

07456 -	LAYOUT	- 60989
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BENCHMARK: Vertical Control Data are shown on the Survey Control Data Sheets.

DESIGN SPECIFICATIONS: AASHTO LRFD Bridge Design Specifications, Seventh Edition (2014) with 2015 Interims.

SEISMIC ZONE: 1 SITE CLASS: B $S_H: 0.07$

Class S (AE) Concrete (superstructure)
 $f'_c = 4,000$ psi
 $f'_c = 3,500$ psi

structural steel (ASTM A709, Gr. 50)
 $F_y = 36,000 \text{ psi}$

STEEL PILING: All piling shall be HP 14x73 (Grade 50) and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 130 tons per pile and into the material designated as shale on the horizon legend. Minimum

with Section 805. Actual pile lengths are to be determined in the field. The Contractor shall use approved steel H-Pile driving points on all piles.

competent shale, or to a depth sufficient to provide the specified minimum pile penetration, whichever is greater. The actual size and depth of preboring are to be determined in the field by the Engineer. The Contractor shall be responsible for

including any backfill and castings, shall not be paid for directly but shall be considered subsidiary to the item described in the item description.

[illegible]

level of the existing ground in accordance with Subsection 801.08. Blasting is not allowed.

5052.

shall not be applied on surfaces where Class 1 Protective Surface Treatment is applied.

RIDGE DECK: The concrete bridge deck shall be given a fine finish as specified for final finishing in Subsection 802.19 Class 5 Tined Bridge Roadway Surface Finish.

and Bents
Intermediate Bents
60991-60994
60995-60996
60996, 60995-60996

General Notes For Steel Bridge Structures	55006	5
Details For Steel Bridge Structures	55007	5 + 09

MAINTENANCE OF TRAFFIC: See Roadway Plans.

$+0.75\%$

HORIZONTAL CURVE DATA

L = 749.67'
T = 395.35'

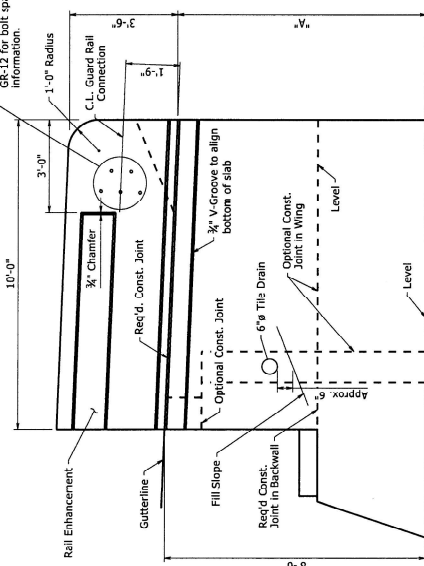
RAMP WN OVER HWY. 70 FRONTAGE ROAD

Garland County
Licensed
Professional Counselor

Arkansas State Highway Commission
No. 9235
Little Rock, Ark.

CHECKED BY: WAC DATE: 8/19/19
 DESIGNED BY: DKS DATE: 4/2019
 SCALE: 1" = 20'

1



VIEW T-T

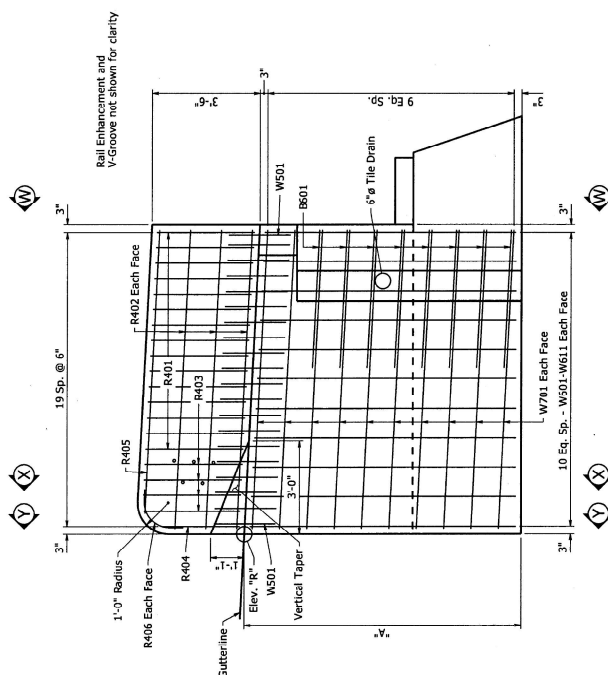
$$\underline{1/2'' = 1'-0''}$$

Wing B, Bent 1 Shown

Wing	Bent	Variable				
		Elev. "R"	"A"	"B"	"L1"	"L2"
A	1	504.64	8'-1 $\frac{3}{4}$ "	4 $\frac{1}{2}$ "	7'-9"	8'-1"
B	1	507.05	8'-1 $\frac{3}{4}$ "	3"	7'-9"	8'-1"
A	4	516.77	9'-0 $\frac{1}{4}$ "	4 $\frac{1}{2}$ "	8'-2"	8'-7"
B	4	520.20	9'-1 $\frac{1}{4}$ "	3"	8'-2"	8'-7"

TABLE OF VARIABLES

For "VIEW W-W", "SECTION X-X", and "SECTION Y-Y", see Dwg. No. 60994.



