STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION HIGHWAY DIVISION 5

PROPOSAL

DATE AND TIME OF BID OPENING: November 9, 2022 AT 2:00 PM

CONTRACT ID: ME00011

WBS ELEMENT NO.: 15RE.15.3

FEDERAL AID NO.: N/A

COUNTY: Warren County

TIP NO.: N/A

MILES: 0.05 MILES

ROUTE NO.: I-85 Rest Area

LOCATION: I-85 S, Mile Marker 231

TYPE OF WORK: Grading, Planting

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.

THIS IS A Roadway PROJECT.

BID BONDS ARE NOT REQUIRED.

CAROLL

NAME OF BIDDER

ADDRESS OF BIDDER

PROPOSAL FOR THE CONSTRUCTION OF CONTRACT No. ME00011 IN WARREN COUNTY, NORTH CAROLINA

Date	20
DEPARTMENT OF TRAI	NSPORTATION,
RALEIGH, NORTH	CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. <u>ME00011</u>; 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. <u>ME00011</u> in <u>Warren County</u>, 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.

TABLE OF CONTENTS

COVER SHEET PROPOSAL SHEET

THIS CONTRACT IS FOR TIP N/A CONTRACT ID ME00011 FOR Grading, Planting TYPE OF WORK IN Warren County.

INSTRUCTIONS TO BIDDERS	5
PROJECT SPECIAL PROVISIONS - GENERAL	
	7
CONTRACTOR PREQUALIFICATIONBOND REQUIREMENTS – NO BONDS REQUIRED	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
CONTRACT TIME AND LIQUIDATED DAMAGES	
NO MAJOR CONTRACT ITEMS NO SPECIALITY ITEMS	o Q
FUEL PRICE ADJUSTMENT	o
SCHEDULE OF ESTIMATED COMPLETION PROGRESS	0 0
MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE	9
(DIVISIONS)	0
RESTRICTIONS ON ITS EQUIPMENT AND SERVICES	<u>)</u> 23
EQUIPMENT IDLING GUIDELINES	2 <u>3</u> 23
USE OF UNMANNED AIRCRAFT SYSTEM (UAS)	
AWARD LIMITS	
TWELVE MONTH GUARANTEE	25
OUTSOURCE OUTSIDE THE USE	
EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION	26
PROCEDURE FOR MONITORING BORROW PIT DISCHARGE	
PROJECT SPECIAL PROVISIONS - ROADWAY	<u></u>
PORTLAND CEMENT CONCRETE PRODUCTION AND DELIVERY	R_1
MATERIALS FOR PORTLAND CEMENT CONCRETE	R-2
WORK ZONE INSTALLER	
STANDARD SPECIAL PROVISIONS	
	CCD 1
AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS	SSP-1
ERRATA	35P-2
PLANT AND PEST QUARANTINES	<u>55P-3</u>
MINIMUM WAGESTITLE VI AND NONDISCRIMINATION	35P-4
ON-THE-JOB TRAINING	<u>351-12</u>

REST AREA SITE WORK SPECIAL PROVISIONS LISTING OF MBE/WBE SUBCONTRACTORS ADDENDUMS AWARD LIMITS ON MULTIPLE PROJECTS EXECUTION OF BID BID FORM

INSTRUCTIONS TO BIDDERS

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

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

TRADITIONAL PAPER BIDS:

- 1. Download the entire proposal from the Connect NCDOT website and return the entire proposal with your bid.
- 2. All entries on the itemized proposal sheet (bid form) shall be written in ink or typed.
- 3. The Bidder shall submit a unit price for every item on the itemized proposal sheet. The unit prices for the various contract items shall be written in figures. Unit prices shall be rounded off by the Bidder to contain no more than FOUR decimal places.
- **4.** An amount bid shall be entered on the itemized proposal sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount" column of the form.
- 5. The total amount bid shall be written in figures in the proper place on the bid form. The total amount bid shall be determined by adding the amounts bid for each item.
- **6.** Changes to any entry shall be made by marking through the entry in ink and making the correct entry adjacent thereto in ink. A representative of the Bidder shall initial the change in ink. Do not use correction fluid, correction tape or similar product to make corrections.
- 7. The bid shall be properly executed on the included Execution of Bid Non-collusion, Debarment and Gift Ban Certification form. All bids shall show the following information:
 - a. Name of corporation, partnership, Limited Liability Company, joint venture, individual or firm, submitting bid.
 - Corporations that have a corporate seal should include it on the bid.
 - b. Name of individual or representative submitting bid and position or title held on behalf of the bidder.
 - c. Name, signature, and position or title of witness.
- 8. The bid shall not contain any unauthorized additions, deletions, or conditional bids.
- **9.** The Bidder shall not add any provision reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.
- 10. THE PROPOSAL WITH THE ITEMIZED PROPOSAL SHEET ATTACHED SHALL BE PLACED IN A <u>SEALED</u> ENVELOPE AND SHALL BE DELIVERED TO AND RECEIVED IN THE NCDOT DIVISION CONTRACT ENGINEER'S OFFICE, LOCATED AT 1020 BIRCH RIDGE DR., DOOR B6, RALEIGH, NC 27610, BY 2:00 PM ON, November 9, 2022.
- 11. The sealed bid must display the following statement on the front of the sealed envelope:

QUOTATION FOR - ME00011 TO BE OPENED AT 2:00 PM ON, November 9, 2022.

12. If Delivered by mail to the Mail Service Center address listed below, the Contractor should allow adequate time for the bid to be routed internally and physically delivered to the Contracts Engineer's Office as listed under Item 10 above. Internal routing and delivery from the Mail Service Center to the Contracts Engineer's Office may take up to three (3) days. The bids must be received by the Division Contract Engineer at the address and time listed above under Item 10. Bids that are not received by this time shall not be considered and will be returned to the Contractor unopened. The sealed envelope shall be placed in another sealed envelope and the outer envelope shall be addressed as follows:

N. C. DEPARTMENT OF TRANSPORTATION 1573 Mail Service Center Raleigh, NC 27699-1573

> ATTN: Michael J. Biedell, PE Division 5 Contract Engineer 1020 Birch Ridge Dr., Door B6

PROJECT SPECIAL PROVISIONS

GENERAL

CONTRACTOR PREQUALIFICATION:

(10-18-22) 102 SPI G01

Revise the 2018 Standard Specifications as follows:

Page 1-10, Subarticle 102-2(A) Bidder Prequalification, lines 30-31, delete and replace the first sentence with the following:

Prospective bidders shall obtain prequalification approval at least two business days prior to any letting in which they intend to submit a bid. It is recommended that the prospective bidder file all required statements and documents with the State Prequalifications Engineer no less than 4 weeks before a given letting.

Page 1-11, Subarticle 102-2(B) Purchase Order Bidder Prequalification, lines 16-18, delete and replace the first sentence with the following:

Prospective bidders shall obtain prequalification approval at least two business days prior to any letting in which they intend to submit a bid. It is recommended that the applicant file all required statements and documents with the State Prequalifications Engineer no less than 4 weeks before a given bid opening for their bid to be considered.

Page 1-11, Subarticle 102-2(C) Subcontractor Prequalification, lines 44-45, delete and replace the first sentence with the following:

The subcontractor shall file all required statements and documents with the State Prequalifications Engineer no less than 4 weeks before beginning work.

Page 1-12, Subarticle 102-2(E) Renewal and Requalification, lines 38-40, delete and replace the first sentence with the following:

It is recommended that the renewing or requalifying firm file all required statements and documents with the State Prequalifications Engineer no less than 4 weeks before a given letting for their bid to be considered.

BOND REQUIREMENTS - No Bonds Required

(06-01-16) SPD 01-420B

The provisions of Articles 102-10 and 103-7 of the 2018 Standard Specifications for Roads and Structures are waived for this project. No bonds required.

CONTRACT TIME AND LIQUIDATED DAMAGES:

(7-1-95) (Rev. 12-18-07) 108 SP1 G10 A

The date of availability for this contract is **December 7, 2022**.

The completion date for this contract is May 14, 2023.

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 Six Hundred Dollars (\$ 600.00) per calendar day.

NO MAJOR CONTRACT ITEMS:

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

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

NO SPECIALTY ITEMS:

(7-1-95) 108-6 SPI G34

None of the items included in this contract will be specialty items (see Article 108-6 of the 2018 Standard Specifications).

FUEL PRICE ADJUSTMENT PAPER BID:

(11-15-05) (Rev. 11-15-22) 109-8 SPI G43

Revise the 2018 Standard Specifications as follows:

Page 1-87, Article 109-8, Fuel Price Adjustments, add the following:

The base index price for DIESEL #2 FUEL is \$ 3.4665 per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

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

Description	Units	Fuel Usage Factor Diesel
Unclassified Excavation	Gal/CY	0.29
Borrow Excavation	Gal/CY	0.29
Class IV Subgrade Stabilization	Gal/Ton	0.55
Aggregate Base Course	Gal/Ton	0.55
Sub-Ballast	Gal/Ton	0.55
Erosion Control Stone	Gal/Ton	0.55
Rip Rap, Class	Gal/Ton	0.55
Asphalt Concrete Base Course, Type	Gal/Ton	0.90 or 2.90
Asphalt Concrete Intermediate Course, Type	Gal/Ton	0.90 or 2.90
Asphalt Concrete Surface Course, Type	Gal/Ton	0.90 or 2.90
Open-Graded Asphalt Friction Course	Gal/Ton	0.90 or 2.90
Permeable Asphalt Drainage Course, Type	Gal/Ton	0.90 or 2.90
Sand Asphalt Surface Course, Type	Gal/Ton	0.90 or 2.90
Ultra-thin Bonded Wearing Course	Gal/Ton	0.90 or 2.90
Aggregate for Cement Treated Base Course	Gal/Ton	0.55
Portland Cement for Cement Treated Base Course	Gal/Ton	0.55
> 11" Portland Cement Concrete Pavement	Gal/SY	0.327
Concrete Shoulders Adjacent to > 11" Pavement	Gal/SY	0.327
9" to 11" Portland Cement Concrete Pavement	Gal/SY	0.272

Concrete Shoulders Adjacent to 9" to 11" Pavement	Gal/SY	0.272
< 9" Portland Cement Concrete Pavement	Gal/SY	0.245
Concrete Shoulders Adjacent to < 9" Pavement	Gal/SY	0.245

For the asphalt items noted in the chart as eligible for fuel adjustments, the bidder may include the *Fuel Usage Factor Adjustment Form for Paper Bid* with their bid submission if they elect to use the fuel usage factor. The *Fuel Usage Factor Adjustment Form for Paper Bid* is included toward the end of this paper bid document when asphalt items noted in the chart as eligible for fuel adjustments are part of the project.

