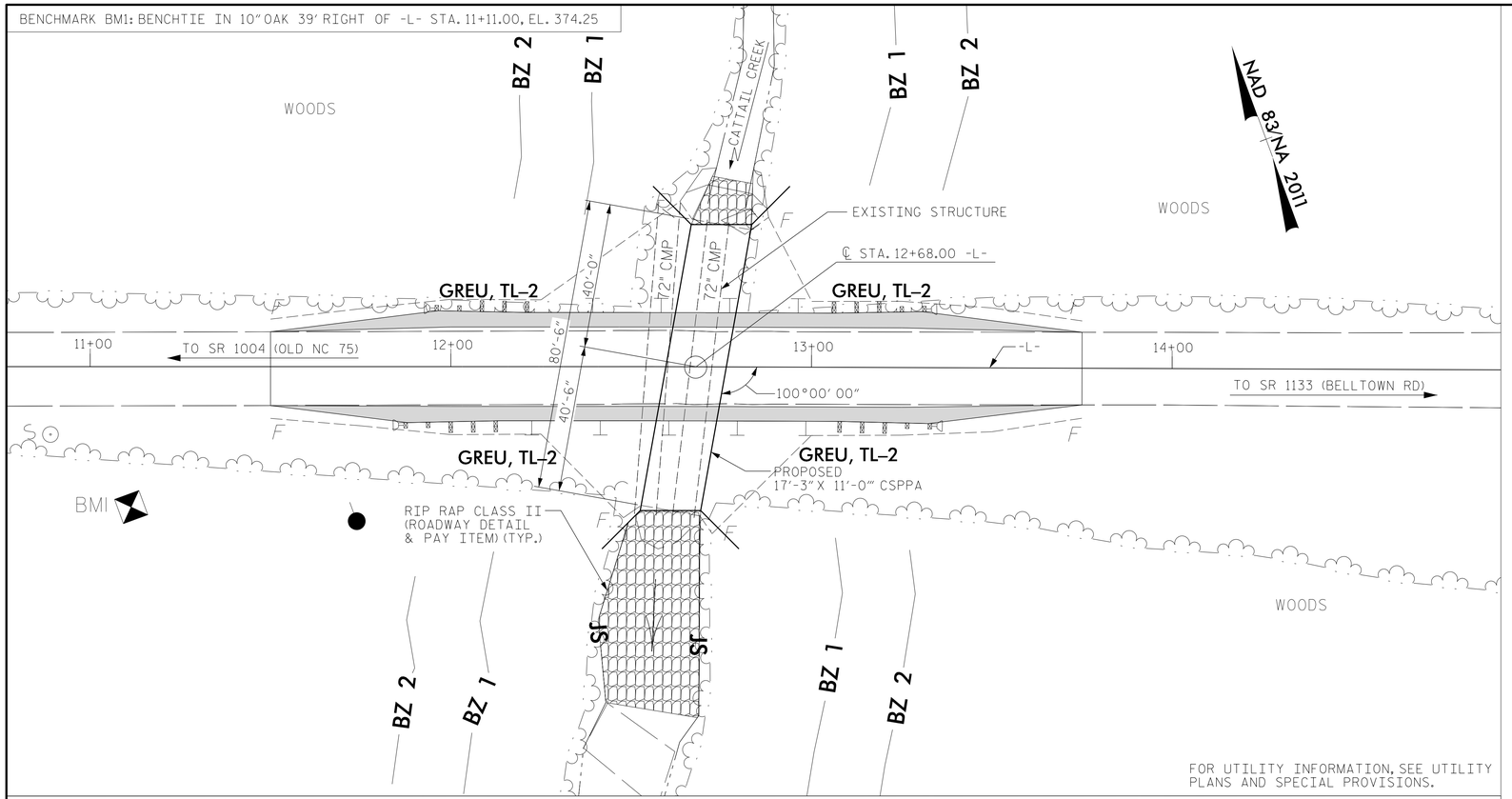
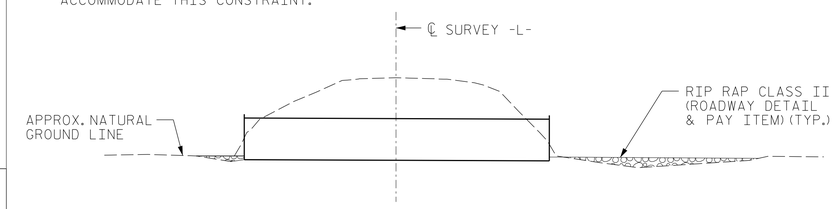


