Cleveland County

CONTRACT PROPOSAL

TIP NUMBER: R-5849

COUNTY: CLEVELAND

DESCRIPTION: ADDITION OF TURN LANES ON SR 1313 (WASHBURN SWITCH RD) AND NEW INDUSTRIAL ENTRANCES TO WASHBURN SWITCH BUSINESS

PARK

DATE OF ADVERTISEMENT: DECEMBER 14th, 2017

MANDATORY PRE-BID MEETING: JANUARY 4TH, 2018 AT 10:00 A.M.

BID OPENING: JANUARY 18TH, 2018 AT 10:00 A.M.

*** 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. FOR CONTRACTS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD, BIDDERS ARE REQUIRESD TO BECOME LICENSED BY THE NC LICENSING BOARD. NON-LICENSED BIDDERS ARE PERMITED 60 DAYS AFTER BID OPENING TO OBTAIN PROPER LICENSING FOR THE TYPE OF PROJECT BEING LET. 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.

NAME OF BIDDER

ADDRESS OF BIDDER

RETURN BIDS TO: CLEVELAND COUNTY

Attention: KIM LESTER

Physical Address: 311 EAST MARION STREET, SHELBY, NC 28150

ALL BIDS MUST BE RECEIVED PRIOR TO THE DATE AND TIME LISTED ABOVE.

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 shall cause the bid to be considered irregular and shall be grounds for rejection of the bid.

- **1.** The bid form furnished by CLEVELAND COUNTY with the proposal shall be used and shall not be altered in any manner. **DO NOT SEPARATE THE BID FORM FROM THE PROPOSAL!**
- **2.** All entries on the bid form, including signatures, shall be written in ink.
- **3.** The Bidder shall submit a unit price for every item on the bid form. The unit prices for the various contract items shall be written in figures. ***Unit prices must be limited to TWO decimal places.***
- **4.** An amount bid shall be entered on the bid form 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 Bid" 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 shall be determined by adding the amounts bid for each item.
- **6.** Changes in any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink. Do not use "White Out" or similar product to make corrections.
- **7.** The bid shall be properly executed. All bids shall show the following information:
 - a. Name of individual, firm, corporation, partnership, or joint venture submitting bid.
 - b. Name of individual or representative submitting bid and position or title.
 - c. Name, signature, and position or title of witness.
 - d. Federal Identification Number
 - e. Contractor's License Number (If available)
- **8.** Bids submitted by corporations shall bear the seal of the corporation.
- **9.** The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **10.** 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.

- 11. THE PROPOSAL WITH THE BID FORM STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED BY CLEVELAND COUNTY AT 311 EAST MARION STREET BY 10:00 A.M. ON, THURSDAY, JANUARY 18TH, 2018.
- **12.** The sealed bid must display the following statement on the front of the sealed envelope:

"QUOTATION FOR - R-5849 - CLEVELAND COUNTY."

13. <u>If delivered by mail</u>, the sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

Cleveland County
Attn: Kim Lester
311 East Marion Street
Shelby, NC 28150

NCDOT STANDARD NOTES (State Funded)

- A. <u>NCDOT Standard Specifications</u> The 2012 North Carolina Department of Transportation Standard Specifications for Roads and Structures, herein referred to as the 'Standard Specifications', and the 2012 Roadway Standard Drawings, shall apply to all portions of this project except as may be modified by this document.
- B. <u>Bidder Prequalification</u> Bidders are required to be prequalified with NCDOT for their specific discipline. Contractors wishing to become prequalified may obtain information through the NCDOT website at:

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

- C. <u>Disadvantaged Business Enterprise References</u> Since this is a State funded project with MBE/WBE participation, only those requirements and goals set forth by NCDOT Goal Setting Committee are applicable. References to any other requirements or to N.C. General Statute 143-128.2 shall <u>not</u> apply to this project. Refer to Special Provision SP1 G68.
- D. <u>Award of Contract</u> The contract will be awarded to the lowest responsible, responsive bidder. Alternate items will not be considered in determining the low bidder and will only be evaluated after the award of the contract is made.
- E. 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 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 are required to become licensed by the N.C. 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.
- F. <u>Bonds</u> Please note that all Bid Bonds, Payment Bonds, and Performance Bonds required for this project, shall be those found on the NCDOT website. The bonds are located at:

Bid Bonds (M-5):

https://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/0 4%20Bid%20Bonds.doc

Payment Bonds (M-6):

https://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/05%20Payment%20Bonds.doc

Performance Bonds (M-7):

https://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/06%20Performance%20Bonds.doc

- G. <u>Liability Insurance</u> In addition to any insurance requirements as may be required by the LGA, the Contractor is obligated to comply with Article 107-15 of the *Standard Specifications* including the dollar limits set forth.
- H. <u>Buy America</u> This project shall be governed by the Buy America requirements, for the use of domestic steel and iron products, as outlined in the *Standard Specifications* and Special Provision SP1 G120.
- I. <u>Proprietary Items</u> When a proprietary (brand name) product, whether material, equipment or procedure, are specified in the plans or specifications, they are used only to denote the style, type, character, and quality desired of the product. They do not restrict the bidder from proposing other brands, makes, or manufacturers, which are determined to be of equal quality. The approval, or disapproval of those products, will be made by the Engineer prior to allowing those product(s) or material(s) to be incorporated into the work.
- J. <u>Retainage by LGAs</u> The LGA for this contract will not retain any amount or percentage from progress payments or final estimates due the contractor.
 - <u>Retainage by Contractors</u> Contractors are NOT permitted to retain any amount or percentage from monies due their subcontractors or material suppliers on state funded projects except as permitted by Subarticle 109-4(B) of the *Standard Specifications*.
- K. <u>Traffic Control</u> –The requirements of the *Manual on Uniform Traffic Control Devices* (*MUTCD*) *FHWA*, as amended by the *NCDOT Supplement to MUTCD*, shall apply. Traffic Control, both vehicular and pedestrian, shall be maintained throughout the project as required by these specifications as modified by the project plans or special provisions.

ALLOWABLE CHANGES TO THE NCDOT 2012 STANDARD SPECIFICATIONS:

- 1. Article 102-1 Delete this section in its entirety.
- 2. Subarticle 102-8(B) Electronic Bids Delete this section in its entirety.
- 3. Subarticle 102-12(A)-Paper Bids In line 5 the reference to "Contract Officer" shall be changed to "Brian Hoaglund Cleveland County".
- 4. Subarticle 102-12(B) Electronic Bids Delete this section in its entirety.
- 5. Subarticle 103-2(B) Electronic Bids Delete this section in its entirety.
- 6. Subarticle 103-3(A)-Criteria for Withdrawal of Bid Modify the reference "G.S.136-28.1" to "G.S.143-129.1". In that same subarticle under (5), in the line 28, modify "State Contract Officer" to "Brian Hoaglund Cleveland County".
- 7. Article 103-7 In the first sentence, modify "14" calendar days to "10" per G.S.143-129.
- 8. Article 103-9 In the first sentence, modify "14" calendar days to "10" per G.S.143-129.
- 9. Article 105-9 Construction Stakes, lines and Grades The Municipality will not set the stakes, lines or grades for this project.
- 10. Article 107-5 In line 11, change the word "entity" to "municipality".
- 11. Article 108-2 Add the following requirement to this article after line 16 on page 1-65, "The municipality may add additional requirements as noted in the bid proposal".
- 12. Article 108-3 Change "Division Engineer" in line 18, to "Brian Hoaglund Cleveland County".
- 13. Article 108-4 Change "Resident Engineer" in line 26 to "Brian Hoaglund Cleveland County".
- 14. Article 109-8 Delete this article in its entirety. Fuel Price Adjustments will not apply to this project.
- 15. Article-620-4 Delete line 3 through 27 on page 6-39. Asphalt Price Adjustments will not apply to this project.

CLEVELAND COUNTY

SPECIFIC REQUIREMENTS

ADVERTISEMENT FOR PROPOSALS ADDITION OF TURN LANES ON SR 1313 (WASHBURN SWITCH RD) AND NEW INDUSTRIAL ENTRANCES TO WASHBURN SWITCH BUSINESS PARK

A mandatory pre-bid conference shall be held at 10:00 o'clock a.m. on Thursday, January 4th, 2018 in the Commission Chambers on the 2nd Floor at 311 East Marion Street in Shelby.

The contract documents for the proposed work described above are available on the Cleveland County website http://www.ccncgov.com/FinanceD/bidders.html

ADDENDA AND INTERPRETATIONS:

No interpretation of the meaning of the Specifications or other portions of the Contract Documents will be made orally. Every request for such interpretation must be addressed to TGS Engineers, 804-C N. Lafayette Street, Shelby, NC 28150 and, to be given consideration, must be received at the above address at least seven (7) days prior to the date fixed for the opening of Bids. Any and all such interpretations and any supplemental instructions will be in the form of written Addenda which, if issued, will be available for download on the Cleveland County website. An email will be sent to all holders of Contract Documents that are on the electronic plan holder list no later than three (3) days prior to the day fixed for the opening of Bids. Failure of any Bidder to receive any such Addenda shall not relieve said Bidder from any obligation under this Bid as submitted. All Addenda so issued shall become part of the Contract Documents.

DISCREPANCY IN BIDS:

In the event there is a discrepancy in any Bid between the unit prices and the extended totals, the unit prices shall govern. Bids which do not contain a price for every numbered item contained in the applicable Bid form will not be accepted, unless otherwise specified.

QUALIFICATIONS OF BIDDERS:

The Owner may make such investigation as he deems necessary to determine the qualifications of the Bidder to perform the Work and the Bidder shall furnish to the Owner all such information data for this purpose as the Owner may request.

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.

All Bidders must be Contractors pre-qualified with the North Carolina Department of Transportation (NCDOT) to perform work of a nature as required by the Contract Documents.

RESPONSIBILITIES OF BIDDERS:

Each bidder shall, by careful examination, satisfy himself as to the nature and location of the Work, the conformation of the ground, the character, quality and quantity of the facilities needed preliminary to and during the prosecution of the Work, the general and local conditions, and all other matters which can in any way affect the Work or the cost thereof under the Contract.

The Contractor shall make his own determination as to the nature and extent of the utility facilities, including proposed adjustments, new facilities, or temporary work to be performed by the utility owner or his representative; and as to whether or not any utility work is planned by the Owner in conjunction with the project construction. The Contractor shall consider in his Bid all of the permanent and temporary utility facilities in their present or relocated positions, whether or not specifically shown on the plans or covered in the Project Special Conditions. It will be the Contractor's responsibility to anticipate any additional costs in his Bid for the various items in the Contract.

The failure or omission of any Bidder to thoroughly examine and familiarize himself with the Contract Documents or to receive or examine any form, instrument or document or to visit the site and acquaint himself with the conditions there existing shall in no way relieve any Bidder from any obligation in respect to his Bid.

No verbal agreement or conversation with any officer, agent or employee of the Owner, either before or after the execution of the Contract, shall affect or modify any of the terms or obligations therein.

TAXES:

The Contractor shall include in his Bid the cost of all sales and use taxes.

COMPARISON OF BIDS:

Bids will be compared on the basis of the totals of the approximated quantities comprising all items at the unit and lump sum prices bid for these items. The resulting Total Contract Bid Price which will be compared, will include and cover the furnishing of all materials, and the performance of all labor requisite or proper, and completion of all the Work called for under the accompanying Contract, and in manner set forth and described in the Contract Documents. The lowest Bidder under the Contract will be that Bidder whose Bid totals the lowest number.

When numbered Alternate Bid items are required, the lowest Bidder is the Bidder whose Bid for the Alternate or combination of Alternates, selected by the Owner, is the lowest. It shall be understood that the Owner reserves the right to select any Alternate or combinations of Alternates.

Where estimated quantities are included in certain items of the Bid, they are for the purpose of comparing bids. While they are believed to be close approximations, they are not guaranteed, and settlement will be made for such items upon the basis of the Work as actually executed at the unit prices in the Bid as accepted.

COMMENCEMENT OF WORK:

Upon execution and delivery of the Contract and the delivery of the required performance and labor and materials bonds and insurance certificates and policies by the Contractor to the Owner and the approval thereof by the Owner's attorney, the Contractor will be notified to proceed with the Work of the Contract. The Work of the Contract shall be commenced within the ten (10) days following such notification or as otherwise specified in the Notice to Proceed.

The Contractor shall notify Cleveland County in writing of his intention to enter upon the site of the Work at least five (5) days in advance of such entrance.

DAMAGES FOR FAILURE TO EXECUTE CONTRACT:

If an accepted Bidder shall fail or refuse to sign and deliver this Contract and the required surety bonds and insurance documentation within fifteen (15) days after he has received notice of the acceptance of his Bid, the Owner shall retain, as partial damages for such failure or refusal, the Bid Security of such defaulting Bidder. In addition to such damages, the Owner reserves whatever other rights and remedies it may have against such defaulting Bidder.

LABOR:

The Contractor shall secure local labor in all categories to the fullest extent possible, consistent with rational progress. Supervisory employees and key-men need not be so secured.

MEETINGS WITH CLEARWATER PAPER CONTRACTOR:

The Contractor shall attend monthly progress meetings held by Clearwater Paper to discuss overall schedule to avoid potential conflicts/delays.

PROJECT SPECIAL PROVISIONS

GENERAL

CONTRACT TIME AND LIQUIDATED DAMAGES:

(7-20-99) (Rev. 12-18-07) 108 SPI G04

The date of availability for this contract is **March 1**st, **2018**, except that work in jurisdictional waters and wetlands shall not begin until a meeting between the DOT, Regulatory Agencies, and the Contractor is held as stipulated in the permits contained elsewhere in this proposal. This delay in availability has been considered in determining the contract time for this project.

The completion date for this contract is **December 26th**, 2018.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are Five Hundred Dollars (\$500.00) per calendar day.

INTERMEDIATE CONTRACT TIME NUMBER #1 AND LIQUIDATED DAMAGES:

(2-20-07) (Rev. 6-18-13)

108

SP1 G14

The Contractor shall complete the work required of **Phase I**, **Step 2** as shown on Sheet(s) **TMP-3** and shall place and maintain traffic on same.

The time of availability for this intermediate contract time is March 1st, 2018.

The completion time for this intermediate contract time is May 1st, 2018.

The liquidated damages are **Five Hundred Dollars (\$500.00)** per day.

INTERMEDIATE CONTRACT TIME NUMBER #2 AND LIQUIDATED DAMAGES:

(2-20-07) 108 SP1 G

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on **SR 1313 (Washburn Switch Road)** during the following time restrictions:

DAY AND TIME RESTRICTIONS

Monday thru Friday 6:00 A.M. to 9:00 A.M. Monday thru Friday 4:00 P.M. to 7:00 P.M.

In addition, the Contractor shall not close or narrow a lane of traffic on **[road name]**, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For New Year's Day, between the hours of 4:00 P.M. December 31st and 9:00 A.M. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until 9:00 A.M. the following Tuesday.
- 3. For **Easter**, between the hours of **4:00 P.M.** Thursday and **9:00 A.M.** Monday.
- 4. For **Memorial Day**, between the hours of **4:00 P.M.** Friday and **9:00 A.M.** Tuesday.
- 5. For **Independence Day**, between the hours of **4:00 P.M.** the day before Independence Day and **9:00 A.M.** the day after Independence Day.
 - If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **4:00 P.M.** the Thursday before Independence Day and **9:00 A.M.** the Tuesday after Independence Day.
- 6. For **Labor Day**, between the hours of **4:00 P.M.** Friday and **9:00 A.M.** Tuesday.
- 7. For **Thanksgiving Day**, between the hours of **4:00 P.M.** Tuesday and **9:00 A.M.** Monday.
- 8. For **Christmas**, between the hours of **4:00 P.M.** the Friday before the week of Christmas Day and **9:00 A.M.** the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures will not be required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated above and place traffic in the existing traffic pattern.

The liquidated damages are **One Hundred Dollars** (\$ 100.00) per hour.

NO MAJOR CONTRACT ITEMS:

(2-19-02) (Rev. 8-21-07) 104 SPI G31

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

(7-1-95)(Rev. 1-17-12) 108-6 SPI G37

Items listed below will be the specialty items for this contract (see Article 108-6 of the 2012 Standard Specifications).

| Line # | Description |
|--------|----------------------------|
| 53 | Fencing |
| 58-64 | Signing |
| 85 | Permanent Pavement Markers |
| 86-95 | Utility Construction |
| 96-122 | Erosion Control |

FUEL PRICE ADJUSTMENT:

(11-15-05) (Rev. 2-18-14) 109-8 SP1 G43

Revise the 2012 Standard Specifications as follows:

Page 1-83, Article 109-8, Fuel Price Adjustments, add the following:

The base index price for DIESEL #2 FUEL is \$2.0016 per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

The pay items and the fuel factor used in calculating adjustments to be made will be as follows:

| Description | Units | Fuel Usage Factor Diesel |
|--|---------|-----------------------------|
| Unclassified Excavation | Gal/CY | 0.29 |
| Borrow Excavation | Gal/CY | 0.29 |
| Class IV Subgrade Stabilization | Gal/Ton | 0.55 |
| Aggregate Base Course | Gal/Ton | 0.55 |
| Sub-Ballast | Gal/Ton | 0.55 |
| Asphalt Concrete Base Course, Type | Gal/Ton | 2.90 |
| Asphalt Concrete Intermediate Course, Type | Gal/Ton | 2.90 |
| Asphalt Concrete Surface Course, Type | Gal/Ton | 2.90 |
| Open-Graded Asphalt Friction Course | Gal/Ton | 2.90 |
| Permeable Asphalt Drainage Course, Type | Gal/Ton | 2.90 |
| Sand Asphalt Surface Course, Type | Gal/Ton | 2.90 |
| Aggregate for Cement Treated Base Course | Gal/Ton | 0.55 |
| Portland Cement for Cement Treated Base Course | Gal/Ton | 0.55 |
| " Portland Cement Concrete Pavement | Gal/SY | 0.245 |
| Concrete Shoulders Adjacent to "Pavement | Gal/SY | 0.245 |

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08) (Rev. 5-16-17) 108-2 SPI G58

No schedule will be required.

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (LOCAL GOVERNMENT AGENCIES):

(10-16-07)(Rev. 1-17-17) 102-15(J) SPI G68

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 <u>not</u> 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.

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

Local Government Agencies (LGA) - The entity letting the contract.

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

Standard Specifications - The general term comprising all directions, provisions, and requirements contained or referred to in the North Carolina Department of Transportation Standard Specifications for Roads and Structures and any subsequent revisions or additions to such book.

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. https://connect.ncdot.gov/business/Turnpike/Documents/Form%20DBE-IS%20Subcontractor%20Payment%20Information.pdf

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.zip

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%20 Forms/Joint%20 Check%20 Notification%20 Form.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%20MB E-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.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 4.0%

- (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 County.

(B) Women Business Enterprises 4.0%

- (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 **County**.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the NCDOT 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://www.ebs.nc.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 submittal 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 County** 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.

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 NCDOT's form titled *Letter of Intent*.

The documentation shall be received in the office of the **County** no later than 2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the **County Project Manager** no later than 10:00 a.m. 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 **County Project Manager** no later than 2:00 p.m. 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 **County Project Manager** no later than 10:00 a.m. 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 **County** documentation of adequate good faith efforts made to reach that specific goal(s).

One complete set and **two** copies of this information shall be received in the office of the **County Project Manager** no later than 2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the **County Project Manager** no later than 10:00 a.m. 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 **County** 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/WBEs that 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) (1) Negotiating in good faith with interested MBEs/WBEs. 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 Opportunity and Work Force Development Unit at DBE@ncdot.gov 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 **County** 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 County may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the **County** does not award the contract to the apparent lowest responsive bidder, the **County** reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the **County** 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 **County Project Manager** 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 **County Project Manager**. 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 NCDOT'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 subcontractor 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 **County**. The **County**'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 County 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 **County Project Manager** 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 **County Project Manager**'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 or Insert Title) 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 NCDOT after the SAF (Subcontract Approval Form) has been received by the County, the County 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.
- When a committed MBE/WBE is decertified prior to the **County** _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 (Engineer or Insert Title) (see A herein for required documentation).

Changes in the Work

When the **County Project Manager** 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 **County Project Manager** 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 **County Project Manager** 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 **County Project Manager**.

When the **County Project Manager** 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 **County Project Manager**.

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 **County** 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 **County Project Manager** 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 **County Project Manager** 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 **County Project Manager** 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 County Project Manager can request written verification of subcontractor payments.

The Contractor shall report the accounting of payments on the NCDOT's DBE-IS (Subcontractor Payment Information) with each invoice. Invoices will not be processed for payment until the DBE-IS is received.

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) 450 SP1 G112 D

Subsurface information is available on the roadway and structure portions of this project.

LOCATING EXISTING UNDERGROUND UTILITIES:

(3-20-12) 105 SPI G115

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 ENVIRONMENTALLY SUSTAINABLE PRACTICES:

(5-21-13) (Rev. 5-19-15) 104-13 SPI G118

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.

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.

COOPERATION BETWEEN CONTRACTORS:

(7-1-95) 105-7 SPI G133

The Contractor's attention is directed to Article 105-7 of the 2012 Standard Specifications.

Clearwater Paper's Contractors are working on a major site development project adjacent to this project.

The Contractor on this project shall cooperate with the Contractor working within or adjacent to the limits of this project to the extent that the work can be carried out to the best advantage of all concerned.

(10-7-13) 108 SPI G146

- (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 **Cleveland County**. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of **Cleveland County**, 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. Cleveland County'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. Cleveland County 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 **Cleveland County** 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.

OUTSOURCING OUTSIDE THE USA:

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

SP1 G150

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

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

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

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09)

107-1

SP1 G152

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

- (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.

LIABILITY INSURANCE:

(5-20-14)

SP1 G160

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.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:

(1-16-07) (Rev 11-22-16)

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 and within 24 hours after a rainfall event of 0.5 inch that occurs within a 24 hour period. Additional monitoring may be required at the discretion of Division of Water Resources personnel if the receiving stream is 303(d) listed for turbidity and the project has had documented problems managing turbidity.
- (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 1536 Mail Service Center Raleigh, NC 27699-1536

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.

