bands and the gaskets have been pre-fitted and will securely tighten around the supplied pipe. Certification of the dimensions must be signed by the manufacturer's representative and dated.
 - i. EXAMPLE: Supplied pipe measures _____ inches in diameter. Supplied bands and the continuous flat gaskets measure _____ inches in length and will securely fasten pipe sections, without field modification.
 - ii. Signature _____
 - iii. Date:_____
- 25. Poor quality of workmanship of any materials supplied will constitute grounds for the material being rejected.

MATERIALS:

 (2-21-12) (Rev. 3-15-16)
 1000, 1002, 1005, 1016, 1018, 1024, 1050, 1074, 1078, 1080, 1081, 1086, 1084, 1087, 1092
 SP10 R01

 Revise the 2012 Standard Specifications as follows:

Page 10-1, Article 1000-1, DESCRIPTION, lines 9-10, replace the last sentence of the first paragraph with the following:

Type IL, IP, IS or IT blended cement may be used instead of Portland cement.

Page 10-1, Article 1000-1, DESCRIPTION, line 14, add the following:

If any change is made to the mix design, submit a new mix design (with the exception of an approved pozzolan source change).

If any major change is made to the mix design, also submit new test results showing the mix design conforms to the criteria. Define a major change to the mix design as:

- (1) A source change in coarse aggregate, fine aggregate or cement.
- (2) A pozzolan class or type change (e.g. Class F fly ash to Class C fly ash).
- (3) A quantitative change in coarse aggregate (applies to an increase or decrease greater than 5%), fine aggregate (applies to an increase or decrease greater than 5%), water (applies to an increase only), cement (applies to a decrease only), or pozzolan (applies to an increase or decrease greater than 5%).

Use materials which do not produce a mottled appearance through rusting or other staining of the finished concrete surface.

Page 10-1, Article 1000-2, MATERIALS, line 16; Page 10-8, Subarticle 1000-7(A), Materials, line 8; and Page 10-18, Article 1002-2, MATERIALS, line 9, add the following to the table of item references:

ItemSectionType IL Blended Cement1024-1

Page 10-1, Subarticle 1000-3(A), Composition and Design, lines 25-27, replace the second paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced.

Page 10-2, Subarticle 1000-3(A), Composition and Design, lines 12-21, delete the third paragraph through the sixth paragraph beginning with "If any change is made to the mix design, submit..." through "...(applies to a decrease only)."

| | | | RE | TA QUIREME | ABLE 1000 ENTS FOR | | RETE | | | | |
|----------------------------------|---|----------------------|-----------------------|----------------------|-----------------------|---|--------------------|----------------|-----------|-----------|-----------|
| <u>د.</u> د. | or s | Maxi | mum Wate | - | | Consiste | ency Max. 1mp | Cement Content | | | |
| Class of Concrete | Min. Comp. Strength at 28 days | Air-En Cone | trained crete | Non Entra Cone | | Vibrated | Non- Vibrated | Vibi | rated | Non- V | ibrated |
| Ū | a T Z | Rounded Aggregate | Angular Aggre-gate | Rounded Aggregate | Angular Aggre-gate | Vi | Vi | Min. | Max. | Min. | Max. |
| Units | psi | | | | | inch | inch | lb/cy | lb/cy | lb/cy | lb/cy |
| AA | 4,500 | 0.381 | 0.426 | _ | - | 3.5 | - | 639 | 715 | - | - |
| AA Slip Form | 4,500 | 0.381 | 0.426 | _ | - | 1.5 | - | 639 | 715 | - | - |
| Drilled Pier | 4,500 | - | - | 0.450 | 0.450 | - | 5-7 dry 7-9 wet | - | - | 640 | 800 |
| А | 3,000 | 0.488 | 0.532 | 0.550 | 0.594 | 3.5 | 4 | 564 | - | 602 | - |
| В | 2,500 | 0.488 | 0.567 | 0.559 | 0.630 | 1.5 machine- placed 2.5 hand- placed | 4 | 508 | - | 545 | - |
| Sand Light- weight | 4,500 | - | 0.420 | - | - | 4 | - | 715 | - | - | - |
| Latex Modified | 3,000 7 day | 0.400 | 0.400 | - | - | 6 | - | 658 | - | - | - |
| Flowable Fill excavatable | 150 max. at 56 days | as needed | as needed | as needed | as needed | - | Flow-able | - | - | 40 | 100 |
| Flowable Fill non-excavatable | 125 | as needed | as needed | as needed | as needed | - | Flow-able | - | - | 100 | as needed |
| Pavement | 4,500 design, field 650 flexural, design only | 0.559 | 0.559 | - | - | 1.5 slip form 3.0 hand place | - | 526 | - | - | - |
| Precast | See Table 1077-1 | as needed | as needed | - | - | 6 | as needed | as needed | as needed | as needed | as needed |
| Prestress | per contract | See Table 1078-1 | See Table 1078-1 | - | - | 8 | - | 564 | as needed | - | - |

Page 10-5, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

Page 10-6, Subarticle 1000-4(I), Use of Fly Ash, lines 36-2, replace the first paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced. Use Table 1000-1 to determine the maximum allowable water-cementitious material (cement + fly ash) ratio for the classes of concrete listed.

Page 10-7, Table 1000-3, MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO, delete the table.

Page 10-7, Article 1000-5, HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE, lines 30-31, delete the second sentence of the third paragraph.

Page 10-19, Article 1002-3, SHOTCRETE FOR TEMPORARY SUPPORT OF EXCAVATIONS, line 30, add the following at the end of Section 1002:

(H) Handling and Storing Test Panels

Notify the Area Materials Engineer when preconstruction or production test panels are made within 24 hours of shooting the panels. Field cure and protect test panels from damage in accordance with ASTM C1140 until the Department transports panels to the Materials and Tests Regional Laboratory for coring.

Robeson County

| Percentage of Total by Weight Passing | | | | | | | | | | | | | |
|---------------------------------------|-----|------------|------------|------------|------------|------------|------------|-----------|-----------|------|-----------|-----------------------|--|
| Std. Size # | 2'' | 1 1/2'' | 1" | 3/4'' | 1/2'' | 3/8'' | #4 | #8 | #10 | #16 | #40 | #200 | Remarks |
| 4 | 100 | 90- 100 | 20- 55 | 0-15 | - | 0-5 | - | - | - | - | - | A | Asphalt Plant Mix |
| 467M | 100 | 95- 100 | - | 35- 70 | - | 0-30 | 0-5 | - | - | - | - | A | Asphalt Plant Mix |
| 5 | - | 100 | 90- 100 | 20- 55 | 0-10 | 0-5 | - | - | - | - | - | Α | AST, Sediment Control St |
| 57 | - | 100 | 95- 100 | - | 25- 60 | - | 0-10 | 0-5 | - | - | - | A | AST, Str. Concrete, Shoulder Drain, Sediment Control Store |
| 57M | - | 100 | 95- 100 | - | 25- 45 | - | 0-10 | 0-5 | - | - | - | A | AST, Concrete Pavemen |
| 6M | - | - | 100 | 90- 100 | 20- 55 | 0-20 | 0-8 | - | - | - | - | Α | AST |
| 67 | - | - | 100 | 90- 100 | - | 20- 55 | 0-10 | 0-5 | - | - | - | Α | AST, Str. Concrete, Asphalt Plant Mix |
| 78M | - | - | - | 100 | 98- 100 | 75- 100 | 20- 45 | 0-15 | - | - | - | A | Asphalt Plant Mix, AST Str. Conc, Weep Hole Dra |
| 14M | - | - | - | - | - | 100 | 35- 70 | 5-20 | - | 0-8 | - | Α | Asphalt Plant Mix, AST, Weep Hole Drain Str. Concrete |
| 9 | - | - | - | - | - | 100 | 85- 100 | 10- 40 | - | 0-10 | - | Α | AST |
| ABC | - | 100 | 75- 97 | - | 55- 80 | - | 35- 55 | - | 25- 45 | - | 14- 30 | 4- 12 ^B | Aggregate Base Course Aggregate Stabilization |
| ABC (M) | - | 100 | 75- 100 | - | 45- 79 | - | 20- 40 | - | 0- 25 | - | - | 0- 12 ^в | Maintenance Stabilization |
| Light- veight ^C | - | - | - | - | 100 | 80- 100 | 5- 40 | 0-20 | - | 0-10 | - | 0-2.5 | AST |

TABLE 1005-1

A. See Subarticle 1005-4(A).

B. See Subarticle 1005-4(B).

C. For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6).

30% of the rock ranges in size from 2" to 1.5 ft in diameter, and

At least 50% of the rock has a diameter of from 1.5 ft to 3 ft,

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Select material is clean, unweathered durable, blasted rock material obtained from an approved source. While no specific gradation is required, the below criteria will be used to evaluate the materials for visual acceptance by the Engineer:

, lines 27-32, replace with the following:

Page 10-39, Article 1016-3, CLASSIFICATIONS

31

Page 10-23, Table 1005-1, AGGREGATE GRADATION-COARSE AGGREGATE, replace with the following:

(C) Not more than 20% of the rock is less than 2" in diameter. No rippable rock will be permitted.

