STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JOSH STEIN
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

August 06, 2025

Addendum No. 1
RE: Contract # C204991
WBS # BP10.R013.3
STATE FUNDED
Mecklenburg County (BP10.R013)
BRIDGE #590165 COFFEY CREEK ON SR 5469 (SHOPTON RD.)

August 19, 2025 Letting

To Whom It May Concern:

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

The following revisions have been made to the Roadway Plans:

Sheet No.	Revision
3B-1	"Summary of Breaking Existing Asphalt Pavement" table updated to correct overlapping station.

Please void the above listed Sheet in your plans and staple the revised Sheet thereto.

The following revisions have been made to the Structure Plans:

Sheet No.	Revision
S-04 & S-05	Bill of Material & Summary updated to reflect quantity changes below.

Please void the above listed Sheets in your plans and staple the revised Sheets thereto.

The following revisions have been made to the proposal:

Page No.	Revision
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 08-06-2025".

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND DEVELOPMENT
1591 MAIL SERVICE CENTER
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900
Fax: (919) 250-4127
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
1020 BIRCH RIDGE DR.
RALEIGH, NC 27610

Please void the above listed Page in your proposal and staple the revised Page thereto.

On the item sheets the following pay item revisions have been made:

Item	Description	Old Quantity	New Quantity
0134 - 8105540000-E 411	3'-6" DIA DRILLED PIERS IN SOIL	122 LF	57 LF
0136 - 8111400000-E 411	PERMANENT STEEL CASING FOR 3'-6" DIA DRILLED PIER	120 LF	55 LF

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

The electronic bidding file has been updated to reflect these revisions. Please download the Addendum File and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

The contract will be prepared accordingly.

Sincerely,

Signed by:
Ronald E. Davenport, Jr.
5AE54B6DC24B4A9...

Ronald E. Davenport, Jr., PE
State Contract Officer

RED/jcm
Attachments

cc: Mr. Wiley W. Jones III, PE
Mr. Felix A. Obregon, PE
Mr. Ken Kennedy, PE
Mr. Malcolm Bell
Mr. Forrest Dungan, PE
Ms. Jaci Kincaid
Mr. Jon Weathersbee, PE
Project File (2)

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

PROPOSAL

INCLUDES ADDENDUM No. 1 DATED 08-06-2025

DATE AND TIME OF BID OPENING: Aug 19, 2025 AT 02:00 PM

CONTRACT ID	C204991
WBS	BP10.R013.3

FEDERAL-AID NO.	STATE FUNDED
COUNTY	MECKLENBURG
T.I.P NO.	BP10-R013
MILES	0.315
ROUTE NO.	SR-5469
LOCATION	BRIDGE #590165 OVER COFFEY CREEK ON SR-5469 (SHOPTON RD).

TYPE OF WORK GRADING, DRAINAGE, PAVING, AND STRUCTURE.

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 & STRUCTURE PROPOSAL

5% BID BOND OR BID DEPOSIT REQUIRED

County: MECKLENBURG

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	0043000000-N	226	GRADING	Lump Sum	L.S.	
0004	0050000000-E	226	SUPPLEMENTARY CLEARING & GRUBBING	1 ACR		
0005	0057000000-E	226	UNDERCUT EXCAVATION	1,600 CY		
0006	0134000000-E	240	DRAINAGE DITCH EXCAVATION	60 CY		
0007	0195000000-E	265	SELECT GRANULAR MATERIAL	3,500 CY		
0008	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZATION	13,500 SY		
0009	0248000000-N	SP	GENERIC GRADING ITEM TYPE 1 BRIDGE APPROACH FILL, STATION 21+59.00 -L-	Lump Sum	L.S.	
0010	0318000000-E	300	FOUNDATION CONDITIONING MATERIAL, MINOR STRUCTURES	170 TON		
0011	0321000000-E	300	FOUNDATION CONDITIONING GEOTEXTILE	510 SY		
0012	0335300000-E	305	18" DRAINAGE PIPE	112 LF		
0013	0335400000-E	305	24" DRAINAGE PIPE	60 LF		
0014	0335850000-E	305	**" DRAINAGE PIPE ELBOWS (18")	2 EA		
0015	0335850000-E	305	**" DRAINAGE PIPE ELBOWS (24")	2 EA		
0016	0448200000-E	310	15" RC PIPE CULVERTS, CLASS IV	444 LF		
0017	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	824 LF		

