

## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J. ERIC BOYETTE Secretary

June 3, 2022

CONTRACT:	DB00539
WBS ELEMENT:	17BP.2.R.90
COUNTY:	LENOIR
ROUTE:	SR 1515
DESCRIPTION:	REPLACEMENT OF BRIDGE 68 OVER GROUNDNUT
	CREEK ON SR 1515 IN LENOIR COUNTY

### ADDENDUM 1

## TO: PROSPECTIVE BIDDERS

Please note the following revisions to the proposal.

- Addition of Line Item 76 to add Item Number 003000000-N, Type II Modified Approach Fill, Station -L- 16+88.00. Please see attached revised Itemized Proposal, pages A1-A5.
- Addition of Bridge Approach Fills, SP4 R02A, pages A6-A8.
- A revised electronic file has been uploaded to bid express named DB00539.001.

Please make sure to sign the addendum page in the proposal to acknowledge this addendum.

Sincerely,

Mary Voelker Moore -714C11DCCFBC4C6

Mary Voelker Moore, PE Division Contract Engineer cc: Mr. Michael C. Aman, PE Mr. Justin Howard, PE Ms. Heather C. Lane, PE Mr. Aaron Bullard, PE Mr. Cadmus Capehart, PE Mr. Hon Yeung, PE Mr. Jeff Cabaniss, PE

# ITEMIZED PROPOSAL FOR CONTRACT NO. DB00539

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
	ROADWAY ITEMS					
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0001000000-E	200	CLEARING & GRUBBING ACRE(S)	Lump Sum	L.S.	
0004	0008000000-E	200	SUPPLEMENTARY CLEARING & GRUBBING	1 ACR		
0005	0022000000-E	225	UNCLASSIFIED EXCAVATION	15 CY		
0006	0036000000-E	225	UNDERCUT EXCAVATION	300 CY		
0007	0106000000-E	230	BORROW EXCAVATION	160 CY		
0008	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	250 SY		
0009	0195000000-E	265	SELECT GRANULAR MATERIAL	300 CY		
0010	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	300 SY		
0011	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	10 TON		
0012	0320000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	30 SY		
0013	0335200000-E	305	15" DRAINAGE PIPE	20 LF		
0014	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	48 LF		
0015	1011000000-N	500	FINE GRADING	Lump Sum	L.S.	
0016	1330000000-E	607	INCIDENTAL MILLING	170 SY		
0017	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	290 TON		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	151900000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	200 TON		
0019	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	30 TON		
0020	2022000000-E	815	SUBDRAIN EXCAVATION	44.8 CY		
0021	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	200 SY		
0022	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	33.6 CY		
0023	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	200 LF		
0024	2070000000-N	815	SUBDRAIN PIPE OUTLET	1 EA		
0025	2077000000-E	815	6" OUTLET PIPE	6 LF		
0026	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	4 EA		
0027	2366000000-N	840	FRAME WITH TWO GRATES, STD 840.24	2 EA		
0028	2367000000-N	840	FRAME WITH TWO GRATES, STD 840.29	2 EA		
0029	2556000000-E	846	SHOULDER BERM GUTTER	100 LF		
0030	303000000-E	862	STEEL BEAM GUARDRAIL	75 LF		
0031	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	4 EA		
0032	3215000000-N	SP	GUARDRAIL ANCHOR UNITS, TYPE III	4 EA		
0033	3287000000-N	SP	GUARDRAIL END UNITS, TYPE TL-3	4 EA		
0034	363500000-E	876	RIP RAP, CLASS II	220 TON		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	364900000-E	876	RIP RAP, CLASS B	2 TON		
0036	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	160 SY		
0037	600000000-E	1605	TEMPORARY SILT FENCE	855 LF		
0038	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	50 TON		
0039	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	5 TON		
0040	6012000000-E	1610	SEDIMENT CONTROL STONE	20 TON		
0041	6015000000-E	1615	TEMPORARY MULCHING	0.5 ACR		
0042	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	100 LB		
0043	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	0.5 TON		
0044	6024000000-E	1622	TEMPORARY SLOPE DRAINS	200 LF		
0045	6029000000-E	SP	SAFETY FENCE	800 LF		
0046	603000000-E	1630	SILT EXCAVATION	10 CY		
0047	603600000-E	1631	MATTING FOR EROSION CONTROL	1,000 SY		
0048	6037000000-E	SP	COIR FIBER MAT	100 SY		
0049	6042000000-E	1632	1/4" HARDWARE CLOTH	80 LF		
0050	6048000000-E	SP	FLOATING TURBIDITY CURTAIN	150 SY		
0051	6071012000-Е	SP	COIR FIBER WATTLE	140 LF		

