

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
HIGHWAY DIVISION 8

## PROPOSAL

**DATE AND TIME OF BID OPENING: SEPTEMBER 11, 2018 AT 2:00 PM**

**CONTRACT ID: DH00283**

**WBS ELEMENT NO.: 17BP.8.R.76**

**FEDERAL AID NO.: N/A**

**COUNTY: RANDOLPH**

**TIP NO.: N/A**

**MILES: 0.057 MILES**

**ROUTE NO.: SR 1911 (ASHLAND ST)**

**LOCATION: BRIDGE #416 OVER DALE CREEK**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, & STRUCTURE**

**NOTICE:**

**ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.**

**BIDS WILL BE RECEIVED AS SHOWN BELOW:**

**THIS IS A STRUCTURE PROJECT.**

**BID BONDS ARE REQUIRED.**

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**NAME OF BIDDER**

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**ADDRESS OF BIDDER**

**PROPOSAL FOR THE CONSTRUCTION OF  
CONTRACT No. DH00283 IN RANDOLPH COUNTY, NORTH CAROLINA**

**Date** \_\_\_\_\_ **20** \_\_\_\_\_

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

The Bidder has carefully examined the location of the proposed work to be known as Contract No. **DH00283**; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Department of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with *the 2018 Standard Specifications for Roads and Structures* by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No. **DH00283** in **RANDOLPH COUNTY**, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled *North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2018* with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

If the proposal is accepted and the award is made, the contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except over the signature of the said Contract Officer or Division Engineer.

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

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

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

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

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

For preparing and submitting the bid electronically using the on-line system Bid Express®, refer to Article 102-8(B) of the *2018 Standard Specifications*.

Bidders that bid electronically on Raleigh Central-Let projects will need a separate Digital Signature form Bid Express® for Division Contracts.

**ELECTRONIC ON-LINE BID THRU BID EXPRESS:**

1. Download entire proposal from Connect NCDOT website. Download EBS file from Connect NCDOT or Bid Express websites.
2. Prepare and submit EBS file using Expedite software.
3. Expedite software necessary for electronic bid preparation may be downloaded from the Connect NCDOT website at: <https://connect.ncdot.gov/letting/Pages/EBS-Information.aspx>

**PROJECT SPECIAL PROVISIONS****GENERAL****SCOPE OF WORK:**

This contract is for the replacement of Bridge No. 416 over Dale Creek on SR 1911 (Ashland St) in Randolph County.

This work shall consist of removal of the existing structure; clearing and grubbing; excavation and embankment; placement of Culvert; grading within limits of the project; placement of rip rap; temporary erosion control; seeding and mulching; drainage; roadway base course and pavement; installation of guardrail; and all other incidental items necessary to complete the project as specified and shown on the plans.

The Department shall furnish Construction Surveying for this project.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the current edition of the North Carolina Department of Transportation *Standard Specifications for Roads and Structures*, the current edition of the North Carolina Department of Transportation *Roadway Standards Drawings*, and the current edition of the *Manual of Uniform Traffic Control Devices* (MUTCD).

Wherever reference is given to codes, or standard specifications, or other data published by regulating agencies or accepted organizations, including but not limited to N.C. State Building Codes, Federal Specifications, ASTM Specifications, N.C. Department of Transportation ‘Standard Specifications for Roads and Structures’, and the like, it shall be understood that such reference is to the latest edition including addenda published prior to the date of the contract documents.

The Contractor shall keep himself fully informed of all Federal, State and local laws, ordinances, and regulations, and shall comply with the provisions of Section 107 of the *Standard Specifications*.

**Traffic Control including detour will be performed by the Contractor.** Refer to Traffic Management Plan.

**DIVISION LET CONTRACT PREQUALIFICATION:**

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

SPD 01-410

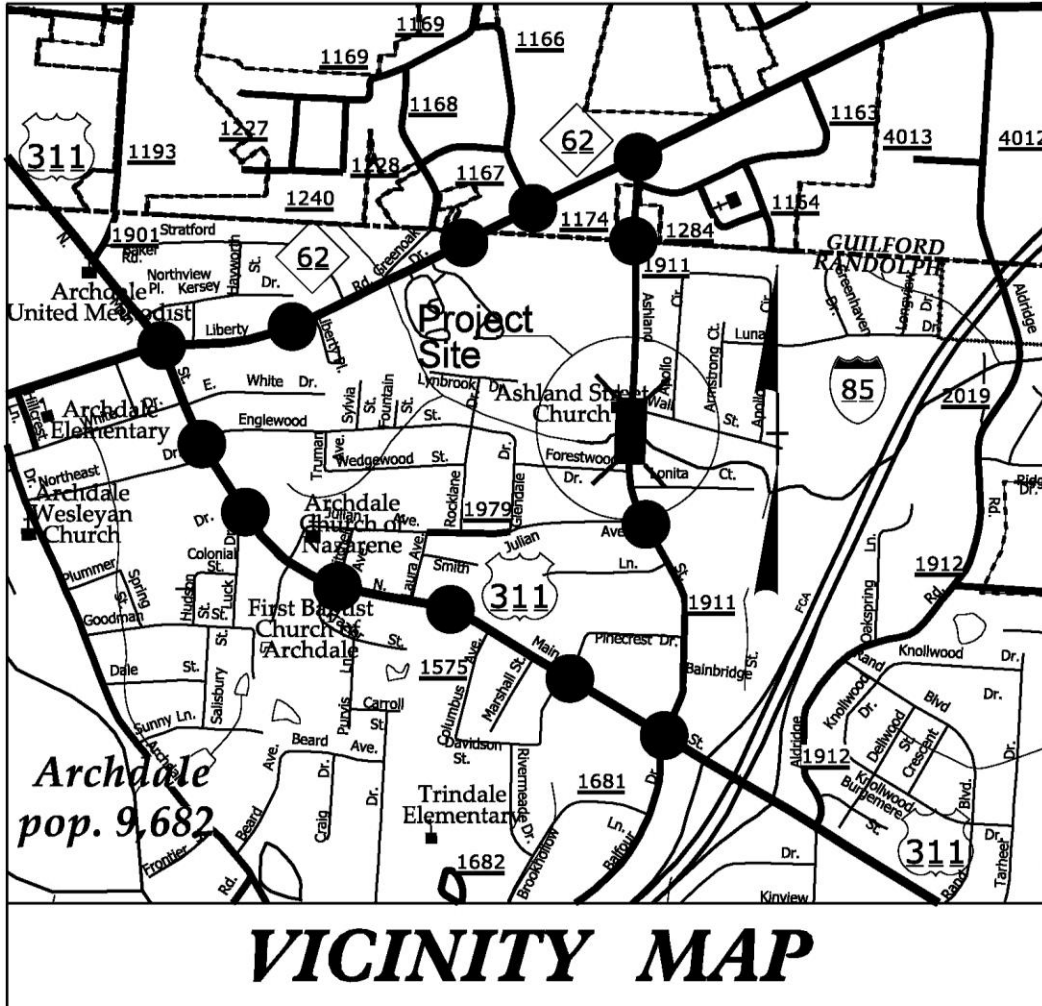
Any firm that wishes to bid as a prime contractor shall be prequalified as a Bidder or PO Prime Contractor prior to submitting a bid. Information regarding prequalification can be found at: <https://connect.ncdot.gov/business/Prequal/Pages/default.aspx>.

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



**LOCATION AND DESCRIPTION:**

The project corridor is located along SR 1911 (Ashland St) at the bridge crossing over Dale Creek (Randolph County) North Carolina. (SEE VICINITY LOCATION MAP)



**RANDOLPH COUNTY 17BP.8.R.76**  
 BRIDGE NO. 416 ON SR 1911 (ASHLAND STREET)  
 OVER DALE CREEK.

Prepared in the Office of:  
 **SUMMIT** 504 Meadowslands Drive  
 Hillsborough, NC 27278  
 (919) 732-3883  
 (919) 732-6676 (FAX) www.summitde.net

**SITE INVESTIGATION AND REPRESENTATION:**

(3-3-2014)

102-6

SPD 01-280

By signing the proposal documents, the Contractor acknowledges that:

- (A) He understands the nature of the work and general and local conditions, particularly those bearing on transportation;
- (B) He is familiar with the availability and cost of labor and materials;
- (C) He will to adhere to State regulations for safety and security of property, roads, and facilities;
- (D) He is able to prosecute the work in accordance with all applicable local, state and federal rules and regulations, and;
- (E) He has thoroughly investigated the project site(s).

Any failure on the part of the Contractor to acquaint himself with all available information shall not relieve him from the responsibility any aspect of the contracting process. No adjustment in contract time or contract prices will be made due to the Contractor's negligence in familiarizing himself with the contract or project site(s).

**BOND REQUIREMENTS:**

(06-01-16)

102-8, 102-10

SPD 01-420A

A Bid Bond is required in accordance with Article 102-10 of the 2018 Standard Specifications for Roads and Structures.

Contract Payment and Performance Bonds are required in accordance with Article 103-7 of the 2018 Standard Specifications for Roads and Structures.

**CONTRACT TIME AND LIQUIDATED DAMAGES:**

(12-20-16)

108

SP1 G07 B

The date of availability for this contract is the date the Contractor begins work but not before **October 15, 2018** or later than **January 28, 2019**, except that work in jurisdictional waters and wetlands shall not begin until a meeting between NCDOT, 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 the date that is **One Hundred Eighty (180)** consecutive calendar days after completion of Intermediate Contract Time Number 1.

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 **Two Hundred Dollars (\$ 200.00)** per calendar day. These liquidated damages will not be cumulative with any liquidated damages which may become chargeable under Intermediate Contract Time Number 1. At the preconstruction conference the Contractor shall declare his expected date for beginning work. Should the Contractor desire to revise this date after the preconstruction conference, he shall notify the Engineer in writing at least thirty (30) days prior to the revised date.

**INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:**

(7-1-95) (Rev. 2-21-12)

108

SPI G13 A

Except for that work required under the Project Special Provisions entitled *Planting, Reforestation* and/or *Permanent Vegetation Establishment*, included elsewhere in this proposal, the Contractor will be required to complete all work included in this contract and shall place and maintain traffic on same.

The date of availability for this intermediate contract time is **the date of availability of the contract.**

The completion date for this intermediate contract time is **One Hundred Fifty (150)** consecutive calendar days after the availability date.

The liquidated damages for this intermediate contract time are **Six Hundred Dollars (\$600.00)** per calendar day.

Upon apparent completion of all the work required to be completed by this intermediate date, a final inspection will be held in accordance with Article 105-17 and upon acceptance, the Department will assume responsibility for the maintenance of all work except *Planting, Reforestation* and/or *Permanent Vegetation Establishment*. The Contractor will be responsible for and shall make corrections of all damages to the completed roadway caused by his planting operations, whether occurring prior to or after placing traffic through the project.

**PERMANENT VEGETATION ESTABLISHMENT:**

(2-16-12) (Rev. 10-15-13)

104

SPI G16

Establish a permanent stand of the vegetation mixture shown in the contract. During the period between initial vegetation planting and final project acceptance, perform all work necessary to establish permanent vegetation on all erodible areas within the project limits, as well as, in borrow and waste pits. This work shall include erosion control device maintenance and installation, repair seeding and mulching, supplemental seeding and mulching, mowing, and fertilizer topdressing, as directed. All work shall be performed in accordance with the applicable section of the *2018 Standard Specifications*. All work required for initial vegetation planting shall be performed as a part of the work necessary for the completion and acceptance of the Intermediate Contract Time (ICT). Between the time of ICT and Final Project acceptance, or otherwise referred to as the vegetation establishment period, the Department will be responsible for preparing the required National Pollutant Discharge Elimination System (NPDES) inspection records.

Once the Engineer has determined that the permanent vegetation establishment requirement has been achieved at an 80% vegetation density (the amount of established vegetation per given area to

stabilize the soil) and no erodible areas exist within the project limits, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor will be responsible for, and shall correct any areas disturbed by operations performed in permanent vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

Payment for *Response for Erosion Control, Seeding and Mulching, Repair Seeding, Supplemental Seeding, Mowing, Fertilizer Topdressing, Silt Excavation, and Stone for Erosion Control* will be made at contract unit prices for the affected items. Work required that is not represented by contract line items will be paid in accordance with Articles 104-7 or 104-3 of the *2018 Standard Specifications*. No additional compensation will be made for maintenance and removal of temporary erosion control items.

**POSTED WEIGHT LIMITS:**

(7-1-95) (Rev.9-15-15)

105

SP1 G24R

The Contractor's attention is directed to Article 105-15 of the *2018 Standard Specifications* and to the fact that various Primary and Secondary Roads and bridges may be posted with weight limits less than the legal limit. Do not exceed the posted weight limits in transporting materials and/or equipment to the projects. Make a thorough examination of all projects and haul routes and be prepared to discuss them at the Preconstruction Conference.

**MAJOR CONTRACT ITEMS:**

(2-19-02)

SP1 G28

The following listed items are the major contract items for this contract (See Articles 101 and 104-5 of the *2018 Standard Specifications*):

<b>Line #</b>	<b>Description</b>
56	Class A Concrete (Culvert)
57	Reinforcing Steel (Culvert)

**SPECIALTY ITEMS:**

(7-1-95)(Rev. 1-17-12)

108-6

SP1 G37

Items listed below will be the specialty items for this contract (see Article 108-6 of the *2018 Standard Specifications*).

<b>Line #</b>	<b>Description</b>
19 thru 21	Guardrail
27 thru 51	Erosion Control
52	Reforestation
58 thru 65	Utility Construction

**FUEL PRICE ADJUSTMENT:**

(11-15-05) (Rev. 2-18-14)

109-8

SP1 G43

Revise the *2018 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 \$ **2.2375** 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 follow

<b>Description</b>	<b>Units</b>	<b>Fuel Usage Factor Diesel</b>
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
Asphalt Concrete Base Course, Type B25.0B	Gal/Ton	2.90
Asphalt Concrete Intermediate Course, Type I19.0B	Gal/Ton	2.90
Asphalt Concrete Surface Course, Type SF9.5A	Gal/Ton	2.90
Open-Graded Asphalt Friction Course	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

SP1 G58

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

<b><u>Fiscal Year</u></b>		<b><u>Progress (% of Dollar Value)</u></b>
2019	(7/01/18 - 6/30/19)	100% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the *2018 Standard Specifications*. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

**MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS):**

(10-16-07)(Rev. 5-15-18)

102-15(J)

SP1 G67

**Description**

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

**Definitions**

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

*Combined MBE/WBE Goal*: A portion of the total contract, expressed as a percentage that is to be performed by committed MBE/WBE subcontractors.

*Committed MBE/WBE Subcontractor* - Any MBE/WBE submitted at the time of bid that is being used to meet the Combined MBE / 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 Goal Requirement* - The approved participation at time of award, but not greater than the advertised Combined MBE/WBE contract goal.

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

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

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

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

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

*North Carolina Unified Certification Program (NCUCP)* - A program that provides comprehensive services and information to applicants for MBE/WBE certification. The MBE/WBE program

follows the same regulations as the federal Disadvantaged Business Enterprise (DBE) program in accordance with 49 CFR Part 26.

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

*WBE Participation (Anticipated)* - A portion of the total contract, expressed as a percentage that is anticipated 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%20Forms/Joint%20Check%20Notification%20Form.pdf>

*Letter of Intent* - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the estimated amount (based on quantities and unit prices) 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 the Combined MBE/WBE goal. This form is for paper bids only.

[http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-WBE%20Subcontractors%20\(State\).docx](http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/09%20MBE-WBE%20Subcontractors%20(State).docx)

*Subcontractor Quote Comparison Sheet* - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and WBEs quoted on the project. This sheet is submitted with good faith effort packages.

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

### **Combined MBE/WBE Goal**

The Combined MBE/WBE Goal for this project is **7.0 %**

The Combined Goal was established utilizing the following anticipated participation for Minority Business Enterprises and Women Business Enterprises:

(A) **Minority Business Enterprises 1.0 %**

- (1) *If the anticipated MBE participation 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.
- (2) *If the anticipated MBE participation is zero*, the Contractor shall make an effort to recruit and use MBEs during the performance of the contract. Any MBE participation obtained shall be reported to the Department.

(B) **Women Business Enterprises 6.0 %**

- (1) *If the anticipated WBE participation 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.
- (2) *If the anticipated WBE participation is zero*, the Contractor shall make an effort to recruit and use WBEs during the performance of the contract. Any WBE participation obtained shall be reported to the Department.

The Bidder is required to submit only participation to meet the Combined MBE/WBE Goal. The Combined Goal may be met by submitting all MBE participation, all WBE participation, or a combination of MBE and WBE participation.

### **Directory of Transportation Firms (Directory)**

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as MBE and WBE certified shall be used to meet the Combined MBE / WBE goal. 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 all MBE and WBE participation that they anticipate to use during the life of the contract. Only those identified to meet the Combined MBE/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 above the goal will follow the banking guidelines found elsewhere in this provision. All other additional MBE/WBE subcontractor participation submitted at the time of bid will be used toward the Department's 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) Electronic Bids

Bidders shall submit a listing of MBE and WBE participation in the appropriate section of Expedite, the bidding software of Bid Express<sup>®</sup>.

- (1) Submit the names and addresses of MBE and WBE firms identified to participate in the contract. If the bidder uses the updated listing of MBE and WBE firms shown in Expedite, the bidder may use the dropdown menu to access the name and address of the firms.
- (2) Submit the contract line numbers of work to be performed by each MBE and WBE firm. When no figures or firms are entered, the bidder will be considered to have no MBE or WBE participation.
- (3) The bidder shall be responsible for ensuring that the MBE and WBE are 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 Combined MBE/WBE goal.

### (B) Paper Bids

- (1) *If the Combined MBE/ WBE goal is more than zero,*
  - (a) 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.
  - (b) If bidders have no MBE or WBE participation, they shall indicate this on the *Listing of MBE and WBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Bids submitted that do not have MBE and WBE participation indicated on the appropriate form will not

be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.

- (c) 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 Combined MBE/WBE goal.
- (2) *If the Combined MBE/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 a Combined MBE/WBE Goal, the firm is responsible for meeting the goal or making good faith efforts to meet the goal, just like any other bidder. In most cases, a MBE or WBE bidder on a contract will meet the Combined MBE/WBE goal 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.

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 Combined MBE/WBE goal of the contract, indicating the bidder's commitment to use the MBE/WBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 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 Engineer 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 Combined MBE/WBE goal, or if the form is incomplete (i.e. both signatures are not present), the MBE/WBE participation will not count toward meeting the Combined MBE/WBE goal. If the lack of this participation drops the commitment below the Combined MBE/WBE goal, the Contractor shall submit evidence of good faith efforts for the goal not met, completed in its entirety, to the Engineer no later than 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 Engineer no later than 10:00 a.m. on the next official state business day.

**Banking MBE/WBE Credit**

If the committed MBE/WBE participation submitted exceeds the algebraic sum of the Combined MBE/WBE goal by \$1,000 or more, the excess will be placed on deposit by the Department for future use by the bidder. Separate accounts will be maintained for MBE and WBE participation and these may accumulate for a period not to exceed 24 months.

When the apparent lowest responsive bidder fails to submit sufficient participation by MBE and WBE firms to meet the advertised goal, as part of the good faith effort, the Department will consider allowing the bidder to withdraw funds to meet the Combined MBE/WBE goal as long as there are adequate funds available from the bidder's MBE and WBE bank accounts.

**Submission of Good Faith Effort**

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

One complete set and **6** copies of this information shall be received in the office of the Engineer 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 Engineer 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 a Combined MBE/WBE Goal More Than Zero**

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

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

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified MBEs/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 Combined MBE/WBE goal 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 advertised goal when the work to be sublet includes potential for MBE/WBE participation (2<sup>nd</sup> and 3<sup>rd</sup> 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 the advertised goal 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 advertised goal, 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 the Business Opportunity and Work Force Development Unit at [BOWD@ncdot.gov](mailto:BOWD@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 advertised goal.

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

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

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

### **Non-Good Faith Appeal**

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

**Counting MBE/WBE Participation Toward Meeting the Combined MBE/WBE Goal****(A) Participation**

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

**(B) Joint Checks**

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

**(C) Subcontracts (Non-Trucking)**

A MBE/WBE may enter into subcontracts. Work that a MBE subcontracts to another MBE firm may be counted toward the anticipated MBE participation. The same holds for work that a WBE subcontracts to another WBE firm. Work that a MBE/WBE subcontracts to a non-MBE/WBE firm does not count toward the contract goal requirement. 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 MBE or WBE participation breakdown. 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 firms and there is no interest or availability, and they can get assistance from other certified firms, the Engineer will not hold the prime responsible for meeting the individual MBE or WBE breakdown. 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.

**(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 /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 /WBE requirement the following expenditures to MBE/WBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a MBE/WBE firm for providing a *bona fide* service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
- (2) With respect to materials or supplies purchased from a MBE/WBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

**Commercially Useful Function**

(A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the MBE/WBE credit claimed for its performance of the work, and any other relevant factors. If it is determined that a MBE or WBE is not performing a Commercially Useful Function, the contractor may present evidence to rebut this presumption to the Department.

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



## **MBE/WBE Replacement**

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

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

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

### **(A) Performance Related Replacement**

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

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

- (1) Copies of written notification to MBEs/WBEs that their interest is solicited in contracting the work defaulted by the previous MBE/WBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with MBEs/WBEs for specific subbids including, at a minimum:
  - (a) The names, addresses, and telephone numbers of MBEs/WBEs who were contacted.
  - (b) A description of the information provided to MBEs/WBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why MBE/WBE quotes were not accepted.
- (4) Efforts made to assist the MBEs/WBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

**(B) Decertification Replacement**

- (1) When a committed MBE/WBE is decertified by the Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department will not require the Contractor to solicit replacement MBE/WBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.
- (2) When a committed MBE/WBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named MBE/WBE firm, the Contractor shall take all necessary and reasonable steps to replace the MBE/WBE subcontractor with another similarly certified MBE/WBE subcontractor to perform at least the same amount of work to meet the Combined MBE/WBE goal requirement. If a MBE/WBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

**Changes in the Work**

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

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by MBEs/WBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed MBE/WBE, the Contractor shall seek participation by MBEs/WBEs unless otherwise approved by the Engineer.

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

**Reports and Documentation**

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

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

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

### **Reporting Minority and Women Business Enterprise Participation**

The Contractor shall provide the Engineer with an accounting of payments made to all MBE and WBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

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

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

Failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from being approved for further work on future projects until the required information is submitted.

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

At any time, the Engineer can request written verification of subcontractor payments. The Contractor shall report the accounting of payments through the Department's DBE Payment Tracking System.

### **Failure to Meet Contract Requirements**

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the *2018 Standard Specifications* may be cause to disqualify the Contractor.

### **SUBSURFACE INFORMATION:**

(7-1-95)

450

SP1 G112 D

Subsurface information is available on the structure portion of this project only.

**MAINTENANCE OF THE PROJECT:**

(11-20-07) (Rev. 1-17-12)

104-10

SP1 G125

Revise the *2018 Standard Specifications* as follows:

**Page 1-39, Article 104-10 Maintenance of the Project, line 25**, add the following after the first sentence of the first paragraph:

All guardrail/guiderail within the project limits shall be included in this maintenance.

**Page 1-39, Article 104-10 Maintenance of the Project, line 30**, add the following as the last sentence of the first paragraph:

The Contractor shall perform weekly inspections of guardrail and guiderail and shall report damages to the Engineer on the same day of the weekly inspection. *Where damaged guardrail or guiderail is repaired or replaced as a result of maintaining the project in accordance with this article*, such repair or replacement shall be performed within 7 consecutive calendar days of such inspection report.

**Page 1-39, Article 104-10 Maintenance of the Project, lines 42-44**, replace the last sentence of the last paragraph with the following:

The Contractor will not be directly compensated for any maintenance operations necessary, except for maintenance of guardrail/guiderail, as this work will be considered incidental to the work covered by the various contract items. The provisions of Article 104-7, Extra Work, and Article 104-8, Compensation and Record Keeping will apply to authorized maintenance of guardrail/guiderail. Performance of weekly inspections of guardrail/guiderail, and the damage reports required as described above, will be considered to be an incidental part of the work being paid for by the various contract items.

**TWELVE MONTH GUARANTEE:**

(7-15-03)

SP1 G145

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

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

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project.

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

**OUTSOURCING OUTSIDE THE USA:**

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

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.

**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:

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

During the Environmental Assessment required by Article 230-4 of the *2018 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](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.

**AUTHORITY OF THE ENGINEER:**

(01-30-14)

105-1

SPD 01-460

The Engineer for this project shall be the Division Engineer, Division 8, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representative.

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

**LIABILITY INSURANCE:**

(1-30-14)

107-15

SPD 01-550

Provide liability insurance in accordance with Article 107-15 of the *2018 Standard Specifications*.

Revise the *2018 Standard Specifications* as follows:

**Page 1-64, Article 107-15 Liability Insurance**, line 26, replace the first sentence of the fourth paragraph with the following:

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

**PROSECUTION AND PROGRESS:**

(3-16-10)

108

SPD 1-700

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods as may be required to complete the work described in the contract by the completion date and in accordance with the *2018 Standard Specifications*.

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

**SUPERVISION BY CONTRACTOR:**

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

At all times that work is actually being performed, the Contractor shall have present on the project one competent individual who is authorized to act in a supervisory capacity over all work on the project, including work subcontracted. The individual who has been so authorized shall be experienced in the type of work being performed and shall be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving

and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

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

## PROJECT SPECIAL PROVISIONS

### ROADWAY

#### CLEARING AND GRUBBING - METHOD II:

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

200

SP2 R02A

Perform clearing on this project to the limits established by Method "II" shown on Standard Drawing No. 200.02 of the *2018 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.

#### LUMP SUM GRADING:

(8-17-10)

226

SP2 R16

Lump sum grading shall be performed in accordance with Section 226 Comprehensive Grading of the *2018 Standard Specifications*.

#### SHOULDER AND FILL SLOPE MATERIAL:

(5-21-02)

235, 560

SP2 R45 A

#### **Description**

Perform the required shoulder and slope construction for this project in accordance with the applicable requirements of Section 560 and Section 235 of the *2018 Standard Specifications*.