County: MECKLENBURG

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0018	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	84 LF		
0019	0995000000-E	340	PIPE REMOVAL	472 LF		
0020	1099500000-E	505	SHALLOW UNDERCUT	100 CY		
0021	1099700000-E	505	CLASS IV SUBGRADE STABILIZATION	6,512 TON		
0022	1112000000-E	505	GEOTEXTILE FOR SUBGRADE STABILIZATION	300 SY		
0023	1330000000-E	607	INCIDENTAL MILLING	1,270 SY		
0024	1491000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0C	1,140 TON		
0025	1503000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE I19.0C	1,070 TON		
0026	1523000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5C	1,150 TON		
0027	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	175 TON		
0028	2022000000-E	815	SUBDRAIN EXCAVATION	84 CY		
0029	2026000000-E	815	GEOTEXTILE FOR SUBSURFACE DRAINS	250 SY		
0030	2036000000-E	815	SUBDRAIN COARSE AGGREGATE	42 CY		
0031	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	250 LF		
0032	2070000000-N	815	SUBDRAIN PIPE OUTLET	1 EA		
0033	2077000000-E	815	6" OUTLET PIPE	6 LF		
0034	2253000000-E	840	PIPE COLLARS	1.292 CY		

County: MECKLENBURG

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0035	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	19 EA		
0036	2308000000-E	840	MASONRY DRAINAGE STRUCTURES	8.4 LF		
0037	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	2 EA		
0038	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	9 EA		
0039	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	8 EA		
0040	2396000000-N	840	FRAME WITH COVER, STD 840.54	1 EA		
0041	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	2,650 LF		
0042	2591000000-E	848	4" CONCRETE SIDEWALK	1,450 SY		
0043	2605000000-N	848	CONCRETE CURB RAMPS	2 EA		
0044	2830000000-N	858	ADJUSTMENT OF MANHOLES	1 EA		
0045	2905000000-N	859	CONVERT EXISTING DROP INLET TO JUNCTION BOX	1 EA		
0046	3030000000-E	862	STEEL BEAM GUARDRAIL	50 LF		
0047	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	5 EA		
0048	3215000000-N	862	GUARDRAIL ANCHOR UNITS, TYPE III	4 EA		
0049	3287000000-N	862	GUARDRAIL END UNITS, TYPE TL-3	4 EA		
0050	3503000000-E	866	WOVEN WIRE FENCE, 47" FABRIC	70 LF		
0051	3509000000-E	866	4" TIMBER FENCE POSTS, 7'-6" LONG	3 EA		

County: MECKLENBURG

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0052	3515000000-E	866	5" TIMBER FENCE POSTS, 8'-0" LONG	4 EA		
0053	3536000000-E	866	CHAIN LINK FENCE, 48" FABRIC	153 LF		
0054	3542000000-E	866	METAL LINE POSTS FOR 48" CHAIN LINK FENCE	13 EA		
0055	3548000000-E	866	METAL TERMINAL POSTS FOR 48" CHAIN LINK FENCE	2 EA		
0056	3628000000-E	876	RIP RAP, CLASS I	405 TON		
0057	3635000000-E	876	RIP RAP, CLASS II	300 TON		
0058	3649000000-E	876	RIP RAP, CLASS B	10 TON		
0059	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	1,425 SY		
0060	3659000000-N	873	PREFORMED SCOUR HOLES WITH LEVEL SPREADER APRON	1 EA		
0061	4025000000-E	901	CONTRACTOR FURNISHED, TYPE *** SIGN (E)	7.5 SF		
0062	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	140 LF		
0063	4116100000-N	904	SIGN ERECTION, RELOCATE TYPE **** (GROUND MOUNTED) (E)	13 EA		
0064	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	618 SF		
0065	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	95 SF		
0066	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	3 EA		
0067	4445000000-E	1145	BARRICADES (TYPE III)	64 LF		
0068	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	11,575 LF		

County: **MECKLENBURG**

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0069	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	235 LF		
0070	4709000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 90 MILS)	340 LF		
0071	4720000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (90 MILS)	6 EA		
0072	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	10 EA		
0073	4726110000-E	1205	HEATED-IN-PLACE THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	6 EA		
0074	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (I)	1,390 LF		
0075	5326200000-E	1510	12" WATER LINE	1,306.3 LF		
0076	5329000000-E	1510	DUCTILE IRON WATER PIPE FITTINGS	4,670 LB		
0077	5546000000-E	1515	8" VALVE	2 EA		
0078	5558000000-E	1515	12" VALVE	2 EA		
0079	5666000000-N	1515	FIRE HYDRANT	2 EA		
0080	5673000000-E	1515	FIRE HYDRANT LEG	20 LF		
0081	5679000000-E	1515	12" LINE STOP	2 EA		
0082	5691000000-E	1520	**" SANITARY GRAVITY SEWER (36")	154.6 LF		
0083	5691300000-E	1520	8" SANITARY GRAVITY SEWER	30 LF		
0084	5775000000-E	1525	4' DIA UTILITY MANHOLE	1 EA		
0085	5776000000-E	1525	5' DIA UTILITY MANHOLE	1 EA		

