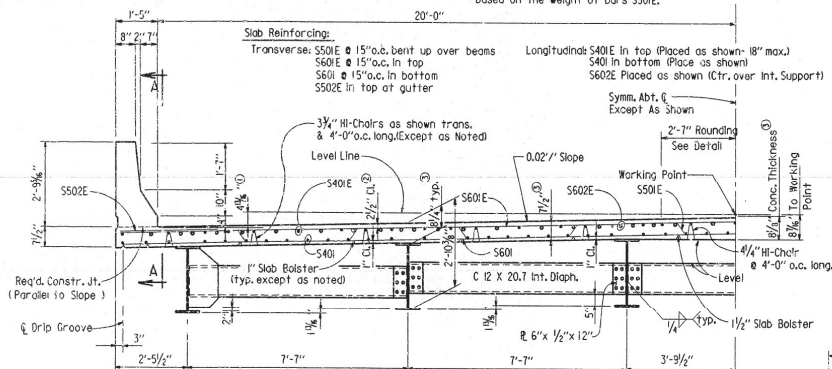


Note: Baked Linseed Oil Treatment shall be applied to the Roadway Surface and the Face and Top of Concrete Parapet Wall.

Note: At Contractor's Option, in lieu of providing bar S50E, two #5 bars may be substituted with the bars in the top mat Epoxy Coated. Payment for Reinforcing will be based on the weight of bars S50E.

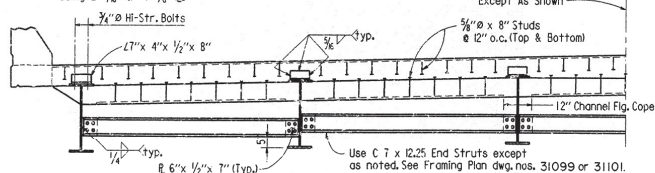


- Working Point to Gutter Line
- Tolerance, Minus = 1/4" Plus: Equal to amount of slab thickening used to meet slab thickness tolerance. See "Adjustment for Slab Thickness Tolerance"
- See "Adjustment for Slab Thickness Tolerance"

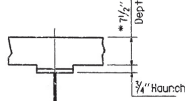
HALF-SECTION NEAR MIDSPAN
1/2" = 1'-0"

Expansion Devices:

Rdwy. C 15 x 33.9
 Conn. L's 7" x 4" x 1/2" x 8"
 Detail Device 1/8" high & provide 1/4" Shims using 2- 3/8" & 1- 1/2" B's



VIEW AT JOINT
1/2" = 1'-0"



Haunch is required. Slab may be thickened and/or the haunch thickened to maintain slab tolerance.

*Tolerance is minus 1/4" and plus 1".

Note: No increase in concrete and structural steel quantities will be made to meet slab tolerances.

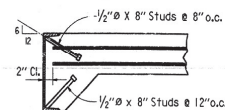
ADJUSTMENT FOR SLAB THICKNESS TOLERANCE
N.T.S.

TABLE FOR WELD

Material Thickness Of Thicker Part Joined (inches)	Minimum Size Of Fillet Weld (inches)	Single Pass Weld Must Be Used
Inclusive to 3/4"	1/4"	
Over 3/4"	3/8"	

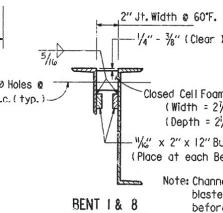
Note: When a fillet weld size, as shown on the Plans, is larger than the minimum, the First Pass shall be that specified for minimum size of fillet weld.

DIAPHRAGM CONNECTIONS AT EXTERIOR BEAMS
N.T.S.



Note: As an alternate to 3/8" x 8" studs, 1/2" x 8" studs spaced as shown may be used. Use weight of 3/8" x 8" stud as basis of measurement of structural steel in anchors.

DETAILS OF ALTERNATE ANCHORS



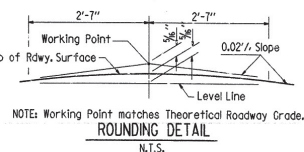
BENT 1 & 8

DETAIL J
N.T.S.

Plate, Angle, or other shapes, attached to Channels (or Angles) for Blocking.

