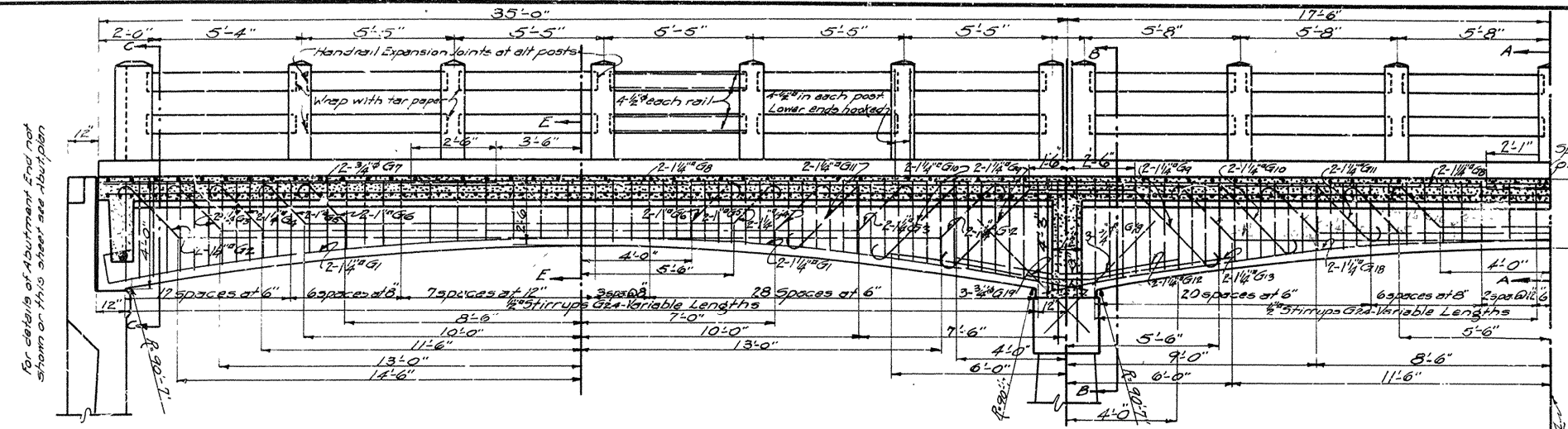
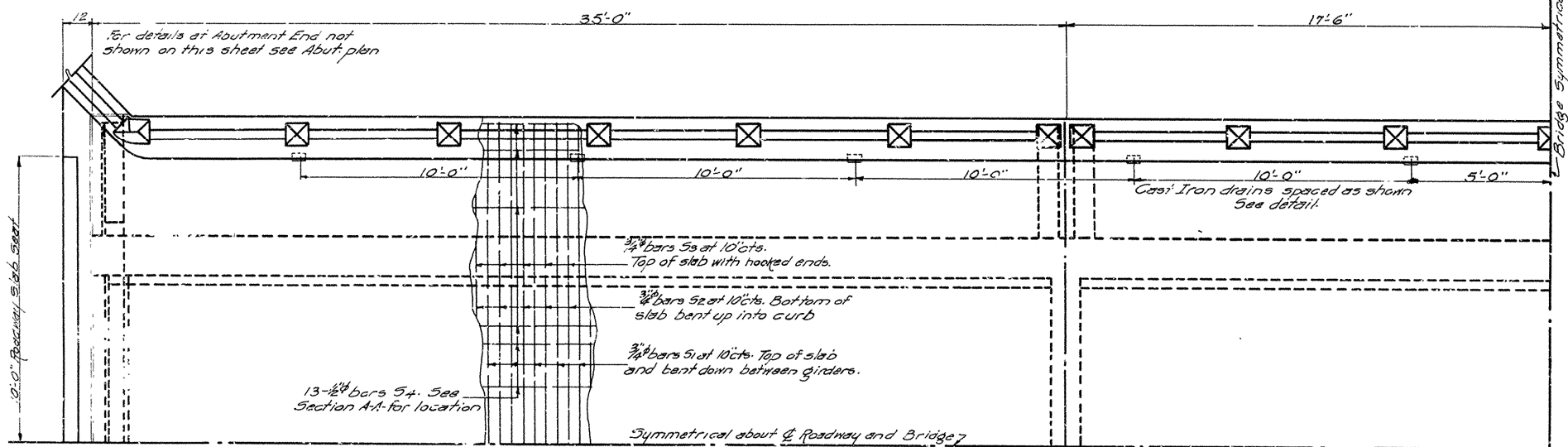


