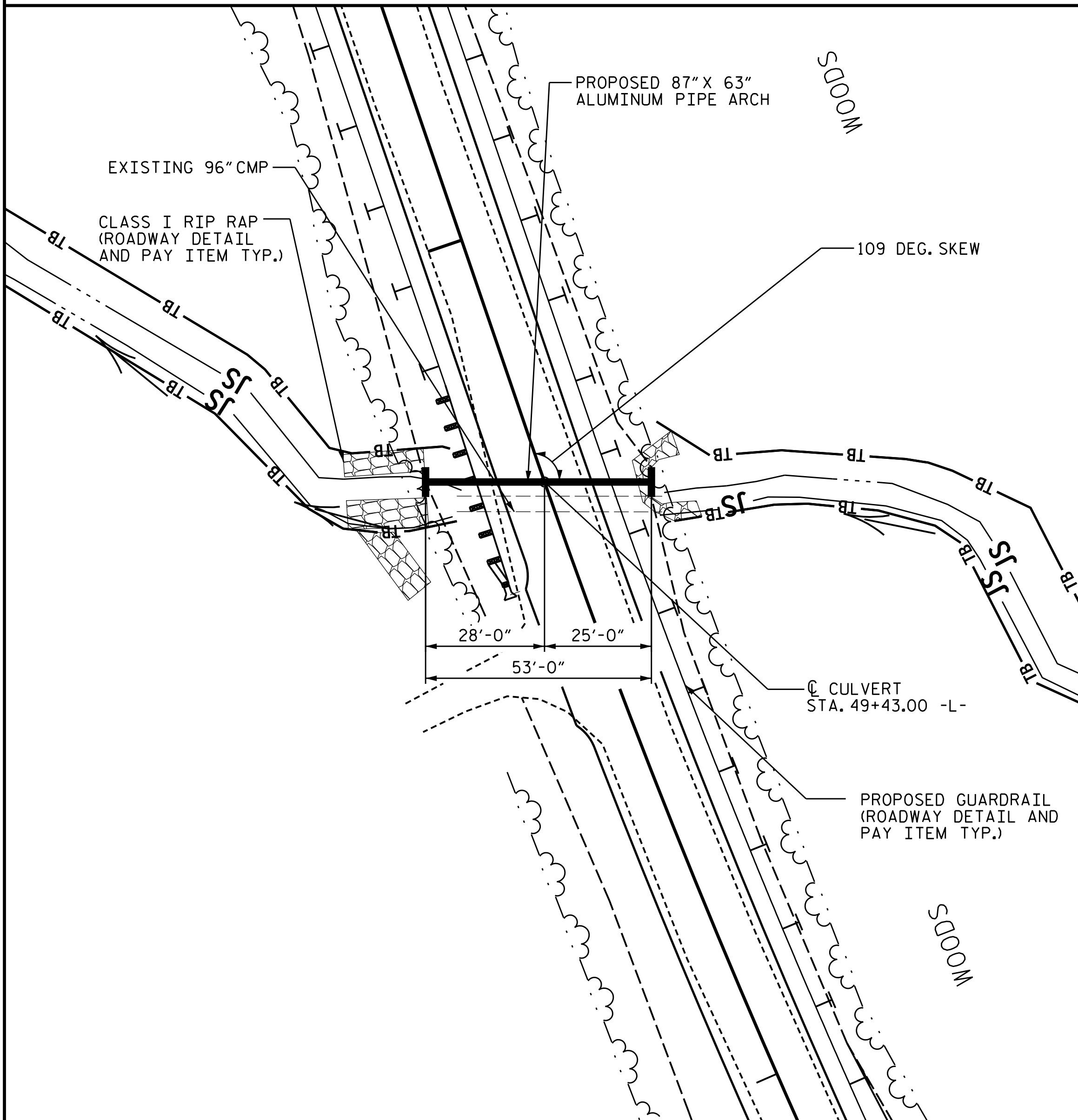


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BM#3 : 39' RIGHT -L- STA. 51+20.14, ELEV. = 387.65'



LOCATION SKETCH

**NOTES**

ASSUMED LIVE LOAD -----HL-93 OR ALTERNATE LOADING.  
 MAXIMUM DESIGN FILL----- 5.0'  
 MINIMUM DESIGN FILL----- 3.4'  
 MATERIALS SHALL MEET THE REQUIREMENTS OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES DATED JANUARY 2018.  
 THE DETAILS SHOWN ARE FOR GENERAL LAYOUT ONLY. THE SUPPLIER SHALL PROVIDE DESIGNS AND DETAILS THAT MEET THE REQUIREMENTS OF AASHTO SECTION 12 AND ARE SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.  
 UNLESS OTHERWISE INDICATED, NCDOT SHALL FURNISH ALL STRUCTURAL ELEMENTS AND HARDWARE.  
 THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF THE CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.  
 THE EXISTING STRUCTURE CONSISTING OF 42" RCP SHALL BE REMOVED.  
 FOR OTHER DESIGN DATA AND NOTES, SEE SHEET SN.  
 FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.  
 FOR INSTALLATION OF STATE SUPPLIED PIPE, SEE SPECIAL PROVISIONS.  
 THE CORRUGATED ALUMINUM PIPE ARCH SHALL BE INSTALLED ACCORDING TO SECTION 300 OF THE STANDARD SPECIFICATIONS AND ACCORDING TO THE MANUFACTURERS RECOMMENDATIONS. THE CULVERT IS TO BE PLACED ON FOUNDATION CONDITIONING MATERIAL WHICH MAY BE SELECT, CLASS V OR VI.  
 MATERIAL AND GEOMETRIC REQUIREMENTS SHALL CONFORM TO AASHTO M219 AND ASTM B864. GEOMETRIC REQUIREMENTS SHALL ALSO CONFORM TO FIGURE 12.9.4.1-1 AND TABLE 12.9.4.1-1 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. BOLTS AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 OR ASTM A449 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.  
 STRUCTURAL CALCULATIONS, INCLUDING THE DETERMINATION OF FOOTING REACTIONS, SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS  
 GUARDRAIL POST SHALL BE LOCATED AS TO NOT DAMAGE INSTALLED CULVERT

**HYDRAULIC DATA**

DESIGN DISCHARGE \_\_\_\_\_ = 160 CFS  
 FREQUENCY OF DESIGN FLOOD \_\_\_\_\_ = 25 YRS.  
 DESIGN HIGH WATER ELEVATION \_\_\_\_\_ = 385.5  
 DRAINAGE AREA \_\_\_\_\_ = 147.98 ACRES  
 BASIC DISCHARGE (Q100) \_\_\_\_\_ = 230 CFS  
 BASIC HIGH WATER ELEVATION \_\_\_\_\_ = 387.1