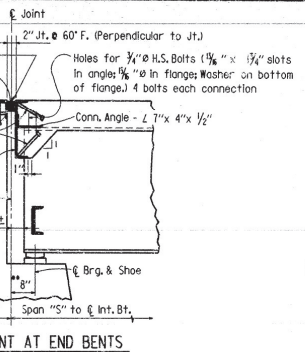
Note: Each expansion joint device shall be blocked in the Shop by the Fabricator to the dimension shown, and the blocking details shall be shown on the Shop Drawings. The blocking shall not be removed until the Slab on one side is complete. Blocking shall be placed within 2 feet of each end of the device and with a maximum spacing of 8 feet. Removal shall be just before or after pouring the second side of the joint, as directed by the Engineer.

DETAILS FOR BLOCKING EXP. JT. DEVICES
N.T.S.

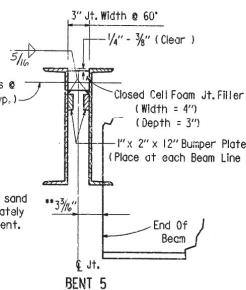


NOTE: Working Point matches Theoretical Roadway Grade.

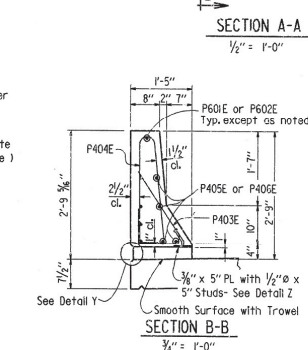
ROUNDING DETAIL
N.T.S.



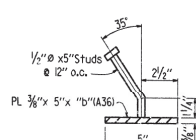
JOINT AT END BENTS
1/4" = 1'-0"



BENT 5



SECTION B-B
1/4" = 1'-0"



DETAIL Z
N.T.S.

Note: The surfaces of the 3/8" Plates which will not be in contact with concrete shall receive two coats of paint in the shop. These coats shall be those specified as Shop Prime Coat and Finish Coat in Subsection 807.59. Painting will not be paid for directly, but will be included in the item of structural steel.

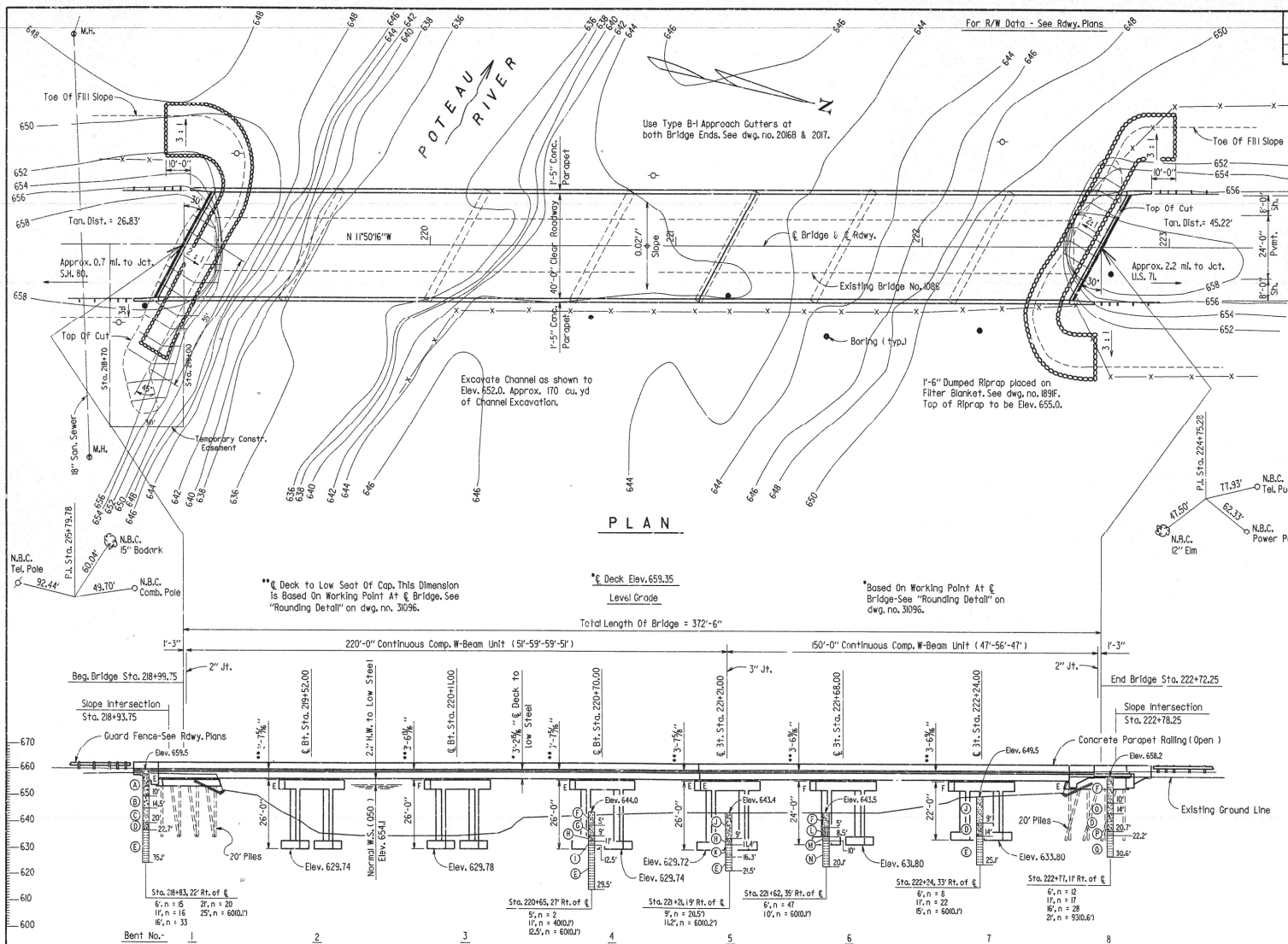
(SHEET 1 OF 2)

