

TOWN OF CLAYTON

CONTRACT PROPOSAL

TIP NUMBER: U-5530 LA, U-5530 LB **WBS NUMBER:** 44111.1.F6 & 44111.1.F5 **FA:** STPDA-0406(8) & STPDA-0406(7)

COUNTY: Johnston

DESCRIPTION: SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING - The project generally includes 1.41 total miles of trail construction, consisting of 1.34 miles of new 10-foot-wide asphalt trail construction, 270 linear feet of new 10 foot wide wooden boardwalk construction, 60 linear feet of new steel bridge construction, pedestrian culvert, roadwork, associated clearing, drainage, erosion control, and signage.

DATE OF ADVERTISEMENT: September 30, 2018

PRE-BID MEETING: Thursday, October 11, 2018 11:00 AM(Local Time), TOWN OF CLAYTON COUNCIL CHAMBERS, 111 E SECOND STREET CLAYTON, NC 27520 BID OPENING: Thursday, November 1, 2018, 2:00 PM (Local time), TOWN OF CLAYTON COUNCIL CHAMBERS 111 E SECOND STREET CLAYTON, NC 27520

*** NOTICE ***

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. FOR CONTRACTS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD, BIDDERS ARE REQUIRESD TO BECOME LICENSED BY THE NC LICENSING BOARD. NON-LICENSED BIDDERS ARE PERMITED 60 DAYS AFTER BID OPENING TO OBTAIN PROPER LICENSING FOR THE TYPE OF PROJECT BEING LET. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA.

NAME OF BIDDER

ADDRESS OF BIDDER

laxton

RETURN BIDS TO: Town of Clayton

Attention: Rich Capolla, P.E. **Person's Title:** Town Engineer

Physical Address: TOWN OF CLAYTON COUNCIL CHAMBERS 111 E SECOND STREET

CLAYTON, NC 27520

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

Project Name: SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING

Project No.: U-5530 LA, U-5530 LB

CERTIFICATION

I HEREBY CERTIFY THAT THE SPECIFICATIONS CONTAINED HEREIN AND THE ACCOMPANYING PLANS AND SPECIFICATIONS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.



BY: Greenway Engineer for U-5530 LA Jeffrey W. Moore, PE

> Kimley-Horn and Associates, Inc. 421 Fayetteville Street Suite 600 Raleigh, NC 27601 License F-0102



BY: Greenway Engineer for U-5530 LB Graham Bruns, PE

> Stewart, Inc. 421 Fayetteville Street Suite 400 Raleigh, NC 27601 License C-1051

SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING U-5530 LA, U-5530 LB

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REINFORCED CONCRETE DECK SLAB (BRIDGE)	
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*** All page numbers are to print pages**

NCDOT STANDARD NOTES (Federal Aid)

01/02/18

- A. <u>NCDOT Standard Specifications</u> The 2018 North Carolina Department of Transportation Standard Specifications for Roads and Structures, herein referred to as the 'Standard Specifications', and the 2018 Roadway Standard Drawings, shall apply to all portions of this project except as may be modified by this document.
- B. <u>Bidder Prequalification</u> Bidders are required to be prequalified with NCDOT for their specific discipline. Contractors wishing to become prequalified may obtain information through the NCDOT website at: https://connect.ncdot.gov/business/Pages/default.aspx
- C. <u>Disadvantaged Business Enterprise References</u> Since this is a Federal-aid project with DBE participation, only those requirements and goals set forth by NCDOT Goal Setting Committee are applicable. References to any other requirements or to N.C. General Statute 143-128.2 shall <u>not</u> apply to this project. Refer to Special Provision SP1 G63.
- D. <u>Award of Contract</u> The contract will be awarded to the lowest responsible, responsive bidder. Alternate items will not be considered in determining the low bidder and will only be evaluated after the award of the contract is made.
- E. <u>Contractor Licensing</u> On all Federal-aid contracts, non-licensed contractors are permitted to submit bids, however they must be licensed prior to performing any work. Bidders are permitted 60 days, after bid opening, to become licensed by the North Carolina Licensing Board. If they fail to do so within 60 days, their bid will be considered non-responsive and will be rejected. If the successful bidder does not hold the proper license to perform any plumbing, heating, air conditioning, or electrical work in this contract, he will be required to sublet such work to a contractor properly licensed in accordance with *Article 2 of Chapter 87 of the General Statutes* (licensing of heating, plumbing, and air conditioning contractors) and *Article 4 of Chapter 87 of the General Statutes* (licensing of electrical contractors).
- F. <u>Bonds</u> Please note that all Bid Bonds, Payment Bonds, and Performance Bonds required for this project, shall be those found on the NCDOT website. The bonds are located at: Bid Bonds (M-5):

 $\underline{https://connect.ncdot.gov/municipalities/Bid\%20Proposals\%20for\%20LGA\%20Conten}{t/04\%20Bid\%20Bonds.doc}$

Payment Bonds (M-6):

 $\underline{https://connect.ncdot.gov/municipalities/Bid\%20Proposals\%20for\%20LGA\%20Content/05\%20Payment\%20Bonds.doc}$

Performance Bonds (M-7):

 $\underline{https://connect.ncdot.gov/municipalities/Bid\%20Proposals\%20for\%20LGA\%20Conten}\\ \underline{t/06\%20Performance\%20Bonds.doc}$

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

INSTRUCTIONS TO BIDDERS

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

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

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

- 11. THE PROPOSAL WITH THE BID FORM STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED AT Town of Clayton ATTENTION: Rich Capolla, P.E. at TOWN OF CLAYTON COUNCIL CHAMBERS 111 E SECOND STREET CLAYTON, NC 27520, BY 2:00 PM ON, **Thursday**, November 1, 2018.
- **12.** The sealed bid must display the following statement on the front of the sealed envelope:

"QUOTATION FOR — SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING TO BE OPENED AT 2:00 PM ON **Thursday November 1, 2018**

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

Town of Clayton
Attn: Rich Capolla, P.E.
111 E Second Street
Clayton, NC 27520

ALLOWABLE CHANGES TO THE NCDOT 2018 STANDARD SPECIFICATIONS

01/02/18

- 1. Article 102-1 Invitation to Bid, page 1-9, delete this section in its entirety.
- 2. Subarticle 102-8(B) Electronic Bids, page 1-15, delete this section in its entirety.
- 3. Article 102-10 Bid Bond or Bid Deposit, page 1-17, line 38, "60" days shall be modified to "days.
- 4. Subarticle 102-12(A) Paper Bid, page 1-18, line 37, the reference to "Contract Officer" shall be changed to "..."
- 5. Subarticle 102-12(B) Electronic Bid, page 1-18, delete this section in its entirety.
- 6. Subarticle 103-2(B) Electronic Bids, page 1-22, delete this section in its entirety.
- 7. Subarticle 103-3(A) Criteria for Withdrawal of Bid, page 1-22, modify the reference "G.S.136-28.1" to "G.S.143-129.1". On page 1-23, in that same subarticle under (5), line 11, modify "State Contract Officer" to "——".
- 8. Article 103-7 Contract Bonds, page 1-30, line 5, modify "14" calendar days to "10" calendar days per G.S.143-129.
- 9. Article 103-9, Failure to Furnish Contract Bonds, page 1-30, line 15, modify "14" calendar days to "10" calendar days per G.S.143-129.
- 10. Article 105-9 Construction Stakes, Lines and Grades, page 1-48, delete this section in its entirety and substitute the following: "The Municipality will <u>not</u> set the stakes, lines or grades for this project."
- 11. Article 107-5 Encroachment on Right of Way, page 1-58, in line 11, change the word "entity" to "municipality".
- 12. Article 108-2, Progress Schedule, page 1-68, add the following requirement as subarticle (D) on page 1-69: "The municipality may add additional requirements as noted in the bid proposal".
- 13. Article 108-3, Preconstruction Conference, page 1-69, line 20, change "Division Engineer" to "_____".
- 14. Article 108-4, Construction Conferences, page 1-69, line 28, change "Resident Engineer" to "_____".
- 15. Article 109-8, Fuel Price Adjustments, page 1-87, delete this article in its entirety and substitute the following: "Fuel Price Adjustments will not apply to this project."
- 16. Article-620-4, Measurement and Payment, page 6-33, delete lines 38 through line 20 on page 6-34 and substitute the following: "Asphalt Price Adjustments will <u>not</u> apply to this project."

NOTICE TO BIDDERS

Sealed Bids will be received by the Town of Clayton, at TOWN OF CLAYTON COUNCIL CHAMBERS 111 E SECOND STREET CLAYTON, NC 27520 until 2:00 PM, local prevailing time of November 1, 2018, and then at said place be publicly opened and read aloud for the following:

SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING NCDOT TIP: U-5530 LA, U-5530 LB

The project generally includes 1.41 total miles of trail construction, consisting of 1.34 miles of new 10-foot-wide asphalt trail construction, 270 linear feet of new 10 foot wide wooden boardwalk construction, 60 linear feet of new steel bridge construction, pedestrian culvert, roadwork, associated clearing, drainage, erosion control, and signage.

No bid shall be considered or accepted by Town of Clayton unless at the time of its filing the same shall be accompanied by a deposit with Town of Clayton of cash, or a cashier's check or a certified check drawn on a bank or trust company insured by the Federal Deposit Insurance Corporation, in an amount equal to not less than five percent of the Proposal. In lieu of making the deposit as above provided, such Bidder may file a Bid Bond executed by a corporate surety licensed under the laws of the state of North Carolina to execute such bonds; conditioned that the surety will upon demand forthwith Contract in accordance with the Bid Bond. If upon acceptance of his Bid, a Bidder fails to enter into a Contract with Town of Clayton, the Bid deposit shall be forfeited to and become the property of Town of Clayton.

A separate performance bond and payment bond each in an amount equal to one hundred percent of the Contract price will be required. Carriers must be authorized to do business in the state of North Carolina.

Any contractor doing work on the project shall be prequalified by NCDOT for the specific type of work they are providing.

THE FOLLOWING FORMS AND DOCUMENTATION SHALL BE COMPLETELY FILLED OUT AND SUBMITTED WITH THE BIDS.

- 1. Proposal
- 2. Certified List of Material Manufacturers
- 3. Certification Affidavit
- 4. Contractor's Certificates Affidavit of Organization and Authority and Sworn Statement
- 5. Non-Discrimination Clause
- 6. E-Verify Affidavit
- 7. Acknowledgement
- 8. Notice To Contractor Regarding Intrusions Beyond Project Limits
- 9. Execution of Bid-Non-Collusion Affidavit, Debarment Certification and Gift Ban Certification
- 10. Listing of DBE Subcontractors

11. Documentation of NCDOT prequalification shall be provided with the bid as a separate attachment.

Bidders must conform with the provisions of the North Carolina Contractor's Licensing Act of 1925, as amended.

The Owner reserves the right to reject any Proposal for failure to comply with all the requirements of this Notice or of any of the Contract Documents; however, it may waive any minor defects of informalities at its discretion. The Owner further reserves the right to reject any and all Proposals or to Award the contract, which in its judgment is in the best interest of the Owner.

The Contract is to be awarded to the lowest responsible, responsive bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents, is judged to be reasonable, and does not exceed the funds available. The low bidder shall be determined based upon the lowest bid amount for those items that comprise the base amount. Bid Alternate Items may be included in the bid sheet but shall not be considered as part of the base bid. Only after the low bidder is determined shall bid alternate items be considered. The owner reserves the right to select any Alternate or combination of Alternate items.

All prospective bidders are strongly urged to attend the Pre-Bid Conference. The pre-bid conference will be held at the TOWN OF CLAYTON COUNCIL CHAMBERS, 111 E SECOND STREET CLAYTON, NC 27520 on **Thursday, October 11, 2018 11:00 AM**., local prevailing time, to discuss the project and answer pertinent questions from prospective bidders.

Contract Documents may be examined at the following locations:

Town of Clayton 111 E Second Street, Clayton, NC 27520

Accent Imaging, Raleigh, 919-782-3332

Copies of the Contract Documents may be obtained at Accent Imaging or using their online plan room. The Non Refundable Purchase of entire bid set includes all plans and specifications, including addenda released at time of order. Future addenda will be issued by plan room to plan holders. Payment should be made directly to Accent Imaging.

Accent Imaging will maintain an official plan holders list. Please contact Accent Imaging at 919-782-3332 to be added to this list if plans are received from any other source.

Questions may be directed to: Ed Lynch at Stewart, Inc., elynch@stewartinc.com or 919-866-4774 for U-5530 LB and Jeff Moore, at Kimley-Horn and Associates, Inc., jeff.moore@kimley-horn.com or 919-677-2000 for U-5530 LA.

Neither the Owner nor the Engineer will be responsible for full or partial sets of Contract Documents, including any Addendum obtained from any other source.

Bidders must certify that they do not and will not maintain or provide for their employees any facilities that are segregated on a basis of race, color, creed or any national origin and so certify with the form included in the Proposal..

Contract No.		Rev. 7-25-	17
County			

STATE OF NORTH CAROLINA

Town of Clayton Clayton, NC 27520

		BID BON	ND
Principal:			
Surety:		Name	of Principal Contractor
Surcty.			Name of Surety
Contract Number:			County:
Date of Bid:			
and SURETY above (5) percent of the to	named, are held and tal amount bid by the e, we bind ourselves,	I firmly bound unto the Principal for the pro	RINCIPAL CONTRACTOR (hereafter, PRINCIPAL) e Town of Clayton in the full and just sum of five ject stated above, for the payment of which sum well administrators, and successors, jointly and severally,
after the opening of of Clayton shall a notice of award is performance of the prosecution of the accordance with the conditions and oblig a final determination determination is ma requirements set for Article 103-3, or af- required and to prove	the bids, or within survard a contract to the received by him, procontract and for the work. In the event at provisions of Artications of this Bid Both to either allow the bide to award the contract award of the contract the required bond in the bide to award the contract award of the contract award of the contract the required bond in the contract award of the contract award a	ach other time period are Principal, the Principal protection of all persetthe Principal requests cle 103-3 of the Stand shall remain in full bid to be withdrawn or attract, the Principal withdrawn areact has been made fare	ncipal shall not withdraw its bid within sixty (60) days as may be provided in the proposal, and if the Town ipal shall, within ten (10) calendar days after written od and sufficient surety, as required for the faithful ons supplying labor, material, and equipment for the sepermission to withdraw his bid due to mistake in indard Specifications for Roads and Structures, the force and effect until the Town of Clayton makes to proceed with award of the contract. In the event a nall have ten (10) calendar days to comply with the aws its bid after bids are opened except as provided in ails to execute such additional documents as may be itod specified above, then the amount of the bid bond ted damages.
IN TESTIMONY W	HEREOF, the Princip	pal and Surety have ca	aused these presents to be duly signed and sealed.
This the day	of	, 20	
			Surety
		By	
		- J <u></u>	General Agent or Attorney-in-Fact Signature
	Seal of Surety		

Print or type Signer's Name

County		Rev. 7-25-17
	BID BOND	
	CORPORATION	
	SIGNATURE OF CONTRACTOR (Pr	incipal)
	Full name of Corporation	1
	Address as prequalified	
	BySignature of Preside	ent, Vice President, Assistant Vice President Select appropriate title
		Print or type Signer's name
	Affix Corporate Seal	
Attest		
	Signature of Secretary, Assistant Secretary Select appropriate title	
	Print or type Signer's name	

Contract No.		
County		

BID BOND

LIMITED LIABILITY COMPANY

	SIGNATURE OF CONTRACTOR (Principal)	
Name of Contractor		
	Full name of Firm	
	Address as prequalified	
Signature of Member/		
Manager/Authorized Agent	Individually	
	Duint on tyma Cianau'a nama	
	Print or type Signer's name	

Contract No.		
County		

BID BOND

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor	
	Individual Name
Trading and doing business as	
	Full name of Firm
	Address as prequalified
Signature of Contractor	
	Individually
	Print or type Signer's name
Signature of Witnes	S S
Print or type Signer's n	ame

Contract No.		
County		

BID BOND

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

SIONA	TOKE OF CONTRACTOR (Finicipal)
Name of Contractor	
	Print or type Individual Name
	Address as prequalified
Signature of Contractor _	Individually
	•
-	Print or type Signer's name
	Time of type Signer's name
Signature of Witne	
Signature of Witne	ess
Print or type Signer's	name

Contract No.				Kev. 7-25-17
County		_		
	В	ID BOND		
	PAR	RTNERSHI	IP	
	SIGNATURE OF	CONTRACTO	TOR (Principal)	
	Full na	me of Partne	nership	
	A January Company of the Australia of th		olic o 1	
	Addre	ss as prequa	аппес	
		Ву		
			Signature of Partner	
			Print or type Signer's nam	e
- 5	Signature of Witness	_		
Prin	nt or type Signer's name	_		

Contract No.		
County		

BID BOND JOINT VENTURE (2 or 3)

SIGNATURE OF CONTRACTORS (Principal)

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

	Name of Joint Venture	;
	Name of Contractor	
-	Address as prequalified	I
Signature of Witness or Attest	By	Signature of Contractor
Print or type Signer's name		Print or type Signer's name
If Corporation, affix Corporate Seal		
	and	
	Name of Contractor	
	Address as prequalified	1
	1 1	
Signature of Witness or Attest	Ву	Signature of Contractor
Print or type Signer's name		Print or type Signer's name
If Corporation, affix Corporate Seal		
	and	
Name o	of Contractor (for 3 Joint V	enture only)
- Traine o	Address as prequalified	
	. Idaress as prequame	-
Signature of Witness or Attest	By	Signature of Contractor
Signature of Whitess of Fittest		

If Corporation, affix Corporate Seal

Contract No.	
County	

Town of Clayton

CONTRACT PAYMENT BOND

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

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

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

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

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

CONTRACT PAYMENT BOND

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

Contract No.	
County	

	CONTRACT PAYMENT B	OND
	CORPORATION	
	SIGNATURE OF CONTRACTOR (F	Principal)
	Full name of Corporation	on
	Address as prequalified	d
	Ву	
		dent, Vice President, Assistant Vice President Select appropriate title
		Print or type Signer's name
	Affix Corporate Seal	
Attest		
	Signature of Secretary, Assistant Secretary Select appropriate title	
	Print or type Signer's name	

CONTRACT PAYMENT BOND

	LIMITED LIABILITY COMPANY
	SIGNATURE OF CONTRACTOR (Principal)
Name of Contractor	
	Full name of Firm
	Address as prequalified
	By:
	Signature of Member, Manager, Authorized Agent Select appropriate title

Print or type Signer's name

CONTRACT PAYMENT BOND

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor	
	Individual Name
Trading and doing business as	
	Full name of Firm
_	Address as prequalified
Signature of Contractor	T 1' '1 11
	Individually
-	Driet outeurs Sienser's name
	Print or type Signer's name
Signature of Witness	
Print or type Signer's na	me

Contract No.	
County	

CONTRACT PAYMENT BOND

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor			
	Print or type Individual name		
	Address as prequalified		
Signature of Contractor			
	Individually		
	Print or type Signer's name		
Q! AWY			
Signature of Witne	SS		
Print or type Signer's	name		

Contract No.	
County	

CONTRACT PAYMENT BOND

CONTRACTIATI	MENT DOND	
PARTNERSHIP		
SIGNATURE OF CONTR.	ACTOR (Principal)	
Full name of P	Partnership	
	1100 1	
Address as pro	equalified	
	By	
	Signature of Partner	
	Print or type Signer's name	
Signature of Witness		
Signature of Williams		
Print or type Signer's name		
rimi of type Signer's name		

U-5530 LA, U-5530 LB SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING

Contract No.	
County	

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

SIGNATURE OF CONTRACTORS (Principal)

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

(1)			
		Name of Joint Venture	
(2)			
		Name of Contractor	
		A 11 11 (* 1	
		Address as prequalified	
	Signature of Witness or Attest	Ву	Signature of Contractor
	Print or type Signer's name		Print or type Signer's name
	If Corporation, affix Corporate Seal		
		and	
(3)			
		Name of Contractor	
		Address as prequalified	
		_	
	Signature of Witness or Attest	Ву	Signature of Contractor
	Print or type Signer's name	<u> </u>	Print or type Signer's name
	If Corporation, affix Corporate Seal		
	3 1 33 1	1	
		and	
(4)	Name	of Contractor (for 3 Joint Ve	nture only)
	- Traine		
		Address as prequalified	
	Signature of Witness or Attest		Signature of Contractor
	Print or type Signer's name	_	Print or type Signer's name

