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8/17/99

REVISIONS

MACON COUNTY
BRIDGE #550043

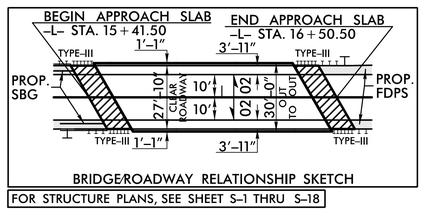
PROJECT REFERENCE NO.	SHEET NO.
17BP.14.R.210	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 035018 ENGINEER JIMMY L. TERRY — 10/30/2019

HYDRAULICS ENGINEER: NORTH CAROLINA PROFESSIONAL SEAL 038697 ENGINEER DAVID B. PETTY — 10/30/2019

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
804-C N. LAFAYETTE ST
SHELBY, NC 28150
PH (704) 476-0003
CORP. LICENSE NO.: C-0275

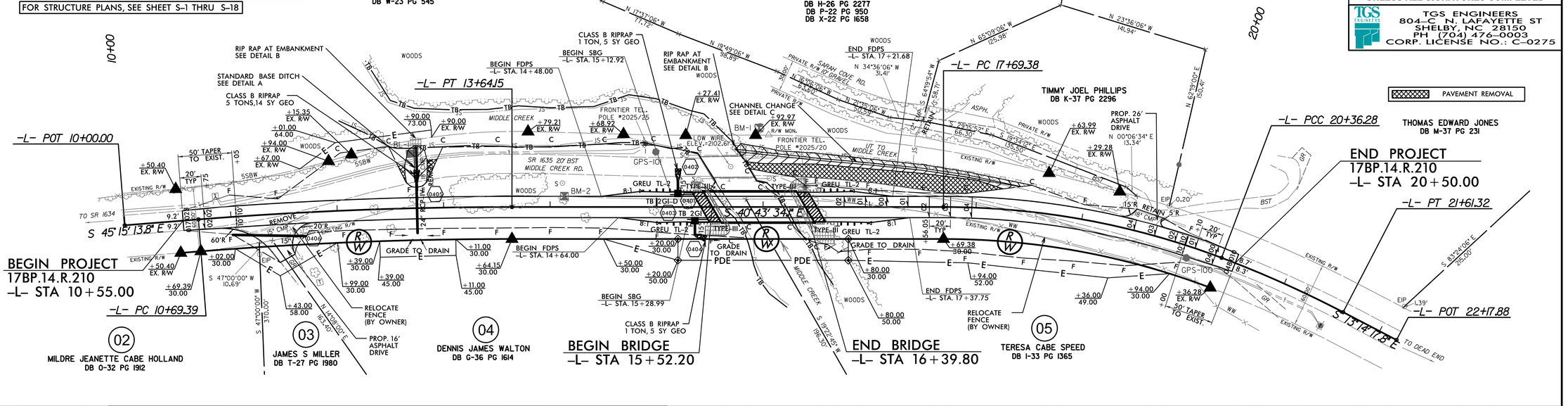


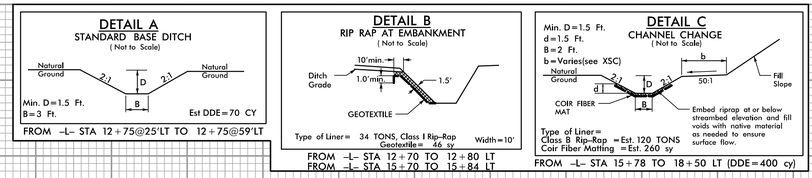
BRIDGE/ROADWAY RELATIONSHIP SKETCH

FOR STRUCTURE PLANS, SEE SHEET S-1 THRU S-18

-L- CURVE DATA

PI Sta 12+16.84	PI Sta 19+04.30	PI Sta 20+98.87
Δ = 4° 31' 39.7" (RT)	Δ = 20° 39' 54.7" (RT)	Δ = 6° 49' 21.6" (RT)
D = 1° 32' 09.9"	D = 7° 44' 33.6"	D = 5° 27' 24.3"
L = 294.76'	L = 266.90'	L = 125.03'
T = 147.46'	T = 134.92'	T = 62.59'
R = 3,730.00'	R = 740.00'	R = 1,050.00'
SE = NC	SE = 0.04	SE = 0.04
DS = 35 MPH	DS = 45 MPH	DS = 50 MPH

