STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

June 19, 2012

ADDENDUM #1

To: Plan Holders

From: Wanda H. Austin, PE Wanda H Austin
Proposals Engineer

RE:
Contract ID: DN00070
County: Henderson
Letting Date: June 26, 2012

The Summary of Quantities (sheet 3) was not included in the original plan. Also the General Drawing sheets 1-3 (pages 28-30) have been revised. Insert these sheets into the plan set.

Please insert this letter into the proposal, sign the verification below and submit with the bid. Thank you for your attention to this matter.

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #1.

Enclosure: Summary of Quantities Sheet
General Drawing Sheets 1-3

Fourteenth Division Office
Phone: (828)586-2141 *253 Webster Road, Sylva, North Carolina 28779* *Fax: (828)586-4043*

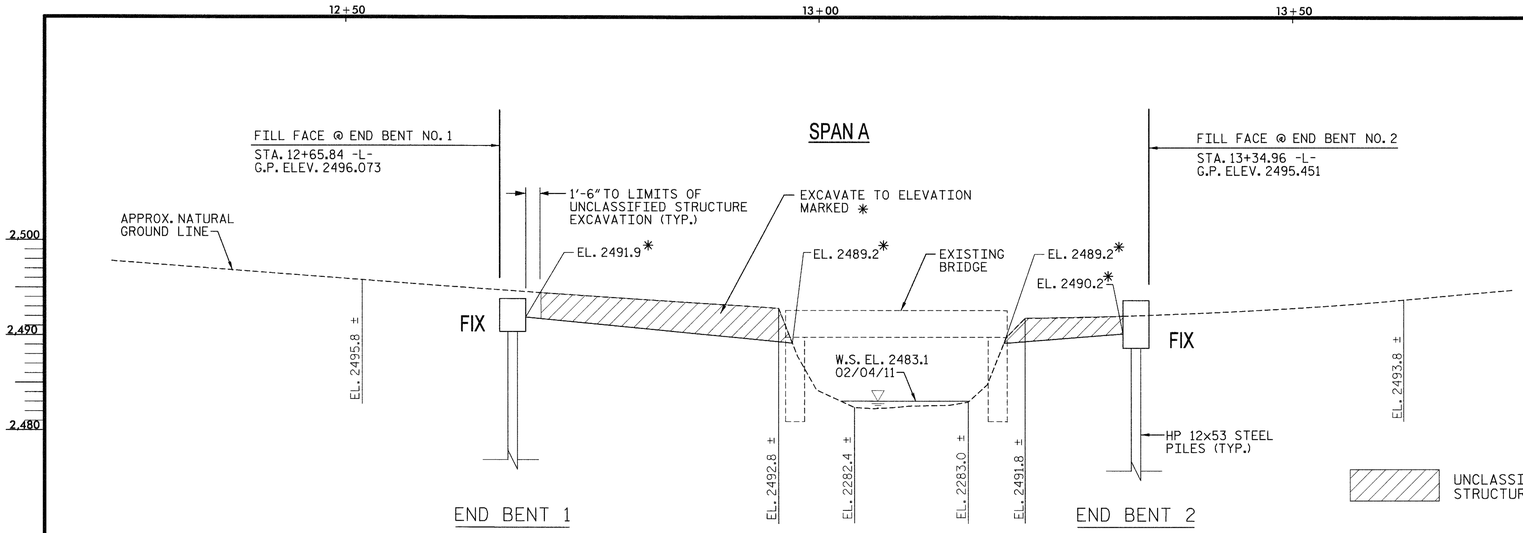
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SUMMARY OF QUANTITIES

