

FED. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	ARK.		1931	1	7

STATE OF ARKANSAS  
STATE HIGHWAY COMMISSION

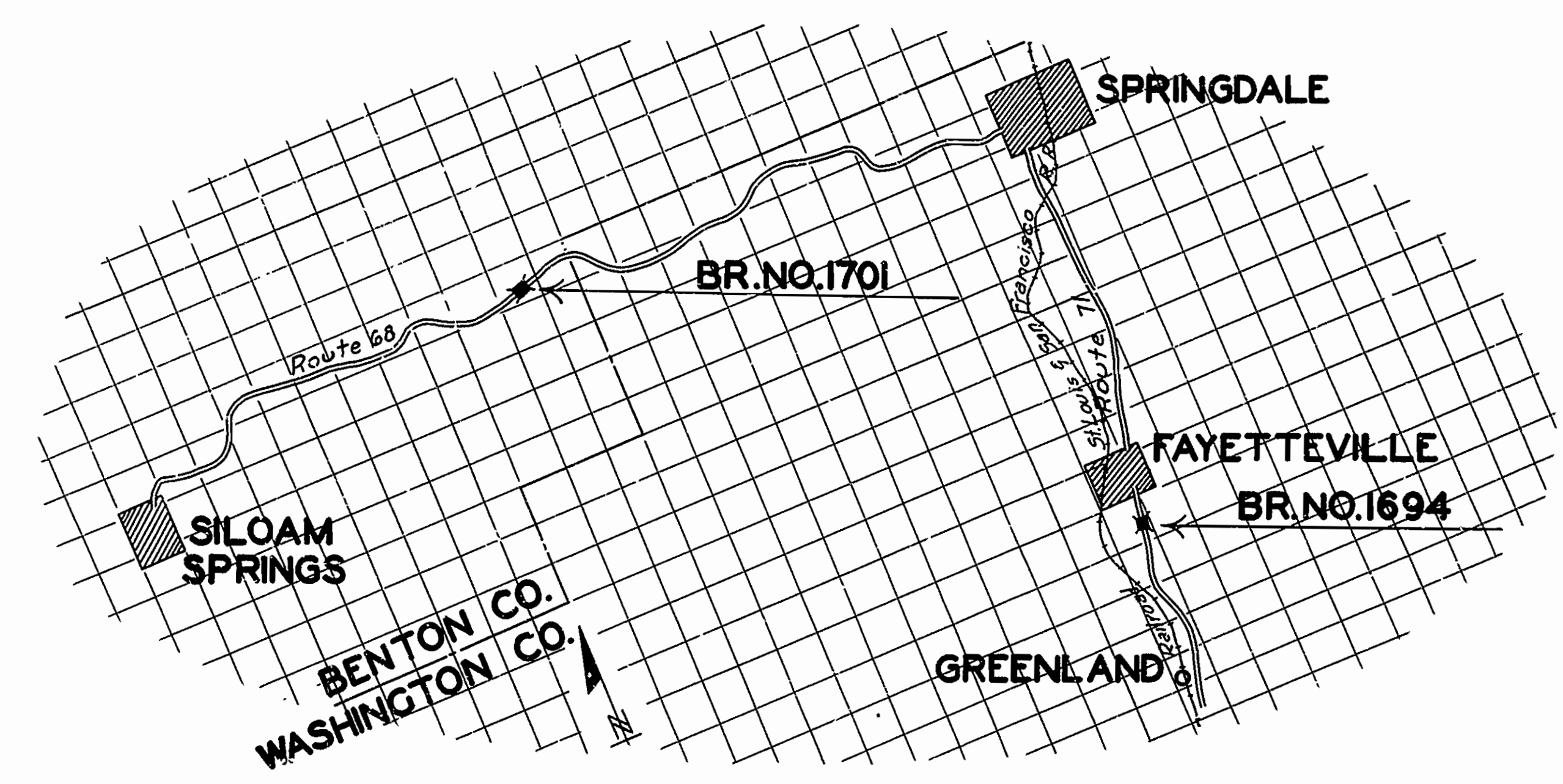
INDEX OF SHEETS

Sheet No.	Drawing No.	Title
1	3111	Title Sheet
2	3112	Layout Bridge No. 1694
3	2299	Details of Standard 40'0" R.C.D. 20'0" Rdwy. 20° Skew Lt.
4	3113	Details of Abutments and Piers
5	3114	Layout Bridge No. 1701
6	2021	Details of Standard 19'0" Tr. Timber. 15'0" Rdwy.
7	3115	Details of Substructure

**PLAN OF PROPOSED BRIDGES**  
ON  
**FAYETTEVILLE-GREENLAND & SILOAM SPRINGS-SPRINGDALE ROAD**  
**WASHINGTON & BENTON COUNTIES**  
ROUTE 71 SEC. 16  
68 0  
**JOB NO. 4-162**  
**FEDERAL AID PROJECT NO.**

QUANTITIES

Item No.	S.P. #	Description	Quantity	Unit
"	"	12 Common Excavation	450	Cu. Yds.
"	"	13 Dry Excavation for Structures	412	" "
"	"	13 Wet Excavation for Structures	617	" "
"	"	13 Solid Rock Excavation for Structures	292	" "
"	"	S.P. # 52 Treated Bridge Timber	19,870	M.F.B.M.
"	"	S.P. # 52 Treated Timber Piling	382	Lin. Ft.
"	"	S.P. # 52 Treated Timber Pile Cut-off	38	" "
"	"	54 Class "A" Concrete	341.06	Cu. Yds.
"	"	54 Class "S" Concrete	129.48	" "
"	"	55 Reinforcing Steel	74,590	Lbs.
"	"	56 Structural Steel (Truss Bridges)	2000	" "
"	"	S.P. # 69 Rip Rap (1 1/2" thick)	87	Cu. Yds.
"	"	74 Concrete Railing for Structures	151	Lin. Ft.
"	"	S.P. Removal of Existing Structure & Erecting Steel Span		



Specifications approved by Chief, Bureau of Public Roads, September 28, 1925, and adopted by State Highway Commission May 30, 1925 with revisions and Special Provisions as follows:

Pamphlet	Revisions	Approved
A	Revised Sept. 1st, 1928	Approved June 1st, 1929
B	Revised Nov. 1st, 1929	
C		
D	Revised July 1st, 1928	Approved Nov. 24th, 1928
E	Revised Jan. 1st, 1930	
F	Revised Aug. 1st, 1929	
G	Revised June 1st, 1929	
H	Revised Jan. 1st, 1930	
I		
J	Revised Jan. 1st, 1929	Approved June 1st, 1929
K		
L	Revised Jan. 1st, 1929	Approved June 1st, 1929

Item	No. of Sheets
Bridge Timber	12
Earth Excavation	3
Concrete Aggregate	2
Rip Rap	1
Section 8.2	1
Structural Steel	1
State Furnished Cement	3
All Material except Cement	1
Removal of Existing Structure and Re-erecting Steel Truss Span 2.	

