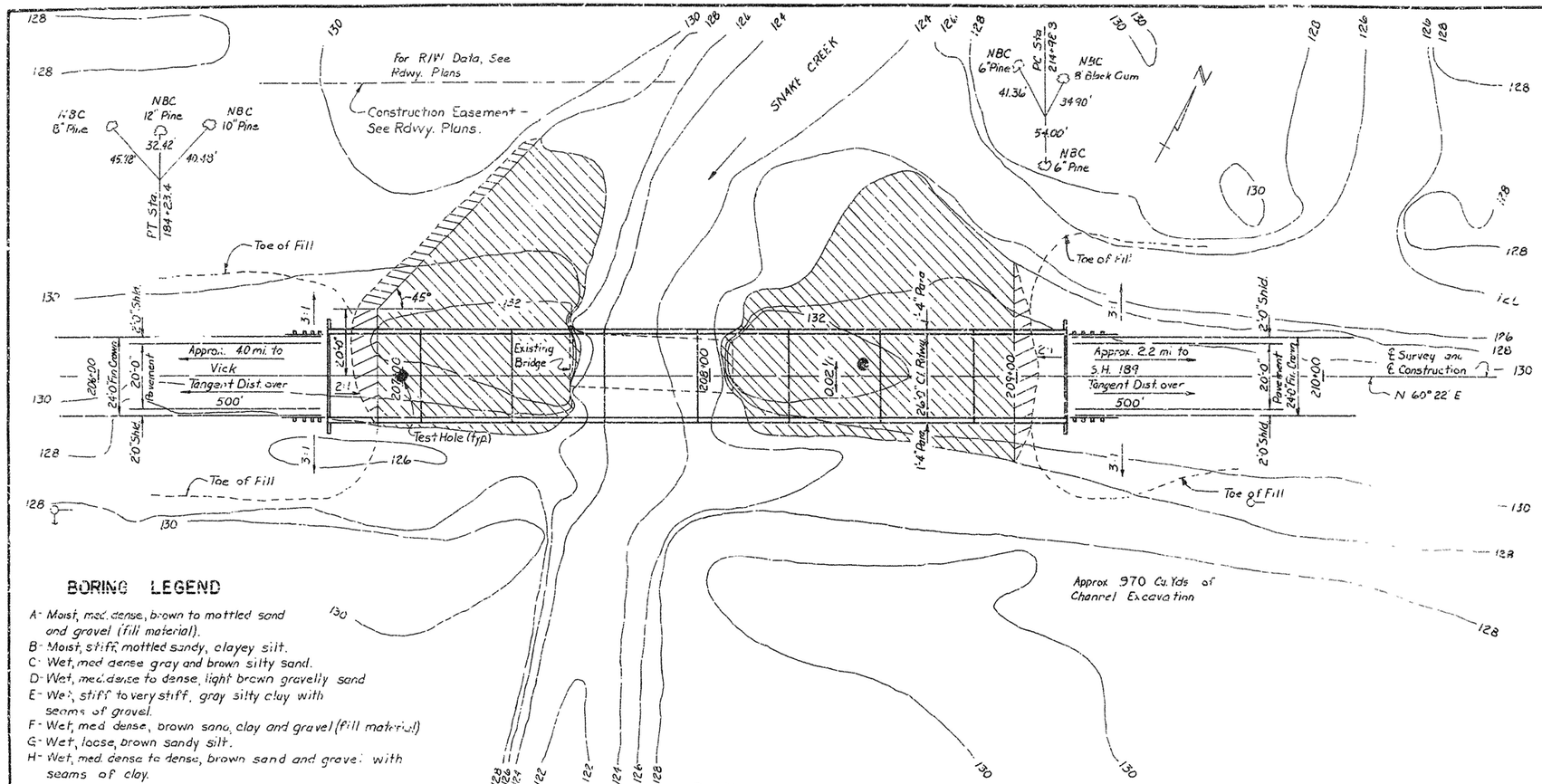
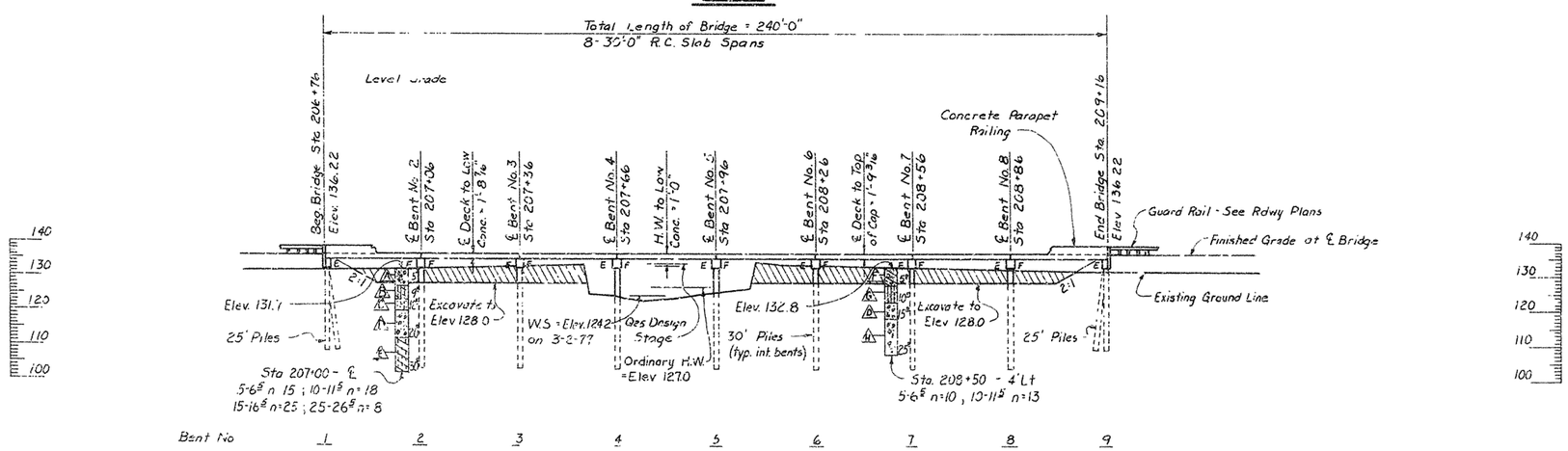
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED. ROAD NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
				6	ARK.			
				JOB NO.		7794	121	78
				(1) 5724	-LAYOUT-	21321		



