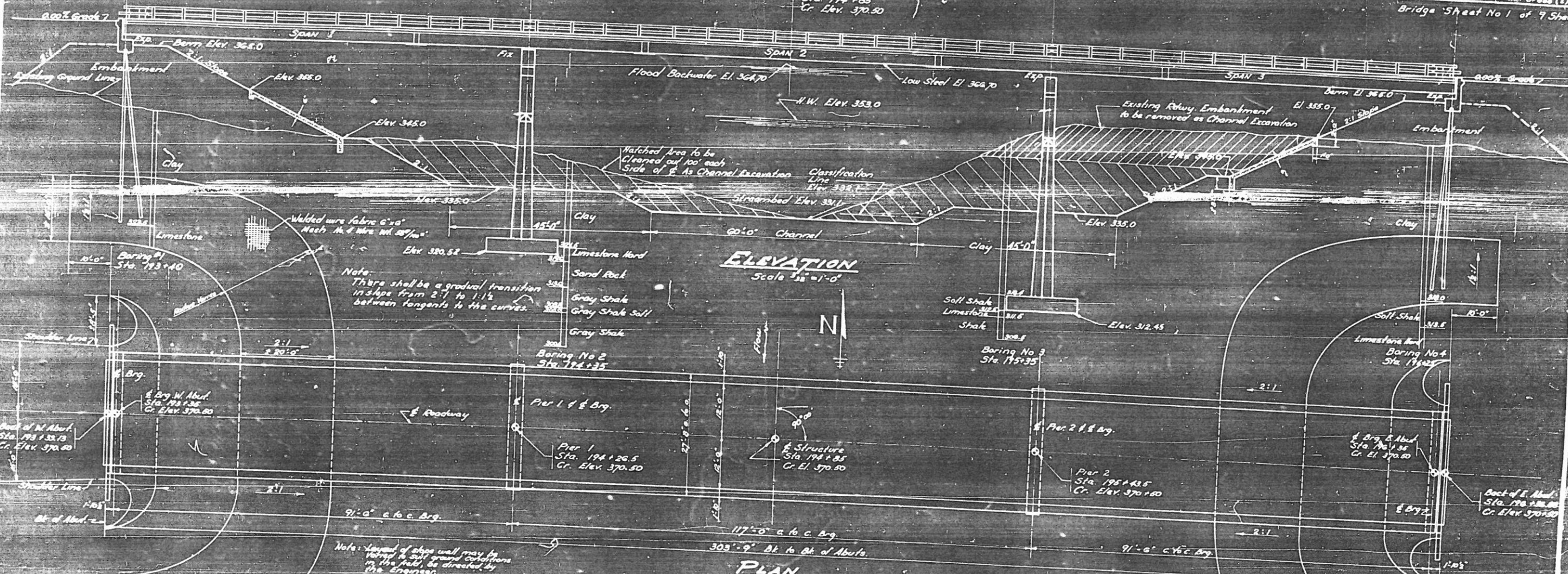


Existing Structure  
 Total length 200'-0", 11' Retain, Wood H.  
 Sub-structure composed of 2 posts of 2'-0" C.L.  
 1 post of Double Post, 64' posts on mud  
 Sills, 2 Posts 2'-0" Steel Cylinders filled  
 with concrete.  
 Spans simple spans composed of 5-8" I Beams  
 and 2-8" C.L. 11' Post Truss, 80' long, 9'-0"  
 deep. Spans 6 @ 24'-0", 1 @ 20' and  
 one @ 22' Handrail, 2'-4" C.L.



Note:  
 There shall be a gradual transition  
 in slope from 2:1 to 1:1 1/2  
 between tangents to the curves.

Note: Layout of abut wall may be  
 varied to suit ground conditions  
 in the field, be directed by  
 the Engineer.

**GENERAL NOTES**

- Class X Concrete shall be used throughout except as noted.
- Handrail Concrete shall be used in the End Posts.
- Concrete floor slabs shall be finished in accordance with Art. 2.10 (c) of the Standard Specs. and shall be poured in one continuous operation on the side of the longitudinal construction joints.
- All Connections shall be riveted except as noted.
- All Bolt heads and open holes shall be covered as noted.
- All steel surfaces shall be suitably prepared, and match mended. See Art. 2.11 sub-paragraph 4 for details.
- All I-Beams shall be shop assembled to their proper grade and alignment with or without diaphragms, inspected and reamed while so assembled.

Anchor bolts shall be set before riveting diaphragms over piers and abutments.  
 Welding shall comply with Art. 2.11 (c) of the Standard Specs.  
 All steel hardware including rollers, anchors, or material for payment to metal hardware, the number of lines, feet is measured, but in case of concrete piers, two (2) test piles shall be driven in permanent location, as directed by the Engineer, before ordering the remainder of the filling.  
 During tests, are shown on the drawing only as a guide to the workers in estimating soil conditions which may be encountered in the field.  
 Before the superstructure is placed and after the abutment piles are driven, the embankment shall be constructed in accordance with Art. 2.11 of the Standard Specifications and as directed by the Engineer.