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE: (2-20-07) (Rev. 3-20-13) 105-16, 230, 801

SP1 G181

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

If during any operating day, the downstream water quality exceeds the standard, the Contractor shall do all of the following:

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

During the Environmental Assessment required by Article 230-4 of the 2012 Standard Specifications, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

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

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

The Contractor shall use the NCDOT Turbidity Reduction Options for Borrow Pits Matrix, available at

http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/fieldops/downloads/Files/TurbidityReductionOptionSheet.pdf

to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Contractor exhaust all Tier I Methods on a site exclusive of rare or unique resources or special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

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

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

EMPLOYMENT:

(11-15-11) (Rev. 1-17-12) 108, 102 SPI G184

Revise the 2012 Standard Specifications as follows:

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

(O) 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) SPI G185

Revise the 2012 Standard Specifications as follows:

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

SUBLETTING OF CONTRACT:

(11-18-2014) 108-6 SP1 G186

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.

PROJECT SPECIAL PROVISIONS

ROADWAY

CLEARING AND GRUBBING - METHOD II:

(9-17-02) (Rev.8-18-15)

SP2 R02A

Perform clearing on this project to the limits established by Method "II" shown on Standard Drawing No. 200.02 of the 2012 Roadway Standard Drawings. Conventional clearing methods may be used except where permit drawings or conditions have been included in the proposal which require certain areas to be cleared by hand methods.

BURNING RESTRICTIONS:

(7-1-95) 200, 210, 215 SP2 R05

Open burning is not permitted on any portion of the right-of-way limits established for this project. Do not burn the clearing, grubbing or demolition debris designated for disposal and generated from the project at locations within the project limits, off the project limits or at any waste or borrow sites in this county. Dispose of the clearing, grubbing and demolition debris by means other than burning, according to state or local rules and regulations.

SELECT GRANULAR MATERIAL:

(3-16-10) (Rev. 1-17-12) 265 SP2 R80

Revise the 2012 Standard Specifications as follows:

Page 2-28, Article 265-2 MATERIALS, add the following:

Use only Class III select material for select granular material.

Page 2-28, Article 265-4 MEASUREMENT AND PAYMENT, lines 13-30, replace all occurrences of Select Granular Material with Select Granular Material. Class III.

Page 2-28, Article 265-4 MEASUREMENT AND PAYMENT, after line 31, delete the pay item and replace with the following:

Payment will be made under:

Pay Item Pay Unit
Cubic Yard

Select Granular Material, Class III

(11-20-12) (Rev. 8-18-15) 300 SP3 R01

Revise the 2012 Standard Specifications as follows:

Page 3-1, Article 300-2, Materials, line 15, in the materials table, replace "Flowable Fill" and "Geotextiles" with the following:

| Item | Section |
|----------------------------|---------|
| Flowable Fill, Excavatable | 1000-6 |
| Grout, Type 2 | 1003 |
| Geotextiles, Type 4 | 1056 |

Page 3-1, Article 300-2, Materials, lines 23-24, replace sentence with the following:

Provide foundation conditioning geotextile and geotextile to wrap pipe joints in accordance with Section 1056 for Type 4 geotextile.

Page 3-3, Subarticle 300-6(A), Rigid Pipe, line 2, in the first paragraph, replace "an approved non-shrink grout." with "grout." and line 4, in the second paragraph, replace "filtration geotextile" with "geotextile".

Page 3-3, Article 300-7, Backfilling, lines 37-38, in the first and second sentences of the fifth paragraph, replace "Excavatable flowable fill" with "Flowable fill".

FLOWABLE FILL:

(9-17-02) (Rev 1-17-12)

300, 340, 450, 1000, 1530, 1540, 1550

SP3 R30

Description

This work consists of all work necessary to place flowable fill in accordance with these provisions, the plans, and as directed.

Materials

Refer to Division 10 of the 2012 Standard Specifications.

| Item | Section |
|---------------|---------|
| Flowable Fill | 1000-6 |

Construction Methods

Discharge flowable fill material directly from the truck into the space to be filled, or by other approved methods. The mix may be placed full depth or in lifts as site conditions dictate. The Contractor shall provide a method to plug the ends of the existing pipe in order to contain the flowable fill.

Measurement and Payment

At locations where flowable fill is called for on the plans and a pay item for flowable fill is included in the contract, *Flowable Fill* will be measured in cubic yards and paid as the actual number of cubic yards that have been satisfactorily placed and accepted. Such price and payment

will be full compensation for all work covered by this provision including, but not limited to, the mix design, furnishing, hauling, placing and containing the flowable fill.

Payment will be made under:

Pay ItemPay UnitFlowable FillCubic Yard

ASPHALT PAVEMENTS - SUPERPAVE:

(6-19-12) (Rev. 8-16-16) 605, 609, 610, 65

SP6 R01

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 (APPLICATION RATES | |
|----------------------------|---------------------------|
| Existing Surface | 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.

| | E 605-2 ATURE 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%20Approved%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:

| | LE 610-1 E 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:

| | E 610-5 RATURES 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°F ^A |
| S9.5C, S12.5C | 45°F ^A |
| S9.5D, S12.5D | 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:

Where:

PA = Pay Adjustment (dollars)

LR# = The Localized Roughness number determined from SAM report for

the ride quality threshold

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

| | TABLE OGAFC GRADAT | | | | |
|-----------------------------|-----------------------|------------------------------|--------------------|--|--|
| Grading Requirements | | Total Percent Passing | | | |
| 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 | | |

ASPHALT BINDER CONTENT OF ASPHALT PLANT MIXES:

(11-21-00) (Rev. 7-17-12) 609 SP6 R15

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

| Asphalt Concrete Base Course | Type B 25.0 | 4.4% |
|--------------------------------------|--------------|------|
| Asphalt Concrete Intermediate Course | Type I 19.0 | 4.8% |
| Asphalt Concrete Surface Course | Type S 4.75A | 6.8% |
| Asphalt Concrete Surface Course | Type SA-1 | 6.8% |
| Asphalt Concrete Surface Course | Type SF 9.5A | 6.7% |
| Asphalt Concrete Surface Course | Type S 9.5 | 6.0% |
| Asphalt Concrete Surface Course | Type S 12.5 | 5.6% |

The actual asphalt binder content will be established during construction by the Engineer within the limits established in the 2012 Standard Specifications.

ASPHALT PLANT MIXTURES:

(7-1-95) 609 SP6 R20

Place asphalt concrete base course material in trench sections with asphalt pavement spreaders made for the purpose or with other equipment approved by the Engineer.

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX:

(11-21-00) 620 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 \$374.50 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **December 1st**, 2017.

FINAL SURFACE TESTING NOT REQUIRED:

(5-18-04) (Rev. 2-16-16) SP6 R45

Final surface testing is not required on this project in accordance with Section 610-13, *Final Surface Testing and Acceptance*.

GENERIC FENCING ITEM - REMOVE AND RESET EXISTING GATE:

866

Description

Remove and reset existing gate as shown on the plans.

Materials

Materials shall meet the requirements of Article 866-2 of the 2012 Standard Specifications.

Construction Methods

Relocate and construct the gate in accordance with Subarticle 866-3(C).

Measurement and Payment

Generic Fencing Item – Remove and Reset Existing Gate will be measured and paid for as a lump sum price for each gate to be relocated. Such price and payment will be full compensation for all materials, labor, fence maintenance, and incidentals necessary to satisfactorily complete the work.

Payment will be made under:

Pay ItemPay UnitGeneric Fencing Item – Remove and Reset Existing GateEach

MATERIALS:

(2-21-12) (Rev. 11-22-16) 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)."

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

| | TABLE 1000-1 REQUIREMENTS FOR CONCRETE | | | | | | | | | | | |
|-------------------------------------|--|----------------------|---------------------------|----------------------|--------------------------------------|---------------------------------------|--------------------|----------------|--------------|---------------------------------------|--------------|--|
| | Ġ. | Maximum Wate | | er-Cement | -Cement Ratio Consistency M Slump | | | Cement Content | | Consistency Max. Slump Cement Content | | |
| Class of Concrete | Min. Comp. Strength at 28 days | Air-En Cond | | Non Entra Cond | ained crete | Vibrated | Non- Vibrated | Vibi | rated | Non- V | ibrated | |
| | Mi S at | Rounded Aggregate | Angular Aggre- gate | Rounded Aggregate | Angular Aggre- gate | Vib | N div | 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 | |
| A | 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 10-6, 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.

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

| | | | | | Percei | Percentage of Total by Weight Passing | Fotal 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 | 1 | 0-5 | 1 | ı | ı | ı | ı | Α | Asphalt Plant Mix |
| 467M | 100 | 95-100 | ı | 35-70 | 1 | 0-30 | 0-5 | ı | ı | ı | ı | A | Asphalt Plant Mix |
| 5 | ı | 100 | 90-100 | 20-55 | 0-10 | 0-5 | | 1 | ı | | ı | Α | AST, Sediment Control Stone |
| 57 | ı | 100 | 95-100 | - | 25-60 | ı | 0-10 | 0-5 | ı | 1 | ı | A | AST, Structural Concrete, Shoulder Drain Stone, Sediment Control Stone |
| 57M | ı | 100 | 95-100 | ı | 25-45 | ı | 0-10 | 0-5 | ı | | ı | Α | AST, Concrete Pavement |
| 6M | ı | ı | 100 | 90-100 | 20-55 | 0-20 | 0-8 | ı | ı | | ı | Α | AST |
| 67 | ı | ı | 100 | 90-100 | ı | 20-55 | 0-10 | 0-5 | ı | ı | ı | Α | Asphalt Plant Mix, AST, Structural Concrete |
| 78M | ı | | 1 | 100 | 98-100 | 75-100 | 20-45 | 0-15 | | | ı | A | Asphalt Plant Mix, AST, Structural Concrete, Weep Hole Drains |
| 14M | ı | 1 | ı | ı | 100 | 98-100 | 35-70 | 5-20 | 1 | 0-8 | ı | Α | Asphalt Plant Mix, AST, Structural Concrete, Weep Hole Drains |
| 9M | ı | ı | ı | ı | 100 | 98-100 | 85-100 | 10-40 | ı | 0-10 | ı | Α | AST |
| ABC | | 100 | 75-97 | 1 | 55-80 | ı | 35-55 | | 25-45 | ı | 14-30 | 4-12 ^B | Aggregate Base Course, Aggregate Stabilization |
| ABC(M) | ı | 100 | 75- 100 | ı | 45-79 | ı | 20-40 | ı | 0- 25 | 1 | ı | 0-12 ^B | Maintenance Stabilization |
| Light- | ı | ı | ı | 1 | 100 | 80-100 | 5-40 | 0-20 | ı | 0-10 | ı | 0-2.5 | AST |

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

Page 10-39, Article 1016-3, CLASSIFICATIONS, lines 27-32, replace with the following:

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:

- (A) At least 50% of the rock has a diameter of from 1.5 ft to 3 ft,
- **(B)** 30% of the rock ranges in size from 2" to 1.5 ft in diameter, and
- (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 F | TABLE 1024-1 POZZOLANS 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 Slag | 35%-50% by weight of required cement content 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:

| TABLE 1 REQUIREMENTS F | | |
|---|---|---|
| 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.

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

| 0 1,500 | 1,500 | 1,500 | 2,000 | 2,000 | 1,500 | 1,500 | Min. Bond Strength Slant Shear Test at 14 days (psi) |
|-----------|------------|------------|-----------------|-------------------|----------------------------|-----------------|---|
| 1.0 | 1.0 | 1.0 | 1.5 | 1.0 | 1.0 | 1.5 | Maximum Water Absorption (%) |
| 1 | 5,000 | ı | ı | ı | ı | 5,000 (Neat) | Min. Compressive Strength of 2" mortar cubes at 7 days |
| 0 6,000 | 3,000 | 3,000 | 6,000 (Neat) | 6,000- | 4,000- | 3,000 (Neat) | Min. Compressive Strength of 2". mortar cubes at 24 hours |
| 5 2-5 | 5-15 | 5-15 | 2-5 | 2-5 | 30 min. | 30 min. | Tensile Elongation at 7 days (%) |
| 0 4,000 | 1,500 | 1,500 | 4,000 | 4,000 | 2,000 | 1,500 | Minimum Tensile Strength at 7 days (psi) |
| 0 20-60 | 40-80 | 40-80 | 5-50 | 20-50 | 30-60 | 20-50 | Pot Life (Minutes) |
| 50 | 10 | 10 | 1 | 20 | 20 | ı | Speed (RPM) |
| 2 | 4 | 4 | 1 | 4 | 3 | ı | Spindle No. |
| 50 1-6 | 40-150 | 40-150 | Gel | 25-75 | 10-30 | Gel | Viscosity-Poises at 77°F ± 2°F |
| е Туре 5 | Type 4B | Type 4A | Type 3A | Type 3 | Type 2 | Type 1 | Property |
| - | - | VSTEMS | ESIN SY | 1081-1 EPOXY H | TABLE 1081-1 MIXED EPOX | TIES OF | TABLE 1081-1 PROPERTIES OF MIXED EPOXY RESIN SYSTEMS |

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

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:

(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.

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 piling 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.

(3-19-13) 1019 SP10 R10

Use soil in accordance with Section 1019 of the 2012 Standard Specifications. Use soil consisting of loose, friable, sandy material with a PI greater than 6 and less than 25 and a pH ranging from 5.5 to 7.0.

Soil with a pH ranging from 4.0 to 5.5 will be accepted without further testing if additional limestone is provided in accordance with the application rates shown in Table 1019-1A. Soil type is identified during the soil analysis. Soils with a pH above 7.0 require acidic amendments to be added. Submit proposed acidic amendments to the Engineer for review and approval. Soils with a pH below 4.0 or that do not meet the PI requirements shall not be used.

| | TABLE 1019-1A ADDITIONAL LIMESTONE APPLICATION RATE TO RAISE pH | | | | | |
|----------------|---|------------------------------------|------------------------------------|--|--|--|
| | ADDITIONAL LIMESTONE | APPLICATION RATE TO | RAISE pH | | | |
| pH TEST RESULT | Sandy Soils Additional Rate | Silt Loam Soils Additional Rate | Clay Loam Soils Additional Rate | | | |
| | (lbs. / Acre) (lbs. / Acre) (lbs. / Acre) | | | | | |
| 4.0 - 4.4 | 1,000 | 4,000 | 6,000 | | | |
| | , | , | , | | | |
| 4.5 - 4.9 | 500 | 3,000 | 5,000 | | | |
| 5.0 - 5.4 | NA | 2,000 | 4,000 | | | |

Note: Limestone application rates shown in this table are in addition to the standard rate of 4000 lbs. / acre required for seeding and mulching.

No direct payment will be made for providing additional lime or acidic amendments for Ph adjustment.

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.

| TABLE 1003-1 AGGREGATE REQUIREMENTS FOR TYPE 5 GROUT | | | | | |
|---|----------------------------------|--------------|------------------|--|--|
| Grad | ation | Maximum | Maximum | | |
| Sieve Designation per AASHTO M 92 | Percentage Passing (% by weight) | Liquid Limit | Plasticity Index | | |
| 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 |
| Dangity (Unit Waight) | AASHTO T 121, |
| Density (Unit Weight) | 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 GROUT REQUIREMENTS | | | | | | |
|------------------|------------------------------------|--------------------------|------------------|--|-----------------------|--|--|
| Type of Grout | _ | mum ressive gth at | Height Change | Flow ^A /Slump ^B | Minimum Durability | | |
| | 3 days | 28 days | at 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.

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.

| ELAPS | TABLE 1003-3 ED TIME FOR PLACING (with continuous agitatio | |
|---|--|--------------------------------|
| | 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.

GEOSYNTHETICS:

(2-16-16) 1056 SP10 R25

Revise the 2012 Standard Specifications as follows:

Replace Section 1056 with the following:

SECTION 1056 GEOSYNTHETICS

1056-1 DESCRIPTION

Provide geosynthetics for subsurface drainage, separation, stabilization, reinforcement, erosion control, filtration and other applications in accordance with the contract. Use geotextiles, geocomposite drains and geocells that are on the NCDOT Approved Products List. Prefabricated geocomposite drains include sheet, strip and vertical drains (PVDs), i.e., "wick drains" consisting of a geotextile attached to and/or encapsulating a plastic drainage core. Geocells are comprised of ultrasonically welded polymer strips that when expanded form a 3D honeycomb grid that is typically filled with material to support vegetation.

If necessary or required, hold geotextiles and sheet drains in place with new wire staples, i.e., "sod staples" that meet Subarticle 1060-8(D) or new anchor pins. Use steel anchor pins with a diameter of at least 3/16" and a length of at least 18" and with a point at one end and a head at the other end that will retain a steel washer with an outside diameter of at least 1.5".

1056-2 HANDLING AND STORING

Load, transport, unload and store geosynthetics so geosynthetics are kept clean and free of damage. Label, ship and store geosynthetics in accordance with Section 7 of AASHTO M 288. Geosynthetics with defects, flaws, deterioration or damage will be rejected. Do not unwrap geosynthetics until just before installation. Do not leave geosynthetics exposed for more than 7 days before covering except for geosynthetics for temporary wall faces and erosion control.

1056-3 CERTIFICATIONS

Provide Type 1, Type 2 or Type 4 material certifications in accordance with Article 106-3 for geosynthetics. Define "minimum average roll value" (MARV) in accordance with ASTM D4439. Provide certifications with MARV for geosynthetic properties as required. Test geosynthetics using laboratories accredited by the Geosynthetic Accreditation Institute (GAI) to perform the required test methods. Sample geosynthetics in accordance with ASTM D4354.

STABILIZATION REQUIREMENTS:

(3-11-2016)

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:

(West)

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

Shoulder and Median Areas:

| August 1 | l - June 1 | May 1 - September 1 | |
|----------|--------------------|---------------------|---------------------------|
| 20# | Kentucky Bluegrass | 20# | Kentucky Bluegrass |
| 75# | Hard Fescue | 75# | Hard Fescue |
| 25# | Rye Grain | 10# | German or Browntop Millet |
| 500# | Fertilizer | 500# | Fertilizer |
| 4000# | Limestone | 4000# | Limestone |

Areas Beyond the Mowing Pattern, Waste and Borrow Areas:

| August 1 | - June 1 | May 1 - September 1 | |
|----------|----------------------|---------------------|---------------------------|
| 100# | Tall Fescue | 100# | Tall Fescue |
| 15# | Kentucky Bluegrass | 15# | Kentucky Bluegrass |
| 30# | Hard Fescue | 30# | Hard Fescue |
| 25# | Rye Grain Fertilizer | 10# | German or Browntop Millet |
| 500# | | 500# | Fertilizer |
| 4000# | Limestone | 4000# | Limestone |

Approved Tall Fescue Cultivars:

| | 119910,00 | Tuni eseue cum runs. | |
|----------------------------|-------------|----------------------|-------------|
| 06 Dust | Escalade | Justice | Serengeti |
| 2 nd Millenium+ | Essential | Kalahari | Shelby |
| 3 rd Millenium | Evergreen 2 | Kitty Hawk 2000 | Sheridan |
| Apache III | Falcon IV | Legitimate | Signia |
| Avenger | Falcon NG | Lexington | Silver Hawk |
| Barlexas | Falcon V | LSD | Sliverstar |

| Barlexas II | Faith | Magellan | Shenandoah Elite |
|-----------------|-----------------|----------------|--------------------|
| Bar Fa | Fat Cat | Matador | Sidewinder |
| Barrera | Festnova | Millennium SRP | Skyline |
| Barrington | Fidelity | Monet | Solara |
| Barrobusto | Finelawn Elite | Mustang 4 | Southern Choice II |
| Barvado | Finelawn Xpress | Ninja 2 | Speedway |
| Biltmore | Finesse II | Ol' Glory | Spyder LS |
| Bingo | Firebird | Olympic Gold | Sunset Gold |
| Bizem | Firecracker LS | Padre | Taccoa |
| Blackwatch | Firenza | Patagonia | Tanzania |
| Blade Runner II | Five Point | Pedigree | Trio |
| Bonsai | Focus | Picasso | Tahoe II |
| Braveheart | Forte | Piedmont | Talladega |
| Bravo | Garrison | Plantation | Tarheel |
| Bullseye | Gazelle II | Proseeds 5301 | Terrano |
| Cannavaro | Gold Medallion | Prospect | Titan ltd |
| Catalyst | Grande 3 | Pure Gold | Titanium LS |
| Cayenne | Greenbrooks | Quest | Tracer |
| Cessane Rz | Greenkeeper | Raptor II | Traverse SRP |
| Chipper | Gremlin | Rebel Exeda | Tulsa Time |
| Cochise IV | Greystone | Rebel Sentry | Turbo |
| Constitution | Guardian 21 | Rebel IV | Turbo RZ |
| Corgi | Guardian 41 | Regiment II | Tuxedo RZ |
| Corona | Hemi | Regenerate | Ultimate |
| Coyote | Honky Tonk | Rendition | Venture |
| Darlington | Hot Rod | Rhambler 2 SRP | Umbrella |
| Davinci | Hunter | Rembrandt | Van Gogh |
| Desire | Inferno | Reunion | Watchdog |
| Dominion | Innovator | Riverside | Wolfpack II |
| Dynamic | Integrity | RNP | Xtremegreen |
| Dynasty | Jaguar 3 | Rocket | |
| Endeavor | Jamboree | Scorpion | |

Approved Kentucky Bluegrass Cultivars:

| 4-Season | Blue Velvet | Gladstone | Quantum Leap |
|-----------|-------------|-------------|---------------|
| Alexa II | Blueberry | Granite | Rambo |
| America | Boomerang | Hampton | Rhapsody |
| Apollo | Brilliant | Harmonie | Rhythm |
| Arcadia | Cabernet | Impact | Rita |
| Aries | Champagne | Jefferson | Royce |
| Armada | Champlain | Juliet | Rubicon |
| Arrow | Chicago II | Jump Start | Rugby II |
| Arrowhead | Corsair | Keeneland | Shiraz |
| Aura | Courtyard | Langara | Showcase |
| Avid | Delight | Liberator | Skye |
| Award | Diva | Madison | Solar Eclipse |
| Awesome | Dynamo | Mercury | Sonoma |
| Bandera | Eagleton | Midnight | Sorbonne |
| Barduke | Emblem | Midnight II | Starburst |
| | | | |

| Barnique | Empire | Moon Shadow | Sudden Impact |
|---------------|-------------|---------------|---------------|
| Baroness | Envicta | Moonlight SLT | Total Eclipse |
| Barrister | Everest | Mystere | Touche |
| Barvette HGT | Everglade | Nu Destiny | Tsunami |
| Bedazzled | Excursion | NuChicago | Unique |
| Belissimo | Freedom II | NuGlade | Valor |
| Bewitched | Freedom III | Odyssey | Voyager II |
| Beyond | Front Page | Perfection | Washington |
| Blacksburg II | Futurity | Pinot | Zinfandel |
| Blackstone | Gaelic | Princeton 105 | |
| Blue Note | Ginney II | Prosperity | |

Approved Hard Fescue Cultivars:

| Aurora II | Eureka II | Oxford | Scaldis II |
|-------------|-----------|------------|------------|
| Aurora Gold | Firefly | Reliant II | Spartan II |
| Berkshire | Granite | Reliant IV | Stonehenge |
| Bighorn GT | Heron | Rescue 911 | |
| Chariot | Nordic | Rhino | |

On cut and fill slopes 2:1 or steeper add 20# Sericea Lespedeza January 1 - December 31.