County: MECKLENBURG

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0086	5777000000-E	1525	6' DIA UTILITY MANHOLE	3 EA		
0087	5781000000-E	1525	UTILITY MANHOLE WALL 4' DIA	4.6 LF		
0088	5782000000-E	1525	UTILITY MANHOLE WALL 5' DIA	6.6 LF		
0089	5783000000-E	1525	UTILITY MANHOLE WALL 6' DIA	19.7 LF		
0090	5798000000-E	1530	ABANDON **" UTILITY PIPE (36")	131.9 LF		
0091	5801000000-E	1530	ABANDON 8" UTILITY PIPE	51 LF		
0092	5804000000-E	1530	ABANDON 12" UTILITY PIPE	1,259.6 LF		
0093	5815500000-N	1530	REMOVE FIRE HYDRANT	1 EA		
0094	5828000000-N	1530	REMOVE UTILITY MANHOLE	2 EA		
0095	5888000000-E	SP	GENERIC UTILITY ITEM 72" TUNNEL LINER PLATES	100 LF		
0096	5888000000-E	SP	GENERIC UTILITY ITEM SEWER LINING CURED-IN-PLACE PIPE	204.6 LF		
0097	5912000000-N	SP	GENERIC UTILITY ITEM TEMPORARY SANITARY SEWER BYPASS PUMPING	Lump Sum	L.S.	
0098	6000000000-E	1605	TEMPORARY SILT FENCE	5,040 LF		
0099	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	150 TON		
0100	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	910 TON		
0101	6012000000-E	1610	SEDIMENT CONTROL STONE	455 TON		
0102	6015000000-E	1615	TEMPORARY MULCHING	11.3 ACR		

County: **MECKLENBURG**

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0103	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	700 LB		
0104	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEEDING	4.5 TON		
0105	6024000000-E	1622	TEMPORARY SLOPE DRAINS	325 LF		
0106	6029000000-E	SP	SAFETY FENCE	400 LF		
0107	6030000000-E	1630	SILT EXCAVATION	1,750 CY		
0108	6036000000-E	1631	MATTING FOR EROSION CONTROL	11,467 SY		
0109	6037000000-E	1629	COIR FIBER MAT	550 SY		
0110	6042000000-E	1632	1/4" HARDWARE CLOTH	780 LF		
0111	6043000000-E	1644	LOW PERMEABILITY GEOTEXTILE	100 SY		
0112	6070000000-N	1639	SPECIAL STILLING BASINS	2 EA		
0113	6071002000-E	1642	FLOCCULANT	220 LB		
0114	6071012000-E	1642	COIR FIBER WATTLE	120 LF		
0115	6071013000-E	1642	WATTLE BARRIER	1,650 LF		
0116	6071014000-E	1642	COIR FIBER WATTLE BARRIER	110 LF		
0117	6071030000-E	1640	COIR FIBER BAFFLE	60 LF		
0118	6071050000-E	1644	**" SKIMMER (1-1/2")	3 EA		
0119	6084000000-E	1660	SEEDING & MULCHING	11.3 ACR		

County: MECKLENBURG

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0120	6087000000-E	1660	MOWING	5.65 ACR		
0121	6090000000-E	1661	SEED FOR REPAIR SEEDING	100 LB		
0122	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	0.25 TON		
0123	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	275 LB		
0124	6108000000-E	1665	FERTILIZER TOPDRESSING	8 TON		
0125	6111000000-E	SP	IMPERVIOUS DIKE	353.3 LF		
0126	6114500000-N	1667	SPECIALIZED HAND MOWING	10 MHR		
0127	6117000000-N	1675	RESPONSE FOR EROSION CONTROL	13 EA		
0128	6117500000-N	SP	CONCRETE WASHOUT STRUCTURE	1 EA		
0129	6132000000-N	SP	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION CLEANOUT	12 EA		
0130	6132000000-N	SP	GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION, TYPE 1	4 EA		
0131	6132000000-N	SP	GENERIC EROSION CONTROL ITEM PREFABRICATED CONCRETE WASHOUT	6 EA		
			STRUCTURE ITEMS			
0132	8035000000-N	402	REMOVAL OF EXISTING STRUCTURE AT STATION ********** (21+59.00 -L-)	Lump Sum	L.S.	
0133	8065000000-N	SP	ASBESTOS ASSESSMENT	Lump Sum	L.S.	
0134	8105540000-E	411	3'-6" DIA DRILLED PIERS IN SOIL	57 LF		
0135	8105640000-E	411	3'-6" DIA DRILLED PIERS NOT IN SOIL	48 LF		

