



Transportation

PAT McCrory
Governor

NICHOLAS J. TENNYSON
Secretary

May 6, 2016

Addendum No. 1

RE: Contract # C203783

WBS # 52010.3.1, 53005.3.1

F. A. # NHPP-0040(6)208, NHPIM-0040(7)208

Guilford County (I-5734, I-5762)

I-40 From Forsyth County Line To 1.1 Mile East of SR-1556

(Gallimore Dairy Road) In Greensboro

May 17, 2016 Letting

To Whom It May Concern:

Reference is made to the proposal form furnished to you on this project.

The following revisions have been made to the proposal:

Page No.	Revisions
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 05-06-16"
R-20, R-21 and New R-21A	Revised the project special provision entitled "Diamond Grinding Concrete Pavement"

Please void the above listed pages in your proposal and replace with the revised pages. Please add New Page No. R-21A after revised Page No. R-21.

The contract will be prepared accordingly.

Sincerely,

R. A. Garris, PE
Contract Officer

RAG/jag

- cc: Mr. Ron Hancock, PE
- Mr. Mike Mills PE
- Mr. Rodger Rochelle, PE
- Mr. R.E. Davenport, PE
- Mr. Ken Kennedy, PE
- Ms. Jaci Kincaid
- Project File (2)
- Mr. Ray Arnold, PE
- Ms. Theresa Canales, PE
- Ms. Marsha Sample
- Mr. Mike Gwyn
- Mr. Mitchell Dixon
- Ms. Penny Higgins
- Ms. Lori Strickland



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

PROPOSAL

INCLUDES ADDENDUM No. 1 DATED 05-06-16

DATE AND TIME OF BID OPENING: **MAY 17, 2016 AT 2:00 PM**

CONTRACT ID C203783
WBS 52010.3.1, 53005.3.1

FEDERAL-AID NO. NHPP-0040(6)208, NHPIM-0040(7)208
COUNTY GUILFORD
T.I.P. NO. I-5734, I-5762
MILES 7.093
ROUTE NO. I 40
LOCATION I-40 FROM FORSYTH COUNTY LINE TO 1.1MI EAST OF SR-1556
 (GALLIMORE DAIRY RD) IN GREENSBORO.

TYPE OF WORK PAVEMENT REHABILITATION.

NOTICE:

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

BIDS WILL BE RECEIVED AS SHOWN BELOW:

THIS IS A ROADWAY PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

DIAMOND GRINDING CONCRETE PAVEMENT:

(4-15-08) (Rev 05-17-16)

SPI 7-9As(rev)

Description

Perform the work covered by this provision including but not limited to diamond grinding and regrinding concrete pavement to meet final surface testing requirements detailed in Article 710-7, selecting diamond tipped saw blades and configuration of cutting head; continual removal of residual slurry from pavement and disposal; furnishing all labor, materials, supplies, tools, equipment and incidentals as necessary. Perform this work at locations indicated in the plans or as directed by the Engineer.

Prior to beginning any diamond grinding operations, schedule a pre-grind meeting with grinding subcontractor, Division Construction Engineer, Project Engineer, Area Roadway Engineer, State Pavement Construction Engineer, representatives from the Roadside Environmental Unit and the Materials and Tests Unit.

Equipment

Use equipment with diamond tipped saw blades gang mounted on a power driven self propelled machine with a minimum wheel base length of 15 feet (4.6 meter) that is specifically designed to smooth and texture Portland Cement Concrete pavement. Utilize equipment that does not cause ravels; aggregate fracture; spalls or disturbance to the longitudinal or transverse joints; or damage and/or strain to the underlying surface of the pavement. Should any of the above problems occur immediately suspend operations.

Provide a minimum 3 feet (1 meter) wide grinding head with 50 (164) to 60 (200) evenly spaced grooves per foot (meter). Prior to designing the grinding head, evaluate the aggregate hardness of the concrete pavement and select the appropriate diamond size, diamond concentration and bond hardness for the individual saw blades.

Provide vacuuming equipment to continuously remove slurry residue and excess water from the pavement as part of the grinding operation. Do not allow the slurry material to flow into a travel lane occupied by traffic or into any drainage facility.