Item Number	Sec No.	Quantity	Unit	Description
0000100000-N	800	1	LS	Mobilization
0000400000-N	800	1	LS	Construction Surveying
0030000000-N	SP	1	LS	Reinforced Bridge Approach Fill - Sub Regional Tier (Sta. 13+00.55)
0043000000-N	226	1	LS	Grading
0057000000-E	226	50	CY	Undercut Excavation
0195000000-E	265	50	CY	Select Granular Material
0196000000-E	270	50	SY	Geotextile for Soil Stabilization
0318000000-E	300	10	Tons	Foundation Conditioning Material, Minor Strs
0335200000-E	310	60	LF	15" Drainage Pipe
1099700000-E	505	50	Tons	Class IV Subgrade Stabilization
1121000000-E	520	12	Tons	Aggregate Base Course
1220000000-E	545	40	Tons	Incidental Stone Base
1489000000-E	610	160	Tons	Asphalt Conc Base Course Type B25.0B
1519000000-E	610	170	Tons	Asphalt Conc Surface Course Type S9.5B
1575000000-E	620	20	Tons	Asphalt Binder for Plant Mix
2286000000-N	840	3	EA	Masonry Drainage Structures
2407000000-N	840	3	EA	Steel Frame with Two Grates, STD 840.37
2556000000-E	846	93	LF	Shoulder Berm Gutter
3030000000-E	862	50	LF	Steel BM Guardrail
3150000000-N	862	5	EA	Additional Guardrail Posts
3165000000-N	SP	2	EA	Guardrail Anchor Units, Type 350 TL-2
3180000000-N	862	2	EA	Guardrail Anchor Units, TYPE III (SHOP CURVED)
3195000000-N	862	1	EA	Guardrail Anchor Units, TYPE AT-1
3215000000-N	862	2	EA	Guardrail Anchor Units, TYPE III
3270000000-N	SP	1	EA	Guardrail Anchor Units, TYPE 350
3649000000-E	876	2	Tons	Rip Rap, Class B
3656000000-E	876	10	SY	Geotextile for Drainage
4400000000-E	1110	431	SF	WORK ZONE SIGNS (STA)
4410000000-E	1110	82	SF	WORK ZONE SIGNS (BARRICADE MOUNTED)
4445000000-E	1145	96	LF	BARRICADES (III)
4810000000-E	1205	1,260	LF	PAINT PVT MKG LINES (4")
4820000000-E	1205	110	LF	PAINT PVT MKG LINES (8")
6000000000-E	1605	440	LF	TEMP SILT FENCE
6006000000-E	1610	10	TON	STONE FOR EROS CNTRL, A
6009000000-E	1610	10	TON	STONE FOR EROS CNTRL, B
6012000000-E	1610	35	TON	SEDIMENT CONTROL STONE
6015000000-E	1615	0.50	ACRES	TEMPORARY MULCHING
6018000000-E	1620	50	LBS	SEED FOR TEMP SEEDING
6021000000-E	1620	0.25	TON	FERTILIZER FOR TEMP SEED
6024000000-E	1622	200	L.F	TEMP SLOPE DRNS
6030000000-E	1630	30	CY	SILT EXCAVATION
6036000000-E	1631	5,000	SY	MATTING FOR EROSION CONTROL
6038000000-E	SP	85	SY	PERMANENT SOIL REINFORCEMENT MATTING
6042000000-E	1632	135	LF	1/4" HARDWARE CLOTH
6071010000-E	SP	20	LF	WATTLE
6084000000-E	1660	0.50	Acre	SEEDING & MULCHING
6087000000-E	1660	0.50	Acre	MOWING
6090000000-E	1661	50	lb	SEED FOR REPAIR SEEDING
6093000000-E	1661	0.25	Ton	FERTILIZER FOR REPAIR SEEDING
6096000000-E	1662	50	lb	SEED FOR SUPPLEMENTAL SEEDING
6108000000-E	1665	0.25	Ton	FERTILIZER TOPDRESSING
6114000000-N	1667	10	hrs	SPECIALIZED HAND MOWING
			STRUCTURAL ITEMS	
8035000000-N	402	1	LS	REMOVAL OF EXISTING STRUCTURE
8121000000-N	412	1	LS	UNCLASSIFIED STRUCTURE EXCAVATION
8182000000-E	420	47.80	CY	CLASS A CONCRETE (BRIDGE)
8210000000-N	422	1	LS	BRIDGE APPROACH SLABS
8217000000-E	425	5,758	LBS	REINFORCING STEEL (BRIDGE)
8365000000-E	450	250	LF	HP12X53 STEEL PILES
8391000000-N	450	12	EA	STEEL PILE POINTS
8505000000-E	460	130.29	LF	VERTICAL CONC BARR RAIL
8657000000-N	430	1	LS	ELASTOMERIC BEARINGS
8763000000-E	430	780.00	LF	3'-0" X 2'-0"" PRESTRESSED CONCRETE CORED SLABS

