



South Carolina Department of Transportation



PROPOSED PLANS FOR

LANCASTER COUNTY
PROJECT ID P041154

STATE ROUTE S-29-765 (HANGING ROCK CHURCH ROAD)
REPLACE BRIDGE OVER HANGING ROCK CREEK

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°-31'-36" N
Longitude 80°-36'-37" W

-N-

LAYOUT

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

2020 ADT 210 V.P.D.

2040* ADT 256* V.P.D.

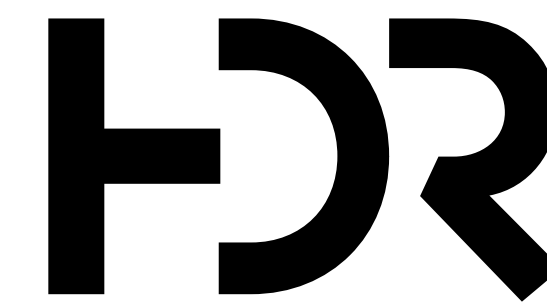
TRUCKS 5%

*DESIGN TRAFFIC DATA

NET LENGTH OF ROADWAY	0.000	MILES
NET LENGTH OF BRIDGES	0.039	MILES
NET LENGTH OF PROJECT	0.039	MILES
LENGTH OF EXCEPTIONS	0.000	MILES
GROSS LENGTH OF PROJECT	0.039	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



