

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH, N.C.

PROPOSAL

DATE AND TIME OF BID OPENING: **NOVEMBER 16, 2004 AT 2:00 PM**

CONTRACT ID C201316

WBS 39400, 6CR.10431.11, 6CR.20261.11, 6CR.20431.11, 6CR.302620.11, 6CR.302644.11,
6CR.304310.11, 6CR.304324.11, 6CR.304349.11

FEDERAL-AID NO. STATE FUNDED

COUNTY HARNETT, CUMBERLAND

T.I.P. NO.

MILES 68.190

ROUTE NO. US 421

LOCATION 4 SECTIONS OF US-421, 3 SECTIONS OF NC-27, 1 SECTION OF
NC-217 & 40 SECTIONS OF SECONDARY ROADS.

TYPE OF WORK MILLING, RESURFACING, SHOULDER RECONSTRUCTION & SIGNALS.

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 SPECIALITY 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.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY

5% BID BOND OR BID DEPOSIT REQUIRED

PROPOSAL FORM FOR THE CONSTRUCTION OF CONTRACT NO. C201316

IN HARNETT & CUMBERLAND COUNTIES NORTH CAROLINA

Date _____ 20__

DEPARTMENT OF TRANSPORTATION,

RALEIGH, NORTH CAROLINA

The Bidder has carefully examined the location of the proposed work to be known as Contract No. C201316; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Board of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with the 2002 Standard Specifications for Roads and Structures by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No. C201316

In Harnett & Cumberland Counties, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled "North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2002 with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the Construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

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

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

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

Accompanying this bid is a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Bidder shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by him, as provided in the Standard Specifications; otherwise said deposit will be returned to the Bidder.

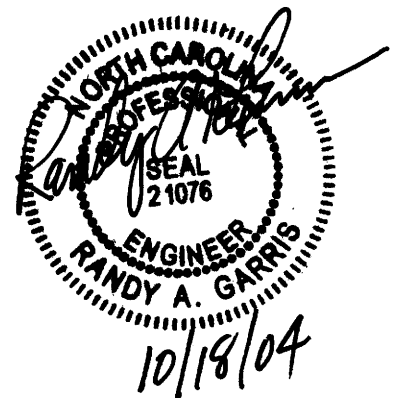


TABLE OF CONTENTS

	PAGE NO.
COVER SHEET	
PROPOSAL SHEETS	
PROJECT SPECIAL PROVISIONS (GREEN SHEETS)	
Contract Time and Liquidated Damages.....	1
Intermediate Contract Time (s).....	1
Prosecution of Work.....	1-2
Safety Index Rating.....	2
Railroad Grade Crossing.....	2
Major Contract Items.....	2
Specialty Items.....	2-3
Schedule of Estimated Completion Progress.....	3
Electronic Bidding.....	3-5
Minority and Women Business.....	6-14
Fuel Price Adjustment.....	15
Prompt Payment.....	15
Partial Payments.....	16
Domestic Steel and Iron Products.....	16
Recycled Steel.....	16-17
Compensation and Record Keeping.....	17
Plant Pest Quarantines.....	17-18
Safety Vests.....	18
Director of Construction in Lieu of Chief Engineer.....	18
Contractor Borrow Source.....	18-19
Outsourcing Outside the USA.....	19
Disqualification of Bidders.....	19-20
Note to Contractor.....	20-23
Roadway.....	24-48
Erosion Control.....	49-50
Traffic Control.....	51-58
Signals.....	59
Sketch Map	
 STANDARD SPECIAL PROVISIONS (YELLOW SHEETS)	
Availability of Funds.....	1
Seed Quality Requirements.....	2-4
Errata.....	5-6
Minimum Wages.....	7
 PROPOSAL FORM ITEM SHEETS, ETC.	
Item Sheets	
Signature Sheet (Bid Acceptance by Department)	

PROJECT SPECIAL PROVISIONS

General

7-1-95
RG01

CONTRACT TIME AND LIQUIDATED DAMAGES:

7-1-95

The date of availability for this contract is January 5, 2005.

The completion date for this contract December 1, 2005.

The observation period for the thermoplastic pavement markings is not a part of the work to be completed by the completion date for this contract as stated above. Warrant the observation period by the payment and performance bond.

The liquidated damages for this contract are One Thousand Dollars (\$1,000.00) per calendar day.

RG06

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:

The Contractor shall complete the work required of **installing each new inductive loop after the removal of each existing loop by the milling or patching operations** and shall place and maintain traffic on same.

The date of availability for this intermediate contract time for each inductive loop installation is **the date when the Contractor disturbs the existing inductive loop.**

The completion time for this intermediate contract time for each inductive loop installation is **the date which is five (5) consecutive calendar days after the Contractor disturbs the existing inductive loop.**

The liquidated damages are **Five Hundred Dollars (\$500.00)** per calendar day time period or any portion thereof.

PROSECUTION OF WORK:

7-1-95

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

In the event that the Contractor's operations are suspended in violation of the above provisions, the sum of \$1,000.00 will be charged the Contractor for each and every calendar day that such suspension takes place. The said amount is hereby agreed upon as liquidated damages due to extra engineering and maintenance costs and due to increased public hazard resulting from a suspension of the work. Liquidated damages chargeable due to suspension of the work will be additional to any liquidated damages that may become chargeable due to failure to complete the work on time.