**TOTAL ~ FILL OF MATERIAL**

ITEM	UNIT	AMT.	EST.	TOTAL
Class X Concrete	Cu. Yds.	410.6	257.0	667.6
Handrail Concrete	Cu. Yds.	11	11	22
Class X Concrete	Cu. Yds.	153	153	306
Reinforcement Bars	Lbs.	24,200	24,200	48,400
Structural Steel	Lbs.	577,300	577,300	1,154,600
Metal Handrail	Lbs.	581.8	581.8	1,163.6
Welding	Each	1	1	2
Class X Excavation for Structures	Cu. Yds.	132	132	264
Channel Excavation	Cu. Yds.	687	687	1,374
4" Metal Small G.I.R. Conc. Piles	Lm. Ft.	516	516	1,032
Foot Piles	Each	2	2	4
Removal of Existing Structures	Each	160	160	320

**WATERWAY INFORMATION**

Drainage Area 1,000,000 Acres  
 Character of Drainage 1/2 to 1/4 mile  
 Present Opening 2000 Sq. Ft.  
 Proposed Opening 2000 Sq. Ft.  
 Required Opening 2000 Sq. Ft.  
 Road Propensity (Class Road) 1/2 to 1/4 mile  
 Assumed "C" (Roller) 2:1

**DESIGN STRENGTHS**

15 10,000 Lb. (Steel)  
 17 20,000 Lb. (Steel)  
 18 1,000 Lb. (Steel)  
 19 10,000 Lb. (Steel)  
 20 10,000 Lb. (Steel)

STATION 1185  
 NORTH FORK SALINE RIVER  
 BUILT 1945  
 F.A.S. Proj. 513, 514, 22-B  
 F.A.S. PROJECT 5-688(2)  
 LOUISIANA, 1945-513

LETTERING FOR NAME PLATE  
 See Standard 5115

Designed by G. D. Douglas  
 Drawn by R. D. Hamilton  
 Checked by Hubert W. Rogers

STRUCTURAL DESIGN & PLANS  
 BY  
 C.K. WILLETTS CONSULTING ENGINEERS  
 DIXON, ILLINOIS  
 FOR  
 ROBERT BROWN  
 CONSULTING ENGINEER  
 HARRISBURG, ILLINOIS.

**GENERAL PLAN & ELEVATION**  
**ASHLEY BRIDGE**  
**OVER NORTH FORK SALINE RIVER**  
 F.A.S. Proj. No. 5-688(2)  
 F.A.S. RT. 613 SECTION 22-B  
 GALLATIN CO., TENNESSEE



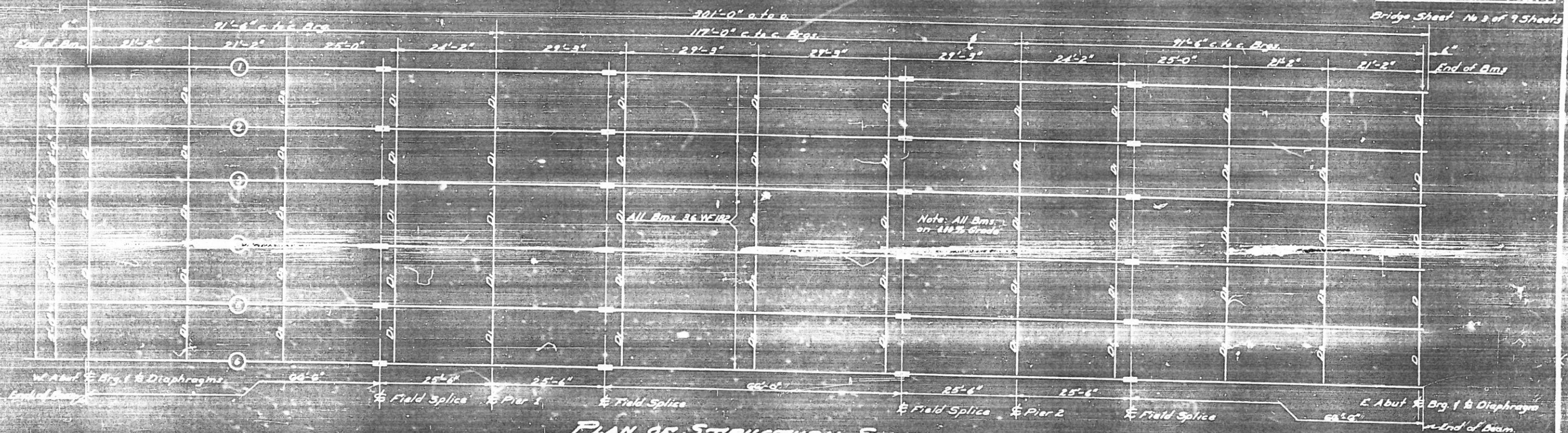






FIGURE NO.	803	228	COUNTY	GALLATIN	TOTAL SHEETS	18	PART NO.	12
FILE NO. SHEET NO.	803 228		BLINDS	PROJECT	S-606 (12)			

