



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

September 30, 2002

Addendum No. 2

RE: State Project: 8.1675103
F. A. Project: HP-NHF-85-2 (56) 42
Mecklenburg County (I-3803A)
I-85 From US-29/NC-49 Connector
To SR-2894.

OCTOBER 10, 2002 PROPOSAL SUBMISSION

To Whom It May Concern:

Reference is made to the Design-Build Package (RFP) furnished to you on the above project.

Then following revisions have been made:

The second page of the "PROPOSAL SHEETS" has been revised to include Mr. Randy A. Garris seal. Please void the second page of the "PROPOSAL SHEETS" in your package and staple the revised page thereto.

Page nos. 62 thru 66-C have been revised. Please void page nos. 62 thru 66-D in your package and staple the revised page nos. 62 thru 66-C thereto.

Signature sheet 7 (Bid-Acceptance by Department) has been revised. Please void signature sheet 7 in your package and staple the revised signature sheet 7 thereto.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
CONTRACTS & PROPOSALS
1591 MAIL SERVICE CENTER
RALEIGH NC 27699-1591

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WEBSITE: WWW.DOH.DOT.STATE.NC.US

LOCATION:
CENTURY CENTER COMPLEX
BUILDING B - ENTRANCE B15
1020 BIRCH RIDGE DRIVE
RALEIGH NC

The Table of Contents has been revised to reflect the above revisions. Please void the first page of the Table of Contents in your package and staple the revised Table of Contents thereto.

Sincerely,



R. A. Garris, P.E.
Contract Officer

RAG/mwl/pa
(Attachments)

cc: Mr. J. D. Goins, P.E.
Ms. D. M. Barbour, P.E.
Mr. J. V. Barbour, P.E.
Ms. Emily Lawton, (FHWA)
Mr. S. D. DeWitt, P.E.
Mr. Benton Payne, P.E.
Mr. Ellis Powell, P.E.
Mr. Greg Perfetti, P.E. (Attn: John Frye, P.E.)
Mr. Dewayne Sykes, P.E.
Ms. Kathy Lassiter, P.E.
Mr. Greg Fuller, P.E. (Attn: Mr. Tom Parker)
Mr. Ron Hancock, P.E.
Mr. Tim Boland, P.E.
Mr. Scott Allen, P.E.
Mr. Randy Turner
Ms. Lee Moore
Mr. Andy Gay, P.E.
Mr. Steve Kite, P.E.
Mr. Ron King, P.E.
Mr. Robert Memory
Mr. Njorge Wainaina, P.E.
Mr. Ron Davenport, Jr., P.E.
Ms. Kim Canady
Ms. Yang Steelman
Project File (2)

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.

Accompanying this Proposal 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 Design-Builder 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 Design-Builder.



A circular professional engineer seal for Randy A. Garris, North Carolina. The seal contains the text "NORTH CAROLINA PROFESSIONAL ENGINEER RANDY A. GARRIS" and "SEAL 01078". A handwritten signature "Randy A. Garris" is written across the seal, and the date "9/26/02" is written below it.

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located at nominal 300-foot spacing. Shoulder drain plans and outlet locations must be submitted for approval.

The following pavement designs apply for Y-lines , Ramps, and Loops.

Description	Surface	Intermediate	Black Base	ABC
US 29/NC 49 Ramps	3" S9.5C	3" I19.0C	4" B25.0C	10"
US 29/NC 49 narrow widen And auxiliary lane	3" S9.5C	3" I19.0C	11" B25.0C.	
US 29/49 partial depth paved Shoulders	3" S9.5C	3" I19.0C		Variabl e (11 inch typical)
Loops at Harris Blvd	3" S9.5B	4" I19.0B	-	8"
Ramps to Harris Blvd	3" S9.5B	4" I19.0B	-	8"
Ramps from Harris Blvd to I-85	3" S9.5B	2.5" I19.0B	3.0" B25.0B	8"
Northbound exit ramps at I-485 and SR 2894	3" S9.5B	2.5" I19.0B	3" B25.0B	8"
Ramp from Mallard Creek to I-85SB	3" S9.5B	3" I19.0B	3" B25.0B	8"
Loop at Mallard Creek	3.0" S9.5B	4" I19.0B	4" B25.0B	-
Other ramps at Mallard Creek	2.5" S9.5B	2.5" I19.0B	3.0" B25.0B	8"

Overlay the existing y-lines with two lifts of surface course as shown in the table above. **Overlay other ramps and loops not specifically listed in the table above with 3" S9.5B. Milling a keyed notch at the termini of paving is recommended to obtain a smooth transition to existing pavement.**

The Design/Build team will be responsible for design of all temporary pavements and for the evaluation of existing shoulders regarding their suitability for carrying traffic during construction. Temporary pavements will be designed in accordance with the most recent version of the North Carolina DOT Pavement Design Procedure. Temporary pavement designs are to be submitted for review and comment using the contract submittal process. The expected duration for traffic on the temporary pavement must be included as part of the submittal.