RG09

SAFETY INDEX RATING:

6-18-02

Revise the 2002 Standard Specifications as follows:

Page 1-10, Article 102-2

Before the last paragraph on this page, add the following paragraph:

"All subcontractors performing work for the Department shall have received a passing grade on the Safety Index Rating form, in accordance with Article 102-2, prior to beginning work. Subcontractors can request the Safety Index Rating form from the State Contractual Services Engineer."

RG11

RAILROAD GRADE CROSSING:

7-1-95

The Contractor's attention is directed to the fact that should the use of slow moving or stopped equipment be required at railroad grade crossings, notify the railroad's local representative of their anticipated time of work at the grade crossing at least 48 hours prior to performing work in that grade crossing location.

RG12

MAJOR CONTRACT ITEMS:

2-19-02_C

The following listed items are the major contract items for this contract (See Articles 101-54 and 104-5 of the Standard Specifications):

<u>Item #</u>	<u>Description</u>
12	Asphalt Concrete Surface Course, Type S9.5B
15	Asphalt Concrete Surface Course, Type SF9.5A

RG15

SPECIALTY ITEMS:

7-1-95_C

Items listed below will be the specialty items for this contract (See Article 108-6 of the Standard Specifications).

<u>Line #</u>	<u>Description</u>
25 thru 32	Long-Life Pavement Markings
36 thru 37	Permanent Pavement Markers
38	Seeding and Mulching
39 thru 44	Signals

RG18

SCHEDULE OF ESTIMATED COMPLETION PROGRESS:

07-20-04

The Contractor's attention is directed to the Standard Special Provision entitled "Availability Of Funds Termination Of Contracts" included elsewhere in this proposal. The Department of Transportation's schedule of estimated completion progress for this project as required by that Standard Special Provision is as follows:

<u>Fiscal Year</u>	<u>Progress (Dollar Value)</u>
2005 (07/01/04 – 06/30/05)	69% of Total Amount Bid
2006 (07/01/05 – 06/30/06)	31% of Total Amount Bid

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the Standard Specifications. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

RG33

ELECTRONIC BIDDING:

03-16-04_R

Page 1-2, Article 101-11

Delete this article and replace with the following:

Bid (Or Proposal): The electronic offer of a Bidder via Bid Express™ to the Department to perform the work and to furnish the labor and materials at the prices quoted.

Page 1-3, Article 101-20, **Contract**

Add after the second paragraph of this article.

All references to contracts shall include electronic agreements and printed paper agreements. These may include but not be limited to the electronic bid bond, non-collusion statement, debarment certification, and award limits.

Page 1-6, Article 101-64 **Proposal Form**

Delete this article and replace with the following:

Proposal or Proposal Form: The electronic or paper form provided by the Department that the Bidder uses to develop his electronic offer to perform the work at designated bid prices.

Page 1-14, Article 102-9

Delete Article 102-9 in its entirety and replace with the following:

102-9 ELECTRONIC BIDDING.

The Bidder shall submit bids electronically using the following guidelines:

1. The prequalified Bidder shall have a fully executed *Non-Collusion Affidavit and Debarment Certification* on file in the Contract Office prior to submitting his bid. If the Bidder cannot provide the debarment certification required, he shall provide an explanation as shown in the certification. The explanation will not necessarily result in denial of participation in a contract. Non-collusion and debarment certification forms shall be downloaded at <http://www.NCDOT.org/business>. Forms shall be executed in accordance with Section 102-8. The affidavit and certification shall be received in the Contract Office by 5 p.m. the last business day before the bid letting. The Contract Office address is shown at the end of this provision.

If the prequalified Bidder's *status* changes, he shall immediately submit a new fully executed non-collusion affidavit and debarment certification with an explanation of the change.

Failure to have a fully executed non-collusion affidavit and debarment certification on file in the Contract Office prior to placing bids will cause those bids to be non-responsive.

2. Obtain on-line bidding information from Bid ExpressTM at www.bidx.com (Note: Obtain an account and valid Digital Signature from Bid ExpressTM in order to bid electronically).
3. An electronic corporate surety bid bond for at least 5% of the total amount bid shall accompany each electronic bid, or the Contractor may submit a certified check or cashier's check in lieu of an electronic bid bond. The certified check or cashier's check shall be for at least 5% of the total amount bid and shall be received by 5 p.m. the last business day before the bid letting and shall be delivered to the address shown at the end of this provision.

Contact either or both of the following bond management companies in order to acquire the necessary service to submit an electronic bid bond.

- a. Surety 2000 (www.surety2000.com)
 - b. Surepath (www.insurevision.com)
4. Debarment Certification – The Bidder shall provide a debarment certification in the electronic bid submittal. If a Bidder cannot provide the debarment certification required, he shall provide an explanation in the Bid ExpressTM miscellaneous folder within the .ebs file. The explanation will not necessarily result in denial of participation in a contract. Failure to furnish a certification or an explanation will be grounds for rejection of a bid.
 5. Zero (0) is considered a valid bid. Do Not enter zero (0) in any unit price field unless zero (0) is the intended bid for that item.

