

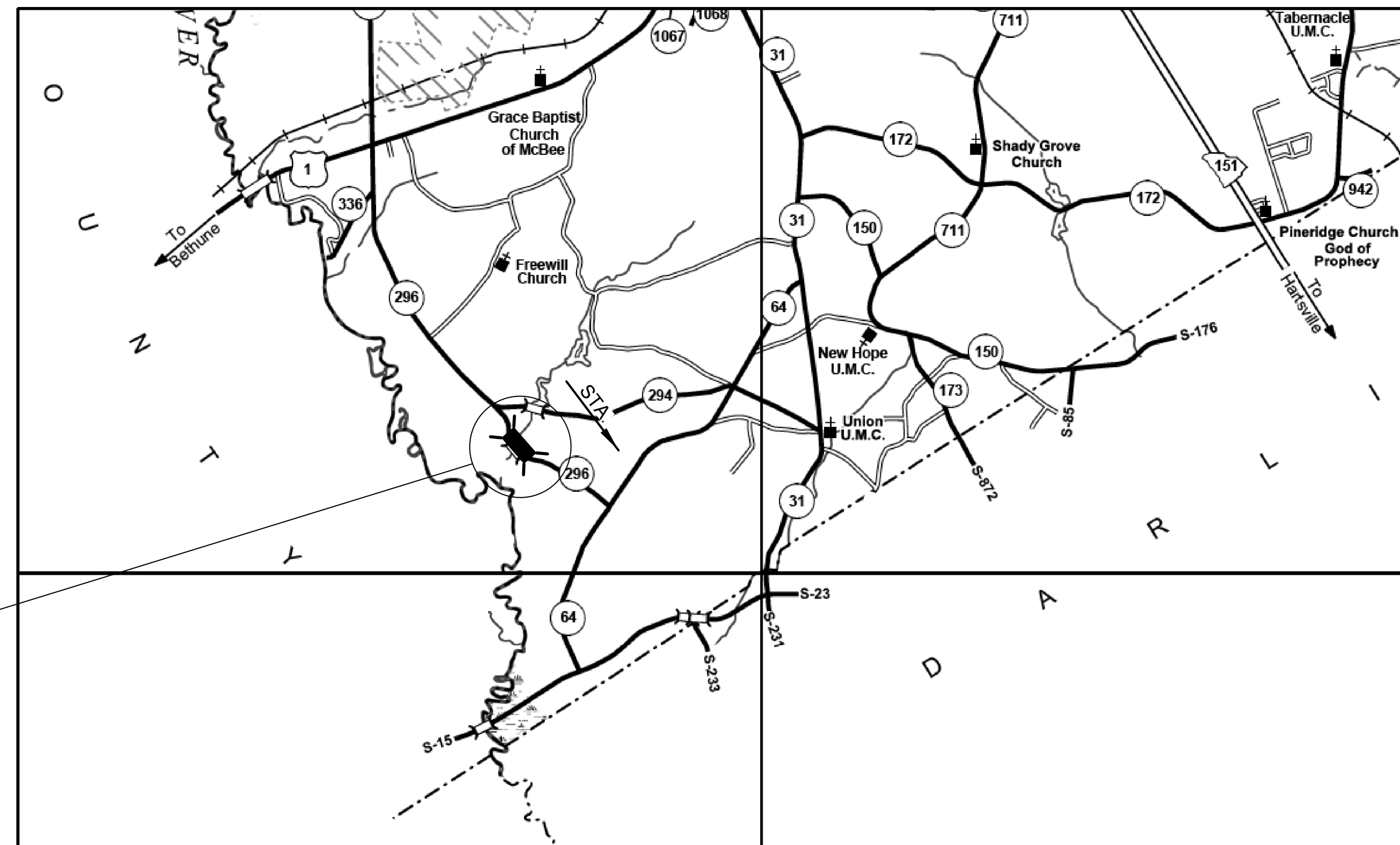


PROPOSED PLANS  
FOR  
CHESTERFIELD COUNTY  
PROJECT ID P041957  
STATE ROUTE S-13-296 (OLD CREEK RD)  
REPLACE BRIDGE OVER BLACKWELL MILL STREAM

Design Reference for these plans is the:

LVB

## Supplemental Design Criteria For Low Volume Bridge Replacement Projects



## SITE LOCATION

Approximate Location of Bridge is

Latitude 34°-23'-55" N  
Longitude 80°-17'-07" W

## LAYOUT

NET LENGTH OF ROADWAY	0.000	MILES
NET LENGTH OF BRIDGES	0.015	MILES
NET LENGTH OF PROJECT	0.015	MILES
LENGTH OF EXCEPTIONS	0.000	MILES
GROSS LENGTH OF PROJECT	0.015	MILES

NOTE: EXCEPT AS MAY OTHERWISE BE SPECIFIED ON THE PLANS OR IN THE SPECIAL PROVISIONS, ALL MATERIALS AND WORKMANSHIP ON THIS PROJECT SHALL CONFORM TO THE SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2007 EDITION) AND THE STANDARD DRAWINGS FOR ROAD CONSTRUCTION IN EFFECT AT THE TIME OF LETTING.