Page 10-40, Tables 1018-1 and 1018-2, PIEDMONT, WESTERN AND COASTAL AREA CRITERIA FOR

ACCEPTANCE OF BORROW MATERIAL, under second column in both tables, replace second row with the following:

Acceptable, but not to be used in the top 3 ft of embankment or backfill

Page 10-46, Article 1024-1, PORTLAND CEMENT, line 33, add the following as the ninth paragraph:

Use Type IL blended cement that meets AASHTO M 240, except that the limestone content is limited to between 5 and 12% by weight and the constituents shall be interground. Class F fly ash can replace a portion of Type IL blended cement and shall be replaced as outlined in Subarticle 1000-4(I) for Portland cement. For mixes that contain cement with alkali content between 0.6% and 1.0% and for mixes that contain a reactive aggregate documented by the Department, use a pozzolan in the amount shown in Table 1024-1.

Page 10-46, Table 1024-1, POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE, replace with the following:

| POZZOLANS | TABLE 1024-1 FOR USE IN PORTLAND CEMENT CONCRETE |
|---------------------------------|---|
| Pozzolan | Rate |
| Class F Fly Ash | 20% - 30% by weight of required cement content with 1.0 lb Class F fly ash per lb of cement replaced |
| Ground Granulated Blast Furnace | 35%-50% by weight of required cement content |
| Slag | with 1.0 lb slag per lb of cement replaced |
| Microsilica | 4%-8% by weight of required cement content with 1.0 lb microsilica per lb of cement replaced |

Page 10-47, Subarticle 1024-3(B), Approved Sources, lines 16-18, replace the second sentence of the second paragraph with the following:

Tests shall be performed by AASHTO's designated National Transportation Product Evaluation Program (NTPEP) laboratory for concrete admixture testing.

Page 10-65, Article 1050-1, GENERAL, line 41, replace the first sentence with the following:

All fencing material and accessories shall meet Section 106.

Page 10-115, Subarticle 1074-7(B), Gray Iron Castings, lines 10-11, replace the first two sentences with the following:

Supply gray iron castings meeting all facets of AASHTO M 306 excluding proof load. Proof load testing will only be required for new casting designs during the design process, and conformance to M306 loading (40,000 lb.) will be required only when noted on the design documents.

Page 10-126, Table 1078-1, REQUIREMENTS FOR CONCRETE, replace with the following:

| | LE 1078-1 IS FOR CONCRETE | |
|---|--|---|
| Property | 28 Day Design Compressive Strength 6,000 psi or less | 28 Day Design Compressive Strength greater than 6,000 psi |
| Maximum Water/Cementitious Material Ratio | 0.45 | 0.40 |
| Maximum Slump without HRWR | 3.5" | 3.5" |
| Maximum Slump with HRWR | 8" | 8" |
| Air Content (upon discharge into forms) | 5 + 2% | 5 + 2% |

Page 10-151, Article 1080-4, INSPECTION AND SAMPLING, lines 18-22, replace (B), (C) and (D) with the following:

- (B) At least 3 panels prepared as specified in 5.5.10 of AASHTO M 300, Bullet Hole Immersion Test.
- (C) At least 3 panels of 4"x6"x1/4" for the Elcometer Adhesion Pull Off Test, ASTM D4541.
- (D) A certified test report from an approved independent testing laboratory for the Salt Fog Resistance Test, Cyclic Weathering Resistance Test, and Bullet Hole Immersion Test as specified in AASHTO M 300.
- (E) A certified test report from an approved independent testing laboratory that the product has been tested for slip coefficient and meets AASHTO M253, Class B.

Page 10-161, Subarticle 1081-1(A), Classifications, lines 29-33, delete first 3 sentences of the description for Type 2 and replace with the following:

Type 2 - A low-modulus, general-purpose adhesive used in epoxy mortar repairs. It may be used to patch spalled, cracked or broken concrete where vibration, shock or expansion and contraction are expected.

Page 10-162, Subarticle 1081-1(A), Classifications, lines 4-7, delete the second and third sentences of the description for Type 3A. Lines 16-22, delete Types 6A, 6B and 6C.

Page 10-162, Subarticle 1081-1(B), Requirements, lines 26-30, replace the second paragraph with the following:

For epoxy resin systems used for embedding dowel bars, threaded rods, rebar, anchor bolts and other fixtures in hardened concrete, the manufacturer shall submit test results showing that the bonding system will obtain 125% of the specified required yield strength of the fixture. Furnish certification that, for the particular bolt grade, diameter and embedment depth required, the anchor system will not fail by adhesive failure and that there is no movement of the anchor bolt. For certification and anchorage, use 3,000 psi as the minimum Portland cement concrete compressive strength used in this test. Use adhesives that meet Section 1081.

List the properties of the adhesive on the container and include density, minimum and maximum temperature application, setting time, shelf life, pot life, shear strength and compressive strength.

| | PROP | ERTIES O | TABLE 1081-1 F MIXED EPOXY | TABLE 1081-1 PROPERTIES OF MIXED EPOXY RESIN SYSTEMS | SIN SYSTI | EMS | |
|---|---|-----------------|-------------------------------|---|-----------------|------------|------------|
| • | Property | Type 1 | Type 2 | Type 3 | Type 3A | Type 4A | Type 4B |
| | Viscosity-Poises at $77^{\circ}F \pm 2^{\circ}F$ | Gel | 10-30 | 25-75 | Gel | 40-150 | 40-150 |
| - | Spindle No. | ı | ω | 4 | ł | 4 | 4 |
| | Speed (RPM) | I | 20 | 20 | 1 | 10 | 10 |
| | Pot Life (Minutes) | 20-50 | 30-60 | 20-50 | 5-50 | 40-80 | 40-80 |
| | Minimum Tensile Strength at 7 days (psi) | 1,500 | 2,000 | 4,000 | 4,000 | 1,500 | 1,500 |
| | Tensile Elongation at 7 days (%) | 30 min. | 30 min. | 2-5 | 2-5 | 5-15 | 5-15 |
| | Min. Compressive Strength of 2". mortar cubes at 24 hours | 3,000 (Neat) | 4,000- | 6,000- | 6,000 (Neat) | 3,000 | 3,000 |
| | Min. Compressive Strength of 2" mortar cubes at 7 days | 5,000 (Neat) | ı | I | ı | ı | 5,000 |
| | Maximum Water Absorption (%) | 1.5 | 1.0 | 1.0 | 1.5 | 1.0 | 1.0 |
| | Min. Bond Strength Slant Shear Test at 14 days (psi) | 1,500 | 1,500 | 2,000 | 2,000 | 1,500 | 1,500 |

Page 10-163, Table 1081-1, PROPERTIES OF MIXED EPOXY RESIN SYSTEMS, replace with the following:

Page 10-164, Subarticle 1081-1(E), Prequalification, lines 31-33, replace the second sentence of the first paragraph with the following:

4,000

20-60

50

Ν

2-5

Manufacturers choosing to supply material for Department jobs must submit an application through the Value Management Unit with the following information for each type and brand name:

Page 10-164, Subarticle 1081-1(E)(3), line 37, replace with the following:

6,000

ı

(3) Type of the material in accordance with Articles 1081-1 and 1081-4,

Page 10-165, Subarticle 1081-1(E)(6), line 1, in the first sentence of the first paragraph replace "AASHTO M 237" with "the specifications".

Page 10-165, Subarticle 1081-1(E), Prequalification, line 9-10, delete the second sentence of the last paragraph.

1,500

1.0

Type 5

1-6

Page 10-165, Subarticle 1081-1(F), Acceptance, line 14, in the first sentence of the first paragraph replace "Type 1" with "Type 3".

Page 10-169, Subarticle 1081-3(G), Anchor Bolt Adhesives, delete this subarticle.

Page 10-170, Article 1081-3, HOT BITUMEN, line 9, add the following at the end of Section 1081:

1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS

(A) General

This section covers epoxy resin adhesive for bonding traffic markers to pavement surfaces.

(B) Classification

The types of epoxies and their uses are as shown below:

Type I – Rapid Setting, High Viscosity, Epoxy Adhesive. This type of adhesive provides rapid adherence to traffic markers to the surface of pavement.