ENGINEER OF RECORD

**CONCEPTUAL
PLANS
NOT FOR
CONSTRUCTION**

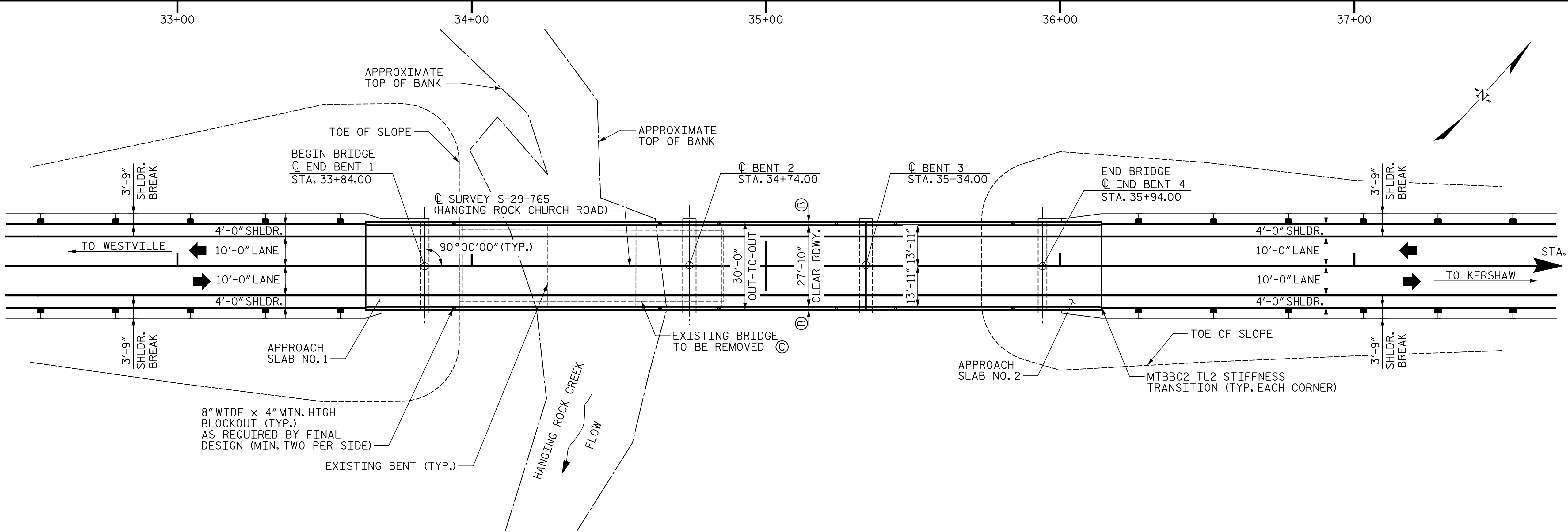
FOR CONSTRUCTION : _____ DATE _____

INDEX OF SHEETS

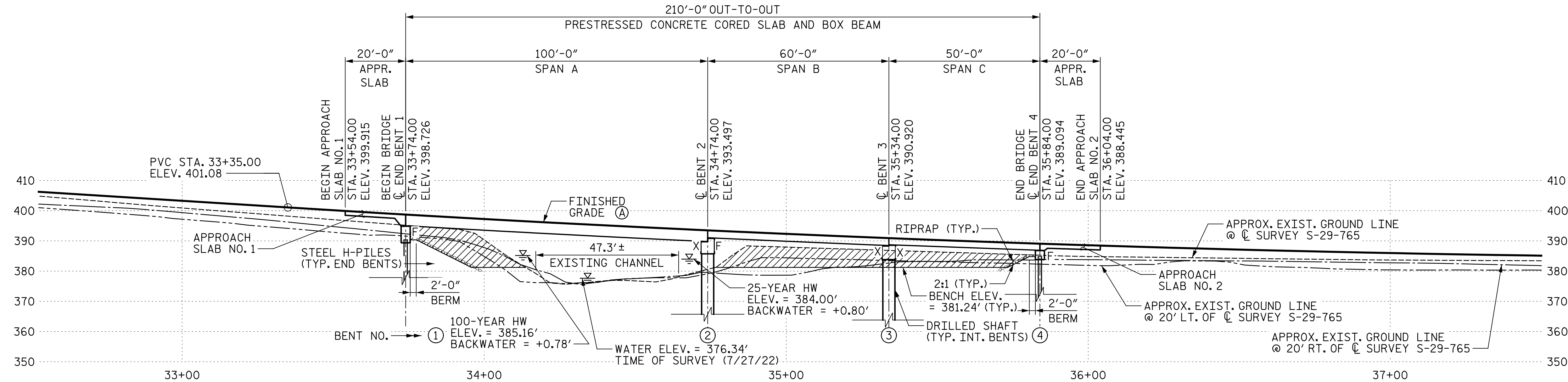
1. TITLE SHEET
2. BRIDGE PLAN AND PROFILE
3. BRIDGE TYPICAL SECTION

RMCKENNA
11-14-22
bP041154-B01_ts.dgn

REVIEWED			
DR.	RAM	DJS	11-22
	BY	CHK	DATE



PLAN



SECTION ALONG C SURVEY S-29-765

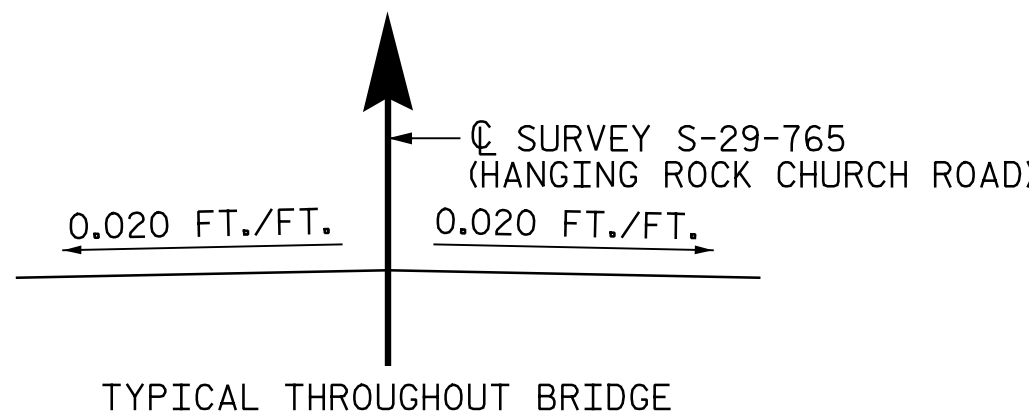
- NOTES:
- (A) PROPOSED PROFILE SET SO THAT THE NEW LOW CHORD ELEVATION IS AT OR ABOVE THE EXISTING LOW CHORD ELEVATION.
 - (B) INCLUDES 1'-0" MASH BARRIER PARAPET AND 1" SLAB EXTENSION.
 - (C) REMOVE AND DISPOSE OF EXISTING 27'-6" x 90'-0" ± 3-SPAN SIMPLE CONCRETE SLAB BRIDGE AND APPURTENANCES IN ACCORDANCE WITH SECTION 202.4.2 OF THE STANDARD SPECIFICATIONS.