#### **Measurement and Payment**

Where the material has been obtained from an authorized stockpile or from a borrow source and *Borrow Excavation* is not included in the contract, no direct payment will be made for this work, as the cost of this work will be part of the work being paid at the contract lump sum price for *Grading*. If *Borrow Excavation* is included in this contract and the material has been obtained from an authorized stockpile or from a borrow source, measurement and payment will be as provided in Section 230 of the *2018 Standard Specifications* for *Borrow Excavation*.

#### BRIDGE APPROACH FILLS:

(10-19-10) (Rev. 1-16-18)

422

SP4 R02A

#### **Description**

Bridge approach fills consist of backfilling behind bridge end bents with select material or aggregate to support all or portions of bridge approach slabs. Install drains to drain water from bridge approach fills and geotextiles to separate approach fills from embankment fills, ABC and natural ground as required. For bridge approach fills behind end bents with mechanically stabilized earth (MSE) abutment walls, reinforce bridge approach fills with MSE wall reinforcement connected to end bent caps. Construct bridge approach fills in accordance with the contract, accepted submittals and 2018 Roadway Standard Drawing Nos. 422.01 or 422.02 or Roadway Detail Drawing No. 422D10.

Define bridge approach fill types as follows:

*Approach Fills* – Bridge approach fills in accordance with 2018 Roadway Standard Drawing Nos. 422.01 or 422.02 or Roadway Detail Drawing No. 422D10,

*Standard Approach Fill* – Type I Standard Bridge Approach Fill in accordance with 2018 Roadway Standard Drawing No. 422.01,

*Modified Approach Fill* – Type II Modified Bridge Approach Fill in accordance with 2018 Roadway Standard Drawing No. 422.02 and

*Reinforced Approach Fill* – Type III Reinforced Bridge Approach Fill in accordance with Roadway Detail Drawing No. 422D10.

## **Materials**

Refer to Division 10 of the *2018 Standard Specifications*.

<b>Item</b>	<b>Section</b>
Geotextiles, Type 1	1056
Portland Cement Concrete	1000
Select Materials	1016
Subsurface Drainage Materials	1044

Provide Type 1 geotextile for separation geotextiles and Class B concrete for outlet pads. Use Class V or Class VI select material for standard and modified approach fills. For an approach fill behind a bridge end bent with an MSE abutment wall, backfill the reinforced approach fill with the same aggregate type approved for the reinforced zone in the accepted MSE wall submittal. For MSE wall aggregate, reinforcement and connector materials, see the *Mechanically Stabilized Earth Retaining Walls* provision. Provide PVC pipes, fittings and outlet pipes for subsurface drainage materials. For PVC drain pipes, use pipes with perforations that meet AASHTO M 278.

## **Construction Methods**

Excavate as necessary for approach fills in accordance with the contract. Notify the Engineer when foundation excavation is complete. Do not place separation geotextiles or aggregate until approach fill dimensions and foundation material are approved.

For reinforced approach fills, cast MSE wall reinforcement or connectors into end bent cap backwalls within 3" of locations shown in the accepted MSE wall submittals. Install MSE wall reinforcement with the orientation, dimensions and number of layers shown in the accepted MSE wall submittals. If a reinforced approach fill is designed with geogrid reinforcement embedded in an end bent cap, cut geogrids to the required lengths and after securing ends of geogrids in place, reroll and rewrap portions of geogrids not embedded in the cap to protect geogrids from damage. Before placing aggregate, pull geosynthetic reinforcement taut so that it is in tension and free of kinks, folds, wrinkles or creases.

Attach separation geotextiles to end bent cap backwalls and wing walls with adhesives, tapes or other approved methods. Overlap adjacent separation geotextiles at least 18" with seams oriented parallel to the roadway centerline. Hold geotextiles in place with wire staples or anchor pins as needed. Contact the Engineer when existing or future obstructions such as foundations, pavements, pipes, inlets or utilities will interfere with separation geotextiles or MSE wall reinforcement.

Install continuous perforated PVC drain pipes with perforations pointing down in accordance with 2018 Roadway Standard Drawing Nos. 422.01 or 422.02. Connect drain pipes to outlet pipes just beyond wing walls. Connect PVC pipes, fittings and outlet pipes with solvent cement in accordance with Article 815-3 of the *2018 Standard Specifications* and place outlet pads in accordance with 2018 Roadway Standard Drawing No. 815.03.

Install drain pipes so water drains towards outlets. If the groundwater elevation is above drain pipe elevations, raise drains up to maintain positive drainage towards outlets. Place pipe sleeves in or under wing walls so water drains towards outlets. Use sleeves that can withstand wing wall loads.

Place select material or aggregate in 8" to 10" thick lifts. Compact fine aggregate for reinforced approach fills in accordance with Subarticle 235-3(C) of the *2018 Standard Specifications* except compact fine aggregate to a density of at least 98%. Compact select material for standard or modified approach fills and coarse aggregate for reinforced approach fills with a vibratory compactor to the satisfaction of the Engineer. Do not displace or damage geosynthetics, MSE wall reinforcement or drains when placing and compacting select material or aggregate. End dumping directly on geosynthetics is not permitted. Do not operate heavy equipment on geosynthetics or drain pipes until they are covered with at least 8" of select material or aggregate. Replace any damaged geosynthetics or drains to the satisfaction of the Engineer. When approach fills extend beyond bridge approach slabs, wrap separation geotextiles over select material or aggregate as shown in 2018 Roadway Standard Drawing No. 422.01 or 2018 Roadway Detail Drawing No. 422D10.

### **Measurement and Payment**

*Type I Standard Approach Fill, Station \_\_\_\_*, *Type II Modified Approach Fill, Station \_\_\_\_* and *Type III Reinforced Approach Fill, Station \_\_\_\_* will be paid at the contract lump sum price. The lump sum price for each approach fill will be full compensation for providing labor, tools, equipment and approach fill materials, excavating, backfilling, hauling and removing excavated materials, installing geotextiles and drains, compacting backfill and supplying select material, aggregate, separation geotextiles, drain pipes, pipe sleeves, outlet pipes and pads and any incidentals necessary to construct approach fills behind bridge end bents.

The contract lump sum price for *Type III Reinforced Approach Fill, Station \_\_\_\_* will also be full compensation for supplying and connecting MSE wall reinforcement to end bent caps but not designing MSE wall reinforcement and connectors. The cost of designing reinforcement and connectors for reinforced approach fills behind bridge end bents with MSE abutment walls will be incidental to the contract unit price for *MSE Retaining Wall No. \_\_\_\_*.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Type I Standard Approach Fill, Station ____	Lump Sum
Type II Modified Approach Fill, Station ____	Lump Sum
Type III Reinforced Approach Fill, Station ____	Lump Sum



**INCIDENTAL STONE BASE:**

(7-1-95) (Rev.8-21-12)

545

SP5 R28R

**Description**

Place incidental stone base on driveways, mailboxes, etc. immediately after paving and do not have the paving operations exceed stone base placement by more than one week without written permission of the Engineer.

**Materials and Construction**

Provide and place incidental stone base in accordance with Section 545 of the *2018 Standard Specifications*.

**Measurement and Payment**

*Incidental Stone Base* will be measured and paid in accordance with Article 545-6 of the *2018 Standard Specifications*.

**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 *2018 Standard Specifications*.

The base price index for asphalt binder for plant mix is **\$553.33** per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **August 1, 2018**.

**FINAL SURFACE TESTING NOT REQUIRED:**

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

610

SP6 R45

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

**ASPHALT CONCRETE SURFACE COURSE COMPACTION:**

(7-1-95) (Rev. 8-21-12)

SP6 R49R rev.

Compact the asphalt surface course on this project in accordance with Subarticle 610-9 of the *2018 Standard Specifications* and the following provision:

Perform the first rolling with a steel wheel roller followed by rolling with a self-propelled pneumatic tired roller with the final rolling by a steel wheel roller as directed by the Engineer.

**ASPHALT CONCRETE PLANT MIX PAVEMENTS:**

(2-20-18)

610, 1012

SP6 R65

Revise the 2018 Standard Specifications as follows:

**Page 6-17, Table 610-1, MIXING TEMPERATURE AT THE ASPHALT PLANT**, replace with the following:

<b>TABLE 610-1 MIXING TEMPERATURE AT THE ASPHALT PLANT</b>	
<b>Binder Grade</b>	<b>JMF Temperature</b>
PG 58-28; PG 64-22	250 - 290°F
PG 76-22	300 - 325°F

**Page 6-17, Subarticle 610-3(C), Job Mix Formula (JMF), lines 38-39**, delete the fourth paragraph.

**Page 6-18, Subarticle 610-3(C), Job Mix Formula (JMF), line 12**, replace “SF9.5A” with “S9.5B”.

**Page 6-18, Table 610-3, MIX DESIGN CRITERIA**, replace with the following:

<b>TABLE 610-3 MIX DESIGN CRITERIA</b>									
<b>Mix Type</b>	<b>Design ESALs millions<sup>A</sup></b>	<b>Binder PG Grade<sup>B</sup></b>	<b>Compaction Levels</b>		<b>Max. Rut Depth (mm)</b>	<b>Volumetric Properties</b>			
			<b>Gmm @</b>			<b>VMA % Min.</b>	<b>VTM %</b>	<b>VFA Min.-Max.</b>	<b>%Gmm @ Nini</b>
			<b>Nini</b>	<b>Ndes</b>					
S4.75A	< 1	64 - 22	6	50	11.5	16.0	4.0 - 6.0	65 - 80	≤ 91.5
S9.5B	0 - 3	64 - 22	6	50	9.5	16.0	3.0 - 5.0	70 - 80	≤ 91.5
S9.5C	3 - 30	64 - 22	7	65	6.5	15.5	3.0 - 5.0	65 - 78	≤ 90.5
S9.5D	> 30	76 - 22	8	100	4.5	15.5	3.0 - 5.0	65 - 78	≤ 90.0
I19.0C	ALL	64 - 22	7	65	-	13.5	3.0 - 5.0	65 - 78	≤ 90.5
B25.0C	ALL	64 - 22	7	65	-	12.5	3.0 - 5.0	65 - 78	≤ 90.5
		<b>Design Parameter</b>					<b>Design Criteria</b>		
All Mix Types		Dust to Binder Ratio ( $P_{0.075} / P_{be}$ )					0.6 - 1.4 <sup>C</sup>		
		Tensile Strength Ratio (TSR) <sup>D</sup>					85% Min. <sup>E</sup>		

**A.** Based on 20 year design traffic.

**B.** Volumetric Properties based on specimens compacted to  $N_{des}$  as modified by the Department.

**C.** Dust to Binder Ratio ( $P_{0.075} / P_{be}$ ) for Type S4.75A is 1.0 - 2.0.

**D.** NCDOT-T-283 (No Freeze-Thaw cycle required).

**E.** TSR for Type S4.75A & B25.0C mixes is 80% minimum.

**Page 6-19, Table 610-5, BINDER GRADE REQUIREMENTS (BASED ON RBR%),** replace with the following:

<b>TABLE 610-5 BINDER GRADE REQUIREMENTS (BASED ON RBR%)</b>			
<b>Mix Type</b>	<b>%RBR ≤ 20%</b>	<b>21% ≤ %RBR ≤ 30%</b>	<b>%RBR &gt; 30%</b>
S4.75A, S9.5B, S9.5C, I19.0C, B25.0C	PG 64-22	PG 64-22 <sup>A</sup>	PG 58-28
S9.5D, OGFC	PG 76-22 <sup>B</sup>	n/a	n/a

- A. If the mix contains any amount of RAS, the virgin binder shall be PG 58-28.
- B. Maximum Recycled Binder Replacement (%RBR) is 18% for mixes using PG 76-22 binder.

**Page 6-20, Table 610-6, PLACEMENT TEMPERATURES FOR ASPHALT,** replace with the following:

<b>TABLE 610-6 PLACEMENT TEMPERATURES FOR ASPHALT</b>	
<b>Asphalt Concrete Mix Type</b>	<b>Minimum Surface and Air Temperature</b>
B25.0C	35°F
I19.0C	35°F
S4.75A, S9.5B, S9.5C	40°F <sup>A</sup>
S9.5D	50°F

- A. If the mix contains any amount of RAS, The virgin binder shall be PG 58-28.

**Page 6-23, Table 610-7, DENSITY REQUIREMENTS,** replace with the following:

<b>TABLE 610-7 DENSITY REQUIREMENTS</b>	
<b>Mix Type</b>	<b>Minimum % G<sub>mm</sub> (Maximum Specific Gravity)</b>
S4.75A	85.0 <sup>A</sup>
S9.5B	90.0
S9.5C, S9.5D, I19.0C, B25.0C	92.0

- A. Compaction to the above specified density will be required when the S4.75A mix is applied at a rate of 100 lbs/sy or higher.

**Page 6-32, Article 610-16 MEASUREMENT AND PAYMENT,** replace with the following:

<b>Pay Item</b>	<b>Pay Unit</b>
Asphalt Concrete Base Course, Type B25.0C	Ton
Asphalt Concrete Intermediate Course, Type I19.0C	Ton
Asphalt Concrete Surface Course, Type S4.75A	Ton
Asphalt Concrete Surface Course, Type S9.5B	Ton
Asphalt Concrete Surface Course, Type S9.5C	Ton

Asphalt Concrete Surface Course, Type S9.5D

Ton

Page 10-30, Table 1012-1, AGGREGATE CONSENSUS PROPERTIES, replace with the following:

<b>TABLE 1012-1 AGGREGATE CONSENSUS PROPERTIES<sup>A</sup></b>				
<b>Mix Type</b>	<b>Coarse Aggregate Angularity<sup>B</sup></b>	<b>Fine Aggregate Angularity % Minimum</b>	<b>Sand Equivalent % Minimum</b>	<b>Flat and Elongated 5 : 1 Ratio % Maximum</b>
<i>Test Method</i>	<i>ASTM D5821</i>	<i>AASHTO T 304</i>	<i>AASHTO T 176</i>	<i>ASTM D4791</i>
S4.75A; S9.5B	75 / -	40	40	-
S9.5C; I19.0C; B25.0C	95 / 90	45	45	10
S9.5D	100 / 100	45	50	10
OGFC	100 / 100	45	45	10
UBWC	100 / 85	45	45	10

A. Requirements apply to the design aggregate blend.

B. 95 / 90 denotes that 95% of the coarse aggregate has one fractured face and 90% has 2 or more fractured faces.

**PAVEMENT DESIGN MIX TYPE MODIFICATIONS:**

(2-20-18)

610

SP6 R66

**Description**

In an effort to reduce the number of asphalt concrete pavement mix types, the department has made the following changes:

Where the “Pavement Schedule” in the plans calls for Asphalt Concrete Surface Course Type SF9.5A, Asphalt Concrete Surface Course Type S9.5B shall be used.

Where the “Pavement Schedule” in the plans calls for either Asphalt Concrete Intermediate Course Type B, C or D, Asphalt Concrete Intermediate Course Type I19.0C shall be used.

Where the “Pavement Schedule” in the plans call for Asphalt Concrete Base Course Type B25.0B, Asphalt Concrete Base Course Type B25.0C shall be used.

In addition, see the project special provision entitled “Asphalt Concrete Plant Mix Pavements” contained elsewhere in the proposal.

**Measurement and Payment**

The pay items in this proposal reflects these changes. The pavement schedule in the plans will not be revised to reflect these changes.

**GUARDRAIL END UNITS, TYPE - TL-2:**

(10-21-08) (Rev. 7-1-17)

862

SP8 R64

**Description**

Furnish and install guardrail end units in accordance with the details in the plans, the applicable requirements of Section 862 of the *2018 Standard Specifications*, and at locations shown in the plans.

**Materials**

Furnish guardrail end units listed on the NCDOT [Approved Products List](https://apps.dot.state.nc.us/vendor/approvedproducts/) at <https://apps.dot.state.nc.us/vendor/approvedproducts/> or approved equal.

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each guardrail end unit certifying it meets the requirements of the AASHTO Manual for Assessing Safety Hardware, Test Level 2 in accordance with Article 106-2 of the *2018 Standard Specifications*.
- (B) Certified working drawings and assembling instructions from the manufacturer for each guardrail end unit in accordance with Article 105-2 of the *2018 Standard Specifications*.

No modifications shall be made to the guardrail end unit without the express written permission from the manufacturer. Perform installation in accordance with the details in the plans, and details and assembling instructions furnished by the manufacturer.

**Construction Methods**

Guardrail end delineation is required on all approach and trailing end sections for both temporary and permanent installations. Guardrail end delineation consists of yellow reflective sheeting applied to the entire end section of the guardrail in accordance with Article 1088-3 of the *2018 Standard Specifications* and is incidental to the cost of the guardrail end unit.

**Measurement and Payment**

Measurement and payment will be made in accordance with Article 862-6 of the *2018 Standard Specifications*.

Payment will be made under:

**Pay Item**  
Guardrail End Units, Type TL-2

**Pay Unit**  
Each

**WORK ZONE TRAFFIC CONTROL:**

(8-16-11)

R11 R20(Rev.)

**In accordance with Page 11-3, Article 1101-13 Traffic Control Supervision of the 2018 specifications,** provide the service of at least one qualified Work Zone Supervisor. The Work Zone Supervisor shall have the overall responsibility for the proper implementation of the traffic management plan, as well as ensuring all employees working inside the NCDOT Right of Way have received the proper training appropriate to the job decisions each individual is required to make.

The work zone supervisor is not required to be on site at all times but must be available to address concerns of the Engineer. The name and contact information of the work zone supervisor shall be provided to the Engineer prior to or at the preconstruction conference.

Qualification of Work Zone Supervisors shall be done by an NCDOT approved training agency or other approved training provider. For a complete listing of these, see the Work Zone Traffic Control's webpage, <http://www.ncdot.gov/doh/preconstruct/wztc/>.

**In accordance with, Page 11-12, Article 1150-3 Construction Methods,** provide the service of properly equipped and qualified flaggers (see *Roadway Standard Drawings* No. 1150.01) at locations and times for such period as necessary for the control and protection of vehicular and pedestrian traffic. Anyone who controls traffic is required to be qualified. Qualification consists of each flagger receiving proper training in the set-up and techniques of safely and competently performing a flagging operation. Qualification of flaggers is to be done at an NCDOT approved training agency. For a complete listing of these, see the Work Zone Traffic Control's webpage, <http://www.ncdot.gov/doh/preconstruct/wztc/>.

Prior to beginning work on the project, a Qualification Statement that all flaggers used on the project have been properly trained through an NCDOT approved training resource shall be provided to the Engineer.

Flagging operations are not allowed for the convenience of the Contractor's operations. However, if safety issues exist (i.e. sight or stopping sight distance), the Engineer may approve the use of flagging operations. Use flagging methods that comply with the guidelines in the MUTCD.

**GENERAL REQUIREMENTS**

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

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, North Carolina Department of Transportation *Standard Specifications for Roads and Structures 2018*, and the current edition of the *Manual of Uniform Traffic Control Devices* (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary

operations shall be removed during periods of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists. No separate payment will be made for traffic control unless specifically identified in these standard or special provisions.

Traffic movements through lane closures on roads with two way traffic shall be controlled by flaggers stationed at each end of the work zone. In situations where sight distance is limited, the Contractor shall provide additional means of controlling traffic, including, but not limited to, two-way radios, pilot vehicles, or additional flaggers. Flaggers shall be competent personnel, adequately trained in flagging procedures, and furnished with proper safety devices and equipment, including, but not limited to, safety vests and stop/slow paddles.

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

The Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

Failure to comply with any of the requirements for safety and traffic control of this contract shall result in suspension of work as provided in subarticle 108-7(b) of the *Standard Specifications*

**TEMPORARY TRAFFIC CONTROL DEVICES:**

(1-17-12)

1105

SP11 R05

Revise the *2018 Standard Specifications* as follows:

**Page 11-5, Article 1105-6 Measurement and Payment**, add the following paragraph after line 24:

Partial payments will be made on each payment estimate based on the following: 50% of the contract lump sum price bid will be paid on the first monthly estimate and the remaining 50% of the contract lump sum price bid will be paid on each subsequent estimate based on the percent of the project completed.

**ROADWAY STANDARD DRAWINGS FOR PAVEMENT MARKINGS AND MARKERS**

(01-17-12)

RWZ-5

Use the following in conjunction with the *2018 Standard Specifications*:

**Standard Pavement Markings***2018 Roadway Standard Drawings:*1205.01, 1205.02, 1205.03, 1205.04, 1205.05,  
1205.06, 1205.07, 1205.08, 1205.09, 1205.10,  
1205.11, 1205.12, 1205.13**Raised Pavement Markers***2018 Roadway Standard Drawings:*

1205.12, 1250.01, 1251.01

**Snowplowable Pavement Markers***2018 Roadway Standard Drawings:*

1250.01, 1253.01

**Milled Rumble Strips***2018 Roadway Standard Drawings:*

665.01



**Project Special Provisions  
Erosion Control**

**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:**

**(East)**

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.

All Roadway Areas

<b>March 1 - August 31</b>		<b>September 1 - February 28</b>	
50#	Tall Fescue	50#	Tall Fescue
10#	Centipede	10#	Centipede
25#	Bermudagrass (hulled)	35#	Bermudagrass (unhulled)
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000#	Limestone

Waste and Borrow Locations

<b>March 1 – August 31</b>		<b>September 1 - February 28</b>	
75#	Tall Fescue	75#	Tall Fescue
25#	Bermudagrass (hulled)	35#	Bermudagrass (unhulled)
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000#	Limestone

Note: 50# of Bahiagrass may be substituted for either Centipede or Bermudagrass only upon Engineer’s request.

## Approved Tall Fescue Cultivars

06 Dust	Escalade	Justice	Serengeti
2 <sup>nd</sup> Millennium	Essential	Kalahari	Shelby
3 <sup>rd</sup> Millennium	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	

On cut and fill slopes 2:1 or steeper Centipede shall be applied at the rate of 5 pounds per acre and add 20# of Sericea Lespedeza from 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**

18# Creeping Red Fescue  
 8# Big Bluestem  
 6# Indiangrass  
 4# Switchgrass  
 35# Rye Grain  
 500# Fertilizer  
 4000# Limestone

**May 1 – September 1**

18# Creeping Red Fescue  
 8# Big Bluestem  
 6# Indiangrass  
 4# Switchgrass  
 25# German or Browntop Millet  
 500# Fertilizer  
 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*.

All areas seeded and mulched shall be tacked with asphalt. Crimping of straw in lieu of asphalt tack shall not be allowed on this project.

**CRIMPING STRAW MULCH:**

Crimping shall be required on this project adjacent to any section of roadway where traffic is to be maintained or allowed during construction. In areas within six feet of the edge of pavement, straw

is to be applied and then crimped. After the crimping operation is complete, an additional application of straw shall be applied and immediately tacked with a sufficient amount of undiluted emulsified asphalt.

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

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

#### **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. Sweet Sudan Grass, 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 on all roadway areas except slopes 2:1 and steeper shall be 10-20-20 grade and shall be applied at the rate of 500 pounds per acre. 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 10-20-20 analysis and as directed.

Fertilizer used for topdressing on slopes 2:1 and steeper and waste and borrow areas 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*, with the exception that no centipede seed will be used in the seed mix for supplemental seeding. The rate of application for supplemental seeding 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 4 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  $\frac{3}{4}$ " 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.

<b>Section</b>	<b>Erosion Control Item</b>	<b>Unit</b>
1605	Temporary Silt Fence	LF
1606	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
1640	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 the NPDES Inspection 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:

<b>Pay Item</b>	<b>Pay Unit</b>
Response for Erosion Control	Each

**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](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.

**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****(A) 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.

**(B) 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.

**(A) 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. Posts shall be installed a minimum of 2 ft. into the ground. 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.

#### (B) 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:

<b>Pay Item</b>	<b>Pay Unit</b>
Safety Fence	Linear Foot

**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:

<b>Pay Item</b>	<b>Pay Unit</b>
Polyacrylamide(PAM)	Pound

### **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**

<b>Item</b>	<b>Section</b>
Coir Fiber Mat	1060-14

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:

<b>Pay Item</b>	<b>Pay Unit</b>
Coir Fiber Mat	Square Yard

**FLOATING TURBIDITY CURTAIN:****Description**

This work consists of furnishing a *Floating Turbidity Curtain* to deter silt suspension and movement of silt particles during construction. The floating turbidity curtain shall be constructed at locations as directed.

**Materials**

The curtain material shall be made of a tightly woven nylon, plastic or other non- deteriorating material meeting the following specifications:

<b>Property</b>	<b>Value</b>
Grab tensile strength	*md-370 lbs *cd-250 lbs
Mullen burst strength	480 psi
Trapezoid tear strength	*md-100 lbs *cd-60 lbs
Apparent opening size	70 US standard sieve
Percent open area	4% permittivity 0.28 sec-1

\*md - machine direction

\*cd - cross machine direction

In the event that more than one width of fabric is required, a 6" overlap of the material shall also be required.

The curtain material shall be supported by a flotation material having over 29 lbs/ft buoyancy. The floating curtain shall have a 5/16" galvanized chain as ballast and dual 5/16" galvanized wire ropes with a heavy vinyl coating as load lines.

**Construction Methods**

The Contractor shall maintain the *Floating Turbidity Curtain* in a satisfactory condition until its removal is requested by the Engineer. The curtain shall extend to the bottom of the jurisdictional resource. Anchor the curtain according to manufacturer recommendations.

**Measurement and Payment**

*Floating Turbidity Curtain* will be measured and paid for as the actual number of square yards of curtain furnished as specified and accepted. Such price and payment will be full compensation for the work as described in this section including but not limited to furnishing all materials, tools, equipment, and all incidentals necessary to complete the work.

Payment will be made under:

**Pay Item**

Floating Turbidity Curtain

**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**

<b>Item</b>	<b>Section</b>
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 thick 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/](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:

<b>Pay Item</b>	<b>Pay Unit</b>
Concrete Washout Structure	Each

**Project 17BP.8.R.76**

**Randolph County**

**Project Special Provisions  
Structure**

**Table of Contents**

			<b>Page #</b>
Falsework and Formwork	(4-5-12)	.....	1
Submittal of Working Drawings	(8-9-13)	.....	8
Crane Safety	(8-15-05)	.....	14
Grout for Structures	(9-30-11)	.....	15
Optional Precast Reinforced Concrete Box Culvert At Station 12+81.00 -L- (12-12-13)		.....	17



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

PROJECT 17BP.8.R.76

RANDOLPH COUNTY

**FALSEWORK AND FORMWORK**

(4-5-12)

**1.0 DESCRIPTION**

Use this Special Provision as a guide to develop temporary works submittals required by the Standard Specifications or other provisions; no additional submittals are required herein. Such temporary works include, but are not limited to, falsework and formwork.