Select either 2.90 Gal/Ton fuel factor or 0.90 Gal/Ton fuel factor for each asphalt line item on the *Fuel Usage Factor Adjustment Form for Paper Bid*. The selected fuel factor for each asphalt item will remain in effect for the duration of the contract.

Failure to complete the *Fuel Usage Factor Adjustment Form for Paper Bid* will result in using 2.90 gallons per ton as the Fuel Usage Factor for Diesel for the asphalt items noted above. The contractor will not be permitted to change the Fuel Usage Factor after the bids are submitted.

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

(7-15-08) (Rev. 7-19-22)

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:

	Fiscal Year	Progress (% of Dollar Value)
2023	(7/01/22 - 6/30/23)	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. 8-17-21) 102-15(J) SPI 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 <u>not</u> 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.

Replacement / Substitution – A full or partial reduction in the amount of work subcontracted to a committed (or an approved substitute) MBE/WBE firm.

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

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 0.0 %

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

- (A) Minority Business Enterprises **0.0** %
 - (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 **0.0** %

- (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 <u>all</u> 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 the electronic submittal file.

(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 the electronic submittal file, 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 **five** 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 (2nd and 3rd tier subcontractors).
- (C) Providing interested certified MBEs/WBEs that are also prequalified subcontractors with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D) (1) Negotiating in good faith with interested MBEs/WBEs. It is the bidder's responsibility to make a portion of the work available to MBE/WBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE/WBE subcontractors and suppliers, so as to facilitate MBE/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of MBEs/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for MBEs/WBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as 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 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 subcontractor (or an approved substitute MBE or WBE subcontractor) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE subcontractor 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, or with the Contractor's own forces or those of an affiliate.

The Contractor must give notice in writing both by certified mail and email to the MBE/WBE subcontractor, with a copy to the Engineer of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor must give the MBE/WBE subcontractor five (5) business days to respond to the Contractor's Notice of Intent to Request Termination and/or Substitution. If the MBE/WBE subcontractor

objects to the intended termination/substitution, the MBE/WBE, within five (5) business days must advise the Contractor and the Department of the reasons why the action should not be approved. The five-day notice period shall begin on the next business day after written notice is provided to the MBE/WBE subcontractor.

A committed MBE/WBE subcontractor may only be terminated after receiving the Department's written approval based upon a finding of good cause for the proposed termination and/or substitution. For purposes of this section, good cause shall include the following circumstances:

- (a) The listed MBE/WBE subcontractor fails or refuses to execute a written contract;
- (b) The listed MBE/WBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the MBE/WBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor:
- (c) The listed MBE/WBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
- (d) The listed MBE/WBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (e) The listed MBE/WBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1,200 or applicable state law;
- (f) The listed MBE/WBE subcontractor is not a responsible contractor;
- (g) The listed MBE/WBE voluntarily withdraws from the project and provides written notice of withdrawal;
- (h) The listed MBE/WBE is ineligible to receive MBE/WBE credit for the type of work required;
- (i) A MBE/WBE owner dies or becomes disabled with the result that the listed MBE/WBE contractor is unable to complete its work on the contract;
- (j) Other documented good cause that compels the termination of the MBE/WBE subcontractor. Provided, that good cause does not exist if the prime contractor seeks to terminate a MBE/WBE it relied upon to obtain the contract so that the prime contractor can self-perform the work for which the MBE/WBE contractor was engaged or so that the prime contractor can substitute another MBE/WBE or non-MBE/WBE contractor after contract award.

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 MBE/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 MBE/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 MBE/WBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of MBE/WBEs who were contacted.
 - (b) A description of the information provided to MBE/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 MBE/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.
- 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 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).
- (3) Exception: If the MBE/WBE's ineligibility is caused solely by its having exceeded the size standard during the performance of the contract, 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 and overall goal.

All requests for replacement of a committed MBE/WBE firm shall be submitted to the Engineer for approval on Form RF-1 (DBE 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.

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.

RESTRICTIONS ON ITS EQUIPMENT AND SERVICES:

(11-17-20) SP01 G090

All telecommunications, video or other ITS equipment or services installed or utilized on this project must be in conformance with UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS 2 CFR, § 200.216 Prohibition on certain telecommunications and video surveillance services or equipment.

EQUIPMENT IDLING GUIDELINES:

(1-19-21) 107 SPI G096

Exercise reduced fuel consumption and reduced equipment emissions during the construction of all work associated with this contract. Employees engaged in the construction of this project should turn off vehicles when stopped for more than thirty (30) minutes and off-highway equipment should idle no longer than fifteen (15) consecutive minutes.

These guidelines for turning off vehicles and equipment when idling do not apply to:

- 1. Idling when queuing.
- 2. Idling to verify the vehicle is in safe operating condition.
- 3. Idling for testing, servicing, repairing or diagnostic purposes.
- 4. Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane, mixing concrete, etc.).
- 5. Idling required to bring the machine system to operating temperature.
- 6. Emergency vehicles, utility company, construction, and maintenance vehicles where the engines must run to perform needed work.
- 7. Idling to ensure safe operation of the vehicle.
- 8. Idling when the propulsion engine is providing auxiliary power for other than heating or air conditioning. (such as hydraulic systems for pavers)

- 9. When specific traffic, safety, or emergency situations arise.
- 10. If the ambient temperature is less than 32 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants (e.g. to run the heater).
- 11. If the ambient temperature is greater than 90 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants of off-highway equipment (e.g. to run the air conditioning) no more than 30 minutes.
- 12. Diesel powered vehicles may idle for up to 30 minutes to minimize restart problems.

Any vehicle, truck, or equipment in which the primary source of fuel is natural gas or electricity is exempt from the idling limitations set forth in this special provision.

USE OF UNMANNED AIRCRAFT SYSTEM (UAS):

(8-20-19) SP01 G092

The Contractor shall adhere to all Federal, State and Local regulations and guidelines for the use of Unmanned Aircraft Systems (UAS). This includes but is not limited to US 14 CFR Part 107 Small UAS Rule, NC GS 15A-300.2 Regulation of launch and recovery sites, NC GS 63-95 Training required for the operation of unmanned aircraft systems, NC GS 63-96 Permit required for commercial operation of unmanned aircraft system, and NCDOT UAS Policy. The required operator certifications include possessing a current Federal Aviation Administration (FAA) Remote Pilot Certificate, a NC UAS Operator Permit as well as operating a UAS registered with the FAA.

Prior to beginning operations, the Contractor shall complete the NCDOT UAS – Flight Operation Approval Form and submit it to the Engineer for approval. All UAS operations shall be approved by the Engineer prior to beginning the operations.

All contractors or subcontractors operating UAS shall have UAS specific general liability insurance to cover all operations under this contract.

The use of UAS is at the Contractor's discretion. No measurement or payment will be made for the use of UAS. In the event that the Department directs the Contractor to utilize UAS, payment will be in accordance with Article 104-7 Extra Work.

AWARD LIMITS:

(4-19-22) 103 SP1 G141

Revise the 2018 Standard Specifications as follows:

Page 1-29, Subarticle 103-4(C), Award Limits, line 4-8, delete and replace the first sentence in the first paragraph with the following:

A bidder who desires to bid on more than one project on which bids are to be opened in the same letting and who desires to avoid receiving an award of more projects than he is equipped to handle, may bid on any number of projects but may limit the total amount of work awarded to him on selected projects by completing the form Award Limits on Multiple Projects for each project subject to the award limit.

TWELVE MONTH GUARANTEE:

(7-15-03) 108 SPI 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) SPI 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 12-15-20) 105-16, 225-2, 16 SPI 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 equal to or greater than 1.0 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 Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III 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. 4-5-19)

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 https://connect.ncdot.gov/resources/roadside/FieldOperationsDocuments/

<u>TurbidityReductionOptionSheet.pdf</u> 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.

PROJECT SPECIAL PROVISIONS

ROADWAY

SP10 R01

$\frac{\textbf{PORTLAND CEMENT CONCRETE PRODUCTION AND DELIVERY:}}{(9\text{-}15\text{-}20)}$

Revise the 2018 Standard Specifications as follows:

Page 10-6, Table 1000-1, REQUIREMENTS FOR CONCRETE, replace with the following:

			RI	EOUIRE	TABLE MENTS		ONCRET	re				
ssive days	ssive 3 days						Consistency Maximum Slump		Cement Content			
Class of	Air-Entrained Non-Air-	Compregth at 28	Non- Vibrated	Vib	rated	Non-V	ibrated					
	Min. Stren		Angular Aggregate	Rounded Aggregate		Vib	Vib					
								Min.	Max.	Min.	Max.	
Units	psi					inch	inch	lb/cy	lb/cy	lb/cy	lb/cy	
AA	4500	0.381	0.426			3.5A		639	715			
AA Slip Form	4500	0.381	0.426			1.5		639	715			
Drilled Pier	4500			0.450	0.450		5 – 7 dry 7 - 9 wet			640	800	
A	3000	0.488	0.532	0.550	0.594	3.5 A	4.0	564		602		
В	2500	0.488	0.567	0.559	0.630	1.5 machine placed 2.5 A hand placed	4.0	508		545		
Sand Light- weight	4500		0.420			4.0 A		715				
Latex Modified	3000 (at 7 days)	0.400	0.400			6.0		658				
Flowable Fill excavatable	150 max. (at 56 days)	as needed	as needed	as needed	as needed		Flowable			40	100	
Flowable Fill non- excavatable	125	as needed	as needed	as needed	as needed		Flowable			100	as needed	

Pavement	4500 Design, field 650 flexural, design only	0.559	0.559	 	1.5 slip form 3.0 hand placed		526			
Precast	See Table 1077-1	as needed	as needed	 	6.0	as needed				
Prestressed	per contract	See Table 1078-1	See Table 1078-1	 	8.0		564	as needed		

A. The slump may be increased to 6 inches, provided the increase in slump is achieved by adding a chemical admixture conforming to Section 1024-3. In no case shall the water-cement ratio on the approved design be exceeded. Concrete exhibiting segregation and/or excessive bleeding will be rejected. Utilizing an Admixture to modify slump does not relinquish the contractor's responsibility to ensure the final product quality and overall configuration meets design specifications. Caution should be taken when placing these modified mixes on steep grades to prevent unintended changes to the set slope.