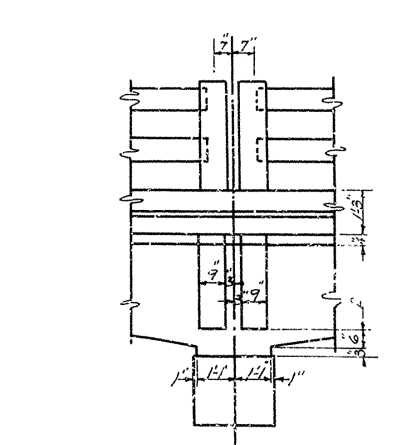
FISCAL YEAR	Job No.	SHEET NO.	TOTAL SHEETS
	461		



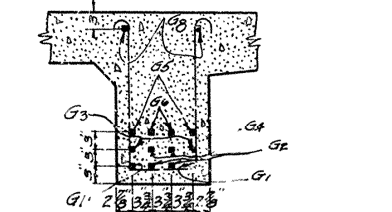
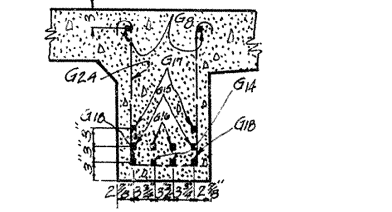
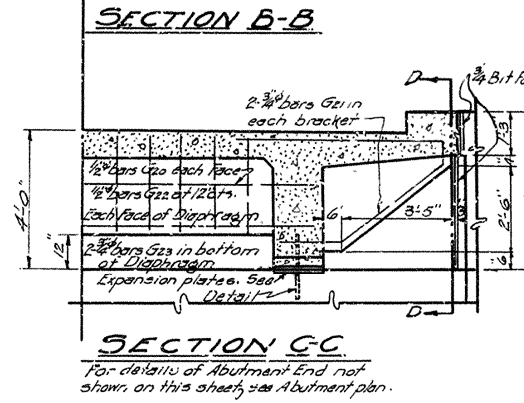
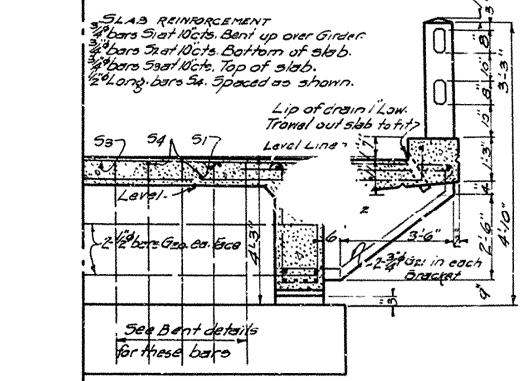
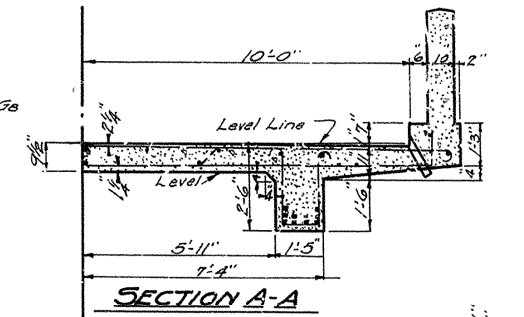
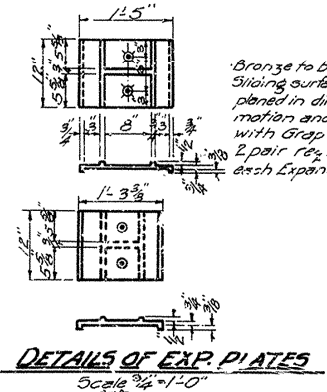
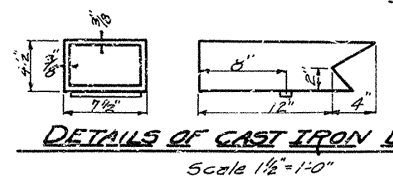
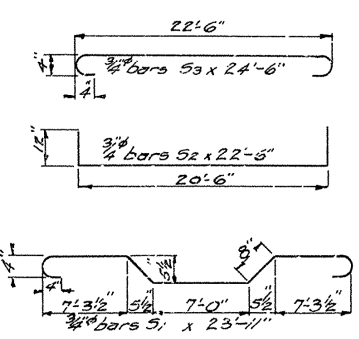
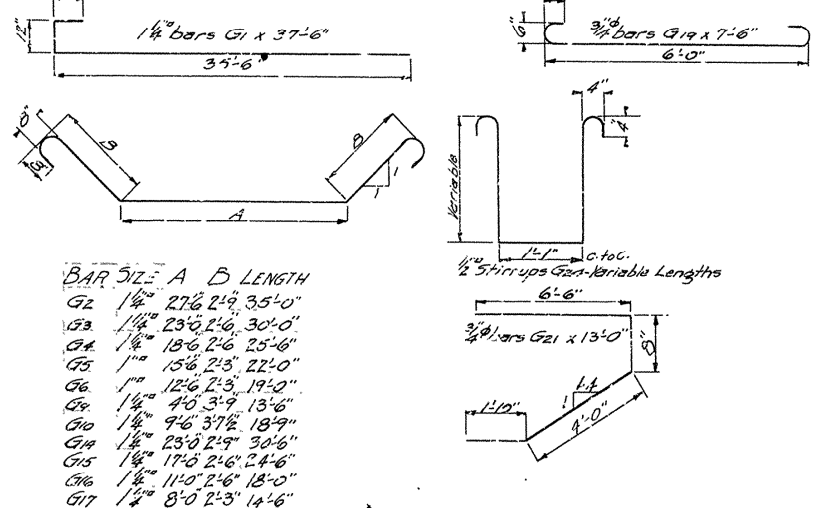
HALF LONGITUDINAL SECTION OF BRIDGE