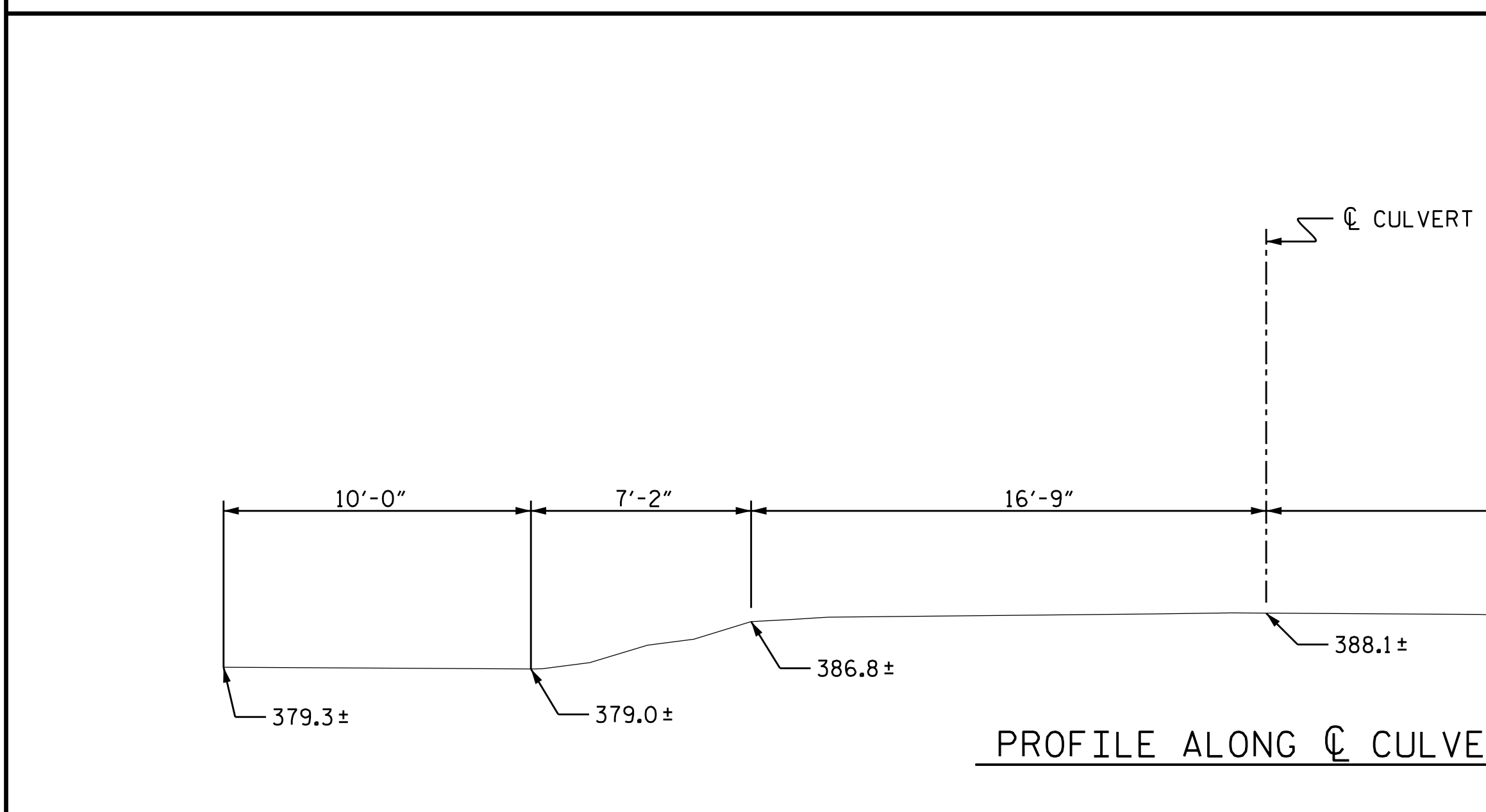
**OVERTOPPING FLOOD DATA**

OVERTOPPING DISCHARGE \_\_\_\_\_ = 190 CFS  
 FREQUENCY OF OVERTOPPING FLOOD \_\_\_\_\_ = 50 YRS.  
 OVERTOPPING FLOOD ELEVATION \_\_\_\_\_ = 386.0

**GRADE DATA**

PI = 50+75.00  
 EL = 379.30  
 VC = 460'  
 G1 = (-) 6.1862%  
 G2 = (+) 5.3145%

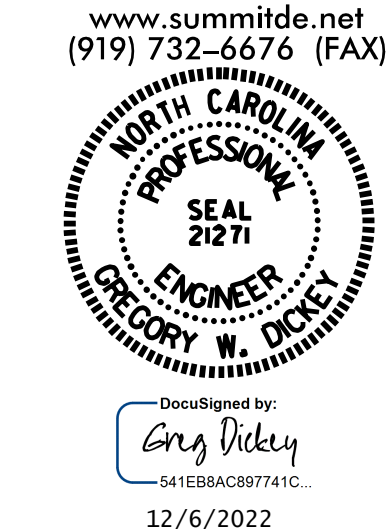
TOTAL STRUCTURE QUANTITIES	
REMOVAL OF EXISTING STRUCTURE	LUMP SUM
CULVERT EXCAVATION	LUMP SUM
FOUNDATION CONDITIONING MATERIAL	42 TONS
INSTALLATION OF STATE SUPPLIED PIPE	LUMP SUM
CULVERT BACKFILL	210 TONS



PROFILE ALONG CULVERT

Prepared in the Office of:  
  
 NC FIRM LICENSE No: P-0339  
 1110 Havaho Drive, Suite 600  
 Raleigh, NC 27609  
 Ph: 919-322-0115 Fax: 919-322-0116  
 www.summitde.net  
 (919) 732-6676 (FAX)

PROJECT NO. 5C.039062  
GRANVILLE COUNTY  
 STATION: 49+43.00 -L-  
 SHEET 1 OF 2

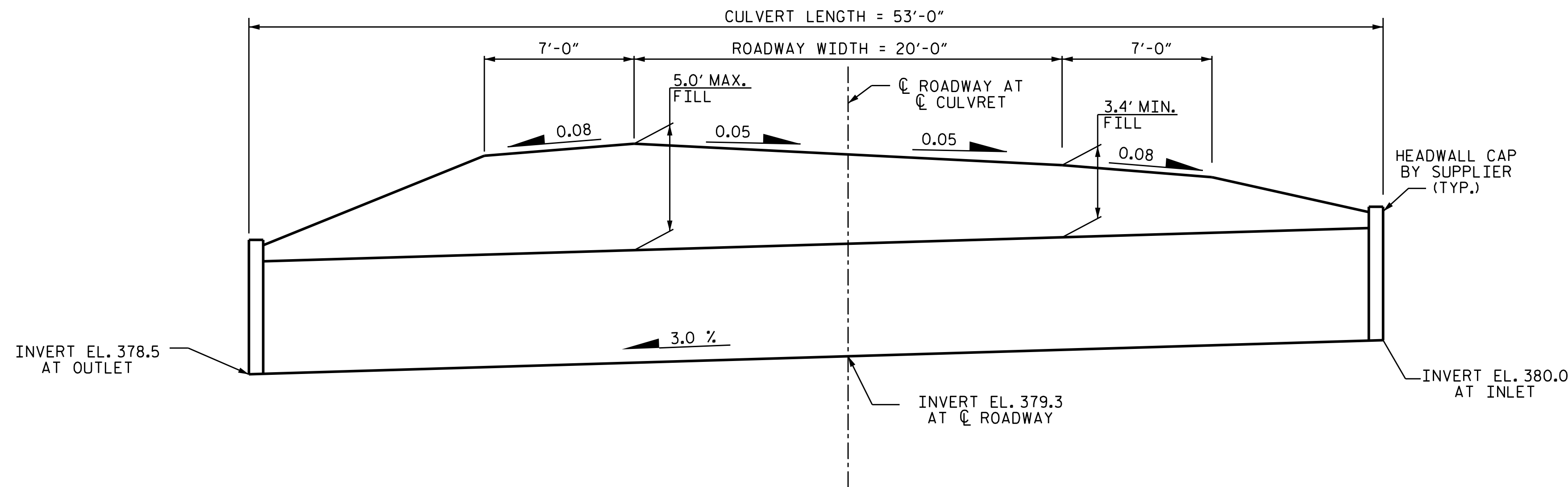


STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
**SINGLE  
 87" x 63"  
 CORRUGATED ALUMINUM  
 PIPE ARCH  
 109° SKEW**

