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8/17/99

PROJECT REFERENCE NO.	SHEET NO.
B-6023	4
HENDERSON COUNTY	BRIDGE #440192
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 041650 ENGINEER BENJAMIN C. PICKERING — DocuSign 11/26/2018

NORTH CAROLINA PROFESSIONAL SEAL 40801 ENGINEER PAUL T. CAMERON — DocuSign 11/26/2018

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Plans Prepared By:

AMERICAN Engineering
8008 CORPORATE CENTER DRIVE, SUITE 110
CHARLOTTE, NORTH CAROLINA 28226
NC Lic. No. C-3881

DETAIL TP1
TOE PROTECTION
(Not to Scale)

2:1 or Flatter Fill Slope; 2:1 or Flatter Fill Slope; d; Geotextile

d= 1 Ft.

Type of Liner= Class B Rip-Rap

FROM -L- STA. 12+69 TO -L- STA. 12+79 LT

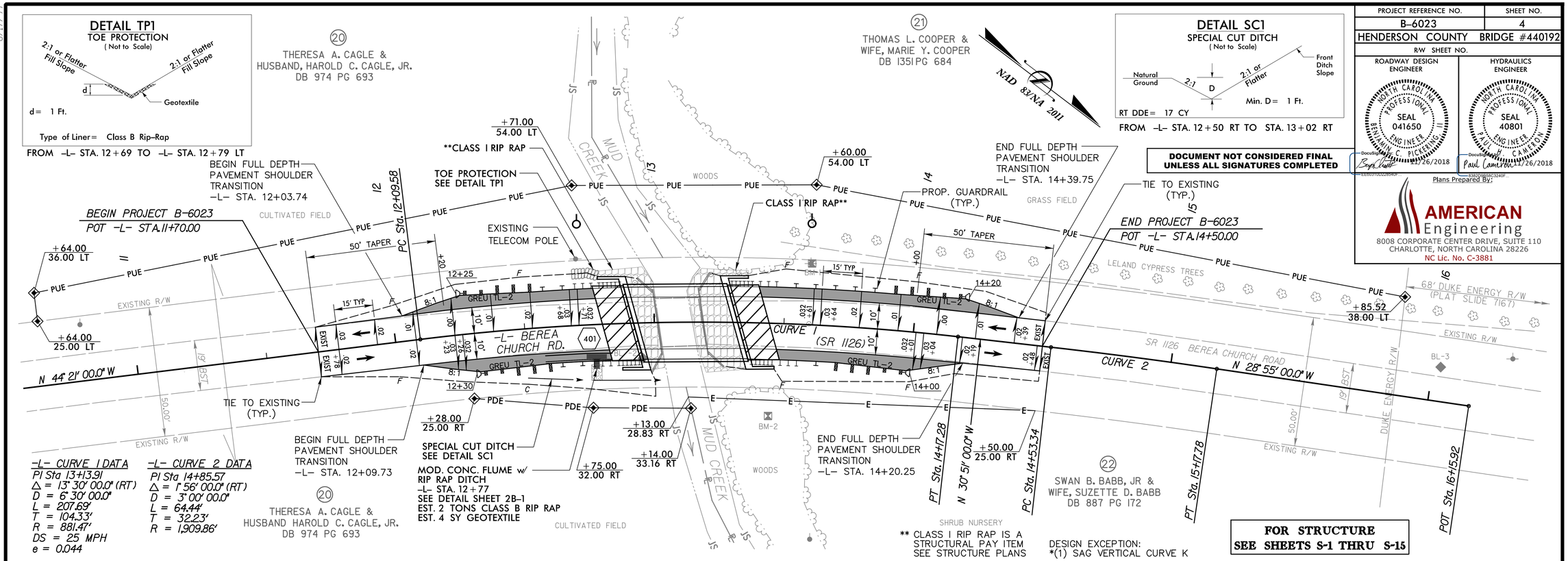
DETAIL SC1
SPECIAL CUT DITCH
(Not to Scale)

Natural Ground; 2:1; D; 2:1 or Flatter; Front Ditch Slope

Min. D= 1 Ft.