Falsework is any temporary construction used to support the permanent structure until it becomes self-supporting. Formwork is the temporary structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens. Access scaffolding is a temporary structure that functions as a work platform that supports construction personnel, materials, and tools, but is not intended to support the structure. Scaffolding systems that are used to temporarily support permanent structures (as opposed to functioning as work platforms) are considered to be falsework under the definitions given. Shoring is a component of falsework such as horizontal, vertical, or inclined support members. Where the term "temporary works" is used, it includes all of the temporary facilities used in bridge construction that do not become part of the permanent structure.

Design and construct safe and adequate temporary works that will support all loads imposed and provide the necessary rigidity to achieve the lines and grades shown on the plans in the final structure.

**2.0 MATERIALS**

Select materials suitable for temporary works; however, select materials that also ensure the safety and quality required by the design assumptions. The Engineer has authority to reject material on the basis of its condition, inappropriate use, safety, or nonconformance with the plans. Clearly identify allowable loads or stresses for all materials or manufactured devices on the plans. Revise the plan and notify the Engineer if any change to materials or material strengths is required.

**3.0 DESIGN REQUIREMENTS****A. Working Drawings**

Provide working drawings for items as specified in the contract, or as required by the Engineer, with design calculations and supporting data in sufficient detail to permit a structural and safety review of the proposed design of the temporary work.



On the drawings, show all information necessary to allow the design of any component to be checked independently as determined by the Engineer.

When concrete placement is involved, include data such as the drawings of proposed sequence, rate of placement, direction of placement, and location of all construction joints. Submit the number of copies as called for by the contract.

When required, have the drawings and calculations prepared under the guidance of, and sealed by, a North Carolina Registered Professional Engineer who is knowledgeable in temporary works design.

If requested by the Engineer, submit with the working drawings manufacturer's catalog data listing the weight of all construction equipment that will be supported on the temporary work. Show anticipated total settlements and/or deflections of falsework and forms on the working drawings. Include falsework footing settlements, joint take-up, and deflection of beams or girders.

As an option for the Contractor, overhang falsework hangers may be uniformly spaced, at a maximum of 36 inches, provided the following conditions are met:

Member Type (PCG)	Member Depth, (inches)	Max. Overhang Width, (inches)	Max. Slab Edge Thickness, (inches)	Max. Screenshot Wheel Weight, (lbs.)	Bracket Min. Vertical Leg Extension, (inches)
II	36	39	14	2000	26
III	45	42	14	2000	35
IV	54	45	14	2000	44
MBT	63	51	12	2000	50
MBT	72	55	12	1700	48

Overhang width is measured from the centerline of the girder to the edge of the deck slab.

For Type II, III & IV prestressed concrete girders (PCG), 45-degree cast-in-place half hangers and rods must have a minimum safe working load of 6,000 lbs.

For MBT prestressed concrete girders, 45-degree angle holes for falsework hanger rods shall be cast through the girder top flange and located, measuring along the top of the member, 1'-2 1/2" from the edge of the top flange. Hanger hardware and rods must have a minimum safe working load of 6,000 lbs.

The overhang bracket provided for the diagonal leg shall have a minimum safe working load of 3,750 lbs. The vertical leg of the bracket shall extend to the point that the heel bears on the girder bottom flange, no closer than 4 inches from the bottom of the member. However, for 72-inch members, the heel of the bracket shall bear on the web, near the bottom flange transition.

Provide adequate overhang falsework and determine the appropriate adjustments for deck geometry, equipment, casting procedures and casting conditions.

If the optional overhang falsework spacing is used, indicate this on the falsework submittal and advise the girder producer of the proposed details. Failure to notify the Engineer of hanger type and hanger spacing on prestressed concrete girder casting drawings may delay the approval of those drawings.

Falsework hangers that support concentrated loads and are installed at the edge of thin top flange concrete girders (such as bulb tee girders) shall be spaced so as not to exceed 75% of the manufacturer's stated safe working load. Use of dual leg hangers (such as Meadow Burke HF-42 and HF-43) are not allowed on concrete girders with thin top flanges. Design the falsework and forms supporting deck slabs and overhangs on girder bridges so that there will be no differential settlement between the girders and the deck forms during placement of deck concrete.

When staged construction of the bridge deck is required, detail falsework and forms for screed and fluid concrete loads to be independent of any previous deck pour components when the mid-span girder deflection due to deck weight is greater than  $\frac{3}{4}$ ".

Note on the working drawings any anchorages, connectors, inserts, steel sleeves or other such devices used as part of the falsework or formwork that remains in the permanent structure. If the plan notes indicate that the structure contains the necessary corrosion protection required for a Corrosive Site, epoxy coat, galvanize or metalize these devices. Electroplating will not be allowed. Any coating required by the Engineer will be considered incidental to the various pay items requiring temporary works.

Design falsework and formwork requiring submittals in accordance with the 1995 AASHTO *Guide Design Specifications for Bridge Temporary Works* except as noted herein.

1. Wind Loads

Table 2.2 of Article 2.2.5.1 is modified to include wind velocities up to 110 mph. In addition, Table 2.2A is included to provide the maximum wind speeds by county in North Carolina.

**Table 2.2 - Wind Pressure Values**

Height Zone feet above ground	Pressure, lb/ft <sup>2</sup> for Indicated Wind Velocity, mph				
	70	80	90	100	110
0 to 30	15	20	25	30	35
30 to 50	20	25	30	35	40
50 to 100	25	30	35	40	45
over 100	30	35	40	45	50

2. Time of Removal

The following requirements replace those of Article 3.4.8.2.

Do not remove forms until the concrete has attained strengths required in Article 420-16 of the Standard Specifications and these Special Provisions.

Do not remove forms until the concrete has sufficient strength to prevent damage to the surface.

**Table 2.2A - Steady State Maximum Wind Speeds by Counties in North Carolina**

COUNTY	25 YR (mph)	COUNTY	25 YR (mph)	COUNTY	25 YR (mph)
Alamance	70	Franklin	70	Pamlico	100
Alexander	70	Gaston	70	Pasquotank	100
Alleghany	70	Gates	90	Pender	100
Anson	70	Graham	80	Perquimans	100
Ashe	70	Granville	70	Person	70
Avery	70	Greene	80	Pitt	90
Beaufort	100	Guilford	70	Polk	80
Bertie	90	Halifax	80	Randolph	70
Bladen	90	Harnett	70	Richmond	70
Brunswick	100	Haywood	80	Robeson	80
Buncombe	80	Henderson	80	Rockingham	70
Burke	70	Hertford	90	Rowan	70
Cabarrus	70	Hoke	70	Rutherford	70
Caldwell	70	Hyde	110	Sampson	90
Camden	100	Iredell	70	Scotland	70
Carteret	110	Jackson	80	Stanley	70
Caswell	70	Johnston	80	Stokes	70
Catawba	70	Jones	100	Surry	70
Cherokee	80	Lee	70	Swain	80
Chatham	70	Lenoir	90	Transylvania	80
Chowan	90	Lincoln	70	Tyrell	100
Clay	80	Macon	80	Union	70
Cleveland	70	Madison	80	Vance	70
Columbus	90	Martin	90	Wake	70
Craven	100	McDowell	70	Warren	70
Cumberland	80	Mecklenburg	70	Washington	100
Currituck	100	Mitchell	70	Watauga	70
Dare	110	Montgomery	70	Wayne	80
Davidson	70	Moore	70	Wilkes	70
Davie	70	Nash	80	Wilson	80
Duplin	90	New Hanover	100	Yadkin	70
Durham	70	Northampton	80	Yancey	70
Edgecombe	80	Onslow	100		
Forsyth	70	Orange	70		

#### B. Review and Approval

The Engineer is responsible for the review and approval of temporary works' drawings.

Submit the working drawings sufficiently in advance of proposed use to allow for their review, revision (if needed), and approval without delay to the work.

The time period for review of the working drawings does not begin until complete drawings and design calculations, when required, are received by the Engineer.

Do not start construction of any temporary work for which working drawings are required until the drawings have been approved. Such approval does not relieve the Contractor of the responsibility for the accuracy and adequacy of the working drawings.

### 4.0 CONSTRUCTION REQUIREMENTS

All requirements of Section 420 of the Standard Specifications apply.

Construct temporary works in conformance with the approved working drawings. Ensure that the quality of materials and workmanship employed is consistent with that assumed in the design of the temporary works. Do not weld falsework members to any portion of the permanent structure unless approved. Show any welding to the permanent structure on the approved construction drawings.

Provide tell-tales attached to the forms and extending to the ground, or other means, for accurate measurement of falsework settlement. Make sure that the anticipated compressive settlement and/or deflection of falsework does not exceed 1 inch. For cast-in-place concrete structures, make sure that the calculated deflection of falsework flexural members does not exceed 1/240 of their span regardless of whether or not the deflection is compensated by camber strips.

#### A. Maintenance and Inspection

Inspect and maintain the temporary work in an acceptable condition throughout the period of its use. Certify that the manufactured devices have been maintained in a condition to allow them to safely carry their rated loads. Clearly mark each piece so that its capacity can be readily determined at the job site.

Perform an in-depth inspection of an applicable portion(s) of the temporary works, in the presence of the Engineer, not more than 24 hours prior to the beginning of each concrete placement. Inspect other temporary works at least once a month to ensure that they are functioning properly. Have a North Carolina Registered Professional Engineer inspect the cofferdams, shoring, sheathing, support of excavation structures, and support systems for load tests prior to loading.

**B. Foundations**

Determine the safe bearing capacity of the foundation material on which the supports for temporary works rest. If required by the Engineer, conduct load tests to verify proposed bearing capacity values that are marginal or in other high-risk situations.

The use of the foundation support values shown on the contract plans of the permanent structure is permitted if the foundations are on the same level and on the same soil as those of the permanent structure.

Allow for adequate site drainage or soil protection to prevent soil saturation and washout of the soil supporting the temporary works supports.

If piles are used, the estimation of capacities and later confirmation during construction using standard procedures based on the driving characteristics of the pile is permitted. If preferred, use load tests to confirm the estimated capacities; or, if required by the Engineer conduct load tests to verify bearing capacity values that are marginal or in other high risk situations.

The Engineer reviews and approves the proposed pile and soil bearing capacities.

**5.0 REMOVAL**

Unless otherwise permitted, remove and keep all temporary works upon completion of the work. Do not disturb or otherwise damage the finished work.

Remove temporary works in conformance with the contract documents. Remove them in such a manner as to permit the structure to uniformly and gradually take the stresses due to its own weight.

**6.0 METHOD OF MEASUREMENT**

Unless otherwise specified, temporary works will not be directly measured.

**7.0 BASIS OF PAYMENT**

Payment at the contract unit prices for the various pay items requiring temporary works will be full compensation for the above falsework and formwork.

**SUBMITTAL OF WORKING DRAWINGS****(8-9-13)****1.0 GENERAL**

Submit working drawings in accordance with Article 105-2 of the *Standard Specifications* and this provision. For this provision, “submittals” refers to only those listed in this provision. The list of submittals contained herein does not represent a list of required submittals for the project. Submittals are only necessary for those items as required by the contract. Make submittals that are not specifically noted in this provision directly to the Resident Engineer. Either the Structure Design Unit or the Geotechnical Engineering Unit or both units will jointly review submittals.

If a submittal contains variations from plan details or specifications or significantly affects project cost, field construction or operations, discuss the submittal with and submit all copies to the Resident Engineer. State the reason for the proposed variation in the submittal. To minimize review time, make sure all submittals are complete when initially submitted. Provide a contact name and information with each submittal. Direct any questions regarding submittal requirements to the Resident Engineer, Structure Design Unit contacts or the Geotechnical Engineering Unit contacts noted below.

In order to facilitate in-plant inspection by NCDOT and approval of working drawings, provide the name, address and telephone number of the facility where fabrication will actually be done if different than shown on the title block of the submitted working drawings. This includes, but is not limited to, precast concrete items, prestressed concrete items and fabricated steel or aluminum items.

**2.0 ADDRESSES AND CONTACTS**

For submittals to the Structure Design Unit, use the following addresses:

Via US mail:

Mr. G. R. Perfetti, P. E.  
State Structures Engineer  
North Carolina Department  
of Transportation  
Structures Management Unit  
1581 Mail Service Center  
Raleigh, NC 27699-1581

Attention: Mr. P. D. Lambert, P. E.

Via other delivery service:

Mr. G. R. Perfetti, P. E.  
State Structures Engineer  
North Carolina Department  
of Transportation  
Structures Management Unit  
1000 Birch Ridge Drive  
Raleigh, NC 27610

Attention: Mr. P. D. Lambert, P. E.

Submittals may also be made via email.

Send submittals to:

[plambert@ncdot.gov](mailto:plambert@ncdot.gov) (Paul Lambert)

Send an additional e-copy of the submittal to the following address:

[jgaither@ncdot.gov](mailto:jgaither@ncdot.gov) (James Gaither)

[jlbolden@ncdot.gov](mailto:jlbolden@ncdot.gov) (James Bolden)

For submittals to the Geotechnical Engineering Unit, use the following addresses:

For projects in Divisions 1-7, use the following Eastern Regional Office address:

Via US mail:

Mr. K. J. Kim, Ph. D., P. E.  
Eastern Regional Geotechnical  
Manager  
North Carolina Department  
of Transportation  
Geotechnical Engineering Unit  
Eastern Regional Office  
1570 Mail Service Center  
Raleigh, NC 27699-1570

Via other delivery service:

Mr. K. J. Kim, Ph. D., P. E.  
Eastern Regional Geotechnical  
Manager  
North Carolina Department  
of Transportation  
Geotechnical Engineering Unit  
Eastern Regional Office  
3301 Jones Sausage Road, Suite 100  
Garner, NC 27529

For projects in Divisions 8-14, use the following Western Regional Office address:

Via US mail:

Mr. Eric Williams, P. E.  
Western Regional Geotechnical  
Manager  
North Carolina Department  
of Transportation  
Geotechnical Engineering Unit  
Western Regional Office  
5253 Z Max Boulevard  
Harrisburg, NC 28075

Via other delivery service:

Mr. Eric Williams, P. E.  
Western Region Geotechnical  
Manager  
North Carolina Department  
of Transportation  
Geotechnical Engineering Unit  
Western Regional Office  
5253 Z Max Boulevard  
Harrisburg, NC 28075

The status of the review of structure-related submittals sent to the Structure Design Unit can be viewed from the Unit's web site, via the "Contractor Submittal" link.

Direct any questions concerning submittal review status, review comments or drawing markups to the following contacts:

Primary Structures Contact: Paul Lambert (919) 707 – 6407  
(919) 250 – 4082 facsimile  
[plambert@ncdot.gov](mailto:plambert@ncdot.gov)

Secondary Structures Contacts: James Gaither (919) 707 – 6409  
James Bolden (919) 707 – 6408



Eastern Regional Geotechnical Contact (Divisions 1-7):

K. J. Kim (919) 662 – 4710  
 (919) 662 – 3095 facsimile  
[kkim@ncdot.gov](mailto:kkim@ncdot.gov)

Western Regional Geotechnical Contact (Divisions 8-14):

Eric Williams (704) 455 – 8902  
 (704) 455 – 8912 facsimile  
[ewilliams@ncdot.gov](mailto:ewilliams@ncdot.gov)

**3.0 SUBMITTAL COPIES**

Furnish one complete copy of each submittal, including all attachments, to the Resident Engineer. At the same time, submit the number of hard copies shown below of the same complete submittal directly to the Structure Design Unit and/or the Geotechnical Engineering Unit.

The first table below covers “Structure Submittals”. The Resident Engineer will receive review comments and drawing markups for these submittals from the Structure Design Unit. The second table in this section covers “Geotechnical Submittals”. The Resident Engineer will receive review comments and drawing markups for these submittals from the Geotechnical Engineering Unit.

Unless otherwise required, submit one set of supporting calculations to either the Structure Design Unit or the Geotechnical Engineering Unit unless both units require submittal copies in which case submit a set of supporting calculations to each unit. Provide additional copies of any submittal as directed.

**STRUCTURE SUBMITTALS**

<b>Submittal</b>	<b>Copies Required by Structure Design Unit</b>	<b>Copies Required by Geotechnical Engineering Unit</b>	<b>Contract Reference Requiring Submittal<sup>1</sup></b>
Arch Culvert Falsework	5	0	Plan Note, SN Sheet & “Falsework and Formwork”
Box Culvert Falsework <sup>7</sup>	5	0	Plan Note, SN Sheet & “Falsework and Formwork”
Cofferdams	6	2	Article 410-4

Foam Joint Seals <sup>6</sup>	9	0	“Foam Joint Seals”
Expansion Joint Seals (hold down plate type with base angle)	9	0	“Expansion Joint Seals”
Expansion Joint Seals (modular)	2, then 9	0	“Modular Expansion Joint Seals”
Expansion Joint Seals (strip seals)	9	0	“Strip Seals”
Falsework & Forms <sup>2</sup> (substructure)	8	0	Article 420-3 & “Falsework and Formwork”
Falsework & Forms (superstructure)	8	0	Article 420-3 & “Falsework and Formwork”
Girder Erection over Railroad	5	0	Railroad Provisions
Maintenance and Protection of Traffic Beneath Proposed Structure	8	0	“Maintenance and Protection of Traffic Beneath Proposed Structure at Station ____”
Metal Bridge Railing	8	0	Plan Note
Metal Stay-in-Place Forms	8	0	Article 420-3
Metalwork for Elastomeric Bearings <sup>4,5</sup>	7	0	Article 1072-8
Miscellaneous Metalwork <sup>4,5</sup>	7	0	Article 1072-8
Optional Disc Bearings <sup>4</sup>	8	0	“Optional Disc Bearings”
Overhead and Digital Message Signs (DMS) (metalwork and foundations)	13	0	Applicable Provisions
Placement of Equipment on Structures (cranes, etc.)	7	0	Article 420-20
Pot Bearings <sup>4</sup>	8	0	“Pot Bearings”
Precast Concrete Box Culverts	2, then 1 reproducible	0	“Optional Precast Reinforced Concrete Box Culvert at Station ____”
Prestressed Concrete Cored Slab	6	0	Article 1078-11

(detensioning sequences) <sup>3</sup>			
Prestressed Concrete Deck Panels	6 and 1 reproducible	0	Article 420-3
Prestressed Concrete Girder (strand elongation and detensioning sequences)	6	0	Articles 1078-8 and 1078- 11
Removal of Existing Structure over Railroad	5	0	Railroad Provisions
Revised Bridge Deck Plans (adaptation to prestressed deck panels)	2, then 1 reproducible	0	Article 420-3
Revised Bridge Deck Plans (adaptation to modular expansion joint seals)	2, then 1 reproducible	0	“Modular Expansion Joint Seals”
Sound Barrier Wall (precast items)	10	0	Article 1077-2 & “Sound Barrier Wall”
Sound Barrier Wall Steel Fabrication Plans <sup>5</sup>	7	0	Article 1072-8 & “Sound Barrier Wall”
Structural Steel <sup>4</sup>	2, then 7	0	Article 1072-8
Temporary Detour Structures	10	2	Article 400-3 & “Construction, Maintenance and Removal of Temporary Structure at Station _____”
TFE Expansion Bearings <sup>4</sup>	8	0	Article 1072-8

**FOOTNOTES**

1. References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Articles refer to the *Standard Specifications*.
2. Submittals for these items are necessary only when required by a note on plans.
3. Submittals for these items may not be required. A list of pre-approved sequences is available from the producer or the Materials & Tests Unit.
4. The fabricator may submit these items directly to the Structure Design Unit.
5. The two sets of preliminary submittals required by Article 1072-8 of the *Standard Specifications* are not required for these items.

6. Submittals for Fabrication Drawings are not required. Submittals for Catalogue Cuts of Proposed Material are required. See Section 5.A of the referenced provision.
7. Submittals are necessary only when the top slab thickness is 18" or greater.

**GEOTECHNICAL SUBMITTALS**

Submittal	Copies Required by Geotechnical Engineering Unit	Copies Required by Structure Design Unit	Contract Reference Requiring Submittal <sup>1</sup>
Drilled Pier Construction Plans <sup>2</sup>	1	0	Subarticle 411-3(A)
Crosshole Sonic Logging (CSL) Reports <sup>2</sup>	1	0	Subarticle 411-5(A)(2)
Pile Driving Equipment Data Forms <sup>2,3</sup>	1	0	Subarticle 450-3(D)(2)
Pile Driving Analyzer (PDA) Reports <sup>2</sup>	1	0	Subarticle 450-3(F)(3)
Retaining Walls <sup>4</sup>	8 drawings, 2 calculations	2 drawings	Applicable Provisions
Temporary Shoring <sup>4</sup>	5 drawings, 2 calculations	2 drawings	“Temporary Shoring” & “Temporary Soil Nail Walls”

**FOOTNOTES**

1. References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Subarticles refer to the *Standard Specifications*.
2. Submit one hard copy of submittal to the Resident or Bridge Maintenance Engineer. Submit a second copy of submittal electronically (PDF via email) or by facsimile, US mail or other delivery service to the appropriate Geotechnical Engineering Unit regional office. Electronic submission is preferred.
3. The Pile Driving Equipment Data Form is available from:  
[www.ncdot.org/doh/preconstruct/highway/geotech/formdet/](http://www.ncdot.org/doh/preconstruct/highway/geotech/formdet/)  
See second page of form for submittal instructions.
4. Electronic copy of submittal is required. See referenced provision.

**CRANE SAFETY****(8-15-05)**

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

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

**CRANE SAFETY SUBMITTAL LIST**

- A. **Competent Person:** Provide the name and qualifications of the "Competent Person" responsible for crane safety and lifting operations. The named competent person will have the responsibility and authority to stop any work activity due to safety concerns.
- B. **Riggers:** Provide the qualifications and experience of the persons responsible for rigging operations. Qualifications and experience should include, but not be limited to, weight calculations, center of gravity determinations, selection and inspection of sling and rigging equipment, and safe rigging practices.
- C. **Crane Inspections:** Inspection records for all cranes shall be current and readily accessible for review upon request.
- D. **Certifications:** By July 1, 2006, crane operators performing critical lifts shall be certified by NC CCO (National Commission for the Certification of Crane Operators), or satisfactorily complete the Carolinas AGC's Professional Crane Operator's Proficiency Program. Other approved nationally accredited programs will be considered upon request. All crane operators shall also have a current CDL medical card. Submit a list of anticipated critical lifts and corresponding crane operator(s). Include current certification for the type of crane operated (small hydraulic, large hydraulic, small lattice, large lattice) and medical evaluations for each operator.

**GROUT FOR STRUCTURES**

9-30-11

**1.0 DESCRIPTION**

This special provision addresses grout for use in pile blockouts, grout pockets, shear keys, dowel holes and recesses for structures. This provision does not apply to grout placed in post-tensioning ducts for bridge beams, girders, or decks. Mix and place grout in accordance with the manufacturer's recommendations, the applicable sections of the Standard Specifications and this provision.

**2.0 MATERIAL REQUIREMENTS**

Use a Department approved pre-packaged, non-shrink, non-metallic grout. Contact the Materials and Tests Unit for a list of approved pre-packaged grouts and consult the manufacturer to determine if the pre-packaged grout selected is suitable for the required application.

When using an approved pre-packaged grout, a grout mix design submittal is not required.

The grout shall be free of soluble chlorides and contain less than one percent soluble sulfate. Supply water in compliance with Article 1024-4 of the Standard Specifications.

Aggregate may be added to the mix only where recommended or permitted by the manufacturer and Engineer. The quantity and gradation of the aggregate shall be in accordance with the manufacturer's recommendations.

Admixtures, if approved by the Department, shall be used in accordance with the manufacturer's recommendations. The manufacture date shall be clearly stamped on each container. Admixtures with an expired shelf life shall not be used.

The Engineer reserves the right to reject material based on unsatisfactory performance.

Initial setting time shall not be less than 10 minutes when tested in accordance with ASTM C266.

Test the expansion and shrinkage of the grout in accordance with ASTM C1090. The grout shall expand no more than 0.2% and shall exhibit no shrinkage. Furnish a Type 4 material certification showing results of tests conducted to determine the properties listed in the Standard Specifications and to assure the material is non-shrink.

Unless required elsewhere in the contract the compressive strength at 3 days shall be at least 5000 psi. Compressive strength in the laboratory shall be determined in accordance with ASTM C109 except the test mix shall contain only water and the dry manufactured material. Compressive strength in the field will be determined by molding and testing 4" x 8" cylinders in accordance with AASHTO T22. Construction loading and traffic loading shall not be allowed until the 3 day compressive strength is achieved.

When tested in accordance with ASTM C666, Procedure A, the durability factor of the grout shall not be less than 80.

### **3.0 SAMPLING AND PLACEMENT**

Place and maintain components in final position until grout placement is complete and accepted. Concrete surfaces to receive grout shall be free of defective concrete, laitance, oil, grease and other foreign matter. Saturate concrete surfaces with clean water and remove excess water prior to placing grout.

Do not place grout if the grout temperature is less than 50°F or more than 90°F or if the air temperature measured at the location of the grouting operation in the shade away from artificial heat is below 45°F.

Provide grout at a rate that permits proper handling, placing and finishing in accordance with the manufacturer's recommendations unless directed otherwise by the Engineer. Use grout free of any lumps and undispersed cement. Agitate grout continuously before placement.

Control grout delivery so the interval between placing batches in the same component does not exceed 20 minutes.

The Engineer will determine the locations to sample grout and the number and type of samples collected for field and laboratory testing. The compressive strength of the grout will be considered the average compressive strength test results of 3 cube or 2 cylinder specimens at 28 days.

### **4.0 BASIS OF PAYMENT**

No separate payment will be made for "Grout for Structures". The cost of the material, equipment, labor, placement, and any incidentals necessary to complete the work shall be considered incidental to the structure item requiring grout.