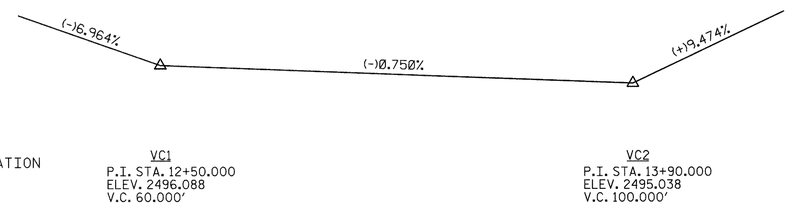
5/28/99
$$$$SYSTIME$$$$
$$$$SYSDATE$$$$
$$$$USERNAME$$$$

FEDERAL AID NUMBER: BRZ-1713 (4)



SECTION ALONG ℄ SURVEY -L-

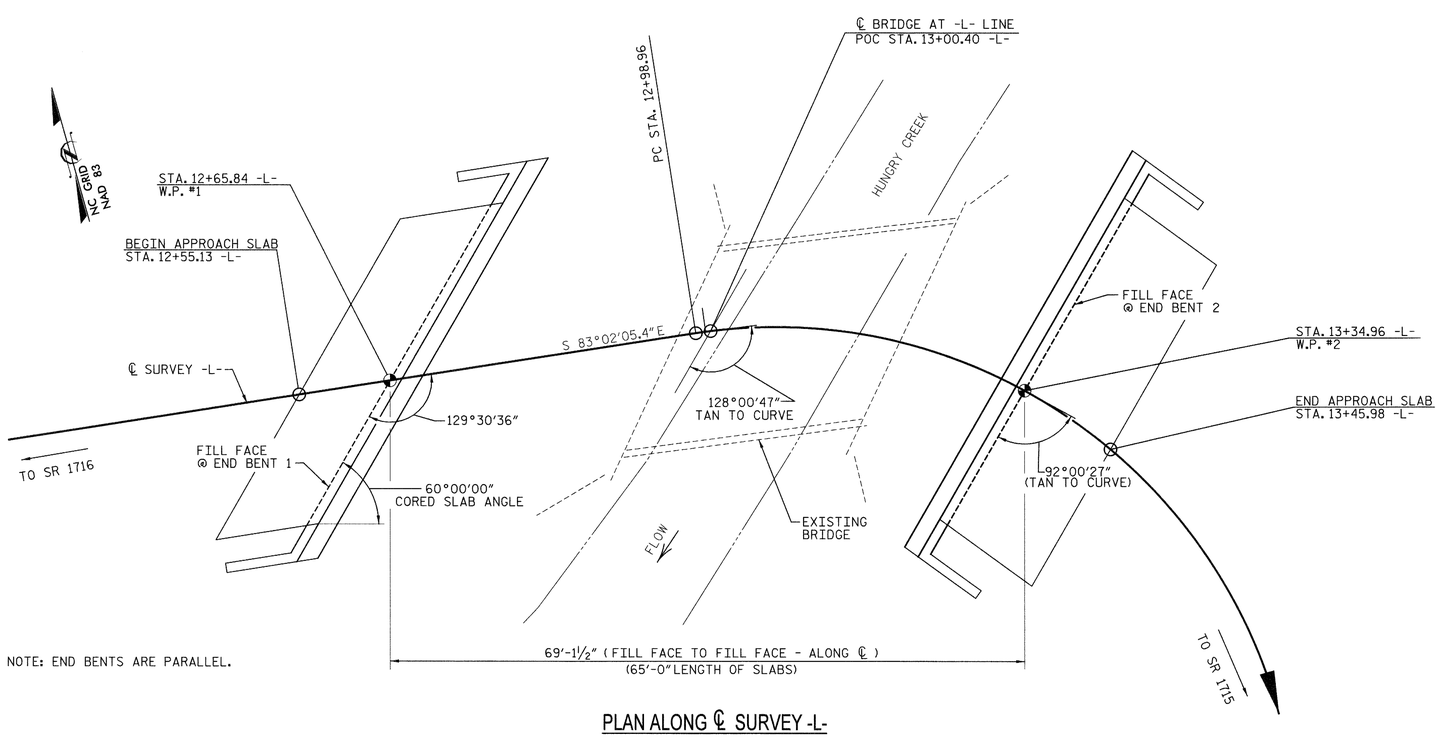
SECTIONS AT END BENTS ARE AT RIGHT ANGLES.



