

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

October 5, 2023

ADDENDUM 1

Division Eleven

Contract No.: MK00010 WBS: TBD

County Alleghany, Ashe, Avery, Caldwell, Surry, Watauga, Wilkes, and Yadkin

Federal Aid No: Federal Aid **Location:** Various

Type of Work: Emergency Landslide Repair and Slope Stabilization-ID-IQ

Bid Opening: October 19, 2023

To Whom It May Concern:

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

The following revisions have been made to the proposal.

Page Number	Revision
R-10	Construction Method has been updated to include 4"
R-13	Pay Items for Reinforced Shotcrete have been updated -2" Reinforced Shotcrete eliminated and 4" Reinforced Shotcrete added

Please void the above listed Pages in your proposal and staple the Revised Pages thereto.

On the Bid Form Sheets the following pay item revisions have been made:

ITEM	DESCRIPTION	OLD QUANTITY	NEW QUANTITY
8847000000-E	2" REINFORCED SHOTCRETE	1,500 SFT	0
8847000000-E	4" REINFORCED SHOTCRETE	NEW ITEM	1,500 SFT
8881000000-E	CEMENTITIOUS VOID FILL	NEW ITEM	10 CY

Telephone: (336) 903-9101

Website: www.ncdot.org

The Contractor's Bid must include these pay item revisions.

This revision is reflected on the Proposal currently on the Division 11 Letting Page.

The contract will be prepared accordingly.

If you have questions about bidding on this project or any other question concerning this project, please contact me at (336) 903-9115 or belmore@ncdot.gov.

Sincerely,

—DocuSigned by:

Bethany Elmore

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Bethany Elmore, PE Division Contract Engineer

CC: Michael Poe, PE, Division Engineer
Ivan Dishman, PE, Division Construction Engineer
Brandon Whitaker, PE, Division Maintenance Engineer
Ramie Shaw, PE, Division Project Development Engineer

Proportion the shotcrete to be pumpable with the concrete pump furnished for the work, with a cementing materials content of at least 24.3 pounds per cubic foot and water/cement ratio not greater than 0.50. Do not use admixtures unless approved by the Engineer. Thoroughly mix admixtures into the shotcrete at the rate specified by the manufacturer. Use only accelerators compatible with the cement used, non-corrosive to steel, and not promoting other detrimental effects such as cracking or excessive shrinkage. The maximum allowable chloride ion content of all ingredients is 0.10% when tested to AASHTO T260.

Air entrainment is not required for temporary shotcrete construction facings.

Provide shotcrete with a design compressive strength of 2000 psi in 3 days and 4000 psi in 28 days.

Batch aggregate and cement by weight or by volume in accordance with the requirements of ASTM C94 or AASHTO M241/ASTM C685. Use mixing equipment that thoroughly blends the materials in sufficient quantity to maintain placing continuity. Produce ready mix shotcrete complying with AASHTO M157. Batch, deliver, and place shotcrete within 90 minutes of mixing. The use of retarding admixtures may extend application time beyond 90 minutes if approved by the Engineer.

Premixed and packaged shotcrete mix may be provided for on-site mixing. Use packages containing materials conforming to the Material section of this provision. Placing time limit after mixing is per the manufacturers' recommendations.

Store cement adequately to prevent moisture degradation and partial hydration. Do not use cement that is caked or lumpy.

Construction Method

Construct shotcrete with a minimum thickness of **4 inches**, **6 inches**, **8 inches**, **or 12 inches** (based on design) with welded-wire fabric a minimum of **2 inches** from the ground surface. Do not begin shotcrete construction or incorporate materials into the work until the submittal requirements are satisfied and accepted by the Engineer. Any changes or deviations from the accepted submittals or re-submittals before proceeding with work are not allowed. No adjustments in contract time will be allowed due to incomplete submittals.

Ensure the minimum thickness of shotcrete using shooting wires, thickness control pins, or other devices acceptable to the Engineer. Install thickness control devices normal to the surface such that they protrude the required shotcrete thickness outside the surface. Ensure that the front face of the shotcrete does not extend beyond the limits established by the Engineer.