Type II – Standard Setting, High Viscosity, Epoxy Adhesive. This type of adhesive is recommended for adherence of traffic markers to pavement surfaces when rapid set is not required.

Type III – Rapid Setting, Low Viscosity, Water Resistant, Epoxy Adhesive. This type of rapid setting adhesive, due to its low viscosity, is appropriate only for use with embedded traffic markers.

Type IV – Standard Set Epoxy for Blade Deflecting-Type Plowable Markers.

(C) Requirements

Epoxies shall conform to the requirements set forth in AASHTO M 237.

(D) Prequalification

Refer to Subarticle 1081-1(E).

(E) Acceptance

Refer to Subarticle 1081-1(F).

Page 10-173, Article 1084-2, STEEL SHEET PILES, lines 37-38, replace first paragraph with the following:

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required by the plans. Galvanized sheet piles shall be coated in accordance with Section 1076. Metallized sheet piles shall be metallized in accordance to the Project Special Provision "Thermal Sprayed Coatings (Metallization)" with an 8 mil, 99.9% aluminum alloy coating and a 0.5 mil seal coating. Any portion of the metallized sheet piles encased in concrete shall receive a barrier coat. The barrier coat shall be an approved waterborne coating with a low-viscosity which readily absorbs into the pores of the aluminum thermal sprayed coating. The waterborne coating shall be applied at a spreading rate that results in a theoretical 1.5 mil dry film thickness. The manufacturer shall issue a letter of certification that the resin chemistry of the waterborne coating is compatible with the 99.9% aluminum thermal sprayed alloy and suitable for tidal water applications.

Page 10-174, Subarticle 1086-1(B)(1), Epoxy, lines 18-24, replace with the following:

The epoxy shall meet Article 1081-4.

The 2 types of epoxy adhesive which may be used are Type I, Rapid Setting, and Type II, Standard Setting. Use Type II when the pavement temperature is above 60° F or per the manufacturer's recommendations whichever is more stringent. Use Type I when the pavement temperature is between 50° F and 60° F or per the manufacturer's recommendations whichever is more



stringent. Epoxy adhesive Type I, Cold Set, may be used to attach temporary pavement markers to the pavement surface when the pavement temperature is between 32° F and 50° F or per the manufacturer's recommendations whichever is more stringent.

Page 10-175, Subarticle 1086-2(E), Epoxy Adhesives, line 27, replace "Section 1081" with "Article 1081-4".

Page 10-177, Subarticle 1086-3(E), Epoxy Adhesives, line 22, replace "Section 1081" with "Article 1081-4".

Page 10-179, Subarticle 1087-4(A), Composition, lines 39-41, replace the third paragraph with the following:

All intermixed and drop-on glass beads shall not contain more than 75 ppm arsenic or 200 ppm lead.

Page 10-180, Subarticle 1087-4(B), Physical Characteristics, line 8, replace the second paragraph with the following:

All intermixed and drop-on glass beads shall comply with NCGS § 136-30.2 and 23 USC § 109(r).

Page 10-181, Subarticle 1087-7(A), Intermixed and Drop-on Glass Beads, line 24, add the following after the first paragraph:

Use X-ray Fluorescence for the normal sampling procedure for intermixed and drop-on beads, without crushing, to check for any levels of arsenic and lead. If any arsenic or lead is detected, the sample shall be crushed and repeat the test using X-ray Fluorescence. If the X-ray Fluorescence test shows more than a LOD of 5 ppm, test the beads using United States Environmental Protection Agency Method 6010B, 6010C or 3052 for no more than 75 ppm arsenic or 200 ppm lead.

GROUT PRODUCTION AND DELIVERY:

(3-17-15)

1003

SP10 R20

Revise the 2012 Standard Specifications as follows:

Replace Section 1003 with the following:

SECTION 1003 GROUT PRODUCTION AND DELIVERY

1003-1 DESCRIPTION

This section addresses cement grout to be used for structures, foundations, retaining walls, concrete barriers, embankments, pavements and other applications in accordance with the contract. Produce non-metallic grout composed of Portland cement and water and at the Contractor's option or as required, aggregate and pozzolans. Include chemical admixtures as required or needed. Provide sand cement or neat cement grout as required. Define "sand cement grout" as grout with only fine aggregate and "neat cement grout" as grout without aggregate.

The types of grout with their typical uses are as shown below:

Type 1 – A cement grout with only a 3-day strength requirement and a fluid consistency that is typically used for filling subsurface voids.

Type 2 – A nonshrink grout with strength, height change and flow conforming to ASTM C1107 that is typically used for foundations, ground anchors and soil nails.

Type 3 – A nonshrink grout with high early strength and freeze-thaw durability requirements that is typically used in pile blockouts, grout pockets, shear keys, dowel holes and recesses for concrete barriers and structures.

Type 4 – A neat cement grout with low strength, a fluid consistency and high fly ash content that is typically used for slab jacking.

Type 5 – A low slump, low mobility sand cement grout with minimal strength that is typically used for compaction grouting.

1003-2 MATERIALS

Refer to Division 10.

| Item | Section |
|--------------------------------------|---------|
| Chemical Admixtures | 1024-3 |
| Fine Aggregate | 1014-1 |
| Fly Ash | 1024-5 |
| Ground Granulated Blast Furnace Slag | 1024-6 |
| Portland Cement | 1024-1 |
| Silica Fume | 1024-7 |
| Water | 1024-4 |

Do not use grout that contains soluble chlorides or more than 1% soluble sulfate. At the Contractor's option, use an approved packaged grout instead of the materials above except for water. Use packaged grouts that are on the NCDOT Approved Products List.

Use admixtures for grout that are on the NCDOT Approved Products List or other admixtures in accordance with Subarticle 1024-3(E) except do not use concrete additives or unclassified or other admixtures in Type 4 or 5 grout. Use Class F fly ash for Type 4 grout and Type II Portland cement for Type 5 grout.

Use well graded rounded aggregate with a gradation, liquid limit (LL) and plasticity index (PI) that meet Table 1003-1 for Type 5 grout. Fly ash may be substituted for a portion of the fines in the aggregate. Do not use any other pozzolans in Type 5 grout.

| AG | TABLE 1003-1 AGGREGATE REQUIREMENTS FOR TYPE 5 GROUT | | | | | | |
|--------------------------------------|--|-----|-----------|--|-----------|--|--------------------|
| Grad | Gradation | | Gradation | | Gradation | | Maximum Plasticity |
| Sieve Designation per AASHTO M 92 | Percentage Passing (% by weight) | | | | | | |
| 3/8" | 100 | | | | | | |
| No. 4 | 70 – 95 | | | | | | |
| No. 8 | 50 - 90 | | | | | | |
| No. 16 | 30 - 80 | N/A | N/A | | | | |
| No. 30 | 25 - 70 | | | | | | |
| No. 50 | 20 - 50 | | | | | | |
| No. 100 | 15 - 40 | | | | | | |
| No. 200 | 10 - 30 | 25 | 10 | | | | |

1003-3 COMPOSITION AND DESIGN

When using an approved packaged grout, a grout mix design submittal is not required. Otherwise, submit proposed grout mix designs for each grout mix to be used in the work. Mixes for all grout shall be designed by a Certified Concrete Mix Design Technician or an Engineer licensed by the State of North Carolina. Mix proportions shall be determined by a testing laboratory approved by the Department. Base grout mix designs on laboratory trial batches that meet Table 1003-2 and this section. With permission, the Contractor may use a quantity of chemical admixture within the range shown on the current list of approved admixtures maintained by the Materials and Tests Unit.

Submit grout mix designs in terms of saturated surface dry weights on Materials and Tests Form 312U at least 35 days before proposed use. Adjust batch proportions to compensate for surface moisture contained in the aggregates at the time of batching. Changes in the saturated surface dry mix proportions will not be permitted unless revised grout mix designs have been submitted to the Engineer and approved.

Accompany Materials and Tests Form 312U with a listing of laboratory test results of compressive strength, density and flow or slump and if applicable, aggregate gradation, durability and height change. List the compressive strength of at least three 2" cubes at the age of 3 and 28 days.

The Engineer will review the grout mix design for compliance with the contract and notify the Contractor as to its acceptability. Do not use a grout mix until written notice has been received. Acceptance of the grout mix design or use of approved packaged grouts does not relieve the Contractor of his responsibility to furnish a product that meets the contract. Upon written request from the Contractor, a grout mix design accepted and used satisfactorily on any Department project may be accepted for use on other projects.

