STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



DIVISION 9

CONTRACT PROPOSAL

CONTRACT NO.:	2014-BRIDGE-01	2014-BRIDGE-01						
ROUTES:	VARIOUS SITES	VARIOUS SITES COUNTIES: DAVIDSON DAVIE FORSYTH ROWAN STOKES						
TYPE OF WORK:		BRIDGE DECK JOINT REPAIR AS NEEDED IN DAVIDSON, DAVIE, FORSYTH, ROWAN AND STOKES COUNTIES						
BID OPENING:	DIVISION 9 OFFICE 375 SILAS CREEK PARKWAY WINSTON-SALEM, NC 27127							
	MARCH 12, 2014	10:00am						

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD.

ALL BIDDERS MUST BE PREQUALIFIED AS A "BIDDER" or "SUBCONTRACTOR" WITH NCDOT PRIOR TO BID OPENING.

NAME OF BIDDER

N.C. CONTRACTOR'S LICENSE NUMBER

ADDRESS OF BIDDER RETURN BIDS TO:

J. Brett Abernathy, PE, PLS
Division 9 Project Manager
N. C. Department of Transportation
375 Silas Creek Parkway
Winston-Salem, North Carolina 27127

If you have any questions concerning this contract, contact J. Brett Abernathy at (336) 747-7800.

"BRIDGE DECK JOINT REPAIR AS NEEDED IN DAVIDSON, DAVIE, FORSYTH, ROWAN AND STOKES COUNTIES"

CONTRACT NO.: 2014-BRIDGE-01 DAVIDSON, DAVIE, FORSYTH, ROWAN AND STOKES COUNTIES, NORTH CAROLINA

DATE: FEBRUARY 19, 2014 DEPARTMENT OF TRANSPORTATION,

RALEIGH, NORTH CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No.: 2014-BRIDGE-01; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Board of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with the 2012 Standard Specifications for Roads and Structures by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No.: 2014-BRIDGE-01 in Davidson, Davie, Forsyth, Rowan, and Stokes Counties, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

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

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

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

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

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INSTRUCTIONS TO BIDDERS

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

All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement shall cause the bid to be considered irregular and shall be grounds for rejection of the bid. NO BID BONDS REQUIRED.

- 1. The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner.
- 2. All entries on the bid sheet, 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 bid prices must be limited to two (2) decimal places. **
- 4. An amount bid shall be entered on the bid sheet for every item. The amount bid for each item shall be determined by multiplying each unit bid by the quantity for that item, and shall be written in figures in the "Amount Bid" column of the sheet.
- 5. The total amount bid shall be written in figures in the proper place on the bid sheet. 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.
- 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
- 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 ENTIRE PROPOSAL INCLUDING BID FORMS SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE DIVISION OFFICE AT 375 SILAS CREEK PARKWAY, WINSTON-SALEM, NC 27127 BY 10:00 A.M. ON MARCH 12, 2014.
- 12. The sealed bid must display the following statement on the front of the sealed envelope:

Name and Address of Company and:

"BRIDGE DECK JOINT REPAIR AS NEEDED IN DAVIDSON, DAVIE, FORSYTH, ROWAN AND STOKES COUNTIES TO BE OPENED AT 10:00AM ON MARCH 12, 2014."

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

J. Brett Abernathy, PE, PLS
Division 9 Project Manager
N. C. Department of Transportation
375 Silas Creek Parkway
Winston-Salem, North Carolina 27127

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder. The lowest responsible Bidder will be notified that his bid has been accepted and that he has been awarded the contract. NCDOT reserves the right to reject any and all bids.

STANDARD PROVISIONS

GENERAL

This contract is for BRIDGE DECK JOINT REPAIR AS NEEDED IN DAVIDSON, DAVIE, FORSYTH, ROWAN AND STOKES COUNTIES.

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

The following is the link to the current edition of the NCDOT

"Standard Specifications for Roads and Structures" and "Roadway Standard Drawings"

http://ncdot.org/doh/preconstruct/ps/specifications/specifications provisions.html

http://ncdot.org/doh/preconstruct/ps/std draw/06english/default.html

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

CONTRACT TIME

The date of availability for this contract is the date of execution of the purchase order. The Contractor may begin work prior to this date upon approval of the Engineer or his duly authorized representative. The completion date is March 31, 2015.

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

At the option of the Department, this contract may be extended for two (2) additional periods of one (1) year with a (Maximum of three (3) years total). The Engineer will notify the contractor in writing before completion of the current contract if the contract is to be extended. No extensions will be authorized except as authorized by Article 108-10 of the Standard Specifications or as stated above.

CPI (PRICE ADJUSTMENT)

The compensation payable to the contractor shall be fixed for the first twelve months of this contract. However, upon an application by the contract, or sixty (60) days prior to the end of each contract period, the renewal contract may be adjusted to reflect the adjustment in the Consumer Price Index for the previous twelve (12) month period as published by the US Bureau of Labor Statistics. If the amount of the requested adjustment is more than ten (10) percent, the Department of Transportation reserves the right to cancel this contract.

ftp://ftp.bls.gov/pub/special.requests/cpi/cpiai.txt

The CPI will be determined from a 12-month period. Example below:

Year	J	\mathbf{F}	\mathbf{M}	\mathbf{A}	M	J	J	A	\mathbf{S}	O	N	D
2009	211.1	212.2	212.7	213.2	213.8	215.7	215.3	215.8	215.9	216.2	216.3	215.9
2010	216.7	216.7	217.6	218.0	218.2	217.9	218.0	218.3	218.4	218.7	218.8	219.2
2011	220.2	221.3	223.4	224.9	225.9	225.7	225.9	226.6	226.9	226.4	226.2	225.7
2012	226.7											

CPI for current period	226.7
Less CPI for previous period	220.2
Equals index point change	6.5

Divided by previous period CPI	220.2
Equals	0.0295
Result multiplied by 100	0.0295 x 100
Equals percentage change	2.95 %

All line items in this contract (except asphalt items) will be adjusted by the calculated percentage at the time of renewal for CPI (Price Adjustment).

UTILITY CONFLICTS

It shall be the responsibility of the Contractor to contact all affected utility owners and determine the precise locations of all utilities prior to beginning construction. Utility owners shall be contacted a minimum of 48 hours prior to the commencement of operations. Special care shall be used in working around or near existing utilities, protecting them when necessary to provide uninterrupted service. In the event that any utility service is interrupted, the Contractor shall notify the utility owner immediately and shall cooperate with the owner, or his representative, in the restoration of service in the shortest time possible. Existing fire hydrants shall be kept accessible to fire departments at all times.

The Contractor shall adhere to all applicable regulations and follow accepted safety procedures when working in the vicinity of utilities in order to insure the safety of construction personnel and the public.

SUBLETTING OF CONTRACT

The contractor shall not sublet, sell, transfer, assign or otherwise dispose of this contract or any portion thereof; or his rights, title, or interest therein; without written consent or prior approval of the Engineer. Subletting of this contract or any portion of the contract shall conform to the requirements of Article of 108-6 of the Standard Specifications.

CONTRACT PAYMENT AND PERFORMANCE BOND

A performance bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the faithful performance of the contract in accordance with specifications and conditions of the contract is required. Such bond shall be solely for the protection of the North Carolina Department of Transportation and the State of North Carolina.

A payment bond in the amount of one hundred percent (100%) of the contract amount, conditioned upon the prompt payment for all labor or materials for which the Contractor, or his subcontractors, is liable is required. The payment bond shall be solely for the protection of persons or firms furnishing materials or performing labor for this contract for which the Contractor is liable.

NOTE: Do not submit bonds with bid forms, hold until notified you are the lowest bidder!

The successful bidder, within fourteen (14) days after notice of award, shall provide the Department with a contract payment bond and a contract performance bond each in an amount equal to 100 percent of the amount of the contract.

WORKERS' COMPENSATION INSURANCE

The contractor shall defend, indemnify and hold harmless the North Carolina Department of Transportation, its officers and employees from any claim, demand, suit, liability, judgment and expense (including attorney's fees and other costs of litigation) arising out of or relating to injury, disease, or death of persons or damage to or loss of property resulting from or in connection with the negligent performance of this contract by the contractor, its agents, employees, and subcontractors or any one for whom the contractor may be responsible. The obligations, indemnities and liabilities assumed by the contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The contractor shall indemnify and hold harmless the North Carolina Department of Transportation from any claim, demand, suit, liability, judgment, and expense involving damage or loss to the contractor's equipment (including vandalism, theft, fire and acts of God) arising out of or relating to work performed under this agreement. The obligations, indemnities and liabilities assumed by the contractor under this paragraph shall not extend to any liability caused by the negligence of the Department of Transportation or its employees. The contractor's liability shall not be limited by any provisions or limits of insurance set forth in this contract.

The contractor further agrees to indemnify the North Carolina Department of Transportation for any damages to the roadway, highway signs, highway equipment and other property owned or in possession of the Department of Transportation, brought about by reason of the negligent operation of the leased equipment. The contractor further agrees to indemnify and save harmless the Department of Transportation, its officers and employees from any claims or amounts recovered by any of the contractor's employees under the Worker's Compensation Act.

Pursuant to N.C.G.S. § 97-19, all contractors/subcontractors of the Department of Transportation are, prior to beginning services, required to show proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured contractor/subcontractors stating that it has complied with N.C.G.S. § 97-93 irrespective of whether contractor/subcontractors have regularly in service fewer than three employees in the same business within the State of North Carolina, and contractor/subcontractors shall be hereinafter liable under the Workers' Compensation Act for payment of compensation and other benefits to its employees for any injury or death due to an accident arising out of and in the course of performance of the work insured by the subcontractor.

The successful bidder shall provide Proof of insurance within (14) days after request from NCDOT prior to issuance of a purchase order and beginning work.

AUTHORITY OF THE ENGINEER

The Engineer for this project shall be the Division Engineer, Division 9, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representatives.

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

AVAILABILITY OF FUNDS – CONTRACT TERMINATION

Payments on this contract are subject to availability of funds as allocated by the General Assembly. If the General Assembly fails to allocate adequate funds, the Department reserves the right to terminate this contract.

In the event of termination, 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.

BANKRUPTCY

The Department of Transportation, at its option, may terminate the contract upon filing by the Contractor of any petition for protection under the provisions of the Federal Bankruptcy Act.

SUPERVISION BY CONTRACTOR

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

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

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

TEMPORARY SUSPENSION OF WORK

In accordance with Article 108-7 of the <u>Standard Specifications</u>, the Engineer will have the authority to suspend the work wholly or in part, any written order for such periods as he may deem necessary for any of the following reasons.

- 1. Conditions considered unfavorable for the suitable prosecution of the work, or
- 2. The Contractor's failure for correct conditions unsafe for workmen or the general public, or
- 3. The Contractor has not carried out orders given to him by the Engineer, or
- 4. The Contractor's failure to perform any provisions of the contract.