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

Native Grass Seeding And Mulching (West)

Native Grass Seeding and Mulching shall be performed on the disturbed areas of wetlands and riparian areas, and adjacent to Stream Relocation and/or trout stream construction within a 50 foot zone on both sides of the stream or depression, measured from top of stream bank or center of depression. The stream bank of the stream relocation shall be seeded by a method that does not alter the typical cross section of the stream bank. Native Grass Seeding and Mulching shall also be performed in the permanent soil reinforcement mat section of preformed scour holes, and in other areas as directed.

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

| August 1 - June 1 | | May 1 – September 1 | |
|-------------------|---------------------|---------------------|---------------------------|
| 18# | Creeping Red Fescue | 18# | Creeping Red Fescue |
| 8# | Big Bluestem | 8# | Big Bluestem |
| 6# | Indiangrass | 6# | Indiangrass |
| 4# | Switchgrass | 4 # | Switchgrass |
| 35# | Rye Grain | 25# | German or Browntop Millet |
| 500# | Fertilizer | 500# | Fertilizer |
| 4000# | Limestone | 4000# | Limestone |
| | | | |

Approved Creeping Red Fescue Cultivars:

Aberdeen Boreal Epic Cindy Lou

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

Native Grass Seeding and Mulching shall be performed in accordance with Section 1660 of the *Standard Specifications* and vegetative cover sufficient to restrain erosion shall be installed immediately following grade establishment.

Measurement and Payment

Native Grass *Seeding and Mulching* will be measured and paid for in accordance with Article 1660-8 of the *Standard Specifications*.

TEMPORARY SEEDING:

Fertilizer shall be the same analysis as specified for *Seeding and Mulching* and applied at the rate of 400 pounds and seeded at the rate of 50 pounds per acre. German Millet, or Browntop Millet shall be used in summer months and rye grain during the remainder of the year. The Engineer will determine the exact dates for using each kind of seed.

FERTILIZER TOPDRESSING:

Fertilizer used for topdressing shall be 16-8-8 grade and shall be applied at the rate of 500 pounds per acre. A different analysis of fertilizer may be used provided the 2-1-1 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as 16-8-8 analysis and as directed.

SUPPLEMENTAL SEEDING:

The kinds of seed and proportions shall be the same as specified for *Seeding and Mulching*, and the rate of application may vary from 25# to 75# per acre. The actual rate per acre will be determined prior to the time of topdressing and the Contractor will be notified in writing of the rate per acre, total quantity needed, and areas on which to apply the supplemental seed. Minimum tillage equipment, consisting of a sod seeder shall be used for incorporating seed into the soil as to prevent disturbance of existing vegetation. A clodbuster (ball and chain) may be used where degree of slope prevents the use of a sod-seeder.

MOWING:

The minimum mowing height on this project shall be six inches.

LAWN TYPE APPEARANCE:

All areas adjacent to lawns must be hand finished as directed to give a lawn type appearance. Remove all trash, debris, and stones ³/₄" and larger in diameter or other obstructions that could interfere with providing a smooth lawn type appearance. These areas shall be reseeded to match their original vegetative conditions, unless directed otherwise by the Field Operations Engineer.

RESPONSE FOR EROSION CONTROL:

Description

Furnish the labor, materials, tools and equipment necessary to move personnel, equipment, and supplies to the project necessary for the pursuit of any or all of the following work as shown herein, by an approved subcontractor.

| Section | Erosion Control Item | Unit |
|---------|----------------------------------|--------|
| 1605 | Temporary Silt Fence | LF |
| SP | Special Sediment Control Fence | LF/TON |
| 1615 | Temporary Mulching | ACR |
| 1620 | Seed - Temporary Seeding | LB |
| 1620 | Fertilizer - Temporary Seeding | TN |
| 1631 | Matting for Erosion Control | SY |
| SP | Coir Fiber Mat | SY |
| SP | Coir Fiber Baffles | LF |
| SP | Permanent Soil Reinforcement Mat | SY |
| 1660 | Seeding and Mulching | ACR |
| 1661 | Seed - Repair Seeding | LB |
| 1661 | Fertilizer - Repair Seeding | TON |
| 1662 | Seed - Supplemental Seeding | LB |
| 1665 | Fertilizer Topdressing | TON |
| SP | Safety/Highly Visible Fencing | LF |
| SP | Response for Erosion Control | EA |

Construction Methods

Provide an approved subcontractor who performs an erosion control action as described in Form 1675. Each erosion control action may include one or more of the above work items.

Measurement and Payment

Response for Erosion Control will be measured and paid for by counting the actual number of times the subcontractor moves onto the project, including borrow and waste sites, and satisfactorily completes an erosion control action described in Form 1675. The provisions of Article 104-5 of the Standard Specifications will not apply to this item of work.

Payment will be made under:

Pay ItemPay UnitResponse for Erosion ControlEach

MINIMIZE REMOVAL OF VEGETATION:

The Contractor shall minimize removal of vegetation within project limits to the maximum extent practicable. Vegetation along stream banks and adjacent to other jurisdictional resources outside the construction limits shall only be removed upon approval of Engineer. No additional payment will be made for this minimization work.

STOCKPILE AREAS:

The Contractor shall install and maintain erosion control devices sufficient to contain sediment around any erodible material stockpile areas as directed.

ACCESS AND HAUL ROADS:

At the end of each working day, the Contractor shall install or re-establish temporary diversions or earth berms across access/haul roads to direct runoff into sediment devices. Silt fence sections that are temporarily removed shall be reinstalled across access/haul roads at the end of each working day.

WASTE AND BORROW SOURCES:

Payment for temporary erosion control measures, except those made necessary by the Contractor's own negligence or for his own convenience, will be paid for at the appropriate contract unit price for the devices or measures utilized in borrow sources and waste areas.

No additional payment will be made for erosion control devices or permanent seeding and mulching in any commercial borrow or waste pit. All erosion and sediment control practices that may be required on a commercial borrow or waste site will be done at the Contractor's expense.

All offsite Staging Areas, Borrow and Waste sites shall be in accordance with "Borrow and Waste Site Reclamation Procedures for Contracted Projects" located at:

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

All forms and documents referenced in the "Borrow and Waste Site Reclamation Procedures for Contracted Projects" shall be included with the reclamation plans for offsite staging areas, and borrow and waste sites.

CLEAN WATER DIVERSION:

Description

This work consists of installing, maintaining, and removing any and all material required for the construction of clean water diversions. The clean water diversions shall be used to direct water flowing from offsite around/away from specific area(s) of construction.

Materials

Refer to Division 10

Geotextile for Soil Stabilization, Type 4

Cleveland County
Section
1056

Construction Methods

The Contractor shall install the clean water diversions in accordance with the details in the plans and at locations indicated in the plans, and as directed. Upon installation, the excavated material shall be immediately stabilized as provided in Section 1620 of the *Standard Specifications*. Other stabilization methods may be utilized with prior approval from the Engineer.

Line clean water diversion with geotextile unrolled in the direction of flow and lay smoothly but loosely on soil surface without creases. Bury top of slope geotextile edge in a trench at least 5" deep and tamp securely. Make vertical overlaps a minimum of 18" with upstream geotextile overlapping the downstream geotextile.

Secure geotextile with eleven gauge wire staples shaped into a *u* shape with a length of not less than 6" and a throat not less than 1" in width. Place staples along outer edges and throughout the geotextile a maximum of 3 ft. horizontally and vertically.

Measurement and Payment

Silt Excavation will be measured and paid for in accordance with Article 1630-4 of the Standard Specifications.

Geotextile for Soil Stabilization will be measured and paid for in accordance with Article 270-4 of the Standard Specifications.

Stabilization of the excavated material will be paid for as *Temporary Seeding* as provided in Section 1620 of the *Standard Specifications*.

Such price and payment shall be considered full compensation for all work covered by this section including all materials, construction, maintenance, and removal of the clean water diversions.

SAFETY FENCE AND JURISDICTIONAL FLAGGING:

Description

Safety Fence shall consist of furnishing materials, installing and maintaining polyethylene or polypropylene fence along the outside riparian buffer, wetland, or water boundary, or other boundaries located within the construction corridor to mark the areas that have been approved to infringe within the buffer, wetland, endangered vegetation, culturally sensitive areas or water. The fence shall be installed prior to any land disturbing activities.

Interior boundaries for jurisdictional areas noted above shall be delineated by stakes and highly visible flagging.

Jurisdictional boundaries at staging areas, waste sites, or borrow pits, whether considered outside or interior boundaries shall be delineated by stakes and highly visible flagging.

Materials

Safety Fencing

Polyethylene or polypropylene fence shall be a highly visible preconstructed safety fence approved by the Engineer. The fence material shall have an ultraviolet coating.

Either wood posts or steel posts may be used. Wood posts shall be hardwood with a wedge or pencil tip at one end, and shall be at least 5 ft. in length with a minimum nominal 2" x 2" cross section. Steel posts shall be at least 5 ft. in length, and have a minimum weight of 0.85 lb/ft of length.

Boundary Flagging

Wooden stakes shall be 4 feet in length with a minimum nominal 3/4" x 1-3/4" cross section. The flagging shall be at least 1" in width. The flagging material shall be vinyl and shall be orange in color and highly visible.

Construction Methods

No additional clearing and grubbing is anticipated for the installation of this fence. The fence shall be erected to conform to the general contour of the ground.

Safety Fencing

Posts shall be set at a maximum spacing of 10 ft., maintained in a vertical position and hand set or set with a post driver. If hand set, all backfill material shall be thoroughly tamped. Wood posts may be sharpened to a dull point if power driven. Posts damaged by power driving shall be removed and replaced prior to final acceptance. The tops of all wood posts shall be cut at a 30-degree angle. The wood posts may, at the option of the Contractor, be cut at this angle either before or after the posts are erected.

The fence geotextile shall be attached to the wood posts with one 2" galvanized wire staple across each cable or to the steel posts with wire or other acceptable means.

Place construction stakes to establish the location of the safety fence in accordance with Article 105-9 or Article 801-1 of the *Standard Specifications*. No direct pay will be made for the staking of the safety fence. All stakeouts for safety fence shall be considered incidental to the work being paid for as "Construction Surveying", except that where there is no pay item for construction surveying, all safety fence stakeout will be performed by state forces.

The Contractor shall be required to maintain the safety fence in a satisfactory condition for the duration of the project as determined by the Engineer.

Boundary Flagging

Boundary flagging delineation of interior boundaries shall consist of wooden stakes on 25 feet maximum intervals with highly visible orange flagging attached. Stakes shall be installed a minimum of 6" into the ground. Interior boundaries may be staked on a tangent that runs parallel to buffer but must not encroach on the buffer at any location. Interior boundaries of hand clearing shall be identified with a different colored flagging to distinguish it from mechanized clearing.

Boundary flagging delineation of interior boundaries will be placed in accordance with Article 105-9 or Article 801-1 of the *Standard Specifications*. No direct pay will be made for delineation

of the interior boundaries. This delineation will be considered incidental to the work being paid for as *Construction Surveying*, except that where there is no pay item or construction surveying the cost of boundary flagging delineation shall be included in the unit prices bid for the various items in the contract. Installation for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall consist of wooden stakes on 25 feet maximum intervals with highly visible orange flagging attached. Stakes shall be installed a minimum of 6" into the ground. Additional flagging may be placed on overhanging vegetation to enhance visibility but does not substitute for installation of stakes.

Installation of boundary flagging for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall be performed in accordance with Subarticle 230-4(B)(5) or Subarticle 802-2(F) of the *Standard Specifications*. No direct pay will be made for this delineation, as the cost of same shall be included in the unit prices bid for the various items in the contract.

The Contractor shall be required to maintain alternative stakes and highly visible flagging in a satisfactory condition for the duration of the project as determined by the Engineer.

Measurement and Payment

Safety Fence will be measured and paid as the actual number of linear feet of polyethylene or polypropylene fence installed in place and accepted. Such payment will be full compensation including but not limited to furnishing and installing fence geotextile with necessary posts and post bracing, staples, tie wires, tools, equipment and incidentals necessary to complete this work.

Payment will be made under:

Pay Item
Safety Fence
Linear Foot

PERMANENT SOIL REINFORCEMENT MAT:

Description

This work consists of furnishing and placing *Permanent Soil Reinforcement Mat*, of the type specified, over previously prepared areas as directed.

Materials

The product shall be a permanent erosion control reinforcement mat and shall be constructed of synthetic or a combination of coconut and synthetic fibers evenly distributed throughout the mat between a bottom UV stabilized netting and a heavy duty UV stabilized top net. The matting shall be stitched together with UV stabilized polypropylene thread to form a permanent three-dimensional structure. The mat shall have the following minimum physical properties:

| Property | Test Method | Value | Unit |
|--------------------|--------------------|-------|----------|
| Light Penetration | ASTM D6567 | 9 | % |
| Thickness | ASTM D6525 | 0.40 | in |
| Mass Per Unit Area | ASTM D6566 | 0.55 | lb/sy |
| Tensile Strength | ASTM D6818 | 385 | lb/ft |

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|----------------------------|------------------------|--------------|------------------|
| Elongation (Maximum) | ASTM D6818 | 49 | % |
| Resiliency | ASTM D1777 | >70 | % |
| UV Stability * | ASTM D4355 | <u>≥</u> 80 | % |
| Porosity (Permanent Net) | ECTC Guidelines | <u>≥</u> 85 | |
| Maximum Permissible Shear | Performance Bench | <u>≥</u> 8.0 | lb/ft^2 |
| Stress (Vegetated) | Test | | |
| Maximum Allowable Velocity | Performance Bench | ≥16.0 | ft/s |
| (Vegetated) | Test | | |

^{*}ASTM D1682 Tensile Strength and % strength retention of material after 1000 hours of exposure.

Submit a certification (Type 1, 2, or 3) from the manufacturer showing:

- (A) the chemical and physical properties of the mat used, and
- (B) conformance of the mat with this specification.

Construction Methods

Matting shall be installed in accordance with Subarticle 1631-3(B) of the *Standard Specifications*.

All areas to be protected with the mat shall be brought to final grade and seeded in accordance with Section 1660 of the *Standard Specifications*. The surface of the soil shall be smooth, firm, stable and free of rocks, clods, roots or other obstructions that

would prevent the mat from lying in direct contact with the soil surface. Areas where the mat is to be placed will not need to be mulched.

Measurement and Payment

Permanent Soil Reinforcement Mat will be measured and paid for as the actual number of square yards measured along the surface of the ground over which Permanent Soil Reinforcement Mat is installed and accepted. Overlaps will not be included in the measurement, and will be considered as incidental to the work. Such payment shall be full compensation for furnishing and installing the mat, including overlaps, and for all required maintenance.

Payment will be made under:

Pay ItemPay UnitPermanent Soil Reinforcement MatSquare Yard

SKIMMER BASIN WITH BAFFLES:

Description

Provide a skimmer basin to remove sediment from construction site runoff at locations shown in the erosion control plans. See the Skimmer Basin with Baffles Detail sheet provided in the erosion control plans. Work includes constructing sediment basin, installation of temporary slope drain pipe and coir fiber baffles, furnishing, installation and cleanout of skimmer, providing and placing stone pad on bottom of basin underneath skimmer device, providing and placing a geotextile spillway liner, providing coir fiber mat stabilization for the skimmer outlet, disposing of excess materials, removing temporary slope drain, coir fiber baffles, geotextile liner and skimmer device, backfilling basin area with suitable material and providing proper drainage when basin area is

abandoned.

Materials

| Item | Section |
|---|---------|
| Stone for Erosion Control, Class B | 1042 |
| Geotextile for Soil Stabilization, Type 4 | 1056 |
| Fertilizer for Temporary Seeding | 1060-2 |
| Seed for Temporary Seeding | 1060-4 |
| Seeding and Mulching | 1060-4 |
| Matting for Erosion Control | 1060-8 |
| Staples | 1060-8 |
| Coir Fiber Mat | 1060-14 |
| Temporary Slope Drain | 1622-2 |
| Coir Fiber Baffle | 1640 |

Provide appropriately sized and approved skimmer device.

Provide Schedule 40 PVC pipe with a length of 6 ft. to attach to the skimmer and the coupling connection to serve as the arm pipe. For skimmer sizes of 2.5 in. and smaller, the arm pipe diameter shall be 1.5 inches. For skimmer sizes of 3 in. and larger, refer to manufacturer recommendation.

Provide 4" diameter Schedule 40 PVC pipe to attach to coupling connection of skimmer to serve as the barrel pipe through the earthen dam.

Anchors: Staples, stakes, or reinforcement bars shall be used as anchors.

Wooden Stakes:

Provide hardwood stakes 12"- 24" long with a 2" x 2" nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving through the coir fiber mat and down into the underlying soil. The other end of the stake needs to have a 1"- 2" long head at the top with a 1"- 2" notch following to catch and secure the coir fiber mat.

Steel Reinforcement Bars:

Provide uncoated #10 steel reinforcement bars 24" nominal length. The bars shall have a 4" diameter bend at one end with a 4" straight section at the tip to catch and secure the coir fiber mat.

Staples:

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

Excavate basin according to the erosion control plans with basin surface free of obstructions, debris, and pockets of low-density material. Install temporary slope drain pipe and construct the primary spillway according to the Skimmer Basin with Baffles Detail sheet in the erosion control plans. Temporary slope drain pipe at inlet of basin may be replaced by geotextile as directed.

Construct the coir fiber baffles according to *Roadway Standard Drawings* No. 1640.01 and Section 1640 of the *Standard Specifications*.

Install skimmer device according to manufacturer recommendations. Install 4" Schedule 40 PVC pipe into dam on the lower side of basin 1 ft. from the bottom of the basin and according to the detail, and extend the pipe so the basin will drain. Attach a 6 ft. arm pipe to the coupling connection and skimmer according to manufacturer recommendations. The coupling shall be rigid and non-buoyant and not exceed a diameter of 4" and 12" in length. Attach the rope included with the skimmer to the tee between the vent socket and the tube inlet, and the other end to a wooden stake or metal post. Clean out skimmer device when it becomes clogged with sediment and/or debris and is unable to float at the top of water in skimmer basin. Take appropriate measures to avoid ice accumulation in the skimmer device. Construct a stone pad of Class B stone directly underneath the skimmer device at bottom of basin. The pad shall be a minimum of 12" in height, and shall have a minimum cross sectional area of 4 ft. by 4 ft.

Line primary spillway with geotextile unrolled in the direction of flow and lay smoothly but loosely on soil surface without creases. Bury edges of geotextile in a trench at least 5" deep and tamp firmly. If geotextile for the primary spillway is not one continuous piece of material, make horizontal overlaps a minimum of 18" with upstream geotextile overlapping the downstream geotextile. Secure geotextile with eleven gauge wire staples shaped into a *u* shape with a length of not less than 12" and a throat not less than 1" in width. Place staples along outer edges and throughout the geotextile a maximum of 3 ft. horizontally and vertically. Geotextile shall be placed to the bottom and across the entire width of the basin according to the Skimmer Basin with Baffles detail. Place sealant inside basin around barrel pipe on top of geotextile with a minimum width of 6 in.

At the skimmer outlet, provide a smooth soil surface free from stones, clods, or debris that will prevent contact of the coir fiber matting with the soil. Unroll the matting and apply without stretching such that it will lie smoothly but loosely on the soil surface. Wooden stakes, reinforcement bars, or staples may be used as anchors in accordance with the details in the plans and as directed. Place anchors across the matting at the ends approximately 1 ft. apart. Place anchors along the outer edges and down the center of the matting 3 ft. apart.

All bare side slope sections of the skimmer basin shall be seeded with a temporary or permanent seed mix as directed and in accordance with Articles 1620-3, 1620-4, 1620-5, 1660-4, 1660-5 and 1660-7 of the *Standard Specifications*. Straw or excelsior matting shall be installed on all bare side slope sections immediately upon the completion of seeding and in accordance with Article 1631-3 of the *Standard Specifications*.

Measurement and Payment

Silt Excavation will be measured and paid for in accordance with Article 1630-4 of the Standard Specifications, as calculated from the typical section throughout the length of the basin as shown on the final approved plans.

Geotextile for Soil Stabilization will be measured and paid for in accordance with Article 270-4 of the Standard Specifications.

Coir Fiber Baffles will be measured and paid for in accordance with Article 1640-4 of the *Standard Specifications*.

__" Skimmer will be measured in units of each. " Skimmer will be measured and paid for as the

maximum number of each size skimmer acceptably installed and in use at any one time during the life of the project. Barrel and arm pipe, cleanout, relocation and reinstallation of "Skimmer is considered incidental to the measurement of the quantity of "Skimmer and no separate payment will be made. No separate payment shall be made if "Skimmer, barrel and/or arm pipe(s) are damaged by ice accumulation.

Coir Fiber Mat will be measured and paid for as the actual number of square yards measured along the surface of the ground over which coir fiber mat is installed and accepted.

Temporary Slope Drain will be measured and paid for in accordance with Article 1622-4 of the *Standard Specifications*.

Stone for Erosion Control, Class will be measured and paid for in accordance with Article 1610-4 of the Standard Specifications.

Seeding and Mulching will be measured and paid for in accordance with Article 1660-8 of the *Standard Specifications*.

Seed for Temporary Seeding will be measured and paid for in accordance with Article 1620-6 of the Standard Specifications.

Fertilizer for Temporary Seeding will be measured and paid for in accordance with Article 1620-6 of the Standard Specifications.

Matting for Erosion Control will be measured and paid for in accordance with Article 1631-4 of the *Standard Specifications*.