**LAYOUT**  
Scale: 1" = 3 Mi.

LENGTH OF PROJECT	=	
LENGTH OF BRIDGES	=	280.85
LENGTH OF EMBANKMENT	=	80.00
LENGTH OF JOB	=	360.85

APPROVED  
CHIEF ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
DISTRICT ENGINEER - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
CHIEF - U. S. BUREAU OF PUBLIC ROADS

APPROVED  
CHAIRMAN - STATE HIGHWAY COMMISSION

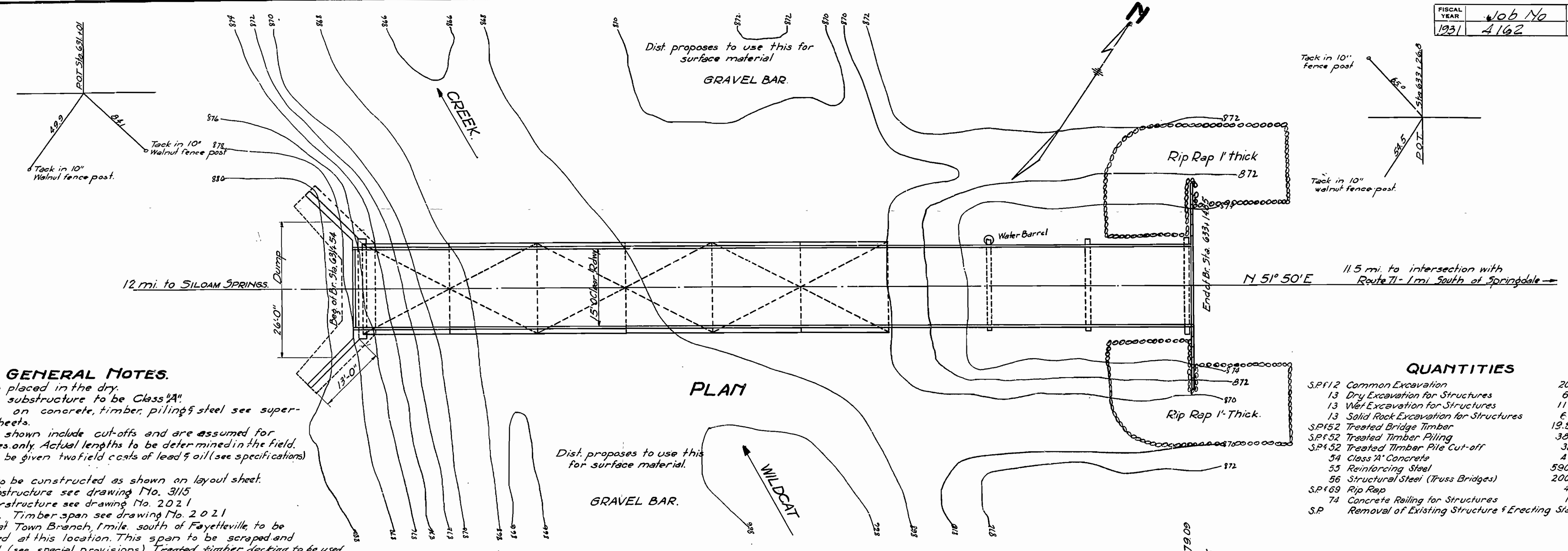
APPROVED  
STATE HIGHWAY ENGINEER

*M.B. Lawrence*  
BRIDGE ENGINEER

BRIDGES No. 1694 & 1701

DRAWING No. 3111

FISCAL YEAR	Job No	SHEET TOTAL
1931	4162	5 7



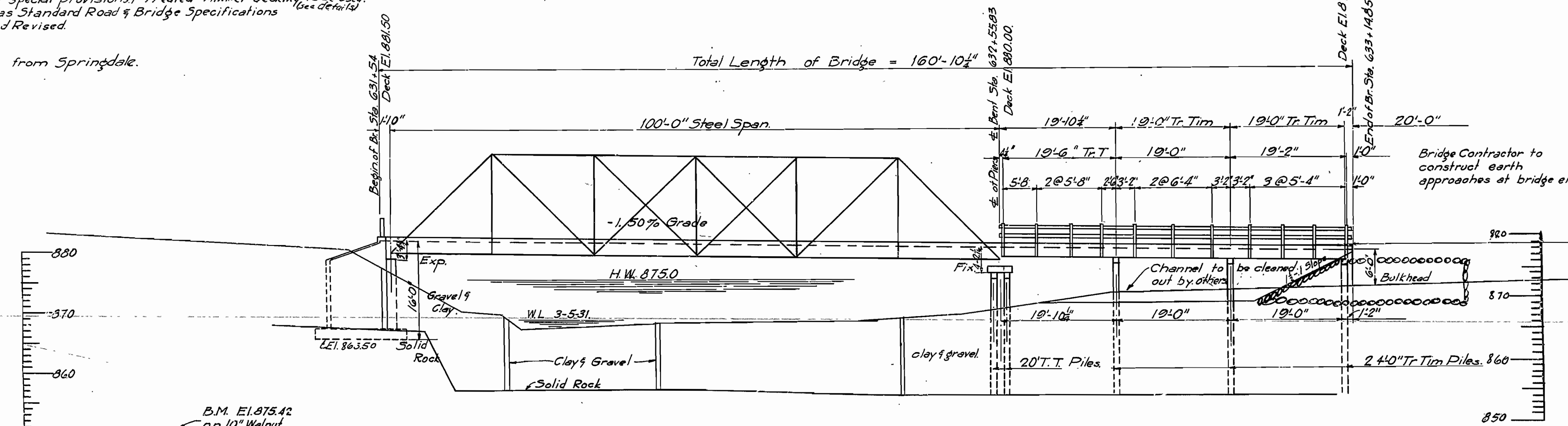
**GENERAL NOTES.**

All concrete to be placed in the dry.  
 All concrete in substructure to be Class "A".  
 For general notes on concrete, timber, piling & steel see super-structure detail sheets.  
 Lengths of piling shown include cut-offs and are assumed for estimating quantities only. Actual lengths to be determined in the field.  
 Structural steel to be given two field coats of lead & oil (see specifications).  
 Expansion joints to be constructed as shown on layout sheet.  
 For details of substructure see drawing No. 3115  
 For details of superstructure see drawing No. 2021  
 For details of 19'-0" Timber span see drawing No. 2021  
 100'-0" steel span at Town Branch, 1 mile south of Fayetteville to be dismantled and erected at this location. This span to be scraped and cleaned and painted. (see special provisions.) Treated timber decking to be used.  
 Specifications: Arkansas Standard Road & Bridge Specifications Adopted May 30, 1925 and Revised.

**QUANTITIES**

S.P.12 Common Excavation	200	Cu. Yds.
13 Dry Excavation for Structures	67	" "
13 Wet Excavation for Structures	117	" "
13 Solid Rock Excavation for Structures	67	" "
S.P.52 Treated Bridge Timber	19,570	M.F.B.M.
S.P.52 Treated Timber Piling	392	Lin. Ft.
S.P.52 Treated Timber Pile Cut-off	38	" "
54 Class "A" Concrete	49.07	Cu. Yds.
55 Reinforcing Steel	5900	Lbs.
56 Structural Steel (Truss Bridges)	2000	" "
S.P.69 Rip Rap	45	Cu. Yds.
74 Concrete Railing for Structures	13.00	Lin. Ft.
S.P. Removal of Existing Structure & Erecting Steel Span.		

Location 12.5 miles from Springdale.



**ELEVATION BR. No 1701.**

Drainage Area: 14 sq. mi.