Perform laboratory tests in accordance with the following test procedures:

| Property | Test Method |
|----------------------------------|--|
| Aggregate Gradation ^A | AASHTO T 27 |
| Compressive Strength | AASHTO T 106 |
| Density (Unit Weight) | AASHTO T 121, AASHTO T 133 ^B , ANSI/API RP ^C 13B-1 ^B (Section 4, Mud Balance) |
| Durability | AASHTO T 161 ^D |
| Flow | ASTM C939 (Flow Cone) |
| Height Change | ASTM C1090 ^E |
| Slump | AASHTO T 119 |

A. Applicable to grout with aggregate.

B. Applicable to Neat Cement Grout.

C. American National Standards Institute/American Petroleum Institute Recommended Practice.

D. Procedure A (Rapid Freezing and Thawing in Water) required.

E. Moist room storage required.

1003-4 GROUT REQUIREMENTS

Provide grout types in accordance with the contract. Use grouts with properties that meet Table 1003-2. The compressive strength of the grout will be considered the average compressive strength test results of three 2" cubes at each age. Make cubes that meet AASHTO T 106 from the grout delivered for the work or mixed on-site. Make cubes at such frequencies as the Engineer may determine and cure them in accordance with AASHTO T 106.

| | | | TABLE 1003-2 JT REQUIREME | NTS | |
|----------------|-----------|-----------------------|---|---------------------------------------|-----------------------|
| | | Compressive gth at | t Change Flow ^A /Slump ^B | Flow ^A /Slump ^B | Minimum Durability |
| | 3 days | 28 days | | • | Factor |
| 1 | 3,000 psi | _ | _ | 10 - 30 sec | _ |
| 2 | | Table 1 ^C | | Fluid Consistency ^C | _ |
| 3 | 5,000 psi | _ | 0 – 0.2% Per Accepted Grout Mix Design/ Approved Packaged Grout | | 80 |
| 4 ^D | 600 psi | 1,500 psi | _ | 10 – 26 sec | _ |
| 5 | _ | 500 psi | _ | 1 – 3" | - |

A. Applicable to Type 1 through 4 grouts.

B. Applicable to Type 5 grout.

C. ASTM C1107.

D. Use Type 4 grout with proportions by volume of 1 part cement and 3 parts fly ash.

1003-5 TEMPERATURE REQUIREMENTS

When using an approved packaged grout, follow the manufacturer's instructions for grout and air temperature at the time of placement. Otherwise, the grout temperature at the time of placement shall be not less than 50° F nor more than 90° F. Do not place grout when the air temperature measured at the location of the grouting operation in the shade away from artificial heat is below 40° F.

1003-6 ELAPSED TIME FOR PLACING GROUT

Agitate grout continuously before placement. Regulate the delivery so the maximum interval between the placing of batches at the work site does not exceed 20 minutes. Place grout before exceeding the times in Table 1003-3. Measure the elapsed time as the time between adding the mixing water to the grout mix and placing the grout.

| ELA | TABLE 1003-3 PSED TIME FOR PLACING GI (with continuous agitation) | ROUT |
|--|---|--------------------------------|
| | Maximum | Elapsed Time |
| Air or Grout Temperature, Whichever is Higher | No Retarding Admixture Used | Retarding Admixture Used |
| 90°F or above | 30 minutes | 1 hr. 15 minutes |
| 80°F through 89°F | 45 minutes | 1 hr. 30 minutes |
| 79°F or below | 60 minutes | 1 hr. 45 minutes |

1003-7 MIXING AND DELIVERY

Use grout free of any lumps and undispersed cement. When using an approved packaged grout, mix grout in accordance with the manufacturer's instructions. Otherwise, comply with Articles 1000-8 through 1000-12 to the extent applicable for grout instead of concrete.

PROJECT SPECIAL PROVISIONS

EROSION CONTROL

TEMPORARY SILT FENCE

Temporary silt fence for erosion control shall be installed as directed by the Engineer. Temporary silt fence shall be installed in accordance with Section 1605 of the <u>Standard Specifications</u>.

Payment of this item will be to furnish all materials including posts, wire, fabrics and fasteners; and to construct, maintain, and remove temporary silt fence.

Basis of payment for "Temporary Silt Fence" shall be the contract unit bid price per linear foot.

EROSION CONTROL STONE

The work covered under this section shall be in accordance with Division 8 and Division 16 of the <u>Standard Specifications</u> and the following provision(s):

The work includes but is not limited to furnishing, weighing, stock piling, placing and maintaining stone; and disposal of any stone not incorporated into the project when necessary.

Stone shall be used as slope protection, or as directed by the Engineer.

The type of stone to be used shall be "Stone for Erosion Control, Class B" unless otherwise directed by the Engineer.

Basis of payment for "Stone for Erosion Control, Class B" shall be the contract unit bid price per ton.

WATTLES

Wattles are tubular products consisting of excelsior fibers encased in synthetic netting. Wattles are used on slopes or channels to intercept runoff and act as a velocity break. Wattles are to be placed at locations shown on the plans or as directed. Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation of wattles, matting installation, PAM application, and removing wattles.

Materials

Wattle shall meet the following specifications:

| 100% Curled Wood(Excelsior) Fibers | | | |
|------------------------------------|----------------------------------|--|--|
| Minimum Diameter | 12 in. | | |
| Minimum Density | 2.5 lb/ft ³ +/- 10% | | |
| Net Material | Synthetic | | |
| Net Openings | 1 in. x 1 in. | | |
| Net Configuration | Totally Encased | | |
| Minimum Weight | 20 lb. +/- 10% per 10 ft. length | | |

Anchors: Stakes shall be used as anchors.

Wooden Stakes:

Provide hardwood stakes a minimum of 2-ft. long with a 2 in. x 2 in. nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving down into the underlying soil.

Matting shall meet the requirements of section 1060-8 of the *Standard Specifications*, or shall meet specifications provided elsewhere in this contract.

Provide staples made of 0.125" diameter new steel wire formed into a u shape not less than 12" in length with a throat of 1" in width.

Construction Methods

Wattles shall be secured to the soil by wire staples approximately every 1 linear foot and at the end of each section of wattle. A minimum of 4 stakes shall be installed on the downstream side of the wattle with a maximum spacing of 2 linear feet along the wattle, and according to the detail. Install a minimum of 2 stakes on the upstream side of the wattle according to the detail provided in the plans. Stakes shall be driven into the ground a minimum of 10 in. with no more than 2 in. projecting from the top of the wattle. Drive stakes at an angle according to the detail provided in the plans.

Only install wattle(s) to a height in ditch so flow will not wash around wattle and scour ditch slopes and according to the detail provided in the plans and as directed. Overlap adjoining sections of wattles a minimum of 6 in.

Installation of matting shall be in accordance with the detail provided in the plans, and in accordance with section 1631-3(B) of the *Standard Specifications*, or in accordance with specifications provided elsewhere in this contract.

The Contractor shall maintain the wattles until the project is accepted or until the wattles are removed, and shall remove and dispose of silt accumulations at the wattles when so directed in accordance with the requirements of Section 1630 of the <u>Standard Specifications</u>.

Measurement and Payment

Wattles will be measured and paid for by the actual number of linear feet of wattles which are installed and accepted. Such price and payment will be full compensation for all work covered by this section, including, but not limited to, furnishing all materials, labor, equipment and incidentals necessary to install the *Wattles*.

Matting will be measured and paid for in accordance with section 1631-4 of the <u>Standard Specifications</u>, or in accordance with specifications provided elsewhere in this contract.

Basis of payment for "Wattle" will be the contract unit price per linear foot.

Basis of payment for "Matting" will be the contract unit price per square yard.

STABILIZATION REQUIREMENTS

(11-4-11)

Stabilization for this project shall comply with the time frame guidelines as specified by the NCG-010000 general construction permit effective August 3, 2011 issued by the North Carolina Department of Environment and Natural Resources Division of Water Quality. Temporary or permanent ground cover stabilization shall occur within 7 calendar days from the last land-disturbing activity, with the following exceptions in which temporary or permanent ground cover shall be provided in 14 calendar days from the last land-disturbing activity:

- Slopes between 2:1 and 3:1, with a slope length of 10 ft. or less
- Slopes 3:1 or flatter, with a slope of length of 50 ft. or less
- Slopes 4:1 or flatter

The stabilization timeframe for High Quality Water (HQW) Zones shall be 7 calendar days with no exceptions for slope grades or lengths. High Quality Water Zones (HQW) Zones are defined by North Carolina Administrative Code 15A NCAC 04A.0105 (25). Temporary and permanent ground cover stabilization shall be achieved in accordance with the provisions in this contract and as directed.

SEEDING AND MULCHING

All disturbed areas shall be dressed in typical sections and plowed to a depth of five (5) inches. The top two (2) inches shall be pulverized to provide a uniform seedbed. Lime should be applied before plowing operation.