6. Include all addenda in the submitted electronic bid. Bid Express™ will not accept a bid which does not contain all addenda. Section 103-2 (Correction of Bid Errors) will not apply to On-Line Electronic Bidding. All addenda and attachments will be considered part of the bid.
7. The electronic bid may be changed and resubmitted as many times as desired prior to the advertised bid opening time specified in the Invitation to Bid. The latest time stamped electronically submitted bid prior to the advertised bid opening time will constitute the Bid.
8. The provisions of Section 102-8 will apply to the preparation of bids except that the bid shall be submitted via Bid Express™ On-Line Bid Submission.
9. All bids shall be submitted with an electronically affixed digital signature. For the purpose of this provision, affixing a digital ID to the bid shall be the equivalent of signing before a notary public and placing in force the non-collusion affidavit and debarment certification on file with the Department.
10. By submitting an electronic bid, the Bidder certifies that he has read, understands, accepts, acknowledges and agrees to comply with all statements, conditions and Specifications in the electronic bid submittal.
11. Bids will be decrypted, opened, printed to paper and read publicly at the time and place specified in the invitation to bid.
12. The successful Bidder if award be made shall submit a fully executed *Execution of Contract, Non-Collusion Affidavit and Debarment Certification* signature sheet, and payment and performance bonds within 14 calendar days of receipt of award letter.
13. The Department will not be responsible if a Bidder cannot submit his bid to Bid Express™ and claims will not be accepted for this. In the event of technical difficulties, the Department reserves the right to postpone the reading of bids for up to 4 hours past the advertised bid opening time.
14. The pre-bid *Non-Collusion Affidavit, Debarment Certification* signature sheet, *Execution of Contract, Non-Collusion Affidavit, Debarment Certification* signature sheet, certified check or cashier's check in lieu of electronic bid bond, payment and performance bonds shall be delivered to the Contract Office at the address shown herein:

Physical Address

State Contract Officer
Project Services Unit
Century Center Bldg. B
1020 Birch Ridge Drive
Raleigh, NC 27610

Mailing Address:

State Contract Officer
NC Department of Transportation
Contracts and Proposals
1591 Mail Service Center
Raleigh, NC 27699-1591

RG34

MINORITY AND WOMEN BUSINESS:7-17-01_R

POLICY

It is the policy of the North Carolina Department of Transportation that minority and women businesses shall have the maximum opportunity to participate in the performance of contracts financed by Non-Federal Funds.

The Contractor is also encouraged to give every opportunity to allow MB/WB participation in Supplemental Agreements.

OBLIGATION

The Contractor and any subsequent Subcontractor shall ensure that minority and women businesses have the maximum opportunity to participate in the performance of the work included in this contract. The Contractor and any subsequent Subcontractor shall take all necessary and reasonable steps to ensure that minority and women businesses have the maximum opportunity to compete for and perform a portion of the work included in this contract and shall not discriminate on the basis of race, color, national origin or sex. Failure on the part of the Contractor to carry out the requirements set forth herein shall constitute a breach of contract and after proper notification, may result in award disqualification, termination of the contract, disqualification from bidding, or other appropriate remedy.

GOALS

Pursuant to the requirements of North Carolina General Statute 136-28.4, the following goals for participation are established for this contract:

Minority Business Enterprises 7%
 Women Business Enterprises 5%

The Contractor shall exercise all necessary and reasonable steps to ensure that Minority Businesses (MB) and Women Businesses (WB) participate in at least the percents of the contract as set forth above as goals for this contract.

LISTING OF MB AND WB SUBCONTRACTORS

All bidders, at the time the bid proposal is submitted, must also submit a listing of MB and WB participation on the appropriate form (or facsimile thereof) contained elsewhere in this proposal in order for the bid to be considered responsive. Bidders must indicate the total dollar value of MB and WB participation of the contract. In the event the bidder has no MB and WB participation, he is still required to indicate this on the forms by entering the word or number zero. Blank forms will not be deemed to represent zero participation. BIDS SUBMITTED WHICH DO NOT HAVE MB AND WB PARTICIPATION INDICATED ON THE APPROPRIATE FORM WILL NOT BE READ PUBLICLY DURING THE OPENING OF BIDS. These bids will not be considered for award by the Department and they will be returned to the bidder. Bidders have the option of submitting their MB and WB participation in an

abbreviated format as required in Paragraph A below, or the bidders may submit their MB and WB participation in the additional detail required by Paragraph B below. In the event the bidder elects to submit MB and WB participation in accordance with Paragraph A and is determined to be the apparent lowest responsive bidder, that bidder must deliver to the Department no later than 12:00 noon of the sixth day following the opening of bids, a detailed MB and WB submittal as required by Paragraph B below.

Only those MB and WB firms with current certification by the Department will be considered acceptable for listing in the bidders submittal of MB and WB participation.

- A. The contractor shall indicate on the form for listing of MB and WB Subcontractors the following required information:

REQUIRED INFORMATION

- (1) The names of MB and WB firms committed to participate in the contract;
- (2) The Contract Item Numbers of work to be performed by each MB and WB firm; and
- (3) The total dollar amount to be paid to each MB and WB based on agreed upon unit prices.

Failure to indicate the required information on the specified form will cause the bid to be considered nonresponsive and it may be rejected.

- B. In lieu of submitting the information required by (A) above, the bidder may submit the detailed information required below along with the bid proposal form.

REQUIRED INFORMATION

- (1) The names of MB and WB firms committed to participate in the contract;
- (2) The Contract Item Numbers and Contract Item Descriptions and agreed upon unit prices of work to be performed by each MB and WB firm; and
- (3) The total dollar amount to be paid to each MB and WB based on agreed upon unit prices.

Failure to indicate the required information on the specified form will cause the bid to be considered nonresponsive and it may be rejected.