**LAYOUT**  
**BRIDGE OVER WILDCAT CREEK.**  
 STA 631 + To STA 633 +  
**BENTON COUNTY.**  
 ROUTE 68 SEC. 0

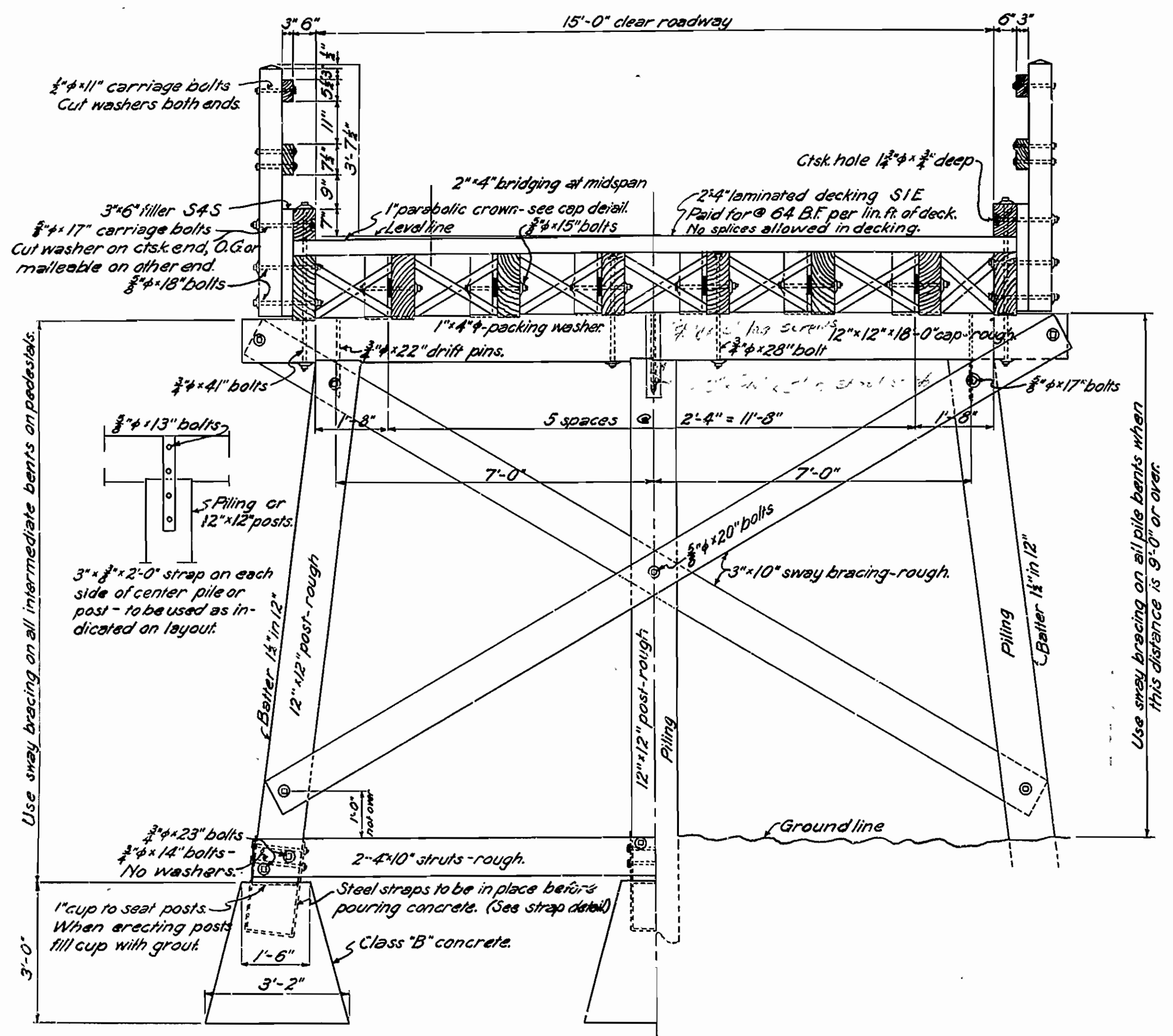
**ARKANSAS STATE HIGHWAY COMMISSION**  
 LITTLE ROCK, ARK.

Drawn By: *REH* Date: 2-10-31  
 Traced By: *ZMM* Date: 2-12-31  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
**BRIDGE NO. 1701**      **DRAWING NO. 3114**

*N.B. Davis*  
 BRIDGE ENGINEER

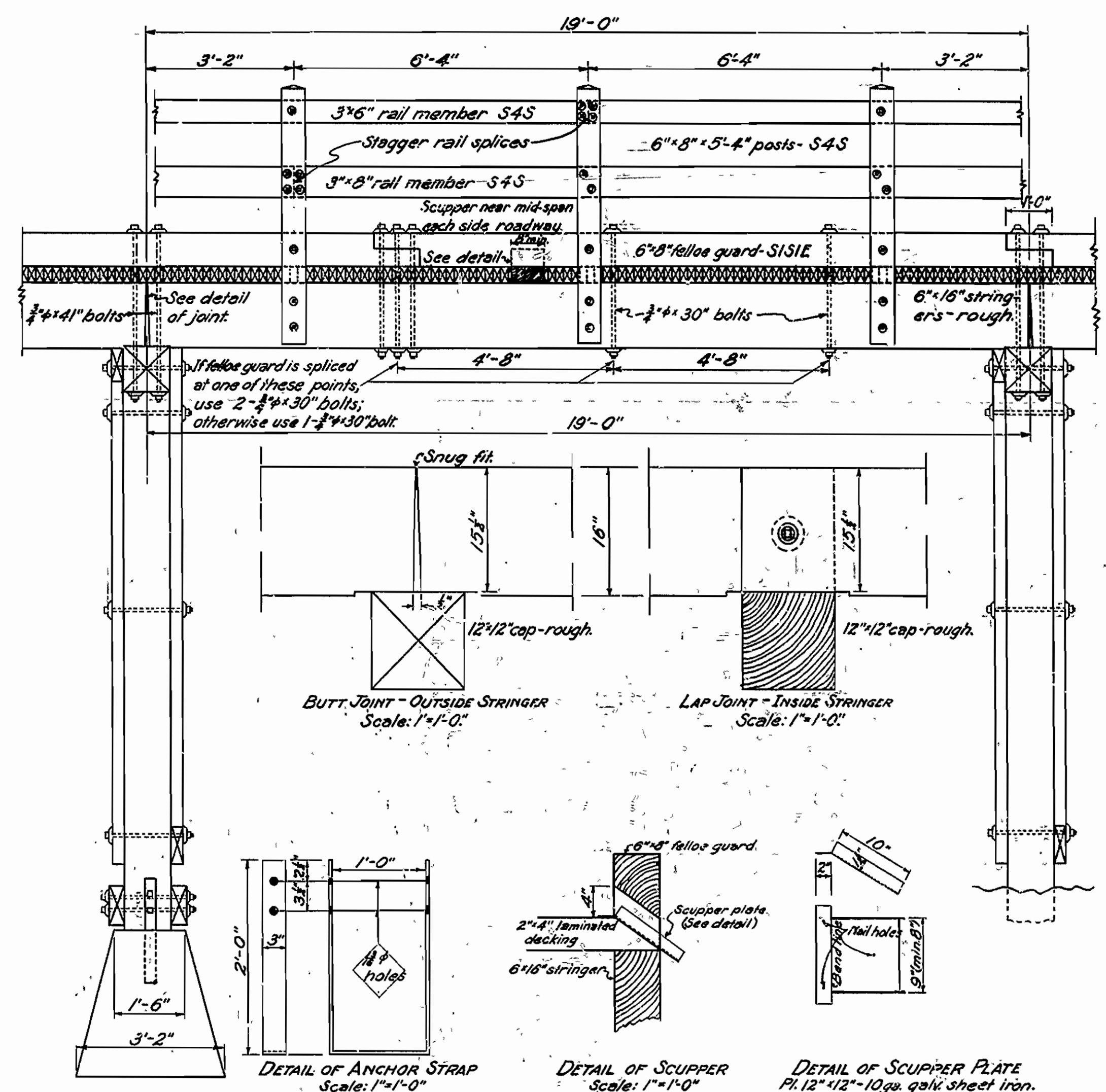
Scale: 1/4" = 10'

