

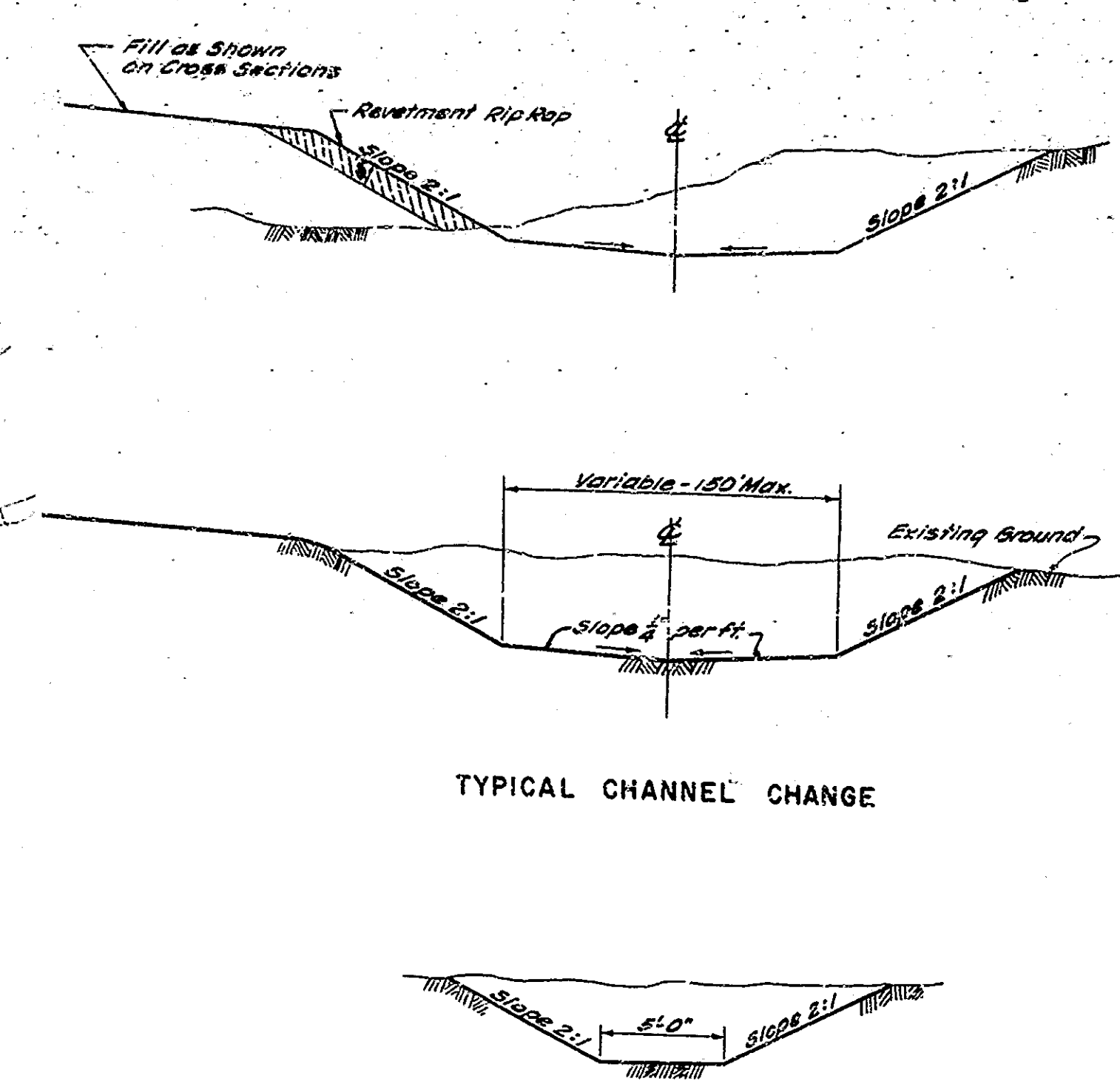
SEC. 29 T. 14 N. R. 9 W.
CLINTON TWP.
VERMILLION CO.

SEC. 28 T. 14 N. R. 9 W.
CLINTON TWP.
VERMILLION CO.

PI. 4+21.0
Δ 25° 0' R.
D 107.0
T 127.0
L 252.0
R 572.9

PI. 12+55.1
Δ 31° 15' L.
D 15° 30'
T 103.7
L 201.6
R 370.8

PI. 16+70.0
Δ 25° 30' L.
D 25.4
T 94.4
L 108.0
R 281.0

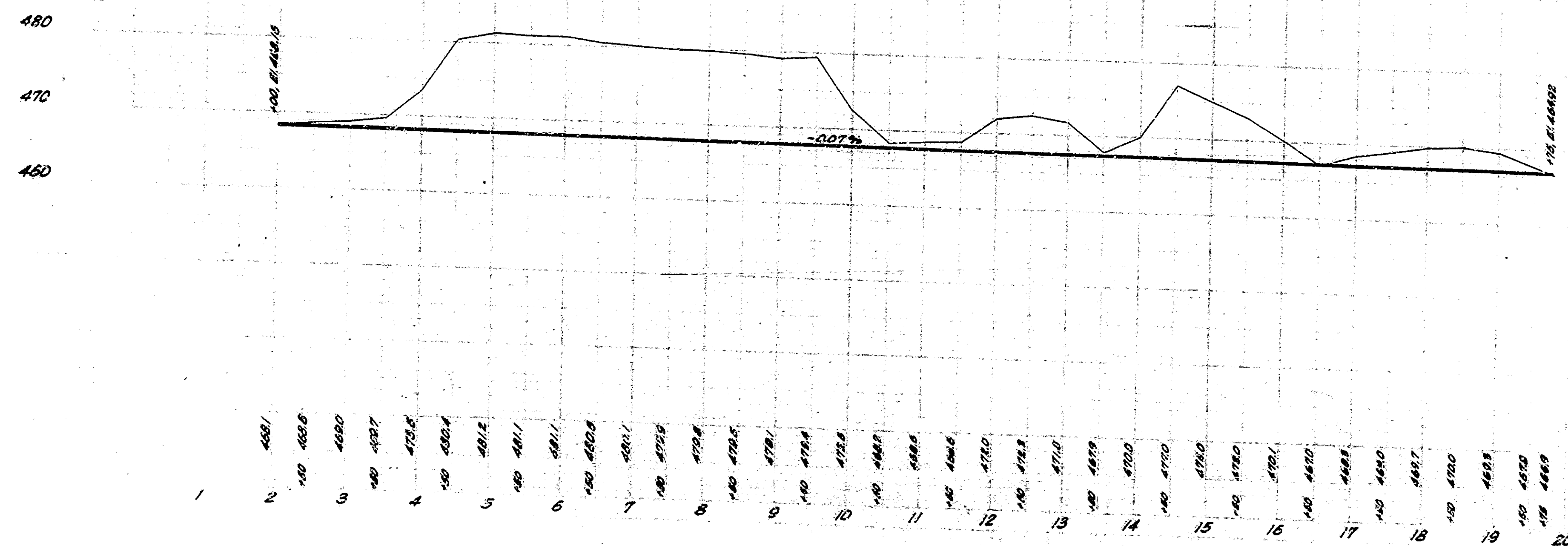


BREAKDOWN OF CHANNEL CHANGE QUANTITIES
CHANNEL CHANGE EXCAVATION

	OUTSIDE LA RIW	INSIDE LA RIW
MILTON RHYAN ET UX	31,792 Cu. Yds.	0 Cu. Yds.
DEREXA W. PENTREATH	0 " "	0 " "
LEO HUFFMAN	0 " "	0 " "
SECONDINO BROS.	11,169 " "	12,855 " "
PAUL NEWLAND ET UX	0 " "	0 " "
TOTAL	42,961 " "	12,855 " "
GRAND TOTAL	55,816 Cu. Yds.	

FILLING OLD CHANNEL

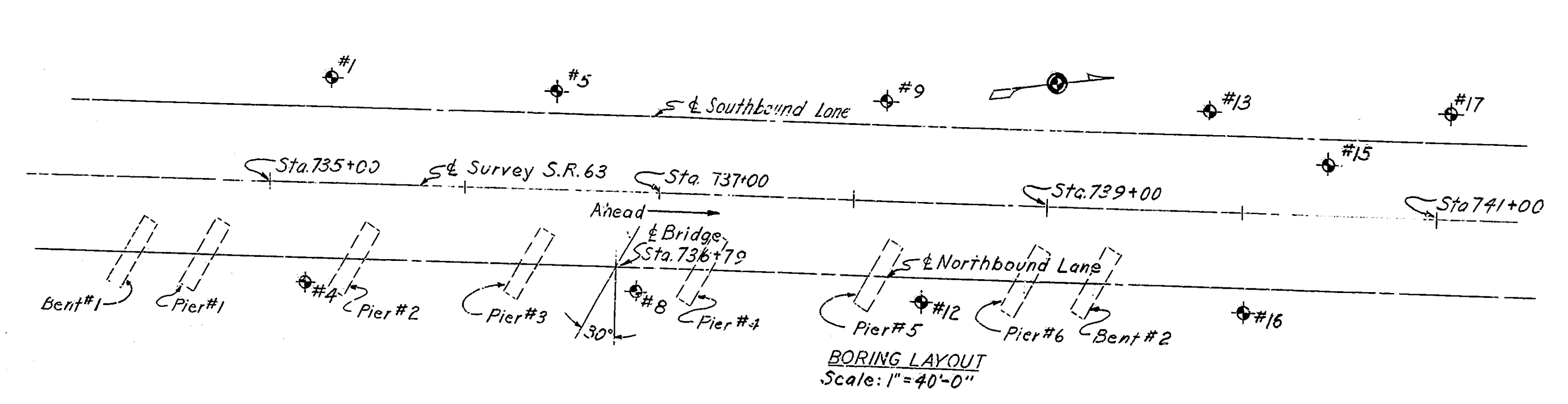
	OUTSIDE LA RIW	INSIDE LA RIW
MILTON RHYAN ET UX	15,848 Cu. Yds.	0 Cu. Yds.
DEREXA W. PENTREATH	1,816 " "	0 " "
LEO HUFFMAN	3,642 " "	4,147 " "
SECONDINO BROS.	0 " "	0 " "
PAUL NEWLAND ET UX	0 " "	0 " "
TOTAL	21,306 " "	4,147 " "
GRAND TOTAL	25,453 Cu. Yds.	



BRIDGES OVER 20' SPAN					
PUB. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F866(6)	1960	6	34

Depth (ft)	T.B.#1 52' Lt. 735+91	T.B.#4 49' Rt. 735+19	T.B.#5 49' Lt. 736+46	T.B.#8 49' Rt. 736+89	T.B.#9 49' Lt. 739+17	T.B.#12 49' Rt. 739+36	T.B.#13 49' Lt. 739+82	T.B.#15 25' Lt. 740+44	T.B.#16 49' Rt. 740+02	T.B.#17 52' Lt. 741+06
475										
470	Brown moist soft clayey silt w/ trace of sand	Brown loose fine sandy silt	Brown dry loose fine to coarse sand w/ some silt	Brown soft moist clayey silt w/ some fine sand	Brown moist very soft clayey silt w/ trace of sand & organic material	Brown loose fine to coarse sand w/ trace of silt	Brown moist soft clayey silt	Brown moist soft clayey silt w/ trace of fine sand	Brown moist very soft clayey silt w/ trace of fine sand	Brown wet very soft fine sand w/ a trace of silt
465	Brown loose fine to coarse sand w/ trace of gravel	Loose wet gray fine to coarse sand some organic	Brown moist soft clayey silt w/ some sand	Gray moist med. dense sand w/ trace of silt	Brown wet med. dense fine to coarse sand w/ some gravel & trace of silt	Brown wet soft clayey silt	Gray moist medium dense fine to coarse sand w/ some gravel	Gray moist soft sandy silt	Gray wet very soft fine to med. sand w/ trace of organic silt & coal	Gray wet very soft fine to med. sand w/ trace of organic silt & coal
460	Brown moist dense gravel w/ trace of sand & silt	Dense moist gray fine to coarse sand w/ gravel & trace of silt	Brownish gray dense fine to coarse sand	Gray moist very stiff clayey silt w/ trace of sand	Gray wet very dense fine to coarse sand w/ silt & trace of fine gravel	Brown moist dense fine to coarse sand	Brown moist dense fine to coarse sand	Gray moist loose fine to coarse sand w/ trace of silt	Brown wet dense fine to coarse sand & gravel	Brown wet dense fine to coarse sand & gravel
455	Gray moist very stiff clayey silt w/ trace of sand & gravel	Very stiff moist gray clayey silt	Gray moist dense fine to coarse sand w/ some silt	Gray moist stiff clayey silt w/ trace of fine sand	Gray moist stiff clayey silt w/ trace of fine sand	Gray moist stiff clayey silt	Gray moist stiff clayey silt	Gray moist very stiff clayey silt	Gray moist very stiff clayey silt	Gray moist very stiff clayey silt
450		Stiff moist gray clayey silt w/ trace of sand	Gray moist stiff clayey silt							
445		Very stiff moist green clayey silt w/ sand & trace of organic matter								
440										
435										
430										
425										
420										
415										
410										
405										

TEST BORING DATA
Vertical scale: 1"=10'-0"



LEGEND

- Sand [Symbol]
- Gravel [Symbol]
- Clay [Symbol]
- Silt [Symbol]
- Organic [Symbol]

GENERAL NOTES

- Hammer Wt. 140 Lbs.
- Hammer Drop 30 inches
- Pipe Size 2 inches O.D.
- Hole Diameter 8 inches

BORING SHEET

R.C. GIRDER & STEEL BEAM BRIDGE
7 SPANS: 36.75, 90.90, 90.75, 36 - SKEW 30°00' RT. - 1-30'0" RDWY 2-2'0" WALKS
OVER BROUILLETTS CREEK ON S.R.63 RELOCATED

STATE HIGHWAY DEPARTMENT OF INDIANA
VERMILLION COUNTY

SCALE: AS NOTED

SUBMITTED FOR APPROVAL: *Thomas D. Wagner*

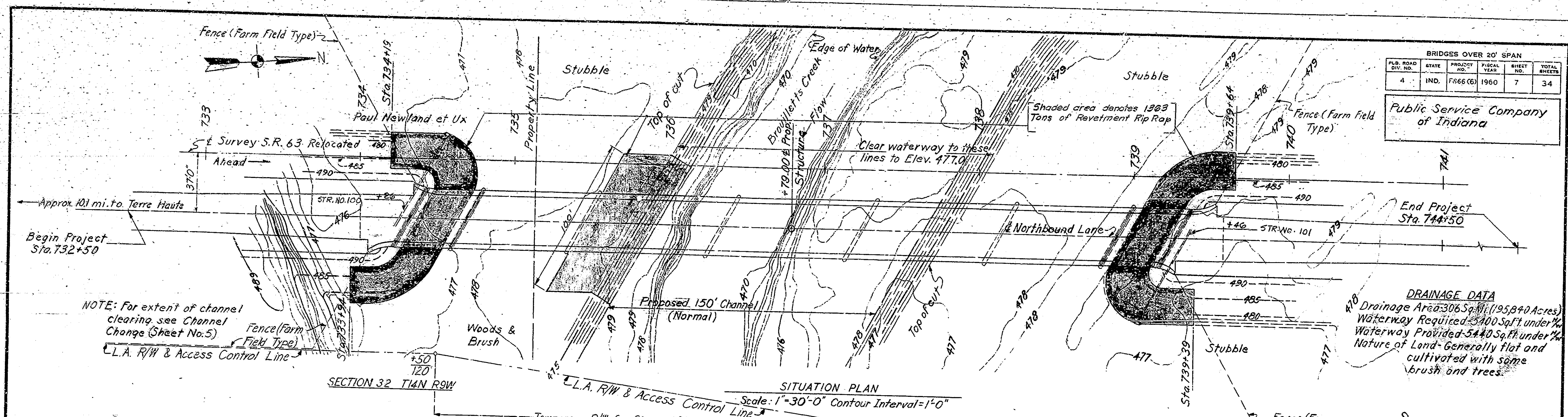
November 3, 1960

DRAWING: 6 OF 34
PROJECT: F866(6)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323

DESIGNED BY: JFW 10-7-58
DRAWN BY: JFW 10-7-58
CHECKED BY: JFW 10-7-58

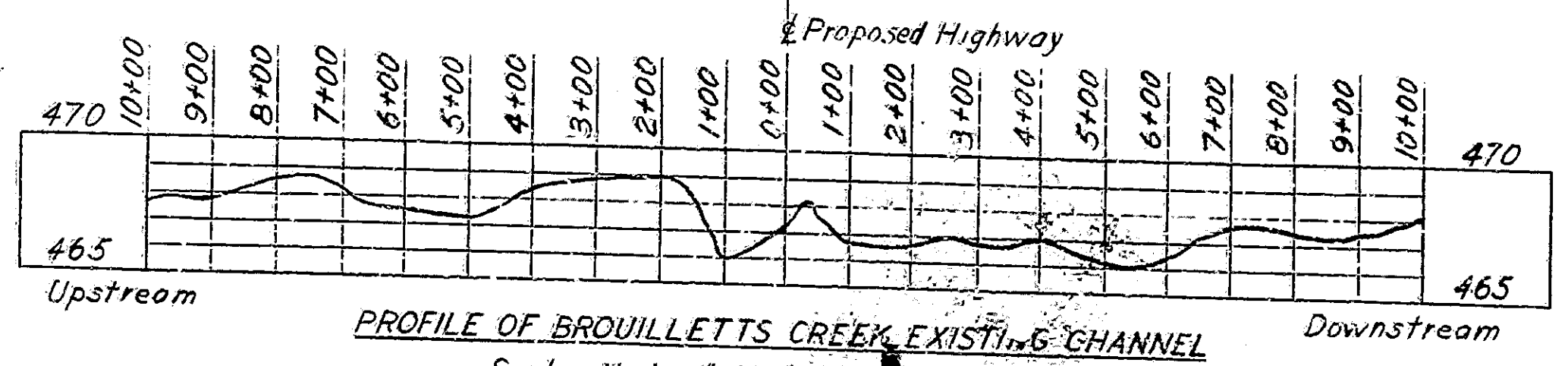
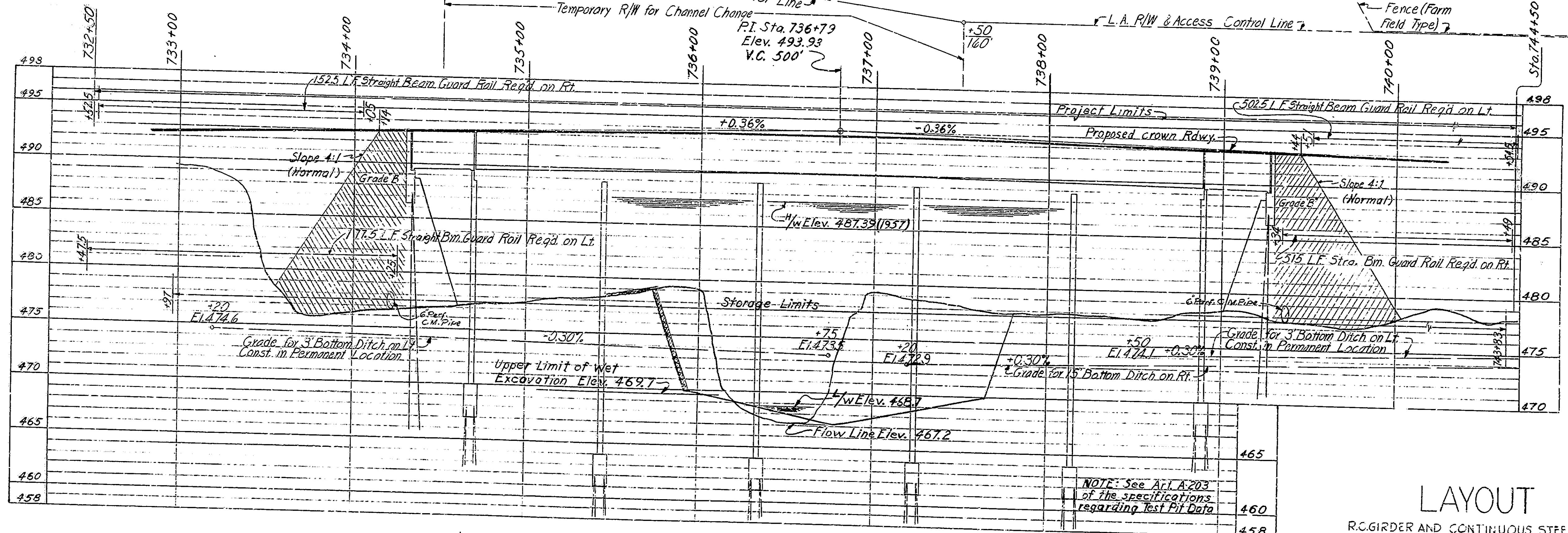
BRIDGES OVER 20' SPAN					
PL. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F866(6)	1960	7	34

Public Service Company of Indiana



NOTE: For extent of channel clearing see Channel Change (Sheet No. 5)

DRAINAGE DATA
 Drainage Area 306 Sq. Ft. (1958±0 Acres)
 Waterway Required 5400 Sq. Ft. under %
 Waterway Provided 5440 Sq. Ft. under %
 Nature of Land: Generally flat and cultivated with some brush and trees.



PROFILE ON PROPOSED HIGHWAY
 Scale: Horiz. 1"=30'-0" Vert. 1"=5'-0"
 Net Fill +20%
 Surplus Channel Change Excavation 30,363 cu. yd.
 Surplus Foundation Excavation 340 cu. yd.
 *Common Excavation 3,860 cu. yd.
 Waste can be used as additional fill in old channel as long as drainage is provided. 26,000 cu. yd.
 Waste 31,563 cu. yd.
 *Common excav. includes 3,001 cu. yd. for ditches to be excavated by the Roadway Contractor if the Roadway Contract precedes the Bridge Contract.
 Rev. 7-1-63
 Rev. 7-27-61 Surplus Channel Excav.

LAYOUT

R.C. GIRDER AND CONTINUOUS STEEL BEAM BRIDGE
 SPANS: 36, 75, 90, 90, 90, 75, 36 - SKEW 30° 00' RT - 1-30'-0" RDWY 2-2'-6" WALKS
 OVER BROUILLETTS CREEK ON S.R. 63 RELOCATED
STATE HIGHWAY DEPARTMENT OF INDIANA
 VERMILLION COUNTY

SCALE: AS SHOWN
 SUBMITTED FOR APPROVAL: *Harry D. Wagner*
 DRAWING: G1 OF 13
 PROJECT: F-866(6) STATION: 736.79±0
 BRIDGE CONTRACT NO. 65 70
 BRIDGE FILE: 63-C9-4323
 November 5, 1960

DESIGNED BY: C.R.D. JFW
 DRAWN BY: J.H.S. JFW
 TRACED BY: J.W. JFW

NOTE: FIELD NOTES, BOOK BR. 1822

BRIDGES OVER 20' SPAN					
PUB. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F866(6)	1960	8	34

GENERAL NOTES

Piles shall be driven to elevation necessary to obtain desired bearing.

No present structure or proposed bridge site.

Depth of footings to be extended if found necessary. See Art. B403.2(a) of Specifications.

Piles shall have minimum bearing value shown on detail drawings. Determine pile lengths by Arts. F103 & F203 of Specifications.

For details of steel encased concrete piles see Bridge Standard C1, the Special Provisions and applicable articles in the Specifications.

Reinforcing steel covering shall be 1/2 inches in top and 1 inch minimum in bottom of floor slabs, 3 inches in footing except bottom steel which shall be 4 inches, 1/2 for stirrups in T-beams, and 2 inches in all other parts unless noted.

Concrete in footings and pier stems to bottom of coping to be Class "E".

Concrete in superstructure, including railing, End Bents and top of piers above construction joint to top of pier to be Class "F".

Concrete in steel encased concrete piles to be Class "D".

Continuous concrete pours shall be required between construction joints as shown on detail plans.

Waterproof bents and wingwalls in accordance with Specifications.

Bevel forms 1/4" under copings; and chamfer exposed edges 1 inch unless noted.

18 standard Roadway Drainage Outlets to be placed as shown on this drawing.

Construct Revetment Riprap at locations as shown on Layout.

Exp. Joint Armor to conform to Roadway Crown.

Tolerance in position of pilehead maximum 2 inches.

All railings to be constructed perpendicular to grade.

The Contractor shall prepare detailed working or shop drawings to enable him to fabricate, erect and construct all parts of the work in conformity with the Engineer's drawings and specifications and shall submit five (5) copies of these to the Engineer.

See special provisions for items included in this contract.

Revetment Riprap to be placed on stream slope at locations as shown on Channel Change Sheet.

DESIGN DATA

Designed for H20-S16-44 loading in accordance with 1961 A.A.S.H.O. Specifications, except floor slab designed for 16,000 Lb. wheel load.

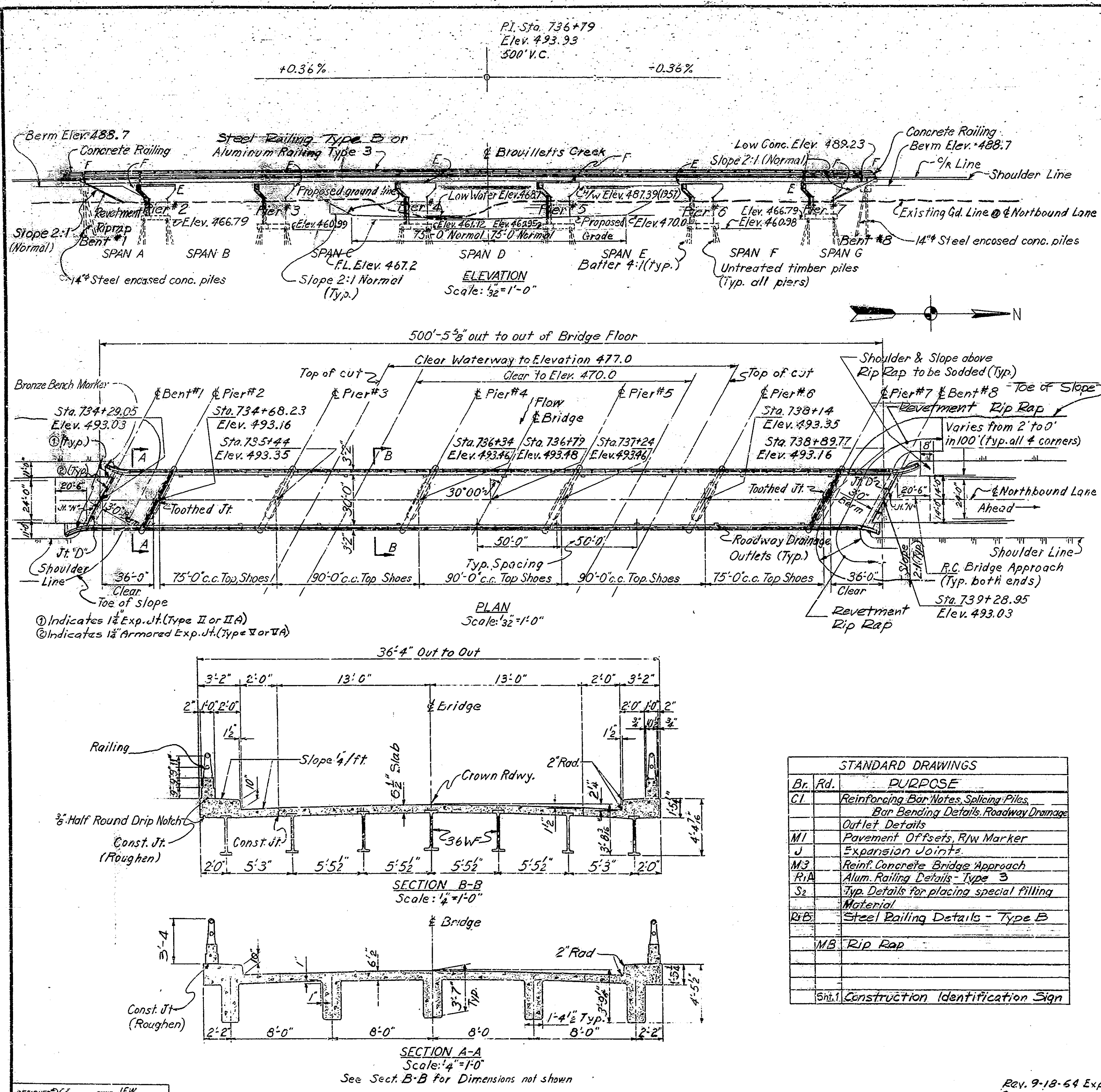
JOINT LEGEND

Joint "D" Indicates 1/2" preformed joint filler under front 6" of girder bearing area.

Joint "N" Indicates 1/4" expansion joint material along vertical sides of keyways and one layer of medium weight roofing felt under horizontal bearing surfaces.

TYPICAL CROSS SECTION

For Typical Cross Section see Sheet No. 2 and No. 3.



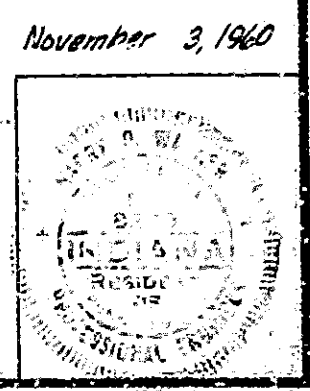
STANDARD DRAWINGS	
Br. Rd.	PURPOSE
C1	Reinforcing Bar Notes, Splicing Piles, Bar Bending Details, Roadway Drainage
	Outlet Details
M1	Pavement Offsets, R/W Marker
J	Expansion Joints
M3	Reinf. Concrete Bridge Approach
R1A	Alum. Railing Details - Type 3
S2	Typ. Details for placing special filling material
R1B	Steel Railing Details - Type B
	MB Rip Rap
	Sh. 1 Construction Identification Sign

GENERAL PLAN

R.G. GIRDER AND CONTINUOUS STEEL BEAM BRIDGE
 7 SPANS: 36.75, 90, 90, 90, 75, 36 - SKEW 30° C.R.T. - 1-30' RDWY 2'-2" WALKS
 OVER BROUILLETTS CREEK ON S.R.63 RELOCATED

STATE HIGHWAY DEPARTMENT OF INDIANA
 VERMILLION COUNTY

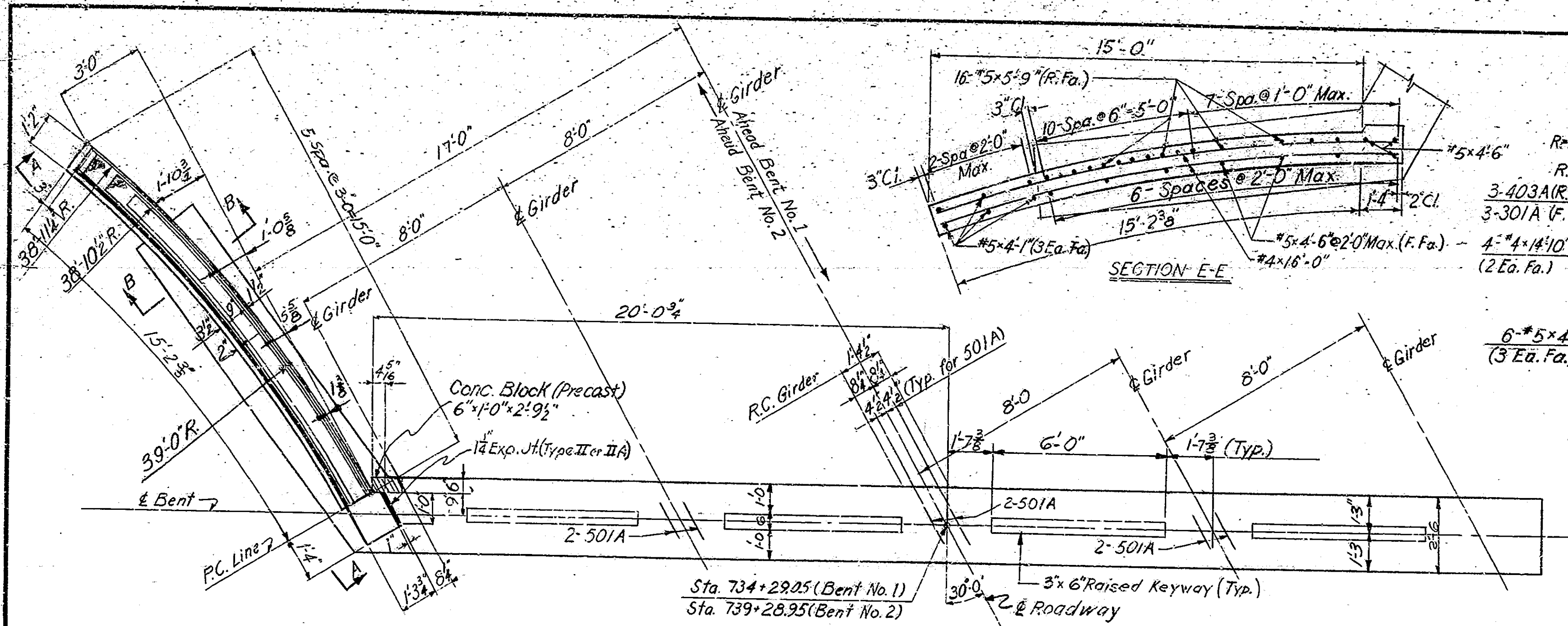
SCALE: AS SHOWN
 SUBMITTED FOR APPROVAL: *Amy Wagner*
 DRAWING: S2 OF 15
 PROJECT: F866(6) STATION 736+79.00
 BRIDGE CONTRACT NO. 6570
 BRIDGE FILE: 63-C9-4323



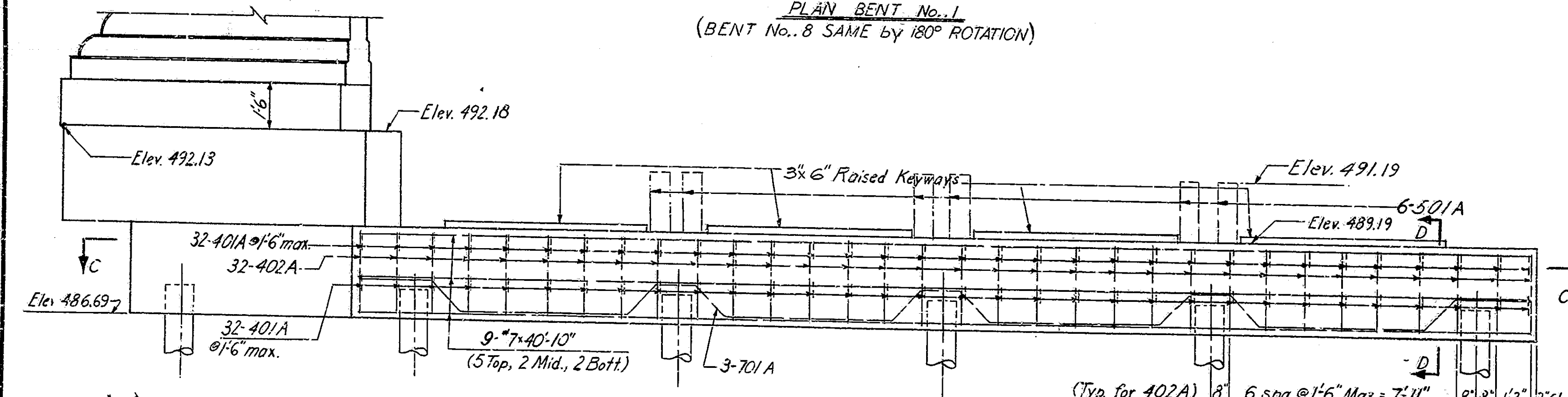
Rev. 9-18-64 Exp. Jts. Std. Drawgs. & Notes.
 Rev. 10-22-63 Notes, Std. Drawg.
 Rev. 7-17-63