SAFETY VESTS

All Contractors' personnel, all subcontractors and their personnel, and any material suppliers and their personnel must wear an OSHA approved reflective vest or outer garment at all times while on the project.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

(2-20-07)

108

SP1 G14 B

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

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

- 1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
- 2. For **New Year's Day**, between the hours of **3pm** December 31st and **7am** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until [hour] the following Tuesday.
- 3. For Easter, between the hours of 3pm Thursday and 7am Monday.
- 4. For **Memorial Day**, between the hours of **3pm** Friday and **7am** Tuesday.
- 5. For **Independence Day**, between the hours of **3pm** the day before Independence Day and **7am** the day after Independence Day.
 - If Independence Day is on a Friday, Saturday, Sunday or Monday, then between the hours of 3pmthe Thursday before Independence Day and 7am the Tuesday after Independence Day.
- 6. For Labor Day, between the hours of 3pm Friday and 7am Tuesday.
- 7. For **Thanksgiving Day**, between the hours of **3pm** Tuesday and **7am** Monday.
- 8. For **Christmas**, between the hours of **3pm** the Friday before the week of Christmas Day and **7am** 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 are not 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 herein and place traffic in the existing traffic pattern.

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

NO MAJOR CONTRACT ITEMS:

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

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

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 2012 Standard Specifications).

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS):

(10-16-07)(Rev. 12-17-13)

102-15(J)

SP1 G67

Description

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

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

Forms and Websites Referenced in this Provision

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

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

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

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

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

Letter of Intent - Form signed by the Contractor and the MBE/WBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed MBE/WBE for the amount listed at the time of bid.

http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf

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

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

Subcontractor Quote Comparison Sheet - Spreadsheet for showing all subcontractor quotes in the work areas where MBEs and WBEs quoted on the project. This sheet is submitted with good faith effort packages. http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20 Example.xls

MBE and WBE Goal

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

- (A) Minority Business Enterprises 0.0 %
 - (1) If the MBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that MBEs participate in at least the percent of the contract as set forth above as the MBE goal.
 - (2) If the MBE goal is zero, the Contractor shall make an effort to recruit and use MBEs during the performance of the contract. Any MBE participation obtained shall be reported to the Department.
- (B) Women Business Enterprises 0.0 %
 - (1) If the WBE goal is more than zero, the Contractor shall exercise all necessary and reasonable steps to ensure that WBEs participate in at least the percent of the contract as set forth above as the WBE goal.
 - (2) If the WBE goal is zero, the Contractor shall make an effort to recruit and use WBEs during the performance of the contract. Any WBE participation obtained shall be reported to the Department.

Directory of Transportation Firms (Directory)

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

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

Listing of MBE/WBE Subcontractors

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

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

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

MBE or WBE Prime Contractor

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

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

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

Written Documentation - Letter of Intent

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

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

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

Submission of Good Faith Effort

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

One complete set and $\underline{3}$ copies of this information shall be received in the office of the Engineer no later than 12:00 noon of the sixth calendar day following opening of bids, unless the sixth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 12:00 noon on the next official state business day.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of MBE/WBE

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

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

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

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

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

or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

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

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

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

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

Non-Good Faith Appeal

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

Counting MBE/WBE Participation Toward Meeting MBE/WBE Goals

(A) Participation

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

(B) Joint Checks

Prior notification of joint check use shall be required when counting MBE/WBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1

(Joint Check Notification Form) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

(C) Subcontracts (Non-Trucking)

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

(D) Joint Venture

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

(E) Suppliers

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

(F) Manufacturers and Regular Dealers

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

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

Commercially Useful Function

(A) MBE/WBE Utilization

The Contractor may count toward its contract goal requirement only expenditures to MBEs and WBEs that perform a commercially useful function in the work of a contract. A MBE/WBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the MBE/WBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a MBE/WBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted,

industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the MBE/WBE credit claimed for its performance of the work, and any other relevant factors.

(B) MBE/WBE Utilization in Trucking

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

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

MBE/WBE Replacement

When a Contractor has relied on a commitment to a MBE or WBE firm (or an approved substitute MBE or WBE firm) to meet all or part of a contract goal requirement, the contractor shall not terminate the MBE/WBE for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another MBE/WBE subcontractor, a non-MBE/WBE subcontractor, or with the

Contractor's own forces or those of an affiliate. A MBE/WBE may only be terminated after receiving the Engineer's written approval based upon a finding of good cause for the termination.

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

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

(A) Performance Related Replacement

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

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

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

(B) Decertification Replacement

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

Changes in the Work

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

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

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

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

Reports and Documentation

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

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

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

Reporting Minority and Women Business Enterprise Participation

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

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

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

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

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

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

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

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

Failure to Meet Contract Requirements

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

SUBSURFACE INFORMATION:

(7-1-95)

450

SP1 G112 A

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

LOCATING EXISTING UNDERGROUND UTILITIES:

(3-20-12)

105

SP1 G115

Revise the 2012 Standard Specifications as follows:

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

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

RESOURCE CONSERVATION:

(5-21-13)

104-13

SP1 G118

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(2), and NCGS 136-28.8, it is the policy of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, and to find ways to recycle and reuse materials for the benefit of the Citizens of North Carolina.

Initiate, develop and use products and construction methods that incorporate the use of recycled or solid waste products in accordance with Article 104-13 of the 2012 Standard Specifications. Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills on the Project Construction Reuse and Recycling Reporting Form.

A location-based tool for finding local recycling facilities and the Project Construction Reuse and Recycling Reporting Form are available at:

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

DOMESTIC STEEL:

(4-16-13)

106

SP1 G120

Revise the 2012 Standard Specifications as follows:

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

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

OUTSOURCING OUTSIDE THE USA:

(9-21-04) (Rev. 5-16-06) SPI GI50

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

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

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

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09)

SP1 G152

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

- (A) Have a contract with a governmental agency; or
- (B) Have performed under such a contract within the past year; or
- (C) Anticipate bidding on such a contract in the future.

For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and N.C.G.S. § 133-32.

Executive Order 24 also encouraged and invited other State Agencies to implement the requirements and prohibitions of the Executive Order to their agencies. Vendors and contractors should contact other State Agencies to determine if those agencies have adopted Executive Order 24.

EMPLOYMENT:

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

108, 102

SP1 G184

Revise the 2012 Standard Specifications as follows:

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

(O) Failure to restrict a former Department employee as prohibited by Article 108-5.

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

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE:

(9-18-12)

SP1 G185

Revise the 2012 Standard Specifications as follows:

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

PROJECT SPECIAL PROVISIONS - ROADWAY

MATERIALS:

(2-21-12) (Rev. 1-21-14)

1000, 1005, 1024, 1050, 1056, 1074, 1078, 1080, 1081, 1086, 1084, 1087, 1092

SP10 R01

Revise the 2012 Standard Specifications as follows:

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

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

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

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

Page 10-1, Article 1000-2, MATERIALS, line 16, add the following to the table of item references:

Item

Section

Type IL Blended Cement

1024-1

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

			REC	TAB UIREMEN	LE 1000-1 TS FOR C		ETE				
rete	Ġ.	Maximum Wa				Con	sistency . Slump	Cement Content			
Conc	Min. Comp. Strength at 28 days	Air-Ent Conc	rete	Non Air-E Conc		eq	, pa	Vib	rated	Non- Vibrated	
Class of Concrete	Min. Stro	Rounded Aggregate	Angular Aggre- gate	Rounded Aggregate	Angular Aggre- gate	Vibrated	Non- Vibrated	Min.	Max.	Min.	Max.
Units	psi	·		1		inch	inch	lb/cy	lb/cy	lb/cy	lb/cy
AA	4,500	0.381	0.426	-	-	3.5	1 -	639	715	-	-
AA Slip Form	4,500	0.381	0.426	_	-	1.5	-	639	715	-	-
Drilled Pier	4,500	-	_	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800
A	3,000	0.488	0.532	0.550	0.594	3.5	4	564	† -	602	-
В	2,500	0.488	0.567	0.559	0.630	2.5	4	508	-	545	
B Slip Formed	2,500	0.488	0.567	_	-	1.5	I -	508	-		-
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	1	-
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow- able	-	-	40	100
Flowable Fill non- excavatable	125	as needed	as needed	as needed	as needed	-	Flow- able	-	_	100	as needed
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	_	_
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	_	564	as needed	-	-

Light-weight^C 467M Size# ABC (M) ABC 57M 78M Std. 6M 14M 67 57 S 0 B. 100 100 12 1 For Lightweight Aggregate used in Structural Concrete, see Subarticle 1014-2(E)(6). See Subarticle 1005-4(B) See Subarticle 1005-4(A) 1 1/2" 95-100 100 100 100 9 00 100 75-100 75<u>-</u> 97 95-95-100 20-55 100 100 1" AGGREGATE GRADATION - COARSE AGGREGATE 0-15 3/4" 100 90-100 20-55 35-70 1/2" 45-79 98-100 100 80 25-45 20-55 60 Percentage of Total by Weight Passing 3/8" 0-20 0-30 75-100 100 100 20-55 100 **TABLE 1005-1** 0-10 0-10 20<u>-</u> 35-55 100 35- 20-45 0-8 0-5 #4 40 0-20 5-20 0 - 150-5 0-5 0-5 40 #8 #10 25-45 25 #16 #40 14-30 4-12^B 0-2.5 $0-12^{B}$ A A AST, Concrete Pavement Aggregate Base Course, AST, Weep Hole Drains. Aggregate Stabilization rspiiait i iaiit iviix, rso i, Sediment Control Stone AST, Sediment Contro Str. Conc, Weep Hole AST, Str. Concrete, Asphalt Plant Mix, AST, Str. Concrete, Asphalt Plant Mix Asphalt Plant Mix Asphalt Plant Mix Shoulder Drain, Str. Concrete Stabilization Maintenance Remarks AST AST

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

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

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

All fencing material and accessories shall meet Section 106.

Page 10-73, Article 1056-1 DESCRIPTION, lines 7-8, delete the first sentence of the second paragraph and replace with the following:

Use geotextile fabrics that are on the NCDOT Approved Products List.

Page 10-73, Article 1056-2 HANDLING AND STORING, line 17, replace "mechanically stabilized earth (MSE) wall faces" with "temporary wall faces".