FISCAL YEAR	Job No.	SHEET No.	TOTAL SHEETS
1931	4162	6	7



**HALF SECTION-FRAME BENTS**  
Scale: 1/2" = 1'-0"

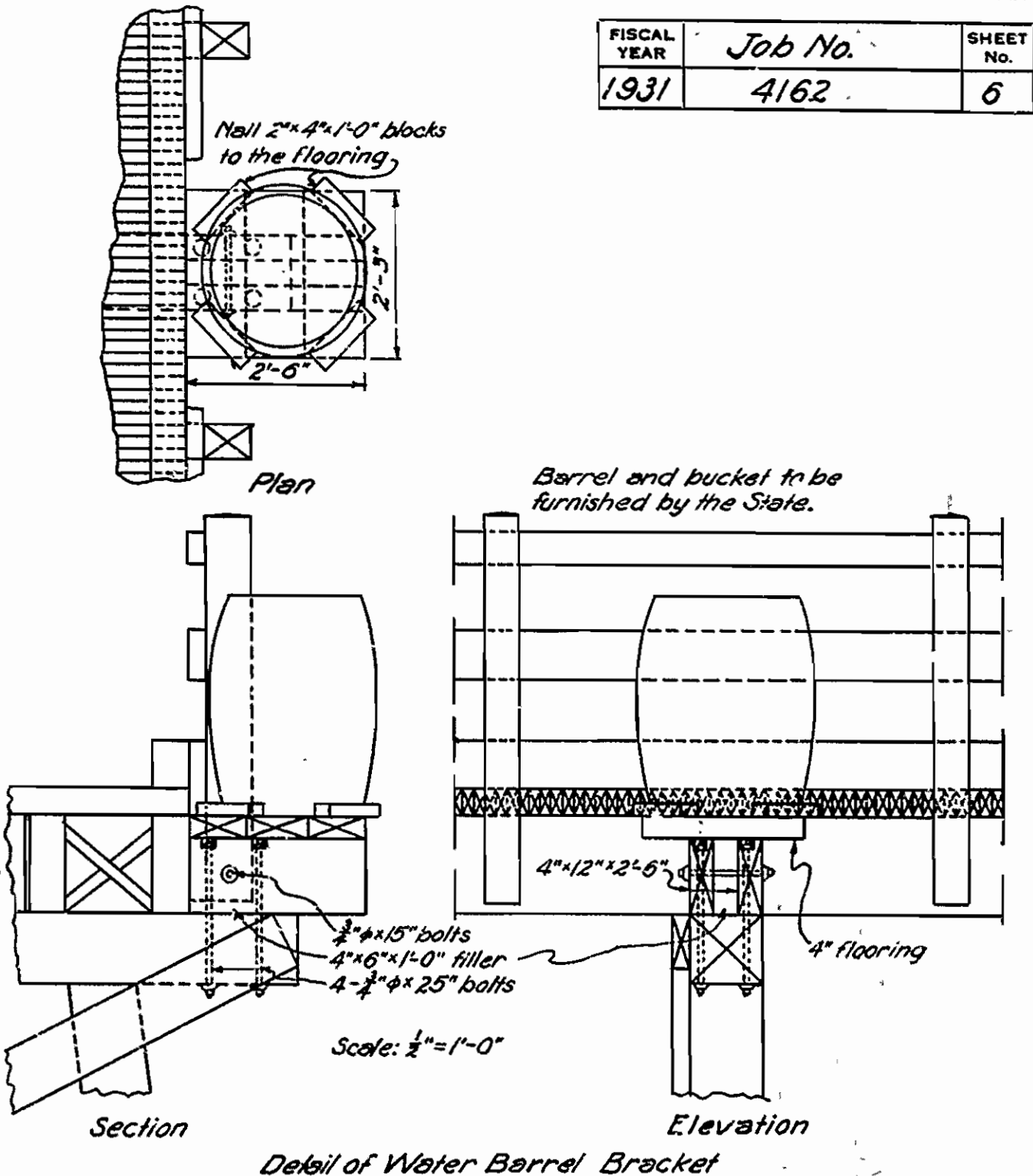
**HALF SECTION-PILE BENTS**  
Scale: 1/2" = 1'-0"



**ELEVATION**  
Scale: 1/2" = 1'-0"

**DETAIL OF ANCHOR STRAP**  
Scale: 1" = 1'-0"

**DETAIL OF SCUPPER PLATE**  
Pl. 12x12-10 ga. galv. sheet iron.  
Scale: 1" = 1'-0"



**Detail of Water Barrel Bracket**

TREATED TIMBER		
Decking	2x4	S1E
Rail Posts	6x8 f 8x8	S4S
Members	3x6 f 3x8	S4S
Post Fillers	3x6 f 3x8	S4S
Felloe Guard	6x8	S1S1E
Stringers	6x16	Rough
Bridging	2x4	"
Caps	12x12	"
Waling	4x12	"
Fillers	4x6 f 4x8	"
Nailing Strips	4x6 f 6x8	"
Sway Bracing	3x10	"
Posts (Frame bents only)	12x12	"
Struts ( " )	4x10	"
Supports (Water barrel)	4x12	"
Flooring	4x10	"
Blocks	2x4	"
Fillers	4x6	"
Dock Plank (Each end lam. deck)	4x8	S1S
Vaneer	1x6 f 1x8	S4S

**GENERAL NOTES**

All timber and piling to be Southern Yellow Pine or Pacific Coast Douglas Fir.

All timber shall be bored and framed before treatment.

The preservative used for treatment of timber and piles shall be Grade 1 of Creosote Oil for Structural Timber.

All timber, except 1" Vaneer on Handrail Turnouts, shall be given a ten (10) pound treatment of Creosote Oil by the empty cell process.

All piling shall be given a twelve (12) pound treatment of Creosote Oil by the empty cell process.

1" Vaneer Boards on Handrail Turnouts to be given three (3) coats of white lead paint.