MATERIALS FOR PORTLAND CEMENT CONCRETE:

(9-15-20) 1000, 1024 SP10 R24

Revise the 2018 Standard Specifications as follows:

Page 10-52, Article 1024-4, WATER, lines 3-6, delete and replace with the following:

Test water from wells at all locations. Test public water supplies from all out of state locations and in the following counties: Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrell and Washington unless the Engineer waives the testing requirements.

Page 10-52, Table 1024-2, PHYSICAL PROPERTIES OF WATER, replace with the following:

Property	Requirement	Test Method
Compression Strength, minimum percent of control at 3 and 7 days	90%	ASTM C1602
Time of set, deviation from control	From 1:00 hr. earlier to 1:30 hr. later	ASTM C1602
рН	4.5 to 8.5	ASTM D1293 *
Chloride Ion Content, Max.	250 ppm	ASTM D512 *
Total Solids Content (Residue), Max.	1,000 ppm	SM 2540B *

Resistivity, Min.	0.500 kohm-cm	ASTM D1125 *	
-------------------	---------------	--------------	--

*Denotes an alternate method is acceptable. Test method used shall be referenced in the test report.

WORK ZONE INSTALLER:

(7-20-21)(Rev. 8-16-22) 1101, 1150 SP11 R04

Provide the service of at least one qualified work zone installer during the setup, installation, and removal of temporary traffic control within the highway right of way. The qualified work zone installer shall serve as crew leader and shall be on site and directing the installation and removal of temporary traffic control. If multiple temporary traffic control installations or removals are occurring simultaneously, then each shall have a qualified work zone installer.

The work zone installer shall be qualified by an NCDOT approved training agency or other NCDOT approved training provider in the safe and competent set up of temporary traffic control. For a complete listing of approved training agencies, see the Work Zone Safety Training webpage.

A work zone supervisor, in accordance with Article 1101-13 of the *Standard Specifications*, may fulfill the role of the work zone installer during the setup, installation, and removal of temporary traffic control within the highway right of way provided they are on site and directing the installation and removal of temporary traffic control.

All other individuals participating in the setup, installation, and removal of temporary traffic control within the highway right of way shall be certified as a qualified flagger in accordance with Article 1150-3 of the *Standard Specifications*, even if flagging is not being performed as part of the traffic control.

Provide the name and contact information of all qualified work zone installers to the Engineer prior to or at the preconstruction conference. Additionally, provide a qualification statement that all other individuals participating in the setup, installation, and removal of temporary traffic control are qualified flaggers that have been properly trained through an NCDOT approved training agency or other NCDOT approved training provider.

All certification records for qualified work zone installers and flaggers shall be uploaded by the approved training agency or other NCDOT approved training provider to the Department's Work Zone Education Verification App (WZ-EVA) prior to the qualified work zone installer or flagger performing any traffic control duties on the project. For more information about WZ-EVA, see the Work Zone Safety Training webpage.

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(D) of the 2018 Standard Specifications.

STANDARD SPECIAL PROVISION

ERRATA

(10-16-18) (Rev. 8-16-22) Z-4

Revise the 2018 Standard Specifications as follows:

Division 4

Page 4-84, Article 458-5 MEASUREMENT AND PAYMENT, line 31, replace article number "454-1" with "458-1".

Division 6

Page 6-7, Article 609-1 DESCRIPTION, line 29, replace article number "609-10" with "609-9".

Page 6-26, Subarticle 610-13(A)(1) Acceptance for New Construction, line 31, replace Table number "610-7" with "610-8".

Page 6-29, Subarticle 610-13(B) North Carolina Hearne Straightedge, line 32, replace Table number "610-8" with "610-9".

Page 6-31, Article 610-14 DENSITY ACCEPTANCE, Specified Density prior to line 30 and line 32, replace Table number "610-6" with "610-7".

Division 7

Page 7-27, Article 725-1 MEASUREMENT AND PAYMENT, line 4, replace article number "725-1" with "724-4".

Page 7-28, Article 725-1 MEASUREMENT AND PAYMENT, line 10, replace article number "725-1" with "725-3".

Division 10

Page 10-37, Article 1012-4, LIGHTWEIGHT AGGREGATE, line 4, replace Table number "1012-8" with "1012-5".

Page 10-78, Article 1056-4 GEOTEXTILES, TABLE 1056-1, Permittivity, Type 2, replace "Table 6^D" with "Table 7^D" and Permittivity, Type 3^B, replace "Table 7^D" with "Table 8^D".

Page 10-121, Article 1076-7, REPAIR OF GALVANIZING, line 8, replace article number "1080-9" with "1080-7".

Page 10-162, Article 1080-50 PAINT FOR VERTICAL MARKERS, line 1, replace article number "1080-50" with "1080-10".

Page 10-162, Article 1080-61 EPOXY RESIN FOR REINFORCING STEEL, line 5, replace article number "1080-61" with "1080-11".

Page 10-162, Article 1080-72 ABRASIVE MATERIALS FOR BLAST CLEANING STEEL, line 22, replace article number "1080-72" with "1080-12".

Page 10-163, Article 1080-83 FIELD PERFORMANCE AND SERVICES, line 25, replace article number "1080-83" with "1080-13".

Division 17

Page 17-15, Article 1715-4 MEASUREMENT AND PAYMENT, lines 42-44, replace the second sentence with the following:

An example is an installation of a single 1.25 inch HDPE conduit would be paid as:

Directional Drill (1)(1.25") Linear Foot

Page 17-15, Subarticle 1715-3(E) Bore and Jack, line 5, replace article number "1540-4" with "1550-4".

Page 17-15, Subarticle 1715-3(E) Bore and Jack, lines 10 & 11, replace "NCDOT Policies and Procedures for Accommodating Utilities on Highway Rights of Way" with "NCDOT Utilities Accommodations Manual".

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, Emerald Ash Borer, Guava Root Knot Nematode, And Other Noxious Weeds)

(3-18-03) (Rev. 5-21-19) 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 https://www.ncagr.gov/plantindustry/Plant/quaran/table2.htm 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, guava root knot nematode, or other noxious weeds.

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.

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 (a) through (f) 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 US.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. (Executive Order 13166)				
Color	Color of skin, including shade of skin within a racial group	Black, White, brown, yellow, etc.					
National Origin (Limited English Proficiency)	Place of birth. Citizenship is not a factor. (Discrimination based on language or a person's accent is also covered)	Mexican, Cuban, Japanese, Vietnamese, Chinese					
Sex	Gender. The sex of an individual. Note: Sex under this program does not include sexual orientation.	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) (Religion/ Creed in all aspects of any aviation or transit-related construction)	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:</i> 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.	Muslim, Christian, Sikh, Hindu, etc.	Title VII of the Civil Rights Act of 1964; 23 CFR 230; FHWA-1273 Required Contract Provisions. (49 U.S.C. 5332(b); 49 U.S.C. 47123)				

(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:

- (a) 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.
- (b) 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);
- (c) Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- (d) 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;
- (e) The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- (f) 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, Non-discrimination 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 abovementioned 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.)

ON-THE-JOB TRAINING

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

Description

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

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

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

Minorities and Women

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

Assigning Training Goals

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

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.

REST AREA SITE WORK

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE	
1	BOLLARDS	2	
2	BRICK VENEER SEAT WALL	2	
3	CHAPEL HILL GRIT STONE	3	
4	CIGARETTE SNUFFER	3	
5	COMPOST FILTER SOCK INLET PROTECTION	3	
6	CONCRETE STEPS W/ HANDRAIL	4	
7	DEMOLITION	5	
8	EDGING	5	
9	LANDSCAPE GRADING	6	
10	MONTHLY ESTABLISHMENT	6	
11	MULCH FOR PLANTING	7	
12	PARKING STOPS	7	
13	PLANTING	8	
14	SELECTIVE TREE TRANSPLANTING	9	
15	SODDING (HYBRID BERMUDA)	9	
16	TOPSOIL	12	
17	TREE PROTECTION/SILT FENCE	13	
18	WATER FEATURE	13	

1 BOLLARDS

General:

The work covered by this special provision consists of furnishing and installing eleven Forms+Surfaces (Helio M30/K4 Security Bollard Series 900), Bullard Bollards (Halo Security Rated Lit Bollard), Ligman (Lightsoft 1 -LH-10665), or equivalent illuminated security bollards. The bollards shall be black powder-coated stainless steel, illuminated security bollards (8-10" diameter; 3-3.5' tall) in the locations shown on the plans. The bollards shall be equipped with a 40W LED light with an input voltage of 120-277 VAC nominal. This shall include a constant output current, with over-voltage, short circuit, overload protection, and have forward-phase, reverse-phase, and 0-10V dimming capabilities. The light shall have a 360° light distribution with a 3,000-4,000K color temperature. The mounting of the bollards shall be surface mount with J-bolts per the manufacturer's installations instructions and completed at the same time as the 4" concrete sidewalk. The concrete for the footing shall be Class-B and meet the requirements of Section 1000 of the Standard Specifications. Since the bollards are illuminated, a licensed electrician will be required to connect the bollards to an existing outdoor lighting circuit. All electrical work shall meet the state and local electrical codes that apply. All applicable sections of the Standard Specifications Section 825, Incidental Concrete Construction - General and Section 848, Concrete Sidewalks, Driveways and Wheelchair Ramps, will apply.

Compensation:

Payment for the work of installing the illuminated bollards and footings as indicated on the plans, and as directed by the Engineer, will be paid for as 'Bollards' for each. Such price and payment will be full compensation for all work covered by this provision; including but not limited to furnishing the illuminated bollards, furnishing the materials and constructing the required footings, providing the materials and connecting the bollards to an existing lighting circuit, and all labor, tools and equipment and any other incidentals necessary or required to complete the work.