**OPTIONAL PRECAST REINFORCED CONCRETE**

(12-12-13)

**BOX CULVERT AT STATION 12+81.00 -L-****1.0 GENERAL**

This Special Provision covers the design, fabrication and construction of precast reinforced concrete box culverts intended for the conveyance of storm water.

If the option is indicated on the plans, the submittal for a precast reinforced box culvert in lieu of a cast-in-place culvert is permitted. Design the precast culvert sections in accordance with ASTM C1577 or the current edition of the AASHTO LRFD Bridge Design Specifications. Rate all sizes of precast reinforced concrete box culverts in accordance with the current edition of the AASHTO Manual for Bridge Evaluation. Ensure the culvert rates for the AASHTO design loads and North Carolina's legal loads (see Section 2.0 for North Carolina's legal loads). Provide the size and number of barrels as indicated on the plans. Detail the culvert with cast-in-place wings walls and footings. Precast wing walls and footings will not be allowed. Provide a precast box culvert that meets the requirements of Section 1077 and any other applicable parts of the Standard Specifications.

The design and rating of the precast and cast-in-place members is the responsibility of the Contractor and is subject to review, comments and approval. Submit two sets of detailed plans and rating sheets for review. Include all details in the plans, including the size and spacing of the required reinforcement necessary to build the precast box and cast-in-place members. Have a North Carolina Registered Professional Engineer check and seal the plans, rating sheets and design calculations. After the plans, rating sheets and design calculations are reviewed and, if necessary, the corrections made, submit one set of plans and rating sheets on 22" x 34" sheets to become part of the contract plans.

If the span, rise and design earth cover for the precast reinforced concrete box culvert are identical to a previously approved submittal, the Contractor may request the previously approved design calculations and plans be considered as the submittal for review and approval. However, a set of plans and rating sheets will need to be submitted to become part of the contract plans.

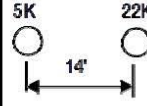
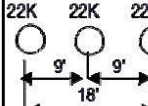
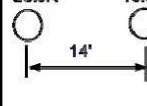
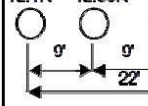
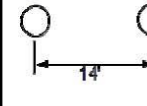
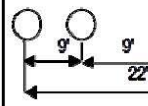
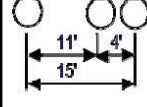
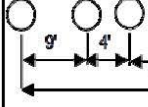
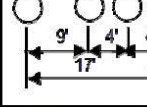
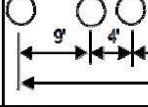
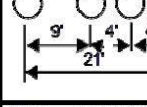
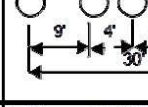
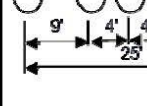
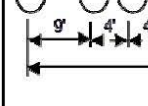
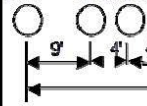
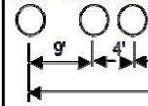


2.0 NORTH CAROLINA'S LEGAL LOADS

Apply the following legal loads to all structures carrying interstate traffic:

SINGLE VEHICLE(SV)			TRUCK TRACTOR SEMI-TRAILER(TTST)		
REF. #	SCHEMATIC		REF. #	SCHEMATIC	
9H		25K 12.5 TON	T4A		56.5K 28.25 TON
93A		45.5K 22.75 TON	T5B		64K 32 TON
93C		43K 21.5 TON	T6A		72K 36 TON
94A		53.5K 26.75 TON	T7A		80K 40 TON
95A		61K 30.5 TON	T7B		80K 40 TON
96A		69K 34.5 TON			
97A		80K 40 TON			
97B		77K 38.5 TON			

Apply the following legal loads to all structures carrying non-interstate traffic:

SINGLE VEHICLE (SV)			TRUCK TRACTOR SEMI-TRAILER (TTST)		
REF. #	SCHEMATIC		REF. #	SCHEMATIC	
<b>SNSH</b>	5K      22K	27K 13.5 TON	<b>TNAGRIT3</b>	22K 22K 22K      86K 33 Ton	
					
<b>SNGARBS2</b>	23.5K      16.5K	40K 20 TON	<b>TNT4A</b>	12.1K 12.05K 21K 21K	86.15K 33.075 TON
					
<b>SNAGRIS2</b>	22K      22K	44K 22 Ton	<b>TNAGRIT4</b>	22K 22K      21K 21K	86K 43 TON
					
<b>SNCOTTS3</b>	4.5K      25K 25K	54.5K 27.25 TON	<b>TNAGT5A</b>	22K 21K 21K      13K 13K	90K 45 TON
					
<b>SNAGGRS4</b>	16K 15.85K 19K 19K	69.85K 34.925 TON	<b>TNAGT5B</b>	6K 21K 21K      21K 21K	90K 45 TON
					
<b>SNS5A</b>	12.1K 8.5K 21K 21K 8.5K	71.1K 35.55 TON	<b>TNT6A</b>	12.1K 8.2K 21K 21K 10.45K 10.45K	83.2K 41.6 TON
					
<b>SNS6A</b>	12.1K 8.6K 8.6K 21K 21K 8.6K	79.9K 39.95 TON	<b>TNT7A</b>	4.1K 4K 21K 21K 11.3K 11.3K 11.3K	84K 42 TON
					
<b>SNS7B</b>	7.6K 8.6K 8.6K 21K 21K 8.6K 8.6K	84K 42 TON	<b>TNT7B</b>	4.1K 10.5K 10.5K 8.45K 8.45K 21K 21K	84K 42 TON
					

### 3.0 PRECAST REINFORCED CONCRETE BOX SECTIONS

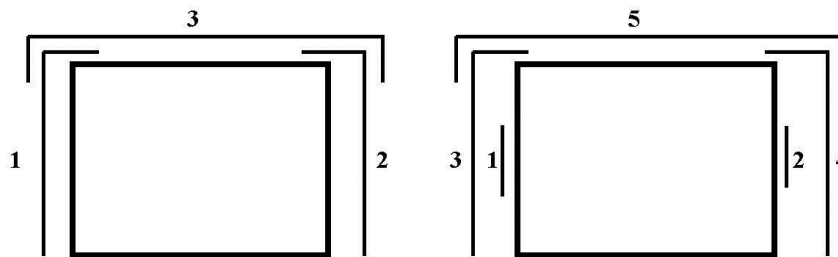
The precast reinforced concrete box culvert sections shall match the size and hydraulic opening indicated in the contract plans.

#### A. Design

1. Design Fill – The design earth cover is reported on the plans as the elevation difference between the point of maximum fill and the bottom of the top slab.
2. Placement of Reinforcement – Provide a 1 inch concrete cover over the reinforcement subject to the provisions of Section F. Extend the inside reinforcement into the tongue portion of the joint and the outside reinforcement into the groove portion of the joint. Detail the clear distance of the end wires so it is not less than 1/2 inch or more than 2 inches from the ends of the box section. Assemble reinforcement per the requirements of ASTM C1577 or the approved design. The exposure of the ends of the wires used to position the reinforcement is not a cause for rejection.
3. Laps and Spacing – Use lap splices for the transverse reinforcement. Detail the transverse wires so that the center to center spacing is not less than 2 inches or more than 4 inches. Do not detail the longitudinal wires with a center to center spacing of more than 8 inches.

#### B. Joints

1. Produce the precast reinforced concrete box section with tongue and groove ends. Design and form these ends of the box section so, when the sections are laid together, they make a continuous line of box sections with a smooth interior free of appreciable irregularities in the flowline, all compatible with the permissible variations given in Section F. The internal joint formed at the tongue and groove ends of the precast units shall be sealed with either bitumen/butyl sealant or closed-cell neoprene material. The internal joint material shall be installed in accordance with the manufacturer's recommendations. The material shall be shown on the shop drawings when they are submitted for review.
2. Seal the external joint with an outside sealer wrap conforming to ASTM C877 that is at least 12 inches wide and covers the joint on both the sides and the top of the box section. Use ConWrap CS-212 from Concrete Sealants, Inc., EZ-Wrap from Press-Seal Gasket Corporation, Seal Wrap from Mar-Mac Manufacturing Co., Inc., Cadilloc External Pipe Joint from Cadilloc, or an approved equal for the outside sealer wrap. If the outside sealer wrap is not applied in a continuous strip along the entire joint, a 12 inch minimum lap of the outside sealer wrap is permitted. Before placing the outside sealer wrap, clean and prime the area receiving the outside sealer wrap in accordance with the sealer wrap manufacturer recommendations. The joint wrap manufacturer installation recommendations shall be included with shop drawings submitted for review. The external joint wrap shall be installed in pieces, as indicated on Figure 1 below:



**Figure 1**

Cover the external joint sealer with a 3 foot strip of filter fabric conforming to Type 4 requirements in Section 1056 of the Standard Specifications.

Place multiple lines of a precast reinforced concrete box culvert such that the longitudinal joint between the sections has a minimum width of 3 inches. Fill the joint between multiple lines of precast box sections with Class A concrete. Use Class A concrete that meets the requirements listed in the Standard Specifications except that Field Compressive Strength Specimens are not required.

#### C. Manufacture

Manufacture precast reinforced concrete box culvert sections by either the wet cast method or dry cast method.

1. Mixture – In addition to the requirements of Section 1077 of the Standard Specifications, do not proportion the mix with less than 564 lb/yd<sup>3</sup> of portland cement.
2. Strength – Concrete shall develop a minimum 28-day compressive strength of 5000 psi. Movement of the precast sections should be minimized during the initial curing period. Any damage caused by moving or handling during the initial curing phase will be grounds for rejection of that precast section.
3. Air Entrainment – Air entrain the concrete in accordance with Section 1077 - 5(A) of the Standard Specifications. For dry cast manufacturing, air entrainment is not required.
4. Testing – Test the concrete in accordance with the requirements of Section 1077 - 5(B).
5. Handling – Handling devices or holes are permitted in each box section for the purpose of handling and placing. Submit details of handling devices or holes for approval and do not cast any concrete until approval is granted. Remove all

handling devices flush with concrete surfaces as directed. Fill holes in a neat and workmanlike manner with an approved non-metallic non-shrink grout, concrete, or hole plug.

D. Physical Requirements

Acceptability of precast culvert sections is based on concrete cylinders made and tested in accordance with ASTM C31 and ASTM C39.

E. Permissible Variations

1. Flatness – All external surfaces shall be flat, true, and plumb. Irregularities, depressions, or high spots on all external surfaces shall not exceed 1/2 inch in 8 feet.
2. Internal Dimensions – Produce sections so that the internal and haunch dimensions do not vary more than 1/4 inch from the plan dimensions.
3. Adjacent Sections - Internal, external, and haunch dimensions for connecting sections shall not vary more than 1/2 inch.
4. Length of Tongue and Groove – The minimum length of the tongue shall be 4 inches. The minimum length of the groove shall be 4 inches. The dimensions of the tongue and groove shall not vary more than 1/4 inch from the plan dimensions.
5. Slab and Wall Thickness – Produce sections so that the slab and wall thickness are not less than that shown on the plans by more than 5% or 3/16 inch, whichever is greater. A thickness more than that required on the plans is not a cause for rejection.
6. Length of Opposite Surfaces – Produce sections so that variations in laying lengths of two opposite surfaces of the box section meet the requirements of ASTM C1577, Section 11.3.
7. Length of Section – Produce sections so that the underrun in length of a section is not more than 1/2 inch in any box section.
8. Position of Reinforcement – Produce sections so that the maximum variation in the position of the reinforcement is  $\pm 3/8$  inch for slab and wall thicknesses of 5 inches or less and  $\pm 1/2$  inch for slab and wall thicknesses greater than 5 inches. Produce sections so that the concrete cover is never less than 5/8 inch as measured to the internal surface or the external surface. The preceding minimum cover limitations do not apply at the mating surfaces of the joint.
9. Area of Reinforcement – Use the design steel shown on the plans for the steel reinforcement. Steel areas greater than those required are not cause for rejection. The permissible variation in diameter of any wire in finished fabric is prescribed for the wire before fabrication by either AASHTO M32 or M225.

#### F. Marking

1. Each section shall be match-marked in order of intended installation as indicated on the approved shop drawings. Ensure that pieces fit together neatly and in a workmanlike manner. In order to ensure a good, neat field fit, the Department will verify assembly of the first five adjacent sections or 20% of the total culvert length, whichever is greater, at the producer's facility and match-mark the pieces. This will require that a minimum of three adjacent sections of the culvert be fitted at the production yard at a time and then match-marked. Once three sections have been match-marked, the first section may be removed for shipment and a fourth section set for marking. Continue in a progressive manner until all sections have been properly match-marked. The producer shall document the GO-NO-GO dimensional measurements of each box culvert section produced through the post-pour inspection process.
2. Clearly mark each section of the box culvert in accordance with ASTM C1577, Section 15. The information requirements of Section 15.1 shall be clearly marked on the inner surface of each section.

#### G. Construction

1. Pre-installation Meeting – A pre-installation meeting is required prior to installation. Representatives from the Contractor, the precast box manufacturer, and the Department should attend this meeting. The precast box manufacturer representative shall be on site during installation.
2. Foundation – Foundation for precast box culvert shall meet the requirements of Section 414 of the Standard Specifications. In addition, Type VI foundation material shall be encapsulated in filter fabric conforming to Type 4 requirements in Section 1056 of the Standard Specifications. The filter fabric shall be placed perpendicular to the culvert barrel. Provide sufficient overhang beyond the excavation to allow a minimum lap of 3 feet when the foundation material is placed and fabric wrapped on top. Perpendicular sections of fabric shall be continuous. A minimum lap of 2 feet shall be provided between sections of fabric.
3. Installation – Sections shall be placed at the beginning of the outlet end of the culvert with the groove end being laid upgrade. Tongue sections shall be laid into the groove sections. Positive means shall be provided to pull each section firmly into the previously placed section so that the joints are tightly homed. Use a "come-along", box pullers or other approved methods to create a positive means of joining box sections. Construction equipment shall not have direct contact with the box section. The load of the box shall be suspended by lifting device during joining procedure.
4. Backfill – Complete backfill in accordance with Section 414 of the Standard Specifications.

**4.0 BASIS OF PAYMENT**

Any additional cost of redesigning will be paid for by the Contractor if Precast Reinforced Concrete Culvert is used in lieu of the cast-in-place culvert shown on the plans. Except for Foundation Conditioning Material and Culvert Excavation, payment for the Precast Box Culvert will be a lump sum amount equal to the payment that would be allowed for construction of a Cast-in-Place Box Culvert. Plan quantities and unit bid prices will be used to compute the lump sum amount. Such price and payment will be full compensation for all work covered by this Special Provision, the plans and applicable parts of the Standard Specifications and will include, but not be limited to, furnishing all labor, materials (including all filter fabric), equipment and other incidentals necessary to complete this work. Such price and payment will also be full compensation for concrete, reinforcing steel, labor, equipment and all other related materials necessary for the completion of the barrel section, and the construction of the headwalls, leveling pad, end curtain walls, wings and wing footings.

**ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES**

(12-30-15)

**1.0 INSPECTION FOR ASBESTOS CONTAINING MATERIAL**

Prior to conducting bridge demolition or renovation activities, the Contractor shall thoroughly inspect the bridge or affected components for the presence of asbestos containing material (ACM) using a firm prequalified by NCDOT to perform asbestos surveys. The inspection must be performed by a N.C. accredited asbestos inspector with experience inspecting bridges or other industrial structures. The N.C. accredited asbestos inspector must conduct a thorough inspection, identifying all asbestos-containing material as required by the Environmental Protection Agency National Emission Standards for Hazardous Air Pollutants (NESHAP) Code of Federal Regulations (CFR) 40 CFR, Part 61, Subpart M.

The Contractor shall submit an inspection report to the Engineer, which at a minimum must include information required in 40 CFR 763.85 (a)(4) vi)(A)-(E), as well as a project location map, photos of existing structure, the date of inspection and the name, N.C. accreditation number, and signature of the N.C. accredited asbestos inspector who performed the inspection and completed the report. The cover sheet of the report shall include project identification information. Place the following notes on the cover sheet of the report and check the appropriate box:

- ACM was found  
 ACM was not found

**2.0 REMOVAL AND DISPOSAL OF ASBESTOS CONTAINING MATERIAL**

If ACM is found, notify the Engineer. Compensation for removal and disposal of ACM is considered extra work in accordance with Article 104-7 of the Standard Specifications.

An Asbestos Removal Permit must be obtained from the Health Hazards Control Unit (HHCU) of the N.C. Department of Health & Human Services, Division of Public Health, if more than 35 cubic feet, 160 square feet, or 260 linear feet of regulated ACM (RACM) is to be removed from a structure and this work must be completed by a contractor prequalified by NCDOT to perform asbestos abatement. RACM is defined in 40 CFR, Part 61, Subpart M. Note: 40 CFR 763.85 (a)(4) vi)(D) defines ACM as surfacing, TSI and Miscellaneous which does not meet the NESHAP RACM.

**3.0 DEMOLITION NOTIFICATION**

Even if no ACM is found (or if quantities are less than those required for a permit), a Demolition Notification (DHHS-3768) must be submitted to the HHCU. Notifications and Asbestos Permit applications require an original signature and must be submitted to the HHCU 10 working days prior to beginning demolition activities. The 10 working day period starts based on the post-marked date or date of hand delivery. Demolition that does not begin as originally notified requires submission of a separate revision form HHCU



3768-R to HHCU. Reference the North Carolina Administrative Code, Chapter 10A, Subchapter 41C, Article .0605 for directives on revision submissions.

Contact Information

Health Hazards Control Unit (HHCU)  
N.C. Department of Health and Human Services  
1912 Mail Service Center  
Raleigh, NC 27699-1912  
Telephone: (919) 707-5950  
Fax: (919) 870-4808

**4.0 SPECIAL CONSIDERATIONS**

Buncombe, Forsyth, and Mecklenburg counties also have asbestos permitting and NESHAP requirements must be followed. For projects involving permitted RACM removals, both the applicable county and the state (HHCU) must be notified.

For demolitions with no RACM, only the local environmental agencies must be notified. Contact information is as follows:

Buncombe County

WNC Regional Air Pollution Control Agency  
49 Mt. Carmel Road  
Asheville, NC 28806  
(828) 250-6777

Forsyth County

Environmental Affairs Department  
537 N. Spruce Street  
Winston-Salem, NC 27101  
(336) 703-2440

Mecklenburg County

Land Use and Environmental Services Agency  
Mecklenburg Air Quality  
700 N. Tryon Street  
Charlotte, NC 28202  
(704) 336-5430

**5.0 ADDITIONAL INFORMATION**

Additional information may be found on N.C. asbestos rules, regulations, procedures and N.C. accredited inspectors, as well as associated forms for demolition notifications and asbestos permit applications at the N.C. Asbestos Hazard Management Program website:

[www.epi.state.nc.us/epi/asbestos/ahmp.html](http://www.epi.state.nc.us/epi/asbestos/ahmp.html)

**6.0 BASIS OF PAYMENT**

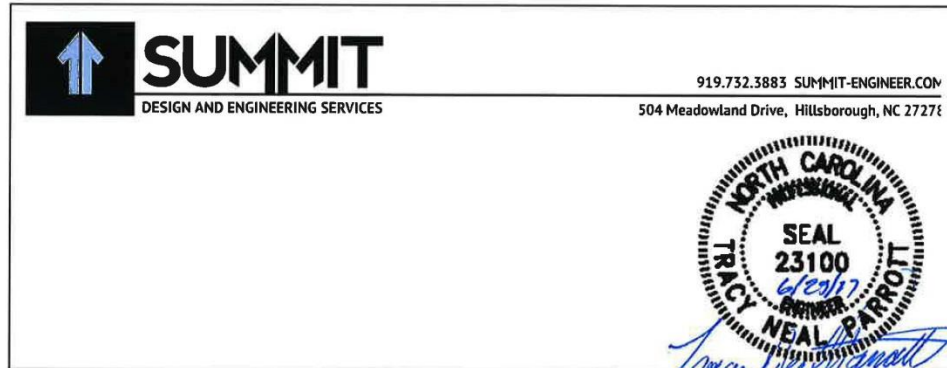
Payment for the work required in this provision will be at the lump sum contract unit price for "Asbestos Assessment". Such payment will be full compensation for all asbestos inspections, reports, permitting and notifications.

Project: 17BP.8.76

UC-1

County: Randolph

PROJECT SPECIAL PROVISIONS  
Utility Construction



**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.

**Page 15-1, Sub-article 1500-2 Cooperation with the Utility Owner, paragraph 2:**

add the following sentences:

The utility owner is City of Archdale. The contact person is Mr. Phillip Yates, City of Archdale Water and Sewer System Manager and he can be reached by phone at 336-434-7364.

The Contractor shall provide access for the owner's representative at all times during construction. A preconstruction meeting shall be held with the City of Archdale and NCDOT prior to any work beginning. The Contractor shall notify the owner two weeks before commencement of any work and three weeks before any service interruption.

**Page 15-2, Sub-article 1500-9 Placing Pipelines into Service**

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.

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

change the allowable leakage formula to:

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

Project: 17BP.8.76

**UC-2**

County: Randolph

**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.”

**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 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.

**Page 15-7, Article 1510-4 MEASUREMENT AND PAYMENT, add the following pay item:**

<b>Pay Item</b>	<b>Pay Unit</b>
Ductile Iron Water Pipe Fittings	Pound

**Page 15-9, Article 1515-4 MEASUREMENT AND PAYMENT, line 28, delete “fittings”.**

**Page 15-11, Sub-article 1520-3(A)(2) Testing, line 5,**

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.

**TEMPORARY SEWER BYPASS PUMPING SYSTEMS****PART 1 - GENERAL**

## 1.1 SCOPE

- A. Under this item the Contractor is required to furnish all materials, labor, equipment, power, maintenance, etc. to implement a temporary pumping system for the purpose of diverting the existing flow around the work area for the duration of the project.
- B. The design, installation and operation of the temporary pumping system shall be the Contractor's responsibility. The Contractor shall employ the services of a vendor who can demonstrate to the Engineer that he specializes in the design and operation of temporary bypass pumping systems. The vendor shall provide at least five (5) references of projects of a similar size and complexity as this project performed by his firm within the past three years. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.

## 1.2 SUBMITTALS

- A. The Contractor shall prepare with the vendor a specific, detailed description of the proposed pumping system and submit it and the vendor's references with his bid proposal. Bid proposals without an acceptable detailed plan for the temporary bypass pumping system shall be rejected.
- B. The Contractor shall submit to the Engineer detailed plans and descriptions outlining all provisions and precautions to be taken by the Contractor regarding the handling of existing wastewater flows. This plan must be specific and complete, including such items as schedules, locations, elevations, capacities of equipment, materials and all other incidental items necessary and/or required to insure proper protection of the facilities, including protection of the access and bypass pumping locations from damage due to the discharge flows, and compliance with the requirements and permit conditions specified in these Contract Documents. No construction shall begin until all provisions and requirements have been reviewed by the Engineer.
- C. The plan shall include but not be limited to details of the following:
  - 1. Staging areas for pumps;
  - 2. Sewer plugging method and types of plugs;
  - 3. Number, size, material, location and method of installation of suction piping;
  - 4. Number, size, material, method of installation and location of installation of discharge piping;
  - 5. Bypass pump sizes, capacity, number of each size to be on site and power requirements;
  - 6. Calculations of static lift, friction losses, and flow velocity (pump curves showing pump operating range shall be submitted);
  - 7. Standby power generator size, location;
  - 8. Downstream discharge plan;
  - 9. Method of protecting discharge manholes or structures from erosion and damage;
  - 10. Thrust and restraint block sizes and locations;
  - 11. Sections showing suction and discharge pipe depth, embedment, select fill and special backfill;
  - 12. Method of noise control for each pump and/or generator;

13. Any temporary pipe supports and anchoring required;
14. Design plans and computation for access to bypass pumping locations;
15. Calculations for selection of bypass pumping pipe size;
16. Schedule for installation of and maintenance of bypass pumping lines;
17. Plan indicating selection location of bypass pumping line locations.

## **PART 2 - PRODUCTS**

### **2.1 EQUIPMENT**

- A. All pumps used shall be fully automatic self-priming units that do not require the use of foot-valves or vacuum pumps in the priming system. The pumps may be electric or diesel powered. All pumps used must be constructed to allow dry running for long periods of time to accommodate the cyclical nature of effluent flows. All pumps must be constructed with acoustical enclosures that shall reduce pump and engine noise to 69 dBA or less at a distance of 30 feet.
- B. The Contractor shall provide the necessary stop/start controls for each pump.
- C. The Contractor shall include one stand-by pump of each size to be maintained on site. Back-up pumps shall be on-line, isolated from the primary system by a valve.
- D. Discharge Piping - In order to prevent the accidental spillage of flows, all discharge systems shall be temporarily constructed of rigid pipe with positive, restrained joints. Under no circumstances will aluminum "irrigation" type piping or glued PVC pipe be allowed. Discharge hose will only be allowed in short sections and by specific permission from the Engineer.

### **2.2 SYSTEM DESCRIPTION**

- A. Design Requirements:
  1. Bypass pumping systems shall have sufficient capacity to pump the wet weather peak flow of sewer. The Contractor shall provide all pipeline plugs, pumps of adequate size to handle peak flow, and temporary discharge piping to ensure that the total flow of the main can be safely diverted around the section to be repaired. Bypass pumping system will be required to be operated 24 hours per day.
  2. The Contractor shall have adequate standby equipment available and ready for immediate operation and use in the event of an emergency or breakdown. One standby pump for each size pump utilized shall be installed at the mainline flow bypassing locations, ready for use in the event of primary pump failure.
  3. Bypass pumping system shall be capable of bypassing the flow around the work area and of releasing any amount of flow up to full available flow into the work area as necessary for satisfactory performances of work.
  4. The Contractor shall make all arrangements for bypass pumping during the time when the main is shut down for any reason. System must overcome any existing force main pressure on discharge.