BORING LEGEND

A- Moist, med. dense, brown to mottled sand and gravel (fill material).
B- Moist, stiff, mottled sandy, clayey silt.
C- Wet, med dense gray and brown silty sand.
D- Wet, med. dense to dense, light brown gravelly sand
E- Wet, stiff to very stiff, gray silty clay with seams of gravel.
F- Wet, med dense, brown sand, clay and gravel (fill material)
G- Wet, loose, brown sandy silt.
H- Wet, med. dense to dense, brown sand and gravel with seams of clay.

PLAN



DESIGN FLOOD DATA

Q_{25} = 5600 cfs
Normal W.S. Elev. 133.51
W.S. with Backwater = Elev 135.42

ELEVATION

Drainage Area = 26.7 Sq. Mi.

BASIC FLOOD DATA

Q_{100} = 8520 cfs
Normal W.S = Elev 134.60
W.S with Backwater = N.A.

GENERAL NOTES

BENCH MARK. RAIL SPIKE IN BRIDGE WINGWALL 15 FEET RIGHT STATION 208+10, ELEVATION 133.36.

ALL CONCRETE SHALL BE CLASS S AND POURED IN THE DRY.

ALL PILING SHALL BE 16 INCH OCTAGONAL OR 16 INCH SQUARE 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 THE GROUND LINE. LENGTHS OF PILING SHOWN ARE ASSUMED FOR ESTIMATING QUANTITIES ONLY. ACTUAL LENGTHS ARE TO BE DETERMINED IN THE FIELD. DRIVE ONE 30 FOOT TEST PILE IN BENT NO. 1. DRIVE ONE 35 FOOT TEST PILE IN BENTS 4 AND 7. PILES IN END BENTS SHALL BE DRIVEN AFTER EMBANKMENT TO BOTTOM OF BENT CAP IS IN PLACE. PILE SHAPES SHALL NOT BE MIXED ON ANY BRIDGE

FOR DETAILS OF BENTS, SEE DWG. NO. 21322
FOR DETAILS OF 30'-0" R.C. SLAB SPANS, SEE DWG. NO. 21323
FOR DETAILS OF STANDARD CONCRETE PILES, SEE DWG. NO. 23P3

SPECIFICATIONS: ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS

DESIGN SPECIFICATIONS AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 1973 WITH 1974 THRU 1977 INTERIM SPECIFICATIONS.