Lime, seed and fertilizer shall be applied with the necessary equipment to give uniform distribution of these materials. The hand/bucket method is not acceptable.

S-2

All areas to be seeded and mulched shall be approved by the Engineer prior to preparing the seedbed. Work shall be in accordance with Section 1660 of the <u>Standard Specifications</u>. The following rates per acre shall apply:

| March 1 – August 31 | | September 1 – February 28 | | | |
|------------------------|------|---------------------------|--------------------------|------|--------|
| Tall Fescue | 50 | pounds | Tall Fescue | 50 | pounds |
| Centipede | 10 | pounds | Centipede | 10 | pounds |
| Bermuda grass (hulled) | 25 | pounds | Bermuda grass (unhulled) | 35 | pounds |
| Fertilizer10-20-20 | 500 | pounds | Fertilizer10-20-20 | 500 | pounds |
| Limestone | 4000 | pounds | Limestone | 4000 | pounds |

Notes:

- 1. Fifty (50) pounds of Bahiagrass may be substituted for either Centipede or Bermudagrass, but only with Engineer's approval.
- On cut and fill slopes 2:1 or steeper, Centipede shall be applied at the rate of 5 pounds per acre and add 20 pounds of Sericea Lespedeza from January 1 – December 31.

The seeded area shall be cultipacked to provide a firm seedbed and cover seed. Grain straw shall be applied over seeded areas as mulch. No bare ground shall be visible when riding by a mulched area if proper application is achieved. Thick clumps of straw are not permissible as a uniform coverage is expected. Hydroseeding, however, will be considered an acceptable means of seeding, however the hydromulch can be used as a tack but not as a mulch. **Seeding shall be done as work progresses. All disturbed areas shall be seeded in accordance with the Stabilization Requirements as mentioned above, unless otherwise directed by the Engineer. All work shall be accepted and approved by the Engineer prior to beginning construction at the next site.**

CRIMPING STRAW MULCH

Crimping shall be required on this project adjacent to any section of roadway where traffic is to be maintained or allowed during construction. In areas within six feet of the edge of pavement, straw is to be applied and then crimped. After the crimping operation is complete, an additional application of straw shall be applied and immediately tacked with a sufficient amount of undiluted emulsified asphalt.

Straw mulch shall be of sufficient length and quality to withstand the crimping operation.

Crimping equipment including power source shall be subject to the approval of the Engineer providing that maximum spacing of crimper blades shall not exceed 8".

Basis of payment for "Seeding and Mulching" will be the contract unit price per acre.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION

(1-16-07) (Rev 9-18-12)

105-16, 225-2, 16

SP1 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 Pollution 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 Supervisor to manage the Contractor and subcontractor operations, insure compliance with Federal, State and Local ordinances and regulations, and 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 or sediment/stormwater control 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.

Roles and Responsibilities

- (A) Certified Erosion and Sediment Control/Stormwater Supervisor The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours' notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
 - (1) 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.
 - (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
 - (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
 - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
 - (d) Implement the erosion and sediment control/stormwater site plans requested.
 - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor'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.
 - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
 - (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
 - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
 - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
 - (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
 - (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be 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 Stormwater permit (NCS000250) 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 for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. 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. from equipment operation/maintenance, 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 and stormwater discharge outfalls at least once every 7 calendar days, twice weekly for construction related *Federal Clean Water Act, Section* 303(d) impaired streams with turbidity violations, and within 24 hours after a significant rainfall event of 0.5 inch that occurs within a 24 hour period.
 - (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily 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, waste sites and staging areas.
- (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 Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit*, *NCG010000*.
- (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
 - (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
 - (b) Ensure that all operators and subcontractors 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) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
 - (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
 - (i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
 - (j) The Contractor'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 Contractor 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 Contractor 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 Level I *Certified Installer* is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, 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 Erosion and Sediment Control/Stormwater Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* and notify the Engineer 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 to the certification entity, certification for *Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* may be revoked or suspended with the issuance of an *Immediate Corrective Action* (*ICA*), *Notice of Violation* (*NOV*), or *Cease and Desist Order* for erosion and sediment control/stormwater related issues.

The Chief Engineer may recommend suspension or permanent revocation of certification due to the following:

- (A) Failure to adequately perform the duties as defined within this certification provision.
- (B) Issuance of an 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 by another entity.

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

A certificant 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 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 certificant 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. Decision of the Chief Engineer will be final and will be made in writing to the certificant.

If a certification is temporarily suspended, the certificant 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 Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and *Certified Designer* will be incidental to the project for which no direct compensation will be made.

PROJECT SPECIAL PROVISIONS

WORK ZONE TRAFFIC CONTROL

TRAFFIC CONTROL AND WORK ZONE SAFETY:

Please note that Traffic Control (detours) will be provided by NCDOT. It is the responsibility of the contractor to inspect onsite barricades and to repair or notify the engineer if repairs need to be made. Furthermore, the contractor shall ensure that the work area is clearly barricaded at the end of each workday. The contractor must notify the Bridge Maintenance Engineer 2 weeks (14 calendar days) prior to beginning work so that NCDOT traffic services can fabricate and install the proper detour signs and barricades.

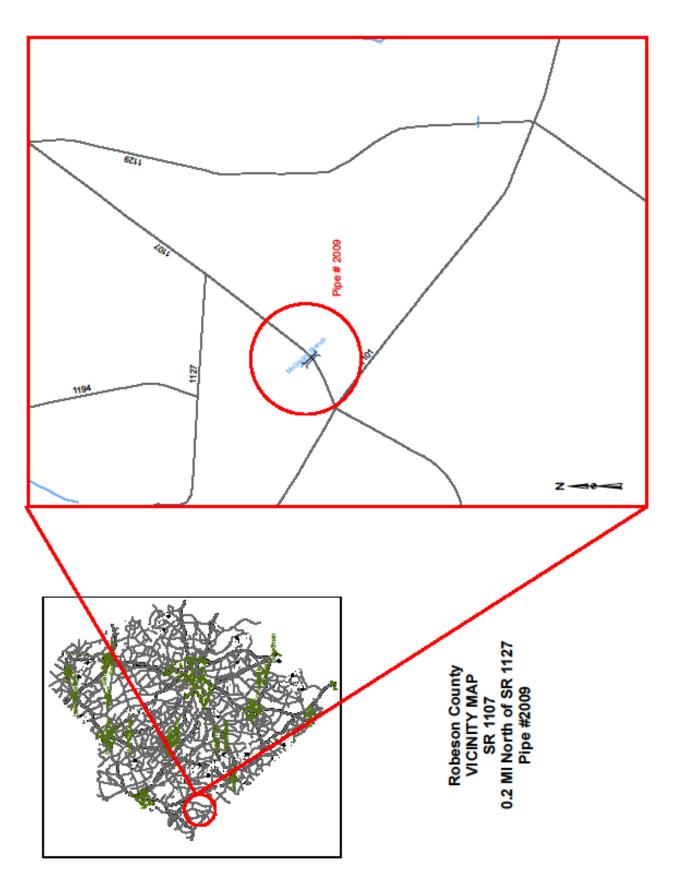
All personnel when working in traffic areas or areas in close proximity to traffic shall wear an approved safety vest, or shirt or jacket which meets the color requirements of the <u>Manual of Uniform Traffic Control Devices</u> (MUTCD).

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are 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.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in sub article 108-7(2) of the <u>Standard Specifications</u>.

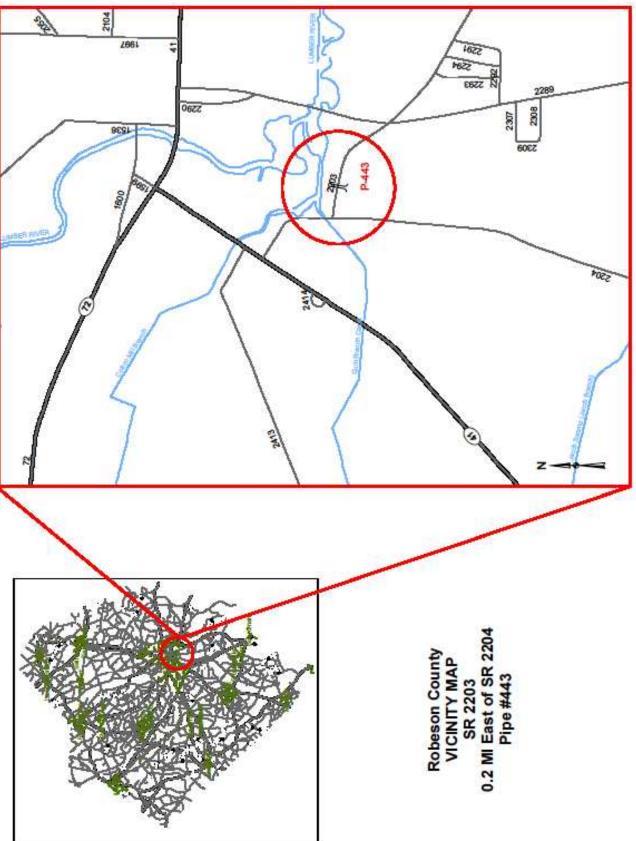
No direct payment shall be made for traffic control and work zone safety items, as they shall be considered incidental to other contract items.

