STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION



DIVISION 10 DISTRICT 2&3

CONTRACT PROPOSAL

WBS ELEMENT:	10.106031A & 10.101331	COUNTY:	Mecklenburg & Cabarrus
TIP#:	-NA-		
FA#:	-NA-		
LOCATION:	I-77, I-85, I-485, I-277, US 74 and NC 16		
TYPE OF WORK:	Repairs to Concrete/Asphalt Roadways, Crack Sealing and Foam Injections at Various Locations.		
BID OPENING:	Wednesday September 16, 2015 at 9:30 A.M.		
DATE OF AVAILABILITY:	October 1, 2015		
COMPLETION DATE:	September 30, 2016		

NOTICE:

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

NAME OF BIDDER	N.C. CONTRACTOR'S LICENSE NUMBER
ADDRESS OF BIDDER	

RETURN BIDS TO: Mr. Mike Campbell

NC Department of Transportation 12033 East Independence Blvd. Matthews, NC 28105

DO NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!

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, except that bids may be prepared by electronic means as described elsewhere in the proposal. Failure to comply with any requirement shall cause the bid to be considered irregular and may be grounds for rejection of the bid.

- The bid sheet furnished by NCDOT with the proposal shall be used and shall not be altered in any manner. DO
 NOT SEPARATE THE BID SHEET FROM THE PROPOSAL!
- 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.
- **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.
- 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. A bid bond or deposit is not required when submitting a bid for this project.
- 12. THE PROPOSAL WITH THE BID SHEET STILL ATTACHED SHALL BE PLACED IN A SEALED ENVELOPE AND SHALL HAVE BEEN DELIVERED TO AND RECEIVED IN THE INTERSTATE MAINTENANCE OFFICE AT 12033 EAST INDEPENDENCE BLVD, MATTHEWS, NC 28105 BY 9:30 A.M. ON WEDNESDAY SEPTEMBER 16, 2015.
- 13. If delivered by mail, the sealed envelope shall be addressed as follows:

Mr. Mike Campbell NC Department of Transportation 12033 East Independence Blvd. Matthews, NC 28105

14. The sealed bid must display the following statement on the bottom left-hand corner of the sealed envelope:

QUOTATION FOR WBS# 10.106031A REPAIRS TO CONCRETE/ASPHALT ROADWAYS TO BE OPENED WEDNESDAY SEPTEMBER 16, 2015 AT 9:30 A.M.

The award of the contract, if it is awarded, will be made to the lowest responsible Bidder in accordance with Section 102 (excluding 102-2 and 102-10) of the 2012 Standard Specifications for Roads and Structures. 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 all bids.

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PROJECT SPECIAL PROVISIONS (GENERAL)

This contract is for the repairs to concrete and or asphalt roadways, crack sealing and foam injections at various locations within Mecklenburg and Cabarrus Counties in accordance with the 2012 Standard Specifications and/or Special Provisions herein.

All work and materials shall be in accordance with the provisions of the General Guidelines of this contract, the Project Special Provisions, the North Carolina Department of Transportation 2012 Standard Specifications for Roads and Structures, the North Carolina Department of Transportation Roadway Standard Drawings, and the current edition of the Manual on Uniform Traffic Control Devices (MUTCD).

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 <u>Standard Specifications</u>.

MANDATORY PRE-BID CONFERENCE (PREQUALIFYING TO BID)

(7-18-06) (Rev. 3-25-13)

SPD 1-310

In order for all prospective bidders to have an extensive knowledge of the project, all prospective bidders shall attend a mandatory pre-bid conference at **Wednesday**, **September 09**, **2015** @ **10:00 A.M**.

Interstate Maintenance Office 12033 East Independence Blvd. Matthews, NC 28105 (704) 791-9759

The pre-bid conference will include a thorough discussion of the plans, contract pay items, special provisions, etc.

Only bidders who have attended and properly registered at the above scheduled pre-bid conference and who have met all other prequalification requirements will be considered prequalified to bid on this project. A bid received from a bidder who has not attended and properly registered at the above scheduled pre-bid conference will not be accepted and considered for award.

Attendance at the pre-bid conference will not meet the requirements of proper registration unless the individual attending has registered at the pre-bid conference in accordance with the following:

- (A) The individual has signed his name on the official roster prior to the above noted time for the beginning of the conference.
- (B) The individual has written in the name and address of the company he or she represents.

- (C) Only one company has been shown as being represented by the individual attending.
- (D) The individual attending is an officer or permanent employee of the company they are representing.

Any individual arriving after the official roster has been received by the Engineer will not be eligible to bid. Attendance at any prior pre-bid conference will not meet the requirement of this provision.

CONTRACT TIME

This contract will be effective for one year beginning October 1st, 2015 and ending September 30th, 2016. The Department of Transportation reserves the right to renew this contract for two (2) additional one-year periods as described below.

The contractor shall submit his bid for one (1) year. At the option of the Department, this contract may be extended for two (2) additional periods of one (1) year each (maximum three (3) years total). If the contract is extended, the unit bid prices will be increased by three (3) percent for each one (1) year extension. No changes in the terms, conditions, etc. of this contract will be made when an extension to the contact is implemented. The total contract expenditures shall not exceed the maximum purchase order value of \$2.5 million per year.

The Engineer will notify the Contractor in writing 30 days before annual expiration date. The Contractor must notify the Engineer within 15 days after receiving notice of his acceptance of this offer. Failure on the part of the Contractor to reply will be received as a rejection of contract extension.

MOBILIZATION AND LIQUIDATED DAMAGES

Only one mobilization shall be paid for each project location for the duration of the project where the Contractor is required to perform work. Notification will be verbal followed by a faxed or emailed work order. The Contractor will be provided a work order for each project with location(s) and estimated quantities. There will be no minimum quantities for any line item associated with a particular mobilization. The Contractor shall consider this when bidding the Item "MOBILIZATION". All work assigned in the work order shall be agreed upon by the Engineer and the Contractor prior to work commencing.

The contractor will be required to begin work within fourteen (14) calendar days after notification from the State on all projects included in this contract, except those identified as emergency situations. In the event that the Contractor fails to make roadway repairs within fourteen (14) calendar days, **liquidated damages in the amount of Five Hundred Dollars** (\$500.00) per calendar day will be deducted from the monies due the Contractor.

An emergency situation occurs if there is a hazard to the traveling public and thereby creates a safety hazard in the judgment of the Engineer. The contractor shall have forty eight (48) hours to

respond after notification to an emergency request. Failure to respond to an emergency request within the specified time frame will result in the application of **liquidated damages in the amount of Five Hundred Dollars (\$500.00) per hour, or portion thereof.**

The contractor shall notify the Division Interstate Project Manager at the beginning of each week of his intended schedule of work. This will allow the DOT to schedule inspections accordingly.

All existing concrete and asphalt or other materials removed shall become the property of the Contractor and shall be disposed of properly.

Work shall be accomplished in a continuous manner once the contractor begins.

INTERMEDIATE CONTRACT TIME #1 AND LIQUIDATED DAMAGES

The Contractor shall complete the required work of installing, maintaining and removing the traffic control devices for lane and shoulder closures and restoring traffic to its normal pattern. The Contractor shall not close or narrow a lane of traffic or shoulder during the following day and time restrictions:

ROADWAY	DAY AND TIME RESTRICTIONS
Lane Closures on	6:00 a.m. to 8:00 p.m., Monday - Friday
I-85, I-485 and I-277	9:00 a.m. to 6:00 p.m., Saturday and Sunday
Lane Closures on	6:00 a.m. to 9:00 p.m., Monday - Friday
I-77	9:00 a.m. to 6:00 p.m., Saturday and Sunday
Shoulder Closures on	Monday thru Friday
I-85, I-485 and I-277	6:00 a.m. to 9:00 a.m.
	4:00 p.m. to 7:00 p.m.
Shoulder Closures on	Monday thru Friday
I-77	6:00 a.m. to 9:00 a.m.
	4:00 p.m. to 9:00 p.m.

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

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

• For any **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.

- For **New Year's Day**, between the hours of 6:00 a.m. December 31st and 9:00 a.m. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until 9:00 a.m. the following Tuesday.
- For **Easter**, between the hours of 6:00 a.m. Thursday and 9:00 a.m. Monday.
- For **Memorial Day**, between the hours of 6:00 a.m. Friday and 9:00 a.m. Tuesday.
- For **Independence Day**, between the hours of 9:00 a.m. the day before Independence Day and 9:00 a.m. the day after Independence Day.

If **Independence Day** is on a Saturday or Sunday, then between the hours of 9:00 a.m. the Thursday before Independence Day and 9:00 a.m. the Tuesday after Independence Day.

- For **Labor Day**, between the hours of 6:00 a.m. Friday and 9:00 a.m. Tuesday.
- For **Thanksgiving Day**, between the hours of 6:00 a.m. Tuesday and 9:00 a.m. Monday.
- For **Christmas**, between the hours of 6:00 a.m. the Friday before the week of Christmas Day and 9:00 a.m. the following Tuesday after the week of Christmas Day.
- For **Spring and Fall Nascar Events** at Lowe's Motor Speedway and **Drag Races** at Z Max Dragway, between the hours of 6:00 a.m. the Thursday before the week of the event until 8:00 p.m. the Monday after the last race or as directed by the Engineer.
- For any **Football game** at the Bank of America Stadium or **Basketball game** at Time Warner Cable Arena, from three hours before the game until 3 hours after the game.

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 original traffic pattern.

The Liquidated Damages for failure to comply with the lane closure restrictions are ONE THOUSAND DOLLARS (\$1000.00) per hour.