DESIGNED BY: C.K.D. JEW
 DRAWN BY: C.K.D. JEW L18-53
 TRACED BY: J.W. HARRIS C.K.D. JEW S-24-53

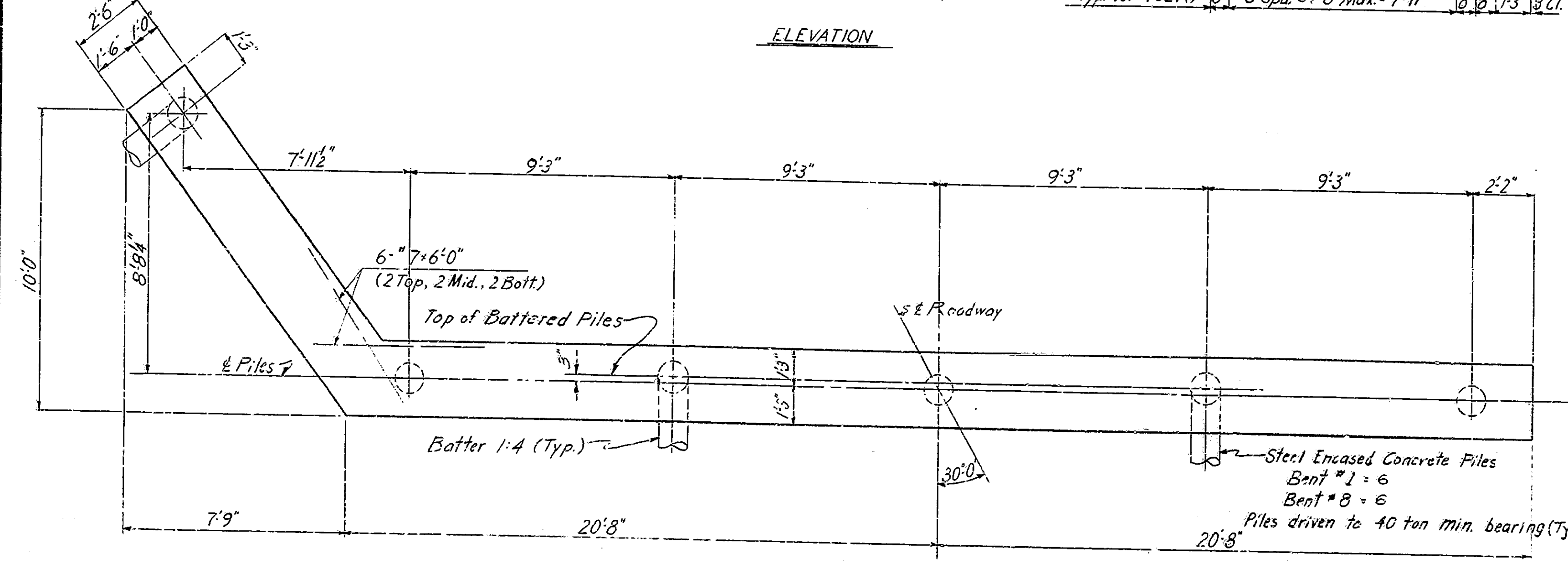
BRIDGES OVER 20' SPAN					
PUB. ROAD NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-866(6)	1960	9	34



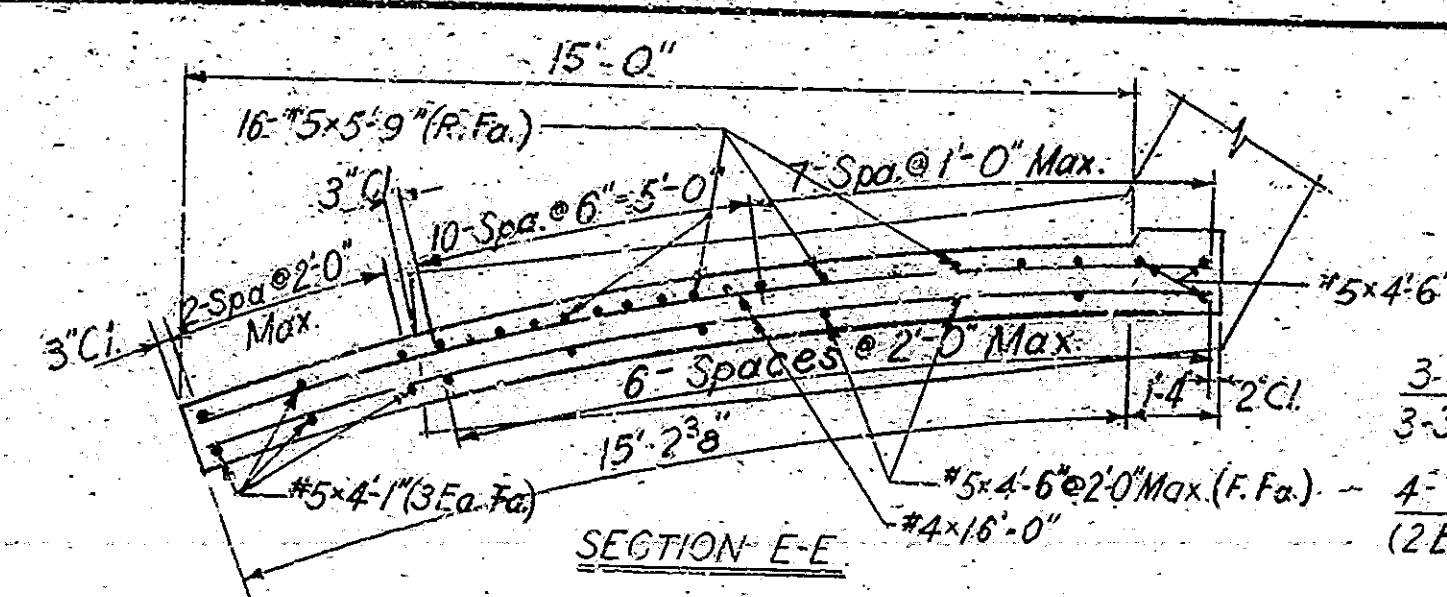
PLAN BENT No. 1
(BENT No. 8 SAME by 180° ROTATION)



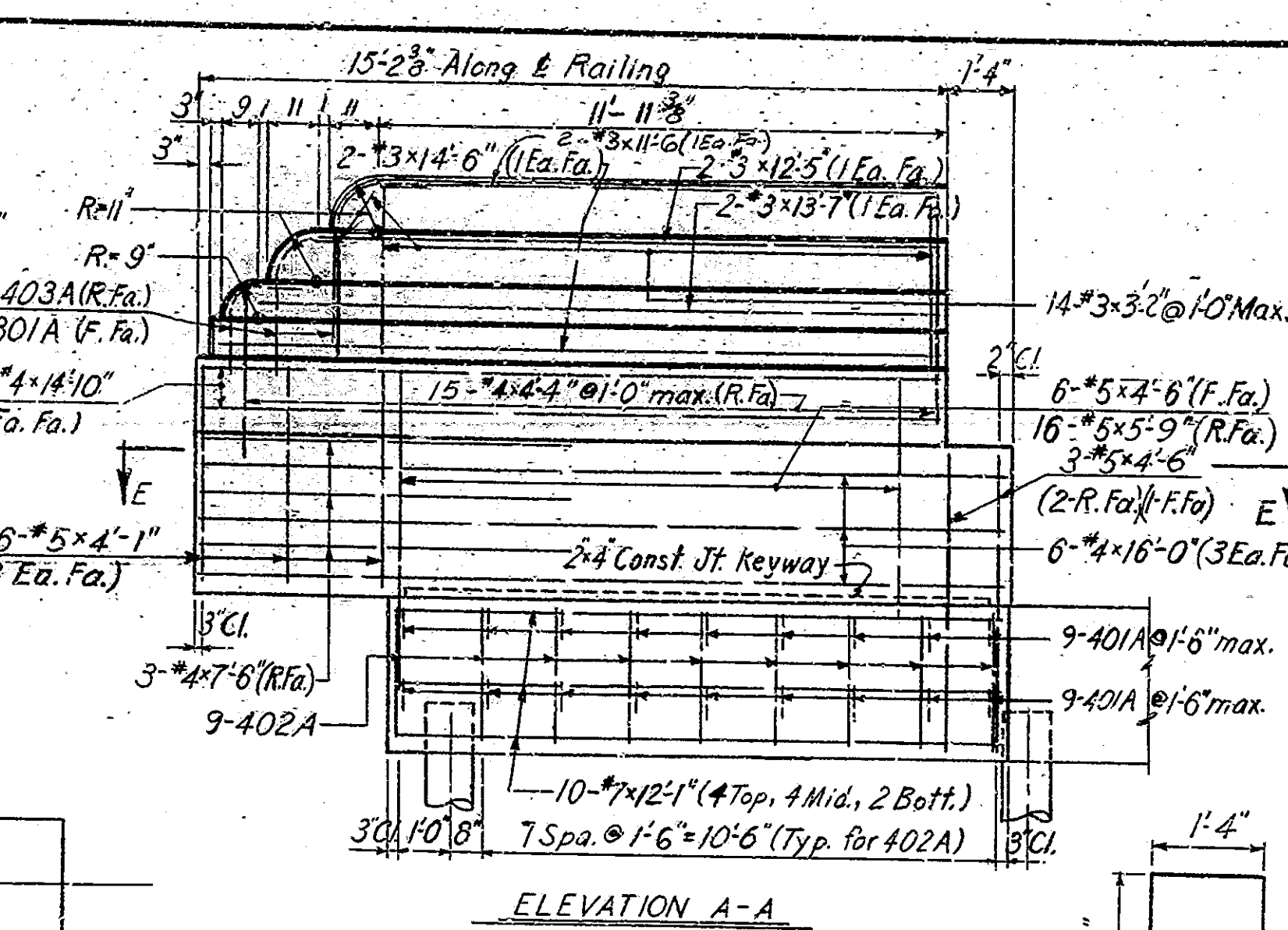
ELEVATION



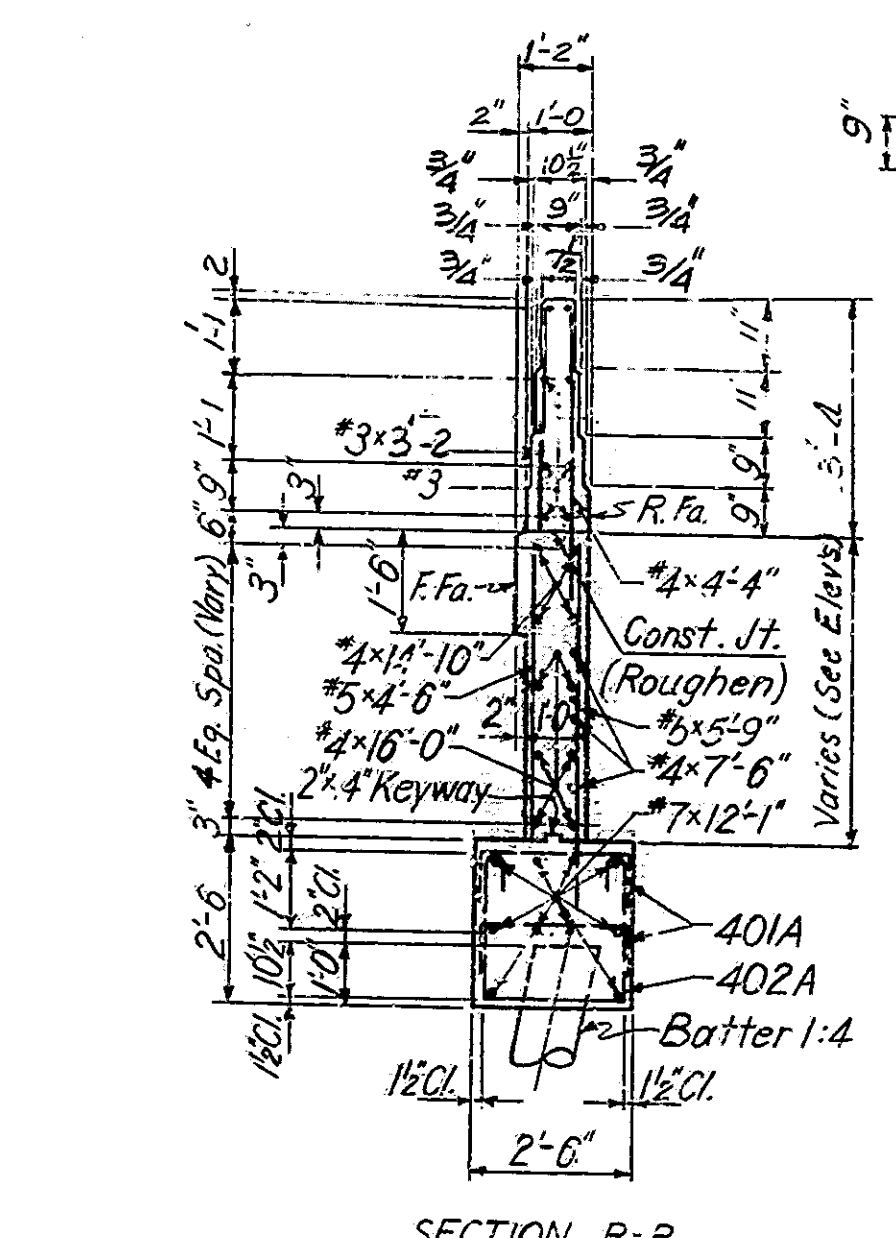
SECTION C-C



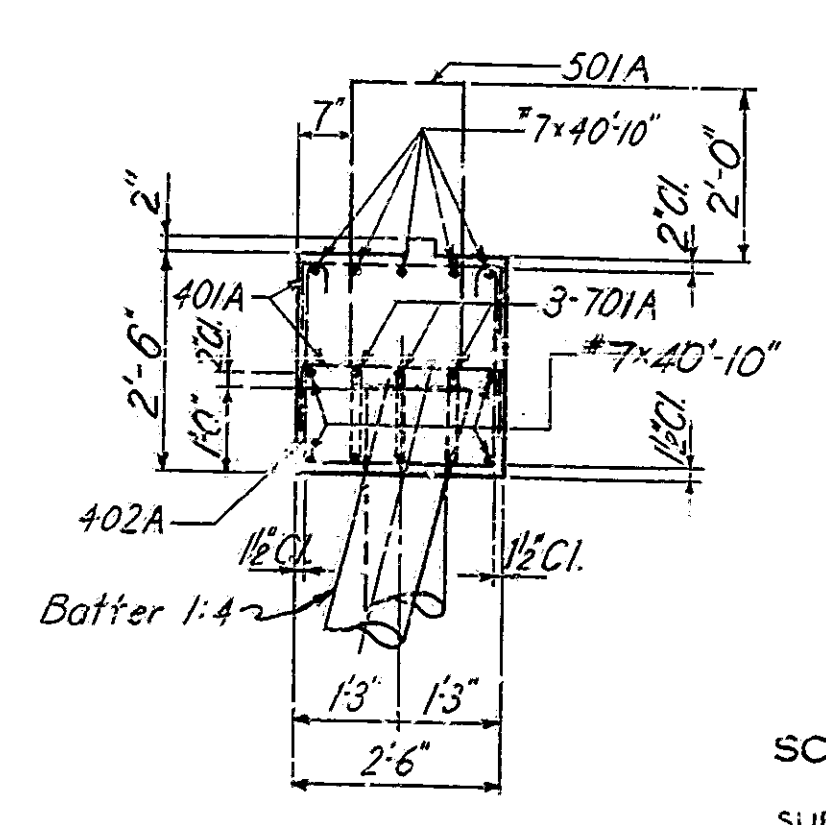
SECTION E-E



ELEVATION A-A



SECTION B-B



SECTION D-D
Scale: 1/2" = 1'-0"

BILL OF MATERIAL
Bent No. 1 (Bent No. 8 Same)

REINFORCING STEEL			
Mark & No. of Size Bars	Length	Weight	
101A 3	44'-5"		
*7 10	12'-1"		
*7 9	40'-10"		
*7 8	6'-0"		
Total #7			1344#
501A 6	7'-10"		
*5 9	4'-6"		
*5 16	5'-9"		
*5 6	4'-1"		
Total #5			213#
403A 3	3'-9"		
401A 82	3'-9"		
402A 41	7'-8"		
*4 15	4'-4"		
*4 6	16'-0"		
*4 3	7'-6"		
*4 4	14'-10"		
Total #4			585#
301A 3	3'-9"		
*3 2	13'-7"		
*3 2	14'-6"		
*3 2	12'-5"		
*3 2	11'-6"		
*3 12	3'-2"		
Total #3			60#
TOTAL STEEL			2202#

CONCRETE	
Class 'F' Cap	12.4 Cu Yds
Class 'F' Wing	8.8 "
Total Class 'F'	15.2 Cu Yds
MISCELLANEOUS	
6" (14x7ga.) Steel Encased Conc. Piles @ Approx. 30 = 180 Lin. Ft.	

NOTES
See Bridge Std. C1 for Reinforcing Bar Notes
See Drawing S2 for General Notes.
Railing and wing bars to be bent in the field as required.

CAP NOT TO BE POURED UNTIL AFTER FILL HAS BEEN COMPLETED UP TO APPROXIMATELY THE ELEVATION OF THE BOTTOM OF THE CAP.

BENT 1 & 8 DETAILS
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 3/8" = 1'-0" UNLESS NOTED
SUBMITTED FOR APPROVAL: *Harry H. Wagner*
DRAWING: S3 OF 15
PROJECT: F-866(6)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323

November 3, 1960

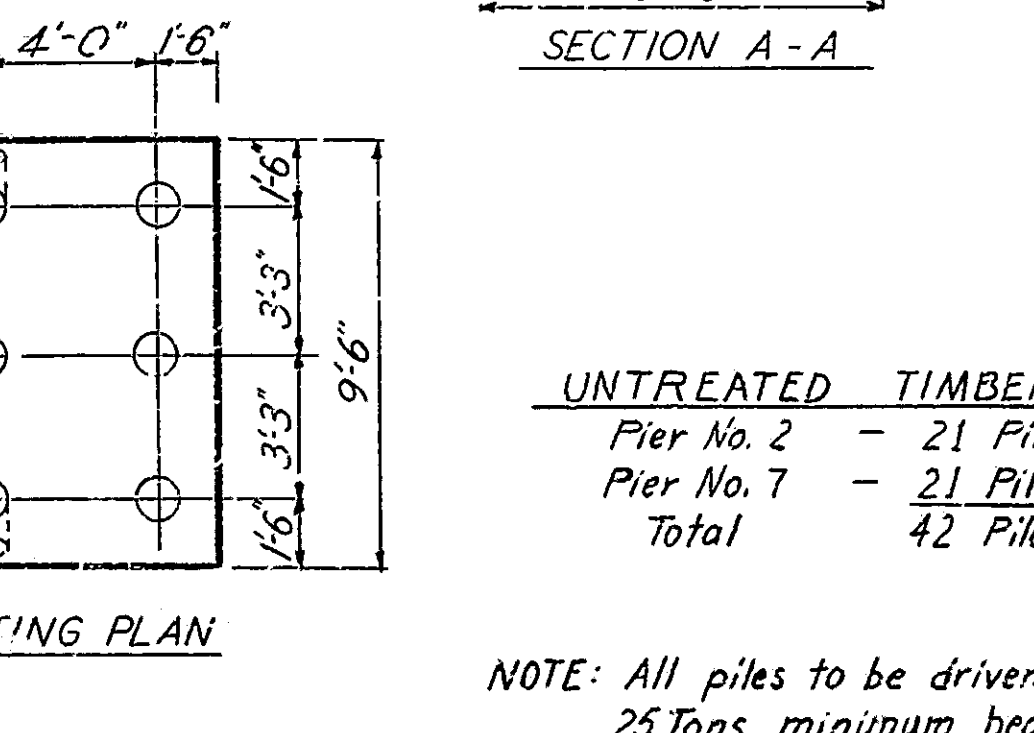
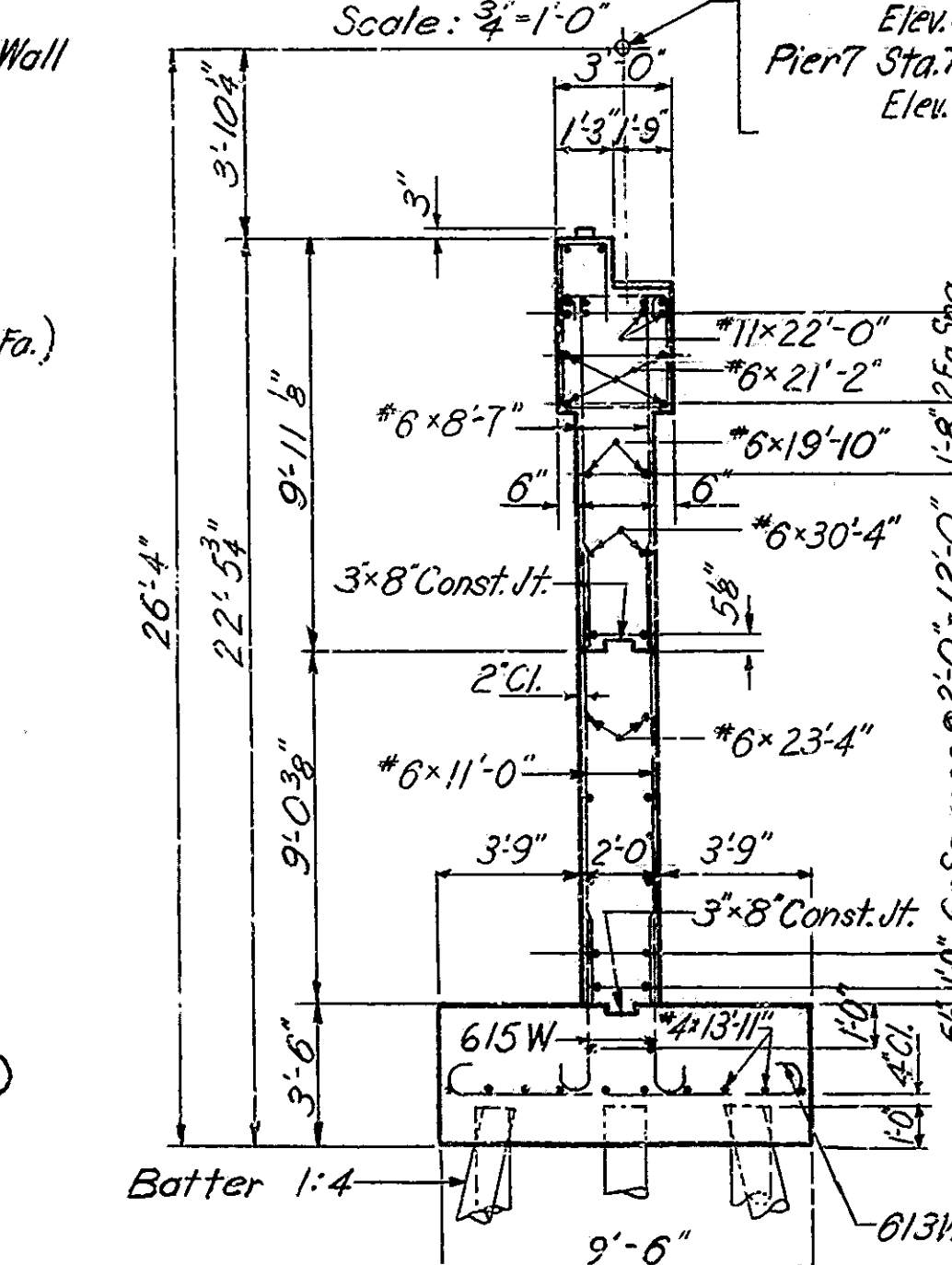
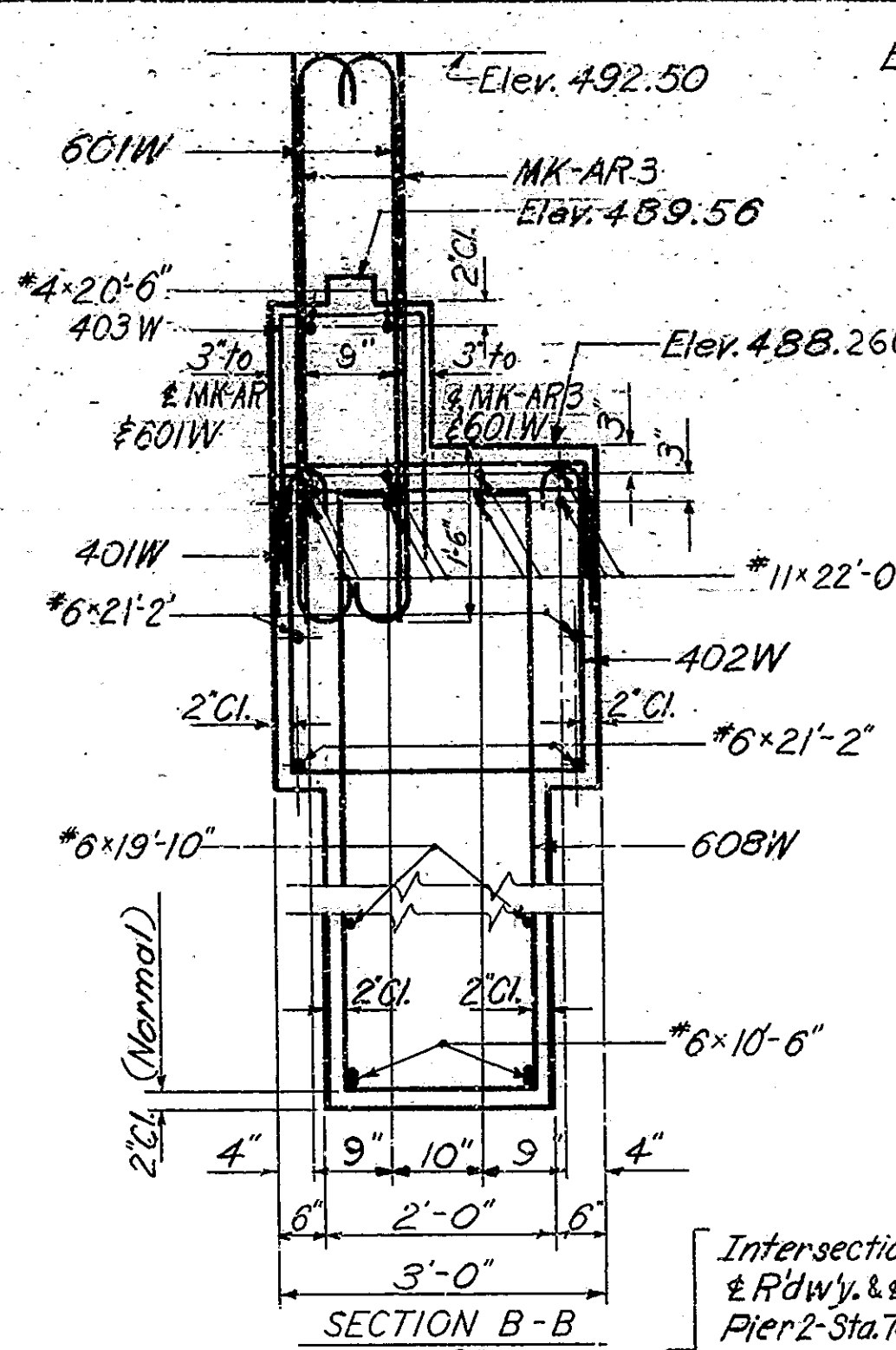
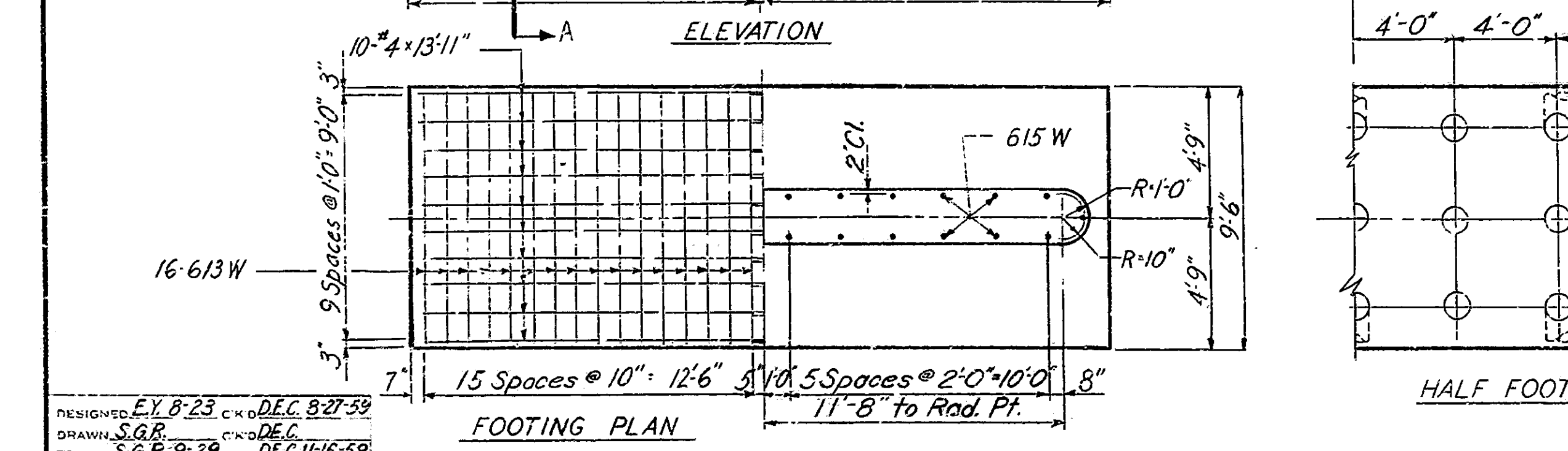
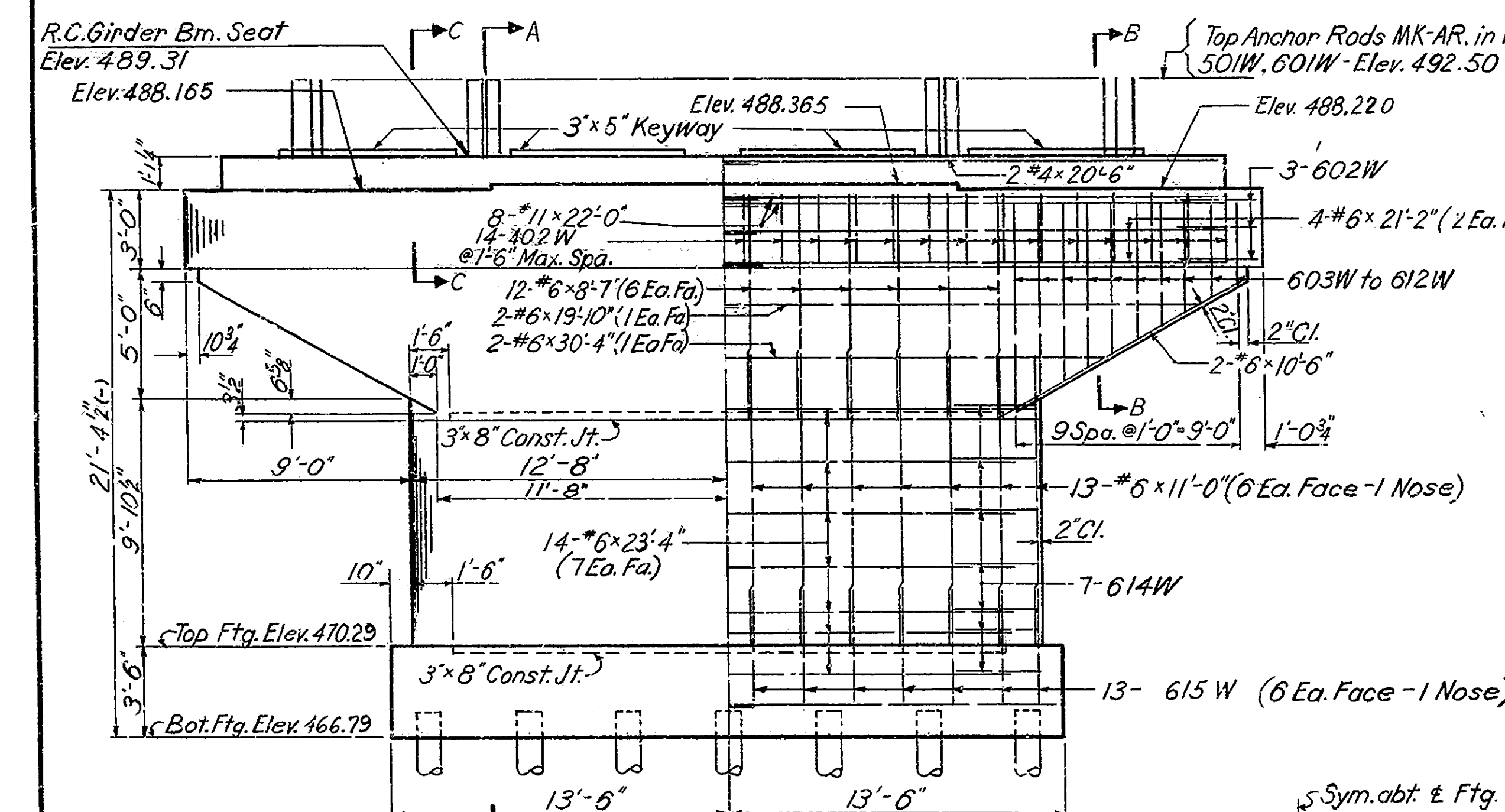
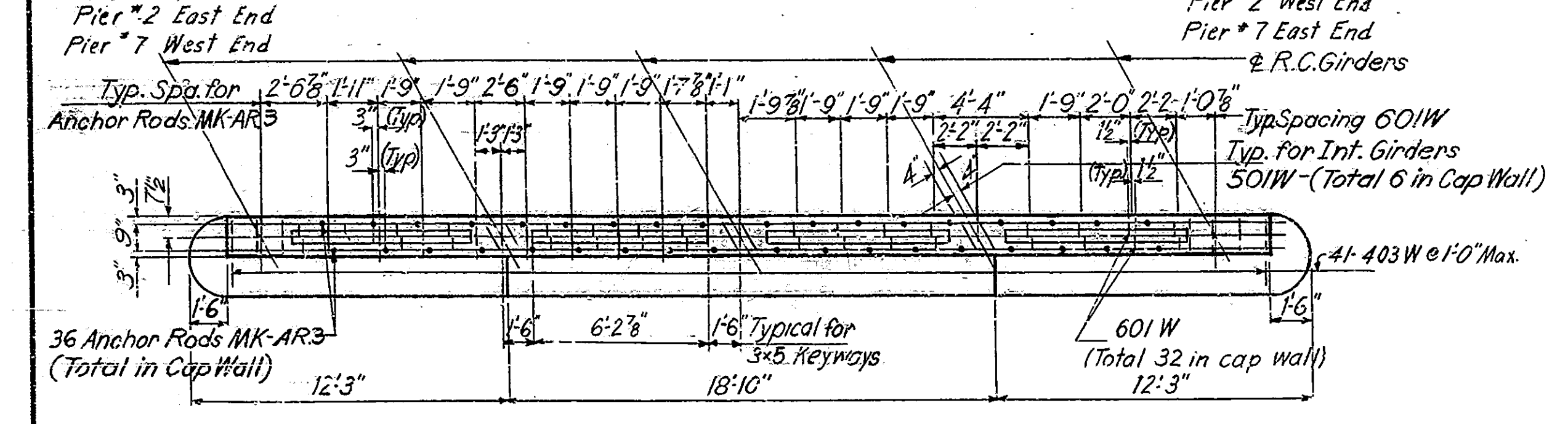
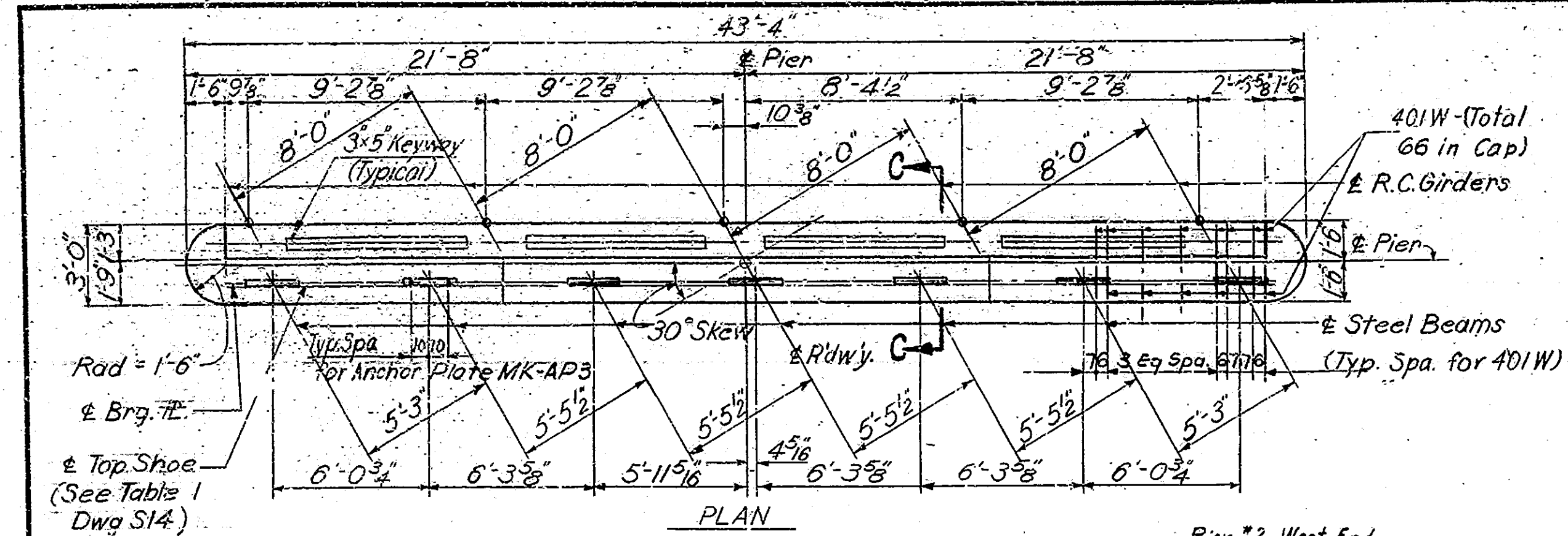
DESIGNED BY: C.K.D. 4-22-59
DRAWN BY: C.K.D. 5-14-59
TRACED BY: C.K.D. 5-14-59