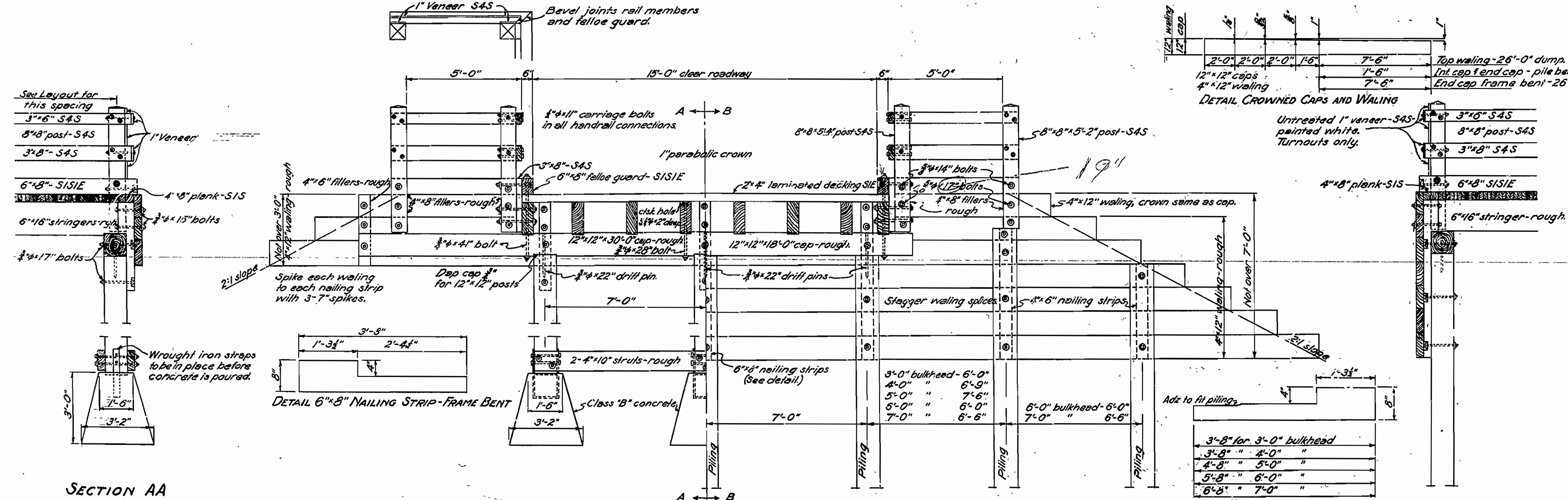
Stringers shall be dapped at ends and spiked to cap with 2-60 d nails in each end of stringer.

Malleable or cast iron washers to be used under heads and nuts of all machine bolts unless otherwise noted.

Concrete in pedestals to be Class "B" and shall be poured in the dry. Each piece of 2x4 decking to be nailed to each adjacent piece once between each stringer with 30 d nail. Each piece to be nailed to alternate stringers with 20 d nail.

Ends of decking to be flush.

Specifications: Arkansas Standard Road and Bridge Specifications as adopted May 30, 1925 and revised.



**SECTION AA**

**DETAIL 6x8 NAILING STRIP-FRAME BENT**

**ABUTMENT DETAILS Frame Bents**

**ABUTMENT DETAILS Pile Bents**

**DETAIL 6x8 NAILING STRIP-PILE BENT**

**SECTION BB**

**DETAILS OF 19'-0" STANDARD TIMBER TRESTLE 15'-0" CLEAR ROADWAY**

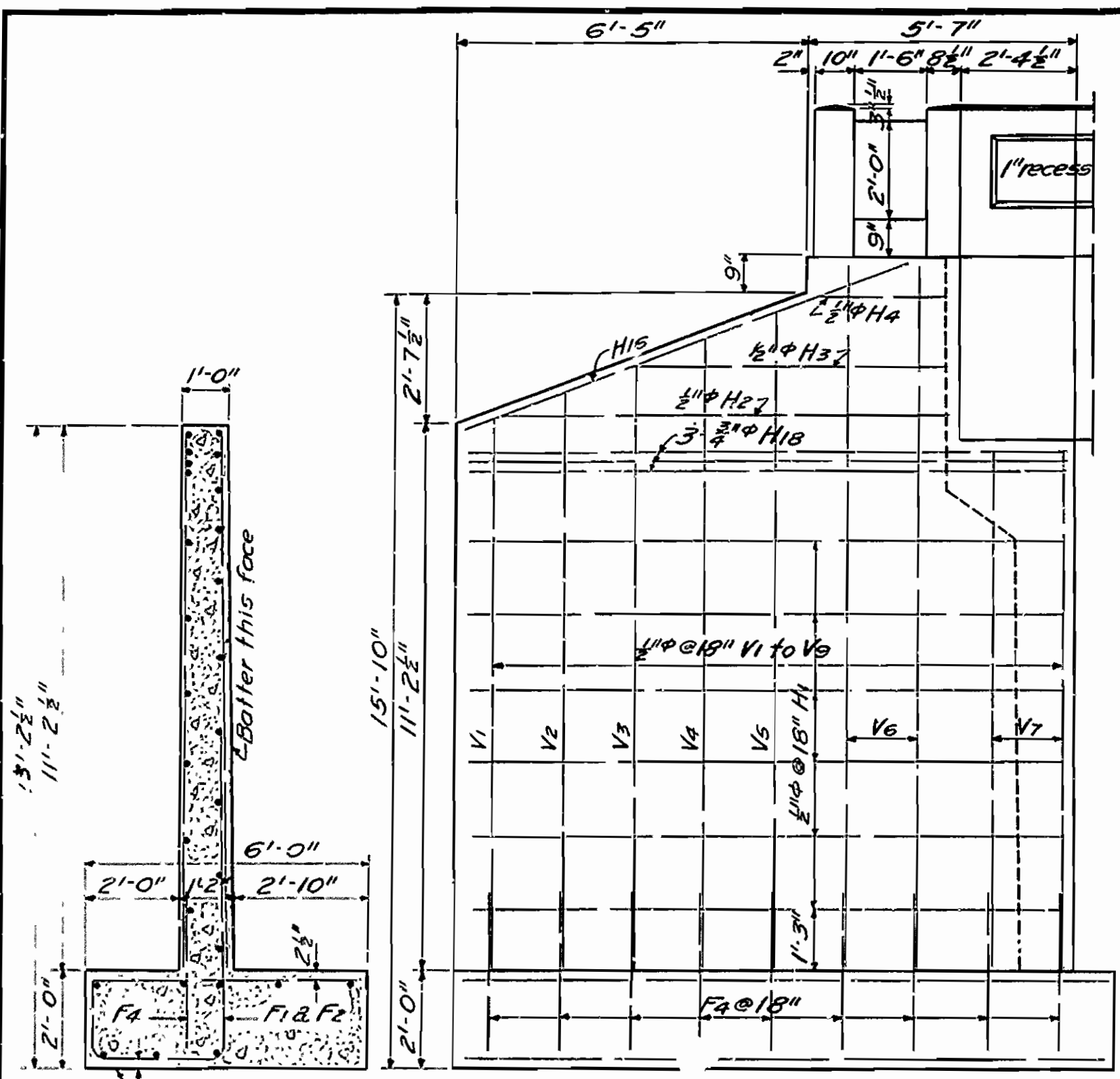
ROUTE SEC.  
**ARKANSAS STATE HIGHWAY COMMISSION**  
LITTLE ROCK, ARK.

