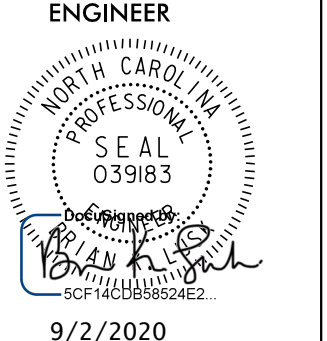
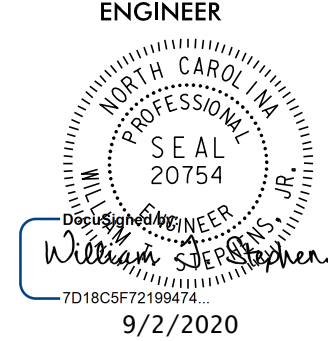
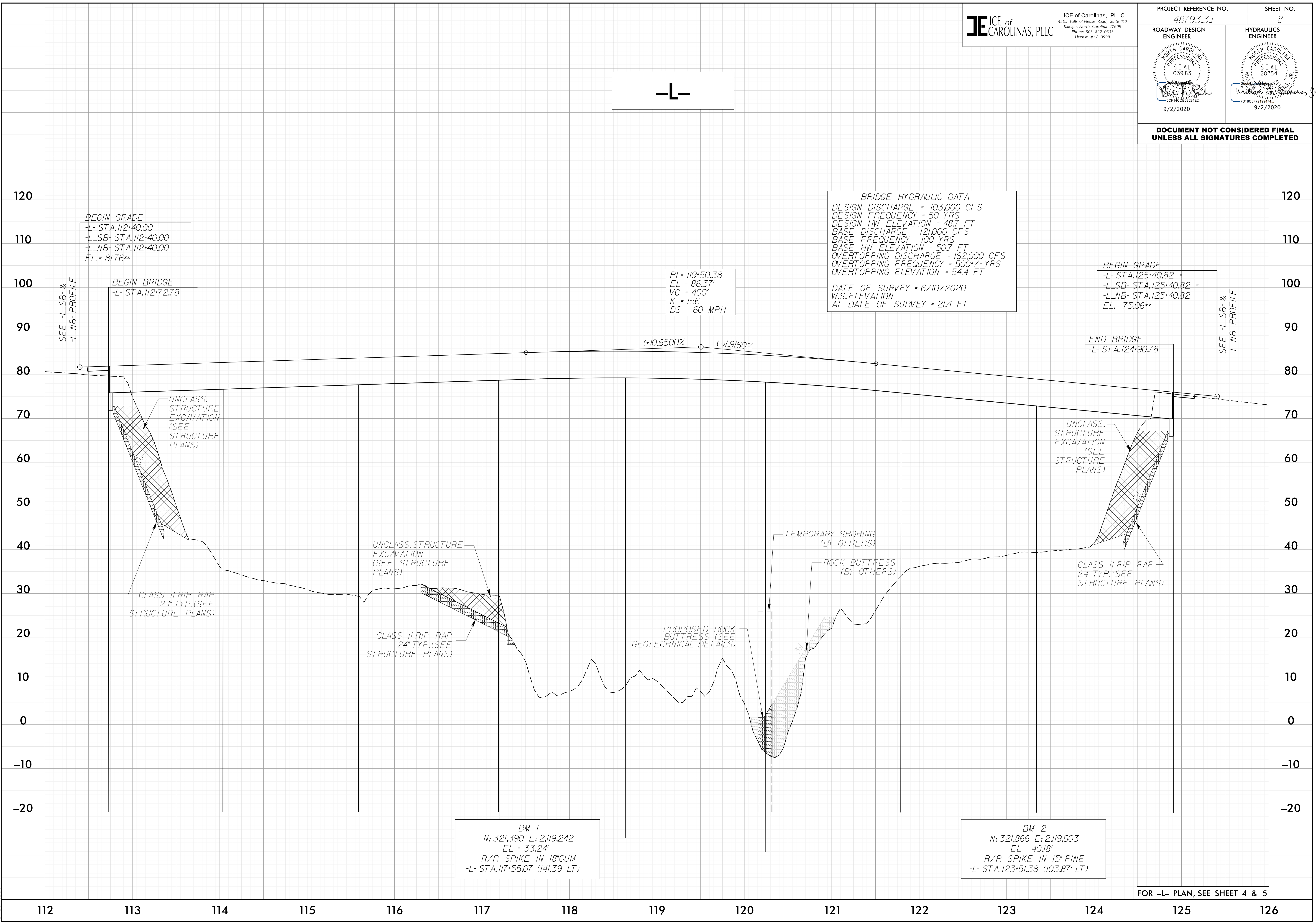