The Department will not allow any substitutions, deletions, or other alterations to the listing of firms committed for MB and WB participation and/or the respective listed contract item numbers after opening of bids. The Department will not allow adjustments to total dollar amount of MB and/or WB participation after the opening of bids which would result in the MB and/or WB participation being less than the contract goal. The only exceptions to the requirements of this paragraph will be: (1) to allow for replacement of a MB or WB firm that had been decertified after opening of bids, and (2) to allow

alteration of the listed contract item numbers subject to the Bidder submitting sufficient documentation to verify an obvious error in the initial submittal.

- C. If the bid of the lowest responsive bidder exceeds \$500,000 and if the MB and/or WB participation submitted in response to Paragraph B exceeds the algebraic sum of the MB and WB goals by \$1000 or more, the excess will be placed on deposit by the Department for future use by the bidder. Separate accounts will be maintained for MB and WB participation and these may accumulate for a period not to exceed 24 months.

If the MB and WB participation submitted in response to Paragraph A/B does not meet or exceed the MB and WB contract goals, the apparent lowest responsive bidder must submit information to satisfy the North Carolina Department of Transportation that sufficient reasonable efforts have been made to meet the contract goals. One complete set and nine (9) copies of this information must be received in the office of the State Contractual Services Engineer no later than 12:00 noon of the sixth day following opening of bids. Where the information submitted includes repetitious solicitation letters it will be acceptable to submit a sample representative letter along with a distribution list of the firms being solicited. Documentation of MB and WB quotations shall be a part of the good faith effort submittal as necessary to demonstrate compliance with the factors listed below which the Department considers in judging good faith efforts. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

Where the bidder fails to provide this information by the deadline, the Department may impose the following sanctions: (1) disqualify the contractor and any affiliated companies from further bidding for a period of time of no more than 90 days from the date of disqualification as established in notification by certified mail; and (2) disqualify the Contractor and any affiliated companies for award of all contracts for which bids have been received and opened.

The following factors are what the Department will consider in judging whether or not the bidder has made adequate good faith effort:

- (1) Whether the bidder attended any pre-bid meetings that were scheduled by the Department to inform MBs and WBs of subcontracting opportunities;
- (2) Whether the bidder provided written notice to a reasonable number of specific MBs and WBs that their interest in the contract is being solicited and whether the firms solicited could have reasonably been expected to quote the work in the contract;
- (3) Whether the bidder followed up on initial solicitations of interests by contacting MBs and WBs to determine with certainty whether they were interested;
- (4) Whether the bidder selected portions of the work to be performed by MBs and WBs in order to increase the likelihood of meeting the contract goals;
- (5) Whether the bidder provided interested MBs and WBs with adequate information about the plans, specifications and requirements of the contract;

- (6) Whether the bidder negotiated in good faith with interested MBs and Wbs not rejecting them as unqualified without sound reasons based on a thorough investigation of their capabilities;
- (7) Whether quotations were received from interested MB and WB firms but rejected as unacceptable without sound reasons why the quotations were considered unacceptable;
- (8) Whether the bidder made efforts to assist interested MBs and WBs in obtaining any required insurance or bonding that may be required by the bid proposal or by the bidder;
- (9) Whether the bidder specifically negotiated with Subcontractors to assume part of the responsibility to meet the contract MB and WB goal when the work to be sublet includes potential for MB and WB participation.

In the event one bidder is the apparent low bidder on two non-federally funded projects within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the MB participation on the two projects so long as the overall MB goal value of both projects is achieved.

In the event one bidder is the apparent low bidder on two non-federally funded projects within the same letting located in the same geographic area of the state, as a part of the good faith effort the Department will consider allowing the bidder to combine the WB participation on the two projects so long as the overall WB goal value of both projects is achieved.

Where the apparent lowest responsive bidder fails to submit sufficient participation by MB firms to meet the contract goal, as part of the good faith effort the Department will consider allowing the bidder to withdraw funds to meet the MB goal so long as there are adequate funds available from the bidders MB bank account.

Where the apparent lowest responsive bidder fails to submit sufficient participation by WB firms to meet the contract goal, as part of the good faith effort the Department will consider allowing the bidder to withdraw funds to meet the WB goal so long as there are adequate funds available from the bidders WB bank account.

Where the apparent lowest responsive bidder fails to submit sufficient participation by MB and WB firms to meet the contract goal and upon a determination by the Goal Compliance Committee based upon the information submitted that the apparent lowest responsive bidder failed to make sufficient reasonable efforts to meet the contract goal, the Department may reject the bid.

In the event that 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 the Department that the contract goal can be met or that adequate good faith efforts have been made to meet the goal.

DIRECTORY OF CERTIFIED BUSINESSES

Included with this Proposal Form is a list of Businesses which have been certified by the North Carolina Department of Transportation. Only those MB firms with current certification may be used to meet the contract MB goal. Only those firms with current certification may be used to meet the contract WB goal.

The listing of an individual firm certified by the Department shall not be construed as an endorsement of the firms capability to perform certain work.

REPLACEMENT OF MBs AND WBs

(A) Performance Related

If any MB or WB Subcontractor indicated on the form for listing of MB and WB Subcontractors, contained elsewhere in this proposal form, does not perform satisfactorily to the extent indicated or anticipated, the Contractor shall take all necessary, reasonable steps to replace the MB Subcontractor with another MB Subcontractor and/or the Contractor shall take all necessary, reasonable steps to replace the WB Subcontractor with another WB Subcontractor.

Any substitution of MB or WB firms after award of the contract shall be approved by the Department. The Contractor shall submit any requests for substitutions through the Resident Engineer and the request must provide a valid basis or reason for the proposed substitution.