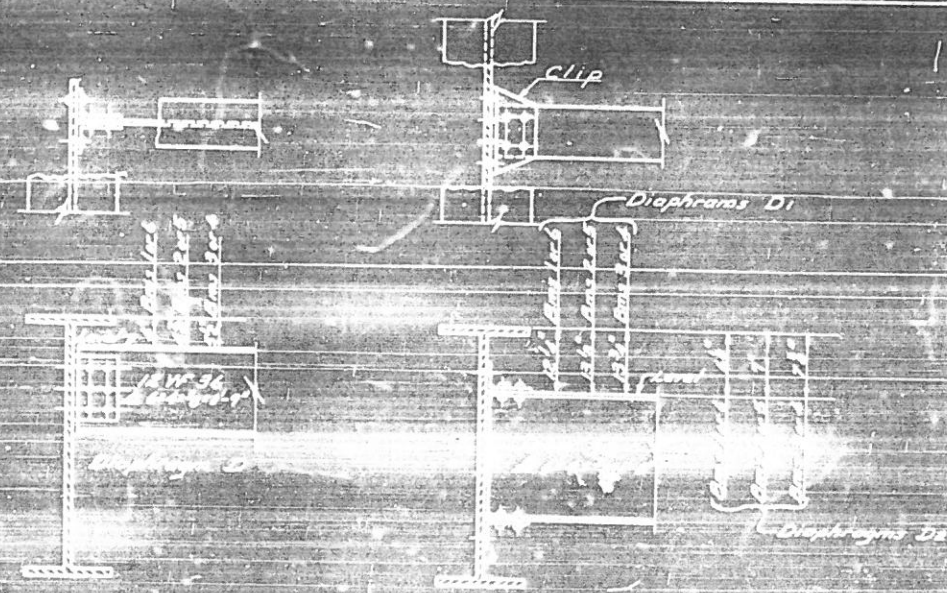
Bridge Sheet No 3 of 9 Sheets



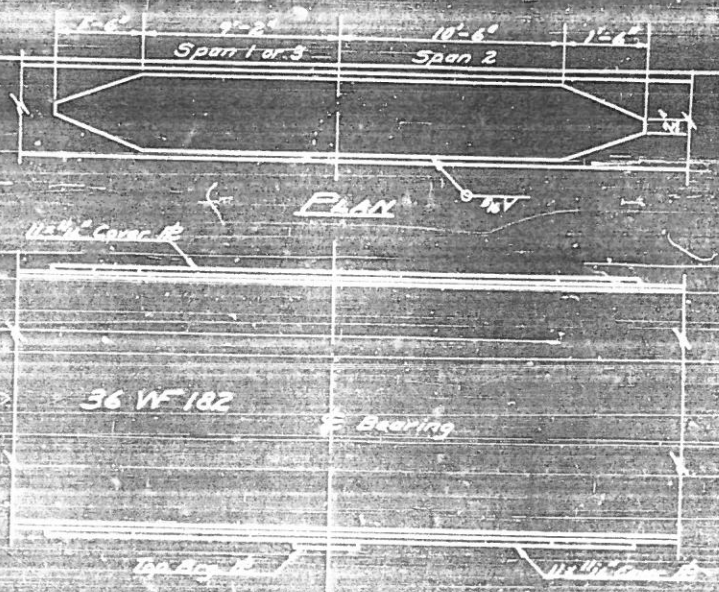
**PLAN OF STRUCTURAL STEEL**



**SPlice DETAIL**



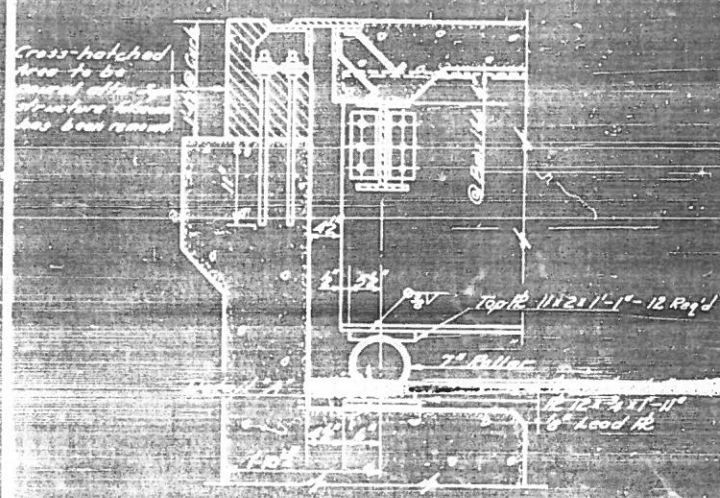
**DIAPHRAGM DETAILS**



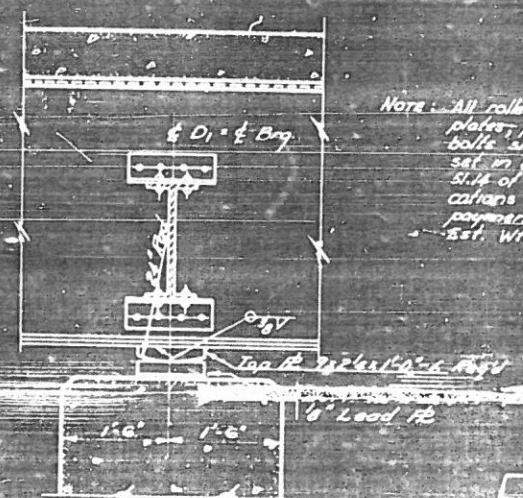
**COVER PLATE DETAIL**

STRUCTURAL STEEL  
 ASHLEY BRIDGE  
 OVER HORN TO RAIL BRIDGE  
 S-606 (12)  
 PART NO. 12  
 GALLATIN COUNTY, MONTANA



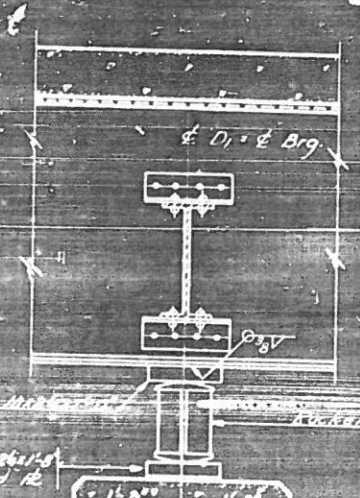


SECTION @ ABUTMENTS

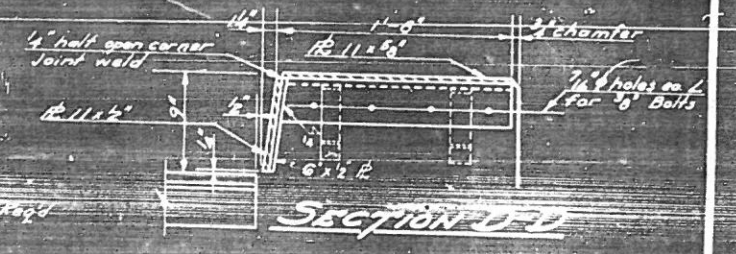


SECTION @ PIER 1

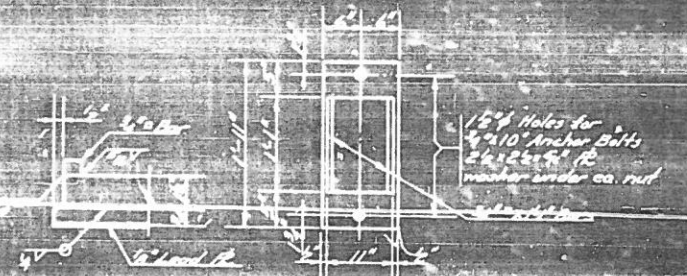
Note: All rollers, rockers, bearing plates, piniles, and anchor bolts shall be fabricated and set in accordance with Article 51.14 of the Standard Specifications and are included for payment as Structural Steel. Est. Wt. 88.00 Lbs.