5/14/19
9:43:15 AM
R:\Projects\19-77 Division 6 On Call\02 US 701 over Cape Fear River\NC00\Roadway\Proj\Plansheets\US701-L-rdy-pl\08.dgn
B:\plan\lusk

ICE of CAROLINAS, PLLC
4505 Falls of Neuse Road, Suite 110
Raleigh, North Carolina 27609
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License #: P-0999

PROJECT REFERENCE NO. 48793.31	SHEET NO. 8
ROADWAY DESIGN ENGINEER  9/2/2020	HYDRAULICS ENGINEER  9/2/2020

**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**



BEGIN GRADE
 -L- STA.112+40.00 =
 -L-SB- STA.112+40.00
 -L-NB- STA.112+40.00
 EL. = 81.76**

BEGIN BRIDGE
 -L- STA.112+72.78

PI = 119+50.38
 EL = 86.37'
 VC = 400'
 K = 156
 DS = 60 MPH

BRIDGE HYDRAULIC DATA
 DESIGN DISCHARGE = 103,000 CFS
 DESIGN FREQUENCY = 50 YRS
 DESIGN HW ELEVATION = 48.7 FT
 BASE DISCHARGE = 121,000 CFS
 BASE FREQUENCY = 100 YRS
 BASE HW ELEVATION = 50.7 FT
 OVERTOPPING DISCHARGE = 162,000 CFS
 OVERTOPPING FREQUENCY = 500 +/- YRS
 OVERTOPPING ELEVATION = 54.4 FT
 DATE OF SURVEY = 6/10/2020
 W.S. ELEVATION
 AT DATE OF SURVEY = 21.4 FT

BEGIN GRADE
 -L- STA.125+40.82 =
 -L-SB- STA.125+40.82 =
 -L-NB- STA.125+40.82
 EL. = 75.06**

END BRIDGE
 -L- STA.124+90.78

UNCLASS. STRUCTURE EXCAVATION (SEE STRUCTURE PLANS)

CLASS II RIP RAP 24" TYP. (SEE STRUCTURE PLANS)

UNCLASS. STRUCTURE EXCAVATION (SEE STRUCTURE PLANS)

CLASS II RIP RAP 24" TYP. (SEE STRUCTURE PLANS)

PROPOSED ROCK BUTTRESS (SEE GEOTECHNICAL DETAILS)

TEMPORARY SHORING (BY OTHERS)
 ROCK BUTTRESS (BY OTHERS)

UNCLASS. STRUCTURE EXCAVATION (SEE STRUCTURE PLANS)

CLASS II RIP RAP 24" TYP. (SEE STRUCTURE PLANS)

BM 1
 N: 321,390 E: 2,119,242
 EL = 33.24'
 R/R SPIKE IN 18" GUM
 -L- STA.117+55.07 (141.39 LT)

BM 2
 N: 321,866 E: 2,119,603
 EL = 40.18'
 R/R SPIKE IN 15" PINE
 -L- STA.123+51.38 (103.87' LT)

FOR -L- PLAN, SEE SHEET 4 & 5