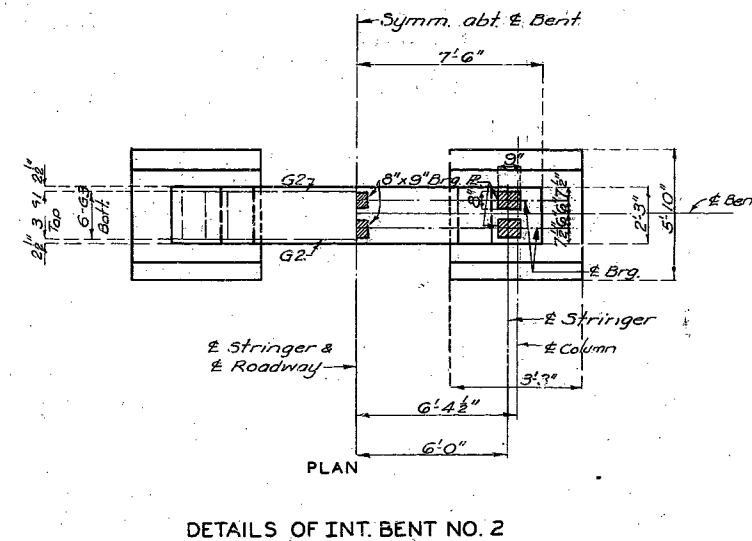
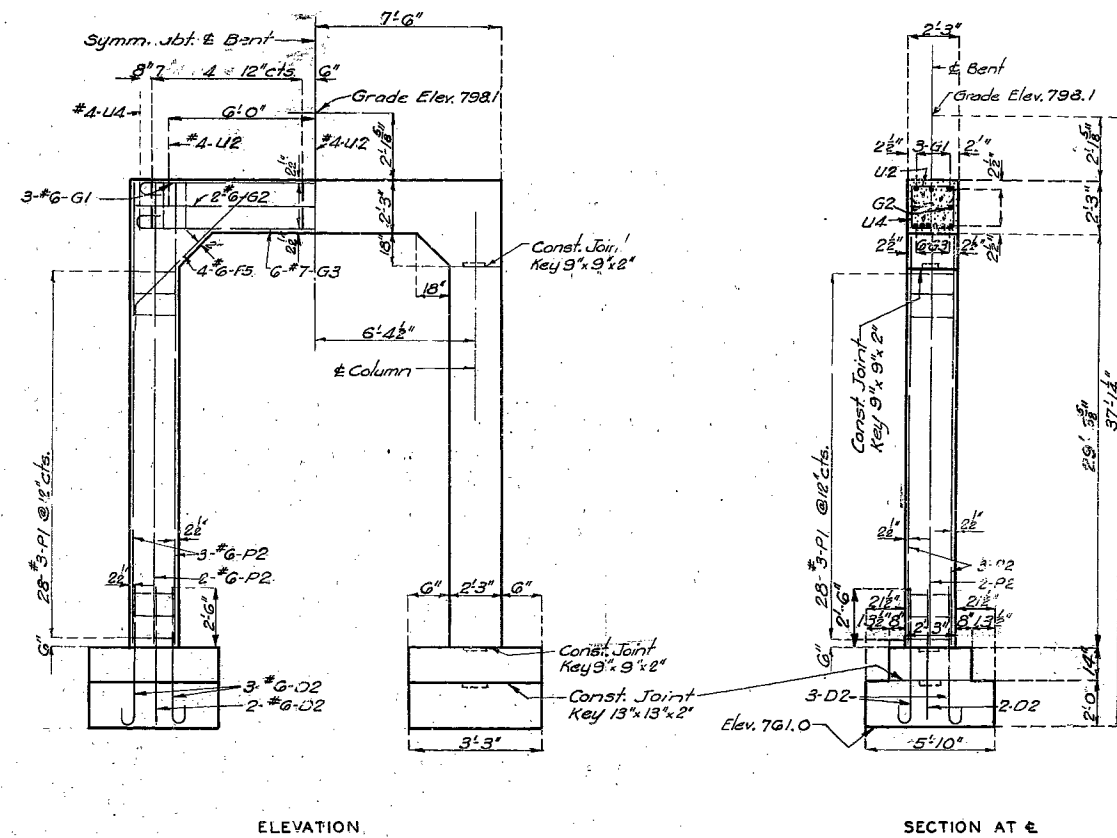
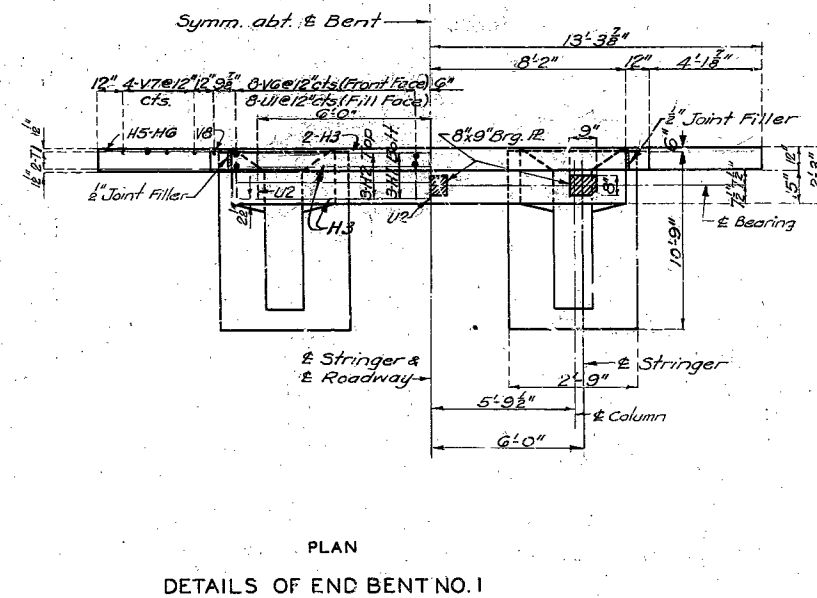
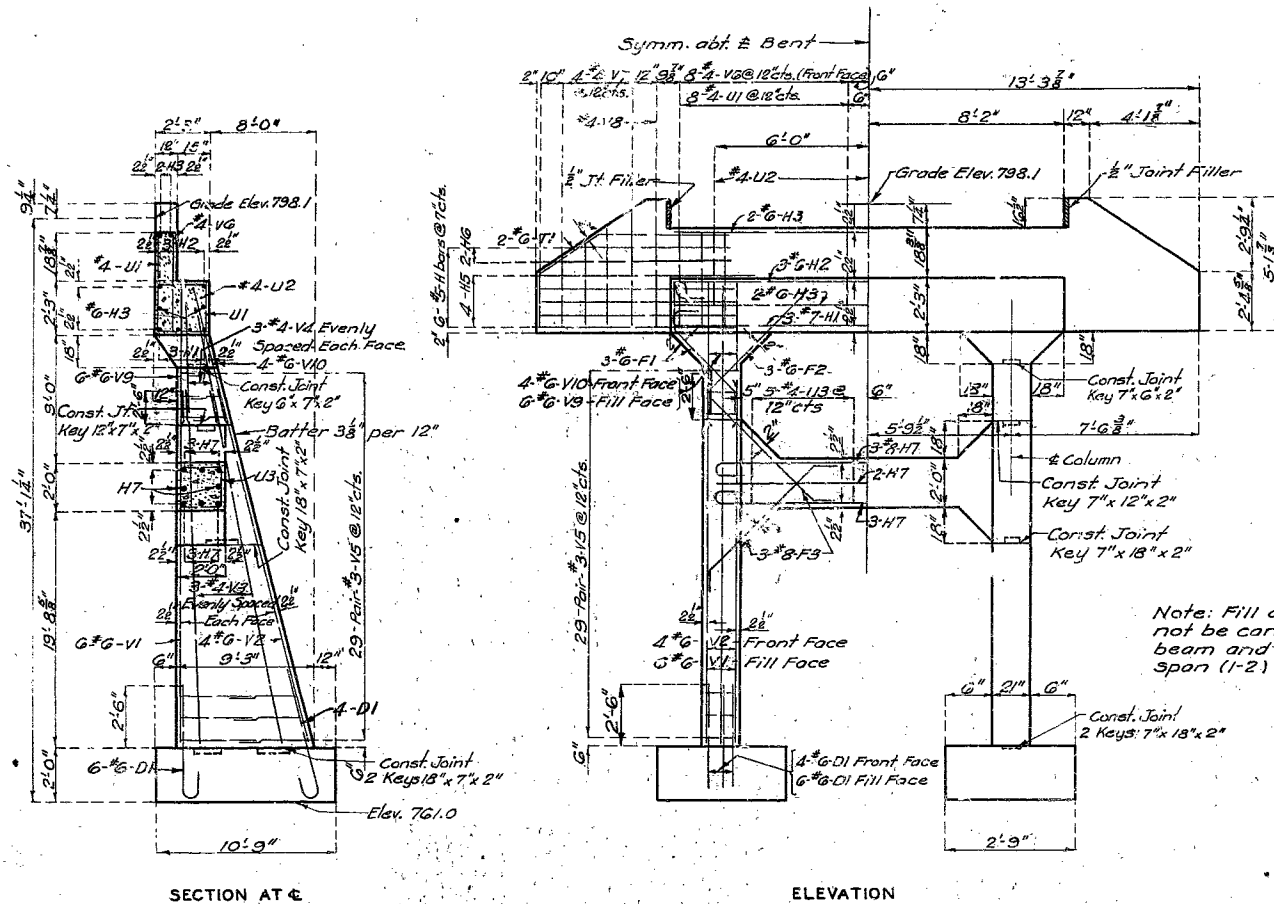


MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	S-1013 (1) SEC. A (S.M.)	19		



BRIDGE OVER BEAR CREEK

STATE ROAD FROM ROUTE 64 EAST TO POLK CO. LINE
ABOUT 18 MILES S.W. OF FLEMINGTON
PROJECT NO. S-1013 (1) SEC. A - (S.M.) STA. 51+82

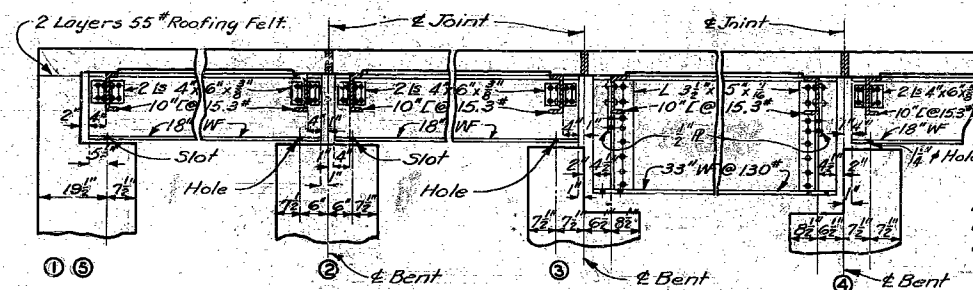
CEDAR

COUNTY

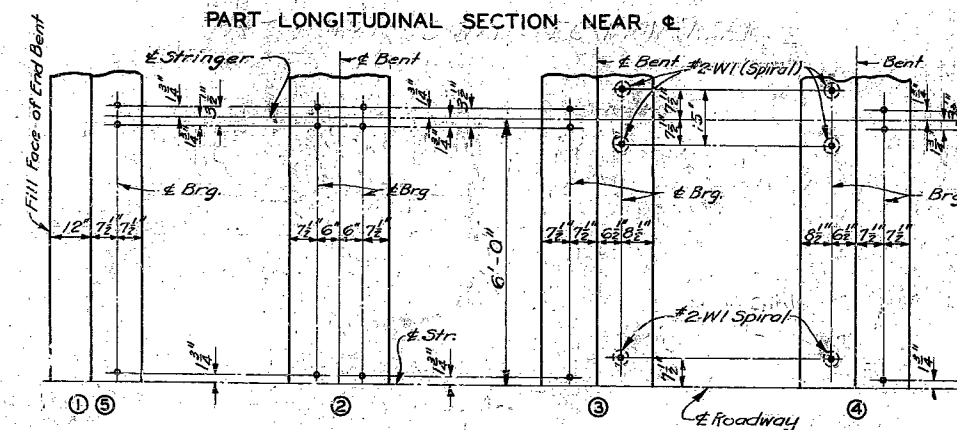
FINISHED

MISSOURI STATE HIGHWAY DEPARTMENT

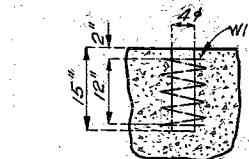
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5	MO.	3-1013 (1) SEC. A (C.M.)	19		



PART LONGITUDINAL SECTION NEAR BENT

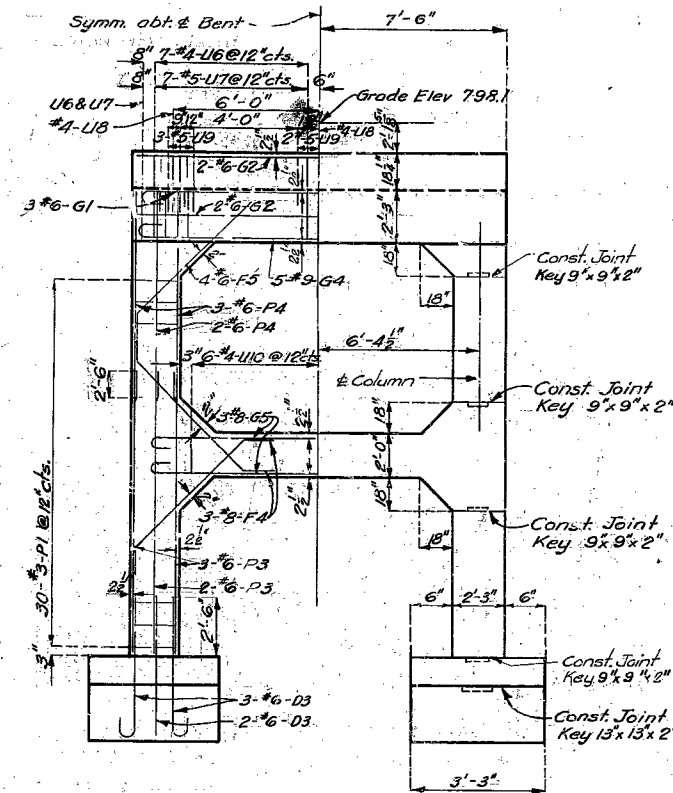


PART ANCHOR BOLT PLAN

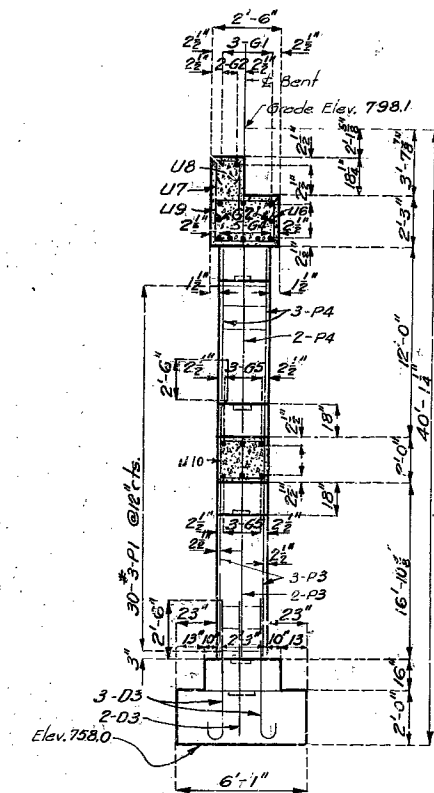


Note: Holes for all 1/2" anchor bolts shall be formed in substructure by placing and setting with template 4" Wells of depth shown.
Grout for anchor bolts shall contain Iron Oxide (Embeco or an approved equivalent).

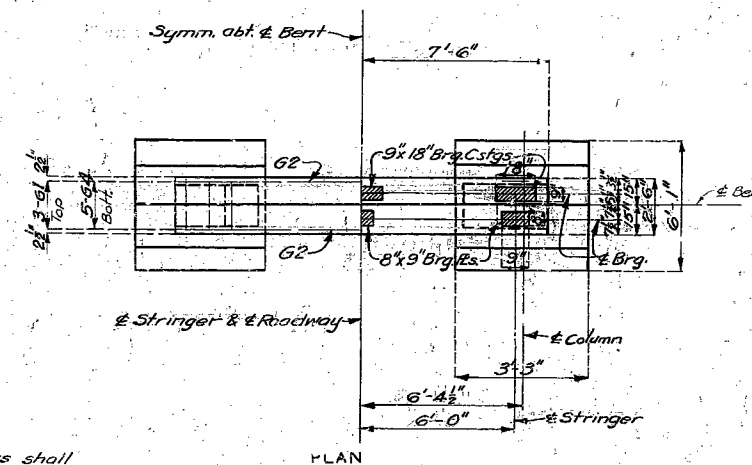
PART SECTION SHOWING ANCHOR BOLT PLAN



ELEVATION



SECTION AT BENT



DETAILS OF INT. BENT NO. 3.

BRIDGE OVER BEAR CREEK

STATE ROAD FROM ROUTE 64 EAST TO POLK CO. LINE
ABOUT 13 MILES S.W. OF FLEMINGTON
PROJECT NO. S-1013 (1) SEC. A (SMSTA. 51+82)

CEDAR

COUNTY

FINISHED

FINISHED

P-360

Assembled April 1953 by J.A.M. & J.C.G.
checked May 1953 by C.S.P.

Note: This drawing is not to scale. Follow dimensions.