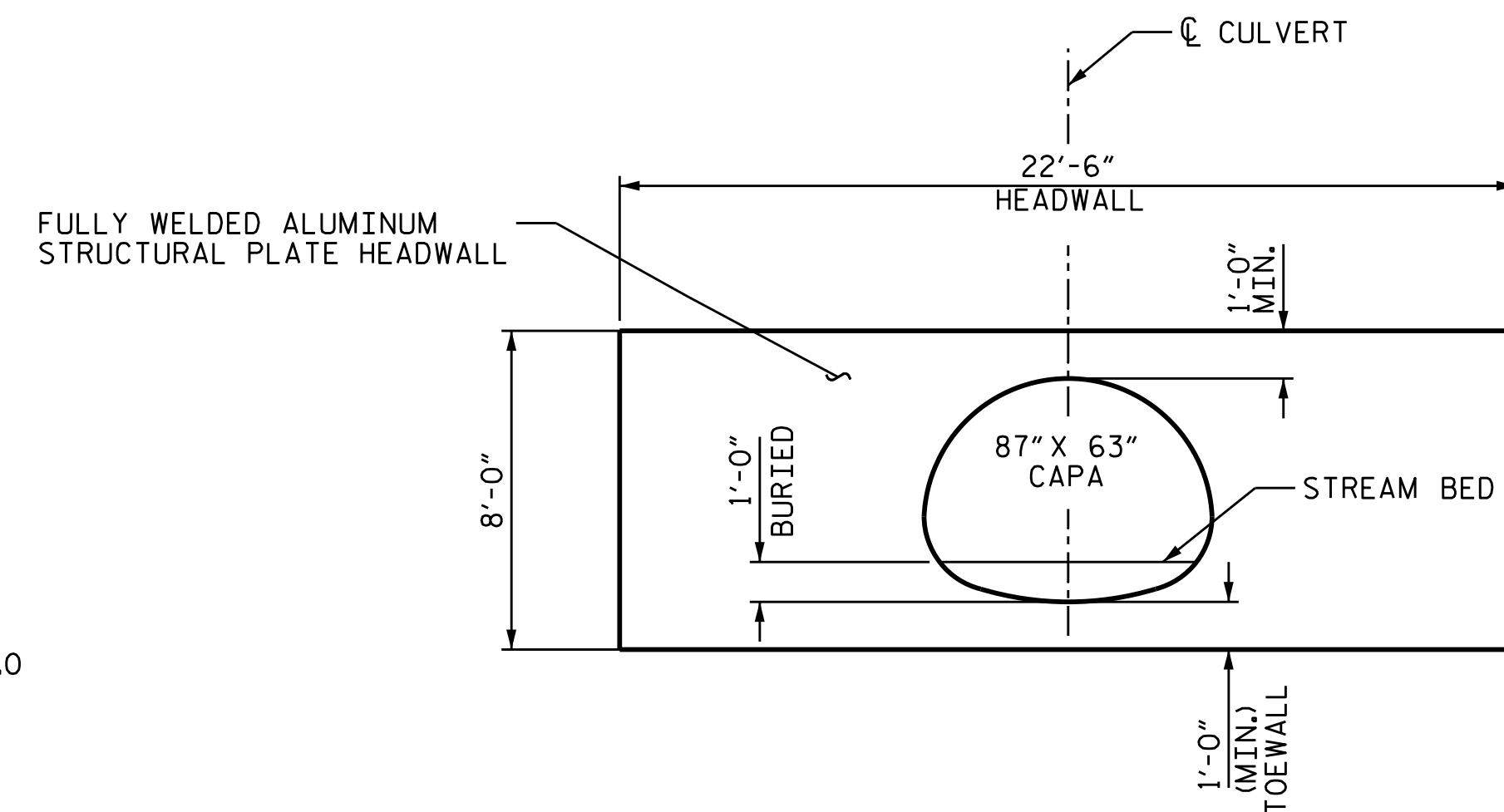
DRAWN BY : G. DICKEY DATE : 11/8/2022  
 CHECKED BY : J. MCROY DATE : 11/8/2022  
 DESIGN ENGINEER OF RECORD: G. DICKEY DATE : 11/8/2022

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	C1-1
1			3			TOTAL SHEETS
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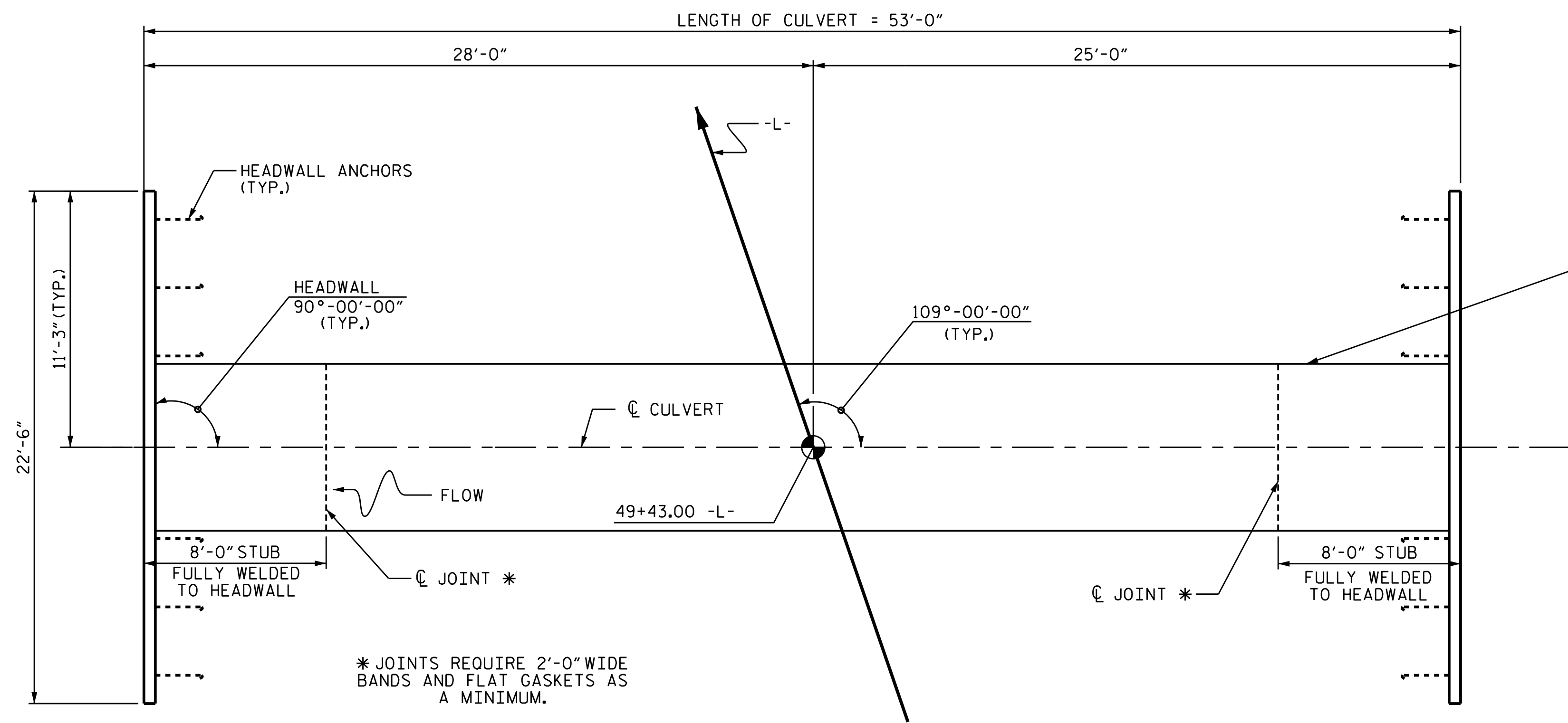
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CULVERT SECTION NORMAL TO ROADWAY



END ELEVATION NORMAL TO SKEW  
INLET SHOWN, OUTLET SIMILAR



LENGTH OF ALUMINUM BOX CULVERT

87" X 63" CORRUGATED ALUMINUM PIPE ARCH (CAPA)  
3" X 1" CORRUGATION, MINIMUM OF 12 GAGE THICKNESS,  
WITH FULLY WELDED HEADWALLS TO 8'-0" SECTIONS AT  
EACH END.