CONTRACT PAYMENT BOND

Attach certified copy of Power of Attorney to this sheet

Contract No.	
County	

Town of Clayton

CONTRACT PERFORMANCE BOND

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

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

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

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

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being

Contract No.	
County	

hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Contract No.	
County	

CONTRACT PERFORMANCE BOND

Affix Seal of Surety Company	-	Print or type Surety Company Name
	Ву	Print, stamp or type name of Attorney-in-Fac
		Time, stamp of type name of Attorney-m-r ac
	-	Signature of Attorney-in-Fact
		Signature of Attorney-III-1 act
Signature of Witness		
Print or type Signer's name		
	-	Address of Attorney-in-Fact

Contract No.	
County	

	CONTRACT PERFORMANC	E BOND
	CORPORATION	
	SIGNATURE OF CONTRACTOR (Principal)
	Full name of Corporati	on
	Address as prequalifie	ed .
	Ву	
		ident, Vice President, Assistant Vice President Select appropriate title
		Print or type Signer's name
	Affix Corporate Seal	
Attest		
	Signature of Secretary, Assistant Secretary Select appropriate title	
-		
	Print or type Signer's name	

CONTRACT PERFORMANCE BOND

LIMITED LIABILITY COMPANY

Name of Contractor

Full name of Firm

Address as prequalified

By:

Signature of Member, Manager, Authorized Agent
Select appropriate title

Print or type Signer's name

Contract No.	
County	

CONTRACT PERFORMANCE BOND

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor			
	Individual Name		
Trading and doing business as			
<u> </u>	Full name of Firm		
	Address as prequalified		
Signature of Contractor			
	Individually		
	Print or type Signer's name		
Cinnotono of Witness			
Signature of Witness			
Print or type Signer's name	<u> </u>		

Contract No.			
County	·		

CONTRACT PERFORMANCE BOND

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

SIGNATURE OF CONTRACTOR (Principal)

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

Contract No.	
County	

Rev. 4-19-11

CONTRACT F	PERFORMANCE BOND
PA	RTNERSHIP
SIGNATURE OI	F CONTRACTOR (Principal)
Full n	name of Partnership
	1101
Addr	ress as prequalified
	_
	By Signature of Partner
	Signature of Fatther
	Print or type Signer's name
	71 2
Signature of Witness	_
	<u></u>
Print or type Signer's name	

U-5530 LA, U-5530 LB SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING

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

SIGNATURE OF CONTRACTORS (Principal)

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

1)			
-		Name of Joint Venture	
2)			
-		Name of Contractor	
-			
		Address as prequalified	
-	Signature of Witness or Attest	By	Signature of Contractor
-	Print or type Signer's name		Print or type Signer's name
	If Corporation, affix Corporate Seal		
		and	
-		Name of Contractor	
-		Address as prequalified	
-	Signature of Witness or Attest	By	Signature of Contractor
-	Print or type Signer's name	<u> </u>	Print or type Signer's name
	If Corporation, affix Corporate Seal		
		and	
-	Name	of Contractor (for 3 Joint Ve	nture only)
-		Address as prequalified	
-	Signature of Witness or Attest	By	Signature of Contractor
-	Print or type Signer's name	<u> </u>	Print or type Signer's name
	If Corporation, affix Corporate Seal		

CONTRACT PERFORMANCE BOND

Attach certified copy of Power of Attorney to this sheet

LISTING OF DBE SUBCONTRACTORS

			Sheet	_ of
Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Address				
Name				
Name				
Address				
Name				
Address				
Name				
Address				
Audicos				

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

^{**} Dollar Volume of DBE 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 DBE SUBCONTRACTORS Sheet of						
Firm Name and Address	Item No.	Item Description	* Agreed upon Unit Price	** Dollar Volume of Item		
Name						
Address						
Name						
Address						
Name						
Address						
Name						
Address						
Name						
Address						
Name						
Address						
	1	1	1	ı		

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

** Dollar ` \$	Volume 	e of DB.	E Subco	ntractor
Percentag	e of Tot %	tal Con	tract Bio	l Price

^{**} Dollar Volume of DBE 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 Upo	n Amount from Letter of Intent

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EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

CORPORATION

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

		Full name of C	Corpo	ration
		Address as Pr	requal	ified
Attest		I	Зу	
_	Secretary/Assistant Secretary Select appropriate title		<i>,</i> –	President/Vice President/Assistant Vice President Select appropriate title
	Print or type Signer's name		_	Print or type Signer's name
				CORPORATE SEAL
	AFFIDA	VIT MUST I	BE N	NOTARIZED
Subscribe	ed and sworn to before me	this the		
da	y of	20 .		
	<i></i>			NOTARY SEAL
	Signature of Notary Public			
of		_County		
State of _				
My Com	mission Expires:			

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

PARTNERSHIP

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S.* § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

	Full Name of Partnership	
	Address as Prequalified	
	Ву	Signature of Partner
Signature of Witness		Signature of Partner
Print or type Signer's name		Print or type Signer's name
Time of type signers manie		Time of type Signer's manie
AFFIDAV	IT MUST BE NO	ΓARIZED
AFFIDAV Subscribed and sworn to before me thi		ΓARIZED NOTARY SEAL
Subscribed and sworn to before me thi	s the	
	s the	
Subscribed and sworn to before me thi	s the 20	

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My Commission Expires:		

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

LIMITED LIABILITY COMPANY

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

Full Name	of Firm
Address as Pr	equalified
Signature of Witness	Signature of Member/Manager/Authorized Agent
Digitate of Willess	Select appropriate title
Print or type Signer's name	Print or type Signer's Name
AFFIDAVIT MUST E	BE NOTARIZED
Subscribed and sworn to before me this the	NOTARY SEAL
day of 20	
Signature of Notary Public	
·	
Signature of Notary Public OfCounty State of	

Contract No		Rev. 11-1-12
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County

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

JOINT VENTURE (2) or (3)

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Instructions: **2 Joint Venturers** Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1)				
		Name of Joint Venture		
(2)		Name of Contractor		
		Address as Prequalified		
	Signature of Witness or Attest	Ву		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(3)		Name of Contractor		
		Address as Prequalified		
	Signature of Witness or Attest	By		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
	If Corporation, affix Corporate Seal	and		
(4)		Name of Contractor (for 3 Joint Ven	ture only)	
	-	Address as Prequalified		_
		Address as Frequantica		
	Signature of Witness or Attest	Ву		Signature of Contractor
	Print or type Signer's name			Print or type Signer's name
ARY SEA	If Corporation, affix Corporate Seal	NOTARY SEAL		NOTARY
ıvit must	t be notarized for Line (2)	Affidavit must be notarized for Line		Affidavit must be notarized for Line (4)
	nd sworn to before me this20	Subscribed and sworn to before meday of		Subscribed and sworn to before me thisday of20
	Notary PublicCounty	Signature of Notary Public of	County	Signature of Notary Public ofCour
of		State of		State of

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My Commission Evniras	My Commission Evniros	My Commission Evnires

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County	M-4	

11-1-12

EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

	TIMETOTOR
Name of Contractor	
	Individual name
Trading and doing business as	
	Full name of Firm
Address as Prequ	nalified
Signature of Witness	Signature of Contractor, Individually
Print or type Signer's name	Print or type Signer's name
AFFIDAVIT MUST BE	NOTARIZED
ubscribed and sworn to before me this the	NOTARY SEAI
day of 20	
·	
Signature of Notary Public	
ofCounty	
County	
•	
state of	
·	

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EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

The person executing the bid, on behalf of the Bidder, being duly sworn, solemnly swears (or affirms) that neither he, nor any official, agent or employee of the bidder has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the Bidder intends to do the work with its own bonafide employees or subcontractors and is not bidding for the benefit of another contractor.

In addition, execution of this bid in the proper manner also constitutes the Bidder's certification of status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF CONTRACTOR

Name of Contractor		
	Prin	nt or type Individual name
	Address as Preq	walifiad
	Address as Freq	uannea
		Signature of Contractor, Individually
		Print or type Signer's Name
Signature of	Witness	
Print or type Sig	ner's name	
	AFFIDAVIT MUST BI	E NOTARIZED
ubscribed and sworn to b	efore me this the	NOTARY SEAL
day of	20	
Signature of Nota	ry Public	
of	County	
State of		

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My Commission Expires:		

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County	

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DEBARMENT CERTIFICATION

Conditions for certification:

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

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DEBARMENT CERTIFICATION

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

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

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

Failure to submit a non-collusion affidavit and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.	cation
-----------------------------------------------------------------	--------

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

	CONTRACT:		NAME OF BIDDER:				
	undersigned intends to perform work in equent award of contract by the Local Pub		vith the above contract upon execution of the bid	and			
							
	City	State	Zip				
	Minority Women E	Susiness Enter	that apply: erprise (MBE) prise (WBE) Enterprise (DBE)				
Tran MBI subse descr	sportation. The above named subcontract E/WBE/DBE Commitment Items sheet, in equent award of contract by the Local Pub.	or is prepare connection lic Agency. The Total for S	ractor is certified by the North Carolina Departmed to perform the described work listed on the attawith the above contract upon execution of the bid ne above named subcontractor is prepared to perform subcontractor Price identified on the MBE/WBE/	iched l and m the			
	mitment Total based on estimated Unit Pr mitment Items sheet:	_					
	Amount S	S					
Quan proje the p quan	ntities. This commitment total is based on ect is completed. Final compensation will bursuance of work. The above listed amount	estimated qua be based on a nt represents t	the Commitment Total estimated for the Unit Price intities only and most likely will vary up or down a ctual quantities of work performed and accepted do the entire dollar amount quoted based on these estimates of non-written representations shall serve to	s the uring nated			
			ontract between the two parties. A separate subcontr of the bidder and the MBE/WBE/DBE subcontractor				
Affiı	rmation						
	above named MBE/ WBE/ DBE subcontr nated dollar value as stated above.	actor affirms	that it will perform the portion(s) of the contract for	r the			
Nan	ne of MBE/ WBE/ DBE Subcontractor	Na	ne of Bidder				
Sign	nature / Title	Sig	nature / Title				
Date	Date Date						

PROPOSAL

TO:	CityCouncil of Town of Clayton, NORTH CAROLINA
FROM:	BIDDER
	ADDRESS
	·
DATE OF BI	'D: , 2018
supplies, etc.,	ned hereby signifies that it is (his/their) intention and purpose to enter into a ct with Town of Clayton to furnish all labor, materials, tools, equipment, apparatus, required and to do all the work necessary for and because of the construction, or installation of the proposed
	SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING NCDOT TIP: U-5530 LA, U-5530 LB
Notice to Bid Conditions an Plans and/or I of the Notice	layton in accordance with the Consulting Engineers' Specifications; the terms of the ders (copy of which is bound herein); the foregoing Instructions to Bidders, General d Specifications; this Proposal; the following forms of Contract and Bonds; and the Prawings, including Addenda Nos. * ; and pursuant with the requirements and Instructions to Bidders. There is deposited, herewith, cash, a certified check in :
	Dollars (\$
to the CityCo	Dollars (\$), in the amount of five percent of the total aggregate amount of this Bid made payable uncil of Town of Clayton, the same to be refunded to the undersigned under the and in accordance with the terms of this Proposal which are as follows:
* Fill i	n appropriate Addenda number.

THAT: The undersigned has carefully examined the Plans and Specifications and all other Contract Documents and fully understands them.

THAT: The undersigned has carefully examined the site of the Project and is familiar with the conditions under which the work, or any part thereof, is to be performed and the conditions which must be fulfilled in furnishing and/or installing, erecting or constructing any or all items of the Project.

THAT: The undersigned will provide all necessary tools, machinery, equipment, apparatus, and all other means necessary to do all the work and will furnish all labor, materials and all else required to complete such Contract as may be entered into, in the manner prescribed in and in accordance with the terms of the Specifications and Contract and in accordance with the true intent and meaning thereof, and in accordance with the Plans and/or Drawings and the requirements of the Engineer under them, in a first class manner.

THAT: The rights of the Owner and the recommendations of the Engineer are not to be questioned in the Award of Contracts.

THAT: It is the intention of the CityCouncil to let Contracts on a basis of the Bids received in accordance with GS 143-129 and in such manner as they may deem to be for the best interests of the Owner.

THAT: The Owner reserves the right to reject any or all Proposals.

THAT: The Contract is to be awarded to the lowest responsible, responsive bidder, provided the Bid has been submitted in accordance with the requirements of the Bidding Documents, is judged to be reasonable, and does not exceed the funds available. The project includes three alternatives. Bids will be evaluated on the Base Bid. The Owner may decide to implement any or all Alternatives if it is determined to be in the Owner's best interest.

THAT: On being awarded the Contract, the undersigned will execute a Performance Bond and a Payment Bond, on the forms included herein, each equal to one hundred percent of the Contract price, as security for the faithful performance of the Contract.

THAT: The undersigned shall submit, in the blank spaces provided, all data efficiencies, guarantees, and other information called for.

THAT: The undersigned shall submit, herewith, Drawings or Cuts and Specifications showing and describing in detail the equipment, material, and/or apparatus which the undersigned proposes to furnish.

THAT: This Proposal shall be signed and submitted in the manner prescribed in the Instructions to Bidders.

THAT: Should this Proposal not be accepted	ed by the CityCouncil of Town of Clayton, the
certified check, in the amount of	Dollars (\$)
or the five percent Bid Bond, deposited here	with will be returned to the undersigned.

THAT: Should the Owner accept this P	roposal and the undersigned fail or neglect to execute
the Contract and furnish the required Box	nds within fifteen days after receiving notifications of
the acceptance of the Proposal and/or rec	ceipt of the formal Contract and Bond forms, the cash or
certified check, in the amount of	
·	Dollars (\$

or the Bid Bond deposited herewith shall be retained by the Owner as liquidated damages, it being understood that the Owner reserves the right to extend the time allowed for executing the Contract and/or furnishing the Bond.

THAT: The undersigned will complete such Contract as may be entered into within the number of consecutive calendar days specified in the Contract from the date specified in the Notice to Proceed.

THAT: The undersigned proposes to enter into a Contract in accordance with this Proposal and the Contract Documents included herein, for the price, or prices, shown on the following pages. Bidder acknowledges that the following quantities are approximate only and are given as the basis for comparison of Bids. The Owner 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 any item will not be regarded as sufficient grounds for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for in the General and Supplemental Conditions.

THE FOLLOWING FORMS AND DOCUMENTATION SHALL BE COMPLETELY FILLED OUT AND SUBMITTED WITH THE BIDS.

- 1. Proposal
- 2. Certified List of Material Manufacturers
- 3. Certification Affidavit
- 4. Contractor's Certificates Affidavit of Organization and Authority and Sworn Statement
- 5. Non-Discrimination Clause
- 6. E-Verify Affidavit
- 7. Acknowledgement
- 8. Notice To Contractor Regarding Intrusions Beyond Project Limits
- 9. Execution of Bid-Non-Collusion Affidavit, Debarment Certification and Gift Ban Certification
- 10. Listing of DBE Subcontractors
- 11. Execution of Bid (Non-collusion affidavit, debarment certification, and gift ban certification)
- 12. Documentation of NCDOT prequalification shall be provided with the bid as a separate attachment.

BASE PROPOSAL

SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING

NCDOT TIP: U-5530 LA & LB - Greenway

BID FORM

BID FOR UNIT PRICE CONTRACT

Bidder agrees to perform all work described in the specifications and shown on the Contract Drawings for the unit prices listed below.

SAM'S BRANCH PHASE II GREENWAY/ NORTH O'NEIL CROSSING

Base Bid

Line #	Item #	Sec #	Description	Quantity	Unit s	Unit Cost	Amount
		**				2 3 2 2	
1	0000100000-N	800	MOBILIZATION	1	LS	\$	\$
2	0000400000-N	801	CONSTRUCTION SURVEYING	1	LS	\$	\$
3	0000900000-N	SP	AS-CONSTRUCTED SURVEY	1	LS	\$	\$
4	0000915000-N	SP	COLLAPSIBLE BOLLARD	4	EA	\$	\$
5	0000915000-N	SP	PERMANENT BOLLARD	6	EA	\$	\$
6	0043000000-N	226	GRADING	1	LS	\$	\$
7	0057000000-Е	226	UNDERCUT EXCAVATION	1770	CY	\$	\$
8	0134000000-Е	240	DRAINAGE DITCH EXCAVATION	2	CY	\$	\$
9	0318000000-Е	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	20	TON	\$	\$
10	0320000000-Е	300	FOUNDATION CONDITIONING GEOTEXTILE	50	SY	\$	\$
11	0335300000-Е	305	18" DRAINAGE PIPE	124	LF	\$	\$
12	0194000000-E	265	SELECT GRANULAR MATERIAL, CLASS III	25	CY	\$	\$
13	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	2940	SY	\$	\$
14	0241000000-E	SP	GEOTEXTILE SEPERATOR FABRIC	9102	SY	\$	\$

15	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	52	LF	\$ \$
16	0372000000-Е	310	18" RC PIPE CULVERTS, CLASS III	92	LF	\$ \$
17	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	20	LF	\$ \$
18	0536000000-E	310	18" HDPE PIPE CULVERTS	88	LF	\$ \$
19	0536000000-Е	310	24" HDPE PIPE CULVERTS	30	LF	\$ \$
20	1077000000-E	SP	#57 STONE	75	TON	\$ \$
21	1099500000-Е	505	SHALLOW UNDERCUT	115	CY	\$ \$
22	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	155	TON	\$ \$
23	1121000000-E	520	AGGREGATE BASE COURSE	3459	TON	\$ \$
24	1220000000-E	545	INCIDENTAL STONE BASE	50	TON	\$ \$
25	133000000-Е	607	INCIDENTAL MILLING	350	SY	\$ \$
26	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	850	TON	\$ \$
27	1489000000-Е	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	85	TON	\$ \$
28	1498000000-Е	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0B	100	TON	\$ \$
29	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	140	TON	\$ \$
30	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	80	TON	\$ \$
31	2275000000-Е	SP	FLOWABLE FILL	10	CY	\$ \$
32	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	3	EA	\$ \$
33	2308000000-Е	840	MASONRY DRAINAGE STRUCTURES	9	LF	\$ \$
34	2253000000-Е	840	PIPE COLLARS	0.5	CY	\$ \$
35	2367000000-N	840	FRAME WITH TWO GRATES, STD 840.29	2	EA	\$ \$
36	2352000000-N	840	FRAME WITH GRATE, STD 840.18 OR 840.27 (G.D.I TYPE B)	1	EA	\$ \$
37	2354200000-N	840	FRAME WITH GRATE, STD 840.24	1	EA	\$ \$
38	2556000000-E	846	SHOULDER BERM GUTTER	117	LF	\$ \$
39	2591000000-E	848	4" CONCRETE SIDEWALK	105	SY	\$ \$
40	2738000000-Е	SP	6" REINFORCED CONCRETE SLAB	35	SY	\$ \$

41	303000000-Е	862	STEEL BEAM GUARDRAIL	250	LF	\$	\$
42	3287000000-n	SP	GUARDRAIL END UNITS, TYPE TL-3	1	EA	\$	\$
43	336000000-Е	863	REMOVE EXISTING GUARDRAIL	205	LF	\$	\$
44	3389500000-N	865	ADDITIONAL GUIDERAIL POSTS	5	EA	\$	\$
45	3536000000-Е	866	CHAIN LINK FENCE, 48" FABRIC	205	LF	\$	\$
46	3542000000-E	866	METAL LINE POSTS FOR 48" CHAINLINK FENCE	18	EA	\$	\$
47	3548000000-Е	866	METAL TERMINAL POSTS FOR 48" CHAIN LINK FENCE	4	EA	\$	\$
		0.40					
48	2605000000-N	848	CONCRETE CURB RAMPS	2	EA	\$	\$
49	3575000000-Е	SP	WOOD SPLIT RAIL FENCE	1354	LF	\$	\$
50	3578000000-N	SP	APPROACH RAILS (BOARDWALK)	14	EA	\$	\$
51	3578000000-N	SP	APPROACH RAILS (BRIDGE)	2	EA	\$	\$
52	3628000000-E	876	RIP RAP, CLASS I	20	TON	\$	\$
53	3649000000-E	876	RIP RAP, CLASS B	1618	TON	\$	\$
54	3656000000-Е	876	GEOTEXTILE FOR DRAINAGE	4350	SY	\$	\$
55	4025000000-Е	901	CONTRACTOR FURNISHED, TYPE E SIGN	11	SF	\$	\$
56	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	49	LF	\$	\$
57	4102000000-N	904	SIGN ERECTION, TYPE E	6	EA	\$	\$
58	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U- CHANNEL	1	EA	\$	\$
				_			
59	4457000000-N	SP	TEMPORARY TRAFFIC CONTROL THERMOPLASTIC PAVEMENT	2	LS	\$	\$
60	4710000000-Е	1205	MARKINGLINES (24", 120 MILS)	100	LF	\$	\$
61	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	908	LF	\$	\$
62	4725000000-Е	1205	THERMOPLASTIC PAVEMENT MARKINGSYMBOL (90 MILS)	2	EA	\$	\$
63	490000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	11	EA	\$	\$
64	5319000000-E	1505	CLASS B CONCRETE FOR ENCASING UTILITY LINES	15	CY	\$	\$
04	5517000000-E	1303	OTEM LINES	1.0		Ψ	
65	5326200000-E	1510	12" WATER LINE	100	LF	\$	\$
66	5329000000-Е	1510	DUCTILE IRON WATER PIPE FITTINGS	1290	LB	\$	\$