LIVE LOADING: H20

METHOD OF DESIGN LOAD FACTOR

UNIT STRESSES
$f'c$ = COMPRESSIVE STRENGTH OF CLASS S CONCRETE = 3500 PSI
f_y = YIELD STRENGTH OF REINFORCING STEEL = 60,000 PSI

DETOUR CONSTRUCTION. THE CONTRACTOR SHALL CONSTRUCT A DETOUR BRIDGE 40 FEET NORTH OF SURVEY CENTERLINE. THE BRIDGE SHALL BE 55 FEET LONG WITH A MINIMUM DECK ELEVATION OF 134.0'. DESIGN LOADING H15. SEE SECTION 603 OF THE STANDARD SPECIFICATIONS

REMOVAL OF EXISTING BRIDGE: THE CONTRACTOR SHALL REMOVE THE EXISTING 53 FOOT BRIDGE NO. M2117 IN ACCORDANCE WITH SECTION 213 OF THE STANDARD SPECIFICATIONS. THE BRIDGE CONSISTS OF FOUR SPANS WITH TIMBER STRINGERS, DECKING AND TIMBER PILE BENTS. ALL MATERIAL FROM THE EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR WITH THE EXCEPTION OF ONE 12" X 12" X 20' AND TWENTY 4" X 12" X 16' PIECES OF TREATED TIMBER WHICH SHALL BE SALVAGED FOR AND RETAINED BY THE STATE.

LAYOUT OF BRIDGE OVER SNAKE CREEK VICK - JOHNSVILLE BRADLEY COUNTY ROUTE 160 SEC. 9

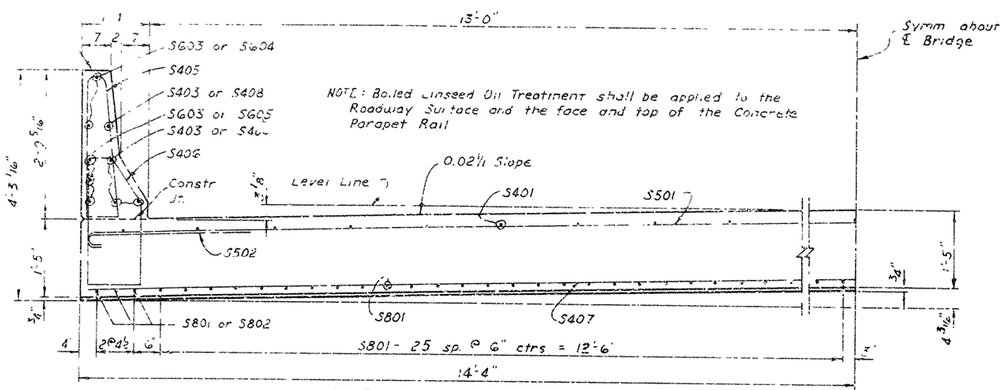
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DRAWN BY: BJM DATE: 5-25-77
CHECKED BY: JCK DATE: 5-26-77
DESIGNED BY: BJM DATE: May 77
SCALE: 1" = 20'-0"

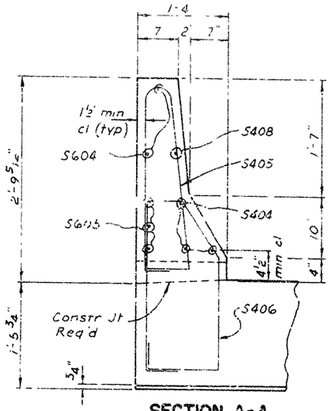
BRIDGE ENGINEER

BRIDGE NO. 5724 DRAWING NO. 21321

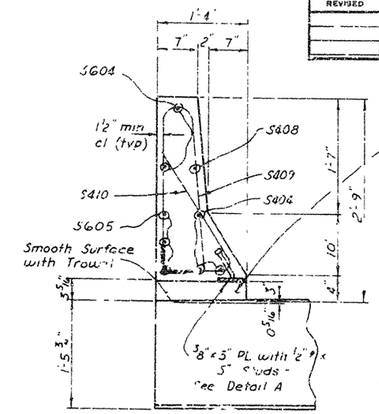
DATE REVISED	DATE FILMED	DATE REVISED	DATE FILMED	FED ROAD NO	STATE	FED AID PROJ NO	SHEET NO	TOTAL SHEETS
				6	ARK.			
				JOB NO		7794	23	78
				1 5724	SLAB SPAN		21323	



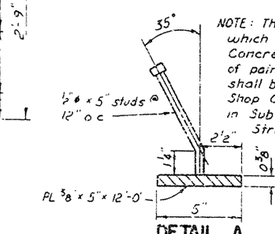
HALF-SECTION THRU ROADWAY
Scale: 3/4" = 1'-0"



SECTION A-A
Scale: 1" = 1'-0"