DIVISION LET CONTRACT PREQUALIFICATION

(07-01-14) SPD 01-410

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

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

AUTHORITY OF THE ENGINEER

The Engineer for this project shall be the Division Engineer, Division 10, 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.

The Contractor will be required to obtain written approval from the Engineer for any subcontract work performed on this project prior to the subcontracted work being performed in accordance with Article 108-6 of the NCDOT Standard Specifications for Roads and Structures.

MATERIALS AND TESTING

The Engineer reserves the right to perform all sampling and testing in accordance with Section 106 of the <u>Standard Specifications</u> and the Department's "Materials and Tests Manual." However the Engineer may reduce the frequency of sampling and testing where he deems it appropriate for the project under construction.

All steel products which are permanently incorporated into this project shall be domestically produced. The Contractor shall furnish a notarized certification certifying that steel products conform to this requirement.

The Contractor shall furnish the applicable certifications and documentation for all materials as required by the <u>Standard Specifications</u>. Material which is not properly certified will not be accepted.

Delivery tickets for all material paid by weight, shall be furnished in accordance with Section 106-7 of the <u>Standard Specifications</u> and shall include the following information:

- NCDOT Work Order Number
- 2. Date
- 3. Time issued
- 4. Type of material
- 5. Gross weight
- 6. Tare weight
- 7. Net weight of material
- 8. Plant location
- 9. Truck number
- 10. Contractor's name
- 11. Public weighmaster's stamp or number
- 12. Public weighmaster's signature or initials in ink
- 13. Job mix formula number

EROSION, SILTATION, AND POLLUTION CONTROL

The Contractor shall exercise every reasonable precaution and take all necessary measures throughout the life of the project to prevent erosion, siltation, and pollution in accordance with Section 107-13 of the <u>Standard Specifications</u>. Silt fence and erosion control measures shall be installed in accordance with the plans for this project, Section 1605 of the <u>Standard Specifications</u>, and in locations directed by the Engineer or his representative.

PRECONSTRUCTION CONFERENCE

In accordance with Section 108-3 of the Standard Specifications, a preconstruction conference will be required prior to beginning work.

BASIS OF PAYMENT AND CLAIMS

The quantity of unit or lump sum prices and payment will be full compensation for all work, including, but not limited to supervision, labor, transportation, fuels, lubricants, repair parts, equipment, machinery and tools, materials necessary for the prosecution and completion of the work. The quantities contained herein are estimated only and the quantity to be paid for shall be the actual quantities which were used on the project.

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. All invoices for payment shall be completely and legibly filled out with all appropriate information supplied and shall be signed by an authorized representative of the Contractor.

If the request for payment is made by Contractor's Invoice, the Invoice shall be submitted to:

Mr. Mike Campbell NC Department of Transportation 12033 East Independence Blvd. Matthews, NC 28105

Payment to the Contractor will be made only for the actual quantities of the various items that are completed and accepted in accordance with the terms of the contract. Unless otherwise specified, all contract pay items will be produced, placed and paid in accordance with the <u>Standard Specifications</u>. In no case will the total amount paid to the contractor exceed the total contract quote by more than ten percent without prior written request from the Division Engineer to Fiscal Section.

FINAL INVOICE

After the project has been completed and accepted, the Contractor shall submit his invoice for final payment.

The reports listed below shall be submitted with the invoice requesting final payment:

- 1. Statement of Consent of Surety on the contract bonds for payment of money due the Contractor.
- 2. Contractor's affidavit for release and waiver of claims, stating that all obligations and debts have been satisfied, or an affidavit which includes a list of obligations not satisfied.
- 3. Any property owner's signed release for waste and borrow areas.
- 4. Any claims for time extensions or additional compensation.
- 5. Any materials, invoices, or certifications required and not previously submitted.
- 6. Final list of all DBE participation and dollar amount. Reporting can be completed monthly at: https://apps.dot.state.nc.us/Vendor/Payment Tracking/ or complete a DBE-IS form, which is available at: https://www.ncdot.org/doh/ forms/files/DBE-IS.xls.

<u>CLAIMS FOR ADDITIONAL COMPENSATION OR EXTENSION OF TIME</u>

The Contractor's attention is directed to the fact that Article 104-5 pertaining to revised contract unit prices will not apply to this contract. Any claims for additional compensation and/or

extension of the completion date shall be submitted to the Division Engineer with detailed justification with the final invoice. The failure to submit the claim(s) with the final invoice may be a bar to recovery. Please be advised that General Statute 136-29 of the Road and Highway Laws of North Carolina provides that a contractor who has not received the amount he claims he is due under the contract may submit a written verified claim to the State Highway Administrator within sixty (60) days after receipt of the final statement. The mailing address for the State Highway Administrator is: N. C. Department of Transportation, 1536 Mail Service Center, Raleigh, NC 27699-1536.

CONTRACT PAYMENT AND PERFORMANCE BOND

The successful bidder will be required to execute both a payment bond and a performance bond for a contract of \$300,000 or more. The successful bidder, within 14 calendar days after the notice of award is received by him, 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. All bonds shall be on the State bond forms which will can be located @ www.NCDOT.org. The corporate surety furnishing the bonds shall be authorized to do business in the State. The successful bidder's failure to file acceptable bonds within 14 calendar days after the notice of award is received by him shall be just cause for rescinding the award of the contract.

SUPERVISION BY CONTRACTOR

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

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

DEFAULT OF CONTRACT

The Department of Transportation shall have the right to declare a default of contract for breach by the Contractor of any material term or condition of the contract. Default of contract shall be in accordance with the terms, conditions, and procedures of Article 108-9 of the <u>Standard Specifications</u>.

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.

BIDS

In accordance with GS 136-28.1(b), if the total bid amount of the contract exceeds \$2,500,000, the bid will not be considered for award.

EXTENSION OF CONTRACT TIME

Failure on the part of the Contractor to furnish bonds or certifications, or to satisfy preliminary requirements necessary to issue the purchase order will not constitute grounds for extension of the contract time. If the Contractor has fulfilled all preliminary requirements for the issuance of a purchase order, and the purchase order authorization is not available by the date of availability, the Contractor shall be granted an extension equal to the number of calendar days the purchase order authorization is delayed after the date of availability.

NOTIFICATION OF OPERATIONS

The Contractor shall notify the Engineer 48 hours in advance of beginning work on this project. The Contractor shall give the Engineer sufficient notice of all operations for any sampling, inspection or acceptance testing required.

NIGHT OPERATIONS

Verification of any city or county permits, required for night work, shall be provided to the Engineer if the contractor wants to work at night. Also, before the contractor begins his operations during night hours, he shall submit in writing, a full and complete plan for traffic control and construction lighting which shall be approved by the engineer prior to construction.

All traffic control devices used outside of closure areas shall meet the requirements for night use as set forth in the North Carolina Department of Transportation Standard Specifications for

Roads and Structures, North Carolina Department of Transportation Roadway Standard Drawings, and the current Manual of Uniform Traffic Control Devices (MUTCD).

PORTABLE CONSTRUCTION LIGHTING

Furnish, operate and maintain everything necessary to provide lighting for compliance with Article 105-14 Night Work requirements for artificial lighting as found in Section 1413 of the Standard Specifications. This item is incidental to the other bid items in the Contract.

PROSECUTION OF WORK

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

It is further the intent that the Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with the equipment, materials, and methods of construction as may be required to complete the work described in the contract, or as may be amended, by the completion date.

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of \$500.00 will be charged to the contractor for each and every calendar day that such suspension takes place. The said amount is hereby agreed upon as liquidated damages. Liquidated damages chargeable due to suspension of the work will be additional to any liquidated damages that may become chargeable due to failure to complete the work by the completion date.

SAFETY AND ACCIDENT PROTECTION

In accordance with Article 107-21 of the Standard Specifications, the Contractor shall comply with all applicable Federal, State, and local laws, ordinances, and regulations governing safety, health, and sanitation, and shall provide all safeguards, safety devices, and protective equipment, and shall take any other needed actions, on his own responsibility that are reasonably necessary to protect the life and health of employees on the job and the safety of the public, and to protect property in connection with the performance of the work covered by the contract.

$\underline{\text{NO MAJOR CONTRACT ITEMS}}_{104}$

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

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

NO SPECIALTY ITEMS

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

None of the items included in this contract will be specialty items (see Article 108-6 of the 2012 Standard Specifications).

MINORITY BUSINESS ENTERPRISE AND WOMEN BUSINESS ENTERPRISE (DIVISIONS)

(10-16-07)(Rev. 12-17-13) 102-15(J) SPI G67

Description

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

Definitions

Additional MBE/WBE Subcontractors - Any MBE/WBE submitted at the time of bid that will not 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% 20 Forms/Joint% 20 Check% 20 Notification% 20 Form.pdf

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

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

MBE and WBE Goal

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

(A) Minority Business Enterprises **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** %

- (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 bid-letting, that MBE's or WBE's participation will not count towards achieving the corresponding goal.
- (B) If either the MBE or WBE goal is zero, entries on the Listing of MBE and WBE Subcontractors are not required for the zero goal, however any MBE or WBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

MBE or WBE Prime Contractor

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

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

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

Written Documentation – Letter of Intent

The bidder shall submit written documentation for each MBE/WBE that will be used to meet the MBE and WBE goals of the contract, indicating the bidder's commitment to use the MBE/WBE in the contract. This documentation shall be submitted on the 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 <u>(6)</u> 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.