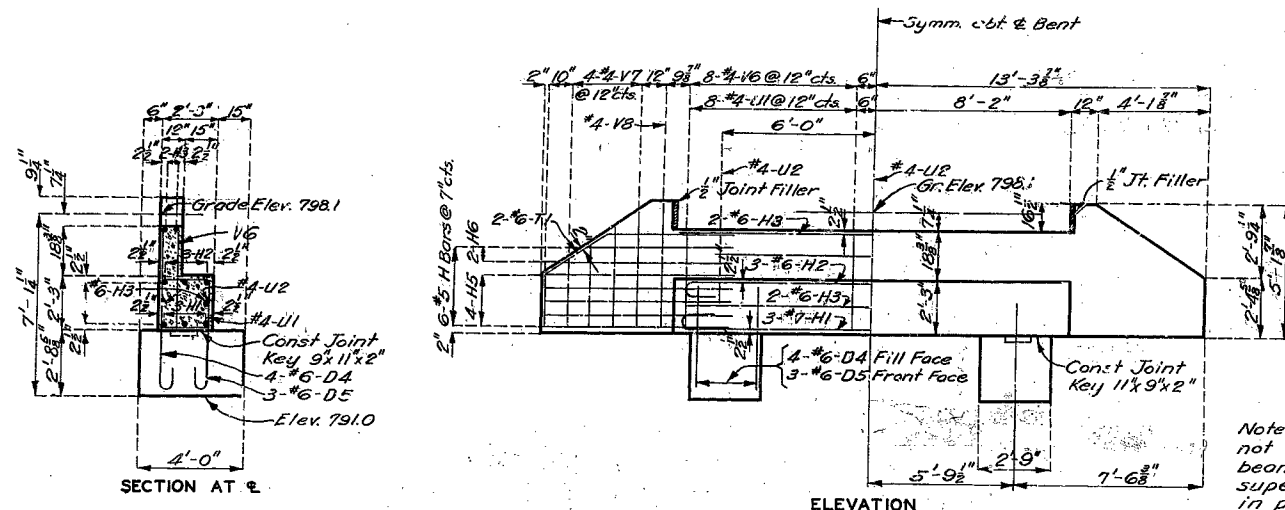
Sheet No. 3 of 6.

SEE FINAL PLANS BROWN-LINES

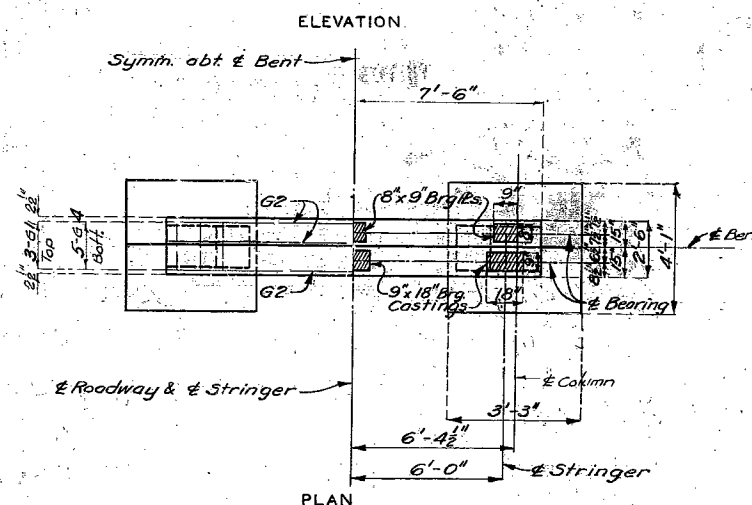
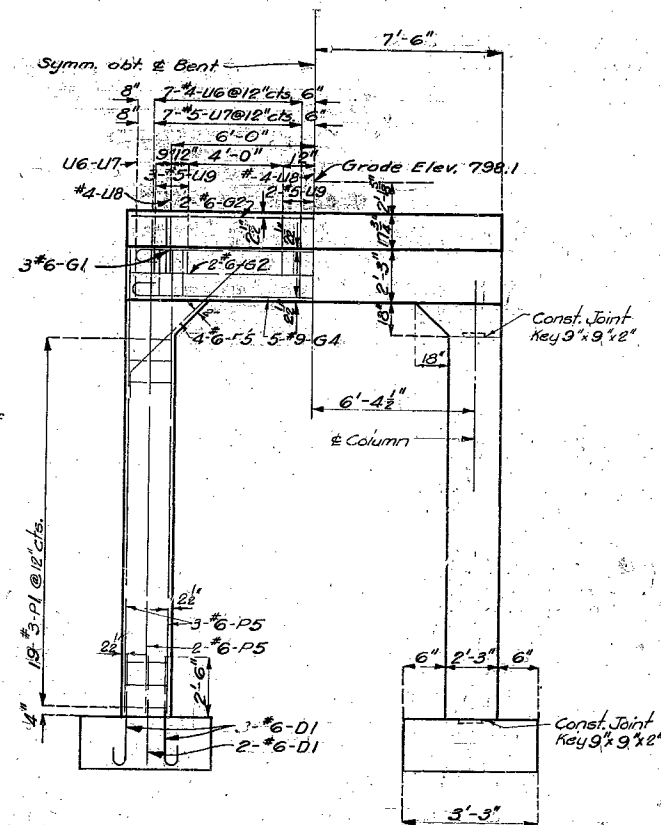
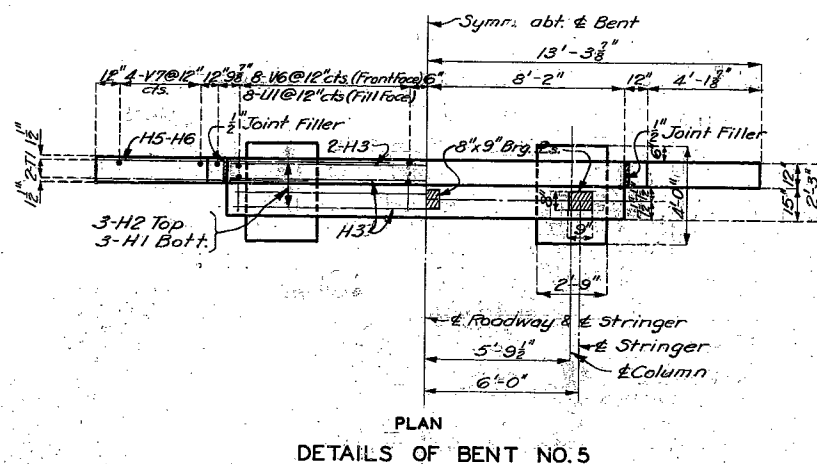
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MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	5-1013(1) SEC. A(64)	19		



Note: Fill at end bent No. 5 shall not be carried above bottom of beam and wings until superstructure upon (4-5) is in place.



BRIDGE OVER BEAR CREEK

STATE ROAD FROM ROUTE 64 EAST TO POLK CO. LINE
ABOUT 18 MILES S.W. FLEMINGTON
PROJECT NO. 5-1013(1) SEC. A (SMSTA. 51+82)

CEDAR COUNTY

FINISHED

Assembled April, 1953 by J.D.M. & J.C.G.
Checked May 1953 by C.S.A.

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 4 of 6.