Page 10-74, TABLE 1056-1 GEOTEXTILE REQUIREMENTS, replace table with the following:

			ABLE 1056-1 ILE REQUIRE	MENTS		
Property		Re	quirement (MA	RV ^A)		
Troperty	Type 1	Type 2	Type 3 ^B	Type 4	Type 5 ^C	Test
Typical Application	Shoulder Drains	Under Rip Rap	Temporary Silt Fence	Soil Stabilization	Temporary Walls	Method
Elongation (MD & CD)	≥ 50%	≥ 50%	≤ 25%	< 50%	< 50%	ASTM D4632
Grab Strength (MD & CD)			100 lb		-	ASTM D4632
Tear Strength (MD & CD)	Table 1 ^b , Class 3	Table 1 ^D , Class 1	-	Table 1 ^D , Class 3	_	ASTM D4533
Puncture Strength		-			- 1	ASTM D6241
Ultimate Tensile Strength (MD & CD)	-	<u>-</u>	-	-	2,400 lb/ft (unless required otherwise in the contract)	ASTM D4595
Permittivity	Table 2D				0.20 sec ⁻¹	ASTM D4491
Apparent Opening Size	15% to	Table 2 ^D , 15% to 50% <i>in Situ</i> Soil		Table 5 ^D	No. 30 ^E	ASTM D4751
UV Stability (Retained Strength)		No. 200 ^E			70%	ASTM D4355

- A. MARV does not apply to elongation
- B. Minimum roll width of 36" required
- C. Minimum roll width of 13 ft required
- D. AASHTO M 288
- E. US Sieve No. per AASHTO M 92

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

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

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

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

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

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

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

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

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

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

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

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

Page 10-163, Table 1081-1 Properties of Mixed Epoxy Resin Systems, replace table with the following:

1,500	1,500	1,500	2,000	2,000	1,500	1,500	Min. Bond Strength Slant Shear Test at 14 days (psi)
1.0	1.0	1.0	1.5	1.0	1.0	1.5	Maximum Water Absorption (%)
1	5,000	1	1	ı	ı	5,000 (Neat)	Min. Compressive Strength of 2" mortar cubes at 7 days
6,000	3,000	3,000	6,000 (Neat)	6,000-	4,000-	3,000 (Neat)	Min. Compressive Strength of 2". mortar cubes at 24 hours
2-5	5-15	5-15	2-5	2-5	30 min.	30 min.	Tensile Elongation at 7 days (%)
4,000	1,500	1,500	4,000	4,000	2,000	1,500	Minimum Tensile Strength at 7 days (psi)
20-60	40-80	40-80	5-50	20-50	30-60	20-50	Pot Life (Minutes)
50	10	10	l	20	20	,	Speed (RPM)
2	4	4	I	4	ယ	1	Spindle No.
1-6	40-150	40-150	Gel	25-75	10-30	Ge]	Viscosity-Poises at 77°F ± 2°F
Type 5	Type 4B	Type 4A	Type 3A	Type 3	Type 2	Type 1	Property
			Systems	081-1 poxy Resin	Table 1081-1 Properties of Mixed Epoxy Resin Systems	Properties	

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

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

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

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

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

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

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

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

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

1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS

(A) General

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

(B) Classification

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

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

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

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

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

(C) Requirements

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

(D) Prequalification

Refer to Subarticle 1081-1(E).

(E) Acceptance

Refer to Subarticle 1081-1(F).

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

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

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

The epoxy shall meet Article 1081-4.

The 2 types of epoxy adhesive which may be used are Type I, Rapid Setting, and Type II, Standard Setting. Use Type II when the pavement temperature is above 60°F or per the manufacturer's recommendations whichever is more stringent. Use Type I when the pavement temperature is between 50°F and 60°F or per the manufacturer's recommendations whichever is more stringent. Epoxy adhesive Type I, Cold Set, may be used to attach temporary pavement markers to the pavement surface when the pavement temperature is between 32°F and 50°F or per the manufacturer's recommendations whichever is more stringent.

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

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

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

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

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

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

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

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

Page 10-204, Subarticle 1092-2(A) Performance and Test Requirements, replace Table 1092-3 Minimum Coefficient of Retroreflection for NC Grade A with the following:

MI		FICIENT (Candel	OF R		REFLE		FOR NC GRADE	A
Observation Angle, degrees	Entrance Angle, degrees	White	Yellow	Green	Red	Blue	Fluorescent Yellow Green	Fluorescent Yellow
0.2	-4.0	525	395	52	95	30	420	315
0.2	30.0	215	162	22	43	10	170	130
0.5	-4.0	310	230	31	56	18	245	185
0.5	30.0	135	100	14	27	6	110	81
1.0	-4.0	120	60	8	16	3.6	64	48
1.0	30.0	45	34	4.5	9	2	36	27

PROJECT SPECIAL PROVISIONS

SILICON EXPANSION JOINT REPLACEMENT

Contractor shall remove the existing expansion joint, clean the area in accordance with the manufacturer's recommendations, and place the silicon expansion joint in accordance with the manufacturer's recommendation. The expansion joint shall be replaced with the materials stated in this contract.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, date of manufacture, batch number, trade name brand, and quantity. Sufficient material to perform the entire expansion joint shall be "on hand" prior to removing the existing expansion joint. Stored materials may be inspected prior to their use and shall meet the requirements of these provisions. Each shipment of repair material shall be accompanied by Material Safety Data Sheets (MSDS) and a certificate of compliance certifying that the materials conform to the requirements of these provisions. The repair material shall be one of the following approved products:

Joints less than or equal to one (1) inch in width: Sealant – Dow 888 Baysilon 960 (silicon based)

Joints greater than one (1) inch in width: Sealant – Dow 902 (silicon based)

The entire cost for the silicon expansion joint replacement including but not limited to labor, maintenance, equipment, tools and incidentals will be included in the unit prices for Silicon Joint Replacement.

Payments shall be made under:

Pay Item
Silicon Joint Replacement

Pay Unit Linear Feet

EVAZOTE EXPANSION JOINT REPLACEMENT

Contractor shall remove the existing expansion joint, clean the area in accordance with the manufacturer's recommendations, and place the evazote expansion joint in accordance with the manufacturer's recommendation. Contractor shall have a manufacturer's representative present during the installation of the first evazote expansion joint of the project. The expansion joint shall be replaced with the materials stated in this contract.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, date of manufacture, batch number, trade name brand, and quantity. Sufficient material to perform the entire expansion joint shall be "on hand" prior to removing the existing expansion joint. Stored materials may be inspected prior to their use and shall meet the requirements of these provisions. Each shipment of repair material shall be accompanied by Material Safety Data Sheets (MSDS) and a certificate of compliance certifying that the materials conform to the requirements of these provisions.

Evazote Joint Seal Specifications

Use preformed seals compatible with concrete and resistant to abrasion, oxidation, oils, gasoline, salt and other materials that are spilled on or applied to the surface. Use a low-density closed cell, cross-linked ethylene vinyl acetate polyethylene copolymer nitrogen blown materials for the seal. Use seals manufactured with grooves 1/8" (3 mm) ± wide by 1/8" (3 mm) ± deep and spaced between 1/4" (6 mm) and ½" (13 mm) apart along the bond surface running the length of the joint. Use seals sized so that the depth of the seal meets the manufacturer's recommendation, but is not less than 70% of the uncompressed width. Provide a seal designed so that, when compressed, the center portion of the top does not extend upward above the original height of the seal by more than ¼" (6 mm). Splice the seal using the heat welding method by placing the joint material ends against a Teflon heating iron of 350°F (177°C) for 7-10 seconds, then pressing the ends together tightly. Do not test the welding until the material has completely cooled. Use material that resists weathering and ultraviolet rays. Provide a seal that has a working range of 30% tension and 60% compression and is watertight along its entire length including the ends.

Have the top of the evazote seal clearly shop marked. Inspect the evazote seals upon receipt to ensure that the marks are clearly visible upon installation.

Provide seals that meet the requirements given below.

TEST	TEST METHOD	REQUIREMENT
Elongation at break	ASTM D3575	210 + 15%
Tensile strength, psi (kPa)	ASTM D2575	110 ± 15 (755 ± 100)
Compression Recovery	AASHTO T42	
(% of original width)	50% compr. For 22 hr. @ 73°F	87 ± 3
	(23°C) ½ hr. recovery	
Weather/Deterioration	AASHTO T42	No deterioration for 10 years min.
	Accelerated Weathering	•
Compression/Deflection	@ 50% deflection of original width	10psi (69 kPa) min.
	@ 50% deflection of original width	60 psi (414 kPa) max.
Tear Strength, psi (kPa)	ASTM D624	$16 \pm 3 (110 \pm 20)$
Density	ASTM D545	2.8 to 3.4
Water Absorption	ASTM D3575 Total immersion for 3	3
(% vol/vol	months	

Adhesives

Use a two component, 100% solid, modified epoxy adhesive with the seal that meets the requirements of ASTM C881, Type 1, Grade 3, Class B & C and has the following physical properties:

Tensile strength 3500 psi (24.1 MPa) min.

Compressive strength 7000 psi (48.3 MPa) min.

Shore D Hardness 75 psi (0.5 MPa) min.

Water Absorption 0.25% by weight

Use an adhesive that is workable to 40°F (4°C). When installing in temperatures below 40°F (4°C) or for application on moist, difficult to dry concrete surfaces, use an adhesive specified by the manufacturer of the joint material.

Joint Preparation

After removal of existing joint, area must be sand-blasted immediately prior to installation of the new joint. Blasting medium shall be a non-silica product. Blasting medium shall be swept up and removed from the project. Traffic shall be protected from blasting operations. Joint shall be re-cleaned (and re-blasted if necessary), if joint installation is delayed and joint is determined to be unsuitable due to dirt, oils, etc. Exact size of joint seals to be used where joints have been repaired with elastomeric concrete shall be determined after the elastomeric concrete work is completed.

Seal Installation

Do not install the joint seal if the ambient air temperature is below 45°F (7°C).

Begin installation at the low end of the joint after applying the mixed epoxy to the sides of both the joint material and both sides of the joint, making certain to completely fill the grooves with epoxy. With gloved hands, compress the material and with the help of a blunt probe, push it down into the joint until it is recessed approximately ¼" (6 mm) below the surface. Do not push the seal at an angle that it would stretch the material. Once work on a joint begins, do not stop until it is completed. Clean the excess epoxy off the surface of the joint material *quickly* and *thoroughly*. Do not use solvents to remove excess epoxy. Remove excess epoxy in accordance with the joint manufacturer's recommendations.

The entire cost for the Evazote expansion joint replacement including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Evazote joint replacement.

Payments shall be made under:

Pay Item

Evazote Joint Replacement

Pay Unit Linear Feet

SAW-CUTTING FOR EVAZOTE EXPANSION JOINTS

The Engineer may require saw-cutting of the expansion joint prior to the placement of Evazote. When this is required, a track mounted saw shall be used and the cut shall be in a continuous and straight line parallel to the existing joint.

Payment shall be made under:

Pay Item

Saw-Cutting for Evazote Expansion Joints

Pay Unit Linear Feet

EVAZOTE EXPANSION JOINT PLACEMENT IN OPEN JOINTS

Contactor shall cut or mill concrete deck along the existing open expansion joints to create a ledge for the Evazote expansion joint material to rest on. This indention shall be constructed in a continuous and straight line parallel to the existing joint. It must be constructed to the necessary depth for the material to be installed according to the manufacture's specifications. All areas shall be smooth and clean before Evazote material is to be placed. The Evazote expansion joint shall then be placed in accordance with the manufacturer's recommendations.

The entire cost for the cutting or milling of the open joint and the Evazote expansion joint placement including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Open Joint Evazote Placement.

Payment shall be made under:

Pay Item

Open Joint Evazote Placement

Pay Unit Linear Feet

ASPHALT JOINT REPAIR AND REPLACEMENT

Joint material shall be hot applied, pre-mixed bituminous material that will provide a smooth riding surface and a waterproof joint. The Contractor shall prepare the surface to be repaired by saw cutting to a minimum of 20" wide and 2" depth, per manufacture's specifications, or as directed by the Engineer, removing all loose material and cleaning the area with compressed air.

No repairs shall be made during periods of rain, snow, or sleet. Standing water shall be removed prior to placement of material.