QUARTER PLAN OF BRIDGE



DETAIL OF BRACKETS FOR BENTS



SECTION D-D SHOWING DETAILS OF BRACKETS AT ABUT. ENDS

GENERAL NOTES
All exposed corners to have 3/4" chamfer unless otherwise noted.
Precast concrete handrails to be 1:3 Mix. Max aggregate 1/2".
Rail posts to be Class 5 concrete.
Reinforcing steel to be deformed bars of 3" structural or Inter mediate Grade. Shop Lists and Bending Diagrams must be submitted by the Contractor before fabrication is begun.
Drains and Expansion devices to be paid for at unit price bid for reinforcing steel.
All concrete above Bent Caps and Expansion plates except Abutment backwalls and handrails to be Class 5.
All concrete below Bent Caps and Expansion plates and backwalls in Abutments to be Class 4 concrete.
All concrete to be poured in the dry.
Specifications: ARKANSAS STATE STANDARD ROAD AND BRIDGE SPECIFICATIONS ADOPTED MAY 30, 1925 AND REVISED.
UNIT STRESSES
CLASS 5 CONCRETE 810 Lbs. per sq. inch
REINFORCING STEEL 18000 Lbs. per sq. inch
n = 12

DETAIL OF SUPERSTRUCTURE FOR RELIEF BRIDGE OVER POTEAU CREEK SCOTT COUNTY ROUTE 71 SECS 11 & 12 ARKANSAS STATE HIGHWAY DEPARTMENT LITTLE ROCK, ARK.

Drawn By: [Signature] Date: [Date]
Traced By: [Signature] Date: [Date]
Checked By: [Signature] Date: [Date]
BRIDGE NO. 1013 DRAWING NO. 1370

BRIDGE ENGINEER

① Note: Remove $\frac{1}{2}$ " of the existing deck and overlay with a minimum of 2" new concrete.

Note:
For Parapet reinforcing-
See Sections A-A & B-B.

13'-5" New Construction

Retain 8'-0" Existing Structure
New Concrete Overlay ①

1'-5" **12'-0"**

2'-9 5/8" **7 1/2"**

S432E or S502E

S401E

1" Slab Bolster-typ.