\* JOINTS REQUIRE 2'-0" WIDE  
BANDS AND FLAT GASKETS AS  
A MINIMUM.

Prepared in the Office of:



NC FIRM LICENSE No: P-0339  
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Raleigh, NC 27609  
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www.summitde.net  
(919) 732-6676 (FAX)

PROJECT NO. 5C.039062  
GRANVILLE COUNTY  
STATION: 49+43.00 -L-

SHEET 2 OF 3



DocuSigned by:  
Gregory W. Dickey  
541EBAC69741C  
12/6/2022

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

SINGLE  
87" x 63"  
CORRUGATED ALUMINUM  
PIPE ARCH  
109° SKEW

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			C1-2
2			4			TOTAL SHEETS 2

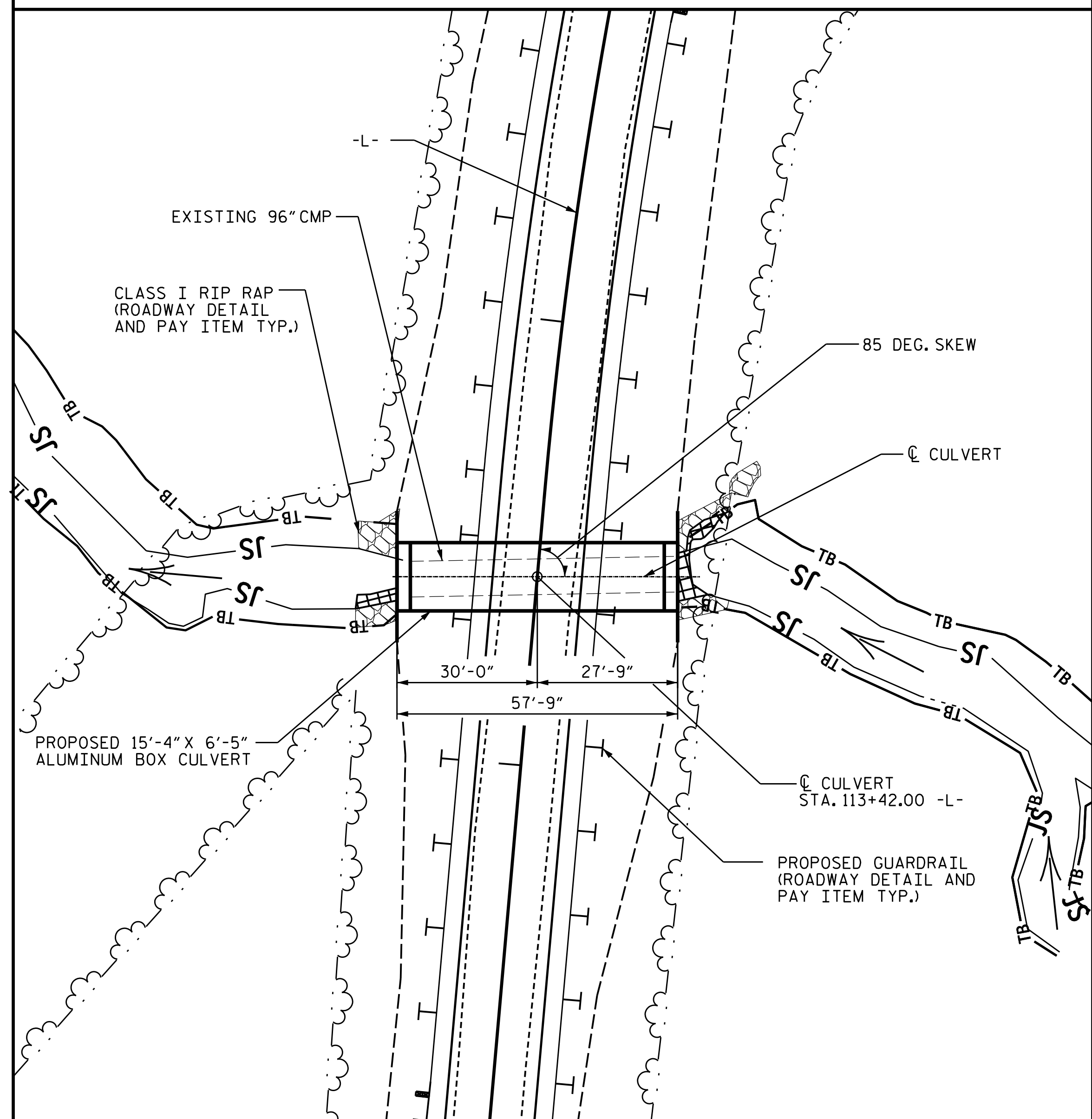
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STR. #10

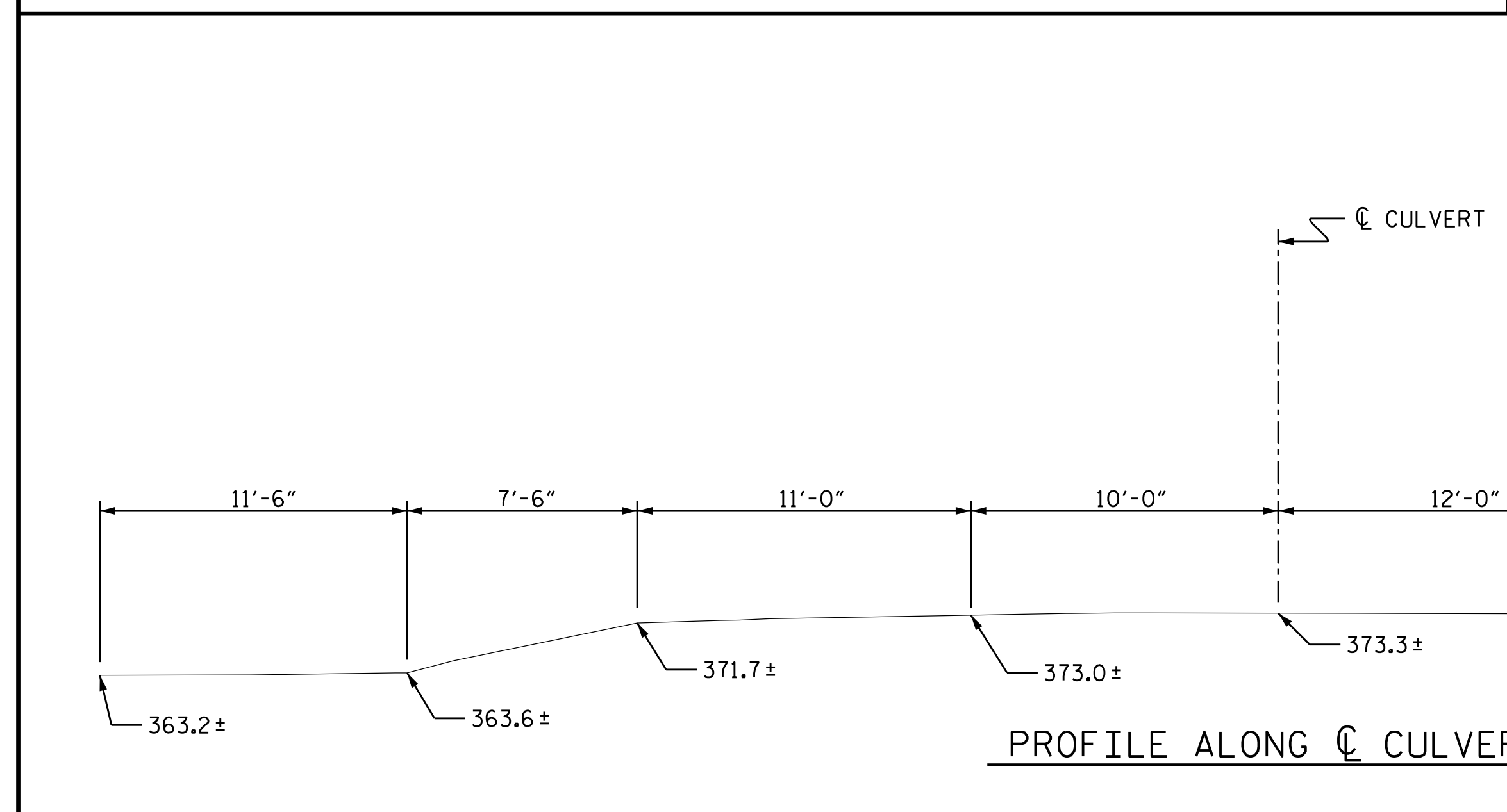
DRAWN BY : G. DICKEY DATE : 11/9/22  
CHECKED BY : J. MCROY DATE : 11/9/22  
DESIGN ENGINEER OF RECORD: G. DICKEY DATE : 11/9/22