Steel bridging plates shall be used as needed to provide load transfer across the joint opening. Plates shall be plate steel, 1/8" to 1/4" thick, and 4" to 9" wide.

Bulking aggregate shall be chosen from the Basalt, Gritstone, Gabbro or Granite family. Only ½" to 1" size stone shall be used.

Material Requirements

All materials shall meet the specifications as approved by the Engineer prior to use. The joint material shall be one of the following approved products:

FibreJoint, A/P Bridge Flex Joint, or other NCDOT approved material

Payment shall be made under:

Pay Item

Pay Unit

Asphalt Joint Repair/Replacement (18"-24" wide with plate

Linear Feet

FIBREJOINT

MATERIAL SPECIFICATIONS OF THE FIBREJOINT ASPHALTIC PLUG EXPANSION JOINT SYSTEM BY FIBRECRETE TECHNOLOGIES, LLC

Scope

This work shall consist of supplying and installing a binder and aggregate system composed of specially blended polymer modified asphalt and specific aggregate placed in layers into a prepared expansion joint block-out. When properly installed, the FibreJoint system by FTL will provide a flexible waterproof bridge joint, which will allow for a joint movement of 1" in expansion and 1" in compression.

Material

Binder Material

The bridge joint binder shall be polymer modified asphalt, as manufactured by Fibrecrete Technologies, LLC, and shall meet the following requirements when tested according to ASTM test methods:

TEST METHOD TYPICAL VALUES

Softening Point ASTM D-36

180°F (82°C)

Tensile Adhesion ASTM D-5329

750% Min.

Ductility @ 77°F (25°C) ASTM D-113

40 cm Min.

Penetration ASTM D-5329

90 dmm Max.

77°F (25°C) 150g, 5 sec.

0°F (-18°C) 200g, 60 sec.

0 dmm Min.

Flow 5h @ 140°F (60°C) ASTM D-5329

3.0 MM Max.

Resilience @ 77°F (25°C) ASTM D-5329 Asphalt Compatibility ASTM D-5329

40% Min. Pass

Recommended Pouring Temperature

390°F (199°C)

Safe Heating Temperature

410°F (216°C)

Aggregate

The stone shall be FibreJoint Bulking Stone. The specified aggregate shall be crushed, double washed and shall meet the following requirements:

Screen Size Percent

Passing 1"

100%

1/2"

9%

INSTALLATION SPECIFICATIONS OF THE FIBREJOINT ASPHALTIC PLUG EXPANSION JOINT SYSTEM BY FIBRECRETE TECHNOLOGIES, LLC.

INSTALLATION CREWS

The FibreJoint™ System is to be installed only by factory trained and certified installation professionals.

EQUIPMENT

The equipment will consist of:

- Small self-propelled dry cut saw.
- Pneumatic compressor of 185 CFM capacity.
- · One Hot-Compressed Air Lance (HCA Lance), capable of delivering a flame retarded air stream with a temperature of 3,000°F (1,648°C), at a speed of 3,000 feet per second

- Rotating vented or un-vented drum type mixers each with a Hot-Compressed Air Lance (HCA Lance), or a pressure-air injection torch (PAT torch).
- Melter unit equipped with agitation and an automatic temperature control which can accurately maintain the
 material temperature from 100°F 375°F. A thermometer to monitor the material temperature must be
 provided. The burner system shall have a safety pilot capable of shutting off the gas supply in the event of a
 flame-out.
- 100lb bottles of propane or smaller.
- Vibratory roller or plate capable of compacting up to 1" in one pass.
- Hand held calibrated digital temperature sensor.
- Chop-saw with carbide blade, if needed.
- Sandblasting equipment, required only for installation in a concrete overlay.
- Safety clothing and equipment as required by OSHA.

INSTALLATION

The following procedures are to be followed to ensure a successful installation:

Note: FibreJoint must be installed at a minimum depth of two inches (2") in order to perform correctly.

Marking Out: FibreJoint™ System shall eb located centrally over the deck expansion gap or fixed joint and marked out to the recommended width of 20".

Excavation: The joint shall be excavated by the use of saws and pneumatic hand tools. Where possible, saws shall be set to cut the full required depth of the wearing surface and any membrane present. Variations in the depth of the wearing surface across the road should be considered to insure, where possible, that the deck is not damaged. All debris from the excavation channel shall be removed to allow the full volume of new joint to be installed.

Cleaning: The entire channel must be thoroughly cleaned and dried. Small debris will be removed by using compressed air. The Hot Compressed Air Lane will then be applied throughout the length of the channel. Installation in concrete overlays requires sandblasting of the concrete vertical walls and adjacent deck area prior to the use of the HCA Lance application.

Repairs: Spalled and defective concrete should be repaired with an approved material as agreed upon by the Engineer.

Caulking: The gap shall be caulked with the backer rod, allowing for approximately 1" of binder in the gap on top of the rod. If the previous caulking is intact and will hold the binder, it may be used to take the place of the backer rod. A small amount of hot binder should be placed onto the caulking to insure that the gap is adequately plugged.

Tanking: Immediately after cleaning and caulking, the entire channel shall be coated with a thin layer of hot binder. If significant delay occurs, the channel shall be inspected to determine if re-cleaning is necessary.

Plating: The gap shall be bridged with the steel plates centered over the gap. There must be at least 2" between the edge of the steel plate and the wall of the channel. The top of the plate shall be coated with a thin layer of hot binder.

MATERIAL PREPARATION

Aggregate: The aggregate must be heated in a vented or un-vented rotating drum mixer by the use of a hot compressed air lance (HCA Lance), or a pressure air injection torch (PAT torch). Once the aggregate has been heated to a temperature of 370° - 380°F (188° - 193°C) it is then coated with a small quantity of binder. One gallon of binder per 100 lbs of stone should be sufficient to coat the stone.

Binder: The binder shall be heated to the recommended pouring temperature, 370° - 385°F (188° - 196°C). At no time shall the recommended safe heating temperature of 400°F (204°C) be exceeded.

Material Installation: Layers of hot pre-coated aggregate not more than 2.5" thick shall be placed in the channel and immediately covered to the level of the coated aggregate. This will ensure that the 3:1 weight ratio of aggregate to binder has been achieved. Layers shall be raked to insure the aggregate is completely coated and that all air pockets are eliminated. This process shall cease approximately three-quarters of an inch (3/4") from the top of the channel.

Surface Layer: The surface layer shall be applied as other layers except that the pre-coated aggregate is not flooded with binder. The pre-coated aggregate shall be transferred to the joint and leveled slightly higher than the adjacent road surface. On a standard 2" deep joint, the topcoat should be one quarter inch (1/4") higher than the road surface. Deeper joints will require higher levels before tamping.

Compaction: Compaction should take place after the point has cooled to approximately 225°F (107°C). The joint surface shall be made approximately level with the existing road surface by using the vibratory plate or roller.

Top Coating: After compaction, lines of 4" tape are placed one inch beyond the joint width on each side of the joint to insure evenness of appearance. The joint and at least one inch of the road surface shall be top-coated with the hot binder until the surface is smooth and absent of voids.

Note: If it is impossible to topcoat the joint during the same working day/night, it is allowable that the topcoat step be completed on the next working day/night. However, the surface must be cleaned, dried and heated with the HCA Lance.

Surface Dressing: Immediately after top-coating, an anti-skid material is spread evenly over the joint to eliminate material tracking (Black Beauty Sand, Medium Grade).

Final Preparation: Prior to departure the crew will insure that the entire work area is clean of debris.

Temporary Joint: In the event of a work stoppage while constructing a joint, the following procedure can be used for low ADT roadways (,20,000). Fill the cavity with cold uncoated aggregate to the level of the road surface and top the aggregate with binder to form a temporary riding surface. Roadways with an ADT greater than 20,000 will require materials similar to a cold patch asphalt. Be sure whatever is used is approved by the State Agency.

QUALITY CONTROL

Upon request, certifications of the materials will be provided.

ELASTOMERIC CONCRETE PLACEMENT

Contractor shall repair damaged concrete adjacent to expansion joints as directed by the Engineer with elastomeric concrete.

Contractor shall submit falsework plans for approval. Falsework plans shall take into account expansion of the bridge deck due to changes in temperature.

Do not place elastomeric concrete if the ambient air temperature is below 45°F (7°C). Prepare and apply a primer, as per manufacturer's recommendations, to all vertical concrete faces, all steel components to be in contact with elastomeric concrete, and to areas specified by the manufacturer. Align the angles with the joint opening.

Prepare, batch and place the elastomeric concrete in accordance with the manufacturer's instructions. Place the elastomeric concrete while the primer is still tacky and within 2 hours after applying the primer. Pay careful attention to properly consolidate the elastomeric concrete around the steel and anchors.

Tarps are to be utilized under the mixing areas, and the bridge deck joint shall be tapered off to protect the bridge deck from spills during elastomeric concrete installation.

Provide materials that comply with the following minimum requirements at 14 days:

CONCRETE PROPERTIES	TEST METHOD	MINIMUM REQUIREMENT
Bond, psi (Strength to Concrete MPa)	ASTM D638 (D638M)	450 (3.1)
Brittleness by Impact, ft-lb (kg-m)	Ball Drop	7 (0.97)
Compressive Strength, psi (MPa)	ASTM D695 (D695M)	2800 (19.3)

BINDER PROPERTIES (without aggregate)	TEST METHOD	MINIMUM REQUIREMENT
Tensile Strength, psi (MPa)	ASTM D638 (D638M)	800 (5.5)
Ultimate Elongation	ASTM D638 (D638M)	150%
Tear Resistance, lb/in (kN/m)	ASTM D624	90 (15.7)

In addition to the requirements above, use elastomeric concrete that also resists water, chemical, UV and ozone exposure and withstands extreme temperature (freeze-thaw) changes.

Furnish a manufacturer's certification verifying that the materials satisfy the above requirements.

Provide samples of elastomeric concrete to the Engineer, if requested, to independently verify conformance with the above requirements.

The entire cost for joint repair using elastomeric concrete including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Joint Repair using Elastomeric Concrete. Linear feet measurement will include both sides of the joint to be repaired.

Payment shall be made under:

Pay Item
Joint Repair using Elastomeric Concrete
(16" wide or less and 2" deep or less)
Joint Repair using Elastomeric Concrete
(Greater than 16" wide or greater than 2" deep)

Pay Unit Linear Feet

Cubic Feet

CONCRETE/ASPHALT REPAIR - FIBRECRETE B

Concrete/asphalt repairs shall be made using the following approved Hot Applied Flexible Repair Material:

Fibrecrete B or approved equal

The Contractor shall prepare areas by removing any loose debris using a pavement breaker, by using a mechanical planer or as directed by the Engineer. The recess is then cleaned and dried using hot compressed air to thoroughly prepare the surface, removing all debris and loose material. The Hot Applied Flexible Repair Material is immediately poured and screeded to fill the recess flush with the surrounding area and overlap the edges. While the material is still molten, a preheated high P.S.V. aggregate is applied to the surface.

When repairing pot holes from 1-1/2" to full depth, the Contractor will include $\frac{1}{2}$ " - 1" washed aggregated at the rate of no more than 30% of volume as directed by the Engineer. The balance of the repair will be completed as previously stated.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, specifying date of manufacture, batch number, trade name or brand and quantity.