Payment will be	made	under:
-----------------	------	--------

Bollards	EA

BRICK VENEER SEAT WALL

General:

2

The work covered by this section consists of furnishing and installing the CMU seat wall and footing, brick veneer, and precast seat cap at the locations shown on the plans and details and as directed by the Engineer.

All applicable requirements of Section 825, Incidental Concrete Construction-General; Section 832, Reinforced Brick Masonry Construction – General; and Section 425, Fabricating and Placing Reinforcement of the Standard Specifications will apply. Concrete shall be Class-B and meet the requirements of Section 1000 of the Standard Specifications.

Construction/Installation:

Construct the concrete footings in accordance with Section 825, unless otherwise noted. Furnish and place reinforcement as shown on the plans and details and in accordance with the provisions of Section 425. The brick veneer being used in the seat wall shall match the brick of the existing buildings as best as possible. Submit a sample for approval to the Engineer. All stone mortar joints are to be tooled concave mortar joints above grade (Type N) and flush mortar joints below grade (Type S). The mortar shall match that of the existing buildings. The concrete and brick seat wall shall be constructed as shown in the plans and details. The top of the wall shall be capped with a precast concrete cap with rounded edges that is light grey in color. The existing seat wall by the restroom building will be receiving two 2'-4" square precast concrete caps to match the new wall caps in the locations shown on the plans, so the new seat wall appears to be seamlessly integrated into the existing wall. Adjustments may be needed in the field depending on the finished height of the new wall and existing height of the current seat wall. The seat wall structure shall not interfere with or negatively impact the building structure.

Compensation:

The seat wall will be paid for as 'Brick Veneer Seat Wall' in linear feet measured along the surface of the completed and accepted work. Such price includes, but is not limited to, excavating and backfilling, furnishing and placing the CMU wall and concrete footing, brick veneer, the precast concrete cap, any necessary wall components, constructing and sealing joints, and all labor, materials, tools, equipment and all other incidentals necessary to complete the work. The additional precast

concrete caps that are being installed on the existing seat wall will be paid for as 'Precast Concrete Cap' for each. Such price includes, but is not limited to, cleaning and preparing the existing seat wall, furnishing and placing the precast concrete cap, constructing and sealing joints, and all labor, materials, tools, equipment and any other incidentals necessary to complete the work.

15RE.15.3

Payment will be made under:

Brick Veneer Seat Wall	LF
Precast Concrete Cap	EA

3 CHAPEL HILL GRIT STONE

General:

This provision will cover the furnishing and placement of Chapel Hill grit in the specified stepping stone area shown on the plans and as directed herein.

Materials:

The stone is a quarried decomposed granite native to the Chapel Hill area. The stone is a granular, yellow/orange gravel resembling sand, but much coarser, that can be packed down firmly that won't wash away during heavy rains. The stone will be placed and compacted to match the depth surface level of the adjacent 4" poured concrete stepping stones and sidewalk. A representative sample and the source of the stone will be submitted for the Engineer's approval prior to delivery and placement.

Compensation:

The stone will be paid for as 'Chapel Hill Grit Stone' by the number of tons applied and accepted. Such price includes, but is not limited to, furnishing the stone, compacting, smoothing of the aggregate, and any equipment, materials, and labor needed to complete the work.

Payment will be made under:

CIGARETTE SNUFFER

General:

4

The work covered by this special provision consists of furnishing and installing two Wausau Tile (TF2053), Belson Outdoors (TF2053), Markstaar (LF2053), or equivalent concrete snuffers. The receptacle shall be 14"x 14" x 36" or similar sized precast, concrete pyramid, smokeless snuffer and all additional hardware needed for installation. The concrete and aggregate color shall match the existing receptacles currently on site as best as possible. This receptacle will be steel-reinforced concrete with an exposed aggregate finish protected with an acrylic sealer. The receptacle will also have a stainless-steel pail insert to collect the cigarette butts.

Installation:

The cigarette snuffers shall be installed on a 4" reinforced concrete pad in the location as shown on the hardscapes plan.

Compensation:

The concrete cigarette snuffer is to be paid for as 'Cigarette Snuffer' at the contract unit price for each. Such payment will be full compensation for all work covered by this section including, but not limited to furnishing and installing the receptacle, hardware, and any equipment, materials, and labor needed to complete the work.

Payment will be made under:

Cigarette Snuffer EA

COMPOST FILTER SOCK INLET PROTECTION

General:

5

The work covered under this provision consists of placing and maintaining compost filter socks around stormwater basins throughout the site during the construction phases of the project and removing the devices once the project is complete. The compost filter socks shall be installed around drainage structures in the locations shown on the drawings. Compost Filter Socks shall be furnished and installed per manufacturer's specifications and according to the details on the plans; and shall receive weekly maintenance (or as required) and replaced as necessary. Work includes furnishing materials, installation, maintenance, and removing compost filter sock inlet protection. Compost Filter Socks shall be SiltSoxx Original by Filtrexx Sustainable Technologies, Pelletized Compost Filter Sock by Diamond Sock, or approved equal.

Compost Filter Socks shall meet the following specifications:

Mesh Material Type: Photodegradable Multi-Filament Polypropylene (MFPP)

Mesh Opening Size: 1/8"
Minimum Diameter: 12 in.
Minimum Functional Longevity: 2 years

Tensile Strength (ASTM D4595): MD 670 lbs; TD 423 lbs

Fill Material: Shall Meet CFR 503 Regulations

Compensation:

The compost filter socks will be paid for as 'Compost Filter Sock Inlet Protection' by the number of linear feet installed and accepted. Such price and payment will be full compensation for all work covered by this special provision; including but not limited to, furnishing the filter sock and filler materials and all labor, materials, equipment, and any other incidentals necessary or required to complete the work.

Payment will be made under:

Compost Filter Sock Inlet Protection _______ LF

CONCRETE STEPS W/ HANDRAILS

General:

6

The work covered under this provision consists of constructing concrete steps, concrete cheek walls, and handrails as shown on the plans and details. All applicable requirements of Incidental Concrete Construction-General, Section 825 and Fabricating and Placing Reinforcement, Section 425 of the Standard Specifications will apply.

Materials:

Concrete steps and cheek wall will be Class B concrete. The handrail shall be constructed of Schedule 40 aluminum pipe with an outside diameter of 1 ½". There will be a total of five 6" risers.

Construction/Installation:

Construct the concrete steps and cheek wall in accordance with Section 825, except as otherwise noted herein. Furnish and place reinforcement, as shown on the plans and details, in accordance with the provisions of Section 425. All stair treads shall have a non-slip stair nosing as shown in the plans and a max 2% slope away from the riser to shed water. Give the formed surfaces of the concrete stairs a brushed finish and the cheek wall a float finish. Erect the handrails as shown on the details, straight and true to line and grade. They will be core mounted into a sleeve pipe as recommended by the manufacturer. All welds will be filed smooth to the touch. Standards for welding shall meet those requirements defined in the Standard Specification for Roadway Structures Section 1072-20. Compact any backfill around the stairs after installation to a degree comparable to the adjacent undisturbed material.

Compensation:

'Concrete Steps w/ Handrail' will be paid for as a lump sum once properly installed and accepted by the engineer. Such price and payment will be full compensation for all work covered by this special provision; including but not limited to, all

concrete work, aluminum handrails, cheek walls, non-slip nosings, grading, and furnishing all labor, materials, equipment, and any other incidentals necessary or required to complete the work.

15RE.15.3

Payment will be made under:

Concrete Steps w/ Handrail	L	S

7 DEMOLITION

General:

Demolition consists of the stump grinding, removal and disposal of existing concrete sidewalks and ramps, paved brick areas, raised beds, old irrigation components, existing landscape lighting, shrub and tree debris, fencing, and any other landscape components designated for removal as indicated on the plans and as directed by the Engineer. Soil removed during grading operations and raised bed removal shall be reused as fill soil where needed. The specified existing recycle/trash receptacles, cigarette snuffers, and media bin will be removed and stored for later use by the Division Roadside Office to protect them from being damaged during the construction process. At the appropriate stage of completion, the Division Roadside Office will reinstall and secure the removed amenities in their final locations as noted in the plans

Construction:

Remove the existing concrete sidewalk and the nonconforming concrete curb ramp from the areas specified on the plans. etc.. The contractor will be responsible for replacing any items damaged during construction activities. All methods and operations used for the removal of paving and structures will meet prior approval of the Engineer. Make a saw cut providing a clean edge at locations where the concrete sidewalk is to be removed. All materials removed will become the property of the contractor and will be properly disposed of by the contractor off-site unless they are to be relocated on-site, delivered to NCDOT, or noted otherwise. Prevent damage to adjacent properties, structures, and vegetation to remain during the removal and demolition operations. The contractor is responsible for repairing all damaged areas back to their original conditions and to the satisfaction of the Engineer.

Compensation:

'Demolition' will be paid for as a lump sum. Such price and payment will be full compensation for all work covered by this provision, including but not limited to removing and disposing of all concrete sidewalks, brick paver areas, fencing, vegetation, stump grinding, and any other item as indicated on the plans, and furnishing all labor, tools and equipment, and any other incidentals necessary or required to complete the work.

Payment will be made under:

Demolition	

8 EDGING

General:

The work covered by this special provision consists of furnishing and installing the ProflexTM, Bon Tool, Master Mark, or equivalent flexible paver edging where the Chapel Hill grit is installed between the poured concrete stepping stones to keep the grit from washing. The edging shall have a 4" wall height and a 2-3" tab depth. The edging shall be installed flush against the concrete steps as shown in the details and secured with 10" galvanized landscape spikes. The finished elevation of the edging should be flush with the top of the concrete stepping stones.

Compensation:

The flexible paver edging will be paid for as 'Edging' per linear foot installed and accepted. Such payment will be full compensation for all work covered by this special provision including but not limited to furnishing and installing the edging and all labor, equipment, and materials necessary to complete the work.

Payment will be made under:

Fdoing		F
Luzinz	L	JI.