Rev. 9-18-64
Rev. 7-17-63

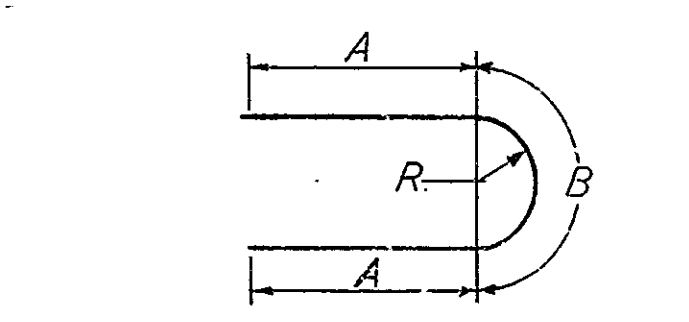
BRIDGES OVER 20' SPAN					
PIER NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-866(6)	1960	10	34

BILL OF MATERIALS PIER 2
(Pier 7 Same)

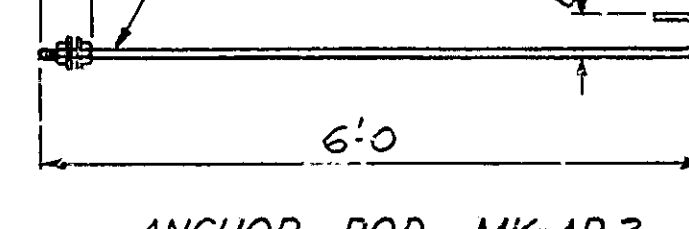
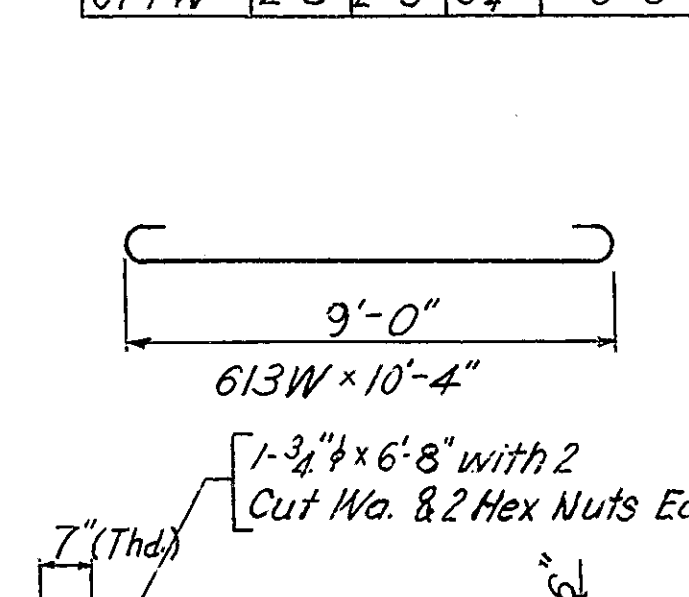
CONCRETE		MARK & NO. OF SIZE BARS	LENGTH	WEIGHT
Class "E" in Ftg.	33.3 Cu Yds	401W	66	4'-8"
Class "E" above Ftg. to Const. Jt.	16.6 Cu Yds	402W	28	8'-10"
Class "F" in Capping above Const. Jt.	30.7 Cu Yds	403W	41	4'-10"
		Total * 4		744#
MISCELLANEOUS		501W	6	12'-0"
21 Untreated Timber Piles @ 25'-0" (Approx.)		601W	.32	6'-6"
		602W	.6	8'-0"
		603W	.2	8'-11"
		604W	.2	10'-0"
		605W	.2	11'-2"
		606W	.2	12'-3"
		607W	.2	13'-5"
		608W	.2	14'-6"
		609W	.2	15'-8"
		610W	.2	16'-9"
		611W	.2	17'-11"
		612W	.2	19'-0"
		613W	32	10'-4"
		614W	14	6'-5"
		615W	26	4'-10"
		*6	8	21'-2"
		*6	4	19'-10"
		*6	2	30'-4"
		*6	14	23'-4"
		*6	26	11'-0"
		*6	4	10'-6"
		*6	24	8'-7"
		Total * 6		3382#
		*11	16	22'-0"
		Total Steel		6071#



MARK & SIZE	A	LENGTH
603W	2'-11 1/2"	8'-11"
604W	3'-6"	10'-0"
605W	4'-1"	11'-2"
606W	4'-7 1/2"	12'-3"
607W	5'-2 1/2"	13'-5"
608W	5'-9"	14'-6"
609W	6'-4"	15'-8"
610W	6'-10 1/2"	16'-9"
611W	7'-5 1/2"	17'-11"
612W	8'-0"	19'-0"



MARK & SIZE	A	B	R	LENGTH
602W	2'-0"	4'-0"	1-3/4"	8'-0"
614W	2'-0"	2'-5"	9/4"	6'-5"



ANCHOR ROD MK-AR3

Scale: 2" = 1'-0"

NOTES:

Pier Reinforcement is symmetrical about & Pier.

Anchor plates MK-AR3 to be pre-set in concrete.

For detail of anchor plates see Drwg. 56.

See Bridge Std. C1 for reinforcing steel notes.

See Drwg. 52 for General Notes.

PIERS 2 & 7 DETAILS
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 1/4" = 1'-0" UNLESS NOTED

SUBMITTED FOR APPROVAL: *Harry D. Wagner*

November 3, 1960

DRAWING: S4 OF 15

PROJECT: F-866(6)

BRIDGE CONTRACT NO. 6570

BRIDGE FILE: -63-C9-4323

DESIGNED BY: B-23 C.K.D. DEC. 8-27-59

DRAWN BY: S.G.R. C.K.D. DEC. 8-27-59

CHECKED BY: S.G.R. C.K.D. DEC. 11-16-59

UNTREATED TIMBER PILES

Pier No. 2 - 21 Piles

Pier No. 7 - 21 Piles

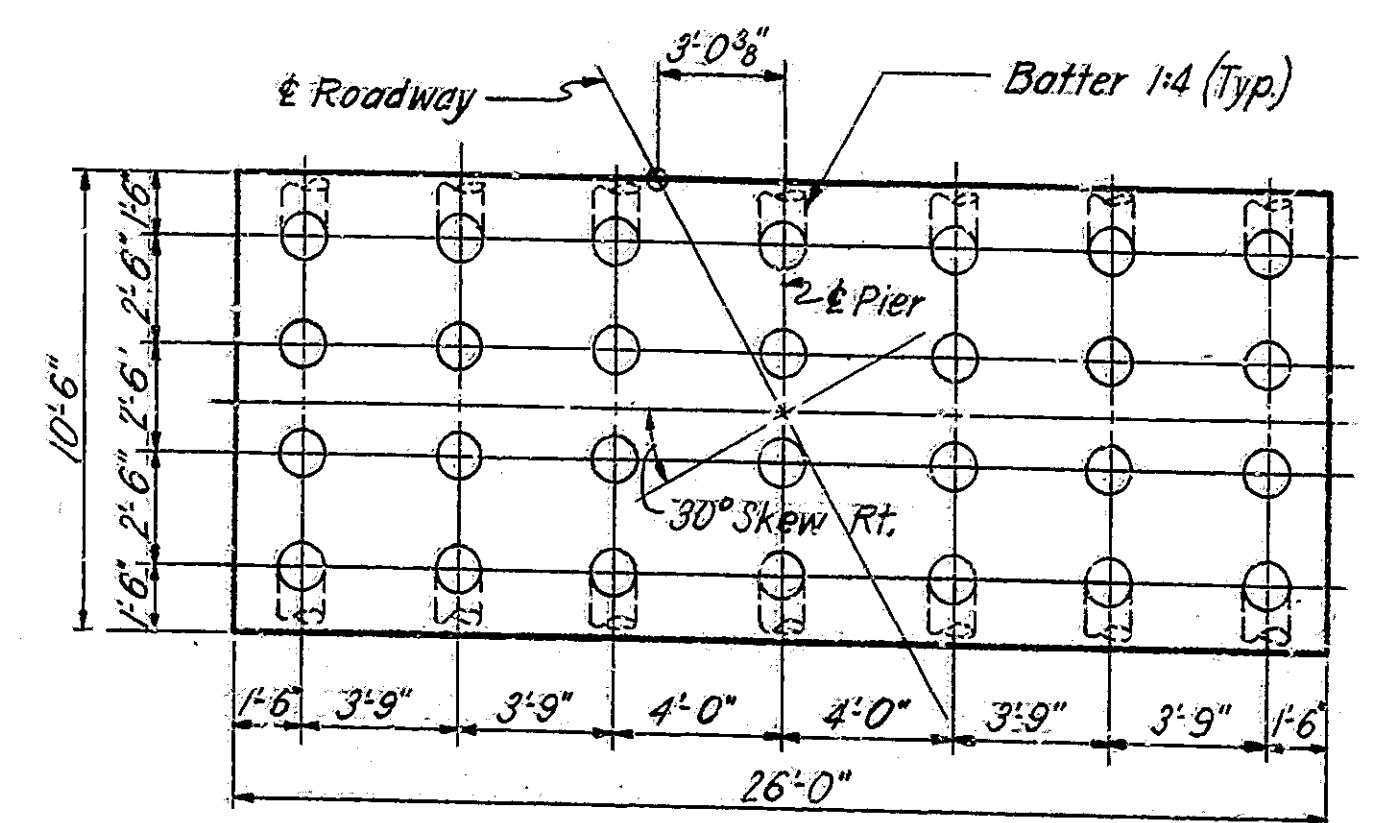
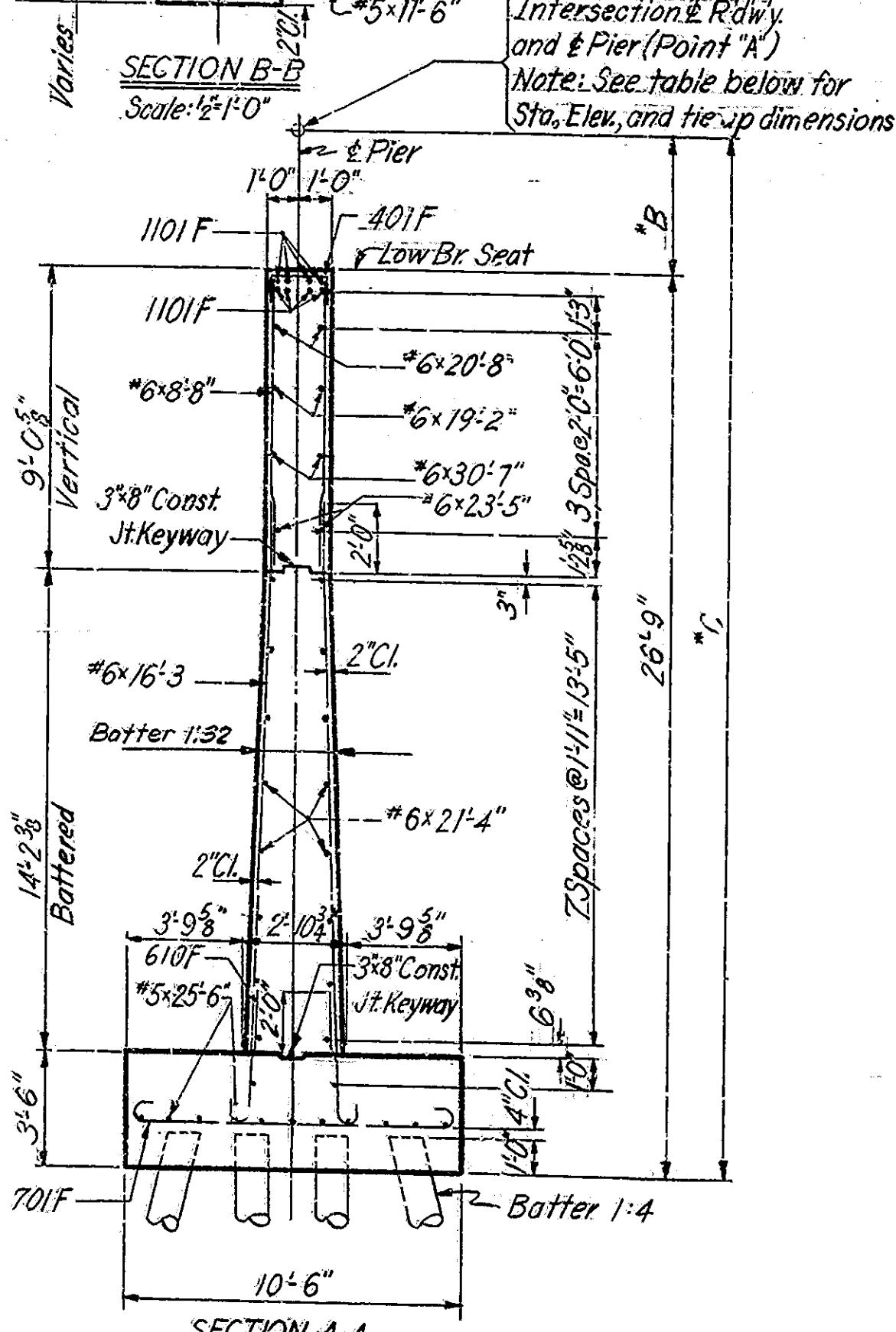
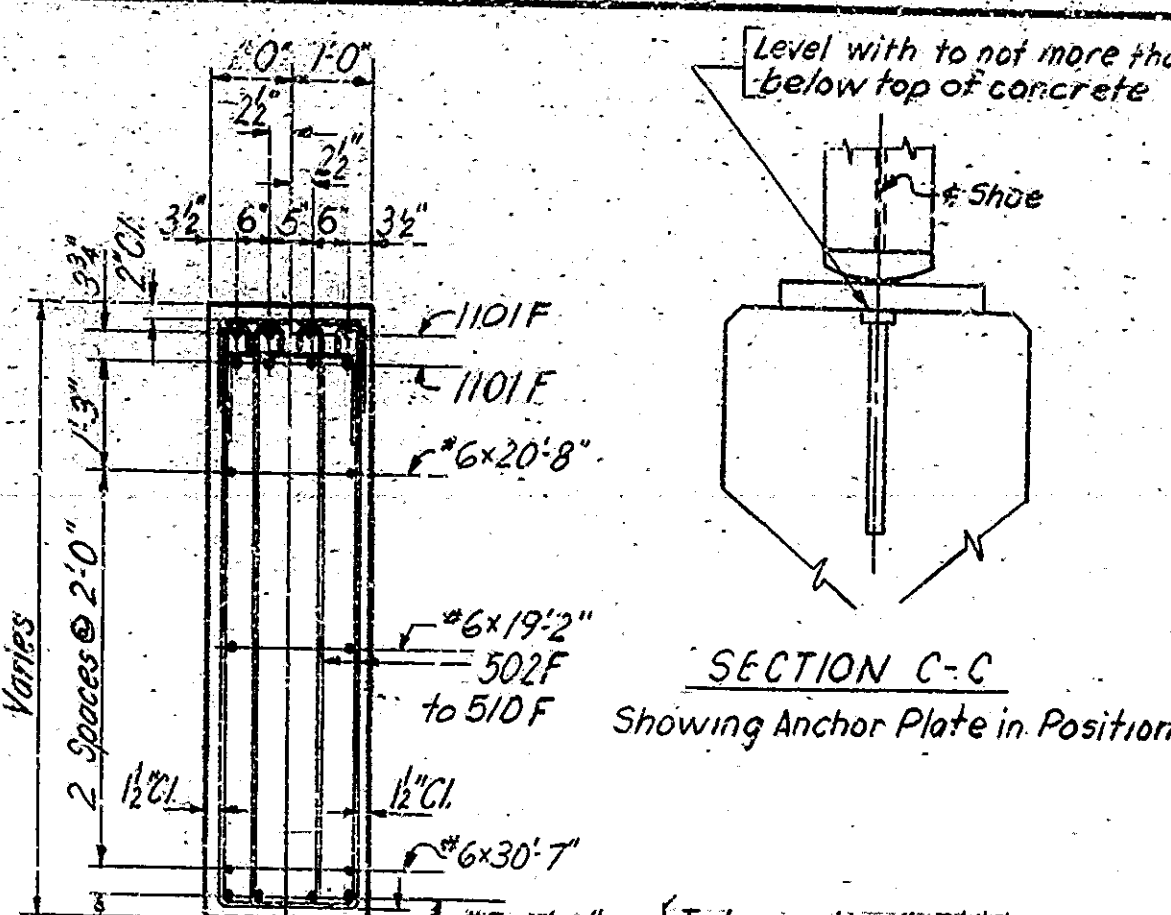
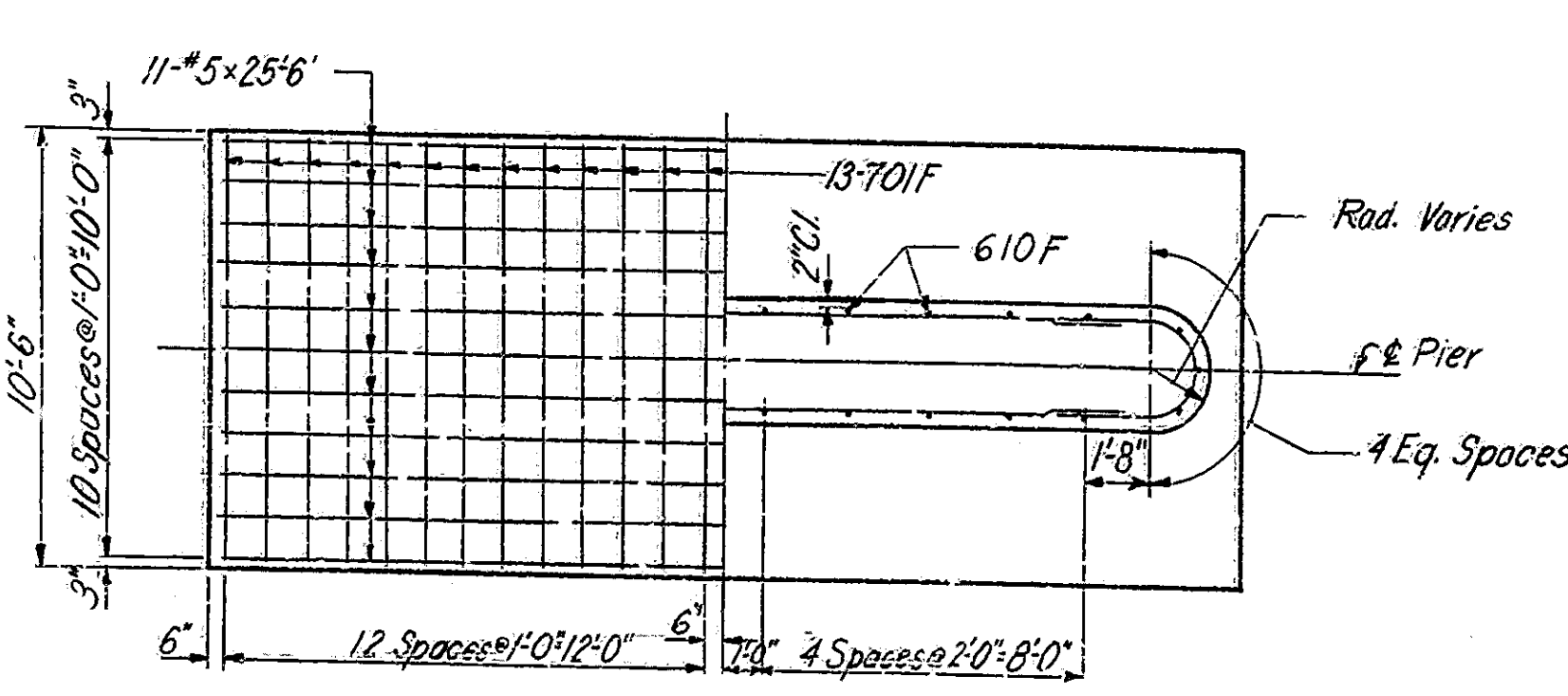
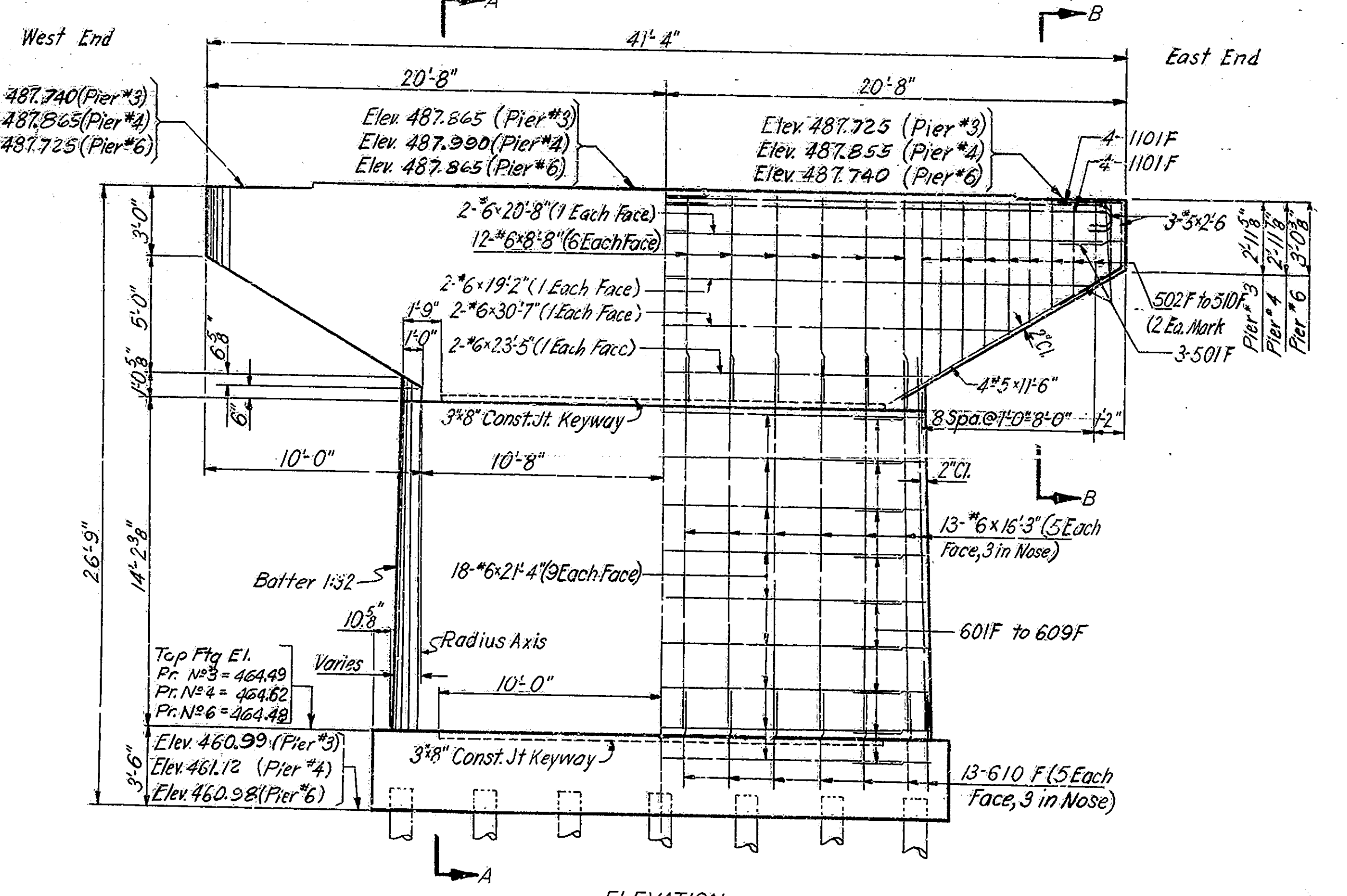
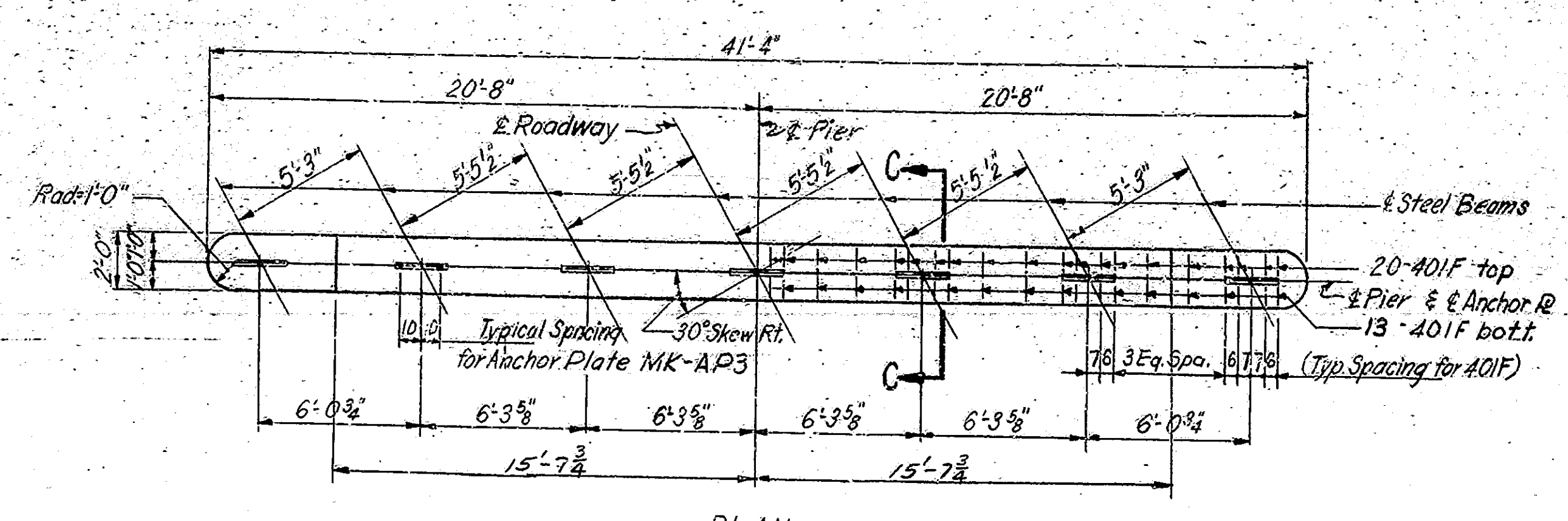
Total 42 Piles

NOTE: All piles to be driven to 25 Tons minimum bearing.

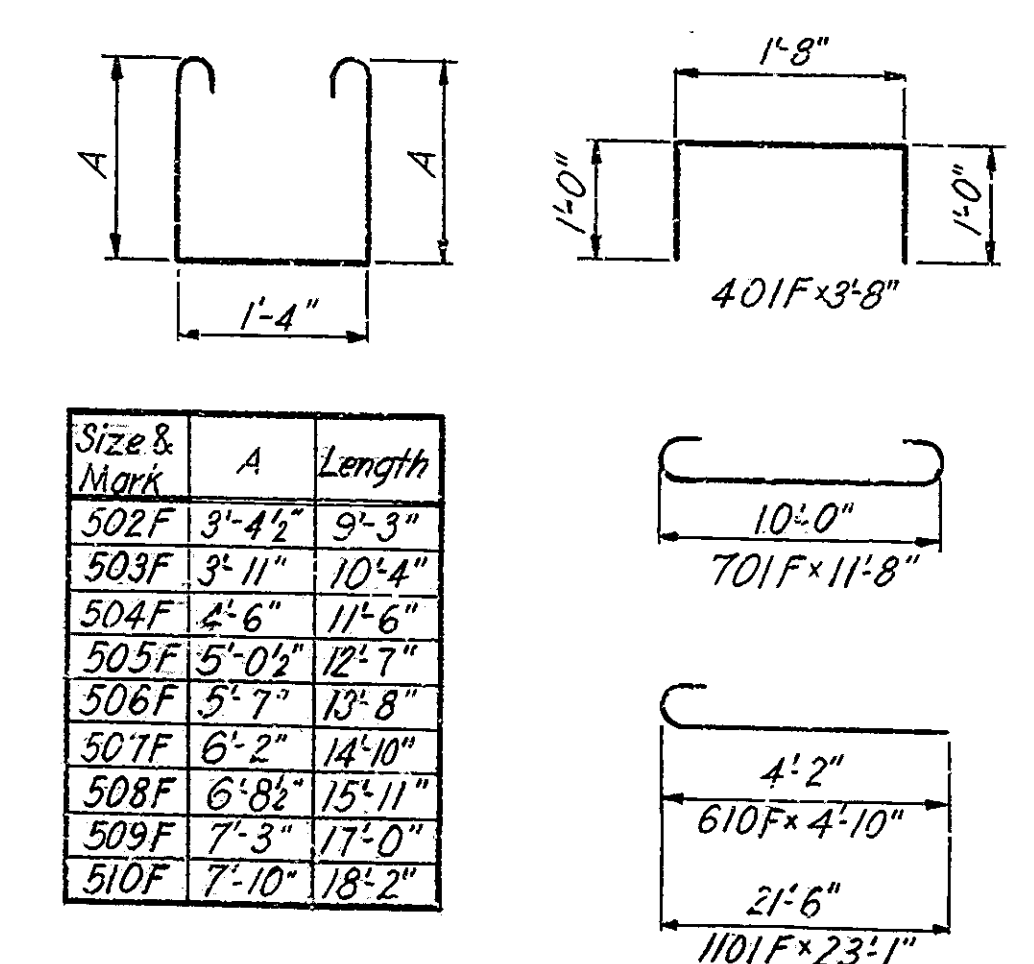
Rev. 9-18-64 Anchor Pls & Rods.

Rev. 7-17-63

BRIDGES OVER 20' SPAN				
PUB. ROAD NO.	STAFF	PROJECT NO.	FISCAL YEAR	SHEET NO.
4	IND.	F-856(6)	1960	11
				TOTAL SHEETS
				34



Size & Mark	A	B	R	Length
601F	2'-5 1/2"	2'-0 3/8"	9 5/16"	6'-6"
602F	2'-7 1/2"	2'-0 1/4"	10 1/16"	6'-8"
603F	2'-9 3/4"	2'-0 3/8"	10 3/8"	6'-10"
604F	3'-0"	2'-0"	11 1/2"	7'-0"
605F	3'-2"	2'-0 3/8"	11 3/8"	7'-3"
606F	3'-4 1/4"	2'-0 3/8"	11 5/8"	7'-5"
607F	3'-6 3/4"	2'-0 3/8"	11 7/8"	7'-7"
608F	3'-9 1/4"	2'-0 3/8"	12 1/8"	7'-10"
609F	3'-11"	2'-0"	12 3/8"	7'-11"
501F	2'-7"	1'-8"	9 5/8"	5'-11"



NOTES
 Pier Reinforcement Symmetrical About E.
 Anchor plate MK-AP3 to be pre-set in concrete.
 For detail of anchor plate see Drwg 56.
 See Bridge Std. C1 for reinforcing bar notes.
 See Drwg. 52 for General Notes.

Pier No.	Station	Elevation	*B	*C
3	735+44	493.350	5'-7 3/8"	32'-4 3/8"
4	736+34	493.465	5'-7 1/8"	32'-4 1/8"
6	738+14	493.350	5'-7 3/8"	32'-4 3/8"

28 Untreated Timber Piles driven to 25 tons min. brg.

BILL OF MATERIALS PIER 3 (PIERS 4 & 6 SAME)

Size & Mark	No. of Bars	Length	Weight
1101F	16	23'-1"	1962
701F	26	11'-8"	620
601F	2	6'-6"	
602F	2	6'-8"	
603F	2	6'-10"	
604F	2	7'-0"	
605F	2	7'-3"	
606F	2	7'-5"	
607F	2	7'-7"	
608F	2	7'-10"	
609F	2	7'-11"	
*6	18	2'-4"	
*6	24	8'-8"	
*6	4	20'-8"	
*6	4	19'-2"	
*6	2	30'-7"	
*6	2	23'-5"	
*6	26	16'-3"	
610F	26	4'-11"	
Total #6			2,310
504F	4	11'-6"	
505F	4	12'-7"	
506F	4	13'-8"	
507F	4	14'-10"	
508F	4	15'-11"	
509F	4	17'-0"	
510F	4	18'-2"	
502F	4	9'-3"	
*5	11	25'-6"	
503F	4	10'-4"	
*5	8	11'-5"	
*5	6	2'-6"	
501F	6	5'-11"	
Total #5			955
401F	66	3'-8"	162
Total Steel			6,009

CONCRETE	
Class E in Fig.	35.4 cu. yd.
Class E above Ft.	
To const. Jt.	238 cu. yd.
Class F in coping above const. Jt.	
Pier #3	232 cu. yd.
Pier #4	231 cu. yd.
Pier #6	232 cu. yd.