Sufficient material to perform the entire repair application shall be in storage at the site or at the Contractors facility prior to any field preparation, so that there shall be no delay in procuring the materials for each day's application.

Stored materials may be inspected prior to their use and shall meet the requirements of these special Provisions at the time of use.

Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejections shall be immediately replaced by the Contractor at no additional cost to the Department.

Each shipment of the Hot Applied Flexible Repair Material shall be accompanied by Material Safety Data Sheets (MSDS) and a Certificate of Compliance certifying that the materials conform to the requirements as approved by NCDOT Materials and Test Unit.

Bases of Payment

The quantity of Hot Applied Flexible Repair Material for which payment will be made will be the actual pounds of material used. Payment shall be in full compensation for all labor, tools, equipment and incidentals necessary for the completion of the work.

Payment shall be made under:

Pay Item Concrete/Asphalt Repair – Fibrecrete B Pay Unit Pounds

MANUFACTURER'S SPECIFICATIONS

Fibrecrete "B" - FLEXIBLE REPAIR MATERIALS

Description

Fibrecrete "B" is a flexible repair for joints/large cracks, spalls and pothole repairs in asphalt and concrete. It is a hot applied polymer modified mastic asphalt binder; factory blended with graded fillers, steel fibers (less than 1% total weight), chopped fiberglass, granite aggregates and recycled tire rubber (no less than 3% of total weight).

Applications

Fibrecrete "B" is designed to replace traditional pavement repairs, which are prone to failure due to their stiffness. The installed product is a load-transferring repair that has superior tensile strength and flexibility to accommodate joint/crack movement associated with thermal expansion and contraction and vibratory movements. Fibrecrete "B" has exceptional resistance to water intrusion and to a broad range of salts, bases and organic materials, making the repair a long-term solution for highway maintenance projects.

Material Specifications

Fibrecrete "B" is supplied in 50 pound (3.3 gallons) easy release cardboard boxes:

FINISHED PRODUCT PROPERTIES METHOD REQURIEMENTS Color Black Tensile Strain FTL Test Method* 35% Minimum @ 2"/minute Cone Flow FTL Test Method* 12% Maximum Aggregate Settlement FTL Test Method * 3% Maximum Flexibility / Mandrel FTL Test Method* Good or Better (No testing at bend point) Resilience FTL Test Method* 50% Recovery Recommended Application Temp 300°F - 380°F Specific Gravity 1.35 – 1.8* FTL Test methods are available upon request.

Site Preparation

The joint or crack, shall be milled with an approved milling machine to the specified width and depth. The pot hole or spall shall be jack hammered and or saw cut to remove the defective areas. The repair surfaces will be cleaned and dried with a hot air lance. The top edges of the repair ca be taped (masked) to prevent unsightly over-spill. The recessed area and vertical walls will be treated with *Fibrecrete Primer* to promote adhesion and prevent moisture intrusion (for concrete applications only).

Installation

Installation of the Fibrecrete material shall be by factory trained and certified installation professionals. The Fibrecrete material will be heated in a thermostatically controlled purpose built mixer having a horizontal agitator that ensures complete mixing. Once the material has reached approximately 300°F, the molten Fibrecrete will be introduced into the prepared repair area, sealing the bottom of the repair from water intrusion. If the depth of the repair exceeds 1 inch, the remainder of the repair process will consist of layering hot *Fibrecrete Bulking Stone* (cleaned and dried) at a rate of 25%-35% by volume with the molten Fibrecrete until within ¾" of the top of the

repair. The final 3/4" of the repair will be Fibrecrete material for optimum flexibility of the repair. Once this top layer has been leveled with a hot iron, Fibrecrete Topping Stone will be applied to the top of the repair to ensure proper skid resistance. Depending on the depth of the repair, the Fibrecrete material will be ready for traffic return between 30 minutes to 1 hour.

All removed materials and residual repair materials will be recovered and disposed of away from the site according to the client's specifications.

Warranty

Fibrecrete Technologies, LLC warrants that the Fibrecrete products meet applicable specifications provided they are installed in accordance with the manufacturer's guidance and specifications. Distributed in the United States under license by:

Marketing Associates, Inc.
131 St. James Way
Mount Airy, NC 27030
336-789-7259
www.marketingassociatesinc.com

CONCRETE/ASPHALT REPAIR – Fibrecrete G

Concrete/asphalt repairs shall be made using the following approved Hot Applied Flexible Repair Materials:

Fibrecrete G or approved equal

The Contractor shall prepare areas by removing any loose debris using a pavement breaker, by using a mechanical planer or as directed by the Engineer. The recess is then cleaned and dried using hot compressed air to thoroughly prepare the surface, removing all debris and loose materials. The Hot Applied Flexible Repair Material is immediately poured or screeded to fill the recess and overlap the edges. While the material is still molten, a preheated high P.S.V. aggregate is applied and then compacted to ensure that the finished repair is flush with the surrounding area.

When repairing pot holes from 1-1/2" to full depth, that are not adjacent to or spanning a joint, the Contractor will include $\frac{1}{2}$ " - 1" washed aggregate at the rate of no more than 30% of volume as directed by the Engineer. The balance of the repair will be completed as previously stated.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, specifying date of manufacture, batch number, trade name or brand and quantity.

Sufficient material to perform the entire repair application shall be in storage at the site or at the Contractors facility prior to any field preparation, so that there shall be no delay in procuring the materials for each day's application.

Stored materials may be inspected prior to their use and shall meet the requirements of these special Provisions at the time of use.

Any material which is rejected because of failure to meet the required tests or that has been damaged so as to cause rejections shall be immediately replaced by the Contractor at no additional cost to the Department.

Each shipment of the Hot Applied Flexible Repair Material shall be accompanied by Material Safety Data Sheets (MSDS) and a Certificate of Compliance certifying that the materials conform to the requirements as approved by NCDOT Materials and Test Unit.

Bases of Payment

The quantity of Hot Applied Flexible Repair Material for which payment will be made will be the actual pounds of material used. Payment shall be in full compensation for all labor, tools, equipment and incidentals necessary for the completion of the work.

Payment shall be made under:

Pay Item

Concrete/Asphalt Repair - Fibrecrete G

Pay Unit Pounds

MANUFACTURER'S SPECIFICATIONS

Fibrecrete "G" - FLEXIBLE REPAIR MATERIALS

Description

Fibrecrete "G" is a flexible repair for joints, large cracks, spalls and pothole repairs in concrete. It is a hot applied synthetic polymer modified resin compound containing mineral fillers, chopped fibers and graded aggregates.

Applications

Fibrecrete "G" is designed to replace traditional cementitious repairs, which are prone to failure due to their stiffness. The installed product is a load-transferring repair that has superior tensile strength and flexibility to accommodate joint/crack movement due to thermal expansion and contraction and vibratory movements. Fibrecrete "G" has exceptional resistance to water intrusion and to a broad range of salts, bases and organic materials, making the repair a long-term solution for highway maintenance projects.

Material Specifications

Fibrecrete "G" is a synthetic polymer modified resin binder factory blended with aggregates, fibers and mineral fillers, supplied in 50 pound meltable bags.

FINISHED PRODUCT PROPERTIES METHOD REQURIEMENTS Color Grey Tensile Strain FTL Test Method* 35% Minimum @ 2"/minute Cone Flow FTL Test Method* 3.5% Maximum Aggregate Settlement FTL Test Method * 3% Maximum Flexibility / Mandrel FTL Test Method* Good or Better (No tearing at bend point) Resilience FTL Test Method* 50% Recovery Recommended Application Temp 300°F - 380°F Specific Gravity 1.8 -2.0° FTL Test methods are available upon request.

Site Preparation

The joint or crack, shall be milled to the specified width and depth using an approved milling machine. The spall or pot hole will be jack hammered and/or saw cut to remove the defective areas. The joint, crack, spall or pot hole surfaces will be cleaned and dried with a hot air lance. The top edges of the repair ca be taped (masked) to prevent unsightly over-spill. The recessed area and vertical walls will be treated with *Fibrecrete Primer* to promote adhesion and prevent moisture intrusion (for concrete applications only).

Installation

The Fibrecrete "G" material will be heated in a thermostatically controlled purpose built mixer having a horizontal agitator that ensures complete mixing. Once the material has reached approximately 300°F, the molten Fibrecrete "G" will be introduced into the prepared repair area, sealing the bottom of the repair from water intrusion. If the depth of the repair exceeds 1 inch, the remainder of the repair process will consist of layering coarse hot angular aggregate (cleaned and dried) at a rate of 25%-35% by volume with the molten Fibrecrete "G" until within 3/4" of the top of the repair. The final 3/4" of the repair will be Fibrecrete "G" material for optimum flexibility of the repair. Once this top layer has been leveled with a hot iron, Fibrecrete Topping Stone will be applied to the top of the repair to ensure proper skid resistance. Depending on the depth of the repair, the Fibrecrete "G" material will be ready for traffic return between 30 minutes to 1 hour.

All removed materials and residual repair materials will be recovered and disposed of away from the site according to the client's specifications.

Warranty

Fibrecrete Technologies, LLC warrants that the Fibrecrete products meet applicable specifications provided they are installed in accordance with the manufacturer's guidance and specifications. Distributed in the United States under license by:

Marketing Associates, Inc. 131 St. James Way

<u>HDPF (High Density Polyurethane Foam) Processes – General and Slab Leveling, Undersealing and Voidfilling</u>

Material

The medium used for Slab Leveling, Undersealing and Voidfilling shall be a blown high-density polyurethane. The material shall be hydrophobic.

The high-density, closed cell, polyurethane system shall exhibit the following physical characteristics and properties:

DENSITY, Lbs/Ft ASTM 1622	COMPRESSIVE STRENGTH ASTM 1621
3.0	40 psi
3.5	50 psi
4.0	60 psi
6.0	110 psi

The polyurethane foam system will have a free rise density of 3.0 - 4.2 lb/ft with a minimum compressive strength of 40 psi. The expansion of the polyurethane foam under pressure increases the foam density above the original free rise density value. The compressive strength is a function of density of the tested material; therefore the foam produced during the lifting process will normally have a higher compressive strength than foam produced without restriction (free rise).

Equipment

A listing of lifting and under sealing equipment shall be submitted to the Engineering Department for review. The minimum list of equipment required shall be as listed below. The listing is a minimum and shall not preclude the use of additional equipment.

- A pneumatic drill and an electric drill capable of drilling $5/8" \frac{3}{4}"$ dia. Holes.
- A dynamic penetrometer.
- A truck-mounted pumping unit capable of injecting the high-density polyurethane formulation below the
 concrete slab or asphalt pavement into the sub-surface soils. This pumping unit will be capable of
 controlling the rate of rise of the pavement and densifying the sub-surface soils.
- A laser level or dial indicator devices capable of monitoring and verifying that the concrete slab or asphalt pavement is raised to the required elevation.

Contractor Pre-Qualification Requirements

The Contractor shall have a minimum of three (3) years of experience in performing this type of work and a minimum of 10 projects on which the Contractor has successfully complete this type of work. Prior to beginning work, the Contractor shall submit certification to the Engineer that the Contractor meets the minimum required experience. The certification shall include a listing of previous clients with contact name and phone numbers.