LANDSCAPE GRADING

General:

9

Landscape grading consists of fine grading within the rest area site where slopes need to be improved or altered to accommodate new site features or where they need to comply with the spot elevations and proposed slopes provided in the plans. Grading should allow for positive drainage across the new walkways and turf areas to the designated storm basins.

Compensation:

'Landscape Grading' will be paid for as a lump sum for the work that has been completed and accepted. Such price and payment will be full compensation for furnishing all labor, equipment, and all incidentals necessary to complete the work.

Payment will be made under:

Landscape GradingLS

10 MONTHLY ESTABLISHMENT

General:

There will be an establishment period for this contract that includes but is not limited to mowing and string trimming of turf areas; management of weeds and pests through herbicide or pesticide applications or by manual removal; watering; fertilization; replacement of mulch; repair or replacement of guy stakes, guy wires, and water rings; and other work as directed to ensure the survival and growth of the plant material and the appearance of the project. Maintain trees, shrubs, grasses, perennials, groundcovers, and surrounding bed areas until final acceptance of the project. Mow and maintain a width of at least 6 feet along the outside perimeter of new shrub beds and mulch rings for individual trees and shrubs or 6 feet beyond the limits of the guy stakes, whichever is greater.

The establishment period will begin once all the plant material of a project is installed and approved unless otherwise noted in the contract. The establishment period for this contract shall begin on (Date) and proceed until (Date). Establishment work will be required on a weekly basis as needed and as required by the Division Roadside Environmental Engineer. The contractor or their appointed representative shall meet on the project site at a predetermined weekly schedule to identify any tasks that need to be accomplished during that week. After (Date), tasks involved in the establishment period shall be performed on a monthly cycle unless otherwise needed or directed by the Engineer or their representative. The contractor shall be available within twenty-four (24) hours of contact by the Engineer to handle any situations requiring immediate attention.

Weed Control:

<u>Weed</u>: Any plant growing where it is not desired. Plants such as, but not limited to: clover, dandelions, purslane, chickweed, pennywort, dog fennel, crabgrass, and volunteer trees are considered weeds.

- Weeds are to be mowed, trimmed, or edged from turf areas as part of turf care operations for each mowing occurrence.
- Weeds are to be mechanically or chemically removed from plant beds, curb gutter expansion joints, pavers, and along fence lines where applicable.
- The contractor may use contact herbicides for spot treatment of weeds in plant beds, as well as preemergent herbicides when possible.

Broad application of pre/post-emergence herbicide throughout a project site will be paid as separate line items in the contract. Herbicidal treatment in the form of spot spraying, wicking, etc. will fall under establishment.

Water for Planting:

Water for planting will be applied in accordance with the standard specifications and paid as a separate line item in the contract. Water newly planted trees and shrubs every few days initially, then once a week depending on soil conditions and rainfall. Weekly to monthly watering should continue until the tree is established in the landscape. Watering should be focused on the root ball and planting area. In general, the soil should not stay saturated and must have time to dry out between each watering, but watering rates can vary by plant type. If necessary, the contractor may use tree irrigation bags to distribute the water, but

their water level must be monitored regularly to ensure appropriate application. Be sure to check the soil moisture before watering in order to prevent damage the plant's health by overwatering.

Replacement Planting:

Replacement planting consists of replacing plants that are not in a healthy, living condition or do not conform to the standards representative of that in the American Standard for Nursery Stock. Replacement of reforestation plants will not be required unless specified otherwise in the plans. Perform all replacement plantings within the planting season specified in the contract. The replacement of plants shall occur as directed by the Division Roadside Environmental Engineer.

Compensation:

'Monthly Establishment' will be paid for each month when work is completed and approved. Such price and payment will be full compensation for all work covered by this provision; including but not limited to re-mulching, weed removal, plant replacement, mowing, and litter removal, as well as, furnishing all labor, tools and equipment, and any other incidentals necessary or required to complete the work.

Payment Item:

Monthly Establishment	<i>EA</i>
Post-Emergence Herbicidal Treatment	SY
Pre-Emergence Herbicidal Treatment	SY
Water for Planting	1,000 gallons (m/g)

11 MULCH FOR PLANTING

Mulch for planting shall consist of double shredded hardwood mulch from a single source, unless otherwise approved by the Engineer. All mulch and the work associated with placing the mulch during the planting shall conform to article 1060-11 of the NCDOT Standard Specifications. Submit a sample for approval prior to placement. Install the mulch to a finished depth of 4 inches (unless otherwise noted), rake, and compact to create a uniform finish.

Compensation:

The 'Mulch for Planting (4" Depth)' will be paid for per cubic yard installed and accepted. Such price will be full compensation for all labor, materials, tools, equipment, and all other incidentals necessary to complete the work.

Payment will be made under:

· ·		
Mulch for Planting (4"	Depth)	CY

12 PARKING STOPS

General:

The work covered by this section consists of furnishing and placing precast concrete parking stops (8' in length and made of 4000 psi air-entrained concrete. Each stop shall be reinforced with a minimum of two No. 4 deformed steel reinforcing bars (rebar). The stops shall be half-octagonal in shape and have chamfered corners, drainage slots on the underside, and holes for dowel-anchoring to the substrate.

Installation:

Securely attach the parking stops into the concrete or asphalt pavement with no less than two 1/2" diameter by 10" in length galvanized steel dowels or No. 4 rebar through the anchor holes provided in the stops. Submit shop drawings of the precast concrete parking stops that includes installation and attachment details to the existing concrete and asphalt pavement for approval.

Compensation:

The 'Parking Stops' will be paid for as each when installed and accepted. Such price will be full compensation for all labor, materials, tools, equipment, and all other incidentals necessary to complete the work.

Payment will be made under:

Parking Stops......EA

13 PLANTING

See the NCDOT Standard Specifications Sections 1060 - Landscape Development Materials and 1670 - Planting.

Seasonal Limitations:

The initial planting and replacement of plants will be accomplished between October 15th and March 31st for all woody plant material (trees, shrubs and ground covers). All herbaceous plants and containerized grasses will be planted between September 1st and November 30th and March 1st and May 15th depending on requirements of each species. Exceptions to these seasonal limitations are at the discretion of the Division Roadside Environmental Engineer and will be submitted in writing. Submit the proposed schedule for plant installation for approval along with plant sources and contact information for each of them. All dates can be adjusted depending on weather, plant availability, and site accessibility, but must be approved by the engineer onsite.

Establishment Period for Planting:

An establishment period will begin after satisfactory installation and approval of all of the planting occurs. All plants must be in an upright healthy condition and planted at the proper depth. Mulched areas will be weed free and tidy, and any staking or guying that is utilized must be in a proper condition prior to beginning the establishment period. During the establishment period, the contractor will be responsible for the proper care of the plantings in accordance with Section 1670-14: Establishment. All plants that do not continue to conform to the specifications and quality as approved when they were installed will be deemed unacceptable. The contractor will remove all plants that are unacceptable from the site within five days of request by the Engineer. **Replacements will be installed within the seasonal limitations.** Each month during the establishment period, a meeting will be held between the Engineer and the Contractor to discuss establishment work required during that period. Additional meetings may be scheduled if deemed necessary by the Engineer. All of the required work will be performed in a timely manner and with the utmost regard to the safety and convenience of the rest area users. Failure on the part of the contractor to complete the required work in a satisfactory manner will result in NCDOT having the work performed by others and paid for by the performance bond. All requirements of Section 1670-14: Establishment will also be applicable during the Establishment Period for Planting. The Establishment Period for Planting will last a minimum of twelve (12) months and extend into the seasonal limitations for planting in order to allow for replacement plantings to be installed. See the contract for exact time period and dates.

Herbicides:

Post-emergence herbicidal treatment and pre-emergent herbicidal treatment will consist of the following products and rates unless otherwise noted by the Engineer.

Herbicide Chart:

Herbicide Brand Name	Common Name	Formulation	Oral LD/50 (MG/KG)	Amount of Formulation per Acre	Lbs. of Active Ingredien t per Acre	Adjuvants	Remarks
Stump Control							
Garlon	Triclopyr	3 S	2,574	1 gal. /1 gal. of water	3 #	1 - 2 qts. Surfactant/a cre	Paint or spray, add bullseye dye.
Pre- emergent							

Pennant + Endurance + Gallery	Metolachlor + Prodiamine + Isoxaben	Liquid (5G) + 65 WDG + 75 DF	3750 + >5,000 + 5,000	2 - 3 pts. (40#) + 2# + 1#	1.95 - 2.93# (2#) + 20 lbs. + 1#	NA	Spring application; use tank agitation when mixing.
Post- emergent							
Roundup	Glyphosate	4 S	>5,000	2 - 4 qts.	2 - 4 #	2 - 4 qts. Surfactant/ 100 gals.	NA

SELECTIVE TREE TRANSPLANTING

General:

14

The work covered by this provision will consist of the removal and replanting of an existing Japanese Maple tree to a new location as specified in the plans.

Removal/Installation:

Prior to removing the existing tree and in order to increase survivability, it is recommended that root pruning occur 6-12 months in advance to allow new feeder roots to develop before the tree is actually moved. Typically, root pruning would occur in the fall prior to a spring planting to encourage root growth before top growth begins in the warmer months. Once the roots are pruned, the root ball should be covered with mulch and watered regularly to prevent drying out. Although this step is encouraged, if contract times do not allow for such a process, the tree can be transplanted without root pruning.

Before removing the existing tree, dig and prepare the new hole. The root ball should be 36" or more in diameter and depth in order to maintain a viable root system. Once the tree is removed, wrap the ball of the tree with biodegradable burlap and latch together using untreated natural twine. This is to keep the soil intact and prevent the interior roots from breaking. Plant the tree in the new hole at the same depth as previously and fill the remaining space in the hole with topsoil. Apply 3-4" of mulch, keeping it off the collar and trunk of the tree. Be sure to provide adequate water throughout the entire growing season. The remaining hole should be filled with any excess soil and/or new topsoil and compacted to match the nearby existing grades.

Compensation:

Transplanting of the tree will be paid for as 'Selective Tree Transplanting' for each once the work is completed and accepted. Such price and payment will be full compensation for all work covered by this provision; including but not limited to tree removal, replanting, additional topsoil, and furnishing all labor, tools and equipment, and any other incidentals necessary or required to complete the work.