Revision #3 09/23/02

CHEMICAL STABILIZATION OF SUBGRADE MATERIALS

GENERAL

The scope of work consist of the following:

1. Technician Certification requirements
2. Laboratory inspection
3. Quality Assurance of laboratory tests

LABORATORY TESTS

The Technician(s) will be certified by Materials and Tests Unit and perform all laboratory tests in accordance with AASHTO specifications as modified by the NCDOT. The certifications will be specific to the tests required to complete the project and must be maintained until the project is completed. Copies of the NCDOT modified AASHTO procedures can be obtained from the Materials and Tests Unit's Soil Sub-Unit.

TEST	AASHTO DESIGNATION
Dry Preparation of Disturbed Soils	T-87
Particle Size Analysis of Soils	T-88
Determining the Liquid Limit of Soils	T-89
Determining the Plastic Limit and Plasticity Index of Soils	T-90
Moisture-Density Relations of Soils	T-99
Moisture-Density Relations of Soil-Cement Mixtures	T-134
Unconfined Compressive Strength of Cohesive Soil (Section 7)	T-208

CERTIFICATION PROCESS

LABORATORY INSPECTION

Prior to beginning any testing, a representative from Materials and Tests Unit will visit the laboratory to verify the required testing equipment. Once the laboratory equipment is verified, a Materials and Tests Unit representative will re-visit the laboratory on a random basis for inspection throughout the life of the project.

TECHNICIAN CERTIFICATION (LABORATORY)

It is the responsibility of the company to provide Technician(s) with the necessary training. Prior to any testing, a representative from Materials and Tests Unit will visit the laboratory to verify if the Technician has received adequate training for performing the required tests. Once the Technician has been certified, a Materials and Tests Unit representative will re-visit the laboratory on a random basis to renew the certification throughout the life of the project.

QUALITY ASSURANCE PROCESS

ROUND-ROBIN

During the life of the project, a round-robin sample will be submitted to the laboratory randomly by the Materials and Tests Unit for comparison testing.

STABILIZATION OPTIONS

Select one of the following stabilization options for the entire project:

1. Stabilize sub-grade soils with either lime or cement.
2. Replace sub-grade soils with Select Material Class IV and stabilize the Class IV material with cement.

SCOPE OF WORK FOR CEMENT AND LIME STABILIZATION OF SUBGRADE SOILS

GENERAL

1. Designating areas to be stabilized by either lime or cement.
2. Determining rates of application.
3. Conducting field tests to determine unconfined compressive strength.
4. Construction of cement or lime treated sub-grade.

CONSTRUCTION OF LIME TREATED SUBGRADE

Construct the lime treated sub-grade as specified in Section 501 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures with the following exceptions:

Subsection 501-4 EQUIPMENT

Contractor's equipment will not require engineer's approval.

Subsection 501-8 (A) GENERAL

Paragraph #1 is not applicable to this project.

Subsection 501-9 (B) PRELIMINARY CURING

Amend as follows: Allow a minimum of 2 days and a maximum of 4 days for preliminary curing.

Subsection 510-10 COMPACTING, SHAPING, AND FINISHING

Last paragraph is not applicable.

Subsection 501-11 THICKNESS

Last two paragraphs are not applicable.

Subsection 501-15 METHOD OF MEASUREMENT

The entire sub-sections is not applicable.

Subsection 501-16 BASIS OF PAYMENT

The entire sub-section is not applicable.

CONSTRUCTION OF CEMENT TREATED SUBGRADE

Construct the soil cement sub-grade as specified in section 542 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures, with the following exceptions:

Subsection 542-4 EQUIPMENT

Contractor's equipment will not require Engineer's approval.

Subsection 542-7 APPLICATION OF CEMENT

First paragraph is not applicable.

Subsection 542-11 THICKNESS

Paragraphs 2 and 3 are not applicable.