Drawn By: R.E.H. Date: 3-12-31  
Trace: W.T.B. Date: 3-18-31  
Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
Scale: as noted

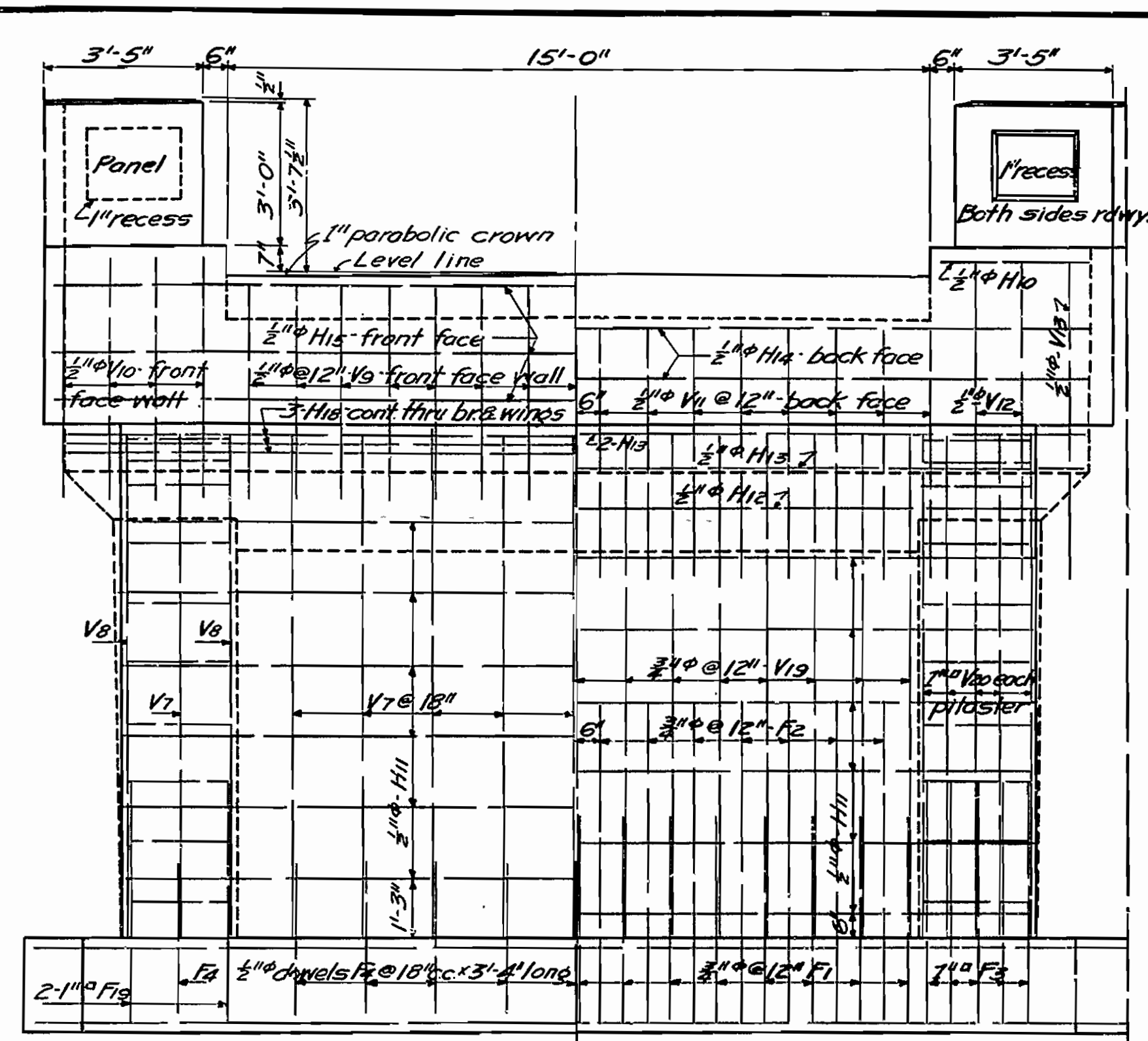
*M.B. Lewis*  
BRIDGE ENGINEER

BRIDGE NO. 1701 DRAWING NO. 2021

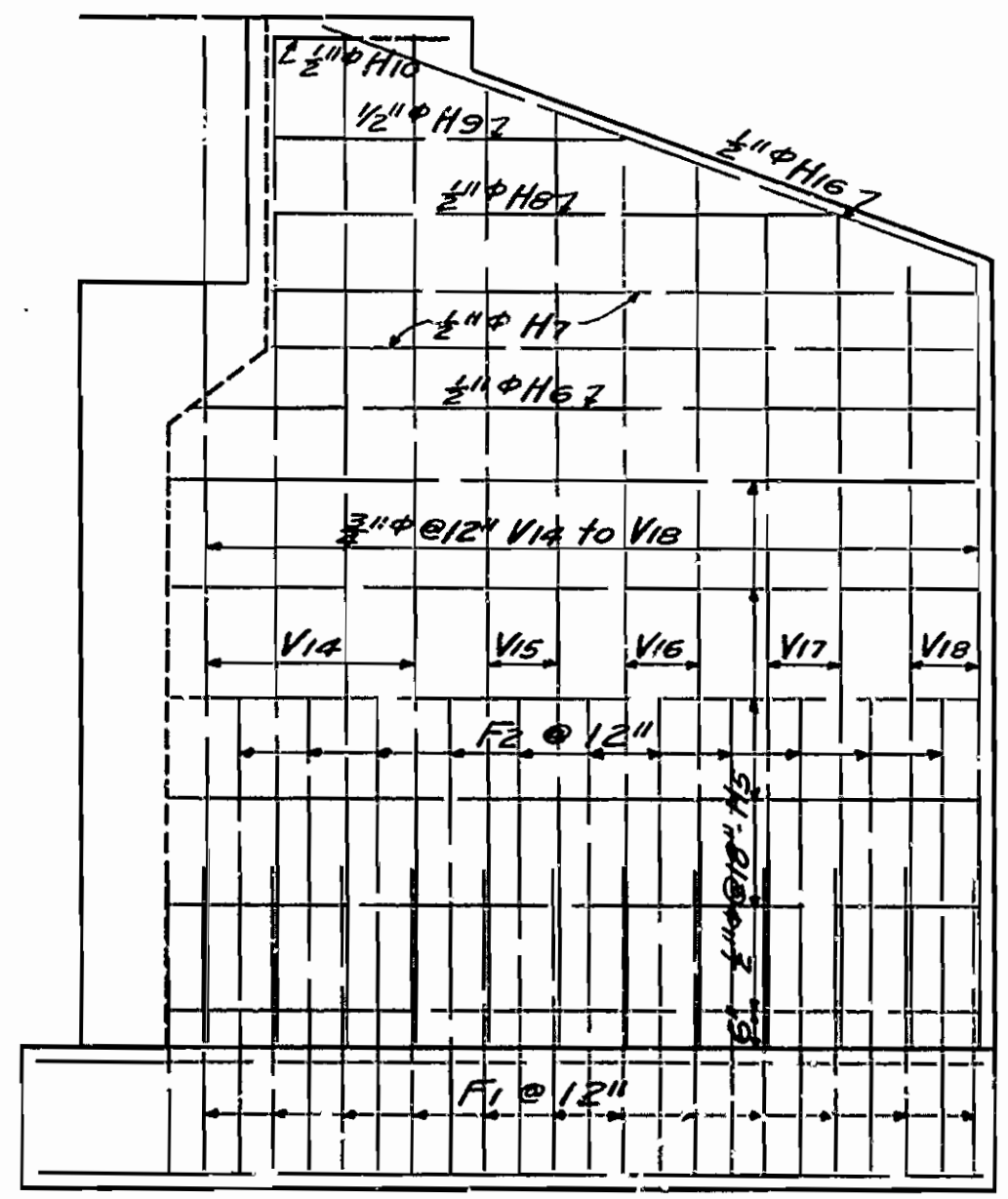
FISCAL YEAR	Job No.	SHEET No.	TOTAL SHEETS
1931	4162	7	7