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0052	608400000-E	1660	SEEDING & MULCHING	0.5 ACR		
0053	6087000000-E	1660	MOWING	0.5 ACR		
0054	609000000-E	1661	SEED FOR REPAIR SEEDING	50 LB		
0055	6093000000-Е	1661	FERTILIZER FOR REPAIR SEEDING	0.25 TON		
0056	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	50 LB		
0057	6108000000-E	1665	FERTILIZER TOPDRESSING	0.25 TON		
0058	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0059	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	2 EA		
0060	6123000000-E	1670	REFORESTATION	0.1 ACR		
0076	003000000-N	SP	TYPE II MODIFIED APPROACH FILL, STATION ****** (-L- 16+88.00)	Lump Sum	L.S.	

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0061	803500000-N	402	REMOVAL OF EXISTING STRUCTURE AT STATION ********** (-L- 16+88.00)	Lump Sum	L.S.
0062	8065000000-N	SP	ASBESTOS ASSESSMENT	Lump Sum	L.S.
0063	8112730000-N		PDA TESTING	1 EA	
0064	812100000-N	412	UNCLASSIFIED STRUCTURE EXCAVATION AT STATION ******* (16+88.00 -L-)	Lump Sum	L.S.
0065	8182000000-E	420	CLASS A CONCRETE (BRIDGE)	40.4 CY	

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Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0066	821000000-N	422	BRIDGE APPROACH SLABS, STATION ************************************	Lump Sum	L.S.	
0067	8217000000-E	425	REINFORCING STEEL (BRIDGE)	4,898 LB		
0068	8328200000-E	450	PILE DRIVING EQUIPMENT SETUP FOR *** STEEL PILES (HP 12X53)	10 EA		
0069	8364000000-E	450	HP 12 X 53 STEEL PILES	550 LF		
0070	839300000-N	450	PILE REDRIVES	6 EA		
0071	8505000000-E	460	VERTICAL CONCRETE BARRIER RAIL	140.25 LF		
0072	860800000-E	876	RIP RAP CLASS II (2'-0" THICK)	125 TON		
0073	8622000000-E	876	GEOTEXTILE FOR DRAINAGE	135 SY		
0074	8657000000-N	430	ELASTOMERIC BEARINGS	Lump Sum	L.S.	
0075	876300000-E	430	3'-0" X 2'-0" PRESTRESSED CONC CORED SLABS	700 LF		

1130/Jun03/Q13426.65/D324981642000/E76

Total Amount Of Bid For Entire Project :

## **BRIDGE APPROACH FILLS:**

(10-19-10) (Rev. 1-16-18)

## 422

SP4 R02A

## Description

Bridge approach fills consist of backfilling behind bridge end bents with select material or aggregate to support all or portions of bridge approach slabs. Install drains to drain water from bridge approach fills and geotextiles to separate approach fills from embankment fills, ABC and natural ground as required. For bridge approach fills behind end bents with mechanically stabilized earth (MSE) abutment walls, reinforce bridge approach fills in accordance with the contract, accepted submittals and 2018 Roadway Standard Drawing Nos. 422.01 or 422.02 or Roadway Detail Drawing No. 422D10.

Define bridge approach fill types as follows:

*Approach Fills* – Bridge approach fills in accordance with 2018 Roadway Standard Drawing Nos. 422.01 or 422.02 or Roadway Detail Drawing No. 422D10;

Standard Approach Fill – Type I Standard Bridge Approach Fill in accordance with 2018 Roadway Standard Drawing No. 422.01;

*Modified Approach Fill* – Type II Modified Bridge Approach Fill in accordance with 2018 Roadway Standard Drawing No. 422.02 and

*Reinforced Approach Fill* – Type III Reinforced Bridge Approach Fill in accordance with Roadway Detail Drawing No. 422D10.

### Materials

Refer to Division 10 of the 2018 Standard Specifications.

Item	Section
Geotextiles, Type 1	1056
Portland Cement Concrete	1000
Select Materials	1016
Subsurface Drainage Materials	1044

Provide Type 1 geotextile for separation geotextiles and Class B concrete for outlet pads. Use Class V or Class VI select material for standard and modified approach fills. For an approach fill behind a bridge end bent with an MSE abutment wall, backfill the reinforced approach fill with the same aggregate type approved for the reinforced zone in the accepted MSE wall submittal. For MSE wall aggregate, reinforcement and connector materials, see the *Mechanically Stabilized Earth Retaining Walls* provision. Provide PVC pipes, fittings and outlet pipes for subsurface drainage materials. For PVC drain pipes, use pipes with perforations that meet AASHTO M 278.