LASTSAVEDDATE\$  
FILEL\$

BM\*6 : 52.22' LEFT -L- STA. 112+37.94, ELEV. = 378.58'



LOCATION SKETCH



PROFILE ALONG CULVERT

DRAWN BY : G. DICKEY DATE : 11/8/2022  
 CHECKED BY : J. MCROY DATE : 11/8/2022  
 DESIGN ENGINEER OF RECORD : G. DICKEY DATE : 11/8/2022

\$LASTSAVEDDATE TIME \$  
\$FILEL \$

**NOTES**

- ASSUMED LIVE LOAD -----HL-93 OR ALTERNATE LOADING.
- MAXIMUM DESIGN FILL----- 6.5'
- MINIMUM DESIGN FILL----- 5.8'
- MATERIALS SHALL MEET THE REQUIREMENTS OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES DATED JANUARY 2018.
- THE DETAILS SHOWN ARE FOR GENERAL LAYOUT ONLY. THE SUPPLIER SHALL PROVIDE DESIGNS AND DETAILS THAT MEET THE REQUIREMENTS OF AASHTO SECTION 12 AND ARE SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.
- UNLESS OTHERWISE INDICATED, NCDOT SHALL FURNISH ALL STRUCTURAL ELEMENTS AND HARDWARE.
- THE RESIDENT ENGINEER SHALL CHECK THE LENGTH OF THE CULVERT BEFORE STAKING IT OUT TO MAKE CERTAIN THAT IT WILL PROPERLY TAKE CARE OF THE FILL.
- THE EXISTING STRUCTURE CONSISTING OF 96" CMP SHALL BE REMOVED.
- FOR OTHER DESIGN DATA AND NOTES, SEE SHEET SN.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR PLACEMENT OF NATURAL STREAM BED MATERIAL, SEE SPECIAL PROVISIONS.
- FOR INSTALLATION OF STATE SUPPLIED PIPE, SEE SPECIAL PROVISIONS.
- EXCAVATE 1 FOOT BELOW CULVERT AND REPLACE WITH FOUNDATION CONDITIONING MATERIAL IN ACCORDANCE WITH ARTICAL 414 OF THE STANDARD PROVISIONS.
- THE ALUMINUM BOX CULVERT SHALL BE INSTALLED ACCORDING TO SECTION 300 OF THE STANDARD SPECIFICATIONS AND ACCORDING TO THE MANUFACTURES RECOMMENDATIONS. THE CULVERT IS TO BE PLACED ON THE STANDARD 1.0 FOOT BLANKET OF FOUNDATION CONDITIONING MATERIAL WHICH MAY BE SELECT, CLASS V OR VI.
- MATERIAL AND GEOMETRIC REQUIREMENTS SHALL CONFORM TO AASHTO M219 AND ASTM B864. GEOMETRIC REQUIREMENTS SHALL ALSO CONFORM TO FIGURE 12.9.4.1-1 AND TABLE 12.9.4.1-1 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS. BOLTS AND NUTS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A307 OR ASTM A449 AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A153.
- STRUCTURAL CALCULATIONS, INCLUDING THE DETERMINATION OF FOOTING REACTIONS, SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

**HYDRAULIC DATA**

DESIGN DISCHARGE \_\_\_\_\_ = 620 CFS  
 FREQUENCY OF DESIGN FLOOD \_\_\_\_\_ = 25 YRS.  
 DESIGN HIGH WATER ELEVATION \_\_\_\_\_ = 369.5  
 DRAINAGE AREA \_\_\_\_\_ = 819 ACRES  
 BASIC DISCHARGE (Q100) \_\_\_\_\_ = 900 CFS  
 BASIC HIGH WATER ELEVATION \_\_\_\_\_ = 372.6

**OVERTOPPING FLOOD DATA**

OVERTOPPING DISCHARGE \_\_\_\_\_ = 1100 CFS  
 FREQUENCY OF OVERTOPPING FLOOD \_\_\_\_\_ = 100+ YRS.  
 OVERTOPPING FLOOD ELEVATION \_\_\_\_\_ = 374.7

**GRADE DATA**

PI = 113+70.00  
 EL = 369.77  
 VC = 300'  
 G1 = (-) 5.0245%  
 G2 = (+) 6.0864%

TOTAL STRUCTURE QUANTITIES	
REMOVAL OF EXISTING STRUCTURE	LUMP SUM
CULVERT EXCAVATION	LUMP SUM
FOUNDATION CONDITIONING MATERIAL	78.7 TONS
INSTALLATION OF STATE SUPPLIED PIPE	LUMP SUM
CULVERT BACKFILL	354 TONS

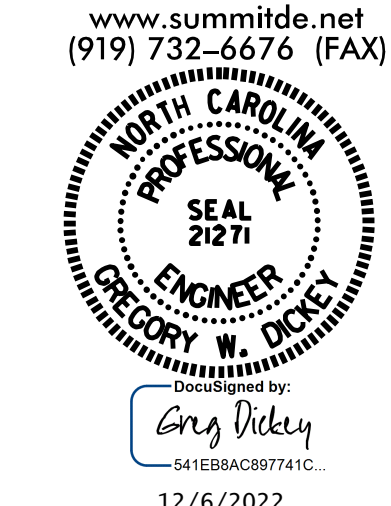
Prepared in the Office of:  
  
 NC FIRM LICENSE No: P-0339  
 1110 Havaho Drive, Suite 600  
 Raleigh, NC 27609  
 Ph: 919-322-0115 Fax: 919-322-0116  
 www.summitde.net  
 (919) 732-6676 (FAX)