To demonstrate necessary, reasonable efforts, the Contractor shall document the steps he has taken to replace any MB or WB Subcontractor that is unable to perform successfully with another MB or WB Subcontractor. Such documentation shall include but not be limited to the following:

- (a) Copies of written notification to MBs/WBs that their interest is solicited in subcontracting the work defaulted by the previous MB or WB Subcontractor or in subcontracting other items of work in the contract.
- (b) Efforts to negotiate with MBs and WBs for specific subbids including at a minimum:
 - (1) The names, addresses, and telephone numbers of MBs and WBs that were contacted;
 - (2) A description of the information provided to MBs and WBs regarding the plans and specifications for portions of the work to be performed; and

- (3) A statement of why additional agreements with MBs and WBs were not reached.
- (c) For each MB or WB contacted but rejected as unqualified, the reasons for the Contractor's conclusion.
- (d) Efforts made to assist the MBs and WBs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

Failure of the Contractor to demonstrate reasonable efforts to replace a MB or WB firm that does not perform as intended or anticipated, shall be just cause to disqualify the Contractor from further bidding for a period of up to 6 months after notification by certified mail.

(B) Decertification

1. If the Department has approved a Request for Subcontract for a particular MB or WB Subcontractor and that MB or WB Subcontractor is subsequently decertified by the Department; then the Department will not require the Prime Contractor to solicit replacement MB or WB participation equal to the remaining work to be performed by the decertified firm.
2. If a Prime Contractor has listed a MB or WB firm in his low bid submittal and the MB or WB firm is decertified prior to the Department approving a Request for Subcontract for the named MB or WB firm, the Prime Contractor may be required to make a good faith effort to:
 - (a) Replace the decertified firm with a certified firm, or
 - (b) To obtain replacement MB or WB participation in other areas of work.

DEFINITIONS

For purposes of this provision, the following definition will apply:

Minority Business or MB means a small business concern, which is owned and controlled by one or more minorities. Except that such term shall not include any concern or group of concerns controlled by the same minority or minorities which has average annual gross receipts over the preceding 3 fiscal years in excess of \$14,000,000, as adjusted by the Department for inflation. For the purposes of this part, owned and controlled means a business:

- (a) Which is at least 51 percent owned by one or more minorities or in the case of a publicly owned business, at least 51 percent of the stock of which is owned by one or more minorities; and
- (b) Whose management and daily business operations are controlled by one or more such individuals.

Minority is defined as a citizen or lawful permanent resident of the United States and who is:

- (1) Black (a person having origins in any of the black racial groups of Africa);
- (2) Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race);
- (3) Asian American (a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands);
- (4) American Indian

Women Business or WB means a small business concern, which is owned and controlled by one or more women. Except that such term shall not include any concern or group of concerns controlled by the same woman or women which has average annual gross receipts over the preceding 3 fiscal years in excess of \$14,000,000, as adjusted by the Department for inflation. For the purposes of this part, owned and controlled means a business:

- (a) Which is at least 51 percent owned by one or more women or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and
- (b) Whose management and daily business operations are controlled by one or more of the women who own it.

COUNTING MB/WB PARTICIPATION TOWARD MEETING THE MB/WB GOAL

- (1) If a firm is determined to be an eligible MB or WB firm and certified by the Department, the total dollar value of the participation by the MB or WB will be counted toward the appropriate MB or WB goal. The total dollar value of participation by a certified MB or WB will be based upon unit prices agreed upon by the Prime Contractor and MB or WB Subcontractor.
- (2) The Contractor may count toward its MB or WB goal a portion of the total dollar value of participation with a joint venture, eligible under the standards of this provision, equal to the percentage of the ownership and controls of the MB or WB partner in the joint venture.
- (3) (a) The Contractor may count toward its MB or WB goal only expenditures to MBs or WBs that perform a commercially useful function in the work of a contract. A MB or WB is considered to perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether a MB or WB is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, and other relevant factors.

- (b) Consistent with normal industry practices, a MB or WB may enter into subcontracts. If a MB or WB Contractor or Subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of normal industry practices, the MB or WB shall be presumed not to be performing a commercially useful function. The MB or WB may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption shall be final.
- (4) A Contractor may count toward its MB or WB goal 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from MB or WB regular dealer and 100 percent of such expenditures to a MB or WB manufacturer.
- (a) For purposes of this provision, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials or supplies obtained by the Contractor.
- (b) For purposes of this provision, a regular dealer is 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. To be a regular dealer, the firm must engage in, as its principal business and in its own name, the purchase and sale 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 or operates distribution equipment. Brokers and packagers shall not be regarded as manufacturers or regular dealers within the meaning of this section.
- (5) A contractor may count toward its MB or WB goal the following expenditures to MB or WB firms that are not manufacturers or regular dealers:
- (a) The fees or commissions charged for providing a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for performance of the contract, provided that the fee or commission is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.
- (b) The fees charged for delivery of materials and supplies required on a job site (but not the cost of the materials and supplies themselves) when the hauler, trucker, or delivery service is not also the manufacturer of or a regular dealer in the materials and supplies, provided that the fee is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.
- (c) The fees or commissions charged for providing any bonds or insurance specifically required for the performance of the contract provided that the fee or commission is determined by the Department to be reasonable and not excessive as compared with fees customarily allowed for similar services.

