

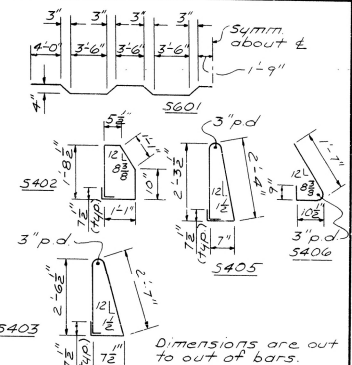
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	PER. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
5-6-86	6-5-86			6	ARK.			
						JOB NO. 60266	23	23

1/31 SPAN DTL'S. 27421

BAR LIST PER UNIT

MK.	No. Reqd	Length	Pin Dia
5401	240	31'-0"	str.
5402	144	6'-0"	2"
5403	144	6'-10"	2"
5404	72	9'-7"	str.
5405	126	6'-4"	2"
5406	126	3'-2"	2"
5501	126	34'-6"	str.
5502	140	4'-7"	str.
5501	62	35'-4"	3 1/2"
5602	70	9'-7"	str.
5603	72	20'-0"	str.
5604	4 ea	32 1/2" to 8 1/2"	str.
5619	16	6'-4"	str.
5620	4	36'-6"	str.

Bending Diagrams



NOTES

ALL STRUCTURAL STEEL SHALL BE ASTM DESIGNATION A588 UNLESS OTHERWISE NOTED AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND BID FOR "STRUCTURAL STEEL IN BEAM SPANS A588." A588 STEEL SHALL NOT BE PAINTED. ALL EXPOSED SURFACES TO BE CLEANED IN ACCORDANCE WITH SP JOB 60266. "UNPAINTED WEATHERING STRUCTURAL STEEL." STRUCTURAL STEEL COMPLETELY EMBEDDED IN CONCRETE MAY BE ASTM A36.

BEAMS ARE CONSIDERED MAIN LOAD CARRYING MEMBERS AND SHALL MEET THE LONGITUDINAL CRACK V-NOTCH TEST SPECIFIED IN SECTION 807.05 OF THE STANDARD SPECIFICATIONS.

DESIGN SPECIFICATIONS: AASHTO 1993 WITH INTERIM SPECIFICATIONS.

LIVE LOAD: HS20

METHOD OF DESIGN: LOAD FACTOR

DEAD LOAD: INTERIOR BEAM EXTERIOR BEAM

A. TO W-BEAM 717 PLF+1.3(WT/FT OF W-BEAM) 572 PLF+1.3(WT/FT OF

B. TO COMPOSITE BEAM 309 PLF+ 309 PLF+1

LIVE LOAD: TO EACH COMPOSITE BEAM 1.364 WHEELS + IMPACT 1.277 WHEELS + IMPACT

*INCLUDES 154 PLF FUTURE WEARING SURFACE.

MATERIAL STRENGTH:
CLASS 5 & S(AE) CONCRETE (N=9) f'c = 3500 PSI
REINFORCING STEEL (A615 OR A617) fy = 60,000 PSI
STRUCTURAL STEEL (A36) fy = 36,000 PSI
STRUCTURAL STEEL (A588) fy = 50,000 PSI

ALL BEAMS SHALL BE SHOP ASSEMBLED IN THEIR TRUE POSITION, FIELD CONNECTION HOLES REAMED AND ALL PARTS MATCH MARKED.

THE PRICE SLAB SHALL BE POURED IN ONE CONTINUOUS OPERATION. FOR ADDITIONAL DETAILS AND GENERAL NOTES, SEE DWG. NO. 14990H.

Revised entire drawing.

DETAILS OF STANDARD

90'-0" CONTINUOUS W-BEAM UNITS

CONC. PARAPET RAIL (OPEN)

32'-0" CL. RDWY, 0.02% PEAKED CROWN

ROUTE SEC.