- (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE/WBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using MBEs/WBEs is not in itself sufficient reason for a bidder's failure to meet the contract MBE or WBE goals, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from MBEs/WBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting MBEs/WBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested MBEs/WBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
- (G) Making efforts to assist interested MBEs/WBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of MBEs/WBEs. Contact within 7 days from the bid opening NCDOT's Business 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 <u>not</u> count toward the MBE contract goal requirement. Again, the same holds true for the work that a WBE subcontracts to a non-WBE firm. If a MBE or WBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the MBE or WBE is not performing a commercially useful function. The MBE/WBE may present evidence to rebut this presumption to the 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 MBE firm, including an owner-operator who is certified as a MBE. The same holds true that a WBE may subcontract the work to another WBE firm, including an owner-operator who is certified as a WBE. When this occurs, the MBE or WBE who subcontracts work receives credit for the total value of the transportation services the subcontracted MBE or WBE provides on the contract. It should be noted that every effort shall be made by MBE and WBE contractors to subcontract to the same certification (i.e., MBEs to MBEs and WBEs to WBEs), in order to fulfill

the goal requirement. This, however, may not always be possible due to the limitation of firms in the area. If the MBE or WBE firm shows a good faith effort has been made to reach out to similarly certified transportation service providers and there is no interest or availability, and they can get assistance from other certified providers, the 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.
- (2) When a committed MBE/WBE is descrified 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.

LOCATING EXISTING UNDERGROUND UTILITIES

(3-20-12) 105 SPI G115

Revise the 2012 Standard Specifications as follows:

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

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

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. Utilities damaged by the Contractor due to his negligence will be repaired at the Contractor's expense.

RESOURCE CONSERVATION AND ENVIRONMENTALLY SUSTAINABLE PRACTICES

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

In accordance with North Carolina Executive Order 156, NCGS 130A-309.14(3), and NCGS 136-28.8, it is the objective of the Department to aid in the reduction of materials that become a part of our solid waste stream, to divert materials from landfills, to find ways to recycle and reuse materials, to consider and minimize, where economically feasible, the environmental impacts associated with agency land use and acquisition, construction, maintenance and facility management for the benefit of the Citizens of North Carolina.

To achieve the mission of reducing environmental impacts across the state, the Department is committed to supporting the efforts to initiate, develop and use products and construction methods that incorporate the use of recycled, solid waste products and environmentally sustainable practices in accordance with Article 104-13 of the *Standard Specifications*.

Report the quantities of reused or recycled materials either incorporated in the project or diverted from landfills and any practice that minimizes the environmental impact on the project annually on the Project Construction Reuse and Recycling Reporting Form. The Project Construction

Reuse and Recycling Reporting Form and a location tool for local recycling facilities are available at:

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

Submit the Project Construction Reuse and Recycling Reporting Form by August 1 annually to <u>valuemanagementunit@ncdot.gov</u>. For questions regarding the form or reporting, please contact the State Value Management Engineer at 919-707-4810.

TWELVE MONTH GUARANTEE

(7-15-03) SP1 G145

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

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

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

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

OUTSOURCING OUTSIDE THE USA

(9-21-04) (Rev. 5-16-06) 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) RG 152

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:

- (1) have a contract with a governmental agency; or
- (2) have performed under such a contract within the past year; or
- (3) 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 G.S. § 133-32.

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

LIABILITY INSURANCE

(5-20-14) SPI G160

Revise the 2012 Standard Specifications as follows:

Page 1-60, Article 107-15 LIABILITY INSURANCE, line 16, add the following as the second sentence of the third paragraph:

Prior to beginning services, all contractors shall provide proof of coverage issued by a workers' compensation insurance carrier, or a certificate of compliance issued by the Department of Insurance for self-insured subcontractors, irrespective of whether having regularly in service fewer than three employees.

EMPLOYMENT

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

Revise the 2012 Standard Specifications as follows:

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

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

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

STATE HIGHWAY ADMINISTRATOR TITLE CHANGE

(9-18-12) SPI G185

Revise the 2012 Standard Specifications as follows:

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

SUBLETTING OF CONTRACT

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

Revise the 2012 Standard Specifications as follows:

Page 1-66, Article 108-6 Subletting of Contract, line 37, add the following as the second sentence of the first paragraph:

All requests to sublet work shall be submitted within 30 days of the date of availability or prior to expiration of 20% of the contract time, whichever date is later, unless otherwise approved by the Engineer.

Page 1-67, Article 108-6 Subletting of Contract, line 7, add the following as the second sentence of the fourth paragraph:

Purchasing materials for subcontractors is not included in the percentage of work required to be performed by the Contractor. If the Contractor sublets items of work but elects to purchase material for the subcontractor, the value of the material purchased will be included in the total dollar amount considered to have been sublet.

PROJECT SPECIAL PROVISIONS (ROADWAY)

SCOPE OF WORK

This contract is for the repairs to concrete and or asphalt roadways, crack sealing and foam injections at various locations within Mecklenburg and Cabarrus Counties in accordance with the 2012 Standard Specifications and/or Special Provisions herein.

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.

CONCRETE/ASPHALT ROADWAY REPAIR (HOT APPLIED MASTIC ASPHALT BINDER

Description

The Contractor shall repair spalled areas, potholes, joints and large cracks (> 1" wide) on concrete pavements and asphalt pavements using an approved Hot Applied Flexible Repair Material such as Fibrecrete "B" or an **approved equal** as directed by the Engineer.

Fibrecrete "B" is a flexible repair for joints, large cracks, spalls, and pot holes in asphalt and concrete. It is a hot-applied polymer modified mastic asphalt binder; factory blended with graded fillers, steel fibers, granite aggregates and recycled tire rubber.

Material

Provide a hot applied patching material consisting of a combination of binder, polymers, graded fillers, aggregates, fibers, and rubber that once heated provides an impermeable, voidless solid mass at ambient temperatures. Formulate the patching material according to climatic conditions to provide a durable pavement repair with good fluidity at process temperature, low temperature flexibility, and ambient temperature flow resistance. The Binder shall be asphalt based.

Material Specifications		
Properties	Method	Requirement

Color	546-C	Black
Resilience	547-C	50% min.
Tensile Strain to Failure	548-C	35% min.
Tensile Stress at Failure	548-C	50 psi min.
Cone Flow	549-C	10% max. (polymer based)
Flexibility	550-C	Pass ¹
Aggregate Settlement	551-C	5% max.
Recommended Application Temp.		300°F to 380°F
Specific Gravity		1.7-2.0

¹No Evidence of cracking of the sample

The Bulking Aggregate shall be a single sized bulking aggregate consisting of a crushed, double washed and dried granite. The Size shall be from 5/8" to 7/8" determined through sieve analysis.

The Final Surface Aggregate shall be a high PSV aggregate consisting of crushed, double washed and dried aggregates.

All materials shall be delivered unopened in their original containers bearing the manufacture'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 Contractor's facility prior to any field preparation, so that there shall be no delay in procuring the material for each day's application.

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 Material and Test Unit.

Construction

Place the patching material to encompass the damaged or spalled areas as shown on the plans, with adjustments to the depth and width of the repairs as directed by the Engineer.

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 milled, saw cut and jack hammered, or cored and jackhammered to remove the defective areas as directed by the Engineer. Remove material from the repair area to a depth and width necessary to provide sound pavement that will allow proper seating of the patching material. If using a jackhammer, use an approved jackhammer capable of performing the required removal of the existing material without further damaging the surrounding pavement. Use a jackhammer no larger than 30 pounds unless approved by the Engineer.

The repair surfaces shall be cleaned and dried with a hot air lance. The recessed area and vertical walls shall be treated with a primer agent to promote adhesion and prevent moister intrusion (for concrete applications only). Use a primer that is recommended by the manufacture.

Mix and heat the patching material to $300^{\circ}F - 350^{\circ}F$ on site in a horizontal mixing unit equipped with electronically controlled thermostats. Heat the bulking and final surface aggregates to ensure they are dry and free of any dust using a vented barrel mixer to $300^{\circ}F$ or other approved method.

Apply the molten patching material to the 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 granite aggregate (cleaned and dried) at a rate of 25%-35% by volume with the molten patching material until within 34" of the top of the repair. The bulking aggregate must be worked into the patch completely. No dry layers of bulking aggregate will be allowed.

Apply a final coat of the heated patching material to level the final ¾" of the repair. Dress the surface of the patch with a high PSV aggregate to ensure proper skid resistance. Perform this operation while the patch is still hot.

Do not allow traffic over the material until after it has cooled to the point that it does not permanently deform under pressure, as recommended by the manufacturer or as directed by the Engineer. Depending on the depth of the repair, the patching material should be ready for traffic in 30 minutes to 1 hour.

All removed materials and residual repair materials will be recovered and disposed of away from the site.

Measurement and Payment

The quantity of Hot Applied Flexible Repair Material to be paid for will be the actual cubic feet of material used to acceptably patch the pavement. Such price and payment will be full compensation for furnishing materials, including bulking and final surface aggregates, patching material binder, primer, heating and mixing, removal and disposal of existing pavement material, placing and finishing, labor, equipment, tools and all incidentals associated with performing this work.

Payment will be made under:

Pay ItemPay UnitConcrete/Asphalt Repair (Hot Applied Mastic Asphalt Binder)Cubic Feet

CONCRETE/ASPHALT ROADWAY REPAIR (HOT APPLIED SYNTHETIC POLYMER MODIFIED RESIN)

Description

The Contractor shall repair spalled areas, potholes, joints and large cracks (> 1" wide) on concrete pavements using an approved Hot Applied Flexible Repair Material such as Fibrecrete "G" or an **approved equal** as directed by the Engineer.

Fibrecrete "G" is a flexible repair for corner breaks, large cracks, spalled joints, and pot holes in concrete. It is a hot-applied synthetic polymer modified resin compound containing mineral fillers, chopped fibers and graded aggregates.

