

HORIZ. CURVE DATA  
Δ = 36°59'53" Lt.  
D = 5°00'00"  
T = 385.40'  
L = 739.96'  
R = 1145.92'  
PI = 37+55.14

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	BR-37-2	10	47	
				4566	LAYOUT	28276		

GENERAL NOTES

BENCH MARK: C.P.S. IN SIDE 12" OAK, 3' RT. CENTERLINE STA. 35+17, ELEV. 249.82.

CONSTRUCTION SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1978 AND APPLICABLE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1983 WITH CURRENT INTERIM SPECIFICATIONS.

LIVE LOADING: HS20

METHOD OF DESIGN: LOAD FACTOR

DETAILS DRAWINGS: 14990H  
Shoe Type B2 (See Dwg. 28278)  
14991  
28277, 28278, 28277A  
14991  
28277, 28280

DETAILS OF STEEL DECK FORMS  
SPANS  
EMBANKMENT CONSTRUCTION  
PILING SPICES  
GUARD RAIL CONNECTION  
TYPE C BRIDGE NAME PLATES  
TYPE J APPROACH GUTTERS  
DETAILS OF DUMPED RIPRAP  
CONCRETE PILING: PILING FOR BENTS 1 THRU 9 SHALL BE 16" OCT. OR SQ. PRECAST CONCRETE AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE AND TO A MINIMUM PENETRATION OF 20 FEET BELOW NATURAL GROUND. LENGTHS OF PILING SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTHS TO BE DETERMINED IN THE FIELD. DRIVE ONE 45 FOOT TEST PILE IN BENTS 2, 5, & 8. PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.

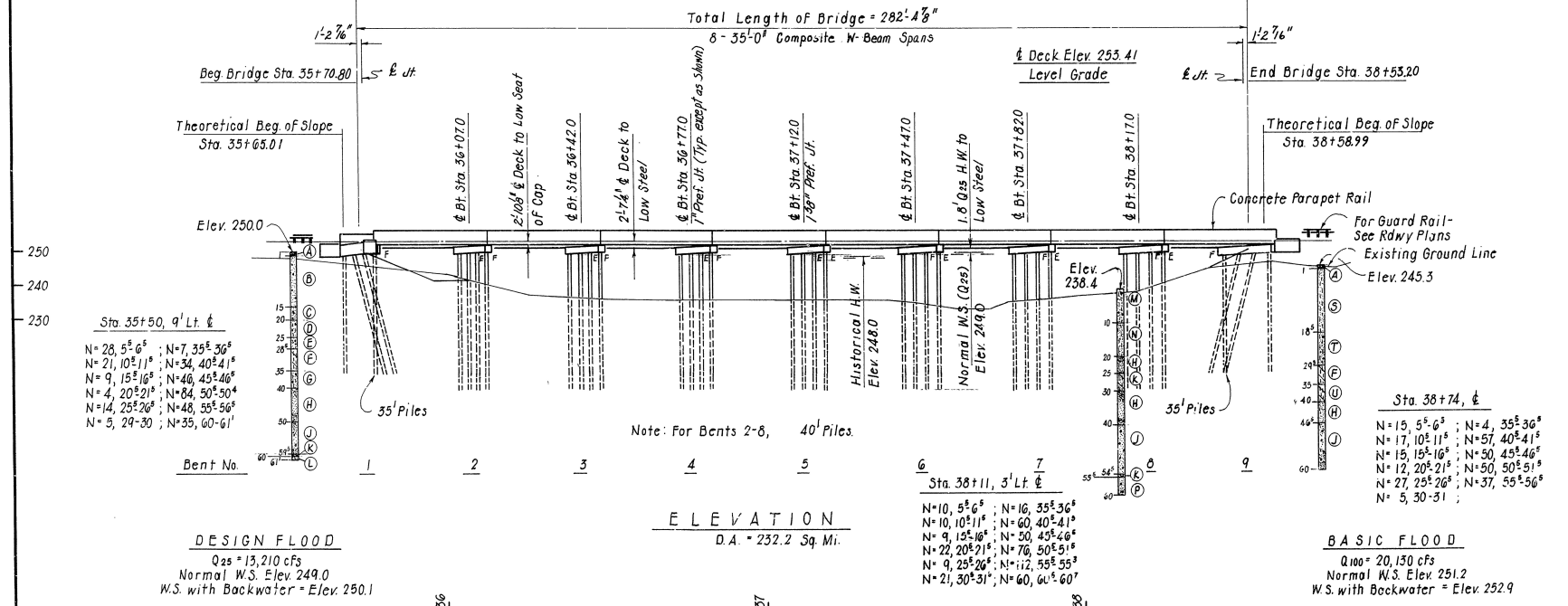
EXISTING BRIDGE: REMOVE THE EXISTING 25 FOOT WIDE BY 239 FOOT LONG BRIDGE NO. 14406 AFTER THE NEW BRIDGE HAS BEEN COMPLETED AND OPENED TO TRAFFIC. THE SUPERSTRUCTURE CONSISTS OF TIMBER DECK ON STEEL STRINGERS. THE SUBSTRUCTURE CONSISTS OF TIMBER CAPS AND PILES. ALL EXISTING MATERIAL SHALL REMAIN THE PROPERTY OF THE COUNTY. SEE SECTION 205 OF THE STANDARD SPECIFICATIONS.