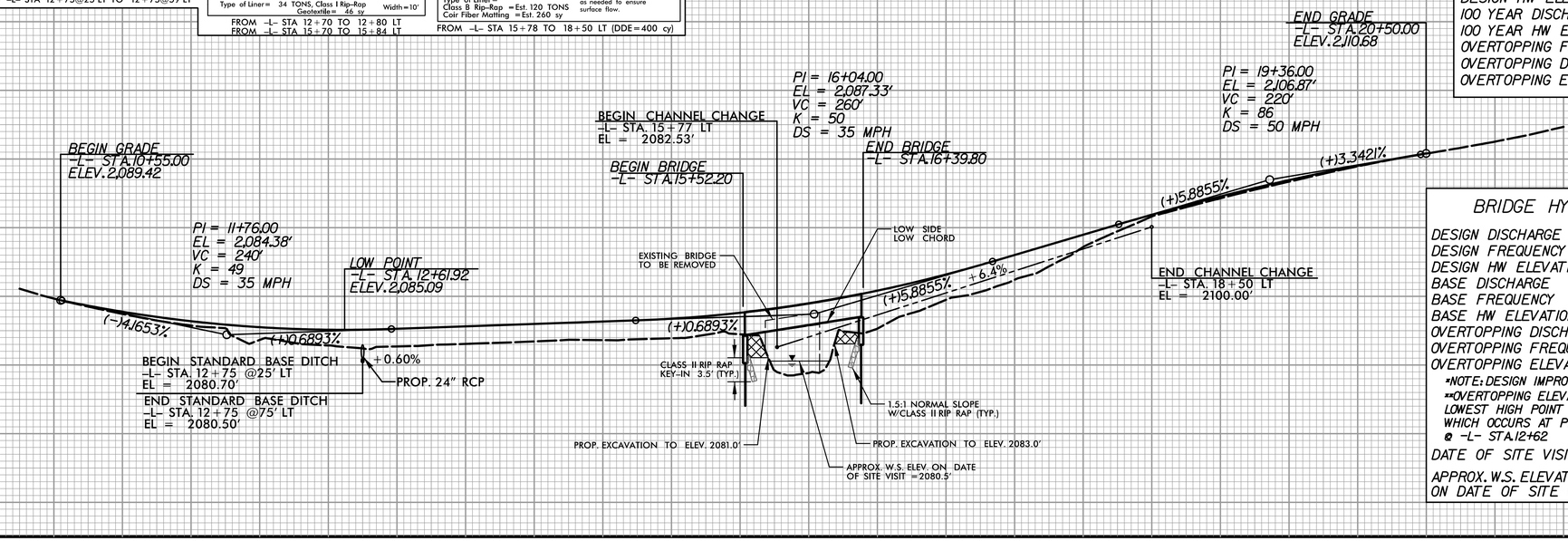




BM#1 ELEV. 2092.91
NAIL IN 10" TREE BASE ROOT
LT 74.14' OF -L- STA 15+96.32

PIPE HYDRAULIC DATA
24" RCP @ -L- Sta. 12+75

DRAINAGE AREA	= 5.8	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 15.5	CFS
DESIGN HW ELEVATION	= 2083.3	FT
100 YEAR DISCHARGE	= 18.8	CFS
100 YEAR HW ELEVATION	= 2083.6	FT
OVERTOPPING FREQUENCY	= 100+	YRS
OVERTOPPING DISCHARGE	= 30	CFS
OVERTOPPING ELEVATION	= 2085.1	FT



BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 1400	CFS
DESIGN FREQUENCY	= 5	YRS*
DESIGN HW ELEVATION	= 2085.1	FT
BASE DISCHARGE	= 3870	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 2087.4	FT
OVERTOPPING DISCHARGE	= 1800	CFS
OVERTOPPING FREQUENCY	= 10+/-	YRS
OVERTOPPING ELEVATION	= 2085.1	FT**

*NOTE: DESIGN IMPROVES LEVEL OF SERVICE.
**OVERTOPPING ELEVATION REPRESENTS LOWEST HIGH POINT ON DECK/ROADWAY WHICH OCCURS AT PROPOSED SAG @ -L- STA.12+62

DATE OF SITE VISIT = 3/8/2018

APPROX. W.S. ELEVATION ON DATE OF SITE VISIT = 2080.5 FT

7/29/2019
X:\NCDOT\Division 14 - 2017\Macon 550043\Roadway\Proj\550043_Rdy_psh.dgn
User: ramelvin