Payment will be made under:

Selective Tree Transplan	ting	EA
Detective free franspian	<i>いいち</i>	. 🗀 🗆 1

15 SODDING (HYBRID BERMUDA)

Description:

This work consists of placing sod on shoulders, slopes, ditches, or other roadside areas, as directed. The sod shall be prepared in accordance with the requirements of Section 1664 of the Standard Specifications and the requirements of this section.

Materials:

Only "approved sod" (trade designation) consisting of Hybrid Bermuda Grass (Cynodon dactylon) shall be used. Approved hybrid bermuda grass varieties/cultivars include Tifton 419 (Tifway), Princess 77, Yukon, Tifsport, and TifTuf. Common Bermuda, pasture-type bermudagrasses and golf green-type bermudagrasses are not acceptable for this project. In addition, seeding and sprigging are not acceptable establishment methods for this project.

The sod, machine cut to the supplier's standard width and length, shall be 5/8" tall minimum, excluding top growth and thatch, at the time of cutting. Before cutting, the sod shall be uniformly mowed at a height of $1\frac{1}{2} - 2$ ". Standard sod sections shall be sufficiently strong to support their own weight and retain their size and shape when suspended vertically from a firm grasp on the upper 10% of the section. The sod may be either industry-standard small roll sod or 18" by 36" strips. Because of the slope associated with this project industry-standard big roll sod will not be accepted.

The Contractor shall obtain a certificate or limited permit issued by the North Carolina Department of Agriculture and Consumer Services (1-800-206-9333) or (919-733-6932) stating that the sod has been found to be free of injurious plant pests.

Sod shall be delivered on site within 18 hours of being cut and be covered by acceptable means during delivery. A certificate from the sod producer stating the date and time of sod cutting shall accompany the sod when it arrives at the project site.

The Contractor shall provide sufficient water to meet the requirements of this section.

Construction Methods:

(A) Soil Preparation

Remove litter and other debris. Mow and satisfactorily dispose of weeds or other unacceptable growth on the areas to be sodded.

Prior to beginning preparation of the soil to receive sod, all eroded, uneven and rough areas shall be contour graded and/or filled with soil as directed. The soil shall be scarified or otherwise loosened to a depth of not less than 5". Clods shall be broken and the top 2" to 3" of soil shall be worked into an acceptable soil bed by the use of soil pulverizers, drags, or harrows.

The Contractor shall be responsible for taking sufficient soil samples - at least one sample per planting area or mile, which ever is less - for testing by the North Carolina Department of Agriculture and Consumer Services, Agronomic Division, Soil Testing Section, to determine the soil pH. Samples shall be taken in the presence of the Engineer. Results shall be received by the Engineer directly from the North Carolina Department of Agriculture and Consumer Services.

Limestone: Based on these results the Contractor shall add limestone, if required, to bring the soil pH to 5.0 to 6.0 (opt. 5.5). The amount of limestone to be applied will be approved by the Engineer prior to application.

Sulfur: Based on these results the Contractor shall add sulfur if the pH is greater than 7.0, to bring the soil pH to 5.0 to 6.0 (opt. 5.5). The amount of sulfur to be applied will be approved by the Engineer prior to application.

Application of limestone, and sulfur will be considered incidental to the work of Sodding and no direct payment will be made for such.

After soil preparation, lime or sulfur, if needed, and fertilizer shall be uniformly distributed by mechanical means using a 42" drop-type spreader and thoroughly mixed with the top 5" of the soil by disking, harrowing, or other approved methods.

The area shall then be harrowed, dragged, raked, or prepared by other approved methods which will give a lawn type finish. All trash, debris and stones larger than 1 ½" in diameter or other obstructions that could interfere with the placing of the sod shall also be removed. The finished surface shall be moistened with water prior to placing the sod as directed.

(B) Sod Placement

Sod handling and placement shall be a continuous process of cutting, transporting and installing including repairing seams and voids. Sod shall always be installed within 36 hours after being cut. Sod shall be watered within 2 hours of installation and periodically thereafter to maintain a moist soil underneath the sod.

Any sod or portions of sod rejected by the Engineer during the initial placement shall be removed from the project and replaced with acceptable sod. The Contractor shall cease any and all other placement of sod on the project until rejected sod has been replaced.

After sod has been placed, and staked where necessary, according to Section 1664 of the Standard Specifications, it shall then be rolled or tamped carefully and firmly by means acceptable to the Engineer to ensure proper soil contact. If rolled, roller shall weigh 150 lbs. per ft. of roller width. Use of rubber tired equipment to roll shall not be allowed. Metal sod staples, 12" long unless otherwise approved, shall be made of 11-gauge new steel wire so as not to bend when pinned or driven through the sod. A minimum of 2 sod staples shall be installed every 3 linear foot of sod to secure it to the surface of the slope. Extreme care shall be taken to prevent the installed sod from being torn or displaced. Because of the slope associated with this site, all sod shall be installed so the long side of the sod is installed vertically (up and down) the face of the slope.

After rolling or tamping the sod, it shall be watered uniformly and thoroughly with a minimum of 1" of water, 5.6 gallons per square yard, applied immediately after installation of sod. In no case shall the time interval between sod placement and initial watering exceed 2 hours. Water shall be placed to the required quantity through sequential passes to insure proper coverage and to prevent runoff. A minimum of 1/4" should be placed on each pass.

(C) Fertilization

For new sod projects on sandy soils, it is recommended to have two applications of 16-4-8 fertilizer with 50% slow-release nitrogen. Each application should be 250lbs per acre. The first application should occur mid-May and the second application should occur mid-July. Once sod is established, if fertilizer is desired, it should be applied at 250lbs per acre with 34-0-0 fertilizer in May and 16-4-8 fertilizer in July.

(D) Maintenance

The Contractor shall be responsible for all watering and other maintenance required to maintain the livability of the sod from installation until final acceptance, including monitoring the sod to ensure all watering and other maintenance is performed as required.

The Contractor shall be responsible for all watering and other maintenance required to maintain the livability and health of the sod from installation until completion of the 60-day observation period. Additional water shall be applied as needed and as directed to maintain the livability of the sod. Each additional watering event shall be a minimum of 0.5" of water, 2.8 gallons per square yard, uniformly applied over the sodded area and may be placed in a series of passes to prevent runoff, with a minimum of ½" on each pass. The installation contractor may apply additional water if the Engineer and Contractor agree that it is warranted.

Any sod or portions of sod rejected by the Engineer after placement, but prior to beginning the observation period, shall be removed from the project and replaced with acceptable sod. Satisfactory replacement of sod shall begin within 10 days of notification. Failure to replace and repair damaged or dead sod as directed may result in sanctions under Article 108-7 or Article 108-8 of the Standard Specifications.

(E) Observation Period

Sodding shall be inspected by the Engineer to begin and end the 60-day observation period.

The Contractor shall maintain responsibility for the sod for a 60-day observation period beginning upon the satisfactory completion and acceptance of all work required in the plans or as directed. The Contractor shall guarantee the sod under the payment and performance bond in accordance with Article 109-10 of the Standard Specifications.

In the following counties, the 60-day observation period for sod installed between August 31 and March 1, shall not begin until March 1:

Alexander Catawba Jackson Surry

Alleghany Cherokee Macon Swain

Ashe Clay Madison Transylvania Avery Graham McDowell Watauga Buncombe Haywood Mitchell Wilkes

Burke Henderson Polk Yadkin

Caldwell Iredell Rutherford Yancey

Installation of sod shall be permitted between August 31 and March 1, however, the Engineer shall not accept such work and begin the 60-day observation period prior to March 1. Upon satisfactory completion of work and acceptance by the Engineer, the 60-day observation period shall begin.

Welcome Center Site Work

In all other counties, the 60-day observation period for sod installed between September 30 and March 1, shall not begin until March 1.

After the first 30 days of the 60-day observation period, the Contractor and Engineer shall meet to review the project and identify dead or damaged sod to be replaced. The Contractor, at no additional expense to the Department, shall satisfactorily replace any sod that is not in a living and healthy condition as determined by the Engineer. Replacement sod shall be furnished and installed in accordance with the same requirements as for initial sodding operation, except that the amounts of limestone, sulfur, and water may be readjusted as directed. Satisfactory replacement of sod shall begin within 10 days of notification. Failure to replace and repair damaged or dead sod as directed may result in sanctions under Article 108-7 or Article 108-8 of the Standard Specifications. Upon completion and acceptance of the sod repairs, the remaining 30 days of the observation period shall begin.

(F) Acceptance

At the end of the 60-day observation period, the sod furnished and installed under this contract must be in a living and healthy condition, as determined by the Engineer. Acceptance of sod will be either at the end of the 60-day observation period or at final acceptance of the project, whichever is later. The sod shall be weed free at time of final acceptance.

Compensation:

Sodding will be measured and paid for in square yards under *Cynodon dactylon x C. transvaalensis* (TifTuf Bermuda). Such price and payment will be full compensation for all work covered by this provision and including but not limited to ground preparations, fine grading, furnishing the sod, installing the sod, fertilizing, all labor, materials, equipment, and any incidentals required to complete the work. Water for the sod will be furnished and paid for under 'Water for Planting'.

Payment will be made under:

Cy	n dactylon x C. transvaalensis (TifTuf Bermudagrass)	Y

16 TOPSOIL

General

The work covered by this provision shall consist of placing, compacting, and grading topsoil in the remaining holes created by selective tree removal and other demolition activities.

Material:

Topsoil shall consist of a sandy loam, silt loam, or clay loam that contains a reasonable amount of humus material. Topsoil shall be of good texture, loose, and friable and shall be representative of topsoil in the general vicinity of the project. It shall be reasonably free of sod, hard lumps, subsoil, large roots, rocks and gravel, noxious weeds/seeds, and other material that would be harmful to plant growth. Remove all stones and other foreign material 3" or larger in diameter. All topsoil shall be approved by the Engineer when delivered to the job site, even if the source of topsoil has already been approved.