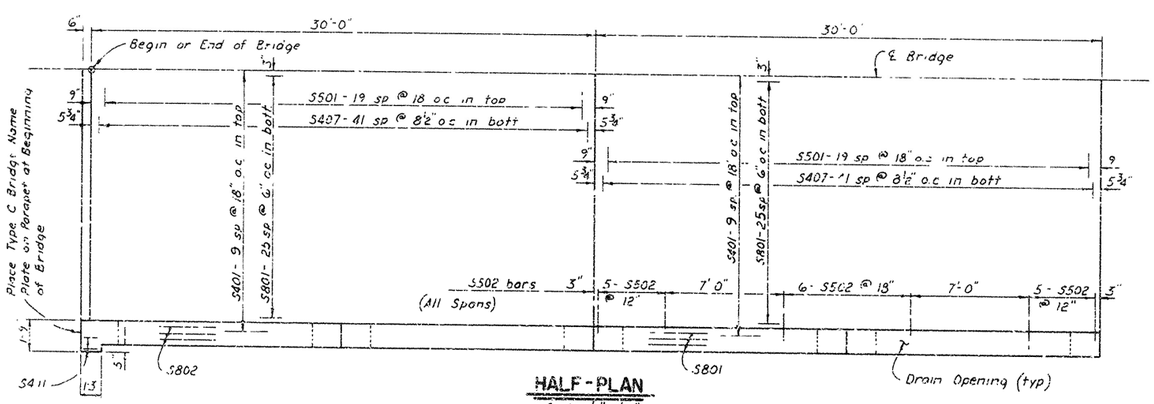


SECTION B-B
Scale: 1" = 1'-0"

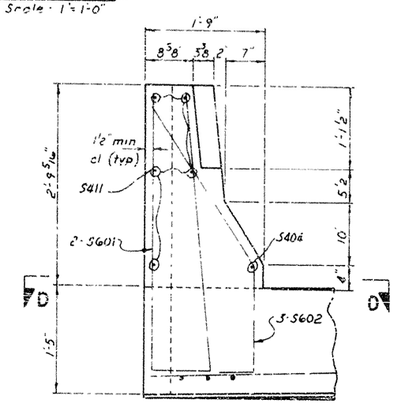


DETAIL A
NO SCALE

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 First Shop Coat and Second Field Coat in Subsection 807.59 (a) and 807.59 (c). Structural Steel shall meet the requirements of section 807, except as noted Studs shall be 5" long, granular flux filled, solid fluxed or equal and automatically welded to Plate Studs and plate to be measured and paid for as Class S Concrete.



HALF-PLAN
Scale: 1/4" = 1'-0"

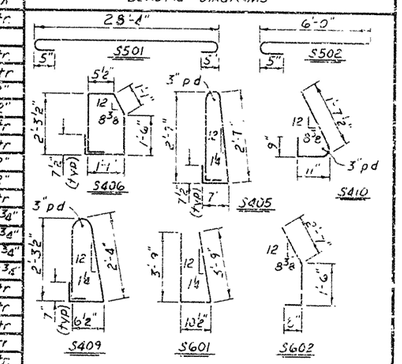


VIEW C-C
Scale: 1" = 1'-0"

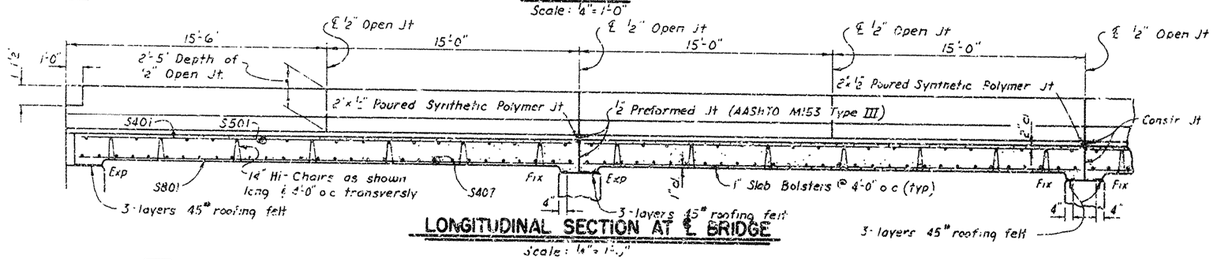
BAR LIST (EACH SPAN)

MARK	NO REQ'D END	NO REQ'D INT	LENGTH	PIN DIA
S401	19	19	29'-8"	Str
S403	8	16	14'-8"	Str
S404	6	–	15'-2"	Str
S405	28	32	7'-1"	2"
S406	23	32	7'-3"	2"
S407	42	42	28'-4"	Str
S408	2	–	14'-2"	Str
S409	48	48	6'-4"	2"
S410	46	48	3'-3"	2"
S411	10	–	11"	Str
S501	20	20	29'-6"	3¾"
S502	32	32	6'-7"	3¾"
S601	4	–	8'-1"	3¾"
S602	6	–	4'-7"	3¾"
S603	10	20	14'-8"	Str
S604	4	–	14'-2"	Str
S605	6	–	15'-2"	Str
S801	52	58	29'-8"	Str
S802	6	–	30'-2"	Str