Subsection 542-16 METHOD OF MEASUREMENT

This entire sub-section is not applicable.

Subsection 542-17 BASIS OF PAYMENT

This entire sub-section is not applicable.

UNCONFINED COMPRESSIVE STRENGTH TESTING OF FIELD SAMPLES

Allow a minimum of seven days curing before testing for strength. Test lime and cement stabilized sub-grades by making field specimens. Compact the field specimens in accordance with AASHTO T-99 Criteria. Transport the specimens in a cooler or other device that will prevent moisture loss. Cure the specimens for seven days in a moist room maintained at a temperature of $73 \pm 3^\circ$ F and a humidity of 100%. Test the cured specimens using the unconfined Compressive Strength test (AASHTO T 208 Section 7). Required unconfined compressive strengths:

Lime: minimum= 60PSI

Cement: minimum=275PSI maximum=500PSI

Conduct tests at a frequency of one test every 440 feet, for each 33 feet running lane and the median. Perform these tests at random locations selected, using random number tables.

SUBMITTALS

1. Submit all laboratory test results for documentation.
2. Submit a sketch in plan view showing beginning and end stations of areas to be stabilized by either lime or cement and application rates for each stabilizer for documentation.
3. Submit any other documentation that would support recommendations for documentation.
4. Submit unconfined compressive strength test results from field specimens for review and acceptance.

SCOPE OF WORK FOR CEMENT TREATED CLASS IV SELECT MATERIAL**GENERAL**

The scope of work consist of the following:

1. Construction of Cement Treated Class IV Select Material
2. Conducting field tests to determine compressive strength

CONSTRUCTION OF CEMENT TREATED CLASS IV SELECT MATERIAL

The contractor has the option of using either Plant Mix or Road Mix technique to obtain a minimum compressive strength of 350 PSI and a maximum of 700 PSI.

Plant Mix Material

1. Undercut 7 inches
2. Place Fabric for Soil Stabilization*
3. Place 7 inches of Plant Mixed Cement Treated Class IV select material on top of fabric and construct as specified in Section 540* of the North Carolina Department of Transportation Standard Specifications for Roads and Structures with the exceptions noted below

Road Mix Material

1. Undercut 9 inches
2. Place Fabric for Soil Stabilization*
3. Place 9 inches of Class IV select material on top of fabric
4. Mix the top 7 inches of Class IV select material with the required rate of cement
5. Do not tear the fabric during the mixing operation
6. Construct the Class IV select material as specified in Section 540* of the North Carolina Department of Transportation Standard Specifications for Roads and Structures with the exceptions noted below

NOTES

1. *Fabric for Soil Stabilization must meet requirements set forth in Section 1056 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures
2. *Substitute the term Cement Treated Class IV Select Material for Cement Treated Base throughout Section 540 of the North Carolina Department of Transportation Standard Specifications for Roads and Structures

Subsection 540-2 MATERIALS

Aggregate.....Table 540-2

Use aggregate that meets the requirements of table 540-2 of the

North Carolina Department of Transportation Standard Specifications for Roads and Structures.

Subsection 540-3 LIMITATIONS

The first sentence is not applicable.

Subsection 540-4 PREPARATION OF SUBGRADE

This entire subsection is not applicable

Subsection 540-5 CONSTRUCTION METHODS

1. (A) GENERAL is not applicable
2. Any reference to approval of the Engineer, designated by Engineer, etc shall be ignored.

Subsection 540-6 COMPACTION

Test method AASHTO T 180 is to be replaced by test method AASHTO T 99.

Subsection 540-10 AGGREGATE FOR CEMENT TREATED BASE

This entire subsection is not applicable.

Subsection 540-13 METHOD OF MEASUREMENT

This entire subsection is not applicable.

Subsection 540-14 BASIS OF PAYMENT

This entire subsection is not applicable.