BOILED LINSEED OIL: BOILED LINSEED OIL TREATMENT SHALL BE APPLIED TO THE ROADWAY SURFACE AND FACE AND TOP OF THE CONCRETE PARAPET RAIL.

BRIDGE DECK: THE CONCRETE BRIDGE DECK SHALL BE GIVEN A TINE FINISH AS SPECIFIED FOR FINAL FINISHING IN SUBSECTION 802.23 FOR CLASS 6 ROADWAY SURFACE FINISH.

BORING LEGEND

- A. MOIST, SOFT, BROWN CLAY WITH GRAVEL (FILL MATERIAL)
  - B. MOIST, MEDIUM DENSE, BROWN SAND WITH SOME GRAVEL.
  - C. WET, LOOSE, BROWN SAND AND GRAVEL.
  - D. WET, VERY LOOSE, GRAY SILTY SAND WITH ORGANIC MATTER.
  - E. WET, MEDIUM DENSE, GRAY SILTY SAND WITH SOME ORGANIC MATTER.
  - F. MOIST, MEDIUM STIFF, BROWN AND GRAY SILTY CLAY.
  - G. MOIST, LOOSE, GRAY SILTY SAND WITH SOME ORGANIC MATTER.
  - H. WET, DENSE, GRAY SAND.
  - J. WET, VERY DENSE, BROWN AND GRAY SAND AND GRAVEL.
  - K. MOIST, STIFF, GRAY SILTY SANDY CLAY.
  - L. WET, DENSE, GRAY SILTY SAND.
  - M. MOIST, LOOSE, GRAY SILTY SAND WITH SOME GRAVEL.
  - N. WET, LOOSE, GRAY AND BROWN SILTY SAND.
  - P. WET, MEDIUM DENSE, GRAY SAND.
  - R. MOIST, VERY DENSE, GRAY SAND WITH SOME LIGNITE.
  - S. MOIST TO WET, MEDIUM DENSE, BROWN AND GRAY SILTY SAND.
  - T. WET, MEDIUM DENSE, GRAY SILTY SAND WITH SOME PEA GRAVEL.
  - U. MOIST, SOFT, GRAY SILTY CLAY.
- SOIL BORINGS: ORIGINAL BRIDGE SITE BORING LOGS MAY BE OBTAINED FROM THE PROGRAMS AND CONTRACTS DIVISION UPON REQUEST.



Note: Revised Spans to W-Bms. D.H.P. 4-30-86

LAYOUT OF BRIDGE OVER  
BODCAW CREEK  
BODCAW CREEK & RELIEF STRS. & APPRS  
LAFAYETTE COUNTY  
COUNTY ROUTE 28 SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.  
DRAWN BY: L.M. DATE: 11-4-83  
CHECKED BY: DFL DATE: 1-13-86  
DESIGNED BY: DFL DATE: 1-13-86  
BRIDGE NO. 4566 DRAWING NO. 28276

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	BR 37-2	11	47	
				① 4566	BENT	28277		