## **Construction Methods**

Excavate as necessary for approach fills in accordance with the contract. Notify the Engineer when foundation excavation is complete. Do not place separation geotextiles or aggregate until approach fill dimensions and foundation material are approved.

For reinforced approach fills, cast MSE wall reinforcement or connectors into end bent cap backwalls within 3" of locations shown in the accepted MSE wall submittals. Install MSE wall reinforcement with the orientation, dimensions and number of layers shown in the accepted MSE wall submittals. If a reinforced approach fill is designed with geogrid reinforcement embedded in an end bent cap, cut geogrids to the required lengths and after securing ends of geogrids in place, reroll and rewrap portions of geogrids not embedded in the cap to protect geogrids from damage. Before placing aggregate, pull geosynthetic reinforcement taut so that it is in tension and free of kinks, folds, wrinkles or creases.

Attach separation geotextiles to end bent cap backwalls and wing walls with adhesives, tapes or other approved methods. Overlap adjacent separation geotextiles at least 18" with seams oriented parallel to the roadway centerline. Hold geotextiles in place with wire staples or anchor pins as needed. Contact the Engineer when existing or future obstructions such as foundations, pavements, pipes, inlets or utilities will interfere with separation geotextiles or MSE wall reinforcement.

Install continuous perforated PVC drain pipes with perforations pointing down in accordance with 2018 Roadway Standard Drawing Nos. 422.01 or 422.02. Connect drain pipes to outlet pipes just beyond wing walls. Connect PVC pipes, fittings and outlet pipes with solvent cement in accordance with Article 815-3 of the *2018 Standard Specifications* and place outlet pads in accordance with 2018 Roadway Standard Drawing No. 815.03.

Install drain pipes so water drains towards outlets. If the groundwater elevation is above drain pipe elevations, raise drains up to maintain positive drainage towards outlets. Place pipe sleeves in or under wing walls so water drains towards outlets. Use sleeves that can withstand wing wall loads.

Place select material or aggregate in 8" to 10" thick lifts. Compact fine aggregate for reinforced approach fills in accordance with Subarticle 235-3(C) of the *2018 Standard Specifications* except compact fine aggregate to a density of at least 98%. Compact select material for standard or modified approach fills and coarse aggregate for reinforced approach fills with a vibratory compactor to the satisfaction of the Engineer. Do not displace or damage geosynthetics, MSE wall reinforcement or drains when placing and compacting select material or aggregate. End dumping directly on geosynthetics is not permitted. Do not operate heavy equipment on geosynthetics or drain pipes until they are covered with at least 8" of select material or aggregate. Replace any damaged geosynthetics or drains to the satisfaction of the Engineer. When approach fills extend beyond bridge approach slabs, wrap separation geotextiles over select material or aggregate as shown in 2018 Roadway Standard Drawing No. 422.01 or 2018 Roadway Detail Drawing No. 422D10.

### **Measurement and Payment**

*Type I Standard Approach Fill, Station* \_\_\_\_\_, *Type II Modified Approach Fill, Station* \_\_\_\_\_ and *Type III Reinforced Approach Fill, Station* \_\_\_\_\_ will be paid at the contract lump sum price. The lump sum price for each approach fill will be full compensation for providing labor, tools, equipment and approach fill materials, excavating, backfilling, hauling and removing excavated materials, installing geotextiles and drains, compacting backfill and supplying select material, aggregate, separation geotextiles, drain pipes, pipe sleeves, outlet pipes and pads and any incidentals necessary to construct approach fills behind bridge end bents.

The contract lump sum price for *Type III Reinforced Approach Fill, Station* \_\_\_\_\_ will also be full compensation for supplying and connecting MSE wall reinforcement to end bent caps but not designing MSE wall reinforcement and connectors. The cost of designing reinforcement and connectors for reinforced approach fills behind bridge end bents with MSE abutment walls will be incidental to the contract unit price for *MSE Retaining Wall No.* \_\_\_\_\_\_.

Payment will be made under:

### Pay Item

Type I Standard Approach Fill, Station \_\_\_\_\_ Type II Modified Approach Fill, Station \_\_\_\_\_ Type III Reinforced Approach Fill, Station \_\_\_\_\_ Pay Unit Lump Sum Lump Sum Lump Sum