County: MECKLENBURG

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0136	8111400000-E	411	PERMANENT STEEL CASING FOR 3'-6" DIA DRILLED PIER	55 LF		
0137	8115000000-N	411	CSL TESTING	1 EA		
0138	8121000000-N	412	UNCLASSIFIED STRUCTURE EXCAVATION AT STATION ******** (21+59.00 -L-)	Lump Sum	L.S.	
0139	8147000000-E	420	REINFORCED CONCRETE DECK SLAB	9,411 SF		
0140	8161000000-E	420	GROOVING BRIDGE FLOORS	8,067 SF		
0141	8182000000-E	420	CLASS A CONCRETE (BRIDGE)	144 CY		
0142	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ********** (21+59.00 -L-)	Lump Sum	L.S.	
0143	8217000000-E	425	REINFORCING STEEL (BRIDGE)	35,282 LB		
0144	8238000000-E	425	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)	3,643 LB		
0145	8262000000-E	430	45" PRESTRESSED CONCRETE GIRDERS	1,327.5 LF		
0146	8328200000-E	450	PILE DRIVING EQUIPMENT SETUP FOR *** STEEL PILES (HP 12 X 53)	20 EA		
0147	8364000000-E	450	HP 12 X 53 STEEL PILES	525 LF		
0148	8482000000-E	460	THREE BAR METAL RAIL	251.7 LF		
0149	8608000000-E	876	RIP RAP CLASS II (2'-0" THICK)	1,134 TON		
0150	8622000000-E	876	GEOTEXTILE FOR DRAINAGE	1,260 SY		
0151	8657000000-N	430	ELASTOMERIC BEARINGS	Lump Sum	L.S.	

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

PROJECT REFERENCE NO.	SHEET NO.
BP10-R013	3B-1

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SUMMARY OF 48" CHAIN LINK WIRE FENCE

STATION TO STATION	LT. or RT.	FABRIC LF	LINE POSTS EA	TERMINAL POSTS EA
–L– 23+05.08 to 24+50.00	RT	152.70	12.39	2
NOTE LT. OR RT. INDICATES LEFT OR RIGHT OF THE MAIN LINE	TOTAL:	152.70	12.39	2
	SAY:	153	13	2

SUMMARY OF 47" WOVEN WIRE FENCE

STATION TO STATION	LT. or RT.	FABRIC LF	4" POSTS EA	5" POSTS EA
–L– 19+69.21 to 20+28.05	RT	64.13	2	4
NOTE LT. OR RT. INDICATES LEFT OR RIGHT OF THE MAIN LINE	TOTAL:	64.13	2	4
	SAY:	70	3	4

EARTHWORK SUMMARY (IN CUBIC YARDS)

CHAIN	FROM STATION	TO STATION	SIDE	UNCL. EXCAVATION	UNDERCUT	EMBT+%	BORROW	WASTE
–L–	13+81.76	20+91.75	LT & RT	364		11,462	11,098	
–L–	22+26.75	22+80.00	LT & RT	1		2,628	2,627	
–L–	23+30.00	30+43.05	LT & RT	1,025		7,069	6,044	
TOTAL				1,390		21,159	19,769	
LOSS DUE TO CLEARING & GRUBBING				1,250			–1,250	
ADDITIONAL UNDERCUT								
PROJECT TOTAL				2,640		22,999	18,519	
ESTIMATE 5% FOR TOPSOIL ON BORROW PITS							926	
GRAND TOTAL				2,640		22,999	19,444	
SAY				2,650			19,500	

EST DDE 60 CY

EST SHALLOW UNDERCUT CONTINGENCY 100 CY

NOTE: Approximate quantities only. Unclassified Excavation, Borrow Excavation, Fine Grading, Clearing and Grubbing, and Breaking of Existing Pavement will be paid for at the contract lump sum price for "Grading."

SUMMARY OF BREAKING EXISTING ASPHALT PAVEMENT

SURVEY LINE	STATION	STATION	LOCATION LT/RT/CL	YD^2
–L–	19+60.00	20+77.58	CL	402.47
–L–	22+40.92	23+94.00	CL	439.36
			TOTAL:	841.83
			SAY:	850

* W MEASURED FROM "N" AT THE BEGINNING OF THE ANCHOR TO "N" AT THE END OF THE ANCHOR.
"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