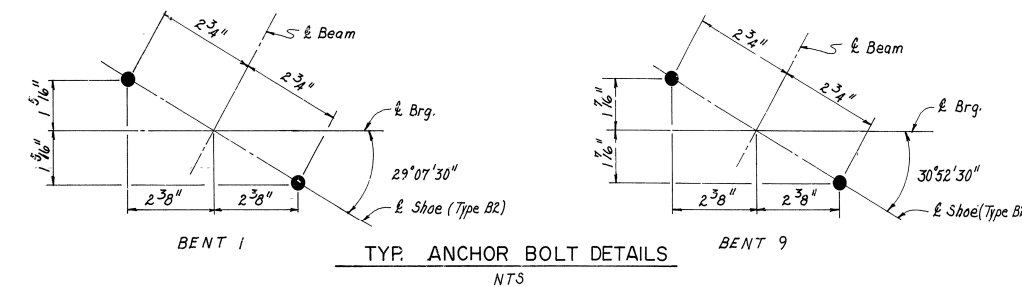
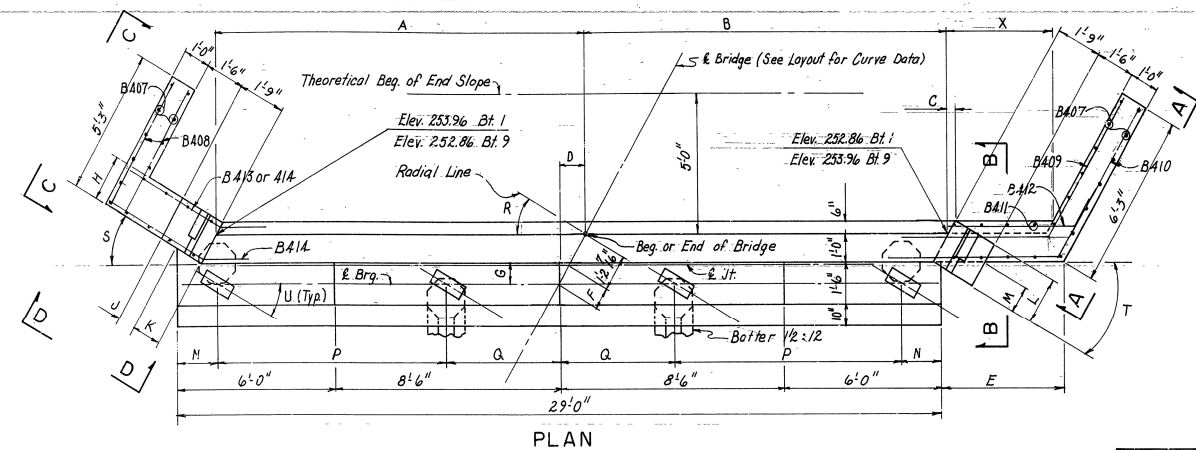
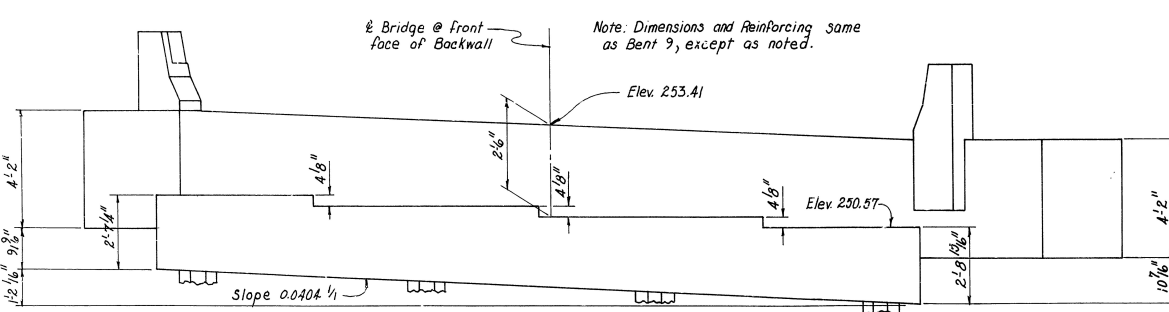
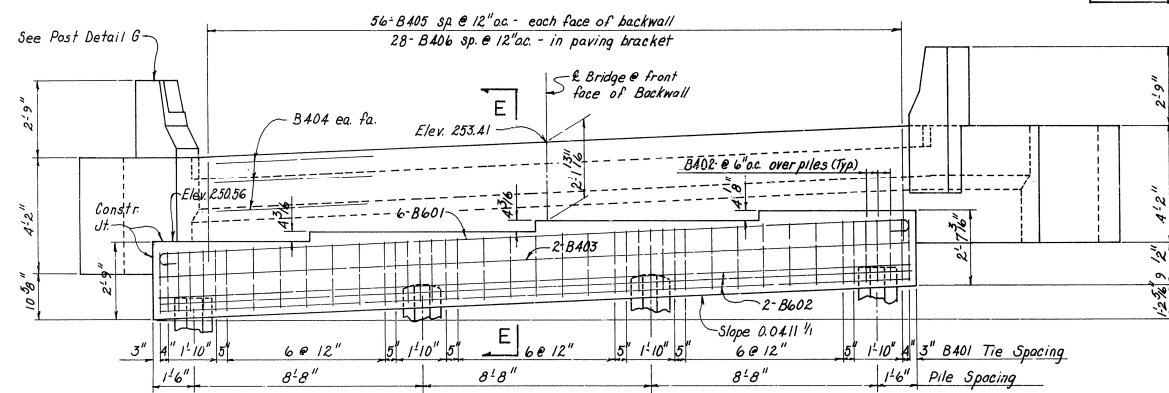


TABLE OF VARIABLES

BENT NO.	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	X
1	13'10 1/6"	13'10 1/6"	3'2"	11'3/4"	4'8 1/2"	9'1/6"	8'3/8"	1'5 1/16"	6'5/8"	1'2 1/16"	1'8 1/8"	1'0 9/16"	1'7 1/2"	8'7"	4'3 1/2"	30'03'37"	29'39'37"	30'21'11"	29'07'30"	4'0 3/4"
9	13'10 1/2"	13'9 7/8"	3'1/6"	11'11/16"	4'7 1/2"	8'15/16"	8'1/4"	1'8 3/4"	6'13/16"	1'2 7/8"	1'8 1/16"	1'1 1/16"	1'4 11/16"	8'8 5/8"	4'4 7/16"	29'56'54"	30'20'54"	29'39'19"	30'52'30"	4'0 1/4"



BAR LIST - ONE BENT

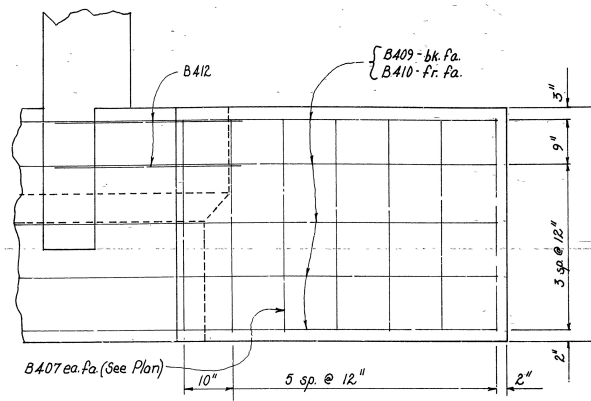
MARK	NO. REQ'D.	LENGTH	A	B	Pin. Dia.	Bending Diagram
B401	31	10'6"			2"	
B402	12	6'6"			2"	
B403	2	28'8"			Str.	
B404	6	27'8"			Str.	
B405	56	4'10"			Str.	
B406	28	3'5"			2"	
B407	35	3'10"			Str.	
B408	10	5'6"	4'11"	8"	2"	
B409	5	10'6"	5'8"	4'10"	2"	
B410	5	11'6"	5'11"	5'7"	2"	
B411	4	4'10"			2"	
B412	2	5'2"	8"	4'6"	2"	
B413	1	4'6"	3'11"	8"	2"	
B414	9	5'8"	4'11"	12"	2"	
B415	12	1'4"			Str.	
B601	6	30'0"	28'8"	6"	4'2"	
B602	6	28'8"			Str.	
B603	6	4'10"			3'3/4"	
B604	8	4'10"			Str.	
B605	4	5'2"	3'0"	2'3"	3'3/4"	