VICINITY MAPS





17BP.6.R.80



Z-1

STANDARD SPECIAL PROVISIONS

PERMITS

(10-18-95) (Rev. 10-15-13)

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

| PERMIT | AUTHORITY GRANTING THE PERMIT |
|--|---|
| Dredge and Fill and/or Work in Navigable Waters (404) | U. S. Army Corps of Engineers |
| Water Quality (401) | Division of Environmental Management, DENR State of North Carolina |

The Contractor shall comply with all applicable permit conditions during construction of this project. Those conditions marked by * are the responsibility of the Department and the Contractor has no responsibility in accomplishing those conditions.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the 2012 Standard Specifications and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the waters or wetlands provided that activities outside those areas is done in such a manner as to not affect the waters or wetlands.

AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS:

(5-20-08)

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 Subarticle 108-13(E) of the 2012 Standard Specifications.

NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11)

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 <u>NOT</u> 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 <u>found</u> pure seed and <u>found</u> 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:

| Restricted Noxious Weed | Limitations per Lb. Of Seed | Restricted Noxious Weed | Limitations per Lb. of Seed |
|----------------------------|--------------------------------|----------------------------|--------------------------------|
| 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.

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) Kobe Lespedeza | Bermudagrass 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 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

| Centipedegrass | Japanese Millet |
|----------------------|-------------------|
| Crownvetch | Reed Canary Grass |
| Pensacola Bahiagrass | Zoysia |
| Creeping Red Fescue | |

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

ERRATA:

(1-17-12) (Rev. 04-21-15)

Z-4

Revise the 2012 Standard Specifications as follows:

Division 2

Page 2-7, line 31, Article 215-2 Construction Methods, replace "Article 107-26" with "Article 107-25".

Page 2-17, Article 226-3, Measurement and Payment, line 2, delete "pipe culverts,".

Page 2-20, Subarticle 230-4(B), Contractor Furnished Sources, change references as follows: Line 1, replace "(4) Buffer Zone" with "(c) Buffer Zone"; **Line 12,** replace "(5) Evaluation for Potential Wetlands and Endangered Species" with "(d) Evaluation for Potential Wetlands and Endangered Species"; and **Line 33,** replace "(6) Approval" with "(4) Approval".

Division 3

Page 3-1, after line 15, Article 300-2 Materials, replace "1032-9(F)" with "1032-6(F)".



Z-04a

Division 4

Page 4-77, line 27, Subarticle 452-3(C) Concrete Coping, replace "sheet pile" with "reinforcement".

Division 6

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments, replace "30" with "45". **Page 6-10, line 42, Subarticle 609-6(C)(2),** replace "Subarticle 609-6(E)" with "Subarticle 609-6(D)". **Page 6-11, Table 609-1 Control Limits,** replace "Max. Spec. Limit" for the Target Source of P_{0.075}/P_{be} Ratio with "1.0". **Page 6-40, Article 650-2 Materials,** replace "Subarticle 1012-1(F)" with "Subarticle 1012-1(E)"

Division 7

Page 7-1, Article 700-3, CONCRETE HAULING EQUIPMENT, line 33, replace "competion" with "completion".

Division 8

Page 8-23, line 10, Article 838-2 Materials, replace "Portland Cement Concrete, Class B" with "Portland Cement Concrete, Class A".

Division 10

Page 10-166, Article 1081-3 Hot Bitumen, replace "Table 1081-16" with "Table 1081-2", replace "Table 1081-17" with "Table 1081-3", and replace "Table 1081-18" with "Table 1081-4".

Division 12

Page 12-7, Table 1205-3, add "FOR THERMOPLASTIC" to the end of the title.

Page 12-8, Subarticle 1205-5(B), line 13, replace "Table 1205-2" with "Table 1205-4".

Page 12-8, Table 1205-4 and 1205-5, replace "THERMOPLASTIC" in the title of these tables with "POLYUREA".

Page 12-9, Subarticle 1205-6(B), line 21, replace "Table 1205-4" with "Table 1205-6".

Page 12-11, Subarticle 1205-8(C), line 25, replace "Table 1205-5" with "Table 1205-7".

Division 15

Page 15-4, Subarticle 1505-3(F) Backfilling, line 26, replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)".

Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the following: $W=LD\sqrt{P}$ ÷ 148,000

Page 15-6, Subarticle 1510-3(B), line 32, delete "may be performed concurrently or" and replace with "shall be performed".

Page 15-17, Subarticle 1540-3(E), line 27, delete "Type 1".

Division 17

Page 17-26, line 42, Subarticle 1731-3(D) Termination and Splicing within Interconnect Center, delete this subarticle.

Revise the 2012 Roadway Standard Drawings as follows:

1633.01 Sheet 1 of 1, English Standard Drawing for Matting Installation, replace "1633.01" with "1631.01".

PLANT AND PEST QUARANTINES:

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds)

(3-18-03) (Rev. 10-15-13)

Within Quarantined Area

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor'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.gov/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.

MINIMUM WAGES:

(7-21-09)

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- **FEDERAL:** The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.
- **<u>STATE:</u>** The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all skilled labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all intermediate labor employed on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

The minimum wage paid to all unskilled labor on this contract shall be SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

This determination of the intent of the application of this act to the contract on this project is the responsibility of the Contractor.

The Contractor shall have no claim against the Department of Transportation for any changes in the minimum wage laws, Federal or State. It is the responsibility of the Contractor to keep fully informed of all Federal and State Laws affecting his contract.

AWARD OF CONTRACT:

(6-28-77) (Rev 2/16/2016)

"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".

TITLE VI AND NONDISCRIMINATION

I. <u>Title VI Assurance</u>

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(1) **Compliance with Regulations:** The contractor shall comply with the Regulation relative to nondiscrimination in Federally-assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(2) Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(3) Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.

(4) Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the North Carolina Department of Transportation (NCDOT) or the Federal Highway Administration (FHWA) to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to the NCDOT, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the NCDOT shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

- (a) Withholding of payments to the contractor under the contract until the contractor complies, and/or
- (b) Cancellation, termination or suspension of the contract, in whole or in part.

(6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The contractor shall take such action with respect to any subcontractor procurement as the NCDOT or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance: provided, however, that, in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the NCDOT to enter into such litigation to protect the interests of the NCDOT, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

II. <u>Title VI Nondiscrimination Program</u>

Title VI of the 1964 Civil Rights Act, 42 U.S.C. 2000d, provides that: "No person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." The broader application of nondiscrimination law is found in other statutes, executive orders, and regulations (see Section III, Pertinent Nondiscrimination Authorities), which provide additional protections based on age, sex, disability and religion. In addition, the 1987 Civil Rights Restoration Act extends nondiscrimination coverage to all programs and activities of federal-aid recipients and contractors, including those that are not federally-funded.

Nondiscrimination Assurance

The North Carolina Department of Transportation (NCDOT) hereby gives assurance that no person shall on the ground of race, color, national origin, sex, age, and disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity conducted by the recipient, as provided by Title VI of the Civil Rights Act of 1964, the Civil Rights Restoration Act of 1987, and any other related Civil Rights authorities, whether those programs and activities are federally funded or not.

Obligation

During the performance of this contract, the Contractor and its subcontractors are responsible for complying with NCDOT's Title VI Program. The Contractor must ensure that NCDOT's Notice of Nondiscrimination is posted in conspicuous locations accessible to all employees and subcontractors on the jobsite, along with the Contractor's own Equal Employment Opportunity (EEO) Policy Statement. The Contractor shall physically incorporate this "TITLE VI AND NONDISCRIMINATION" language, in its entirety, into all its subcontracts <u>on federally-assisted and state-funded NCDOT-owned projects</u>, and ensure its inclusion by subcontractors into all subsequent lower tier subcontracts. The Contractor and its subcontractors shall also physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts and subsequent lower tier subcontracts and subsequent lower tier subcontracts on <u>Federal-aid highway construction contracts only</u>. The Contractor is also responsible for making its subcontractors aware of NCDOT's Discrimination Complaints Process, as follows:

FILING OF COMPLAINTS

- 1. Applicability These complaint procedures apply to the beneficiaries of the NCDOT's programs, activities, and services, including, but not limited to, members of the public, contractors, subcontractors, consultants, and other sub-recipients of federal and state funds.
- 2. Eligibility Any person or class of persons who believes he/she has been subjected to discrimination or retaliation prohibited by any of the Civil Rights authorities, based upon race, color, sex, age, national origin, or disability, may file a written complaint with NCDOT's Civil Rights office. The law prohibits intimidation or retaliation of any sort. The complaint may be filed by the affected individual or a representative, and must be in writing.
- 3. Time Limits and Filing Options A complaint must be filed no later than 180 calendar days after the following:
 - > The date of the alleged act of discrimination; or
 - > The date when the person(s) became aware of the alleged discrimination; or
 - Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.