67	5558000000-E	1515	12" VALVE	2	EA	\$ \$
68	5804000000-E	1530	ABANDON 12" UTILITY PIPE	91	LF	\$ \$
69	5836000000-E	1540	24" ENCASEMENT PIPE	40	LF	\$ \$
70	5882000000-N	SP	12" INSERTION GATE VALVE ASSEMBLY	2	EA	\$ \$
71	6000000000-E	1605	TEMPORARY SILT FENCE	8140	LF	\$ \$
72	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	140	TON	\$ \$
73	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	300	TON	\$ \$
74	6012000000-E	1610	SEDIMENT CONTROL STONE	555	TON	\$ \$
75	6030000000-E	1630	SILT EXCAVATION	40	CY	\$ \$
76	6015000000-E	1615	TEMPORARY MULCHING	5	ACR	\$ \$
77	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEED-ING	2.5	TON	\$ \$
78	6029000000-E	SP	SAFETY FENCE	200	LF	\$ \$
79	6036000000-E	1631	MATTING FOR EROSION CONTROL	3040	SY	\$ \$
80	6037000000-Е	SP	COIR FIBER MAT	100	SY	\$ \$
81	6038000000-Е	SP	PERMANENT SOIL REINFORCEMENT MAT	480	SY	\$ \$
82	6042000000-Е	1632	1/4" HARDWARE CLOTH	2020	LF	\$ \$
83	6045000000-E	SP	15" TEMPORARY PIPE	16	LF	\$ \$
84	6045100000-Е	SP	18" TEMPORARY PIPE	16	LF	\$ \$
85	6070000000-N	1639	SPECIAL STILLING BASINS	3	EA	\$ \$
86	6071012000-Е	SP	COIR FIBER WATTLE	595	LF	\$ \$
87	6084000000-E	1660	SEEDING & MULCHING	6.8	ACR	\$ \$
88	6087000000-E	1660	MOWING	6.5	ACR	\$ \$
89	6090000000-E	1661	SEED FOR REPAIR SEEDING	150	LB	\$ \$
90	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.5	TON	\$ \$
91	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	250	LB	\$ \$
92	6108000000-E	1665	FERTILIZER TOPDRESSING	4.45	TON	\$ \$

93	6111000000-E	SP	IMPERVIOUS DIKE	30	LF	\$	\$
		~~		_			
94	6135000000-E	SP	TEMPORARY SEEDING	5	ACR	\$	\$
95	8112730000-N	450	PDA TESTING	8	EA	\$	\$
0.5	0222000000	a.p.	TREATED TIMBER PILES 9" MIN. TIP	151		•	
96	8322000000-E	SP	DIAMETER	1716	LF	\$	\$
97	8364000000-E	450	HP12X53 STEEL PILES	270	LF	\$	\$
0.0	0.00000000 F	07.6	DID D AD GV A GG VI (QL QU TVVQV)	4.5	TON	Φ.	
98	8608000000-E	876	RIP RAP CLASS II (2'-0" THICK)	45	TON	\$	\$
99	8867000000-E	SP	BOARDWALK 10 FOOT SPANS	390	LF	\$	\$
100	8867000000-E	SP	BOARDWALK 20 FOOT SPANS	40	LF	\$	\$
101	8867000000-E	450	PILE EXCAVATION	75	LF	\$	\$
102	8867000000-E	SP	BRIDGE SPLIT RAIL FENCE	66	LF	\$	\$
103	8897000000-N	SP	CONCRETE APPROACH SLAB	16	EA	\$	\$
			PRECAST REINFORCED CONC BOX				
104	8063000000-N	SP	CULVERT AT STA 13+19.12	1	LS	\$	\$
105	8126000000-N	414	CULVERT EXCAVATION,	1	LS	\$	\$
			FOUNDATION CONDITIONING				
106	8133000000-E	414	MATERIAL, BOX CULVERT	105	TON	\$	\$
107	8897000000-N	SP	PREFABRICATED BRIDGE, 60'	1	EA	\$	\$
10,	227,0000011	~-	2112 2112 21, 00			7	7
108	8897000000-N	SP	60' BRIDGE SUBSTRUCTURE	1	EA	\$	\$
109	8897000000-N	SP	60' BRIDGE ERECTION	1	EA	\$	\$
207	203,0000011	~1		-		7	7
110	8897000000-N	SP	60' BRIDGE CONCRETE DECK	1	EA	\$	\$

ESTIMATED PROJECT TOTAL (BASE U-5530LA & LB)		
	Contractor	r
		(Print)

Note: Proposal signature required on Page

CERTIFIED LIST OF MATERIAL MANUFACTURERS

known as SAM'S BRANCH PHASE II GREENW. Manufacturers to be used in the performance all materials furnished shall be based on requirements.	AY e o uir e C	s part of the procedure for the submission of Bids on this project NORTH O'NEIL CROSSING, submits the following list of Material f work to be done on said Project. The list of Manufacturers and rements of the Contract Documents. Changes to this list after the owner upon request by the Contractor or as required by the Owner
MATERIALS		MANUFACTURER/SUPPLIER
Treated Timber		
Asphalt		
Prefabricated Bridge		
The Bidder,, as pa as SAM'S BRANCH PHASE II GREENWAY/ NOI to be used in the performance of work to be requirements of the Contract Documents. Cl	occ Trt (RT: do	Contract, the Contractor will not make any additions, deletions or onsent of the Owner. LIST OF SUBCONTRACTORS of the procedure for the submission of Bids on this project known H O'NEIL CROSSING, submits the following list of Subcontractors one on said Project. The list of Subcontractors shall be based on negs to this list after the Bid opening shall only be as approved by a required by the Owner based upon review of Contractor's
submittals:		
ITEM		SUBCONTRACTOR
Boardwalk		
Asphalt Paving		
Prefabricated Bridge		
It is understood and agreed that, if awarded a substitutions to this Certified list without the	cc	Contract, the Contractor will not make any additions, deletions or onsent of the Owner.

CERTIFICATION AFFIDAVIT

THE PRIOR INFORMATION IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I FURTHER UNDERSTAND AND AGREE THAT, IF AWARDED A CONTRACT, THIS CERTIFICATION SHALL BE ATTACHED THERETO AND BECOME A PART THEREOF.

NAME OF S	IGNER:			
		(Pleas	se Print or Type)	
TITLE OF SI	IGNER:			
	IGNER:	(Pleas	se Print or Type)	
	SIG	GNATURE:		
DATE:				
BID SECUR	RITY:			
Accompanyir	ng this Proposal is a (a)			in the amount
of (b) \$				<u></u> .
NOTE: (a)	Insert the words "bank draft"	, "certified check	", "bid bond" as the	e case may be.
(b)	Amount must be equal to at l	east five percent	of the Total Base I	Bid.
CONTRACT	TOR'S LICENSE:			
The undersig under the spe (his/their) lice	ned certifies that (he/they)ecific State law regulatingense, under which	_ (he/they)	_ (is/are) (his/their) partice (is/are_	licensed as a Contractor ular trade and that the number of now operating is

LIQUIDATED DAMAGES:

The undersigned agrees, further, that the Owner may retain those amounts indicated below from the amount of Compensation due the undersigned, under the terms of the Contract, for each and every day that the work remains incomplete beyond the completion date specified in the Notice to Proceed. This amount is agreed upon as the proper measure of liquidated damages the Owner will sustain, per day, by the failure of the undersigned to complete the work, within the stipulated time, and it is not to be construed, in any sense, as a penalty.

Total Liquidated Damages

Six Hundred Dollars (\$600.00)

No Contractor shall have a claim against the Owner as a result of other construction Contractor's lack of progress or project completion.

PROPOSAL SIGNATURE: (Signature required on Page 68)

CORPORATION: The Bidder is a corporation organized and existing under the laws of the State of ______, which operates under the legal name of: and the full names of its officers are as follows: President _____ Secretary/Treasurer_ Manager and it does have a corporate seal. The President is authorized to sign construction proposals and contracts for the company by action of its Board of Directors taken a certified copy of which is hereto attached. (Strike out this last sentence if not applicable.) **PARTNERSHIP:** The Bidder is a partnership consisting of individual partners whose full names are as follows: The partnership does business under the legal name of:

INDIVIDUAL:	
The Bidder is an individual whose full name is:	_
and if operating under a trade name, said trade name is as follows:	

LIMITED LIABILITY CORPORATION:

SIGNATURE PAGE

	(Sign Below)		
Dated	, 2018.		
		Legal Entity	
(Sign Here) By:			
SEAL - if Corporation		(Printed Name)	
		Telephone No. ()	
Subscribed and sworn to before me this	day of	, 2018.	
My Commission Expires:		Notary Public	

CONTRACTOR'S CERTIFICATES AFFIDAVIT OF ORGANIZATION AND AUTHORITY AND SWORN STATEMENT

STATE OF	
COUNTY OF	
being the first duly sworn on oath deposes and says bidder on the attached bid proposal is organized as indicated below and that all statements herein made at on behalf of such Bidder and that this deponent is authorized to make them. (Fill Out Applicable Paragraph) 1. CORPORATION:	that the e made
The Bidder is a Corporation organized and existing under the laws of the State of	
and its President is; its Secretary is, and it does have a corporate sea	
	. The irectors
2. PARTNERSHIP:	
The Bidder is a partnership consisting of, partners doing business under the name of:	
3. SOLE TRADER: The Bidder is an individual and if operating under a trade name, such trade name is as follows:	
4. ADDRESS:	
The business address of the Bidder is as follows:	
Its phone number is	
Bidder	
By:	
Subscribed and sworn to before me this day of,2015.	
Co	
Notary Public My Commission Expires:	

NON-DISCRIMINATION CLAUSE

It is specifically agreed as part of the consideration of the signing of the Contract that the parties hereto, their agents, officials, employees or servants will not discriminate in any manner on the basis of age, handicap, race, color, creed, sexual orientation or national origin with reference to the subject matter of the Contract, no matter how remote. The parties hereto further agree in all respects to conform with the provisions and intent of Town of Clayton, North Carolina Ordinance No. 1969-889 as amended.

This provision being incorporated for the benefit of Town of Clayton and its residents may be enforced as set out in said ordinances, enforcement of this provision shall be by action for specific performance, injunctive relief, or other remedy as by law provided.

This provision shall be binding on the successors and assigns of the parties hereto with reference to the subject matter of this Contract.

Corporate Name
Y:
(Vice) President
(Printed Name)
IDUAL):
(SEAL)
(Printed Name)

STATE OF NORTH CAROLINA <u>E-VERIFY AFFIDAVIT</u>

Town of Clayton

NOW COMES Affiant, first being sworn, deposes and says as follows:

1. I have submitted a bid for contract or desire to enter into a con	tract with the Town of Clayton;
2. As part of my duties and responsibilities pursuant to said bid a compliance with the requirements of E-Verify, Article 2 of Chap to include (mark which applies):	
After hiring an employee to work in the United States I verifthrough E-Verify and retain the record of the verification of work and for one year thereafter; or	
I employ less than twenty-five (25) employees in the State of	f North Carolina.
3. As part of my duties and responsibilities pursuant to said bid a knowledge any subcontractors employed as a part of this bid and requirements of E-Verify, Article 2 of Chapter 64 of the North C which applies):	or contract are in compliance with the
After hiring an employee to work in the United States the susaid employee through E-Verify and retain the record of the verified employee is employed and for one year thereafter; or Employ less than twenty-five (25) employees in the State of	fication of work authorization while the
Specify subcontractor:	North Caronna.
This the day of, 201	
	Affiant
Sworn to and subscribed before me, this the day of	, 201
[OFFICIAL SEAL]	
	, Notary Public
	My Commission Expires:

ACKNOWLEDGMENT

See Instructions Below

Use the following form for acknowledgment signature by a Corporation:

I,thatis (Asst.) Secretary ofthe act of the Corporation, the foregoing instr	, a Notary Public in and for the a _ personally appeared before me t	foresaid State and County, certhis day and acknowledged that
is (Asst.) Secretary of	, a Corporation, and the	hat by authority duly given an
the act of the Corporation, the foregoing instr Corporate Seal, and attested by himself as its	rument was signed in its name by i s (Asst.) Secretary.	ts (Vice) President, sealed with
WITNESS my hand and notarial seal this	day of	, 20
		Notary Public
(SEAL)		
My commission expires:		
Use the following form for acknowledgment	t signature by an individual:	
NORTH CAROLINA	t signature by an individual:	
NORTH CAROLINA Johnston County I, the undersigned Notary Public, do hereby	certify that	
NORTH CAROLINA Johnston County I, the undersigned Notary Public, do hereby appeared before me this day and acknowledge	certify thatged the due execution of the forego	oing instrument.
NORTH CAROLINA Johnston County I, the undersigned Notary Public, do hereby appeared before me this day and acknowledge	certify thatged the due execution of the forego	oing instrument.
NORTH CAROLINA Johnston County I, the undersigned Notary Public, do hereby appeared before me this day and acknowledg WITNESS my hand and notarial seal this	certify thatged the due execution of the forego	oing instrument
NORTH CAROLINA Johnston County I, the undersigned Notary Public, do hereby appeared before me this day and acknowledg WITNESS my hand and notarial seal this	certify that ged the due execution of the forego	oing instrument

NOTICE TO CONTRACTOR REGARDING INTRUSIONS BEYOND PROJECT LIMITS

The Contractor and Owner hereby acknowledge that the Owner has acquired permanent and temporary easements on private property for the construction of the Project, and that such easements, together with public street rights-of-way (and previously acquired easements) comprise the sole areas where the Contractor is allowed to work on the Project, or to use for mobilization, access, staging, storage, and other purposes associated with the Project.

ANY OCCUPANCY OF OR INTRUSIONS ONTO PRIVATE PROPERTY OUTSIDE SUCH EASEMENTS OR RIGHTS-OF-WAY OWNED OR CONTROLLED BY THE CITY WILL CONSTITUTE A TRESPASS UPON PRIVATE PROPERTY, AND WILL LIKELY INVOLVE SERIOUS LEGAL CONSEQUENCES for Town of Clayton. Accordingly, the Contractor will be solely responsible for such actions and hereby agrees to hold harmless and indemnify Town of Clayton from all actions, claims, liabilities, including the payment of attorney's fees, arising from such actions.

The only exception to the above stated limitations on the Contractor's work area will be in those instances where the Contractor has independently negotiated and secured agreements for temporary work and/or access privileges from Property Owners. Such agreements must be in writing, and a copy of any such agreement shall be provided to Town of Clayton in advance of any use or occupancy of private property pursuant to the agreement. The terms of these agreements should clearly express to the Property Owner that the Contractor is seeking such use, occupancy, or access independently from Town of Clayton and its Contract with Town of Clayton, and that the Contractor will be solely responsible for activities carried out on such areas.

Signature
Printed Name
Title

Date

I have read and understand Town of Clayton 's policy as stated above.

OWNER'S CERTIFICATES

EXTRACT FROM MINUTES OF CONTRACT AWARD MEETING

ed for:
ed for:
or furnishing all labor, materials,
moved that the proposal of:
s interests, and that the Manager and Town
reement embodying the provisions of said
S

CERTIFICATE OF CLERK

I	, do hereby certify the foregoing and above to be an accurate copy of so much of								
the minutes of	of a meeting of the CityCouncil								
held on, 2018, as relate in any way to the awarding of a Contract for the second secon									
in and/or for	Town of Clayton, N.C., said minutes being entered in volume at page								
Witness my l	hand and seal of Town of Clayton, N.C., on this day of, 2018.								
	, Clerk								

NOTICE OF AWARD

TO:CONTRACTOR	
ADDRESS	
FROM:	
OWNER:	
PROJECT:	
You are hereby notified that the Owner has considered the Proposal submitted by you for the above-described project in Notice to Bidders dated	response to its
It appears that it is to the best interest of said Owner to accept your Proposal in the amount of:	
You are required by the Notice to Bidders and Instructions to Bidders to execute the formal Contract with the undersign to furnish the required Contractor's Performance Bond, Payment Bond, and Certificate of Insurance within fifteen days fr the delivery of this Notice to you.	
If you fail to execute said Contract and to furnish said Bonds and Certificate within fifteen days from the date of delivery said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Proposal as abandoned the work covered by your Proposal to another, or to readvertise the work or otherwise dispose thereof as the Owner may	d and to award
Dated thisday of, 2018.	
Stewart, Inc.	
By:	
Title:	

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged this	day of	, 2018.
By:		
Title:		

PROJECT SPECIAL PROVISIONS – GENERAL

NOTE ALL SPECIAL PROVISIONS SHALL COVER BOTH U-5530 LA AND U-5530 LB UNLESS OTHERWISE NOTED

CONTRACT TIME AND LIQUIDATED DAMAGES

(12-20-16) 108 SP1 G07 B

The date of availability for this contract is the mutually agreed upon date between the owner and Contractor as listed in the notice to proceed, except that work in jurisdictional waters and wetlands shall not begin until a meeting between NCDOT, Regulatory Agencies, and the Contractor is held as stipulated in the permits contained elsewhere in this proposal. This delay in availability has been considered in determining the contract time for this project.

The completion date for this contract is **Three Hundred Sixty** (360) consecutive calendar days after and including the date of availability.

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

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES

(12-18-07) (Rev. 2-21-12)

SP1 G13 B

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

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

The completion date for this intermediate contract time is the date which is **Three Hundred** (300) consecutive calendar days after the date of availability.

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

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

INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES

(2-20-07) 108 SPI G14 A

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on **City Road** and **O'Neil Street** during the following time restrictions:

DAY AND TIME RESTRICTIONS

Monday thru Friday from 6:00 AM to 9:00 AM And Monday thru Friday from 4:00 PM to 6:00 PM

In addition, the Contractor shall not close or narrow a lane of traffic on **City Road** and **O'Neil Street**, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, OR or any other time when traffic is unusually heavy, including the following schedules:

SCHOOL YEAR RESTRICTIONS

In addition, the Contractor shall only perform construction of the culvert tunnel during summer months to avoid conflict with Johnson County Schools. Current school schedule is estimated to be on summer break from June 1, 2019 to August 15, 2019.

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

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

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

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

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

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

PROSECUTION OF WORK

(7-1-95) (Rev. 8-21-12) 108 SPI G15R

The Contractor will be required to prosecute the work in a continuous and uninterrupted manner from the time he begins the work until completion and final acceptance of the project. The Contractor will not be permitted to suspend his operations except for reasons beyond his control or except where the Engineer has authorized a suspension of the Contractor's operations in writing.

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of \$500.00 will be charged the Contractor for each and every calendar day that such suspension takes place. The said amount is hereby agreed upon as liquidated damages due to extra engineering and maintenance costs and due to increased public hazard resulting from a suspension of the work. Liquidated damages chargeable due to suspension of the work will be additional to any liquidated damages that may become chargeable due to failure to complete the work on time.

PERMANENT VEGETATION ESTABLISHMENT

(2-16-12) (Rev. 10-15-13) 104 SP1 G16

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

Once the Engineer has determined that the permanent vegetation establishment requirement has been achieved at an 80% vegetation density (the amount of established vegetation per given area to stabilize the soil) and no erodible areas exist within the project limits, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor

will be responsible for, and shall correct any areas disturbed by operations performed in permanent vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

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

NO MAJOR CONTRACT ITEMS

(2-19-02) (Rev. 8-21-07)

104

SP1 G31

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

NO SPECIALTY ITEMS

(7-1-95)

108-6

SP1 G34

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

DISADVANTAGED BUSINESS ENTERPRISE (LOCAL GOVERNMENT AGENCIES)

(10-16-07)(Rev. 1-16-18)

102-15(J)

SP1 G63

Description

The purpose of this Special Provision is to carry out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with Federal funds. This provision is guided by 49 CFR Part 26.

