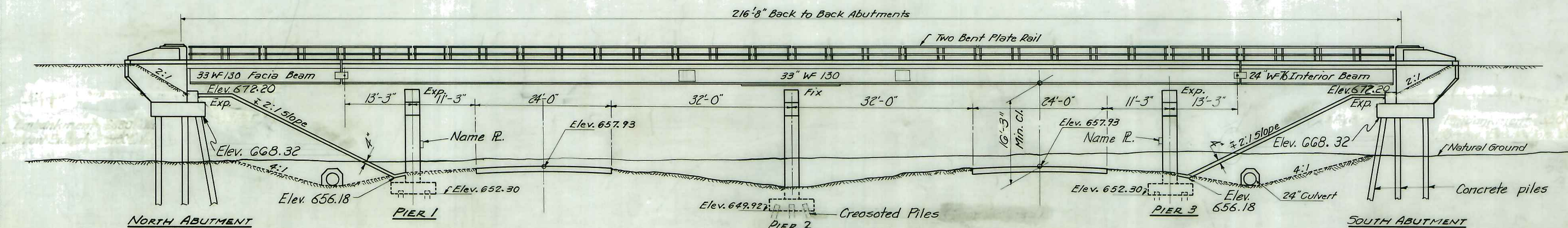


B. M. spike and washer in side of Telephone Pole
32' Lt. Sta. 24+90 F.A.I. 80-1 Elev. 660.31
(U.S.G.S. Datum)

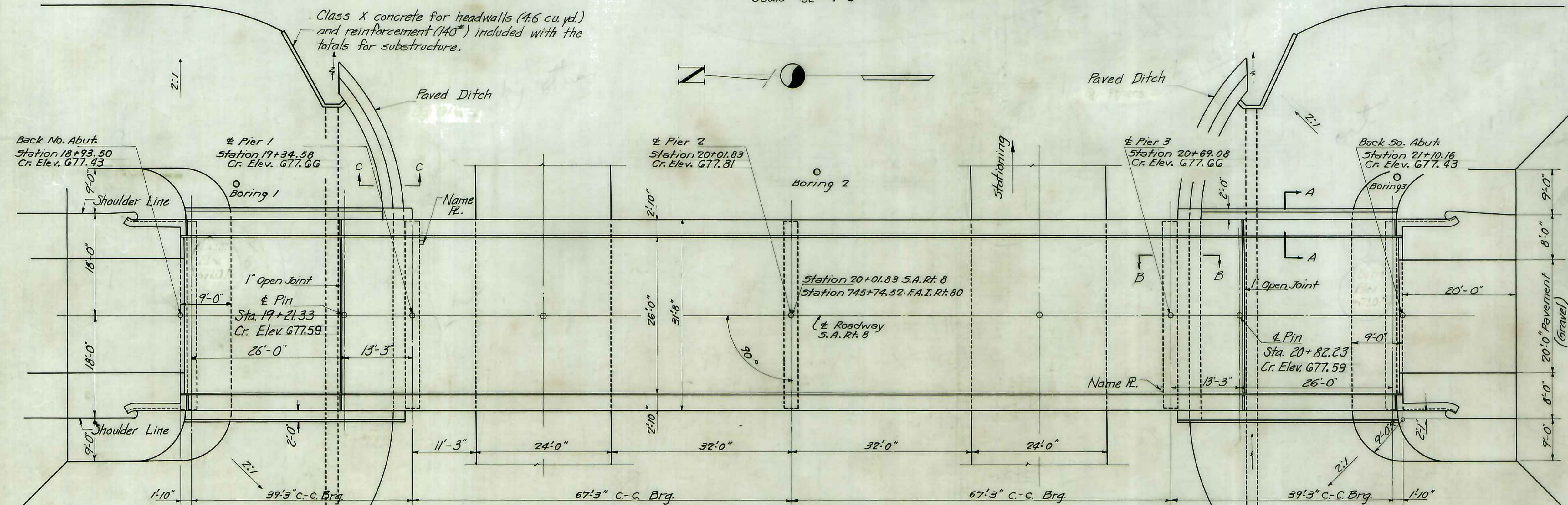
No Existing Structure

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. /
S.B.I. F.A.I. 80	06-3 3HB-1	BUREAU	97	21	9 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT-I-80-2(7)50					



ELEVATION
Scale 3/32" = 1'-0"