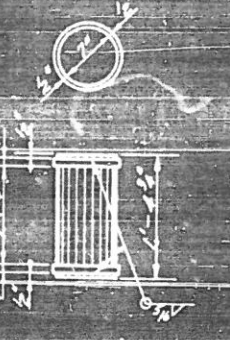
SECTION @ PIER 2



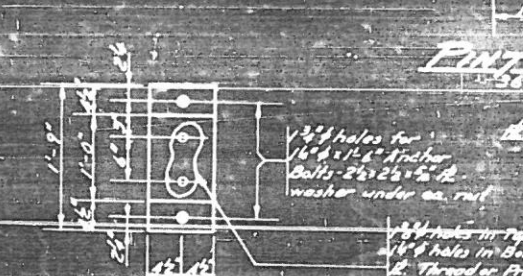
SECTION D-D



DETAIL 'A' PLAN BOTTOM



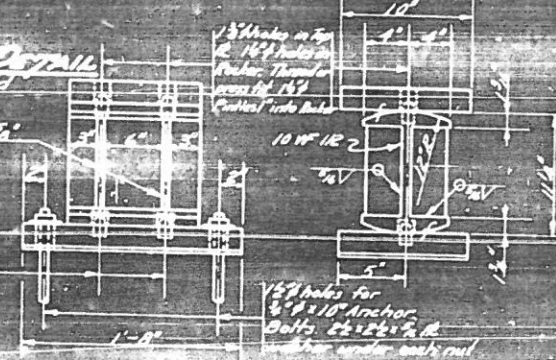
ROLLER



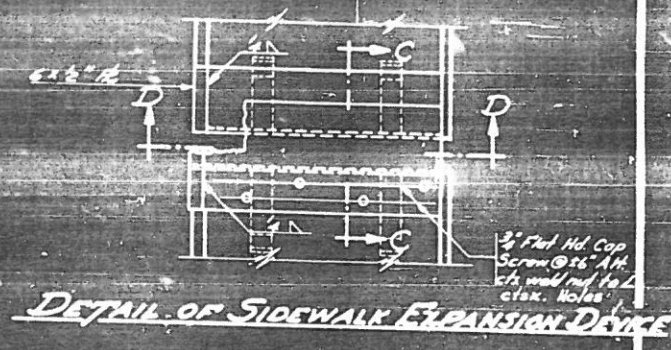
PLAN TOP & BOTTOM



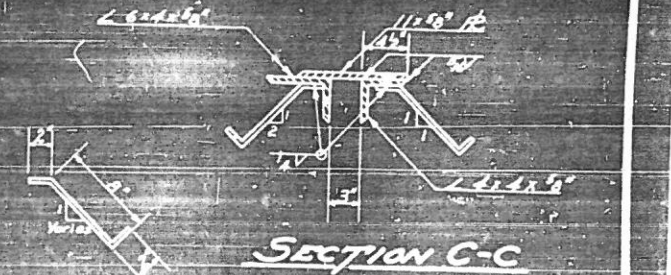
PINILE DETAIL



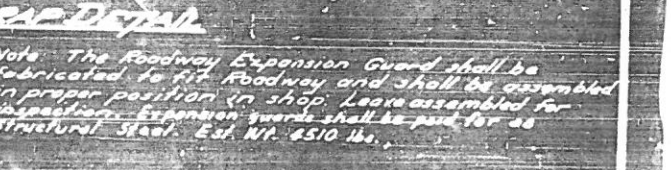
ROCKER DETAILS



DETAIL OF SIDEWALK EXPANSION DEVICE



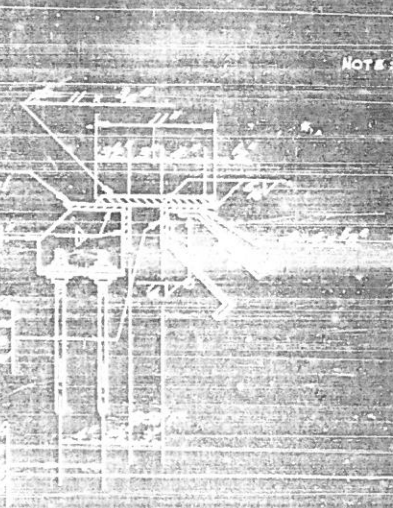
SECTION C-C



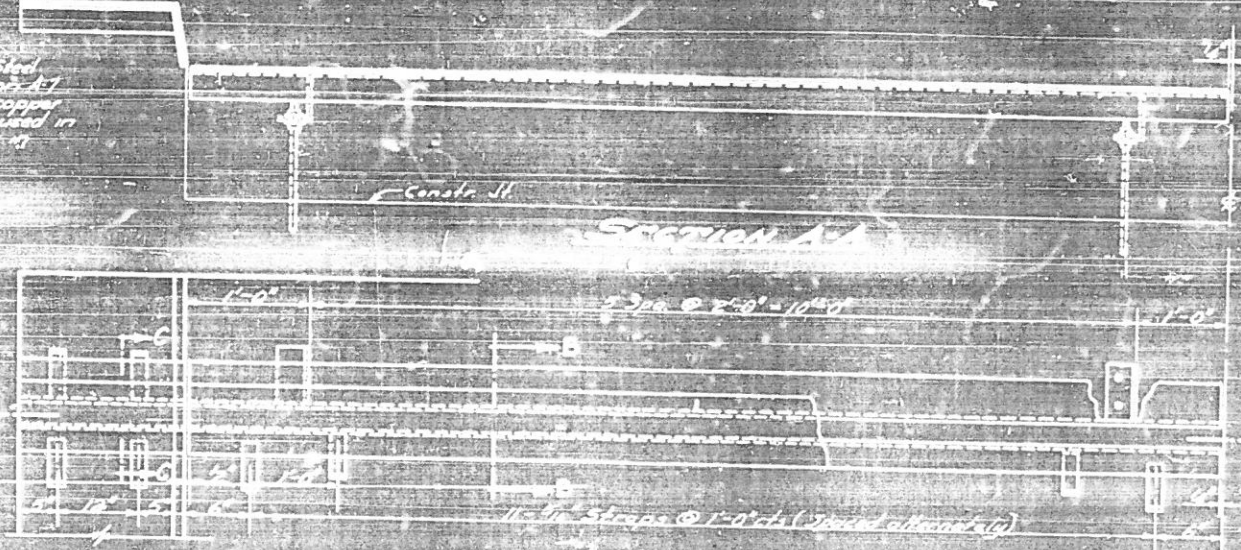
STRAP DETAIL