Definitions

Additional DBE Subcontractors - Any DBE submitted at the time of bid that will <u>not</u> be used to meet the DBE goal. No submittal of a Letter of Intent is required.

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

Contract Goal Requirement - The approved DBE participation at time of award, but not greater than the advertised contract goal.

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

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

Goal Confirmation Letter - Written documentation from Town of Clayton to the bidder confirming the Contractor's approved, committed DBE participation along with a listing of the committed DBE firms.

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

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

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

North Carolina Unified Certification Program (NCUCP) - A program that provides comprehensive services and information to applicants for DBE certification, such that an applicant is required to apply only once for a DBE certification that will be honored by all recipients of USDOT funds in the state and not limited to the Department of Transportation only. The Certification Program is in accordance with 49 CFR Part 26.

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

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

Forms and Websites Referenced in this Provision

DBE Payment Tracking System - On-line system in which the Contractor enters the payments made to DBE 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 DBE 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 DBE Replacement Request Form - Form for replacing a committed DBE.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE %20Replacement%20Request%20Form.pdf

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

JC-1 *Joint Check Notification Form* - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

http://connect.ncdot.gov/projects/construction/Construction% 20 Forms/Joint% 20 Check% 20 Notification% 20 Form.pdf

Letter of Intent - Form signed by the Contractor and the DBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed DBE 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%20 a%20Subcontractor.pdf

Listing of DBE Subcontractors Form - Form for entering DBE subcontractors on a project that will meet this DBE goal. This form is for paper bids only.

http://connect.ncdot.gov/municipalities/Bid%20 Proposals%20 for %20 LGA%20 Content/08%20 DBE%20 Subcontractors%20 (Federal).docx

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where DBEs 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

DBE Goal

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

Disadvantaged Business Enterprises 5 %

- (A) If the DBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that DBEs participate in at least the percent of the contract as set forth above as the DBE goal.
- (B) If the DBE goal is zero, the Contractor shall make an effort to recruit and use DBEs during the performance of the contract. Any DBE participation obtained shall be reported to Town of Clayton.

Directory of Transportation Firms (Directory)

Real-time information is available about firms doing business with the NCDOT and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the

Directory as DBE certified shall be used to meet the DBE 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 DBE Subcontractors

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

- (A) If the DBE goal is more than zero,
 - (1) Bidders, at the time the bid proposal is submitted, shall submit a listing of DBE participation, including the names and addresses on *Listing of DBE 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 DBE participation for the contract.
 - (2) If bidders have no DBE participation, they shall indicate this on the *Listing of DBE 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 DBE participation indicated on the appropriate form will not be read publicly during the opening of bids. Town of Clayton will not consider these bids for award and the proposal will be rejected.
 - (3) The bidder shall be responsible for ensuring that the DBE 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 DBE's participation will not count towards achieving the DBE goal.
- (B) If the DBE goal is zero, entries on the Listing of DBE Subcontractors are not required, however any DBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

DBE Prime Contractor

When a certified DBE firm bids on a contract that contains a DBE goal, the DBE 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 DBE bidder on a contract will meet the DBE goal by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the DBE bidder and any other DBE subcontractors will count toward the DBE goal. The DBE bidder shall list itself along with any DBE subcontractors, if any, in order to receive credit toward the DBE goal.

For example, if the DBE goal is 45% and the DBE bidder will only perform 40% of the contract work, the prime will list itself at 40%, and the additional 5% shall be obtained through additional DBE participation with DBE subcontractors or documented through a good faith effort.

DBE prime contractors shall also follow Sections A or B listed under *Listing of DBE Subcontractor* just as a non-DBE bidder would.

Written Documentation – Letter of Intent

The bidder shall submit written documentation for each DBE that will be used to meet the DBE goal of the contract, indicating the bidder's commitment to use the DBE in the contract. This documentation shall be submitted on the NCDOT's form titled *Letter of Intent*.

The documentation shall be received in the office of the Town of Clayton 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 Town of Clayton 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 DBE to be used toward the DBE goal, or if the form is incomplete (i.e. both signatures are not present), the DBE participation will not count toward meeting the DBE goal. If the lack of this participation drops the commitment below the DBE goal, the Contractor shall submit evidence of good faith efforts, completed in its entirety, to the Town of Clayton no later than 2:00 p.m. on 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 Town of Clayton no later than 10:00 a.m. on the next official state business day.

Submission of Good Faith Effort

If the bidder fails to meet or exceed the DBE goal, the apparent lowest responsive bidder shall submit to Town of Clayton documentation of adequate good faith efforts made to reach the DBE goal.

One complete set and **ÇintSP01G063CopiesLGA** copies of this information shall be received in the office of the Town of Clayton 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 Town of Clayton 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 DBE 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 DBE Goals More Than Zero

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

Town of Clayton 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 goal 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 DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the DBEs to respond to the solicitation. Solicitation shall provide the opportunity to DBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
- (B) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved.
 - (1) Where appropriate, break out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
 - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be sublet includes potential for DBE participation (2nd and 3rd tier subcontractors).
- (C) Providing interested DBEs 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 DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs 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 DBEs to perform the work.
 - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration.

However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE 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 DBEs if the price difference is excessive or unreasonable.

- (E) Not rejecting DBEs 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 DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested DBEs 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 DBEs. Contact within 7 days from the bid opening NCDOT's Business Opportunity and Work Force Development Unit at DBE@ncdot.gov to give notification of the bidder's inability to get DBE quotes.
- (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the DBE goal.

In addition, Town of Clayton may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the DBE goal.
- (2) The bidders' past performance in meeting the DBE goals.
- (3) The performance of other bidders in meeting the DBE goal. For example, when the apparent successful bidder fails to meet the DBE 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 DBE goal, but meets or exceeds the average DBE participation obtained by other bidders, Town of Clayton may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If Town of Clayton does not award the contract to the apparent lowest responsive bidder, Town of Clayton reserves the right to award the contract to the next lowest responsive bidder that can satisfy

to Town of Clayton that the DBE goal can be met or that an adequate good faith effort has been made to meet the DBE goal.

Non-Good Faith Appeal

The Town of Clayton 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 Town of Clayton. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

Counting DBE Participation Toward Meeting DBE Goal

(A) Participation

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

(B) Joint Checks

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

(C) Subcontracts (Non-Trucking)

A DBE may enter into subcontracts. Work that a DBE subcontracts to another DBE firm may be counted toward the contract goal requirement. Work that a DBE subcontracts to a non-DBE firm does <u>not</u> count toward the contract goal requirement. If a DBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the DBE is not performing a commercially useful function. The DBE may present evidence to rebut this presumption to Town of Clayton. Town of Clayton 's decision on the rebuttal of this presumption is subject to review by the Federal Highway Administration but is not administratively appealable to USDOT.

(D) Joint Venture

When a DBE 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 DBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the DBE performs with its forces.

(E) Suppliers

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

(F) Manufacturers and Regular Dealers

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

- (1) The fees or commissions charged by a DBE firm for providing a *bona fide* service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.
- (2) With respect to materials or supplies purchased from a DBE, 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) DBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to DBEs that perform a commercially useful function in the work of a contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, Town of Clayton will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and any other relevant factors.

(B) DBE Utilization in Trucking

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

- (1) The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting DBE goals.
- (2) The DBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The DBE may subcontract the work to another DBE firm, including an owner-operator who is certified as a DBE. The DBE who subcontracts work to another DBE receives credit for the total value of the transportation services the subcontracted DBE provides on the contract.
- (5) The DBE may also subcontract the work to a non-DBE firm, including from an owner-operator. The DBE who subcontracts the work to a non-DBE is entitled to credit for the total value of transportation services provided by the non-DBE subcontractor not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE 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 DBE and the Contractor will not count towards the DBE contract requirement.
- (6) A DBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the DBE 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 DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. This type of lease may count toward the DBE's credit as long as the driver is under the DBE's payroll.
- (7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the DBE 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.

DBE Replacement

When a Contractor has relied on a commitment to a DBE firm (or an approved substitute DBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the DBE 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 DBE subcontractor, a non-DBE subcontractor, or with the Contractor's own forces or those of an affiliate. A DBE may only be

terminated after receiving the Town of Clayton's written approval based upon a finding of good cause for the termination. The prime contractor must give the DBE firm five (5) calendar days to respond to the prime contractor's notice of termination and advise the prime contractor and the Department of the reasons, if any, why the firm objects to the proposed termination of its subcontract and why the Department should not approve the action.

All requests for replacement of a committed DBE firm shall be submitted to the Town of Clayton 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.

The Contractor shall comply with the following for replacement of a committed DBE:

(A) Performance Related Replacement

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

If a replacement DBE is not found that can perform at least the same amount of work as the terminated DBE, 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 DBEs that their interest is solicited in contracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with DBEs for specific subbids including, at a minimum:
 - (a) The names, addresses, and telephone numbers of DBEs who were contacted.
 - (b) A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why DBE quotes were not accepted.
- (4) Efforts made to assist the DBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

(B) Decertification Replacement

(1) When a committed DBE is decertified by the NCDOT after the SAF (*Subcontract Approval Form*) has been received by Town of Clayton, Town of Clayton will not require the Contractor to solicit replacement DBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.

When a committed DBE is decertified prior to the Town of Clayton receiving the SAF (*Subcontract Approval Form*) for the named DBE firm, the Contractor shall take all necessary and reasonable steps to replace the DBE subcontractor with another DBE subcontractor to perform at least the same amount of work to meet the DBE goal requirement. If a DBE firm is not found to do the same amount of work, a good faith effort must be submitted to Town of Clayton (see A herein for required documentation).

Changes in the Work

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

When the Town of Clayton 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 DBEs unless otherwise approved by the Town of Clayton .

When the Town of Clayton 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 DBE, the Contractor shall seek participation by DBEs unless otherwise approved by the Town of Clayton .

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 DBE, the Contractor shall seek additional participation by DBEs equal to the reduced DBE 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 DBE subcontractor. Town of Clayton reserves the right to require copies of actual subcontract agreements involving DBE 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 DBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Town of Clayton a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for DBE credit.

Reporting Disadvantaged Business Enterprise Participation

The Contractor shall provide the Town of Clayton with an accounting of payments made to all DBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Town of Clayton 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 DBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the 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 work on future projects until the required information is submitted.

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

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

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

Failure to Meet Contract Requirements

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

CERTIFICATION FOR FEDERAL-AID CONTRACTS

(3-21-90) SP1 G85

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(A) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of

- any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (B) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

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

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

U.S. DEPARTMENT OF TRANSPORTATION HOTLINE

(11-22-94)

108-5

SP1 G100

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

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

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

CARGO PREFERENCE ACT

(2-16-16)

Privately owned United States-flag commercial vessels transporting cargoes are subject to the Cargo Preference Act (CPA) of 1954 requirements and regulations found in 46 CFR 381.7. Contractors are directed to clause (b) of 46 CFR 381.7 as follows:

- (b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees-
 - "(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
 - (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
 - (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

SUBSURFACE INFORMATION

(7-1-95)

450

SP1 G112 D

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

Geotechnical Reports may be downloaded from the following link: INSERT LINK PRIOR TO BIDDING

TWELVE MONTH GUARANTEE – LGA Projects

(10-7-13)

108

SP1 G146

- (A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to Town of Clayton. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of Town of Clayton, 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. Town of Clayton'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. Town of Clayton 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 Town of Clayton 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.

EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION

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

105-16, 225-2, 16

SP1 G180

General

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

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

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

Roles and Responsibilities

- (A) Certified Erosion and Sediment Control/Stormwater Supervisor The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
 - (1) Manage Operations Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.
 - (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
 - (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
 - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
 - (d) Implement the erosion and sediment control/stormwater site plans requested.
 - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
 - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
 - (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
 - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
 - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
 - (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
 - (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.
 - (2) Requirements set forth under the NPDES Permit The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references NCG010000, General Permit to Discharge Stormwater under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion

and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:

- (a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
- (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days and within 24 hours after a rainfall event of 0.5 inch that occurs within a 24 hour period. Additional monitoring may be required at the discretion of Division of Water Resources personnel if the receiving stream is 303(d) listed for turbidity and the project has had documented problems managing turbidity.
- (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.
- (d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.
- (e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.
- (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
- (g) Provide secondary containment for bulk storage of liquid materials.
- (h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.
- (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
 - (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
 - (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
 - (c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
 - (d) Conduct the inspections required by the NPDES permit.
 - (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
 - (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.

- (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
- (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
- Remove temporary erosion or sediment control devices when they are no (i) longer necessary as agreed upon by the Engineer.
- The Contractor's quality control and inspection procedures shall be subject (j) 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
 - Foreman in charge of bridge or culvert construction over jurisdictional areas (2)
 - Foreman in charge of utility activities (3)

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

If a Level I Certified Installer is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

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

Preconstruction Meeting

Furnish the names of the Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

Ethical Responsibility

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

Revocation or Suspension of Certification

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

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

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

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

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

Chief Engineer 1536 Mail Service Center Raleigh, NC 27699-1536

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

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

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

Measurement and Payment

Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified *Installers* and *Certified Designer* will be incidental to the project for which no direct compensation will be made.

PROCEDURE FOR MONITORING BORROW PIT DISCHARGE

(2-20-07) (Rev. 3-20-13)

105-16, 230, 801

SP1 G181

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

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

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

During the Environmental Assessment required by Article 230-4 of the 2018 Standard Specifications, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

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

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

The Contractor shall use the NCDOT Turbidity Reduction Options for Borrow Pits Matrix, available at http://www.ncdot.gov/doh/operations/dp_chief_eng/roadside/fieldops/downloads/ Files/TurbidityReductionOptionSheet.pdf 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.

REVISION TO FHWA-1273 CONCERNING TAP-FUNDED PROJECTS

(10-15-13)

SP1 G190

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

Replace the last sentence in Section I.4 and the third sentence in the first paragraph of **Section IV with the following:**

Transportation Alternative Program (TAP)-funded projects shall have the same requirements as Federal-Aid highway projects except physical location exceptions will not apply.

PROJECT SPECIAL PROVISIONS – ROADWAY

CLEARING AND GRUBBING - METHOD II

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

Perform clearing on this project to the limits established by Method "II" shown on Standard Drawing No. 200.02 of the 2018 Roadway Standard Drawings. Conventional clearing methods may be used except where permit drawings or conditions have been included in the proposal which require certain areas to be cleared by hand methods.

SHOULDER AND FILL SLOPE MATERIAL:

(5-21-02)SP2 R45 A

Description

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

Measurement and Payment

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

FLOWABLE FILL

(9-17-02) (Rev1-17-12) 300, 340, 1000, 1530, 1540, 1550 **NOTE** THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LA

SP3 R30

Description

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

Materials

Refer to Division 10 of the 2018 Standard Specifications.

Item Section Flowable Fill 1000-6

Construction Methods

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

Measurement and Payment

At locations where flowable fill is called for on the plans and a pay item for flowable fill is included in the contract, Flowable Fill will be measured in cubic yards and paid as the actual number of cubic yards that have been satisfactorily placed and accepted. Such price and payment will be full compensation for all work covered by this provision including, but not limited to, the mix design, furnishing, hauling, placing and containing the flowable fill.

Payment will be made under:

Pay Item Pav Unit Flowable Fill Cubic Yard

PRICE ADJUSTMENT - ASPHALT BINDER FOR PLANT MIX

(11-21-00)

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2018 Standard Specifications.

The base price index for asphalt binder for plant mix is \$ 392.50 per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on 6/1/2018.

ASPHALT CONCRETE PLANT MIX PAVEMENTS

(2-20-18)

610, 1012

SP6 R65

SP6 R25

Revise the 2018 Standard Specifications as follows:

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

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

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

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

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

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

- A. Based on 20 year design traffic.
- B. Volumetric Properties based on specimens compacted to N_{des} as modified by the Department.
- C. Dust to Binder Ratio $(P_{0.075} / P_{be})$ for Type S4.75A is 1.0 2.0.
- D. NCDOT-T-283 (No Freeze-Thaw cycle required).
- E. TSR for Type S4.75A & B25.0C mixes is 80% minimum.

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

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

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

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

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

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

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

TABLE 610-7 DENSITY REQUIREMENTS			
Mix Type	Mix Type Minimum % G _{mm} (Maximum Specific Gravity)		
S4.75A	85.0 ^A		
S9.5B	90.0		
S9.5C, S9.5D, I19.0C, B25.0C	92.0		

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

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

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

B. Maximum Recycled Binder Replacement (%RBR) is 18% for mixes using PG 76-22 binder.

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

TABLE 1012-1 AGGREGATE CONSENSUS PROPERTIES ^A						
Mix Type	Flat and Elongated 5 : 1 Ratio % Maximum					
Test Method	ASTM D5821	AASHTO T 304	AASHTO T 176	ASTM D4791		
S4.75A; S9.5B	75 / -	40	40	-		
S9.5C; I19.0C; B25.0C	95 / 90	45	45	10		
S9.5D	100 / 100	45	50	10		
OGFC	100 / 100	45	45	10		
UBWC	100 / 85	45	45	10		

A. Requirements apply to the design aggregate blend.

PAVEMENT DESIGN MIX TYPE MODIFICATIONS:

(2-20-18) SP6 R66

Description

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

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

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

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

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

Measurement and Payment

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

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

GUARDRAIL END UNITS, TYPE -TL-3

(4-20-04) (Rev. 7-1-17) **NOTE** THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LA

SP8 R65

Description

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

Materials

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

Prior to installation the Contractor shall submit to the Engineer:

- (A) FHWA acceptance letter for each guardrail end unit certifying it meets the requirements of the AASHTO Manual for Assessing Safety Hardware, Test Level 3, in accordance with Article 106-2 of the 2018 Standard Specifications.
- Certified working drawings and assembling instructions from the manufacturer for each (B) guardrail end unit in accordance with Article 105-2 of the 2018 Standard Specifications.

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

Construction Methods

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

Measurement and Payment

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

Payment will be made under:

Pay Item Guardrail End Units, Type TL-3 **Pay Unit**

Each

Revise the 2018 Standard Specifications as follows:

Page 11-5, Article 1105-6 Measurement and Payment, add the following paragraph after line 27:

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

GEOTEXTILE SEPARATOR FABRIC

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

Description

The work of furnishing and installing separator fabric shall consist of performing all work and services necessary to complete construction in accordance with these Contract Documents.

Geotextile Separator Fabric shall be used to separate the soil subgrade from the aggregate base course.

Submittal

The Contractor shall submit manufacturer's technical data and a sample of the fabric to be used for approval by the engineer prior to actual use.

Material

Geotextile Separator Fabric - The separator fabric shall be a synthetic woven fabric, resistant to naturally occurring chemicals, alkalis, and acids, specified for use on roadway subgrade, having the following properties:

	Typical	Test
Grab Tensile Strength, lbs.	180	ASTM D4632-86
Elongation at Break, %	< 50	ASTM D4632
Puncture, Strength, lbs.	67	ASTM D0751
Burst Strength, psi	300	ASTM D0751/3786
Trapezoid Tear, lbs.	67	ASTM D4533
Apparent Opening Size	0.60mm max	
Ultraviolet Stability (>500hr)	50%	

Construction Methods

The fabric shall be free of defects or flaws, which may significantly affect its physical properties. The fabric shall be overlapped a minimum of 24 inches where necessary. Aggregate shall be

back dumped and spread in a uniform lift maintaining the design aggregate thickness at all times. Construction vehicles will not be allowed to traffic directly on the fabric.

The soil shall not be overstressed. Equipment shall be utilized in spreading the dumping that exerts only moderate pressures on the soil. Severe rutting at the time of placement shall be corrected by increasing the aggregate depth at no additional cost to the owner. Any ruts shall be filled with additional aggregate rather than from aggregate bladed from surrounding areas.

Measurement and Payment

Geotextile Separator Fabric will be measured and paid in square yards. Geotextile Separator Fabric will be measured along subgrades as the square yards of exposed geotextiles before placing base course. No measurement will be made for overlapping geotextiles. The contract unit price for Geotextile Separator Fabric will be full compensation for providing, transporting and placing geotextiles. The contract unit price and payment shall constitute full compensation for furnishing all labor, material, equipment, and performing all operations in connection with placing the engineering fabric as shown on the contract plans or as directed by the Engineer.