3 3/4" HI-Chairs as shown @ 4'-0" o.c. except as noted.

S901E **S501E**

4 1/8" **2 1/2" cl.**

Level Line

6" HI-Chairs @ 4'-0"

2'-10 1/8" **1'-0 1/8"**

Sym. about C Bridge

See "DETAIL X"

0.02 ft./ft. Slope **Elev. 657.15**

2'-0"

S503 **S401** **S501** **S402E** **S902**

7 1/2" **1" cl.** **9 1/2"** **1 1/2" cl.**

3" **2'-4"** **2-S403**

Cut Line

S433 or S434

C 3/4" Drip Groove **3"** **1"** **1'-6"** **1"** **1 1/2"**

2'-3 1/2" **6'-3"** **6'-3"** **6'-7 1/2"**

3 1/2" **9"** **12 spaces @ 12" o.c.** **9"** **3 1/2"**

S404 thru S417 or S418 thru S431 (See "SECTION C-C")

Note: The Concrete Bridge Deck shall be given a tine finish as specified for final finish in Subsection 802.20 for Class 5, Tined Bridge Roadway Surface Finish.

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

Note: Concrete in Bridge Superstructure shall be placed and consolidated for the entire pour before any concrete has taken its initial set. This may require the use of a retarding agent.

Sym. about C Bridge

Joint Spacing

Drain Spacing

S432E-9 sp. @ 9" (For End End of Unit)

S502E-8 sp. @ 9"

8'-0" Drain

1'-10"

1'-10"

1'-10"

1'-10"

8'-0" Drain

1'-10"

1'-10"

8'-0" Drain

1'-10"

1'-10"

4'-0"

1'-5"

12'-0" Clear Roadway

Retain 8'-0" Exist. New Conc. Overlay

4 1/2"

70-S501E @ 9" o.c. (in Top) & 70-S501E @ 9" o.c. (in Bottom) - see Half-Section Thru Rdwy.

12'-6"

Slab Joint

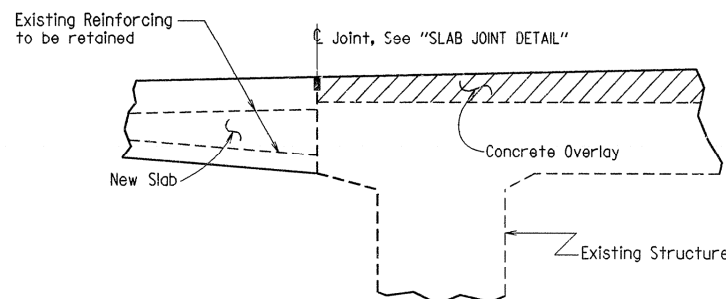
S901E-Placed as shown in Half-Section Thru Roadway

Cut Line & Slab Joint

4 1/2"

Note: S401E, S401I & S901I-Placed as shown in Half-Section Thru Roadway.

Req. or End of Bridge

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


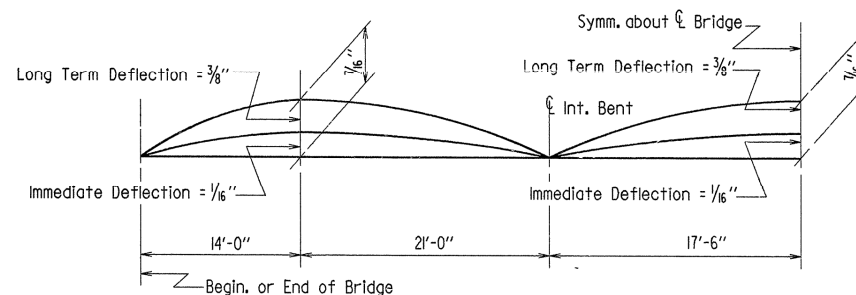
Note: If two or more adjacent bars or two bars separated by only one bar are broken in the concrete removal or bar straightening process, replacement dowel bars shall be drilled and grouted in place.

$$l'' = l' - 0''$$

1/4" x 1" Type 6 Joint Sealer. See Sections 501.03 (h) and 501.04 (j) of the Standard Specifications. Joint Sealer shall be measured and paid for as Class S(AE) Concrete. If slab joints are to be sawed, they shall be sawed before any vehicular traffic is allowed on the unit.

