STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

DIVISION 8
BRIDGE MAINTENANCE

CONTRACT PROPOSAL
SMALL BUSINESS ENTERPRISE

WORK ORDER NUMBER: TO BE DETERMINED

ROUTE: VARIOUS

COUNTY: CHATHAM, HOKE, LEE, MONTGOMERY, MOORE, RANDOLPH, RICHMOND, AND SCOTLAND

DESCRIPTION: REPLACE OR REPAIR BRIDGE JOINTS, CONCRETE/ASPHALT DECK REPAIRS AND FOAM INJECTIONS

BID OPENING: WEDNESDAY, DECEMBER 14, 2011

_____
NAME OF BIDDER

_____
ADDRESS OF BIDDER

RETURN BIDS TO:

US Postal Service:
North Carolina Dept. of Transportation
Division of Highways
P.O. Box 1067
Aberdeen, NC 28315
Attn.: Alison Whitesell, PE

Delivery Service:
North Carolina Dept. of Transportation
Division of Highways
902 N. Sandhills Boulevard
Aberdeen, NC 28315
Attn.: Alison Whitesell, PE

NO BID BOND REQUIRED

INSTRUCTIONS TO BIDDERS

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

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

1. The bid 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. **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 NCDOT 8th DIVISION OFFICE AT 902 N SANDHILLS BLVD., ABERDEEN, NC BY 2:00 P.M. ON WEDNESDAY, DECEMBER 14, 2011.**
12. The sealed bid must display the bidder's name and address and the following statement on the front of the sealed envelope:

    QUOTATION FOR WBS ELEMENT 'TO BE DETERMINED' – REPLACE OR REPAIR BRIDGE JOINTS, CONCRETE/ASPHALT DECK REPAIRS AND FOAM INJECTIONS AT VARIOUS SITES IN CHATHAM, HOKE, LEE, MONTGOMERY, MOORE, RANDOLPH, RICHMOND, AND SCOTLAND COUNTIES TO BE OPENED AT 2:00 P.M., WEDNESDAY, DECEMBER 14, 2011.

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

US Postal Service:
North Carolina Dept. of Transportation
Division of Highways
P.O. Box 1067
Aberdeen, NC 28315
Attn.: L. Alison Whitesell, PE

Delivery Service:
North Carolina Dept. of Transportation
Division of Highways
902 N. Sandhills Boulevard
Aberdeen, NC 28315
Attn.: L. Alison Whitesell, PE

AWARD OF CONTRACT

The award of the contract, if it be awarded, will be made to the lowest responsible Bidder in accordance with Section 102 *(excluding 102-2)* of the current edition of the *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 any or all bids.

PURCHASE ORDER CONTRACT
PROJECT SPECIAL PROVISIONS

GENERAL

This contract is for replace or repair bridge joints, concrete/asphalt deck repairs and foam injections at various sites in Chatham, Hoke, Lee, Montgomery, Moore, Randolph, Richmond, and Scotland Counties

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 *Standard Specifications for Roads and Structures 2012*, the current edition of the North Carolina Department of Transportation *Roadway Standards Drawings*, and the current edition of the *Manual of Uniform Traffic Control Devices* (MUTCD).

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

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

SMALL BUSINESS ENTERPRISE PROGRAM

This is a **Small Business Enterprise Program** project, and as such, will be restricted to businesses with a gross income of not more than $1.5 million, excluding materials during the previous calendar year. The Department's normal bonding and Contractor license requirements will be waived. Since general liability insurance is required, a copy of a certificate of insurance must also be submitted. Proof of small business status will be the previous year's income tax return. A copy of this return does not have to be submitted with this bid proposal, but may be requested at a later date.

CONTRACT LIMITATIONS

In accordance with GS 136-28.10 the total amount paid for work on this project shall not exceed five hundred thousand dollars ($500,000.00) per year. If the cost of the amount of work successfully accomplished reaches $500,000.00 within a one calendar year timeframe, the contract will be terminated and no additional work may be performed under the terms of this contract.

CONTRACT AND LIQUIDATED DAMAGES

The date of availability for this project is upon receipt of purchase order contract. The Contractor may begin work prior to this date upon approval of the Engineer or his duly authorized representative. If such approval is given, and the Contractor begins work prior to the date of availability, the Department of Transportation will assume no responsibility for any delays caused prior to the date of availability by any reason whatsoever, and such delays, if any, will not constitute a valid reason for extending the completion date. The Contractor will be notified by the Engineer of job location and scope and shall begin work on the project within 30 days after this notification or as determined by the Engineer. Failure to begin work within 30 calendar days will result in the assessment of liquidated damages

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

The completion date for this project is December 31, 2012. No extensions will be authorized except as authorized by Article 108-10 of the current edition of the *Standard Specifications*.

The liquidated damages of One Hundred Dollars ($100.00) per calendar day will be charged for each calendar day when the Contractor fails to respond within 30 days or does not complete the project deadlines as required by the Engineer.