Payment will be made under:

Pay Item **Pay Unit** Geotextile Separator Fabric Square Yard

BOLLARDS

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

The bollards shall be furnished by the Owner and installed by the Contractor at the locations shown in the plans. Details are shown in the plans.

The bollards, concrete footings, and hardware shall be of the sizes and materials shown in the plans.

All bollards will be measured by counting the number of each type of bollard.

Payment will be made at the contract unit price per each for bollard. Such prices and payment will be considered full compensation for furnishing all materials, tools, labor, and equipment.

Payment will be made under:

Pay Item Pay Unit Collapsible Bollard Each Permanent Bollard Each

AS-CONSTRUCTED SURVEY

Requirements

All projects requiring As-Builts are to have a post construction survey conducted by a professional land surveyor.

- 1. Survey shall include the following:
 - a. Roadway / Greenway edge of pavement, both horizontal and vertical, shoulder points, ditches, and slope tie points.
 - b. Bridge / Boardwalk location, both horizontal and vertical, clear width, deck elevation, top of rail, low chord elevation.
 - c. Installed fencing / guardrail location
 - d. Installed manhole location and rim, bottom, and invert elevation(s)
 - e. Installed catch basin and curb inlet location and rim, bottom, and invert elevation(s)
 - f. Installed storm pipe locations and invert elevations
 - g. Installed detention pond structures or other water quality structures (inlets and outlets) location and rim, bottom, and invert elevation(s)
 - h. Installed location of cleanouts, vaults, fire hydrants, blow-off assemblies, water meters, and water valves.
 - i. Floodplain Excavation Areas
- 2. All pages of As-Built drawings must display:
 - a. "AS BUILT" or "RECORD DRAWING"
 - b. Surveyor's name, address, and phone number
 - c. Surveyors seal, signature, and date
- 3. All pages of the As-Built drawings shall be noted with the following statement: "The improvements noted on these drawings were constructed in accordance with the approved pl ans and specifications. These drawings are a true and accurate representation of the actual construction."

Submittal

- 1. Submit one (1) paper set of "Red-Lined" As-Built drawings to the Engineer, and one (1) paper set of "Red-Lined" As-Built drawings to the Owner.
- 2. Submit one (1) sealed paper copy of the As-Built Survey drawing to the Engineer, and submit one (1) sealed paper copy of the As-Built Survey drawing to the Owner.
- 3. Submit one (1) CD USB Thumb Drive containing the 3D As-Built Survey in Autocad format to the Engineer, and 1) CD or USB Thumb Drive containing the 3D As-Built Survey in Autocad format to the Owner.

Measurement and Payment

The Lump Sum price for "As-Constructed Survey" shall include all labor, equipment, and materials to required to provide the record documents as outlined in this section.

Payment will be made under:

Pay Unit Pay Item As-Constructed Survey Lump Sum

WOOD SPLIT RAIL FENCING

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

Description

Fencing shall be furnished and installed by the Contractor at the locations shown in the plans. Details for wooden split rail are shown in the plans.

Materials

Wood Split Rail Fence:

- A. Dimensions for fence shall match those in the plan detail. Fence must be three rail style.
- B. All wood materials shall be pressure treated wood. Materials shall be free from loose knots, cracks, and other imperfections.
- C. Post dimensions shall be 5" x 5".

Concrete:

Concrete shall be Class B per NCDOT Standard Specification 1000.

Construction Methods

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Ensure property lines and legal boundaries of work are clearly established.
- C. Follow individual installation instructions for the appropriate style in setting posts.
- D. Place assembled fence sections into position and slide rails into posts. The rails are secured into posts by tabs which are notched into the rails and catch on the inside wall of the post.
- E. Check each post for vertical and top alignment, and maintain in position during placement and finishing operation.
- F. Station ranges shown in plans are minimum range that fence must span. Fence installation shall extend beyond limits shown in order to maintain equal spans between fence posts. Fence spans shall maintain distances shown in the plan details. Payment will not be made for extra fence required beyond station limits shown in plans.

Cleaning:

Clean up debris and unused material and remove from site.

Measurement and Payment

Wood Split Rail Fence will be measured along the top rail of the completed installation. Payment will be made at the contract unit price per linear foot Wood Split Rail Fence, which price and payment will be considered full compensation for furnishing all materials, tools, labor, and equipment.

Payment will be made under:

Pav Unit Pav Item Wood Split Rail Fence Linear Foot

6" REINFORCED CONCRETE SLAB

Pay Unit

Square Yard

Description

Construct Portland cement concrete approach slab in accordance with the details in the plans, Sections 848 and 1070, as applicable, of the 2018 Standard Specifications, and as directed by the Engineer.

Measurement and Payment

6" Reinforced Concrete Slab will be measured and paid in square yards, measured along the surface of the completed work.

The price per square yard for these items shall be full compensation for all labor, materials, equipment, tools, and any incidentals to satisfactorily install the concrete slab per this special provisions section.

Aggregate base course will be paid for separately at the contract unit price for Aggregate Base Course.

Payment will be made under:

Pay Item 6" Reinforced Concrete Slab

TEMPORARY PIPE FOR CULVERT CONSTRUCTION

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LA

Description

This work consists of furnishing, installing, maintaining and removing any and all temporary pipe used on this project in conjunction with the culvert construction.

Construction Methods

The Contractor shall install temporary pipe in locations shown on the plans in such a manner approved by the Engineer. The temporary pipe shall provide a passageway for the stream through the work-site. The minimum size requirements will be as stated on the erosion control plans.

Measurement and Payment

__" Temporary Pipe will be measured and paid for at the contract unit price per linear foot of temporary pipe approved by the Engineer and measured in place from end to end. Such price and payment will be full compensation for all work covered by this section including but not limited to furnishing all materials required for installation, construction, maintenance, and removal of temporary pipe.

Payment will be made under:

Pay Item 15" Temporary Pipe 18" Temporary Pipe

Pay Unit Linear Foot Linear Foot

County: Johnston

PROJECT SPECIAL PROVISIONS



300 West Morgan St., Suite 1500, Durham, NC 27701

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LA

INSERTION GATE VALVE ASSEMBLY

The proposed utility construction shall meet the applicable requirements of the NC Department of Transportation's "Standard Specifications for Roads and Structures" dated January 2018, and the following Special Provisions:

Revise the 2018 Standard Specifications as follows:

Page 10-63; Sub-article 1036-8, Sleeves, Couplings and Miscellaneous add the following after Subparagraph (B):

(C) MJ Solid Sleeve Couplings and MJ Transition Sleeve Couplings

MJ Solid Sleeve Couplings shall be used to connect ductile iron piping to ductile iron and MJ Transition Sleeve Couplings shall be used to connect ductile iron pipe to cast iron pipe for buried service, where shown on the Plans. Solid sleeves shall be ductile iron and conform to the requirements off ANSI A21.10 (AWWA C110) or ANSI A21.53 (AWWA C153). MJ Solid Sleeve Couplings shall be per the Town of Clayton's Manual of Specifications, Standards, and Designs.

(D) Mechanical Joint Restraints

Mechanical joint restraints shall be specifically selected for the appropriate application. Restraint devices for nominal pipe sizes 3 inch through 48 inch shall consist of multiple gripping wedges incorporated into a follower gland meeting the applicable requirements of ANSI/AWWA C110/A21.10. The devices shall have a working pressure rating of 350 psi for 3-16 inch and 250 psi for 18-48 inch. Ratings are for water pressure and must include a minimum safety factor of 2 to 1 in all sizes. Restraint devices shall be Listed by Underwriters Laboratories (3" through 24" inch size) and Approved by Factory Mutual (3" through 12" inch size). Gland body, wedges and wedge actuating components shall be cast from grade 65-45-12 ductile iron material in accordance with ASTM A536. Ductile iron gripping wedges shall be heat treated within a range of 370 to 470 BHN. Three (3) test bars shall be incrementally poured per production shift as per Underwriter's Laboratory (U.L.) specifications and ASTM A536. Testing for tensile, yield and elongation shall be done in accordance with ASTM E8. Chemical and

Project: U-5530LA County: Johnston

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nodularity tests shall be performed as recommended by the Ductile Iron Society, on a per ladle basis.

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

The utility owner is the Town of Clayton. The contact person is Tim Simpson, Public Works Director, and can be reached by phone at 919-553-1530 ext. 6501.

Page 15-4; Sub-article 1505-3, Construction Methods, add the following after Subparagraph (F):

(G) Concrete Thrust Collars

Concrete thrust collars shall be installed where shown on the Plans and as required under Article 1505-3, Subparagraph (E). Concrete thrust collars shall be provided at the locations shown on the Plans or as requested by the Engineer. The excavation at such location(s) shall receive special attention with such undisturbed materials within as short a distance as possible from the pipe. Concrete thrust collars shall be installed in accordance with the Detail 512.02, as shown on the Plans.

All reinforcing steel shall be Grade 60 in accordance with Article 1070-2. All concrete shall be Class AA in accordance with Article 1000-4.

(H) Reaction Blocking

All fittings or components subject to hydrostatic thrust shall be securely anchored by the use of concrete thrust blocks poured in place, unless otherwise directed by the Engineer. Where concrete must be reinforced, the Contractor shall furnish such reinforcing as is required.

Required thrust block sizing shall be per the schedule provided on the plans and installation shall be per the detail notes; see Details 512.05 and 512.06.

Material for reaction blocking shall be transit-mixed concrete. This concrete shall have a twentyeight day compressive strength of 3000 psi. Any metal used to resist thrust which is not encased in concrete shall be "hot dipped" galvanized.

Page 15-5; Sub-article 1505-6, Measurement and Payment, add the following after Line 43:

Concrete thrust collars required for the Project shall be considered incidental to the _____" Water Line pay item. No additional measurement nor payment will be made.

Page 15-9, Article 1515-4, Measurement and Payment, add the following:

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PROJECT SPECIAL PROVISIONS

All <i>MJ Solid Sleeve Couplings and MJ Transition Sleeve Coe</i> considered incidental to the" Water Line pay item. It payment will be made.	
All <i>Mechanical Joint Restraints</i> shall be considered incident No additional measurement nor payment will be made.	ntal to the" Water Line pay item.
All miscellaneous connections to existing pipe shall be installed to the Promade.	
"Insertion Valve Assembly: The Work shall include the couplings, mechanical joint restraints, adapters, sleeves, tracconcrete, excavation and backfill, crushed stone, and appurequired for a complete and operable "Insertion Valve shall be ductile iron, unless otherwise shown on the Plans.	ensition pieces, plugs, rodding, etenances shown on the Plans and as
All other Work required to complete the" Insertion Vacconsidered as incidental to the project and no specific payment completing the work specified herein and as shown on the at the contract unit price per each, for each size of associated	nent will be made. Payment for Plans shall be measured and paid for
Page 15-9, Article 1515-4, Measurement and Payment, add the following to the Pay Item table:	
" Insertion Valve Assembly	Each

County: Johnston Project: U-5530LA PROJECT SPECIAL PROVISIONS

PROJECT SPECIAL PROVISIONS - EROSION CONTROL

County: Johnston Project: U-5530LA

PROJECT SPECIAL PROVISIONS

#57 STONE

General: The Contractor shall provide and place #57 Stone where show on the plans or in areas as needed during construction as directed by the Engineer.

Stone shall be provided and installed in accordance with; Section 1005 - NCDOT - Standard Specifications For Roads and Structures

Method of Measurement and Basis of Payment: The work of furnishing and installing the #57 Stone as approved by the Engineer, when completed and accepted, will be paid for at the unit price per ton for "#57 Stone". Such price and payment will be full compensation for all work covered by this special provision; including but not limited to furnishing all labor and materials. (see Section 1005 -Standard Specification)

Payment will be made under:

Pav Item **Pay Unit** #57 Stone Ton

COIR FIBER MAT

Description

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

Materials

Item Section Coir Fiber Mat 1060-14

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

Wooden Stakes:

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

Steel Reinforcement Bars:

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

County: Johnston Project: U-5530LA

PROJECT SPECIAL PROVISIONS

fiber mat.

Staples:

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

Construction Methods

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

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

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

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

Measurement and Payment

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

No measurement will be made for anchor items.

Payment will be made under:

Pay Item Pay Unit Coir Fiber Mat Square Yard

WATTLE

Description

Coir Fiber Wattles are tubular products consisting of coir fibers (coconut fibers) encased in coir fiber netting. Coir Fiber Wattles are used on slopes or channels to intercept runoff and act as a velocity break. Coir Fiber Wattles are to be placed at locations shown on the plans or as directed.

Project: U-5530LA County: Johnston

PROJECT SPECIAL PROVISIONS

Installation shall follow the detail provided in the plans and as directed. Work includes furnishing materials, installation of coir fiber wattles, matting installation, and removing wattles.

Wattles are tubular products consisting of excelsior fibers encased in synthetic netting.

Materials

Coir Fiber Wattle shall meet the following specifications:

100% Coir (Coconut) Fibers Minimum Diameter 12 in.

Minimum Density $3.5 \text{ lb/ft}^3 +/- 10\%$

Net Material Coir Fiber
Net Openings 2 in. x 2 in.
Net Strength 90 lbs.

Minimum Weight 2.6 lbs./ft. +/-

Wattle shall meet the following specifications:

100% Curled Wood (Excelsior) Fibers

Minimum Diameter 12 in.

Minimum Density $2.5 \text{ lb/ft}^3 +/- 10\%$

Net MaterialSyntheticNet Openings1 in. x 1 in.Net ConfigurationTotally Encased

Minimum Weight 20 lb. +/- 10% per 10 ft. length

10% Anchors: Stakes shall be used as anchors.

Wooden Stakes:

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

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

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

Construction Methods

Wattles or Coir Fiber Wattles shall be secured to the soil by wire staples approximately every 1 linear foot and at the end of each section of wattle. A minimum of 4 stakes shall be installed on the downstream side of the wattle with a maximum spacing of 2 linear feet along the wattle, and according to the detail. Install a minimum of 2 stakes on the upstream side of the wattle according to the detail provided in the plans. Stakes shall be driven into the ground a minimum of 10 in. with no more than 2 in. projecting from the top of the wattle. Drive stakes at an angle according to the U-5530 LA, U-5530 LB - SAM'S BRANCH PHASE II GREENWAY/NORTH O'NEIL CROSSING 124

County: Johnston Project: U-5530LA

PROJECT SPECIAL PROVISIONS

detail provided in the plans.

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

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

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

Measurement and Payment

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

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

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

Payment will be made under:

Pay Item **Pay Unit** Coir Fiber Wattle Linear Foot Wattle Linear Foot

IMPERVIOUS DIKE

Description

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

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Materials

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

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

Measurement and Payment

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

Payment will be made under:

Pay Unit Pay Item Impervious Dike Linear Foot

STABILIZATION REQUIREMENTS

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

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

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

NATIVE GRASS SEEDING AND MULCHING: (East)

PROJECT SPECIAL PROVISIONS

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

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

March 1 - August 31 September 1 - February 28

18#	Creeping Red Fescue	18#	Creeping Red Fescue
8#	Little Bluestem	8#	Little Bluestem
4#	Switchgrass	4#	Switchgrass
25#	Browntop Millet	35#	Rye Grain
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000#	Limestone

Approved Creeping Red Fescue Cultivars:

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

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

Temporary Seeding

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

Fertilizer Topdressing

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

Supplemental Seeding

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

Mowing

The minimum mowing height shall be 4 inches.

Measurement and Payment

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

PERMANENT SOIL REINFORCEMENT MAT

Description

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

Materials

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

Property	Test Method	Value	Unit
Light Penetration	ASTM D6567	9	%
Thickness	ASTM D6525	0.40	in
Mass Per Unit Area	ASTM D6566	0.55	lb/sy
Tensile Strength	ASTM D6818	385	lb/ft
Elongation (Maximum)	ASTM D6818	49	%
Resiliency	ASTM D1777	>70	%
UV Stability *	ASTM D4355	<u>≥</u> 80	%
Porosity (Permanent Net)	ECTC Guidelines	<u>≥</u> 85	%
Maximum Permissible Shear	Performance Bench	<u>≥</u> 8.0	lb/ft ²
Stress (Vegetated)	Test		
Maximum Allowable Velocity	Performance Bench	≥16.0	ft/s
(Vegetated)	Test		

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

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

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

Construction Methods

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

All areas to be protected with the mat shall be brought to final grade and seeded in accordance with Section 1660 of the Standard Specifications. The surface of the soil shall be smooth, firm, stable and free of rocks, clods, roots or other obstructions that would prevent the mat from lying in direct contact with the soil surface. Areas where the mat is to be placed will not need to be mulched.

Measurement and Payment

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

Payment will be made under:

Pay Item Permanent Soil Reinforcement Mat Pay Unit Square Yard

SAFETY FENCE AND JURISDICTIONAL FLAGGING

Description

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

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

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

Materials

(A) Safety Fencing

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

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

(B) Boundary Flagging

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

Construction Methods

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

Safety Fencing (A)

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

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

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

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

(B) Boundary Flagging

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

Boundary flagging delineation of interior boundaries will be placed in accordance with Article 105-9 or Article 801-1 of the Standard Specifications. No direct pay will be made for delineation of the interior boundaries. This delineation will be considered incidental to the work being paid for as Construction Surveying, except that where there is no pay item or construction surveying the cost of boundary flagging delineation shall be included in the unit prices bid for the various items in the contract. Installation for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall consist of wooden stakes on 25 feet maximum intervals with highly visible orange flagging attached. Stakes shall be installed a minimum of 6" into the ground. Additional flagging may be placed on overhanging vegetation to enhance visibility but does not substitute for installation of stakes.

Installation of boundary flagging for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall be performed in accordance with Subarticle 230-4(B)(3)(d) or Subarticle 802-2(F) of the Standard Specifications. No direct pay will be made for this delineation, as the cost of same shall be included in the unit prices bid for the various items in the contract.

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

Measurement and Payment

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

Payment will be made under:

Pay Item Pay Unit Safety Fence Linear Foot

PROJECT SPECIAL PROVISIONS – STRUCTURES

1.0 DESCRIPTION

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

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

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

2.0 MATERIALS

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

3.0 DESIGN REQUIREMENTS

A. Working Drawings

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

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

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

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

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

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

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

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

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

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

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

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

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

Falsework hangers that support concentrated loads and are installed at the edge of thin top flange concrete girders (such as bulb tee girders) shall be spaced so as not to exceed 75% of the manufacturer's stated safe working load. Use of dual leg hangers (such as

Meadow Burke HF-42 and HF-43) are not allowed on concrete girders with thin top flanges. Design the falsework and forms supporting deck slabs and overhangs on girder bridges so that there will be no differential settlement between the girders and the deck forms during placement of deck concrete.

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

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

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

1. Wind Loads

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

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

Table 2.2 - Wind Pressure Values

2. Time of Removal

The following requirements replace those of Article 3.4.8.2.

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

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

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

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

B. Review and Approval

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

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

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

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

4.0 CONSTRUCTION REQUIREMENTS

All requirements of Section 420 of the Standard Specifications apply.

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

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

A. MAINTENANCE AND INSPECTION

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

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

B. FOUNDATIONS

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

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

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

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

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

REMOVAL

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

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

METHOD OF MEASUREMENT

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

BASIS OF PAYMENT

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

SUBMITTAL OF WORKING DRAWINGS

Dated 6-28-17

General

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

If a submittal contains variations from plan details or specifications or significantly affects project cost, field construction or operations, discuss the submittal with and submit all copies to the Engineer. State the reason for the proposed variation in the submittal. To minimize review time, make sure all submittals are complete when initially submitted. Provide a

contact name and information with each submittal. Direct any questions regarding submittal requirements to the Engineer, Structures Management Unit contacts or the Geotechnical Engineering Unit contacts noted below.

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

Addresses and Contacts

For submittals to the Structures Management Unit, use the following addresses:

Via US mail: Via other delivery service:

Mr. B. C. Hanks, P. E. Mr. B. C. Hanks, P. E. State Structures Engineer State Structures Engineer

North Carolina Department North Carolina Department

of Transportation of Transportation

Structures Management Unit Structures Management Unit

1581 Mail Service Center 1000 Birch Ridge Drive

Raleigh, NC 27699-1581 Raleigh, NC 27610

Attention: Mr. J. L. Bolden, P. E. Attention: Mr. J. L. Bolden, P. E.

Submittals may also be made via email.

Send submittals to:

ilbolden@ncdot.gov (James Bolden)

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

eomile@ncdot.gov (Emmanuel Omile) mrorie@ncdot.gov (Madonna Rorie)

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

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

Via US mail: Via other delivery service:

Mr. Chris Kreider, P. E. Mr. Chris Kreider, P. E.