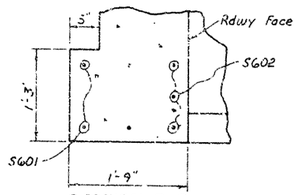
BENDING DIAGRAMS



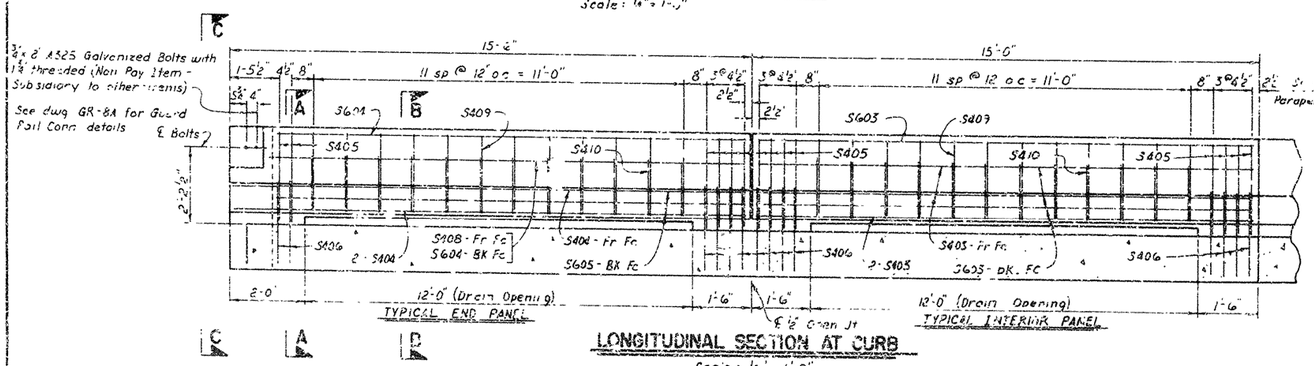
Dimensions are out to out of Bars



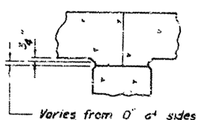
LONGITUDINAL SECTION AT ℄ BRIDGE
Scale: 1/4" = 1'-0"



SECTION D-D
Scale: 1" = 1'-0"



LONGITUDINAL SECTION AT CURB
Scale: 1/2" = 1'-0"



RISER DETAIL
No Scale

GENERAL NOTES

ALL EXPOSED CORNERS TO BE CHAMFERED 3/4 UNLESS OTHERWISE NOTED

BAR SUPPORTS FOR REINFORCING BARS WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED SUBSIDIARY TO THE ITEM "REINFORCING STEEL"

ROOFING FELT, BITUMINOUS FELT, PREFORMED JOINT, AND SYNTHETIC POLYMER SHALL BE MEASURED AND PAID FOR AS CLASS S CONCRETE

SPECIFICATIONS. ARKANSAS STATE HIGHWAY COMMISSION STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, EDITION OF 1972, AND APPLICABLE SPECIAL PROVISIONS

DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES 1973 WITH 1974 THRU 1977 INTERIM SPECIFICATIONS

LIVE LOAD: H20
METHOD OF DESIGN LOAD FACTOR

LOAD DISTRIBUTION TO SLAB DEAD LOAD: 260 PSF
LIVE LOAD: 0.174 WHEELS/FT OF WIDTH PLUS 30% IMPACT

CONCRETE ALL CONCRETE SHALL BE CLASS S WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH f'c = 3500 PSI

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

Quantity	End Span	Int Span
Concrete	50.61 yd³	50.29 yd³
Reinforcing Steel	7880 lbs	7812 lbs
Structural Steel *	323 LBS	323 LBS

* Not Paid for Directly, Subsidiary to the Item "Class S Concrete"

DETAILS OF STANDARD 30'-0" R.C. SLAB SPANS CONC. PARAPET RAIL - 26'-0" CL. RDWY.

ROUTE SEC.

ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DETAILED BY JJM DATE 7-0-77
CHECKED BY [illegible] DATE 7-1-77
DESIGNED BY SJO DATE
SCALE: As Noted

BRIDGE ENGINEER

BRIDGE NO. 5724 DRAWING NO. 21323