For General Notes See Drawg. 28277A

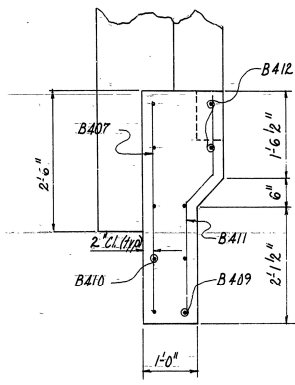
SHEET 1 OF 2  
 DETAILS OF END BENTS 1 & 9  
 BODCAW CREEK  
 LAYFAYETTE COUNTY  
 ROUTE 6 SEC.  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.  
 DRAWN BY: M.R.J. DATE: 4-14-86  
 CHECKED BY: D.H.P. DATE: 4-28-86  
 DESIGNED BY: M.R.J. DATE: 3-18-86  
 SCALE: 3/8" = 1'-0" or As Shown  
 BRIDGE NO. 4566 DRAWING NO. 28277



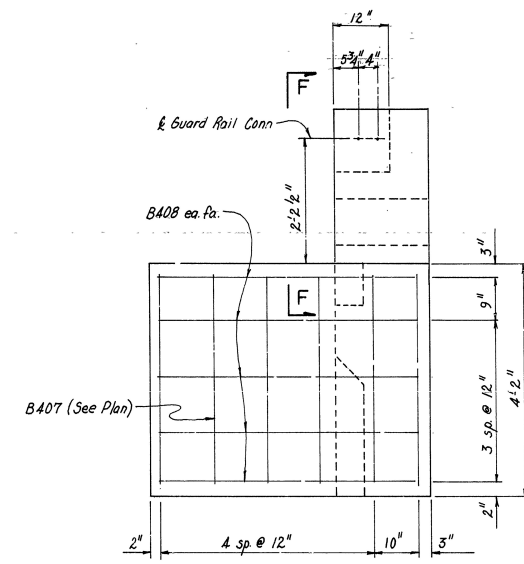
DATE REVISION	DATE FILMED	DATE REVISION	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	BR 37-2	12	47	
				① 4566	BENT	28277A		