Term of Contract – The Contractor shall submit his bid for the initial period. 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). No changes in the terms, conditions, etc. of this contract will be made when an extension to the contract is implemented, except that there will be a clause to allow up to a maximum 3% increase in the existing contract unit prices. The Engineer will notify the Contractor in writing by **November 1, 2012** if the contract may be extended. The Contractor must notify the Engineer in writing by **December 1, 2012** of his acceptance or rejection of this offer. Failure on the part of Contractor to reply will be received as a rejection of contract extension. These dates are subject to change based on lead-time required. If they change it will be covered at the pre construction conference.

BASIS OF AWARD:

The Contractor is advised that this is an annual needs contract and that the quantities as shown on the bid form are estimates only. Actual quantities will be determined on an as needed basis. The quantities shown on the bid form will be used to establish unit prices for each line item and determination of low bid only. The Contractor shall submit a unit price for every item on the bid form.

Unit prices should reflect actual costs; in accordance with Article 102-14, unbalanced bids may be rejected.

Quotations will be evaluated based on the total bid of all items. There are no guarantees either stated or implied for the quantities as shown on the bid form. *Payment to the successful low bidder will be based on actual quantities installed and accepted at the PER UNIT PRICE for each item as quoted.*

The Department reserves the right to reject any or all bids.

CONTRACTOR CLAIM SUBMITTAL FORM:

(9-16-08) SP1 G140

If the Contractor elects to file a written claim or requests an extension of contract time, it shall be submitted on the *Contractor Claim Submittal Form (CCSF)* available through the Construction Unit or http://ncdot.org/doh/operations/dp_chief_eng/constructionunit/formsmanuals/.

OUTSOURCING OUTSIDE THE USA:

(9-21-04) SP1 G150

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

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

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

GIFTS FROM VENDORS AND CONTRACTORS:

(12-15-09) SP1 G152

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

(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.

EMPLOYMENT:

(11-15-11) (Rev. 1-17-12) 108, 102 RG184

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.

MAINTENANCE OF PROJECT:

The Contractor shall maintain the project from the date construction begins until project is finally accepted in accordance with Section 104-10, Maintenance of Project, Section 104-11, Final Clean Up, and Section 105-16, Failure to Maintain the Project or Perform Erosion Control Work.

WARRANTY – MATERIALS AND WORKMANSHIP

All materials and workmanship are to be warranted for a period of one year from the date of installation.

SMALL BUSINESS ENTERPRISE CONTRACT
PROJECT SPECIAL PROVISIONS

BRIDGE JOINT & DECK REPAIR

GENERAL

Joints, bridge decks, and areas of foam injection to be repaired shall be designated by the Engineer. The Contractor shall begin work within 30 days of notification. Failure to respond within the designated time frame may result in liquidated damages or cancellation of this contract.

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

Cost of Mobilization shall be included in other bid items. There will be no bid item for mobilization.

The contractor shall notify the Bridge Engineer/Supervisor at the beginning of each week of his intended schedule of work. This will allow the DOT to schedule inspections accordingly.

All existing joint material removed shall become the property of the Contractor and shall be disposed of properly. All residual joint repair material shall be disposed of properly by the Contractor.

WORK ZONE TRAFFIC CONTROL

The Contractor shall maintain traffic in accordance with Division 11 of the *2012 Standard Specifications for Roads and Structures*. The Contractor shall furnish, install, maintain, relocate and remove any signs, barricades, drums, cones, flashing arrow boards, truck mounted impact attenuators, etc.

When closing a lane on a 2-lane, 2-way roadway the Contractor shall install temporary lane closures in accordance with Standard 1101.02 sheet 1 and 2 of 9 of the Highway Design Branch Roadway Standard Drawings. When closing a lane on a multi-lane roadway the Contractor shall install temporary lane closures in accordance with Standard 1101.02 sheets 3, 4, 5, 6, and 7 of 9 of the Highway Design Branch Roadway Standard Drawings.

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

Payment shall be made under:

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

SILICON EXPANSION JOINT REPLACEMENT

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

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

The repair material shall be one of the following approved products:

Joints less than or equal to one (1) inch in width:

Sealant – Dow 888

Baysilon 960 (silicon based)

Joints greater than one (1) inch in width:

Sealant – Dow 902 (silicon based)

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

Payment shall be made under:

Silicon Joint Replacement . . . . . Linear Foot

EVAZOTE EXPANSION JOINT REPLACEMENT

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

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

Evazote Joint Seal Specifications

Use preformed seals compatible with concrete and resistant to abrasion, oxidation, oils, gasoline, salt and other materials that are spilled on or applied to the surface. Use a low-density closed cell, cross-linked ethylene vinyl acetate polyethylene copolymer nitrogen blown material for the seal. Use seals manufactured with grooves 1/8" (3 mm) ± wide by 1/8" (3 mm) ± deep and spaced between 1/4 (6 mm) and 1/2 inch (13 mm) apart along the bond surface running the length of the joint. Use seals sized so that the depth of the seal meets the manufacturer's recommendation, but is not less than 70% of the uncompressed width. Provide a seal designed so that, when compressed, the center portion of the top does not extend upward above the original height of the seal by more than 1/4 inch (6 mm). Splice the seal using the heat welding method by placing the joint material ends against a Teflon heating iron of 350°F (177°C) for 7 - 10 seconds, then pressing the ends together tightly. Do not test the welding until the material has completely cooled. Use material that resists weathering and ultraviolet rays. Provide a seal

that has a working range of 30% tension and 60% compression and is watertight along its entire length including the ends. Have the top of the evazote seal clearly shop marked. Inspect the evazote seals upon receipt to ensure that the marks are clearly visible upon installation.

Provide seals that meet the requirements given below:

TEST	TEST METHOD	REQUIREMENT
Elongation at break	ASTM D3575	210 ± 15%
Tensile strength, psi (kPa)	ASTM D3575	110 ± 15 (755 ± 100)
Compression Recovery (% of original width)	AASHTO T42 50% compr. for 22 hr. @ 73°F (23°C) 1/2 hr. recovery	87 ± 3
Weather/Deterioration	AASHTO T42 Accelerated Weathering	No deterioration for 10 years min.
Compression/Deflection	@ 50% deflection of original width @ 50% deflection of original width	10 psi (69 kPa) min. 60 psi (414 kPa) max.
Tear Strength, psi (kPa)	ASTM D624	16 ± 3 (110 ± 20)
Density	ASTM D545	2.8 to 3.4
Water Absorption (% vol/vol)	ASTM D3575 Total immersion for 3 months	3

Adhesives

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

Tensile strength	3500 psi (24.1 MPa) min.
Compressive strength	7000 psi (48.3 MPa) min.
Shore D Hardness	75 psi (0.5 MPa) min.
Water Absorption	0.25% by weight

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

Joint Preparation

After removal of existing joint, area must be sand-blasted immediately prior to installation of the new joint. Blasting medium shall be a non-silica product. Blasting medium shall be swept up and removed from the project. Traffic shall be protected from blasting operations. Joint shall be re-cleaned (and re-blasted if necessary), if joint installation is delayed and joint is determined to be unsuitable due to dirt, oils, etc.

Exact size of joint seals to be used where joints have been repaired with elastomeric concrete shall be determined after the elastomeric concrete work is completed.

Seal Installation

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

Begin installation at the low end of the joint after applying the mixed epoxy to the sides of both the joint material and both sides of the joint, making certain to completely fill the grooves with epoxy. With gloved hands, compress the material and with the help of a blunt probe, push it down into the joint until it is recessed approximately 1/4 inch (6 mm) below the surface. Do not push the seal at an angle that would stretch the material. Once work on a joint begins, do not stop until it is completed. Clean the excess epoxy off the surface of the joint material *quickly* and *thoroughly*. Do not use solvents to remove excess epoxy. Remove excess epoxy in accordance with the joint manufacturer's recommendations.

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

Payment shall be made under:

Evazote Joint Replacement. . . . . Linear Foot

V-SEALS EXPANSION JOINTS

Contractor shall remove the existing expansion joint, clean the area in accordance with the manufacturer's recommendations, and place the V-Seal expansion joint in accordance with the manufacturer's recommendations. The expansion joint shall be replaced with the materials stated in this contract or an approved equal.

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

Joints one (1) inch to two (2) inches in width:
V-Seal 300

Joints two (2) inches to three and a half (3 ½") inches in width:
V-Seal 400

Payment shall be made under:

V-Seal 300 Expansion Joint Replacement. . . . . Linear Foot

V-Seal 400 Expansion Joint Replacement. . . . . Linear Foot

ELASTOMERIC CONCRETE PLACEMENT

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

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

Do not place elastomeric concrete if the ambient air temperature is below 45°F (7°C). Prepare and apply a primer, as per manufacturer's recommendations, to all vertical concrete faces, all steel components to

be in contact with elastomeric concrete, and to areas specified by the manufacturer. Align the angles with the joint opening.

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

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

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

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

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

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

Furnish a manufacturer's certification verifying that the materials satisfy the above requirements. Provide samples of elastomeric concrete to the Engineer, if requested, to independently verify conformance with the above requirements.

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

BASIS OF PAYMENT

Payment shall be made under:

Joint Repair using Elastomeric Concrete
(16" wide or less and 2" deep or less) . . . . . .Linear Feet

Joint Repair using Elastomeric Concrete
(greater than 16" wide or greater than 2"deep) . . . . . Cubic Feet

ASPHALT JOINT REPAIR AND REPLACEMENT

SCOPE

This work shall consist of supplying and installing a binder and aggregate system composed of specially blended polymer modified asphalt and specific aggregate placed in layers into a prepared expansion joint block-out.