LOCATION SKETCH

1. ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.
2. DESIGN FILL IS 11 FEET.
3. THE EXISTING CULVERT 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 CULVERT SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.
4. FOR ALUMINUM ALLOY STRUCTURAL PLATE PIPE AND PIPE ARCH, SEE SPECIAL PROVISIONS.
5. FOR OTHER DESIGN DATA AND NOTES, SEE STANDARD NOTES SHEET.
6. FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.
7. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
8. STRUCTURE EXCAVATION SHALL BE EXCAVATED TO THE LIMITS SHOWN ON SHEET 2G-1. FOR STRUCTURE EXCAVATION, SEE SPECIAL PROVISIONS. FILL MATERIAL TO REPLACE EXCAVATED MATERIAL IS PAID FOR UNDER LUMP SUM GRADING PAY ITEM. SUMMARY OF EARTHWORK TABLE ON SHEET 3B-1 DOES NOT INCLUDE FILL MATERIAL REQUIRED TO REPLACE EXCAVATED MATERIAL.
9. HEADWALL SHALL BE DESIGNED FOR LIVE LOAD SURCHARGE.
10. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
11. THE PROPOSED CULVERT SHALL BE CONSTRUCTED WITH A MINIMUM 12 INCH BLANKET OF FOUNDATION CONDITIONING MATERIAL BELOW THE BOTTOM OF CULVERT.
12. OVERHEAD POWER LINES RUNNING ALONG THE SOUTH SIDE OF ROADWAY WILL REMAIN IN PLACE DURING CONSTRUCTION. CONTRACTOR SHALL PLAN FOR INSTALLATION OF CULVERT THAT WILL ACCOMMODATE THIS CONSTRAINT.



RIP RAP DETAIL FOR INLET AND OUTLET

ROADWAY DATA

GRADE POINT ELEV. @ STATION 12+68.00 -L- = 375.73
BED ELEV. @ STATION 12+68.00 -L- = 353.65
ROADWAY SLOPES 2:1

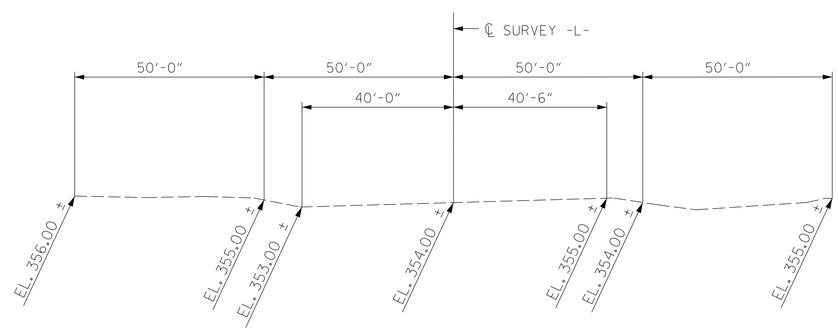
HYDRAULIC DATA

DESIGN DISCHARGE	1200 CFS
FREQUENCY OF DESIGN FLOOD	25 YR.
DESIGN HIGHWATER ELEV.	364.6 FT.
DRAINAGE AREA	3.6 SQ. MI.
BASE DISCHARGE (Q100)	1700 CFS
BASE HIGHWATER ELEV.	367.7 FT.

OVERTOPPING FLOOD DATA

OVERTOPPING DISCHARGE	>2300 CFS
FREQUENCY OF OVERTOPPING FLOOD	>500 YR.
OVERTOPPING FLOOD ELEV.	375.4 FT.

SAG AT STA. 12+22.81 -L-



PROFILE ALONG ℄ OF CULVERT

TOTAL STRUCTURE QUANTITIES	
REMOVAL OF EXISTING STRUCTURE @ STA. 12+68.00 -L-	LUMP SUM
ALUMINUM ALLOY STRUCTURAL PLATE PIPE AND PIPE ARCH @ STA. 12+68.00 -L-	80'-6" LIN. FT.
STRUCTURE EXCAVATION @ STA. 12+68.00 -L-	LUMP SUM
FOUNDATION CONDITIONING MATERIAL	110 TONS

PROJECT NO. 17BP.5.C.04
GRANVILLE COUNTY
STATION: 12+68.00 -L-

SHEET 1 OF 2

NORTH CAROLINA PROFESSIONAL SEAL 11725 ENGINEER DAVID R. RUGGLES

DocuSigned by: David Ruggles C462768DF412422... 5/4/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

17'-3" X 11'-0" ALUMINUM
CORRUGATED STRUCTURAL
PLATE PIPE ARCH
100° SKEW

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

DRAWN BY:	E. PHELPS	DATE :	2/18
CHECKED BY:	D. RUGGLES	DATE :	3/18
DESIGN ENGINEER OF RECORD:	D. RUGGLES	DATE :	3/18

17BP.5.C.04
5/4/2018
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USER:ephelps