**B. Performance Requirements:**

1. It is essential to the operation of the existing sewerage system that there be no interruption in the flow of sewage throughout the duration of the project. To this end, the Contractor shall provide, maintain and operate all temporary facilities such as dams, plugs, pumping equipment (both primary and back-up units as required), conduits, all necessary power, and all other labor and equipment necessary to intercept the sewage flow before it reaches the point where it would interfere with his work, carry it past his work and return it to the existing sewer downstream of his work.
2. The design, installation and operation of the temporary pumping system shall be the Contractor's responsibility. The bypass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.
3. The Contractor shall provide all necessary means to safely convey the sewage past the work area. The Contractor will not be permitted to stop or impede the main flows under any circumstances.
4. The Contractor shall maintain sewer flow around the work area in a manner that will not cause surcharging of sewers, damage to sewers and that will protect public and private property from damage and flooding.
5. The Contractor shall protect water resources wetlands and other natural resources.

**PART 3 - EXECUTION****3.1 FIELD QUALITY CONTROL AND MAINTENANCE****A. Test:**

1. The Contractor shall perform leakage and pressure tests of the bypass pumping discharge piping using clean water prior to actual operation. The Engineer will be given 24 hours notice prior to testing.

**B. Inspection:**

1. Contractor shall inspect bypass pumping system every two hours to ensure that the system is working correctly.

**C. Maintenance Service:**

1. The Contractor shall insure that the temporary pumping system is properly maintained and a responsible operator shall be on hand at all times when pumps are operating.

**D. Extra Materials:**

1. Spare parts for pumps and piping shall be kept on site as required.
2. Adequate hoisting equipment for each pump and accessories shall be maintained on the site.

**3.2 PREPARATION****A. Precautions**

1. Contractor is responsible for locating any existing utilities in the area the Contractor selects to locate the bypass pipelines. The Contractor shall locate his bypass pipelines to minimize any disturbance to existing utilities and shall obtain approval of the pipeline locations from the City and the Engineer. All costs associated with relocating utilities and obtaining all approvals shall be paid by the Contractor.
2. During all bypass pumping operation, the Contractor shall protect the Pumping Station and main and all local sewer lines from damage inflicted by any equipment. The Contractor shall be responsible for all physical damage to the Pumping Station and main and all local sewer lines caused by human or mechanical failure.

### 3.3 INSTALLATION AND REMOVAL

- A. The Contractor shall remove manhole sections or make connections to the existing sewer and construct temporary bypass pumping structures only at the access location indicated on the Drawings and as may be required to provide adequate suction conduit.
- B. Plugging or blocking of sewage flows shall incorporate primary and secondary plugging device. When plugging or blocking is no longer needed for performance and acceptance or work, it is to be removed in a manner that permits the sewage flow to slowly return to normal without surge, to prevent surcharging or causing other major disturbances downstream.
- C. When working inside manhole or force main, the Contractor shall exercise caution and comply with OSHA requirements when working in the presence of sewer gases, combustible oxygen-deficient atmospheres, and confined spaces.
- D. The installation of the bypass pipelines is prohibited in all saltmarsh/wetland areas. The pipeline must be located off streets sidewalks and on shoulders of the roads. When the bypass pipeline crosses local streets and private driveways, the contractor must place the bypass pipelines in trenches and cover with temporary pavement. Upon completion of the bypass pumping operations, and after the receipt of written permission from the Engineer, the Contractor shall remove all the piping, restore all property to pre-construction condition and restore all pavement. The Contractor is responsible for obtaining any approvals for placement of the temporary pipeline within public ways from the city.





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

July 5, 2017

Zeb Holden, City Manager  
City of Archdale  
307 Balfour Drive  
Archdale, NC 27263

Subject: Permit No. WQ0039318  
City of Archdale  
NCDOT Project 17BP.8.R.76 BRIDGE 750416 on SR 1911 Ashland Street  
Wastewater Collection System Extension Permit  
Randolph County

Dear Mr. Holden:

In accordance with your application received July 3, 2017, and the additional information received on July 5, 2017, we are forwarding herewith Permit No. WQ0039318 dated July 5, 2017, to the City of Archdale (Permittee) for the construction and operation upon certification of the subject wastewater collection system extension. This permit shall be effective from the date of issuance until rescinded, and shall be subject to the conditions and limitations as specified therein. This cover letter shall be considered a part of this permit and is therefore incorporated therein by reference.

Please pay particular attention to the following conditions contained within this permit:

- Condition II.1: This permit shall not be automatically transferable; a request must be made and approved.
- Condition II.4: Requires that the wastewater collection facilities be properly operated and maintained in accordance with 15A NCAC 2T .0403 or any individual system-wide collection system permit issued to the Permittee.

It shall be responsibility of the Permittee to ensure that the as-constructed project meets the appropriate design criteria and rules. Failure to comply may result in penalties in accordance with North Carolina General Statute §143-215.6A through §143-215.6C, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board.

If any parts, requirements, or limitations contained in this permit are unacceptable, you have the right to request an adjudicatory hearing upon written request within 30 days following receipt of this permit. This request must be in the form of a written petition, conforming to Chapter 150B of North Carolina General Statutes, and filed with the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, NC 27699-6714. Unless such demands are made, this permit shall be final and binding.

450 West Hanes Mill Road, Suite 300, Winston-Salem, NC 27105  
Phone: 336-776-9800 \ Internet: [www.ncwaterquality.org](http://www.ncwaterquality.org)

State of North Carolina | Environmental Quality | Water Resources

City of Archdale  
Permit No. WQ0039318

If you need additional information concerning this matter, please contact Justin Henderson at (336) 776-9697 or via e-mail at [justin.henderson@ncdenr.gov](mailto:justin.henderson@ncdenr.gov).

Sincerely,



for S. Jay Zimmerman, P.G.  
Director, Division of Water Resources

for/by Sherri V. Knight, PE, Regional Supervisor  
Water Quality Regional Operations Section  
Winston-Salem Regional Office  
Division of Water Resources, NCDEQ

cc: Tracy N. Parrott, P.E.-Summit Design and Engineering Services, PLLC- [tracy.parrott@summitde.net](mailto:tracy.parrott@summitde.net)  
Terry Houk, Public Works Director, City of High Point- [terry.houk@highpointnc.gov](mailto:terry.houk@highpointnc.gov)  
Winston-Salem Regional Office Files  
Water Resources Central Files  
PERCS (electronic copy)

STATE OF NORTH CAROLINA  
ENVIRONMENTAL MANAGEMENT COMMISSION  
DEPARTMENT OF ENVIRONMENTAL QUALITY

WASTEWATER COLLECTION SYSTEM EXTENSION PERMIT


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In accordance with the provisions of Article 21 of Chapter 143, General Statutes of North Carolina as amended, and other applicable Laws, Rules, and Regulations, permission is hereby granted to the

City of Archdale  
Randolph County

for the construction and operation of approximately 135 linear feet of 8-inch gravity sewer to relocate the existing line, with no additional connections and/or flows as part of the NCDOT Project 17BP.8.R.76 BRIDGE 750416 on SR 1911 Ashland Street project, and the discharge of "0" gallons per day of collected domestic wastewater into the City of High Point's existing sewerage system, pursuant to the application received July 3, 2017, and the additional information received on July 5, 2017 and in conformity with 15A NCAC 2T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting data subsequently filed and approved by the Department of Environmental Quality and considered a part of this permit.

This permit shall be effective from the date of issuance until rescinded and shall be subject to the specified conditions and limitations contained therein.

  
for S. Jay Zimmerman, P.G.  
Director, Division of Water Resources  
By Authority of The Environmental Management Commission

**Permit Number: WQ0039318**  
**Permit Issued: July 5, 2017**

## SUPPLEMENT TO PERMIT COVER SHEET

**City of Archdale** is hereby authorized to:

Construct, and then operate upon certification the aforementioned wastewater collection extension. The sewage and wastewater collected by this system shall be treated in the City of High Point's Eastside Wastewater Treatment Facility in accordance with Permit Number NC0024210.

Permitting of this project does not constitute an acceptance of any part of the project that does not meet 15A NCAC 2T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; and the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable, unless specifically mentioned herein. Division approval is based on acceptance of the certification provided by a North Carolina-licensed Professional Engineer in the application. It shall be the Permittee's responsibility to ensure that the as-constructed project meets the appropriate design criteria and rules.

Construction and operation is contingent upon compliance with the Standard Conditions and the Special Conditions identified below.

### **I. SPECIAL CONDITIONS**

1. This permit shall become voidable unless the agreement between City of Archdale and City of High Point for the collection and final treatment of wastewater is in full force and effect. [15A NCAC 02T.0304(h)]
2. No flow in excess of the quantity permitted herein, "0" GPD, shall be made tributary to the subject sewer system until an application for permit modification for an increase in flow has been submitted to and approved by the Division. [15A NCAC 02T.0304(b)]

### **II. STANDARD CONDITIONS**

1. This permit shall not be transferable. In the event there is a desire for the wastewater collection facilities to change ownership, or there is a name change of the Permittee, a formal permit request shall be submitted to the Division accompanied by documentation from the parties involved, and other supporting materials as may be appropriate. The approval of this request shall be considered on its merits and may or may not be approved. [15A NCAC 02T.0104; G.S 143-215.1(d3)]

2. This permit shall become voidable unless the wastewater collection facilities are constructed in accordance with the conditions of this permit; 15A NCAC 2T; the Division's Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials unless specifically mentioned herein. [15A NCAC 02T.0110]
3. This permit shall be effective only with respect to the nature and volume of wastes described in the application and other supporting data. [15A NCAC 02T .0110]
4. The wastewater collection facilities shall be properly maintained and operated at all times. The Permittee shall maintain compliance with an individual system-wide collection system permit for the operation and maintenance of these facilities as required by 15A NCAC 2T .0403. If an individual permit is not required, the following performance criteria shall be met: [15A NCAC 02T .0108(b)]:
  - a. The sewer system shall be effectively maintained and operated at all times to prevent discharge to land or surface waters, and to prevent any contravention of groundwater standards or surface water standards.
  - b. A map of the sewer system shall be developed and shall be actively maintained.
  - c. An operation and maintenance plan including pump station inspection frequency, preventative maintenance schedule, spare parts inventory and overflow response has been developed and implemented.
  - d. Pump stations that are not connected to a telemetry system shall be inspected every day (i.e. 365 days per year). Pump stations that are connected to a telemetry system shall be inspected at least once per week.
  - e. High-priority sewer lines shall be inspected at least once per every six-months and inspections are documented.
  - f. A general observation of the entire sewer system shall be conducted at least once per year.
  - g. Overflows and bypasses shall be reported to the appropriate Division regional office in accordance with 15A NCAC 2B .0506(a), and public notice shall be provided as required by North Carolina General Statute §143-215.1C.
  - h. A Grease Control Program is in place as follows:
    1. For public owned collection systems, the Grease Control Program shall include at least biannual distribution of educational materials for both commercial and residential users and the legal means to require grease interceptors at existing establishments. The plan shall also include legal means for inspections of the grease interceptors, enforcement for violators and the legal means to control grease entering the system from other public and private satellite sewer systems.
    2. For privately owned collection systems, the Grease Control Program shall include at least bi-annual distribution of grease education materials to users of the collection system by the permittee or its representative.

3. Grease education materials shall be distributed more often than required in Parts (1) and (2) of this Subparagraph if necessary to prevent grease-related sanitary sewer overflows.
  - i. Right-of-ways and easements shall be maintained in the full easement width for personnel and equipment accessibility.
  - j. Documentation shall be kept for Subparagraphs (a) through (i) of this Rule for a minimum of three years with exception of the map, which shall be maintained for the life of the system.
5. The Permittee shall report by telephone to a water resources staff member at the Winston-Salem Regional Office, telephone number (336) 776-9800, as soon as possible, but in no case more than 24 hours, following the occurrence or first knowledge of the occurrence of either of the following:
  - a. Any process unit failure, due to known or unknown reasons, that renders the facility incapable of adequate wastewater transport, such as mechanical or electrical failures of pumps, line blockage or breakage, etc.; or
  - b. Any SSO and/or spill over 1,000 gallons; or
  - c. Any SSO and/or spill, regardless of volume, that reaches surface water

Voice mail messages or faxed information is permissible, but this shall not be considered as the initial verbal report. Overflows and spills occurring outside normal business hours may also be reported to the Division of Emergency Management at telephone number (800) 858-0368 or (919) 733-3300. Persons reporting any of the above occurrences shall file a spill report by completing and submitting Part I of Form CS-SSO (or the most current Division approved form) within five days following first knowledge of the occurrence. This report must outline the actions taken or proposed to be taken to ensure that the problem does not recur. Part II of Form CS-SSO (or the most current Division approved form) can also be completed to show that the SSO was beyond control. [G.S. 143-215.1C(a1)]

6. Construction of the gravity sewers, pump stations, and force mains shall be scheduled so as not to interrupt service by the existing utilities nor result in an overflow or bypass discharge of wastewater to the surface waters of the State. [15A NCAC 02T.0108(b)]
7. Upon completion of construction and prior to operation of these permitted facilities, the completed Engineering Certification form attached to this permit shall be submitted with the required supporting documents to the address provided on the form. A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Any wastewater flow made tributary to the wastewater collection system extension prior to completion of this Engineer's Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions.

A complete certification is one where the form is fully executed and the supporting documents are provided as applicable. Supporting documentation shall include the following:

- a. One copy of the project construction record drawings (plan & profile views of sewer lines & force mains) of the wastewater collection system extension. Final record drawings should be clear on the plans or on digital media (CD or DVD disk) and are defined as the design drawings that are marked up or annotated with after construction information and show required buffers, separation distances, material changes, etc.
- b. One copy of the supporting applicable design calculations including pipe and pump sizing, velocity, pump cycle times, and level control settings, pump station buoyancy, wet well

storage, surge protection, detention time in the wet well, and force main, ability to flush low points in force mains with a pump cycle, and downstream sewer capacity analysis. If a portable power source or pump is dedicated to multiple stations, an evaluation of all the pump stations' storage capacities and the rotation schedule of the portable power source or pump, include travel timeframes, shall be provided.

- c. Changes to the project that do not result in non-compliance with this permit, regulations, or the Minimum Design Criteria should be clearly identified on the record drawings, on the certification in the space provided, or in written summary form.

**Prior to Certification** (Final or Partial): Permit modifications are required for any changes resulting in non-compliance with this permit (including pipe length increases of 10% or greater, increased flow, pump station design capacity design increases of 5% or greater, and increases in the number/type of connections), regulations, or the Minimum Design Criteria. Requested modifications or variances to the Minimum Design Criteria will be reviewed on a case-by-case basis and each on its own merit. Please note that variances to the Minimum Design Criteria should be requested and approved during the permitting process prior to construction. After-construction requests are discouraged by the Division and may not be approved, thus requiring replacement or repair prior to certification & activation. [15A NCAC 02T .0116]

8. Gravity sewers installed greater than ten percent below the minimum required slope per the Division's Gravity Sewer Minimum Design Criteria shall not be acceptable and shall not be certified until corrected. If there is an unforeseen obstacle in the field where all viable solutions have been examined, a slope variance can be requested from the Division with firm supporting documentation. This shall be done through a permit modification with fee. Such variance requests will be evaluated on a case-by-case basis. Resolution of such request shall be evident prior to completing and submitting the construction certification. [ 15A NCAC 02T.0105(n)]
9. A copy of the construction record drawings shall be maintained on file by the Permittee for the life of the wastewater collection facilities. [15A NCAC 02T .0116]
10. Failure to abide by the conditions and limitations contained in this permit; 15A NCAC 2T; the Division's Gravity Sewer Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Station and Force Mains adopted June 1, 2000 as applicable; and other supporting materials may subject the Permittee to an enforcement action by the Division, in accordance with North Carolina General Statutes §143-215.6A through §143-215.6C, construction of additional or replacement wastewater collection facilities, and/or referral of the North Carolina-licensed Professional Engineer to the licensing board. [15A NCAC 02T .0104; 15A NCAC 02T .0108(b-c)]
11. In the event that the wastewater collection facilities fail to perform satisfactorily, including the creation of nuisance conditions, the Permittee shall take immediate corrective action, including those as may be required by this Division, such as the construction of additional or replacement facilities. [15A NCAC 02T .0110; 15A NCAC 02T .0108(b)]
12. The issuance of this permit shall not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by the Division any other Federal, State, or Local government agencies which have jurisdiction or obtaining other permits which maybe required by the Division or any other Federal, State, of Local government agencies. [G.S. 143-215.1(b)]

**FAST TRACK SEWER ENGINEERING CERTIFICATION**

**PERMITTEE:** City of Archdale  
**PERMIT #:** WQ0039318  
**PROJECT:** NCDOT Project 17BP.8.R.76 BRIDGE 750416 on SR 1911 Ashland Street  
**ISSUE DATE:** July 5, 2017

This project shall not be considered complete nor allowed to operate in accordance with Condition 7 of this permit until the Division has received this Certification and all required supporting documentation. It should be submitted in a manner that documents the Division's receipt. *Send the required documentation the Regional Supervisor, Water Quality Regional Operations Section at the address at the bottom.*

Any wastewater flow made tributary to the wastewater collection system extension prior to completion of this Certification shall be considered a violation of the permit and shall subject the Permittee to appropriate enforcement actions. The Permittee is responsible for tracking all partial certifications up until a final certification is received. A Final Certification shall be a complete set of record drawings and design calculations regardless of whether partials have been submitted.

**PERMITTEE'S CERTIFICATION**

I, the undersigned agent for the Permittee, hereby state that this project has been constructed pursuant to the applicable standards & requirements, the Professional Engineer below has provided applicable design/construction information to the Permittee, and the Permittee is prepared to operate & maintain the wastewater collection system permitted herein or portions thereof.

\_\_\_\_\_  
Printed Name, Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

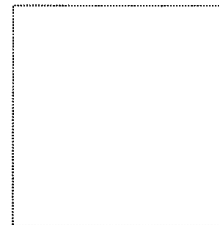
**ENGINEER'S CERTIFICATION**

I, \_\_\_\_\_, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe ( periodically,  weekly,  full time) the construction of the NCDOT Project 17BP.8.R.76 BRIDGE 750416 on SR 1911 Ashland Street and location as referenced above for the above Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance of this permit; 15A NCAC 02T; the Division of Water Resources' (Division) Gravity Sewer Minimum Design Criteria adopted February 12, 1996 as applicable; the Division's Minimum Design Criteria for the Fast-Track Permitting of Pump Stations and Force Mains adopted June 1, 2000 as applicable; and other supporting materials.

North Carolina Professional Engineer's Seal w/signature & date:

Final       Partial (include description)

Certification Comments/Qualifiers (attach if necessary):





Central Files: APS  SWP   
7/5/2017

**Permit Number** **WQ0039318** **Permit Tracking Slip**

<b>Program Category</b> Non-discharge	<b>Status</b> Active	<b>Project Type</b> New Project
<b>Permit Type</b> Gravity Sewer Extension, Pump Stations, & Pressure Sewer Extensions	<b>Version</b> 1.00	<b>Permit Classification</b> Individual

**Primary Reviewer** justin.henderson **Permit Contact Affiliation**

**Coastal SWRule**

**Permitted Flow**

**Facility**

<b>Facility Name</b> NCDOT Project 17BP.8.76 BRIDGE 750416 on SR 1911 Ashland Street	<b>Major/Minor</b> Minor	<b>Region</b> Winston-Salem
<b>Location Address</b>		<b>County</b> Randolph
	<b>Facility Contact Affiliation</b>	

**Owner**

<b>Owner Name</b> City of Archdale	<b>Owner Type</b> Government - Municipal
	<b>Owner Affiliation</b> Zeb Holden City Manager PO Box 14068 Archdale NC 27263

Orig Issue	App Received	Draft Initiated	Scheduled Issuance	Public Notice	Issue	Effective	Expiration
7/5/2017	7/3/2017				7/5/2017	7/5/2017	

Regulated Activities	Requested /Received Events
Wastewater collection	Additional information requested 7/5/17 Additional information received 7/5/17

**Outfall**

<b>Waterbody Name</b>	<b>StreamIndex Number</b>	<b>Current Class</b>	<b>Subbasin</b>
-----------------------	---------------------------	----------------------	-----------------



Water Resources  
Environmental Quality

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

July 26, 2017

City of Archdale  
Attention: Mr. Zeb Holden, City Manager  
307 Balfour Drive  
Archdale, North Carolina 27263

Re: Engineering Plans & Project Special Provisions Approval  
Distribution Relocation  
Replacement of BR 750416 on Ashland St  
(NCDOT TIP 17BP.8.R.76)  
City of Archdale  
Water System No.: NC0276030  
Randolph County  
Serial No.: 17-00626

Dear Applicant:

Enclosed please find one copy of the "Application for Approval..." together with one copy of the referenced engineering plans and specifications bearing the Division of Water Resources stamp of approval for the referenced project. These engineering plans and specifications are approved under Division of Water Resources Serial Number 17-00626, dated July 26, 2017. **This approval has one condition: Please ensure that the necessary 401/404 certifications/permits (if applicable) have been obtained prior to relocation of the water line through the impacted stream.**

Engineering plans and project special provisions prepared by Tracy Neal Parrott, P.E., call for the relocation of approximately 236 feet of 8-inch DIP water main, valves and other appurtenances along Ashland Street (SR 1911) near the crossing with Dale Creek located near the intersection of Wall Street and Ashland Street (SR 1911). The proposed 8-inch water main will connect to the existing 8-inch water main along Ashland Street (SR 1911) both north and south of the bridge located over Dale Creek. Construction of this project must be in accordance with North Carolina Department of Transportation standard specifications, in addition to the project special provisions.

Please note that in accordance with 15A NCAC 18C .0309(a), no construction, alteration, or expansion of a water system shall be placed into service or made available for human consumption until the Public Water Supply Section has issued Final Approval. Final Approval will be issued and mailed to the applicant upon receipt of both an Engineer's Certification and an Applicant's Certification submitted in accordance 15 A NCAC 18C .0303 (a) and (c).

Nothing Compares™

State of North Carolina | Environmental Quality | Water Resources  
Public Water Supply Section  
1634 Mail Service Center | Raleigh, North Carolina 27689-1634  
919 707 9100 | Lab Fax 919 715 6637 | Admin Fax 919 715 4374 | [www.ncwater.org/pws/](http://www.ncwater.org/pws/)

City of Archdale  
Mr. Zeb Holden, City Manager  
Page 2 of 2  
July 26, 2017

These plans and project special provisions in the foregoing application are approved insofar as the protection of public health is concerned as provided in the rules, standards and criteria adopted under the authority of Chapter 130A-317 of the General Statutes. This approval does not constitute a warranty of the design, construction or future operation of the water system.

One copy of the "Application for Approval..." and a copy of the plans and project special provisions with a seal of approval from the department are enclosed. One copy of the enclosed documents in a digital format (CD) is being forwarded to our Winston-Salem Regional Office. The second copy of the CD is being retained for our permanent records.

If Public Water Supply Section can be of further service, please call (919) 707-9100.

Sincerely,

*Justin M. Rhodes* /for

Robert W. Midgette, P.E.  
Operations Branch Head  
Public Water Supply Section

RWM/DMR

Enclosures: Approval Document

cc: Eric Hudson, P.E., Winston-Salem Regional Office  
Randolph County Health Department  
Tracy N. Parrott, P.E., Summit Design and Engineering Svc.



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

July 26, 2017

CITY OF ARCHDALE  
 ATTN: ZEB HOLDEN - CITY MANAGER  
 307 BALFOUR DRIVE  
 ARCHDALE, NC 27263

Re: **Authorization to Construct (This is not a Final Approval)**  
 Issue Date: July 26, 2017  
 REPLACEMENT OF BR 750416 ON ASHLAND ST  
 Serial No.: 17-00626      Water System No.: NC0276030  
 Randolph County

Dear Applicant:

This letter is to confirm that a complete Engineer's Report and a Water System Management Plan have been received, and that engineering plans and specifications have been approved by the Department for **REPLACEMENT OF BR 750416 ON ASHLAND ST, Serial No.: 17-00626**.

The "Authorization to Construct" is valid for 24 months from the issue date. Authorization to construct may be extended if the Rules Governing Public Water Supplies and site conditions have not changed (see Rule .0305). The "Authorization to Construct" and the engineering plans and specifications approval letter shall be posted at the primary entrance of the job site before and during construction.

Upon completion of the construction or modification, **and prior to placing the new construction or modification into service**, the applicant must submit an Engineer's Certification and Applicant's Certification to the Public Water Supply Section.

- **Engineer's Certification:** in accordance with Rule .0303 (a), the applicant shall submit a certification statement signed and sealed by a registered professional engineer stating that construction was completed in accordance with approved engineering plans and specifications, including any provisions stipulated in the Department's engineering plan and specification approval letter.
- **Applicant's Certification:** in accordance with Rule .0303 (c), the applicant shall submit a signed certification statement indicating that the requirements for an Operation and Maintenance Plan and Emergency Management Plan have been satisfied in accordance with Rule .0307 (d) and (e) and that the system has a certified operator in accordance with Rule .1300. The "Applicant's Certification" form is available at <http://www.ncwater.org/> (click on Public Water Supply Section, Plan Review, Plan Review Forms).

If this "Authorization to Construct" is for a new public water system, the owner must submit a completed **application for an Operating Permit** and the appropriate fee. For a copy of the application for an Operating Permit please call (919) 707-9085.

Once the certifications and permit application and fee (if applicable) are received and determined adequate, the Department will issue a Final Approval letter to the applicant. In accordance with Rule .0309 (a), **no portion of this project shall be placed into service until the Department has issued Final Approval**.

Please contact us at (919) 707-9100 if you have any questions or need additional information.

Sincerely,

Robert W. Midgette, P.E., Operations Branch Head  
 Public Water Supply Section  
 Division of Water Resources

cc: ERIC HUDSON, P.E., Regional Engineer  
 SUMMIT DESIGN AND ENGINEERING SVC

North Carolina Department of Environmental Quality  
Division of Water Resources

Authorization to Construct

Project Applicant:	CITY OF ARCHDALE
Public Water System Name and Water System No.:	ARCHDALE, CITY OF NC0276030
Project Name:	REPLACEMENT OF BR 750416 ON ASHLAND ST
Serial No.:	17-00626
Issue Date:	July 26, 2017
Expiration Date:	24 Months after Issue Date

In accordance with NCAC 18C .0305, this Authorization to Construct must be posted  
at the primary entrance to the job site during construction.