Construction:

Care shall be exercised by the contractor to minimize disturbance to the existing turf, remaining sidewalks and curbs, and water, sewer, and electrical utilities. The topsoil shall be placed and spread evenly to the depth required which, after settlement, shall constitute the finish grade. Topsoil shall not be placed when the ground is frozen, excessively wet, or in a condition that the soil cannot be worked easily and dressed smoothly.

Compensation:

The quantity of topsoil will be paid for as 'Topsoil' for the actual number of cubic yards of topsoil that has been placed and accepted. Such price and payment will be full compensation for furnishing and placing the new topsoil, grading work, and all labor, equipment, and incidentals necessary to complete the work. The topsoil used on this project will be measured by the truck load. Each truck shall have a legible identification mark indicating its capacity. Each truck shall be loaded to its capacity at the time it arrives to the point of delivery. The recorded capacity will be adjusted by making a 25% deduction to allow for shrinkage, and the adjusted capacity will be the quantity to be paid. Topsoil stripped, stockpiled, and distributed from the rest area site will not qualify for compensation. Only topsoil furnished from offsite sources will be compensated.

Payment will be m	ade under:	
<i>Topsoil</i>		<i>CY</i>

TREE PROTECTION FENCE / SILT FENCE

General:

17

This provision covers the furnishing and installation of temporary tree protection fence around the existing trees and plant beds to remain. The contractor will be responsible for erecting tree protection fence to protect the existing plants from damage, such as soil compaction and broken limbs, prior to demolition or construction beginning. There shall be no disturbance within the boundaries of the tree fence. No construction, grading, equipment or material storage, or any other activity shall be allowed within the tree protection area. The engineer in the field may authorize field adjustments of the fence as needed. The fence shall remain up until installation of new planting occurs or as specified by the engineer. Once construction is complete, the contractor will be responsible for removing all tree protection fence from the site.

Materials:

All tree protection fence shall be standard 4' tall, UV resistant, orange polyethylene laminar fencing. Signs shall be installed every 50' along the tree protection fence and be visible on all sides. The size of each sign must be a minimum of 2' by 2' and contain the following phrase in English and Spanish: "TREE PROTECTION ZONE, KEEP OUT."

Compensation:

The tree protection fence will be paid for as 'Tree Protection Fence' by the actual number of linear feet installed and accepted. Such payment will be full compensation for all work covered by this section including, but not limited to furnishing and installing the barricade fabric, metal fence posts, signage, hardware, and all labor, materials, equipment, and incidentals necessary to complete the work.

Payment will be made under:	
Tues Duetestion Force	

18 WATER FEATURE

General:

The work required under this section consists of the construction of the stream and waterfall water feature noted in the plans, details, and as specified herein. The scope of work included in this section includes the furnishing of all materials, equipment, and labor necessary for the completion of the described water feature. The contractor(s) shall coordinate and schedule the waterfall contract work with all other associated project work. A pre-construction meeting between the general contractor, water feature contractor, and NCDOT Roadside Environmental staff is required to discuss the coordination of the water feature construction. This allows for a detailed explanation of the suggested installation materials, techniques, and the sequence of the installation.

The furnishing and installation of materials include but is not limited to the following items:

- 1. Water supply plumbing, valves, valve boxes, pipes accessories, and equipment
- 2. Basin overflow drain lines, equipment, water make-up device, and all associated materials
- 3. Boulders, large TN river rock, small TN river rock, river pebbles, all basin stone, and associated masonry work
- 4. Submersible pump, pumping equipment, pump vault, water level censor, overflow pipe, and pump riser
- 5. Liners, underlayment, bulkhead fittings, waterproofing materials, and equipment
- 6. All supplemental river rock
- 7. System controls, timers, and utility access box(es)
- 8. Risers, fittings, nozzles, and associated equipment
- 9. Utility service connection and coordination for power, fill water, and sewer
- 10. Special tools

Approved Water Feature Contractor:

- 1. The contractor responsible for the construction and of the waterfall and stream water feature shall have extensive experience with the installation, construction, and maintenance of waterfalls, water features, and/or ponds (minimum of 7 years of experience). They shall show proof of workmanship, accreditation, and photographic samples of their work.
- 2. Plans, details, and pictures of the contractor's previous work will assist in the process and discussion of how the proposed water feature will be constructed.

Approved Equipment Supplier:

- 1. The design shown on the drawings and the specifications listed herein are based on the design data, services, and materials readily available through national suppliers of pond, waterfall, fountain, and plumbing materials
- 2. The contractor shall use only use reputable equipment suppliers approved by the Engineer.

Water Feature Materials and Equipment:

PUMP:

- 1. Pump capacity: 2500 GPH (SBL) and 1000 GPH (NBL); plumbed with a manual ball valve (in feeder line at spillway; placed in valve box) to restrict flow if necessary.
- 2 Acceptable manufacturers: Aquascape Inc., Tsurumi, Pondmaster ProLine, or approved equal.
- 3. Two year manufacturer warranty (minimum).
- 4. Low water cutoff switch.
- 5. Plumbed within a pump vault to allow for removal without entering basin.
- 6. Connected to power supply by power cable within valve box.
- 7. Contractor supplies plug in exterior grade timer (pump plugged in to timer within valve box).

ROCK, STONE, BASIN MODULES, AND STONE BOWL:

- 1. It is the responsibility of the water feature contractor to supply all boulders, large river rock, small river rock, river pebbles, and stone for the completion of the water feature and adjoining areas.
- 2. Multiple sizes and grades of boulders and river rock shall be integrated within the design in order to give the feature and the immediate surrounding area natural character.
- 3. Fill stone will be washed #57 or approved equal.
- 4. The stone supplied shall range in size from boulders (18-40"), TN natural stone slabs (1.5-3.5' x 1.5-3.5' x 3"), large TN river rock (8-17"), small TN river rock (4-14") and TN river pebbles (1-2").
- 5. Rainwater tank modules will be used subsurface within the basin to maximize basin capacity. Construction and bearing capacity shall be approved upon submittal.
- 6. The basin area will be filled with river stone and washed graveled as defined on the plans and as approved by the Landscape Architect.

Construction:

All work shall be completed in coordination with other site work. The contractor working on the water feature will be responsible for any damaged caused to nearby property during the construction of the water feature. Job site visits by NCDOT project engineers and designers will be made during certain construction phases of the project.

A final meeting shall be provided for the proper adjustments to be made to the water feature to meet the desired performance levels. This meeting will also be when the contractor instructs the division staff on how to properly operate and maintain the water feature and its equipment. Before final inspection of the water feature, all the following items need to be completed:

- 1. Electrical connections tested.
- 2. Hydraulic piping and fittings tested for leaks, repaired if necessary, and flushed clean.
- 3. The water basin cleaned and filled to the correct operating depth.

Industry Standards and Applicable Codes:

1. The materials shall be installed in accordance with all applicable provisions of the most recent edition of the following:

ANSI

ASTM

ASSE

ASME

AWWA

CS

NEMA

NSF

UL

NEC

OSHA

NFPA

American National Standards Institute

American Society for Testing and Materials

American Society of Sanitary Engineering

American Society of Mechanical Engineers

American Water Works Association

Commercial Standards

National Electrical Manufactures Association

National Sanitation Foundation

Underwriters Laboratory

National Electric Code

Occupational Safety and Health Act

National Fire Protection Agency

Other state or local code(s) which are applicable.

2. The above referenced guidelines shall be considered minimum standards for the materials or the installation practices applicable for the water features/waterfall system.

Shop Drawings and Submittals:

The plumbing and water supply systems noted on the plans shall be considered schematic in design. Final design specifications shall be defined and supplied by the contractor.

- 1. The contractor shall submit drawings in accordance with the conditions of the contract specifications describing the size(s), location(s), and installation details of the interconnecting piping, waterfall management equipment, and electrical systems.
- 2. The Landscape Architect may add other drawings during the period of construction as required for clarification.
- 3. This specification shall be considered an integral part of the accompanying drawings.
- 4. All pertinent information on substitute system(s), including engineering performance calculations on the pumping system(s), drainage, equipment, and electrical system diagrams and schematics, shall be provided to Engineer for review and evaluation.

- 5. Submittals for the pump, liner, underlayment, bulkheads, sealants, pump vault, rock/stone, tank modules waterfall spillway, and riser shall be provided to the Engineer/Landscape Architect for review and approval.
- 6. Material submittals for the rock and river stone shall be from a single supplier. The landscape architect can approve the material on site, or if feasible, visit the supplier for approval at the source.
- 7. Submittals shall be rejected if they are difficult to read due to poor image, drafting quality, insufficient scale, or missing data.

Submittals shall include the following:

- Shop drawings and product information for all equipment and materials furnished
- A complete material list
- An equipment space layout showing all electrical and mechanical equipment in addition to all piping and conduit
- Installation details for each piece of equipment being provided

Substitutions:

- 1. Submittals for equal substitution items shall include the following information where applicable:
- A. Operation design description.
- B. Component materials and finishes.
- C. Pump curve(s).
- D. Certification of compliance with specified codes and standards.
- 2. Proposed substitutions for equipment or material must be submitted within (30) working days prior to construction for consideration as approved equals. Proposals for substitutions shall be made only by the prime bidders in writing to the Engineer, and sub-contractors shall not make any proposals to the Landscape Architect for substitution.
- 3. Submittals of equal substitution systems or components may be rejected by the Engineer or Landscape Architect if it doesn't meet the minimal criteria set forth in the plans, contract, or specifications.

General Installation:

- 1. Protect all pipes, conduits, equipment, and other components against damage from exposure to the weather while stored during construction and after installation.
- 2. Install and connect all equipment in accordance with manufacturer's instructions and recommendations unless otherwise noted. If the specified installation in the plans is contrary to the manufacturer's instruction, cease installation of affected components or systems and notify the Engineer.
- 3. General Pipe Installation:
- A. Make all pipe runs as direct as possible using a minimum number of fittings.
- B. Flexible PVC pipe, sized and approved for the specified flow and pressure, shall be used for the feeder pipe. It shall be buried at an appropriate depth and/or protected from puncture or damage.
- C. Cut all pipe and tubing ends square. Remove rough edges and burrs.
- D. Protect all openings in piping during construction to prevent entrance of foreign matter.
- E. All connections shall be made with manufacturer approved adhesives, joint compounds, and fittings.