SEC. END OF WING

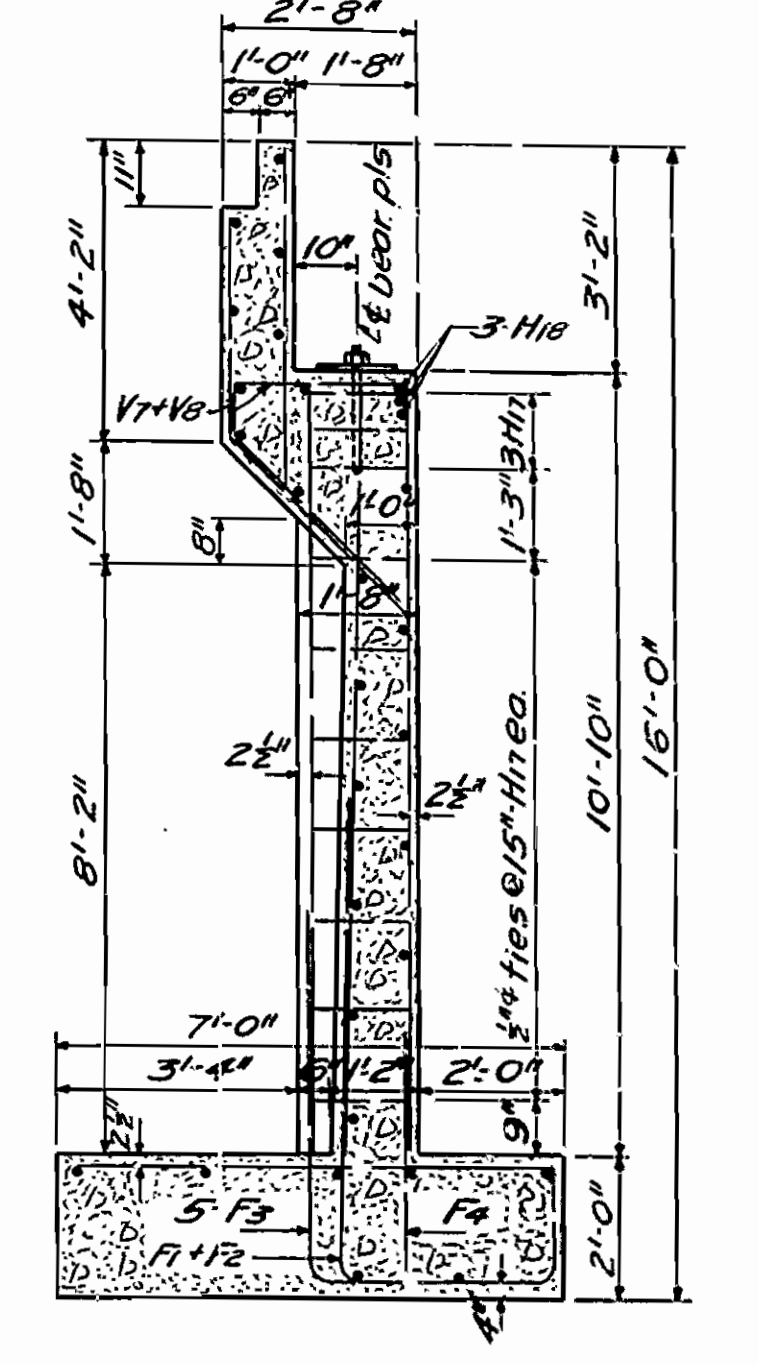


ELEVATION OF BREAST



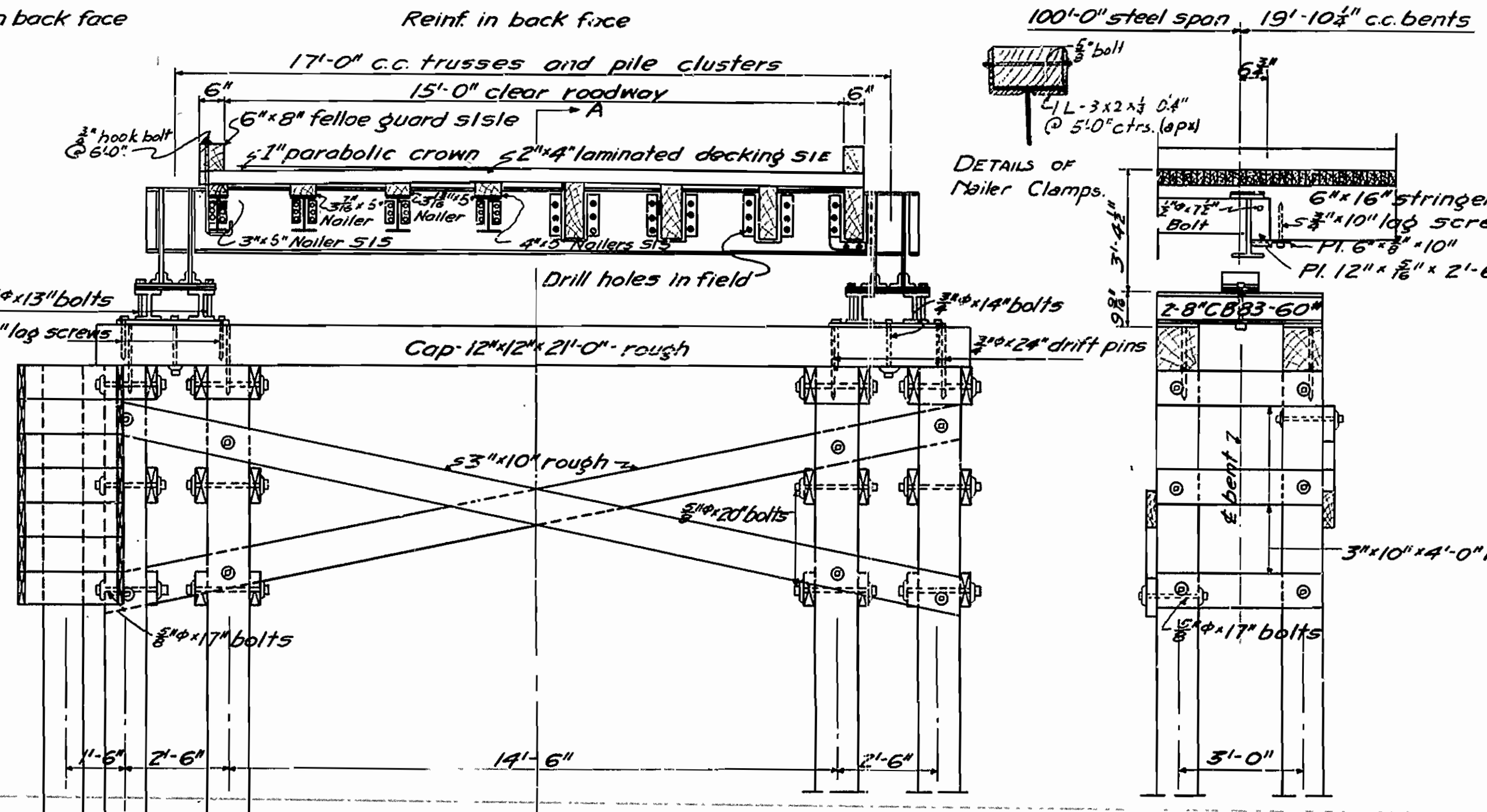
ELEVATION OF WING

MARK	SIZE	LENGTH	A	B	C	Bending diagram
F1	#4	8'-11"	2'-9"	4'-2"	1"	1'-6"
F2	#4	10'-7"	2'-9"	6'-8"	1 1/2"	4" R
F3	#4	9'-4"	3'-2"	5'-0"	0	B
F19	#4	6'-0"				5'-0"
V7	#4	16'-10"				5'-0"
V8	#4	16'-10"				5'-0"
H17	#4	7'-10"	2'-3"			10'-7"
V11	#4	7'-2"	3'-11"	3'-3"		
V12	#4	7'-9"	4'-6"	3'-3"		
H1	#4	14'-9"	12'-9"	2'-0"		A
H2	#4	11'-6"	9'-6"	2'-0"		
H3	#4	8'-9"	6'-9"	2'-0"		
H4	#4	4'-9"	2'-9"	2'-0"		
H8	#4	10'-0"	8'-0"	2'-0"		
H9	#4	8'-3"	6'-3"	2'-0"		
H10	#4	6'-0"	2'-9"	3'-3"		
F12	#4	15'-6"	13'-6"	2'-0"		
F13	#4	15'-6"	13'-6"	2'-0"		
H18	#4	4'-3"				19'-3"