Note: All joints to be cleaned by sand blasting or other approved methods before pouring joint.

No Scale



CAMBER DIAGRAM
N.T.S.

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.		4917	27	64
				(1)	1013W	SPAN DETAILS	31106	

Note: Bars designated with an "E" shall be epoxy coated.

MK	No. Req'd.	Length	A	B	Pin. Dia.
P401E	160	6'-4"	2'-6 1/2"	2'-7"	2"
P402E	160	5'-6"	1'-8 1/2"	1'-1"	2"
P403E	68	11'-2"			Str.
P404E	112	5'-10"	2'-3 1/2"	2'-4"	2"
P405E	112	3'-2"	1'-7"	10 1/2"	2"
P601E	82	11'-2"			Str.
S401	88	27'-6"			Str.
S401E	104	27'-6"			Str.
S402E	468	6'-1"	2'-0 3/8"	1'-3"	2"
S403	72	13'-7"			Str.
S404-S417	4 Each	6'-3" to 6'-9"	1'-0"	2'-5" to 2'-8"	2"
S418-S431	4 Each	7'-7" to 8'-11"	2'-4"	2'-5" to 2'-8"	2"
S432E	40	4'-0"			Str.
S433	4	3'-6"	1'-0"	1'-4"	2"
S434	4	4'-10"	2'-4"	1'-4"	2"
S501	280	13'-11"			Str.
S501E	280	13'-11"			Str.
S502E	144	4'-6"			Str.
S503	32	27'-10"			Str.
S901E	40	60'-0"			Str.
S902	72	37'-6"			Str.

Dimensions are out to out of bars.

GENERAL NOTES

All concrete in new construction to be Class S(AE). All exposed corners to be camfered 3/4" unless otherwise noted. The con

GENERAL NOTES

All concrete in new construction to be Class S(AE). All exposed corners to be chamfered 3/4" unless otherwise noted. The concrete in the girders, diaphragms and deck for each side of widening, shall be placed in one continuous pour.

Reinforcing steel to be ASTM A615 or A617, Grade 60. Bar supports of reinforcing bars will not be paid for directly, but will be considered subsidiary to the item "Reinforcing Steel Grade 60".

Elastomeric pads, Type 2 Joint Filler, Type 6 Poured Joint Material and Structural Steel shall be measured and paid for as "Class 5(AE) Concrete".

Elastomeric Material shall meet the requirements of Section 808.02 of the Standard Specifications and shall be in one piece for the full width and length of the bearing.

DEAD LOAD: Interior Girder Exterior Girder
1250 plf • 1170 plf •

* Includes 160 plf future wearing surface.

LIVE LOAD: Interior Girder	Exterior Girder
1.042 Wheels	1.000 Wheels
+ Impact	+ Impact

For additional information, see Drawing No. 31102.

ROUTE 71B SEC. 10B
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.