Clean the face of the excavation and other proposed shotcrete surfaces of loose materials, mud, rebound, overspray or other foreign matter that could prevent or reduce shotcrete bond. Protect adjacent surfaces from over spray during shooting. Avoid loosening, cracking, or shattering the ground during excavation and cleaning. Remove any surface material that is so loosened or

drainage strips, weep holes, reinforcing steel, shotcrete, and preparatory trimming and cleaning of soil/rock surfaces and shotcrete cold joint in preparation for receiving new shotcrete, and all incidentals for placing shotcrete around the soil nails and/or micropiles. No payment will be made for partial deliveries.

Payment will be made under:

Pay Item	Pay Unit
4" Reinforced Shotcrete	Square Foot
6" Reinforced Shotcrete	Square Foot
8" Reinforced Shotcrete	Square Foot
12" Reinforced Shotcrete	Square Foot
Shotcrete Shoulder Build-Up	Linear Foot

HORIZONTAL DRAINS

Description

The work consists of installing horizontal drains into drill holes.

Materials

Furnish horizontal drains consisting of 1.5-inch diameter (or larger) slotted schedule 80 (or thicker) polyvinyl chloride (PVC) plastic pipe conforming to the requirements of ASTM Designation: D 1785.

Pipe Slots/Perforations: Slotted pipe shall have 2 rows of slots. The rows shall be in the longitudinal direction of the pipe and the slots shall be cut in the circumferential direction of the pipe. The rows shall be centered on 2 of the third points (120 degrees apart) of the pipe circumference. Each row of slots shall conform to one of the following configurations. Slots shall be spaced uniformly along the pipe. The minimum opening will be measured on the inner surface of the pipe.

Number of Slots (± 3)		Width of Slot	Minimum Opening per meter		
	per meter	(millimeters)	(square millimters)		
	72	1.27	2110		
	75	0.51	975		
	151	0.25	975		

Perforated pipe shall have 3 rows of perforations with one row on each side of the pipe and the third row in the top. The perforations shall be 10 mm in diameter spaced at 75-mm centers with the top perforations staggered in relation with the holes on either side. Fittings for the PVC plastic pipe shall be Schedule 80 Type II PVC solvent weld type fittings conforming to the requirements in ASTM Designation: D 2467. Machined male and female ends may be used in lieu of couplings. Unslotted or unperforated PVC plastic pipe, between 1 m to 9 m in length, shall be provided at the outlet of the drain.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION **BID FORM**

WBS Element: Various Contract Number: MK00010
DESCRIPTION: Emergency Landslide Repair and Slope Stabilization Upon Request at Various Locations in Division 11

PAGE 1 OF 3

LINE	ITEM NUMBER	SECT	DESCRIPTION	QUAN	UNIT	UNIT BID	AMOUNT BID
1	0000810000-N	SP	ROCK SLOPE SCALING	2	DAY		
2	0000915000-N	SP	MOBILIZATION	8	EACH		
3	0000915000-N	SP	DESIGN PLAN SUBMITTAL	8	EACH		
4	4609000000-N	SP	WORK ZONE TRAFFIC CONTROL	15	DAY		
5	8834000000-N	SP	PERMANENTLY CASED SOIL NAILS UP TO 20'	50	EACH		
6	8834000000-N	SP	PERMANENTLY CASED SOIL NAILS UP TO 30'	40	EACH		
7	8834000000-N	SP	PERMANENTLY CASED SOIL NAILS UP TO 40'	30	EACH		
8	8834000000-N	SP	PERMANENTLY CASED SOIL NAILS UP TO 50'	10	EACH		
9	8834000000-N	SP	PERMANENTLY CASED SOIL NAILS UP TO 60'	5	EACH		
10	8834000000-N	SP	PERMANENTLY CASED SOIL NAILS UP TO 70'	5	EACH		
11	8834000000-N	SP	PERMANENTLY CASED SOIL NAILS UP TO 80'	2	EACH		
12	8834000000-N	SP	SELF-DRILLING SOIL NAILS UP TO 20'	50	EACH		
13	8834000000-N	SP	SELF-DRILLING SOIL NAILS UP TO 30'	40	EACH		
14	8834000000-N	SP	SELF-DRILLING SOIL NAILS UP TO 40'	30	EACH		
15	8834000000-N	SP	SELF-DRILLING SOIL NAILS UP TO 50'	10	EACH		
16	8834000000-N	SP	SELF-DRILLING SOIL NAILS UP TO 60'	10	EACH		
17	8834000000-N	SP	SELF-DRILLING SOIL NAILS UP TO 70'	5	EACH		
18	8834000000-N	SP	SELF-DRILLING SOIL NAILS UP TO 80'	2	EACH		
19	8834000000-N	SP	SELF-DRILLING MICROPILES UP TO 20'	25	EACH		
20	8834000000-N	SP	SELF-DRILLING MICROPILES UP TO 30'	25	EACH		
21	8834000000-N	SP	SELF-DRILLING MICROPILES UP TO 40'	10	EACH		
22	8834000000-N	SP	SELF-DRILLING MICROPILES UP TO 50'	10	EACH		
23	8834000000-N	SP	SELF-DRILLING MICROPILES UP TO 60'	5	EACH		