CONSULTING ENGINEERING FIRM



HNTB CORPORATION  
SC License No. 265  
343 E. Six Forks Rd., Suite 200, Raleigh, N.C. 27609

ENGINEER OF RECORD

**CONCEPTUAL  
PLANS  
NOT FOR  
CONSTRUCTION**

FOR CONSTRUCTION : \_\_\_\_\_ DATE \_\_\_\_\_

## INDEX OF SHEETS

1. TITLE SHEET
2. BRIDGE PLAN AND PROFILE
3. BRIDGE TYPICAL SECTION

### 3 DAYS BEFORE DIGGING IN SOUTH CAROLINA

CALL 811

SOUTH CAROLINA 811 (SC811)  
WWW.SC811.COM  
ALL UTILITIES MAY NOT BE A MEMBER OF SC811

ASSET ID NOT ASSIGNED

## TRAFFIC DATA

2025 ADT 700 V.P.D.

2045\* ADT 1,010\* V.P.D.

TRUCKS 35%.

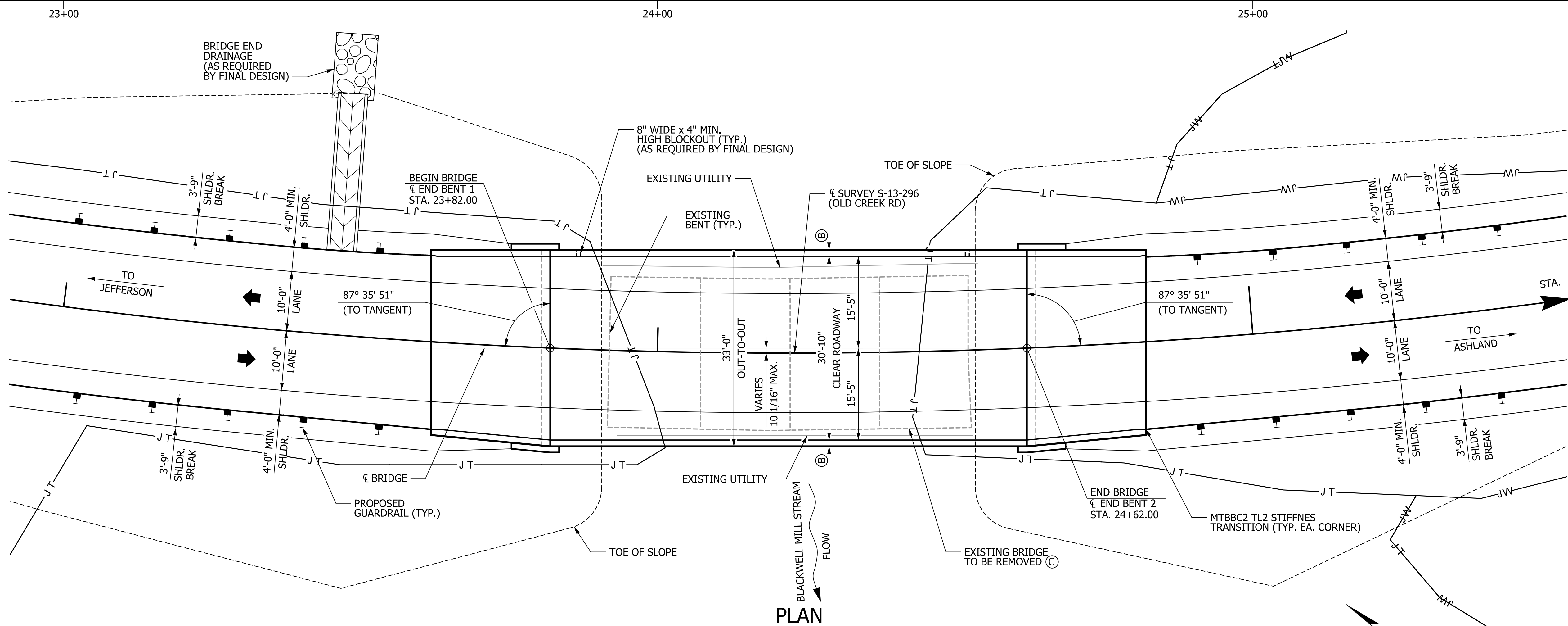
\*DESIGN TRAFFIC DATA

REVIEWED					
DR.	MEW	BJA	6/23		
	BY	CHK	DATE		

CADD FILE INFORMATION 3:54:53 PM  
 PLOTTED DATE: 7/5/2023  
 FILE NAME: ...Prep-001.S13\_296\_P041957-.tss.dgn

CADD FILE INFORMATION 3:55:27 PM  
PLOTTED DATE: 7/5/2023  
FILE NAME: ...\\Prp\_002.S.13.296\_P041957\_dp.dgn

BRIDGE PLANS ID	SHEET NO.
P041957	2



- NOTES:
- (A) PROPOSED PROFILE SET SO THAT THE LOW CHORD SATISFIES THE HYDRAULIC REQUIREMENTS, SET FORTH BY THE RFP.
  - (B) INCLUDES 1'-0" MASH BARRIER PARAPET AND 1" SLAB EXTENSION.
  - (C) REMOVE AND DISPOSE OF EXISTING 25'-6" x 60'-0" 4-SPAN SIMPLE CONCRETE SLAB BRIDGE AND APPURTENANCES IN ACCORDANCE WITH SECTION 202.4.2 OF THE STANDARD SPECIFICATIONS.

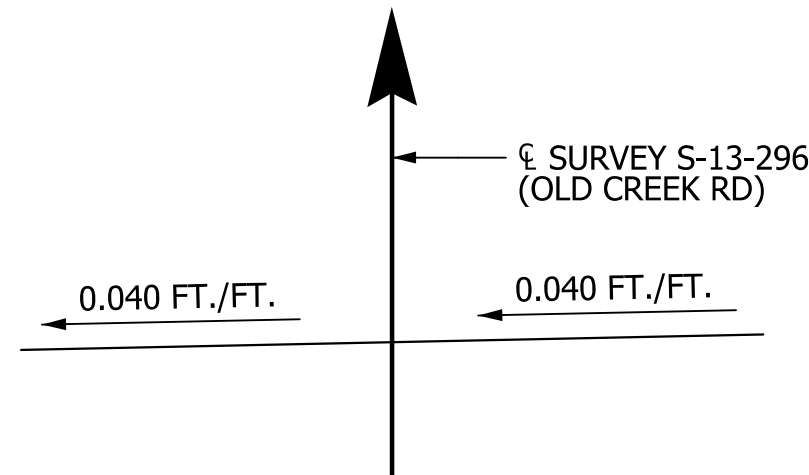
F - DENOTES FIXED BEARING

[Hatched Box] = EXCAVATE HATCHED AREA

#### CONTROL POINTS

CP3  
ELEVATION = 224.09'  
N 934466.73 E 2215354.84  
#5 REBAR

CP4  
ELEVATION = 214.22'  
N 933948.09 E 2215638.59  
#5 REBAR



TYPICAL THROUGHOUT BRIDGE  
SUPERELEVATION SKETCH

#### VERTICAL CURVE DATA

PVI = 21+00.00 ELEV. 214.25 V.C. = 550'  
PVI = 26+75.00 ELEV. 217.13 V.C. = 400'

-6.41% +0.50% +5.48%

#### HYDROLOGY DATA

D.A. = 5.24 SQ. MILES  
Q<sub>25</sub> = 324 CFS  
VELOCITY<sub>25</sub> = 5.7 FPS  
AREA FURNISHED UNDER<sub>25</sub> = 56.4 SQ. FT.  
Q<sub>100</sub> = 447 CFS  
VELOCITY<sub>100</sub> = 5.8 FPS  
AREA FURNISHED UNDER<sub>100</sub> = 76.8 SQ. FT.