PROJECT NO. 5C.039062

GRANVILLE COUNTY

STATION: 113+42.00 -L-

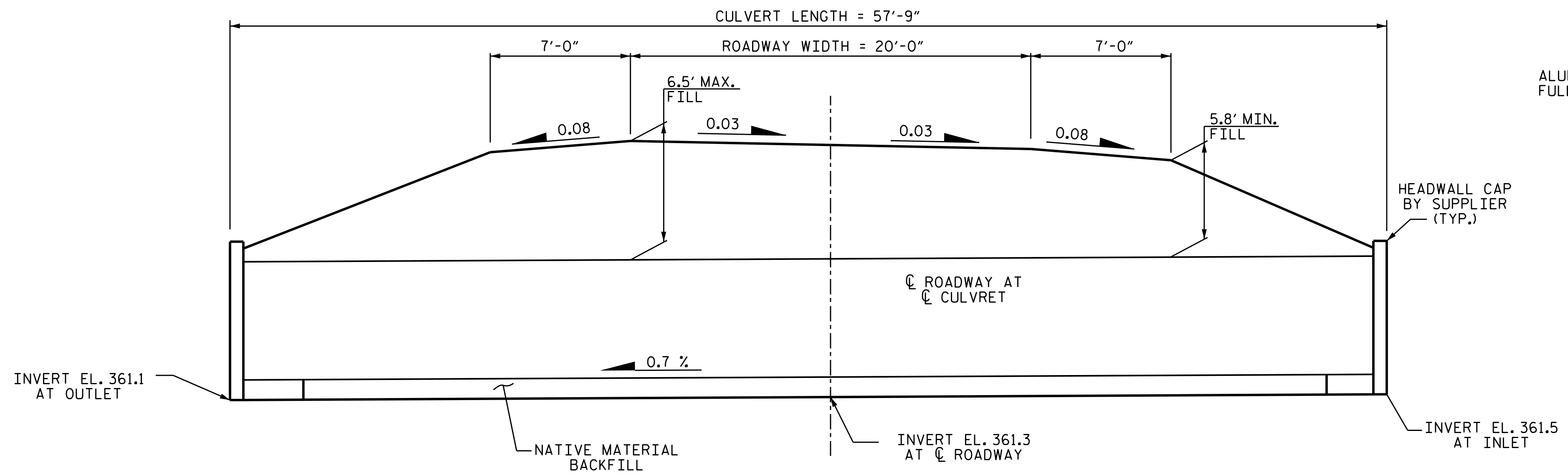
SHEET 1 OF 2



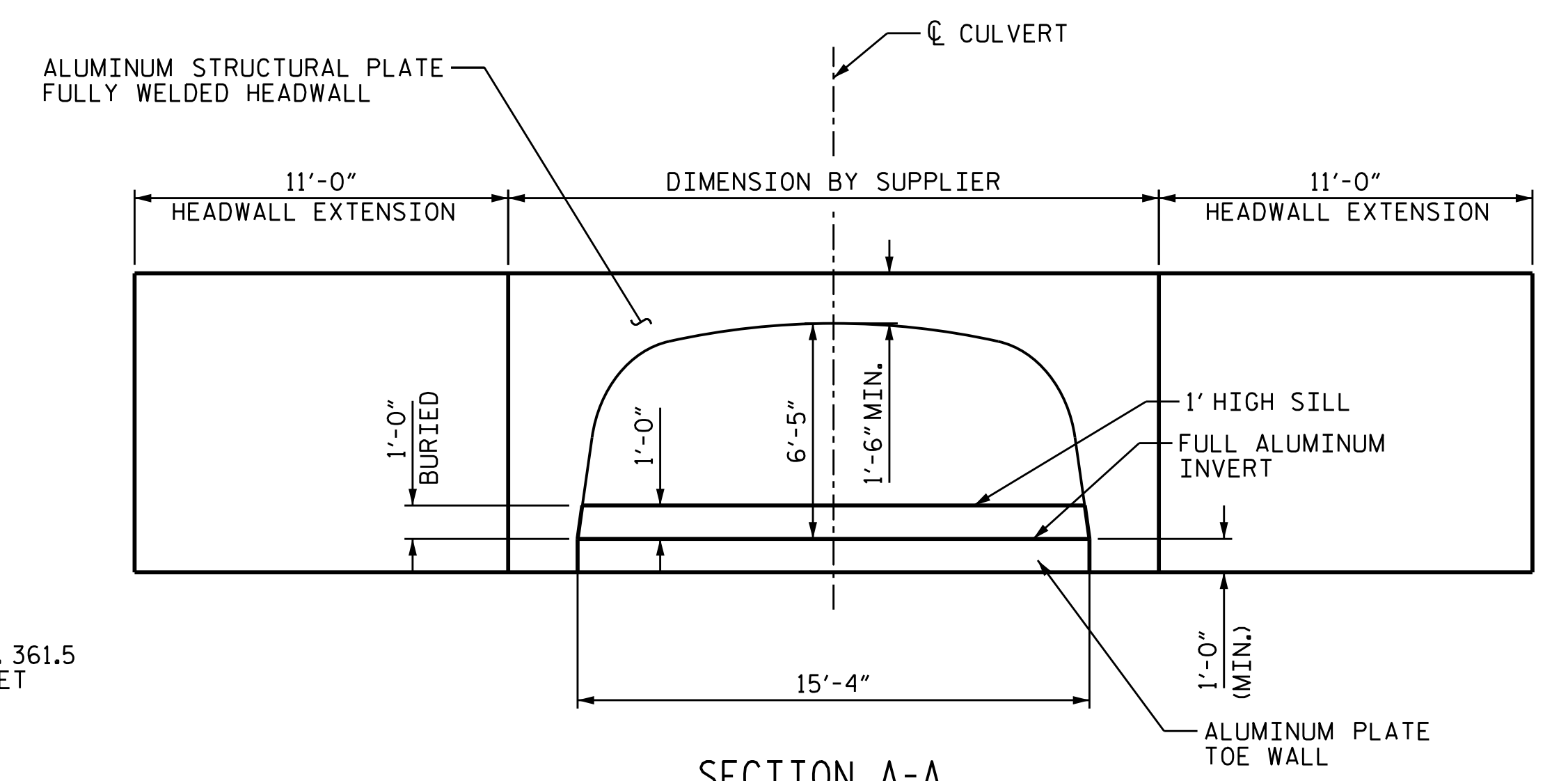
STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SINGLE  
 15'-4" x 6'-5"  
 ALUMINUM BOX CULVERT  
 85° SKEW

REVISIONS				SHEET NO.		
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2			4			