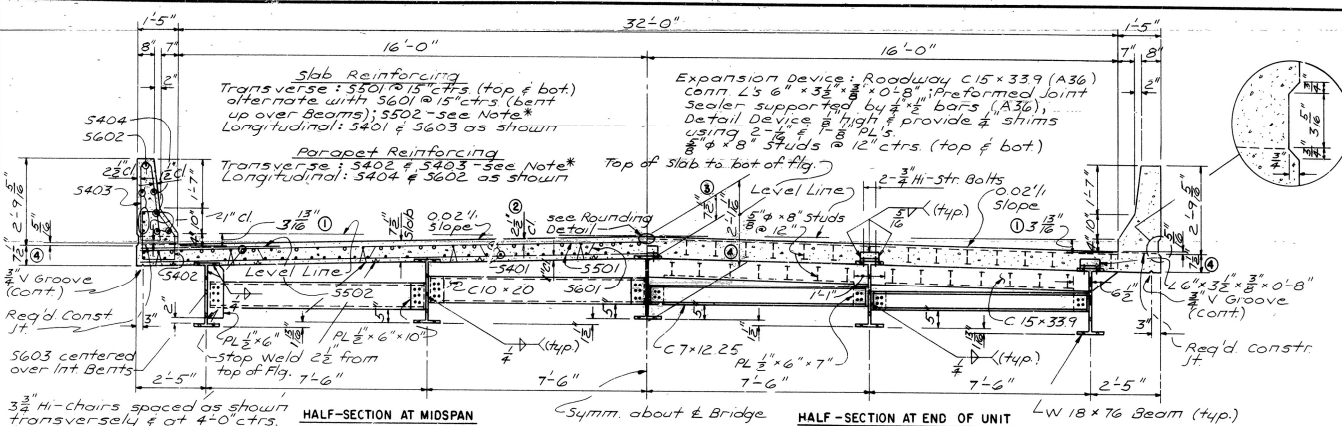
ARKANSAS STATE HIGHWAY COMMISSION

BRIDGE NO. 6131 DRAWING NO. 27421

DATE: 5-6-86 SCALE: as noted

CHECKED BY: ARW DATE: 5-27-86

DESIGNED BY: DATE: BRIDGE NO. 6131 DRAWING NO. 27421



3/4" Hi-chairs spaced as shown transversely & at 4'-0" ctrs. longitudinally.

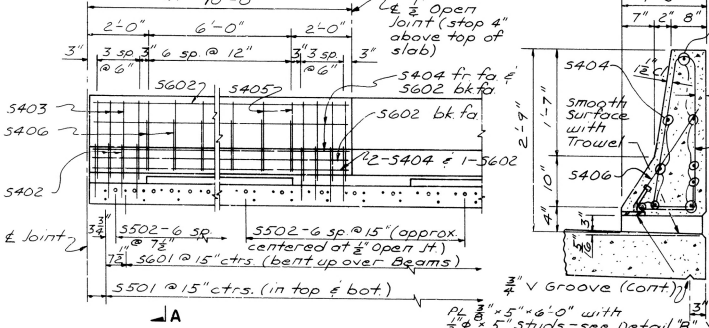
1" slab Bolsters spaced as shown transversely.

1- Working Point to Gutter Line

2- Tolerance: Minus = 4

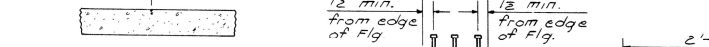
3- Refer to dwg. no. 14990H

4- These dimensions are taken at & Bearing & & Beam.



LONGITUDINAL SECTION AT CURB FOR OPEN PARAPET RAILING Scale: 1/2"=1'-0"

Note: Working Point matches Theoretical Roadway Grade.



CRACK CONTROL JOINT No Scale

Note: 1/2" x 1' poured synthetic polymer. It in slab to be paid for as "Class S(AE) Concrete." If slab Jts are to be sawed, they shall be sawed before any vehicular traffic is allowed on the span. The joint shall be located over each Int. Bearing.