Material

Provide a hot applied patching material consisting of a combination of binder, polymers, graded fillers, aggregates, fibers, and rubber that once heated provides an impermeable, voidless solid mass at ambient temperatures. Formulate the patching material according to climatic conditions to provide a durable pavement repair with good fluidity at process temperature, low temperature flexibility, and ambient temperature flow resistance. The Binder shall be pentaerythritol rosin based.

	Material Specifi	cations
Properties	Method	Requirement
Color	546-C	Gray
Resilience	547-C	50% min.
Tensile Strain to Failure	548-C	20% min.
Tensile Stress at Failure	548-C	50 psi min.
Cone Flow	549-C	4% max. (polymer based)
Flexibility	550-C	Pass ¹
Aggregate Settlement	551-C	3mm max.
Recommended Application		300°F to 350°F
Temp.		
Specific Gravity		1.8-2.0

¹No Evidence of cracking of the sample

The Bulking Aggregate shall be a single sized bulking aggregate consisting of a crushed, double washed and dried granite. The Size shall be from 5/8" to 7/8" determined through sieve analysis.

The Final Surface Aggregate shall be a high PSV aggregate consisting of crushed, double washed and dried aggregates.

All materials shall be delivered unopened in their original containers bearing the manufacture'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 Contractor's facility prior to any field preparation, so that there shall be no delay in procuring the material for each day's application.

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 Material and Test Unit.

Construction

Place the patching material to encompass the damaged or spalled areas as shown on the plans, with adjustments to the depth and width of the repairs as directed by the Engineer.

The Contractor shall prepare areas by removing all loose and damaged material from the repair area, either by saw cutting around the area and using a jackhammer to remove material, or by using a milling machine, as directed by the Engineer. Remove material from the repair area to a depth and width necessary to provide sound pavement that will allow proper seating of the patching material. If using a jackhammer, use an approved jackhammer capable of performing the required removal of the existing material without further damaging the surrounding pavement. Use a jackhammer no larger than 30 pounds unless approved by the Engineer.

The repair surfaces shall be cleaned and dried with a hot air lance. The recessed area and vertical walls shall be treated with a primer agent to promote adhesion and prevent moister intrusion (for concrete applications only). Use a primer that is recommended by the manufacture.

Mix and heat the patching material to $300^{\circ}F - 350^{\circ}F$ on site in a horizontal mixing unit equipped with electronically controlled thermostats. Heat the bulking and final surface aggregates to ensure they are dry and free of any dust using a vented barrel mixer to $300^{\circ}F$ or other approved method.

Apply the molten patching material to the repair area, sealing the bottom of the repair from water intrusion. The remainder of the repair process will consist of layering coarse, hot, angular granite aggregate (cleaned and dried) with the molten patching material until within ½" of the top of the repair. The final ½" of the repair will be patching material for optimum flexibility of the repair. Once the top layer has been screened to a level grade, a high PSV aggregate will be applied to the top of the repair to ensure proper skid resistance. Perform this operation while the patch is still hot.

Sweep the area and remove all debris from the site. Do not allow traffic over the material until after it has cooled to the point that it does not permanently deform under pressure, as recommended by the manufacturer or as directed by the Engineer.

All removed materials and residual repair materials will be recovered and disposed of away from the site.

Measurement and Payment

The quantity of Hot Applied Flexible Repair Material to be paid for will be the actual cubic feet of material used to acceptably patch the pavement. Such price and payment will be full compensation for furnishing materials, including bulking and final surface aggregates, patching material binder, primer, heating and mixing, removal and disposal of existing pavement material, placing and finishing, labor, equipment, tools and all incidentals associated with performing this work.

Payment will be made under:

Pay Item Pay Unit

Concrete/Asphalt Repair (Hot Applied Synthetic Polymer Modified Resin) Cubic Feet

HIGHLY FLEXIBLE ASPHALT PAVEMENT REPAIR

Description

The Contractor shall repair spalled areas, potholes and cracks larger than 1" and smaller than 8" on asphalt pavements and asphalt overlaid concrete pavements using an approved Highly Flexible Asphalt Pavement Repair Material such as SAMIscreed or an **approved equal** as directed by the Engineer.

SAMIscreed is a highly flexible repair for cold joints, overlaid joints, large cracks, spalls, and pot holes in asphalt. It is a hot applied polymer modified mastic asphalt binder; factory blended with graded fillers, steel fibers, granite aggregates and recycled tire rubber.

Material

Provide a hot applied patching material consisting of asphalt, rosin ester, polymers, graded fillers, granite aggregates, metal fibers, glass fibers and recycled rubber that once heated provides an impermeable, voidless solid mass at ambient temperatures. Formulate the patching material according to climatic conditions to provide a durable pavement repair with good fluidity at process temperature, low temperature flexibility, and ambient temperature flow resistance. The Binder shall contain asphalt and resin, and shall be premixed with the other components of the patching material.

	Material Specifi	cations
Properties	Method	Requirement
Color	546-C	Black
Resilience	547-C	50% min.
Tensile Strain to Failure	548-C	20% min.
Cone Flow	549-C	12% max.
Flexibility	550-C	Pass ¹
Aggregate Settlement	551-C	3mm max.
Recommended Application		350°F to 390°F
Temp.		
Specific Gravity	552-C	1.8-2.2

¹No Evidence of cracking of the sample

Material must pass a field evaluation by the NCDOT. The manufacturer of the product must perform the field trial and submit samples as requested.

The Bulking Aggregate shall be a single sized bulking aggregate consisting of a crushed, double washed and dried granite. The Size shall be from 3/4" determined through sieve analysis. The bulking aggregate may not be added to the mix and the melting machine or premixed at the factory.

Construction

The minimum crack or joint width should be 1" in width and there are no depth or length limitations.

Place the patching material to encompass the damaged or spalled areas as shown on the plans, with adjustments to the depth and width of the repairs as directed by the Engineer.

Use an applicator certified by the material manufacture.

Using a hot air lance or compressed air and forced gas torch, dry and clean the area to be repaired. Use an air compressor with a minimum of 185 CFM.

Mix and heat the patching material on site in a horizontal mixing unit equipped with electronically controlled thermostats. Heat the bulking aggregate using a vented barrel mixer to 300°F or other approved method separately from the material in the melting machine.

Using a screed box or other manufacturer approved method, apply the patching material to the repair area. If the repair area is deeper than 1 inch and wider than 4 inches, add bulking aggregate at a rate of 20% to 30% by volume in 2" or less lifts. Otherwise, bulking aggregate is not necessary.

Install additional patching material and bulking aggregate in 2 in. or less lifts until the repair is within 1" of the existing pavement.

Sweep the area and remove all debris from the site. Do not allow traffic over the material until after it has cooled to the point that it does not permanently deform under pressure, as recommended by the manufacturer or as directed by the Engineer.

Measurement and Payment

The quantity of Highly Flexible Asphalt Pavement Repair Material to be paid for will be the actual pounds of material used to acceptably patch the pavement. Such price and payment will be full compensation for furnishing materials, including bulking aggregates, patching material binder, primer, heating and mixing, removal and disposal of existing pavement material, placing and finishing, labor, equipment, tools and all incidentals associated with performing this work.

Payment will be made under:

Pay ItemPay UnitHighly Flexible Asphalt Repair MaterialPound

SEAL EXISTING PAVEMENT CRACKS AND JOINTS

(8-10-15) 657 Div 10

Description

The work consists of sealing existing longitudinal and transverse pavement cracks and joints with hot applied joint sealer at locations as directed by the Engineer. The Contractor will not be required to seal the existing edge joints.

Materials

Refer to Division 10.

ItemSectionHot Applied Joint Sealer1028-2

Construction

Install the sealant so that it forms a complete watertight bond with a high degree of elasticity, with maximum flexibility and longevity under extreme temperature ranges.

Clean cracks and joints using a hot compressed air lance to blast out any vegetation, dirt, dampness and loose materials from the cracks and joints. Equip the air compressor with suitable traps and filters to remove moisture and oil from the compressed air. Use the hot air lance to dry and warm the adjacent pavement immediately before sealing. Direct flame dryers are not allowed.

Heat and apply the sealant material according to the manufacturer's recommendations. Use a portable melting kettle for heating the material that is equipped with indirect heating (air-jacketed flow) and is capable of constantly agitating the joint sealer to maintain a uniform temperature. Equip the kettle with either mechanically operated paddles and/or a continuous circulating pump to maintain agitation. Use heating equipment capable of controlling the sealant material temperature within the manufacturer's recommended temperature range and that is thermostatically-control calibrated between 200°F to 600°F. Locate a thermometer on the kettle so the Engineer can safely check the temperature of the sealant material. Overheating of the sealant material will not be permitted.

Apply sealant in the prepared cracks and joints within the manufacturer's recommended temperature range, using a pressure screed shoe to completely fill the crack or joint, leaving a sealed 2" overband. Excessive overbanding or waste of sealant materials will not be tolerated. Immediately squeegee the crack seal material to minimize the height of the overband. All sealed cracks and joints shall have a minimum of 1/8" depth of sealant installed.

Do not apply the hot applied joint sealer when the surface temperature of the pavement is below 32°F. Follow manufacturer's recommendations.

After the crack or joint has been sealed, promptly remove any surplus sealer on the pavement. Do not permit traffic over the sealed cracks and joints without approval by the Engineer. When approved by the Engineer, place sand or other approved material over the crack or joint to prevent tracking.