COMMON DETAILS FOR 220' & 150' CONT. W-BEAM UNITS
POTEAU RIVER ROUTE SEC.
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: W.MALL DATE: 10-15-90
 CHECKED BY: D.L.V DATE: 1-17-90
 SCALE: As Shown

TABLE OF VARIABLES

Parapet Joint Spacing	Open Rail Variables		
No. @ 1'-0"	"a"	"b"	"m"
11'-9"	1'-10 1/2"	8'-0"	7
11'-2 3/4"	2'-1 3/4"	7'-0"	6
12'-9"	2'-4 1/4"	8'-0"	7
11'-9 5/8"	1'-10 1/8"	8'-0"	7



DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.	4917	13	64
				JOB NO.				
				6361		LAYOUT	31092	

GENERAL NOTES

BENCH MARK: Std. Disk stamped "658.827 W20 1931", located 17' Left of E. Sta. 222+55. Elevation 658.827.

CONSTRUCTION SPECIFICATIONS: Arkansas State Highway and Transportation Department Standard Specifications for Highway Construction, 1988 edition, with applicable supplemental specifications and special provisions.

DESIGN SPECIFICATIONS: AASHTO Standard Specifications for Highway Bridges, 1983, with current interim Specifications.

LIVE LOADING: HS20 METHOD OF DESIGN: Load Factor

MATERIALS AND STRENGTHS:

- Class 5A Concrete (superstructure) $f'_c = 4,000$ psi
- Class 5 Concrete (substructure) $f'_c = 3,500$ psi
- Reinforcing Steel (A615 or A617, Gr. 60) $F_y = 60,000$ psi
- Structural Steel (A588) $F_y = 50,000$ psi
- Structural Steel (A36) $F_y = 36,000$ psi

NUMERICAL: boring logs may be obtained from the Programs and Contracts Division upon request.

STEEL PILING: Piling in End Bent 1 and 8 shall be HP 10x42 and shall be driven with an approved air, steam, or diesel hammer to a minimum safe bearing capacity of 55 tons per pile and into the material designated as shale on the boring legend. Lengths of piling shown are for estimating quantities and for use in determining payment for cut-off and build-up in accordance with the standard specifications. Piles in end bents to be driven after embankment to bottom of cap is in place. On all piles the Contractor shall use Hard-Bite HP17600 H-Pile Points manufactured by Associated Pipe and Piling Corporation, Versa-Bite 300 P-Rock Duty Series H-Pile Points manufactured by Versa-Steel, Inc. or equal as approved by the Bridge Engineer.