No measurement will be made for other items or for over excavation or stockpiling. Payment will be made under:

Pay Item
__" Skimmer
Each
Coir Fiber Mat

Square Yard

TEMPORARY ROCK SILT CHECK TYPE A WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM):

Description

Temporary Rock Silt Checks Type A with Excelsior Matting and Polyacrylamide (PAM) are devices utilized in temporary and permanent ditches to reduce runoff velocity and incorporate PAM into the construction runoff to increase settling of sediment particles and reduce turbidity of runoff. Temporary Rock Silt Checks Type A with Excelsior Matting and PAM 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 Temporary Rock Silt Checks Type A, matting installation, PAM application, and removing Temporary Rock Silt Checks Type A with Excelsior Matting and PAM.

Materials

Structural stone shall be class B stone that meets the requirements of Section 1042 of the *Standard Specifications* for Stone for Erosion Control, Class B.

Sediment control stone shall be #5 or #57 stone, which meets the requirements of Section 1005 of the *Standard Specifications* for these stone sizes.

Matting shall meet the requirements of Excelsior Matting in Subarticle 1060-8(B) of the *Standard Specifications*, or shall meet specifications provided elsewhere in this contract.

Polyacrylamide (PAM) shall be applied in powder form and shall be anionic or neutrally charged. Soil samples shall be obtained in areas where the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM will be placed, and from offsite material used to construct the roadway, and analyzed for the appropriate PAM flocculant to be utilized with each Temporary Rock Silt Check Type A. The PAM product used shall be listed on the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Water Quality (DWQ) web site as an approved PAM product for use in North Carolina.

Construction Methods

Temporary Rock Silt Checks Type A shall be installed in accordance with Subarticle 1633-3(A) of the *Standard Specifications*, Roadway Standard Drawing No. 1633.01 and the detail provided in the plans.

Installation of matting shall be in accordance with the detail provided in the plans, and anchored by placing Class B stone on top of the matting at the upper and lower ends.

Apply PAM at a rate of 4 ounces over the center portion of the Temporary Rock Silt Checks Type A and matting where the water is going to flow over. PAM applications shall be done during construction activities and after every rainfall event that is equal to or exceeds 0.50 in.

The Contractor shall maintain the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM until the project is accepted or until the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM are removed, and shall remove and dispose of silt accumulations at the Temporary Rock Silt Checks Type A with Excelsior Matting and PAM when so directed in accordance with the requirements of Section 1630 of the *Standard Specifications*.

Measurement and Payment

Temporary Rock Silt Checks Type A will be measured and paid for in accordance with Article 1633-5 of the Standard Specifications, or in accordance with specifications provided elsewhere in this contract.

Matting will be measured and paid for in accordance with Article 1631-4 of the *Standard Specifications*, or in accordance with specifications provided elsewhere in this contract.

Polyacrylamide(PAM) will be measured and paid for by the actual weight in pounds of PAM applied to the Temporary Rock Silt Checks Type A. 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 apply the *Polyacrylamide(PAM)*.

Payment will be made under:

Pay Item Pay Unit

Polyacrylamide(PAM) Pound

IMPERVIOUS DIKE:

Description

This work consists of furnishing, installing, maintaining, and removing an *Impervious Dike* for the purpose of diverting normal stream flow around the construction site. The Contractor shall construct an impervious dike in such a manner approved by the Engineer. The impervious dike shall not permit seepage of water into the construction site or contribute to siltation of the stream. The impervious dike shall be constructed of an acceptable material in the locations noted on the plans or as directed.

Materials

Acceptable materials shall include but not be limited to sheet piles, sandbags, and/or the placement of an acceptable size stone lined with polypropylene or other impervious geotextile.

Earth material shall not be used to construct an impervious dike when it is in direct contact with the stream unless vegetation can be established before contact with the stream takes place.

Measurement and Payment

Impervious Dike will be measured and paid as the actual number of linear feet of impervious dike(s) constructed, measured in place from end to end of each separate installation that has been completed and accepted. Such price and payment will be full compensation for all work including but not limited to furnishing materials, construction, maintenance, and removal of the impervious dike.

Payment will be made under:

Pay Item
Impervious Dike
Linear Foot

COIR FIBER MAT:

Description

Furnish material, install and maintain coir fiber mat in locations shown on the plans or in locations as directed. Work includes providing all materials, excavating and backfilling, and placing and securing coir fiber mat with stakes, steel reinforcement bars or staples as directed.

Materials

ItemSectionCoir Fiber Mat1060-14

Anchors: Stakes, reinforcement bars, or staples shall be used as anchors.

Wooden Stakes:

Provide hardwood stakes 12"- 24" long with a 2" x 2" nominal square cross section. One end of the stake must be sharpened or beveled to facilitate driving through the coir fiber mat and down into the underlying soil. The other end of the stake needs to have a 1"- 2" long head at the top with a 1"- 2" notch following to catch and secure the coir fiber mat.

Steel Reinforcement Bars:

Provide uncoated #10 steel reinforcement bars 24" nominal length. The bars shall have a 4" diameter bend at one end with a 4" straight section at the tip to catch and secure the coir fiber mat.

Staples:

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

Place the coir fiber mat immediately upon final grading. Provide a smooth soil surface free from stones, clods, or debris that will prevent the contact of the mat with the soil. Unroll the mat and apply without stretching such that it will lie smoothly but loosely on the soil surface.

For stream relocation applications, take care to preserve the required line, grade, and cross section of the area covered. Bury the top slope end of each piece of mat in a narrow trench at least 6 in. deep and tamp firmly. Where one roll of matting ends and a second roll begins, overlap the end of the upper roll over the buried end of the second roll so there is a 6 in. overlap. Construct check trenches at least 12 in. deep every 50 ft. longitudinally along the edges of the mat or as directed. Fold over and bury mat to the full depth of the trench, close and tamp firmly. Overlap mat at least 6 in. where 2 or more widths of mat are installed side by side.

Place anchors across the mat at the ends approximately 1 ft. apart. Place anchors along the outer edges and down the center of the mat 3 ft. apart.

Adjustments in the trenching or anchoring requirements to fit individual site conditions may be required.

Measurement and Payment

Coir Fiber Mat will be measured and paid for as the actual number of square yards measured along the surface of the ground over which coir fiber mat is installed and accepted.

No measurement will be made for anchor items.

Payment will be made under:

R-5849 **EC-17** Pay Item

Coir Fiber Mat

Cleveland County
Pay Unit
Square Yard

CONCRETE WASHOUT STRUCTURE:

(12-01-15)

Description

Concrete washout structures are enclosures above or below grade to contain concrete waste water and associated concrete mix from washing out ready-mix trucks, drums, pumps, or other equipment. Concrete washouts must collect and retain all the concrete washout water and solids, so that this material does not migrate to surface waters or into the ground water. These enclosures are not intended for concrete waste not associated with wash out operations.

The concrete washout structure may include constructed devices above or below ground and or commercially available devices designed specifically to capture concrete waste water.

Materials

| Item | Section |
|----------------------|---------|
| Temporary Silt Fence | 1605 |

Safety Fence shall meet the specifications as provided elsewhere in this contract.

Geomembrane basin liner shall meet the following minimum physical properties for low permeability; it shall consist of a polypropylene or polyethylene 10 mil think geomembrane. If the minimum setback dimensions can be achieved the liner is not required. (5 feet above groundwater, 50 feet from top of bank of perennial stream, other surface water body, or wetland.)

Construction Methods

Build an enclosed earthen berm or excavate to form an enclosure in accordance with the details and as directed.

Install temporary silt fence around the perimeter of the enclosure in accordance with the details and as directed if structure is not located in an area where existing erosion and sedimentation control devices are capable to containing any loss of sediment.

Post a sign with the words "Concrete Washout" in close proximity of the concrete washout area, so it is clearly visible to site personnel.

The construction details for the above grade and below grade concrete washout structures can be found on the following web page link:

http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/soil_water/details/

Alternate details for accommodating concrete washout may be submitted for review and approval.

The alternate details shall include the method used to retain and dispose of the concrete waste water within the project limits and in accordance with the minimum setback requirements. (5 feet above

groundwater, 50 feet from top of bank of perennial stream, other surface water body, or wetland.)

Maintenance and Removal

Maintain the concrete washout structure(s) to provide adequate holding capacity plus a minimum freeboard of 12 inches. Remove and dispose of hardened concrete and return the structure to a functional condition after reaching 75% capacity.

Inspect concrete washout structures for damage and maintain for effectiveness.

Remove the concrete washout structures and sign upon project completion. Grade the earth material to match the existing contours and permanently seed and mulch area.

Measurement and Payment

Concrete Washout Structure will be paid for per each enclosure installed in accordance with the details. If alternate details are approved then those details will also be paid for per each approved and installed device.

Temporary Silt Fence will be measured and paid for in accordance with Article 1605-5 of the *Standard Specifications*.

No measurement will be made for other items or for over excavation or stockpiling.

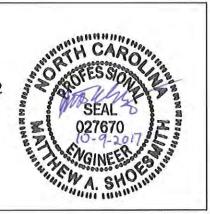
Payment will be made under:

Pay Item
Concrete Washout Structure
Each

PROJECT SPECIAL PROVISIONS Utility Construction



Matthew A. Shoesmith, PE 200 South Tryon Street, Suite 200, Charlotte, NC 28202 704-954-7490 Matthew.Shoesmith@Kimley-Horn.com



I. GENERAL CONSTRUCTION REQUIREMENTS

The proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated January 2012, and the following Special Provisions:

Revise the 2012 Standard Specifications as follows:

GENERAL (WATER PIPE AND FITTINGS)

Revise the 2012 Standard Specifications as follows:

Page 10-58, Sub-article 1036-1 General add the following sentence:

All materials in contact with potable water shall be in conformance with Section 1417 of the Safe Drinking Water Act.

COOPERATION WITH THE UTILITY OWNER

Page 15-1, Sub-article

add the following sentences to paragraph 2:

The utility owner is the City of Shelby, North Carolina. The contact person is David Hux and he can be reached by phone at 704-484-6840.

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Utility Construction

PLACING PIPELINES INTO SERVICE

Page 15-2, Sub-article 1500-9

add the following sentence:

Obtain approval from the NCDENR-Public Water Supply Section prior to placing a new water line into service. Use backflow prevention assemblies for temporary connections to isolate new water lines from existing water line.

TESTING AND STERILIZATION

Page 15-6, Sub-article 1510-3 (B), Testing and Sterilization

change the allowable leakage formula to:

$$W = LD\sqrt{P} \div 148,000$$

Page 15-6, Sub-article 1510-3 (B), Testing and Sterilization, sixth paragraph:

Replace the paragraph with the following:

Sterilize water lines in accordance with Section 1003 of The Rules Governing Public Water supply and AWWA C651 Section 4.4.3, the Continuous Feed Method. Provide a chlorine solution with between 50 parts per million and 100 parts per million in the initial feed. If the chlorine level drops below 10 parts per million during a 24 hour period, then flush, refill with fresh chlorine solution, and repeat for 24 hours. Provide certified bacteriological and contaminant test results from a state-approved or state-certified laboratory. Operate all valves and controls to assure thorough sterilization.

Page 15-6, Sub-article 1510-3 (B), Testing and Sterilization, seventh paragraph:

delete the words "may be performed concurrently or consecutively." and replace with "shall be performed consecutively."

MATERIALS (UTILITY CONTROLS)

Page 15-7, Sub-article 1515-2 Materials,

replace paragraph beginning "Double check valves..." with the following:

Double Check valves (DCV) and Reduced Pressure Zone principal (RPZ) backflow prevention assemblies shall be listed on the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research list of approved backflow devices.

MEASUREMENT AND PAYMENT

Page 15-7, Article 1510-4 Measurement and Payment,

add the following paragraph after line 7:

The quantity of *Ductile Iron Water Pipe Fittings* will be measured and paid per pound based on the published weights for ductile iron fittings, exclusive of the weights of any accessories, as listed in the "DI Fittings Weight Chart" located at the NCDOT Utilities

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Utility Construction

web site. If the Contractor elects to use compact ductile iron water pipe fittings, measurement will be based on the weight of standard size ductile iron water pipe fittings. Any fitting not listed will be measured based on the published weights for ductile iron fittings listed in ANSI/AWWA C-110/A21.10. This is limited to pressure pipe 4 inches or larger.

MEASUREMENT AND PAYMENT

Page 15-7, Article 1510-4 Measurement and Payment,

add the following pay item:

Pay ItemPay UnitDuctile Iron Water Pipe FittingsPound

MEASUREMENT AND PAYMENT

Page 15-9, Article 1515-4 Measurement and Payment, line 28, delete "fittings".

MATERIALS (UTILITY CONTROLS)

Page 15-11, Sub-article 1520-3(A)(2) Testing,

replace the second paragraph with the following:

Test all 24" and smaller gravity sewer lines for leakage using infiltration, exfiltration, or air test. Perform visual inspection on gravity sewer lines larger than 24". Perform line and grade testing and deflection testing on all gravity sewer lines.

WATER SPECIAL PROVISIONS

The Contractor shall be required to obtain City of Shelby Standard Specifications and Details, which contain the standard specifications and details for water main construction. The Contractor is hereby advised that the Material Specifications, Detailed Specifications, and Standard Details as referenced in the City of Shelby Specifications and Details are made a part of this Contract by reference.

In the event provisions of this Section modify, differ, or contradict a provision contained elsewhere in the Plans or in The City of Shelby standards, the City of Shelby standards shall take precedence.

The Work covered by these Specifications consists of constructing various utilities as required by the Plans and provisions herein or as directed by the Engineer. The Contractor shall furnish materials, labor, equipment, and incidentals necessary to complete the proposed utility Work.

Apply the applicable provisions of the Rules and Regulations of the North Carolina Department of Environmental Quality, Division of Environmental Health to the construction of water lines and reclaimed water lines and Work regarding monitoring wells.

The City of Shelby Standard Details are available as a web-based document at: http://www.cityofshelby.com/departments/engineering

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Utility Construction

Unless a specific pay item exists in the Pay Item Descriptions, the following items shall be considered incidental to the construction of the water main. The Contractor shall include all costs associated with this Work in the pay items in the Bid Tab.

Water Line

All water line installed under this contract shall be Polyethylene Encased Ductile Iron Restrained Joint Pipe. All pipe shall be installed as per manufacturer's specifications, at locations shown on the utility plans and/or directed by the Engineer. This item includes furnishing all materials, equipment, and labor required to install restrained joint ductile iron pipe (including fittings), as specified and as shown on the Plans. The Contractor shall be responsible for installing the restrained joints in accordance with manufacturer's recommendations regarding assembly, deflection, and installation. Ductile iron pipe installation shall meet the requirements of AWWA Specification C 151 and ANSI Standard #A21-51. Ductile iron pipe shall be mechanical joint or push-on joint type. All joints for ductile iron pipe shall conform to the applicable dimensions and weights shown in the tables in AWWA C151 and to ANSI A 21.11 (AWWA C111) or latest revision.

Polyethylene encasement shall be applied to all ductile iron pipe and fittings. Polyethylene encasement shall also be applied to any ductile iron pipe and fittings located in areas where contaminated soil is encountered or where directed by the Engineer. Polyethylene material, thickness and width, shall conform to latest revision of AWWA/ANSI C-105/A21.5. Only tubes shall be used on the main pipeline. Minimum thickness shall be 8 mil. The inside surface of the polyethylene wrap to be in contact with the pipe exterior shall be infused with a blend of anti-microbial biocide to mitigate microbiologically influenced corrosion and a volatile corrosion inhibitor to control galvanic corrosion. Polyethylene encasement shall be installed, per AWWA C600 and AWWA/ANSI C-105/A21.5 where shown on the drawings on ductile iron pipe, fittings, and valves. Method C, using polyethylene sheets, shall only be used when directed by the Engineer.

20" Steel Encasement Pipe (Min. .25" Thick)

The contract unit price shall be the total compensation for the furnishing of all labor, materials, casing spacers, casing end seals, tools, equipment, and incidentals necessary to complete the work. Casing end seals shall be made of 1/8 inch thick rubber and shall be full conical in shape. The casing end seal shall be configured to the exact dimensions of the piping and casing. The rubber end seals shall fully enclose the end of the casing and shall be water tight. Casing spacers shall be stainless steel bands that are 11 inches long with polymer plastic runners that are 2 inches wide. Casing insulators shall be specifically designed for the intended purpose and sized in accordance with the manufacturer's recommendations. The number of casing spacers and the distance between them shall be in accordance with the recommendations of the manufacturer not to exceed a maximum of 10'. A minimum of three casing spacers (one at each end and one at the midpoint of the

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Utility Construction

pipe) shall be required for each pipe length. The insulated casing spacers shall be sized to be capable of supporting the weight of the pipe filled with water.

Work, products, and execution shall comply with the requirements of the City of Shelby. Use steel pipe meeting an ASTM specification with the minimum yield strength of 35,000 psi. Use pipe that is circular in shape and straight in length.

Reinforced Concrete Thrust Collar

This item includes furnishing all new materials, equipment, labor and incidentals required to install reinforced concrete thrust collars, in accordance with the Drawings, detail No. 6.20 sheet UC-4, and Specifications.

Pay ItemPay UnitReinforced Concrete Thrust CollarEach

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Project: R-5849 UbO-1 County: CLEVELAND

PROJECT SPECIAL PROVISIONS

Utilities by Others

TGS Engineers

706 Hillsborough Street - Suite 200 Raleigh, NC 27603

General:

The following utility companies have facilities that will be in conflict with the construction of this project:

- A) Duke Energy Power Distribution
- B) Charter Communications CATV
- C) AT&T Communications
- D) City Of Shelby Sanitary Sewer
- E) City Of Shelby- Gas

The conflicting facilities of these concerns will be adjusted prior to the date of availability, unless otherwise noted and are therefore listed in these special provisions for the benefit of the Contractor. All utility work listed herein will be done by the utility owners. All utilities are shown on the plans from the best available information.

The Contractor's attention is directed to Article 105-8 of the 2012 Standard Specifications.

Utilities Requiring Adjustment:

Utility relocations are shown on the Utilities by Others Plans.

- A) Duke Energy Power Distribution
- 1) Duke Energy will not be relocated by date of availability. They have indicated relocation should be completed by January 31, 2018.
- 2) Contact person for Duke Energy is Mike Fite at 704-302-7863
- B) Charter Communications CATV
- 1) Charter Communications will not be relocated by date of availability. They indicated relocations should be completed within 60 days after Duke Energy relocates or by March 31, 2018.
- 2) Contact person for Charter Communications is Jason Paysour at 980-722-7112

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PROJECT SPECIAL PROVISIONS Utilities by Others

C) AT&T - Communications

- 1) AT&T will not be relocated by date of availability. They indicated relocations should be completed within 60 days after Duke Energy and Charter Communications relocates or by May 31, 2018.
- 2) Contact person for AT&T is Jim Estridge at 704-804-3726
- D) City Of Shelby Sanitary Sewer
- 1) City Of Shelby will not be relocated by date of availability. They indicated relocations should be completed by April 1, 2018.
- 2) Contact person for City Of Shelby is David Hux at 704-484-6840
- E) City Of Shelby Gas
- 1) City Of Shelby will not be relocated by date of availability. The relocation will start by April 1, 2018 and they have indicated relocations should be completed by May 31, 2018.
- 2) Contact person for City of Shelby is Julie McMurry at 704-484-6840

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PERMITS

The Contractor's attention is directed to the following permits, which have been issued to Clearwater Paper or NCDOT by the authority granting the permit.

| <u>PERMIT</u> | AUTHORITY GRANTING THE PERMIT |
|--------------------------------|---|
| Dredge and Fill and/or | U. S. Army Corps of Engineers |
| Work in Navigable Waters (404) | |
| Water Quality (401) | Division of Environmental Management, DEQ |
| | State of North Carolina |
| Erosion and Sediment Control | Division of Environmental Management, DEQ |
| Permit | 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 restricted waters, wetlands or buffer zones, provided that activities outside those areas is done in such a manner as to not affect the restricted waters, wetlands or buffer zones.



ROY COOPER Governor MICHAEL S. REGAN Secretary S. JAY ZIMMERMAN Director

September 25, 2017

DWR # 2010-0899 v4 Cleveland County

Clearwater Paper Corp Attn: Brian Hoaglund 601 W Riverside Ave, Suite 1100 Spokane, WA 99201

Subject: Approval of Individual 401 Water Quality Certification with Additional Conditions

Clearwater Paper Corp Expansion

USACE Action ID. No. SAW-2014-00061

Dear Mr. Hoaglund:

Attached hereto is a copy of Certification No. WQC004122 issued to Brian Hoaglund and Clearwater Paper Corp., dated September 20, 2017. This Certification replaces the Certification issued on July 18, 2017. Please note that you should get any other federal, state or local permits before proceeding with the subject project, including those required by (but not limited to) Sediment and Erosion Control, Non-Discharge, and Water Supply Watershed regulations.

This approval and its conditions are final and binding unless contested. This Certification can be contested as provided in General Statute 150B by filing a written petition for an administrative hearing to the Office of Administrative Hearings (hereby known as OAH) within sixty (60) calendar days.

A petition form may be obtained from the OAH at http://www.ncoah.com/ or by calling the OAH Clerk's Office at (919) 431-3000 for information. A petition is considered filed when the original and one (1) copy along with any applicable OAH filing fee is received in the OAH during normal office hours (Monday through Friday between 8:00am and 5:00pm, excluding official state holidays).

The petition may be faxed to the OAH at (919) 431-3100, provided the original and one copy of the petition along with any applicable OAH filing fee is received by the OAH within five (5) business days following the faxed transmission.

Clearwater Paper Corp WQC004122 2010-0899 v4 September 20, 2017

Mailing address for the OAH:

If sending via US Postal Service:

If sending via delivery service (UPS, FedEx,

etc):

Office of Administrative Hearings 6714 Mail Service Center Raleigh, NC 27699-6714 Office of Administrative Hearings 1711 New Hope Church Road Raleigh, NC 27609-6285

One (1) copy of the petition must also be served to DENR:

William F. Lane, General Counsel
Department of Environment and Natural Resources
1601 Mail Service Center
Raleigh, NC 27699-1601

Unless such a petition is filed, this Certification shall be final and binding.

This certification completes the review of the Division under section 401 of the Clean Water Act and 15A NCAC 02H .0500. Contact Sue Homewood at 336-8776-9693 or sue.homewood@ncdenr.gov or Alan Johnson at 704-235-2200 or alan.johnson@ncdenr.gov if you have any questions or concerns.