Measurement and Payment

Sealing existing pavement cracks and joints will be measured and paid as the actual number of pounds of material that has satisfactorily been used to seal pavement cracks and joints in the designated highway. Any material spilled, used in excessive overbanding, wasted, misapplied or unsatisfactorily used in any way will be deducted in determining quantities for payment. The Engineer will determine the quantity, if any, to be deducted. The Engineer's decision on the quantity to be deducted will be final and binding. The above price and payment will be full compensation for all work required to seal the pavement cracks including, but not limited to, furnishing, hauling, loading and unloading, and storage of all sealant materials; cleaning and preparation of cracks to be sealed; application of sealant material in the prepared cracks; any clean-up; and any incidentals necessary to satisfactorily complete the work.

Payment will be made under:

Pay ItemPay UnitSealing Existing Pavement Cracks (Without Router or Diamond Saw)PoundSealing Existing Pavement Cracks (With Router or Diamond Saw)Pound

SLAB JACKING AND UNDERSEALING/VOID FILLING

Description

The Contractor shall use a High Density Polyurethane Foam for slab leveling, undersealing and void filling in locations directed by the Engineer.

Material

The medium used shall be blown, high density, hydrophobic polyurethane. The high density, closed cell, polyurethane system shall exhibit the following characteristics and physical properties:

Density, Lbs/Ft	Compressive Strength
ASTM 1622	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 list of lifting and undersealing equipment shall be submitted to the Engineer prior to commencement of the work 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" to 3/4" dia. holes.
- A truck-mounted pumping unit capable of injecting the high density polyurethane formulation below the concrete slab or asphalt pavement. This pumping unit will be capable of controlling the rate of rise of the pavement.
- Stringlines or dial indicators may be periodically used to measure the rate of lift.

Construction

For leveling and undersealing, the Contractor shall prepare concrete to be leveled by profiling the existing pavement and determining where the pavement needs to be raised. Void filling shall be in areas as indicated and as directed by the Engineer.

The Contractor shall drill a series of 5/8" holes into the pavement at 3'-6' O.C. (exact location and spacing to be determined in the field). The expanding High Density Polyurethane Foam material shall be injected under the slab. The amount of rise shall be controlled by regulating the rate of High Density Polyurethane Foam material injected.

Final elevations shall be within 1/4" 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 50ft or less. Elevations can also be verified by flooding the area to confirm that the pavement has been realigned properly. It will be the Contractor's responsibility to control these operations to make sure excessive rising of the slabs does not occur. The Contractor shall be responsible for any pavement blowouts or excessive pavement lifting which may result from the process and shall repair the damaged area to the satisfaction of the Engineer without additional cost.

The High Density Polyurethane Foam shall reach 90% of the full compressive strength in 15 minutes after injection.

Injection holes shall be sealed with a non-expansive cementitious grout once leveling is complete.

Measurement and Payment

The polyurethane material shall be paid for by the pound and the measurement verified by the following Double Verification methods.

- 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.

The quantity of material to be paid for shall be the actual quantity of High Density Polyurethane Foam used to satisfactorily complete the work. Such price and payment shall be full compensation for furnishing and injecting the material, labor, tools, equipment and all incidentals necessary to complete the work.

Pay ItemPay UnitSlab Leveling, Undersealing and Void FillingPounds

HYDROPHOBIC FOAM SOIL STABILIZATION

Description

Pressure inject hydrophobic polyurethane injection resin into the soil at locations to be determined by the Engineer to permeate, stabilize weak and loose soils, and prevent water migration. The Contractor shall furnish all materials, labor, tools, and equipment to stabilize soils as specified.

A. Quality Assurance

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

The Contractor shall provide the Engineer with job references where they have successfully completed 10 projects using moisture activated hydrophobic polyurethane resins for soil stabilization.

B. 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.

C. Site 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°F protect grout from freezing. Ice or the formation of ice can prevent grout penetration and travel.

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

Materials

A. Acceptable Manufacturers

Prime Flex 920, as manufactured by Prime Resins, Inc., Conyers, Georgia (800-321-7212) is considered to conform to the requirements of this specification and has performed satisfactorily for soil stabilization.

The use of a product other than specified will be considered providing the Contractor requests its use in writing to the Engineer. The request shall be accompanied by a notarized certification of compliance from an approved independent testing laboratory that the proposed substitute product meets or exceeds the specified performance criteria,

tested in accordance with the specified test standards, and documented proof that the proposed product has a proven record of performance of soil stabilization, confirmed by actual field tests and five successful installations that the Engineer can investigate.

The installing Contractor must have a minimum of at least 10 successful soil stabilization projects utilizing moisture activated hydrophobic polyurethane injection resins and be able to provide project lists and references to the Engineer.

B. Performance Criteria

- (1) Physical properties of polyurethane resin:
 - i. Water activated resin
 - ii. Variable cure rate
 - iii. Viscosity: 110-130 cps \pm 20 cps
 - iv. Solids Content: 100% solids
 - v. Characteristics: Hydrophobic polymer
 - vi. Meets ANSI/NSF 61 Approval
- (2) Physical properties of catalyst:
 - i. Appearance: Clear liquid
 - ii. Viscosity: 15-20 cps
 - iii. Solids Content: 100%
- (3) Physical properties of polyurethane resin cured under pressure:
 - i. Shrinkage (ASTM D-1042 / D-756): None
 - ii. Meets ANSI/NSF 61 Approval
 - iii. Tensile Propoerties (ASTM D-1623)
 - 1. Tensile strength: 23 psi
 - 2. Elongation: 3%

C. Poylurethane Resin Specifications

Polyurethane resin shall be a single component material that requires catalyst. Adjusting the percentage of catalyst to the base resin shall control the reaction time of the grout.

The Material shall be a water reactive grout.

Polyurethane resin shall be hydrophobic in nature.

Construction Methods

A. Preparation

Prior to starting work the Owner shall provide the grouting Contractor with detailed drawing of all underground utilities in the work zone and all utilities shall be properly marked on the site. If a soil analysis report is not part of the original documents, the Contractor has the right to request one be provided at no additional cost to the Contractor.

This may be needed to determine proper probe placement, to identify potential problem areas, and natural differences in soil composition.

The Contractor shall determine appropriate spacing and depth placement for injection probes to successfully seal and stabilize area as shown in drawings. Test sections may be necessary to determine best probe spacing depending on soil types and conditions encountered. (Typical spacing will vary between 12" to 60" in each direction and if multiple rows are needed then each row shall be offset 1/2 the space distance.)

Probes shall utilize Expendable Drive Point or other acceptable means to keep dirt from clogging pipe during driving, type and size to be determined by Contractor. Probes may be placed by manual driver, pneumatic driver, auger, or water jetting.

Prior to injecting grout Contractor shall ensure that the soils contain enough moisture to fully react the grout or shall use a plural component pump to inject water and grout simultaneously (twin streaming) through injection pipe/probe. When twin streaming is done a ratio of 10:1 (grout:water) shall be used. A pump capable of injection pressures from 100 psi to 3300 psi is recommended. Flow rate of pumps shall be 2.0 gpm minimum. Manually operated or "hand pumps" are considered unacceptable and cannot be used.

A grout log shall be maintained recording amount of grout and percentage of catalyst used for inspection by the Engineer at all times. Request for payment of grout shall include a copy of grout log detailing quantities used.

B. Application

Contractor shall determine the amount of grout to be injected into each probe to ensure all areas with the work area are fully grouted. Grouting shall use the "Lift Grouting Technique" where the pipe is raised or jacked up and grout is injected in 12" to 15" intervals or lifts. The amount of grout to be injected at each lift is to be determined by the Contractor based on soil conditions for that particular area. Injection pressures will vary depending on soil conditions.

On below grade structures grouting can also be done via the "through wall" method. This involves drilling holes through a wall (or floor) and grouting via these holes. In some cases it may be necessary to install soil pipes to transfer grout further out into the soils. The Contractor shall determine appropriate hole spacing to ensure desired results.

Adhere to all limitations and cautions set forth by the manufacturer.

C. Safety

A copy of the Data sheet and Material Safety Data Sheet (MSDS) of all chemicals used must be on site at all times. Workers must wear protective rubber gloves, full protection

(front and side) safety glasses, chemical goggles or face shield and any other necessary precautions as outlined in product MSDS when handling or pumping grout.

D. Cleaning

Flush the pump and hoses with approved pump flush. Follow the manufactures recommendations if the material comes in contact with the skin. The uncured polyurethane resin can be removed from tools with an approved solvent. Cured polyurethane can only be removed mechanically.

Remove all pipes from the work area and leave the work area clean and neat.

E. Measurement and Payment

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

Payment will be made under:

Pay ItemPay UnitFoam Installation Soil StabilizationGallons

STRUCTURAL FOAM VOID FILL/STABLIZATION

Description

Inject a structural, two-component, polyurethane foam at locations to be determined by the Engineer to stabilize slabs and structures with voids to prevent further movement or settling. The Contractor shall furnish all materials, labor, tools, and equipment to stabilize soils as specified.

A. Quality Assurance

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

The Contractor shall provide the Engineer with job references where they have successfully completed 10 projects using moisture activated hydrophobic polyurethane resins for soil stabilization.

Contractor shall provide submittals prior to commencement of work that details the material to be used and that it conforms to the project specifications.

B. 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.

Materials

A. Acceptable Manufacturers

Prime Flex 985 (LX-10 or LX-20) Structural Foam, as manufactured by Prime Resins, Inc., Conyers, Georgia (800-321-7212) is considered to conform to the requirements of this specification and has performed satisfactorily for the application of void filling and slab stabilization.

The use of a product other than specified will be considered providing the Contractor requests its use in writing to the Engineer. The request shall be accompanied by a notarized certification of compliance from an approved independent testing laboratory that the proposed substitute product meets or exceeds the specified performance criteria, tested in accordance with the specified test standards and documented proof that the proposed product has a proven record of performance of soil stabilization, confirmed by actual field tests and five successful installations that the Engineer can investigate. Instant or rapid set (less than 5 minutes) foams will not be approved due to lack of migration time needed for material to travel between rock.