MATERIAL

Binder Material:

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

	TEST METHOD	TYPICAL VALUES
Softening Point	ASTM D-36.	180° F (82° C)
Tensile Adhesion	ASTM D-3583.	750% Min.
Ductility @ 77°F (25°C)	ASTM D-113	40 cm. Min
Penetration	ASTM D-3407	
	77°F (25°C) 150g, 5 sec. . .	….90 dmm Max.
	0° F (-18°C) 200g, 60 sec. . .	..10 dmm Min.
Flow 5h @ 140° F(60°C)	ASTM D-3407.	3.0 MM Max.
Resilience @ 77° F (25°C)	ASTM D-3407.	40% Min
Asphalt Compatibility	ASTM D-3407.	Pass
Recommended Pouring Temperature……..		390° F (199° C)
Safe Heating Temperature……		..410° F (216° C)

Aggregate:

The stone type shall consist of Granite, Basalt, Gabbro, Porphyry or Gritstones. The specified aggregate shall be crushed, double washed, and shall meet the following requirements:

GRADATION

Sieve Size	¾" Percent Passing
7/8	**95-100**
5/8	**30-50**
½	**10-30**
3/8	**0-7**
¼	**-**
#8	**-**

Backer Rod:

The backer rod shall be a closed cell, foam expansion joint filler, capable of withstanding the elevated temperature of the polymeric binder. The backer rod shall have the following typical physical properties using a 2" specimen and test method ASTM D-545:

Density:	2.0Lbs/Cu.Ft, min
Tensile Strength:	30 psi, min.
Compression:	5 psi @ 25%, min
Water Absorption:	0.03 g/cc by weight, min
Temperature @ 410°F (210°C)	No Melting

Bridging Plate:

The bridging plate shall be a mild steel plate, ¼" thick by 8" wide, cut in 4' to 5' lengths. Spike holes shall be drilled on a longitudinal centerline at 1' intervals.

INSTALLATION CREWS

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

EQUIPMENT

The equipment will consist of:

1. Small self-propelled dry cut saw
2. Pneumatic compressor of 185 CFM capacity.
3. One Hot-Compressed Air Lance (HCA Lance), capable of delivering flame retarded air stream with a temperature of 3,000° F (1648° C), at a speed of 3,000 feet per second.
4. Rotating vented or un-vented drum type mixers each with a Hot-Compressed Air Lance (HCA Lance), or a pressure – air injection torch (PAT torch).
5. Melter unit equipped with agitation and an automatic temperature control which can accurately maintain the material temperature from 100°F - 650°F (38°C - 343°C). A thermometer to monitor the material temperature must be provided. The burner system shall have a safety pilot capable of shutting off the gas supply in the event of a flame-out.
6. 100 lb. Bottles of propane or smaller
7. Vibratory roller or plate capable of compacting up to 1" in one pass.
8. Hand held calibrated digital temperature sensor.
9. Chop-saw with carbide blade, if needed.
10. Sandblasting equipment, required only for installation in a concrete overlay.
11. Safety clothing and equipment as required by OSHA.

INSTALLATION

The following procedures are to be followed to ensure a successful installation:
Note: Material must be installed at a minimum depth of two inches (2").

Marking out: Joint System shall be located centrally over the deck expansion gap or fixed joint and marked out to the recommended minimum width of 20".

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

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

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

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

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

Plating: The gap shall be bridged with the steel plates centered over the gap by placing locating pins in the centerline of the plate. There must be at least 2" between the edge of the steel plate and the wall of the channel. Once the locating pins are in place, the top of the plate shall be coated with a thin layer of hot binder.

MATERIAL PREPARATION

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

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

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

Surface Layer: The surface layer shall be applied as other layers except that the pre-coated aggregate is not flooded with binder. The pre-coated aggregate shall be transferred to the joint and leveled slightly

higher than the adjacent road surface. On a standard 2" deep joint, the topcoat should be one quarter inch (1/4") higher than the road surface. Deeper joints will require higher levels before tamping.

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

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

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

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

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

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

QUALITY CONTROL

Upon request, certifications of the materials will be provided.

The Project Engineer may require the contractor to provide samples during the course of the work for laboratory test of any or all of the properties specified.

BASIS OF PAYMENT

Payment shall be made under:

Asphalt Joint Repair/Replacement (18"-24" wide, w/ plate) . . . . . Linear Feet

CONCRETE/ASPHALT REPAIR – Fibrecrete

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

a) Fibrecrete B or approved equal
b) Fibrecrete G or approved equal

DESCRIPTION

Fibrecrete is a flexible repair material for spalls and pot-hole repairs in concrete and asphalt. It is a hot-applied mastic asphalt binder with 36% bitumen content, polymers mixed with graded fillers, recycled steel fibers (less than 1% total weight), aggregates, and recycled tire rubber (no less than 3% of total weight).