FINISHED

P-360

SEE FINAL PLANS BROWN-LINES

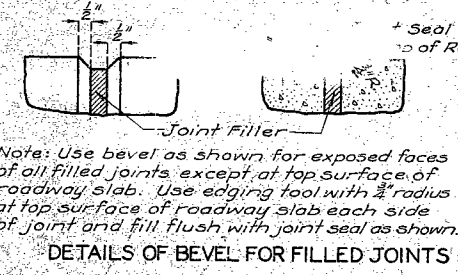
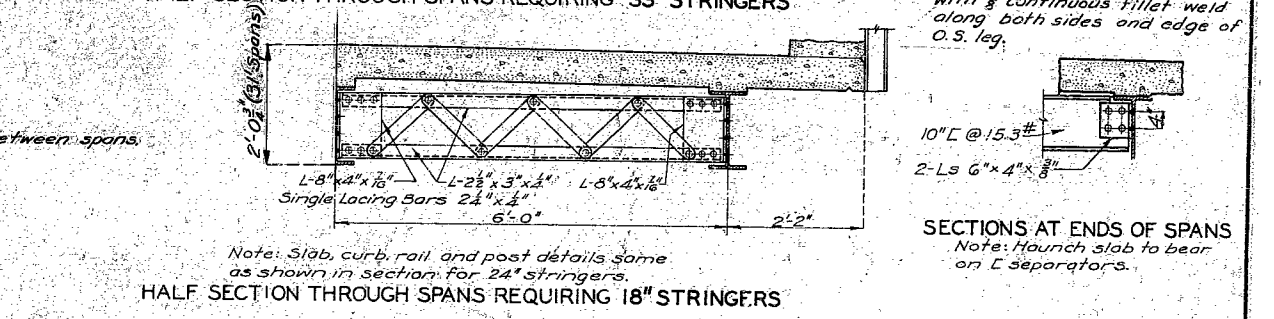
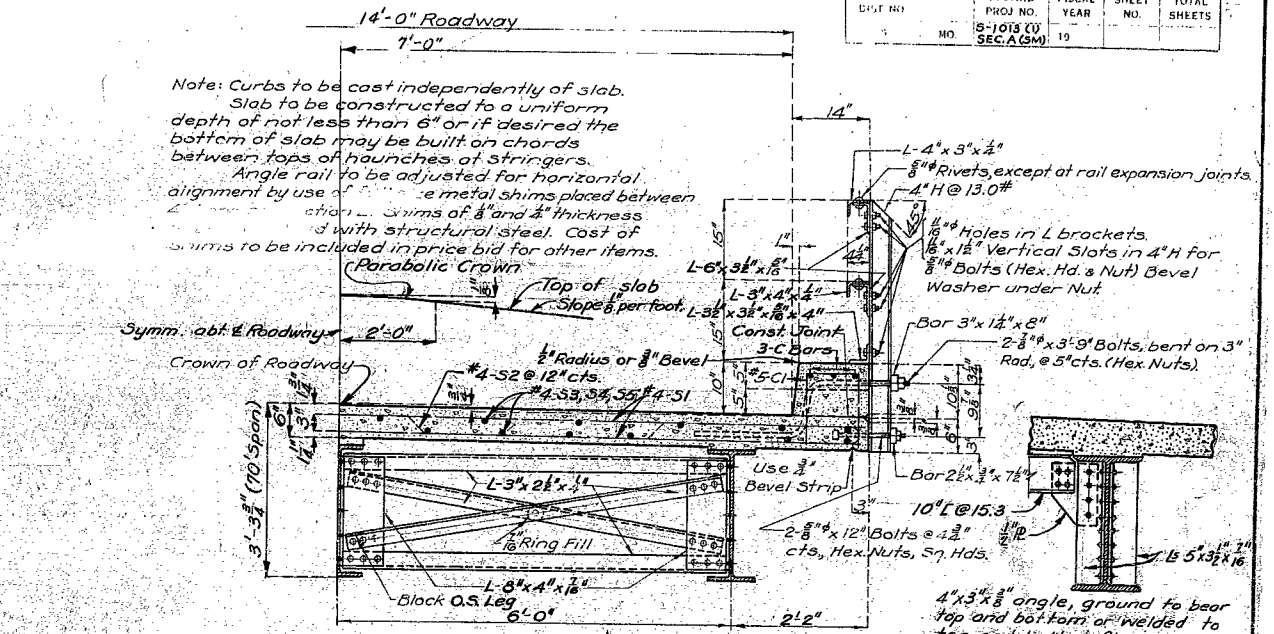
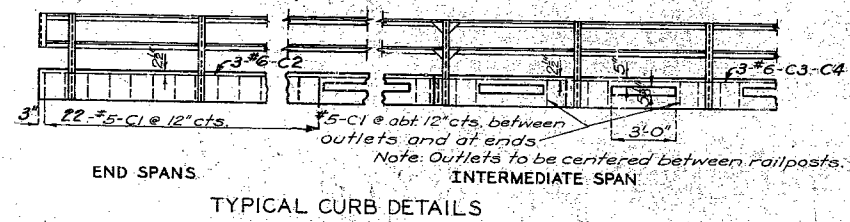
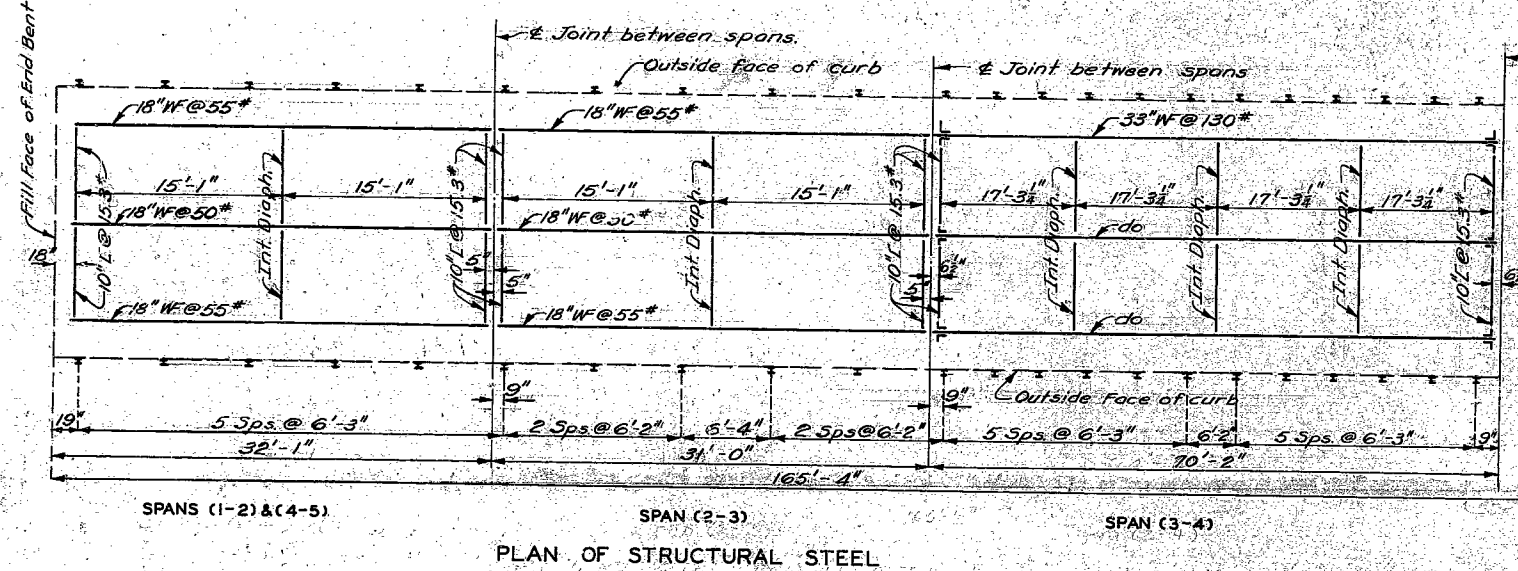
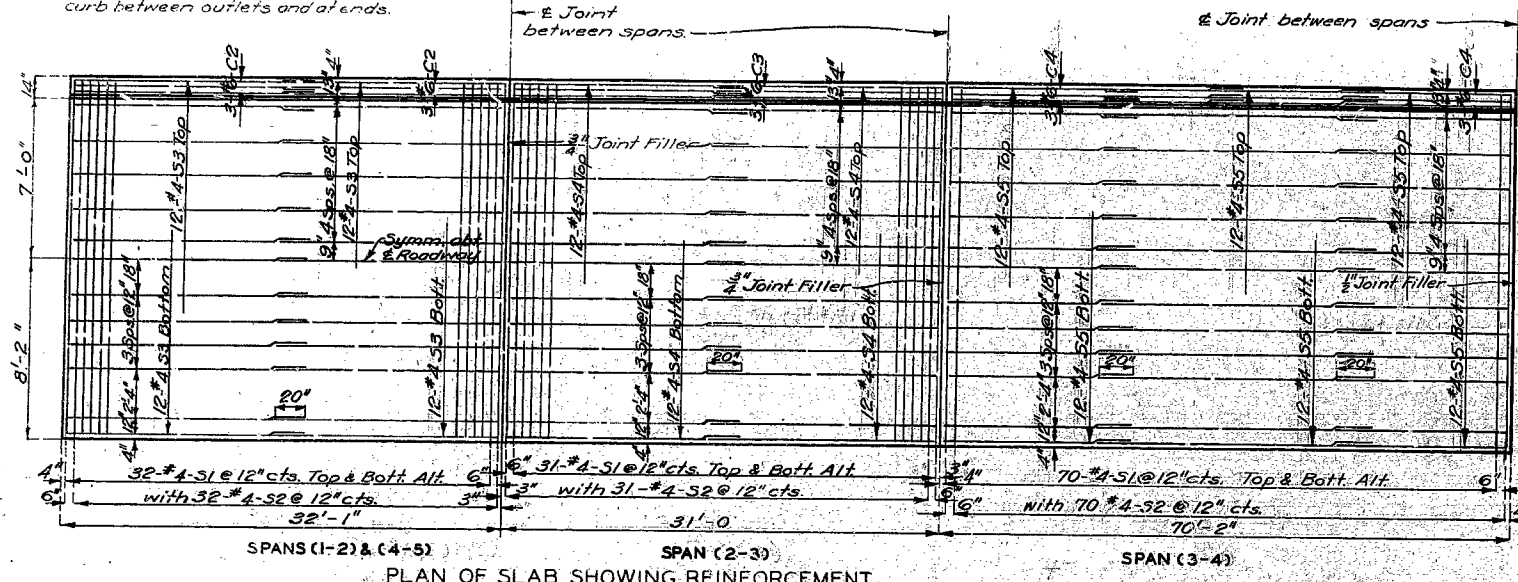
2 Col. Int. 14' Rdwy.

401

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
MO	MO	5-1013 (1) SEC. A (SM)	19		

Note: Space dowel bars C1 at approximately 12" centers in curb between outlets and at ends.

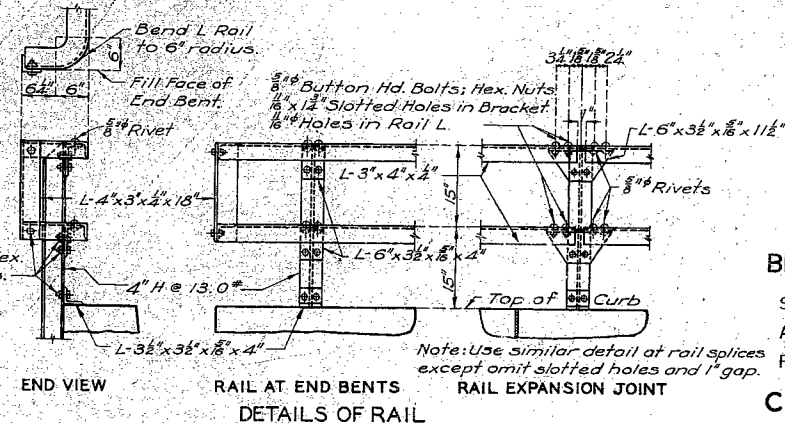


31" Spans	0"	1/2"	1"	1 1/2"	0"	Outside Stringers
70" Span	0"	1/2"	1"	1 1/2"	0"	Inside Stringers
	0"	1/2"	1"	1 1/2"	0"	Outside Stringers
	0"	1/2"	1"	1 1/2"	0"	Inside Stringer

5" = Center to Center of Bearings

Note: Slab shall be built parallel to grade and to a minimum thickness of 6". Dead load deflection, vertical curve (if any), crown and any difference in depth of stringers shall be taken care of by haunching to stringers by the amounts shown above. This additional concrete is included in "Estimated Quantities".