Eastern Regional Geotechnical Eastern Regional Geotechnical

Manager Manager

North Carolina Department North Carolina Department

of Transportation of Transportation

Geotechnical Engineering Unit Geotechnical Engineering Unit

Eastern Regional Office Eastern Regional Office

1570 Mail Service Center 3301 Jones Sausage Road, Suite 100 Via Email: EastGeotechnicalSubmittal@ncdot.gov

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

Via US mail or other delivery service:

Mr. Eric Williams, P. E.

Western Regional Geotechnical

Manager

North Carolina Department

of Transportation

Geotechnical Engineering Unit

Western Regional Office

5253 Z Max Boulevard

Harrisburg, NC 28075

Via Email: WestGeotechnicalSubmittal@ncdot.gov

The status of the review of structure-related submittals sent to the Structures Management Unit can be viewed from the Unit's website, via the "Drawing Submittal Status" link.

The status of the review of geotechnical-related submittals sent to the Geotechnical Engineering Unit can be viewed from the Unit's website, via the "Geotechnical Construction Submittals" link.

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

Primary Structures Contact: James Bolden

(919)707 - 6408

(919)

250 – 4082 facsimile

ilbolden@ncdot.gov

Emmanuel Omile Secondary Structures Contacts: (919)707 -

6451

Madonna Rorie (919)707 -

6508

Eastern Regional Geotechnical Contact (Divisions 1-7):

662 - 4710

ckreider@ncdot.gov

Western Regional Geotechnical Contact (Divisions 8-14):

Eric Williams (704) 455 -

8902

ewilliams3@ncdot.gov

Submittal Copies

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

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

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

STRUCTURE SUBMITTALS

Submittal	Copies Required by Structures Management Unit	Copies Required by Geotechnical Engineering Unit	Contract Reference Requiring Submittal ¹
Arch Culvert Falsework	5	0	Plan Note, SN Sheet & "Falsework and Formwork"
Box Culvert Falsework ⁷	5	0	Plan Note, SN Sheet & "Falsework and Formwork"
Cofferdams	6	2	Article 410-4
Foam Joint Seals ⁶	9	0	"Foam Joint Seals"

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

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

FOOTNOTES

- 1. References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Articles refer to the *Standard Specifications*.
- 2. Submittals for these items are necessary only when required by a note on plans.
- 3. Submittals for these items may not be required. A list of pre-approved sequences is available from the producer or the Materials & Tests Unit.
- 4. The fabricator may submit these items directly to the Structures Management Unit.
- 5. The two sets of preliminary submittals required by Article 1072-8 of the *Standard Specifications* are not required for these items.
- 6. Submittals for Fabrication Drawings are not required. Submittals for Catalogue Cuts of Proposed Material are required. See Section 5.A of the referenced provision.
- 7. Submittals are necessary only when the top slab thickness is 18" or greater.

GEOTECHNICAL SUBMITTALS

Submittal	Copies Required by Geotechnical Engineering Unit	Copies Required by Structures Management Unit	Contract Reference Requiring Submittal ¹
Drilled Pier Construction Plans ²	1	0	Subarticle 411-3(A)
Crosshole Sonic Logging (CSL) Reports ²	1	0	Subarticle 411-5(A)(2)
Pile Driving Equipment Data Forms ^{2,3}	1	0	Subarticle 450-3(D)(2)
Pile Driving Analyzer (PDA) Reports ²	1	0	Subarticle 450-3(F)(3)
Retaining Walls ⁴	1 drawings, 1 calculations	2 drawings	Applicable Provisions
Temporary Shoring ⁴	1 drawings, 1 calculations	2 drawings	"Temporary Shoring" & "Temporary Soil Nail Walls"

FOOTNOTES

- 1. References are provided to help locate the part of the contract where the submittals are required. References in quotes refer to the provision by that name. Subarticles refer to the Standard Specifications.
- 2. Submit one hard copy of submittal to the Engineer. Submit a second copy of submittal electronically (PDF via email), US mail or other delivery service to the appropriate Geotechnical Engineering Unit regional office. Electronic submission is preferred.
- 3. The Pile Driving Equipment Data Form is available from: https://connect.ncdot.gov/resources/Geological/Pages/Geotech_Forms_Details.aspx See second page of form for submittal instructions.
- 4. Electronic copy of submittal is required. See referenced provision.

CRANE SAFETY

(8-15-05)

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

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

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

CRANE SAFETY SUBMITTAL LIST

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

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

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

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

GROUT FOR STRUCTURES

9-30-11

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

DESCRIPTION

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

MATERIAL REQUIREMENTS

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

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

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

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

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

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

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

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

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

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

SAMPLING AND PLACEMENT

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

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

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

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

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

BASIS OF PAYMENT

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

1.0 GENERAL

Requirement

- A. The Contractor shall furnish and completely install new timber boardwalk to the lines and grades designated on the construction drawings or as directed by the engineer, including fabricating, erecting, treating and coating of the timber elements as specified in the construction drawings and these Specifications.
- B. For PDA testing of boardwalks, see plan notes on Sheet SB-1 and PART 4 of this specification.
- C. Timber boardwalks are to be constructed in accordance with NCDOT section 1082 unless noted otherwise in these specifications.

Materials

- A. Materials shall be in accordance with the relevant paragraphs of the 2018 NCDOT Standard Specifications Section 1082. Have all timber and lumber, including any preservative treatment, inspected and/or tested at no cost to the Owner by an approved commercial inspection company (example A.W. Williams) before it is delivered to the project. Provide industry standard commercial inspection reports for each shipment of untreated timber or lumber prior to its use on the project. Provide industry standard commercial inspection reports and treatment test reports for each shipment of treated timber or lumber prior to its use on the project. Perform all timber and lumber treatment inspections in accordance with Standard M2 (Part A) of the AWPA Specifications. In addition, brand, hammer mark, ink stamp or tag each piece of timber or lumber with the approved commercial inspection company's unique mark to indicate it has been inspected.
- B. Timber piles shall be southern pine and conform to ASTM D25. They shall possess a minimum tip diameter as specified in the plans (10" or 12") and conform to AASHTO Standard M 168 of Wood Products. Preservatives and Pressure Treatment Process shall be in accordance with AASHTO Standard M 133 and American Wood Preservers' Association (AWPA) standards. All pressure treated timber piles shall be Chromated Copper Arsenate (CCA) with minimum retentions of 0.8 lbs/cf.
- C. Posts and Timbers 5" and larger shall be pressure treated southern yellow pine grade 1 or better with a minimum Fb of 1350 psi, and shall conform to AASHTO Standard M 168 of Wood Products. Preservatives and Pressure Treatment Process shall be in accordance with AASHTO Standard M 133 and American Wood-Preservers' Association (AWPA) standards. Pressure treated timber components shall be Chromated Copper Arsenate (CCA) with minimum retentions of 0.60 lbs/c.f. All timber should be dressed cut S4S (surfaced four sides).
- D. Timbers 2"-4" thick shall be pressure treated southern yellow pine grade 1 or better with a minimum Fb of 1250 psi, and shall conform to AASHTO Standard M 168 of Wood

Products. Preservatives and Pressure Treatment Process shall be in accordance with AASHTO Standard M 133 and American Wood-Preservers' Association (AWPA) standards. Pressure treated timber components shall be free of arsenic and shall be Alkaline Copper Quaternary Type D. Components in direct contact with the soil shall be use condition UCB-4B, with minimum retentions of 0.6 lbs/cf. Other framing and handrail components not in direct contact with the soil shall be use condition UCB-3B, with minimum retentions of 0.15 lbs/cf. All timber should be dressed cut S4S (surfaced four

E. All fasteners to be in accordance with AASHTO Standard M 253 and shall be appropriate for selected timber and associated treatment methods.

Quality Control

- A. Quality Control shall be provided in accordance with ANSI/AITC A190.1-latest edition, the American Institute for Timber Construction "Standard for Heavy Timber Construction" AITC 108, American Wood-Preservers' Association Standards, and the American Institute of Timber Construction Inspection Manual AITC-200, as applicable.
- B. Provide timber graded by an industry recognized agency.
 - 1. With rules and service complying with the requirements of American Lumber Standards Committee and PS 20.

2.0 PRODUCTS

Timber

All structural solid wood components shall comply with the American Institute for Timber Construction "Standard for Heavy Timber Construction" AITC 108 as applicable.

3.0 EXECUTION

General

Boardwalk construction shall be in accordance with relevant paragraphs of the 2018 NCDOT Standard Specifications Section 1082 and Section 450.

Top Down Boardwalk Construction

Boardwalks are to be constructed using top down methods. Boardwalks are designed for a 90psf area load or H5 loading, whichever is controlling. The H5 loading is defined in the LRFD Guide Specifications for the Design of Pedestrian Bridges, 2009 edition. The Contractor shall provide to the Engineer for review and approval calculations signed and sealed by a registered professional engineer verifying that the equipment used to complete the construction will not exceed these loading criteria. Construction is to be completed in a fashion that does not damage, mar, or otherwise affect the structural capacity or appearance to users of the trail of any of the boardwalk materials. In addition, the construction methods shall not damage, mark, scuff, or otherwise mar the deck surface of the boardwalk. Materials deemed unsatisfactory by the Owner shall be replaced or repaired at no additional cost. Markings on the deck surface (i.e., rubber marks from equipment wheels) shall be removed in a manner that is approved in advance by the Engineer.

4.0 PDA TESTING

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

Pile Driving Analyzer

- A. If required, test piles with a pile driving analyzer (PDA) manufactured by Pile Dynamics, Inc., analyze data and provide PDA reports. Perform PDA testing in accordance with ASTM D4945. Use a PDA Consultant prequalified by the NCDOT Contractual Services Unit for Pile Driving Analyzer Work (work code 3060) to perform PDA testing and analysis and provide PDA reports. When using a PDA Consultant, use a PDA Operator approved as a Field Engineer (key person) for the PDA Consultant. Also, provide PDA reports sealed by a Professional Engineer approved as a Project Engineer (key person) for the same PDA Consultant.
- B. The Engineer will determine the number of piles and which piles to be tested with a PDA. Do not drive piles with a PDA until the proposed pile driving methods and equipment has been preliminarily accepted. Notify the Engineer of the pile driving schedule a minimum of 7 calendar days in advance.
- C. The Engineer will complete the review and acceptance of the proposed pile driving methods and equipment and provide the blows per foot and equivalent set for 10 blows for the required driving resistance within 10 calendar days after the Engineer receives the PDA report or the Engineer finishes PDA testing. A PDA report for or PDA testing on multiple piles may be required as determined by the Engineer before the 10 day time period begins.

Preparation

- A. Provide piles for PDA testing that are 5 ft (1.5 m) longer than the estimated pile lengths shown on the plans. Supply an AC electrical power source of a voltage and frequency suitable for computer equipment.
- B. Provide a shelter to protect the PDA equipment and operator from conditions of sun, water, wind and temperature. The shelter should have a minimum floor size of 6 ft by 6 ft (1.8 m by 1.8 m) and a minimum roof height of 8 ft (2.4 m). If necessary, heat or cool the shelter to maintain a temperature between 50 and 85 degrees F (10 and 30 degrees C). Place the shelter within 75 ft (23 m) of the pile such that the PDA cables reach the computer and the operator can clearly observe the pile. The Engineer may waive the shelter requirement if weather conditions allow.
- C. Drill up to a total of 16 bolt holes in either 2 or 4 sides of the pile, as directed by the PDA Consultant or Engineer, at an approximate distance equal to 3 times the pile diameter below the pile head. If the PDA Consultant or Engineer chooses to drill the bolt holes, provide the necessary equipment, tools and assistance to do so. A hammer drill is required for concrete piles. Allow for 2 hours per pile to drill holes.
- D. Lift, align and rotate the pile to be tested with a PDA as directed by the PDA Consultant or Engineer. Place the pile in the leads and template so that the PDA instruments and their accompanying wires will not be damaged. Attach PDA instruments as directed by the PDA Consultant or Engineer after the pile is placed in the leads and the template.

Testing

A. Use only the preliminarily accepted pile driving methods and equipment to drive piles with the PDA instruments attached. Drive piles in accordance with this provision and as

- directed by the PDA Operator or Engineer. The PDA Operator or Engineer may require the Contractor to modify the pile installation procedure during driving. Dynamic measurements will be recorded and used to evaluate the hammer performance, driving resistance and stresses, energy transfer, pile integrity and various soil parameters such as quake and damping.
- B. If required, reattach the PDA instruments and restrike or redrive the pile in accordance with this provision. Obtain the required stroke and at least 6" (150 mm) of penetration as directed by the PDA Operator or Engineer. Dynamic measurements will be recorded during restriking and redriving. The Engineer will determine when PDA testing has been satisfactorily completed.
- C. The Contractor is responsible in terms of both actual expense and time delays for any damage to the PDA instruments and supporting equipment due to the Contractor's fault or negligence. Replace any damaged equipment at no additional cost to the Department.

Analysis

When using a PDA Consultant, analyze data with the CAse Pile Wave Analysis Program (CAPWAP), version 2006 or later, manufactured by Pile Dynamics, Inc. At a minimum, analysis is required for a hammer blow near the end of initial drive and for each restrike and redrive. Additional CAPWAP analysis may be required as determined by the PDA Consultant or Engineer.

Report

- A. When using a PDA Consultant, submit 2 copies of each PDA report within 7 calendar days of completing field testing. Include the following in PDA reports:
 - 1. Title Sheet
 - 2. Project Name as shown on Title Sheet of Plans
 - 3. Project description
 - 4. County
 - 5. Boardwalk number
 - 6. Pile location
 - 7. Personnel
 - 8. Report date
 - 9. Introduction
 - 10. Site and Subsurface Conditions (including water table elevation)
 - 11. Pile Details
 - 12. Pile type and length
 - 13. Required driving resistance and resistance factor
 - 14. Installation methods including use of predrilling, spudding, vibratory hammer, template, barge, etc.
 - 15. Driving Details
 - 16. Hammer make, model and type
 - 17. Hammer and pile cushion type and thickness
 - 18. Pile helmet weight
 - 19. Hammer efficiency and operation data including fuel settings, bounce chamber pressure, blows per minute, equipment volume and pressure
 - 20. Ground or mud line elevation and template reference elevation at the time of driving

- 21. Final pile tip elevation
- 22. Driving data (ram stroke, blows per foot (0.3 meter) and set for last 10 hammer blows)
- 23. Restrike and redrive information
- 24. PDA Field Work Details
- 25. CAPWAP Analysis Results
- 26. Table showing percent skin and tip, skin and toe damping, skin and toe quake and match quality
- 27. Summary/Conclusions

B. Attachments

- 1. Boring log(s)
- 2. Pile driving equipment data form (from Contractor)
- 3. Field pile driving inspection data (from Engineer)
- 4. Accelerometer and strain gauge locations
- 5. Accelerometer and strain gauge serial numbers and calibration information
- 6. PDA hardware model and CAPWAP software version information
- 7. Electronic copy of all PDA data and executable CAPWAP input and output files

5.0 MEASUREMENT AND PAYMENT

Timber boardwalk (XX foot spans) will be measured and paid for as the actual linear feet of boardwalk incorporated in the work shown on the drawings. The contract unit price for *Timber* Boardwalk (XX foot spans) shall include full compensation for all labor, equipment, and materials, including drilling of holes to accept bolts, plates, bolts, nuts, washers, screws, other hardware, girders, joists, blocking, braces, joist hangers, beams, post caps, cross bracing, railing, beam saddles and other items for a finished boardwalk with ten foot spans. Treated Timber Piles and decking shall be paid for separately.

Pav Unit Pay Item Boardwalk 10 foot Spans Linear Foot Boardwalk 20 foot Spans Linear Foot

PDA Testing will be measured and paid for in units of each. No payment for PDA Testing will be made if the Engineer performs PDA testing. If the Engineer does not perform PDA testing, PDA Testing will be measured as one per pile. The contract unit price for PDA Testing will be full compensation for performing PDA testing the first time a pile is tested with a PDA, performing analysis on data collected during initial drive, restrikes and redrives and providing the PDA report. Subsequent PDA testing of the same piles will be considered incidental to the contract unit price for Pile Redrives.

Pay Item Pay Unit **PDA** Testing Each

Treated Timber Piles shall be measured and paid for as the actual linear feet of posts incorporated in the work shown on the drawings. The piles shall have a minimum tip diameter of 9-inches. The contract unit price for *Treated Timber Piles* shall include full compensation for all labor, equipment, and materials required for a finished installation.

Pay ItemPay UnitTreated Timber Piles 9"Min TIP DiameterLinear Foot

CONCRETE APPROACH SLAB

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

The quantity of "Concrete Approach Slab" to be paid for will be the actual number of approaches installed as shown in the Drawings and incorporated into the Work. Concrete Approaches to Boardwalks are used at the beginning and end of each Boardwalk and are shown on Sheet SB-8. Concrete Approaches to Bridges are used at bridge approaches as shown on Sheet S-7. Concrete used in Concrete Approaches shall be fiber reinforced Class AA concrete per section 1000 of the *NCDOT Standard Specifications*.

The unit price for "Concrete Approach Slab" shall include full compensation for all labor, equipment, and materials, including excavation, compaction, ABC stone, forming, placing, finishing and curing of concrete, reinforcing steel, welded wire fabric, ties, finishing and all other required items of work associated with the Concrete Approach Slab.

Payment will be made under:

Pay ItemPay UnitConcrete Approach SlabEach

APPROACH RAILS

(SPECIAL)

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

1.0 GENERAL

This Special Provision governs materials, forming and all other related work in the construction of approach rails to boardwalk and bridge structures in accordance with applicable parts of the Standard Specifications, the details shown on the plan, and as outlined in these Special Provisions.

2.0 MATERIALS

All structural solid wood components shall comply with the American Institute for Timber Construction "Standard for Heavy Timber Construction" AITC 108 as applicable.

Posts and Timbers 5" and larger shall be pressure treated southern yellow pine grade 1 or better with a minimum Fb of 1350 psi, and shall conform to AASHTO Standard M 168 of Wood Products. Preservatives and Pressure Treatment Process shall be in accordance with AASHTO Standard M 133 and American Wood-Preservers' Association (AWPA) standards. Pressure

treated timber components shall be Chromated Copper Arsenate (CCA) with minimum retentions of 0.60 lbs/c.f. All timber should be dressed cut S4S (surfaced four sides).

Timbers 2"-4" thick shall be pressure treated southern yellow pine grade 1 or better with a minimum Fb of 1250 psi, and shall conform to AASHTO Standard M 168 of Wood Products. Preservatives and Pressure Treatment Process shall be in accordance with AASHTO Standard M 133 and American Wood-Preservers' Association (AWPA) standards. Pressure treated timber components shall be free of arsenic and shall be Alkaline Copper Quaternary Type D. Components in direct contact with the soil shall be use condition UCB-4B, with minimum retentions of 0.6 lbs/cf. Other framing and handrail components not in direct contact with the soil shall be use condition UCB-3B, with minimum retentions of 0.15 lbs/cf. All timber should be dressed cut S4S (surfaced four sides).

All fasteners to be in accordance with AASHTO Standard M 253 and shall be appropriate for selected timber and associated treatment methods.

Concrete footings shall be Class AA, fiber reinforced, and are considered incidental to the work. No additional payment will be made for the concrete footings.

3.0 MEASUREMENT AND PAYMENT

Approach Rails bid item includes a set of two (2) rails shown in the details for each approach to a bridge or boardwalk structure. The total number of individual rails required divided by two will be measurement and payment incorporated in the work shown on the drawings. The contract unit price for Approach Rails shall include full compensation for all labor, equipment, and materials.

Pav Item **Pay Unit** Approach Rails (Boardwalk) Each Approach Rails (Bridge) Each

PREFABRICATED PEDESTRIAN BRIDGE

(SPECIAL)

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

PART 1 - GENERAL

- A. This project special provision is for fully engineered clear span bridges of steel construction and shall be regarded as minimum standards for design and construction.
- B. Structural Design of the bridge structure shall be performed by or under the direct supervision of a licensed professional engineer and done in accordance with recognized engineering practices and principles. The engineer shall be licensed to practice in North Carolina.

PART 2 – QUALIFIED SUPPLIERS

The Contractor is required to obtain a pedestrian bridge from a manufacturer that is prequalified with the NCDOT and shall identify the manufacture in their bid package. Refer to the NCDOT Approved Product List of preapproved pedestrian bridge manufacturers the Contractor may use. The Approved Product List of Pedestrian Bridges can be viewed at: https://apps.ncdot.gov/vendor/approvedproducts/.