GRADE DATA -L-

PI Sta 14+53.34
△ = 140° 46' 50.9" (RT)
D = 104° 10' 26.9"
L = 135.14'
T = 154.38'
R = 55.00'

HORIZONTAL CURVE DATA -L-



NOTE: END BENTS ARE PARALLEL.

PLAN ALONG ℄ SURVEY -L-

NORTH CAROLINA PROFESSIONAL SEAL 20777 ENGINEER HARDY L. WILLIS
6/15/12

PROJECT NO. BD-5114B

HENDERSON COUNTY

STATION: 13+00.40 -L-

SHEET 1 OF 3 REPLACES BRIDGE NO. 128

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE on SR 1713 (SUMMER RD.)
over HUNGRY CREEK
Between SR 1716 & SR 1715

MAY 2012

Vaughn & Melton
Consulting Engineers
Asheville, North Carolina 828-253-2796
Charlotte, North Carolina 704-357-0488
Tri-Cities, Tennessee 423-467-8401
Knoxville, Tennessee 865-546-5800
Middlesboro, Kentucky 606-248-6600
Spartanburg, South Carolina 864-574-4775

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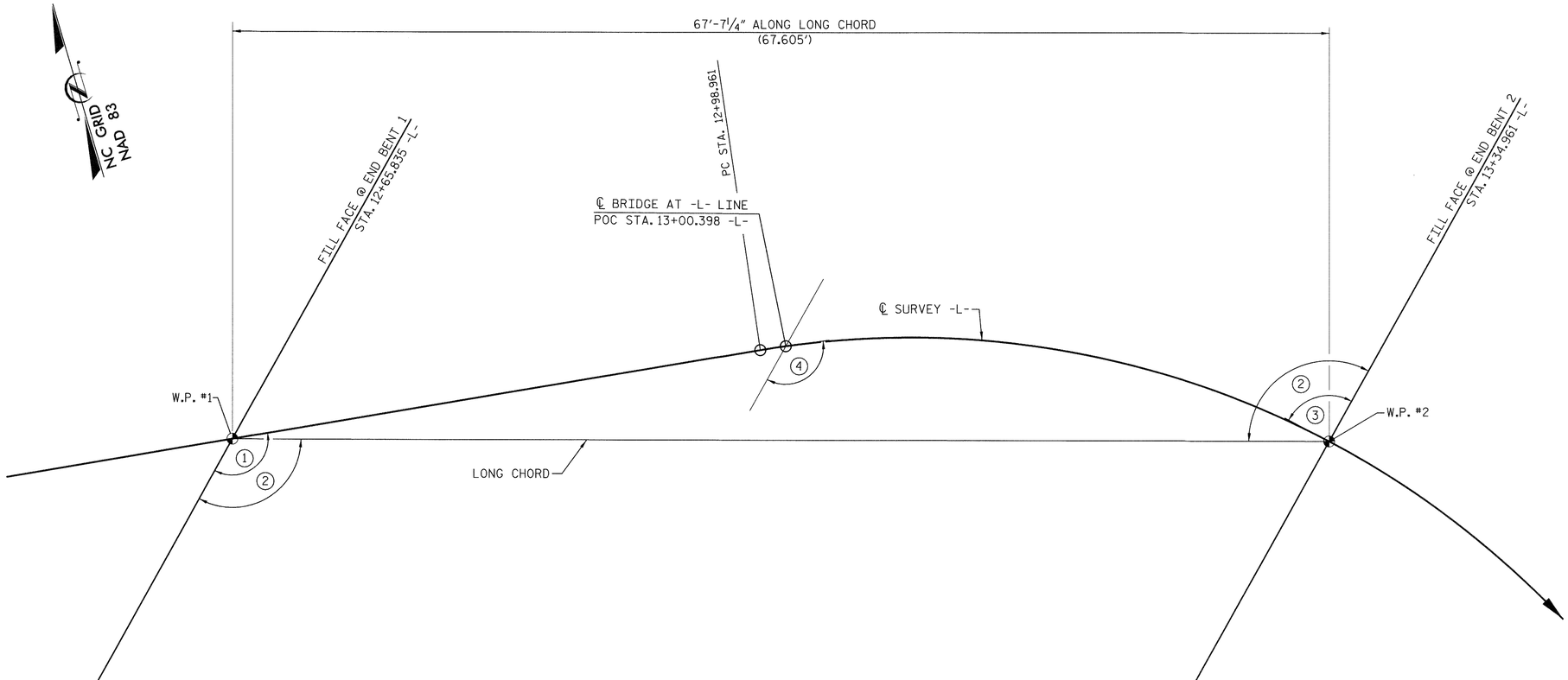
DWN. BY: MAF DATE: MAY 2012
CHKD. BY: HLW DATE: MAY 2012