REPORTS

Within 30 days after receipt of materials, supplies, or services from MBs or WBs, not otherwise documented by Request for Subcontracts (RS-1A/RS-1B), the Contractor shall furnish to the Engineer appropriate documentation (canceled checks, paid invoices, etc.) to verify expenditures with MB and WB concerns. The documentation should also indicate the percentage (60% or 100%) of expenditures claimed for MB or WB credit.

All requests for subcontracts involving MB or WB Subcontractors shall be accompanied by a certification executed by both the Prime Contractor and the MB or WB Subcontractor attesting to the agreed upon unit prices and extensions for the affected contract items. This document shall be on the Department's Form RS-1-D, or in lieu of using the Department's Form, copies of the actual executed agreement between the Prime Contractor and the MB or WB Subcontractor may be submitted. In any event, the Department reserves the right to require copies of actual subcontract agreements involving MB and WB Subcontractors.

The RS-1-D certification forms may be obtained from the Department's Resident Engineer.

These certifications shall be considered a part of the project records, and consequently will be subject to any penalties under State Law associated with falsifications of records related to projects.

REPORTING MINORITY BUSINESS ENTERPRISE OR WOMEN BUSINESS ENTERPRISE PARTICIPATION

When payments are made to Minority Business Enterprise firms or Women Business Enterprise firms, including material suppliers, contractors at all levels (prime, subcontractor, or second tier subcontractor) shall provide the Engineer with an accounting of said payments. This accounting shall be furnished the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in (1) withholding of money due in the next partial pay estimate; or (2) removal of an approved Contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list. The accounting shall list for each payment made to a MB/WB Enterprise firm the following:

DOT Project Number

Payee Contractor Name

Receiving Contractor or Material Supplier

MB/WB Certification Basis, e.g., Woman Owned, Native American, African American, etc.

Amount of Payment

Date of Payment

A responsible fiscal officer of the payee contractor, subcontractor, or second tier subcontractor who can attest to the date and amounts of the payments shall certify that the accounting is correct. A copy of an acceptable report may be obtained from the Engineer.

RG42

FUEL PRICE ADJUSTMENT:

2-19-02_{CC}

Fuel Price Adjustment for items of work listed below will be made in accordance with Section 109-8 of the Standard Specifications.

The base index price for DIESEL #2 FUEL is \$ 1.388 per gallon.

The selected item(s) of work and the fuel factor used in calculating adjustments to be made are as follows:

<u>Line #</u>	<u>Description</u>	<u>Units</u>	<u>Fuel Usage Factor</u> Diesel
15	Asphalt Concrete Surface Course, Type SF 9.5A	Gal/Ton	2.90
12	Asphalt Concrete Surface Course, Type S9.5B	Gal/Ton	2.90

RG43

PROMPT PAYMENT:

6-19-01_C

Prompt Payment of Monies Due Subcontractors, Second Tier Subcontractors and Material Suppliers and Release of Retainage

Contractors at all levels; prime, subcontractor, or second tier subcontractor, shall within seven calendar days of receipt of monies, resulting from work performed on the project or services rendered, pay subcontractors, second tier subcontractors, or material suppliers as appropriate. This seven-day period begins upon knowledgeable receipt by the contracting firm obligated to make subsequent periodic or final payment. These prompt payment requirements will be met if each firm mails the payment to the next level firm by evidence of postmark within the seven-day period.

This provision for prompt payment shall be incorporated into each subcontract or second tier subcontract issued for work performed on the project or for services provided. If any retainage is held on subcontractors, all retainage shall be released within seven calendar days of release by the Department.

Failure of any entity to make prompt payment as defined herein may result in (1) withholding of money due to that entity in the next partial payment until such assurances are made satisfactory to this provision; or (2) removal of an approved contractor from the prequalified bidders list or the removal of other entities from the approved subcontractors list.

RG51

PARTIAL PAYMENTS

1-01-02

The 2002 Standard Specifications are revised as follows:

Page 1-69, Subarticle 109-4(A)

In the first line of the third paragraph change the amount of "\$200,000.00" to read "\$500,000.00".

RG54

DOMESTIC STEEL AND IRON PRODUCTS:

7-1-95

All steel and iron products which are permanently incorporated into this project shall be produced in the United States except minimal amounts of foreign steel and iron products may be used provided the combined project cost of the bid items involved does not exceed one-tenth of one percent (0.1 percent) of the total amount bid for the entire project or \$2,500.00, whichever is greater. This minimal amount of foreign produced steel and iron products permitted for use by this Special Provision is not applicable to fasteners. Domestically produced fasteners are required for this project.

All steel and iron products furnished as "domestic products" shall be melted, cast, formed, shaped, drawn, extruded, forged, fabricated, produced, or otherwise processed and manufactured in the United States. Raw materials including pig iron and processed pelletized and reduced iron ore used in manufacturing "domestic" steel products may be imported; however, all manufacturing processes to produce the products, including coatings, must occur in the United States.

Before each steel or iron product is incorporated into this project or included for partial payment on a monthly estimate, the Contractor shall furnish the Resident Engineer a notarized certification certifying that the product conforms to the above requirements of this Special Provision. The Resident Engineer will forward a copy of each certification to the Materials and Tests Unit.

Each purchase order issued by the Contractor or a subcontractor for steel and iron products to be permanently incorporated into this project shall contain in bold print a statement advising the supplier that all manufacturing processes to produce the steel or iron shall have occurred in the United States. The Contractor and all affected subcontractors shall maintain a separate file for steel products permanently incorporated into this project so that verification of the Contractor's efforts to purchase "domestic" steel and iron products can readily be verified by an authorized representative of the Department or the Federal Highway Administration.