GUARDRAIL SUMMARY

SURVEY LINE	BEG. STA.	END STA.	LOCATION	LENGTH			WARRANT POINT		"N" DIST. FROM E.O.L.	TOTAL SHOUL. WIDTH	FLARE LENGTH		W*		ANCHORS									IMPACT ATTENUATOR TYPE 350		SINGLE FACED GUARDRAIL	REMOVE EXISTING GUARDRAIL	REMOVE AND STOCKPILE EXISTING GUARDRAIL	REMARKS
				STRAIGHT	SHOP CURVED	DOUBLE FACED	APPROACH END	TRAILING END			APPROACH END	TRAILING END	APPROACH END	TRAILING END	XI MOD	B–77	GREU TL–3	M–350	TYPE III	CAT–1	VI MOD	BIC	AT–1	EA	G NG				
–L–	20+07.33	20+91.75	LT	81.25′				20+91.75	17.5′ – 18.5′	17.5′ – 21.5′		50′		1′			1		1									
–L–	20+13.41	20+91.75	RT	81.25′			20+91.75		17.5′ – 18.5′	17.5′ – 21.5′	50′		1′				1		1									
–L–	22+26.75	23+11.27	LT	81.25′			22+26.75		17.5′ – 18.5′	17.5′ – 21.5′	50′		1′				1		1									
–L–	22+26.75	23+05.10	RT	81.25′				22+26.75	17.5′ – 18.5′	17.5′ – 21.5′		50′		1′			1		1									
			TOTAL:	325′													4 EA		4 EA									
			TOTAL ANCHOR LENGTH:	275′																								
			TOTAL GUARDRAIL LENGTH:	50′																								
			SAY:	50 LF			ADDITIONAL GUARDRAIL POSTS = 5 EACH																						

8/5/2025
R:\Roadway\Proj\SHT\R138_rdy_psh03B-1.dgn
owensc

SUMMARY OF PILE INFORMATION/INSTALLATION

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pile(s) #-# (e.g., "Bent 1, Piles 1-5")	Factored Resistance per Pile TONS	Pile Cut-Off (Top of Pile) Elevation FT	Estimated Pile Length per Pile FT	Scour Critical Elevation FT	Driven Piles			Predrilling for Piles*			Drilled-In Piles		
					Min Pile Tip (Tip No Higher Than) Elev FT	Required Driving Resistance (RDR)** per Pile TONS	Total Pile Redrives Quantity EACH	Predrilling Length per Pile Lin FT	Predrilling Elevation (Elev Not To Predrill Below) FT	Maximum Predrilling Dia INCHES	Pile Excavation (Bottom of Hole) Elev FT	Pile Exc Not In Soil per Pile Lin FT	Pile Exc In Soil per Pile Lin FT
End Bent 1, Piles 1-5	90	See Structure Plans	20		582.8	150							
End Bent 1, Piles 6-10	90		25		582.6	150							
End Bent 2, Piles 1-5	117		30		576.2	195							
End Bent 2, Piles 6-10	117		30		577.6	195							

*Predrilling for Piles is required for end bents/bents with a predrilling length and at the Contractor's option for end bents/bents with predrilling information but no predrilling length.

$$^{**}RDR = \frac{Factored\ Resistance + Factored\ Downdrag\ Load + Factored\ Dead\ Load}{Dynamic\ Resistance\ Factor} + Nominal\ Downdrag\ Resistance + \frac{Nominal\ Scour\ Resistance}{Scour\ Resistance\ Factor}$$

PILE DESIGN INFORMATION

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pile(s) #-# (e.g., "Bent 1, Piles 1-5")	Factored Axial Load per Pile TONS	Factored Downdrag Load per Pile TONS	Factored Dead Load* per Pile TONS	Dynamic Resistance Factor	Nominal Downdrag Resistance per Pile TONS	Nominal Scour Resistance per Pile TONS	Scour Resistance Factor (Default = 1.00)
End Bent 1, Piles 1-10	90						1.00
End Bent 2, Piles 1-10	115						1.00
							1.00

*Factored Dead Load is factored weight of pile above the ground line.

SUMMARY OF DRILLED PIER INFORMATION/INSTALLATION

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pier(s) #-# (e.g., "Bent 1, Piers 1-3")	Factored Resistance per Pier TONS	Minimum Pier Tip (Tip No Higher Than) Elevation FT	Required Tip Resistance per Pier TSF	Scour Critical Elevation FT	Minimum Drilled Pier Penetration Into Rock per Pier Lin FT	Drilled Pier Length per Pier Lin FT	Drilled Pier Length Not In Soil per Pier Lin FT	Drilled Pier Length In Soil per Pier Lin FT	Permanent Steel Casing Required? YES or MAYBE	Permanent Steel Casing Tip Elevation (Elev Not To Extend Casing Below) FT	Permanent Steel Casing Length* per Pier Lin FT
Bent 1, Piers 1-2	395	571.0	20	580	10.0	18.0	10.5	7.5	YES	581.0	8.0
Bent 1, Piers 3-5	395	566.0	20	575	10.0	23.0	9.0	14.0	YES	576.0	13.0
						1		1			1

*Permanent Steel Casing Length equals the difference between the ground line or top of drilled pier elevation, whichever is higher, and the permanent casing tip elevation.