SLAB HAUNCHING DIAGRAM



BRIDGE OVER BEAR CREEK
STATE ROAD FROM ROUTE 64 EAST TO POLK CO. LINE
ABOUT 18 MILES S.W. OF FLEMINGTON
PROJECT NO. 5-1013 (1) SEC. A (SM) STA. 51+82
CEDAR COUNTY
FINISHED
NO CONSTRUCTION CHANGES
P-360

402

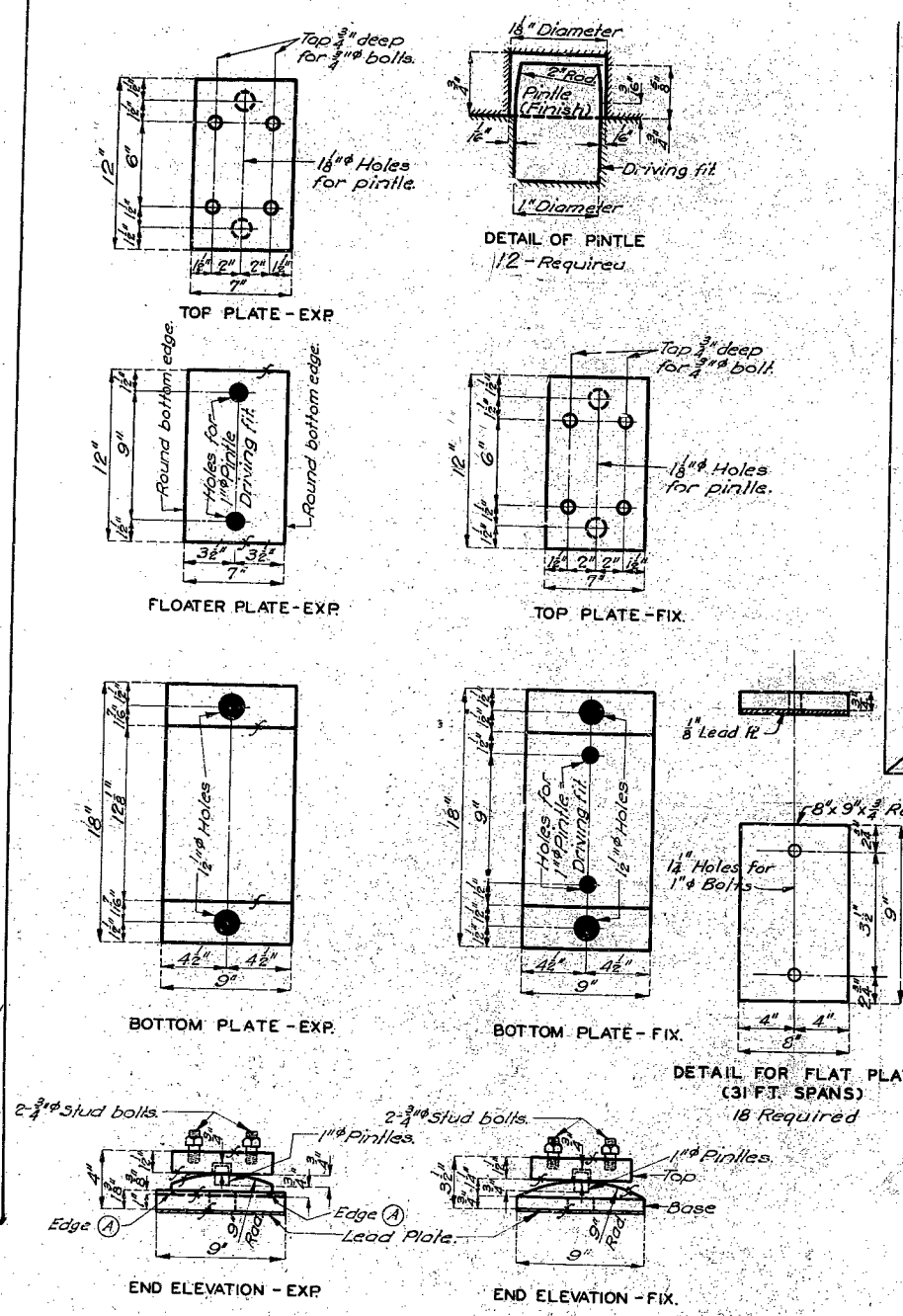
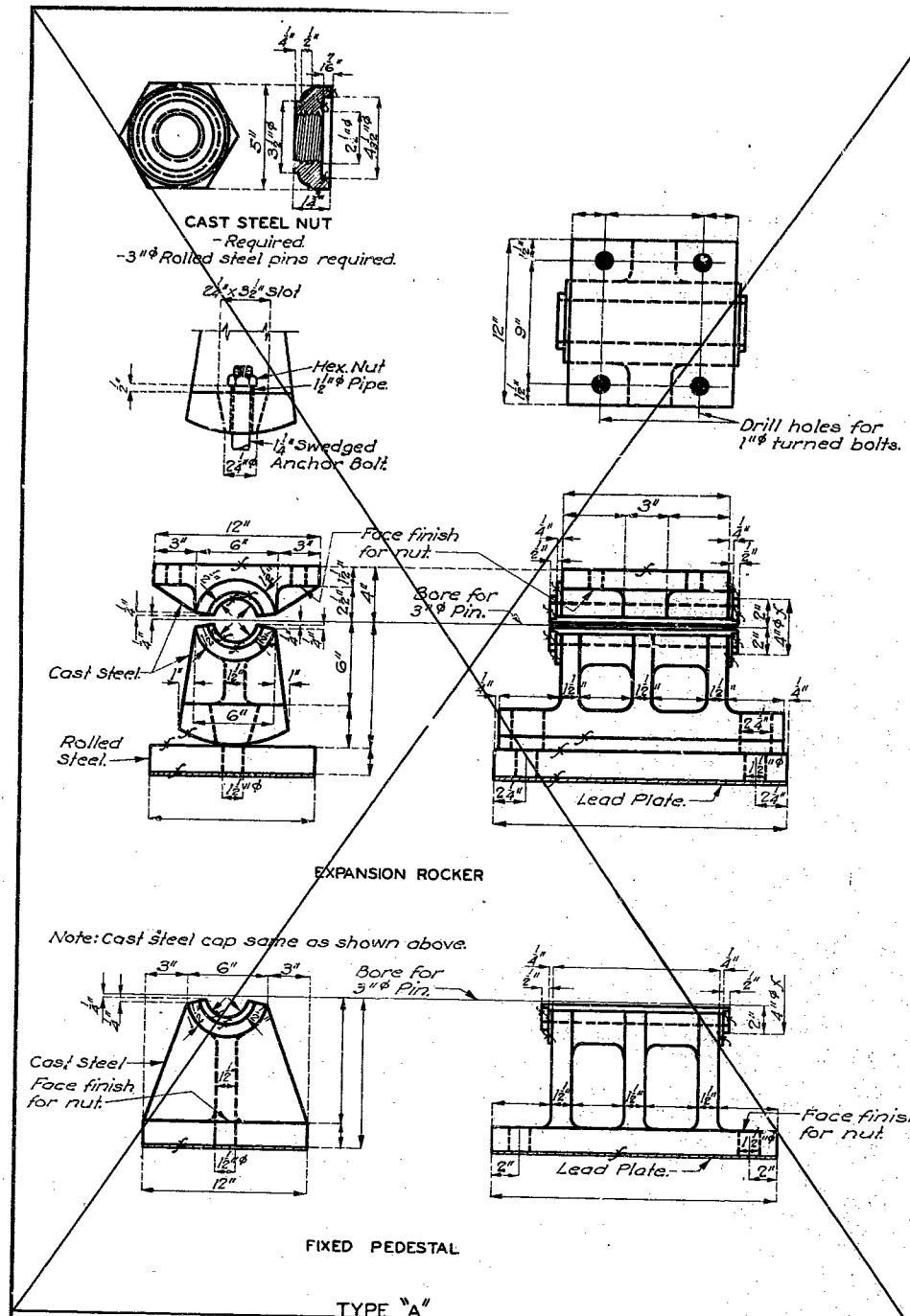
Assembled April 1953 by J.D.M. & J.C.G.
Checked May 1953 by C.S.A.

Note: This drawing is not to scale. Follow dimensions.