Method of Construction

Grind the pavement surface to a uniform appearance with a high skid resistant longitudinal corduroy type texture. Provide grooves between 0.09 (2.28mm) and 0.15 (3.81mm) inches wide with the land area between the grooves between 0.06 (1.52mm) and 0.13 (3.30mm) inches wide. Ensure a ridge peak of approximately 0.0625 inches (1.59mm) higher than the bottom of the grooves.

Begin and end diamond grinding at lines normal to the pavement centerline. Grind only in the longitudinal direction. All grooves and adjacent passes shall be parallel to each other with no variation. Completely lap adjacent passes with no unground surface remaining between passes and no overlap of more than 1½ inches (35 mm). Adjacent passes shall be within 1/8 inch

(10 mm) of the same height as measured with a 3 foot (0.914 meter) straightedge. Maintain positive cross-slope drainage for the duration of the grinding operation.

Grind all travel lanes to include auxiliary lanes, ramps and loops with not less than 98 percent of the specified surface being textured by grinding. Grinding of the bridge decks and concrete shoulders will not be required. Remove a minimum 0.0625 inches at all locations except dips. Extra grinding to eliminate minor depressions is not required. It is anticipated that extra grinding will be required on the high side of existing faults in the pavement. There shall be no ridge between lanes. In a separate operation, transition the grinding of any remaining ridges greater than 1/8 inch (10mm) in height on the outside edge next to the shoulder or at a tie to an existing facility to the satisfaction of the Engineer.

Disposal of Residual Slurry

Diamond grinding slurry disposal shall be in accordance with the Statewide Permit for Land Application of Diamond Grinding Slurry (DGS), Permit No. WQ0035749 dated June 3, 2014. Submit a slurry disposal plan to the Engineer detailing method of handling and disposing of slurry from the diamond grinding operation a minimum of 60 days prior to beginning the diamond grinding operation. Engineer shall review the slurry disposal plan. Plan must be accepted prior to beginning the diamond grinding operation. DGS may also be transported beyond the project limits to an approved permitted site. No additional payment will be made for transporting this slurry material for disposal.

Other disposal options are:

- (A) Land apply slurry directly from diamond grinding machine within DOT right-of-way on shoulders, medians and other designated areas as directed by the Engineer and a representative from the Roadside Environmental Unit if slurry qualifies as cake residuals as defined in the Statewide Permit.
- (B) Collect, contain, haul, and land apply slurry within DOT right-of-way at interchanges or other designated areas as directed by the Engineer and a representative from the Roadside Environmental Unit if slurry qualifies as cake residuals as defined in the Statewide Permit.
- (C) Collect, contain, haul, and land apply slurry within DOT right-of-way or private property in compliance with the Statewide Permit.
- (D) Concrete grinding residues (CGR) that are not liquid and otherwise not hazardous may be disposed of in a municipal solid waste landfill or utilized as an alternate daily cover (ADC). The sanitary landfill operator that requests the use of this material as ADC shall contact the N.C. Department of Environmental Quality (DEQ) inspector for approval.
- (E) Dewatered CGR's may be beneficially reused within the DOT project boundary or areas under DOT control at agronomic rates suitable for the establishment of vegetation.

Dewatered CGR's that meet the solid waste definition for inert debris, North Carolina General Statute 130A-290(a)(14), may also be used within the roadbed at rates approved by the Engineer for soil modification purposes.

For more detailed information, see the Environmental Permits and Guidelines section under Environmental resources on the NC Connect website for the DG permit and guidelines at the following link.

<https://connect.ncdot.gov/resources/Environmental/Environmental%20Permits%20and%20Guidelines/Forms/AllItems.aspx>

Measurement and Payment

The quantity of Diamond Grinding PCC Pavement to be paid for at the contract unit price will be the actual number of square yards of pavement diamond ground in accordance with the requirements of this provision. In measuring this quantity, the length will be the actual length diamond ground measured along the pavement surface. The width will be the width required by the plans or directed, measured along the pavement surface. No separate payment will be made for any overlapping.

Payment is full compensation for the work and includes but is not limited to grinding, disposal of slurry, furnishing all materials, equipment, labor and all incidentals necessary to complete the work satisfactorily.

Payment will be made under:

Pay Item

Diamond Grinding PCC Pavement

Pay Unit

Square Yard