MATERIAL SPECIFICATIONS

Fibrecrete is an electrometric polymer modified binder. Installed in accordance with the manufacturer's specifications, the installed product will conform to the following properties:

BINDER PROPERTIES	METHOD	REQUIREMENT
Bond	ASTM D 1190	Pass, 3 cycles @ -20°C, 50%
Penetration	ASTM D 5329	1 mm min @ -18°C, 200 g, 60 sec 9 mm max @ 25°C, 150 g, 5 sec
Ductility	ASTM D113	40 cm min @ 25°C
Flexibility	ASTM D5329	Pass @ -12°C
Flow	ASTM D5329	3 mm max @ 60° @ 5 hours
Resilience	ASTM D5329	40% min @ 25°C
Softening Point	ASTM D36	82°C min
Elongation		500% min
Wheel tracking @ 122 degrees F	BS598	4.8 mm/h
Safe Heating Temperature		230°C (440°F)
Recommended Pouring Temperature		185°C to 199°C (365°F-390°F)

SITE PREPARATION

All spalls and pot holes shall be milled, saw cut, or jack hammered. If required, the joint/crack shall be milled with a mechanical planer to the specified width and depth. All loose material shall be removed. The repair surfaces will be cleaned and dried with a hot air lance capable of producing temperatures in excess of 1400°C and directional velocities exceeding 750 meters per second. The recessed area and vertical walls will be treated with a primer agent to promote adhesion and prevent moisture intrusion on concrete applications.

INSTALLATION

Installation of the Fibrecrete material shall be by factory trained and certified installation professionals. The Fibrecrete material shall be heated in a thermostatically controlled mixer, having a horizontal agitator that ensures complete mixing. Once the material has reached approximately 300°F, the molten Fibrecrete will be introduced into the prepared repair area, sealing the bottom of the repair from water intrusion. For depths greater than 1 inch, heated ¾" granite aggregate shall be added at a rate of 25% - 35% by volume. The final ¾" of the repair will be Fibrecrete for optimum flexibility of the repair. Once this top layer has been screeded to a level grade, a high PSV aggregate will be applied to the top of the repair to ensure proper skid resistance.

Depending on the depth of the repair, Fibrecrete will be ready for traffic in 30 to 60 minutes.

All materials shall be delivered unopened in their original containers bearing the manufacturer's label, specifying date of manufacture, batch number, trade name or brand, and quantity. Sufficient material to perform the entire repair application shall be in storage at the site or at the contractor's facility prior to any field preparation, so that there shall be no delay in procuring the material for each day's application. Stored materials may be inspected prior to their use and shall meet the requirements of these Special Provisions at the time of use. Any material which is rejected because of failure to meet the required tests or that has been damaged, shall be immediately replaced by the contractor at no additional cost to the Department.

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

The quantity of Hot Applied Flexible Repair Material (Fibrecrete) for which payment will be made will be the actual pounds of material used. The entire cost for Concrete/Asphalt Repair using Fibrecrete including but not limited to labor, maintenance, equipment, tools, and incidentals will be included in the unit prices for Concrete/Asphalt Repair - Fibrecrete B or Concrete/Asphalt Repair - Fibrecrete G. Linear feet measurement will include both sides of the joint to be repaired.

Payment shall be made under:

Concrete/Asphalt repair – Fibrecrete B . . . . . .Pound
Concrete/Asphalt repair – Fibrecrete G . . . . . .Pound

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

MATERIAL

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

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

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

A. A pneumatic drill and an electric drill capable of drilling 5/8”- 3/4” dia. holes.

B. A dynamic penetrometer.

C. A truck-mounted pumping unit capable of injecting the high-density polyurethane formulation below the concrete slab or asphalt pavement into the sub-surface soils. This pumping unit will be capable of controlling the rate of rise of the pavement and densifying the sub-surface soils.

D. A laser level or dial indicator devices capable of monitoring and verifying that the concrete slab or asphalt pavement is raised to the required elevation.

CONTRACTOR PRE-QUALIFICATION REQUIREMENTS

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

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

(a) A report from an industrial hygienist who has conducted a personnel, production vehicle and typical jobsite safety review of the contractor's implementation procedures involving the polyurethane material.

(b) A copy of the contractor's Employee Safety Manual specific to polyurethane pavement raising and undersealing work.

CONSTRUCTION METHODS

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

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

HDPF SLAB LEVELING, UNDERSEALING AND VOIDFILLING

For leveling and undersealing, the Contractor shall prepare concrete to be leveled by profiling existing pavement and determining where the pavement needs to be raised. Voidfilling shall be in areas as indicated and as directed by the engineer. A series of 5/8" holes shall be drilled into the pavement 3 - 6 foot O.C. (exact location and spacing to be determined in the field). The expanding HDPF material shall then be injected under the slab. The amount of rise shall be controlled by regulating the rate of HDPF injected. Injection holes shall be sealed with non-expansive cementitious grout once leveling is complete.