MISCELLANEOUS	
28 Untreated Timber piles x 25'-0" (Approx.)	
=	700 L.F.
Anchor PK MK-AP3	7 Each

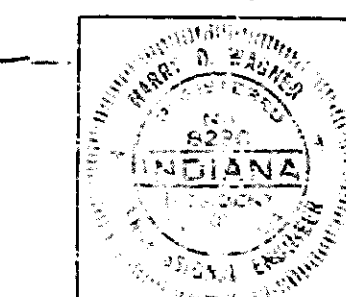
PIERS 3, 4 & 6 DETAILS
 STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 1/4" = 1'-0" UNLESS NOTED

SUBMITTED FOR APPROVAL: *Harry A. Wagner*

November 9, 1960

DRAWING: 55 OF 15
 PROJECT: F-856(6)
 BRIDGE CONTRACT NO. 6570
 BRIDGE FILE: 63-C9-4323



DESIGNED: DCE-5-17-60, C.K.O. (E.C. 5-18-60)
 DRAWN: JRC 6-1-60, C.K.O. (E.C. 6-6-60)
 TRACED: JRC 6-1-60, C.K.O. (E.C. 6-6-60)

Rev. 9-18-64 Anchor Pls.
 Rev. 7-17-63

BRIDGES OVER 20' SPAN					
PIER ROAD	STATE	PROJECT	FISCAL	SHEET	TOTAL
NO.		NO.	YEAR	NO.	SHEETS
4	IND.	F-866(6)	1960	12	34

BILL OF MATERIALS

Size & Mark	No. of Bars	Length	Weight
1101C	16	23'-1"	1962

801C	31	13'-8"	4131
601C	2	6'-6"	
602C	2	6'-8"	
603C	2	6'-10"	
604C	2	7'-0"	
605C	2	7'-3"	
606C	2	7'-5"	
607C	2	7'-7"	
608C	2	7'-10"	
609C	2	7'-11"	
810C	2	8'-1"	
611C	48	4'-10"	
#6	20	21'-4"	
#6	26	17'-7"	
#8	12	25'-6"	
#8	24	8'-8"	
#6	2	11'-0"	
#6	4	20'-8"	
#6	4	19'-2"	
#6	2	30'-7"	
#6	2	23'-5"	
Total #6			3434

501C	6	5'-11"	
502C	4	9'-3"	
503C	4	10'-4"	
504C	4	11'-6"	
505C	4	12'-7"	
506C	4	13'-8"	
507C	4	14'-10"	
508C	4	15'-11"	
509C	4	17'-0"	
510C	4	18'-2"	
#5	8	11'-6"	
#5	6	2'-6"	
Total #5			663

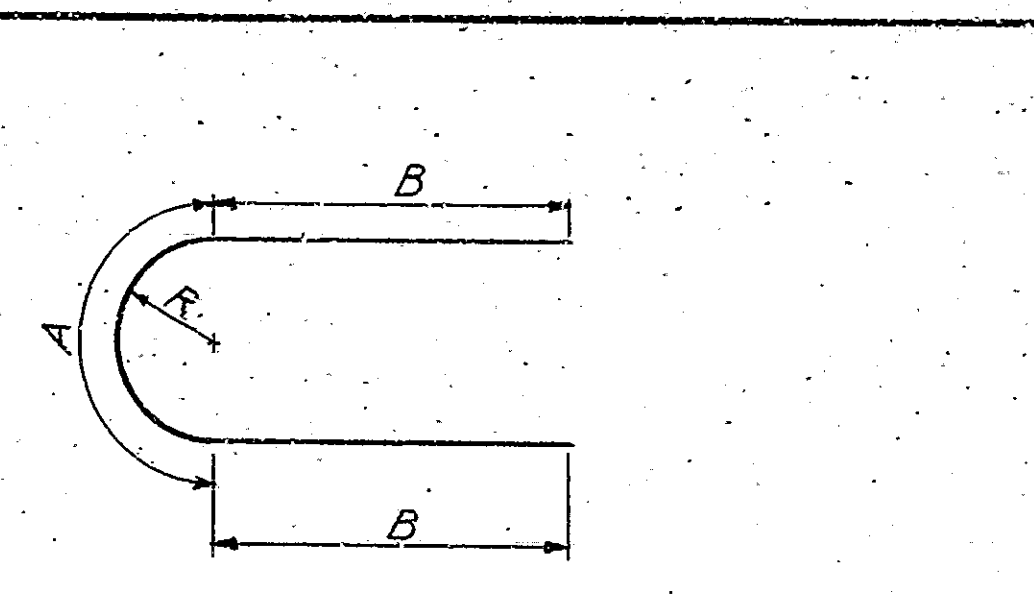
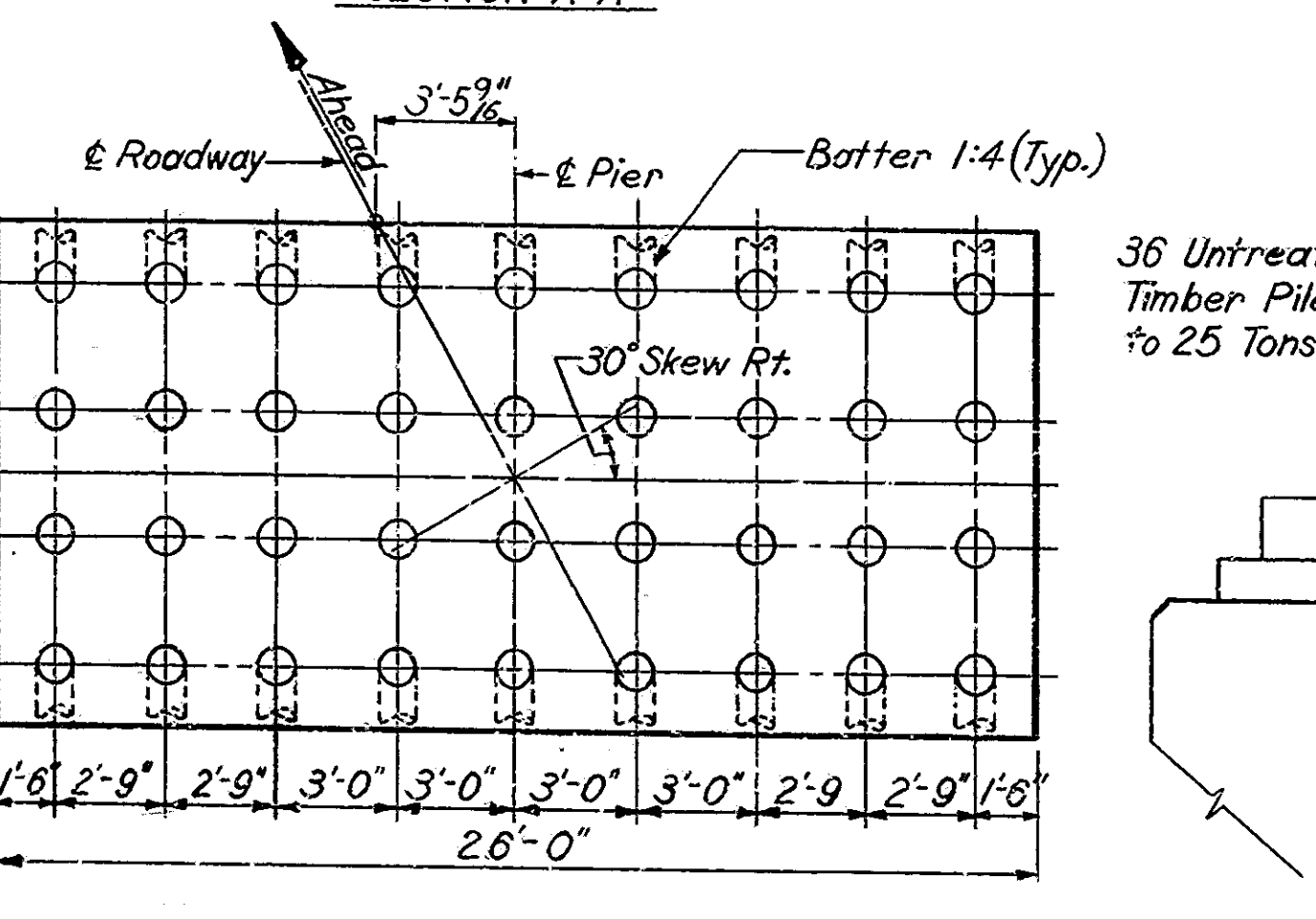
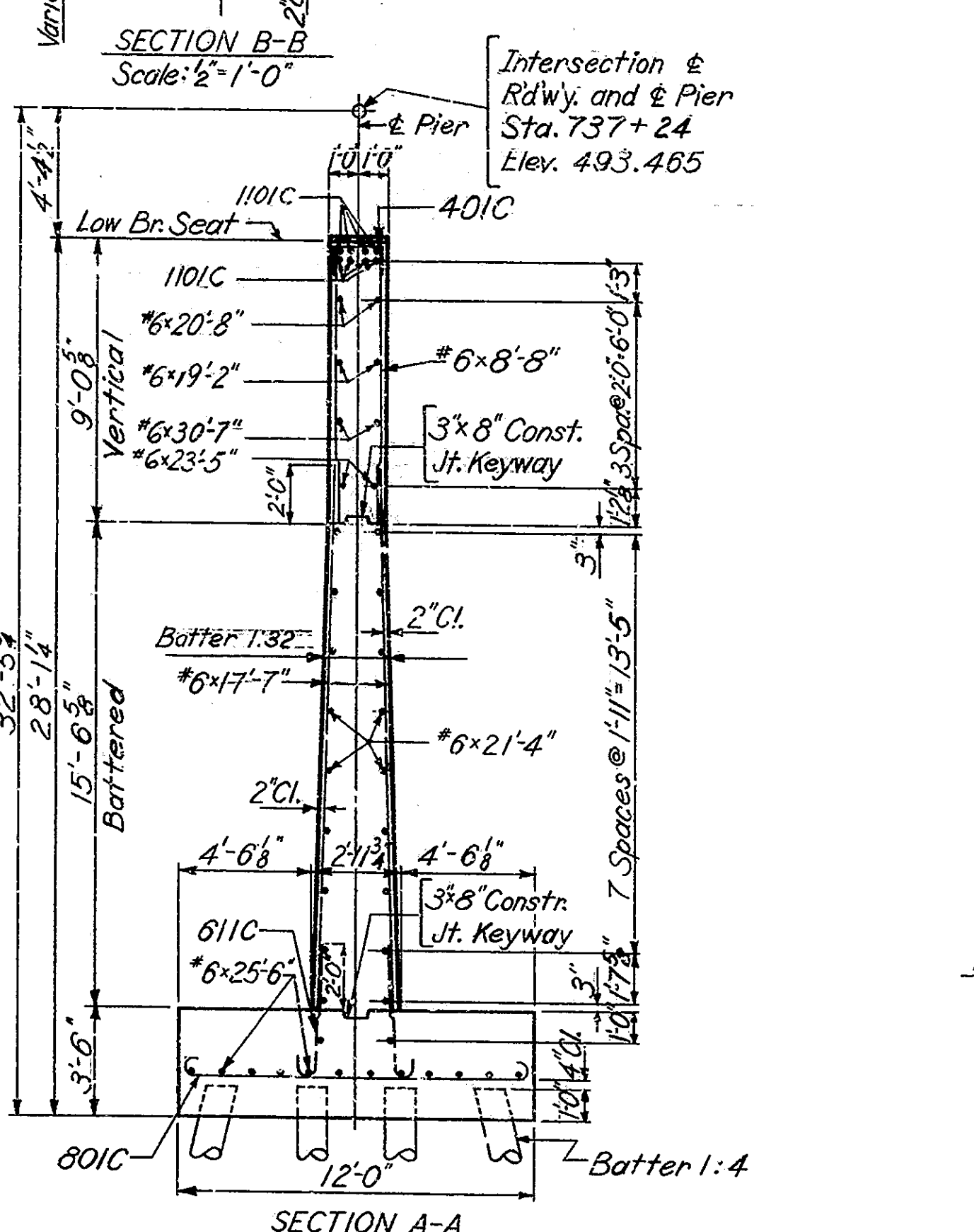
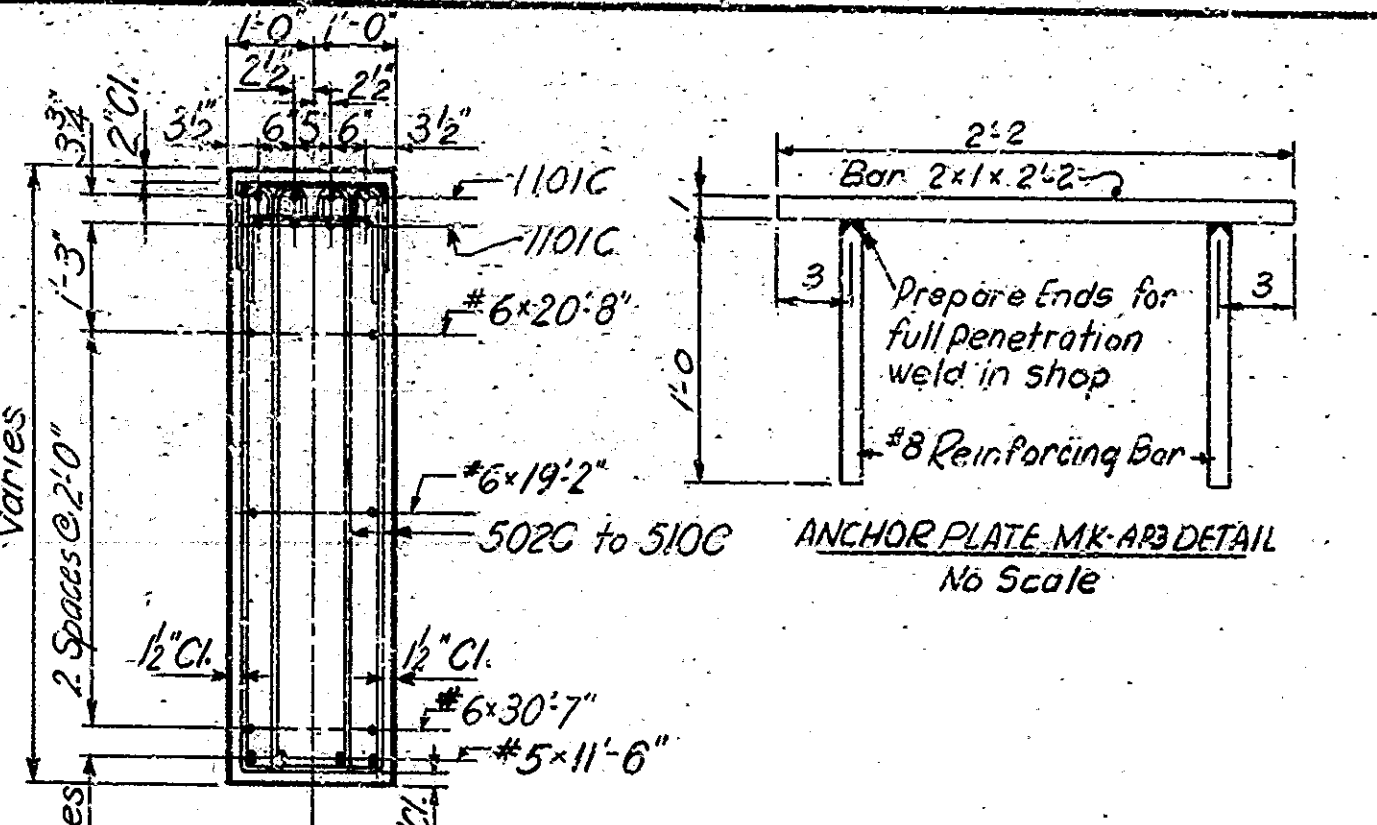
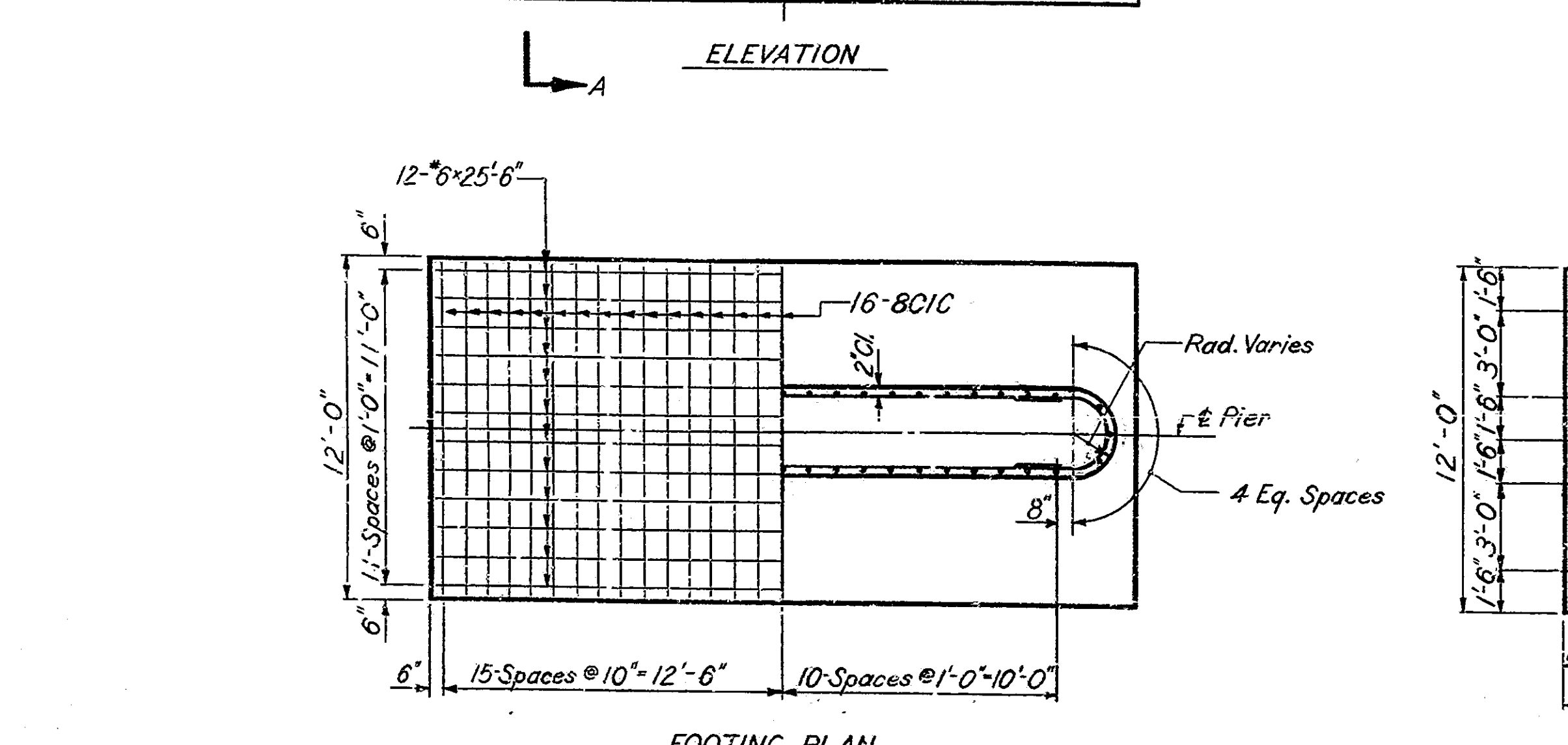
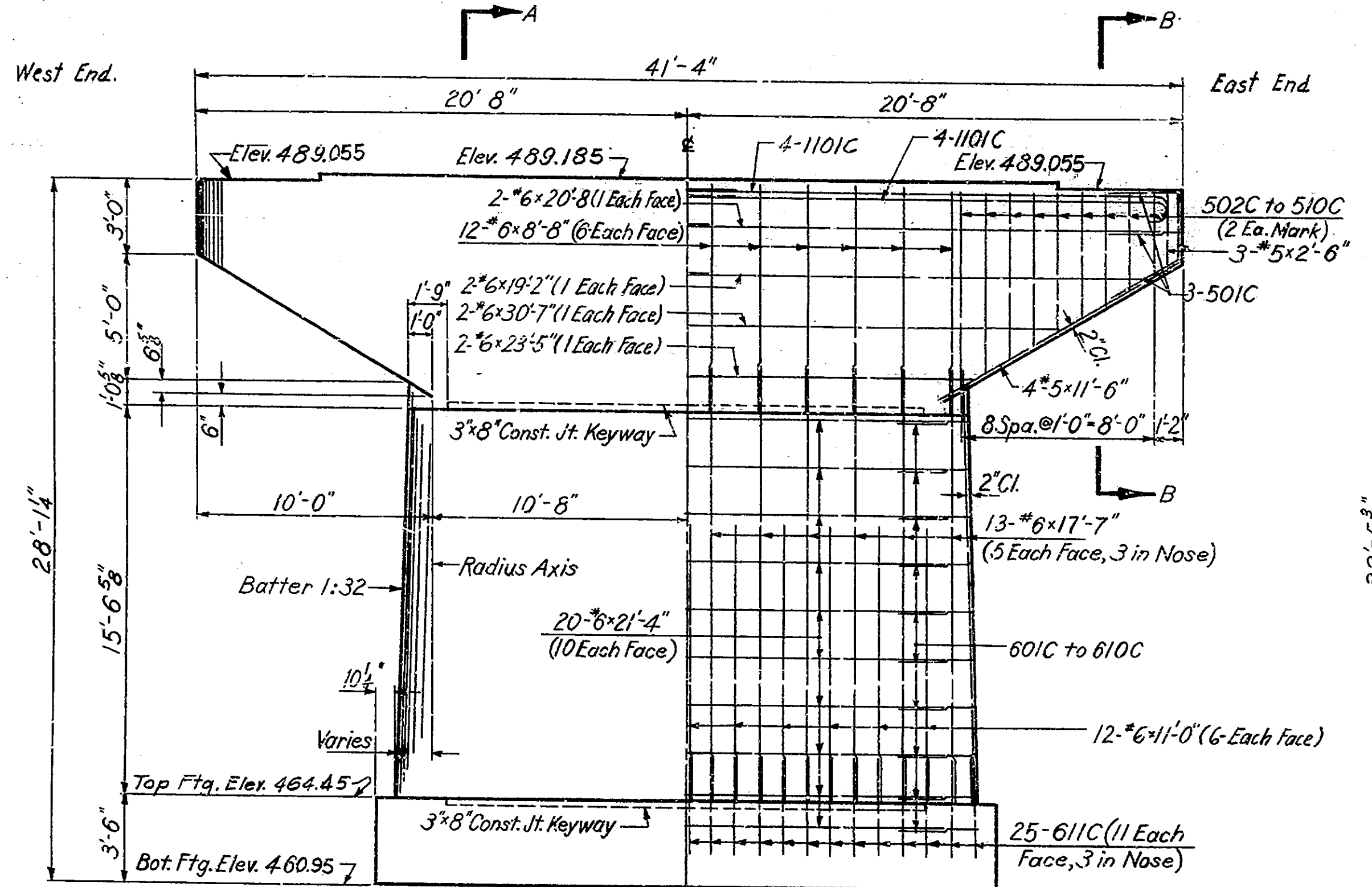
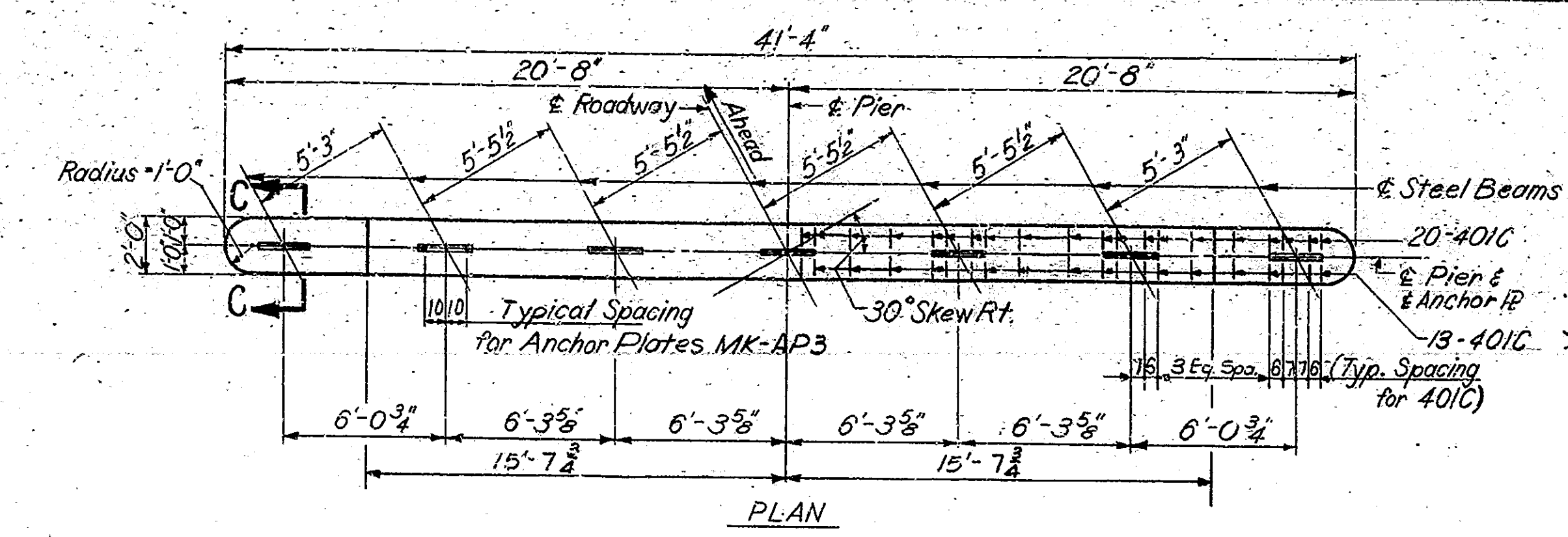
401C	66	3'-8"	162
Total Steel			7352

CONCRETE

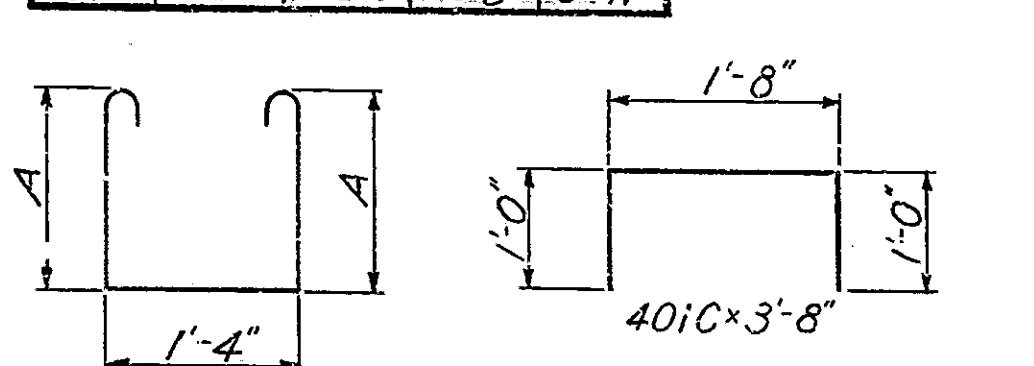
Class F in Ftg.	40.5 cu. ft.
Class E above Ftg.	
To Constr. Jt.	33.3 cu. ft.
Class F in Coping above Constr. Jt.	23.1 cu. ft.

MISCELLANEOUS

36 Untreated Timber	
Piles x 25' (Approx.)	
= 900 l.o. ft.	
Anchor @ MK-AP3	7 each



Size & Mark	A	B	R	Length
601C	2'-5 1/2"	2'-0 3/4"	9 1/8"	6'-6"
602C	2'-7 1/2"	2'-0 1/4"	10 1/8"	6'-8"
603C	2'-9 1/2"	2'-0 1/8"	10 1/4"	6'-10"
604C	3'-0"	2'-0"	11 1/2"	7'-0"
605C	3'-2 1/2"	2'-0 1/4"	1'-0 1/4"	7'-3"
606C	3'-4 1/2"	2'-0 1/8"	1'-0 1/8"	7'-5"
607C	3'-6 1/2"	2'-0 1/8"	1'-1 1/8"	7'-7"
608C	3'-9 1/2"	2'-0 1/8"	1'-2 1/8"	7'-10"
609C	3'-11"	2'-0"	1'-2 1/4"	7'-11"
810C	4'-0 1/4"	2'-0 3/8"	1'-3 1/2"	8'-1"
501C	2'-7"	1'-8"	9 3/8"	5'-11"

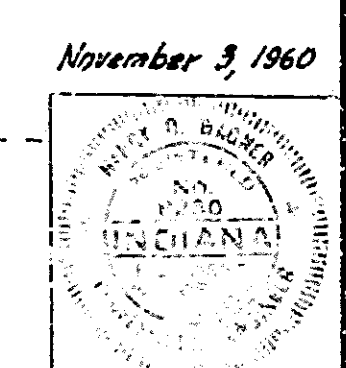


Size & Mark	A	Length
502C	3'-4 1/2"	9'-3"
503C	3'-11"	10'-4"
504C	4'-6"	11'-6"
505C	5'-0 1/2"	12'-7"
506C	5'-7"	13'-8"
507C	6'-2"	14'-10"
508C	6'-8 1/2"	15'-11"
509C	7'-3"	17'-0"
510C	7'-10"	18'-2"

NOTES:
 Pier Reinforcement Symmetrical About ϵ .
 Anchor plate MK-AP3 to be pre-set in concrete.
 See Bridge std. C1 for reinforcing bar notes.
 See Drwg. S2 for General Notes.

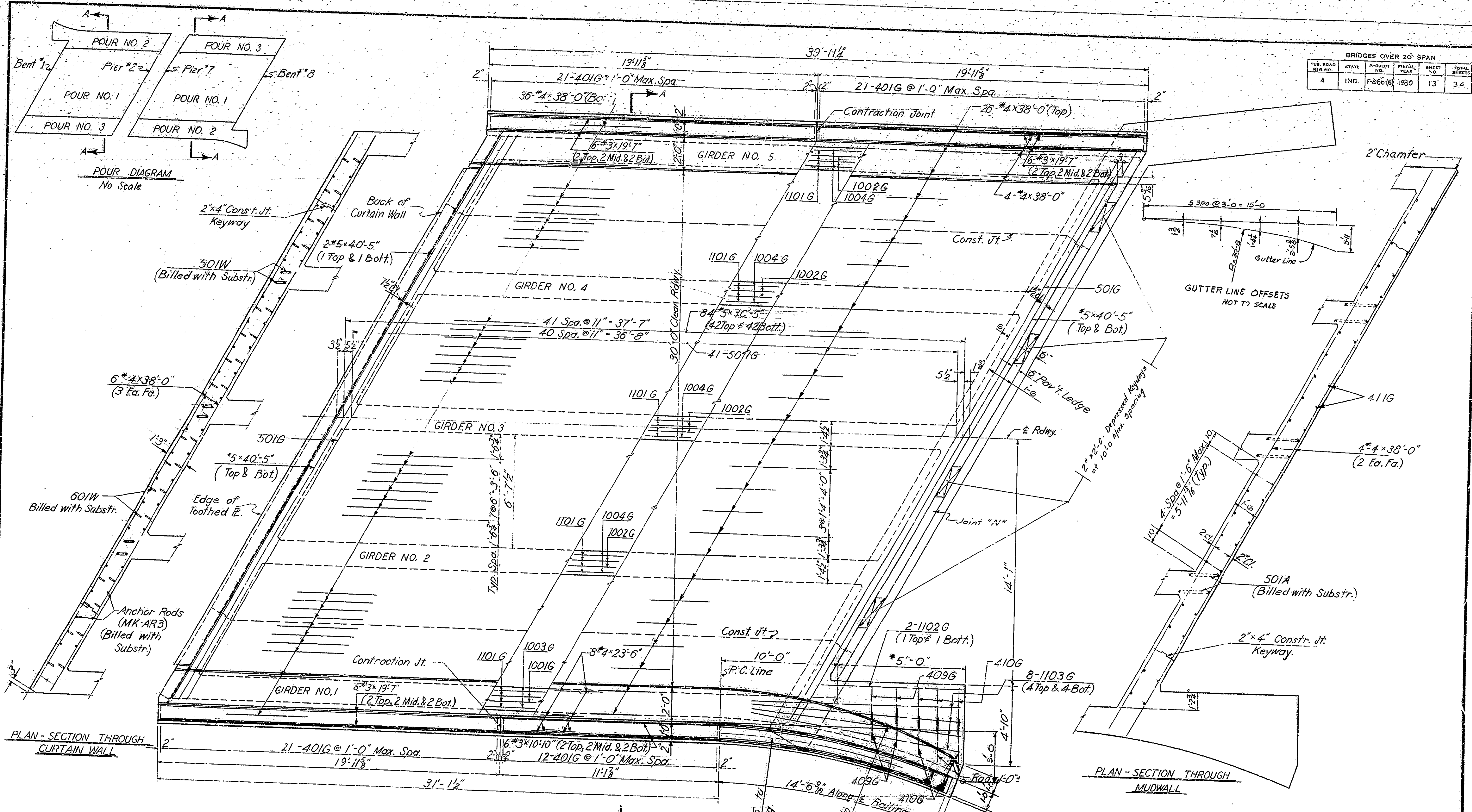
PIER NO. 5 DETAILS
 STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 1/4"=1'-0" UNLESS NOTED
 SUBMITTED FOR APPROVAL: *Harold Wagner*
 DRAWING: 56 OF 15
 PROJECT: F-866(6)
 BRIDGE CONTRACT NO. 6570
 BRIDGE FILE: 63-C9-4323



DESIGNER: B.E. 520-68 C.K. V.E.C. 5-23-68
 DRAWN: S.G.R. 6-15-68 C.K. V.E.C. 6-14-68
 TRACED: S.G.R. 6-15-68 C.K. V.E.C. 6-14-68

BRIDGES OVER 20' SPAN					
STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	
IND.	F-866(6)	1960	13	34	



PLAN SPAN G
(SPAN A SAME BY 180° ROTATION)

DESIGN DATA
 Unit Stresses: $f_c = 20,000$ psi. $f_s = 1200$ psi.
 Live Load: H-20-S16-44 in accordance with 1961 A.A.S.H.O. Specifications, except slab designed for 16,000 lb. wheel load.
 Slab designed with $\frac{1}{2}$ " monolithic wearing surface.
 Maximum Dead Load deflection = $\frac{1}{16}$ "
 Dead Load includes 35#/ft.² for future wearing surface.

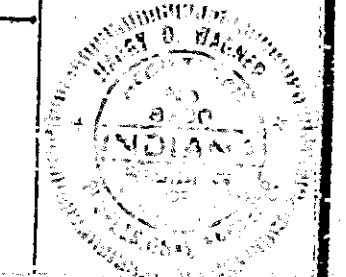
NOTES
 See Drawing S2 for General Notes.
 See Drawings S8 and S9 for additional details and bill of Materials.
 See Bridge Standard C1 for reinforcing bar notes.
 See Bridge Standard R1A or R1B for railing details.
 For Expansion Joint details see Drawing S13
 Railing and wing bars to be bent in the field as required.

* NOTE Length of cantilever not to scale.