RG63

RECYCLED STEEL

05-17-04

Recycled steel shall be incorporated into this project provided it meets the following requirements:

1. Recycled steel shall meet the Department's specifications and standards.

2. Recycled steel shall be acquired competitively for a reasonable price, and within a reasonable time period.

RG65

COMPENSATION AND RECORD KEEPING

03-16-04

Revise the *2002 Standard Specifications* as follows:

104-8 Compensation and Record Keeping

Change Article (A), subarticle 1. with the following:

In line 3 and line 6, change \$15,000.00 to \$25,000.00.

RG80

PLANT AND PEST QUARANTINES: **(IMPORTED FIRE ANT, GYPSY MOTH, WITCHWEED, AND OTHER NOXIOUS WEEDS)**

03-18-03

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.com/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.

RG84

SAFETY VESTS:

6-19-01

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

RG87

DIRECTOR OF CONSTRUCTION IN LIEU OF CHIEF ENGINEER

03-16-04

Revise the 2002 Standard Specifications as follows:

Wherever the term *Chief Engineer* or *Chief Engineer of Operations* occurs in the Specifications, the actions and responsibilities referred to will be performed by the Director of Construction, Division of Highways, North Carolina Department of Transportation, acting directly or through his duly authorized representative.

Revision to Definitions of Terms

Page 1-4, Article 101-35

101-35 ENGINEER

The Chief Engineer of Operations, and/or Director of Construction, Division of Highways, North Carolina, Department of Transportation, acting directly or through their duly authorized representative.

RG91

CONTRACTOR BORROW SOURCE

10-19-04

Revise the 2002 *Standard Specifications* as follows:

Page 2-17, Article 230-4(C) Contractor Furnished Sources, add the following;

If the Contractor proposes a borrow source, the environmental assessment shall include wetland and stream delineation extending 400 feet beyond the proposed borrow source limits.

- 1. If wetlands or streams are present within 400 feet of the borrow source and the contractor proposes to dewater:
 - a. Submit a hydrologic analysis (Skaggs Method) to determine if lateral effects will permanently impact or cause degradation to wetlands or streams. The analysis shall be performed by an environmental or hydraulics engineer with expertise in this discipline and shall consist of, but not be limited to:

- Hydric soil type
- Average profile depth to restrictive soil layer
- Average hydraulic conductivity or permeability
- Average drainable porosity or available water capacity
- Required buffer width, including safety factor

- b. Attach a conservation easement specifying that the completed pit impoundment, shall not be drained, ditched, used for irrigation, or any other manner that would degrade wetlands and streams.
 - c. Provide copy of recorded conservation easement to Engineer prior to commencement of any work on proposed pit.
2. If wetlands or streams are not present within 400 feet, no additional documentation will be required.

During Department review of the proposed borrow area, the hydrologic analysis will be submitted to the U. S. Army Corps of Engineers for evaluation.

Obtain copy of Skaggs Method for Determining Lateral Effects of a Borrow Pit on Adjacent Wetlands from Roadside Environmental Unit web site:

http://www.doh.dot.state.nc.us/operations/dp_chief_eng/roadside/fieldops/

Copies may also be obtained from Room 558, Transportation Building, 1 S. Wilmington Street, Raleigh, NC 27601.

RG92

OUTSOURCING OUTSIDE THE USA

09-21-04

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

RG95

DISQUALIFICATION OF BIDDERS

11-16-04

The 2002 *Standard Specifications* are revised as follows:

Page 1-17 Article 102-16, replace No.12 with the following:

- 12. Failure to submit the documents required by Article 109-10 within 60 days after request by the Engineer.

Page 1-18 Article 102-16, add the following after Number 15.

16. False information submitted on any application, statement, certification, report, records and/or reproduction.

Conviction of any employee of company, of any applicable state or federal law, may be fully imputed to the business firm with which he is or was associated or by whom he was employed or with the knowledge or approval of the business firm or thereafter ratified by it.

17. Being debarred from performing work with other city, state, and federal agencies.
18. Failure to perform guaranty work within the terms of the contract.

RG155

NOTE TO CONTRACTOR:

Vegetation Removal

On various maps within this contract as directed by the Engineer, the Contractor will be required to remove all vegetation from the edge of pavement prior to the commencement of paving operations. The material generated from the vegetation removal shall be scarified along the shoulders or utilized in shoulder construction operations. If the material cannot be scarified along the shoulders or utilized in shoulder reconstruction operations, the Contractor will dispose of all excess material generated by removing the vegetation from the edge of pavement. The disposal of the excess material should be completed prior to the placement of the edge line pavement markings.

No separate payment shall be made for removing vegetation from the edge of pavement or disposing of excess material generated from removing the vegetation from the edge of pavement, as they shall be considered incidental to the paving operations.

MAP 3

The Contractor's attention is directed to the bridge approaches/departures at Rockfish Creek and Buckhead Creek. The Contractor shall level full pavement width to the approach/departure at an average depth of 1½ inches for a distance of 100 ft, unless otherwise directed by the Engineer.

MAP 4

The Contractor's attention is directed to the railroad crossing on SR 1104. The Contractor shall level full pavement width to the approach/departure at an average depth of 1½ inches for a distance of 100 ft. The Contractor's attention is directed to all bridge approaches/departures. The Contractor shall mill full pavement width to the approach/departure at an average depth of 1½ inches for a distance of 300 ft. Once milled, a paper joint shall be placed at the deck to provide a smooth transition from the milled pavement. The paper joint shall be maintained until the final surface is placed, unless otherwise directed by the Engineer.