RECEIVED JUL 31 2017

TRACY N PARROTT, PE  
SUMMIT DESIGN AND ENGINEERING SVC  
504 MEADOWLAND DRIVE

HILLSBOROUGH, NC 27278

### RIGHT OF WAY FIELD CERTIFICATION

TIP No. 076SR1911  
 WBS Element: 17BP.8.R.76  
 County: Randolph  
 Description: Bridge Replacement Randolph County

**No Railroad work will be performed within the project limits.**

In connection with the above-referenced project, I certify that there were: no persons displaced for this project or that all individuals and families have been relocated to DSS housing, or that comparable replacement housing has been made available to relocates in accordance with applicable Federal and State laws and regulations. The steps relative to relocation advisory assistance and payments as required by current FHWA directive(s) covering the administration of the Highway Relocation Assistance Program have been taken, or that they are not required. I further certify that one of the following has application:

- 1. All necessary right of way has been acquired or the State has legal right of physical possession of that right of way,  
  
or
- 2. The acquisition or right of occupancy and use of a few remaining parcels is not complete, but all occupants of the residences on such parcels have had replacement housing made available to them in accordance with 49 CFR 24.204. I assure that, if the physical construction of the project proceeds, displaced persons who have not yet moved from the right of way will be protected against unnecessary inconvenience and disproportionate injury or any action coercive in nature. I believe that it will be in the best public interest to proceed with this project. The following information is provided regarding excepted parcels and will be provided in the contract documents. These parcels will require delays of entry noted as follows:

TIP/PARCEL	PROPERTY OWNER	REASON FOR DELAY REQUEST	RELO (Y/N)	DELAY OF ENTRY UNTIL

This certification assures compliance with all applicable Federal and State laws, rules and policies.

Date: 06/05/2018

*William Stair Schell*  
 \_\_\_\_\_  
 DIVISION RIGHT OF WAY AGENT

**PROJECT SPECIAL PROVISION**

(10-18-95) (Rev. 3-21-17)

Z-1

**PERMITS**

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

<b><u>PERMIT</u></b>	<b><u>AUTHORITY GRANTING THE PERMIT</u></b>
Dredge and Fill and/or Work in Navigable Waters (404)	U. S. Army Corps of Engineers
Water Quality (401)	Division of Environmental Management, DEQ State of North Carolina
Buffer Certification	Division of Environmental Management, DEQ 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 *2018 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.**



**U.S. ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT**

Action Id. SAW-2013-02225 County: Randolph U.S.G.S. Quad: NC-High Point East

**GENERAL PERMIT (REGIONAL AND NATIONWIDE) VERIFICATION**

Permittee: NCDOT, Division 8  
Attn: Art King  
 Address: 902 North Sandhills Blvd.  
Aberdeen, NC 28315  
 Telephone Number: 910-944-2344  
 E-mail: acking@ncdot.gov

Size (acres) <1 acre Nearest Town Archdale  
 Nearest Waterway Muddy Creek River Basin Cape Fear  
 USGS HUC Cape Fear 03030003 Coordinates Latitude: 35.912474  
 Longitude: -79.957376

Location description: This project is located in Randolph County near Archdale, NC, on Ashland Street at Bridge 416 crossing an unnamed tributary to Muddy Creek.

Description of projects area and activity: This verification authorizes the aquatic impacts associated with the replacement of a deficient bridge with new box culvert. Specifically, these impacts are all to stream features and include 47 linear feet of culvert, 48 linear feet of bank stabilization, and 51 linear feet of floodplain bench construction. Compensatory mitigation is required for the loss of water related to the culvert (see Special Conditions below).

Applicable Law(s):  Section 404 (Clean Water Act, 33 USC 1344)  
 Section 10 (Rivers and Harbors Act, 33 USC 403)

Authorization: **NWP 14. Linear Transportation Projects**

**SEE ATTACHED NWP GENERAL, REGIONAL, AND/OR SPECIAL CONDITIONS**

**Your work is authorized by the above referenced permit provided it is accomplished in strict accordance with the enclosed Conditions, your application signed and dated 7/3/2018, the email containing additional information dated 7/25/2018, and the most recent plans submitted with these documents. Any violation of the attached conditions or deviation from your submitted plans may subject the permittee to a stop work order, a restoration order, a Class I administrative penalty, and/or appropriate legal action.**

This verification will remain valid until the expiration date identified below unless the nationwide authorization is modified, suspended or revoked. If, prior to the expiration date identified below, the nationwide permit authorization is reissued and/or modified, this verification will remain valid until the expiration date identified below, provided it complies with all requirements of the modified nationwide permit. If the nationwide permit authorization expires or is suspended, revoked, or is modified, such that the activity would no longer comply with the terms and conditions of the nationwide permit, activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon the nationwide permit, will remain authorized provided the activity is completed within twelve months of the date of the nationwide permit's expiration, modification or revocation, unless discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization.

Activities subject to Section 404 (as indicated above) may also require an individual Section 401 Water Quality Certification. You should contact the NC Division of Water Resources (telephone 919-807-6300) to determine Section 401 requirements.

For activities occurring within the twenty coastal counties subject to regulation under the Coastal Area Management Act (CAMA), prior to beginning work you must contact the N.C. Division of Coastal Management **Morehead City, NC, at (252) 808-2808.**

This Department of the Army verification does not relieve the permittee of the responsibility to obtain any other required Federal, State or local approvals/permits.

SAW 2013-02225 (continued)

Special Conditions:

1) In order to compensate for impacts associated with this permit, mitigation shall be provided in accordance with the provisions outlined on the most recent version of the attached Compensatory Mitigation Responsibility Transfer Form. The requirements of this form, including any special conditions listed on this form, are hereby incorporated as special conditions of this permit authorization.

2) The U.S. Fish and Wildlife Service's (USFWS's) Programmatic Biological Opinion (BO) titled "Northern Long-eared Bat (NLEB) Programmatic Biological Opinion for North Carolina Department of Transportation (NCDOT) Activities in Eastern North Carolina (Divisions 1-8)," dated March 25, 2015, and adopted on April 10, 2015, contains mandatory terms and conditions to implement the reasonable and prudent measures that are associated with "incidental take" that are specified in the BO. As such, this permit verification contains a special condition requiring compliance with all the mandatory terms and conditions (incorporated by reference into this permit verification) associated with incidental take of the BO. Reasonable and prudent measures are actions necessary to minimize the impacts of incidental take that is anticipated to result from implementing the project that the Service regarded as not likely to jeopardize the species or adversely modify designated critical habitat.

If there are any questions regarding this verification, any of the conditions of the Permit, or the Corps of Engineers regulatory program, please contact Andy Williams at 919-554-4884 or Andrew.e.williams2@usace.army.mil.

Corps Regulatory Official:



Date: 07/03/2018

Expiration Date of Verification: 03/18/2022

**Compensatory Mitigation Responsibility Transfer Form**

**Permittee:** NCDOT, Division 8, Attn: Art King  
**Project Name:** NCDOT Division 8, Bridge 416

**Action ID:** SAW-2013-02225  
**County:** Randolph

**Instructions to Permittee:** The Permittee must provide a copy of this form to the Mitigation Sponsor, either an approved Mitigation Bank or the North Carolina Division of Mitigation Services (NCDMS), who will then sign the form to verify the transfer of the mitigation responsibility. Once the Sponsor has signed this form, it is the Permittee's responsibility to ensure that to the U.S. Army Corps of Engineers (USACE) Project Manager identified on page two is in receipt of a signed copy of this form before conducting authorized impacts, unless otherwise specified below. If more than one mitigation Sponsor will be used to provide the mitigation associated with the permit, or if the impacts and/or the mitigation will occur in more than one 8-digit Hydrologic Unit Code (HUC), multiple forms will be attached to the permit, and the separate forms for each Sponsor and/or HUC must be provided to the appropriate mitigation Sponsors.

**Instructions to Sponsor:** The Sponsor must verify that the mitigation requirements (credits) shown below are available at the identified site. By signing below, the Sponsor is accepting full responsibility for the identified mitigation, regardless of whether or not they have received payment from the Permittee. Once the form is signed, the Sponsor must update the bank ledger and provide a copy of the signed form and the updated bank ledger to the Permittee, the USACE Project Manager, and the Wilmington District Mitigation Office (see contact information on page 2). The Sponsor must also comply with all reporting requirements established in their authorizing instrument.

**Permitted Impacts and Compensatory Mitigation Requirements:**

Permitted Impacts Requiring Mitigation*			8-digit HUC and Basin: 03030003, Cape Fear River Basin			
Stream Impacts (linear feet)			Wetland Impacts (acres)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
47						

\*If more than one mitigation sponsor will be used for the permit, only include impacts to be mitigated by this sponsor.

Compensatory Mitigation Requirements:			8-digit HUC and Basin: 03030003, Cape Fear River Basin			
Stream Mitigation (credits)			Wetland Mitigation (credits)			
Warm	Cool	Cold	Riparian Riverine	Riparian Non-Riverine	Non-Riparian	Coastal
94						

**Mitigation Site Debited:** NCDMS  
 (List the name of the bank to be debited. For umbrella banks, also list the specific site. For NCDMS, list NCDMS. If the NCDMS acceptance letter identifies a specific site, also list the specific site to be debited).

<i>Section to be completed by the Mitigation Sponsor</i>	
<p><b>Statement of Mitigation Liability Acceptance:</b> I, the undersigned, verify that I am authorized to approve mitigation transactions for the Mitigation Sponsor shown below, and I certify that the Sponsor agrees to accept full responsibility for providing the mitigation identified in this document (see the table above), associated with the USACE Permittee and Action ID number shown. I also verify that released credits (and/or advance credits for NCDMS), as approved by the USACE, are currently available at the mitigation site identified above. Further, I understand that if the Sponsor fails to provide the required compensatory mitigation, the USACE Wilmington District Engineer may pursue measures against the Sponsor to ensure compliance associated with the mitigation requirements.</p>	
<p><b>Mitigation Sponsor Name:</b> _____</p>	
<p><b>Name of Sponsor's Authorized Representative:</b> _____</p>	
<p>_____ Signature of Sponsor's Authorized Representative</p>	<p>_____ Date of Signature</p>



**Conditions for Transfer of Compensatory Mitigation Credit:**

- Once this document has been signed by the Mitigation Sponsor and the USACE is in receipt of the signed form, the Permittee is no longer responsible for providing the mitigation identified in this form, though the Permittee remains responsible for any other mitigation requirements stated in the permit conditions.
- Construction within jurisdictional areas authorized by the permit identified on page one of this form can begin only after the USACE is in receipt of a copy of this document signed by the Sponsor, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein. For authorized impacts conducted by the North Carolina Department of Transportation (NCDOT), construction within jurisdictional areas may proceed upon permit issuance; however, a copy of this form signed by the Sponsor must be provided to the USACE within 30 days of permit issuance. NCDOT remains fully responsible for the mitigation until the USACE has received this form, confirming that the Sponsor has accepted responsibility for providing the mitigation requirements listed herein.
- Signed copies of this document must be retained by the Permittee, Mitigation Sponsor, and in the USACE administrative records for both the permit and the Bank/ILF Instrument. It is the Permittee's responsibility to ensure that the USACE Project Manager (address below) is provided with a signed copy of this form.
- If changes are proposed to the type, amount, or location of mitigation after this form has been signed and returned to the USACE, the Sponsor must obtain case-by-case approval from the USACE Project Manager and/or North Carolina Interagency Review Team (NCIRT). If approved, higher mitigation ratios may be applied, as per current District guidance and a new version of this form must be completed and included in the USACE administrative records for both the permit and the Bank/ILF Instrument.

**Comments/Additional Conditions:** A letter from NCDMS, confirming their willing and able to accept the applicants compensatory mitigation responsibility, dated 6/26/2018 was included with the preconstruction notification.

This form is not valid unless signed below by the USACE Project Manager and by the Mitigation Sponsor on Page 1. **Once signed, the Sponsor should provide copies of this form along with an updated bank ledger to: 1) the Permittee, 2) the USACE Project Manager at the address below, and 3) the Wilmington District Mitigation Office, Attn: Todd Tugwell, 11405 Falls of Neuse Road, Wake Forest, NC 27587 (email: [todd.tugwell@usace.army.mil](mailto:todd.tugwell@usace.army.mil)).** Questions regarding this form or any of the permit conditions may be directed to the USACE Project Manager below.

**USACE Project Manager:** Andy Williams  
**USACE Field Office:** Raleigh Regulatory Office  
 US Army Corps of Engineers  
 3331 Heritage Trade Drive, Suite 105  
 Wake Forest, North Carolina 27587  
**Email:** [Andrew.e.williams2@usace.army.mil](mailto:Andrew.e.williams2@usace.army.mil)

  
 \_\_\_\_\_  
 USACE Project Manager Signature

8/17/2018  
 \_\_\_\_\_  
 Date of Signature

Current Wilmington District mitigation guidance, including information on mitigation ratios, functional assessments, and mitigation bank location and availability, and credit classifications (including stream temperature and wetland groupings) is available at <http://ribits.usace.army.mil>

Action ID Number: SAW-2013-02225 County: Randolph

Permittee: NCDOT, Division 8, Attn: Art King

Project Name: NCDOT Division 8, Bridge 416

Date Verification Issued: 07/03/2018

Project Manager: Andy Williams

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

US ARMY CORPS OF ENGINEERS  
WILMINGTON DISTRICT  
Attn: Andy Williams  
Raleigh Regulatory Office  
U.S Army Corps of Engineers  
3331 Heritage Trade Drive, Suite 105  
Wake Forest, North Carolina 27587  
or  
Andrew.e.williams2@usace.army.mil

Please note that your permitted activity is subject to a compliance inspection by a U. S. Army Corps of Engineers representative. Failure to comply with any terms or conditions of this authorization may result in the Corps suspending, modifying or revoking the authorization and/or issuing a Class I administrative penalty, or initiating other appropriate legal action.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and condition of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

**NATIONWIDE PERMIT 14  
DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
FINAL NOTICE OF ISSUANCE AND MODIFICATION OF NATIONWIDE PERMITS  
FEDERAL REGISTER  
AUTHORIZED MARCH 19, 2017**

**Linear Transportation Projects.** Activities required for crossings of waters of the United States associated with the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 32.) (Authorities: Sections 10 and 404)

**Note 1:** For linear transportation projects crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. Linear transportation projects must comply with 33 CFR 330.6(d).

**Note 2:** Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under section 404(f) of the Clean Water Act (see 33 CFR 323.4).

**Note 3:** For NWP 14 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended

to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

**NATIONWIDE PERMIT GENERAL CONDITIONS**

The following General Conditions must be followed in order for any authorization by a NWP to be valid:

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.  
(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.  
(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.
3. **Spawning Areas.** Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. **Migratory Bird Breeding Areas.** Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
5. **Shellfish Beds.** No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
6. **Suitable Material.** No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).



7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status,

unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. The permittee shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No NWP activity may cause more than minimal adverse effects on tribal rights (including treaty rights), protected tribal resources, or tribal lands.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the effects of the proposed activity has been completed. Direct effects are the immediate effects on listed species and critical habitat caused by the NWP activity. Indirect effects are those effects on listed species and critical habitat that are caused by the NWP activity and are later in time, but still are reasonably certain to occur.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that

might be affected by the proposed activity or that utilize the designated critical habitat that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species or critical habitat, or until ESA section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.

(e) Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring their action complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting appropriate local office of the U.S. Fish and Wildlife Service to determine applicable measures to reduce impacts to migratory

birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) In cases where the district engineer determines that the activity may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act. If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect. Where the non-Federal applicant has identified historic properties on which the activity might have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed.

(d) For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation to ensure that the activity results in no more than minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. Restored riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-

lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill

material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:  
“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To



validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- (a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
- (c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a “USACE project”), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission is not authorized by NWP until the appropriate Corps office issues the section 408 permission to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the

prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures. For single and complete linear projects, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters.

Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-Federal permittees, if any listed species or designated critical habitat might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat, the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed activity or utilize the designated critical habitat that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-Federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an activity that requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is an NWP PCN and must include all of the applicable information required in paragraphs (b)(1) through (10) of this general condition. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and

supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of stream bed; (iii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iv) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWP, including the need for mitigation to ensure the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

#### **DISTRICT ENGINEER'S DECISION**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal

individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the individual crossings of waters of the United States to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51, 52, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects. For those NWPs that have a waivable 300 linear foot limit for losses of intermittent and ephemeral stream bed and a 1/2-acre limit (i.e., NWPs 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52), the loss of intermittent and ephemeral stream bed, plus any other losses of jurisdictional waters and wetlands, cannot exceed 1/2-acre.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters (e.g., streams). The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and

include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31, or to evaluate PCNs for activities authorized by NWPs 21, 49, and 50), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

#### **FURTHER INFORMATION**

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

### **DEFINITIONS**

**Best management practices (BMPs):** Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

**Compensatory mitigation:** The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

**Currently serviceable:** Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

**Direct effects:** Effects that are caused by the activity and occur at the same time and place.

**Discharge:** The term “discharge” means any discharge of dredged or fill material into waters of the United States.

**Ecological reference:** A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

**Enhancement:** The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

**Ephemeral stream:** An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

**Establishment (creation):** The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

**High Tide Line:** The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

**Historic Property:** Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National

Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the acres or linear feet of stream bed that are filled or excavated as a result of the regulated activity. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the



primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Protected tribal resources: Those natural resources and properties of traditional or customary religious or cultural importance, either on or off Indian lands, retained by, or reserved by or for, Indian tribes through treaties, statutes, judicial decisions, or executive orders, including tribal trust resources.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine- marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water

surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a jurisdictional water of the United States. If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of “waterbodies” include streams, rivers, lakes, ponds, and wetlands.

**FINAL REGIONAL CONDITIONS 2017*****NOTICE ABOUT WEB LINKS IN THIS DOCUMENT:***

*The web links (both internal to our Wilmington District and any external links to collaborating agencies) in this document are valid at the time of publication. However, the Wilmington District Regulatory Program web page addresses, as with other agency web sites, may change over the timeframe of the five-year Nationwide Permit renewal cycle, in response to policy mandates or technology advances. While we will make every effort to check on the integrity of our web links and provide re-direct pages whenever possible, we ask that you report any broken links to us so we can keep the page information current and usable. We apologize in advanced for any broken links that you may encounter, and we ask that you navigate from the Regulatory home page (Regulatory Permit Program Wetlands and Streams) of the Wilmington District Corps of Engineers, to the "Permits" section of our web site to find links for pages that cannot be found by clicking directly on the listed web link in this document.*

**Final 2017 Regional Conditions for Nationwide Permits (NWP) in the Wilmington District****1.0 Excluded Waters**

The Corps has identified waters that will be excluded from the use of all NWP's during certain timeframes. These waters are:

**1.1 Anadromous Fish Spawning Areas**

Waters of the United States identified by either the North Carolina Division of Marine Fisheries (NCDMF) or the North Carolina Wildlife Resources Commission (NCWRC) as anadromous fish spawning areas are excluded during the period between February 15 and June 30, without prior written approval from the Corps and either NCDMF or NCWRC.

**1.2 Trout Waters Moratorium**

Waters of the United States in the designated trout watersheds of North Carolina are excluded during the period between October 15 and April 15 without prior written approval from the NCWRC, or from the Eastern Band of Cherokee Indians (EBCI) Fisheries and Wildlife Management (FWM) office if the project is located on EBCI trust land. (See Section 2.7 for information on the designated trout watersheds).

**1.3 Sturgeon Spawning Areas as Designated by the National Marine Fisheries Service (NMFS)**

Waters of the United States designated as sturgeon spawning areas are excluded during the period between February 1 and June 30, without prior written approval from the NMFS.

## 2.0 Waters Requiring Additional Notification

The Corps has identified waters that will be subject to additional notification requirements for activities authorized by all NWP's. These waters are:

### 2.1 Western NC Counties that Drain to Designated Critical Habitat

For proposed activities within waters of the United States that require a Pre-Construction Notification (PCN) and are located in the sixteen counties listed below, permittees must provide a copy of the PCN to the U.S. Fish and Wildlife Service (USFWS), 160 Zillicoa Street, Asheville, North Carolina 28801. This PCN must be sent concurrently to the U.S. Fish and Wildlife Service and the Corps Asheville Regulatory Field Office. Please see General Condition 18 for specific notification requirements related to the Endangered Species Act and the below website for information on the location of designated critical habitat.

Counties with tributaries that drain to designated critical habitat that require notification to the Asheville U.S. Fish and Wildlife Service: Avery, Cherokee, Forsyth, Graham, Haywood, Henderson, Jackson, Macon, Mecklenburg, Mitchell, Stokes, Surry, Swain, Transylvania, Union and Yancey.

Website and office addresses for Endangered Species Act Information:

The Wilmington District has developed the following website for permittees which provides guidelines on how to review linked websites and maps in order to fulfill NWP General Condition 18 requirements:

<http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram/AgencyCoordination/ESA.aspx>

Permittees who do not have internet access may contact the appropriate U.S. Fish and Wildlife Service offices listed below or Corps at (910) 251-4633:

Asheville U.S. Fish and Wildlife Service Office counties: All counties west of and including Anson, Stanly, Davidson, Forsythe and Stokes Counties.

U.S. Fish and Wildlife Service  
Asheville Field Office  
160 Zillicoa Street  
Asheville, NC 28801  
Telephone: (828) 258-3939

Raleigh U.S. Fish and Wildlife Service Office counties: all counties east of and including Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

U.S. Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726

Raleigh, NC 27636-3726  
Telephone: (919) 856-4520

## **2.2 Special Designation Waters**

Prior to the use of any NWP, except NWP 3, that involves a discharge of dredged or fill material in any of the following identified waters and/or adjacent wetlands in North Carolina, permittees shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32). The North Carolina waters and wetlands that require additional notification requirements are:

“Outstanding Resource Waters” (ORW) or “High Quality Waters” (HQW) as designated by the North Carolina Environmental Management Commission; “Primary Nursery Areas” (PNA), including inland PNA, as designated by the North Carolina Marine Fisheries Commission and the NCWRC; or wetlands adjacent to these waters. Definitions of ORW, HQW and PNA waters can be found in the North Carolina State Administrative Code, Title 15A, Subchapters 2B and 10C (15A NCAC 02B, 15A NCAC 10C) and at the following World Wide Web page: <http://reports.oah.state.nc.us/ncac.asp?folderName=Title%2015A%20-%20Environmental%20Quality&lookUpError=15A%20NCAC%20000%20>. Surface water classifications for waters in North Carolina can be viewed at the North Carolina Division of Water Resources website or at the following World Wide Web Page: <https://deq.nc.gov/about/divisions/water-resources/planning/classification-standards/classifications>

Permittees who do not have internet access may contact the Corps at (910) 251- 4633.

## **2.3 Coastal Area Management Act (CAMA) Areas of Environmental Concern**

Non-federal permittees for any NWP in a designated “Area of Environmental Concern” (AEC) in the twenty (20) counties of Eastern North Carolina covered by the North Carolina Coastal Area Management Act (CAMA) must also obtain the required CAMA permit. Development activities for non-federal projects may not commence until a copy of the approved CAMA permit is furnished to the appropriate Wilmington District Regulatory Field Office (Wilmington Field Office – 69 Darlington Avenue, Wilmington, NC 28403, (910) 251-4802 or Washington Field Office – 2407 West 5th Street, Washington, NC 27889, (910) 251-4610).

## **2.4 Barrier Islands**

Prior to the use of any NWP on a barrier island of North Carolina, permittees must submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32).

## **2.5 Mountain or Piedmont Bogs**

Prior to the use of any NWP in a Bog, as classified by the North Carolina Wetland Assessment Methodology (NCWAM), permittees shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32). The latest version of NCWAM can be

viewed on the Corps RIBITS (Regulatory In-lieu Fee and Bank Information Tracking System) website or at the following World Wide Web Page:  
[https://ribits.usace.army.mil/ribits\\_apex/f?p=107:27:0::NO::](https://ribits.usace.army.mil/ribits_apex/f?p=107:27:0::NO::)

**2.6 Animal Waste Facilities**

Prior to use of any NWP for construction of animal waste facilities in waters of the United States, including wetlands, permittees shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32).

**2.7 Trout Waters**

Prior to any discharge of dredge or fill material into streams, waterbodies or wetlands within the 294 designated trout watersheds of North Carolina, the permittee shall submit a PCN (see General Condition 32) to the District Engineer prior to commencing the activity, unless other thresholds are established in the Regional Conditions in Section 4 (Additional Regional Conditions for Specific Nationwide Permits). The permittee shall also provide a copy of the notification to the appropriate NCWRC office, or to the EBCI FWM Office (if the project is located on EBCI trust land), to facilitate the determination of any potential impacts to designated Trout Waters.

Notification to the Corps will include a statement with the name of the NCWRC or EBCI FWM biologist contacted, the date of the notification, the location of work, a delineation of wetlands and waters, a discussion of alternatives to working in the mountain trout waters, why alternatives were not selected, and, if applicable, a plan to provide compensatory mitigation for all unavoidable adverse impacts to mountain trout waters.

NCWRC and NC Trout Watersheds:

<b>NCWRC Contact**</b>	<b>Counties that are entirely within Trout Watersheds*</b>	<b>Counties that are partially within Trout Watersheds*</b>
Mountain Coordinator Balsam Depot 20830 Great Smoky Mountain Expressway Waynesville, NC 28786 Telephone: (828) 558-6011	Alleghany Jackson Ashe Macon Avery Swain Graham Transylvania Haywood Watauga	Burke McDowell Buncombe Mitchell Caldwell Polk Cherokee Rutherford Clay Surry Henderson Wilkes Madison Yancey
For NCDOT Projects:  NCDOT Coordinator 206 Charter. Street Albemarle, NC 28001 Telephone: (704) 982-9181		

\*NOTE: To determine notification requirements, contact the Corps Asheville Regulatory Field Office at (828) 271-7980 or view maps for each County at the following World Wide Web page: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Trout/>.

\*\*If a project is located on EBCI trust land, submit the PCN in accordance with Section 3.14. Contact the Corps Asheville Regulatory Field Office at (828) 271-7980 with questions.