Prior to being approved for performing this type of work, the following documents shall be supplied by the Contractor to the Engineer and found to be acceptable:

- A. A report from an industrial hygienist who has conducted a personnel, production vehicle and typical jobsite safety review of the Contractor's implementation procedures involving the polyurethane material
- B. A copy of the Contractor's Employee Safety Manual specific to polyurethane pavement raising and undersealing work.

Construction Methods

Final elevations shall be within ¼" of the elevations proposed by profile, to the extent permitted by the structure, existing construction and site conditions. A tight string line may be used to monitor and verify elevations for slab

lengths of 50 foot or less. For longer sections, a laser level will be used to monitor and verify elevations. Elevations can also be verified by flooding the area to confirm that the paving has been realigned properly. The Contractor shall be responsible for any pavement blowouts or excessive payment lifting which may result from process and shall repair the damaged area tot the satisfaction of the Engineer without additional cost.

The HDPF shall reach 90% of the full compressive strength in 15 minutes after injection.

HDPF Slab Leveling, Undersealing and Voidfilling

For leveling and undersealing, the Contractor shall prepare concrete to be leveled by profiling existing pavement and determining where the pavement needs to be raised. Voidfilling shall be in areas as indicated and as directed by the Engineer. A series of 5/8" holes shall be drilled into the pavement 6-8 foot O.C. (exact location and spacing to be determined in the field). The expanding HDPF material shall then be injected under the slab. The amount of rise shall be controlled by regulating the rate of HDPF injected. Injection holes shall be sealed with non-expansive cementitious grout once leveling is complete.

Measurement

The polyurethane material shall be paid for by the pound, which will include furnishing and injecting material.

Double Verification of Actual Pounds pumped will be accomplished as follow:

A conversion from pump counters to pounds will be provided with a manufacturer's certification of the accurate conversion factor.

A visual measurement conversion on the actual totes/barrels of pounds per inches pumped.

Basis of Payment

The quantity of material to be paid for shall be the quantity used, based on the contract unit price shown on the bid form. Only those items shown on the bid sheet shall be paid for directly. All other labor, tools, equipment and incidentals necessary for the completion of the project shall be considered incidental to the contract bid items.

Payment shall be made under:

Pay Item

Foam Installation - HDPF Slab Leveling, Undersealing and Voidfilling

Pay Unit

Pounds

FOAM INSTALLATION – SOIL STABILIZATION

Prime-Flex 910 or approved equal

Specification describes pressure injection of soils to stabilize weak and loose soils and stop water migration through injected soils using a hydrophobic polyurethane injection resin.

Purpose

Furnish all materials, labor, tools and equipment to stabilize soils as indicated on drawings or in contract documents.

Quality Assurance

Manufacturer of polyurethane materials shall have been in existence for a period of not less than 15 years.

The Contractor must provide the Engineer with job references where they successfully used hydrophobic polyurethane resins for soil stabilization.

Delivery, Storage and Handling

Deliver the specified products in original unopened containers with manufacturer's name, labels, product identification, and batch numbers intact.

Store and condition the specified product as recommended by the manufacturer.

Job Conditions

Do not apply the material if it is or it appears that it will be raining or snowing unless precautions are taken to protect the material from moisture. If temperature is or will be below 34 degrees F protect grout from freezing. Ice or the formation of ice can prevent grout penetration and travel.

Contractor will take all precautions necessary to insure that no damage will occur to any work zone due to handling or pumping of the polyurethane resin.

Basis of Payment

The quantity of material to be paid for shall be the quantity actual used, based on the contract unit price shown on bid form. Only those items shown on the bid sheet shall be paid for directly. All other labor, tools, equipment and incidentals necessary for the completion of the project shall be considered incidental to the contract bid items.

Payment shall be made under:

Pay Item

Foam Installation - Soil Stabilization

Pay Unit Gallon

SITE INVESTIGATION AND REPRESENTATION

The Contractor acknowledges that he has satisfied himself as to the nature of the work, and general and local conditions; particularly those bearing on transportation, availability of labor, and State Regulations for safety required for the prosecution of the work and all matters which can in any way affect the work or cost thereof under this contract. Any failure by the Contractor to acquaint himself with all the available information concerning these conditions will not relieve him from the responsibility for estimating properly the difficulty or cost of successfully performing the work.

TRAFFIC CONTROL

The Contractor shall maintain traffic during construction and provide, install, and maintain all traffic control devices in accordance with these project guidelines, the Project Special Provisions, North Carolina Department of Transportation Standard Specifications for Roads and Structures, January 2012 and the current edition of the Manual of Uniform Traffic Control Devices (MUTCD).

The Contractor shall utilize complete and proper traffic controls and traffic control devices during all operations. All traffic control and traffic control devices required for any operation shall be functional and in place prior to the commencement of that operation. Signs for temporary operations shall be removed during period of inactivity. The Contractor is required to leave the project in a manner that will be safe to the traveling public and which will not impede motorists.

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

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

When temporary lane closure on a multi-lane roadway is shifted to another lane, the Contractor will be paid for a Lane Closure Shift. On 2-lane, 2-way roadways, the Contractor will be paid one Temporary Lane Closure for both lanes.

Payment shall be made under:

Pay Item

Temporary Lane Closure (2-Lane, 2-Way Roadway)

Pay Unit Each

Temporary Lane Closure (Multi-Lane Roadway)	Each
Lane Closure Shift (Multi-Lane Roadway)	Each
Nighttime Temporary Lane Closure (2-Lane, 2-Way Roadway)	Each
Nighttime Temporary Lane Closure (Multi-Lane Roadway)	Each
Nighttime Lane Closure Shift (Multi-Lane Roadway)	Each

SAFETY VESTS and FLAGGER CERTIFICATION

All Contractors personnel, all subcontractors and their personnel, and any material suppliers and their personnel must wear an OSHA approved or MUTCD Class II (Class III at night) reflective vest or outer garment at all times while on the project. All flaggers must be certified.

STANDARD SPECIAL PROVISIONS

AVAILABILITY OF FUNDS - TERMINATION OF CONTRACTS

(5-20-08) Z-2

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

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

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(E) of the 2012 Standard Specifications.

ERRATA

(1-17-12) (Rev. 1-21-14)

Revise the 2012 Standard Specifications as follows:

Division 2

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

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

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

Division 3

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

Division 4

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

Division 6

Page 6-7, line 31, Article 609-3 Field Verification of Mixture and Job Mix Formula Adjustments, replace "30" with "45".

Page 6-10, line 42, Subarticle 609-6(C)(2), replace "Subarticle 609-6(E)" with "Subarticle 609-6(D)".

Page 6-11, Table 609-1 Control Limits, replace "Max. Spec. Limit" for the Target Source of $P_{0.075}/P_{be}$ Ratio with "1.0".

Page 6-40, Article 650-2 Materials, replace "Subarticle 1012-1(F)" with "Subarticle 1012-1(E)"

Division 8

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

Division 12

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

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

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

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

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

Division 15

Page 15-4, Subarticle 1505-3(F) Backfilling, line 26, replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)". Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the following: $W = LD\sqrt{P} \div 148,000$

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

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

Division 17

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

Revise the 2012 Roadway Standard Drawings as follows:

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

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, And Other Noxious Weeds) (3-18-03) (Rev. 10-15-13)

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, 919-733-6932, or http://www.ncagr.gov/plantind/ to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

Regulated Articles Include

- 1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
- 2. Plants with roots including grass sod.
- 3. Plant crowns and roots.
- 4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
- 5. Hay, straw, fodder, and plant litter of any kind.
- 6. Clearing and grubbing debris.
- 7. Used agricultural cultivating and harvesting equipment.

- 8. Used earth-moving equipment.
- 9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed or other noxious weeds.

MINIMUM WAGES

(7-21-09)

Z-5

FEDERAL:

The Fair Labor Standards Act provides that with certain exceptions every employer shall pay wages at the rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

STATE:

The North Carolina Minimum Wage Act provides that every employer shall pay to each of his employees, wages at a rate of not less than SEVEN DOLLARS AND TWENTY FIVE CENTS (\$7.25) per hour.

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

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

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

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

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

ON-THE-JOB TRAINING

(10-16-07) (Rev. 5-21-13)

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. A sample agreement is available at www.ncbowd.com/section/on-the-job-training.

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.

REQUESTS FOR QUOTATIONS WERE SENT TO THE FOLLOWING:

Applied Polymerics, Inc. Ms. Tami Gabriel (EMAIL)

PO Box 6007 NCDOT

Mount Airy, NC 27030 Civil Rights Office

ATTN: Ricky Marion

Mr. Reginald McNeill (EMAIL)

NCDOT

Civil Rights Office

Civil Rights Office

Country Boy Landscaping, Inc.

PO Box 290

Harmony, NC 28634 Mr. Michael McKoy (EMAIL)

ATTN: Chris Carter NCDOT

Ms. Jamila Ormond (EMAIL)

R.E. Burns & Sons Co., Inc. NCDC

PO Box 7168

Statesville, NC 28687 ATTN: Kevin Burns NCDOT

Association of General Contractors (EMAIL)

TLC Works Division 9 Web Page:

1021 Woods Crossroads Rd.

Benson, NC 27504 ATTN: Chris Barefoot http://www.ncdot.org/doh/operations/division9/div9bid.html

NC A & T Plan & Resource Center

Department of Construction Management &

Occupational Safety and Health

Price Hall - Room 112M, Laurel Street

Greensboro, NC 27411 Attn: Andrew Davis

Revised 11-2012

Subcontract Approval Form (SAF)

- Complete the "Subcontract Approval Form" (Form SAF) for the Subcontractor and the 2nd Tier Subcontractor on one form. Additional items of work can be entered on the "Subcontract Approval Form Attachment". If there is more than one 2nd Tier Subcontractor, the information should be listed on the "Subcontract Approval Form - Additional 2nd Tier" (SAF - Additional 2nd Tier).
- Reporting Number is the Fiscal Vendor Number for Contractors and Subcontractors. This number can be found in the NCDOT Directory of Transportation Firms - Prequalified Bidders and Subcontractors. Use the following web address to access the list of Prequalified Bidders and Subcontractors.

https://partner.ncdot.gov/VendorDirectory/default.html

Enter the name of your subcontractor and hit "Submit". If the firm is prequalified to perform work for NCDOT, the firm's information will be shown on the screen. Click on the firm's name to access the Reporting Number.

- 3. If retainage is being withheld for the Subcontractor or 2nd Tier Subcontractor place an "X" in the box under the column titled "Retainage."
- 4. When the proposed Subcontractor or 2nd Tier Subcontractor is a certified DBE, MBE, or WBE Subcontractor, select the appropriate certification from the drop down list. When the proposed Subcontractor is not a certified DBE, MBE, or WBE subcontractor, select "NONE" from the drop down list.
- 5. Partial Item of Work and Portion of Work

Partial Item of Work is defined as a Subcontractor performing part of the work associated with a line item, such as hauling asphalt or tying steel. The partial item of work should be indicated by the symbol (*). The work associated with the contract line item to be performed by the Subcontractor shall be identified.