Note: The Roadway Expansion Guard shall be fabricated to fit Roadway and shall be assembled in proper position in shop. Leave assembled for inspection. Expansion guards shall be paid for as Structural Steel. Est. Wt. 6510 lbs.

NOTE: Copper Bearing Steel (ASTM designation B7) with 2 per cent copper added (also) bonded in place on rollers of expansion guard.



SECTION E-E

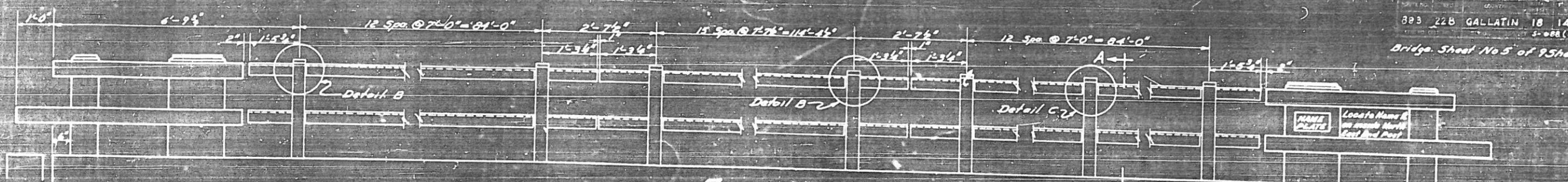


HALF PLAN OF EXPANSION GUARD

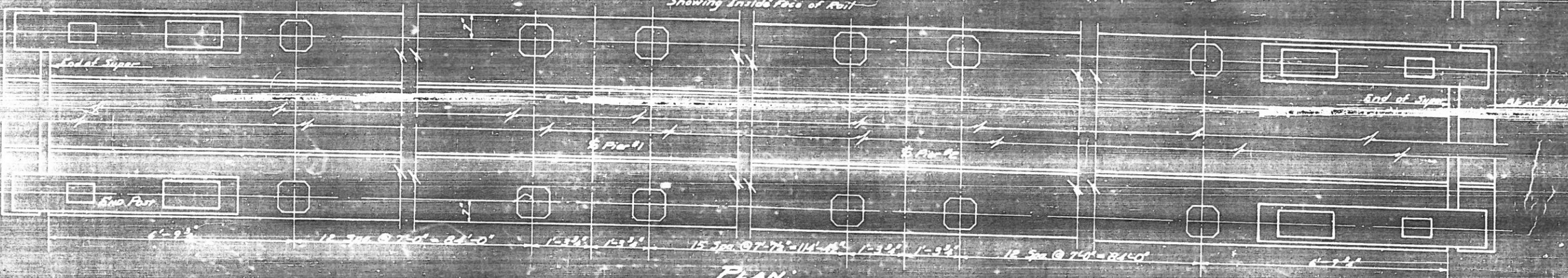
BEARING EXPANSION DETAILS

ASHLEY BRIDGE  
 OVER NORTH FORK SALINE RIVER  
 EAS Proj. No. S-685(2)  
 EAS Pt. 893 SECTION 22B  
 GALLATIN CO. MONTANA