#### OVERTOPPING FLOOD

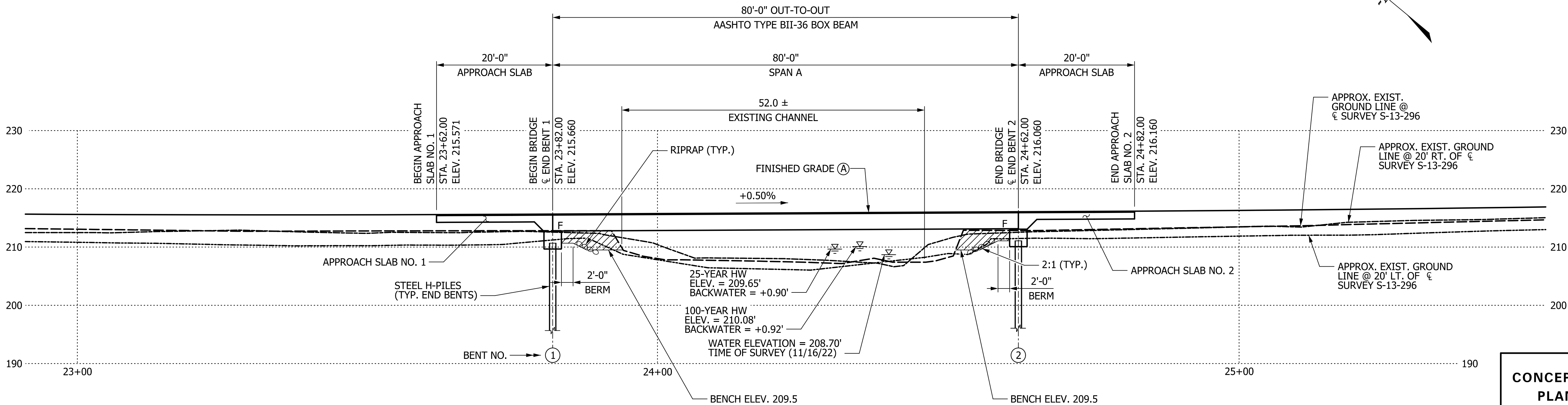
Q = 3,500 CFS  
PROBABILITY < 0.2%

#### HORIZONTAL CURVE DATA

PI = 26+56.28  
Δ = 50° 20' 23" (LT)  
Dc = 6° 00' 17"  
T = 448.40'  
L = 838.36'  
E = 100.11'  
R = 954.20'

NOT FOR  
CONSTRUCTION

#### SECTION ALONG SURVEY Ǝ S-13-296



#### CONCEPTUAL PLANS

REV.			
REV.			
REV.			
REVIEWED			
QUAN.			
DR.	MEW	BJA	6-23
DES.			
BY	CHK.	DATE	

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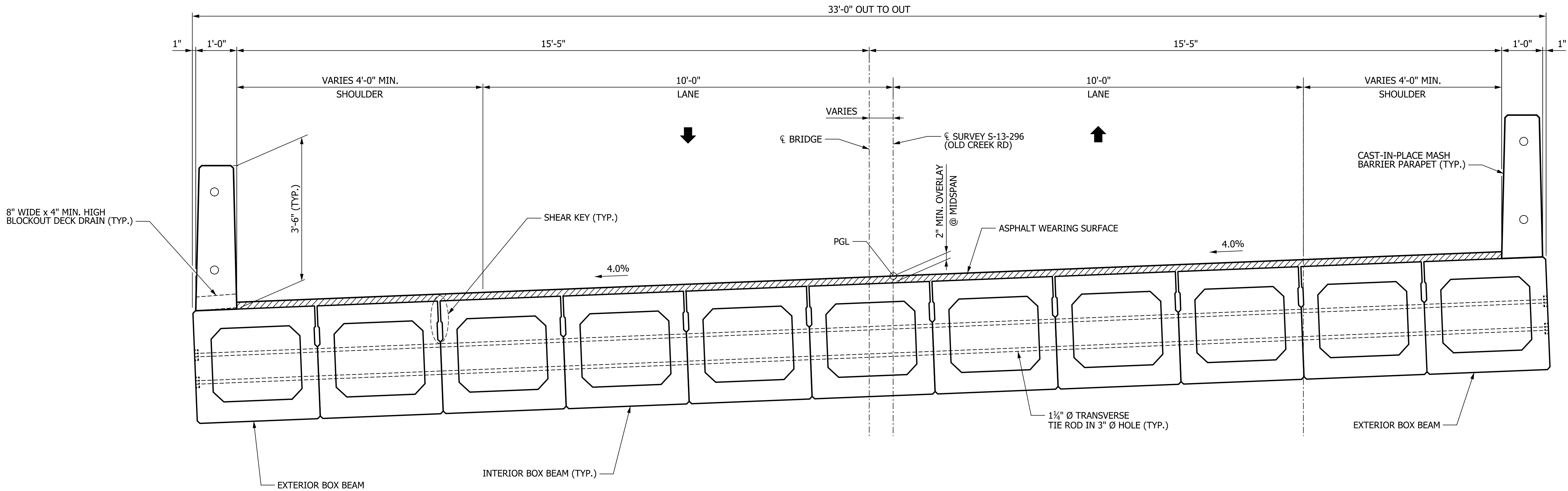
SOUTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