MEASUREMENT

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

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

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

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

BASIS OF PAYMENT

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

Payment shall be made as follows:

HDPF Slab Leveling, Undersealing and Voidfilling……..Pound

HYDROPHOBIC FOAM SOIL STABILIZATION

Important Notice:

The information contained herein related to material selection, installation techniques and instruction is general in nature and may not be applicable to a particular project. Specific installation procedures, material requirements, and measuring techniques should be determined after careful analysis of the conditions and desired results of the actual project. We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, expressed or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.

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

PART 1 - GENERAL

1.01 Purpose

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

1.02 Related Work

A. None

1.03 Quality Assurance

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

1. The contractor must provide the engineer with job references where they successfully used hydrophobic polyurethane resins for soil stabilization.

1.04 Delivery, Storage, and Handling

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

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

1.05 Job Conditions

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

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

PART 2 - MATERIALS

2.01 Acceptable Manufacturers

A. Prime Flex 910, 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.

B. 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.

2.02 Performance Criteria

A. Physical properties of polyurethane resin:

1. Water activated resin.
2. Variable cure rate.
3. Viscosity 40 cps. - 20 cps
4. Solids Content 100% solids
5. Characteristics Hydrophobic polymer

B. Physical properties of Catalyst:

Appearance – Clear liquid
Viscosity 15 – 20 cps
Solids content 100%

C. Physical properties of polyurethane resin cured under pressure:

1. Shrinkage - (ASTM D-1042 / D-756) None
2. Tensile Properties (ASTM D-1623)
   a. Tensile strength: 23 psi
   b. Elongation 3%

2.03 Materials

A. Polyurethane Resin

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

B. Polyurethane resin shall be based on MDI in combination with pre polyols.

C. Polyurethane resin shall be hydrophobic in nature.

PART 3 - EXECUTION

3.01 Preparation

A. 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.

B. 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" – 60" in each direction and if multiple rows are needed then each row shall be offset ½ the space distance.) Probes: Pipe shall utilize Prime Resins Soil Probe, Expendable Drive Point or other acceptable means to keep dirt from clogging pipe during driving. Type and size to be determined by contractor. Pipes may be placed by manual driver, pneumatic driver, auger, or water jetting.

C. 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 – 3000 psi is recommended. Flow rate of pumps shall be 1.50 gpm minimum. Manually operated or "hand pumps" are considered unacceptable and cannot be used.

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

3.02 Application

Contractor shall determine 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" - 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.

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

3.03 Safety

Copy of 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.

All chemicals used on site including grout, catalyst and chemicals to clean pumps and equipment shall be non-flammable.

3.04 Cleaning

A. Flush the pump and hoses with approved pump flush. Do not use solvents to clean off human skin.

B. Uncured polyurethane resin can be removed from tools with an approved solvent. Cured polyurethane can only be removed mechanically.

C. Remove all pipes from work area. Leave work area clean and neat.

BASIS OF PAYMENT

The quantity of material to be paid for shall be the quantity actual used, based on the contract unit price shown on the bid form. 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 this work shall be considered incidental to the contract bid items.

Payment shall be made as follows:

Hydrophobic Foam Soil Stabilization ……..……..Gallon

FULL DEPTH CONCRETE SAWING

The Contractor shall perform full depth saw cutting to shape, straighten, or otherwise modify concrete decks and rails as deemed necessary by the Engineer to provide a suitable joint.

BASIS OF PAYMENT

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

Payment shall be made as follows:

Full Depth Sawing of Concrete Deck ……..……..Linear Foot

Full Depth Sawing of Concrete Rail ……..……..Linear Foot

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.

PURCHASE ORDER CONTRACT
PROJECT STANDARD PROVISIONS

AUTHORITY OF THE ENGINEER

In accordance with Section 105 of the *2012 Standard Specifications for Roads and Structures* the Engineer for this project shall be the Division Engineer, Division 8, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized 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.

NOTIFICATION OF OPERATIONS:

The Contractor shall notify the Engineer at least 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.

INSPECTION

All work shall be subject to inspection by the Engineer at any time. Routinely, the Engineer will make periodic inspections of the completed work. It will be the responsibility of the Contractor to keep the Engineer informed of his proposed work plan and to submit written reports of work accomplished on a frequency to be determined by the Engineer.

MATERIALS AND TESTING

The Engineer reserves the right to perform all sampling and testing deemed appropriate. The Contractor shall furnish the applicable certifications and documentation for all materials as required by the *Standard Specifications* and the Engineer. Material, which is not properly certified, will not be accepted. **All materials and workmanship shall be warranted for a period of one (1) year.**

SUBLETTING OF CONTRACT

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

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 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. The individual who has been so authorized shall be experienced in the type of work being performed and shall

be fully capable of managing, directing, and coordinating the work; of reading and thoroughly understanding the contract; and receiving and carrying out directions from the Engineer or his authorized representatives. He shall be an employee of the Contractor unless otherwise approved by the Engineer.