Pedestrian Bridge Vendors not listed on the Approved Product List will not be allowed unless they are prequalified with the NCDOT before the bid opening. The vendor must have written documentation from the NCDOT stating that they are prequalified. Any bids that used nonprequalified vendors are subject to rejection.

PART 3 – DESIGN FEATURES

Bridge shall be designed as a truss system with 10.0 feet minimum clear width and a cast in place concrete deck. The vertical height from top of finished deck to low bridge chord shall be a maximum of 1'-934". All members of the vertical trusses shall be fabricated from structural steel shapes or square or rectangular structural steel tubing. Design loads are to include pedestrian and vehicular loads as required by AASHTO LRFD Guide Specifications for Design of Pedestrian Bridges, Article 3.1 and 3.2.

Unless the floor and fastenings are specifically designed to provide adequate lateral support to the top flange of open shape stringers (W shapes or channels), a minimum of one stiffener shall be provided in each stringer at every floor beam location.

The bridge shall be provided with a continuous pedestrian/ bicycle railing on each side of the bridge with a minimum height of 48". Design the vertical and/ or horizontal members of this railing to meet all geometric and loading requirements for pedestrian and bicycle bridge rails, as outlined in Section 13.10 of AASHTO LRFD Bridge Design Specifications. In addition, the openings between members of a pedestrian railing shall not allow a 4 inch sphere to pass through the lower 27 inches of the railing and a 6 inch sphere should not pass through any openings above 27 inches.

As a minimum, three rails shall be provided:

- A top rail at a minimum height of 48 inches above the top of deck.
- A bottom rail mounted at a height adequate to provide a 2" gap between the bottom of the rail and the top of the deck.
- A rail at mid-height between the top and bottom rails.

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

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

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

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

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

The minimum thickness of all structural steel members shall be 1/4" nominal and be in accordance with the AISC Manual of Steel Construction's "Standard Mill Practice Guidelines." For ASTM A500 and ASTM A847 tubing, the section properties used for design shall be per the Steel Tube Institute of North America's Hollow Structure Sections "Dimension and Section Properties."

Construction

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

Structural Steel Allowable Stresses

American Association of State Highway and Transportation Officials (AASHTO)

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

Welded Connections

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

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

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

- Chord face plastification
- Punching shear (through main member face)
- Material failure
 - Tension failure of the web member
 - Local buckling of a compression web member
- Weld failure
 - Allowable stress based on "effective lengths"
 - "Ultimate" capacity
- Local buckling of a main member face
- Main member failure:

- Web or sidewall yielding
- Web or sidewall crippling
- Web or sidewall buckling
- Overall shear failure

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

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

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

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

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

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

Bolted field splices shall be located on the bridge to produce a bridge that can be economically shipped and erected. Splices along the length of the bridge (in chords and diagonals) shall be placed at the approximately mid-point of a bay (between two panel points). Splices across the width of the bridge (in floor beams and wind braces) may be used, when necessary, to keep the overall structure width within reasonable limits for shipping.

Materials and Inspection

Unless noted otherwise, all materials, construction, and inspection shall be in accordance with Section 1072 of the 2018 NCDOT Standard Specifications for Roads and Structures.

Within seven (7) days after contract execution, the fabricator shall notify the Engineer to allow for communication between the fabricator and the Engineer regarding certification, material sampling and testing, and other items stated in Section 1072 of the 2018 NCDOT Standard Specifications for Roads and Structures.

Bridges shall be fabricated from high-strength, low-alloy, atmospheric corrosion resistant ASTM A847 cold-formed, welded square and rectangular tubing and/or atmospheric corrosion resistant ASTM A588, ASTM A242, and ASTM A606 plate and structural steel shapes (Fy = 50,000 psi).

The minimum corrosion index of the atmospheric corrosion resistant steel, as determined in accordance with ASTM G101, shall be 6.0.

Bolts, nuts, and washers shall be in accordance with Section 1072-7(F) of the 2018 NCDOT Standard Specifications for Roads and Structures.

The bridge deck shall be composed of a reinforced concrete deck. For concrete deck, see special provisions.

Submittals

Schematic drawings and diagrams shall be submitted to the Engineer for their review after receipt of order. Submittal drawings shall be unique drawings, prepared to illustrate the specific portion of the work to be done. All relative design information such as member sizes, bridge reactions, and general notes shall be clearly specified on the drawings. Drawings shall have cross referenced details and sheet numbers. All drawings shall be signed and sealed by a Professional Engineer who is licensed as outlined in Part 1 of this specification.

Structural calculations and special provisions for the bridge superstructure shall be submitted by the bridge manufacturer and reviewed by the Engineer. All calculations and special provisions shall be signed and sealed by a Professional Engineer who is licensed as outlined in Part 1. The calculations shall include all design information necessary to determine the structural adequacy of the bridge. The calculations shall include, but are not limited to, the following:

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

Note that all shop drawings and calculations are subject to the approval of the NCDOT Structure Design Unit if the project is funded with Federal or State funds.

Fabrication

When the collection of water inside a structural tube is a possibility, either during construction or during service, the tube shall be provided with a drain hole at its lowest point. Drain holes shall be considered during structural design and analysis. Drain holes shall be drilled during fabrication. On site drilling of drain holes will not be allowed without written consent of the design engineer (and NCDOT if applicable).

Special attention shall be given to developing sufficient weld throats on tubular members. Fillet weld details shall be in accordance with AWS D1.1, Section 3.9 (See AWS Figure 3.2). Unless

determined otherwise by testing, the loss factor "Z" for heel welds shall be in accordance with AWS Table 2.8. Fillet welds that run onto the radius of a tube shall be built up to obtain the full throat thickness. The maximum root openings of fillet welds shall not exceed 3/16" in conformance with AWS D1.1, Section 5.22. Weld size or effective throat dimensions shall be increased in accordance with this same section when applicable (i.e., fit-up gaps > 1/16").

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

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

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

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

All welds shall be visually inspected. A minimum ten percent (10%) of all fillet welds shall be tested by Magnetic Particle Testing (MT). All (100%) full penetration welds shall be subject to Radiographic Testing (RT). Welding inspection and testing shall be subject to the requirements of AWS D1.1 or AWS 1.5, whichever is applicable and more stringent. Also, please refer to Section 1072 of the 2018 NCDOT Standard Specifications for Roads and Structures.

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

Delivery and Erection

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

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

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

Foundations

Unless specified otherwise, the bridge manufacturer shall determine the number, location and layout, diameter, minimum grade, finish, and embedment of all anchor bolts. The anchor bolts shall be designed to resist all horizontal and uplift forces to be transferred by the superstructure to the supporting foundations. The Contractor shall provide and install anchor bolts in accordance with the bridge manufacturer's anchor bolt plans and requirements.

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

Warranty

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

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

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

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

Measurement and Payment

The *Prefabricated Bridge* shall be paid for at the contract lump sum price per each bridge. The lump sum price shall include full compensation for all labor, materials, equipment, and submittals needed to complete fabrication of the bridge.

Bridge Erection shall be paid for the delivery of the bridge structure to the site as described herein, and the erection and installation of the bridge at the horizontal and vertical location shown in the plans. The lump sum price shall include full compensation for all labor, materials, and equipment needed to complete delivery, erection, and installation of the bridge.

Payment will be made under:

Pay Item	Pay Unit
Prefabricated Bridge (60')	Each
(60') Bridge Erection	Each

CONSTRUCTION OF SUBSTRUCTURE

(2/14/04)

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

Furnish and place all reinforcing steel, concrete, and incidentals necessary to construct all bridge substructure elements for a given bridge site including all end bents, interior bents, and columns as shown on the construction plans. Exclude all piles and drilled shafts from the pay item. Excavation required to construct bridge substructure is incidental to substructure construction. No additional payment will be made for excavation.

Complete all work in accordance with the contract plans and Division 4 of the Standard Specifications except payment for these items will be as described below.

Drilled piers shall be constructed according to Section 411 of the Standard Specifications. End bent caps shall be constructed of Class A Concrete according to Section 1000 of the Standard Specifications. Refer to the plans for all other details.

No measurement will be made for these items. The price and payment below will be full compensation for all items required to complete the work described above. Payment will be made under:

Pay Item 60' Bridge Substructure Pay Unit Each

REINFORCED CONCRETE DECK SLAB (BRIDGE)

(SPECIAL)

GENERAL

This Special Provision governs materials, forming and all other related work in the construction of a reinforced concrete deck slab at the bridge location in accordance with applicable parts of Division 4 of the Standard Specifications, the details shown on the plan, and as outlined in these Special Provisions.

Design and submit to the Engineer for approval a 6" minimum Reinforced Concrete Deck Slab. Provide design calculations and supporting data, sealed by a North Carolina Registered Professional Engineer, in sufficient detail to permit a structural review. For design loads, see Project Special Provision for "Prefabricated Pedestrian Bridge".

MATERIALS

Concrete to be used in the Reinforced Concrete Deck Slab shall be either Class AA concrete or sand lightweight concrete. Class AA concrete must meet the requirement of Section 1000 of the Standard Specifications. If Sand Lightweight Concrete is used, concrete is to meet requirements of Special Provision for "Sand Light Concrete."

BASIS OF PAYMENT

The full cost of Reinforced Concrete Deck shall be included in the pay item for "Bridge" Concrete Deck". The Reinforced Concrete Deck cost will be full compensation for all work covered by this Special Provision and applicable parts of the Standard Specifications, but not limited to furnishing and placing concrete, reinforcing steel, joint filler and sealer, curing, crack repair and any other material; erecting and removing all falsework and forms including any appurtenances required by the Engineer to stabilize the trusses construction; protecting concrete in wind, rain, low humidity, high temperatures or other unfavorable weather, construction joints, finishing concrete and curing concrete.

Pay Unit Pav Item 60' Bridge Concrete Deck Each

SAND LIGHTWEIGHT CONCRETE

(9-30-11)

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

Use sand lightweight concrete, as noted on the plans, that meets the requirements of this Special Provision.

Sand lightweight concrete is composed of portland cement, fine aggregate, lightweight coarse aggregate, water, and admixtures. Provide sand lightweight concrete that complies with the applicable requirements of Sections 420, 1000, and 1024 of the Standard Specifications and the additional requirements herein.

Submit a mix design from a testing laboratory approved by the NC Division of Highways for approval at least 35 days prior to the proposed use. Provide a mix meeting Table 1000-1 of the Standard Specifications and the following design criteria:

TEST	TEST METHOD	REQUIREMENT
Max. Unit Weight, plastic, lbs/ft ³	AASHTO T121	120
Max. Unit Weight, dry, lbs/ft ³	ASTM C567 using equilibrium air dried unit weight	115
Min. Relative Dynamic Modulus, (percent)	AASHTO T161 Procedure A	80

When submitting the mix design, include the source of the aggregates, cement, and admixtures and the gradation, specific gravity and fineness modulus (fine aggregate only) of the aggregates. Submit test results showing the mix design conforms to the criteria, including the 28 day compressive strength of a minimum of six cylinders. Provide a mix design that produces an average compressive strength sufficient to ensure that a minimum strength of 4500 psi is achieved in the field.

Produce an additional mix in accordance with AASHTO M195 to determine the drying shrinkage. The maximum drying shrinkage for this mix is 0.07%.

For lightweight aggregate, use expanded shale or slate that meets the requirements of AASHTO M195. Grade the lightweight aggregate in accordance with 1014-2(E)(6).

Determine the soundness in accordance with AASHTO T104. Loss of more than 10% of the lightweight aggregate in five cycles of the accelerated soundness test using sodium sulfate is not permitted.

Ensure the lightweight aggregate is in a saturated surface-dry condition when it is proportioned and incorporated into the mix.

BRIDGE SPLIT RAIL FENCE

(SPECIAL)

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LB

GENERAL

This Special Provision governs materials, forming and all other related work in the construction of split rail fence at bridge structures in accordance with applicable parts of the Standard Specifications, the details shown on the plan, and as outlined in these Special Provisions. Details for Bridge Split Rail Fence are shown in the plans on Sheet 2A.

MATERIALS

- All structural solid wood components shall comply with the American Institute for Timber Construction "Standard for Heavy Timber Construction" AITC 108 as applicable.
- Posts and Timbers 5" and larger shall be pressure treated southern yellow pine grade 1 or better with a minimum Fb of 1350 psi, and shall conform to AASHTO Standard M 168 of Wood Products. Preservatives and Pressure Treatment Process shall be in accordance with AASHTO Standard M 133 and American Wood-Preservers' Association (AWPA) standards. Pressure treated timber components shall be Chromated Copper Arsenate (CCA) with minimum retentions of 0.60 lbs/c.f. All timber should be dressed cut S4S (surfaced four sides).
- Timbers 2"-4" thick shall be pressure treated southern yellow pine grade 1 or better with a minimum Fb of 1250 psi, and shall conform to AASHTO Standard M 168 of Wood Products. Preservatives and Pressure Treatment Process shall be in accordance with AASHTO Standard M 133 and American Wood-Preservers' Association (AWPA) standards. Pressure treated timber components shall be free of arsenic and shall be Alkaline Copper Quaternary Type D. Components in direct contact with the soil shall be use condition UCB-4B, with minimum retentions of 0.6 lbs/cf. Other framing and handrail components not in direct contact with the soil shall be use condition UCB-3B, with minimum retentions of 0.15 lbs/cf. All timber should be dressed cut S4S (surfaced four sides).
- All fasteners to be in accordance with AASHTO Standard M 253 and shall be appropriate for selected timber and associated treatment methods.
- Concrete used in concrete footings is to be Class B per Section 1000 of the NCDOT Standard Specifications.

MEASUREMENT AND PAYMENT

Bridge Split Rail Fence will be measured and paid for as the actual linear feet of boardwalk incorporated in the work shown on the drawings. The contract unit price for Bridge Split Rail Fence shall include full compensation for all labor, equipment, and materials, including timber, hardware, concrete footings, and excavation required for a finished installation.

Pay Unit Pay Item Bridge Split Rail Fence Linear Foot

PLACING LOAD ON STRUCTURE MEMBERS

(11-27-12)

The 2018 Standard Specifications shall be revised as follows:

In Section 420-20 – Placing Load on Structure Members replace the first sentence of the fifth paragraph with the following:

Do not place vehicles or construction equipment on a bridge deck until the deck concrete develops the minimum specified 28 day compressive strength and attains an age of at least 7 curing days.

PRECAST REINFORCED CONCRETE BOX CULVERT AT STATION 13+19.12 Y

(12-12-13)

NOTE THIS SPECIAL PROVISION IS ONLY FOR THE TIP U-5530 LA

1.0 GENERAL

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

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

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

If the span, rise and design earth cover for the precast reinforced concrete box culvert are identical to a previously approved submittal, the Contractor may request the previously approved design calculations and plans be considered as the submittal for review and

2.0 NORTH CAROLINA'S LEGAL LOADS

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

SINGLE VEHICLE(SV)		TRUCK TRACTOR SEMI-TRAILER(TTST)			
REF.#	SCHEMATIC		REF.#	SCHEMATIC	
SH	5K 20K ○ ○ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	25K 12.5 TON	T4A	11K 7.5K 19K 19K	
S3A	7.5K 19K 19K	45.5K 22.75 TON		56.5K 28.25 TON 6.5K 19K 19K 9.75K 9.75K	
s3C	5K 19K 19K	43K 21.5 TON	T5B	9' 4' 9' 4' 26' 9' 4' 64K 32 TON	
	15' 15K 4K 19K 19K	53.5K	T6A	11K 4K 19K 19K 9.5K 9.5K 9.5K 9.5K 9.5K 9.5K	
S4A	9' 4' 4'	26.75 TON		72K 36 TON 11K 4K 19K 19K 9K 9K 9K	
\$5A	11K 6K 19K 19K 6K 9' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4'	61K 30.5 TON	Т7А	9' 4' 4' 9' 4' 4' 80K 40 TON	
S6A	9' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4'	69K 34.5 TON	Т7В	11K 9.5K 9.5K 6K 6K 19K 19K 9' 4' 4' 4' 4' 4' 80K	
S7A	9' 4' 4' 4' 4' 9' 34'	11K 80K 40 TON		40 TON	
S7B	11K 7K 7K 19K 19K 7K 7K 7K 9'				
		38.5 TON			

SINGLE VEHICLE (SV)			TRUCK TRACTOR SEMI-TRAILER (TTST)			
REF.#	REF.# SCHEMATIC		REF.#	SCHEMATIC		
SNSH	5K 22K	27K 13.5 TON	TNAGRIT3	22K 22K 22K	66K 33 Ton	
SNGARBS2	23.5K 16.5K	40K 20 TON	TNT4A	12.1K 12.05K 21K 21K	66.15K 33.075 TON	
SNAGRIS2	22K 22K	44K 22 Ton	TNAGRIT4	22K 22K 21K 21K	86K 43 TON	
SNCOTTS3	4.5K 25K 25K	54.5K 27.25 TON	TNAGT5A	22K 21K 21K 13K 1 9' 4' 9' 4' 26'	90K 45 TON	
SNAGGRS4	16K 15.85K 19K 19K	69.85K 34.925 TON	TNAGT5B	6K 21K 21K 21K 2 9' 4' 9' 4'	90K 45 TON	
SNS5A	12.1K 8.5K 21K 21K 8.5K 9' 4' 4' 4' 4' 4' 4' 4'	71.1K 35.55 TON	TNT6A	12.1K 8.2K 21K21K 10.45K1	0.45K 83.2K 41.6 TON	
SNS6A	12.1K 8.6K 8.6K 21K 21K 8.6K	79.9K 39.95 TON	TNT7A	4.1K 4K 21K 21K 11.3K 1	1.3K 11.3K 1.3K 11.3K 84K 42 TON	
SNS7B	7.6K 8.6K 8.6K 21K 21K 8.6K 8.9 9' 4' 4' 29' 4' 29'	6K) 84K 42 TON	ТМТ7В	4.1K 10.5K 10.5K 8.45K 8.45K 2 9' 4' 9' 4' 34'	21K 21K 21K 21K 4' 4' 84K 42 TON	

3.0 PRECAST REINFORCED CONCRETE BOX SECTIONS

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

A. Design

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

B. Joints

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

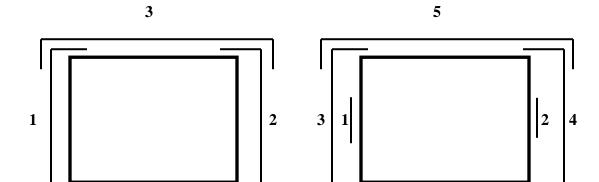


Figure 1

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

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

C. Manufacture

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

- 1. Mixture In addition to the requirements of Section 1077 of the Standard Specifications, do not proportion the mix with less than 564 lb/yd³ of portland cement.
- 2. Strength Concrete shall develop a minimum 28-day compressive strength of 5000 psi. Movement of the precast sections should be minimized during the initial curing period. Any damage caused by moving or handling during the initial curing phase will be grounds for rejection of that precast section.
- 3. Air Entrainment Air entrain the concrete in accordance with Section 1077 5(A) of the Standard Specifications. For dry cast manufacturing, air entrainment is not required.
- 4. Testing Test the concrete in accordance with the requirements of Section 1077 -5(B).
- 5. Handling Handling devices or holes are permitted in each box section for the purpose of handling and placing. Submit details of handling devices or holes for approval and do not cast any concrete until approval is granted. Remove all handling devices flush with concrete surfaces as directed. Fill holes in a neat and workmanlike manner with an approved non-metallic non-shrink grout, concrete, or hole plug.

D. Physical Requirements

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

E. Permissible Variations

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

F. Marking

1. Each section shall be match-marked in order of intended installation as indicated on the approved shop drawings. Ensure that pieces fit together neatly and in a workmanlike manner. In order to ensure a good, neat field fit, the Department will verify assembly of the first five adjacent sections or 20% of the total culvert length, whichever is greater, at the producer's facility and match-mark the pieces. This will

require that a minimum of three adjacent sections of the culvert be fitted at the production yard at a time and then match-marked. Once three sections have been match-marked, the first section may be removed for shipment and a fourth section set for marking. Continue in a progressive manner until all sections have been properly The producer shall document the GO-NO-GO dimensional measurements of each box culvert section produced through the post-pour inspection process.

2. Clearly mark each section of the box culvert in accordance with ASTM C1577, Section 15. The information requirements of Section 15.1 shall be clearly marked on the inner surface of each section.