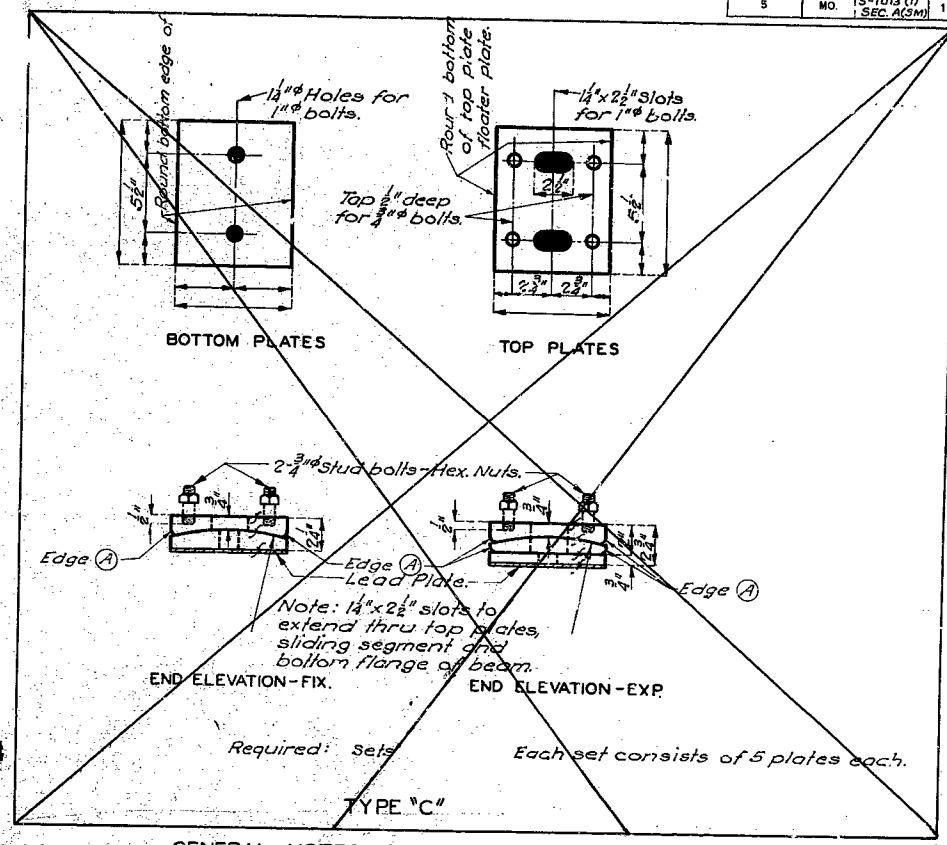
Sheet No. 5 of 6.

MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.	S-1013 (1) SEC. A(3M)	19		



TYPE "B"
Required: 3 Exp. Castings
3 Fix Castings



GENERAL NOTES:
Finish all surfaces marked X.
All fillets for Type "A" castings shall have 3/4" radius.
Material for Type "A" castings shall be Cast steel, except as noted. Material for Type "B" and Type "C" castings shall be either gray iron alloy or cast steel. Payment will be made as Gray Iron Alloy.
pins, bolts, nuts, pipe sleeves, rolled steel, pinilles shall be paid for as structural steel.
Anchor bolts for Type "A" and Type "B" castings shall be 1/2" swedged bolts with Hex. nuts and shall extend 12" into concrete.
Anchor bolts for Type "C" castings shall be 1" swedged bolts, no heads or nuts and shall extend 10" into concrete. Top ends of anchor bolts shall be above the top of castings but not higher than 3" below the top surface of the bottom flange of beam.
Lead plates under bearings shall be approximately 8" thickness and weigh 8#/Sq. Ft. Cost of lead plates shall be included in price bid for other items.
Edge (A) to be rounded.
Anchor bolts for flat plates to be 1" swedged bolts no heads Hex. nuts, and are to extend 10" into concrete. Plates to be straightened to plane surfaces.

DETAILS OF BEARING CASTINGS

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 6 of 6.

BRIDGE OVER BEAR CREEK
STATE ROAD FROM ROUTE 64 EAST TO POLK CO. LINE
ABOUT 18 MILES S.W. OF FLEMINGTON
PROJECT NO. S-1013(1) SEC. A (3M) STA. 51+82

CEDAR COUNTY FINISHED

P-360

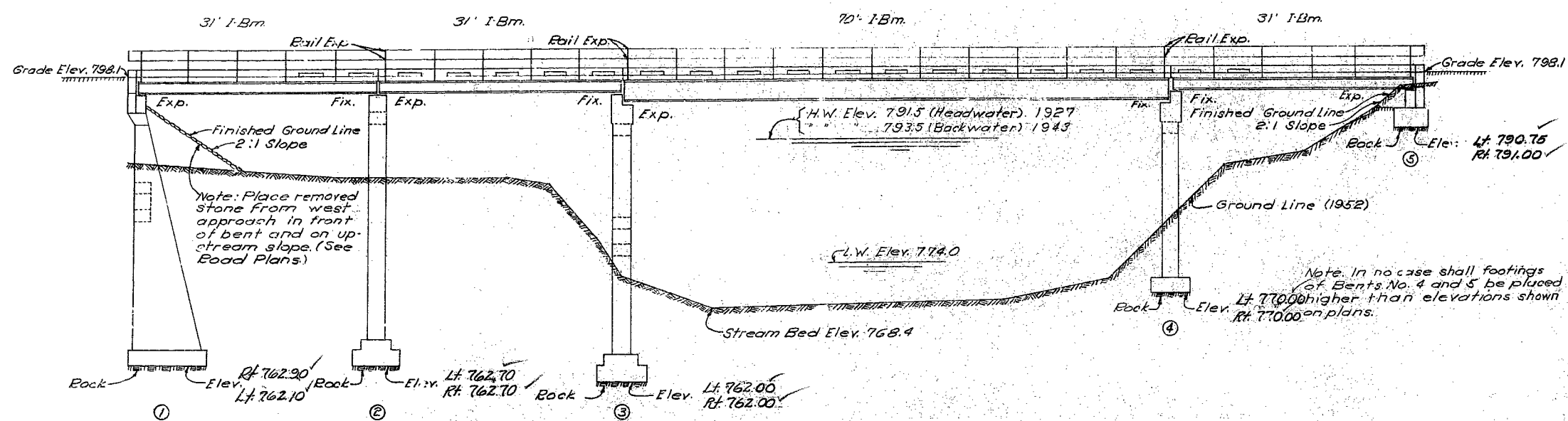
NO CONSTRUCTION CHANGES

403

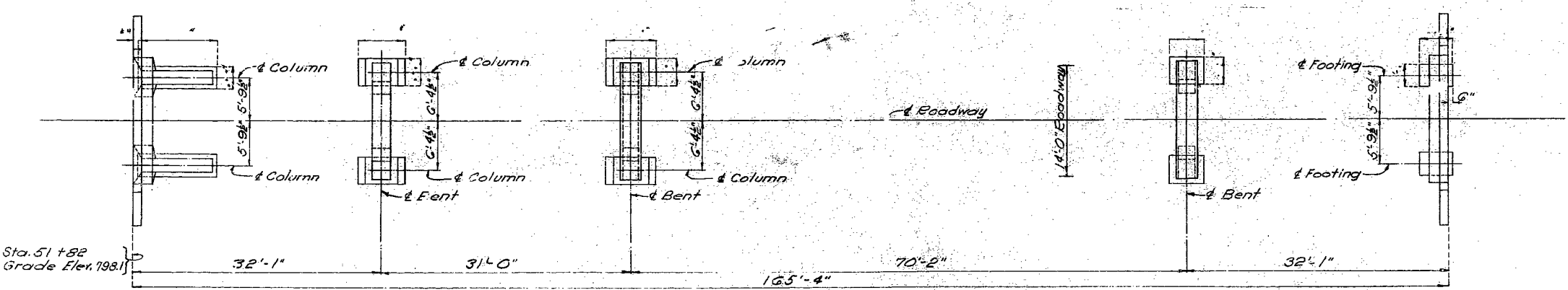
Assembled May 1953 by JDM & JCG.
Checked May 1953 by C.S.A.

MISSOURI STATE HIGHWAY DEPARTMENT

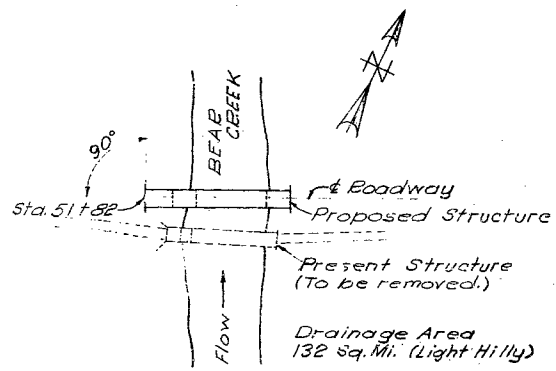
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5	MO.	31073(1) Sec. 2 (RM)	19		



GENERAL ELEVATION



PLAN



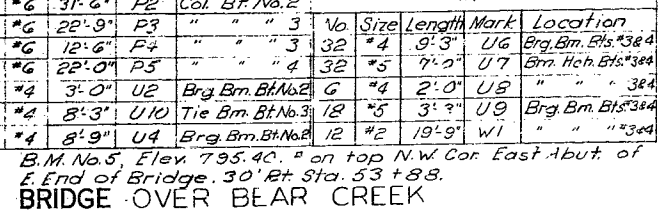
LOCATION SKETCH

GENERAL NOTES:
Design Specifications: A.A.S.H.O. - 1953.
Loading: H-10-44.
Structural Steel Stress: 18,000 #/sq. in.
Reinforcing Steel Stress: 18,000 #/sq. in.
Concrete, Class "B" Stress: 1,000 #/sq. in.
All concrete shall be Class "B".
Rivets 3/4"; holes 1/2", except in handrail where rivets shall be 5/8"; holes 3/4".
Field connections shall be riveted except as noted in handrail details or if the Contractor desires to eliminate all field riveting on this project, he may use machine bolts except for the 3/4" button head bolts specified for handrail. Heads and nuts of machine bolts shall be American Standard Regular.
Paint: Shop, none; field, contact surfaces of bolted field connections one coat of red lead; and surfaces inaccessible after erection three coats of red lead. No other paint to be applied by Contractor. Red lead required shall be furnished by Contractor. Payment for cleaning and painting such surfaces will be included in unit price bid for fabricated structural steel.
Where joint filler is specified on the plans it shall conform with the requirements for Premoulded Material for Filler as given in Section 38-19A(11) of the Standard Specifications.
All beams over 55' in length shall be shipped by rail to the specified shipping point.