B. Performance Criteria

- (1) Physical properties of mixed polyurethane resin:
 - i. Mix ration by volume: 1:1 (A:B)
 - ii. Initial reaction time: 70 sec. @ 72°F (23°C)
 - iii. Set time: 8 min.
 - iv. Expansion (free rise): 10:1*
 - v. Viscosity: Part "A" 270 cps, Part "B" 280 cps
 - vi. Compressive Strength (ASTM D-1621): LX 10 60 psi @ 4.5 lbs. density 9216 psf*

*Expansion is affected by field conditions. Actual results may vary depending on temperature, mixing equipment and degree of constraint.

C. Poylurethane Resin Specifications

The Material shall be a two (2) component, structural polyurethane foam. Cured foam shall be closed cell. The minimum compressive strength of cured foam shall be 40-60 psi. The minimum expansion rate shall be 10:1 by volume (free rise). Heat shall not be used or required to activate foam. The maximum exotherm temperature not to exceed 270°F per 10 cf.

Construction Methods

A. Mixing

Automated 1:1 ratio positive displacement bulk pumps such as "The Flowmaster Pump" (Prime Resins, Inc., Conyers, GA, 800-321-7212 or www.primeresins.com) may be used to mix and dispense material.

B. Application

Locate and mark areas with voids.

Using drill, drill a series holes as determined by Contractor or Engineer based on actual site conditions over area to be grouted. Over large areas, stagger holes in an offset grid pattern by one half the distance spacing per row. Manufacturer of polyurethane resin can be contacted for assistance in the hole pattern.

Use a 1/4" rod, dowel, or other instrument to determine depth of void under slab. After determining amount of void, calculate approximate amount of resin needed.

Using meter-mix, positive displacement pump, inject pre-determined amount (to be based on field conditions) of Prime-Flex 985 Structural Foam into void.

After removing the injection nozzle from the hole it may be left open for venting of excess foam or plugged off with a wood dowel or other means. Removing plugs will also assist in relieving pressure by allowing excess foam to release out the top.

After foam has fully reacted, shave excess from slab surface. Holes may be left filled with foam or drilled out and filled as directed by Engineer.

C. Safety

A copy of the Data sheet and Material Safety Data Sheet (MSDS) of all chemicals used must be on site at all times. Workers must wear protective rubber gloves, full protection (front and side) safety glasses, chemical goggles or face shield and any other necessary precautions as outlined in product MSDS when handling or pumping grout.

D. Cleaning

Clean the substrate to produce a finish appearance acceptable to the Engineer. Shave any excess foam from the area. Clean the tools and equipment with MEK or Xylene immediately after use. Cured polyurethane foam can only be removed mechanically. Clean skin with soap and water, NEVER solvent.

Leave the work area in a neat, clean and safe condition without evidence of spillovers onto adjacent areas.

E. Measurement and Payment

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

Payment will be made under:

Pay ItemPay UnitStructural Foam Void Fill/StabilizationGallons

MATERIALS

(2-21-12) (Rev. 5-19-15)

1000, 1002, 1005, 1018, 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:

If any change is made to the mix design, submit a new mix design (with the exception of an approved pozzolan source change).

If any major change is made to the mix design, also submit new test results showing the mix design conforms to the criteria. Define a major change to the mix design as:

- (1) A source change in coarse aggregate, fine aggregate or cement.
- (2) A pozzolan class or type change (e.g. Class F fly ash to Class C fly ash).
- (3) A quantitative change in coarse aggregate (applies to an increase or decrease greater than 5%), fine aggregate (applies to an increase or decrease greater than 5%), water (applies to an increase only), cement (applies to a decrease only), or pozzolan (applies to an increase or decrease greater than 5%).

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

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

			REC	TA UIREME	BLE 100 NTS FOI		RETE						
	Maximum W					Consiste	ncy Max.		Cement	Content	;		
Class of Concrete	Min. Comp. Strength at 28 days		trained Ent		Air-Entrained Concrete		Air- ained crete	Vibrated Vibrated Vibrated Vibrated Vibrated		Vib	rated	Non- V	ibrated
9 9	Mi S at	Rounded Aggregate	Angular Aggre- gate	Rounded Aggregate	Angular Aggre- gate	Vib	Vib	Min.	Max.	Min.	Max.		
Units	psi		Ü			inch	inch	lb/cy	lb/cy	lb/cy	lb/cy		
AA	4,500	0.381	0.426	-	-	3.5	-	639	715	-	-		
AA Slip Form	4,500	0.381	0.426	-	-	1.5	-	639	715	-	-		
Drilled Pier	4,500	-	-	0.450	0.450	-	5-7 dry 7-9 wet	-	-	640	800		
A	3,000	0.488	0.532	0.550	0.594	3.5	4	564	-	602	-		
В	2,500	0.488	0.567	0.559	0.630	1.5 machine- placed 2.5 hand- placed	4	508	-	545	-		
Sand Light- weight	4,500	-	0.420	-	-	4	-	715	-	-	-		
Latex Modified	3,000 7 day	0.400	0.400	-	-	6	-	658	-	-	-		
Flowable Fill excavatable	150 max. at 56 days	as needed	as needed	as needed	as needed	-	Flow- able	-	-	40	100		
Flowable Fill non-excavatable	125	as needed	as needed	as needed	as needed	-	Flow- able	-	-	100	as needed		
Pavement	4,500 design, field 650 flexural, design only	0.559	0.559	-	-	1.5 slip form 3.0 hand place	-	526	-	-	-		
Precast	See Table 1077-1	as needed	as needed	-	-	6	as needed	as needed	as needed	as needed	as needed		
Prestress	per contract	See Table 1078-1	See Table 1078-1	-	-	8	-	564	as needed	-	-		

Page 10-1, Article 1000-2, MATERIALS, line 16; Page 10-8, Subarticle 1000-7(A), Materials, line 8; and Page 10-18, Article 1002-2, MATERIALS, line 9, add the following to the table of item references:

ItemSectionType IL Blended Cement1024-1

Page 10-19, Article 1002-3, SHOTCRETE FOR TEMPORARY SUPPORT OF EXCAVATIONS, line 30, add the following at the end of Section 1002:

(H) Handling and Storing Test Panels

Notify the Area Materials Engineer when preconstruction or production test panels are made within 24 hours of shooting the panels. Field cure and protect test panels from

damage in accordance with ASTM C1140 until the Department transports panels to the Materials and Tests Regional Laboratory for coring.

Page 10-1, Subarticle 1000-3(A), Composition and Design, lines 25-27, replace the second paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced.

Page 10-2, Subarticle 1000-3(A), Composition and Design, lines 12-21, delete the third paragraph through the sixth paragraph beginning with "If any change is made to the mix design, submit..." through "...(applies to a decrease only)."

Page 10-6, Subarticle 1000-4(I), Use of Fly Ash, lines 36-2, replace the first paragraph with the following:

Fly ash may be substituted for cement in the mix design up to 30% at a rate of 1.0 lb of fly ash to each pound of cement replaced. Use Table 1000-1 to determine the maximum allowable water-cementitious material (cement + fly ash) ratio for the classes of concrete listed.

Page 10-7, Table 1000-3, MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIO, delete the table.

Page 10-7, Article 1000-5, HIGH EARLY STRENGTH PORTLAND CEMENT CONCRETE, lines 30-31, delete the second sentence of the third paragraph.

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

			AGG	REG.	ATE (FATE GRADATION - COARSE AGG: Percentage of Total by Weight Passing	ATIC f Tota	DATION - CO. of Total by Wei	OAR: Veigh	SE AC	GRE	AGGREGATE GRADATION - COARSE AGGREGATE Percentage of Total by Weight Passing	
Std. Size #	2"	1/2"	1"	3/4"	1/2"	3/8''	#4	#8	#10	#16	#40	#200	Remarks
4	100	90-	20- 55	0-15		0-5		ı	ı	ı		A	Asphalt Plant Mix
467M	100	95- 100		35- 70		0-30	0-5		1	1		A	Asphalt Plant Mix
5	1	100	90-	20- 55	0-10	0-5						>	AST, Sediment Control Stone
57	1	100	95- 100	1	25- 60	ı	0-10	0-5	ı	ı	ı	>	AST, Str. Concrete, Shoulder Drain, Sediment Control Stone
57M	1	100	95- 100	1	25- 45	ı	0-10	0-5	ı	ı	ı	A	AST, Concrete Pavement
6M	1	1	100	90-	20- 55	0-20	0-8	1	ı	ı	ı	A	AST
67	ı	ı	100	90- 100	ı	20- 55	0-10	0-5	ı	ı	ı	A	AST, Str. Concrete, Asphalt Plant Mix
78M	ı	ı	ı	100	98- 100	75- 100	20- 45	0-15	ı	ı	ı	A	Asphalt Plant Mix, AST, Str. Conc, Weep Hole Drains
14M	ı	ı	ı	ı	ı	100	35- 70	5-20	ı	0-8	ı	A	Asphalt Plant Mix, AST, Weep Hole Drains, Str. Concrete
9	ı	ı	ı	ı	ı	100	85- 100	10- 40	ı	0-10	ı	Α	AST
ABC		100	75- 97		55- 80	ı	35- 55	ı	25- 45	ı	14- 30	4- 12 ^B	Aggregate Base Course, Aggregate Stabilization
ABC (M)	ı	100	75- 100	1	45- 79	ı	20- 40	ı	0- 25	ı	ı	0- 12 ^{B}	Maintenance Stabilization
Light- weight ^C	1	ı			100	80-	5- 40	0-20	1	0-10	1	0-2.5	AST

⁵⁶

Page 10-40, Tables 1018-1 and 1018-2, PIEDMONT, WESTERN AND COASTAL AREA CRITERIA FOR ACCEPTANCE OF BORROW MATERIAL, under second column in both tables, replace second row with the following:

Acceptable, but not to be used in the top 3 ft of embankment or backfill

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

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

Page 10-46, Table 1024-1, POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE, replace with the following:

POZZOLANS	TABLE 1024-1 FOR USE IN PORTLAND CEMENT CONCRETE				
Pozzolan	Rate				
Class E Ely Ash	20% - 30% by weight of required cement content				
Class F Fly Ash	with 1.0 lb Class F fly ash per lb of cement replaced				
Ground Granulated Blast	35%-50% by weight of required cement content				
Furnace Slag	with 1.0 lb slag per lb of cement replaced				
Microsilica	4%-8% by weight of required cement content				
Microsifica	with 1.0 lb microsilica per lb of cement replaced				

Page 10-47, Subarticle 1024-3(B), Approved Sources, lines 16-18, replace the second sentence of the second paragraph with the following:

Tests shall be performed by AASHTO's designated National Transportation Product Evaluation Program (NTPEP) laboratory for concrete admixture testing.