SPANS G & A DETAILS
 STATE HIGHWAY DEPARTMENT OF INDIANA

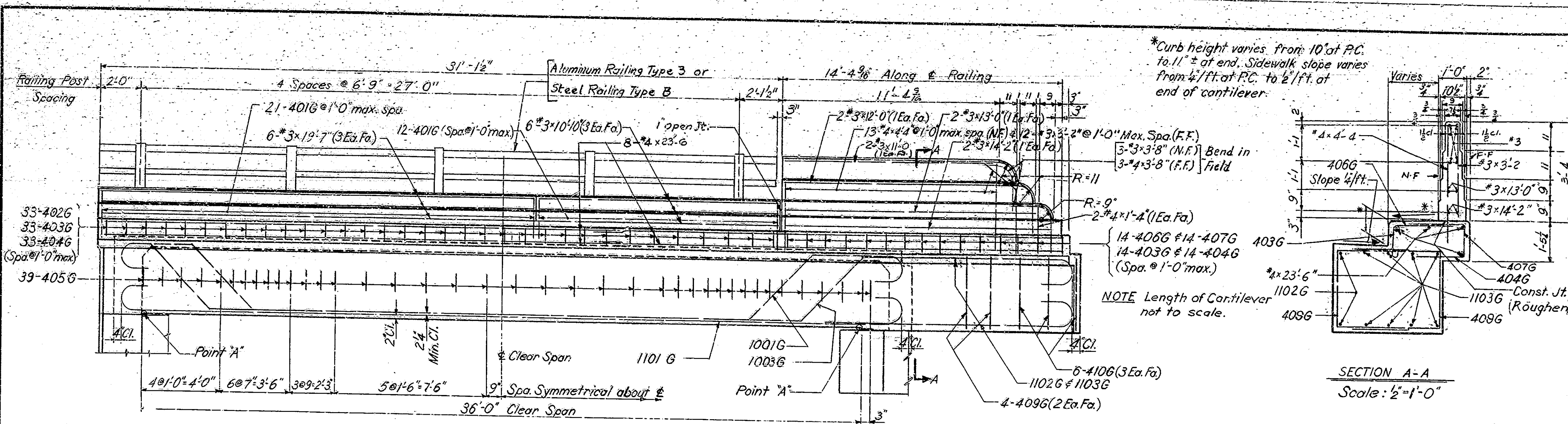
SCALE: 3/8" = 1'-0" UNLESS NOTED
 SUBMITTED FOR APPROVAL: *Harry C. Wagner*
 DRAWING: S7 OF 15
 PROJECT: F-866(6)
 BRIDGE CONTRACT NO. 6570
 BRIDGE FILE: 63-C9-4323

November 3, 1960



DESIGNED: B.E. 2059 ck-G.B. 3-2-59
 DRAWN: D.W. 511-59 ck-S.G.R. 5-15-59
 TRACED: S.G.R. 5-15-59 ck-V.L.C. 5-22-59

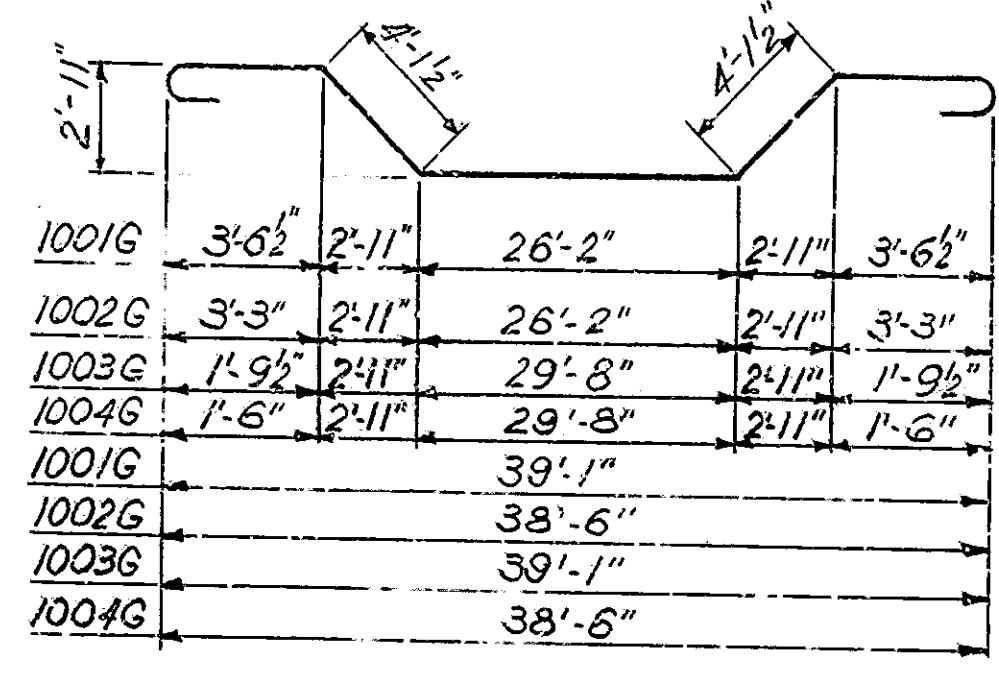
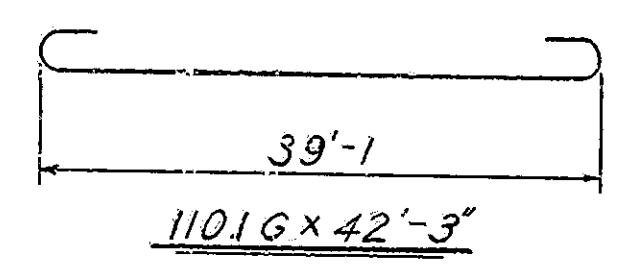
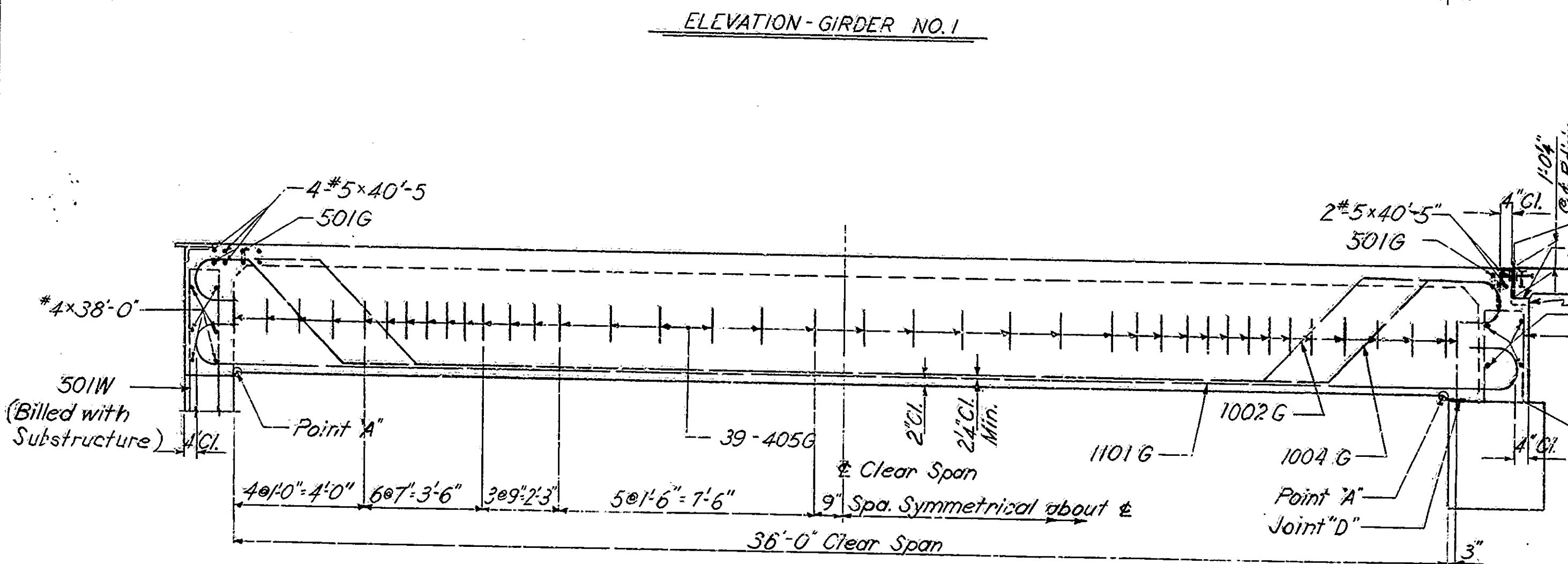
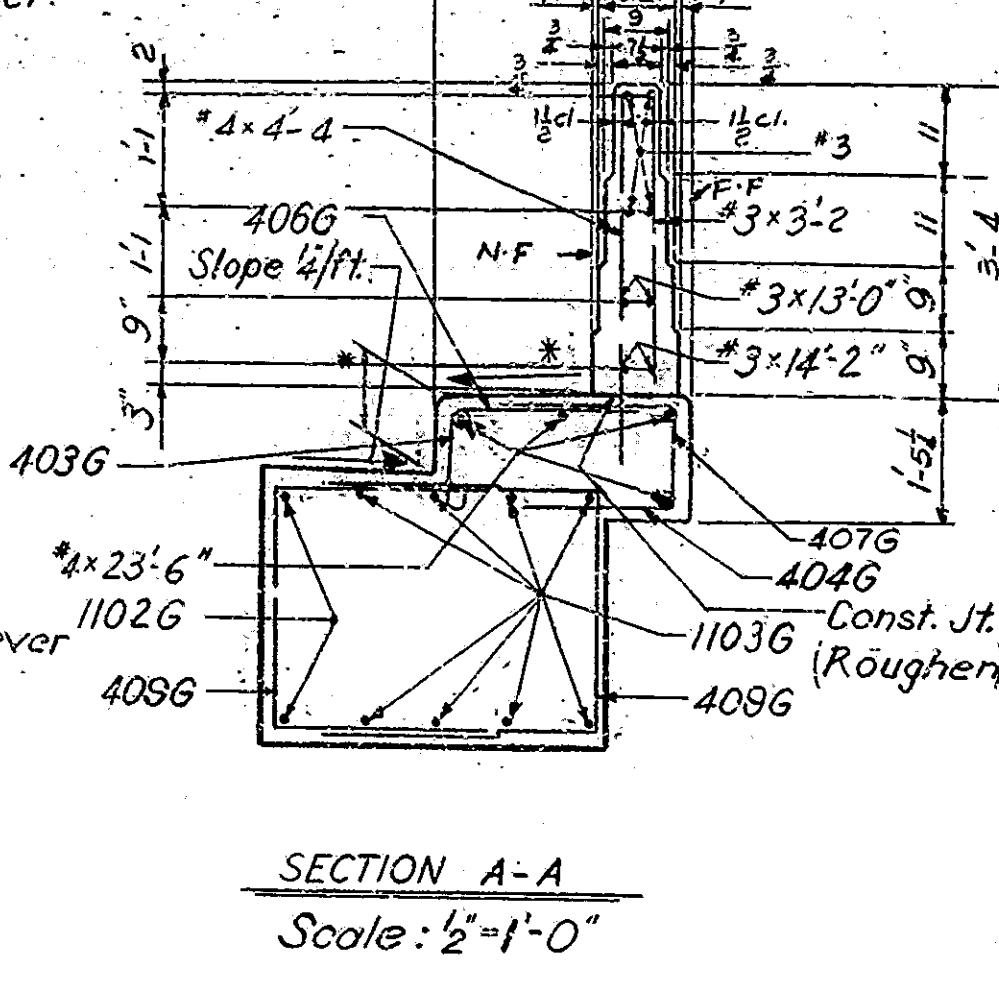
Rev. 7-17-63



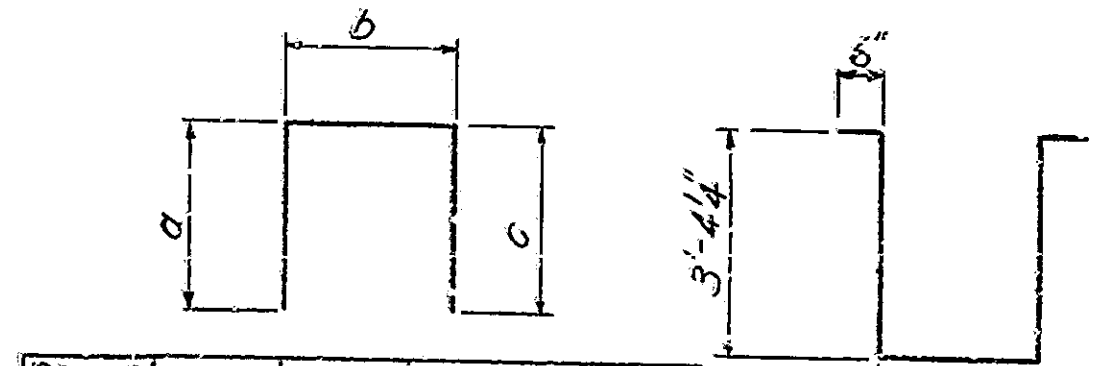
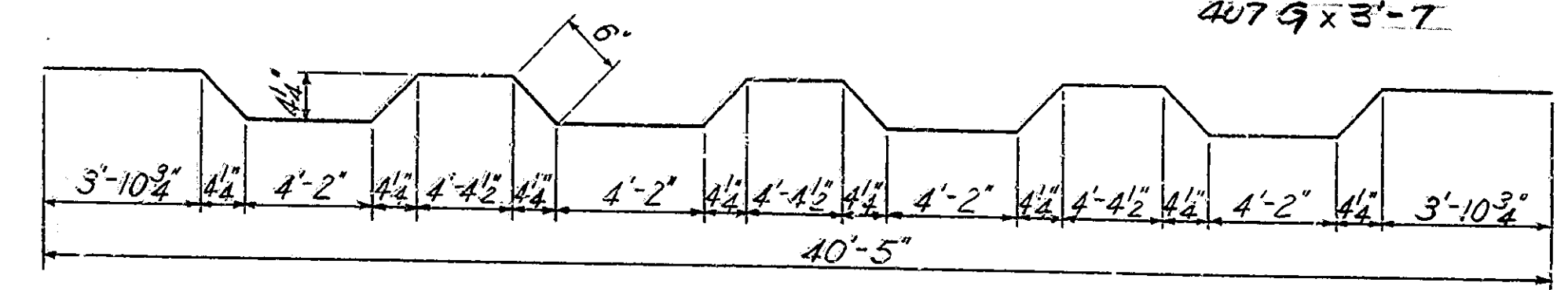
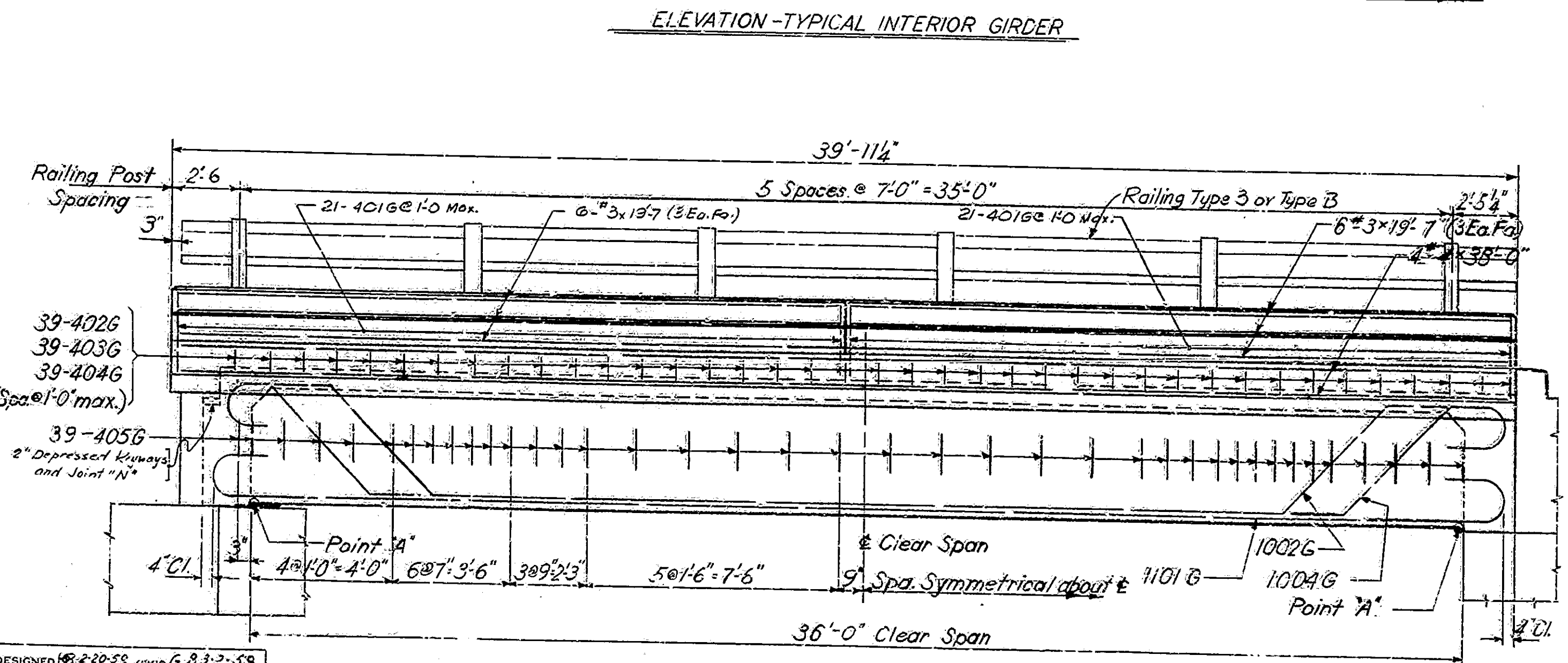
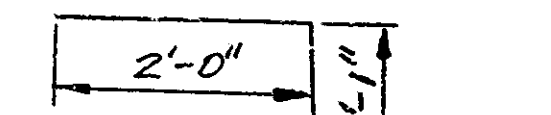
PUR. ROAD REG. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-866 (S)	1960	14	34

BILL OF MATERIALS SPAN A (Span G Same)

Size & Mark	No. of Bars	Length	Weight
REINFORCING			
1101G	20	42'-3"	
1102G	2	7'-4"	
1103G	8	11'-4"	
Total #11			5,050
1001G	2	44'-4"	
1002G	8	13'-9"	
1003G	2	44'-4"	
1004G	8	43'-9"	
Total #10			3,776
501G	41	41'-7"	
#5	86	40'-5"	
Total #5			5,404
401G	75	5'-5"	
402G	72	4'-5"	
403G	86	2'-2"	
404G	86	2'-4"	
405G	195	8'-10"	
406G	14	2'-6"	
407G	14	3'-7"	
408G	4	7'-10"	
410G	6	8'-2"	
411G	20	6'-5"	
#4	13	4'-4"	
#4	76	38'-0"	
#4	8	23'-6"	
#4	2	1'-4"	
#4	3	3'-8"	
Total #4			4,195
#3	18	19'-7"	
#3	6	10'-10"	
#3	2	14'-2"	
#3	2	13'-0"	
#3	2	12'-0"	
#3	2	11'-0"	
#3	12	3'-2"	
#3	3	3'-8"	
Total #3			214
TOTAL STEEL			15,639



Size & Mark	a	Length
1102G	5'-9"	7'-4"
1103G	9'-9"	11'-4"
404G	1'-10"	2'-4"
406G	2'-0"	2'-6"



Size & Mark	a	b	c	Length
401G	2'-2"	7 1/2"	2'-7 1/2"	3'-5"
409G	2'-5"	3'-0"	2'-5"	7'-10"
410G	3'-1"	3'-0"	3'-1"	9'-2"
411G	2'-6 1/2"	1'-4"	2'-6 1/2"	6'-5"

NOTES
See Bridge Standard CI for reinforcing bar notes.
See Drawing S2 for General Notes.
Railing and wing bars to be bent in the field as required.
See Bridge Standard R1A or R1B for Railing Details and Notes.
See Drawings S7 and S9 for additional Details.

SPANS A & G DETAILS
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 3/8"=1'-0" UNLESS NOTED

SUBMITTED FOR APPROVAL: *Larry Wagner*

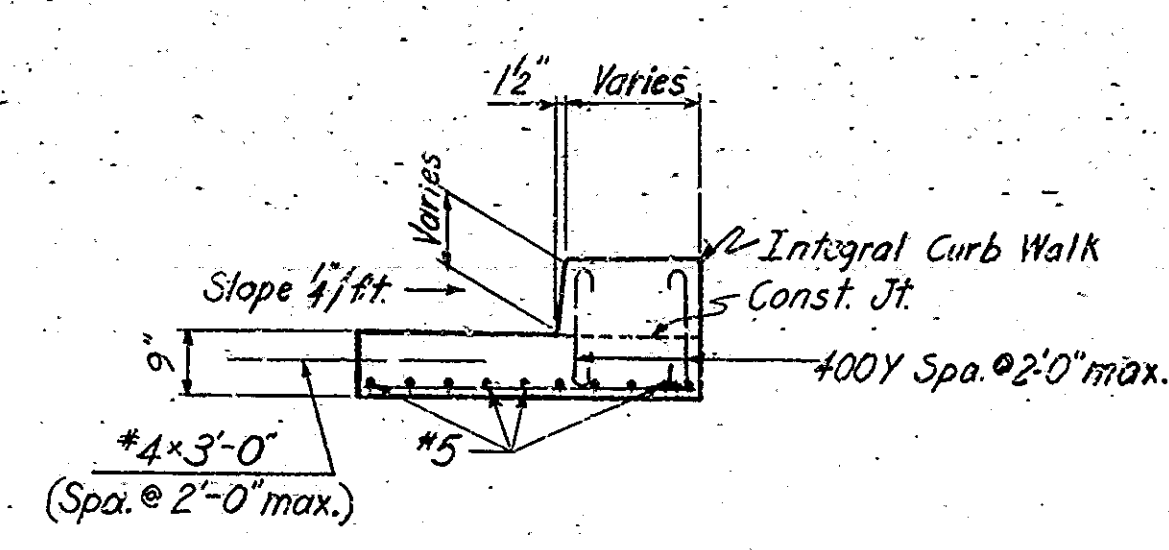
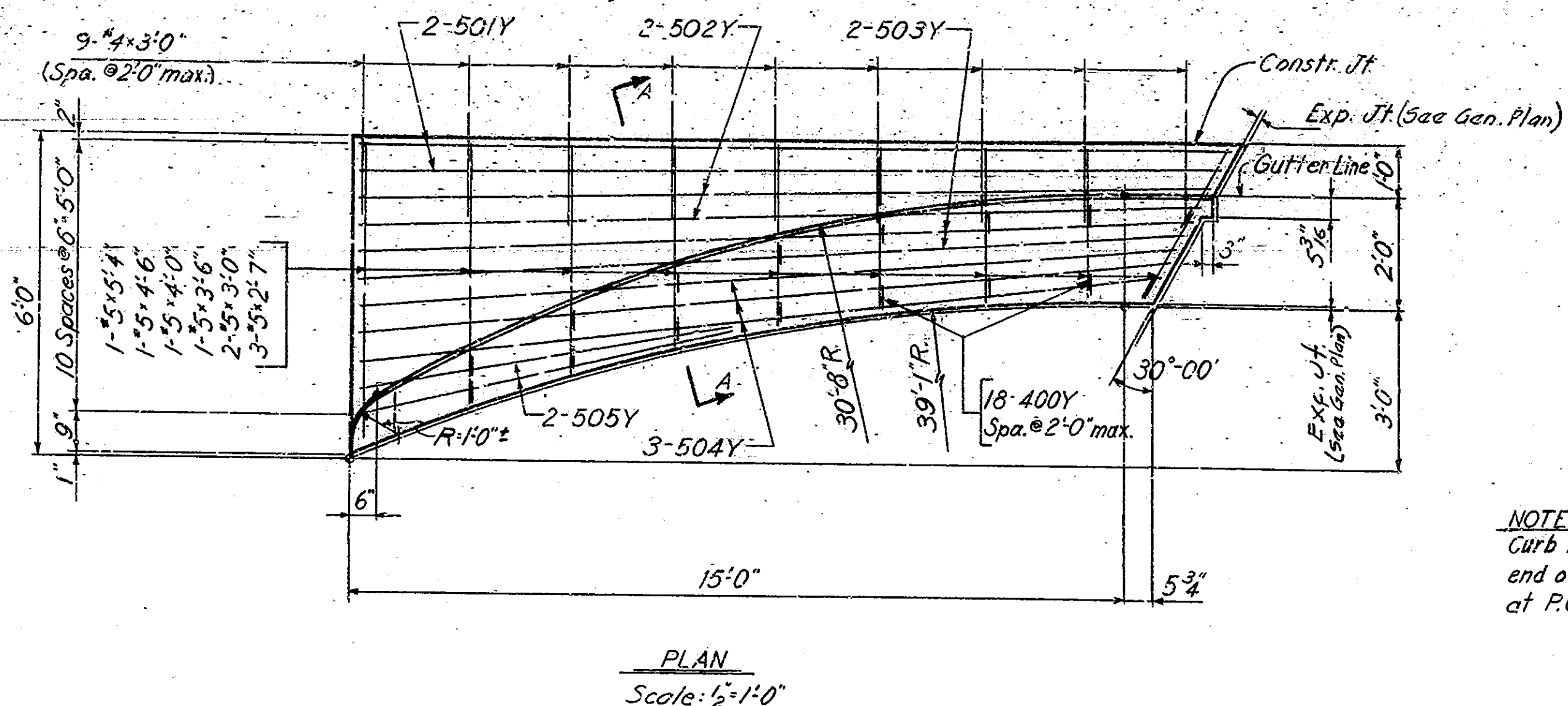
November 3, 1960

DRAWING: S8 OF 15
PROJECT: F-866 (S)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323

DESIGNED: 10-22-58 CKD G. B. J. 2-58
DRAWN: 10-22-58 CKD E. C. S. 2-58
TRACE: 10-22-58 CKD E. C. S. 2-58

Rev. 9-18-64 - Exp. Jts.
Rev. 10-22-63 Notes
Rev. 7-17-63

BRIDGES OVER 20' SPAN					
PUR. ROAD	STATE	PROJECT	FISCAL	SHEET	TOTAL
NO.		NO.	YEAR	NO.	SHEETS
4	IND.	F-866(6)	1960	15	34



NOTE:
Curb height varies from 10" at P.C. to 11 1/2" at free end of curb. Sidewalk slope varies from 4" per ft. at P.C. to 2" per ft. at free end of curb.

501Y x 18'-0"	16'-10"
502Y x 17'-7"	16'-5"
503Y x 17'-4"	16'-2"
504Y x 16'-11"	15'-9"
505Y x 8'-2"	7'-0"

BILL OF MATERIAL
(R.C. Bridge Approach)

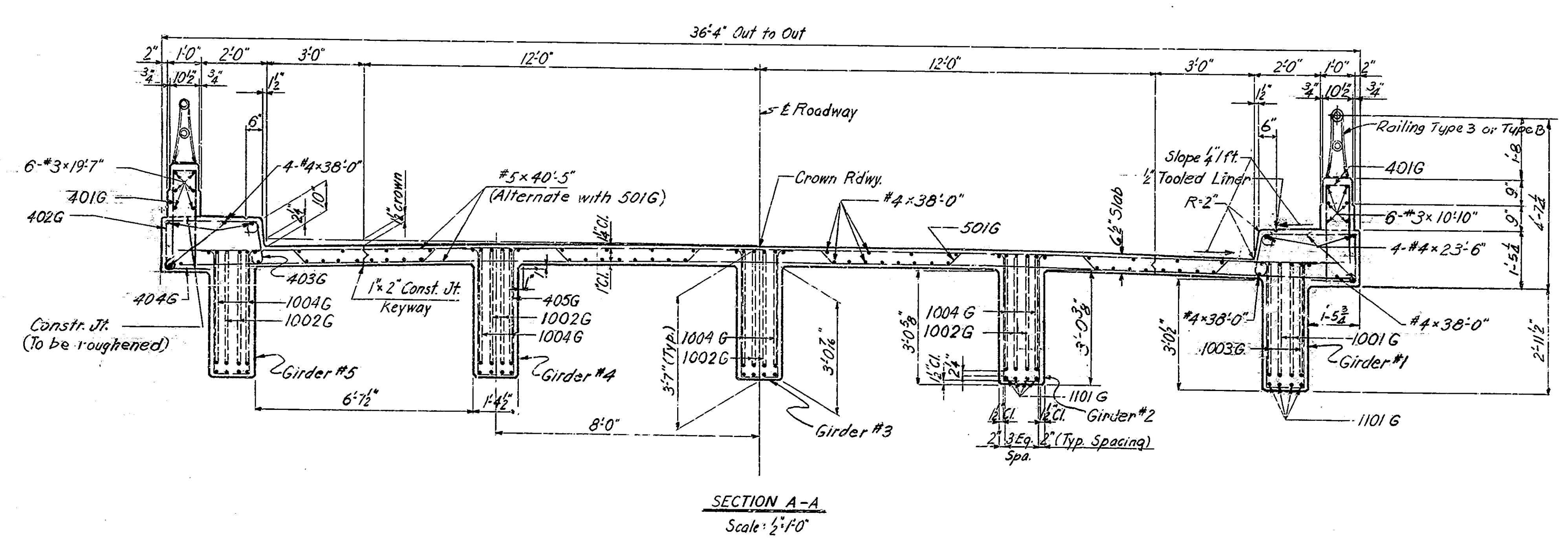
REINFORCING STEEL

Size & No. of Mark Bars	Length	Weight
501Y 4	18'-0"	75
502Y 4	17'-7"	73
503Y 4	17'-4"	72
504Y 6	16'-11"	106
505Y 4	8'-2"	34
* #5 112	20'-6"	2395
* #5 22	31'-9"	729
* #5 2	5'-4"	11
* #5 2	4'-6"	9
* #5 2	4'-0"	8
* #5 2	3'-6"	7
* #5 4	3'-0"	13
* #5 6	2'-7"	16
Total #5		3548
400Y 38	2'-3"	54
#4 18	3'-0"	36
Total #4		90
Total Steel		3638

CONCRETE

R.C. Bridge Approach	192 SqYd
Integral Curb Walk	
(Class F concrete)	1.8 Cu.Yd

R.C. BRIDGE APPROACH DETAILS
Showing Widened Bridge Approach & Integral Curb Walk
Scale: 1/2"=1'-0"



Bottom of Girder Elevations at Point A'

Girder No.	End Spans	
	Bent No. 1 & 8	Pier No. 2 & 7
1	489.30	489.41
2	489.40	489.52
3	489.45	489.57
4	489.37	489.49
5	489.23	489.36

NOTES
See Drawing S2 for General Notes.
See Drawings S7 & S8 for additional details.
See Bridge Standard C1 for reinforcing bar notes.
See Bridge Standard R1A or R1B for Railing details, and notes.
For Additional Details of R.C. Bridge Approaches see Br. Std. M2 & M3.

SPANS A & G DETAILS
AND R.C. BRIDGE APPROACH DETAILS
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: AS NOTED
SUBMITTED FOR APPROVAL: *Harry D. Wagner* November 3 1960
DRAWING: S9 OF 15
PROJECT: F-866(6)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323

DESIGNED: B.22D-59 CKD G.B. J-2-59
DRAWN: B.C.L. 2-11-59 CKD V.E. L.S. 2-59
TRACED: B.C.L. 2-11-59 CKD V.E. L.S. 2-59

REV. 9-18-64 Exp. Jts.
REV. 7-17-63

BRIDGES OVER 20' SPAN					
PUR. ROAD	STATE	PROJECT	FISCAL	SHEET	TOTAL
RECORD		NO.	YEAR	NO.	SHEETS
4	IND.	F 866(6)	1960	16 A	34

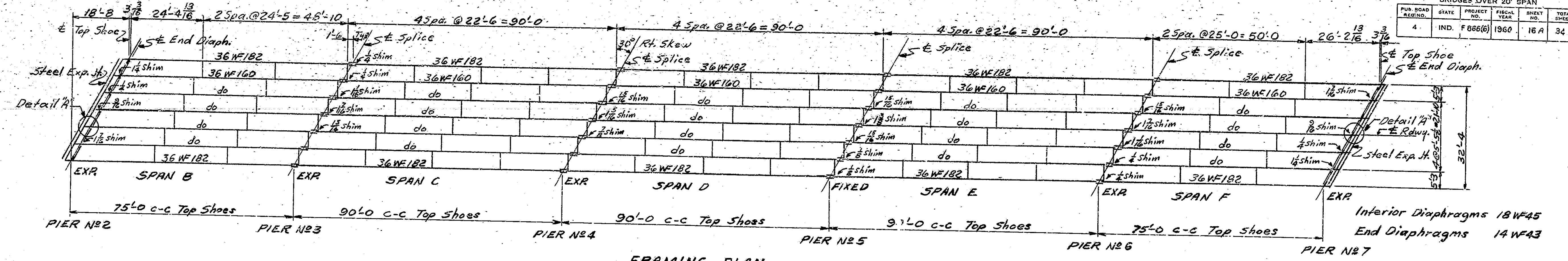
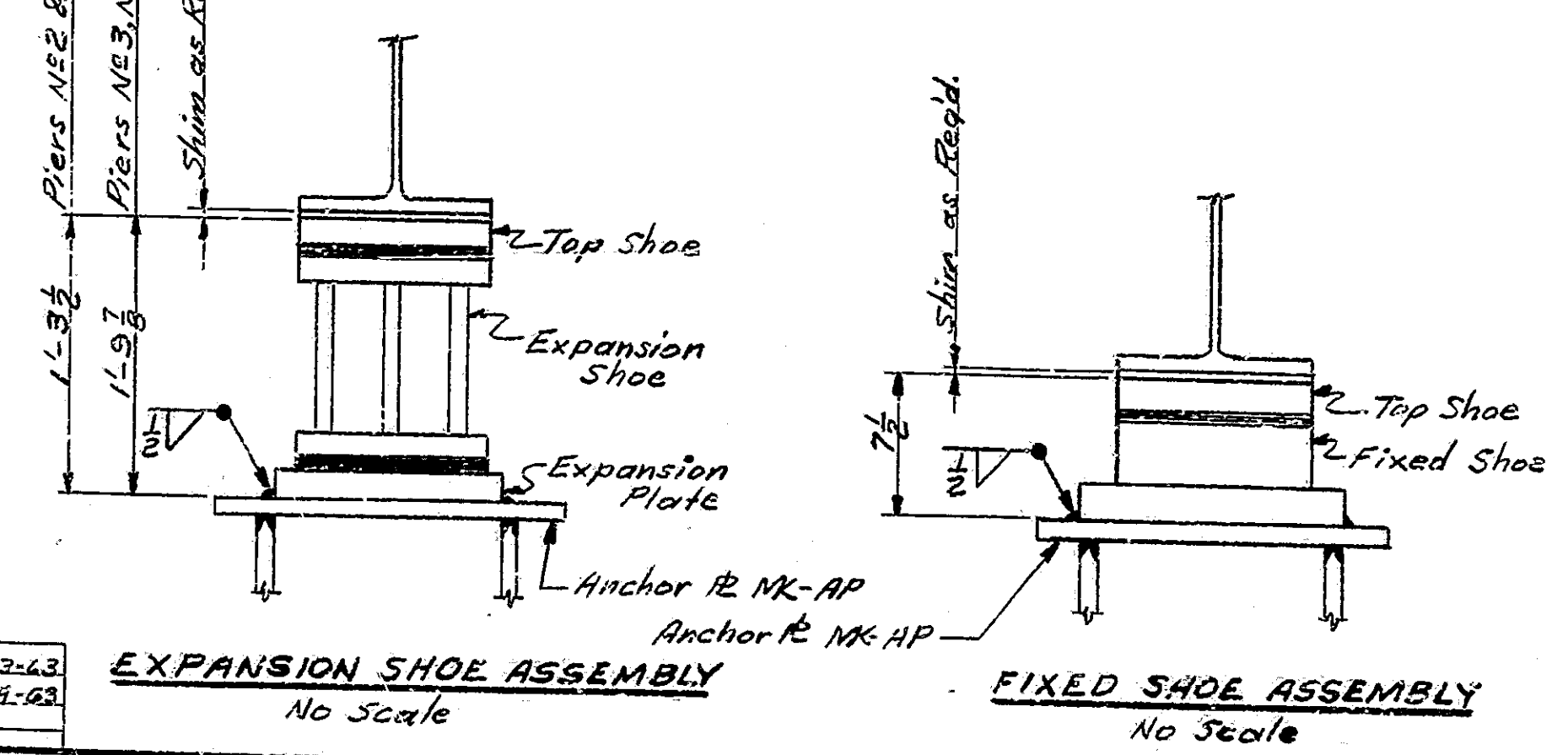
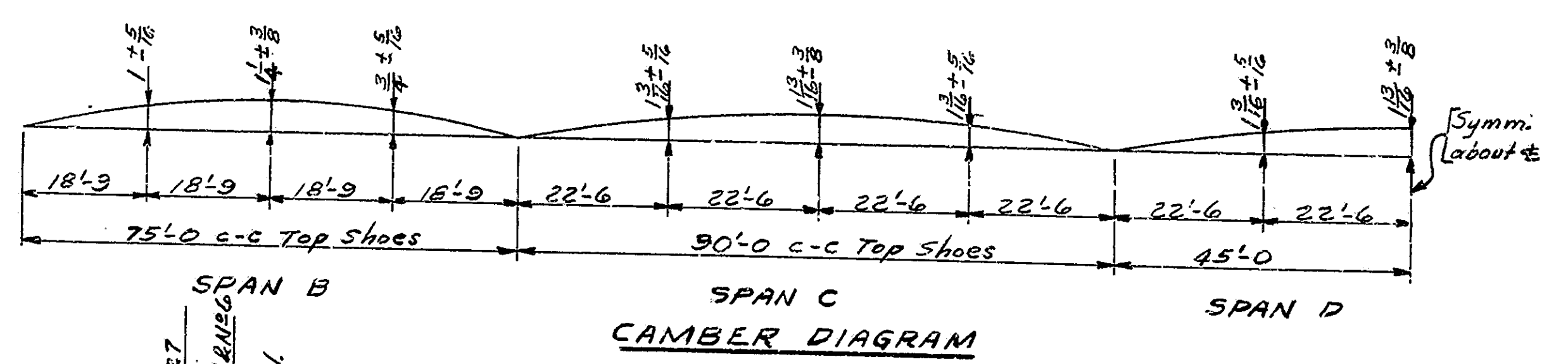
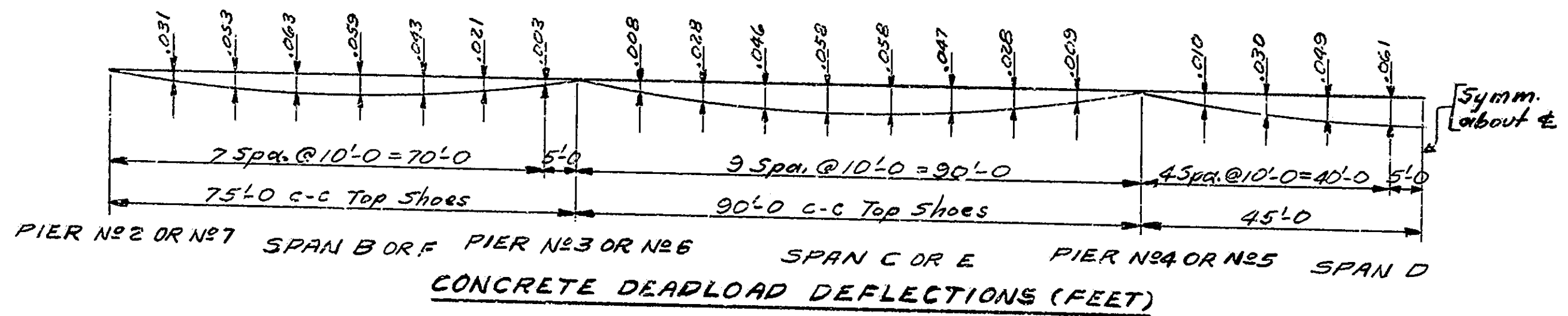


TABLE OF MOMENTS (FT-POUNDS) AND REACTIONS (POUNDS)

	MOMENT AT 0.4 SPAN B		MOMENT AT 0.4 SPAN C		MOMENT AT 0.4 SPAN D		NEGATIVE MOM. AT R3 R4		NEGATIVE MOM. AT R4 R5		REACTION PIERS N23 R7		REACTION PIERS N24 R8		REACTION PIERS N25 R9	
	INT.	O.S.	INT.	O.S.	INT.	O.S.	INT.	O.S.	INT.	O.S.	INT.	O.S.	INT.	O.S.	INT.	O.S.
DEADLOAD	372400	534800	386200	528800	391600	537200	488422	774770	476944	756415	23500	34800	68400	105000	68400	104500
LIVELOAD	427400	410900	421900	405700	422700	406400	429680	430250	457080	439450	30400	20100	24500	34300	45900	35500
IMPACT	106900	102725	58300	94500	96500	94690	103930	99930	106700	102390	7600	5000	10700	8300	10700	8300
TOTAL	906700	1048425	906400	1029000	912800	1035390	1022010	1287810	1040710	1296255	61500	59900	123600	147600	125000	148300



DATA USED FOR DESIGN AND DETAILS

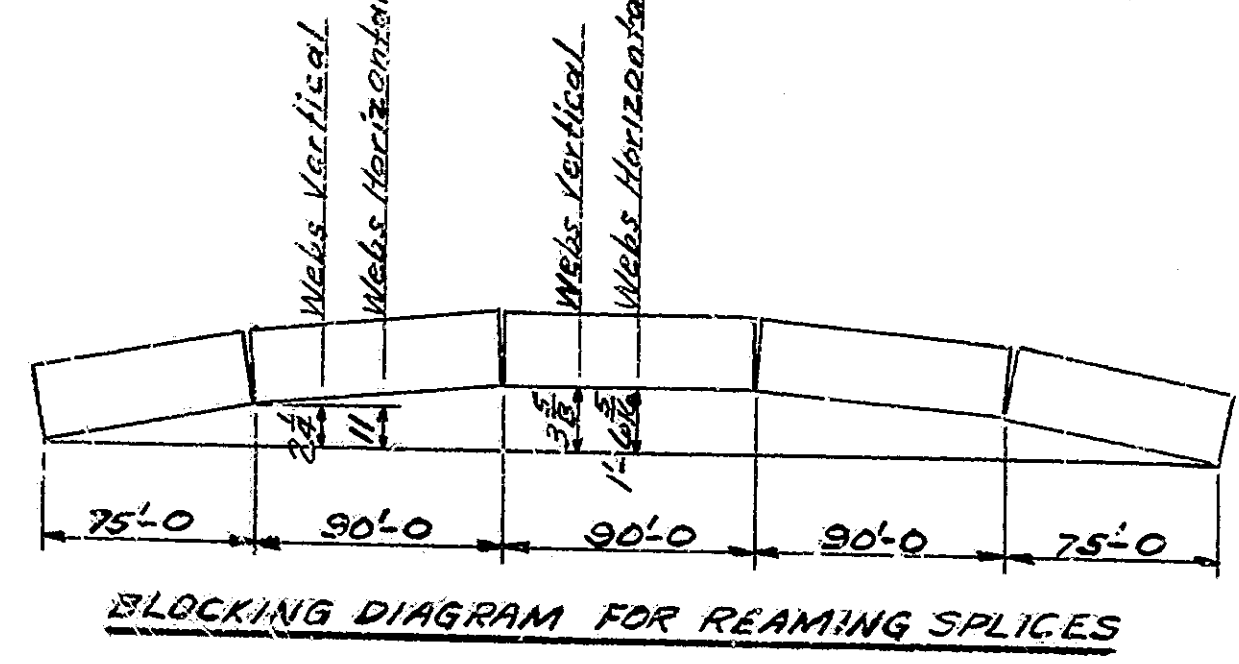
Liveload: H20-S16-44 loading with impact and distribution of leads in accordance with 1961 AASHTO Specifications.