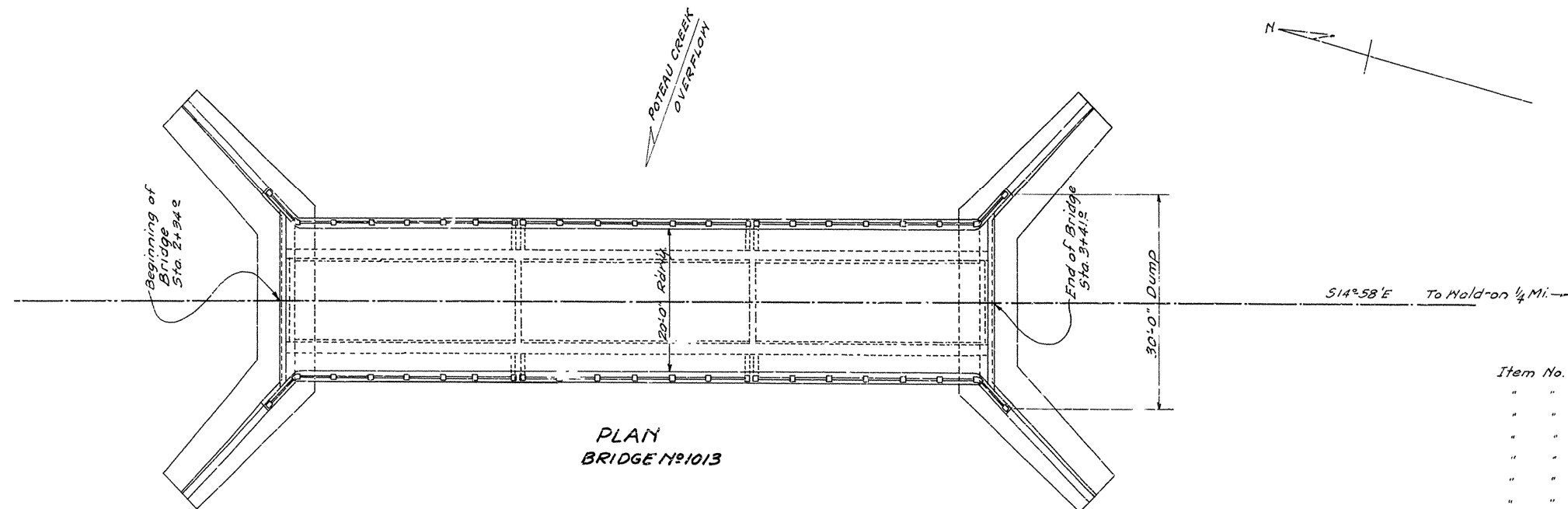
DRAWN BY: TEB DATE: 1/10/90
CHECKED BY: DLV DATE: 1-31-90 SCALE: As Shown