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

All fencing material and accessories shall meet Section 106.

Page 10-73, 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 10-73, Article 1056-4, GEOTEXTILES, line 33, add the following after the first sentence in the second paragraph:

Geotextiles will be identified by the product name printed directly on the geotextile. When geotextiles are not marked with a product name or marked with only a manufacturing plant identification code, geotextiles will be identified by product labels attached to the geotextile wrapping. When identification is based on labels instead of markings, unwrap geotextiles just before use in the presence of the Engineer to confirm that the product labels on both ends of the outside of the geotextile outer wrapping match the labels affixed to both ends of the inside of the geotextile roll core. Partial geotextile roles without the product name printed on the geotextile or product labels affixed to the geotextile roll core may not be used.

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

	(BLE 1056-1 LE REQUIRI	EMENTS			
Dronoutr			Requiremen	nt			
Property	Type 1	Type 2	Type 3 ^A	Type 4	Type 5 ^B	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 ^C	100 lb ^C		ASTM D4632	
Tear Strength (MD & CD)	Table 1 ^D , Class 3	Table 1 ^D , Class 1	-	Table 1 ^D , Class 3	-	ASTM D4533	
Puncture Strength			-			ASTM D6241	
Ultimate Tensile Strength (MD & CD)	-	-	-	-	2,400 lb/ft ^C (unless required otherwise in the contract)	ASTM D4595	
Permittivity	T-1.1	. aD			0.20 sec ^{-1,C}	ASTM D4491	
Apparent Opening Size	15% t	e 2 ^{D} , o 50% u Soil	Table 7 ^D	Table 5 ^D	0.60 mm ^F	ASTM D4751	
UV Stability (Retained Strength)		No. 200 ^E			70% ^{C, G}	ASTM D4355	

- **A.** Minimum roll width of 36" required.
- **B.** Minimum roll width of 13 ft required.
- C. MARV per Article 1056-3.
- **D.** AASHTO M 288.
- E. US Sieve No. per AASHTO M 92.
- F. Maximum average roll value.
- **G.** After 500 hours of exposure.

Page 10-74, Article 1056-5, GEOCOMPOSITES, lines 7-8, replace the first sentence with the following:

Provide geocomposite drain strips with a width of at least 12" and Type 1 geotextiles attached to drainage cores that meet Table 1056-2.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1081-4 EPOXY RESIN ADHESIVE FOR BONDING TRAFFIC MARKINGS

(A) General

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

(B) Classification

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

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

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

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

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

(C) Requirements

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

(D) Prequalification

Refer to Subarticle 1081-1(E).

(E) Acceptance

Refer to Subarticle 1081-1(F).

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

Steel sheet piles detailed for permanent applications shall be hot rolled and meet ASTM A572 or ASTM A690 unless otherwise required by the plans. Steel sheet piles shall be coated as required

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

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

The epoxy shall meet Article 1081-4.

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

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

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

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

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

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

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

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

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

Page 10-204, Table 1092-3 MINIMUM COEFFICIENT OF RETROREFLECTION FOR NC GRADE A, replace with the following:

MINIMU		IENT (ndelas	OF RE		REFL		ON FOR NC GR eter)	RADE 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

TRAFFIC CONTROL

(01-17-12)(01-09-12)

Maintain traffic in accordance with Divisions 10, 11 and 12 of the 2012 Standard Specifications and the following provisions:

Refer to attached details and Standard Drawing No. 1101.01, 1101.02, 1101.03, 1101.04, 1101.05, 1101.11, 1110.01, 1110.02, 1115.01, 1130.01, 1135.01, 1145.01, 1150.01, 1165.01, 1170.01 and 1180.01 of the 2012 Roadway Standard Drawings when closing a lane of travel in a stationary work zone such as pavement patching resurfacing, or pavement marking removal. Properly Skinny Drums may be used instead of drums for lane closures with prior approval from the Engineer. However, drums are required for the upstream taper portion of lane closures in all applications. The stationary work zone shall be a maximum of 2 miles in length at any given time unless otherwise directed by the Engineer. A pilot vehicle operation may be used in conjunction with flaggers and the appropriate pilot vehicle warning signing as directed by the Engineer. During periods of construction inactivity, return the traffic pattern to the existing alignment and remove or cover any work zone signs. When covering work zone signs, use an opaque material that prevents reading of the sign at night by a driver using high beam headlights. Use material, which does not damage the sign sheeting. Replace any obliterated markings as required by other sections of the 2012 Standard Specifications and the Engineer.

When personnel and/or equipment are working on the shoulder adjacent to an undivided facility and within 5 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working on the shoulder, adjacent to a divided facility and within 10 feet of an open travel lane, close the nearest open travel lane using Standard Drawing No. 1101.02 of the 2012 Roadway Standard Drawings unless the work area is protected by barrier or guardrail. When personnel and/or equipment are working within a lane of travel of an undivided or divided facility, close the lane according to the traffic control plans, 2012 Roadway Standard Drawings or as directed by the Engineer. Conduct the work so that all personnel and/or equipment remain within the closed travel lane. Do not work simultaneously, on both sides of an open travel way, within the same location, on a two-lane, two-way road. Do not perform work involving heavy equipment within 5 feet of the edge of travel way when work is being performed behind a lane closure on the opposite side of the travel way. Perform work only when weather and visibility conditions allow safe operations as directed by the Engineer.

Operate equipment and conduct operations in the same direction as the flow of traffic. Do not cross medians with equipment, except at properly designated interchanges.

Provide appropriate lighting in accordance with Section 1413 of the 2012 Standard Specifications.

Measurement and Payment

Payment will be made for the traffic control items that have been included in the contract. Such price and payment includes, but not limited to installation and removal of portable signs, cones,

drums, skinny drums, flaggers, portable lighting, changeable message boards, truck mounted attenuators, flashing arrow boards, and pilot vehicles.

Payment will be made under:

Pay ItemPay UnitTemporary Lane Closures (Multi-Lane Roadways)EachNightime Temporary Lane Closures (Multi-Lane Roadways)Each

WORK ZONE SIGNING

(01-17-12)(01-09-12)

RWZ-3

Description

Install and maintain signing in accordance with Divisions 11 and 12 of the 2012 Standard Specifications, the 2012 Roadway Standard Drawings and the following provisions:

Furnish, install, maintain and remove advance warning work zone signs and any required lane closure signing.

All work zone signs may be portable.

Construction Methods

(A) Advance Warning Work Zone Signs

Install advance warning work zone signs in accordance with Standard Drawing No. 1101.01, 1101.02 and 1110.01 of the 2012 Roadway Standard Drawings prior to beginning of work and remove upon final completion of the repair.

(B) Lane Closure Work Zone Signs

Install any required lane closure signing needed during the repair in accordance with the Standard Drawing No. 1101.02, 1101.11 and 1110.02 of the 2012 Roadway Standard Drawings. **Measurement and Payment**

No direct payment will be made for providing work zone signing.

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 Article 108-13(E), of the *North Carolina Department of Transportation Standard Specifications for Roads and Structures*, dated January 1, 2012.

ERRATA

(1-17-12) (Rev. 04-21-15)

Revise the 2012 Standard Specifications as follows:

Division 2

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

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

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

Division 3

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

Division 4

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

Division 6

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

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

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

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

Division 7

Page 7-1, Article 700-3, CONCRETE HAULING EQUIPMENT, line 33, replace "competion" with "completion".

Division 8

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

Division 10

Page 10-166, Article 1081-3 Hot Bitumen, replace "Table 1081-16" with "Table 1081-2", replace "Table 1081-17" with "Table 1081-3", and replace "Table 1081-18" with "Table 1081-4".

Division 12

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

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

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

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

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

Division 15

Page 15-4, Subarticle 1505-3(F) Backfilling, line 26, replace "Subarticle 235-4(C)" with "Subarticle 235-3(C)".

Page 15-6, Subarticle 1510-3(B), after line 21, replace the allowable leakage formula with the following: $W = LD\sqrt{P} \div 148.000$

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

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

Division 17

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

Revise the 2012 Roadway Standard Drawings as follows:

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

PLANT AND PEST QUARANTINES

(Imported Fire Ant, Gypsy Moth, Witchweed, 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. 4-21-15)

Description

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

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

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

Minorities and Women

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

Assigning Training Goals

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

Training Classifications

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

Equipment Operators Office Engineers

Truck Drivers Estimators

Carpenters Iron / Reinforcing Steel Workers

Concrete Finishers Mechanics
Pipe Layers Welders

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

classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

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

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

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

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

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

Records and Reports

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

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

Trainee Interviews

All trainees enrolled in the program will receive an initial and Trainee/Post graduate interview conducted by the OJT program staff.