SHEAR CONNECTOR DETAIL No Scale

NOTE: STUD SHEAR CONNECTORS SHOWN SHALL BE 4" LONG, GRANULAR FLUX FILLED, SOLID FLOXED OR SOLAL, AND AUTOMATICALLY END WELDED TO BEAM PLATES IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER. 1/8" DIAMETER STUD MAY BE SUBSTITUTED FOR THE 3/4" DIAMETER STUD SHOWN AT THE RATIO OF 0.73 - 7/8" STUDS IN PLACE OF ONE 3/4" STUD AND SPACING SHALL NOT EXCEED 24". THE 3/4" STUDS SHALL BE USED AS THE BASIS OF PAYMENT OF 61.5 LBS. PER 100 STUDS.

HALF-SECTION AT END OF UNIT Scale: 1/2"=1'-0"

Note: Bailed Linseed oil treatment shall be applied to the roadway surface and the face and top of the concrete parapet rail.

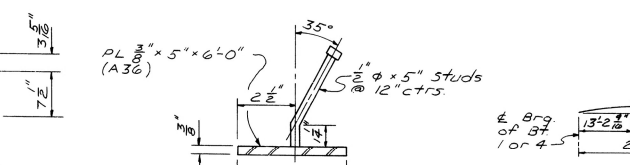
*For spacing of 5402, 5403 & 5502-see Longitudinal Section AT Curb For Open Parapet Railing.

At the Contractor's option, in lieu of providing Bar 5601, one number 6 bar top & bottom may be substituted. Payment will be based on the weight of Bar 5601.

THE SURFACE 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 FIRST SHOP AND SECOND FIELD COAT IN SUBSECTION 801.59 AND SPECIAL PROVISION 807-10.

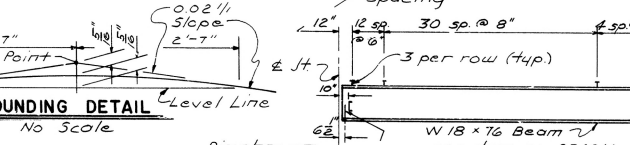
THE 1/2" Ø STUDS SHALL BE GRANULAR FLUX FILLED, SOLID FLOXED, OR EQUAL, AND AUTOMATICALLY END WELDED TO THE 3/8" PLATES IN ACCORDANCE WITH RECOMMENDATION OF THE MANUFACTURER. STRUCTURAL STEEL SHALL MEET THE REQUIREMENTS OF SECTION 807.

THE PLATES AND STUDS SHALL BE MEASURED AND PAID FOR AS "STRUCTURAL STEEL IN BEAM SPANS (A588)."



DETAIL "B" No Scale

Camber for Total Dead Load Deflection Plus Vertical Curve ± 1/2" tolerance, Vertical Curve corrections not included



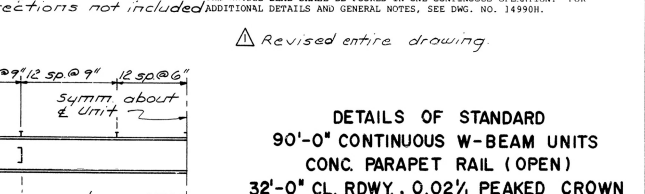
ROUNDING DETAIL No Scale

Note: STUD SHEAR CONNECTORS SHOWN SHALL BE 4" LONG, GRANULAR FLUX FILLED, SOLID FLOXED OR SOLAL, AND AUTOMATICALLY END WELDED TO BEAM PLATES IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER. 1/8" DIAMETER STUD MAY BE SUBSTITUTED FOR THE 3/4" DIAMETER STUD SHOWN AT THE RATIO OF 0.73 - 7/8" STUDS IN PLACE OF ONE 3/4" STUD AND SPACING SHALL NOT EXCEED 24". THE 3/4" STUDS SHALL BE USED AS THE BASIS OF PAYMENT OF 61.5 LBS. PER 100 STUDS.

Diaphragm Spacing 30'-0" 15'-0"

HALF CONTINUOUS W-BEAM ELEVATION No Scale

DEAD LOAD CAMBER DIAGRAM



DEAD LOAD CAMBER DIAGRAM

W 18 x 76 Beam see dwg. no. 27421A

HALF CONTINUOUS W-BEAM ELEVATION No Scale

BRIDGE ENGINEER