#### BRIDGE PLAN AND PROFILE

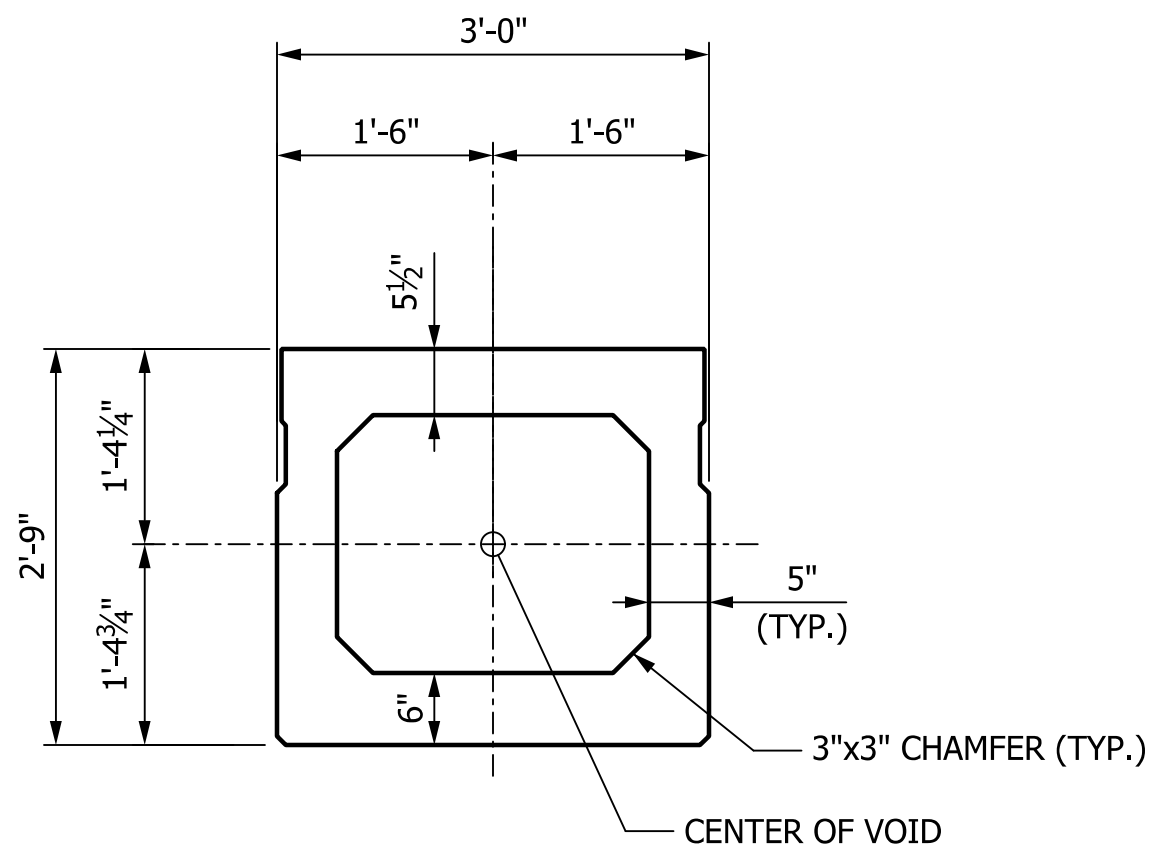
S-13-296 (OLD CREEK RD) BRIDGE REPLACEMENT  
OVER BLACKWELL MILL STREAM

COUNTY  
CHESTERFIELD

ROUTE  
S-13-296



TYPICAL SECTION  
(LOOKING IN DIRECTION OF STATIONING)



INTERIOR BOX BEAM SECTION

NOT FOR CONSTRUCTION	CONCEPTUAL PLANS				<b>HNTB</b> HNTB CORPORATION SC License No. 265 343 E. Six Forks Rd., Suite 200, Raleigh, N.C. 27609			
	REV.				SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION			
	REV.							
	REV.							
	REVIEWED				BRIDGE TYPICAL SECTION S-13-296 (OLD CREEK RD) BRIDGE REPLACEMENT OVER BLACKWELL MILL STREAM			
	QUAN.							
					DR.	MEW	BJA	6-23
					DES.			
					BY	CHK.	DATE	COUNTY CHESTERFIELD
					ROUTE S-13-296			