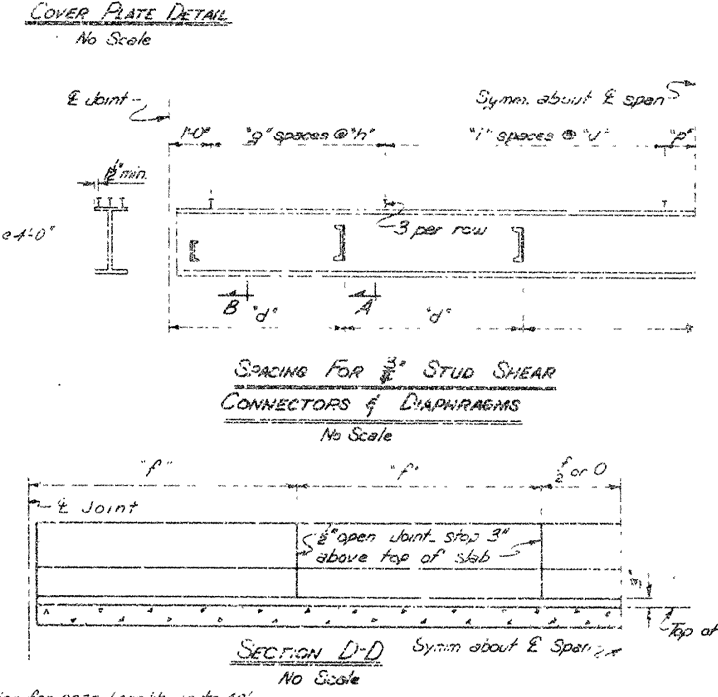
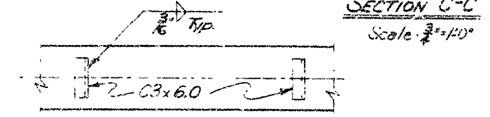


* See Drug No. 1490F for alternate anchor details.

SECTION C-C



ALL STRUCTURAL STEEL SHALL BE PAID FOR AT THE PRICE BID PER POUND FOR "STRUCTURAL STEEL IN BEAM SPANS (A572 GRADE 50)".

LOADING: HS20 DESIGN SPECIFICATIONS, 045-70 1973

<u>TYPE B RAIL</u>		<u>INTERIOR BEAM</u>	<u>EXTERIOR BEAM</u>
<u>DEAD LOAD:</u>			
a. TO W BEAM	820#/'H.3QWT/FT OF WF)	826#/'H.3QWT/FT OF WF)	
b. TO COMPOSITE BEAM	258#/'†	258#/'†	
<u>LIVE LOAD:</u>			
TO EACH COMPOSITE BEAM	1,500 WHEELS + IMPACT	1,423 WHEELS + IMPACT	
<u>CONCRETE PARAPET RAIL</u> † OPEN PARAPET RAIL			
<u>DEAD LOAD:</u>			
a. TO W BEAM	820#/'H.3QWT/FT OF WF)	778 #/'H.3QWT/FT OF WF)	
b. TO COMPOSITE BEAM	304#/'†	304#/'†	
<u>LIVE LOAD:</u>			
TO EACH COMPOSITE BEAM	1,500 WHEELS + IMPACT	1,423 WHEELS : IMPACT	

UNIT STRESSES:	
CLASS 5 OR CLASS 36(E) CONCRETE (N=9)	1,400 PSI
STRUCTURAL STEEL (A572, GRADE 50)	27,000 PSI BEAMS & COVER PLATES ONLY
STRUCTURAL STEEL (A36)	20,000 PSI
REINFORCING STEEL (A615-60)	24,000 PSI

DIAPHRAGMS

cut to cut of bars.

3'-9" 3'-9" 3'-9" 3'-9" 4'-0" wide 8"

BEAM AND COVER PLATES SHALL BE A772 GRADE 50, ALL OTHER STRUCTURAL STEEL SHALL BE A36. ALL REINFORCING STEEL SHALL BE A615-GR60.

+ INCLUDES 135° WELDING SURFACE.

Revised Reinforcing Unit Stresses @ Load. from work which 4-9-74.

DETAILS OF STANDARD
COMPOSITE W-BEAM SPAN
30'-0" CLEAR ROWY.
0.02' PEAKED CROWN

ROUTE 109 SEC. 5
ARKANSAS STATE HIGHWAY COMMISSION

LITTLE ROCK, ARK.
DRAWN BY: K.M.G. DATE: 12 April 71
TRACED BY: _____ DATE: _____
CHECKED BY: D.V. DATE: 4-30-71 SCALE: As Noted
BRIDGE NO. 5653 DRAWING NO. 20220

[illegible]