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-1
1			3			TOTAL SHEETS
2			4			16



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Δ = 140° 46' 50.9" (RT)
D = 104° 10' 26.9"
L = 135.14'
T = 154.38'
R = 55.00'

HORIZONTAL CURVE DATA -L-

1. 129°30'36" TO ℄ SURVEY -L-
2. 120°00'00" TO LONG CHORD
3. 92°00'27" TAN TO CURVE, ℄ SURVEY -L-
4. 128°00'47" TAN TO CURVE, ℄ SURVEY -L-

LONG CHORD LAYOUT

END BENTS ARE PARALLEL.

PROJECT NO. BD-5114B

HENDERSON COUNTY

STATION: 13+00.40 -L-

SHEET 2 OF 3

NORTH CAROLINA PROFESSIONAL SEAL 20777 ENGINEER HARDY L. WILLIS

6/15/12

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NO.	BY:	DATE:	NO.	BY:	DATE:	S-2
1			3			TOTAL SHEETS
2			4			16

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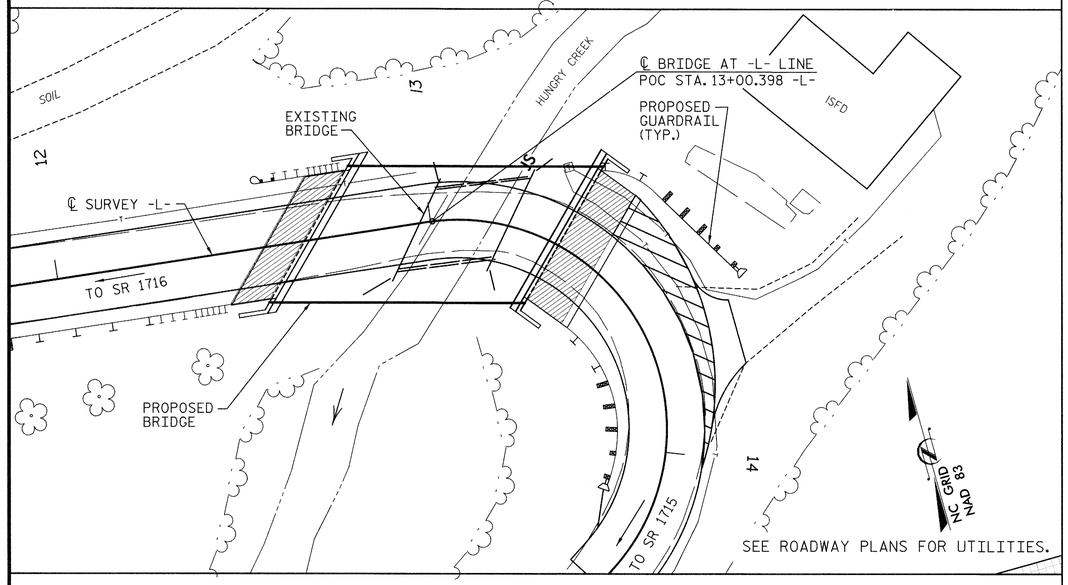
BL2- 18" REBAR WITH CAP - N 606494 E 1020576 ELEV. 2492.88 -BL- STA. 6+67.08



LOCATION SKETCH

GENERAL 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 PERFORMANCE ZONE 1. NO DETAILED SEISMIC DESIGN IS REQUIRED.