Sincerely,

Karen Higgins, Supervisor 401 & Buffer Permitting Branch

cc: Jeff Richardson, Cleveland County, PO Box 1210 Shelby NC 28151

Clement Riddle, ClearWater Environmental (via email)

David Shaeffer, USACE Charlotte Regulatory Field Office (via email)

Todd Bowers, EPA, (via email)

DWR MRO 401 file

DWR 401 & Buffer Permitting Unit file

Filename: 100899v4ClearwaterPaper(Cleveland)_401_IC_MOD

NORTH CAROLINA 401 WATER QUALITY CERTIFICATION

CERTIFICATION # WQC004122 is issued in conformity with the requirements of Section 401, Public Laws 92-500 and 95-217 of the United States and subject to North Carolina's Regulations in 15A NCAC 02H .0500, Brian Hoaglund and Clearwater Paper Corp., who have authorization for the impacts listed below, as described within your application received by the N.C. Division of Water Resources (Division) on February 3, 2017 and subsequent information on May 5, 2017, June 7, 2017, June 12 2017, and June 13, 2017; by Public Notice issued by the U. S. Army Corps of Engineers and received by the Division on February 17, 2017; and by the modification request received on August 28, 2017.

The State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of the Public Laws 92-500 and PL 95-217 if conducted in accordance with the application, the supporting documentation, and conditions hereinafter set forth.

This approval requires you to follow the conditions listed in the certification below.

Conditions of Certification:

 The following impacts are hereby approved provided that all of the other specific and general conditions of the Certification are met. No other impacts are approved, including incidental impacts. [15A NCAC 02B .0506(b)(c)

| Type of Impact | Amount Approved (units) Permanent | Amount Approved (units) Temporary |
|-----------------------------|-----------------------------------|---|
| Stream | | |
| Previous Impact (perennial) | 104 (linear feet) | 0 (linear feet) |
| Site 1a & b (perennial) | 298 (linear feet) | 26 (linear feet) |
| Site 2 (perennial) | 737 (linear feet) | 94 (linear feet) |
| Site 3 (perennial) | 410 (linear feet) | 44 (linear feet) |
| Site 3 (intermittent) | 63 (linear feet) | 0 (linear feet) |
| Utility Impacts to Streams | | |
| Site US3 | 0 (linear feet) | 20 (linear feet) |
| Site US7 | 0 (linear feet) | 20 (linear feet) |
| Site US8 | 0 (linear feet) | 20 (linear feet) |
| Site US10 | 0 (linear feet) | 20 (linear feet) |
| 404/401 Wetlands | | |
| Site 4 | 0.03 (acres) | 0 (acres) |
| Site UW1 (utility impact) | 0 (acres) | 0.001 (acres) |

| Type of Impact | Amount Approved (units) Permanent | Amount Approved (units) Temporary |
|---------------------------|-----------------------------------|-----------------------------------|
| Site UW2 (utility impact) | 0 (acres) | 0.02 (acres) |
| Site UW3 (utility impact) | 0 (acres) | 0.0001 (acres) |
| Site UW4 (utility impact) | 0 (acres) | 0.01 (acres) |

2. Mitigation must be provided for the proposed impacts as specified in the table below. The Division has received an acceptance letter from the Division of Mitigation Services (DMS) to meet this mitigation requirement. Until the DMS receives and clears your payment, and proof of payment has been provided to this Office, no impacts specified in this Authorization Certificate shall occur. For accounting purposes, this Authorization Certificate authorizes payment to the DMS to meet the following compensatory mitigation requirement [15A NCAC 02H .0506 (b)(6)]:

| | Compensatory Mitigation Required | River & Sub- basin Number |
|------------------|-------------------------------------|------------------------------|
| Perennial Stream | 1445 (feet) | Broad 03050105 |

- 3. The Division approves the SMP consisting of two (2) wet detention basin and one (1) dry detention basin for Phase 2S, the dry detention basin is to be converted to a wet detention basin for Phase 3S, and all associated stormwater conveyances, inlet and outlet structures, and grading and drainage patterns depicted on plan sheets dated May 31, 2017, which are incorporated by reference and are enforceable by the Division. The following conditions also apply [15A NCAC 02H .0506(b)(5)]:
 - i. The maximum allowable drainage area for the approved wet detention basin 1 shall be 3,226,936 square feet and the maximum allowable built-upon area within that drainage area shall be 2,153,605 square feet. Any changes to these maximum areas shall require the applicant to submit and receive approval for a revised stormwater management plan by the Division. [15A NCAC 02H .0506(b)(5)]
 - ii. The maximum allowable drainage area for the approved wet detention basin 2 shall be 1,507,423 square feet and the maximum allowable built-upon area within that drainage area shall be 1,210,229 square feet. Any changes to these maximum areas shall require the applicant to submit and receive approval for a revised stormwater management plan by the Division. [15A NCAC 02H .0506(b)(5)]

- iii. The maximum allowable drainage area for the approved wet detention basin 3 shall be 2,120,931 square feet and the maximum allowable built-upon area within that drainage area shall be 1,729,768 square feet. Any changes to these maximum areas shall require the applicant to submit and receive approval for a revised stormwater management plan by the Division. [15A NCAC 02H .0506(b)(5)]
- iv. The maximum allowable drainage area for the approved dry detention basin 3 (to be converted to wet detention basin 3 for Phase 3S shall be 2,120,931 square feet and the maximum allowable built-upon area within that drainage area shall be 157,025 square feet. Any changes to these maximum areas shall require the applicant to submit and receive approval for a revised stormwater management plan by the Division. [15A NCAC 02H .0506(b)(5)]
- v. The footprint of all stormwater management devices as well as an additional 10-foot wide area on all sides of the devices shall be located in either: public rights-of-way; dedicated common areas; or recorded easement areas. The final plats for the project showing all such rights-of-way, common areas and easement areas shall be in accordance with the approved plans. [15A NCAC 02H .0506(b)(5)]
- vi. The approved SMP shall be constructed and operational before any permanent building or other structure is occupied at the site. [15A NCAC 02H .0506(b)(5)]
- vii. The SMP may not be modified without prior written authorization from the Division. [15A NCAC 02H .0506(b)(5)]
- viii. Maintenance activities for the three basins shall be performed in accordance with the notarized O&M agreements signed by Mr. Rodney Powell of Clearwater Paper Corp on June 14, 2017. The O&M agreement shall transfer with the sale of the land or transfer of ownership/responsibility for the BMP facility. The Division shall be notified promptly of every transfer. [15A NCAC 02H .0506(b)(5)]
- ix. The applicant and/or authorized agent shall provide a completed Certificate of Completion form to the Division within thirty (30) days of completion of Phase 2S and shall submit a Certificate of Completion form to the Division upon conversion of the dry detention basin to a wet detention basin for Phase 3S of the project (available at https://edocs.deq.nc.gov/Forms/Certificate-of-Completion). [15A NCAC 02H .0506(b)(5)]
- The project shall comply with 15A NCAC 02T .0301 and all other State, Federal and local sewer system regulations. [15A NCAC 02T .0301]
- Construction corridors in wetlands and across stream channels shall be minimized to the maximum extent practicable and shall not exceed 50 feet wide. [15A NCAC 02H .0506 (b)(2) and (c)(2)]

For construction corridors in wetlands and across stream channels, stumps shall be grubbed only as needed to install the utility and remaining stumps shall be cut off at grade level. The general stripping of topsoil within wetlands along the construction corridor is not permitted.

- Permanent maintained access corridors in wetlands and across stream channels shall be restricted to the minimum width practicable and shall not exceed 20 feet wide for all sewer lines except at manhole locations. 15-foot by 15-foot perpendicular vehicle turnarounds shall be allowed in access corridors but must be spaced at least 500 feet apart. [15A NCAC 02H .0506 (b)(2) and (c)(2)]
- 7. For all utility lines constructed within wetlands, an anti-seep collar shall be placed at the downstream (utility line gradient) wetland boundary and every 150 feet up the gradient until the utility exits the wetland. Anti-seep collars may be constructed with class B concrete, compacted clay, PVC pipe, or metal collars. Wetland crossings that are directionally drilled, and perpendicular wetland crossings that are open cut and less than 150 feet long do not require anti-seep collars. The compacted clay shall have a specific infiltration of 1 X 10⁻⁵ cm/sec or less. A section and plan view diagram is attached for the anti-seep collars. [15A NCAC 02H .0506 (b)(4) and (c)(4)]

The following specifications shall apply to class B concrete:

- a. Minimum cement content, sacks per cubic yard with rounded course aggregate 5.0
- b. Minimum cement content, sacks per cubic yard with angular course aggregate 5.5
- c. Maximum water-cement ratio gallons per sack 6.8
- d. Slump range 2" to 4"
- e. Minimum strength 28 day psi 2,500
- 8. The applicant shall have a specific plan for restoring wetland contours. Any excess material will be removed to a high ground disposal area. [15A NCAC 02H .0506 (b)(2) and (c)(2)]
 - The mixing of topsoil and subsoils within the wetlands along utility corridors shall be minimized to the greatest extent practical. During excavation, the soils shall be placed on fabric to minimize impacts whenever possible. Topsoil excavated from utility trenches will be piled separately from subsoils and will be backfilled into the trench only after the subsoils have been placed and compacted.
- 9. The Permittee shall visually inspect the stream channel in the immediate vicinity of the aerial sewer crossing at station 94+00 (sheet C-106) semi-annually for signs of stream instability. Photo documentation shall be taken of the channel upstream and downstream of the aerial crossing during each inspection and shall be made available to the Division upon request.
- 10. No waste, spoil, solids, or fill of any kind shall occur in wetlands, waters, or riparian areas beyond the footprint of the impacts depicted in the application for this project. All construction activities, including the design, installation, operation, and maintenance of sediment and erosion control Best Management Practices shall be performed so that no violations of state water quality standards, statutes, or rules occur. Approved plans and specifications for this project are incorporated by reference and are enforceable parts of this permit. [15A NCAC 02H .0501 and .0502]

- 11. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices. If applicable, the project must comply with the specific conditions and requirements of the NPDES Construction Stormwater Permit issued to the site and the following requirements [15A NCAC 02H .0506(b)(3) and (c)(3)]:
 - a. Design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal or exceed the requirements specified in the most recent version of the North Carolina Sediment and Erosion Control Manual. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
 - b. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the North Carolina Surface Mining Manual.
 - c. Reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.
 - d. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site at all times.
- 12. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized by this Certification. [15A NCAC 02H .0501 and .0502]
- 13. An NPDES Construction Stormwater Permit (NCG010000) is required for construction projects that disturb one (1) or more acres of land. The NCG010000 Permit allows stormwater to be discharged during land disturbing construction activities as stipulated in the conditions of the permit. If the project is covered by this permit, full compliance with permit conditions including the erosion & sedimentation control plan, inspections and maintenance, self-monitoring, record keeping and reporting requirements is required. [15A NCAC 02H .0506(b)(5) and (c)(5)]
- 14. All work in or adjacent to stream waters shall be conducted so that the flowing stream does not come in contact with the disturbed area. Approved best management practices from the most current version of the NC Sediment and Erosion Control Manual, or the NC DOT Construction and Maintenance Activities Manual, such as sandbags, rock berms, cofferdams, and other diversion structures shall be used to minimize excavation in flowing water. [15A NCAC 02H .0506(b)(3) and (c)(3)]
- 15. If concrete is used during the construction, then all necessary measures shall be taken to prevent direct contact between uncured or curing concrete and waters of the state. Water that inadvertently contacts uncured concrete shall not be discharged to waters of the state due to the potential for elevated pH and possible aquatic life/fish kills. [15A NCAC 02B .0200]

- 16. Culverts required for this project shall be installed in such a manner that the original stream profiles are not altered and to allow for aquatic life movement during low flows. Existing stream dimensions (including the cross section dimensions, pattern and longitudinal profile) must be maintained above and below locations of each culvert. [15A NCAC 02H .0506(b)(2) and (c)(2)]
 - Placement of culverts and other structures in waters, streams must be below the elevation of the streambed by one (1) foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life.
- 17. All temporary impact areas (including temporary impacts associated with permanent impact areas) shall be returned to natural conditions within 60 calendar days of the determination that the temporary impact is no longer necessary. The impacted areas shall be restored to original grade, including each stream's original cross sectional dimensions, plan form pattern, and longitudinal bed and bed profile, and the various sites shall be stabilized with natural woody vegetation (except approved maintenance areas) and restored to prevent erosion. [15A NCAC 02H .0506(b)(2) and (c)(2)]
- 18. All temporary pipes/culverts/riprap pads etc, shall be installed in all streams as outlined in the most recent edition of the North Carolina Sediment and Erosion Control Planning and Design Manual so as not to restrict stream flow or cause dis-equilibrium. [15A NCAC 02H .0506(b)(2) and (c)(2)]
- 19. Any riprap required for proper culvert placement, stream stabilization, or restoration of temporarily disturbed areas shall be restricted to the area directly impacted by the approved construction activity. All riprap shall be buried and/or "keyed in" such that the original stream elevation and streambank contours are restored and maintained. Placement of riprap or other approved materials shall not result in de-stabilization of the stream bed or banks upstream or downstream of the area. [15A NCAC 02H .0506(b)(2)]
- 20. Any riprap used for stream stabilization shall be of a size and density to prevent movement by wave action, current action, or stream flows and consist of clean rock or masonry material free of debris or toxic pollutants. Riprap shall not be installed in the streambed except in specific areas required for velocity control and to ensure integrity of bank stabilization measures. [15A NCAC 02H .0506(b)(2)]

Clearwater Paper Corp WQC004122 2010-0899 v4 September 20, 2017

- 21. Deed notifications or similar mechanisms shall be placed on all retained jurisdictional wetlands, waters and protective buffers within the project boundaries in order to assure compliance for future wetland, water and buffer impact. These mechanisms shall be put in place at the time of recording of the property, or of individual lots, whichever is appropriate. A sample deed notification can be found online: http://ncdenr.s3.amazonaws.com/s3fs-public/Water%20Quality/Surface%20Water%20Protection/401/Certs%20and%20Permits/sample deed notification.pdf. The text of the sample deed notification may be modified as appropriate to suit to this project. Documentation of deed notifications shall be provided to the Division upon request. [15A NCAC 02H .0501 and .0502]
- 22. This Certification does not relieve the applicant of the responsibility to obtain all other required Federal, State, or Local approvals before proceeding with the project.
- 23. Brian Hoaglund and Clearwater Paper Corp. shall conduct construction activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with section 303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. [15A NCAC 02B .0200] If the Division determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the Division may reevaluate and modify this Certification. Before modifying the Certification, the Division shall notify Brian Hoaglund and Clearwater Paper Corp. and the U.S. Army Corps of Engineers, provide public notice in accordance with 15A NCAC 02H .0503 and provide opportunity for public hearing in accordance with 15A NCAC 02H .0504. Any new or revised conditions shall be provided to Brian Hoaglund and Clearwater Paper Corp. in writing, shall be provided to the U.S. Army Corps of Engineers for reference in any Permit issued pursuant to Section 404 of the Clean Water Act, and shall also become conditions of the 404 Permit for the project.
- 24. This approval is for the purpose and design described in your application and as described in the Public Notice. The plans and specifications for this project are incorporated by reference and are an enforceable part of the Certification. If you change your project, you must notify the Division and you may be required to submit a new application package with the appropriate fee. If the property is sold, the new owner must be given a copy of this Certification and is responsible for complying with all conditions. Any new owner must notify the Division and request the Certification be issued in their name. [15A NCAC 02H .0501 and .0502]
- 25. The applicant and/or authorized agent shall provide a completed Certificate of Completion Form to the DWR 401 & Buffer Permitting Unit within ten days of project completion (available at: https://edocs.deg.nc.gov/Forms/Certificate-of-Completion). [15A NCAC 02H .0502(f)]

Clearwater Paper Corp WQC004122 2010-0899 v4 September 20, 2017

- 26. This Certification neither grants nor affirms any property right, license, or privilege in any waters, or any right of use in any waters. This Certification does not authorize any person to interfere with the riparian rights, littoral rights, or water use rights of any other person and this Certification does not create any prescriptive right or any right of priority regarding any usage of water. This Certification shall not be interposed as a defense in any action respecting the determination of riparian or littoral rights or other rights to water use. No consumptive user is deemed by virtue of this Certification to possess any prescriptive or other right of priority with respect to any other consumptive user regardless of the quantity of the withdrawal or the date on which the withdrawal was initiated or expanded.
- 27. This Certification grants permission to the Director, an authorized representative of the Director, or DWR staff, upon the presentation of proper credentials, to enter the property during normal business hours. [15A NCAC 02H .0502(e)]

This approval to proceed with your proposed impacts or to conduct impacts to waters as depicted in your application shall expire upon expiration of the 404 Permit. The conditions in effect on the date of issuance shall remain in effect for the life of the project, regardless of the expiration date of this Certification. [15A NCAC 02H .0507(d)(2) and 15A NCAC 02H .0506]

Non-compliance with or violation of the conditions herein set forth may result in revocation of this Certification and may also result in criminal and/or civil penalties.

This the 25th day of September, 2017

Karen Higgins, Supervisor

401 & Buffer Permitting Branch

KAH/slh

WQC004122



DEPARTMENT OF THE ARMY

WILMINGTON DISTRICT, CORPS OF ENGINEERS 69 DARLINGTON AVENUE WILMINGTON, NORTH CAROLINA 28403-1343

September 29, 2017

Regulatory Division

Action ID: SAW-2010-00061

Mr. Rodney E. Powell Clearwater Paper 671 Washburn Switch Road Shelby, North Carolina 28150

Dear Ms. Gualtieri:

In accordance with your written request on August 29, 2016, and the ensuing administrative record, enclosed are two copies of a permit to place fill material in 1,653 linear feet of stream and 0.03 acre of wetlands to facilitate the expansion of the Clearwater Paper Shelby facility.

You should acknowledge that you accept the terms and conditions of the enclosed permit by signing and dating each copy in the spaces provided ("Permittee" on page 3). Your signature, as permittee, indicates that, as consideration for the issuance of this permit, you voluntarily accept and agree to comply with all of the terms and conditions of this permit. All pages of both copies of the signed permit with drawings and exhibits should then be returned to this office for final authorization. A self-addressed envelope is enclosed for your convenience.

Title 33, Part 325.1(f), of the Code of Federal Regulations reads, in part, that, "A \$10 fee will be charged for permit applications when the work is noncommercial in nature and provides personal benefits that have no connection with a commercial enterprise...", and "A fee of \$100 will be charged for permit applications when the planned or ultimate purpose of the project is commercial or industrial in nature and is in support of operations that charge for the production, distribution, or sale of goods or services." As your application fits the second category, you are requested to remit your check for \$100, made payable to the Finance and Accounting Officer, USAED, Wilmington. The check should accompany the signed and dated copies of your permit.

This correspondence contains a proffered permit for the above described project. If you object to this decision, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and request for appeal (RFA) form. If you request to appeal this decision you must submit a completed RFA form to the District Commander, Wilmington District at the following address:

Col. Robert J. Clark
Department of the Army
US AED, Wilmington District
Corps of Engineers
69 Darlington Avenue
Wilmington, North Carolina 28403

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the District Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by November 29, 2017.

It is not necessary to submit an RFA form to the District Office if you do not object to the decision in contained in this correspondence.

After the permit is authorized in this office, the original copy will be returned to you and the duplicate copy will be permanently retained in this office. Should you have questions, please contact the Charlotte Regulatory Field Office at telephone (704) 510-1437.

FOR THE COMMANDER

Sincerely,

Chief,

Scott Jone

Asheville/Charlotte Regulatory Field Offices

Enclosures

cc (with Special Conditions):

Clearwater Environmental Consultants, Inc. Mr. R. Clement Riddle, P.W.S 224 South Grove Street, Suite F Hendersonville, North Carolina 28792

| NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL | | | |
|---|-----------------------------|-------------------|--|
| Applicant: Clearwater Paper Corporation, Rodney E. | File Number: SAW-2010-00061 | Date: 9/29/2017 | |
| <u>Powell</u> | | | |
| Attached is: | | See Section below | |
| INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission) | | A | |
| PROFFERED PERMIT (Standard Permit or Letter of permission) | | В | |
| PERMIT DENIAL | | C | |
| APPROVED JURISDICTIONAL DETERMINATION | ON | D | |
| PRELIMINARY JURISDICTIONAL DETERMINA | TION | E | |

SECTION 1 - The following identifies your rights and options regarding an administrative appeal of the above decision.

Additional information may be found at or http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits.aspx
or the Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all
 rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the
 permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final
 authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
 signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all
 rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the
 permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein,
 you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of
 this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days
 of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the
 date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers
 Administrative Appeal Process by completing Section II of this form and sending the form to the district engineer. This form
 must be received by the division engineer within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

| | S TO AN INITIAL PROFFERED PERMIT your reasons for appealing the decision or your objections to an initial och additional information to this form to clarify where your reasons or |
|---|---|
| record of the appeal conference or meeting, and any supple clarify the administrative record. Neither the appellant nor However, you may provide additional information to clarif record. | a review of the administrative record, the Corps memorandum for the amental information that the review officer has determined is needed to the Corps may add new information or analyses to the record. By the location of information that is already in the administrative |
| POINT OF CONTACT FOR QUESTIONS OR INFORMA | |
| If you have questions regarding this decision and/or the | If you only have questions regarding the appeal process you may |
| appeal process you may contact: | also contact: |
| District Engineer, Wilmington Regulatory Division Attn: David L. Shaeffer | Mr. Jason Steele, Administrative Appeal Review Officer CESAD-PDO |
| Asheville Regulatory Office | U.S. Army Corps of Engineers, South Atlantic Division |
| U.S Army Corps of Engineers | 60 Forsyth Street, Room 10M15 |
| 151 Patton Avenue, Room 208 | Atlanta, Georgia 30303-8801 |
| Asheville, North Carolina 28801 | Phone: (404) 562-5137 |
| RIGHT OF ENTRY: Your signature below grants the right | it of entry to Corps of Engineers personnel, and any government |
| | ring the course of the appeal process. You will be provided a 15 day |
| The start of the start of the special start of the | Date: Telephone number: |

For appeals on Initial Proffered Permits send this form to:

Signature of appellant or agent.