FOUNDATION NOTES

1. For piles, see Piles Provision and Section 450 of the Standard Specifications.
2. For drilled piers, see Section 411 of the Standard Specifications.
3. Install permanent steel casings at Bent No. 1 by vibrating, screwing or driving permanent casings before excavating or disturbing any material below elevation 586 ft.

NOTES:

1. The Pile and Dilled Pier Foundation Tables are based on the bridge substructure design and foundation recommendations sealed by a North Carolina Professional Engineer (Shiping Yang, PE #031661) on 11/01/2021.
2. Total Pile Driving Equipment Setup quantity (not shown in Pile Foundation Tables) equals the number of driven piles, i.e., the number of piles with a Required Driving Resistance.
3. The Engineer will determine the need for PDA Testing and Pipe Pile Plates when PDAs or plates may be required.
4. The Engineer will determine the need for Permanent Steel Casing, SPTs, CSL Testing, SID Inspections and PITs when these items may be required.

SUMMARY OF PDA/PILE ORDER LENGTHS

(Blank entries indicate item is not applicable to structure)

Pile Driving Analyzer (PDA)				Pile Order Lengths	
End Bent/ Bent No	PDA Testing Required? YES or MAYBE	PDA Test Pile Length FT	Total PDA Testing Quantity EACH	End Bent/ Bent No(s)	Pile Order Length Basis* EST or PDA
End Bent 1, Piles 1-10	MAYBE				
End Bent 2, Piles 1-10	MAYBE				

*EST = Pile order lengths from estimated pile lengths; PDA = Pile order lengths based on PDA testing. For groups of end bents/bents with pile order lengths based on PDA testing, the first end bent/bent no. listed for each group is the representative end bent/bent with the PDA.

SUMMARY OF PILE ACCESSORIES

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pile(s) #-# (e.g., "Bent 1, Piles 1-5")	Pipe Pile Plates Required? YES or MAYBE	Steel Pile Points			Steel Pile Tips Required? YES
		Pipe Pile Cutting Shoes Required? YES	Pipe Pile Conical Points Required? YES	H-Pile Points Required? YES	
TOTAL QTY:					

SUMMARY OF DRILLED PIER TESTING

(Blank entries indicate item is not applicable to structure)

End Bent/ Bent No, Pier(s) #-# (e.g., "Bent 1, Piers 1-3")	Standard Penetration Test (SPT) Required? YES or MAYBE	Crosshole Sonic Logging (CSL) Required?* YES or MAYBE	Total CSL Tube Length (For All Tubes) per Pier Lin FT	Shaft Inspection Device (SID) Required? YES or MAYBE	Pile Integrity Test (PIT) Required? MAYBE
Bent 1, Piers 1-2		MAYBE	130		
Bent 1, Piers 3-5		MAYBE	150		
TOTAL QTY:		1			

*CSL Tubes are required if CSL Testing is or may be required. The number of CSL Tubes per drilled pier is equal to one tube per foot of design pier diameter with at least 4 tubes per pier. The length of each CSL Tube is equal to the drilled pier length plus 1.5 ft.