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

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

REMOVAL OF THE EXISTING BRIDGE SHALL BE PERFORMED SO AS NOT TO ALLOW DEBRIS TO FALL INTO THE WATER. THE CONTRACTOR SHALL REMOVE THE BRIDGE AND SUBMIT PLANS FOR DEMOLITION IN ACCORDANCE WITH ARTICLE 402-2 OF THE STANDARD SPECIFICATIONS.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. SINCE THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR, THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION 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.

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH HEC 18, "EVALUATING SCOUR AT BRIDGES", MAY 2001.

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.

THE MATERIAL SHOWN IN THE CROSS-HATCHED AREA SHALL BE EXCAVATED FOR A DISTANCE OF 25 FT. EACH SIDE OF CENTERLINE ROADWAY AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR UNCLASSIFIED STRUCTURE EXCAVATION. SEE SECTION 412 OF THE STANDARD SPECIFICATIONS.

ASPHALT WEARING SURFACE IS INCLUDED IN ROADWAY QUANTITY ON ROADWAY PLANS.

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.
PILES AT END BENT NO. 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.
DRIVE PILES AT END BENT NO. 1 TO A REQUIRED DRIVING RESISTANCE OF 142 TONS PER PILE.
PILES AT END BENT NO. 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 80 TONS PER PILE.
DRIVE PILES AT END BENT NO. 2 TO A REQUIRED DRIVING RESISTANCE OF 133 TONS PER PILE.

A MINIMUM OF 10 FEET OF PILE EMBEDMENT IS REQUIRED AT END BENT NO. 1 AND END BENT NO. 2. IF THE MINIMUM PILE EMBEDMENT CANNOT BE ACHIEVED, CALL THE WESTERN REGION OPERATIONS ENGINEER AT (704) 455-8902.

SUBSURFACE PLANS WERE GENERATED USING AN ASSUMED ELEVATION FOR THE BENCHMARK OF 100.0 FT. THE ACTUAL ELEVATION OF THE BENCHMARK IS 2492.8 FT.

THE EXISTING STRUCTURE, CONSISTING OF A ONE-SPAN, 25-FOOT LONG TIMBER DECK ON STEEL I-BEAMS, 20-FEET WIDE, ON TIMBER CAP AND PILE END BENTS, AND LOCATED AT THE PROPOSED STRUCTURE, SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY POSTED BELOW THE LEGAL LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE FURTHER DETERIORATE, THIS LOAD LIMITATION MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE, PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

TOTAL BILL OF MATERIAL

	REMOVAL OF EXISTING STRUCTURE	UNCLASSIFIED STRUCTURE EXCAVATION	CLASS A CONCRETE	BRIDGE APPROACH SLABS	REINFORCING STEEL	HP 12 X 53 STEEL PILES		VERTICAL CONCRETE BARRIER RAIL	ELASTOMERIC BEARINGS	3'-0" x 2'-0" PRESTRESSED CONCRETE CORED SLAB UNIT	
	LUMP SUM	LUMP SUM	CU. YARDS	LUMP SUM	LBS.	NO.	LIN. FT.	LIN. FT.	LUMP SUM	NO.	LIN. FT.
SUPERSTRUCTURE								130.29	LUMP SUM	12	780.00
END BENT 1			17.0		2,521	7	90				
END BENT 2			30.8		3,237	8	160				
TOTAL	LUMP SUM	LUMP SUM	47.8	LUMP SUM	5,758	15	250	130.29	LUMP SUM	12	780.00

HYDROGRAPHIC DATA

DESIGN DISCHARGE = 650 CFS
DESIGN FREQUENCY = 25 YRS
DESIGN HW ELEVATION = 2488.6 FT
BASE DISCHARGE = 900 CFS
BASE FREQUENCY = 100 YRS
BASE HW ELEVATION = 2489.4 FT
DRAINAGE AREA = 1.9 SQ. MI.

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE = 3000 CFS
OVERTOPPING FREQUENCY = 500 YRS
OVERTOPPING ELEVATION = 2494.9 FT

NORTH CAROLINA PROFESSIONAL SEAL 20777 ENGINEER HARDY L. WILLIS
6/15/12

PROJECT NO. BD-5114B
HENDERSON COUNTY
STATION: 13+00.40 -L-

SHEET 3 OF 3

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