F - DENOTES FIXED BEARING
X - DENOTES EXPANSION BEARING
= EXCAVATE HATCHED AREA

CONTROL POINTS

CP4
ELEVATION = 390.78'
N 980158.46 E 2117364.88
8" NAIL

CP5
ELEVATION = 383.60'
N 980458.00 E 2117710.26
8" NAIL



SUPERELEVATION SKETCH

VERTICAL CURVE DATA

PVI = 38+75.00
ELEV. 367.24
V.C. = 1,080'

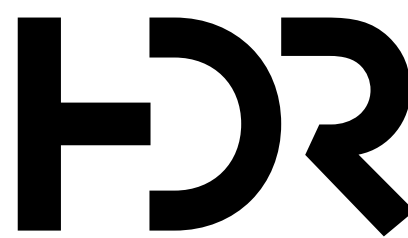
(-)6.27% Δ (+)6.34%

HYDROLOGY DATA

D.A. = 12.0 SQ. MILES
Q.25 = 2,251 CFS
VELOCITY.25 = 8.5 FPS
AREA FURNISHED UNDER.25 = 1,087.4 SQ. FT.
Q.100 = 3,215 CFS
VELOCITY.100 = 9.4 FPS
AREA FURNISHED UNDER.100 = 1,343.9 SQ. FT.
OVERTOPPING FLOOD
Q = 3,198 CFS
PROBABILITY = 1%

REV.			
REV.			
REV.			
REVIEWED			
QUAN.			
DR.	RAM	DJS	11-22
DES.			