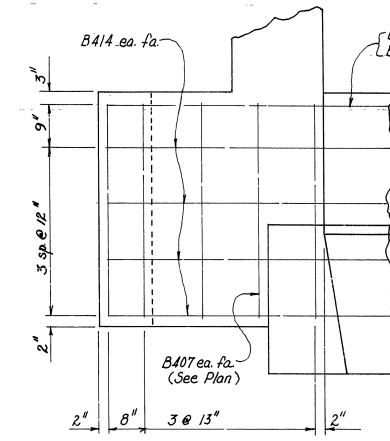
VIEW A-A



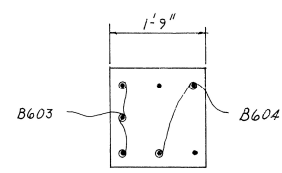
SECTION B-B



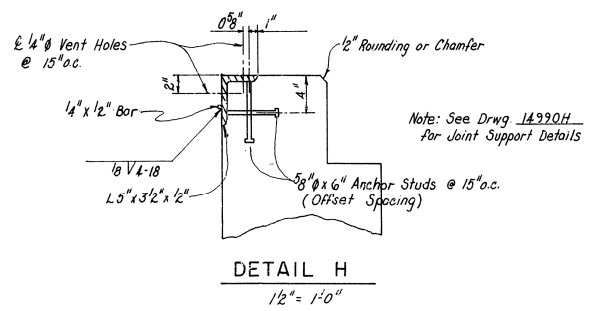
VIEW C-C



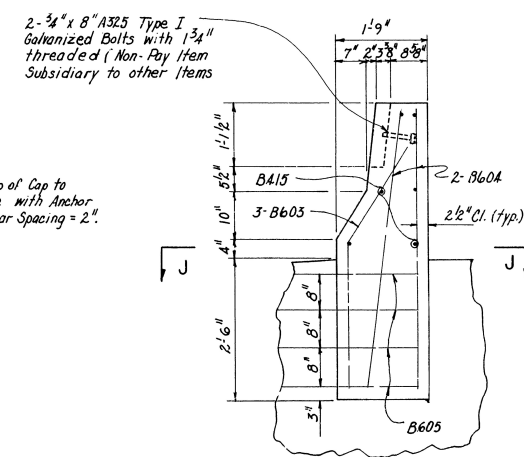
VIEW D-D



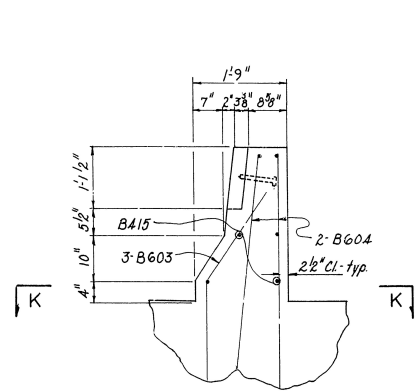
SECTION K-K



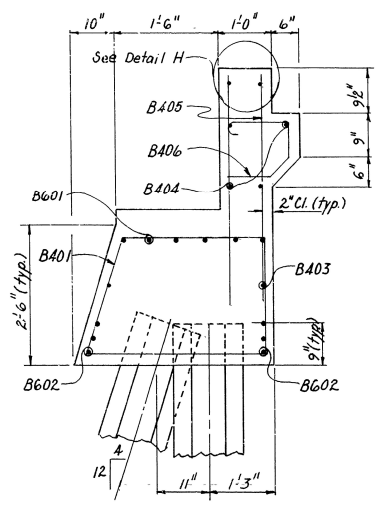
DETAIL H



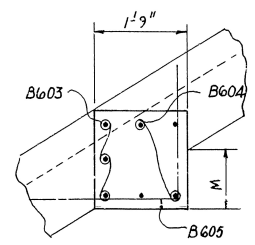
POST DETAIL G



VIEW F-F



SECTION E-E



SECTION J-J

Note: Spread Re-Bars in Top of Cap to prevent interference with Anchor Bolts. Minimum clear Spacing = 2".

GENERAL NOTES

ALL CONCRETE SHALL BE CLASS "5" AND ... BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4 INCH. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE,  $f'_c$  = 3500 PSI.

ALL PILES SHALL BE 16" OCT. OR SQUARE CONCRETE PILES AND SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE. PILES SHALL BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.

REINFORCING STEEL TO BE ASTM A615 OR A617, GRADE 60 (YIELD STRENGTH = 60,000 PSI).

BACKWALL SHALL NOT BE POURED UNTIL DEAMS HAVE BEEN PLACED ON BENT.

ALL STRUCTURAL STEEL TO BE ASTM A583. ALL STRUCTURAL STEEL SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND BID FOR "STRUCTURAL STEEL IN BEAM SPANS (A588)".

DESIGN SPECIFICATIONS: AASHTO 1983 WITH CURRENT INTERIM SPECIFICATIONS.

LIVE LOAD: HS20

METHOD OF DESIGN: LOAD FACTOR

FOR ADDITIONAL NOTES, SEE LAYOUT.