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WBS Element: <u>Various</u> Contract Number: <u>MK00010</u> DESCRIPTION: Emergency Landslide Repair and Slope Stabilization Upon Request at Various Locations in

Division 11

PAGE 2 OF 3

LINE	ITEM NUMBER	SECT	DESCRIPTION	QUAN	UNIT	UNIT BID	AMOUNT BID
24	883400000-N	SP	SELF-DRILLING MICROPILES UP TO 70'	2	EACH		
25	8834000000-N	SP	SELF-DRILLING MICROPILES UP TO 80'	2	EACH		
26	8834000000-N	SP	HORIZONTAL DRAINS UP TO 20'	25	EACH		
27	8834000000-N	SP	HORIZONTAL DRAINS UP TO 30'	20	EACH		
28	8834000000-N	SP	HORIZONTAL DRAINS UP TO 40'	10	EACH		
29	8834000000-N	SP	HORIZONTAL DRAINS UP TO 50'	5	EACH		
30	8834000000-N	SP	HORIZONTAL DRAINS UP TO 60'	5	EACH		
31	8834000000-N	SP	HORIZONTAL DRAINS UP TO 70'	2	EACH		
32	8834000000-N	SP	HORIZONTAL DRAINS UP TO 80'	2	EACH		
33	8834000000-N	SP	FURNISH CONCRETE MASONRY UNITS	8,000	EACH		
34	8839000000-E	SP	SHOTCRETE SHOULDER BUILD-UP	500	LFT		
35	8847000000-Е	SP	WIRE MESH SURFACE TREATMENT	1,500	SFT		
36	8847000000-Е	SP	4" REINFORCED SHOTCRETE	1,500	SFT		
37	8847000000-Е	SP	6" REINFORCED SHOTCRETE	5,000	SFT		
38	8847000000-Е	SP	8" REINFORCED SHOTCRETE	5,000	SFT		
39	8847000000-Е	SP	12" REINFORCED SHOTCRETE	2,500	SFT		
40	8847000000-N	SP	FURNISH GEOSYNTHETIC FABRIC	9,000	SFT		
41	8834000000-N	SP	INSTALL GEOSYNTHETICALLY REINFORCED SOIL RETAINING WALL	10,000	SFT		
42	8867000000-E	SP	HIGH REACH DRILLING	10	LF		
43	8881000000-E	SP	CEMENTITIOUS VOID FILL	10	CY		

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION BID FORM

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Page 3 of 3

TOTAL BID FOR PROJECT:		
CONTRACTOR:		_
ADDRESS:		_
PHONE NUMBER:		_
Federal Identification Number:	Contractor's License Number:	_
Authorized Agent Signature:	Date:	_
Title:		_
Witness Signature:	Date:	_
Title:		_
Corporate Seal		
THE SECTION TO BE COMPLETED DAYS	CORTH CAROLINA DEPARTMENT OF	
THIS SECTION TO BE COMPLETED BY N	ORTH CAROLINA DEPARTMENT OF	
<u>TRANSPORTATION</u>		
This hid has been nowinged in accordan	on with Antiala 102 1 of the Standard	
This bid has been reviewed in accordan	· · · · · · · · · · · · · · · · · · ·	
Specifications for Roads and Structures	S 2018.	
Reviewed by	Date	
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