1 REVISED DRILLED PIER QUANTITIES

PROJECT NO. BP10-R013

MECKLENBURG COUNTY

STATION: 21+59.00 -L-

SHEET 3 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

PILE AND DRILLED PIER FOUNDATION TABLES AND NOTES

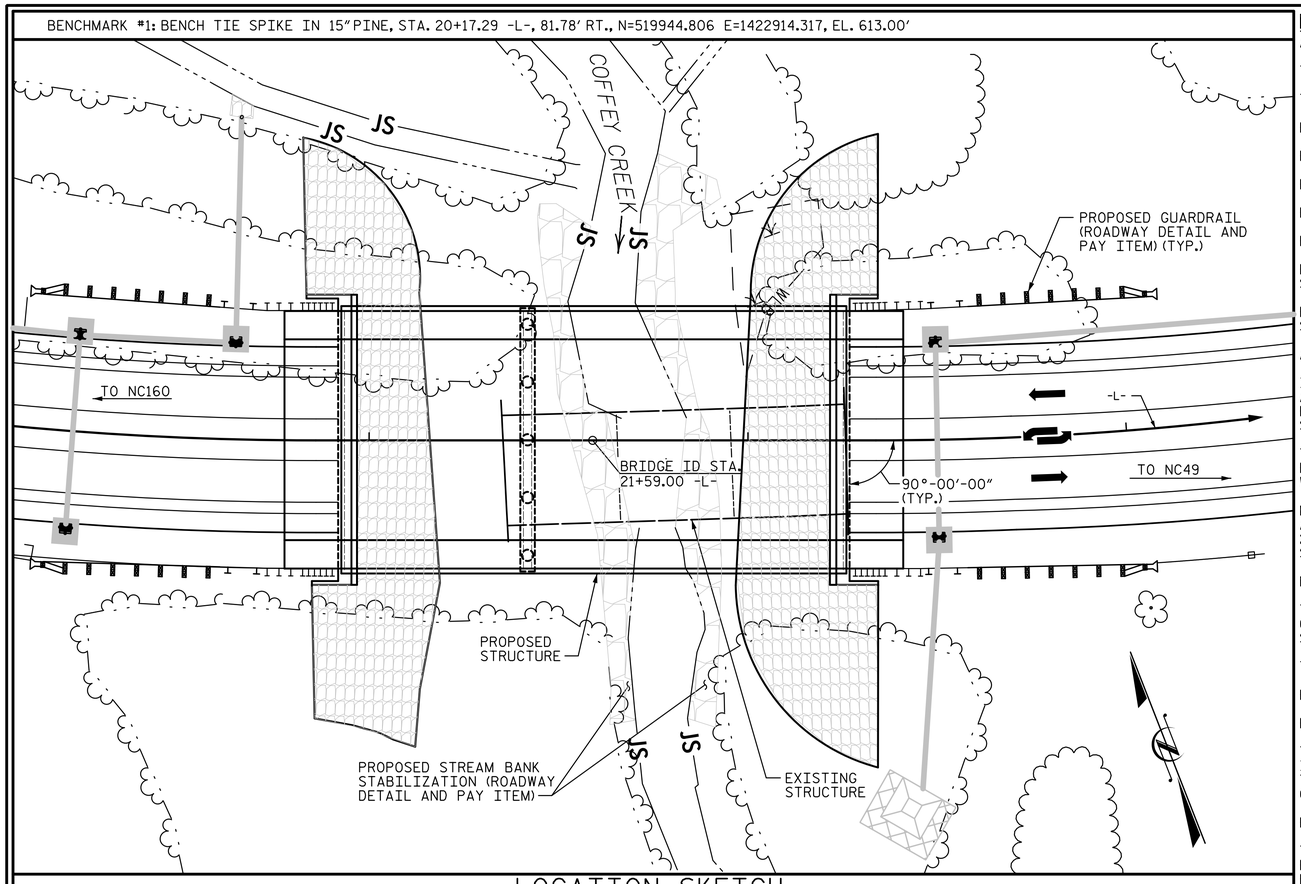
NORTH CAROLINA PROFESSIONAL SEAL 19765 ENGINEER PAUL E. KELLY, JR. 8/4/2025

STV Engineers, Inc.
2151 Hawkins St., Suite 1400
Charlotte, NC 28203
NC License Number F-0991

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-04
1	PEK	8/2025	3			TOTAL SHEETS
2			4			37

DRAWN BY : MBC DATE : 11-21
CHECKED BY : TRL DATE : 11-21
DESIGN ENGINEER OF RECORD : P. KELLY DATE : 4-25



LOCATION SKETCH

FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.

NOTES:

ASSUMED LIVE LOAD = HL 93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE STANDARD NOTES SHEET.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

PRESTRESSED CONCRETE DECK PANELS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.

REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH SECTION 420-3 OF THE STANDARD SPECIFICATIONS.

ALL PAVEMENT MARKING WILL BE IN ACCORDANCE WITH THE PAVEMENT MARKING PLANS AND SHALL PROVIDE FOR BICYCLES.

INASMUCH AS THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR "REMOVAL OF EXISTING STRUCTURE AT STATION 21+59.00 -L-.

THE CLASS AA CONCRETE IN THE BRIDGE DECK SHALL CONTAIN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG AT THE SUBSTITUTION RATE SPECIFIED IN ARTICLE 1024-1 AND IN ACCORDANCE WITH ARTCILES 1024-5 AND 1024-6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE COST OF THE REINFORCED CONCRETE DECK SLAB.

MATERIAL SHOWN IN THE CROSS HATCHED AREA SHALL BE EXCAVATE FOR A DISTANCE OF 43 FT ON THE LEFT SIDE OF THE CENTERLINE ROADWAY AND 84 FT ON THE RIGHT SIDE OF CENTERLINE ROADWAY AT END BENT 1 AND 36 FT ON EACH SIDE OF THE CENTERLINE ROADWAY AT END BENT 2 OR AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.