SHEET 2 OF 2

DETAILS OF END BENTS 1 & 9

BODCAW CREEK

LAYFAYATTE COUNTY

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

DRAWN BY: MRL DATE: 4-16-85

CHECKED BY: D.H.P. DATE: 4-28-86

DESIGNED BY: MRL DATE: 3-18-85

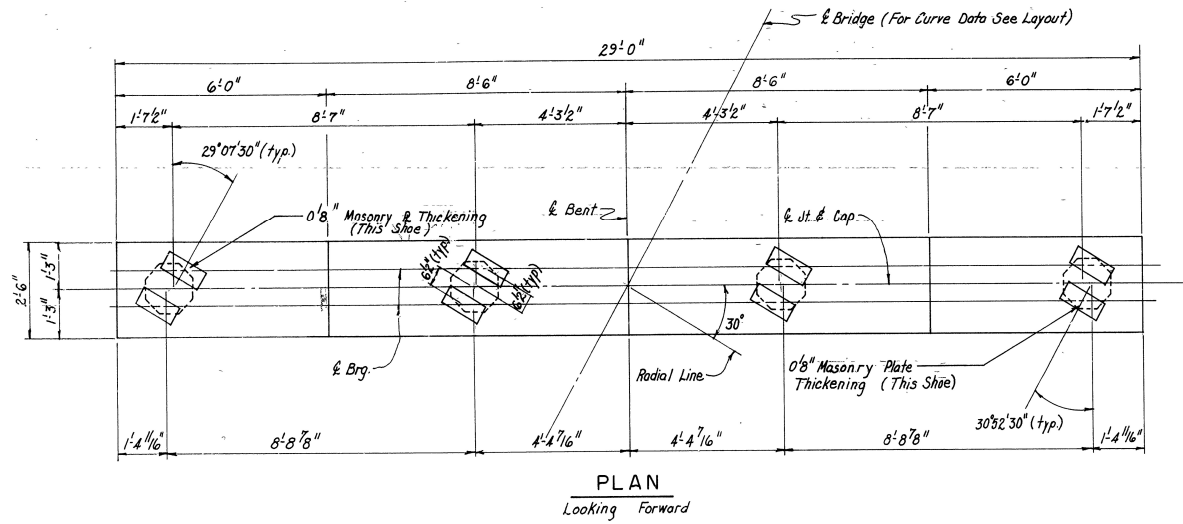
BRIDGE NO. 4566 DRAWING NO. 28277A

SCALE: 3/4" = 1'-0" or As Shown

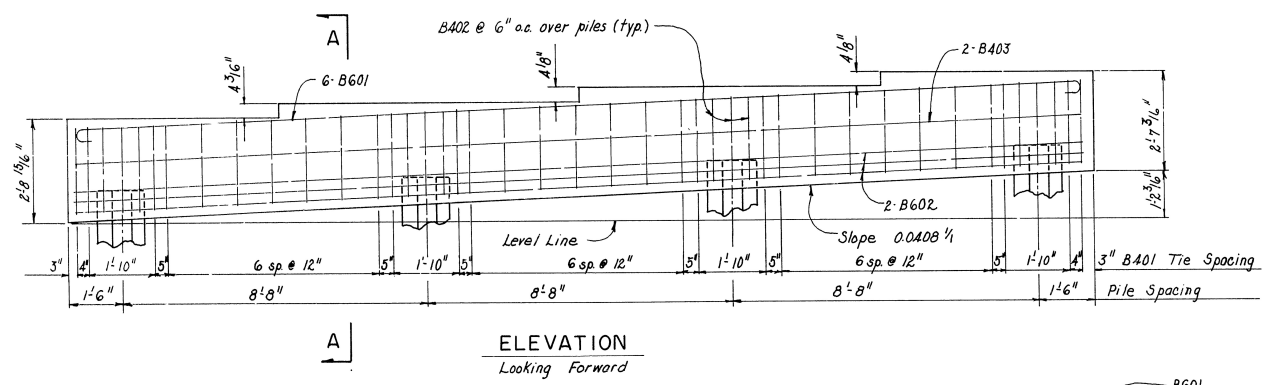
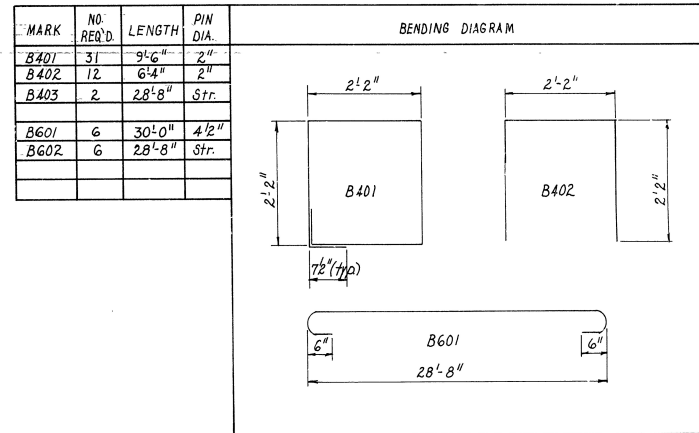
BRIDGE ENGINEER

56

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		BR 37-2	13	47
						4566 INT. BENT	28278	



BAR LIST - ONE BENT



GENERAL NOTES

ALL CONCRETE SHALL BE CLASS "S" AND TO BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4 INCH. MINIMUM 28 DAY COMPRESSIVE STRENGTH OF CONCRETE, f'c = 3500 PSI.

ALL PILES SHALL BE 16" OCT. OR SQUARE CONCRETE PILES AND SHALL BE DRIVEN TO A MINIMUM BEARING CAPACITY OF 44 TONS PER PILE. PILES SHALL BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF CAP IS IN PLACE.

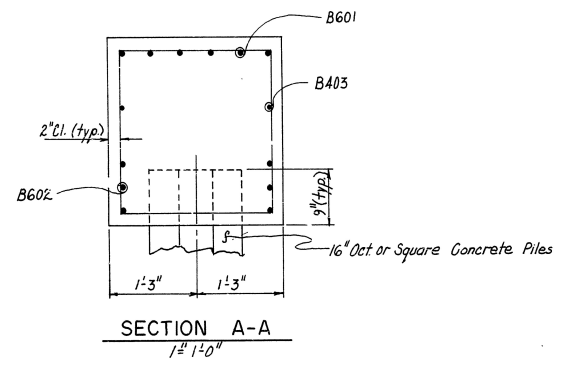
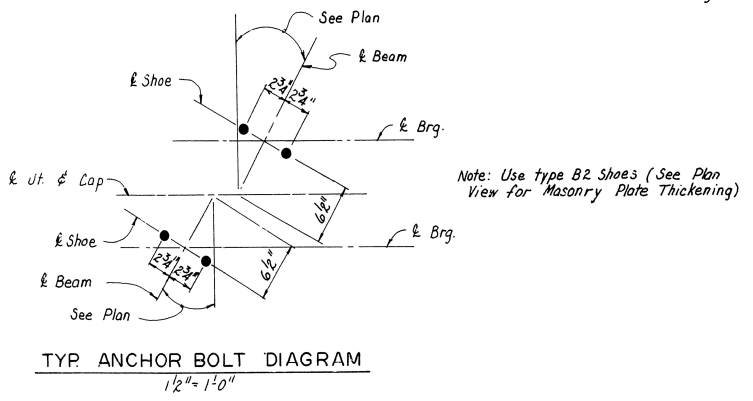
REINFORCING STEEL TO BE ASTM A615 OR A617, GRADE 60 (YIELD STR. = 60,000 PSI)

DESIGN SPECIFICATIONS: AASHTO 1983 WITH CURRENT INTERIM SPECIFICATIONS.

LIVE LOAD: HS20

METHOD OF DESIGN: LOAD FACTOR

FOR ADDITIONAL NOTES, SEE LAYOUT.