G. Construction

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

BASIS OF PAYMENT

The Precast Reinforced Concrete Box Culvert as described on the plans and in this Special Provision will be paid for at the contract lump sum price for "Precast Reinforced Concrete Box Culvert at Station 17+81.32 -L-. Such price and payment will be full compensation for all work covered by this Special Provision, the plans and applicable parts of the Standard Specifications and will include, but not be limited to, furnishing all labor, materials (including all filter fabric), equipment and other incidentals necessary to complete this work. Such price and payment will also be full compensation for concrete, reinforcing steel, labor, equipment and all other related materials necessary for the completion of the barrel section, and the construction of the headwalls, end curtain walls, wings and wing footings. Culvert Excavation and Foundation Conditioning Material will be paid for in accordance with the Standard Specifications and will not be a part of this pay item.

Payment will be made under:

Pay Item Pay Unit

Precast Reinforced Concrete

Box Culvert at Station 13+19.12 -Y-Lump Sum

STANDARD SPECIAL PROVISIONS

(5-20-08)

General Statute 143C-6-11. (h) Highway Appropriation is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in General Statute 143C-6-11(c). Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(E) of the 2018 Standard Specifications.

NCDOT GENERAL SEED SPECIFICATION FOR SEED QUALITY

(5-17-11)

Z-3

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

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

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

Tolerances established by the Association of Official Seed Analysts will generally be recognized. However, for the purpose of figuring pure live seed, the found pure seed and found germination percentages as reported by the North Carolina Department of Agriculture and Consumer Services, Seed Testing Laboratory will be used. Allowances, as established by the NCDOT, will be recognized for minimum pure live seed as listed on the following pages.

The specifications for restricted noxious weed seed refers to the number per pound as follows:

Restricted Noxious	Limitations per	Restricted Noxious	Limitations per
<u>Weed</u>	Lb. Of Seed	<u>Weed</u>	Lb. of Seed
Blessed Thistle	4 seeds	Cornflower (Ragge	d 27 seeds
		Robin)	
Cocklebur	4 seeds	Texas Panicum	27 seeds
Spurred Anoda	4 seeds	Bracted Plantain	54 seeds
Velvetleaf	4 seeds	Buckhorn Plantain	54 seeds
Morning-glory	8 seeds	Broadleaf Dock	54 seeds
Corn Cockle	10 seeds	Curly Dock	54 seeds
Wild Radish	12 seeds	Dodder	54 seeds
Purple Nutsedge	27 seeds	Giant Foxtail	54 seeds
Yellow Nutsedge	27 seeds	Horsenettle	54 seeds
Canada Thistle	27 seeds	Quackgrass	54 seeds
Field Bindweed	27 seeds	Wild Mustard	54 seeds
Hedge Bindweed	27 seeds		

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

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

FURTHER SPECIFICATIONS FOR EACH SEED GROUP ARE GIVEN BELOW:

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

Sericea Lespedeza Oats (seeds)

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

Tall Fescue (all approved varieties)

Bermudagrass

Kobe Lespedeza Korean Lespedeza Weeping Lovegrass

Carpetgrass

Browntop Millet German Millet - Strain R Clover – Red/White/Crimson

Minimum 78% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 76% pure live seed will not be approved.

Common or Sweet Sundangrass

Minimum 76% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 restricted noxious weed seed per pound. Seed less than 74% pure live seed will not be approved.

Rye (grain; all varieties)

Kentucky Bluegrass (all approved varieties)

Hard Fescue (all approved varieties)

Shrub (bicolor) Lespedeza

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 144 noxious weed seed per pound. Seed less than 70% pure live seed will not be approved.

Centipedegrass Japanese Millet Crownvetch Reed Canary Grass

Pensacola Bahiagrass

Creeping Red Fescue

Minimum 70% pure live seed; maximum 1% total weed seed; maximum 2% total other crop seed; maximum 5% inert matter; maximum 144 restricted noxious weed seed per pound.

Zoysia

Barnyard Grass

Big Bluestem

Little Bluestem

Bristly Locust

Birdsfoot Trefoil

Indiangrass

Orchardgrass

Switchgrass

Yellow Blossom Sweet Clover

ERRATA

(2-12-18)Z-4

Revise the 2018 Standard Specifications as follows:

Division 7

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

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

Division 10

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

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

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

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

PLANT AND PEST QUARANTINES

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

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

Within Quarantined Area

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

Originating in a Quarantined County

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

Contact

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-707-3730, or http://www.ncagr.gov/plantindustry/ to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.

- 2. Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.
- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed, emerald ash borer, or other noxious weeds.

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.

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:

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.

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.

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.

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.

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:

Withholding payments to the contractor under the contract until the contractor complies; and/or

Cancelling, terminating, or suspending a contract, in whole or in part.

Incorporation of Provisions

The contractor shall include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

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:

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:

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.

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.

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."

Physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts on Federal-aid highway construction contracts only.

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.

For assistance with these Title VI requirements, contact the NCDOT Title VI Nondiscrimination Program at 1-800-522-0453.

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))

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))

The Contractor is responsible for notifying subcontractors of NCDOT's External Discrimination Complaints Process.

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.

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.

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:

The date of the alleged act of discrimination; or

The date when the person(s) became aware of the alleged discrimination; or

Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.

Title VI and 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

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.

Discrimination Complaint Form

Contact NCDOT Civil Rights to receive a full copy of the Discrimination Complaint Form and procedures.

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.

		E 103-1 INT 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.
Color	Color of skin, including shade of skin within a racial group	Black, White, brown, yellow, etc.	(Executive Order 13166)
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	An individual belonging to a	Muslim, Christian,	Title VII of the Civil Rights Act of 1964;
employment) (Religion/ Creed in all aspects of any aviation or transit-related construction)	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.	Sikh, Hindu, etc.	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:

Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.

The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);

Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);

Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability) and 49 CFR Part 27;

The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);

Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);

- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- (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);
- 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;
- Executive Order 13166, Improving Access to Services for Persons with Limited English (k) Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from (1) discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).
- Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e et seq., Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, religion, sex, or national origin).

Additional Title VI Assurances

**The following Title VI Assurances (Appendices B, C and D) shall apply, as applicable

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, guitclaim 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 above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].*

(*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

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):

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:

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.

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. *

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.)

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):

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.

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. *

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.)

MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS

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

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

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

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

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

EMPLOYMENT GOALS FOR MINORITY AND FEMALE PARTICIPATION

Economic Areas

Area 023 29.7%
Bertie County
Camden County
Chowan County
Gates County
Hertford County
- · ·

Area 023 20 7%

Pasquotank County **Perquimans County**

Area 024 31.7%

Beaufort County Carteret County **Craven County** Dare County **Edgecombe County**

Green County Halifax County **Hyde County** Jones County **Lenoir County** Martin County Nash County

Northampton County **Pamlico County** Pitt County Tyrrell County **Washington County** Wayne County Wilson County

Area 025 23.5%

Columbus County **Duplin County Onslow County** Pender County

Area 026 33.5% Bladen County **Hoke County Richmond County Robeson County** Sampson County **Scotland County**

Area 027 24.7%

Chatham County Franklin County **Granville County Harnett County** Johnston County Lee County **Person County** Vance County Warren County

Area 028 15.5%

Alleghany County Ashe County Caswell County **Davie County Montgomery County** Moore County **Rockingham County**

Surry County Watauga County Wilkes County

Area 029 15.7% **Alexander County Anson County Burke County** Cabarrus County Caldwell County Catawba County **Cleveland County** Iredell County Lincoln County **Polk County Rowan County Rutherford County Stanly County**

<u>Area 0480 8.5%</u>

Buncombe County Madison County

Area 030 6.3%

Avery County Cherokee County Clay County **Graham County Haywood County Henderson County Jackson County** McDowell County **Macon County** Mitchell County **Swain County**

Transylvania County Yancey County

SMSA Areas

Area 5720 26.6%

Currituck County

Area 9200 20.7%

Brunswick County New Hanover County

<u>Area 2560</u> 24.2% **Cumberland County** **Durham County**

Orange County Wake County

Area 1300 16.2%

<u>Area 6640</u> 22.8%

Alamance County

Area 3120 16.4%

Davidson County Forsyth County **Guilford County** Randolph County **Stokes County** Yadkin County

<u>Area 1520 18.3%</u>

Gaston County Mecklenburg County **Union County**

Goals for Female Participation in Each Trade (Statewide) 6.9%

REQUIRED CONTRACT PROVISIONS FEDERAL - AID CONSTRUCTION **CONTRACTS**

FHWA - 1273 Electronic Version - May 1, 2012

Z-8

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- 2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting
- Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
 - The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
 - The contractor will accept as its operating policy the following statement: "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
- 2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be
 - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
 - Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
 - The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
 - The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
 - In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
 - The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

- 5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
 - The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
 - The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
 - a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
 - The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
 - In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
 - a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract. b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
 - The records kept by the contractor shall document the following:
 - (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women: and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
 - The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (ii) The classification is utilized in the area by the construction industry; and
 - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
 - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
 - (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or
- 2. Withholding. The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/ wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.
 - (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
 - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
 - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

Apprentices (programs of the USDOL). Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

Trainees (programs of the USDOL). Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- Apprentices and Trainees (programs of the U.S. DOT). Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.
- 5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- 6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- 7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- 9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- 10. Certification of eligibility.
 - a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
- 4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
 - (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
 - (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
 - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more - as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this
- The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) 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;
- (3) 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 (a)(2) of this certification; and
- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of

Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and

- The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

- The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
- Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

ON-THE-JOB TRAINING

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

Description

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

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

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

Minorities and Women

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

Assigning Training Goals

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

Training Classifications

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

> **Equipment Operators** Office Engineers

Truck Drivers **Estimators**

Carpenters Iron / Reinforcing Steel Workers

Concrete Finishers Mechanics Pipe Layers Welders

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

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

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

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

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

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

Records and Reports

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

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

Trainee Interviews

All trainees enrolled in the program will receive an initial and Trainee/Post graduate interview conducted by the OJT program staff.

Trainee Wages

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

Achieving or Failing to Meet Training Goals

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

Measurement and Payment

No compensation will be made for providing required training in accordance with these contract documents.

MINIMUM WAGES GENERAL DECISION NC180103 01/05/2018 NC103

Z-103

Date: January 5, 2018

General Decision Number: NC180103 01/05/2018 NC103

Superseded General Decision Numbers: NC20170103

State: North Carolina

Construction Type: HIGHWAY

COUNTIES:

Brunswick	Greene	Onslow
Cumberland	Hoke	Pender
Currituck	Johnston	Pitt
Edgecombe	Nash	Wake
Franklin	New Hanover	Wayne

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 that applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract for calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2) – (60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

SUNC2014-005 11/17/2014

	Rates	NC2014-005 11/ Fringes
BLASTER	21.04	Timges
CARPENTER	13.72	
CEMENT MASON/CONCRETE FINISHER	14.48	
ELECTRICIAN	2,7,10	
Electrician	17.97	
Telecommunications Technician	16.79	.63
IRONWORKER	16.02	
LABORER		
Asphalt Raker and Spreader	12.46	
Asphalt Screed/Jackman	14.33	
Carpenter Tender	12.88	
Cement Mason/Concrete Finisher Tender	12.54	
Common or General	10.20	
Guardrail/Fence Installer	12.87	
Pipelayer	12.17	
Traffic Signal/Lighting Installer	14.89	
PAINTER		
Bridge	24.57	
POWER EQUIPMENT OPERATORS		
Asphalt Broom Tractor	11.85	
Bulldozer Fine	17.04	
Bulldozer Rough	14.34	
Concrete Grinder/Groover	20.34	2.30
Crane Boom Trucks	20.54	
Crane Other	20.08	
Crane Rough/All-Terrain	20.67	
Drill Operator Rock	14.38	
Drill Operator Structure	21.14	
Excavator Fine	16.60	
Excavator Rough	14.00	
Grader/Blade Fine	18.47	
Grader/Blade Rough	14.62	
Loader 2 Cubic Yards or Less	13.76	
Loader Greater Than 2 Cubic Yards	14.14	
Material Transfer Vehicle (Shuttle Buggy)	15.18	
Mechanic	17.55	
Milling Machine	15.36	
Off-Road Hauler/Water Tanker	11.36	
Oiler/Greaser	13.55	
Pavement Marking Equipment	12.11	
Paver Asphalt	15.59	
Paver Concrete	18.20	
Roller Asphalt Breakdown	12.45	
Roller Asphalt Finish	13.85	
Roller Other	11.36	
Scraper Finish	12.71	
Scraper Rough	11.35	
Slip Form Machine	16.50	
Tack Truck/Distributor Operator	14.52	

	Rates	Fringes
TRUCK DRIVER		
GVWR of 26,000 Lbs or Less	11.12	
GVWR of 26,000 Lbs or Greater	12.37	

Welders – Receive rate prescribed for craft performing operation to which welding is incidental.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number,

007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier. Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
 - * an existing published wage determination
 - * a survey underlying a wage determination
 - * a Wage and Hour Division letter setting forth a position on a wage determination matter
 - * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D.C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, D.C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board U.S. Department of Labor 200 Constitution Avenue, N.W. Washington, D.C. 20210

4.) All decisions by the Administrative Review Board are final.

GREENWAYS AND MULTI-USE PATHS:

(2-18-14) Z-200

Description

This special provision provides for revisions to the 2018 Standard Specifications for work on a greenway or multi-use path not designed or intended to carry highway traffic.

Materials

Refer to the 2018 Standard Specifications except as noted in these Special Provisions. Use materials on the NCDOT Approved Products List (APL) where applicable.

Construction Methods

Construct Greenway in accordance with the contract plans, 2018 Standard Specifications except as noted below:

SECTION	ARTICLE	PAG	REVISION
		\mathbf{E}	
235:	235-3(C):	2-24	Delete first sentence and replace with the following:
Embankments	Embankment		Compact each layer for its full width to a density equal to
	Compaction		at least 90% of that obtained by compacting a sample of
	-		the material in accordance with AASHTO T 99 as
			modified by the Department.

SECTION	ARTICLE	PAG	REVISION
		\mathbf{E}	
500: Fine Grading Subgrade	500-2(C): Compaction of Subgrade	5-1	Delete first sentence and replace with the following: Compact all material to a depth of up to 8 inches below the finished surface of the subgrade to a density equal to at least 92% of that obtained by compacting a sample of the material in accordance with AASHTO T 99 as modified by the Department.
500: Fine Grading Subgrade	500-3: Tolerances	5-2	Delete Article 500-3 and replace with the following: A tolerance of plus or minus one inch from the established greenway grade will be permitted after the subgrade has been graded to a uniform surface.
505: Aggregate Subgrade	505-3: Construction Methods	5-8	Delete first paragraph and replace with the following: Perform shallow undercut up to 12 inches as necessary to remove unsuitable material. If necessary, install geotextile for soil stabilization in accordance with Article 270-3. Place Class III select material or Class IV subgrade stabilization (standard size no. ABC) by end dumping on geotextiles. Do not operate heavy equipment on geotextiles until geotextiles are covered with Class III or ABC. Compact ABC to 92% or to the highest density that can be reasonably attained.
520: Aggregate Base Course	520-7: Shaping and Compaction	5-11	Delete first sentence in second paragraph and replace with the following: For both nuclear and ring tests, compact each layer of the base to a density equal to at least 92% of that obtained by compacting a sample of the material in accordance with AASHTO T 180 as modified by the Department. Delete the third paragraph.
610: Asphalt Concrete Plant Mix Pavements	610-10: Density Requirements	6-23	Delete Article 610-10 and replace with the following: Compact the asphalt plant mix to at least 85% of the maximum specific gravity.
610: Asphalt Concrete Plant Mix Pavements	610-13: Final Surface Testing and Acceptance	6-24	Delete Article 610-13.
848: Concrete Sidewalks	848-3: Construction Methods	8-31	Delete second paragraph and replace with the following: Construct concrete greenway based on the typical sections in the plans. Place groove joints at a spacing equal to the width of the greenway. Transverse Expansion Joints are required every 40 feet.

CONTRACT REQUIREMENTS

SUBCONTRACT APPROVAL FORM

Contract No.:			F.A. No.:			I	0,	Subcontract Re	Subcontract Request Number:		
WBS Element:			T.I.P. No.:	ol				County:			
APPROVAL I	APPROVAL IS REQUESTED TO SUBLET THE FOLLOWING ITEMS OF WORK ON THIS PROJECT TO:	ING ITE	MS OF	WORK	N THIS PROJE	CT TO:					
63							ш.	Retainage	Certification	Reporting No.	g No.
Subcontractor Name and Address	ame and Address							Retainage	Certification	Reporting No.	g No.
2 nd Tier-1 Subcon	2 nd Tier-1 Subcontractor Name and Address										
Line Code Number	Item Description	Portion (•)	Partial (◆)	Sub or 2nd Tier	Quantity	UOM CP	- 220	DBE/MBE/WBE Unit Price	DBE/MBE/WBE Sublet Amount	Subcontract Unit Price	Total Subcontract Amount
							+				
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AGTNOCATION	SIIBCONTDACT CEDTIEICATION (applies publits Eadard projects)	project	9								
The Contracto	Contractor / Successions of the subcontract is in writing and that FHWA 1273, "Required Contract Provisions," have been included	t is in w	riting a	nd that FF	HWA 1273, "Red	quired Cor	ntract P	rovisions," hav	ve been included	1000	
Contractor	uact / z uel subconuact in its enurety.					APPROVED.	Ė				
Signature:			Date								
Title:			123			Resident Engineer	Enginee	ı,			Date
Subcontractor:		3		l		Approved	with th	e understanding	that the Contracto	Approved with the understanding that the Contractor will be responsible for the	for the
Signature:			Date			satisfacto	ry perfo	mance and con	npletion of the worl	satisfactory performance and completion of the work in compliance with the	the
Title:			la l			terms of t	he contr	act and that all	payments will be n	terms of the contract and that all payments will be made to the Contractor.	o.
2 nd Tier Subcontractor:											
Signature:			Date								
Title:			Ř								

STATE OF NORTH CAROLINA COUNTY SALES AND USE TAX REPORT SUMMARY TOTALS AND CERTIFICATION (PAID DURING THIS ESTIMATE PERIOD)

CONTRACTOR:			ľ			Page_	geof
PROJECT:				FOR	FOR PERIOD:		
	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL FOR COUNTY OF:	TOTAL ALL COUNTIES
CONTRACTOR							
SUBCONTRACTOR(S)*							
COUNTY TOTAL							
* Attach subcontractor(s) report(s) ** Must balance with Detail Sheet(s)	r(s) report(s) letail Sheet(s)						
I certify that the above figures do not include any tax paid on supplies, tools and equipment which were used to perform this contract and only includes those building materials, supplies, fixtures and equipment which actually became a part of or annexed to the building or structure. I certify that, to the best of my knowledge, the information provided here is true, correct, and complete.	figures do not e building mate nat, to the best	include any tax srials, supplies, of my knowledç	paid on supplie fixtures and equ ye, the informati	is, tools and equipment which a ion provided he	uipment which vactually became	were used to pe e a part of or an ct, and complet	tax paid on supplies, tools and equipment which were used to perform this contract es, fixtures and equipment which actually became a part of or annexed to the building ledge, the information provided here is true, correct, and complete.
Sworn to and subscribed before me,	ed before me,						
This the day of	of	, 20				Signed	
N	Notary Public						
My Commission Expires:	es:			25	Print or Typ	Print or Type Name of Above	Ve
Seal				NOTE: This cer	rtified statement	NOTE: This certified statement may be subject to audit.	to audit.

STATE OF NORTH CAROLINA SALES AND USE TAX REPORT DETAIL

Page of		COUNTY COUNTY TAX PAID OF SALE *	Н										2		8				\$
		INVOICE	\$	į.		0 0	0	(0	9	0	9 7	0	9	8 8	8	6 5	0	8	TOTAL:
FOR PERIOD:		TYPE OF PROPERTY															8		
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S: CTOR		VENDOR NAME																	2
CONTRACTOR:	PROJECT:	PURCHASE DATE																	

^{*} If this is an out-of-state vendor, the County of Sale should be the county to which the merchandise was shipped.

APPENDICES

Permits

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

<u>PERMIT</u>	AUTHORITY GRANTING THE PERMIT
Fill and/or Work in Jurisdictional	II S Army Corns of Engineers
Wetland (404)	U. S. Army Corps of Engineers
NCDWR 401 Water Quality	Division of Water Resources, DENR, State of North
Certification	Carolina
Sedimentation and Erosion Control	Division of Energy, Mineral, and Land Resources,
	DENR, State of North Carolina

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

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

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the 2018 Standard Specifications and the following:

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

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