FINAL QUANTITIES			
Item	Subst.	Superst.	Total
Class 1 Excavation for Structures Cu. Yds.	138.5		138.5
Class 2 Excavation for Structures Cu. Yds.	183.0		183.0
Class "B" Concrete Cu. Yds.	91.1	60.8	151.9
Reinforcing Steel Lbs.	10050	10510	20560
Fabricated Structural Steel Lbs.		55850	55850
Gray Iron Alloy Castings Lbs.		630	630
Test Holes	L.F.	52	52

Note: Excavation for bridge made above Elev. 775.0 will be paid for as Class 1 Excavation for Structures.
Excavation for bridge made below Elev. 775.0 will be paid for as Class 2 Excavation for Structures.

COMPLETE BILL OF REINFORCING STEEL				
No.	Size	Length	Mark	Location
Superstructure				
240	*5	2'-3"	C1	Curb
24	*6	17'-3"	C2	"
12	*6	16'-6"	C3	"
12	*6	36'-0"	C4	"
330	*4	16'-0"		Slab
165	*4	17'-9"	S2	"
96	*4	16'-9"	S3	"
48	*4	16'-3"	S4	"
72	*4	24'-6"	S5	"
End Bents No. 1 & 5				
20	*6	5'-3"	D1	Fig. Bt. No. 1
8	*6	6'-0"	D4	" " " 5
6	*6	5'-6"	D5	" " " 5
6	*6	7'-9"	F1	Col. Hch. Bt. No. 1
6	*6	7'-9"	F2	" " " 1
12	*8	8'-6"	F3	Tie Bm. " " 1
6	*7	18'-0"	H1	Brg. Bm.
6	*6	18'-0"	H2	"
8	*6	16'-0"	H3	"
8	*6	3'-6"	B22A	Br. Hch. Bt. No. 1
16	*5	10'-0"	H5	Wing
8	*5	9'-6"	H6	"
8	*8	15'-0"	H7	Tie Em. Bt. No. 1
8	*6	12'-6"	T1	Wing
32	*4	10'-3"	U1	Brg. Bm.
6	*4	3'-0"	U2	"
10	*4	7'-9"	U3	Tie Bm. Bt. No. 1
12	*6	25'-9"	V1	Col. Bt. No. 1
8	*6	24'-6"	V2	" " " 1
12	*4	25'-6"	V3	" " " 1
12	*4	9'-6"	V4	" " " 1
58	*3	15'-8"	V5	" " " 1
32	*4	3'-6"	V6	Backwall
8	*4	7'-6"	V7	Wing
4	*4	4'-9"	V8	"
12	*5	9'-6"	V9	Col. Bt. No. 1
8	*6	9'-9"	V10	" " " 1
Intermediate Bents No. 2, 3 & 4				
16	*6	5'-3"	D1	Fig. Bt. No. 4
16	*6	6'-6"	D2	" " " 2
16	*6	6'-9"	D3	" " " 3
12	*8	9'-0"	F4	Tie Bm. Bt. No. 3
24	*6	8'-6"	F5	Col. Hch.
9	*6	16'-9"	G1	Brg. Bm.
10	*6	14'-9"	G2	Brg. Bm. Bt. No. 2
6	*7	16'-9"	G3	Brg. Bm. Bt. No. 2
10	*9	17'-3"	G4	" " " 3
6	*8	16'-9"	G5	Tie Bm. Bt. No. 3
154	*3	8'-9"	P1	Col. Bt. No. 2
16	*6	31'-6"	P2	Col. Bt. No. 2
16	*6	28'-9"	P3	" " " 3
16	*6	12'-6"	P4	" " " 3
16	*6	22'-0"	P5	" " " 4
3	*4	3'-0"	U2	Brg. Bm. Bt. No. 2
1	*4	8'-3"	U10	Tie Bm. Bt. No. 3
16	*4	8'-9"	U4	Brg. Bm. Bt. No. 2
B.M. No. 5, Elev. 795.40, " on top N.W. Cor. East Abut. of E. End of Bridge, 30' Rt. Sta. 53+88.				
BRIDGE OVER BEAR CREEK				
STATE ROAD FROM ROUTE 44 EAST TO FOLK CO. LINE ABOUT 18 MILES N.W. OF FLEMINGTON				
PROJECT NO. 1013(1) SEC. 2 (RM) STA. 51+82				
CEDAR COUNTY				



Submitted by: J. A. Williams, DATE: 6/3/53
Approved by: R. M. Wilson, DATE: 6/3/53
FINISHED
STD. C-110R3
P-360

404

Drawn Apr. 1953 by J.D.M.
Checked May 1953 by C.S.A.

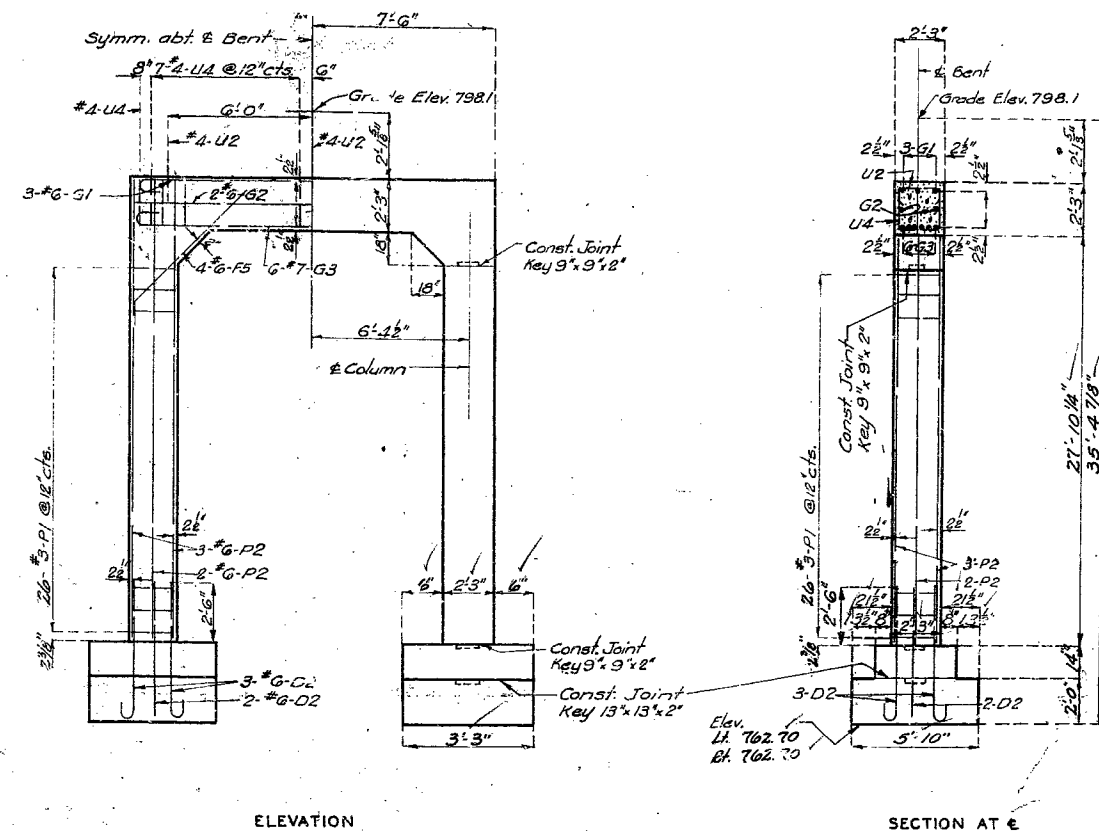
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Sheet No. 1A of 4

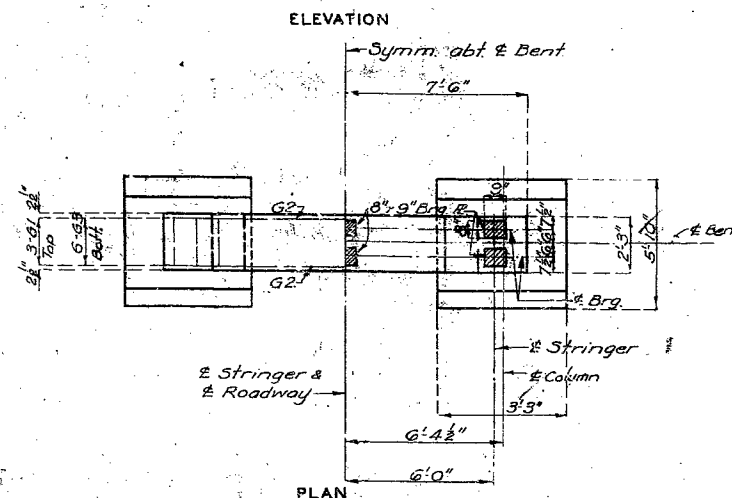
FINAL PLANS

Q. Q. Q.

507



ELEVATION



SECTION AT 4

DETAILS OF INT. BENT NO. 2

STATE ROAD FROM ROUTE 64 EAST TO POLK CO. LINE
ABOUT 18 MILES S.W. OF FLEMINGTON
PROJECT NO. S-1013(1) SEC. A (SM) STA. 51+82

FINISHED

COUNTY

FINIS

P-260

Note: This drawing is not to scale. Follow dimensions.