THE REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED IN A MANNER THAT PREVENTS DEBRIS FROM FALLING INTO THE WATER. THE CONTRACTOR SHALL SUBMIT DEMOLITION PLANS FOR REVIEW AND REMOVE THE BRIDGE IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH "HEC 18-EVALUATING SCOUR AT BRIDGES."

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

FOR FOUNDATION NOTES, SEE "FOUNDATION LAYOUT" SHEET.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

FOR ASBESTOS ASSESSMENT, SEE SPECIAL PROVISIONS.

THE EXISTING STRUCTURE CONSISTING OF (1) 30'-3", (1) 30'-0" AND (1) 30'-3" SPANS WITH STEEL PLANK DECK ON STEEL I-BEAMS WITH A CLEAR ROADWAY WIDTH OF 28'-0" SUPPORTED BY TIMBER ABUTMENTS AND LOCATED AT THE PROPOSED STRUCTURE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE AT STA. 21+59.00 -L-	ASBESTOS ASSESSMENT	3'-6" DIA. DRILLED PIERS IN SOIL	3'-6" DIA. DRILLED PIERS NOT IN SOIL	PERMANENT STEEL CASING FOR 3'-6" DIA. DRILLED PIER	CSL TESTING	UNCLASSIFIED STRUCTURE EXCAVATION AT STA. 21+59.00 -L-	REINFORCED CONCRETE DECK SLAB	GROOVING BRIDGE FLOORS	CLASS A CONCRETE	BRIDGE APPROACH SLABS STATION 21+59.00	REINFORCING STEEL	SPIRAL COLUMN REINFORCING STEEL	45" PRESTRESSED CONCRETE GIRDER		PILE DRIVING EQUIP. SETUP FOR HP 12x53 STEEL PILES
	LUMP SUM	LUMP SUM	LIN. FT.	LIN. FT.	LIN. FT.	EA.	LUMP SUM	SQ. FT.	SQ. FT.	CU. YD.	LUMP SUM	LBS.	LBS.	NO.	LIN. FT.	EA.
SUPERSTRUCTURE								9,411	8,067		LUMP SUM			20	1,327.5	
END BENT 1										44.1		6,483				10
BENT 1			57.0	48.0	55.0					55.8		22,316	3,643			
END BENT 2										44.1		6,483				10
TOTAL	LUMP SUM	LUMP SUM	57.0	48.0	55.0	1	LUMP SUM	9,411	8,067	144.0	LUMP SUM	35,282	3,643	20	1,327.5	20

⚠ ⚠ ⚠

HYDRAULIC DATA

DESIGN DISCHARGE: ---------- 2,632 CFS
FREQUENCY OF DESIGN FLOOD: ------- 25 YRS.
DESIGN HIGH WATER ELEVATION: ----- 593.5'
DRAINAGE AREA: ---------- 6.4 SQ. MI.
BASE DISCHARGE (Q100): ---------- 3,969 CFS
BASE HIGH WATER ELEVATION: -------- 595.1'

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE: ---------- 28,500 CFS
FREQUENCY OF OVERTOPPING FLOOD: -- 500+ YRS.
OVERTOPPING FLOOD ELEVATION: ----- 610.5
OVERTOPPING OCCURS @ STA. 20+21.72 -L- PROPOSED ROADWAY

TOTAL BILL OF MATERIAL CONT'D

	HP 12x53 STEEL PILES		THREE BAR METAL RAIL	RIP RAP CLASS II (2'-0" THICK)	GEOTEXTILE FOR DRAINAGE	ELASTOMERIC BEARINGS
	NO.	LIN. FT.	LIN. FT.	TON	SQ. YD.	LUMP SUM
SUPERSTRUCTURE			251.7			LUMP SUM
END BENT 1	10	225		603	670	
BENT 1						
END BENT 2	10	300		531	590	
TOTAL	20	525	251.7	1,134	1,260	LUMP SUM

DRAWN BY : JMG DATE : 11-21
CHECKED BY : TRL DATE : 11-21
DESIGN ENGINEER OF RECORD : P. KELLY DATE : 4-25

⚠ REVISED DRILLED PIER QUANTITIES

PROJECT NO. BP10-R013
MECKLENBURG COUNTY
STATION: 21+59.00 -L-

SHEET 4 OF 4

Signed by: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19765 PAUL E. KELLY, JR. 8/4/2025

STV Engineers, Inc.
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Charlotte, NC 28203
NC License Number F-0991

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

LOCATION SKETCH, GENERAL NOTES AND TOTAL BILL OF MATERIAL

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-05
1	PEK	8/2025	3			TOTAL SHEETS
2			4			37