Trainee Wages

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

60 percent	of the journeyman wage for the first half of the training period
75 percent	of the journeyman wage for the third quarter of the training period
90 percent	of the journeyman wage for the last quarter of the training period

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

Achieving or Failing to Meet Training Goals

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

Measurement and Payment

No compensation will be made for providing required training in accordance with these contract documents.

LISTING OF MBE & WBE SUBCONTRACTORS							
Sheet of							
FIRM NAME AND ADDRESS	MBE or WBE	ITEM NO.	ITEM DESCRIPTION	* AGREED UPON UNIT PRICE	** DOLLAR VOLUME OF ITEM		
				plume of MBE	\$		
* The Dollar Volume sh column shall be the Actual Upon by the Prime Contro	Price Aga actor and	reed ME the	BE Percentage of Total	Price	%		
MBE and/or WBE subcontractor, and ** Dollar Volume of WBE these prices will be used to determine Subcontractor Subcontractor				\$			
	the percentage of the MBE and/or WBE WBE Percentage of Total Contract Bid participation in the contract.						
** Must have entry even i	f figure to	o be					

entered is zero.

This form must be completed in order for the Bid to be considered responsive and be publicly read. Bidders with no MBE and/or WBE participation must so indicate this on the form by entering the word or number *zero*.

LETTER OF INTENT TO PERFORM AS A SUBCONTRACTOR

	CONTRACT:	NAME OF BIDDER:					
	he undersigned intends to perform work in connection with the above contract upon execution of the bid and subsequent award of contract by the Local Public Agency as:						
Name (of MBE/WBE/DBE Subcontractor						
Addres	ss						
City	State	Zip					
	Please check al Minority Business Ente Women Business Ente Disadvantaged Business l	erprise (MBE) rprise (WBE)					
Depart isted of apon establishment of the second of the se	BE /WBE /DBE status of the above named subcontraction the attached MBE/WBE/DBE Commitment Items execution of the bid and subsequent award of contract tractor is prepared to perform the described work at the attacher Price identified on the MBE/WBE/DBE Commitment Items of the American State of the American S	tor is prepared to perform the described work sheet, in connection with the above contract by the Local Public Agency. The above named he estimated Commitment Total for					
	itment Total based on estimated Unit Prices and Quaritment Items sheet: Amount \$						
Prices vary up berform moun	ove named bidder and subcontractor mutually accepts and Quantities. This commitment total is based on est or down as the project is completed. Final compensationed and accepted during the pursuance of work. The at quoted based on these estimated quantities. No convolution of non-written representations shall serve to add, dele	cimated quantities only and most likely will ation will be based on actual quantities of work above listed amount represents the entire dollar versations, verbal agreements, and/or other					
subcon	ocument shall not serve in any manner as an actual su tractor agreement will describe in detail the contractor WBE/DBE subcontractor.						
Affirm	aation						
	ove named MBE/ WBE/ DBE subcontractor affirms t estimated dollar value as stated above.	that it will perform the portion(s) of the contract					
	Name of MBE/ WBE/ DBE Subcontractor	Name of Bidder					
	Signature / Title	Signature / Title					
	 Date	Date					

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 PROPRIETO CORPORATION OR PARTNERSHIP NAME:	OR: ENTER NAME AS SHOWN ON SOCIAL SEC : ENTER YOUR LEGAL BUSINESS NAME	URITY CARD
MAILING ADDRESS: STREET/PO BOX:		
CITY, STATE, ZIP:		
DBA / TRADE NAME (IF APPLICABLE):		
	☐ 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.)
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OR FED.EMPLOYER IDENTIFICATION NO		(Employer Identification #)
CITY, STATE, ZIP		on The information below will in no you offert the youlon
		or. The information below will in no way affect the vendor If you choose to participate, circle the answer that best fits your
	Γο Answer, □ African American, □ Native A	American, □Caucasian American, □Asian
☐ Hispanic American, ☐ Asian-Indian American,	Other:)
What is your firm's gender? (☐Prefer Not to	o Answer, Male, Female) Disabled-Own	ed Business? (☐Prefer Not to Answer, ☐Yes,☐ No
J 1	(a) I am exempt from backup withholding, or (b) I ha report all interest or dividends, or (c) the IRS has notif	3
NAME (Print or Type)	TITLE (P	rint or Type)
SIGNATURE	DATE	PHONE NUMBER

To avoid payment delays, completed forms should be returned promptly to the Contract Administrator.

EXECUTION OF BID

NON-COLLUSION AFFIDAVIT, DEBARMENT CERTIFICATION AND GIFT BAN CERTIFICATION

CORPORATION

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

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

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

	Full	name of Corpor	ation
	Ado	dress as Prequal	ified
Attest		Ву	
_	Secretary/Assistant Secretary Select appropriate title		President/Vice President/Assistant Vice President Select appropriate title
	Print or type Signer's name		Print or type Signer's name
			CORPORATE SEAL
	AFFIDAVIT	MUST BE	NOTARIZED
Subscribe	ed and sworn to before me this the	e	
da	y of20)	
			NOTARY SEAL
	Signature of Notary Public		
of	Cour	nty	
State of _			
Mv Comr	mission 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 attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

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

Full	Name of Partners	hip
Add	dress as Prequalific	ed
	D	
Signature of Witness	ву	Signature of Partner
Print or type Signer's name		Print or type Signer's name
AFFIDAVIT	MUST BE N	NOTARIZED
Subscribed and sworn to before me this th	e	NOTARY SEAL
day of 20	0	
Signature of Notary Public		
ofCou	nty	
State of		
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 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.

f Member/Manager/Authorized Agent Select appropriate title
Print or type Signer's Name
ZED NOTARY SEAL

JOINT VENTURE (2) or (3)

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

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

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

SIGNATURE OF CONTRACTOR

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

(1)		NI CT ' 137 1			
(2)		Name of Joint Venture			
		Name of Contractor			
		Address as Prequalifie	d		
	Signature of Witness or Attest	Ву		Signature of Contractor	
	Print or type Signer's name			Print or type Signer's name	
	If Corporation, affix Corporate Seal	and			
(3)					
		Name of Contractor			
		Address as Prequalifie	d		
	Signature of Witness or Attest	Ву		Signature of Contractor	
	Print or type Signer's name			Print or type Signer's name	
	If Corporation, affix Corporate Seal	and			
(4)					
		Name of Contractor (for 3 Joint V	enture only)		
		Address as Prequalifie	d		
	Signature of Witness or Attest	Ву		Signature of Contractor	
	Print or type Signer's name			Print or type Signer's name	
	If Corporation, affix Corporate Seal				
RY SEA		NOTARY SEAL			NOTARY
	t be notarized for Line (2)	Affidavit must be notarized for L	, ,	Affidavit must be notarized f	
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	ion 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.

Name of Contractor		
		Individual name
Trading and doing business as		Full name of Firm
		Tun mane of Tuni
	Address as	Prequalified
		•
Signature of Witness		Signature of Contractor, Individually
-		
Print or type Signer's name		Print or type Signer's name
AFFIDAV	IT MUS	T BE NOTARIZED
Subscribed and sworn to before me thi	s the	NOTARY SEAL
day of	_ 20	
Signature of Notary 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.

Name of Contractor	Dein	t or type Individual name
	PIIII	or type individual name
	Address as Prequ	ualified
		Signature of Contractor, Individually
		Print or type Signer's Name
Signature of Witne	USS	
Print or type Signer's	name	
AI	FFIDAVIT MUST B	E NOTA DIZED
Subscribed and sworn to before		
Subscribed and sworn to before	e me uns me	NOTARY SEAL
day of	20	
Signature of Notary Pu	blic	
C	G .	
of	County	
State of		
My Commission Expires:		

DEBARMENT CERTIFICATION

Conditions for certification:

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

DEBARMENT CERTIFICATION

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

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

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

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

Check here if an explanation is attached to this certification.

(3-3-2014)

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

North Carolina Department of Transportation CONTRACT BID FORM

Description: Repairs to concrete/asphalt roadways, crack sealing and foam injections at

various locations.

County: Mecklenburg and Cabarrus Bid Opening Date: September 16, 2015

LINE NO.	SEC NO.	ITEM DESCRIPTION	EST. QUANT.	UNIT	UNIT PRICE	AMOUNT BID
1	SP	Mobilization	25	EA		
2	SP	Concrete/Asphalt Repair (Hot Applied Mastic Asphalt Binder)	2,000	CF		
3	SP	Concrete/Asphalt Repair (Hot Applied Synthetic Polymer Modified Resin)	2,000	CF		
4	SP	Highly Flexible Asphalt Repair Material	2,000	LB		
5	SP	Sealing Existing Pavement Cracks (Without Router Or Diamond Saw)	10,000	LB		
6	SP	Sealing Existing Pavement Cracks (With Router Or Diamond Saw)	10,000	LB		
7	SP	Slab Leveling, Undersealing And Void Filling	1,000	LB		
8	SP	Foam Installation Soil Stabilization	1,500	GAL		
9	SP	Structural Foam Void Fill/Stabilization	2,000	GAL		
10	SP	Temporary Lane Closures (Multi-Lane Roadways)	10	EA		
11	SP	Nighttime Temporary Lane Closures (Multi-Lane Roadways)	30	EA		

TOTAL BID FOR PROJECT: \$		
	Federal ID No Contr. License No Telephone No	
Vendor NumberAuthorized Agent		CORPORATE SEAL
Signature	Date	
Witness	Title	
Signature	Date	