Portion of Work is defined as a Subcontractor performing all the work associated with a line item, but only a portion of the contract quantity. An example is grading from Station 225+00 - L- to the end of the project. The portions of work should be indicated by the symbol (•). The physical limits of the sublet quantity shall be identified.

The Contractor may designate a subcontracted item of work as both a portion and a partial. (Example: Contractor is subcontracting hauling of unclassified excavation to multiple trucking contractors.) If the item of work is designated as both a portion and a partial the unit price shall be less than the contract unit price and the quantity shall be less than the contract quantity.

- 6. Sub or 2nd Tier Designate if the work for the associated line item will be performed by a Subcontractor or a 2nd Tier Subcontractor. This must be completed to correctly calculate the Subcontract Amount.
- 7. Units of Measure (UOM) shown on the Subcontract Approval Form (SAF) shall be the same as those shown in the Department's contract. Any conversions that are necessary to satisfy this requirement shall be the responsibility of the Contractor. The Converted Price (CP) shall be denoted with an asterisk (*). (Examples of converting units of measure can be found in the HiCAMS User Guide, Chapter 2, Section 8A. Use the following link to view the examples.)

https://connect.ncdot.gov/projects/construction/Pages/HiCAMS-Manual.aspx

8. DBE/MBE/WBE Unit Price - This unit price should only be completed for DBE/MBE/WBE Subcontractors. Enter a DBE/MBE/WBE Unit Price for the items of work performed by any certified DBE/MBE/WBE. Use the chart below to determine if a DBE/MBE/WBE Unit Price shall be entered for the line item, based on the certification of the firm.

		Enter
		DBE/MBE/WBE
Subcontractor	2nd Tier	Unit Price For
Certified	None	Subcontractor
Certified	Certified	Subcontractor
None	Certified	2nd Tier

The DBE/MBE/WBE Unit Price must be the negotiated unit or lump sum price agreed upon between the Contractor and the Subcontractor, unless the Contractor is entering a Converted Price. Indicating a Converted Price acknowledges that the price shown is not the actual price, but an approximate value used for calculating the Sublet Amount as reasonably close as possible. It can be higher, lower or equal to the contract bid price.

- 9. DBE/MBE/WBE Sublet Amount is the DBE/MBE/WBE Unit Price multiplied by the Quantity. For committed firms, the DBE/MBE/WBE Sublet Amount shall be the same or higher than the amount listed in the contract.
- 10. Subcontract Unit Price The Subcontract Unit Price must be the same as the contract unit price unless the Subcontractor is performing a partial item of work. When a partial item of work is sublet, the unit price must be less than the contract unit price. When only a portion of the quantity of an item is sublet, the unit price shall be the same as the contract unit price. If an item of work is designated as both a partial and a portion, refer to Item 5 of these instructions. A Subcontract Unit Price must be entered for every line item, including an item of work performed by a DBE/MBE/WBE Subcontractor.
- 11. The Total Subcontract Amount is the Subcontract Unit Price multiplied by the Quantity.
- 12. The Subcontract Amount is the amount subcontracted by the Contractor. The amount is used to determine the percent of work performed by the Prime Contractor. (Refer to Article 108-6 of the Standard Specifications for subletting percentages.) The Subcontract Amount is calculated by summing the Total Subcontract Amounts for the Subcontractor. Any items listed on the Attachment sheet for the Subcontractor is also included in the Subcontract Amount. The line items for 2nd Tier Subcontractor(s) are not included.
- 13. When any item requested to be sublet has been previously included in an approved subcontract, the following statement shall be included above the listing of these items: "The following items are being deleted from "Subcontract Request Number _____."
- 14. The Contractor, Subcontractor and 2nd Tier Subcontractor shall sign the original Subcontract Approval Form and the Contractor shall submit the form to the Resident Engineer.

Sublet Percentages

FOR USE BY NCDOT PERSONNEL (for non HiCAMS contracts)

The following is the process used to calculate the Sublet Percentages after the approval of each subcontract. The fields will not populate, this process should be hand calculated.

(1) Total Original Contract Amount	(5) Difference {1-(2+3)}
(2) Specialty Items Sublet	(6) Percent by Prime {(1-4)/5
(3) Non-spec. Items Sublet to DBE/MBE/WBE	(7) Threshold Check {(1-4)/(1-2)}
(4) Total Sublet (Grand Total)	

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SUBCONTRACT APPROVAL FORM

Contract No.:		F.A. No.:	D.				Subcontract R	Subcontract Request Number:		
VBS Element:		T.I.P. No.:	Х о				County:			
APPROVAL IS REQUESTED TO SUBLET THE FOLLOWING ITEMS OF WORK ON THIS PROJECT TO:	WING IT	EMS C	F WORK	ON THIS PROJ	ECT TO	Ö	•			
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Subcontractor Name and Address							Retainage	Certification	Reporting No.	ig No.
nd Tier-1 Subcontractor Name and Address							(
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SUBCONTRACT CERTIFICATION (applies only to Federal projects) The Contractor / Subcontractor certifies that the subcontract is in writing and that FHWA 1273, "Required Contract Provisions," have been included in the subcontract / 2 nd tier subcontract in its entirety.	eral projectract is in	cts) writing	and that	FHWA 1273, "Re	quired	Contra	act Provisions," h	nave been includ	ed	
Contractor: Signature:	L	Date			APPROVED:	VED:				
Title:					Resident Engineer	nt Engi	neer			Date
Subcontractor: Signature: Title:		Date			Approved with satisfactory perterms of the cor	/ed with xtory pe of the co	n the understandin erformance and co entract and that all	g that the Contract mpletion of the wo payments will be r	Approved with the understanding that the Contractor will be responsible for the satisfactory performance and completion of the work in compliance with the terms of the contract and that all payments will be made to the Contractor.	le for the h the tor.
2 nd Tier Subcontractor: Signature: Title:	111	Date								

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Rev. 5-2012

SUBCONTRACT APPROVAL FORM

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Line Code Number	Item Description	Portion Partial (•) (•)		Sub or 2nd Tier	Quantity	MOM	* 유	DBE/MBE/WBE Unit Price	DBE/MBE/WBE Sublet Amount	Subcontract Unit Price	Total Subcontract Amount
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Indicates a F	Indicates a Portion ofWork (•)	_	ndicat	es a Parti	Indicates a Partial Item (•)						



SUBCONTRACT APPROVAL FORM

Subcontractor: Signature: Date Date satisfactory performance and completion of the work in compliance with the understanding that the Contractor will be responsible for the satisfactory performance and completion of the work in compliance with the terms of the contract and that all payments will be made directly to the Contractor.	Title: Resident Engineer	Contractor: APPROVED: Signature: Date	SUBCONTRACT CERTIFICATION (applies only to Federal projects) The Contractor / Subcontractor certifies that the subcontract is in writing and that FHWA 1273, "Required Contract Provisions," have been included in the subcontract / 2 nd tier subcontract in its entirety.	Indicates a Portion of Work (●) Indicates a Partial Item (♦)								Line Code Item Description Portion Portion Partial or Quantity UOM CP DBE/MBE/WB Unit Price	2 nd Tier-3 Subcontractor Name and Address		2 nd Tier-2 Subcontractor Name and Address		APPROVAL IS REQUESTED TO SUBLET THE FOLLOWING ITEMS OF WORK ON THIS PROJECT TO:	WBS Element: T.I.P. No.: Cour	Contract No.: F.A. No.: Subcontra
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Date

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR CONTRACT: NAME OF BIDDER: The undersigned intends to perform work in connection with the above contract upon execution of the bid and subsequent award of contract by the Board of Transportation as: Name of MBE/WBE/DBE Subcontractor_ Address____ City_____State____Zip___ Please check all that apply: Minority Business Enterprise (MBE) Women Business Enterprise (WBE) Disadvantaged Business Enterprise (DBE) The MBE /WBE /DBE status of the above named subcontractor is certified by the North Carolina Department of Transportation. The above named subcontractor is prepared to perform the described work listed on the attached MBE/WBE/DBE Commitment Items sheet, in connection with the above contract upon execution of the bid and subsequent award of contract by the Board of Transportation. The above named subcontractor is prepared to perform the described work at the estimated Commitment Total for Subcontractor Price identified on the MBE/WBE/DBE Commitment Items sheet and amount indicated below. Commitment Total based on estimated Unit Prices and Quantities on the "attached" MBE/WBE/DBE Commitment Items sheet. Amount \$ The above named bidder and subcontractor mutually accepts the Commitment Total estimated for the Unit Prices and Quantities. This commitment total is based on estimated quantities only and most likely will vary up or down as the project is completed. Final compensation will be based on actual quantities of work performed and accepted during the pursuance of work. The above listed amount represents the entire dollar amount quoted based on these estimated quantities. No conversations, verbal agreements, and/or other forms of non-written representations shall serve to add, delete, or modify the terms as stated. This document shall not serve in any manner as an actual subcontract between the two parties. A separate subcontractor agreement will describe in detail the contractual obligations of the bidder and the MBE/WBE/DBE subcontractor. Affirmation The above named MBE/ WBE/ DBE subcontractor affirms that it will perform the portion(s) of the contract for the estimated dollar value as stated above. Name of MBE/ WBE/ DBE Subcontractor Name of Bidder Signature / Title Signature / Title

Date

Form DBE-IS Rev DIV 9 12-31-07

State of North Carolina Department of Transportation Subcontractor Payment Information

Submit with	n Invoice						
NCDOT PO	e No. Reference D/Contract Number State Project No.) Dice						
Signed		7 1					
Invoice Line Item Reference (from PO)	Payer Name	Payer Federal Tax ld	Subcontractor / Subconsultant/ Material Supplier Name	Subcontractor / Subconsultant / Material Supplier Federal Tax Id	Amount Paid To Subcontractor / Subconsultant / Material Supplier This Invoice	Date Paid To Subcontractor / Subconsultant / Material Supplier This Invoice	
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certify that the consultan	his information accurat hts/Material Suppliers o	tely reflects actual pon the above referer	ayments made and the aced project.	e dates the payment	ts were made to Sub	contractors/	
		Signature			Title		
		Print Name			Date		

State of North Carolina Department of Transportation Subcontractor Payment Information

Submit with	Invoice					
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Eaxmple 1 10	XYZ Trucking	123-45-6789	ABC Company	987-65-4312	\$ 7,000.00	11/16/2007
60	CDF Company	456-78-9123	DEF Paving	789-12-3456	\$ 1,000.00	11/17/2007
N/A					0.00	
					Example 1	Example 2
		Total Amount P	aid to Subcontractor	Firms	\$ 8,000.00	0.00
certify that th		ely reflects actual ¡	oour Fiscal progran payments made and the enced project.			, - -
		Signature _	John !	Doe	Title	Owner
		Print Name	John Doe		Date	12/11/2007

Field	Instructions
Subgrantee Letterhead / Name & Address Goes Here	Enter the name and address of the company, firm, governmental entity subgrantee requesting payment form the North Carolina Department of Transportation
Submit with Invoice To:	Update this section with the name and address of the NCDOT represen that is responsible for processing payment requests for your contracts.
Firm Invoice No. Reference	Enter the invoice number that was submitted to NCDOT that correspond the payment information contained on this form.
NCDOT PO / Contract Number	Enter the NCDOT Purchase Order or Contract number that corresponds the information contained on this form.

ital entity or

representative

Enter the name of the person responsible for the validity of the information Enter the date of the invoice that was submitted for payment. Enter the NCDOT WBS element number assigned to this project the information contained on this form. prresponds with corresponds with

Signed

contained on this form.