FOOTINGS: Footings shall be set a minimum of 1'-6" into material designated as med. hard or hard shale on the Boring Legend. The top of the interior bent footings shall be set at or below the channel bottom. Foundations for footings shall be prepared in accordance with section 804.4 of the Standard Specifications. Rock excavations shall be made to neat lines of the concrete footings. Care shall be exercised to avoid shattering of rock faces by excessive blasting. Concrete in footings shall be poured directly against excavated surfaces of rock.

BRIDGE DECK: The concrete deck shall be given a fine finish as specified for final finishing in subsection 802.20 for Class 5 Bridge Roadway Surface Finish.

DETAIL DRAWINGS:

- End Bents 31093 & 31094
- Intermediate Bents 31095
- 220' Continuous W-Beam Unit 31096-31099
- 150' Continuous W-Beam Unit 31099, 31097, 31000 & 31001
- Steel Piling 14995A

DETOUR BRIDGE: The Contractor shall construct a temporary bridge approximately 50' downstream from the existing bridge. The temporary bridge shall have a minimum roadway width of 24', a minimum length of 280', a minimum live load capacity of HS, and minimum deck elev. 658.0. See section 603 of the standard specifications. See detour nos. 238, 239A, and 239B for standard detour bridge details.

IF timber piling or pile tilters are used in the temporary structure, they shall be 1' x 12" with a preservative in accordance with the specifications.

EXISTING BRIDGES: The existing bridge No. 1086 is 20' wide and 35' long and consists of a concrete superstructure supported by a concrete substructure.

REMOVAL AND SALVAGE: The existing bridge No. 1086 shall be removed in accordance with section 205 of the Standard Specifications. All material from the existing bridge shall become the property of the contractor.

BORING LEGEND

- A - Moist, Stiff, Brown Sandy Clay with some Gravel
- B - Moist, Medium, Dense, Brown Sandstone Cobbles with Sandy Clay
- C - Moist, Hard, Brown Sandy Clay
- D - Moist, Very Stiff, Brown Sandy Clay with Sandstone Gravel
- E - Hard, Dark Gray Shale with some Soft, Dark Gray Weathered Shale Seams
- F - Moist, Stiff, Brown Sandy Clay
- G - Wet, Soft, Brown Sandy Clay
- H - Wet, Soft, Gray Sandy Clay
- I - Soft, Gray Weathered Shale
- J - Moist, Medium Stiff, Brown Sandy Clay
- K - Medium Hard to Hard, Dark Gray Shale
- L - Moist, Dense, Brown and Gray Sandy Silt
- M - Soft, Brown and Gray Weathered Shale
- N - Hard, Dark Gray Shale
- O - Moist, Very Stiff, Brown Sandy Clay
- P - Medium Hard to Hard, Brown and Gray Weathered Shale
- Q - Hard, Dark Gray Shale with some Thin Gray Sandstone Seams

LAYOUT OF BRIDGE OVER
POTEAU RIVER
POTEAU RIVER & RELIEF AND MUD CREEK
BRS. & APPRS. (WALDRON)
SCOTT COUNTY
ROUTE 71B SEC. 10B
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: WJAL DATE: 4-9-89
CHECKED BY: G.E.S. DATE: 2-7-90
DESIGNED BY: G.E.C. DATE: 11-87

Waldron

SCALE: 1" = 20'

HYDRAULIC DATA				
	Frequency	Discharge	Normal Water Surface Elevation	Water Surface Elevation with Backwater
Design Flood	050	26,900 cfs*	653.9	654.4
Basic Flood	000	31,500 cfs*	654.5	655.1
Overtopping	020	20,000 cfs**	N.A.	653.0

Drainage Area = 44.9 Sq. Mi.
Historical High Water Elev. 653.8

* Conveyed by overtopping of roadway and flow thru Br. No. 6361 & 103W.