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

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 *Standard Specifications.*

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.

PROSECUTION AND PROGRESS

The Contractor shall pursue the work diligently with workmen in sufficient numbers, abilities, and supervision, and with equipment, materials, and methods of construction as may be required to complete the work described in the contract by the completion date and in accordance with Section 108 of the *Standard Specifications.*

The Contractor's operations are restricted to daylight hours. No work may be performed on Saturdays or Sundays, nor legal State holidays. Work shall only be performed when weather, traffic, and visibility conditions allow safe operations.

PAYMENT

The Contractor may submit a request for partial payment on a monthly basis, or other interval as approved by the Engineer. Compensation for all pay items shall be in accordance with the *Standard Specifications.* The amount of partial payments will be based on the work accomplished and accepted as the last day of the approved pay period. **Minority Business Enterprise and Women Business Enterprise (MBE/WBE) participation shall be listed on the Department's DBE Subcontractor Payment Information Form DBE-IS, which is available at http://www.ncdot.org/doh/forms/files/DBE-IS.xls, and shall be submitted with each payment request.** If there is no participation the word "None" or the figure "0" shall be entered. **There will be no retainage held on this contract.** One hundred percent (100%) payment shall be made after successful completion of the work and all quantities have been verified. The invoices will show the requisition number and purchase order number and should state "Terms Net Ten (10) Days." The invoices shall be sent to Mr. Dean R. Garner, Bridge Maintenance Engineer, P.O. Box 289, Siler City, N.C. 27344. Any invoices sent to other addresses will delay payment.

STANDARD SPECIAL PROVISION
AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS

(5-20-08) Z-2

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

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

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

STANDARD SPECIAL PROVISION

ERRATA

(1-17-12) Z-4

Revise the *2012 Standard Specifications* on all projects 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,".

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".

Division 10

Page 10-74, Table 1056-1 Geotextile Requirements, replace "50%" for the UV Stability (Retained Strength) of Type 5 geotextiles with "70%".

Division 12

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

Division 17

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

STANDARD SPECIAL PROVISION

MINIMUM WAGES

(7-21-09) Z-5

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

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

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

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

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

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

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

STANDARD SPECIAL PROVISION

ON-THE-JOB TRAINING:

(10-16-07) (Rev. 7-21-09) Z-10

Description

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

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

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

Minorities and Women

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

Assigning Training Goals

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

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.

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

CORPORATION

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

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

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

SIGNATURE OF CONTRACTOR

_____
Full name of Corporation

_____
Address as prequalified

Attest _____ By _____
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

NOTARY SEAL

Subscribed and sworn to before me this the

_____ day of _____, 20_____

_____
Signature of Notary Public

Of _____County

State of _____

My Commission Expires _____

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

PARTNERSHIP

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

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

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

SIGNATURE OF CONTRACTOR

_____
Full Name of Partnership

_____
Address as Prequalified

_____ By _____
Signature of Witness Signature of Partner

_____ _____
Print or type Signer's name Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

day of _____ 20____

NOTARY SEAL

_____
Signature of Notary Public

of _____County

State of _____

My Commission Expires:_____

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

LIMITED LIABILITY COMPANY

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

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

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

SIGNATURE OF CONTRACTOR

_____
Full Name of Firm

_____
Address as Prequalified

_____ _____
Witness's Signature | Signature of Member/Manager/Authorized Agent *Select appropriate title*

_____ _____
Print or type Signer's name | Print or type Signer's Name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the **NOTARY SEAL**

_____ day of _____ 20__.

_____
Signature of Notary Public

of _____County

State of _____

My Commission Expires:_____

BRIDGE JOINT REPAIR
WBS NO: TBD
COUNTY: CHATHAM, HOKE, LEE, MONTGOMERY, MOORE, RANDOLPH, RICHMOND & SCOTLAND

Rev. 4-19-11

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

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

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

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

SIGNATURE OF CONTRACTOR

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

(1) _____
Name of Joint Venture

(2) _____
Name of Contractor

_____
Address as prequalified

_____ By _____
Signature of Witness or Attest — Signature of Contractor

_____ _____
Print or type Signer's name — Print or type Signer's name

If Corporation, affix Corporate Seal and

(3) _____
Name of Contractor

_____
Address as prequalified

_____ By _____
Signature of Witness or Attest — Signature of Contractor

_____ _____
Print or type Signer's name — Print or type Signer's name

If Corporation, affix Corporate Seal and

(4) _____
Name of Contractor (for 3 Joint Venture only)

_____
Address as prequalified

_____ By _____
Signature of Witness or Attest — Signature of Contractor

_____ _____
Print or type Signer's name — Print or type Signer's name

If Corporation, affix Corporate Seal

NOTARY SEAL
Affidavit must be notarized for Line (2)
Subscribed and sworn to before me this
_____day of_____ 20___