District Engineer, Wilmington Regulatory Division, Attn: David L. Shaeffer, 69 Darlington Avenue, Wilmington, North Carolina 28403

For Permit denials, Proffered Permits and Approved Jurisdictional Determinations send this form to:

Division Engineer, Commander, U.S. Army Engineer Division, South Atlantic, Attn: Mr. Jason Steele, Administrative Appeal Officer, CESAD-PDO, 60 Forsyth Street. Room 10M15, Atlanta, Georgia 30303-8801 Phone: (404) 562-5137

DEPARTMENT OF THE ARMY PERMIT

Permittee Clearwater Paper, Corporation, Rodney E. Powell

Permit No. SAW-2010-00061

Issuing Office CESAW-RG-C

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: This permit authorizes the grading and placement of fill material in 1,733 linear feet of stream and 0.062 acre of wetlands to facilitate the expansion of the Clearwater Paper Shelby facility. The project would result in the loss of 1,653 linear feet of stream and 0.03 acre of wetlands and temporary impacts to 80 linear feet of stream and 0.032 acre of wetlands. The proposed project would involve the construction of a 2.5 million square feet manufacturing and warehouse facility. The additional manufacturing space would house a tissue machine which converts raw material to parent rolls of tissue; converting equipment which converts rolls into consumer products such as toilet paper, paper towels, facial tissue, and napkins; a parent roll storage warehouse; and a bale storage warehouse. The project also includes warehouse space for finished goods and an entrance road to access the facility.

Project Location: The project site is located at 662 Washburn Switch Road in Shelby, Cleveland County, North Carolina. To access the site from Asheville, take I-26 East to Exit 67 (US Highway 74 to Columbus/Rutherfordton/NC Highway 108). Continue onto US Highway 74 and travel approximately 37 miles. Turn left on to Washburn Switch Road. The proposed Clearwater Paper facility is on the east side of the railroad tracks and across from the existing Clearwater Paper facility. In general, the site is bordered to the north by an unnamed tributary to Brushy Creek, to the east by Brushy Creek, to the west by railroad tracks, and to the south by an overhead transmission line.

Permit Conditions:

General Conditions:

- 1. The time limit for completing the work authorized ends on <u>September 29, 2022</u> If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
- 2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
- 3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
- If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified
 in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it
 contains such conditions.
- 6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit,

Special Conditions:

SEE ATTACHED SPECIAL CONDITIONS

Further Information:

- 1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:
 - () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
 - (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
 - () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 2. Limits of this authorization.
 - a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.
 - b. This permit does not grant any property rights or exclusive privileges.
 - c. This permit does not authorize any injury to the property or rights of others.
 - d. This permit does not authorize interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:
- Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
 - d. Design or construction deficiencies associated with the permitted work

- e. Damage claims associated with any future modification, suspension, or revocation of this permit.
- 4 Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this permit.
 - The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
 - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit, Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

| Page | Page

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferred sign and date below.

(TRANSFEREE) (DATE)

Special condition 1: All work authorized by this permit must be performed in strict compliance with the attached plans Sheets 6-6.2 dated August 31, 2017 (facility plans), Sheets 1-5 dated August 24, 2017 (roadway crossing), and Figures 7-8, Figure 8 Sheet 1, Figure 8 Sheet 2, Figure 8A, and Figures 9-10 (utility lines) dated January 27, 2017, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

Rationale: This condition ties the permittee's project plans to the permit.

Special condition 2: Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

Special condition 3: Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

Rationale: Special Conditions 2 and 3 clarify that only the impacts to waters of the US specified by the project plans (specified in Special Condition 1) are approved by this permit.

Special condition 4: All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality Resources at (919) 733-3300 or (800) 858-0368 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

Rationale: This condition addresses potential indirect impacts to waters of the U.S. from mechanized equipment fluids.

Special condition 5: All necessary precautions and measures will be implemented so that any activity will not kill, injure, capture, harass, or otherwise harm any protected federally listed species. While accomplishing the authorized work, if the permittee discovers or observes a damaged or hurt listed endangered or threatened species, the District Engineer will be immediately notified to initiate the required Federal coordination.

the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

Special condition 11: The permittee shall remove all sediment and erosion control measures placed in wetlands or waters, and shall restore natural grades in those areas, prior to project completion.

Rationale: Special Conditions 12-13 address potential indirect impacts to waters of the U.S. from sedimentation and erosion as well as measures used for their control.

Special condition 12: The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

Rationale: This condition documents the permittee's responsibility to restore permitted impacts to their pre-project condition.

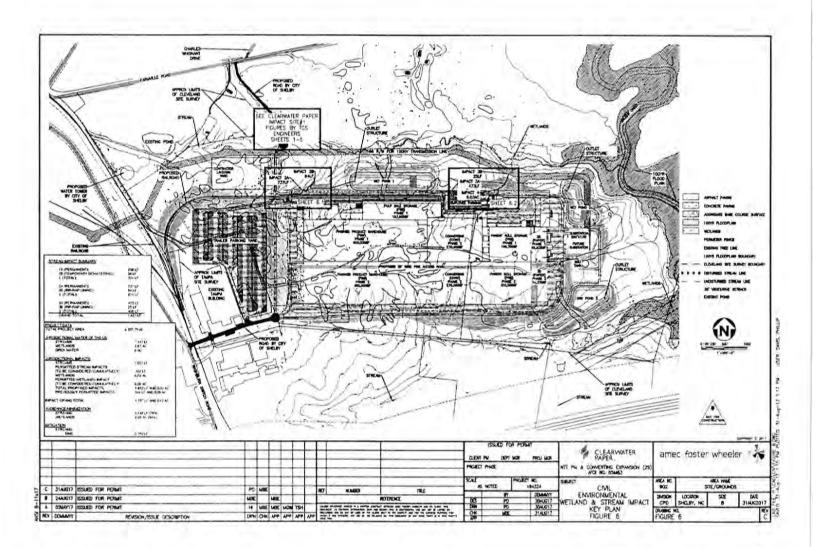
Special condition 13: All reports, documentation and correspondence required by the conditions of this permit shall be submitted to the following address: U.S. Army Corps of Engineers, Regulatory Division, Asheville Regulatory Field Office, c/o David L. Shaeffer, 151 Patton Avenute, Room 208, Asheville, North Carolina 28801, and by telephone at: 704-510-1437. The Permittee shall reference the following permit number, SAW-2010-00061, on all submittals.

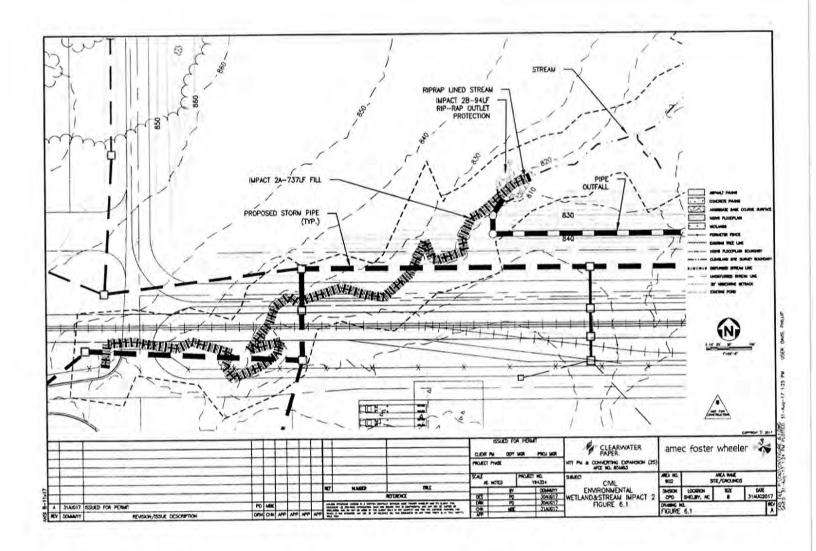
Special condition 14: Violations of these conditions or violations of Section 404 of the Clean Water Act must be reported in writing to the U.S. Army Corps of Engineers, Wilmington District within 24 hours of the permittee's discovery of the violation.

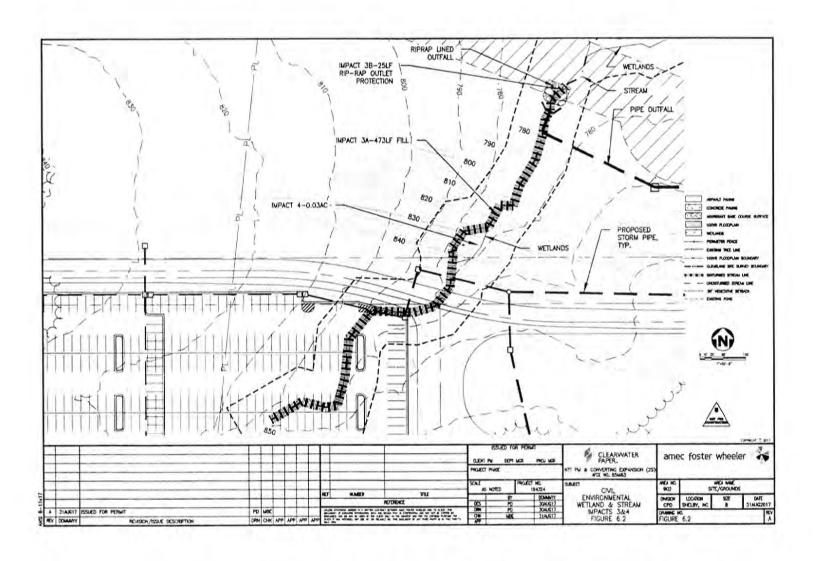
Rationale: Special Conditions 14-15 specify compliance reporting contacts and requirements.

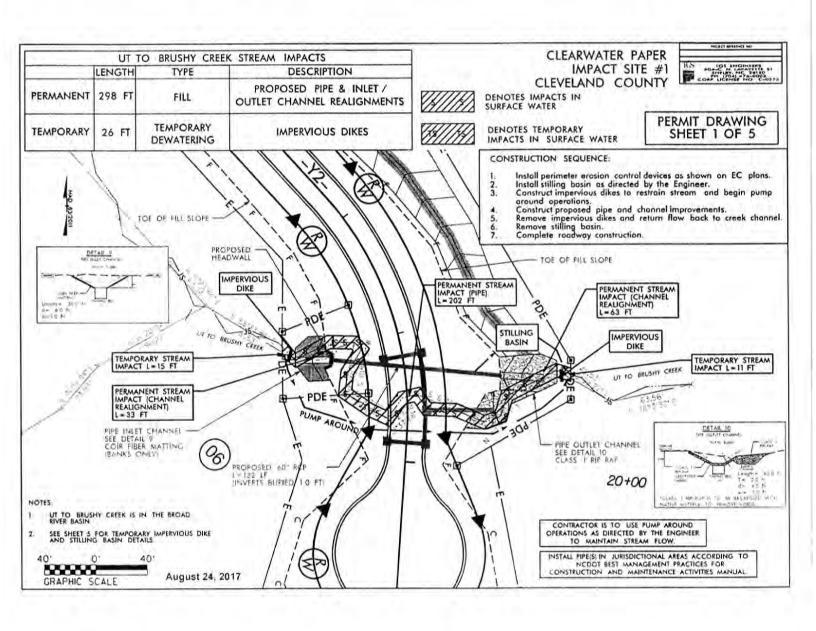
Special condition 15: A representative of the Corps of Engineers will periodically and randomly inspect the work for compliance with these conditions. Deviations from these procedures may result in an administrative financial penalty and/or directive to cease work until the problem is resolved to the satisfaction of the Corps.

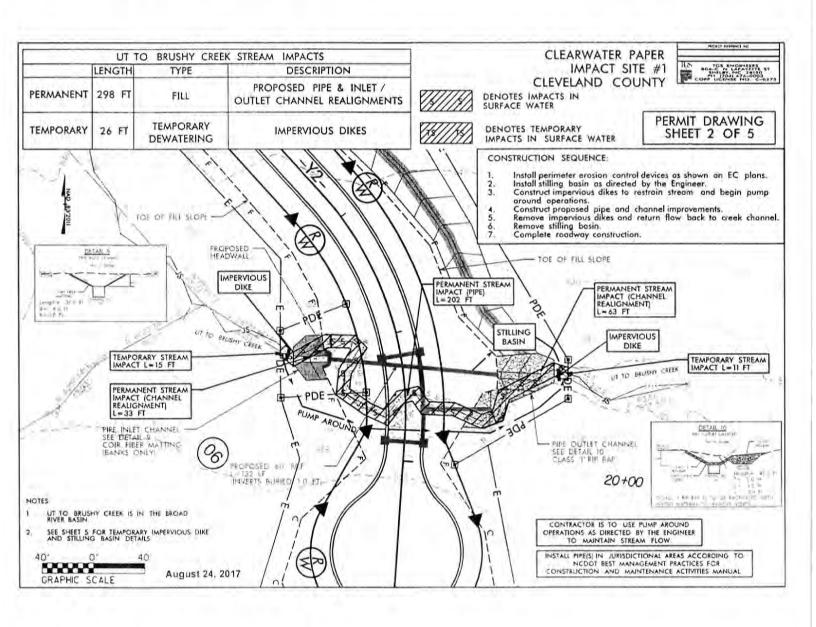
Rationale: This condition document's the Corps' responsibility to conduct compliance inspections as well as potential measures to assure compliance with permit conditions.

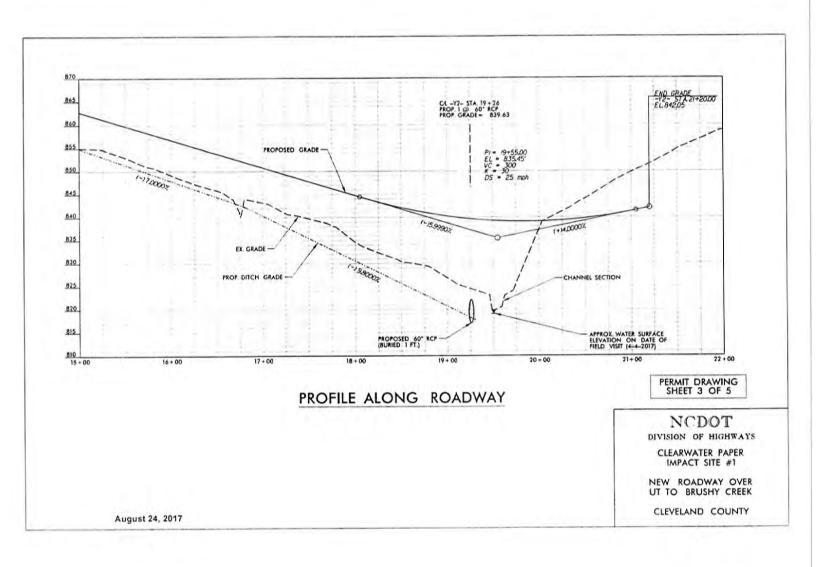


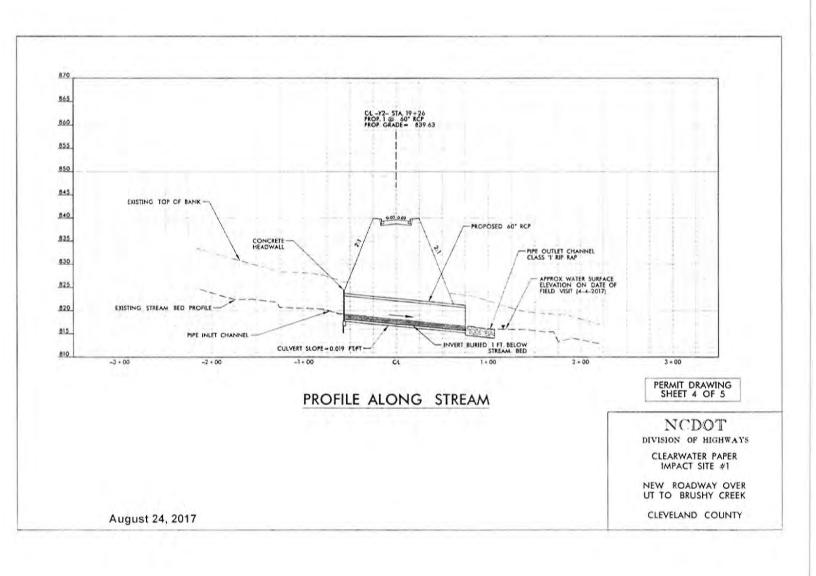


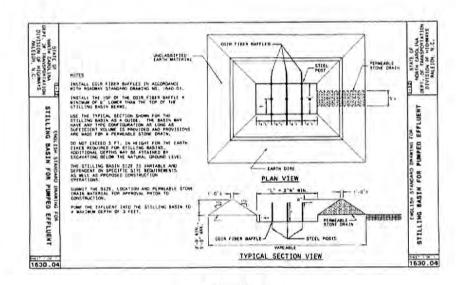


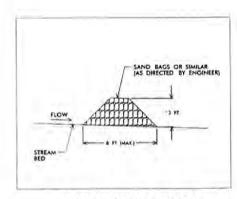












TEMPORARY IMPERVIOUS DIKE DETAIL

PERMIT DRAWING SHEET 5 OF 5

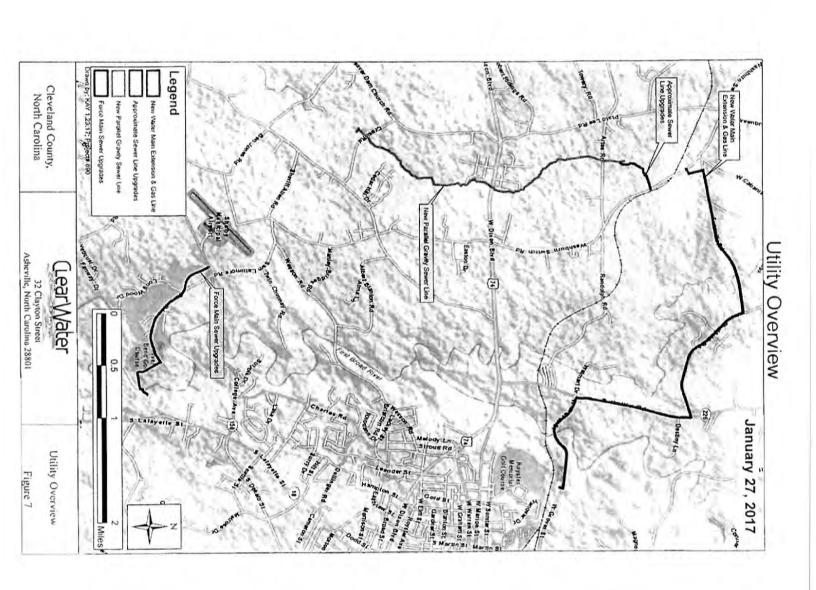
NCDOT
DIVISION OF HIGHWAYS
CLEARWATER PAPER
IMPACT SITE #1

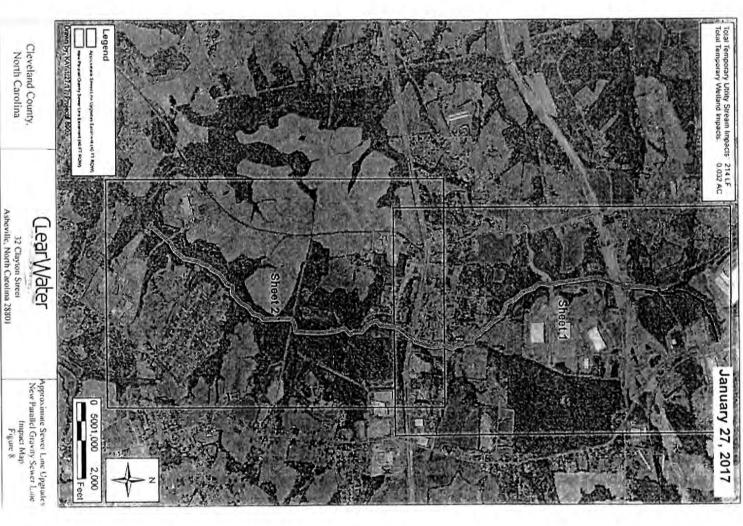
NEW ROADWAY OVER UT TO BRUSHY CREEK

CLEVELAND COUNTY

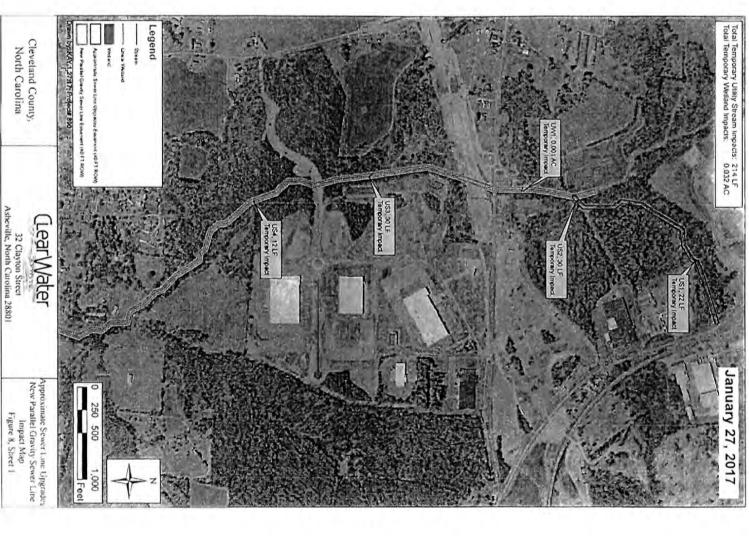
STILLING BASIN DETAIL

August 24, 2017

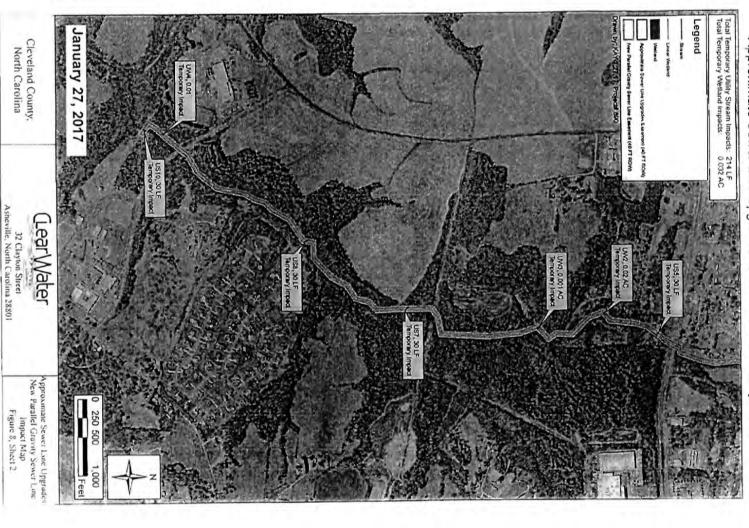




Approximate Sewer Line Upgrades & New Parallel Gravity Sewer Line



Approximate Sewer Line Upgrades & New Parallel Gravity Sewer Line



January 27, 2017

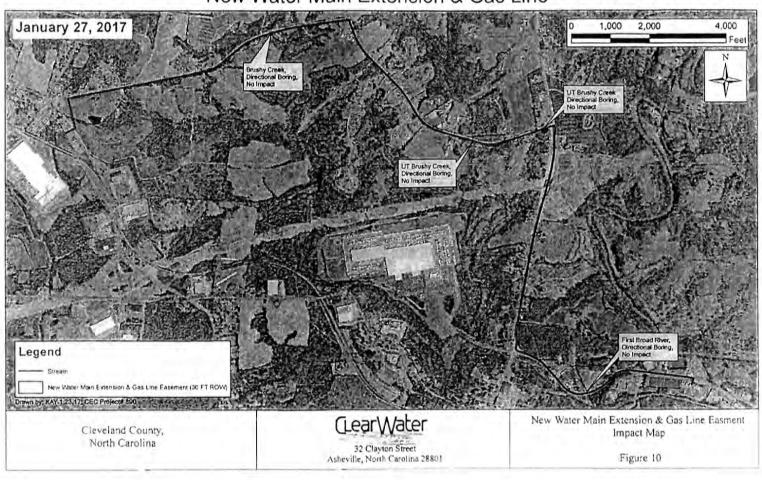
STREAMBANK RESTORATION DETAIL

NOT TO SCALE

Force Main S ver Upgrades



New Water Main Extension & Gas Line



STANDARD SPECIAL PROVISION AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

Z-2

(5-20-08)

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.