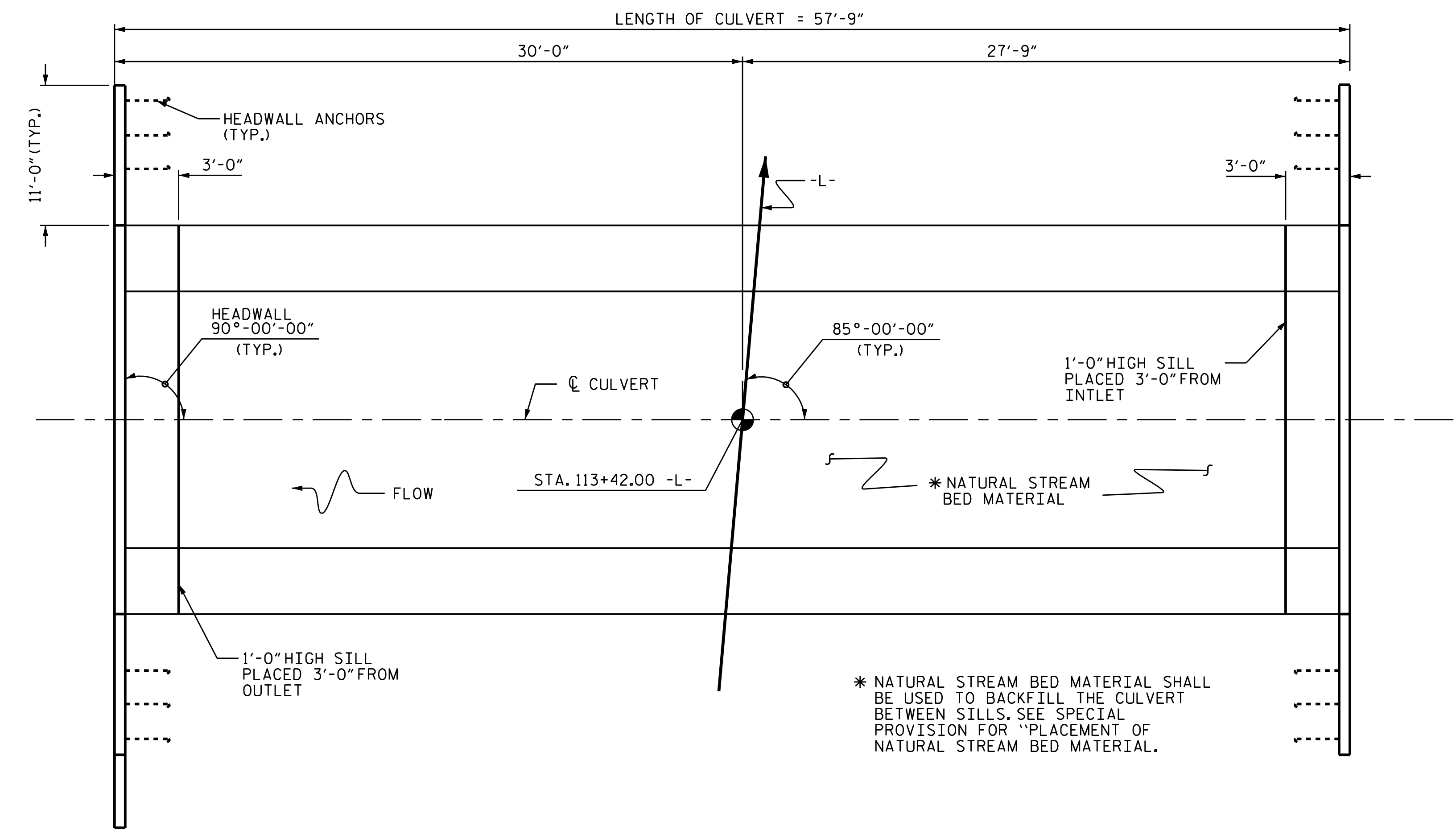
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CULVERT SECTION NORMAL TO ROADWAY



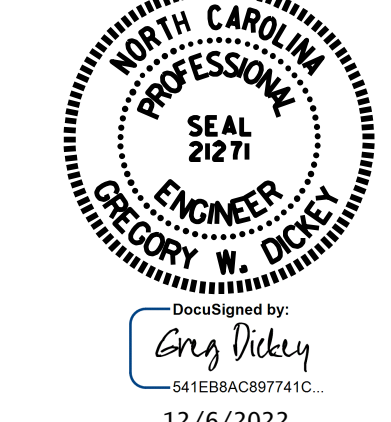
SECTION A-A  
TYPICAL EACH SILL LOCATION



LENGTH OF ALUMINUM BOX CULVERT

Prepared in the Office of: **SUMMIT** DESIGN AND ENGINEERING SERVICES  
 PROJECT NO. 5C.039062  
GRANVILLE COUNTY  
 STATION: 113+42.00 -L-  
 SHEET 2 OF 2

NC FIRM LICENSE No: P-0339  
 1110 Havaho Drive, Suite 600  
 Raleigh, NC 27609  
 Ph: 919-322-0115 Fax: 919-322-0116  
 www.summitde.net  
 (919) 732-6676 (FAX)



STATE OF NORTH CAROLINA  
 DEPARTMENT OF TRANSPORTATION  
 RALEIGH  
 SINGLE  
 15'-4" x 6'-5"  
 ALUMINUM BOX CULVERT  
 85° SKEW

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS: 2

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\$LASTSAVEDDATE\$ TIME\$ FILE\$

DRAWN BY: G. DICKEY DATE: 11/9/22  
 CHECKED BY: J. MCROY DATE: 11/9/22  
 DESIGN ENGINEER OF RECORD: G. DICKEY DATE: 11/9/22

## STANDARD NOTES

### DESIGN DATA:

SPECIFICATIONS	-----	A.A.S.H.T.O. (CURRENT)
LIVE LOAD	-----	SEE PLANS
IMPACT ALLOWANCE	-----	SEE A.A.S.H.T.O.
STRESS IN EXTREME FIBER OF STRUCTURAL STEEL - AASHTO M270 GRADE 36	--	20,000 LBS. PER SQ. IN.
	--	27,000 LBS. PER SQ. IN.
	--	27,000 LBS. PER SQ. IN.
REINFORCING STEEL IN TENSION - GRADE 60	----	24,000 LBS. PER SQ. IN.
CONCRETE IN COMPRESSION	-----	1,200 LBS. PER SQ. IN.
CONCRETE IN SHEAR	-----	SEE A.A.S.H.T.O.
STRUCTURAL TIMBER - TREATED OR UNTREATED EXTREME FIBER STRESS	----	1,800 LBS. PER SQ. IN.
COMPRESSION PERPENDICULAR TO GRAIN OF TIMBER	-----	375 LBS. PER SQ. IN.
EQUIVALENT FLUID PRESSURE OF EARTH	-----	30 LBS. PER CU. FT. (MINIMUM)

### MATERIAL AND WORKMANSHIP:

EXCEPT AS MAY OTHERWISE BE SPECIFIED ON PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE 2018 "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" OF THE N.C. DEPARTMENT OF TRANSPORTATION.

STEEL SHEET PILING FOR PERMANENT OR TEMPORARY APPLICATIONS SHALL BE HOT ROLLED.

### CONCRETE:

UNLESS OTHERWISE REQUIRED ON PLANS, CLASS A CONCRETE SHALL BE USED FOR ALL PORTIONS OF ALL STRUCTURES WITH THE EXCEPTION THAT: CLASS AA CONCRETE SHALL BE USED IN BRIDGE SUPERSTRUCTURES, ABUTMENT BACKWALLS, AND APPROACH SLABS; AND CLASS B CONCRETE SHALL BE USED FOR SLOPE PROTECTION AND RIP RAP.

### CONCRETE CHAMFERS:

UNLESS OTHERWISE NOTED ON THE PLANS, ALL EXPOSED CORNERS ON STRUCTURES SHALL BE CHAMFERED  $\frac{3}{4}$ " WITH THE FOLLOWING EXCEPTIONS: TOP CORNERS OF CURBS MAY BE ROUNDED TO  $\frac{1}{2}$ " RADIUS WHICH IS BUILT INTO CURB FORMS; CORNERS OF TRANSVERSE FLOOR EXPANSION JOINTS SHALL BE ROUNDED WITH A  $\frac{1}{4}$ " FINISHING TOOL UNLESS OTHERWISE REQUIRED ON PLANS; AND CORNERS OF EXPANSION JOINTS IN THE ROADWAY FACES AND TOPS OF CURBS AND SIDEWALKS SHALL BE ROUNDED TO A  $\frac{1}{4}$ " RADIUS WITH A FINISHING STONE OR TOOL UNLESS OTHERWISE REQUIRED ON PLANS.

### DOWELS:

DOWELS WHEN INDICATED ON PLANS AS FOR CULVERT EXTENSIONS, SHALL BE EMBEDDED AT LEAST 12" INTO THE OLD CONCRETE AND GROUTED INTO PLACE WITH 1:2 CEMENT MORTAR.