RT DDE= 17 CY

FROM -L- STA. 12+50 RT TO STA. 13+02 RT



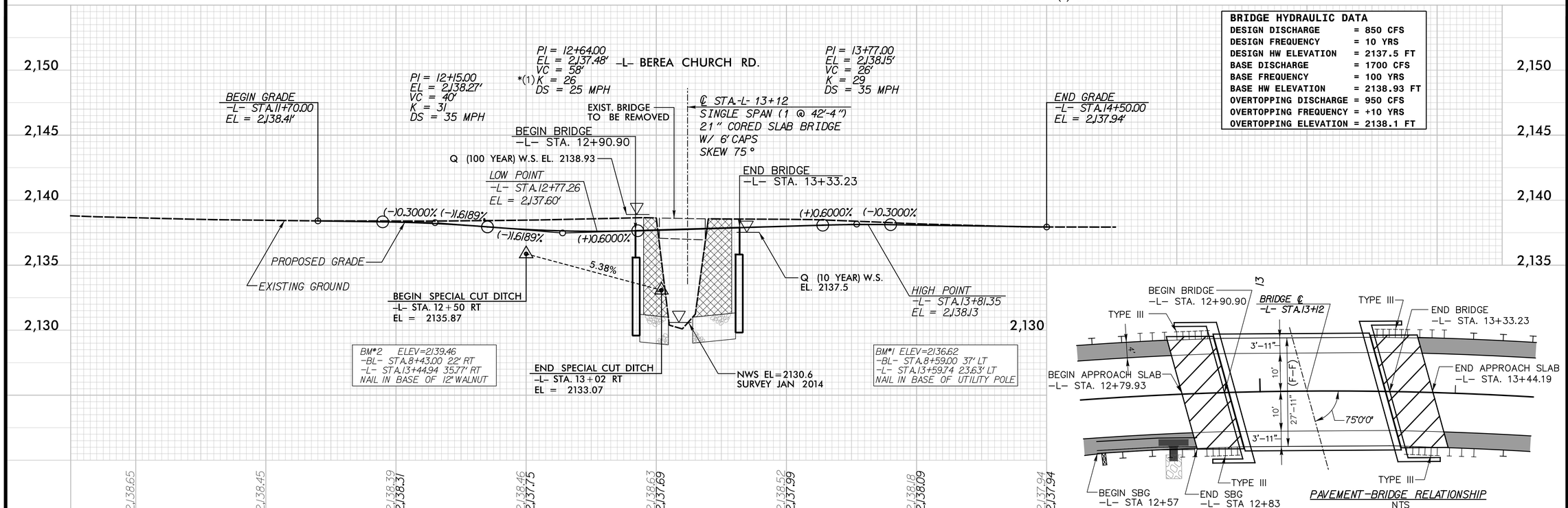
** CLASS I RIP RAP IS A STRUCTURAL PAY ITEM SEE STRUCTURE PLANS

DESIGN EXCEPTION:
*(1) SAG VERTICAL CURVE K

FOR STRUCTURE SEE SHEETS S-1 THRU S-15

BRIDGE HYDRAULIC DATA

DESIGN DISCHARGE	= 850 CFS
DESIGN FREQUENCY	= 10 YRS
DESIGN HW ELEVATION	= 2137.5 FT
BASE DISCHARGE	= 1700 CFS
BASE FREQUENCY	= 100 YRS
BASE HW ELEVATION	= 2138.93 FT
OVERTOPPING DISCHARGE	= 950 CFS
OVERTOPPING FREQUENCY	= +10 YRS
OVERTOPPING ELEVATION	= 2138.1 FT



PAVEMENT-BRIDGE RELATIONSHIP
NTS