Guarantee:

- 1. The water feature contractor(s) shall issue a guarantee that any equipment found defective within one (1) year of the final acceptance shall be replaced at no cost to the department.
- 2. The guarantee does not extend to damage incurred through operation and maintenance by the owner. The owner will assume full responsibility for the proper operation and maintenance of the water feature(s) upon final acceptance. All mechanical water feature systems shall be furnished by the contractor unless otherwise specified.

Waterfall Sign:

The work covered by this item shall consist of furnishing and installing the new water feature sign in accordance with the dimensions and finishes as shown on the landscape site plans, sign details, and as described herein. The signage shall be 0.080 gauge, double-sided, engineering grade, reflective aluminum sign. The sign shall be brown (MUTCD color) with a

white border as shown in the detail. The sign shall be structurally sound and free of burs and sharp edges. All text shall be made of a white exterior grade vinyl. The sign shall be mounted on a galvanized steel post with galvanized mounting hardware. The exact location of the sign will be at the discretion of the engineer.

Compensation:

The waterfalls and stream water feature will be paid for as a lump sum as 'Water Feature' once properly installed and accepted by the engineer. Such price and payment will be full compensation for all work covered by this special provision including but not limited to, furnishing and installing all boulders, river rock, and other stone materials, waterfall components, electrical and water supply utility work, waterfall sign, grading, and furnishing all labor, materials, equipment, and any other incidentals necessary or required to complete the work.

Payment will be made under:	
Water Feature	<i>LS</i>

LISTING OF MBE/WBE SUBCONTRACTORS

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

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

^{**} Dollar Volume of MBE/WBE Subcontractor Percentage of Total Contract Bid Price:

If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent. If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.

LISTING OF MBE/WBE SUBCONTRACTORS

				Sheet	of
Firm Name and Address	Circle One	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name	MBE				
Address	WBE				
Name	MBE				
Address	WBE				
Name					
	MBE				
Address	WBE				
Name					
	MBE				
Address	WBE				
Name	MBE				
	MDE				
Address	WBE				
Address	WDE				
			** Dollar Volume of	MBE Subcontra	ctor \$
			MBE Percentage of To	otal Contract Bi	d Price%
			** Dollar Volume of	WBE Subcontra	actor \$
			WBE Percentage of To	otal Contract Bi	d Price%

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

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

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

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

ADDENDUM(S)

ADDENDUM #1	
I,(SIGNATURE)	representing
Acknowledge receipt of Addendum #1.	
ADDENDUM #2	
I,(SIGNATURE)	representing
Acknowledge receipt of Addendum #2.	
100000000000000000000000000000000000000	
ADDENDUM #3	
I,(SIGNATURE)	representing
Acknowledge receipt of Addendum #3.	

AWARD LIMITS ON MULTIPLE PROJECTS

It is the desire of the Proposer to be awarded contr \$, for those projects indicated below
on which bids are being opened on the same date a be indicated by placing the project number and co- selected will not be subject to an award limit.	as shown in the Proposal Form. Individual projects shall unty in the appropriate place below. Projects not
(Project Number)	(County)
*If a Proposer desires to limit the total amount of limit in the space provided above in the second limit.	work awarded to him in this letting, he shall state such e of this form.
of which is more that the above stipulated award l	successful bidder on indicated projects, the total value imits, the Board of Transportation will award me (us) total value not exceeding the award limit and which of Transportation.
	**Signature of Authorized Person
**Only those persons authorized to sign bids unde	er the provisions of Article 102-8, Item 7, shall

be authorized to sign this form.

EXECUTION OF BID

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

CORPORATION

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee 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 prequalified bidder has not been convicted of violating N.C.G.S. §133-24 within the last three years, and that the prequalified bidder intends to do the work with his own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his 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 PREQUALIFIED BIDDER

	Full name of	Corporatio	on .
	Address as P	requalifie	1
Attest	Secretary/Assistant Secretary	By	President/Vice President/Assistant Vice President
	(Select appropriate title)		(Select appropriate title)
	Print or type Signer's name		Print or type Signer's name

CORPORATE SEAL

PARTNERSHIP

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee 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 prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his 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 PREQUALIFIED BIDDER

	Full Name of Partnership
	Address as Prequalified
Signature of Witness	Signature of Partner
Print or Type Signer's Name	Print or Type Signer's Name

LIMITED LIABILITY COMPANY

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee 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 prequalified bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his 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 PREQUALIFIED BIDDER

Fi	ull Name of Firm
Add	lress as Prequalified
Signature of Witness	Signature of Member/Manager/Authorized Agent (Select appropriate Title)

JOINT VENTURE (2) or (3)

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee 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 prequalified bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor. By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his 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 PREQUALIFIED BIDDER

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.

Name of Joint Venture				
	Name of Contractor			
	Address as Prequalified			
	BY			
Signature of Witness or Attes		Signature of Contractor		
Print or Type Signer's Name		Print or Type Signer's Name		
If Corporation, affix Corpora	ate Seal AND			
	Name of Contractor			
	Address as Prequalified			
	BY			
Signature of Witness or Attes	t	Signature of Contractor		
Print or Type Signer's Name		Print or Type Signer's Name		
If Corporation, affix Corpora	tte Seal AND			
	Name of Contractor			
	Address as Prequalified			
	BY			
Signature of Witness or Attes	et —	Signature of Contractor		
Print or Type Signer's Name		Print or Type Signer's Name		

If Corporation, affix Corporate Seal

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee 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 prequalified bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his 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 PREQUALIFIED BIDDER

Name of Prequalified Bidder	Individual Name		
Trading and Doing Business As	Full name of Firm		
Addr	ress as Prequalified		
Signature of Witness	Signature of Prequalified Bidder, Individual		
Print or Type Signer's Name	Print or Type Signer's Name		

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee 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 prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his 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 PREQUALIFIED BIDDER

Name of Prequalified Bidder	
	Print or Type Name
	address as Prequalified
	Ci
	Signature of Prequalified Bidder, Individually
	Print or type Signer's Name
Cinnatura of With and	
Signature of Witness	
Print or type Signer's name	

DEBARMENT CERTIFICATION

Conditions for certification:

- 1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation filed with the Department, or has become erroneous because of changed circumstances.
- 2. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
- 3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
- 4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273)* provided by the Department, without subsequent modification, in all lower tier covered transactions.
- 5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
- 6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion 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.
 certification.

North Carolina Department of Transportation PURCHASE ORDER CONTRACT BID FORM

Work Order: 15RE.15.3

Description: Warren County Rest Area and Welcome Center Courtyard Renovation

County: Warren

ITEM	SECT	DESCRIPTION	QTY	UNIT	UNIT PRICE	AMOUNT BID
					(\$)	(\$)
1	1670	Magnolia 'Jane' (Jane Magnolia), 6-7', B&B	1	EA		
2	1670	Abelia x grandiflora 'Radiance', (Radiance Abelia), 18-24", #3	21	EA		
3	1670	Distylium 'PIIDIST-V', (Cinnamon Girl Distylium) 15-18", #3	50	EA		
4	1670	Fothergilla gardenii, (Dwarf Fothergilla), 15-18", #3	25	EA		
5	1670	Hydrangea paniculata 'Little Quick Fire',(Little Quick Fire Panicle Hydrangea), 18-24", #3	33	EA		
6	1670	llex vomitoria 'Stoke's Dwarf', (Stoke's Dwarf Yaupon Holly), 18-24", #3	26	EA		
7	1670	Prunus laurocerasus 'Otto Luyken' (Otto Luyken English Laurel), 18-24", #3	27	EA		
8	1670	Rhodendron 'Conleb', (Encore Autumn Embers Azalea), 18-24", #3	13	EA		
9	1670	Rhodendron 'Roblev', (Encore Autumn Ivory Azalea), 18-24", #3	18	EA		
10	SP	Cynodon dactylon x C.transvaalensis, (TifTuf Bermuda)	306	SY		
11	1670	Liriope muscari 'Big Blue', (Big Blue Lilyturf), 6-12", #1 Cont.	322	EA		
12	1670	Muhlenbergia capillaris, (Pink Muhly Grass), 18-24", #3	34	EA		
13	1670	Phlox subulata 'Drummond's Pink', (Drummond's Pink Creeping Phlox), 6-12", #1 Cont.	56	EA		
14	1670	Rudbeckia fulgida var. sullivantii 'Goldsturm', (Goldstrum Black-Eyed Susan), 6-12", #1 Cont.	38	EA		
15	1670	Sporobolus heterolepis 'Tara', (Dwarf Prairie Dropseed), 6-12",#1 Cont.	22	EA		
16	1670	Existing Plant Bed Removal	1281	SY		
17	SP	Monthly Establishment	18	EA		
18	SP	Mulch for Planting (4" depth)	93	CY		

19	SP	Pre emergence Herbicidal Treatment	839	SY	
20	SP	Post emergence Herbicidal Treatment	839	SY	
21	1651	Selective Tree Removal (6")	5	EA	
22	1651	Selective Tree Removal (10")	5	EA	
23	1651	Selective Tree Removal (15")	2	EA	
24	SP	Selective Tree Transplanting	1	EA	
25	SP	Water for Planting	13	m/g	
26	846	2'-6" Concrete Curb and Guitter	10	LF	
27	848	4" Concrete Sidewalk	857	SY	
28	848	6" Concrete Driveway	28	SY	
29	SP	Bollards	11	EA	
30	SP	Brick Veneer Seat Wall	63	LF	
31	SP	Chapel Hill Grit Stone	0.33	TON	
32	SP	Cigarette Snuffer	2	EA	
33	SP	Compost Filter Sock Inlet Protection	33	LF	
34	848	Concrete Curb Ramp	2	EA	
35	SP	Concrete Steps w/ Hand Rail	1	LS	
36	SP	Demolition	1	LS	
37	SP	Edging	15	LF	
38	SP	Landscape Grading	1	LS	
39	800	Mobilization	1	LS	
40	SP	Parking Stops	4	EA	

41	SP	Topsoil	13	CY	
42	SP	Tree Protection Fence	594	LF	
43	SP	Water Feature	1	LS	

TOTAL BID FOR PROJECT:		