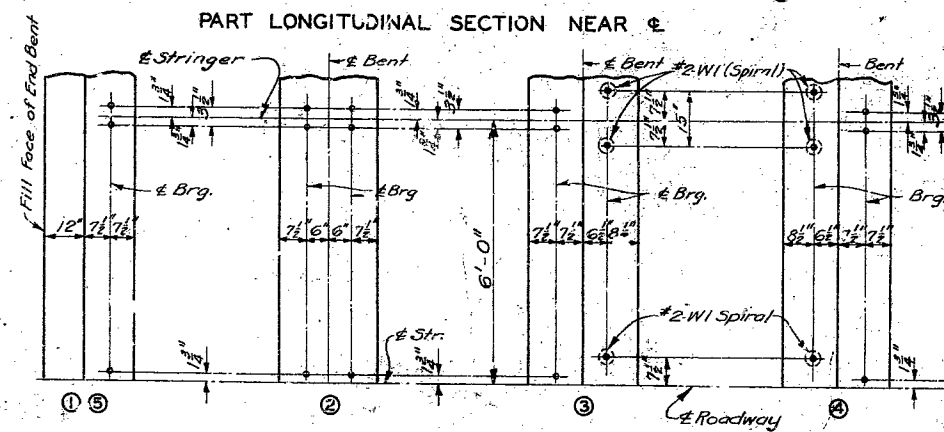
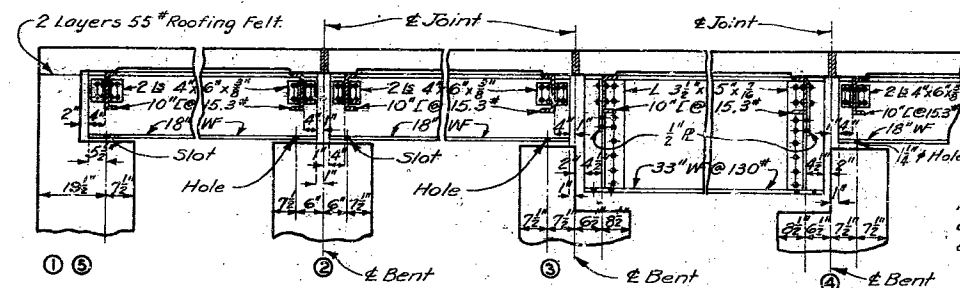
Sheet No. 2A of 4

2 Col. Engd & 2 Col. Inf. } 14th Regt

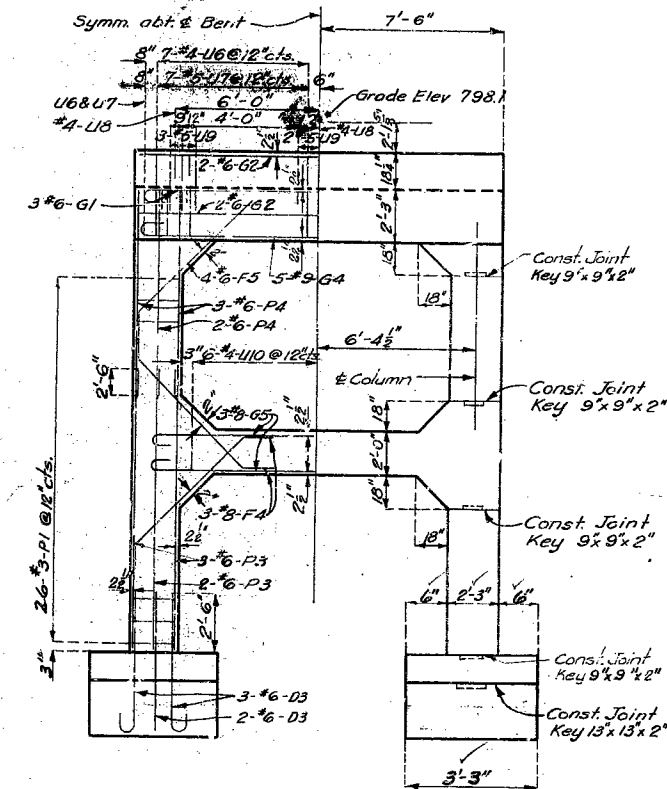
MISSOURI STATE HIGHWAY DEPARTMENT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO	3-1013 (1) SEC. A (9M)	19		

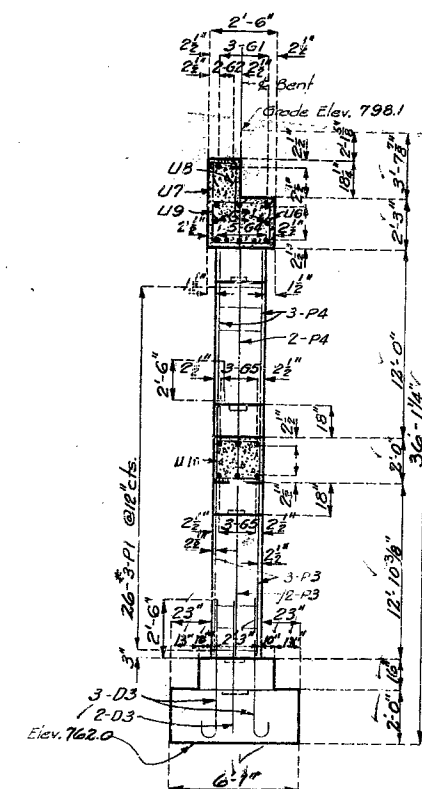
FINAL PLAN



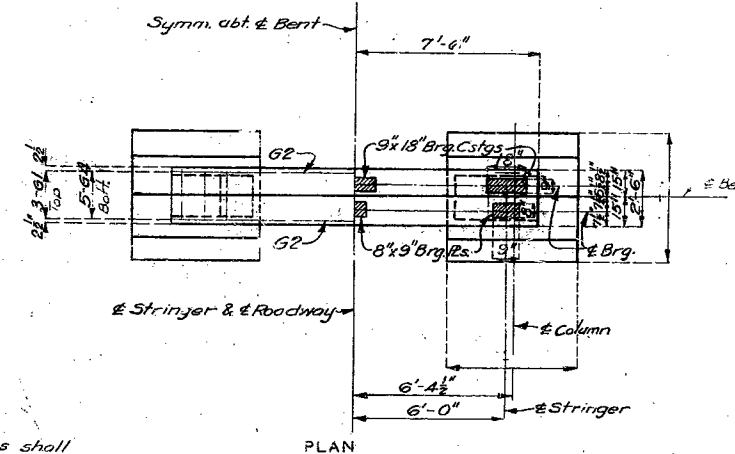
PART SECTION SHOWING ANCHOR BOLT PLAN



ELEVATION



SECTION AT E



DETAILS OF INT. BENT NO. 3.

BRIDGE OVER BEAR CREEK

STATE ROAD FROM ROUTE 64 EAST TO POLK CO. LINE
ABOUT 18 MILES S.W. OF FLEMINGTON
PROJECT NO. S-1013 (1) SEC. A (SMSTA. 51+82)

CEDAR COUNTY

FINISHED

Assembled April 1953 by J.D.M. & J.C.G.
checked May 1953 by C.S.A.

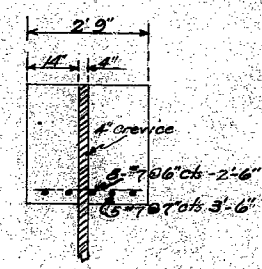
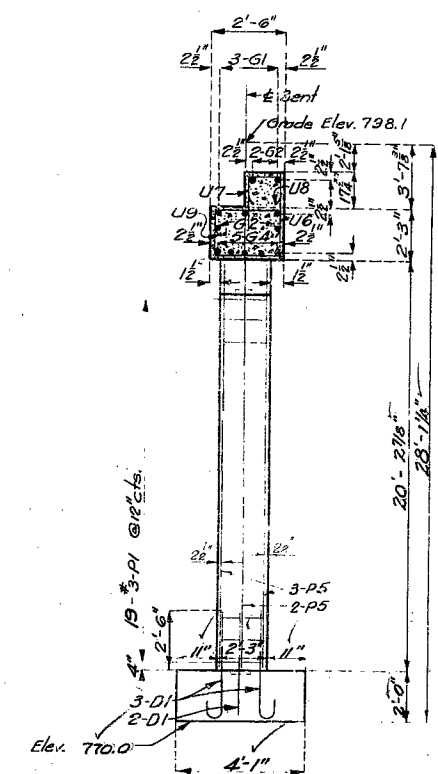
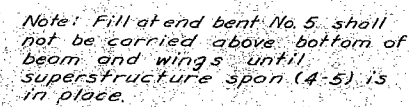
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Sheet No. 3A of 4.

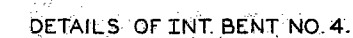
P-360

104

FINAL PLANS



Showing Cracks & Reinforcing Steel



FINISHED

Sheet No. 4A of 4

UNRECORDED

P-360

2 Col. Ind. } 12' Rdwy.
Square or Skewed } H70