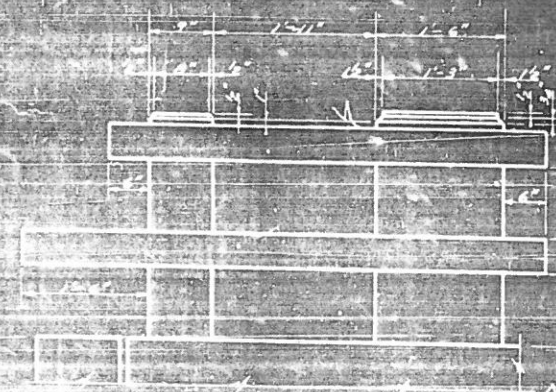




**ELEVATION**  
 Showing Inside face of Rail

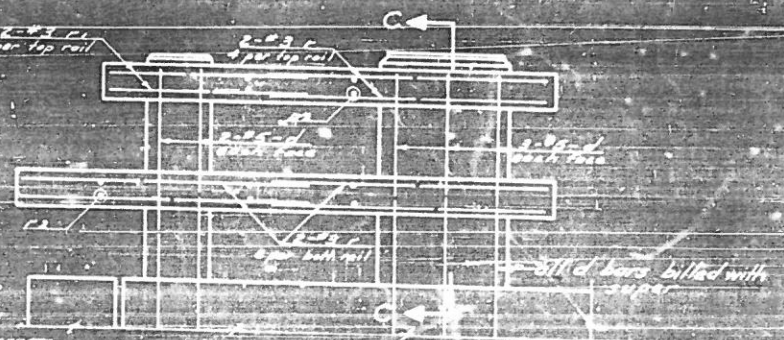


**PLAN**



**ELEVATION**  
 END POST

Note: Form horizontal bands with 45 degree corners form vertical sides of post with 45 degree.

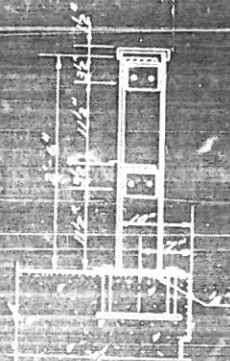


**ELEVATION**  
 Showing Reinforcement

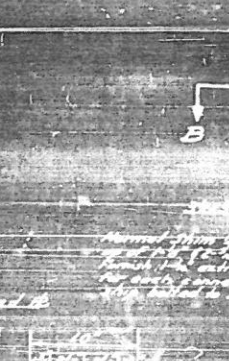
**Bill of Materials**

BAR NO.	SIZE	LENGTH	SHAPE
1	1 1/2"	114'-4 1/2"	Rectangular
2	1 1/2"	84'-0"	Rectangular
3	1 1/2"	84'-0"	Rectangular
4	1 1/2"	84'-0"	Rectangular
5	1 1/2"	84'-0"	Rectangular
6	1 1/2"	84'-0"	Rectangular
7	1 1/2"	84'-0"	Rectangular
8	1 1/2"	84'-0"	Rectangular
9	1 1/2"	84'-0"	Rectangular
10	1 1/2"	84'-0"	Rectangular
11	1 1/2"	84'-0"	Rectangular
12	1 1/2"	84'-0"	Rectangular
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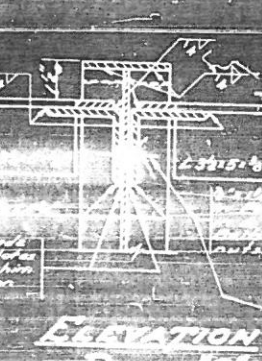
Anchor Bolts  
 One North Post  
 One South Post  
 One East Post  
 One West Post  
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 One for 1000 Section



