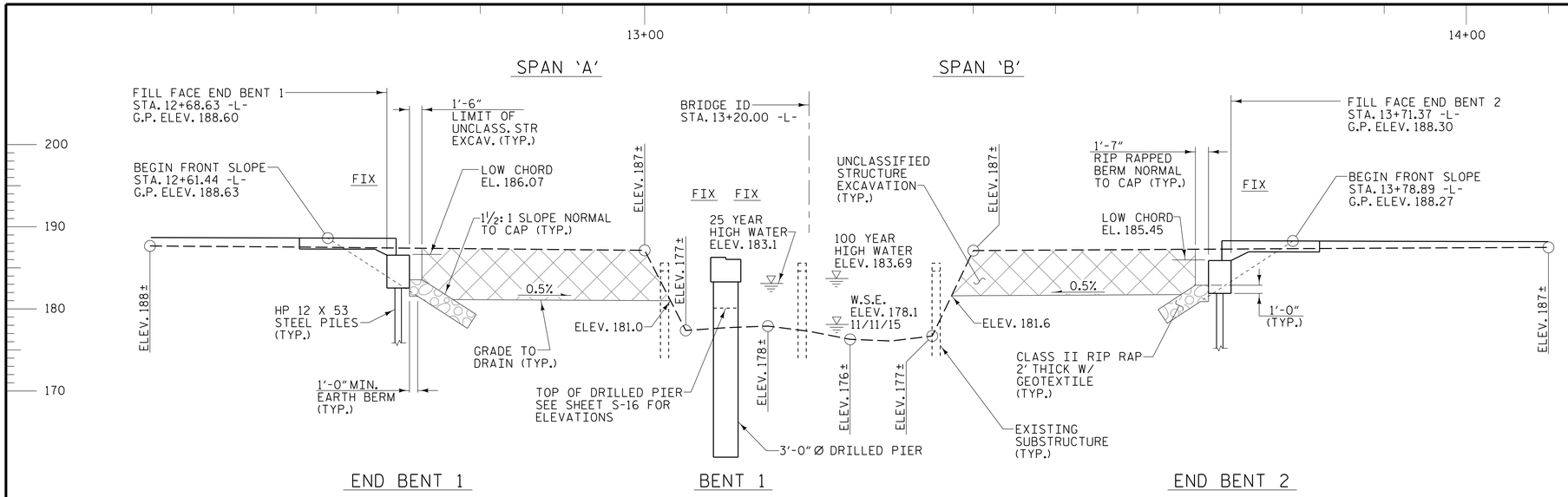
DocuSign Envelope ID: 6598CDCB-6462-437F-96B1-F480334A07D2



SECTION ALONG -L-

PI = 11+31.00	PI = 14+88.58
EL = 189.02'	EL = 187.94'
VC = 220'	VC = 195'
(-)2.0047% △ (-)0.3007%	(-)0.3007% △ (+)1.4425%

GRADE DATA
-L- (SR 1109)