Deadload: Actual weight plus 35 pounds per sq. ft. of roadway to provide for future wearing surface.

Slab: Designed for 16000 lb. wheel plus impact and with 1/2" monolithic wearing surface.

UNIT STRESSES

Structural Steel Bending (Tension) (ASTM A-44) - 22000 #/sq. in.
Structural Steel Bending (Tension) (ASTM A-36) - 20000 #/sq. in.
Shear on Rivets - 13500 #/sq. in.
Structural Steel Bearing (Not including rivets or H.S. bolts) - 29500 #/sq. in.
Structural Steel Bearing on power driven rivets and forged H.S. bolts - 40000 #/sq. in.
Bearing Steel on Concrete (Including overturning and eccentric loading) - 1000 #/sq. in.
Reinforcing Steel (Tension) - 20000 #/sq. in.
Concrete (Compression) - 1200 #/sq. in.



NOTE:
This sheet supersedes Framing Plan dated Nov. 3, 1960.
See Drawg. 512 for Detail "A" and sketch showing punching of beam webs.

GENERAL NOTES

Rivets - 7/8" dia.
Open Holes - 1/8" unless noted.
All paint shall be in accordance with Current State Highway Specifications.
Shop Paint: One coat Red Lead, Type I or II except as noted.
Field Paint: 2 Coats of Aluminum.
Beams must be cambered to a smooth curve. Camber must be checked while beams are supported in such a way as to have no bending moment in direction of camber.
Holes for beam splices shall be subpunched or subdrilled and reamed to size while assembled. See Article E1103.15(d) of the specifications.
The shop details shall show a plan of matchmarking for all reamed pieces.
All splice plates to be removed, cleaned and painted after reaming. Splice plates shall not extend beyond end of beam after bolting for shipment.
Flange splice bars shall have planed or rolled edges and holes in bars shall be subdrilled and reamed to drilled full size while assembled.
Diameter of holes in all material connecting top shoes to beam flanges shall be 1/8" min.
Bolts connecting beam flange to top shoe shall extend in to top shoe a min. of 1 inch.
Shims between beams and top shoes may be built up. No shim shall be less than 1/2 inch in thickness.
The shop plans shall indicate whether reaming is to be done in shop or field. If shop reaming or drilling is used, the beams may be reamed with the webs in either a horizontal or vertical position. If the beams are reamed with the webs vertical, they shall be supported relative to their final erection position. If they are reamed with the webs horizontal, a minimum of one line of beams shall be shop assembled with webs vertical and inspected for fit.
As soon as the Engineer has approved the field welds, all welds and any surface from which the shop coat has been omitted or becomes worn off or has otherwise become defective, shall be thoroughly cleaned of all charred paint or any foreign matter and completely covered with one coat of shop paint.
The contractor shall prepare detailed working or shop drawings to enable him to fabricate, erect, and construct all parts of the work in conformity with the Engineer's drawings and specifications and shall submit five (5) copies of these to the Engineer. See Article E1103.2 of the specifications.
All structural steel on which welding is used for primary stresses shall be made from steel conforming to ASTM A36 Specification unless otherwise noted.
Estimated Weight Structural Steel = 588,200#

FRAMING PLAN
INDIANA STATE HIGHWAY COMMISSION

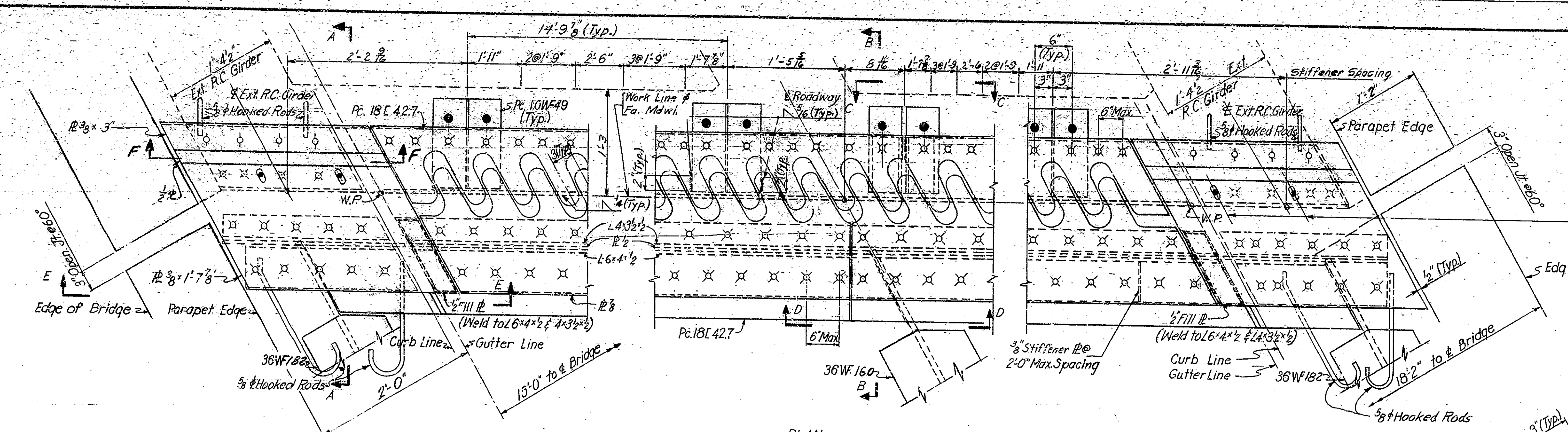
SCALE: AS NOTED
JULY 17, 1963

RECOMMENDED FOR APPROVAL: *C. R. Reimer*
ENGINEER OF BRIDGE DESIGN

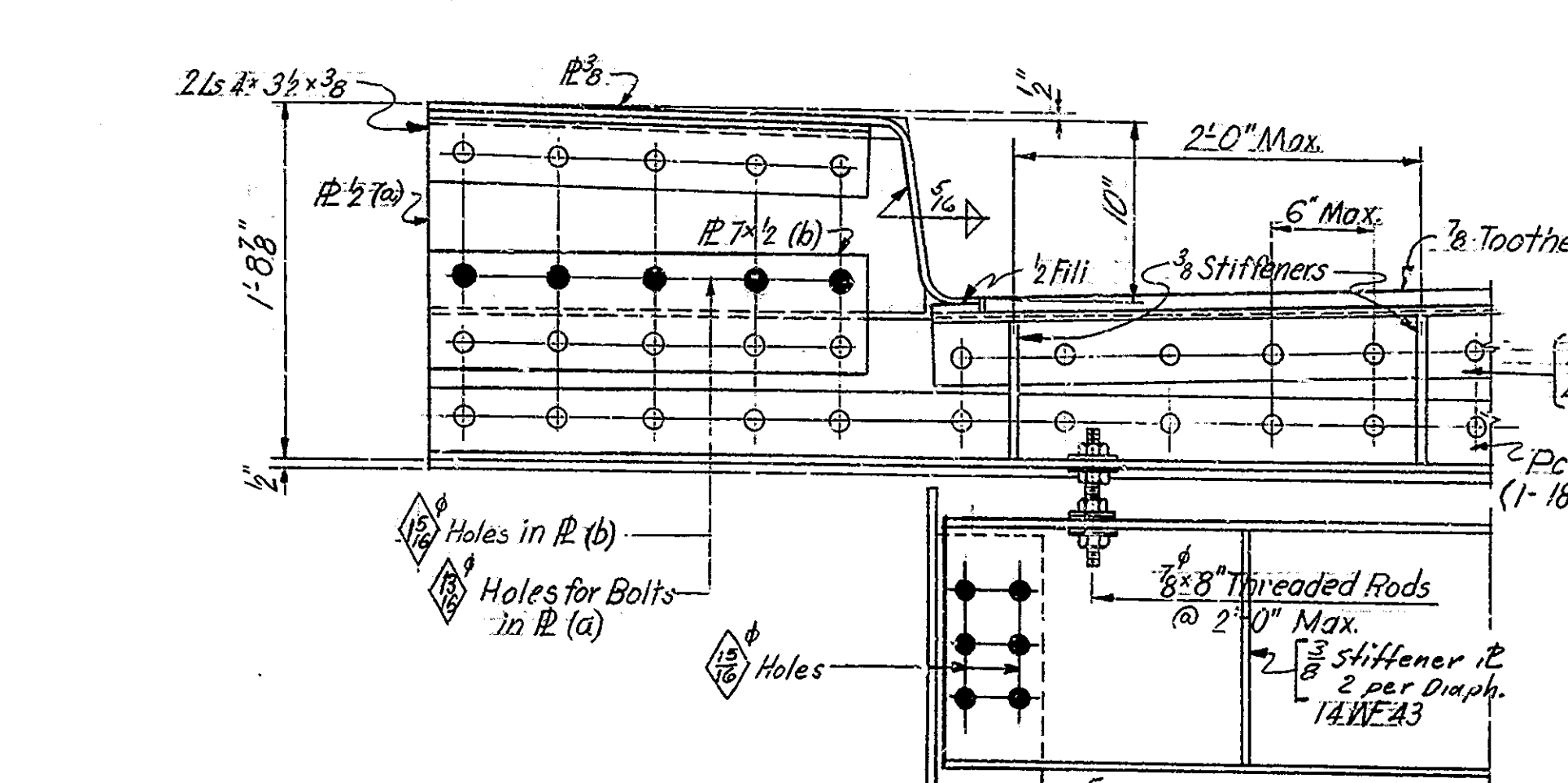
DRAWING: S10A0F 15
PROJECT: F-866-6
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323

DESIGNED: RMB:7-8-63 CKD: JWC 7-23-63
DRAWN: QKS:7-8-63 CKD: WSL 7-29-63
TRACED: _____ CKD: _____

BRIDGES OVER 20' SPAN					
PUB. ROAD DIST. NO.	STATE	PROJECT NO.	SCALE	SHEET NO.	TOTAL SHEETS
4	IND.	F-866(6)	1960	17	34

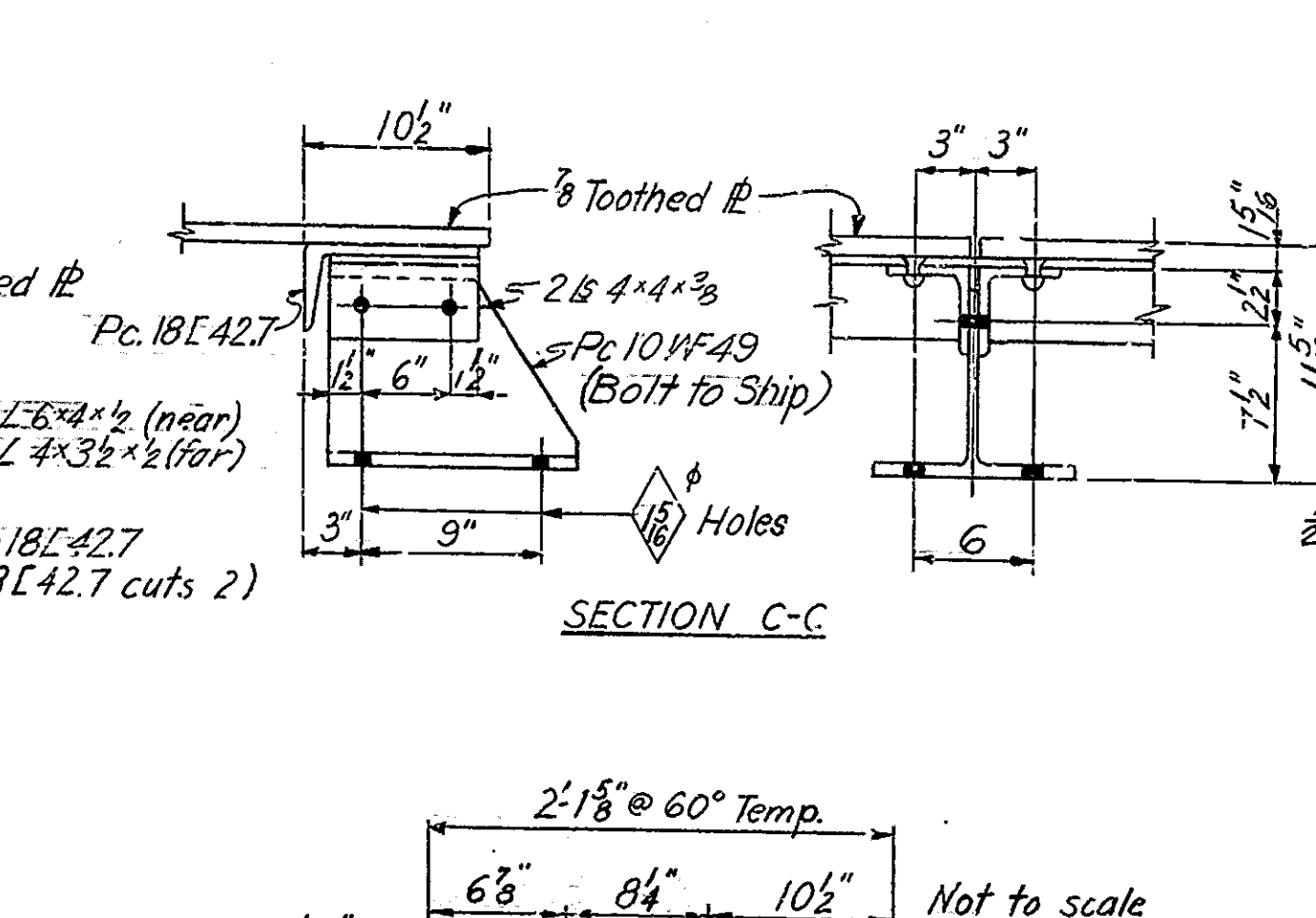


9/16" x 1 1/2" Slots in 3/8" R for erection Drill & Tap 1/2" R & L purposes only. for 2" Cap Screws to be removed after initial set of concrete.

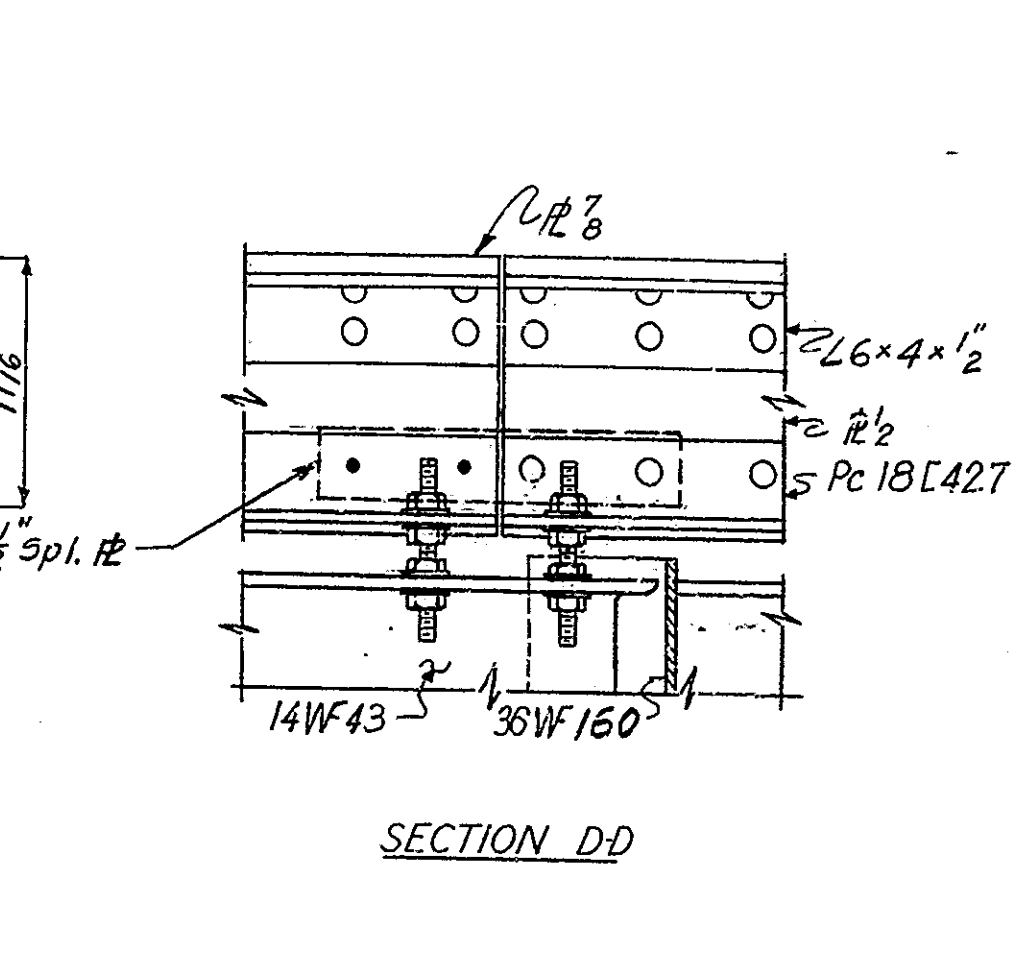


SECTION A-A

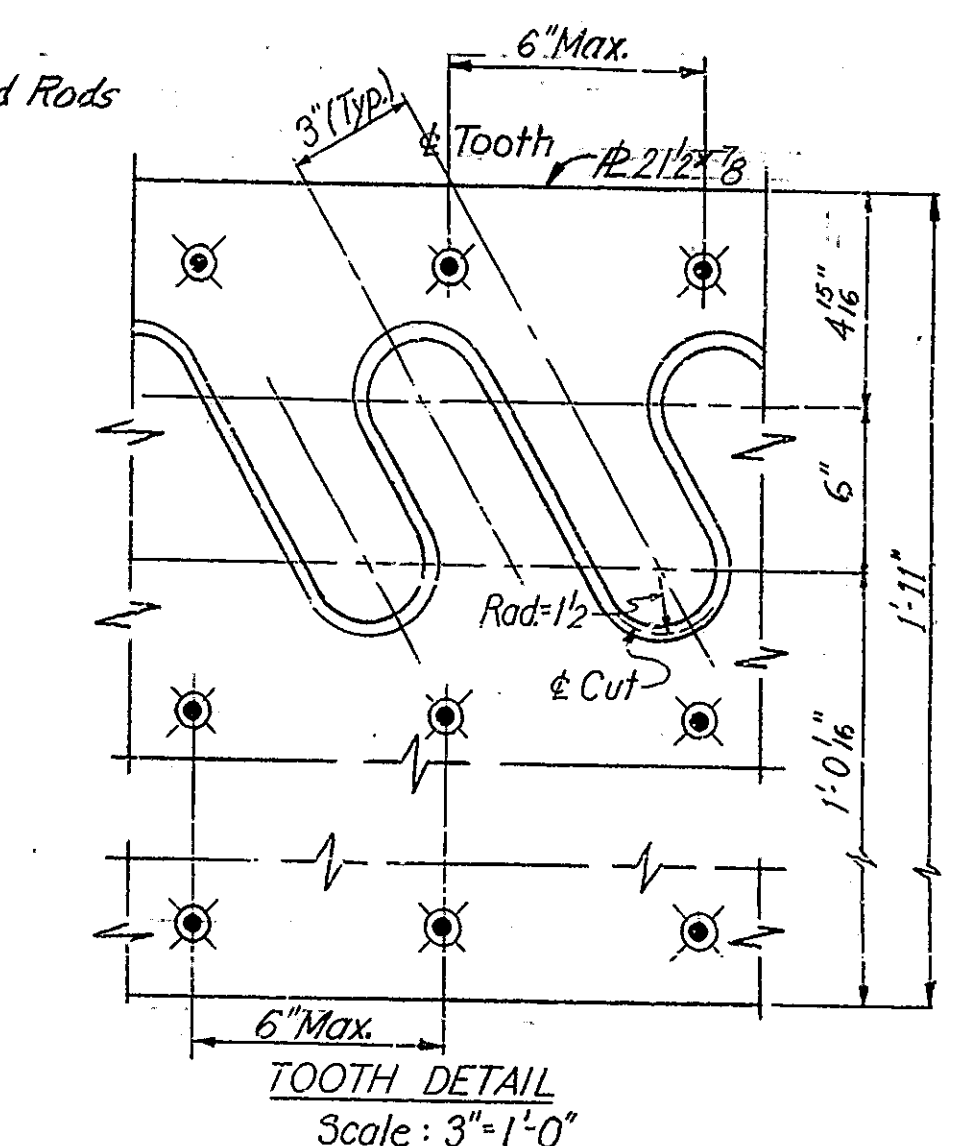
NOTE: All dimensions are normal to face of Curtain Wall.



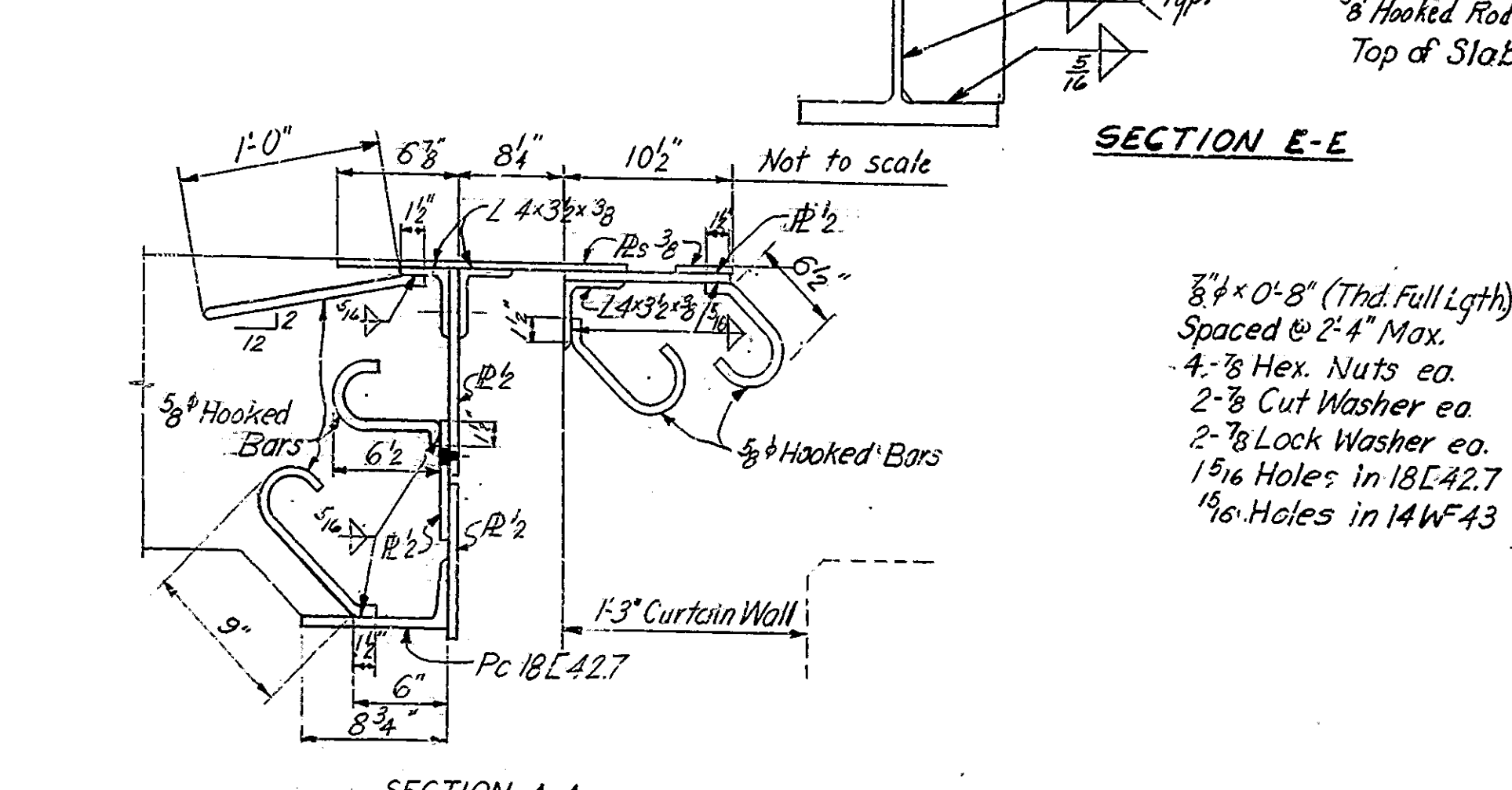
SECTION C-C



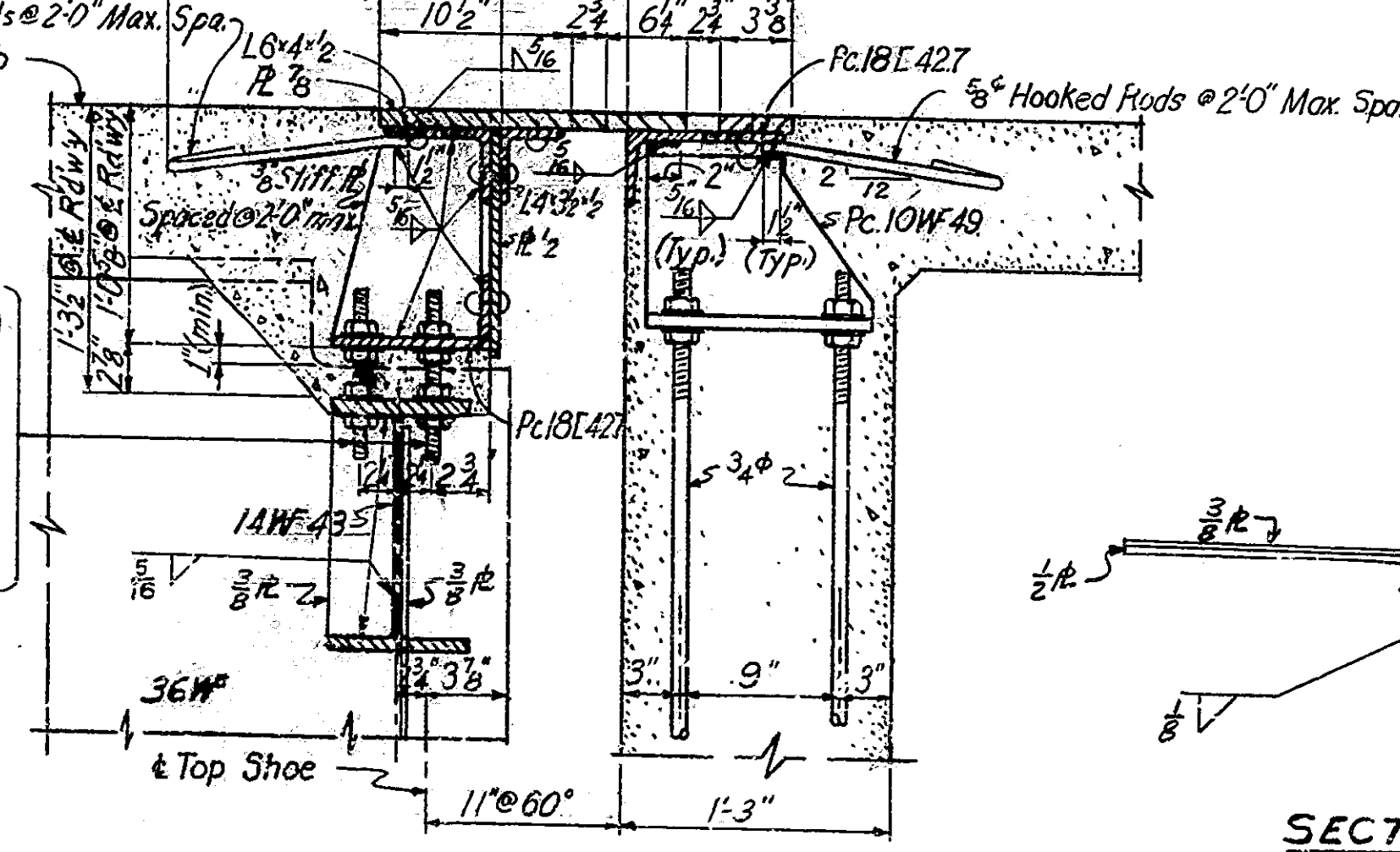
SECTION D-D



TOOTH DETAIL Scale: 3" = 1'-0"

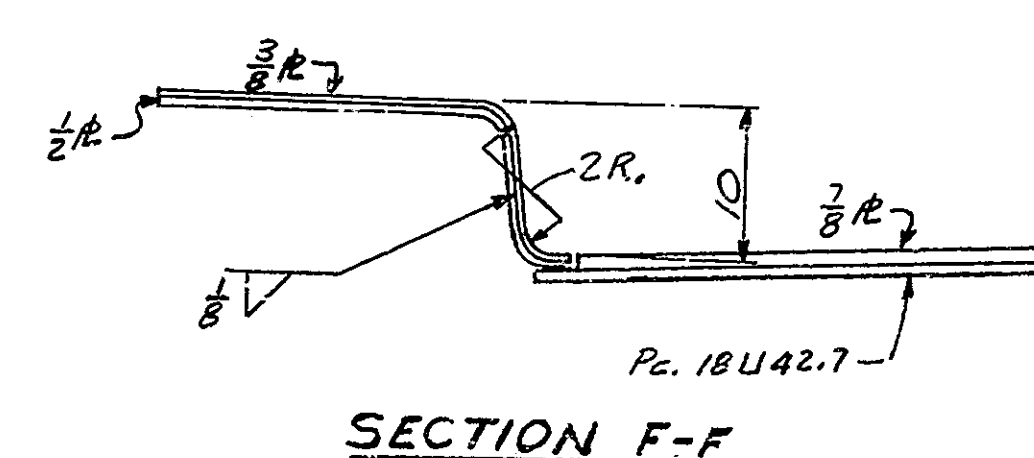


SECTION E-E



SECTION B-B

NOTE: All dimensions are normal to face of Curtain Wall.



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

NOTES

- Top of Expansion Jt. to conform to Roadway Crown Contour. For Pavement Offsets see Br. Std. M1.
- Rivets - 3/8" in Expansion Joint. Open Holes 1 3/8" unless noted.
- For tooth settings see Dwg. No. S14.
- All dimensions to cuts are given to & cut. See Specifications Art. E1103.13 regarding burning of toothed plate. The toothed plates shall be match marked to maintain the same relative position before and after cutting.
- Expansion Joints are to be assembled in the shop in their relative erection positions and inspected for fit.