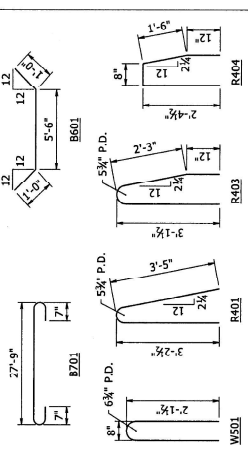
VIEW V-V

$$\underline{\frac{1}{2}'' = 1'-0''}$$

Wing B, Bent 1 Shown

BAR LIST - PER BENT

Mark	No. Req'd.	Length	Pin Dia.	Bending Diagram (Dimensions are out to out of flares)
B401	18	27'-3"	3/8"	
B402	6	5'-11"	3/8"	
B403	20	5'-2"	2"	
B404	16	6'-8"	2"	
B501	28	5'-0"	3/8"	
B502	28	9'-1"	3/8"	
B503	33	15'-2"	3/8"	
B504	12	9'-10"	3/8"	
B601	16	7'-6"	1/2"	
B701	6	29'-5"	3/4"	
B702	7	29'-5"	3/8"	
R401	30	6'-11"	3/8"	
R402	12	9'-8"	3/8"	
R403	8	6'-9"	3/8"	
R404	2	5'-4"	2"	
R405	2	2'-9 1/2"	3/8"	
R406	4	2'-3"	-	
W501	40	4'-8"	3/8"	
W601 - W611	4 EA.	"11" to "12"	1/2"	
W701	40	6'-0"	3/8"	



STATE OF
ARKANSAS
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LICENSED
PROFESSIONAL
ENGINEER
* * *
No. 9235
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SHEET 3 OF 4
DETAILS OF END BENTS
HWY. 70 FRONTAGE ROAD

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY:	DKS	DATE:	6/7/2019	FILENAME:	b'60140x4_b2.dgn
CHECKED BY:	DKS	DATE:	8/14/19	SCALE:	AS NOTED
DESIGNED BY:	DKS	DATE:	5/20/19		

BRIDGE NO. 07456 DRAWING NO. 60593

Diagram of Section A-A of a column. The column has a square cross-section with dimensions 4'-0" by 4'-0". The reinforcement includes 4 #4 bars at the corners (B801, B802) and 4 #4 bars at the midpoints of each side (B602). The stirrups are BS17-B539. The section is labeled "SECTION A-A" and "4# = 1'-0".

MARK	NO. REQD.	"X"	LENGTH	PIN DIA.
B401	44		6'-6"	2"
B501-B516	2 EA.	3'-9" to 6'-0"	12'-8" to 18'-0"	2 3/4"
B517-B529	2 EA.	5'-0" to 6'-9"	15'-2" to 17'-0"	2 3/4"
B530-B545	2 EA.	3'-8" to 5'-10"	12'-4" to 15'-0"	2 3/4"
B601	6	-	27'-8"	4 1/2"
B602	8	-	26'-9"	5"
B603	2	-	23'-8"	5"
B604	2	-	19'-2"	5"
B605	2	-	14'-8"	5"
B801	6	-	29'-0"	6"
B802	6	-	28'-4"	6"
C501	31	-	26'-3"	3 3/4"
C502	100	-	4'-4"	3 3/4"
C901	48	-	25'-3"	5"
F701	46	-	23'-6"	5"
F901	921	-	26'-0"	9"
F902	48	-	13'-4"	9"

$$\frac{3}{4}'' = 1'-0''$$
 $\frac{3}{4}'' = 1'-0''$

TYPICAL PEDESTAL DETAILS

PEDESTAL PLAN

$$\frac{3}{4}^m = 1^1 - 0^m$$
$$\frac{1}{4}'' = 1'-0''$$

OTI

A circular professional engineer seal for the State of Arkansas. The outer ring contains the text "STATE OF ARKANSAS" on the left and "CHARLES R. SITTE" on the right. The inner circle contains the text "LICENSED PROFESSIONAL ENGINEER" in the center, "No. 9235" on the left, and "Exp. 8-14-79" on the right. A signature, "Charles R. Sitte", is written across the seal.

SHEET 2 OF 2
DETAILS OF INTERMEDIATE BENTS
HWY. 70 FRONTAGE ROAD

ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWING NO. 07456
 BRIDGE NO. 60996
 FILENAME: br60140x4_b2.dgn
 DATE: 6/7/2019
 SCALE: AS NOTED
 DESIGNED BY: LJB
 CHECKED BY: LJB
 DATE: 8-13-19
 DATE: 5/2019

DRAWING NO. 60996