STANDARD SPECIAL PROVISION NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11) Z-3

Seed shall be sampled and tested by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory. When said samples are collected, the vendor shall supply an independent laboratory report for each lot to be tested. Results from seed so sampled shall be final. Seed not meeting the specifications shall be rejected by the Department of Transportation and shall not be delivered to North Carolina Department of Transportation warehouses. If seed has been delivered it shall be available for pickup and replacement at the supplier's expense.

Any re-labeling required by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory, that would cause the label to reflect as otherwise specified herein shall be rejected by the North Carolina Department of Transportation.

Seed shall be free from seeds of the noxious weeds Johnsongrass, Balloonvine, Jimsonweed, Witchweed, Itchgrass, Serrated Tussock, Showy Crotalaria, Smooth Crotalaria, Sicklepod, Sandbur, Wild Onion, and Wild Garlic. Seed shall not be labeled with the above weed species on the seed analysis label. Tolerances as applied by the Association of Official Seed Analysts will NOT be allowed for the above noxious weeds except for Wild Onion and Wild Garlic.

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the <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 <u>Weed</u> | Limitations per Lb. of Seed |
|---|----------------------------------|--|--|
| Blessed Thistle Cocklebur Spurred Anoda Velvetleaf | 4 seeds 4 seeds 4 seeds 4 seeds | Cornflower (Ragged Robin) Texas Panicum Bracted Plantain Buckhorn Plantain | 27 seeds 27 seeds 54 seeds 54 seeds |
| Morning-glory Corn Cockle | 8 seeds 10 seeds | Broadleaf Dock Curly Dock | 54 seeds 54 seeds |
| Wild Radish Purple Nutsedge Yellow Nutsedge | 12 seeds 27 seeds 27 seeds | Dodder Giant Foxtail Horsenettle | 54 seeds 54 seeds 54 seeds |
| Canada Thistle Field Bindweed Hedge Bindweed | 27 seeds 27 seeds 27 seeds | Quackgrass Wild Mustard | 54 seeds 54 seeds |

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes

both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

Exceptions may be made for minimum pure live seed allowances when cases of seed variety shortages are verified. Pure live seed percentages will be applied in a verified shortage situation. Those purchase orders of deficient seed lots will be credited with the percentage that the seed is deficient.

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

Minimum 85% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 83% pure live seed will not be approved.

Sericea Lespedeza Oats (seeds)

Minimum 80% pure live seed; maximum 1% total weed seed; maximum 2% total other crop; maximum 144 restricted noxious weed seed per pound. Seed less than 78% pure live seed will not be approved.

Tall Fescue (all approved varieties)

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)

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)".

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: $W = LD\sqrt{P} \div 148,000$

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, Emerald Ash Borer, And Other Noxious Weeds)

(3-18-03) (Rev. 12-20-16) Z-04a

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, 919-707-3730, or http://www.ncagr.gov/plantindustry/ 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, emerald ash borer, or other noxious weeds.

MINIMUM WAGES

(7-21-09)

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.

STATE: 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 2/16/2015) Z-6

"The North Carolina Department of Transportation, in accordance with the provisions of *Title VI of the Civil Rights Act of 1964* (78 Stat. 252) and the Regulations of the Department of Transportation (49 C.F.R., Part 21), issued pursuant to such act, hereby notifies all bidders that it will affirmatively insure that the contract entered into pursuant to this advertisement will be awarded to the lowest responsible bidder without discrimination on the ground of race, color, or national origin".

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 on federally-assisted and state-funded NCDOT-owned projects, 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 on Federal-aid highway construction contracts only. 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 | | | Regulations | |
| | | | FHWA | FTA |

| Race Color National Origin | An individual belonging to one of the accepted racial groups; or the perception, based usually on physical characteristics that a person is a member of a racial group Color of skin, including shade of skin within a racial group Place of birth. Citizenship is not a factor. Discrimination | 1 | the Civil the | CFR 21; ılar |
|------------------------------|---|---|---|------------------------|
| Origin | based on language or a person's accent is also covered. | Chinese Vietnamese, | | |
| Sex | Gender | Women and Men | Federal-Aid the Highway Educ | IX of ation ndmen 1972 |
| Age | Persons of any age | 21 year old person Age Discrimination Act of 1975 | | |
| Disability | Physical or mental impairment, permanent or temporary, or perceived. | Blind, alcoholic, para- amputee, epileptic, diabetic, arthritic | Section 504 of Rehabilitation Ac 1973; Americans Disabilities Act of 1 | et of with |

III. Pertinent Nondiscrimination Authorities

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;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your 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).

MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE NUMBER 11246)

1. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, see as shown on the attached sheet entitled "Employment Goals for Minority and Female participation".

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its effort to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project or the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

2. As used in this Notice and in the contract resulting from this solicitation, the "covered area" is the county or counties shown on the cover sheet of the proposal form and contract.

Z-7

ON-THE-JOB TRAINING

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

Description

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

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

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority 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.\

Training Classifications

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

Equipment Operators Office Engineers

Truck Drivers Estimators

Carpenters Iron / Reinforcing Steel Workers

Concrete Finishers Mechanics
Pipe Layers Welders

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

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

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

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

Records and Reports

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information as requested shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

Trainee Interviews

All trainees enrolled in the program 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.

STANDARD SPECIAL PROVISION

NAME CHANGE FOR NCDENR:

(1-19-16) Z-11

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.

| Contract No. | I | Rev. 7-25-17 |
|--------------|---|--------------|
| County | | |

STATE OF NORTH CAROLINA CLEVELAND COUNTY

BID BOND

| Principal: | | | | |
|--|---|--|--|--|
| • | Name of Principal Contractor | | | |
| Surety: | Name of Surety | | | |
| Contract Number: | County: | | | |
| Date of Bid: | | | | |
| <u> </u> | | | | |
| and SURETY above of five (5) percent of | named, are held and firmly boun of the total amount bid by the Prin o be made, we bind ourselves, ou | t, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) d unto the CLEVELAND COUNTY in the full and just sum acipal for the project stated above, for the payment of which r heirs, executors, administrators, and successors, jointly and | | |
| days after the opening CLEVELAND CO after written notice of faithful performance for the prosecution of accordance with the conditions and obliging makes a final determination the requirements seprovided in Article 1 may be required and | ng of the bids, or within such oth UNTY shall award a contract to the of award is received by him, prove of the contract and for the protes of the work. In the event the Prince provisions of Article 103-3 of ations of this Bid Bond shall remaination to either allow the bid to be is made to award the contract, to the form of the contract of the contract of the contract of the provide the required bonds were under the toprovide the required bonds were under the top of the contract of the contract of the contract of the contract of the provide the required bonds were under the contract of the contract | is: the Principal shall not withdraw its bid within sixty (60) or time period as may be provided in the proposal, and if the ne Principal, the Principal shall, within ten (10) calendar days de bonds with good and sufficient surety, as required for the ction of all persons supplying labor, material, and equipment pal requests permission to withdraw his bid due to mistake in the <i>Standard Specifications for Roads and Structures</i> , the in in full force and effect until the CLEVELAND COUNTY be withdrawn or to proceed with award of the contract. In the ne Principal shall have ten (10) calendar days to comply with Principal withdraws its bid after bids are opened except as thas been made fails to execute such additional documents as thin the time period specified above, then the amount of the ND COUNTY as liquidated damages. | | |
| IN TESTIMONY W | HEREOF, the Principal and Suret | have caused these presents to be duly signed and sealed. | | |
| This the day | of, 20 _ | | | |
| | | | | |
| | | Surety | | |
| |] | Зу | | |
| | | General Agent or Attorney-in-Fact Signature | | |
| | Seal of Surety | | | |
| | , | Print or type Signer's Name | | |

| Contract No | Rev. 7-25-17 |
|-------------|--|
| | BID BOND |
| | CORPORATION |
| | SIGNATURE OF CONTRACTOR (Principal) |
| | Full name of Corporation |
| | Address as prequalified |
| | Signature of President, Vice President, Assistant Vice President Select appropriate title |
| | Print or type Signer's name |
| | Affix Corporate Seal |
| Attest | Signatura (G. 4 A 14 4 G. 4 |
| | Signature of Secretary, Assistant Secretary Select appropriate title |

Print or type Signer's name

| Contract No. | |
|--------------|--|
| County | |

BID BOND

LIMITED LIABILITY COMPANY

| | SIGNATURE OF CONTRACTOR (Principal) | |
|--|-------------------------------------|--|
| Name of Contractor | | |
| | Full name of Firm | |
| | | |
| | Address as prequalified | |
| | | |
| Signature of Member/ Manager/Authorized Agent | | |
| | Individually | |
| | | |
| | | |
| | | |
| | | |
| | Print or type Signer's name | |

| Contract No. | |
|--------------|--|
| County | |

BID BOND

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

| Name of Contractor | |
|-------------------------------|-----------------------------|
| | Individual Name |
| Trading and doing business as | |
| | Full name of Firm |
| | |
| | Address as prequalified |
| Signature of Contractor | |
| Signature of Contractor | Individually |
| | |
| | |
| | Print or type Signer's name |
| | |
| | |
| | |
| Signature of Witness | |
| | |
| | |
| Print or type Signer's name | |

| Contract No. | | |
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| County | | |

BID BOND

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

| Name of Contractor | |
|-----------------------------|-------------------------------|
| | Print or type Individual Name |
| | |
| | |
| | |
| | Address as prequalified |
| | |
| | |
| | |
| Signature of Contractor | Individually |
| | |
| | |
| | |
| | Print or type Signer's name |
| | 71.48 |
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| | |
| | |
| Signature of Witness | |
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| | |
| | |
| Print or type Signer's name | |
| - 7 F - ~ - 0 ~ 11011110 | |

| Contract No. | | | |
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| County | | | |
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Rev. 7-25-17

| BID BOND | | | |
|-----------------------------|------------------------------|--|--|
| PARTNERSHIP | | | |
| SIGNATURE OF CONTRA | ACTOR (Principal) | | |
| | | | |
| Full name of Par | rtnership | | |
| | | | |
| | | | |
| Address as preq | ualified | | |
| | | | |
| R | у | | |
| | Signature of Partner | | |
| | | | |
| | | | |
| | Driet and are Cianada and an | | |
| | Print or type Signer's name | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Signature of Witness | | | |
| | | | |
| | | | |
| Print or type Signer's name | | | |
| Time of the signer a manie | | | |

| Contract No. | |
|--------------|--|
| County | |

Rev. 7-25-17

BID BOND JOINT VENTURE (2 or 3)

SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: **2 Joint Ventures**, Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3), (4) and execute. Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

| | Name of Joint Venture | |
|--------------------------------------|--------------------------------|-----------------------------|
| | | |
| | Name of Contractor | |
| | Address as prequalified | d |
| Signature of Witness or Attest | By | Signature of Contractor |
| Print or type Signer's name | <u> </u> | Print or type Signer's name |
| If Corporation, affix Corporate Seal | | |
| | and | |
| | Name of Contractor | |
| | | |
| | Address as prequalified | d |
| Signature of Witness or Attest | By | Signature of Contractor |
| Print or type Signer's name | | Print or type Signer's name |
| If Corporation, affix Corporate Seal | | |
| | and | |
| | | |
| Name | e of Contractor (for 3 Joint V | enture only) |
| | Address as prequalified | d |
| Signature of Witness or Attest | By | Signature of Contractor |
| Print or type Signer's name | | Print or type Signer's name |

| Contract No. | R | ev. 11-1-12 |
|--------------|-------|-------------|
| County | | |

CLEVELAND COUNTY

CONTRACT PAYMENT BOND

| Date of Payment Bond Execution | |
|--------------------------------|--|
| Name of Principal Contractor | |
| Name of Surety: | |
| Name of Contracting Body: | |
| | |
| Amount of Bond: | |
| Contract ID No.: | |
| County Name: | |
| | |

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

| Contract No. | |
|--------------|--|
| County | |

Rev. 11-1-12

CONTRACT PAYMENT BOND

| Affix Seal of Surety Company | | |
|------------------------------|----|---|
| | - | Print or type Surety Company Name |
| | Ву | |
| | Бу | Print, stamp or type name of Attorney-in-Fact |
| | | |
| | | |
| | - | Signature of Attorney-in-Fact |
| | | |
| | | |
| Signature of Witness | | |
| Signature of Whites | | |
| | | |
| | | |
| Print or type Signer's name | | |
| | | |
| | - | Address of Attorney-in-Fact |

| Contract No. | |
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| County | CONTRAC |

| | CONTRACT PAYMENT BOND |
|--------|--|
| | CORPORATION |
| | SIGNATURE OF CONTRACTOR (Principal) |
| | |
| | Full name of Corporation |
| | |
| | Address as prequalified |
| | |
| | Ву |
| | Signature of President, Vice President, Assistant Vice President Select appropriate title |
| | |
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| | |
| | Print or type Signer's name |
| | Time of type signers name |
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| | |
| | Affix Corporate Seal |
| | |
| | |
| | |
| Attest | |
| Attest | Signature of Secretary, Assistant Secretary |
| | Select appropriate title |
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| | Print or type Signer's name |
| | Time of type digital a name |

| Contract No. | |
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| County | |

Rev. 4-19-11

CONTRACT PAYMENT BOND

| | LIMITED LIABILITY COMPANY | | | |
|--------------------|---------------------------|---|--|--|
| | SIC | GNATURE OF CONTRACTOR (Principal) | | |
| Name of Contractor | | | | |
| | Full name of Firm | | | |
| | | | | |
| | | Address as prequalified | | |
| | | | | |
| | | | | |
| | | | | |
| | By: | | | |
| | | Signature of Member, Manager, Authorized Agent Select appropriate title | | |
| | | | | |
| | | | | |
| | | | | |
| | | Print or type Signer's name | | |

CONTRACT PAYMENT BOND

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

| Name of Contractor | |
|-------------------------------|-----------------------------|
| | Individual Name |
| Trading and doing business as | |
| | Full name of Firm |
| | |
| _ | Address as prequalified |
| Signature of Contractor | |
| | Individually |
| | |
| <u>-</u> | |
| | Print or type Signer's name |
| | |
| | |
| Cinnature of Witness | |
| Signature of Witness | |
| | |
| Print or type Signer's na | |
| Print or type Signer's na | me |

CONTRACT PAYMENT BOND

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

| Name of Contractor | |
|--------------------------|-------------------------------|
| | Print or type Individual name |
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| | |
| | Address as prequalified |
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| Signature of Contractor | Individually |
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| _ | Print or type Signer's name |
| | That of type Signer's name |
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| Signature of Witnes | <u> </u> |
| Signature of witness | 5 |
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| Print or type Signer's n | ame |

| Contract No. | |
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| County | |

| Rev. | 4-19-11 |
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| CONTRACT PAYMENT BOND | | |
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| PARTNERSH | IP | |
| SIGNATURE OF CONTRACT | ΓOR (Principal) | |
| | | |
| Full name of Partner | ership | |
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| | 110. 1 | |
| Address as prequa | lified | |
| | | |
| Ву | Signature of Partner | |
| | Signature of Partner | |
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| | | |
| | Print or type Signer's name | |
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| - CANAL CANA | | |
| Signature of Witness | | |
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| | | |
| Print or type Signer's name | | |

| Contract No. | |
|--------------|--|
| County | |

Rev. 4-19-11

CONTRACT PAYMENT BOND JOINT VENTURE (2) or (3)

SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: **2 Joint Ventures**, Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3), (4) and execute. On Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *NCDOT Standard Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

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| | | |
| | Name of Contractor | |
| | Address as prequalifie | d |
| Signature of Witness or Attest | By | Signature of Contractor |
| Print or type Signer's name | <u> </u> | Print or type Signer's name |
| If Corporation, affix Corporate Seal | | |
| | and | |
| | | |
| | Address as prequalifie | d |
| Signature of Witness or Attest | Ву | Signature of Contractor |
| Print or type Signer's name | <u> </u> | Print or type Signer's name |
| If Corporation, affix Corporate Seal | | |
| | and | |
| Name | of Contractor (for 3 Joint V | Venture only) |
| | Address as prequalifie | d |
| Signature of Witness or Attest | Ву | Signature of Contractor |
| Print or type Signer's name | | Print or type Signer's name |
| | Signature of Witness or Attest Print or type Signer's name If Corporation, affix Corporate Seal Signature of Witness or Attest Print or type Signer's name If Corporation, affix Corporate Seal Name | Print or type Signer's name If Corporation, affix Corporate Seal Address as prequalifie Signature of Witness or Attest By Print or type Signer's name If Corporation, affix Corporate Seal and Name of Contractor (for 3 Joint V. Address as prequalifie |

| Contract No. | |
|--------------|--|
| County | |

CONTRACT PAYMENT BOND

Attach certified copy of Power of Attorney to this sheet

| IXCV. 11-1-12 | Rev. | 11- | 1-12 |
|---------------|------|-----|------|
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| Contract No. | |
|--------------|--|
| County | |

CLEVELAND COUNTY

CONTRACT PERFORMANCE BOND

| Date of Performance Bond Execution: | |
|-------------------------------------|--|
| Name of Principal Contractor: | |
| Name of Surety: | |
| Name of Contracting Body: | |
| | |
| Amount of Bond: | |
| Contract ID No.: | |
| County Name: | |

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

| Contract No. | |
|--------------|--|
| County | |

Rev. 11-1-12

CONTRACT PERFORMANCE BOND

| Affix Seal of Surety Company | | |
|------------------------------|----|---|
| | - | Print or type Surety Company Name |
| | Ву | |
| | Бу | Print, stamp or type name of Attorney-in-Fact |
| | | |
| | | |
| | - | Signature of Attorney-in-Fact |
| | | |
| | | |
| Signature of Witness | | |
| Signature of Whites | | |
| | | |
| | | |
| Print or type Signer's name | | |
| | | |
| | - | Address of Attorney-in-Fact |

| Contract No. | |
|--------------|--|
| County | |

| | CONTRACT PERFORMANCE BOND | |
|--------|---|---------|
| | CORPORATION | |
| | SIGNATURE OF CONTRACTOR (Principal) | |
| | | |
| | Full name of Corporation | |
| | | |
| | Address as prequalified | |
| | D | |
| | Signature of President, Vice President, Assistant Vice President Select appropriate title | esident |
| | | |
| | | |
| | | |
| | Print or type Signer's name | |
| | | |
| | Affix Corporate Seal | |
| | | |
| | | |
| Attest | | |
| S | Signature of Secretary, Assistant Secretary Select appropriate title | |
| | | |
| | | |
| | Print or type Signer's name | |

| Contract No. | |
|--------------|--|
| County | |

LIMITED LIABILITY COMPANY

| | S | IGNATURE OF CONTRACTOR (Principal) |
|--------------------|-------|---|
| Name of Contractor | _ | |
| | _ | Full name of Firm |
| | | |
| | _ | |
| | | Address as prequalified |
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| | | |
| | By: | |
| | - , . | Signature of Member, Manager, Authorized Agent Select appropriate title |
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| | | Print or type Signer's name |

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

| Name of Contractor | |
|-------------------------------|-----------------------------|
| | Individual Name |
| Trading and doing business as | |
| | Full name of Firm |
| | |
| | Address as prequalified |
| Signature of Contractor | |
| | Individually |
| | |
| | |
| | Print or type Signer's name |
| | |
| | |
| | |
| Signature of Witness | |
| | |
| | |
| Print or type Signer's name | |

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

| Name of Contractor | |
|-----------------------------|-------------------------------|
| | Print or type Individual name |
| | |
| | |
| | |
| | Address as prequalified |
| | |
| | |
| Signature of Contractor | |
| Signature of Contractor | Individually |
| | |
| | |
| | |
| | Print or type Signer's name |
| | |
| | |
| | |
| | |
| | |
| Signature of Witness | |
| | |
| | |
| | |
| Print or type Signer's name | |

| Contract No. | |
|--------------|--|
| County | |

| CONTRACT PERFORMANCE BOND | | | |
|-----------------------------|-----------------------------|--|--|
| PARTNERSHIP | | | |
| SIGNATURE OF CONTRACT | TOR (Principal) | | |
| | | | |
| Full name of Partner | ership | | |
| | | | |
| | | | |
| Address as prequa | lified | | |
| | | | |
| Ву | | | |
| -, | Signature of Partner | | |
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| | | | |
| | Print or type Signer's name | | |
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| | | | |
| | | | |
| | | | |
| Signature of Witness | | | |
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| Print or type Signer's name | | | |

| Contract No. | |
|--------------|--|
| County | |

Rev. 4-19-11

CONTRACT PERFORMANCE BOND JOINT VENTURE (2) OR (3)

SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: **2 Joint Ventures**, Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3), (4) and execute. On Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *NCDOT Standard Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

| (1) | | | |
|-------|--------------------------------------|-------------------------------|-----------------------------|
| | | Name of Joint Venture | |
| (2) | | | |
| ` ′ • | | Name of Contractor | |
| | | | |
| | | Address as prequalified | l |
| • | Signature of Witness or Attest | By | Signature of Contractor |
| | Print or type Signer's name | | Print or type Signer's name |
| | | | |
| | If Corporation, affix Corporate Seal | | |
| | | and | |
| (3) | | | |
| | | Name of Contractor | |
| • | | Address as prequalified | I |
| | | _ | |
| | 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 | |
| (4) | | | |
| (+) | Name | of Contractor (for 3 Joint Ve | enture only) |
| • | | Address as prequalified | I |
| | | • • | |
| | Signature of Witness or Attest | Ву | Signature of Contractor |
| | Print or type Signer's name | | Print or type Signer's name |

| Contract No. | |
|--------------|--|
| County | |

Attach certified copy of Power of Attorney to this sheet

| Contract No | |
|-------------|-----|
| County | M-4 |

My Commission Expires:

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

Rev. 11-1-12

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.

| | | Full name of Corp | pration |
|-----------|--|-------------------|--|
| | | | |
| | | Address as Prequ | alified |
| Attest _ | Secretary/Assistant Secretary | Ву | President/Vice President/Assistant Vice President |
| | 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 |
| | AFFIDAV | IT MUST BE | NOTARIZED |
| Subscribe | ed and sworn to before me thi | s the | |
| da | y of | _ 20 | |
| | | | NOTARY SEAL |
| | Signature of Notary Public | | |
| | (| County | |
| of | | Jounty | |

| Contract No. | _ |
|--------------|---|
| County | _ |

My Commission Expires:___

Rev. 11-1-12

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

M-4

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.

| Full Nam | e of Partnership |
|---|-------------------------------|
| i un Nam | e of Lataletiship |
| Address | as Prequalified |
| | By |
| Signature of Witness | By Signature of Partner |
| | |
| Print or type Signer's name | Print or type Signer's name |
| AFFIDAVIT MU Subscribed and sworn to before me this the | UST BE NOTARIZED NOTARY SEAL |
| day of 20 | |
| Signature of Notary Public | |
| ofCounty | |
| State of | - |

| Contract No | |
|-------------|-----|
| County | M-4 |

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

Rev. 11-1-12

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.

| Full Nan | ne of Firm |
|--|--|
| Address as | Prequalified |
| Address as | Trequamica |
| | |
| 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 MUS | T BE NOTARIZED |
| Subscribed and sworn to before me this the | NOTARY SEAL |
| day of20 | |
| Signature of Notary Public | |
| ofCounty | |
| State of | |
| My Commission Expires: | |

County _____

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

M-4

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.

| (1) | | | | |
|--------------------------------------|--------------------------------------|--|-------------|--|
| (2) | | Name of Joint Venture | | |
| (-) | | Name of Contractor | | |
| | | Address as Prequalified | | |
| | 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 | | |
| (3) | | | | |
| | | Name of Contractor | | |
| | | Address as Prequalified | | _ |
| | 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 | | |
| (4) | | | | |
| | | Name of Contractor (for 3 Joint Ver | iture only) | |
| | | Address as Prequalified | | |
| | Signature of Witness or Attest | By | | Signature of Contractor |
| | Print or type Signer's name | | | Print or type Signer's name |
| | If Corporation, affix Corporate Seal | | | |
| ARY SEA | AL | NOTARY SEAL | | NOTARY |
| davit must be notarized for Line (2) | | Affidavit must be notarized for Line (3) | | Affidavit must be notarized for Line (4) |
| oscribed and sworn to before me this | | Subscribed and sworn to before me | e this | Subscribed and sworn to before me this |
| _day of_ | 20 | day of | 20 | day of20 |
| | Notary Public | Signature of Notary Public | | Signature of Notary Public |
| | County | of State of | County | ofCour State of |
| | ion Expires: | My Commission Expires: | | My Commission Expires: |
| COMMISS | IOH EADHES. | IVIV COHHIBSSION EXDITES: | | MV COMMISSION EXDITES. |

| M-4 | |
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Rev. 11-1-12

| Contract No. | |
|--------------|--|
| County | |

EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, 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.

| Name of Contractor | | | | | |
|--------------------------------|------------------|---------------------------------------|--|--|--|
| | | Individual name | | | |
| Trading and doing business as | | | | | |
| | | Full name of Firm | | | |
| | Address as Prequ | alified | | | |
| Signature of Witness | | Signature of Contractor, Individually | | | |
| Print or type Signer's na | me | Print or type Signer's name | | | |
| AFF | FIDAVIT MUST BE | E NOTARIZED | | | |
| Subscribed and sworn to before | me this the | NOTARY SEAL | | | |
| day of | 20 | | | | |
| Signature of Notary Publi | ic | | | | |
| of | County | | | | |
| State of | | | | | |
| My Commission Expires: | | | | | |

| Contract No | |
|-------------|--|
| County | |

My Commission Expires:

Rev. 11-1-12

EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

M-4

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

| Contract No. | |
|--------------|--|
| County | |

Rev. 11-1-12

DEBARMENT CERTIFICATION

M-4

Conditions for certification:

- 1. The prequalified bidder shall provide immediate written notice to the Municipality if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation filed with the Municipality, 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 Municipality project representative.
- 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 Municipal contracts, unless authorized by the Municipality.
- 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 Municipality, 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 Municipality 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.

| Contract No. | |
|--------------|--|
| County | |

Rev. 11-1-12

DEBARMENT CERTIFICATION

M-4

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.

| LISTING OF | MBE | /WBE S | UBCONTRACTORS | Sh | eet of |
|---------------------------------|---------------|----------|---------------------------------|-----------------------------|--------------------------|
| Firm Name and Address | Circle One | Item No. | Item Description | * Agreed upon Unit Price | ** Dollar Volume of Item |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| *The Dellar Volume shows in the | ria aaluum | | A atual Drive A arread Unear by | ha Drima Cantra | otom and the MDE/WDE |

^{*} 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.

| LISTING OF | MBE | /WBE SU | UBCONTRACTORS | She | eet of |
|-----------------------|---------------|----------|------------------|-----------------------------|--------------------------|
| Firm Name and Address | Circle One | Item No. | Item Description | * Agreed upon Unit Price | ** Dollar Volume of Item |
| Name | MBE | | | | |
| Address | WBE | | | | |
| Name | | | | | |
| | MBE | | | | |
| Address | WBE | | | | |
| | | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| | | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| | | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| | | | | | |
| Name | MBE | | | | |
| Address | WBE | | | | |
| | | | | | |

| * 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.

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

| CONTRACT: | NAME OF BIDDER: |
|--|--|
| The undersigned intends to perform work in cosubsequent award of contract by the Local Public | onnection with the above contract upon execution of the bid at a Agency as: |
| Name of MBE/WBE/DBE Subcontracto | DΓ |
| | |
| City | Zip |
| Minority Bu Women Bus | usiness Enterprise (MBE) Il Business Enterprise (DBE) |
| Transportation. The above named subcontractor MBE/WBE/DBE Commitment Items sheet, in c subsequent award of contract by the Local Publi | ned subcontractor is certified by the North Carolina Department is prepared to perform the described work listed on the attacher connection with the above contract upon execution of the bid as ic Agency. The above named subcontractor is prepared to perform Total for Subcontractor Price identified on the MBE/WBE/DE perform. |
| Commitment Items sheet: | es and Quantities on the "attached" MBE/WBE/DBE |
| and Quantities. This commitment total is based of the project is completed. Final compensation wi during the pursuance of work. The above listed | tually accepts the Commitment Total estimated for the Unit Price on estimated quantities only and most likely will vary up or down will be based on actual quantities of work performed and accept amount represents the entire dollar amount quoted based on the agreements, and/or other forms of non-written representations shall. |
| | r as an actual subcontract between the two parties. A separathe contractual obligations of the bidder and the MBE/WBE/DE |
| Affirmation | |
| The above named MBE/ WBE/ DBE subcontract estimated dollar value as stated above. | etor affirms that it will perform the portion(s) of the contract for t |
| Name of MBE/ WBE/ DBE Subcontractor | Name of Bidder |
| Signature / Title | Signature / Title |
| Date | Date |

CONTRACT ITEMS

TIP Number: R-5849 Location: Cleveland County

Date:

| Line No. | Master Item No. | Sec No. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT | UNIT PRICE | TOTAL AMOUNT |
|-------------|--------------------|------------|---|--------------------|------|------------|--------------|
| 1 | 0000100000-N | 800 | MOBILIZATION | 1 | LS | | |
| 2 | 0000400000-N | 801 | CONSTRUCTION SURVEYING | 1 | LS | | |
| 3 | 0036000000-E | 226 | UNDERCUT EXCAVATION | 1,900 | CY | | |
| 4 | 0050000000-E | 226 | SUPPLEMENTARY CLEARING & GRUBBING | 1 | ACR | | |
| 5 | 0043000000-N | 226 | GRADING | 1 | LS | | |
| 6 | 0134000000-E | 240 | DRAINAGE DITCH EXCAVATION | 2,400 | CY | | |
| 7 | 0194000000-E | SP | SELECT GRANULAR MATERIAL, CLASS III | 2,450 | CY | | |
| 8 | 0196000000-E | 270 | GEOTEXTILE FOR SOIL STABILIZATION | 3,800 | SY | | |
| 9 | 0318000000-E | 300 | FOUNDATION COND.MAT, MINOR STRS | 150 | TON | | |
| 10 | 0320000000-E | 300 | FOUNDATION COND. GEOTEXTILE | 460 | SY | | |
| 11 | 0335300000-E | 305 | 18" DRAINAGE PIPE | 124 | LF | | |
| 12 | 0343000000-E | 310 | 15" SIDE DRAIN PIPE | 68 | LF | | |
| 13 | 0366000000-E | 310 | 15" RC PIPE CULVERTS, CLASS III | 24 | LF | | |
| 14 | 0378000000-E | 310 | 24" RC PIPE CULVERTS, CLASS III | 40 | LF | | |
| 15 | 0396000000-E | 310 | 42" RC PIPE CULVERTS, CLASS III | 120 | LF | | |
| 16 | 0414000000-E | 310 | 60" RC PIPE CULVERTS, CLASS III | 132 | LF | | |
| 17 | 0448200000-E | 310 | 15" RC PIPE CULVERTS, CLASS IV | 712 | LF | | |
| 18 | 0448400000-E | 310 | 24" RC PIPE CULVERTS, CLASS IV | 60 | LF | | |
| 19 | 0582000000-E | 310 | 15" CS PIPE CULVERTS, 0.064" THICK | 88 | LF | | |
| 20 | 0636000000-E | 310 | 15" CS PIPE ELBOWS, 0.064" THICK | 4 | EA | | |
| 21 | 0995000000-E | 340 | PIPE REMOVAL | 494 | LF | | |
| 22 | 1099500000-E | 505 | SHALLOW UNDERCUT | 750 | CY | | |
| 23 | 1099700000-E | 505 | CLASS IV SUBGRADE STABILIZATION | 1,470 | TON | | |
| 24 | 1121000000-E | 520 | AGGREGATE BASE COURSE | 2,400 | TON | | |
| 25 | 1220000000-E | 545 | INCIDENTAL STONE BASE | 350 | TON | | |
| 26 | 1308000000-E | 607 | MILLING ASPHALT PAVEMENT, 0" TO 1.5" | 500 | SY | | |
| 27 | 1330000000-E | 607 | INCIDENTAL MILLING | 50 | SY | | |
| 28 | 1489000000-E | 610 | ASPHALT CONC BASE COURSE, TYPE B 25.0 B | 4,100 | TON | | |
| 29 | 1498000000-E | 610 | ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B | 3,400 | TON | | |
| 30 | 1519000000-E | 610 | ASPHALT CONC SURFACE COURSE, TYPE S9.5B | 3,000 | TON | | |
| 31 | 1575000000-E | 620 | ASPHALT BINDER FOR PLANT MIX | 525 | TON | | |
| 32 | 1693000000-E | 654 | ASPH.PLANT MIX, PAV'T REPAIR | 60 | TON | | |
| 33 | 2022000000-E | 815 | SUBDRAIN EXCAVATION | 112 | CY | | |
| 34 | 2026000000-E | 815 | GEOTEXTILE FOR SUBSURFACE DRAINS | 500 | CY | | |
| 35 | 2036000000-E | 815 | SUBDRAIN COURSE AGGREGATE | 84 | CY | | |
| 36 | 2044000000-E | 815 | 6" PERFORATED SUBDRAIN PIPE | 500 | LF | | |
| 37 | 2070000000-N | 815 | SUBDRAIN PIPE OUTLET | 1 | EA | | |
| 38 | 2077000000-E | 815 | 6" OUTLET PIPE | 6 | LF | | |
| 39 | 2220000000-E | 838 | REINFORCED ENDWALLS | 5.6 | CY | | |
| 40 | 2253000000-E | 840 | PIPE COLLARS | 0.60 | CY | | |
| 41 | 2275000000-E | SP | FLOWABLE FILL | 7 | CY | | |

| Line No. | Master Item No. | Sec No. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT | UNIT PRICE | TOTAL AMOUNT |
|-------------|--------------------|------------|--|--------------------|------|------------|--------------|
| 42 | 2286000000-N | 840 | MASONRY DRAINAGE STRUCTURES | 20 | EA | | |
| 43 | 2308000000-E | 840 | MASONRY DRAINAGE STRUCTURES | 1.3 | LF | | |
| 44 | 2354200000-N | 840 | FRAME WITH GRATE, TYPE 840.24 | 1 | EA | | |
| 45 | 2364000000-N | 840 | FRAME WITH TWO GRATES, STD 840.16 | 4 | EA | | |
| 46 | 2366000000-N | 840 | FRAME WITH TWO GRATES, STD 840.24 | 1 | EA | | |
| 47 | 2374000000-N | 840 | FRAME WITH GRATE & HOOD, STD 840.03, TYPE E | 2 | EA | | |
| 48 | 2374000000-N | 840 | FRAME WITH GRATE & HOOD, STD 840.03, TYPE F | 5 | EA | | |
| 49 | 2374000000-N | 840 | FRAME WITH GRATE & HOOD, STD 840.03, TYPE G | 7 | EA | | |
| 50 | 2396000000-N | 840 | FRAME WITH COVER, STD 840.54 | 1 | EA | | |
| 51 | 2535000000-E | 846 | 8" X 12" CONCRETE CURB | 100 | LF | | |
| 52 | 2549000000-E | 846 | 2'-6" CONCRETE CURB & GUTTER | 3,600 | LF | | |
| 53 | 3578000000-N | SP | GENERIC FENCE ITEM - REMOVE AND RESET EXISTING GATE | 1 | EA | | |
| 54 | 3628000000-E | 876 | RIP RAP, CLASS I | 20 | TON | | |
| 55 | 3635000000-E | 876 | RIP RAP, CLASS II | 290 | TON | | |
| 56 | 3649000000-E | 876 | RIP RAP, CLASS B | 40 | TON | | |
| 57 | 3656000000-E | 876 | GEOTEXTILE FOR DRAINAGE | 560 | SY | | |
| 58 | 4025000000-E | 901 | CONTRACTOR FURNISHED, TYPE D SIGN | 15 | SF | | |
| 59 | 4025000000-E | 901 | CONTRACTOR FURNISHED, TYPE E SIGN | 65 | SF | | |
| 60 | 4072000000-E | 903 | SUPPORTS, 3 LB STEEL U-CHANNEL | 160 | LF | | |
| 61 | 4096000000-N | 904 | SIGN ERECTION, TYPE D | 4 | EA | | |
| 62 | 4102000000-N | 904 | SIGN ERECTION, TYPE E | 12 | EA | | |
| 63 | 4155000000-N | 907 | DISPOSAL OF SIGN SYSTEM, U-CHANNEL | 4 | EA | | |
| 64 | 4237000000-N | 907 | STOCKPILE SIGN, D, E, OR F | 2 | EA | | |
| 65 | 4400000000-E | 1110 | WORK ZONE SIGNS (STATIONARY) | 100 | SF | | |
| 66 | 4405000000E | 1110 | WORK ZONE SIGNS (PORTABLE) | 115 | SF | | |
| 67 | 4410000000-E | 1110 | WORK ZONE SIGNS (BARRICADE MOUNTED) | 20 | SF | | |
| 68 | 4430000000-N | 1130 | DRUMS | 100 | EA | | |
| 69 | 4435000000-N | 1135 | CONES | 25 | EA | | |
| 70 | 4445000000-N | 1145 | BARRICADES (TYPE III) | 64 | LF | | |
| 71 | 4450000000-N | 1150 | FLAGGERS | 2,880 | HR | | |
| 72 | 4516000000-N | 1180 | SKINNY DRUMS | 25 | EA | | |
| 73 | 4685000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS) | 3,785 | LF | | |
| 74 | 4686000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS) | 7,620 | LF | | |
| 75 | 4690000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING LINES (6", 120 MILS) | 40 | LF | | |
| 76 | 4700000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS) | 140 | LF | | |
| 77 | 4705000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING LINES (16", 120 MILS) | 45 | LF | | |
| 78 | 4710000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS) | 260 | LF | | |
| 79 | 4721000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS) | 6 | EA | | |
| 80 | 4725000000-E | 1205 | THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS) | 13 | EA | | |
| 81 | 4810000000-E | 1205 | PAINT PAVEMENT MARKING LINES (4") | 10,750 | LF | | |
| 82 | 4825000000-E | 1205 | PAINT PAVEMENT MARKING LINES (12") | 140 | LF | | |
| 83 | 4835000000-E | 1205 | PAINT PAVEMENT MARKING LINES (24") | 140 | LF | | |
| 84 | 4845000000-N | 1205 | PAINT PAVEMENT MARKING SYMBOL | 12 | EA | | |
| 85 | 4905000000-N | 1253 | SNOWPLOWABLE RAISED PAVEMENT MARKERS | 115 | EA | | |
| 86 | 5325600000-E | 1510 | 6" WATER LINE | 14 | LF | | |
| 87 | 5326000000-E | 1510 | 10" WATER LINE | 120 | LF | | |

| Line No. | Master Item No. | Sec No. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT | UNIT PRICE | TOTAL AMOUNT |
|-------------|--------------------|------------|---|--------------------|------|------------|--------------|
| 88 | 5326600000-E | 1510 | 16" WATER LINE | 1,824 | LF | | |
| 89 | 5329000000-E | SP | DUCTILE IRON WATER PIPE FITTINGS | 8,430 | LB | | |
| 90 | 5540000000-E | 1515 | 6" VALVE | 1 | EA | | |
| 91 | 5552000000-E | 1515 | 10" VALVE | 1 | EA | | |
| 92 | 5558600000-E | 1515 | 16" VALVE | 10 | EA | | |
| 93 | 5810000000-E | 1530 | ABANDON 16" UTILITY PIPE | 1,758 | LF | | |
| 94 | 5835900000-E | 1540 | 20" STEEL ENCASEMENT PIPE | 89 | LF | | |
| 95 | 5882000000-N | SP | GENERIC UTILITY ITEM - REINFORCED CONCRETE THRUST COLLAR | 3 | EA | | |
| 96 | 6000000000-E | 1605 | TEMPORARY SILT FENCE | 4,545 | LF | | |
| 97 | 6006000000-E | 1610 | STONE FOR EROSION CONTROL, CLASS A | 95 | TON | | |
| 98 | 6009000000-E | 1610 | STONE FOR EROSION CONTROL, CLASS B | 1,015 | TON | | |
| 99 | 6012000000-E | 1610 | SEDIMENT CONTROL STONE | 475 | TON | | |
| 100 | 6015000000-E | 1615 | TEMPORARY MULCHING | 5.5 | AC | | |
| 101 | 6018000000-E | 1620 | SEED FOR TEMPORARY SEEDING | 500 | LB | | |
| 102 | 6021000000-E | 1620 | FERTILIZER FOR TEMPORARY SEEDING | 3.5 | TON | | |
| 103 | 6024000000-E | 1622 | TEMPORARY SLOPE DRAINS | 225 | LF | | |
| 104 | 6029000000-E | SP | SAFETY FENCE | 800 | LF | | |
| 105 | 6030000000-E | 1630 | SILT EXCAVATION | 1,230 | CY | | |
| 106 | 6036000000-E | 1631 | MATTING FOR EROSION CONTROL | 6,675 | SY | | |
| 107 | 6037000000-E | SP | COIR FIBER MAT | 195 | SY | | |
| 108 | 6038000000-E | SP | PERMANENT SOIL REINFORCEMENT MAT | 550 | SY | | |
| 109 | 6042000000-E | 1632 | 1/4" HARDWARE CLOTH | 785 | LF | | |
| 110 | 6071020000-E | SP | POLYACRYLAMIDE (PAM) | 165 | LB | | |
| 111 | 6071030000-E | 1640 | COIR FIBER BAFFLE | 175 | LF | | |
| 112 | 6071050000-E | SP | 1 1/2" SKIMMER | 1 | EA | | |
| 113 | 6084000000-E | 1660 | SEEDING AND MULCHING | 9 | AC | | |
| 114 | 6087000000-E | 1660 | MOWING | 6 | AC | | |
| 115 | 6090000000-E | 1661 | SEED FOR REPAIR SEEDING | 100 | LB | | |
| 116 | 6093000000-E | 1661 | FERTILIZER FOR REPAIR SEEDING | 0.25 | TON | | |
| 117 | 6096000000-E | 1662 | SEED FOR SUPPLEMENTAL SEEDING | 175 | LB | | |
| 118 | 6108000000-E | 1665 | FERTILIZER TOPDRESSING | 5.25 | TON | | |
| 119 | 6111000000-E | SP | IMPERVIOUS DIKE | 50 | LF | | |
| 120 | 6114500000-N | 1667 | SPECIALIZED HAND MOWING | 10 | MHR | | |
| 121 | 6117000000-N | SP | RESPONSE FOR EROSION CONTROL | 13 | EA | | |
| 122 | 6132000000-N | SP | GENERIC EROSION CONTROL ITEM - CONCRETE WASHOUT STRUCTURE | 1 | EA | | |
| | | | | | | | |
| | | | Total Bid for Project: | | | | |