MAP 5

The Contractor's attention is directed to all bridge approaches/departures. The Contractor shall mill full pavement width to the approach/departure at an average depth of 1.0 inches for a distance of 300 ft. Once milled, a paper joint shall be placed at the deck to provide a smooth transition from the milled pavement. The paper joint shall be maintained until the final surface is placed, unless otherwise directed by the Engineer.

MAP 11

The Contractor's attention is directed to all bridge approaches/departures. The Contractor shall mill full pavement width to the approach/departure at an average depth of 1.5 inches for a distance of 300 ft. Once milled, a paper joint shall be placed at the deck to provide a smooth transition from the milled pavement. The paper joint shall be maintained until the final surface is placed, unless otherwise directed by the Engineer.

MAP 15

The Contractor's attention is directed to the milling on SR 1815. The Contractor shall mill full pavement width to the approach/departure at an average depth of 3.0 inch for a distance of 700 ft. The Contractor is then required to place two equal 1.5 inch lifts of S9.5C at an average rate of 168 pounds per square yard, unless otherwise directed by the Engineer.

MAP 18

The Contractor's attention is directed to the Railroad crossing approach and departure on SR 1319. The Contractor shall mill full pavement width an average depth of 1½ inches for a distance of 150 ft, unless otherwise directed by the Engineer.

MAP 23

The Contractor's attention is directed to SR 1400. The Contractor shall mill in the curb and gutter sections an average depth of 4½ inches so as to be a depth of 1½ inches below the gutter line. The remaining portion of the road shall be milled to a depth of 1½ inches, unless otherwise directed by the Engineer. (See detail 2).

This map will also include the replacement of approximately 30 linear feet of damaged 2'-6" Concrete Curb and Gutter as directed by the Engineer. Payment for the 2'-6" Concrete Curb and Gutter will be full compensation for the removal and disposal of the existing concrete curb and gutter, all grading necessary to construct the concrete curb and gutter, patching any damaged asphalt and any other incidentals associated with the construction of the 2'-6" Concrete Curb and Gutter. The Contractor will only be allowed to remove curb and gutter that he can replace on a given day. If the Contractor removes more curb and gutter than he can replace on a given day then the Contractor shall backfill all open trenches or provide 24-hour traffic control prior to halting operations for that day. Basis of pavement will be the unit bid price under 2'-6" Concrete Curb and Gutter per linear foot.

MAP 25

The Contractor's attention is directed to SR 1499. The Contractor shall mill full pavement width in curb and gutter sections an average depth of 1½ inches and place back with 1½ inches of SF9.5A.

MAP 26

The Contractor's attention is directed to SR 1499. The Contractor shall mill full pavement width in curb and gutter sections an average depth of 1½ inches and place back with 1½ inches of SF9.5A.

MAP 27

The Contractor's attention is directed to SR 1499. The Contractor shall mill full pavement width in curb and gutter sections an average depth of 1½ inches and place back with 1½ inches of SF9.5A.

MAP 28

The Contractor's attention is directed to SR 1499. The Contractor shall mill full pavement width in curb and gutter sections an average depth of 1½ inches and place back with 1½ inches of SF9.5A.

MAP 31

The Contractor's attention is directed to SR 1403. The Contractor shall raise one drop inlet, unless otherwise directed by the Engineer.

MAP 38

The Contractor's attention is directed to the Food Lion Project On US 421 that will be on going simultaneously adjacent to the limits of this map. The Contractor shall plan and coordinate their activities with the Engineer and any other Contractors performing work near or at the common construction limits to the extent that the work can be carried out to the best advantage of all concerned. Also, the Contractor shall place a paper joint at the common station.

The Contractor's attention is directed to the 2 foot symmetrical widening. The Contractor shall widen the entire project limits. The Contractor shall place 4 inches of B25.0C and an average rate of 456 pounds per square yard. The Contractor shall then place 2.50 inches of I 19.0C at an average rate of 285 pounds per square yard over the full pavement width. Then the Contractor shall then place 1.50 inches of S9.5C at an average rate of 168 pounds per square yard over full pavement width.

MAP 39

The Contractor's attention is directed to all bridge approaches/departures. The Contractor shall mill full pavement width to the approach/departure at an average depth of 1 inch for a distance of 300 ft. Once milled, a paper joint shall be placed at the deck to provide a smooth transition from the milled pavement. The paper joint shall be maintained until the final surface is placed, unless otherwise directed by the Engineer.

MAP 46

The Contractor's attention is directed to the bridge approaches/departures on SR 1808. The Contractor shall mill full pavement width to the approach/departure at an average depth of 3 inches for a distance of 775 feet in the west quadrant towards the Sadlers Truck stop and 450 feet in the Eastern quadrant towards the Johnson County Line. Once milled, a paper joint shall be placed at the deck to provide a smooth transition from the milled pavement. The paper joint shall be maintained until the final surface is placed.

The Contractor's attention is also directed to the resurfacing at the end of the milling in the Eastern quadrant towards the Johnston County Line. The Contractor shall place 1.25 inches of SF9.5A at a rate of 138 pounds per square yard.

The Contractor's attention is directed to the 4 foot widening. The Contractor shall widen 4 feet beginning at the on-ramp of the I-95 SBL and continue west for a distance of approximately 500 feet with an additional 50 foot taper.