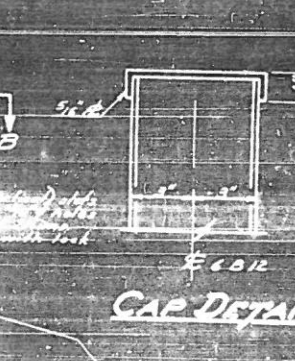
**SECTION AA**



**SECTION BB**



**ELEVATION**  
 DETAIL C



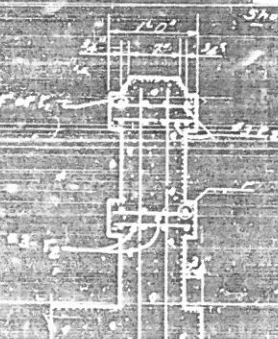
**CAP DETAIL**



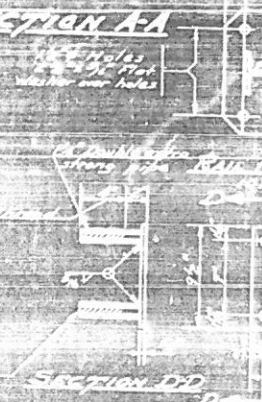
**PLAN**



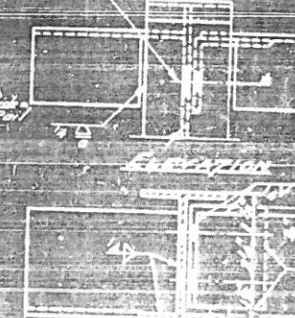
**Bars Y-Y**



**SECTION C-C**



**SECTION DD**



**DETAIL B**

**ANCHOR DETAILS FOR RAIL POST**

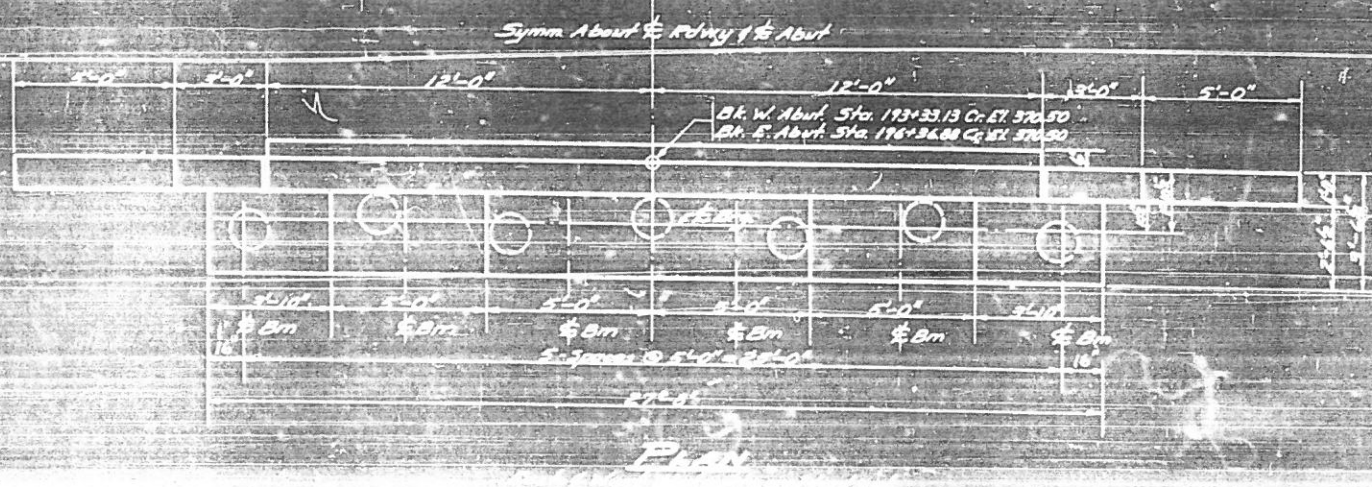
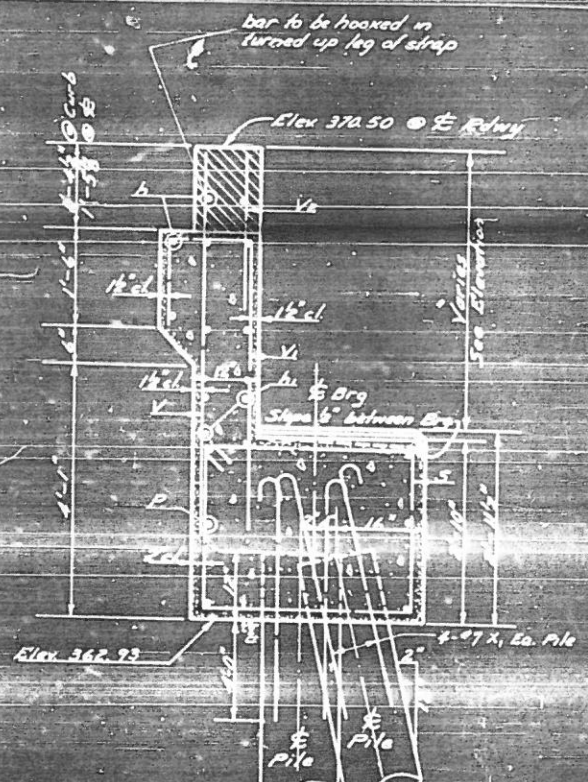
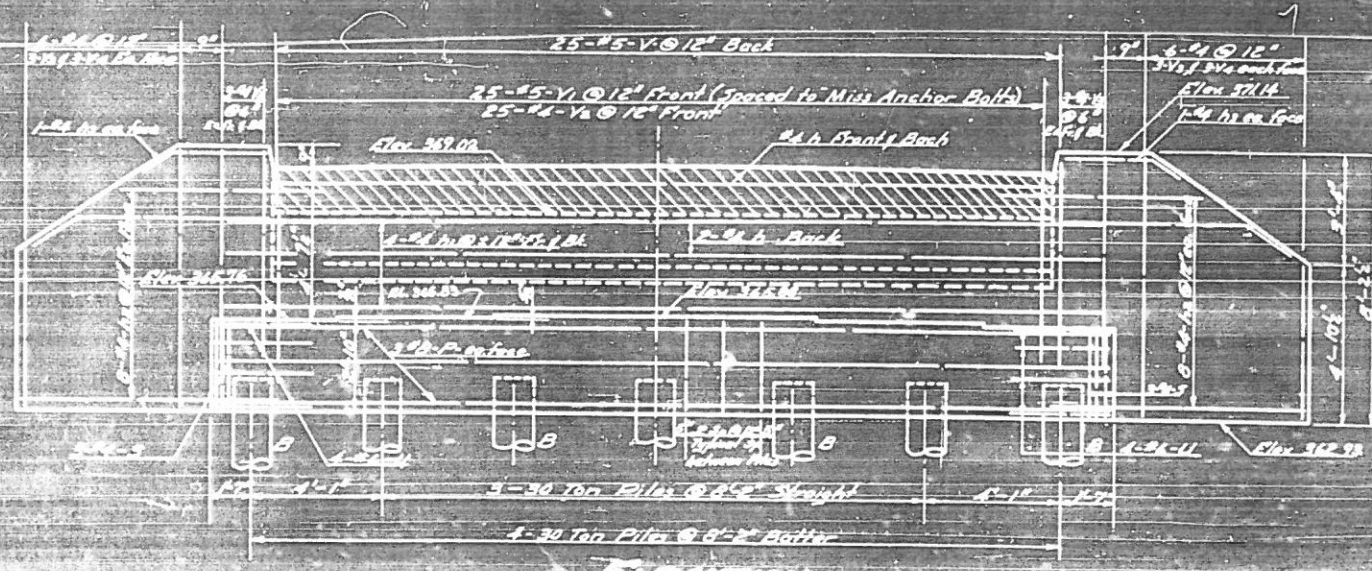