Tabular Data by JGI Date 6-8-76
Checked by D.M.E. Date 3-5-76

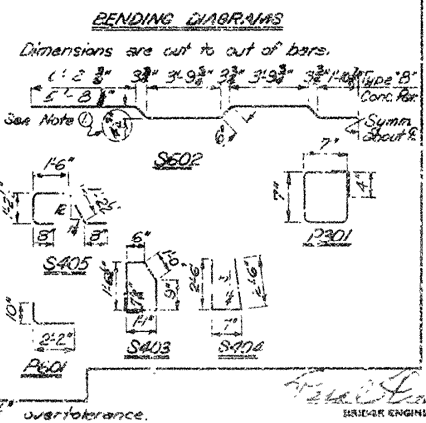
USE FOR SPAN LENGTH 15' TO 19' 10" USE FOR SPAN LENGTH 19' TO 90'

REINFORCING STEEL (PER SPAN)

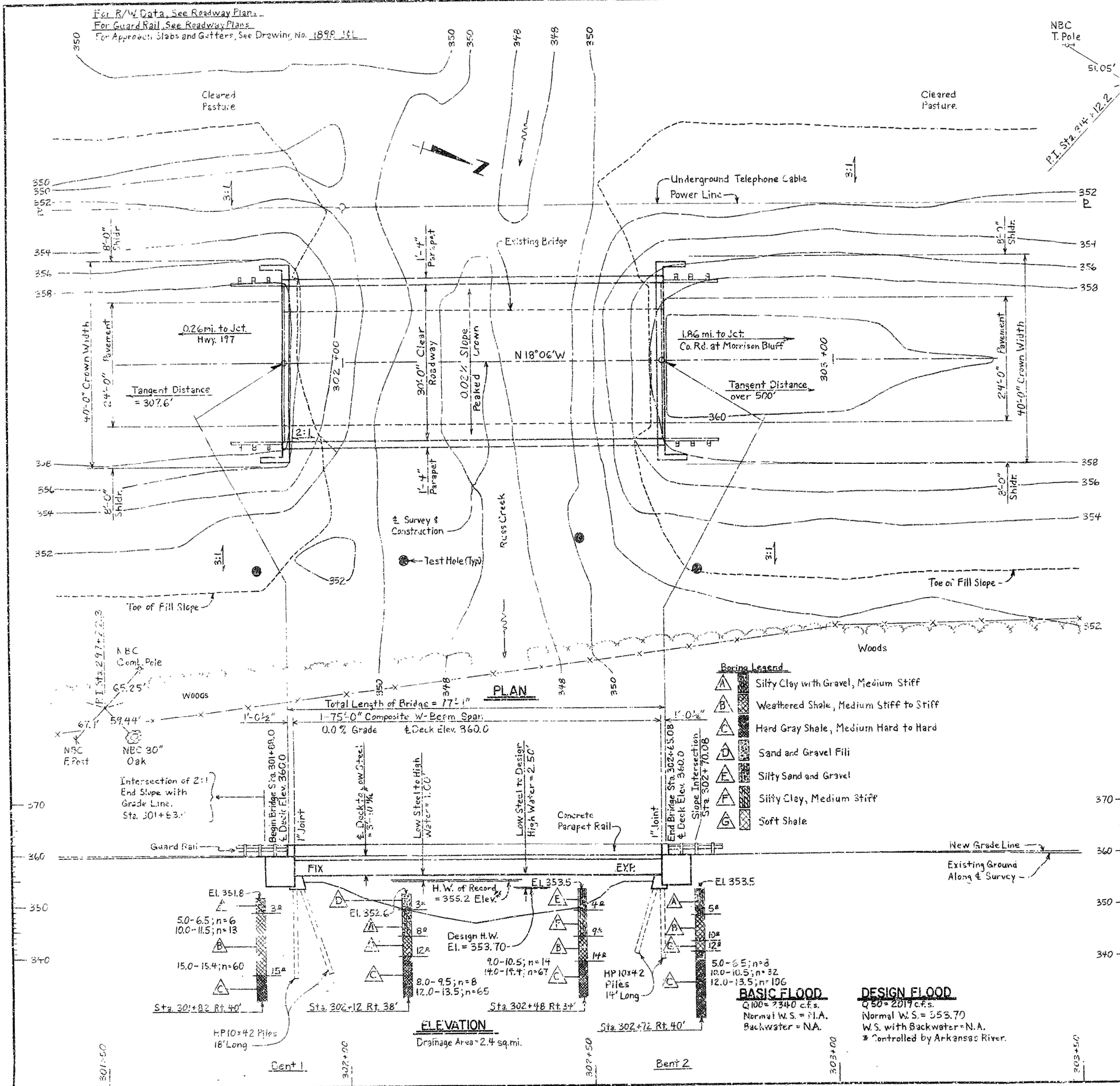
MARK	LENGTH		PIN DIA.	SPAN LENGTH	
	CONCRETE PARALLEL RAIL	TYPE 'B' RAIL		75'	NUMBER REQUIRED
S601	32'-4"	33'-4"	3/4"	No. 20221 see Drawing	
S602	33'-1"	34'-1"	3/4"		
** S401	3' ± 1'-0"	3' ± 1'-0"			
S501	5'-8"	6'-2"	3/4"		
* S401	5'-6"	5'-6"			
** S401	8' ± 7"	8' ± 7"	1/2"		
S703	5'-9"	-	2"		
S404	5'-5"	-	2"		
S405	-	4'-11"	2"		
S402	4'-6"	-	3/4"		
Non- Pkg	P301	2'-3"	1/2"	For Bar List	
	P601	2'-11"	3/4"		

① No under tolerances.