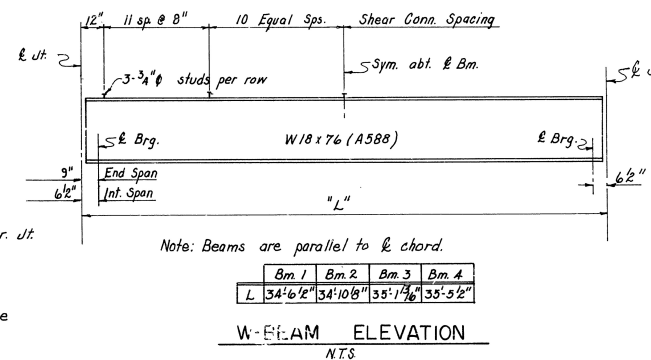
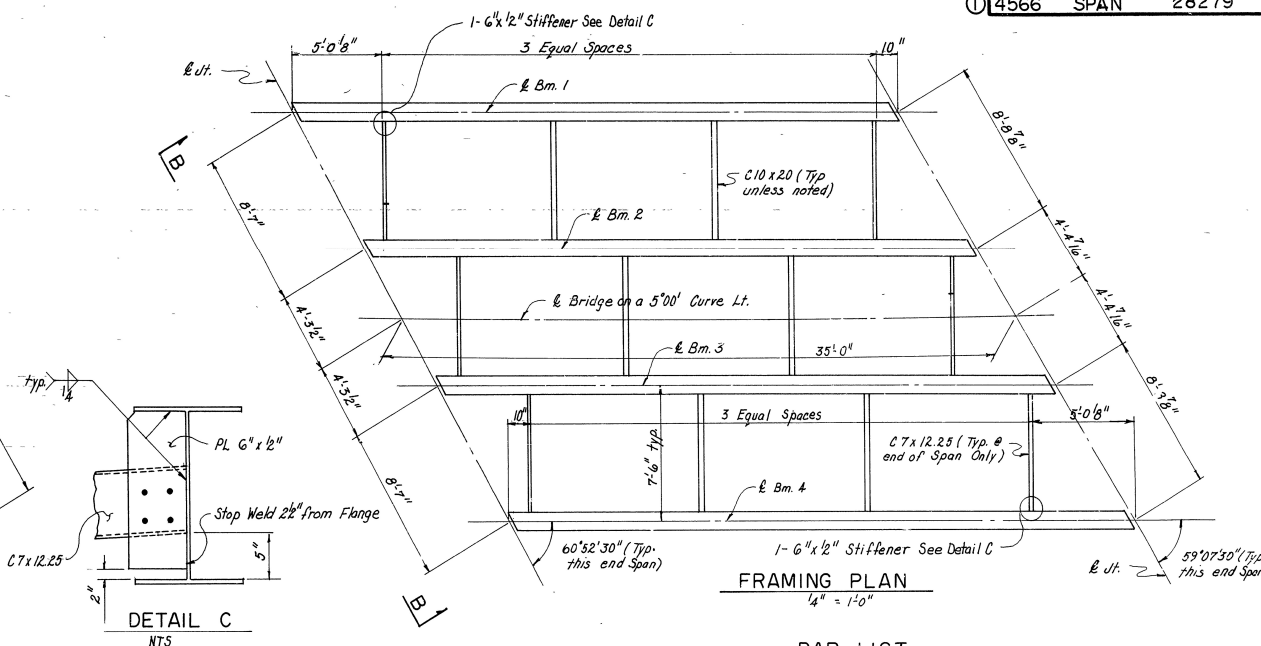
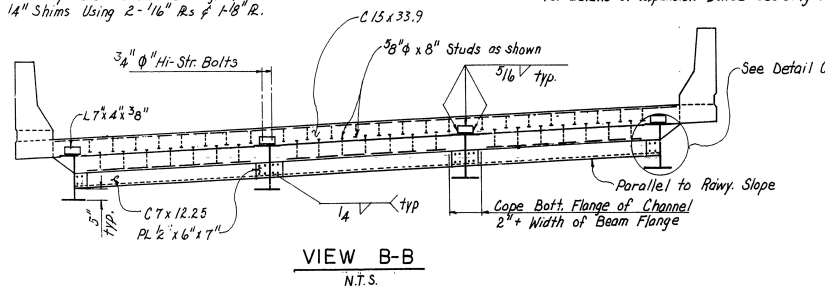
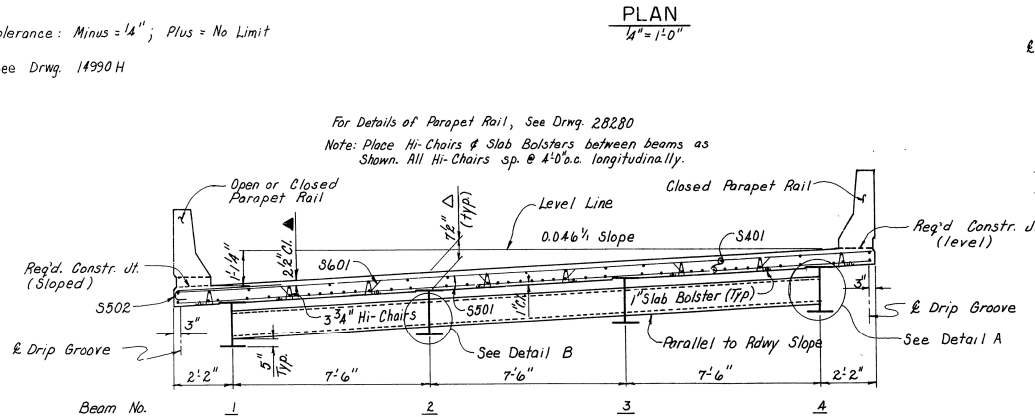
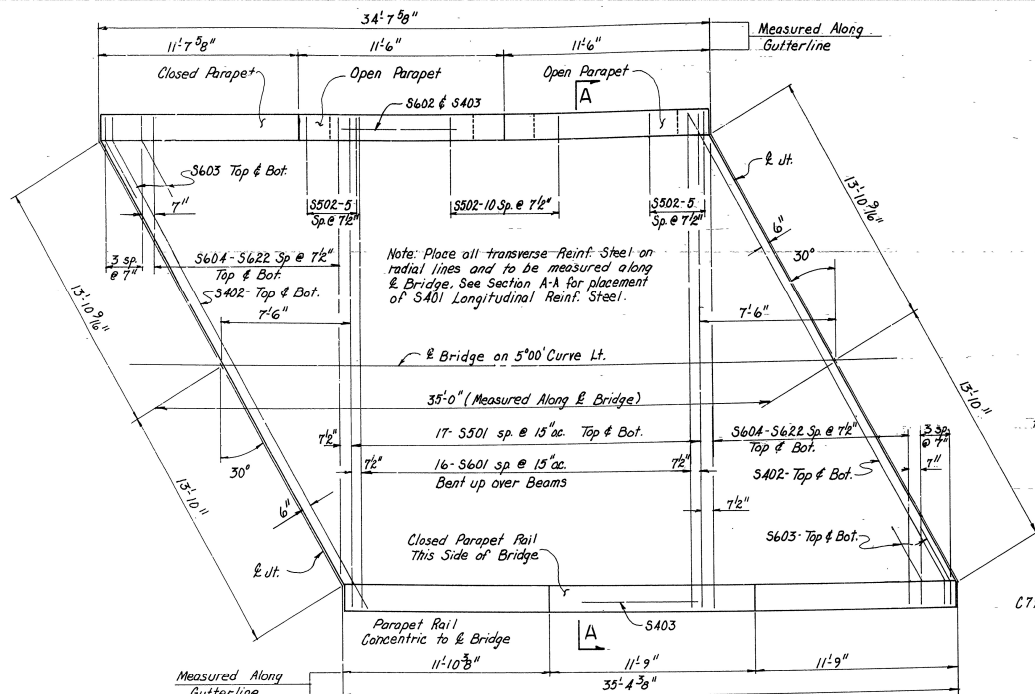