_____
Signature of Notary Public
of _____County
State of _____
My Commission Expires:_____

NOTARY SEAL
Affidavit must be notarized for Line (3)
Subscribed and sworn to before me this
_____day of _____ 20___

_____
Signature of Notary Public
of _____County
State of _____
My Commission Expires:_____

NOTARY SEAL
Affidavit must be notarized for Line (4)
Subscribed and sworn to before me this
____day of _____ 20____

_____
Signature of Notary Public
of _____County
State of _____
My Commission Expires:_____

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

INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME

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

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

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

SIGNATURE OF CONTRACTOR

Name of Contractor _____
Individual name

Trading and doing business as _____
Full name of Firm

_____
Address as Prequalified

_____ _____
Signature of Witness | Signature of Contractor, Individually

_____ _____
Print or type Signer's name | Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

NOTARY SEAL

_____ day of _____ 20__.

_____
Signature of Notary Public

of _____County

State of _____

My Commission Expires:_____

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

INDIVIDUAL DOING BUSINESS IN HIS OWN NAME

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

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

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

SIGNATURE OF CONTRACTOR

Name of Contractor _____
Print or type Individual name

_____
Address as Prequalified

_____
Signature of Contractor, Individually

_____
Print or type Signer's Name

_____
Signature of Witness

_____
Print or type Signer's name

AFFIDAVIT MUST BE NOTARIZED

Subscribed and sworn to before me this the

NOTARY SEAL

_____ day of _____ 20__.

_____
Signature of Notary Public

of _____County

State of _____

My Commission Expires:_____

ACCEPTED BY THE
DEPARTMENT OF TRANSPORTATION

_____

Division Contract Officer

_____

Date

DEBARMENT CERTIFICATION

Conditions for certification:

1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation that is file with the Department, or has become erroneous because of changed circumstances.

2. The terms *covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal,* and *voluntarily excluded,* as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.

3. The prequalified bidder agrees by submitting this form that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.

4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR* 1273) provided by the Department, without subsequent modification, in all lower tier covered transactions.

5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.

6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

DEBARMENT CERTIFICATION

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

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and

d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

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

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

☐ Check here if an explanation is attached to this certification.

WBS NO. To Be Determined
COUNTY Divisionwide

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

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

** Must have entry even if figure to be entered is zero.

** Dollar Volume of MBE Subcontractor $ _____

MBE Percentage of Total Contract Bid Price _____ %

** Dollar Volume of WBE Subcontractor $ _____

WBE Percentage of Total Contract Bid Price _____ %

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*.

North Carolina Department of Transportation
PURCHASE ORDER CONTRACT BID FORM

Work Order Number: To Be Determined
Repair Bridge Joints, Concrete/Asphalt Deck Repairs and Foam Injections
Chatham, Hoke, Lee, Montgomery, Moore, Randolph, Richmond, and Scotland Counties

ITEM	ACTIVITY	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
1	SP	SP	Silicon Joint Replacement	1,500	LF		
2	SP	SP	Evazote Joint Replacement	1,500	LF		
3	SP	SP	V-Seal 300 Expansion Joint Replacement	200	LF		
4	SP	SP	V-Seal 400 Expansion Joint Replacement	200	LF		
5	SP	SP	Joint Repair Using Elastomeric Concrete (less than 16” wide and less than 2“ deep)	500	LF		
6	SP	SP	Joint Repair Using Elastomeric Concrete (greater than 16” wide and greater than 2” deep)	50	CF		
7	SP	SP	Asphalt Joint Repair/Replacement (18” – 24” wide, w/ plate)	500	LF		
8	SP	SP	Concrete/Asphalt Repair – Fibrecrete B	15,000	LB		
9	SP	SP	Concrete/Asphalt Repair – Fibrecrete G	15,000	LB		
10	SP	SP	HDPF Slab Leveling, Undersealing, and Voidfilling	1,000	LB		
11	SP	SP	Hydrophobic Foam Stabilization	100	GAL		
12	SP	SP	Full Depth Sawing of Concrete Deck	100	LF		
13	SP	SP	Full Depth Sawing of Concrete Rail	50	LF		
14	SP	SP	Temporary Lane Closure (2-Lane, 2-Way Roadway)	30	EA		

ITEM	ACTIVITY	SECT	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT BID
15	**SP**	**SP**	**Temporary Lane Closure (Multi-Lane Roadway)**	**30**	**EA**		
16	**SP**	**SP**	**Lane Closure Shift (Multi-Lane Roadway)**	**40**	**EA**		

TOTAL BID FOR PROJECT:_____

CONTRACTOR_____

ADDRESS_____

Federal Identification Number _____Contractors License Number _____

Authorized Agent_____Title_____

Signature_____Date_____

Witness_____Title_____

Signature_____Date_____