EXPANSION JOINT DETAILS
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: 1/2" = 1'-0" UNLESS NOTED

SUBMITTED FOR APPROVAL: *Harry D. Wagner*

November, 3 1960

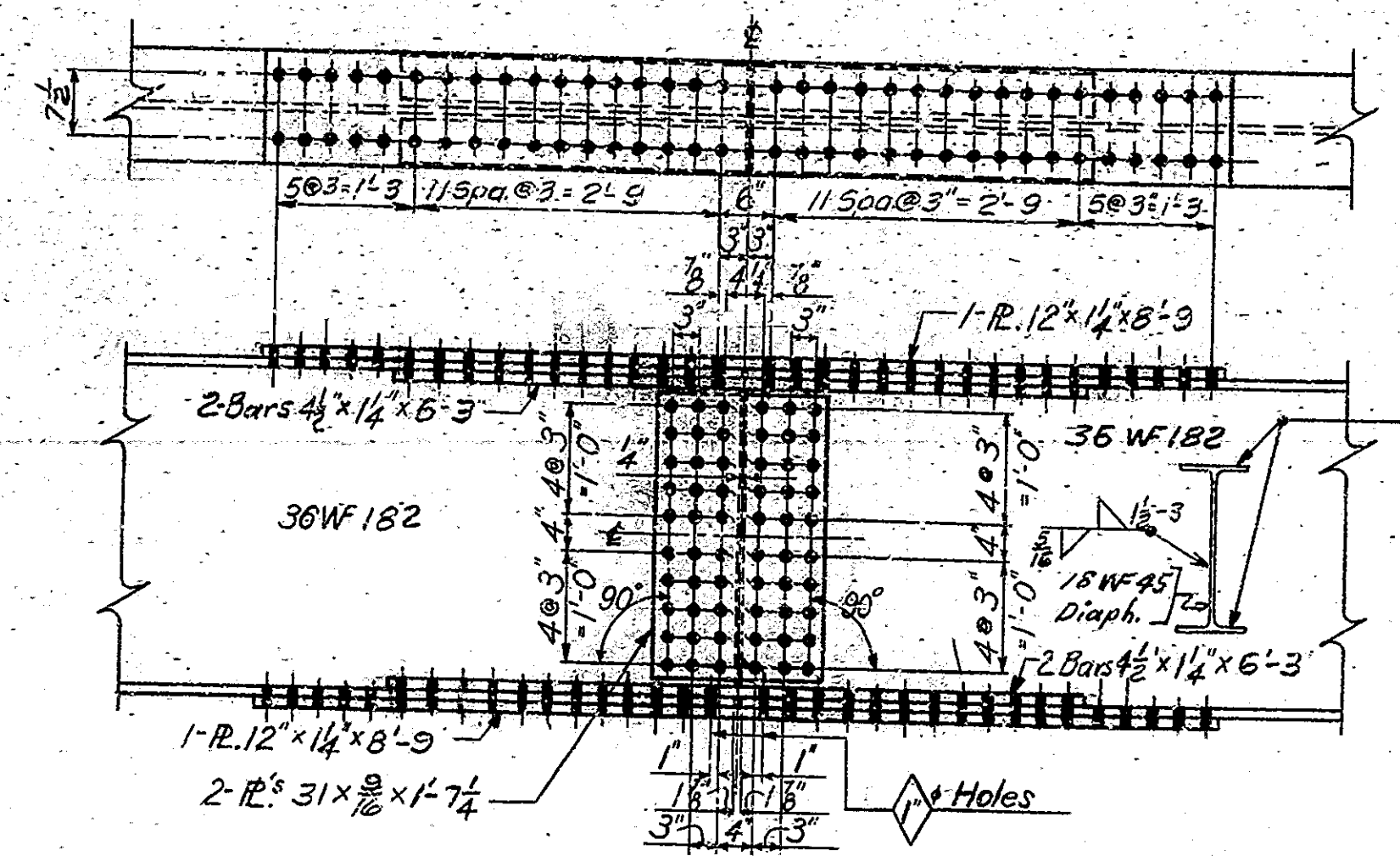
DRAWING: S11 OF 15
PROJECT: F-866 (6)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323



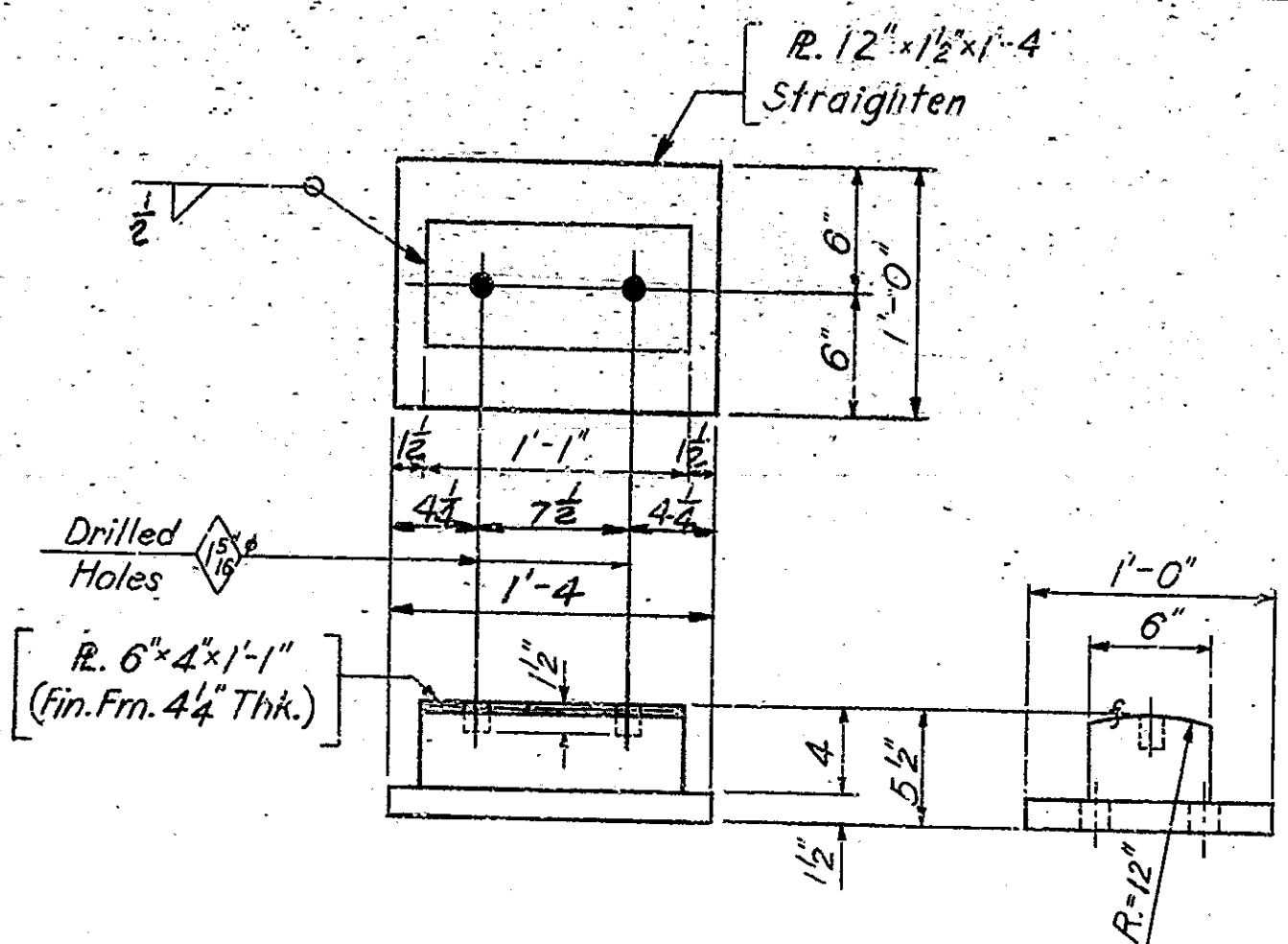
DESIGNED BY: A. J. ...
DRAWN BY: ...
CHECKED BY: ...

REV. 7-17-63

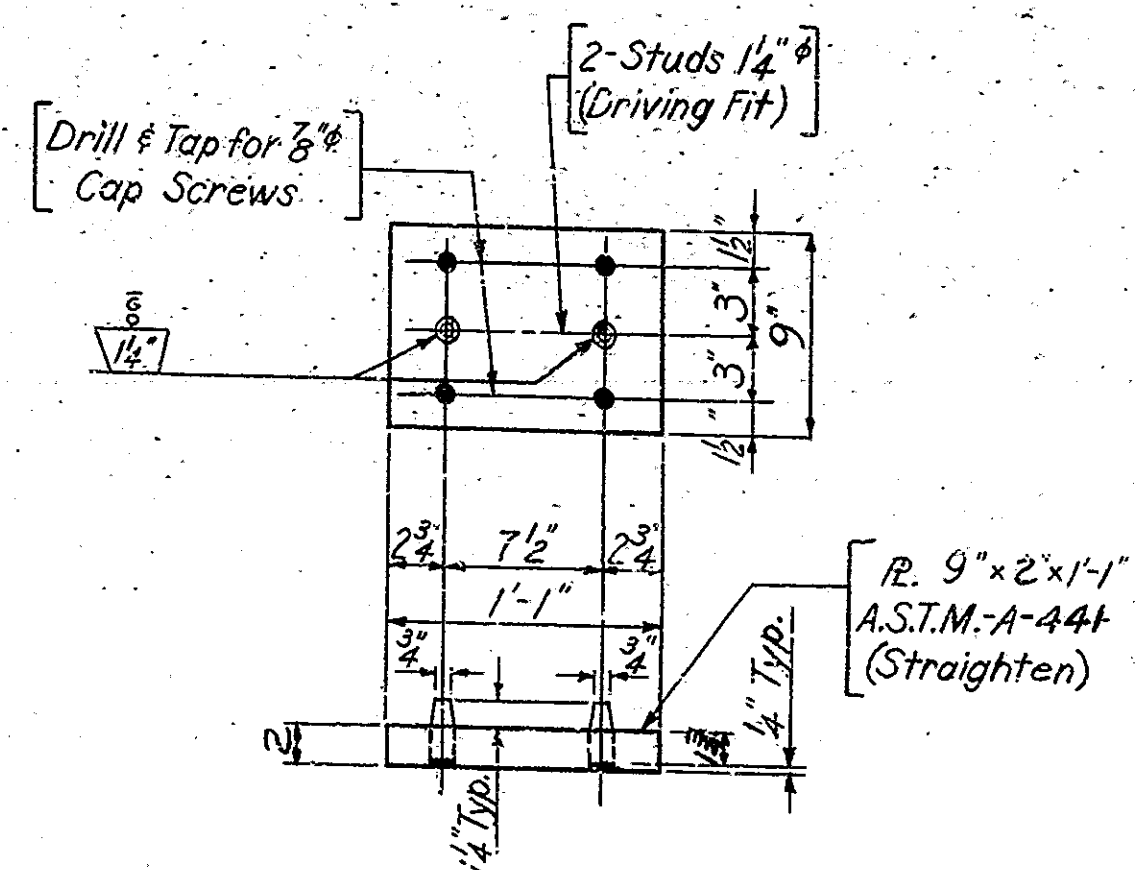
BRIDGES OVER 20' SPAN				
PUB. ROAD NO.	STATE	PROJECT NO.	FISCAL YEAR	TOTAL SHEETS
4	IND.	F-866(6)	1960	34



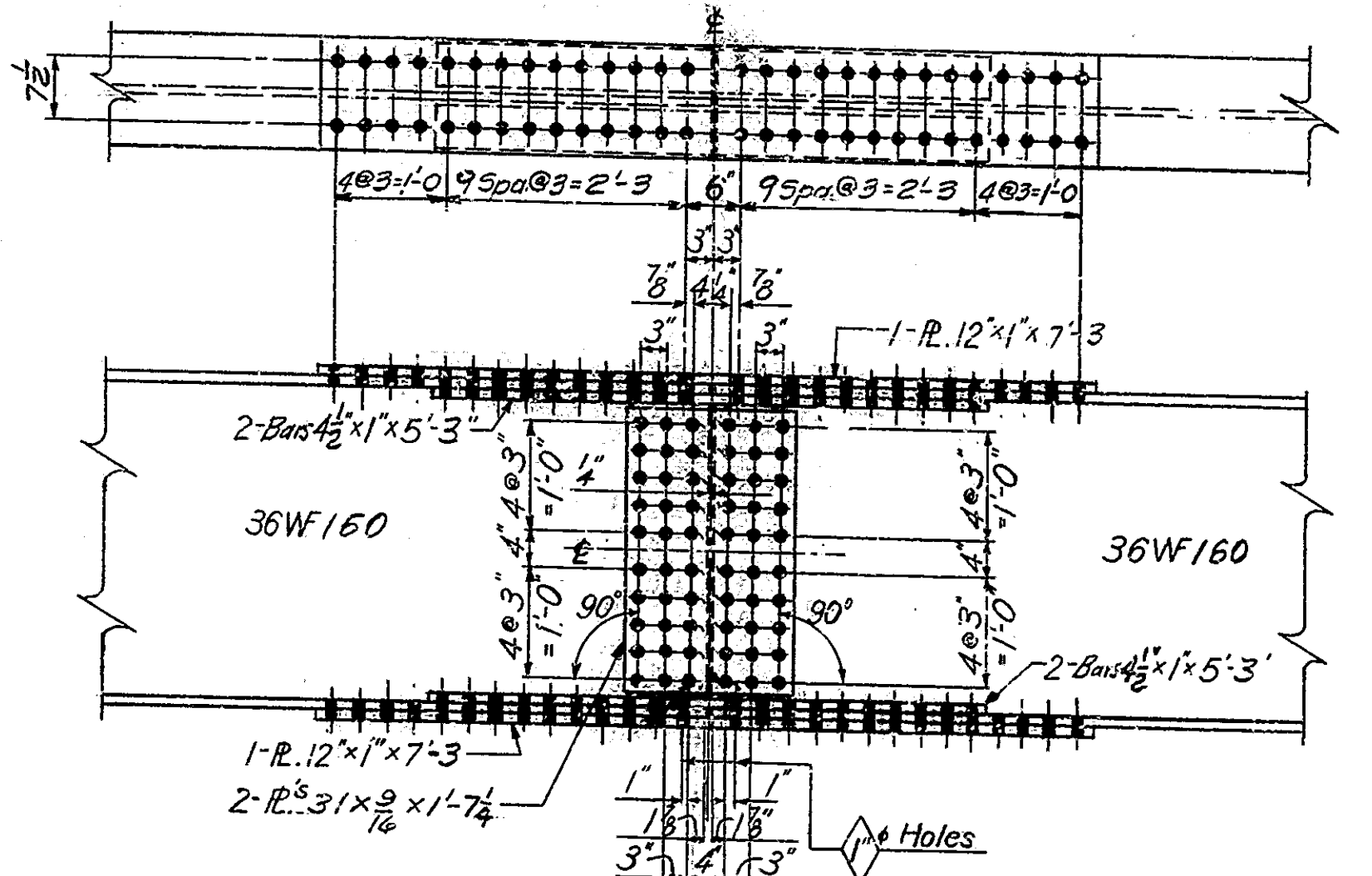
EXTERIOR BEAM SPLICE
Scale: 3/4"=1'-0"



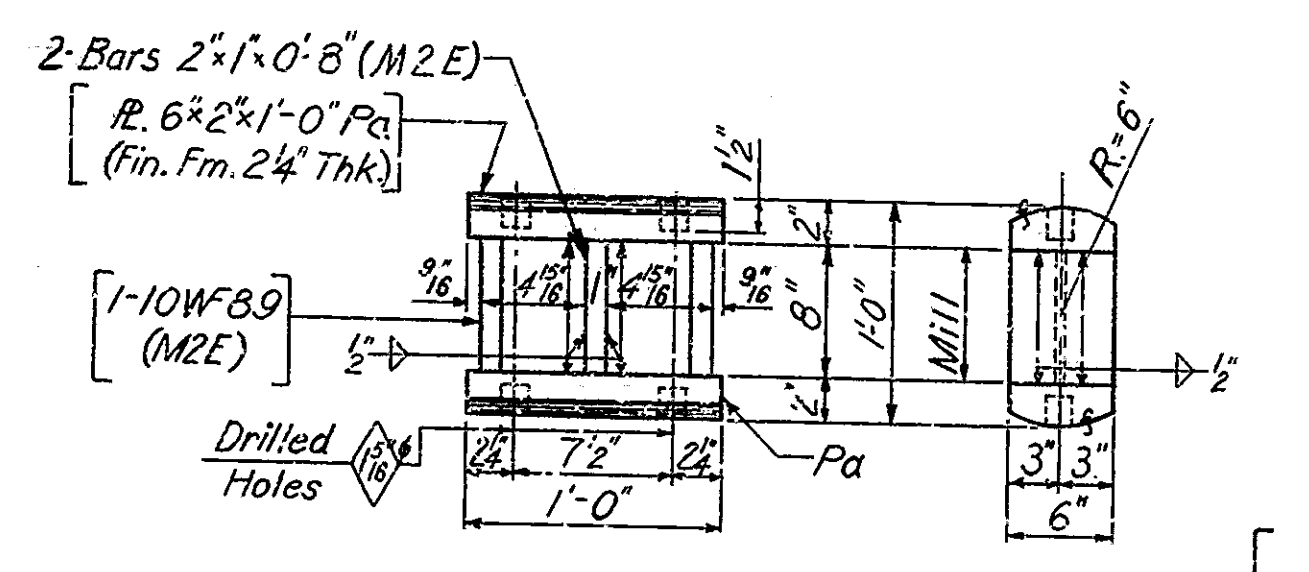
FIXED SHOE @ PIER 5
Scale: 1/2"=1'-0"



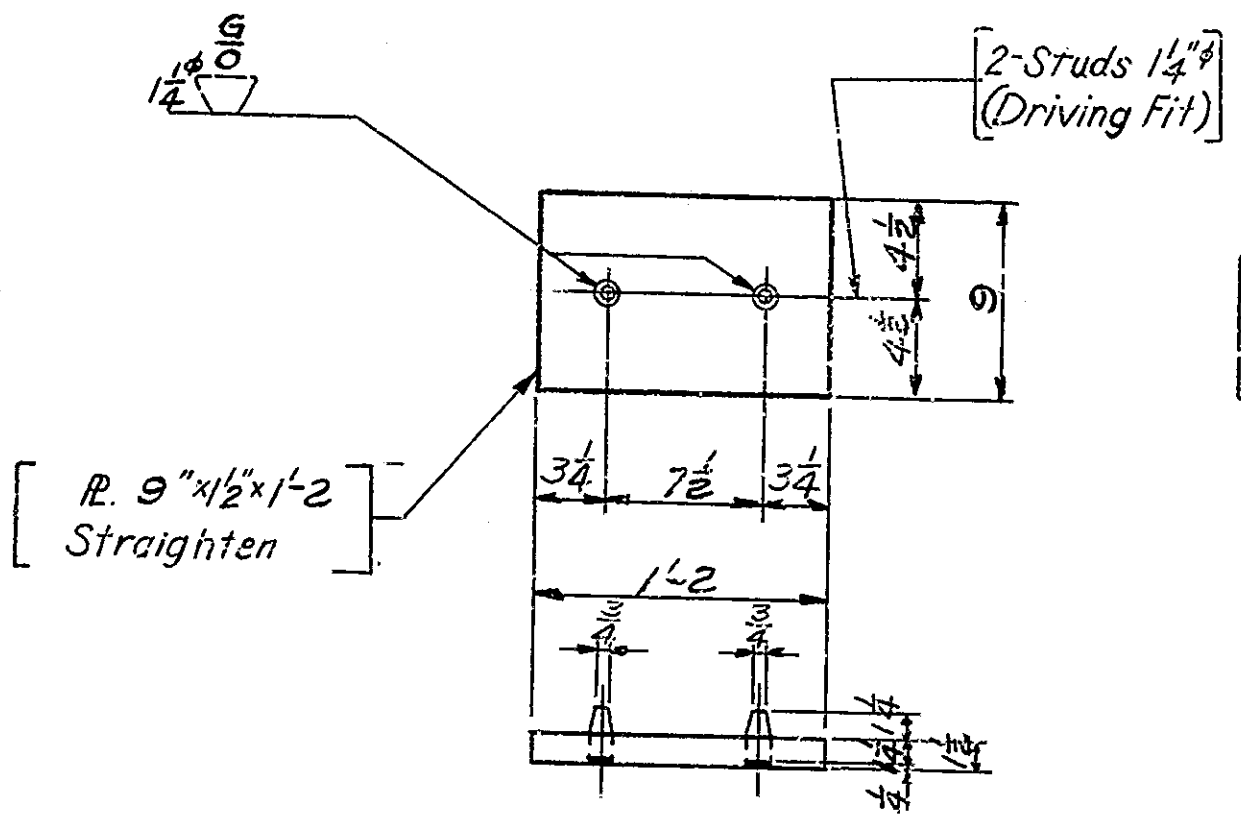
TOP SHOE
Scale: 1-1/2"=1'-0"



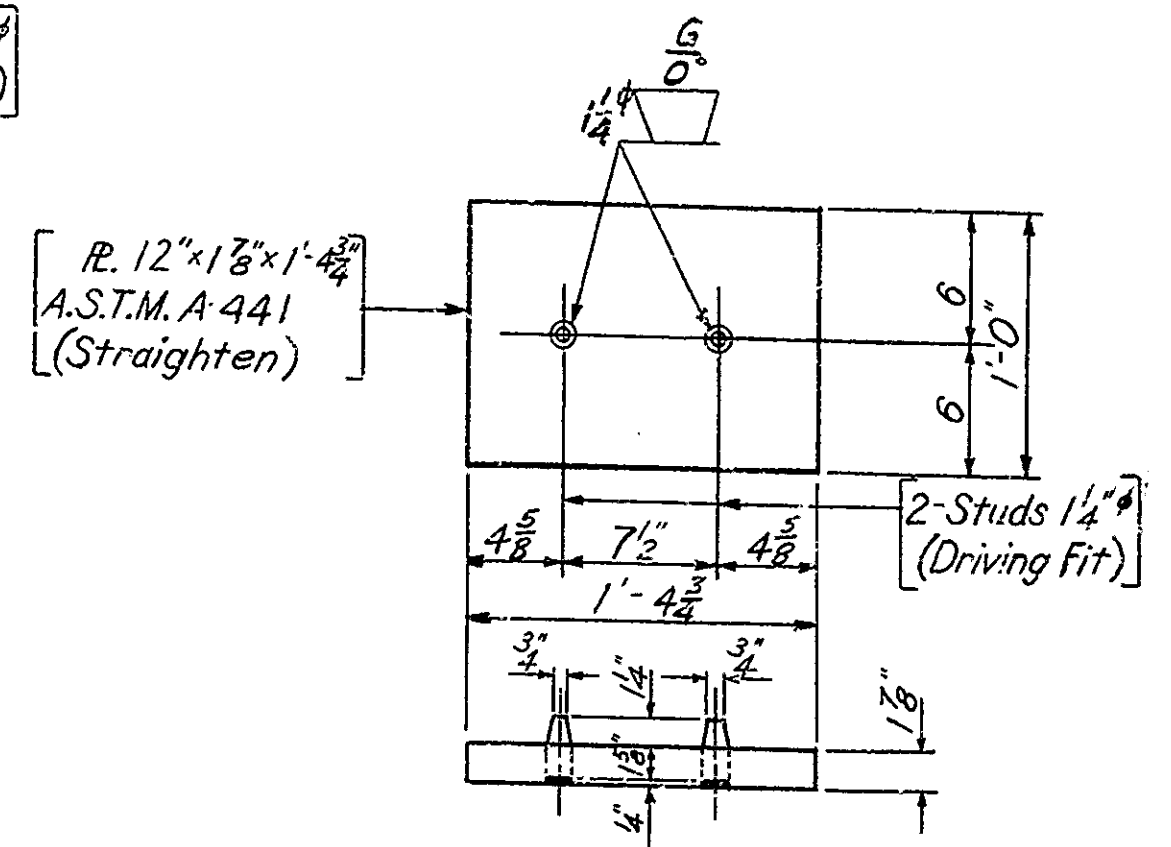
INTERIOR BEAM SPLICE
Scale: 3/4"=1'-0"



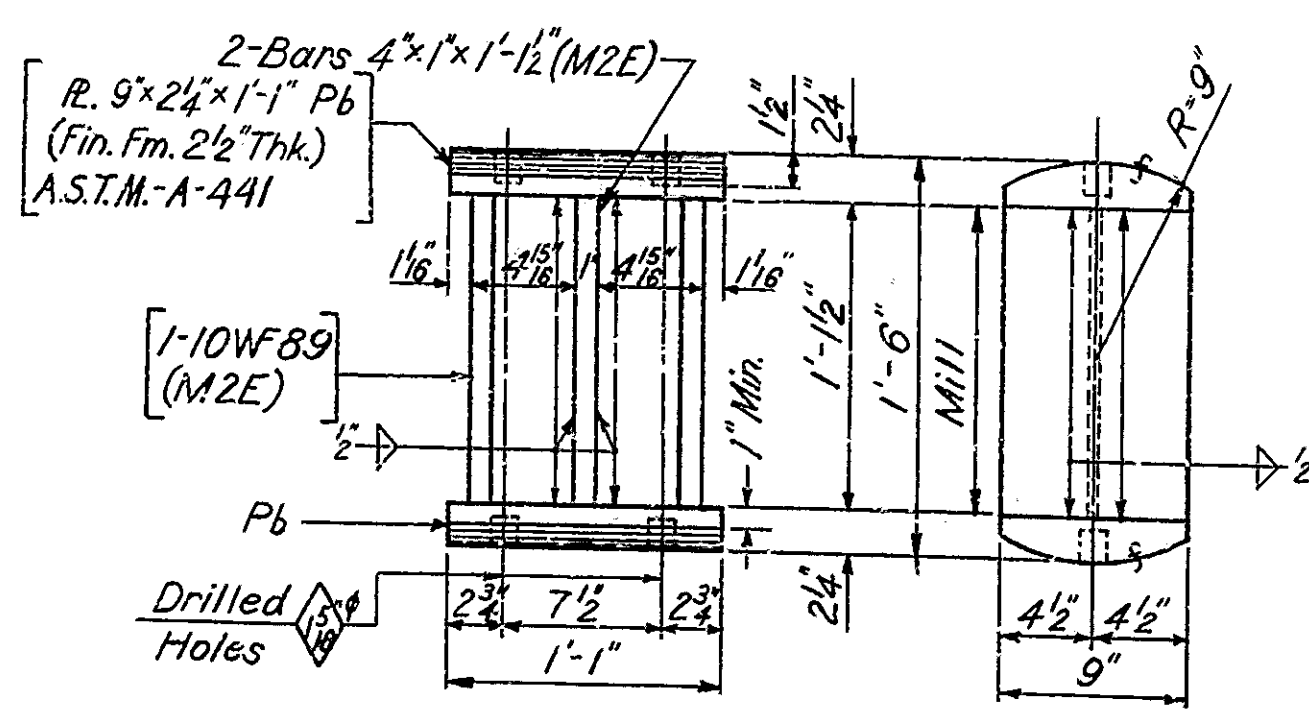
EXP. SHOE @ PIERS 2 & 7
Scale: 1/2"=1'-0"



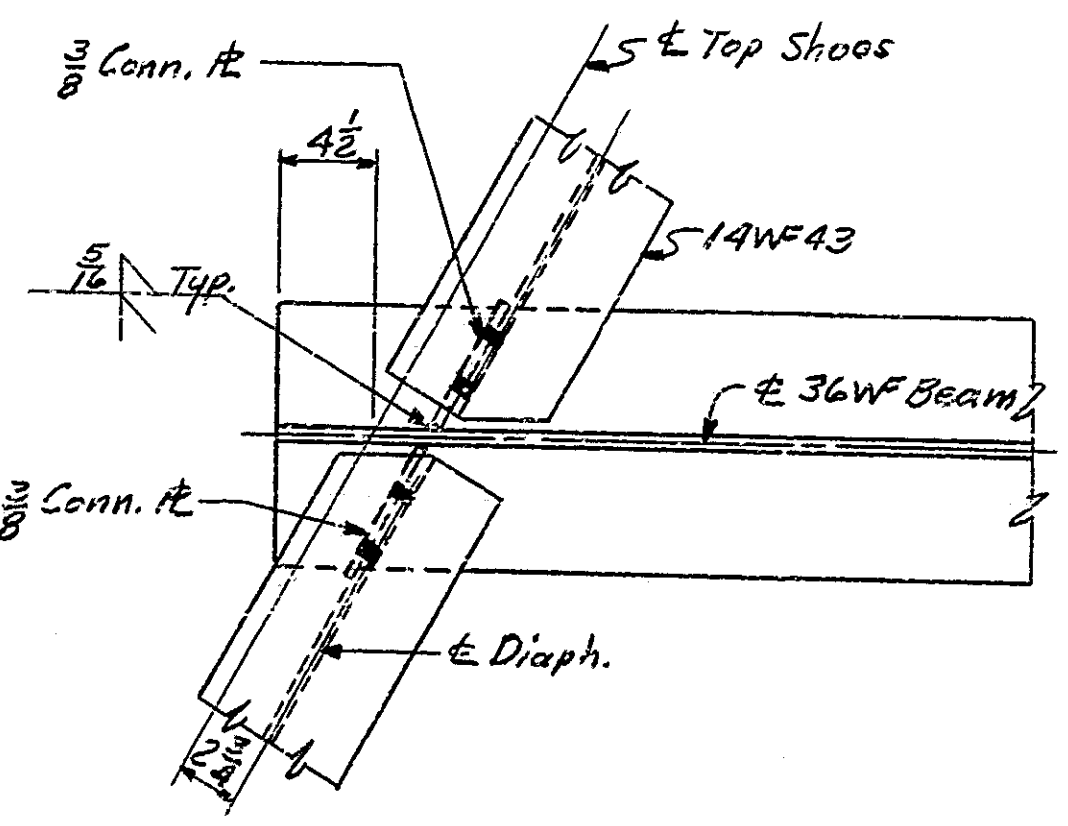
EXP. PLATE @ PIERS 2 & 7
Scale: 1/2"=1'-0"



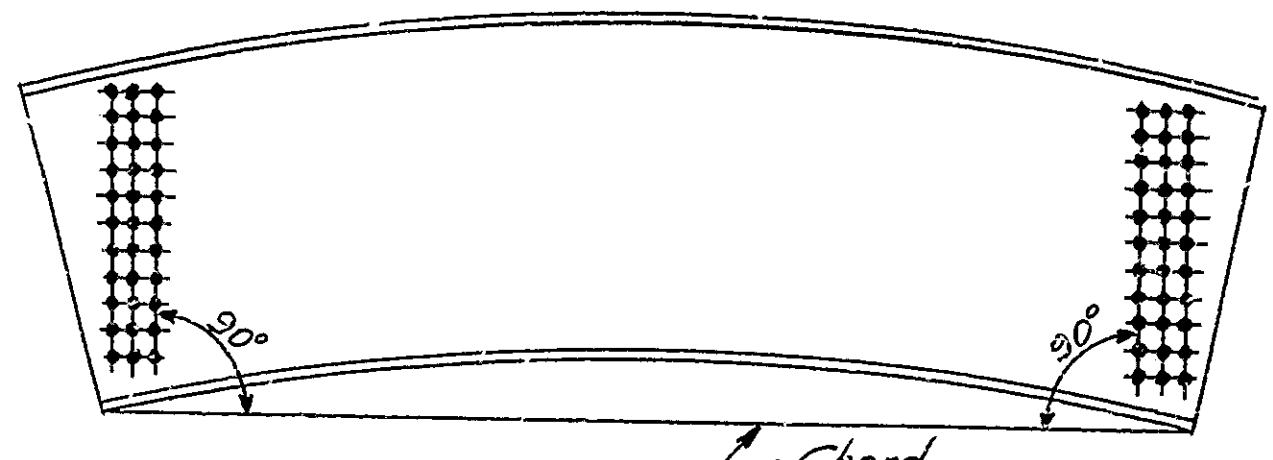
EXP. PLATE @ PIERS 3, 4 & 6
Scale: 1/2"=1'-0"



EXP. SHOE @ PIERS 3, 4 & 6
Scale: 1/2"=1'-0"



TYPICAL DETAIL "A"
Scale: 1/2"=1'-0"



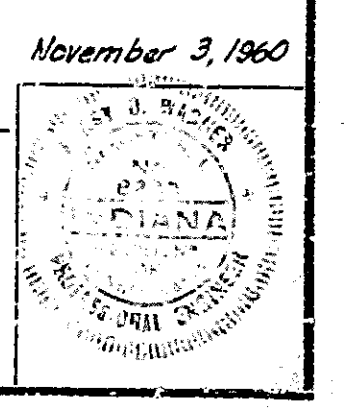
SKETCH SHOWING PUNCHING OF BEAM WEB
No Scale

NOTES:
Rivets 7/8"
Open Holes 1 1/8" unless noted
See Drawing S04 for General notes

BEAM SPLICE & SHOE DETAILS

STATE HIGHWAY DEPARTMENT OF INDIANA

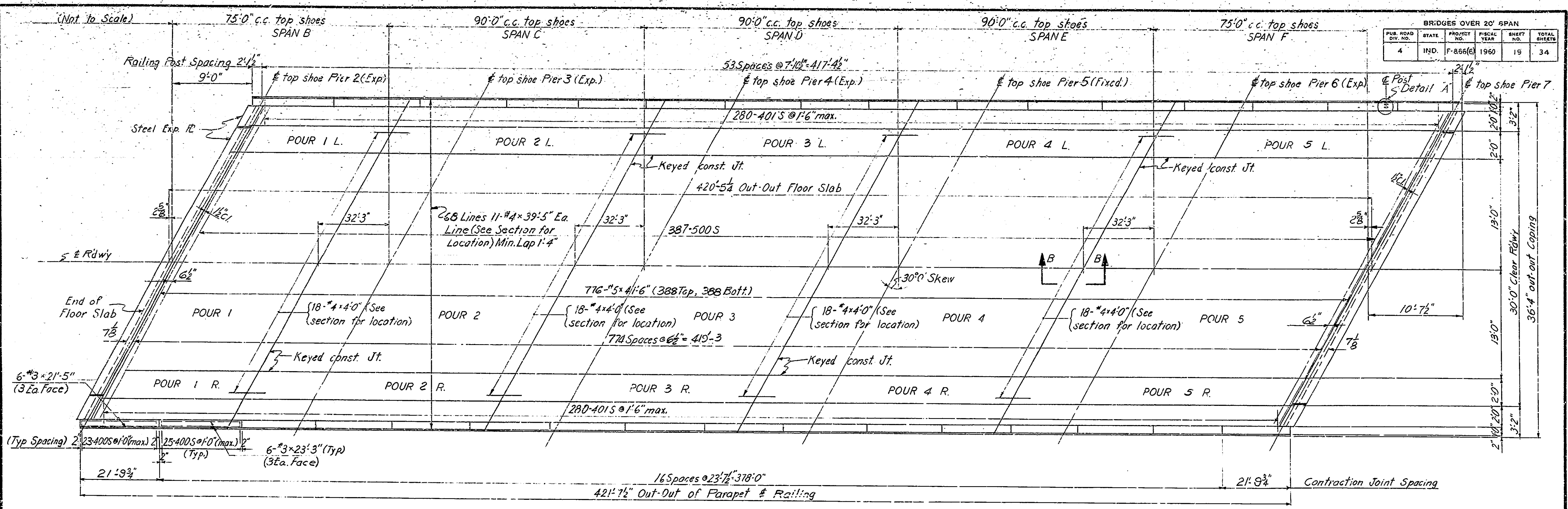
SCALE: AS NOTED
SUBMITTED FOR APPROVAL: *Harry D. Wagner*
DRAWING: 512 OF 15
PROJECT: F-866(6)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323



DESIGNED: J.R.W. 5-9-60, C.K.C. 5-16-60
DRAWN: S.G.R. 6-6-60, C.K.C. 6-8-60
TRACED: S.G.R. 6-6-60, C.K.C. 6-9-60

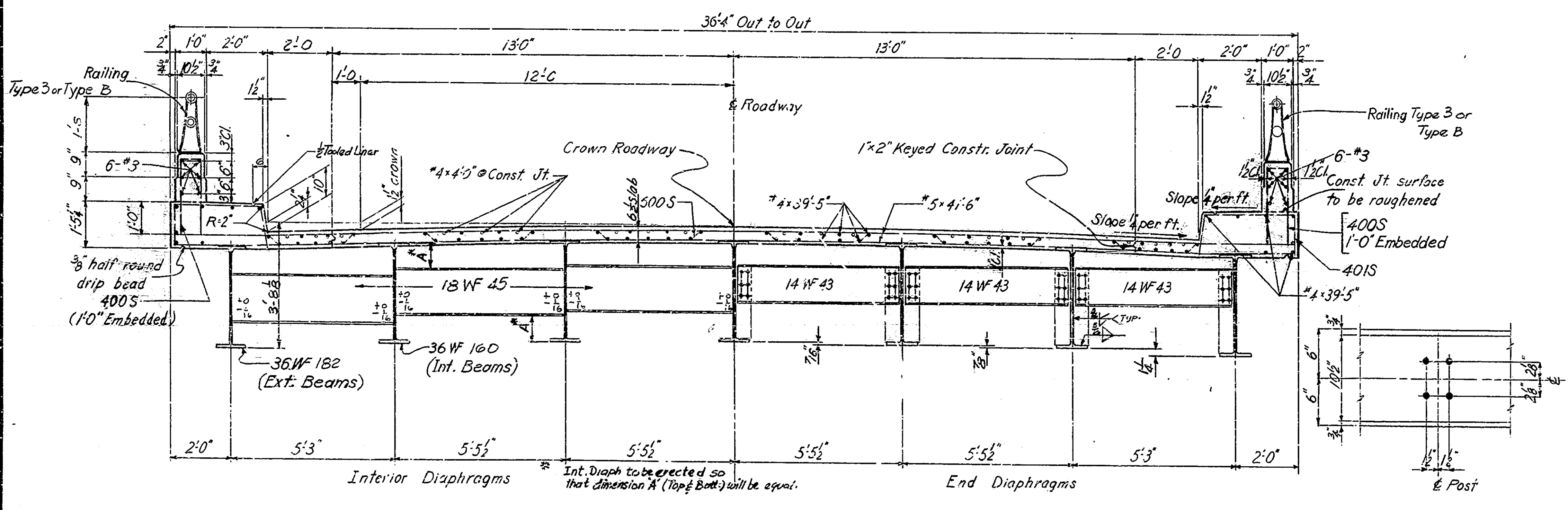
REV. 7-17-63

BRIDGES OVER 20' SPAN				
PUR. ROAD DIV. NO.	STATE	PROJECT NO.	FISCAL YEAR	TOTAL SHEETS
4	IND.	F-866(6)	1960	19
				34



PLAN
Scale: 1/8" = 1'-0"
(Except as Noted)

NOTES
 For reinforcing bar notes see Bridge Standard C1
 For additional details and Bill of Materials see Dwg. S14
 Sequence of pours to be made in order of pour numbers
 Transverse construction joints are optional and pours may be continuous provided the pour terminates at a construction joint as indicated on the plans.
 After structural steel has been erected, concrete forms shall not be blocked against the expansion end of the steel in making any pours adjacent to steel spans.
 For notch in slab at ends of beams see Bridge Standard C1
 For details of Railing see Bridge Standard R1A or R1B.
 For details of Construction Joint see Bridge Standard R1A or R1B.
 See Drawing S2 for General Notes.