WBS No. (State Project No.)

Date of Invoice

that is being paid for goods or services related to the NCDOT PO / Contract Enter the name of the DBE Subcontractor, Subconsultant or Material Supplier Enter the Federal Tax Identification number of the Payer (See Payer Name) Enter the name of the company, firm, governmental entity or subgrantee that is Enter the invoice line item or pay item that the DBE payment information is responsible for paying the DBE subcontractor. related to

Subconsultant or Material Supplier that is being paid for goods or services related to the NCDOT PO / Contract Number. Enter the Federal Tax Identification number of the DBE Subcontractor

Enter the amount paid to the DBE Subcontractor, Subconsultant or Material Supplier for the invoice referenced.

Amount Paid To Subcontractor / Subconsultant / Material Supplier Subcontractor / Subconsultant/ Material Supplier Federal Tax Id

This Invoice

Subcontractor / Subconsultant/ Material Supplier Name

Payer Federal Tax Id

Payer Name

Invoice Line Item Reference

Date Paid To Subcontractor / Subconsultant / Material Supplier This Enter the date that the Subcontractor / Subconsultant / Material Supplier was Enter the total payments made to all DBE Subcontractor / Subconsultant / paid for the items referenced on the invoice.

Material Supplier for the invoice referenced.

Total Amount Paid to DBE Firms

SUBSTITUTE FORM W-9

VENDOR REGISTRATION FORM NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Pursuant to Internal Revenue Service (IRS) Regulations, vendors must furnish their Taxpayer Identification Number (TIN) to the State. If this number is not provided, you may be subject to a 20% withholding on each payment. To avoid this 20% withholding and to insure that accurate tax information is reported to the Internal Revenue Service and the State, please use this form to provide the requested information exactly as it appears on file with the IRS.

INDIVIDUAL AND SOLE PROPRIETOR: ENTER NAME AS SHOWN ON SOCIAL SECURITY CARD

CORPORATION OR PARTNERSHIP	: ENTER YOUR LEGAL BUSINESS NAME	
NAME:		the second secon
MAILING ADDRESS: STREET/PO BOX:		
CITY, STATE, ZIP:		
DBA / TRADE NAME (IF APPLICABLE):		
BUSINESS DESIGNATION:	☐ INDIVIDUAL (use Social Security No.) ☐ CORPORATION (use Federal ID No.) ☐ ESTATE/TRUST (use Federal ID no.) ☐ OTHER / SPECIFY	☐SOLE PROPRIETER (use SS No. or Fed ID No.) ☐PARTNERSHIP (use Federal ID No.) ☐STATE OR LOCAL GOVT. (use Federal ID No.)
SOCIAL SECURITY NO.		(Social Security #)
OR FED.EMPLOYER IDENTIFICATION NO.		(Employer Identification #
COMPLETE THIS SECTION IF PAYMENTS	ARE MADE TO AN ADDRESS OTHER THAN	N THE ONE LISTED ABOVE:
REMIT TO ADDRESS: STREET / PO BOX:	:	
CITY, STATE, ZIP		
10-10-10-10-10-10-10-10-10-10-10-10-10-1		
Participation in this section is voluntary. You are not required and its sole purpose is to collect statistical data on those vendo	to complete this section to become a registered vendor. The interpretation of the present of the section of the	formation below will in no way affect the vendor registration process circle the answer that best fits your firm's group definition.
		erican, Caucasian American, Asian American,
☐ Hispanic American, ☐ Asian-Indian American	an, Other:)
What is your firm's gender? (☐ Prefer Not to	Answer, Male, Female) Disabled-Owner	Business? (☐Prefer Not to Answer, ☐Yes,☐ No)
withholding as a result of a failure to report all int I am a U.S. person (including a U.S. resident alier The IRS does not require your consent to any p	(a) I am exempt from backup withholding, or (b) I have terest or dividends, or (c) the IRS has notified me that I	ons required to avoid backup withholding. For
NAME (Print or Type)	TITLE (Print	or Type)
SIGNATURE	DATE	PHONE NUMBER

To avoid payment delays, completed forms should be returned promptly to:

NC Department of Transportation Fiscal /Commercial Accounts 1514 Mail Service Center Raleigh, North Carolina 27699-1514

PHONE (919) 733-3624 FAX (919) 715-3700

CORPORATION

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

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

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

SIGNATURE OF CONTRACTOR Full name of Corporation Address as prequalified Attest Secretary/Assistant Secretary President/Vice President/Assistant Vice President Select appropriate title Select appropriate title Print or type Signer's name Print or type Signer's name CORPORATE SEAL AFFIDAVIT MUST BE NOTARIZED **NOTARY SEAL** Subscribed and sworn to before me this the __ day of _____ , 20 Signature of Notary Public Of _____County State of

My Commission Expires

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 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.

My Commission Expires:

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 also includes any required statements concerning exceptions that are applicable.

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

SIGNATURE OF CONTRACTOR Full Name of Firm Address as Prequalified Witness's Signature Signature of Member/Manager/Authorized Agent Select appropriate title Print or type Signer's name Print or type Signer's name AFFIDAVIT MUST BE NOTARIZED NOTARY SEAL Subscribed and sworn to before me this the ____ day of _____, 20____ Signature of Notary Public Of _____ County State of _____

My Commission Expires _____

EXECUTION OF BID NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION JOINT VENTURE (2) or (3)

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

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

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

SIGNATURE OF CONTRACTOR

Instructions: 2 Joint Venturers Fill in lines (1), (2) and (3) and execute. 3 Joint Venturers Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturers 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	0: 10 10	
Signature of Witness of Attest		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		
	Ву		
Signature of Witness or Attest	5,	Signature of Contractor	
Print or type Signer's name		Print or type Signer's name	
If Corporation, affix Corporate Seal	and and	3,000 2 3,000 2 1,000	
(4)			
	Name of Contractor (for 3 Joint Venture only)		
	Address as prequalified		
	Ву		
Signature of Witness or Attest	re of Witness or Attest Signature of Contracto		
Print or type Signer's name		Print or type Signer's name	
If Corporation, affix Corporate Seal	NOTARY SEAL	NOTARY SEAL	
Affidavit must be notarized for Line (2)	Affidavit must be notarized for Line (3)	Affidavit must be notarized for Line (4)	
Subscribed and sworn to before me this	Subscribed and sworn to before me this	Subscribed and sworn to before me this	
day of20	day of20	day of 20	
Signature of Notary Public	Signature of Notary Public	Signature of Notary Public	
of County	ofCounty State of	of County	
State of	State of	ofCounty State of	
My Commission Expires:	My Commission Expires:	My Commission Expires:	

My Commission Expires:

My Commission Expires:

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.

	SIGNATU	RE OF CONTRACTOR	
Name of Contractor			
		Individual Name	
Trading and doing busine	ess as	Full name of Firm	***
		ruii name oi riim	
1	Addre	ess as Prequalified	
Signatur	e of Witness	Signature of Contractor, Individually	
Print or type	e Signer's name	Print or type Signer's name	
	AFFIDAVIT	MUST BE NOTARIZED	
		NOTARY SEAL	
Subscribed and sworn to	before me this the		
day of	, 20		
Signature of Not	ary Public		
Of	County		
State of			

My Commission Expires

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

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

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

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

	SIGNATURE OF CONTRACTOR
Name of Contractor	
	Print or type individual name
	Address as Prequalified
	Signature of Contractor, Individually
	Print or type Signer's name
Signature of Witness	
Print or type Signer's name	
Print or type Signer's name	
	AFFIDAVIT MUST BE NOTARIZED
	NOTARY SEAL
Subscribed and sworn to before me this the	
day of, 20	-
	_
Signature of Notary Public	
Of County	
State of	_

My Commission Expires _

DEBARMENT CERTIFICATION

Conditions for certification:

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

DEBARMENT CERTIFICATION

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

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

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

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

Execution of Contract

CONTRACT NO.: 2014-BRIDGE-01
COUNTY: Davidson, Davie, Forsyth, Rowan & Stokes
ACCEPTED BY THE
Proposals Engineer
Date
EXECUTION OF CONTRACT AND BONDS APPROVED AS TO FORM:
Division Engineer
Date

Signature Sheet (Bid) - ACCEPTANCE SHEET

North Carolina Department of Transportation

BID FORM

DESCRIPTION:

BRIDGE DECK JOINT REPAIR AS NEEDED IN DAVIDSON, DAVIE, FORSYTH, ROWAN AND STOKES COUNTIES

LINE #	SECT	ITEM DESCRIPTION	QTY*	UNIT	UNIT	PRICE
1	SP	Silicon Joint Replacement	1000	LF	PRICE	-
2	SP	Evazote Joint Replacement	1500	LF		
3	SP	Saw-Cutting for Evazote Expansion Joints	1000	LF		-
4	SP	Open Joint Evazote Placement	500	LF		
5	SP	Joint Repair using Elastomeric Concrete 750 LF				
	J.	(16" wide or less and 2" deep or less)	/30	Lr		
6	SP	Joint Repair using Elastomeric Concrete (greater than 16" wide or greater than 2" deep)		CF		
7	SP	Asphalt Joint Repair/Replacement (18"-24" wide, with plate)	500	LF		
8	SP	Concrete/Asphalt Repair - Fibrecrete B	20,000	LB		
9	SP	Concrete/Asphalt Repair - Fibrecrete G	10,000	LB		
10	SP	Foam Installation – HDPF Slab Leveling, Undersealing and Voidfilling	500	LB		
11	SP	Foam Installation – Soil Stabilization	500	GAL		
12	SP	Temporary Lane Closure (2-Lane, 2-Way Roadway)	25	EA		
13	SP	Temporary Lane Closure (Multi-Lane Roadway)	25	EA		
14	SP	Lane Closure Shift (Multi-Lane Roadway)	20	EA		
15	SP	Nighttime Temporary Lane Closure (2-Lane, 2-Way Roadway)	10	EA		
16	SP	Nighttime Temporary Lane Closure (Multi-Lane Roadway)	25	EA		
17	SP	Nighttime Lane Closure Shift (Multi-Lane Roadway)	20	EA		

^{*}The Contractor shall note that all quantities are used only for figuring the lowest responsible bidder. The quantities may vary based on the amount of work needed during the year as directed by the Engineer.

TOTAL BID FOR PROJECT:			
CONTRACTORADDRESS			
Federal Identification NumberAuthorized Agent	Title		
Signature	Date		
witness	litle		
Signature	Date		
THIS SECTION TO BE COMPLETED BY NO This bid has been reviewed in accordance w Structures 2012.	RTH CAROLINA DEPARTMENT OF TRANSPORTATION with Article 103-1 of the Standard Specifications for Roads and		
Reviewed by	(date)		
Accepted by NCDOT	Engineer (date)		