DETAILS OF INT. BENTS 2 THRU 8  
BODCAW CREEK  
LAFAYETTE COUNTY  
ROUTE SEC.  
ARKANSAS STATE HIGHWAY COMMISSION  
LITTLE ROCK, ARK.

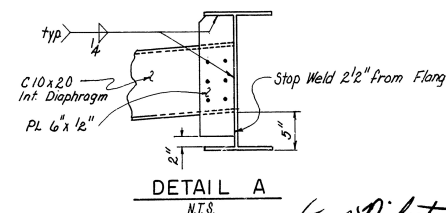
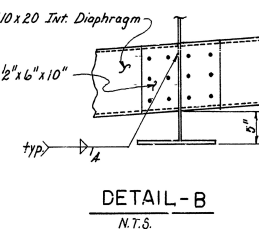
*W. J. Pinkerton*  
BRIDGE ENGINEER

DRAWN BY: *MRJ* DATE: *4-27-86*  
CHECKED BY: *D.H.P.* DATE: *4-28-86*  
DESIGNED BY: *MRJ* DATE: *3-17-86*  
SCALE: 1/2" = 1' or As Shown  
BRIDGE NO. 4566 DRAWING NO. 28278

DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.	BR-37-2	14	47	
				① 4566	SPAN	28279		



	INTERIOR BEAM			EXTERIOR BEAM		
	BEAM	BEAM & SLAB	BEAM & PARAPET	BEAM	BEAM & SLAB	BEAM & PARAPET
1/4 POINT	1/16"	7/16"	1/2"	1/16"	3/8"	3/8"
MIDSPAN	1/16"	3/8"	1/16"	1/16"	1/2"	9/16"



BAR LIST				BENDING DIAGRAM	
MARK	NO.	Req'd.	LENGTH	PIN DIA.	
S601	16	27'-2"	3 3/4"		
S602	10	11'-2"	3 3/4"		
S603	16	6'-3"	3 3/4"		
S604 to S622	4 ea.	24'-10"	to 5'-4"	Str.	
S501	34	26'-6"	Str.		
S502	23	4'-9"	Str.		
S401	61	34'-6"	Str.		
S402	4	30'-4"	Str.		
S403	32	11'-4"	Str.		
S404	48	5'-6"	2"		
S405	64	6'-0"	2"		
S406	16	6'-10"	2"		
S407	16	6'-4"	2"		
S408	16	3'-2"	2"		

For bending diagrams not shown See drwg. no. 28280  
Dimensions are out to out of bars.

Note: At the contractors option, in lieu of providing bar S601, one No. 6 bar top and bottom may be substituted. Payment for reinforcing steel will be based on the weight of bar S601.