CONCEPTUAL
PLANS



HDR ENGINEERING INC.
OF THE CAROLINAS
1201 MAIN STREET
SUITE 800
COLUMBIA, SC. 29201
803-509-6600

NOT FOR
CONSTRUCTION

SOUTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BRIDGE PLAN AND PROFILE

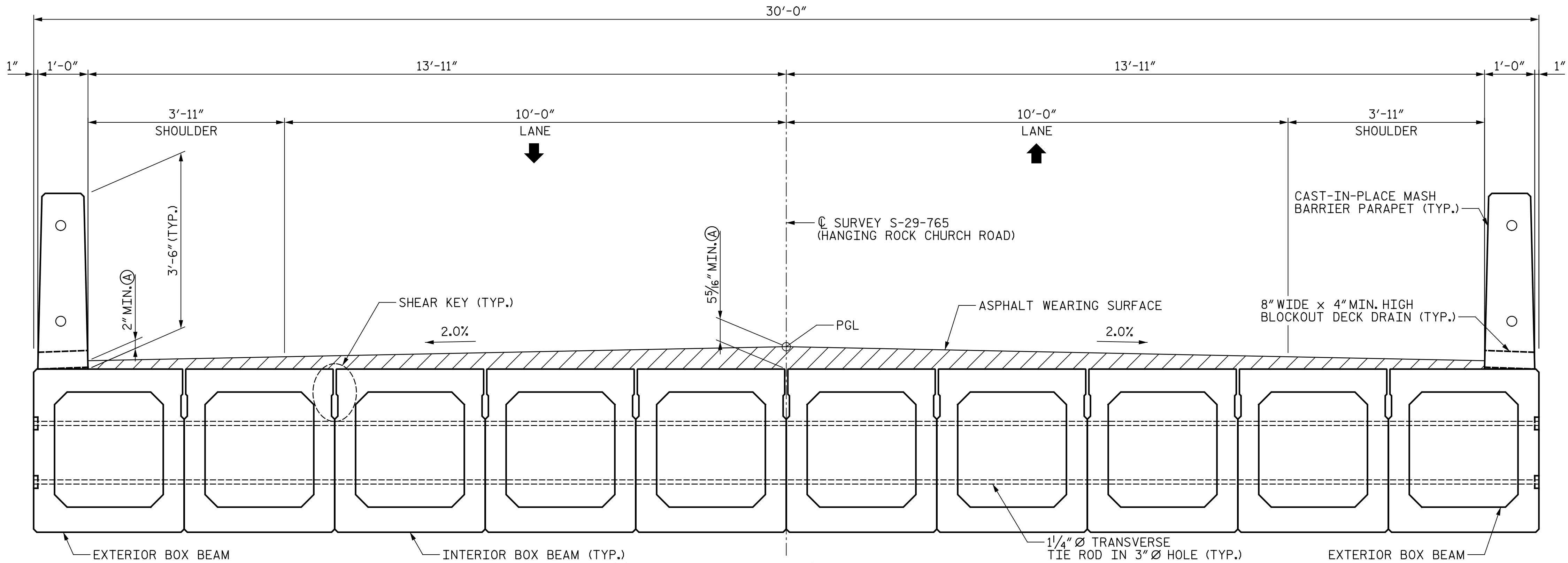
S-29-765 (HANGING ROCK CHURCH ROAD)
BRIDGE REPLACEMENT OVER HANGING ROCK CREEK

COUNTY
LANCASTER

ROUTE
S-29-765

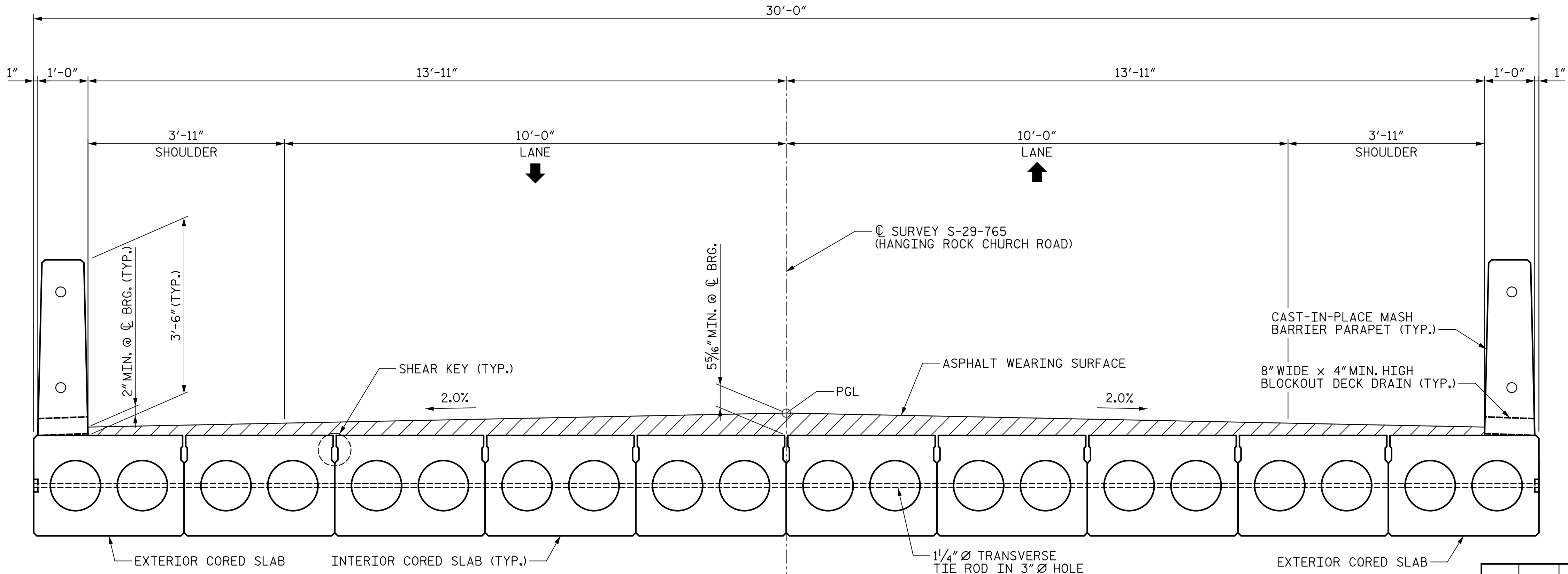
NOTES:

Ⓐ DUE TO BEAM CAMBER AND THE VERTICAL CURVE ORDINATES, THE MINIMUM THICKNESS WILL NOT OCCUR AT THE BEARINGS. THE OVERLAY THICKNESS WILL NEED TO BE ADJUSTED IN ORDER TO MAINTAIN THE MINIMUM OVERLAY THICKNESS ACROSS THE BRIDGE.



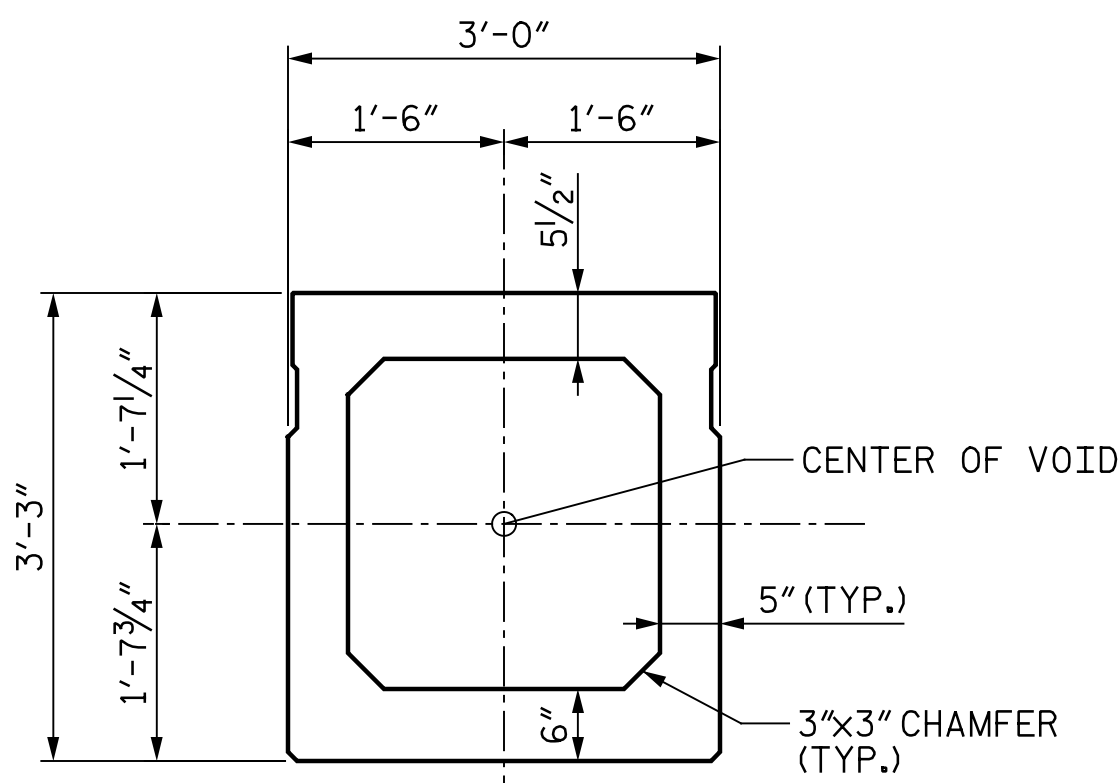
TYPICAL SECTION - SPAN A

(LOOKING IN DIRECTION OF STATIONING)