### ALLOWANCE FOR DEAD LOAD DEFLECTION, SETTLEMENT, ETC. IN CASTING SUPERSTRUCTURES:

BRIDGES SHALL BE BUILT ON THE GRADE OR VERTICAL CURVE SHOWN ON PLANS. SLABS, CURBS AND PARAPETS SHALL CONFORM TO THE GRADE OR CURVE.

ALL DIMENSIONS WHICH ARE GIVEN IN SECTION AND ARE AFFECTED BY DEAD LOAD DEFLECTIONS ARE DIMENSIONS AT CENTER LINE OF BEARING UNLESS OTHERWISE NOTED ON PLANS. IN SETTING FORMS FOR STEEL BEAM BRIDGES AND PRESTRESSED CONCRETE GIRDER BRIDGES, ADJUSTMENTS SHALL BE MADE DUE TO THE DEAD LOAD DEFLECTIONS FOR THE ELEVATIONS SHOWN. WHERE BLOCKS ARE SHOWN OVER BEAMS FOR BUILDING UP TO THE SLAB, THE VERTICAL DIMENSIONS OF THE BLOCKS SHALL BE ADJUSTED BETWEEN BEARINGS TO COMPENSATE FOR DEAD LOAD DEFLECTIONS, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER. WHERE BOTTOM OF SLAB IS IN LINE WITH BOTTOM OF TOP FLANGES, DEPTH OF SLAB BETWEEN BEARINGS SHALL BE ADJUSTED TO COMPENSATE FOR DEAD LOAD DEFLECTION, VERTICAL CURVE ORDINATE, AND ACTUAL BEAM CAMBER.

IN SETTING FALSEWORK AND FORMS FOR REINFORCED CONCRETE SPANS, AN ALLOWANCE SHALL BE MADE FOR DEAD LOAD DEFLECTIONS, SETTLEMENT OF FALSEWORK, AND PERMANENT CAMBER WHICH SHALL BE PROVIDED FOR IN ADDITION TO THE ELEVATIONS SHOWN. AFTER REMOVAL OF THE FALSEWORK, THE FINISHED STRUCTURES SHALL CONFORM TO THE PROFILE AND ELEVATIONS SHOWN ON THE PLANS AND CONSTRUCTION ELEVATIONS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR FALSEWORK OR FORMS FOR BRIDGE SUPERSTRUCTURE AND ANY STRUCTURE OR PARTS OF A STRUCTURE AS NOTED ON THE PLANS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL BEFORE CONSTRUCTION OF THE FALSEWORK OR FORMS IS STARTED.

### REINFORCING STEEL:

ALL REINFORCING STEEL SHALL BE DEFORMED. DIMENSIONS RELATIVE TO PLACEMENT OF REINFORCING ARE TO CENTERS OF BARS UNLESS OTHERWISE INDICATED IN THE PLANS. DIMENSIONS ON BAR DETAILS ARE TO CENTERS OF BARS OR ARE OUT TO OUT AS INDICATED ON PLANS.

WIRE BAR SUPPORTS SHALL BE PROVIDED FOR REINFORCING STEEL WHERE INDICATED ON THE PLANS. WHEN BAR SUPPORT PIECES ARE PLACED IN CONTINUOUS LINES, THEY SHALL BE SO PLACED THAT THE ENDS OF THE SUPPORTING WIRES SHALL BE LAPPED TO LOCK LEGS ON ADJOINING PIECES.

### STRUCTURAL STEEL:

AT THE CONTRACTOR'S OPTION, HE MAY SUBSTITUTE  $\frac{7}{8}$ "  $\emptyset$  SHEAR STUDS FOR THE  $\frac{3}{4}$ "  $\emptyset$  STUDS SPECIFIED ON THE PLANS. THIS SUBSTITUTION SHALL BE MADE AT THE RATE OF 3 -  $\frac{7}{8}$ "  $\emptyset$  STUDS FOR 4 -  $\frac{3}{4}$ "  $\emptyset$  STUDS, AND STUD SPACING CHANGES SHALL BE MADE AS NECESSARY TO PROVIDE THE SAME EQUIVALENT NUMBER OF  $\frac{7}{8}$ "  $\emptyset$  STUDS ALONG THE BEAM AS SHOWN FOR  $\frac{3}{4}$ "  $\emptyset$  STUDS BASED ON THE RATIO OF 3 -  $\frac{7}{8}$ "  $\emptyset$  STUDS FOR 4 -  $\frac{3}{4}$ "  $\emptyset$  STUDS. STUDS OF THE LENGTH SPECIFIED ON THE PLANS MUST BE PROVIDED. THE MAXIMUM SPACING SHALL BE 2'-0".

EXCEPT AT THE INTERIOR SUPPORTS OF CONTINUOUS BEAMS WHERE THE COVER PLATE IS IN CONTACT WITH BEARING PLATE, THE CONTRACTOR MAY, AT HIS OPTION, SUBSTITUTE FOR THE COVER PLATES DESIGNATED ON THE PLANS COVER PLATES OF THE EQUIVALENT AREA PROVIDED THESE PLATES ARE AT LEAST  $\frac{3}{16}$ " IN THICKNESS AND DO NOT EXCEED A WIDTH EQUAL TO THE FLANGE WIDTH LESS 2" OR A THICKNESS EQUAL TO 2 TIMES THE FLANGE THICKNESS. THE SIZE OF FILLET WELDS SHALL CONFORM TO THE REQUIREMENTS OF THE CURRENT ANSI/AASHTO/AWS "BRIDGE WELDING CODE". ELECTROSLAG WELDING WILL NOT BE PERMITTED.

WITH THE SOLE EXCEPTION OF EDGES AT SURFACES WHICH BEAR ON OTHER SURFACES, ALL SHARP EDGES AND ENDS OF SHAPES AND PLATES SHALL BE SLIGHTLY ROUNDED BY SUITABLE MEANS TO A RADIUS OF APPROXIMATELY  $\frac{1}{16}$ " INCH OR EQUIVALENT FLAT SURFACE AT A SUITABLE ANGLE PRIOR TO PAINTING, GALVANIZING, OR METALLIZING.

### HANDRAILS AND POSTS:

METAL STANDARDS AND FACES OF THE CONCRETE END POSTS FOR THE METAL RAIL SHALL BE SET NORMAL TO THE GRADE OF THE CURB, UNLESS OTHERWISE SHOWN ON PLANS. THE METAL RAIL AND TOPS OF CONCRETE POSTS USED WITH THE ALUMINUM RAIL SHALL BE BUILT PARALLEL TO THE GRADE OF THE CURB.

METAL HANDRAILS SHALL BE IN ACCORDANCE WITH THE PLANS. RAILS SHALL BE AS MANUFACTURED FOR BRIDGE RAILING. CASTINGS SHALL BE OF A UNIFORM APPEARANCE. FINS AND OTHER DEFORMATIONS RESULTING FROM CASTING OR OTHERWISE SHALL BE REMOVED IN A MANNER SO THAT A UNIFORM COLORING OF THE COMPLETED CASTING SHALL BE OBTAINED. CASTINGS WITH DISCOLORATIONS OR OF NON-UNIFORM COLORING WILL NOT BE ACCEPTED. CERTIFIED MILL REPORTS ARE REQUIRED FOR METAL RAILS AND POSTS.

### SPECIAL NOTES:

GENERALLY, IN CASE OF DISCREPANCY, THIS STANDARD SHEET OF NOTES SHALL GOVERN OVER THE SPECIFICATIONS, BUT THE REMAINDER OF THE PLANS SHALL GOVERN OVER NOTES HEREON, AND SPECIAL PROVISIONS SHALL GOVERN OVER ALL. SEE SPECIFICATIONS ARTICLE 105-4.

ENGLISH

JANUARY, 1990

STD. NO. SN