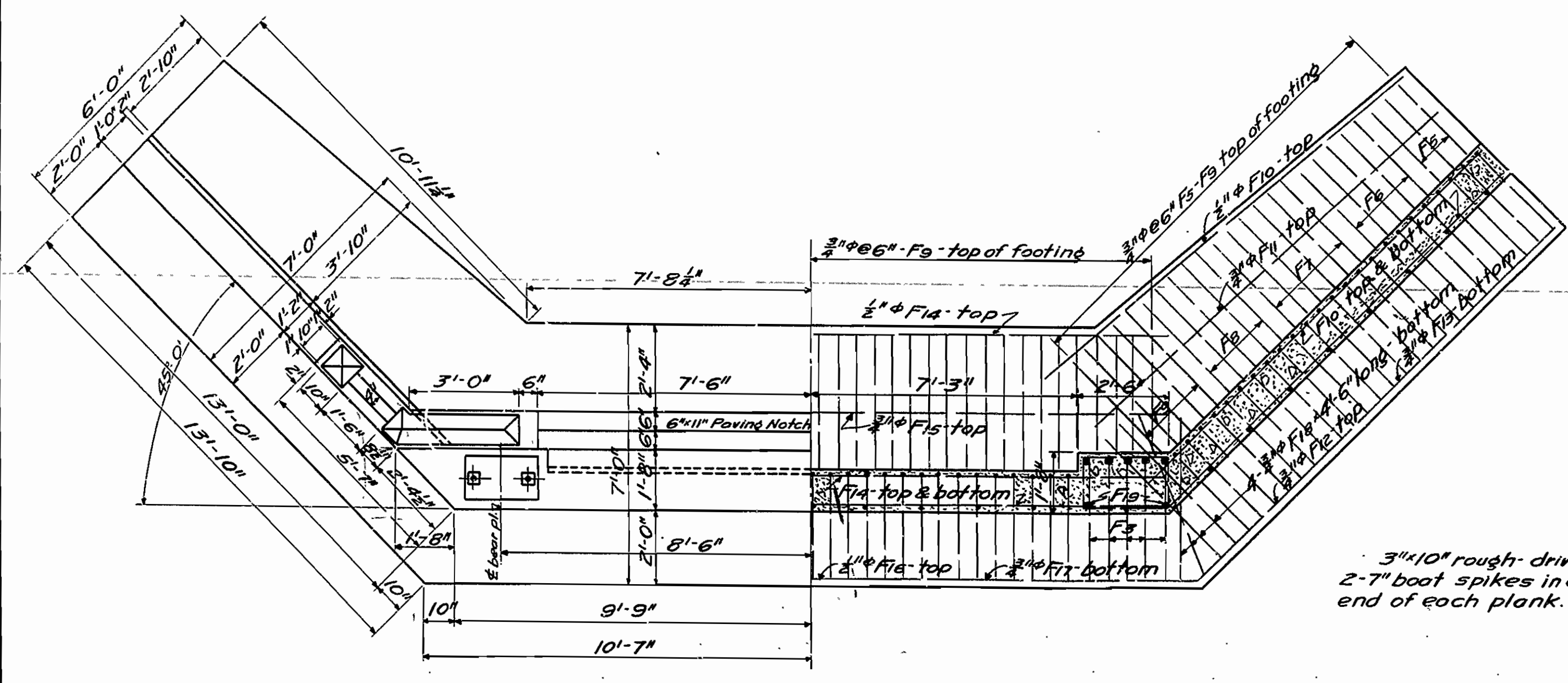


SECTION THRU BREAST

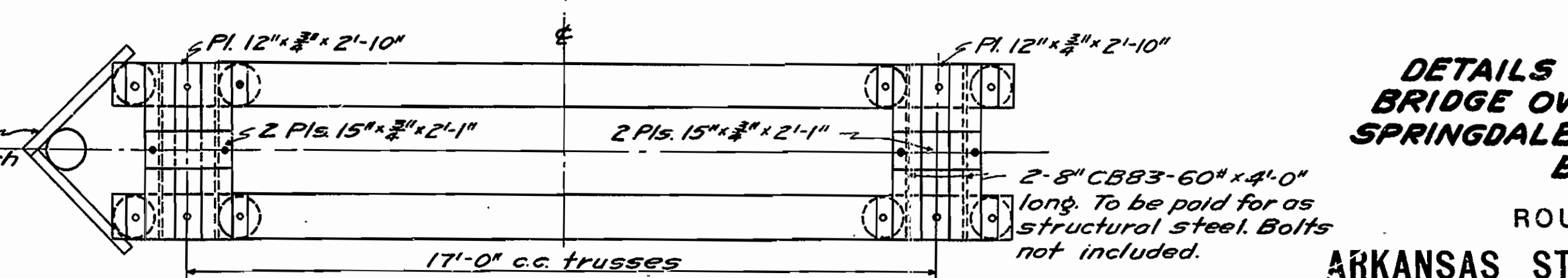
**GENERAL NOTES**  
 All exposed corners to have 3/4" chamfer except turnout posts and panels.  
 All concrete to be Class "A" and is to be poured in the dry.  
 Reinforcing steel to be deformed bars of structural or intermediate grade.  
 Shop lists and bending diagrams must be submitted and approved before fabrication is begun.  
 All hardware in Treated Timber spans to be included in unit price bid for Treated Timber, and in floor of steel span. (New treated timber floor to be used)  
 Specifications: Arkansas Standard Road and Bridge Specifications adopted May 30, 1925 and revised.



HALF ELEVATION OF PIER  
 HALF SEC. THRU STEEL SPAN  
 HALF ELEVATION OF PIER  
 HALF SEC. THRU TIMBER SPAN  
 Note: Nose is on upstream end of pier only.



HALF PLAN - ABUTMENT  
 HALF PLAN - FOOTING



PLAN - CAP

**DETAILS OF SUBSTRUCTURE  
 BRIDGE OVER WILDCAT CREEK  
 SPRINGDALE-SILOAM SPRINGS RD.  
 BENTON CO.**

ROUTE 68 SEC. 0  
 ARKANSAS STATE HIGHWAY COMMISSION  
 LITTLE ROCK, ARK.

Drawn By: R.E.H. Date: 3-16-31  
 Traced By: M.W.H. Date: 3-17-31  
 Checked By: \_\_\_\_\_ Date: \_\_\_\_\_  
 BRIDGE NO. 1701  
 DRAWING NO. 3115

*N.R. Larson*  
 BRIDGE ENGINEER