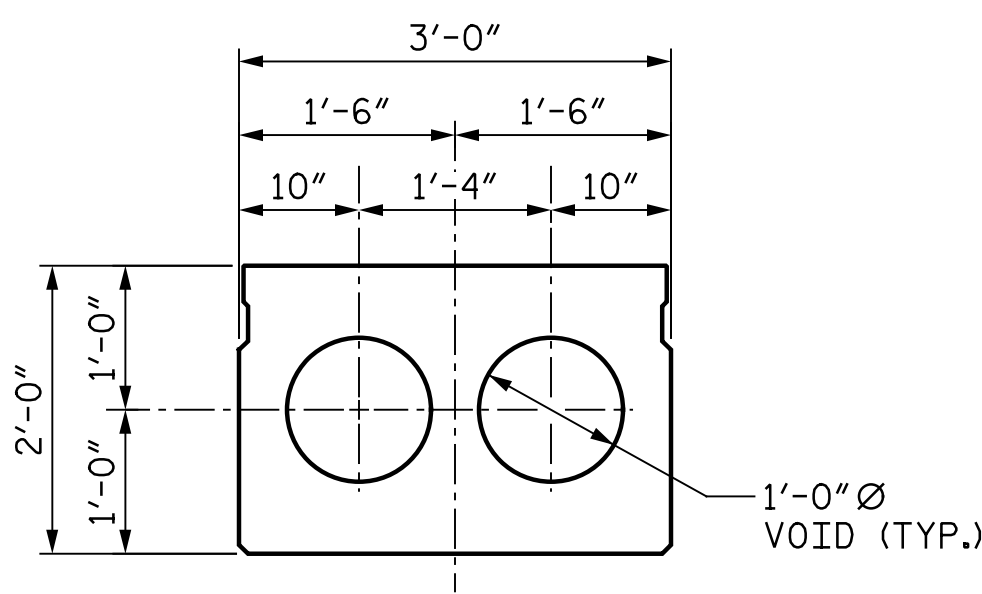


TYPICAL SECTION - SPANS B AND C

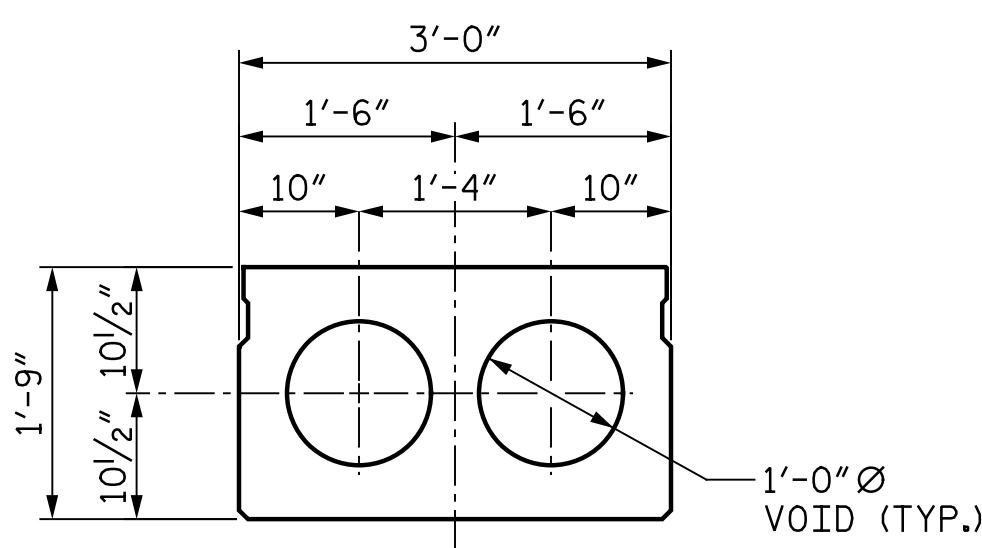
(LOOKING IN DIRECTION OF STATIONING)



INTERIOR BOX BEAM SECTION - SPAN A



INTERIOR CORED SLAB SECTION - SPAN B

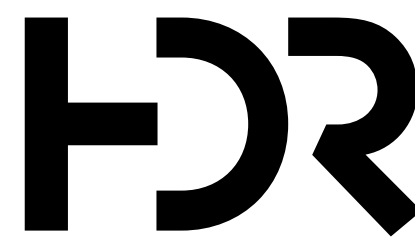


INTERIOR CORED SLAB SECTION - SPAN C

REV.			
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BRIDGE TYPICAL SECTION

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