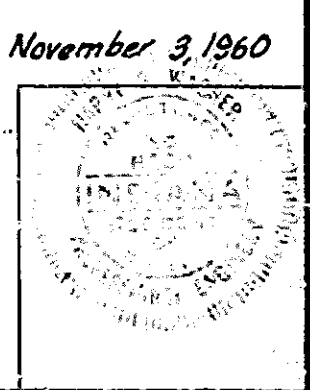


SECTION PERPENDICULAR TO & R/WAYWAY
Scale: 1/2" = 1'-0"

SPANS B, C, D, E, & F DETAILS
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: AS NOTED
 SUBMITTED FOR APPROVAL: *Henry D. Wagner*

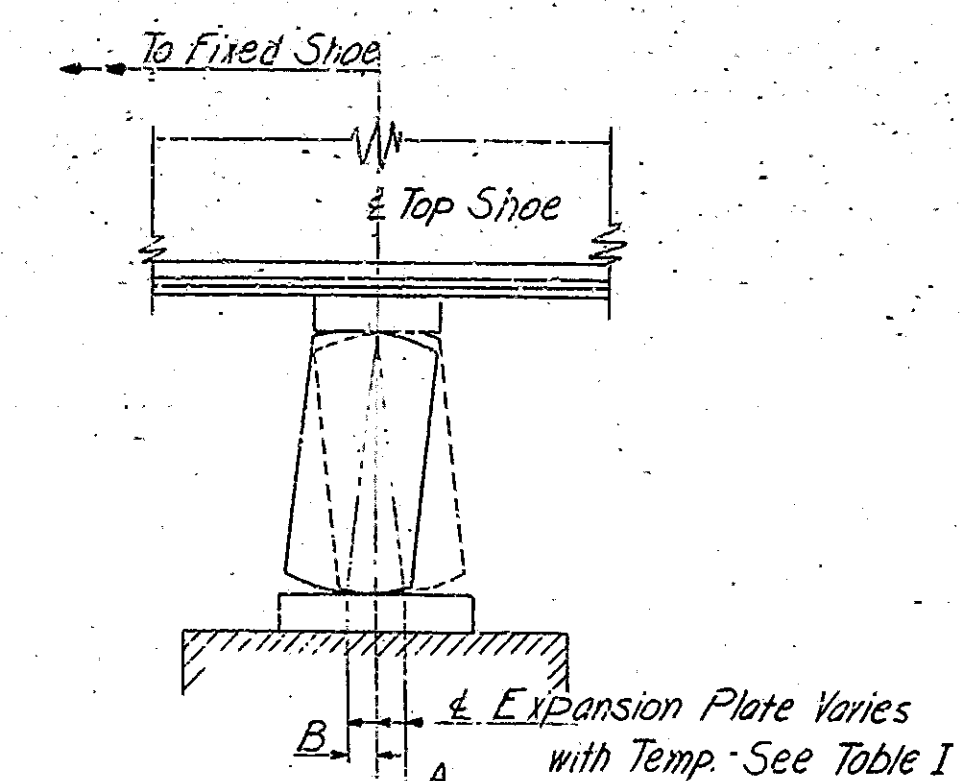
DRAWING: S13 OF 15
 PROJECT: F-866(6)
 BRIDGE CONTRACT NO. 6570
 BRIDGE FILE: 63-C9-4323



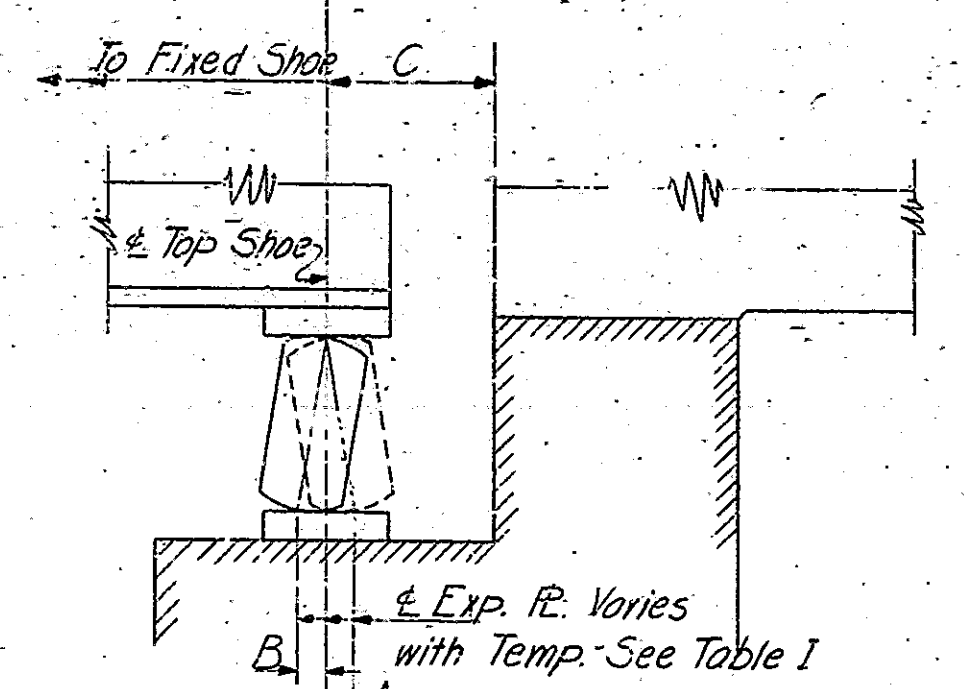
DESIGNED: J.L. 220-52-K.D. 2-26-59
 DRAWN: V.C. 3-31-59 C.K.D. 2-26-59
 TRACED: D.E. 3-3-59 C.K.D. 2-26-59

Rev. 9-18-64 Loc. of Const. Jt.
 Rev. 7-17-63

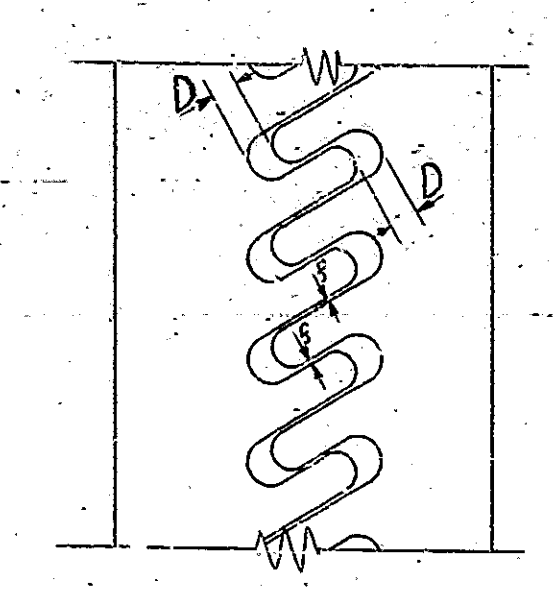
BRIDGES OVER 20' SPAN					
PUB. ROAD REG. NO.	STAT.	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-866(6)	1960	20	34



PIERS NO. 3, 4 & 6



PIERS NO. 2 & 7



PART PLAN OF TOOTHED EXPANSION JOINT

BENDING DIAGRAMS FOR SPANS B, C, D, E & F

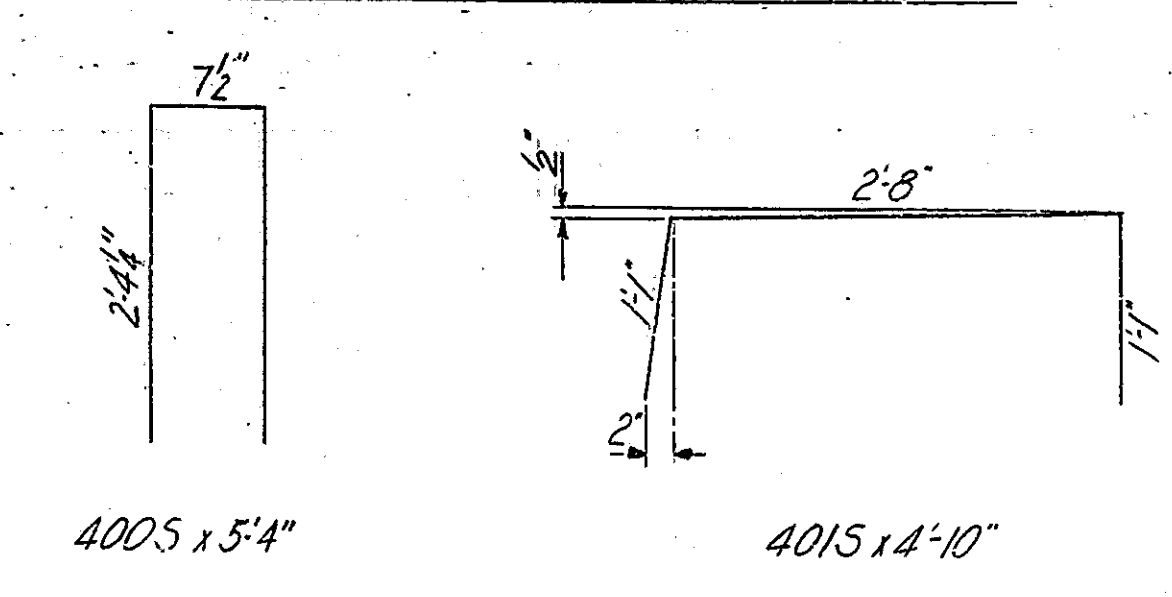


TABLE I

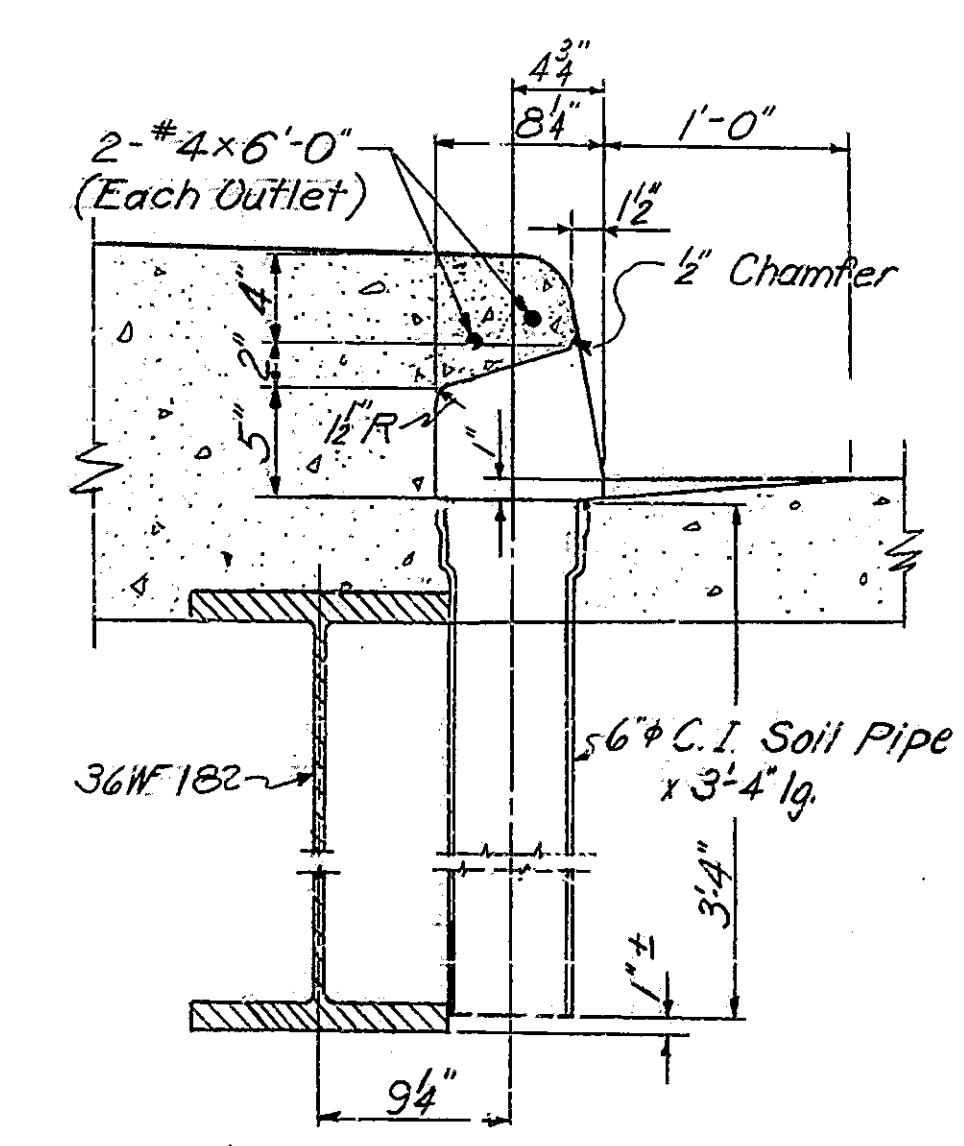
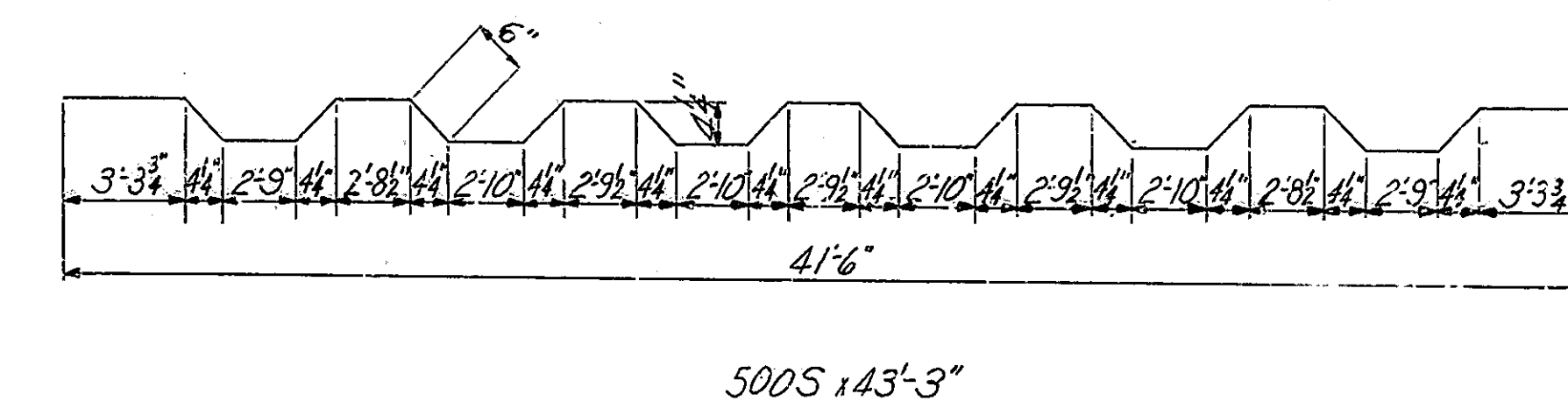
TEMPERATURE	DIMENSION A'				DIMENSION B'			
	0	20	40	60	80	100	120	
Top Shoe to Exp. Pl. @ Pier #2	13 1/2"	13 1/8"	13"	12 1/2"	12 1/8"	12 1/4"	12"	11 1/2"
Top Shoe to Exp. Pl. @ Pier #3	13 1/2"	13 1/8"	13"	12 1/2"	12 1/8"	12 1/4"	12"	11 1/2"
Top Shoe to Exp. Pl. @ Pier #4	13 1/2"	13 1/8"	13"	12 1/2"	12 1/8"	12 1/4"	12"	11 1/2"
Top Shoe to Exp. Pl. @ Pier #6	13 1/2"	13 1/8"	13"	12 1/2"	12 1/8"	12 1/4"	12"	11 1/2"
Top Shoe to Exp. Pl. @ Pier #7	13 1/2"	13 1/8"	13"	12 1/2"	12 1/8"	12 1/4"	12"	11 1/2"

Dimensions are measured parallel to beams.

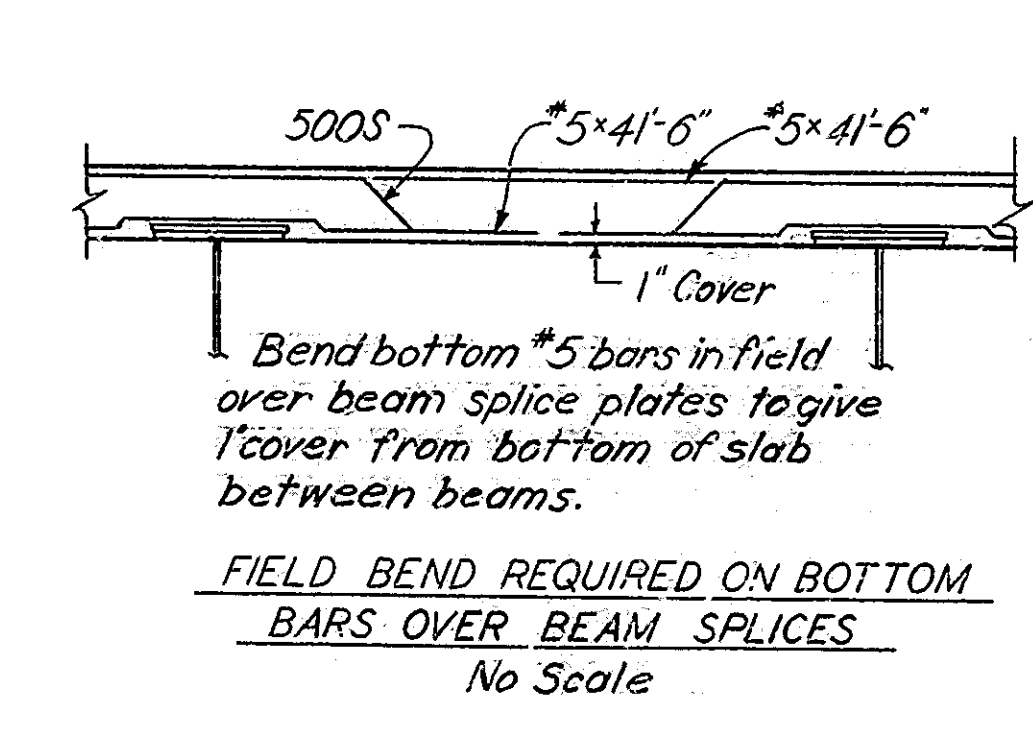
TABLE II

TEMPERATURE	0	20	40	60	80	100	120
Dimension D' Pier #2	4 3/8"	4 1/8"	3 7/8"	3 5/8"	3 3/8"	3 1/8"	2 7/8"
Dimension D' Pier #7	3 3/8"	3 1/8"	3"	2 7/8"	2 5/8"	2 3/8"	2 1/8"

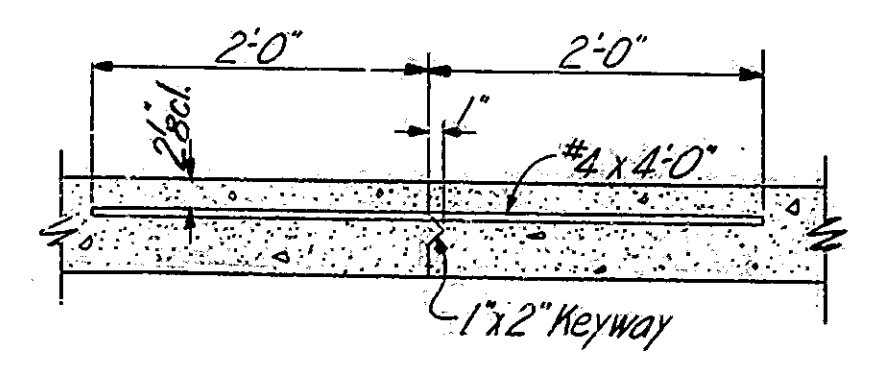
Dimensions are measured parallel to beams



ROADWAY DRAINAGE OUTLET DETAIL
Scale: 1/2" = 1'-0"
For additional details see Bridge Standard C1.
For location of Outlets see General Plan.



Bend bottom #5 bars in field over beam splice plates to give 1" cover from bottom of slab between beams.
FIELD BEND REQUIRED ON BOTTOM BARS OVER BEAM SPLICES
No Scale



SECTION B-B
Scale: 1" = 1'-0"
(For Location of Section See Dwg. S13)

NOTES

See Bridge Standard C1 for bar bending notes and Roadway Drainage Outlet details.
For additional details see Drawing S13.
See Drawing S2 for General Notes.
TABLE I shows data for setting expansion plates.
TABLE II shows data for setting toothed expansion joints and data for locating spans.

GENERAL PROCEDURE:

- After all structural steel has been erected, welding completed and rivets driven, locate superstructure longitudinally so that dimensions 'C' at Pier Nos. 2 & 7 are equal. Weld the fixed shoes to the anchor plates at Pier No. 5.
- Adjust the expansion plates under each expansion shoe in accordance with dimension 'A' or 'B' in TABLE I for the prevailing temperature. Note that Dimension 'A' is always the distance from a vertical line through the center of top shoe in a direction away from the fixed shoe. Weld the expansion plates to the anchor plates.
- Adjust the Steel Expansion Joint transversely so that the openings 'F' between the teeth are equal; and longitudinally so that openings 'D' correspond to the values shown in TABLE II for the prevailing temperature.
- After the shoes are set, take elevations at all screed points on top of adjacent beams. Subtract these elevations from the screed elevations given on Drawing S15 and use the resulting dimension as the height for setting the screed form above that point. This dimension remains constant regardless of how much or in what order the concrete is poured. Do not set screeds by levelling.
- No concrete in the floor is to be poured until the above operations are complete.

BILL OF MATERIALS FOR SPANS B, C, D, E & F

REINFORCING STEEL

MKS Size	No. of Bars	Length	Weight
500S	387	43'-3"	17,458 #
#5	776	41'-6"	33,589
Total #5			51,047 #
400S	876	5'-4"	3,119
401S	560	4'-10"	1,808
#4	36	6'-0"	144
#4	72	4'-0"	192
#4	748	39'-5"	19,695
Total #4			24,958 #
#3	24	21'-5"	193
#3	192	23'-3"	1,680
Total #3			1,873 #
Total Steel			77,878 #

CONCRETE

Class	Four #	cu. yd.
Class F	Pour #1	21.8
	Pour #2	45.5
	Pour #3	45.5
	Pour #4	48.3
	Pour #5	54.5
	Pour #1 LR (208.6 cu. yd.)	17.2
	Pour #2 LR (2018.1 cu. yd.)	36.2
	Pour #3 LR (2018.1 cu. yd.)	36.2
	Pour #4 LR (2018.1 cu. yd.)	36.2
	Pour #5 LR (2021.6 cu. yd.)	43.2
Total Class F		361.8
Railing Concrete		43.9

MISCELLANEOUS

18 Pcs. of 6" Cast Iron	
Soil Pipe x 3'-4" long	1710 lbs.
Railing Type 3 or Type B	8433L.F.

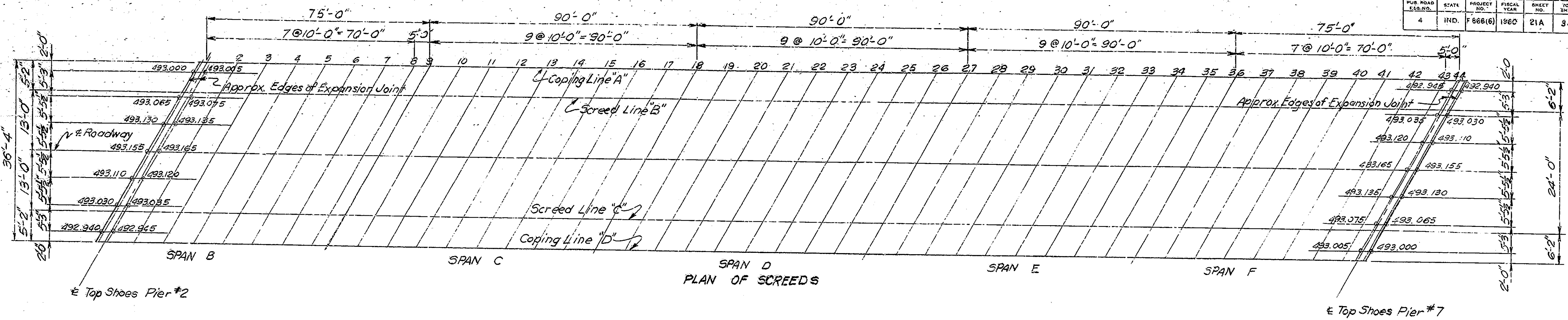
MISCELLANEOUS
STATE HIGHWAY DEPARTMENT OF INDIANA

SCALE: AS NOTED
SUBMITTED FOR APPROVAL: *Harry J. Wagner*
November 3, 1960
DRAWING: S14 OF 15
PROJECT: F-866(6)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: 63-C9-4323

DESIGNED V.E.C. 2/20/59 C.K.D. 3-2-59
DRAWN V.E.C. 1-1-59 C.K.D. G.M.B. 5-14-59
TRACED V.E.C. 3-5-59 C.K.D. G.M.B. 3-26-59

Rev. 9-18-64 Bill of Materials.
Rev. 7-17-63

BRIDGES OVER 20' SPAN					
PUB. ROAD DIST. NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	IND.	F-866(6)	1960	21A	34



Point		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
A	Elev. Top of Coping Form	494.545	494.575	494.600	494.615	494.615	494.600	494.580	494.565	494.560	494.570	494.590	494.610	494.625	494.625	494.615	494.600	494.580	494.570	494.580	494.600	
	Elev. Top of Outside Beam																					
	Dist. Top of O.S. Beam to Coping																					
B	Elev. Top of Screed	493.710	493.745	493.770	493.780	493.780	493.765	493.745	493.730	493.730	493.740	493.760	493.780	493.790	493.795	493.785	493.765	493.745	493.740	493.750	493.770	
	Elev. Top of Beam																					
	Dist. Top of Beam to Top Screed																					
C	Elev. Top of Screed	493.705	493.740	493.765	493.780	493.775	493.760	493.745	493.730	493.725	493.735	493.755	493.775	493.790	493.790	493.780	493.765	493.745	493.740	493.750	493.770	
	Elev. Top of Beam																					
	Dist. Top of Beam to Top Screed																					
D	Elev. Top of Coping Form	494.535	494.570	494.595	494.610	494.610	494.595	494.575	494.560	494.555	494.570	494.590	494.610	494.620	494.625	494.615	494.595	494.580	494.570	494.580	494.600	
	Elev. Top of Outside Beam																					
	Dist. Top of O.S. Beam to Coping																					

Point		21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
A	Elev. Top of Coping Form	494.620	494.635	494.635	494.620	494.600	494.580	494.570	494.580	494.595	494.615	494.625	494.620	494.610	494.590	494.570	494.555	494.565	494.585	494.600	494.610
	Elev. Top of Outside Beam																				
	Dist. Top of O.S. Beam to Coping																				
B	Elev. Top of Screed	493.790	493.800	493.800	493.790	493.770	493.750	493.740	493.745	493.765	493.780	493.790	493.790	493.775	493.755	493.735	493.725	493.735	493.755	493.770	493.780
	Elev. Top of Beam																				
	Dist. Top of Beam to Top Screed																				
C	Elev. Top of Screed	493.790	493.800	493.800	493.790	493.770	493.750	493.740	493.745	493.765	493.785	493.795	493.790	493.780	493.760	493.740	493.730	493.735	493.755	493.775	493.780
	Elev. Top of Beam																				
	Dist. Top of Beam to Top Screed																				
D	Elev. Top of Coping Form	494.620	494.635	494.635	494.620	494.600	494.580	494.570	494.580	494.600	494.615	494.625	494.625	494.610	494.590	494.570	494.560	494.570	494.590	494.610	494.615
	Elev. Top of Outside Beam																				
	Dist. Top of O.S. Beam to Coping																				

Point		41	42	43	44
A	Elev. Top of Coping Form	494.605	494.585	494.555	494.535
	Elev. Top of Outside Beam				
	Dist. Top of O.S. Beam to Coping				
B	Elev. Top of Screed	493.775	493.755	493.725	493.705
	Elev. Top of Beam				
	Dist. Top of Beam to Top Screed				
C	Elev. Top of Screed	493.775	493.760	493.730	493.710
	Elev. Top of Beam				
	Dist. Top of Beam to Top Screed				
D	Elev. Top of Coping Form	494.610	494.590	494.560	494.545
	Elev. Top of Outside Beam				
	Dist. Top of O.S. Beam to Coping				

NOTE:
This sheet supersedes Screeds
Sheet dated Nov. 3, 1960.

SCREEDS

INDIANA STATE HIGHWAY COMMISSION

SCALE: - NONE JULY 17 1963

RECOMMENDED FOR APPROVAL: *C.R. Remmer*

DRAWING: - S15A OF 15
PROJECT: - F-866(6)
BRIDGE CONTRACT NO. 6570
BRIDGE FILE: - 63-Cg-4323

DESIGNED: J.B.M. CKD: G.E.S. 3/16/63
DRAWN: M.R.Z. 11/16/63 CKD: D.R.R. 3/18/63
TRACED: CKC

Rev. 9-18-64 Flava.

ITEM	STRUCTURE QUANTITIES														STRUCTURAL STEEL	CAST IRON	UNTREATED TIMBER PILES	STEEL PILE SHELLS	RAILING TYPE 3 OR TYPE B	ANCHOR RODS NK-AB3	ANCHOR PLATES NK-AP3
	CONCRETE				REINFORCING STEEL (1934 STD. WTS.)																
	CLASS F	CLASS D	CLASS E		CLASS F																
Pier No. 1	15.2																				
Pier No. 2	30.7		16.6	32.2																	
Pier No. 3	23.2		29.8	35.4																	
Pier No. 4	23.2		29.8	35.4																	
Pier No. 5	23.2		29.8	35.4																	
Pier No. 6	23.2		29.8	35.4																	
Pier No. 7	30.7		16.6	32.2																	
Pier No. 8	15.2																				
Substructure (Span 1)	79.1				1.4																
Substructure (Span 2)	79.1				5.0																
Substructure (Span 3)	79.1				5.0																
Substructure (Span 4)	79.1				5.0																
Sill of Splice Bars						117	45		23	18	34	42	13	6							
TOTALS	726.2		155.9	213.3	567	21,805	7,597		1,154	4,554	17,162	63,549	36,760	2,427							

Size	Number	Pieces	Length	Weight
#11	2		11'-0"	117
#10	1		10'-0"	45
#8	1		8'-0"	23
#7	1		8'-0"	16
#6	3		8'-0"	34
#5	3		8'-0"	42
#4	4		8'-0"	16
#3	3		8'-0"	6
Total				299

Size	Mark	No. Pcs.	Length	No. Pcs.	Length	Weight

ITEM	UNIT	QUANTITY	ASSEMBLY	STK. NO.
WARNING SIGNS	Each		Signs 130 R	
			123 R	
			124 R	
			115 R	
STD. BARRICADES (TYPE A)	Each		Barricades (Type A)	
			Signs 113 R	
STD. BARRICADES (TYPE B)	Each		W11 R	
			117	
BRIDGE (SUITABLE) BARRIERS	Each		Suitcase Barriers	
			Lanterns or Torches	
STD. BARRICADES (TYPE B)	Each		Barricades (Type B)	
			Signs 113	
CONSTRUCTION IDENTIFICATION SIGN	Each		Lanterns or Torches	
			Signs XM2	
			W11 R	
			117	

STREET NO.	LOCATION	SIZE	KIND	LENGTH	CL. D CONC IN STRUCTS CU YDS.	REINF. STEEL LBS.	CAST IRON LBS.	REMARKS
100	734+26	6"	Perf. C.M. Pipe (186a)	66'	0.2			
101	739+46	6"	Perf. C.M. Pipe (186a)	66'	0.2			
TOTALS					0.4			

ITEM	DESCRIPTION	UNIT	QUANTITY
1	Class F Concrete	Cu. Yds.	726.2
2	Class D Concrete	Cu. Yds.	
3	Class E Concrete above Footings	Cu. Yds.	155.9
4	Class E Concrete in Footings	Cu. Yds.	213.3
5	Railing Concrete	Lin. Ft.	
6	Reinforcing Steel	Lbs.	161,018
7	Structural Steel	Lbs.	
8	Cast Iron	Lbs.	1,710
9	Untreated Timber Piles Furnished	Lin. Ft.	4,050
10	Untreated Timber Piles Driven	Lin. Ft.	3,240
11	Furnishing Equipment for Driving Piles	Lump Sum	1
12	Well Excavation	Cu. Yds.	587
13	Waterway Excavation	Cu. Yds.	55,816
14	Common Excavation	Cu. Yds.	3,850
15	Special Dorrow	Cu. Yds.	50
16	Grade B Special Borrow	Cu. Yds.	3,200
17	Sodding	Sq. Yds.	
18	Mulched Seeding	Sq. Yds.	
19	Cement Concrete Pavement	Sq. Yds.	
20	Reinforced Cement Concrete Pavement	Sq. Yds.	192
21	Thickened Rein' Cement Concrete Pavement	Sq. Yds.	
22	Aggregate for Compacted Aggregate Base	Tons	
23	Removal Present Structure	Lump Sum	
24	Temporary Bridge and Approaches	Lump Sum	
25	Warning Signs	Each	
26	Std. Barricades (Type A)	Each	
27	Class D Concrete in Structures	Cu. Yds.	0.4
28	R/W Markers	Each	4
29	Steel Pile Shells Furnished	Lin. Ft.	360
30	Steel Pile Shells Driven	Lin. Ft.	380
31	Railing (Type 3 or Type B)	Lin. Ft.	984.5
32			
33	1/2 Exp. Joint (Type II or III)	Lin. Ft.	70
34	1/2 Exp. Joint (Type IV or V)	Lin. Ft.	48
35			
36			
37			
38			
39			
40	Railing Concrete	Cu. Yds.	58.7
41	Subbase (Type I or II)	Cu. Yd.	45
42			
43	Anchor Rods 1/2" x 12"	Tons	236.1
44	Anchor Rods NK-AB3	Each	72
45	Structural Steel	Lump Sum	1
46	6" Perf. C.M. Pipe (186a)	Lin. Ft.	132
47	Anchor Plates NK-AP3	Each	42
48	1/2 Exp. Joint Armor (Type I or II)	Lin. Ft.	68.8
49			
50			
51			
52			
53			
54			
55			
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59			
60			

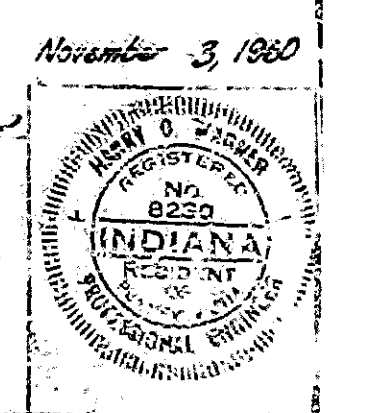
*Not a pay item.
 *The weight of structural steel shown is approximate only and it shall be the Contractor's responsibility to determine the weight on which to base his bid.

Rev. 9-18-64 Items 33,44,47, Items 34 & 48 Added.
 Rev. 7-17-63 Items 1,6, 20,21,40,43 Deleted: 17,18,32,34,39 incl. 41,42
 Added: 27,46,47

SUMMARY
 STATE HIGHWAY DEPARTMENT OF INDIANA

Submitted FOR APPROVAL *Larry D. Wagner*

PROJECT: F-366(6)
 BRIDGE CONTRACT NO 6570
 BRIDGE FILE: 61-09-4323



END STR