## **2.8 Western NC Waters and Corridors**

The permittee shall submit a PCN (see General Condition 32) to the District Engineer prior to commencing the activity in waters of the United States if the activity will occur within any of the following identified waters in western North Carolina, within 0.5 mile on either side of these waters, or within 0.75 mile of the Little Tennessee River, as measured from the top of the bank of the respective water (i.e., river, stream, or creek):

Brasstown Creek  
Burningtown Creek  
Cane River  
Caney Fork  
Cartoogechaye Creek  
Chattooga River  
Cheoah River  
Cowee Creek  
Cullasaja River  
Deep Creek  
Ellijay Creek  
French Broad River  
Garden Creek  
Hiwassee River  
Hominy Creek  
Iotla Creek  
Little Tennessee River (within the river or within 0.75 mile on either side of this river)  
Nantahala River  
Nolichucky River  
North Fork French Broad River  
North Toe River  
Nottley River  
Oconaluftee River (portion not located on trust/EBCI land)  
Peachtree Creek  
Shooting Creek  
Snowbird Creek  
South Toe River  
Stecoah Creek  
Swannanoa River  
Sweetwater Creek



Tuckasegee River (also spelled Tuckaseegee or Tuckaseigee)  
Valley River  
Watauga Creek  
Watauga River  
Wayah Creek  
West Fork French Broad River

To determine notification requirements, contact the Corps Asheville Regulatory Field Office at (828) 271-7980 or view maps for all corridors at the following World Wide Web page:

<http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/Designated-Special-Waters.aspx>

### **3.0 List of Corps Regional Conditions for All Nationwide Permits**

The following conditions apply to all Nationwide Permits in the Wilmington District:

#### **3.1 Limitation of Loss of Stream Bed**

NWPs may not be used for activities that may result in the loss or degradation of more than 300 total linear feet of stream bed, unless the District Engineer has waived the 300 linear foot limit for ephemeral and intermittent streams on a case-by-case basis and has determined that the proposed activity will result in minimal individual and cumulative adverse impacts to the aquatic environment. Waivers for the loss of ephemeral and intermittent streams must be in writing and documented by appropriate/accepted stream quality assessments\*. This waiver only applies to the 300 linear feet threshold for NWPs.

This Regional Condition does not apply to NWP 23 (Approved Categorical Exclusions).

\*NOTE: Permittees should utilize the most current methodology prescribed by Wilmington District to assess stream function and quality. Information can be found at:

[https://ribits.usace.army.mil/ribits\\_apex/f?p=107:27:0::NO::](https://ribits.usace.army.mil/ribits_apex/f?p=107:27:0::NO::)

#### **3.2 Mitigation for Loss of Stream Bed**

For any NWP that results in a loss of more than 150 linear feet of stream, the permittee shall provide a mitigation proposal to compensate for more than minimal individual and cumulative adverse impacts to the aquatic environment. For stream losses of 150 linear feet or less that require a PCN, the District Engineer may determine, on a case-by-case basis, that compensatory mitigation is required to ensure that the activity results in minimal adverse effect on the aquatic environment.

#### **3.3 Pre-construction Notification for Loss of Streambed Exceeding 150 Feet**

Prior to use of any NWP for any activity which impacts more than 150 total linear feet of perennial stream, intermittent or ephemeral stream, the permittee shall submit a PCN to the District Engineer prior to commencing the activity (see General Condition 32). This applies to

NWPs that do not have specific notification requirements. If a NWP has specific notification requirements, the requirements of the NWP should be followed.

#### **3.4 Restriction on Use of Live Concrete**

For all NWPs which allow the use of concrete as a building material, live or fresh concrete, including bags of uncured concrete, may not come into contact with the water in or entering into waters of the United States. Water inside coffer dams or casings that has been in contact with wet concrete shall only be returned to waters of the United States after the concrete is set and cured and when it no longer poses a threat to aquatic organisms.

#### **3.5 Requirements for Using Riprap for Bank Stabilization**

For all NWPs that allow for the use of riprap material for bank stabilization, the following measures shall be applied:

**3.5.1.** Where bank stabilization is conducted as part of an activity, natural design, bioengineering and/or geoengineering methods that incorporate natural durable materials, native seed mixes, and native plants and shrubs are to be utilized to the maximum extent practicable.

**3.5.2.** Filter cloth must be placed underneath the riprap as an additional requirement of its use in North Carolina waters. The placement of filter fabric is not required if the riprap will be pushed or "keyed" into the bank of the waterbody. A waiver from the specifications in this Regional Condition may be requested in writing. The waiver will only be issued if it can be demonstrated that the impacts of complying with this Regional Condition would result in greater adverse impacts to the aquatic environment.

**3.5.3.** The placement of riprap shall be limited to the areas depicted on submitted work plan drawings.

**3.5.4.** The riprap material shall be clean and free from loose dirt or any pollutant except in trace quantities that would not have an adverse environmental effect.

**3.5.5.** It shall be of a size sufficient to prevent its movement from the authorized alignment by natural forces under normal conditions.

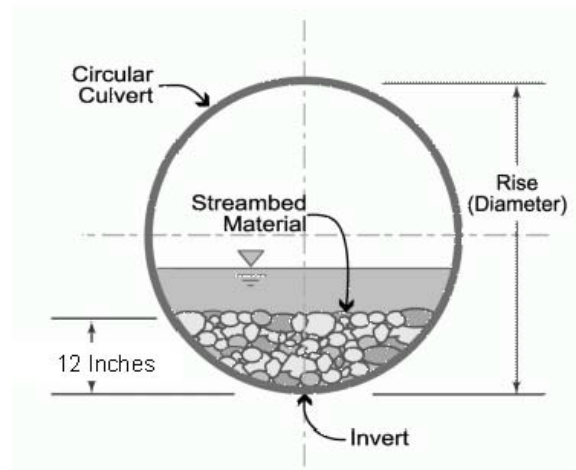
**3.5.6.** The riprap material shall consist of clean rock or masonry material such as, but not limited to, granite, marl, or broken concrete.

#### **3.6 Requirements for Culvert Placement**

**3.6.1** For all NWPs that involve the construction/installation of culverts, measures will be included in the construction/installation that will promote the safe passage of fish and other aquatic organisms. The dimension, pattern, and profile of the stream above and below a pipe or culvert should not be modified by altering the width or depth of the stream profile in connection with the construction activity. The width, height, and gradient of a proposed culvert should be

sufficient to pass the average historical low flow and spring flow without adversely altering flow velocity. Spring flow is the seasonal sustained high flow that typically occurs in the spring. Spring flows should be determined from gage data, if available. In the absence of such data, bank-full flow can be used as a comparable indicator.

In Public Trust Areas of Environmental Concern (AEC) and/or the Estuarine Waters AEC as designated by the Coastal Area Management Act (CAMA): All pipes/culverts must be sufficiently sized to allow for the burial of the bottom of the culvert at least one foot below normal bed elevation.



In all other areas: Culverts greater than 48 inches in diameter will be buried at least one foot below the bed of the stream. Culverts 48 inches in diameter or less shall be buried to maintain aquatic passage and to maintain passage during drought or low flow conditions, and every effort shall be made to maintain the existing channel slope.

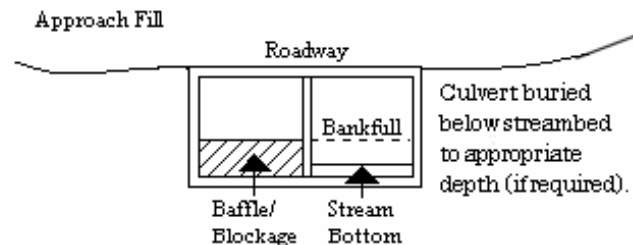
Culverts must be designed and constructed in a manner that minimizes destabilization and head cutting. Destabilizing the channel and head cutting upstream should be considered and appropriate actions incorporated in the design and placement of the culvert.

A waiver from the depth specifications in this condition may be requested, in writing, by the permittee and issued by the Corp; this request must be specific as to the reasons(s) for the request. The waiver will be issued if it can be demonstrated that the proposed design would result in less impacts to the aquatic environment.

All counties: Culverts placed within riparian and/or riverine wetlands must be installed in a manner that does not restrict the flow and circulation patterns of waters of the United States.

Culverts placed across wetland fills purely for the purposes of equalizing surface water do not have to be buried, but the culverts must be of adequate size and/or number to ensure unrestricted transmission of water.

**3.6.2** Bank-full flows (or less) shall be accommodated through maintenance of the existing bank-full channel cross sectional area. Additional culverts or culvert barrels at such crossings shall be allowed only to receive bank-full flows.



**3.6.3** Where adjacent floodplain is available, flows exceeding bank-full should be accommodated by installing culverts at the floodplain elevation. Additional culverts or culvert barrels at such crossings should not be buried, or if buried, must have sills at the inlets to ensure that they only receive flows exceeding bank-full.

**3.6.4** Excavation of existing stream channels shall be limited to the minimum necessary to construct or install the proposed culvert. The final width of the impacted stream at the culvert inlet and outlet should be no greater than the original stream width. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if the proposed design would result in less impacts to the aquatic environment and/or if it can be demonstrated that it is not practicable to restore the final width of the impacted stream at the culvert inlet and outlet to the width of the original stream channel.

**3.6.5** The width of the culvert shall be comparable to the width of the stream channel. If the width of the culvert is wider than the stream channel, the culvert shall include baffles, benches and/or sills to maintain the width of the stream channel. A waiver from this condition may be requested in writing; this request must be specific as to the reason(s) for the request. The waiver will be issued if it can be demonstrated that it is not practicable or necessary to include baffles, benches or sills and the design would result in less impacts to the aquatic environment.

### **3.7 Notification to NCDEQ Shellfish Sanitation Section**

Permittees shall notify the NCDEQ Shellfish Sanitation Section prior to dredging in or removing sediment from an area closed to shell fishing where the effluent may be released to an area open for shell fishing or swimming in order to avoid contamination from the disposal area and cause a temporary shellfish closure to be made. Such notification shall also be provided to the appropriate Corps Regulatory Field Office. Any disposal of sand to the ocean beach should occur between November 1 and April 30 when recreational usage is low. Only clean sand

should be used and no dredged sand from closed shell fishing areas may be used. If beach disposal were to occur at times other than stated above or if sand from a closed shell fishing area is to be used, a swimming advisory shall be posted, and a press release shall be issued by the permittee.

### **3.8 Submerged Aquatic Vegetation**

Impacts to Submerged Aquatic Vegetation (SAV) are not authorized by any NWP, except NWP 48, unless EFH Consultation has been completed pursuant to the Magnuson-Stevens Fisheries Conservation and Management Act (Magnuson-Stevens Act). Permittees shall submit a PCN (See NWP General Condition 32) to the District Engineer prior to commencing the activity if the project would affect SAV. The permittee may not begin work until notified by the Corps that the requirements of the Magnuson-Stevens Act have been satisfied and that the activity is authorized.

### **3.9 Sedimentation and Erosion Control Structures and Measures**

All PCNs will identify and describe sedimentation and erosion control structures and measures proposed for placement in waters of the United States. The structures and measures should be depicted on maps, surveys or drawings showing location and impacts to jurisdictional wetlands and streams.

### **3.10 Restoration of Temporary Impacts to Stream Beds**

Upon completion of work that involves temporary stream impacts, streambeds are to be restored to pre-project elevations and widths using natural streambed material such that the impacted stream reach mimics the adjacent upstream and downstream reach. The impacted area shall be backfilled with natural streambed material to a depth of at least 12 inches or to the bottom depth of the impacted area if shallower than 12 inches. An engineered in-stream structure or material can be used to provide protection of a buried structure if it provides benefits to the aquatic environment and can be accomplished by a natural streambed design. A permittee may request a waiver of this condition if it is determined a buried structure needs significant physical protection beyond those provided in this condition. This condition does not apply to NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities.

### **3.11 Restoration of Temporary Impacts to Stream Banks**

Upon completion of work involving temporary stream bank impacts, stream banks are to be restored to pre-project grade and contours or beneficial grade and contours if the original bank slope is steep and unstable. Natural durable materials, native seed mixes, and native plants and shrubs are to be utilized in the restoration. Natural designs which use bioengineered and/or geo-engineered methods are to be applied. An engineered structure or material can be used to provide protection of a buried structure if it provides benefits to the stream bank environment, provided it is not in excess of the minimum amount needed for protection and does not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark. A permittee may request a waiver of this condition if it is determined a buried structure

needs significant physical protection beyond those provided in this condition. This condition does not apply to NWP 27 – Aquatic Habitat Restoration, Enhancement, and Establishment Activities.

### **3.12 Federal Navigation Channel Setbacks and Corps Easements**

**3.12.1** Authorized structures and fills located in or adjacent to Federally authorized waterways will be constructed in accordance with the latest setback criteria established by the Wilmington District Engineer. You may review the setback policy at <http://www.saw.usace.army.mil/Missions/Navigation/Setbacks.aspx>. This general permit does not authorize the construction of hardened or permanently fixed structures within the Federally Authorized Channel Setback, unless the activity is approved by the Corps. The permittee shall submit a PCN (see General Condition 32) to the District Engineer prior to the construction of any structures or fills within the Federally Authorized Channel Setback.

**3.12.2** The permittee shall obtain a Consent to Cross Government Easement from the Wilmington District's Land Use Coordinator prior to any crossing of the Corps easement and/or prior to commencing construction of any structures, authorized dredging or other work within the right-of-way of, or in proximity to, a federally designated disposal area. The Land Use Coordinator may be contacted at: CESAW-OP-N, 69 Darlington Avenue, Wilmington, North Carolina 28403-1343, email: [SAWeb-NAV@usace.army.mil](mailto:SAWeb-NAV@usace.army.mil)

### **3.13 Northern Long-eared Bat – Endangered Species Act Compliance**

The Wilmington District, U.S. Army Corps of Engineers has consulted with the United States Fish and Wildlife Service (USFWS) in regards to the threatened Northern long-eared bat (NLEB) (*Myotis septentrionalis*) and Standard Local Operating Procedures for Endangered Species (SLOPES) have been approved by the Corps and the USFWS. This condition concerns effects to the NLEB only and does not address effects to other federally listed species and/or federally designated critical habitat.

A. Procedures when the Corps is the lead federal\* agency for a project:

The permittee must comply with (1) and (2) below when:

- the project is located in the western 41 counties of North Carolina, to include non-federal aid North Carolina Department of Transportation (NCDOT) projects, OR;
- the project is located in the 59 eastern counties of North Carolina, and is a non-NCDOT project.

\*Generally, if a project is located on private property or on non-federal land, and the project is not being funded by a federal entity, the Corps will be the lead federal agency due to the requirement to obtain Department of the Army authorization to impact waters of the United States. If the project is located on federal land, contact the Corps to determine the lead federal agency.

(1) A permittee using a NWP must check to see if their project is located in the range of the NLEB by using the following website:

<http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>. If the project is within the range of the NLEB, or if the project includes percussive activities (e.g., blasting, pile driving, etc.), the permittee is then required to check the appropriate website in the paragraph below to discover if their project:

- is located in a 12-digit Hydrologic Unit Code area (“red HUC” - shown as red areas on the map), AND/OR;
- involves percussive activities within 0.25 mile of a red HUC.

Red HUC maps - for the western 41 counties in NC (covered by the Asheville Ecological Services Field Office), check the project location against the electronic maps found at: [http://www.fws.gov/asheville/htmls/project\\_review/NLEB\\_in\\_WNC.html](http://www.fws.gov/asheville/htmls/project_review/NLEB_in_WNC.html). For the eastern 59 counties in NC (covered by the Raleigh Ecological Services Field Office), check the project location against the electronic maps found at: [https://www.fws.gov/raleigh/NLEB\\_RFO.html](https://www.fws.gov/raleigh/NLEB_RFO.html).

(2) A permittee must submit a PCN to the District Engineer, and receive written authorization from the District Engineer, prior to commencing the activity, if the activity will involve any of the following:

- tree clearing/removal, construction/installation of wind turbines in a red HUC, AND/OR;
- bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, (applies anywhere in the range of the NLEB), AND/OR;
- percussive activities in a red HUC, or within 0.25 mile of a red HUC.

The permittee may proceed with the activity without submitting a PCN to either the Corps or the USFWS, provided the activity complies with all applicable NWP terms and general and regional conditions, if the permittee’s review under A.(1) and A.(2) above shows that the project is:

- located outside of a red HUC (and there are no percussive activities), and the activity will NOT include bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, OR;
- located outside of a red HUC and there are percussive activities, but the percussive activities will not occur within 0.25-mile of a red HUC boundary, and the activity will NOT include bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, OR;

- located in a red HUC, but the activity will NOT include: tree clearing/removal; construction/installation of wind turbines; bridge removal or maintenance, unless the bridge has been inspected and there is no evidence of bat use, and/or; any percussive activities.

B. Procedures when the USACE is not the lead federal agency:

For projects where another federal agency is the lead federal agency - if that other federal agency has completed project-specific ESA Section 7(a)(2) consultation for the NLEB, and has (1) determined that the project would not cause prohibited incidental take of the NLEB, and (2) completed coordination/consultation that is required by the USFWS (per the directions on the respective USFWS office's website), that project may proceed without notification to either the USACE or the USFWS, provided all General and Regional Permit Conditions are met.

The NLEB SLOPES can be viewed on the USACE website at the following World Wide Web Page: <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/>. Permittees who do not have internet access may contact the USACE at (910) 251- 4633.

### **3.14 Work on Eastern Band of Cherokee Indians Land**

All PCNs submitted for activities in waters of the United States on Eastern Band of Cherokee Indians (EBCI) trust land (i.e., Qualla Boundary and non-contiguous tracts of trust land), must comply with the requirements of the latest MOU between the Wilmington District and the Eastern Band of Cherokee Indians.

### **4.0 Additional Regional Conditions for Specific Nationwide Permits**

#### **4.1 NWP #14 - Linear Transportation Projects**

**4.1.1** If appropriate, permittees shall employ natural channel design (see definition below and NOTE below) to the maximum extent practicable for stream relocations. All stream relocation proposals shall include a Relocation and Monitoring Plan and a functional assessment of baseline conditions (e.g., use of the North Carolina Stream Assessment Methodology). Compensatory mitigation may be required for stream relocations.

Natural Channel Design means a geomorphologic approach to stream restoration based on an understanding of valley type, general watershed conditions, dimension, pattern, profile, hydrology and sediment transport of natural, stable channels (reference condition) and applying this understanding to the reconstruction of a stable channel.

NOTE: For more information on Natural Channel Design, permittees should reference North Carolina Stream Mitigation Guidance on the Corps RIBITS (Regulatory In-lieu Fee and Bank Information Tracking System) website or at the following World Wide Web Page: [https://ribits.usace.army.mil/ribits\\_apex/f?p=107:27:16705499703550::NO:RP:P27\\_BUTTON\\_KEY:0](https://ribits.usace.army.mil/ribits_apex/f?p=107:27:16705499703550::NO:RP:P27_BUTTON_KEY:0).



**4.1.2** This NWP authorizes only upland to upland crossings and cannot be used in combination with Nationwide Permit 18 to create an upland within waters of the United States, including wetlands.

**4.1.3** This NWP cannot be used for private projects located in tidal waters or tidal wetlands.

**4.1.4** In designated trout watersheds, a PCN is not required for impacts to a maximum of 60 linear feet (150 linear feet for temporary dewatering) or 1/10-acre of jurisdictional aquatic resources for proposed structures not adjoining, adjacent to, or connected to existing structures. In designated trout waters, the permittee shall submit a PCN (see Regional Conditions 2.7 and General Condition 32) to the District Engineer prior to commencing the activity if 1) impacts (other than temporary dewatering to work in dry conditions) to jurisdictional aquatic resources exceed 60 linear feet or 1/10-acre; 2) temporary impacts to streams or waterbodies associated with dewatering to work in dry conditions exceed 150 linear feet; 3) the project will involve impacts to wetlands; 4) the primary purpose of the project is for commercial development; 5) the project involves the replacement of a bridge or spanning structure with a culvert or non-spanning structure in waters of the United States; or 6) the activity will be constructed during the trout waters moratorium (October 15 through April 15).

**4.1.5** The permittee shall submit a PCN to the District Engineer prior to commencing the activity if the activity will involve the discharge of dredged or fill material into more than 150 linear feet of stream channel for the construction of temporary access fills and/or temporary road crossings. The PCN must include a restoration plan that thoroughly describes how all temporary fills will be removed, describes how pre-project conditions will be restored, and includes a timetable for all restoration activities.



ROY COOPER  
Governor

MICHAEL S. REGAN  
Secretary

LINDA CULPEPPER  
Interim Director

July 11, 2018  
Randolph County  
NCDWR Project No. 20180925  
Bridge 416 on SR 1911  
WBS No. 17BP.8.R.76

**APPROVAL of 401 WATER QUALITY CERTIFICATION and RANDLEMAN LAKE WATERSHED BUFFER AUTHORIZATION with ADDITIONAL CONDITIONS**

Art King, Division Environmental Supervisor  
NCDOT Division 8  
902 North Sandhills Blvd.  
Aberdeen, NC 28315

Dear Mr. King:

You have our approval, in accordance with the conditions listed below, for the following impacts to replace Bridge 416 over Muddy Creek with a new reinforced concrete box culvert in Randolph County, as described in your application:

**Stream Impacts in the Cape Fear River Basin**

Site	Permanent Fill in Perennial Stream (linear ft.)	Permanent Fill in Perennial Stream (linear ft.)	Total Stream Impact (linear ft.)
	RCBC	Stabilization	
1	46.25	99	145.25
<b>Totals</b>	<b>46.25</b>	<b>99</b>	<b>145.25</b>

**Total Stream Impact for Project: 145.25 linear feet**

**Randleman Lake Watershed Riparian Buffer Impacts**

Site	Zone 1 Impact (sqft)	minus Wetlands in Zone 1 (sqft)	= Zone 1 Buffers (not wetlands) (sqft)	Zone 1 Buffer Mitigation Required (using 3:1 ratio)	Zone 2 Impact (sqft)	minus Wetlands in Zone 2 (sqft)	= Zone 2 Buffers (not wetlands) (sqft)	Zone 2 Buffer Mitigation Required (using 1.5:1 ratio)
1	2,685	0	2,685	0	1,077	0	1,077	0
<b>Totals</b>	<b>2,685</b>	<b>0</b>	<b>2,685</b>	<b>0</b>	<b>1,077</b>	<b>0</b>	<b>1,077</b>	<b>0</b>

**Total Buffer Impact for Project: 3,762 square feet.**

The project shall be constructed in accordance with your application dated July 3, 2018 and received July 6, 2018. After reviewing your application, we have decided that these impacts are covered by General Water Quality Certification Number 4135. This certification corresponds to Nationwide Permit 14 issued by the Corps of Engineers. In addition, you should acquire any other federal, state or local permits before you proceed with your project including, but not limited to, Sediment and Erosion Control, Non-Discharge and Water Supply Watershed regulations. This approval will expire with the accompanying 404 permit.

This approval is valid solely for the purpose and design described in your application. Should your project change,



State of North Carolina | Environmental Quality  
1617 Mail Service Center | Raleigh, North Carolina 27699-1617

you must notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If total wetland fills for this project (present or future) exceed one acre, or of total impacts to streams (present or future) exceed 300 linear feet, compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7). Additional buffer impacts may require compensatory mitigation as described in 15A NCAC 2B .0250. For this approval to remain valid, you must adhere to the conditions listed in the attached certification(s) and any additional conditions listed below.

**Condition(s) of Certification**

**Project Specific Conditions:**

1. All stormwater runoff shall be directed as sheetflow through stream buffers at non-erosive velocities, unless otherwise approved by this certification. [15A NCAC 2B.0250]
2. All riparian buffers impacted by the placement of temporary fill or clearing activities shall be restored to the preconstruction contours and revegetated. Maintained buffers shall be permanently revegetated with non-woody species by the end of the growing season following completion of construction. For this condition, maintained buffer areas are defined as areas within the transportation corridor that will be subject to regular NCDOT maintenance activities including mowing. The area with non-maintained buffers shall be permanently revegetated with native woody species before the next growing season following completion of construction. [15A NCAC 2B.0250]
3. Any modifications to this 401 Water Quality Certification that propose additional stream impacts or increased impervious surface requiring additional stormwater management may be subject the Randleman Water Supply Nutrient Strategy. [15A NCAC02B .0250]

**General Conditions:**

1. If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills. [15A NCAC 02B.0200]
2. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
3. The dimension, pattern and profile of the stream above and below the crossing shall not be modified. Disturbed floodplains and streams shall be restored to natural geomorphic conditions. [15A NCAC 02H.0506(b)(2)]
4. The use of rip-rap above the Normal High-Water Mark shall be minimized. Any rip-rap placed for stream stabilization shall be placed in stream channels in such a manner that it does not impede aquatic life passage. [15A NCAC 02H.0506(b)(2)]
5. The permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. [15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
6. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water. [15A NCAC 02H.0506(b)(3) and (c)(3)]
7. Heavy equipment may be operated within the stream channels however; its usage shall be minimized. [15A NCAC 02H.0506(b)(3)]
8. All mechanized equipment operated near surface waters must be regularly inspected and maintained to prevent contamination of stream waters from fuels, lubricants, hydraulic fluids, or other toxic materials. [15A NCAC 02H.0506(b)(3)]
9. No rock, sand or other materials shall be dredged from the stream channel except where authorized by this certification. [15A NCAC 02H.0506(b)(3)]

10. Discharging hydroseed mixtures and washing out hydroseeders and other equipment in or adjacent to surface waters is prohibited. [15A NCAC 02H.0506(b)(3)]
11. When applicable, all construction activities shall be performed and maintained in full compliance with G.S. Chapter 113A Article 4 (Sediment and Pollution Control Act of 1973). Regardless of applicability of the Sediment and Pollution Control Act, all projects shall incorporate appropriate Best Management Practices for the control of sediment and erosion so that no violations of state water quality standards, statutes, or rules occur. [15A NCAC 02H .0506(b)(3) and (c)(3) and 15A NCAC 02B .0200]
12. Design, installation, operation, and maintenance of all sediment and erosion control measures shall be equal to or exceed the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*, or for linear transportation projects, the *NCDOT Sediment and Erosion Control Manual*.
13. All devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) sites, including contractor-owned or leased borrow pits associated with the project. Sufficient materials required for stabilization and/or repair of erosion control measures and stormwater routing and treatment shall be on site always.
14. For borrow pit sites, the erosion and sediment control measures shall be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*. Reclamation measures and implementation shall comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act and the Mining Act of 1971.
15. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-1, WS-11, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watershed*. [15A NCAC 02H.0506(b)(3) and (c)(3)]
16. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR 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 NCDWR may reevaluate and modify this certification. [15A NCAC 02B.0200]
17. All fill slopes located in jurisdictional wetlands shall be placed at slopes no flatter than 3:1, unless otherwise authorized by this certification. [15A NCAC 02H.0506(b)(2)]
18. A copy of this Water Quality Certification shall be maintained on the construction site always. Additionally, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
19. The outside buffer, wetland or water boundary located within the construction corridor approved by this authorization, including all non-commercial borrow and waste sites associated with the project, shall be clearly marked by highly visible fencing prior to any land disturbing activities. Impacts to areas within the fencing are prohibited unless otherwise authorized by this certification. [15A NCAC 02H.0501 and .0502]
20. The issuance of this certification does not exempt the permittee from complying with all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
21. The permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
22. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. [15A NCAC 02H.0502(f)]
23. Native riparian vegetation must be reestablished in the riparian areas within the construction limits of the project by the end of the growing season following completion of construction. [15A NCAC 02B.0506(b)(2)]

24. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. [15A NCAC 02H.0506(b)(3) and (c)(3)]
25. 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 to protect surface waters standards [15A NCAC 02H.0506(b)(3) and (c)(3):
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
  - b. The 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.
  - c. 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*.
  - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
26. Sediment and erosion control measures shall not be placed in wetlands or surface waters, or within 5 feet of the top of bank, without prior approval from NCDWR. [15A NCAC 02H.0506(b)(3) and (c)(3)]

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission.