DESIGNED BY: GEC DATE: 9-22-89

BRIDGE NO. 1013W DRAWING NO. 31106

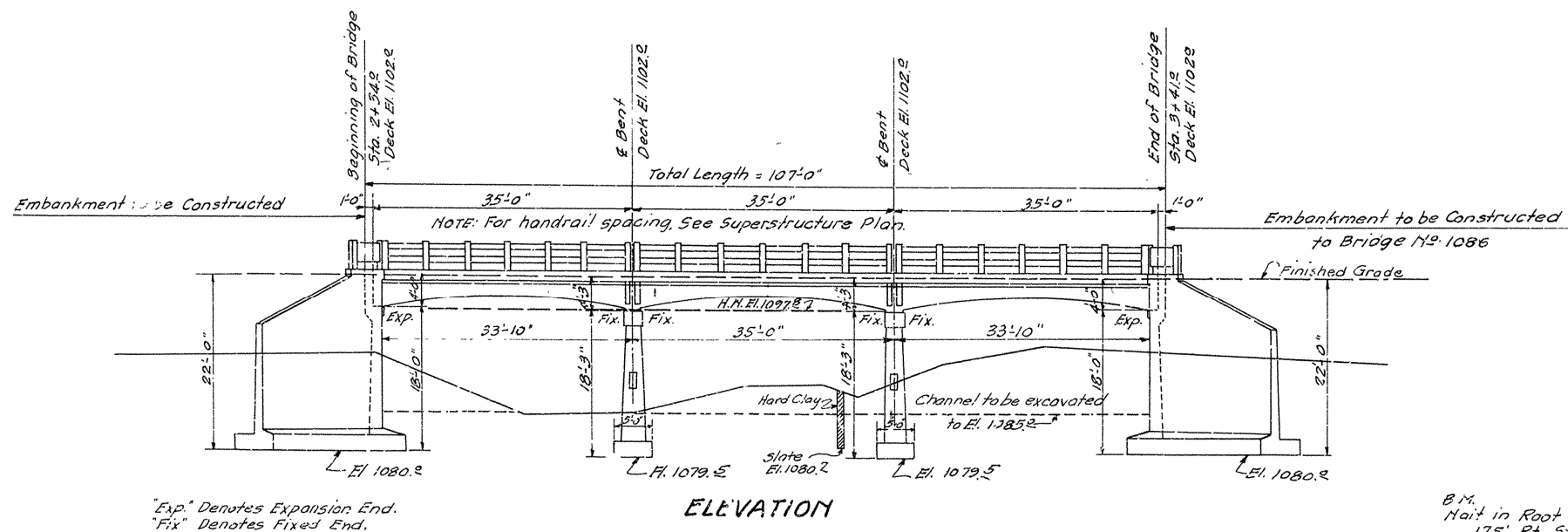
1,550,3001,4917,TEBE549,B4917XXI,SI

FISCAL YEAR	JOB NO.	SHEET NO.	TOTAL SHEETS
	461		



QUANTITIES

Item No. 12	EARTH EXCAVATION	CU. YDS.
" "	13 DRY EXCAV. FOR STRUCTS.	354.04 CU. YDS.
" "	13 WET EXCAV. FOR STRUCTS.	312.00 CU. YDS.
" "	13 SOLID ROCK EXC. FOR STRS.	24.00 CU. YDS.
" "	54 CLASS "A" CONCRETE	249.08 CU. YDS.
" "	54 CLASS "S" CONCRETE	112.43 CU. YDS.
" "	55 REINFORCING ST.	62,467.00 LBS.
" "	74 CONC. RAIL FOR STRUCTS.	228'-0" LIN. FT.



For Details of Superstructure, See Draw. No. 1370
For Details of Abutments, See Draw. No. 1368
For Details of Bents, See Draw. No. 1369

**LAYOUT OF RELIEF BRIDGE
OVER
POTEAU CREEK
SCOTT COUNTY**

ROUTE 71 SEC. 3, 11 & 12
ARKANSAS STATE HIGHWAY DEPARTMENT
LITTLE ROCK, ARK.

Drawn By: *AWB* Date: *1-25-29*
Traced By: *AWB* Date: *1-29-29*
Checked By: *AWB* Date: *1-29-29*

Scale: 1 in. = 10 ft.

BRIDGE NO. 1013

DRAWING NO. 1367

BRIDGE ENGINEER

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.		4917	23	64
				1013W	LAYOUT		3102	

GENERAL NOTES

BENCH MARK: Std. Disk stamped "658.827 W20 1931", located 11' Left of C Sta. 222+59. 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 S(AE) Concrete (superstructure)
Class S Concrete (substructure)
Reinforcing Steel (A615 or A617, Gr. 60)
Structural Steel (A36)

f'c = 4,000 psi
f'c = 3,500 psi
Fy = 60,000 psi
Fy = 36,000 psi

BORING LOGS: Boring logs may be obtained from the Programs and Contracts Division.

FOOTINGS: Footings shall be set a minimum of 1'-6" into material designated as 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 801.04 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
Intermediate Bents
105' Continuous R.C.D.G. Unit

DRAWING NO.

3103 & 3104
3105
3106 & 3107

EXISTING BRIDGE: The existing bridge No. 1013 is 20' wide and 105' long and consists of a concrete superstructure supported by a concrete substructure.

The work contemplated consists of widening the existing bridge on both sides of the roadway. Repairing and overlaying the existing bridge deck, modifying and repairing existing int. bents and abutments. For requirements in conducting the work, see Special Provisions, Detail Drawings, and the Standard Specifications.

All dimensions relating to the existing bridge are to be verified in the field and the Contractor shall be responsible for adjusting widening to existing structure.

Plans of the existing structure will be made available to the Contractor upon request. Existing dwg. nos. 1361 - 1370.

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 100', a minimum live load capacity of HS15, and minimum deck Elev. 658.0. See section 603 of the standard specifications See dwg. nos. 2391, 2391A and 2392A for standard detour bridge details. If timber piling or pine timbers are used in the temporary structure, they shall be treated with a preservative in accordance with the specifications.

Note: Removal & disposal of asphalt from existing bridge will not be paid for directly, but will be considered subsidiary to the item "Modification of Existing Bridge Structure (Br. No. 1013W)".

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

DRAWN BY: WMAJ. DATE: 11-6-87
CHECKED BY: CES DATE: 2-1-90
DESIGNED BY: GEC DATE: 11-87

SCALE: 1" = 20'

BRIDGE NO. 1013W DRAWING NO. 3102