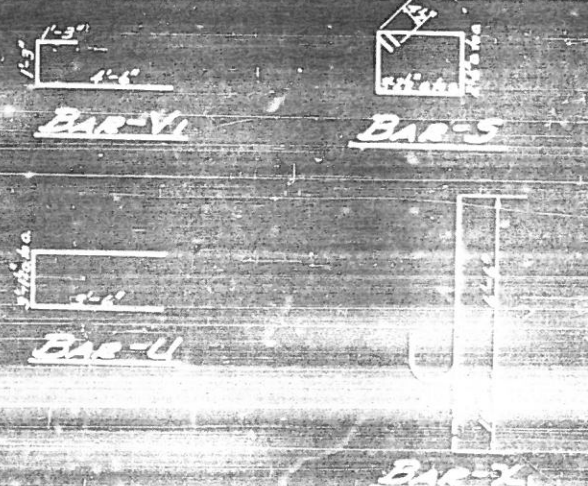




SECTION THRU ABUTMENTS

BILL OF MATERIALS

BAR NO.	SIZE	LENGTH	WEIGHT
h	8	4	23'-6"
h1	16	4	23'-0"
h2	64	4	7'-2"
h3	8	4	4'-6"
V	20	5	6'-0"
V1	20	5	7'-0"
V2	20	7	7'-5"
V3	20	1	7'-0"
V4	20	2	5'-0"
V5	20	2	7'-0"
V6	20	2	7'-0"
V7	20	2	7'-0"
V8	20	2	7'-0"
V9	20	2	7'-0"
V10	20	2	7'-0"
V11	20	2	7'-0"
V12	20	2	7'-0"
V13	20	2	7'-0"
V14	20	2	7'-0"
V15	20	2	7'-0"
V16	20	2	7'-0"
V17	20	2	7'-0"
V18	20	2	7'-0"
V19	20	2	7'-0"
V20	20	2	7'-0"
V21	20	2	7'-0"
V22	20	2	7'-0"
V23	20	2	7'-0"
V24	20	2	7'-0"
V25	20	2	7'-0"
V26	20	2	7'-0"
V27	20	2	7'-0"
V28	20	2	7'-0"
V29	20	2	7'-0"
V30	20	2	7'-0"
V31	20	2	7'-0"
V32	20	2	7'-0"
V33	20	2	7'-0"
V34	20	2	7'-0"
V35	20	2	7'-0"
V36	20	2	7'-0"
V37	20	2	7'-0"
V38	20	2	7'-0"
V39	20	2	7'-0"
V40	20	2	7'-0"
V41	20	2	7'-0"
V42	20	2	7'-0"
V43	20	2	7'-0"
V44	20	2	7'-0"
V45	20	2	7'-0"
V46	20	2	7'-0"
V47	20	2	7'-0"
V48	20	2	7'-0"
V49	20	2	7'-0"
V50	20	2	7'-0"
V51	20	2	7'-0"
V52	20	2	7'-0"
V53	20	2	7'-0"
V54	20	2	7'-0"
V55	20	2	7'-0"
V56	20	2	7'-0"
V57	20	2	7'-0"
V58	20	2	7'-0"
V59	20	2	7'-0"
V60	20	2	7'-0"
V61	20	2	7'-0"
V62	20	2	7'-0"
V63	20	2	7'-0"
V64	20	2	7'-0"
V65	20	2	7'-0"
V66	20	2	7'-0"
V67	20	2	7'-0"
V68	20	2	7'-0"
V69	20	2	7'-0"
V70	20	2	7'-0"
V71	20	2	7'-0"
V72	20	2	7'-0"
V73	20	2	7'-0"
V74	20	2	7'-0"
V75	20	2	7'-0"
V76	20	2	7'-0"
V77	20	2	7'-0"
V78	20	2	7'-0"
V79	20	2	7'-0"
V80	20	2	7'-0"
V81	20	2	7'-0"
V82	20	2	7'-0"
V83	20	2	7'-0"
V84	20	2	7'-0"
V85	20	2	7'-0"
V86	20	2	7'-0"
V87	20	2	7'-0"
V88	20	2	7'-0"
V89	20	2	7'-0"
V90	20	2	7'-0"
V91	20	2	7'-0"
V92	20	2	7'-0"
V93	20	2	7'-0"
V94	20	2	7'-0"
V95	20	2	7'-0"
V96	20	2	7'-0"
V97	20	2	7'-0"
V98	20	2	7'-0"
V99	20	2	7'-0"
V100	20	2	7'-0"



ABUTMENTS

ASHTO BRIDGE  
 Over North Fork Salmon River  
 U.S. PROJ. NO. 5460A  
 U.S. EP. 68-5-10-10-1  
 GALLATIN COUNTY, MONT.  
 STATION 14485

Notes:  
 1. See also sheet 17 of this set for the abutment.  
 2. All dimensions are in feet and inches.  
 3. All reinforcement is to be placed in accordance with the specifications.  
 4. All reinforcement is to be placed in accordance with the specifications.  
 5. All reinforcement is to be placed in accordance with the specifications.  
 6. All reinforcement is to be placed in accordance with the specifications.  
 7. All reinforcement is to be placed in accordance with the specifications.  
 8. All reinforcement is to be placed in accordance with the specifications.  
 9. All reinforcement is to be placed in accordance with the specifications.  
 10. All reinforcement is to be placed in accordance with the specifications.