UNCONFINED COMPRESSIVE STRENGTH TESTING OF FIELD SAMPLES

Compact specimens in the field in accordance with AASHTO T-99 as modified by the Department. Transport them to the laboratory in a cooler or other device that will prevent loss of moisture. Cure them for seven days in a moist room, maintained at a temperature of 73 +/- 3° F and a humidity of 100%. At the end of seven days, test them for compressive strength in accordance with AASHTO T-208. Required compressive strength:

minimum: 350 PSI

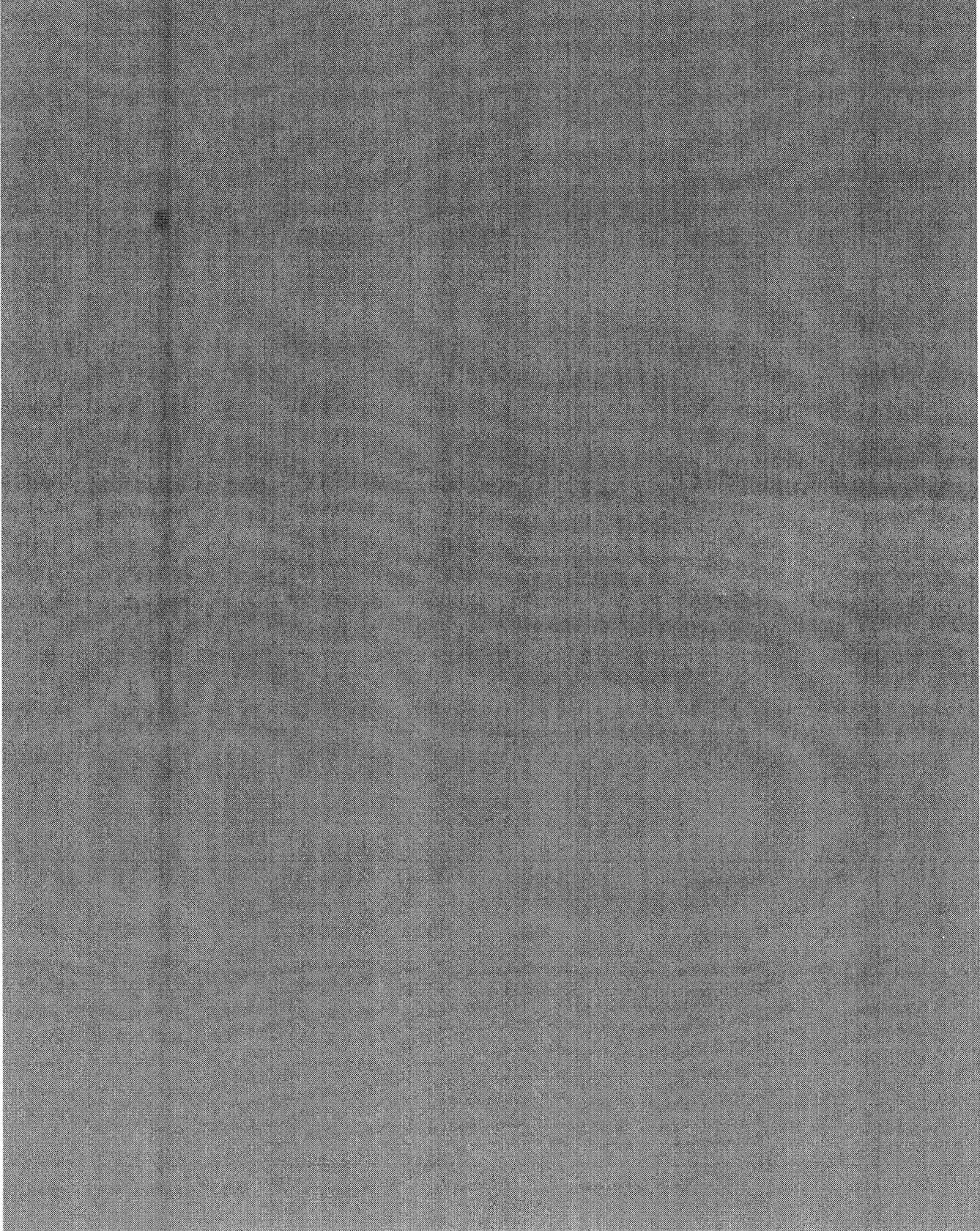
maximum: 700 PSI

Conduct the tests at a frequency of one test for every 440 feet, per 33 foot lane at random locations utilizing random number tables.

SUBMITTALS

1. Submit unconfined compressive strength test results from field specimens for review and acceptance.

2. Submit moisture density test results for documentation.
3. Submit unconfined compressive strength test results from mix design specimens for documentation.



Project No.:8.1675103

County: MECKLENBURG

ACCEPTED BY THE
DEPARTMENT OF TRANSPORTATION

Contract Officer

Date

Execution of Contract and Bonds
Approved as to Form:

Attorney General