The mailing address for the Office of Administrative Hearings is:


Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Bill F. Lane, General Counsel  
Department of Environmental Quality  
1601 Mail Service Center

This letter completes the review of the Division of Water Resources under Section 401 of the Clean Water Act. If you have any questions, please contact April Norton at (919) 707-9111 or [April.Norton@ncdenr.gov](mailto:April.Norton@ncdenr.gov).

Sincerely,



Linda Culpepper, Interim Director  
Division of Water Resources

Electronic copy only distribution:  
Andrew Williams, US Army Corps of Engineers, Raleigh Field Office  
File Copy





ROY COOPER  
*Governor*

MICHAEL S. REGAN  
*Secretary*

LINDA CULPEPPER  
*Interim Director*

NCDWR Project No.: \_\_\_\_\_ County: \_\_\_\_\_

Applicant: \_\_\_\_\_

Project Name: \_\_\_\_\_

Date of Issuance of 401 Water Quality Certification: \_\_\_\_\_

**Certificate of Completion**

Upon completion of all work approved within the 401 Water Quality Certification or applicable Buffer Rules, and any subsequent modifications, the applicant is required to return this certificate to the 401 Transportation Permitting Unit, North Carolina Division of Water Resources, 1617 Mail Service Center, Raleigh, NC, 27699-1617. This form may be returned to NCDWR by the applicant, the applicant's authorized agent, or the project engineer. It is not necessary to send certificates from all of these.

**Applicant's Certification**

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Agent's Certification**

I, \_\_\_\_\_, hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Engineer's Certification**

\_\_\_\_\_ Partial \_\_\_\_\_ Final

I, \_\_\_\_\_, as a duly registered Professional Engineer in the State of North Carolina, having been authorized to observe (periodically, weekly, full time) the construction of the project for the Permittee hereby state that, to the best of my abilities, due care and diligence was used in the observation of the construction such that the construction was observed to be built within substantial compliance and intent of the 401 Water Quality Certification and Buffer Rules, the approved plans and specifications, and other supporting materials.

Signature \_\_\_\_\_ Registration No. \_\_\_\_\_

Date \_\_\_\_\_



**STANDARD SPECIAL PROVISION**  
**AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS**

(5-20-08)

Z-2

*General Statute 143C-6-11. (h) Highway Appropriation* is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(E) of the *2018 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 found pure seed and found germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

<b><u>Restricted Noxious Weed</u></b>	<b><u>Limitations per Lb. Of Seed</u></b>	<b><u>Restricted Noxious Weed</u></b>	<b><u>Limitations per Lb. of Seed</u></b>
Blessed Thistle	4 seeds	Cornflower (Ragged Robin)	27 seeds
Cocklebur	4 seeds	Texas Panicum	27 seeds
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds
Morning-glory	8 seeds	Broadleaf Dock	54 seeds
Corn Cockle	10 seeds	Curly Dock	54 seeds
Wild Radish	12 seeds	Dodder	54 seeds
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds
Canada Thistle	27 seeds	Quackgrass	54 seeds
Field Bindweed	27 seeds	Wild Mustard	54 seeds
Hedge Bindweed	27 seeds		

Seed of Pensacola Bahiagrass shall not contain more than 7% inert matter, Kentucky Bluegrass, Centipede and Fine or Hard Fescue shall not contain more than 5% inert matter whereas a maximum of 2% inert matter will be allowed on all other kinds of seed. In addition, all seed shall



not contain more than 2% other crop seed nor more than 1% total weed seed. The germination rate as tested by the North Carolina Department of Agriculture shall not fall below 70%, which includes both dormant and hard seed. Seed shall be labeled with not more than 7%, 5% or 2% inert matter (according to above specifications), 2% other crop seed and 1% total weed seed.

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

**FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:**

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

Sericea Lespedeza  
Oats (seeds)

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

Tall Fescue (all approved varieties)	Bermudagrass
Kobe Lespedeza	Browntop Millet
Korean Lespedeza	German Millet – Strain R
Weeping Lovegrass	Clover – Red/White/Crimson
Carpetgrass	

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties)  
Kentucky Bluegrass (all approved varieties)  
Hard Fescue (all approved varieties)  
Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass  
Crownvetch

Japanese Millet  
Reed Canary Grass

Pensacola Bahiagrass  
Creeping Red Fescue

Zoysia

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Barnyard Grass  
Big Bluestem  
Little Bluestem  
Bristly Locust  
Birdsfoot Trefoil  
Indiangrass  
Orchardgrass  
Switchgrass  
Yellow Blossom Sweet Clover

**STANDARD SPECIAL PROVISION****ERRATA**

(2-12-18)

Z-4

Revise the *2018 Standard Specifications* as follows:

**Division 7**

**Page 7-27, line 4, Article 725-1 MEASUREMENT AND PAYMENT**, replace article number “725-1” with “724-4”.

**Page 7-28, line 10, Article 725-1 MEASUREMENT AND PAYMENT**, replace article number “725-1” with “725-3”.

**Division 10**

**Page 10-162, line 1, Article 1080-50 PAINT FOR VERTICAL MARKERS**, replace article number “1080-50” with “1080-10”.

**Page 10-162, line 5, Article 1080-61 EPOXY RESIN FOR REINFORCING STEEL**, replace article number “1080-61” with “1080-11”.

**Page 10-162, line 22, Article 1080-72 ABRASIVE MATERIALS FOR BLAST CLEANING STEEL**, replace article number “1080-72” with “1080-12”.

**Page 10-163, line 25, Article 1080-83 FIELD PERFORMANCE AND SERVICES**, replace article number “1080-83” with “1080-13”.

**STANDARD SPECIAL PROVISION****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.

**STANDARD SPECIAL PROVISION****MINIMUM WAGES**

(7-21-09)

Z-5

**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.

**STANDARD SPECIAL PROVISION****TITLE VI AND NONDISCRIMINATION:**

(6-28-77)(Rev 6/19/2018)

Z-6

Revise the *2018 Standard Specifications* as follows:

Replace Article 103-4(B) with the following:

The North Carolina Department of Transportation is committed to carrying out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts.

The provisions of this section related to United States Department of Transportation (US DOT) Order 1050.2A, Title 49 Code of Federal Regulations (CFR) part 21, 23 United States Code (U.S.C.) 140 and 23 CFR part 200 (or 49 CFR 303, 49 U.S.C. 5332 or 49 U.S.C. 47123) are applicable to all North Carolina Department of Transportation (NCDOT) contracts and to all related subcontracts, material supply, engineering, architectural and other service contracts, regardless of dollar amount. Any Federal provision that is specifically required not specifically set forth is hereby incorporated by reference.

**(1) Title VI Assurances (USDOT Order 1050.2A, Appendix A)**

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:

**(a) Compliance with Regulations**

The contractor (hereinafter includes consultants) shall comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

**(b) 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 directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

**(c) 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 Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

**(d) Information and Reports**

The contractor shall provide all information and reports required by the Acts, the Regulations, and 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 Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor shall so certify to the Recipient or the FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

(e) Sanctions for Noncompliance:

In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it and/or the FHWA may determine to be appropriate, including, but not limited to:

- (i) Withholding payments to the contractor under the contract until the contractor complies; and/or
- (ii) Cancelling, terminating, or suspending a contract, in whole or in part.

(f) Incorporation of Provisions

The contractor shall include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**(2) Title VI Nondiscrimination Program (23 CFR 200.5(p))**

The North Carolina Department of Transportation (NCDOT) has assured the USDOT that, as a condition to receiving federal financial assistance, NCDOT will comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by Title 49 CFR part 21 and related nondiscrimination authorities to ensure that no person shall, on the ground of race, color, national origin, limited English proficiency, sex, age, or disability (including religion/creed or income-level, where applicable), be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs, activities, or services conducted or funded by NCDOT. Contractors and other organizations under contract or agreement with NCDOT must also comply with Title VI and related authorities, therefore:

- (a) During the performance of this contract or agreement, contractors (e.g., subcontractors, consultants, vendors, prime contractors) are responsible for complying with NCDOT's Title VI Program. Contractors are not required to prepare or submit Title VI Programs. To comply with this section, the prime contractor shall:

1. Post NCDOT's Notice of Nondiscrimination and the Contractor's own Equal Employment Opportunity (EEO) Policy in conspicuous locations accessible to all employees, applicants and subcontractors on the jobsite.
  2. Physically incorporate the required Title VI clauses into all subcontracts on federally-assisted and state-funded NCDOT projects, and ensure inclusion by subcontractors into all lower-tier subcontracts.
  3. Required Solicitation Language. The Contractor shall include the following notification in all solicitations for bids and requests for work or material, regardless of funding source:
 

“The North Carolina Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award. In accordance with other related nondiscrimination authorities, bidders and contractors will also not be discriminated against on the grounds of sex, age, disability, low-income level, creed/religion, or limited English proficiency in consideration for an award.”
  4. Physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts on Federal-aid highway construction contracts only.
  5. Provide language assistance services (i.e., written translation and oral interpretation), free of charge, to LEP employees and applicants. Contact NCDOT OCR for further assistance, if needed.
  6. For assistance with these Title VI requirements, contact the NCDOT Title VI Nondiscrimination Program at 1-800-522-0453.
- (b) Subrecipients (e.g. cities, counties, LGAs, planning organizations) may be required to prepare and submit a Title VI Plan to NCDOT, including Title VI Assurances and/or agreements. Subrecipients must also ensure compliance by their contractors and subrecipients with Title VI. (23 CFR 200.9(b)(7))
- (c) If reviewed or investigated by NCDOT, the contractor or subrecipient agrees to take affirmative action to correct any deficiencies found within a reasonable time period, not to exceed 90 calendar days, unless additional time is granted by NCDOT. (23 CFR 200.9(b)(15))
- (d) The Contractor is responsible for notifying subcontractors of NCDOT's External Discrimination Complaints Process.

#### 1. Applicability

Title VI and related laws protect participants and beneficiaries (e.g., members of the public and contractors) from discrimination by NCDOT employees, subrecipients and contractors, regardless of funding source.



## 2. Eligibility

Any person—or class of persons—who believes he/she has been subjected to discrimination based on race, color, national origin, Limited English Proficiency (LEP), sex, age, or disability (and religion in the context of employment, aviation, or transit) may file a written complaint. The law also prohibits intimidation or retaliation of any sort.

## 3. Time Limits and Filing Options

Complaints may be filed by the affected individual(s) or a representative and must be filed no later than 180 calendar days after the following:

- (i) The date of the alleged act of discrimination; or
- (ii) The date when the person(s) became aware of the alleged discrimination; or
- (iii) 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 related discrimination complaints may be submitted to the following entities:

- North Carolina Department of Transportation, Office of Civil Rights, Title VI Program, 1511 Mail Service Center, Raleigh, NC 27699-1511; toll free 1-800-522-0453
- Federal Highway Administration, North Carolina Division Office, 310 New Bern Avenue, Suite 410, Raleigh, NC 27601, 919-747-7010
- 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

## 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 Civil Rights 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 (LEP), sex, age, disability, or religion (in the context of employment, aviation or transit). "Basis" refers to the complainant's membership in a protected group category.

**TABLE 103-1  
COMPLAINT BASIS**

Protected Categories	Definition	Examples	Applicable Nondiscrimination Authorities
Race and Ethnicity	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	Black/African American, Hispanic/Latino, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, White	Title VI of the Civil Rights Act of 1964; 49 CFR Part 21; 23 CFR 200; 49 U.S.C. 5332(b); 49 U.S.C. 47123. ( <i>Executive Order 13166</i> )
Color	Color of skin, including shade of skin within a racial group	Black, White, brown, yellow, etc.	
National Origin ( <i>Limited English Proficiency</i> )	Place of birth. Citizenship is not a factor. ( <i>Discrimination based on language or a person's accent is also covered</i> )	Mexican, Cuban, Japanese, Vietnamese, Chinese	
Sex	Gender. The sex of an individual. <i>Note: Sex under this program does not include sexual orientation.</i>	Women and Men	1973 Federal-Aid Highway Act; 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Age	Persons of any age	21-year-old person	Age Discrimination Act of 1975 49 U.S.C. 5332(b); 49 U.S.C. 47123.
Disability	Physical or mental impairment, permanent or temporary, or perceived.	Blind, alcoholic, para-amputee, epileptic, diabetic, arthritic	Section 504 of the Rehabilitation Act of 1973; Americans with Disabilities Act of 1990
Religion (in the context of employment) ( <i>Religion/ Creed in all aspects of any aviation or transit-related construction</i> )	An individual belonging to a religious group; or the perception, based on distinguishable characteristics that a person is a member of a religious group. In practice, actions taken as a result of the moral and ethical beliefs as to what is right and wrong, which are sincerely held with the strength of traditional religious views. <i>Note: Does not have to be associated with a recognized religious group or church; if an individual sincerely holds to the belief, it is a protected religious practice.</i>	Muslim, Christian, Sikh, Hindu, etc.	Title VII of the Civil Rights Act of 1964; 23 CFR 230; FHWA-1273 Required Contract Provisions. ( <i>49 U.S.C. 5332(b); 49 U.S.C. 47123</i> )

### (3) 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);
- (g) 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);
- (h) 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;
- (i) The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- (j) Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Nondiscrimination 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;
- (k) 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);
- (l) 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).
- (m) 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).

**(4) Additional Title VI Assurances**

*\*\*The following Title VI Assurances (Appendices B, C and D) shall apply, as applicable*

- (a) Clauses for Deeds Transferring United States Property (1050.2A, Appendix B)

The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4.

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the North Carolina Department of Transportation (NCDOT) will accept title to the lands and maintain the project constructed thereon in accordance with the North Carolina General Assembly, the Regulations for the Administration of the Federal-Aid Highway Program, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the NCDOT all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the North Carolina Department of Transportation (NCDOT) and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the NCDOT, its successors and assigns.

The NCDOT, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]\* (2) that the NCDOT will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

(b) Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program (1050.2A, Appendix C)

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(a):

1. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:
  - (i.) In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
2. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued. \*
3. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. \*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

(c) Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program (1050.2A, Appendix D)

The following clauses will be included in deeds, licenses, permits, or similar instruments/ agreements entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(b):

1. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
2. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, the NCDOT will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued. \*
3. With respect to deeds, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. \*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

**STANDARD SPECIAL PROVISION****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.

**\*AWARD LIMITS ON MULTIPLE PROJECTS\***

It is the desire of the Proposer to be awarded contracts, the value of which will not exceed a total of \$ \_\_\_\_\_, for those projects indicated below on which bids are being opened on the same date as shown in the Proposal Form. Individual projects shall be indicated by placing the project number and county in the appropriate place below. Projects not selected will not be subject to an award limit.

_____ (Project Number)	_____ (County)
_____ (Project Number)	_____ (County)
_____ (Project Number)	_____ (County)
_____ (Project Number)	_____ (County)

\*If a Proposer desires to limit the total amount of work awarded to him in this letting, he shall state such limit in the space provided above in the second line of this form.

It is agreed that in the event that I am (we are) the successful bidder on indicated projects, the total value of which is more that the above stipulated award limits, the Board of Transportation will award me (us) projects from among those indicated which have a total value not exceeding the award limit and which will result in the best advantage to the Department of Transportation.

\_\_\_\_\_  
\*\*Signature of Authorized Person

\*\*Only those persons authorized to sign bids under the provisions of Article 102-8, Item 7, shall be authorized to sign this form.

<b>LISTING OF MBE/WBE SUBCONTRACTORS</b>					Sheet _____ of _____
Firm Name and Address	Circle One	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
<b>Name</b>  Address	MBE  WBE				
<b>Name</b>  Address	MBE  WBE				
<b>Name</b>  Address	MBE  WBE				
<b>Name</b>  Address	MBE  WBE				
<b>Name</b>  Address	MBE  WBE				
<b>Name</b>  Address	MBE  WBE				
<b>Name</b>  Address	MBE  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.*

<b>LISTING OF MBE/WBE SUBCONTRACTORS</b>					Sheet _____ of _____
Firm Name and Address	Circle One	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
<b>Name</b>	MBE				
Address	WBE				
<b>Name</b>	MBE				
Address	WBE				
<b>Name</b>	MBE				
Address	WBE				
<b>Name</b>	MBE				
Address	WBE				
<b>Name</b>	MBE				
Address	WBE				
<b>Name</b>	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 Subcontractor** \$ \_\_\_\_\_

**MBE Percentage of Total Contract Bid Price** \_\_\_\_\_%

**\*\* Dollar Volume of WBE Subcontractor** \$ \_\_\_\_\_

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

**WBE 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.*

**ADDENDUM(S)**

ADDENDUM #1

I, \_\_\_\_\_ representing \_\_\_\_\_  
(SIGNATURE)

Acknowledge receipt of Addendum #1.

ADDENDUM #2

I, \_\_\_\_\_ representing \_\_\_\_\_  
(SIGNATURE)

Acknowledge receipt of Addendum #2.

ADDENDUM #3

I, \_\_\_\_\_ representing \_\_\_\_\_  
(SIGNATURE)

Acknowledge receipt of Addendum #3.

County : Randolph

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
<b>ROADWAY ITEMS</b>						
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0043000000-N	226	GRADING	Lump Sum	L.S.	
0003	0050000000-E	226	SUPPLEMENTARY CLEARING & GRUB-BING	1 ACR		
0004	0057000000-E	226	UNDERCUT EXCAVATION	50 CY		
0005	0195000000-E	265	SELECT GRANULAR MATERIAL	50 CY		
0006	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	50 SY		
0007	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	30 TON		
0008	0320000000-E	300	FOUNDATION CONDITIONING GEO-TEXTILE	70 SY		
0009	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	132 LF		
0010	0995000000-E	340	PIPE REMOVAL	118 LF		
0011	1220000000-E	545	INCIDENTAL STONE BASE	50 TON		
0012	1330000000-E	607	INCIDENTAL MILLING	225 SY		
0013	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	140 TON		
0014	1503000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	80 TON		
0015	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	100 TON		
0016	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	20 TON		
0017	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	1 EA		
0018	2366000000-N	840	FRAME WITH TWO GRATES, STD 840.24	1 EA		

County : Randolph

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0019	3030000000-E	862	STEEL BEAM GUARDRAIL	118.75		LF
0020	3045000000-E	862	STEEL BEAM GUARDRAIL, SHOP CURVED	75		LF
0021	3195000000-N	862	GUARDRAIL END UNITS, TYPE AT-1	2		EA
0022	3288000000-N	SP	GUARDRAIL END UNITS, TYPE TL-2	2		EA
0023	3628000000-E	876	RIP RAP, CLASS I	80		TON
0024	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	349		SY
0025	4457000000-N	SP	TEMPORARY TRAFFIC CONTROL	Lump Sum		L.S.
0026	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	2,400		LF
0027	5325800000-E	1510	8" WATER LINE	267		LF
0028	5329000000-E	1510	DUCTILE IRON WATER PIPE FITTINGS	610		LB
0029	5546000000-E	1515	8" VALVE	2		EA
0030	5649000000-N	1515	RECONNECT WATER METER	1		EA
0031	5691300000-E	1520	8" SANITARY GRAVITY SEWER	135		LF
0032	5775000000-E	1525	4' DIA UTILITY MANHOLE	1		EA
0033	5801000000-E	1530	ABANDON 8" UTILITY PIPE	370		LF
0034	5835700000-E	1540	16" ENCASEMENT PIPE	35		LF
0035	5888000000-E	SP	GENERIC UTILITY ITEM 8" TEMPORARY SEWER PUMP-AROUND	160		LF
0036	6000000000-E	1605	TEMPORARY SILT FENCE	275		LF
0037	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	75		TON

County : Randolph

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0038	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	30 TON		
0039	6012000000-E	1610	SEDIMENT CONTROL STONE	105 TON		
0040	6015000000-E	1615	TEMPORARY MULCHING	1 ACR		
0041	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	100 LB		
0042	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEED- ING	0.5 TON		
0043	6024000000-E	1622	TEMPORARY SLOPE DRAINS	200 LF		
0044	6029000000-E	SP	SAFETY FENCE	200 LF		
0045	6030000000-E	1630	SILT EXCAVATION	70 CY		
0046	6036000000-E	1631	MATTING FOR EROSION CONTROL	2,730 SY		
0047	6037000000-E	SP	COIR FIBER MAT	100 SY		
0048	6042000000-E	1632	1/4" HARDWARE CLOTH	270 LF		
0049	6045000000-E	SP	*** TEMPORARY PIPE (24")	150 LF		
0050	6070000000-N	1639	SPECIAL STILLING BASINS	2 EA		
0051	6071012000-E	SP	COIR FIBER WATTLE	60 LF		
0052	6071020000-E	SP	POLYACRYLAMIDE (PAM)	20 LB		
0053	6084000000-E	1660	SEEDING & MULCHING	3 ACR		
0054	6087000000-E	1660	MOWING	0.5 ACR		
0055	6090000000-E	1661	SEED FOR REPAIR SEEDING	50 LB		
0056	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.25 TON		
0057	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	50 LB		



County : Randolph

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0058	6108000000-E	1665	FERTILIZER TOPDRESSING	0.5 TON		
0059	6111000000-E	SP	IMPERVIOUS DIKE	50 LF		
0060	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0061	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	25 EA		
0062	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	2 EA		
0063	6123000000-E	1670	REFORESTATION	0.1 ACR		

**CULVERT ITEMS**

0064	8035000000-N	402	REMOVAL OF EXISTING STRUCTURE AT STATION ***** (12+81.00-L-)	Lump Sum	L.S.	
0065	8126000000-N	414	CULVERT EXCAVATION, STA ***** (12+81.00 -L-)	Lump Sum	L.S.	
0066	8133000000-E	414	FOUNDATION CONDITIONING MATER- IAL, BOX CULVERT	70 TON		
0067	8196000000-E	420	CLASS A CONCRETE (CULVERT)	113.6 CY		
0068	8245000000-E	425	REINFORCING STEEL (CULVERT)	19,371 LB		

1613/Aug20/Q29865.2/D306197932000/E68

Total Amount Of Bid For Entire Project :

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

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF CONTRACTOR**

\_\_\_\_\_  
Full name of Corporation

\_\_\_\_\_  
Address as Prequalified

Attest \_\_\_\_\_  
Secretary/Assistant Secretary  
*Select appropriate title*

By \_\_\_\_\_  
President/Vice President/Assistant Vice President  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Print or type Signer's name

**CORPORATE SEAL**

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

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF CONTRACTOR**

\_\_\_\_\_ Full Name of Partnership

\_\_\_\_\_ Address as Prequalified

\_\_\_\_\_ By \_\_\_\_\_  
Signature of Witness Signature of Partner

\_\_\_\_\_ Print or type Signer's name

\_\_\_\_\_ Print or type Signer's name

**EXECUTION OF BID  
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION  
LIMITED LIABILITY COMPANY**

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF CONTRACTOR**

\_\_\_\_\_  
Full Name of Firm

\_\_\_\_\_  
Address as Prequalified

Signature of Witness

Signature of Member/Manager/Authorized Agent  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Print or type Signer's Name

**EXECUTION OF BID  
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION  
JOINT VENTURE (2) or (3)**

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

(2) \_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Address as Prequalified

\_\_\_\_\_  
Signature of Witness or Attest By \_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Print or type Signer's name Print or type Signer's name

*If Corporation, affix Corporate Seal* and

(3) \_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Address as Prequalified

\_\_\_\_\_  
Signature of Witness or Attest By \_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Print or type Signer's name Print or type Signer's name

*If Corporation, affix Corporate Seal* and

(4) \_\_\_\_\_  
Name of Contractor (*for 3 Joint Venture only*)

\_\_\_\_\_  
Address as Prequalified

\_\_\_\_\_  
Signature of Witness or Attest By \_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Print or type Signer's name Print or type Signer's name

*If Corporation, affix Corporate Seal*

**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.

**SIGNATURE OF CONTRACTOR**

Name of Contractor

\_\_\_\_\_

Individual name

Trading and doing business as

\_\_\_\_\_

Full name of Firm

\_\_\_\_\_  
Address as  
Prequalified

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Signature of Contractor, Individually

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Print or type Signer's name

**EXECUTION OF BID  
NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION  
INDIVIDUAL DOING BUSINESS IN HIS OWN NAME**

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

**DEBARMENT CERTIFICATION**

Conditions for certification:

- 1.0 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.
- 1.1 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.
- 1.2 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.
- 1.3 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.
- 1.4 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.
- 1.5 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.
- 1.6 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.



**DEBARMENT CERTIFICATION**

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- 2.0 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;
- 2.1 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
- 2.2 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.
- 2.3 Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

**Execution of Contract**

**Contract No: DH00283**

**County: RANDOLPH**

ACCEPTED BY THE DEPARTMENT

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**Proposals Engineer**

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**Date**