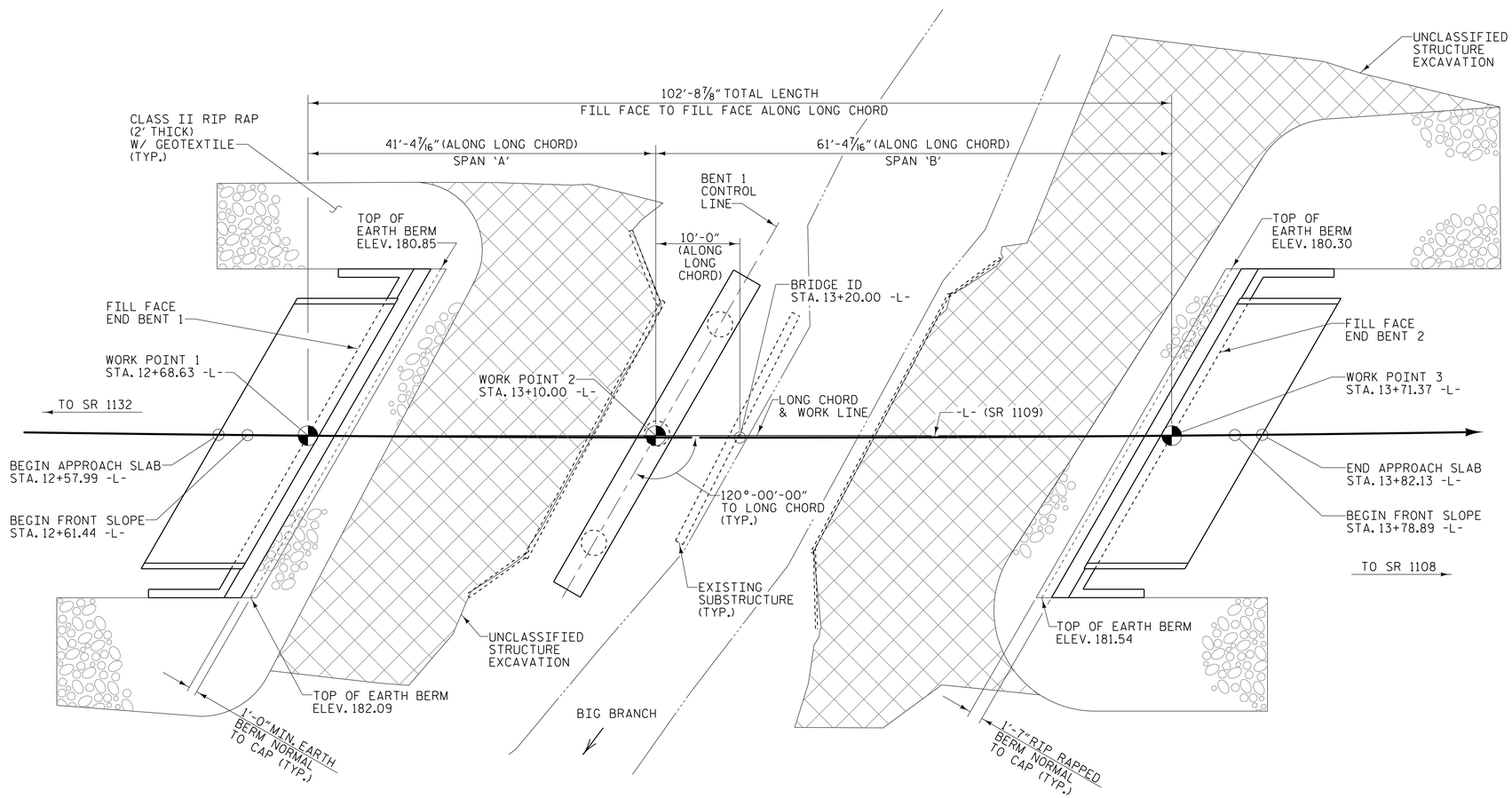
HYDRAULIC DATA:

DESIGN DISCHARGE -	650 CFS
FREQUENCY OF DESIGN FLOOD -	25 YEAR
DESIGN HIGH WATER ELEVATION -	183.1
DRAINAGE AREA -	5.2 SQ. MI.
BASE DISCHARGE (Q 100) -	1000 CFS
BASE HIGH WATER ELEVATION -	183.69

OVERTOPPING DATA:

OVERTOPPING DISCHARGE -	4241 CFS
FREQUENCY OF OVERTOPPING-	>500 YEAR
OVERTOPPING FLOOD ELEVATION -	188.4

OVERTOPPING OCCURS AT ROADWAY STA. 14+50.00 -L-
AT HIGH SIDE OF SUPER



PLAN

PILES NOT SHOWN FOR CLARITY

NOTE: THIS BRIDGE IS CONSTRUCTED PARALLEL TO THE LONG CHORD

HORIZONTAL CURVE DATA

PI STA. 12+43.90
△ = 4° 48' 13.1" (LT)
D = 0° 59' 07.2"
L = 487.51'
T = 243.90'
R = 5,814.85'

PROJECT NO. 17BP.4.R.69
NASH COUNTY
STATION: 13+20.00 -L-

SHEET 1 OF 2 REPLACES BRIDGE NO. 62

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON SR 1109 OVER
BIG BRANCH BETWEEN
SR 1132 & SR 1108

30'-10" CLEAR ROADWAY - 120° SKEW

NORTH CAROLINA PROFESSIONAL SEAL 19661 ENGINEER KEVIN AUSTIN
DocuSigned by: K. Kevin Austin
B7B37205A4BB...
1/3/2017

PLANS PREPARED BY:
CALYX ENGINEERS + CONSULTANTS
6750 TRYON ROAD
CARY, NC 27518
phone: 919.851.1912
CALYXengineers.com
NC License # F-1333

REVISIONS								SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:			S-1
1			3					TOTAL SHEETS
2			4					20

DRAWN BY : W. B. ALLEN DATE : 7/16
CHECKED BY : W. A. DAVIS DATE : 7/16

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

1/3/2017 9:07:53 AM R:\Structures\17BP.4.R.69_SMU_GD_01.dgn