① No under tolerance, & over tolerance.



DATE REVISION	DATE REVISION	DATE REVISION	DATE REVISION	FILE NO.	STATE	FED. AID PROJ. NO.	PROJECT NO.	TOTAL SHEETS
10-4-76	9-10-76			6	ARK.	705-A128(1)	1442	63
							5453 BR. LAYOU	20218



GENERAL NOTES

BENCH MARK - NAIL IN TOP PIER POST NORTH END OF BRIDGE 15 FT. RT. STATION 302+64. ELEVATION 356.48.

ALL CONCRETE SHALL BE POURED IN THE DRY. ALL EXPOSED CORNERS TO BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.

ALL PILING SHALL BE HP10X42 AND SHALL BE DRIVEN WITH AN APPROVED AIR, STEAM, OR DIESEL HAMMER TO A MINIMUM BEARING CAPACITY OF 55 TONS PER PILE AND INTO THE MATERIAL DESIGNATED AS ROCK (HARD GRAY SHALE) ON THE BORING LOGS. LENGTHS OF PILING SHOWN ARE FOR ESTIMATING QUANTITIES ONLY. ORDER LENGTHS SHOWN; CUT-OFF OR BUILD-UP, IF NECESSARY, TO BE PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

PILES IN END BENTS TO BE DRIVEN AFTER EMBANKMENT TO SUBGRADE IS IN PLACE.

FOR DETAILS OF END BENTS, SEE DWG. NO. 20219.

FOR DETAILS OF COMPOSITE W-BEAM SPANS, SEE DWG. NOS. 20220 & 20221.

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 INTERIM SPECIFICATIONS.

LIVE LOADING: HS20

METHOD OF DESIGN: SUBSTRUCTURE - LOAD FACTOR
SUPERSTRUCTURE - LOAD FACTOR

BRIDGE REMOVAL AND SALVAGE: AFTER THE DETOUR BRIDGE IS COMPLETED AND OPEN TO TRAFFIC, REMOVE THE EXISTING 70' X 10' TIMBER BRIDGE BEGINNING AT STATION 301+00 AND ENDING AT STATION 302+00. SEE SECTION 213 OF THE STANDARD SPECIFICATIONS. THE BRIDGE CONSISTS OF FOUR TREATED TIMBER SPANS ON TREATED TIMBER BENTS.

ALL MATERIAL FROM THE EXISTING BRIDGE SHALL BECOME THE PROPERTY OF THE CONTRACTOR EXCEPT THE FOLLOWING ITEMS WHICH WILL REMAIN THE PROPERTY OF THE STATE:

ITEMS	NO.	SIZE
TREATED TIMBER BENT CAPS	5	12" X 12" X 22'-0"
TREATED TIMBER BENT CAPS	9	12" X 12" X 10'-0"
TREATED TIMBER STRINGERS	56	4" X 14" X 20'-0"
TREATED TIMBER DECKING	6	3" X 10" X 20'-0"
TREATED TIMBER GUARDS	8	6" X 8" X 20'-0"

MAINTENANCE OF TRAFFIC: DETOUR BRIDGE TO HAVE A MINIMUM DECK ELEVATION OF 354.0 AND A MINIMUM LENGTH OF 60 FEET AND TO BE LOCATED APPROX. 40 FEET DOWN STREAM. THE BRIDGE SHALL HAVE A MINIMUM ROADWAY WIDTH OF 20 FEET AND A MINIMUM DESIGN CAPACITY OF HIS LOADING. SEE SECTION 603 OF THE STANDARD SPECIFICATIONS.

STATE FORCES WILL CONSTRUCT AND REMOVE APPROACHES TO TEMPORARY BRIDGE STRUCTURE.

LAYOUT OF BRIDGE
OVER RUSS CREEK
ARK. RIVER BRIDGE
& APPRS. (CLARKSVILLE)
MAIN BRIDGE SUPERSTRUCTURE
LOGAN COUNTY

ROUTE 109 SEC 3
ARKANSAS STATE HIGHWAY COMMISSION
LITTLE ROCK, ARK.

DESIGNED BY: D.M.E. DATE: 5-20-76
CHECKED BY: U.A.S. DATE: 5-25-76
DESIGNED BY: U.A.S. DATE: _____
BRIDGE NO. 5653
DRAWING NO. 20218

BRIDGE ENGINEER