Title VI and other discrimination complaints may be submitted to the following entities:

- North Carolina Department of Transportation, Office of Equal Opportunity & Workforce Services (EOWS), External Civil Rights Section, 1511 Mail Service Center, Raleigh, NC 27699-1511; 919-508-1808 or toll free 800-522-0453
- US Department of Transportation, Departmental Office of Civil Rights, External Civil Rights Programs Division, 1200 New Jersey Avenue, SE, Washington, DC 20590; 202-366-4070

Federal Highway Administration, North Carolina Division Office, 310 New Bern Avenue, Suite 410, Raleigh, NC 27601, 919-747-7010

Federal Highway Administration, Office of Civil Rights, 1200 New Jersey Avenue, SE, 8th Floor, E81-314, Washington, DC 20590, 202-366-0693 / 366-0752

Federal Transit Administration, Office of Civil Rights, ATTN: Title VI Program Coordinator, East Bldg. 5th Floor – TCR, 1200 New Jersey Avenue, SE, Washington, DC 20590

Federal Aviation Administration, Office of Civil Rights, 800 Independence Avenue, SW, Washington, DC 20591, 202-267-3258

- US Department of Justice, Special Litigation Section, Civil Rights Division, 950 Pennsylvania Avenue, NW, Washington, DC 20530, 202-514-6255 or toll free 877-218-5228
- 4. Format for Complaints Complaints must be in writing and signed by the complainant(s) or a representative and include the complainant's name, address, and telephone number. Complaints received by fax or e-mail will be acknowledged and processed. Allegations received by telephone will be reduced to writing and provided to the complainant for confirmation or revision before processing. Complaints will be accepted in other languages including Braille.
- 5. Discrimination Complaint Form Contact NCDOT EOWS at the phone number above to receive a full copy of the Discrimination Complaint Form and procedures.
- 6. Complaint Basis Allegations must be based on issues involving race, color, national origin, sex, age, or disability. The term "basis" refers to the complainant's membership in a protected group category. Contact this office to receive a Discrimination Complaint Form.

| Protected | Definition | Examples | Applicable Statutes and | |
|------------|--------------------------------------|-------------------------------|---------------------------------|---------------|
| Categories | | | Regula | |
| | | | FHWA | FTA |
| Race | An individual belonging to one of | Black/African American, | Title VI of the | Title VI of |
| | the accepted racial groups; or the | Hispanic/Latino, Asian, | Civil Rights | the Civil |
| | perception, based usually on | American Indian/Alaska | Act of 1964; | Rights Act of |
| | physical characteristics that a | Native, Native | 49 CFR Part | 1964; |
| | person is a member of a racial | Hawaiian/Pacific Islander, | 21; | 49 CFR Part |
| | group | White | 23 CFR 200 | 21; |
| Color | Color of skin, including shade of | Black, White, brown, yellow, | | Circular |
| | skin within a racial group | etc. | | 4702.1B |
| National | Place of birth. Citizenship is not a | Mexican, Cuban, Japanese, |] | |
| Origin | factor. Discrimination based on | Vietnamese, Chinese | | |
| | language or a person's accent is | | | |
| | also covered. | | | |
| Sex | Gender | Women and Men | 1973 Federal- | Title IX of |
| | | | Aid Highway | the Education |
| | | | Act | Amendments |
| | | | | of 1972 |
| Age | Persons of any age | 21 year old person | Age Discrimination Act of | |
| | | | 1975 | |
| Disability | Physical or mental impairment, | Blind, alcoholic, para- | Section 504 of the | |
| | permanent or temporary, or | amputee, epileptic, diabetic, | Rehabilitation Act of 1973; | |
| | perceived. | arthritic | Americans with Disabilities Act | |
| | | | of 1990 | |

III. <u>Pertinent Nondiscrimination Authorities</u>

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

- programs (70 Fed. Reg. at 74087 to 74100);
 Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).
- Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e *et seq.*, Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, religion, sex, or national origin);
- 49 CFR Part 26, regulation to ensure nondiscrimination in the award and administration of DOT-assisted contracts in the Department's highway, transit, and airport financial assistance programs, as regards the use of Disadvantaged Business Enterprises (DBEs);
- Form FHWA-1273, "Required Contract Provisions," a collection of contract provisions and proposal notices that are generally applicable to *all Federal-aid construction projects* and must be made a part of, and physically incorporated into, *all federally-assisted contracts*, as well as appropriate subcontracts and purchase orders, particularly Sections II (Nondiscrimination) and III (Nonsegregated Facilities).

ON-THE-JOB TRAINING:

(10-16-07) (Rev. 4-21-15)

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 shall be given to training employees on NCDOT Federal-Aid funded projects.

Minorities and Women

Developing, training and upgrading of minorities and women toward journeyman 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.

Assigning 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.\

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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 Truck Drivers Carpenters Concrete Finishers Pipe Layers Office Engineers Estimators Iron / Reinforcing Steel Workers Mechanics 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 will 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 NC Department of Labor (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.

NAME CHANGE FOR NCDENR:

(1-19-16)

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Wherever in the 2012 Standard Specifications, Project Special Provisions, Standard Special Provisions, Permits or Plans that reference is made to "NCDENR" or "North Carolina Department of Environment and Natural Resources", replace with "NCDEQ" or North Carolina Department of Environmental Quality" respectively, as the case may be.

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, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, 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 na | ame of Corpor | ation |
|----------|---|-----------------|---|
| | | | |
| | Addro | ess as Prequali | fied |
| Attest | | By | |
| _ | Secretary/Assistant Secretary Select appropriate title | | President/Vice President/Assistant Vice President Select appropriate title |
| | Print or type Signer's name | | Print or type Signer's name |
| | | | CORPORATE SEAL |
| | AFFIDA | VIT MUST | BE NOTARIZED |
| | and sworn to before me this the | | NOTARY SEAL |
| day o | of 20 | | |
| | Signature of Notary Public | | |
| of | County | | |
| State of | | | |
| My Commi | ssion Expires: | | |



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, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, 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

By

| Signature | of Witness |
|-----------|------------|

Signature of Partner

Print or type Signer's name

Print or type Signer's name

NOTARY SEAL

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

_____ day of ______ 20___.

Signature of Notary Public

of _____County

State of

My Commission Expires:_____



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, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, 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 Na | me of Firm |
|--|--|
| | |
| Address a | s Prequalified |
| | |
| Signature of Witness | Signature of Member/Manager/Authorized Agent Select appropriate title |
| 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 | |
| ofCounty | |
| State of | |
| My Commission Expires: | |



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, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, 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.

| | Signature of Witness or Attest | Ву | | Signature of Contractor | |
|---|---|--|-------------------------|---|-----------|
| | Print or type Signer's name | | | Print or type Signer's name | |
| If | Corporation, affix Corporate Seal | and | | | |
| | Signature of Witness or Attest | Ву | | Signature of Contractor | |
| | Print or type Signer's name | | | Print or type Signer's name | |
| If | Corporation, affix Corporate Seal | and | | | |
| | Signature of Witness or Attest | By | Signature of Contractor | | |
| | Print or type Signer's name | | | Print or type Signer's name | |
| NOTARY SEAL Affidavit must be r Subscribed and sw | If Corporation, affix Corporate Seal notarized for Line (2) yourn to before me this 20 | NOTARY SEAL Affidavit must be notarized for Lia Subscribed and sworn to before n day of | ne this | Affidavit must be notarized for Subscribed and sworn to before day of | e me this |
| | County | Signature of Notary Public of | County | Signature of Notary Public of State of My Commission Expires: | County |
| My Commission L | apires | wry Commission Explices | | wry commission Expires | |

My Commission Expires:_



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, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, 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

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___.

Signature of Notary Public

of _____County

State of

My Commission Expires:_____

NOTARY SEAL



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, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, 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

NOTARY SEAL

_____ day of ______ 20___.

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 filed 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.

FORM DBE-IS

Rev. 01/07

State of North Carolina

Department of Transportation Subcontractor Payment Information

Submit with Invoice To: DIVISION 6 North Carolina Department of Transportation PO BOX 1150 FAYETTEVILLE, NC 28302

| Firm Invoice No. Reference: | |
|-----------------------------|--|
| NCDOT PO / Contract Number: | |
| WBS No. / Map No.: | |
| Date of Invoice: | |
| | |

| | | | | | | Date Paid To |
|-----------|------------|---------------|------------------------|------------------|-------------------|----------------|
| | | | | Subcontractor/ | Amount Paid To | Subcontractor/ |
| | | | | Subconsultant/ | Subcontractor/ | Subconsultant/ |
| Invoice | | | Subcontractor/ | Material | Subconsultant/ | Material |
| Line Item | | Payer Federal | Subconsultant/ | Supplier Federal | Material Supplier | Supplier |
| Reference | Payer Name | Tax ID | Material Supplier Name | Tax ID | This Invoice | This Invoice |
| | | | | | | |

Total Amount Paid to Subcontractor Firms: ______

Note: These documents are scanned into the NCDOT Fiscal Program. Please do not highlight or shade the figures.

Certification of Firm

I certify that this information accurately reflects actual payments made and the dates the payments were made to Subcontractors/Subconsultants/Material Suppliers on the above referenced project.

 Signature:
 Title:

 Print Name:
 Date:

LISTING OF MBE/WBE SUBCONTRACTORS

| | | | | Sheet _ | of |
|-----------------------|---------------|----------|------------------|-----------------------------|--------------------------|
| Firm Name and Address | Circle One | Item No. | Item Description | * Agreed upon Unit Price | ** Dollar Volume of Item |
| Name | MBE | | | | |
| Address | | | | | |
| Address | WBE | | | | |
| Name | | | | | |
| | MBE | | | | |
| Address | | | | | |
| | WBE | | | | |
| Name | MBE | | | | |
| | | | | | |
| Address | WBE | | | | |
| Name | | | | | |
| | MBE | | | | |
| Address | | | | | |
| | WBE | | | | |
| Name | MBE | | | | |
| Address | | | | | |
| Address | WBE | | | | |
| Name | | | | | |
| | MBE | | | | |
| Address | | | | | |
| | WBE | | | | |
| Name | MBE | | | | |
| | | | | | |
| Address | WBE | | | | |
| Name | | | | | |
| | MBE | | | | |
| Address | | | | | |
| | WBE | | | | |

| | _ | | | Sheet | of |
|-----------------------|---------------|----------|------------------|-----------------------------|--------------------------|
| Firm Name and Address | Circle One | Item No. | Item Description | * Agreed upon Unit Price | ** Dollar Volume of Item |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | | | | | |
| 1 vanie | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |

** Dollar Volume of MBE Subcontractor \$_____

MBE Percentage of Total Contract Bid Price _____%

** Dollar Volume of WBE Subcontractor \$_____

WBE Percentage of Total Contract Bid Price _____%

*The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the MBE/WBE subcontractor, and these prices will be used to determine the percentage of the MBE/WBE participation in the contract.

** Dollar Volume of MBE/WBE Subcontractor Percentage of Total Contract Bid Price.

If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent.

If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.

North Carolina Department of Transportation <u>CONTRACT BID FORM</u>

PROJECT NUMBER: 17BP.6.R.80 COUNTY: Robeson DESCRIPTION: Pipe Replacements

| ROAD: SR 1107 | | | PIPE NO.: 2009 | | | COUNTY: Robeson | | | |
|---------------|--------------|----------|---|------|------|-----------------|------------|--|--|
| LINE | ITEM NO. | SEC | DESCRIPTION | QTY | UNIT | UNIT PRICE | AMOUNT BID | | |
| 1 | 000100000-N | 800 | Mobilization | 1 | LS | | | | |
| 2 | 0043000000-N | SP | Comprehensive Grading | 1 | LS | | | | |
| 3 | 0106000000-E | 230 | Borrow | 50 | CY | | | | |
| 4 | 1077000000-E | SP | #57 Stone / Backfill | 730 | TON | | | | |
| 5 | 0995000000-E | SP | Pipe Removal | 42 | LF | | | | |
| 6 | 1220000000-E | 545 | Aggregate Base Course | 115 | TON | | | | |
| 7 | 1498000000-E | 610 | ACIC, Type I19.0B | 38 | TON | | | | |
| 8 | 1525000000-E | 610 | ACSC, Type SF9.5A | 48 | TON | | | | |
| 9 | 1575000000-E | 620 | Asphalt Binder, Grade PG 64-22 | 5 | TON | | | | |
| 10 | 2474000000-N | SP | Pipe & Headwall (13'-3" x 6'-9" Box w/Headwalls) | 1 | LS | | | | |
| 11 | 3691000000-N | SP | Dewatering | 1 | EA | | | | |
| 12 | 5912000000-N | SP | Utility Relocations | 1 | EA | | | | |
| 13 | 6000000000-E | 1605 | Temporary Silt Fence | 100 | LF | | | | |
| 14 | 6000900000-E | 1610 | Stone for Erosion Control -Class B | 100 | TON | | | | |
| 15 | 6036000000-E | 1631 | Matting for Erosion Control | 100 | SY | | | | |
| 16 | 6071010000-E | SP | Wattle | 48 | LF | | | | |
| 17 | 6084000000-E | 1660 | Seeding and Mulching | 0.25 | AC | | | | |
| | 1 | <u> </u> | | | 1 | SUBTOTAL: | | | |

CONTRACT BID FORM

| | ROAD: SR 2203 | | PIPE NO.: 443 | | | COUNTY: Robeson | | |
|------|---------------|------|---|------|------|-----------------|------------|--|
| LINE | ITEM NO. | SEC | DESCRIPTION | QTY | UNIT | UNIT PRICE | AMOUNT BID | |
| 1 | 0001000000-N | 800 | Mobilization | 1 | LS | | | |
| 2 | 0043000000-N | SP | Comprehensive Grading | 1 | LS | | | |
| 3 | 0106000000-E | 230 | Borrow | 50 | CY | | | |
| 4 | 1077000000-E | SP | #57 Stone / Backfill | 990 | TON | | | |
| 5 | 0995000000-E | SP | Pipe Removal | 52 | LF | | | |
| 6 | 1220000000-E | 545 | Aggregate Base Course | 150 | TON | | | |
| 7 | 1498000000-E | 610 | ACIC, Type I19.0B | 41 | TON | | | |
| 8 | 1525000000-E | 610 | ACSC, Type SF9.5A | 52 | TON | | | |
| 9 | 1575000000-E | 620 | Asphalt Binder, Grade PG 64-22 | 5 | TON | | | |
| 10 | 2474000000-N | SP | Pipe & Headwall (25'-3" x 7'-9" Box w/Headwalls) | 1 | LS | | | |
| 11 | 3691000000-N | SP | Dewatering | 1 | EA | | | |
| 12 | 5912000000-N | SP | Utility Relocations | 1 | EA | | | |
| 13 | 600000000-E | 1605 | Temporary Silt Fence | 100 | LF | | | |
| 14 | 6000900000-E | 1610 | Stone for Erosion Control -Class B | 100 | TON | | | |
| 15 | 6036000000-E | 1631 | Matting for Erosion Control | 100 | SY | | | |
| 16 | 6071010000-E | SP | Wattle | 48 | LF | | | |
| 17 | 6084000000-E | 1660 | Seeding and Mulching | 0.25 | AC | | | |
| | I | I I | | 1 | | SUBTOTAL: | | |

TOTAL BID FOR PROJECT:_____

| CONTRACTOR | |
|---|--|
| ADDRESS | |
| Federal Identification Number | Contractors License Number |
| Authorized Agent | Title |
| Signature | Date |
| Witness | Title |
| Signature | Date |
| Point of Contact for Post Bid Inquiries (e.g., Letters of Intent, I | Insurance, Bonds, Contract Execution, etc.): |
| Name | |
| Email | |
| Phone | |
| | |

THIS SECTION TO BE COMPLETED BY NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

This bid has been reviewed in accordance with Article 103-1 of the current edition of the **Standard Specifications for Roads and Structures.**

Division Proposals Engineer

Date

EXECUTION OF CONTRACT

Contract No: 17BP.6.R.79

County: Robeson County

ACCEPTED BY THE DEPARTMENT

Proposals Engineer

Date

EXECUTION OF CONTRACT AND BONDS APPROVED AS TO FORM:

Proposals Engineer

Date

Signature Sheet (Bid) - ACCEPTANCE SHEET