PLAN

GENERAL NOTES

Class-X Concrete shall be used throughout except in Handrail end Posts.
Handrail Concrete shall be used in Handrail end Posts.
The Concrete floor slab shall be finished in accordance with Art. 5.1.9 of the Standard Specifications.
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh 1/2 wires weighing 56# per 100 sq. ft.
All rockers, bearing plates, lead plates, pintles and anchor bolts shall be fabricated and set in accordance with Art. 5.1.5 of the standard specifications and are included in quantity of structural steel. Est. Wt. 6740.
Anchor bolts shall be set before riveting diaphragms over supports.
Expansion guards shall be fabricated and erected in accordance with Art. 5.1.3 (d) of the standard specifications.
Expansion Guards are included in quantity of structural steel. Est. Weight - 2260 #.
Except as otherwise provided all structural steel shall receive one shop coat of red lead paint and two field coats of aluminum paint.
See Art. 56.1 to 56.5 inclusive of the standard specifications.
All paint shall be furnished and applied by the Contractor.
The Contractor shall drive two test piles as directed by the Engineer before ordering remainder of Piles.
One timber test pile in the vicinity of Pier 1 and one concrete pile in a permanent location at South Abutment.
All structural steel shall conform to the A.S.T.M. Spec. A 36.
Rivets 3/4" Open Holes 1/2" Unless noted.
Layout of paved ditch may be varied to suit ground conditions in the field as directed by the Engineer.
Quantity of paved ditch is included with slope wall.

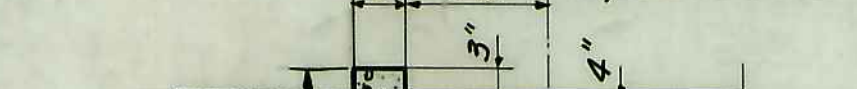
Abutment Piles shall be pre-cored thru embankment in accordance with article 60.9(c) of the Standard Specifications.
All the outside vertical faces of the vertical legs of angles in the expansion guard shall be given two shop coats of red lead paint.

Face of Piers 1 or 3

SECTION B-B



Water table of Superstructure



SEC. A-A

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER.	SUBSTR.	TOTAL
Class-X Concrete	Cu. Yds.	188.5	204.3	392.8
Handrail Concrete	Cu. Yds.	2.3		2.3
Reinforcement Bars	Lbs.	31990	14536	46526
Structural Steel	Lbs.	163,070		163,070
Name Plates	Each		2	2
Metal Handrail	Lin. Ft.	430		430
Class-A Excav. for Structures	Cu. Yds.		107	107
Slope Wall 4"	Sq. Yds.		440	440
Concrete Piles	Lin. Ft.		544	544
Test Piles (Concrete)	Each		1	1
Crested Piles	Lin. Ft.		630	630
Test Piles (Timber)	Each		1	1
Pipe Culvert Type 2-24"	Lin. Ft.			152

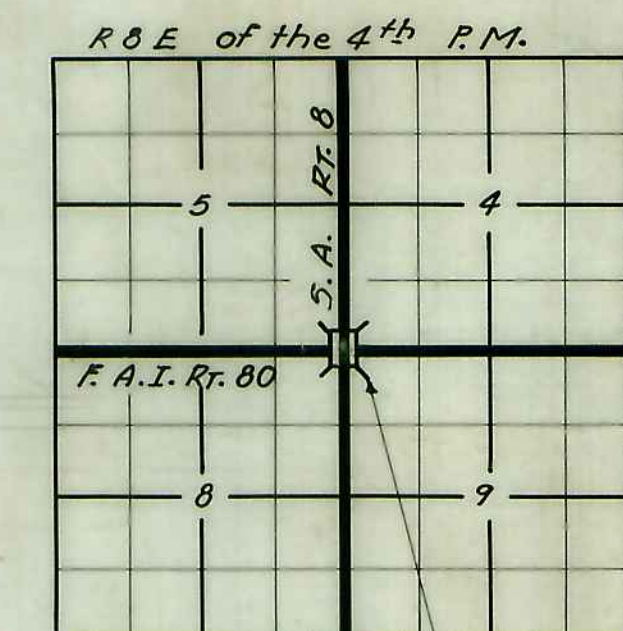
GENERAL PLAN & ELEVATION

PROJ. I-80-2(7)50

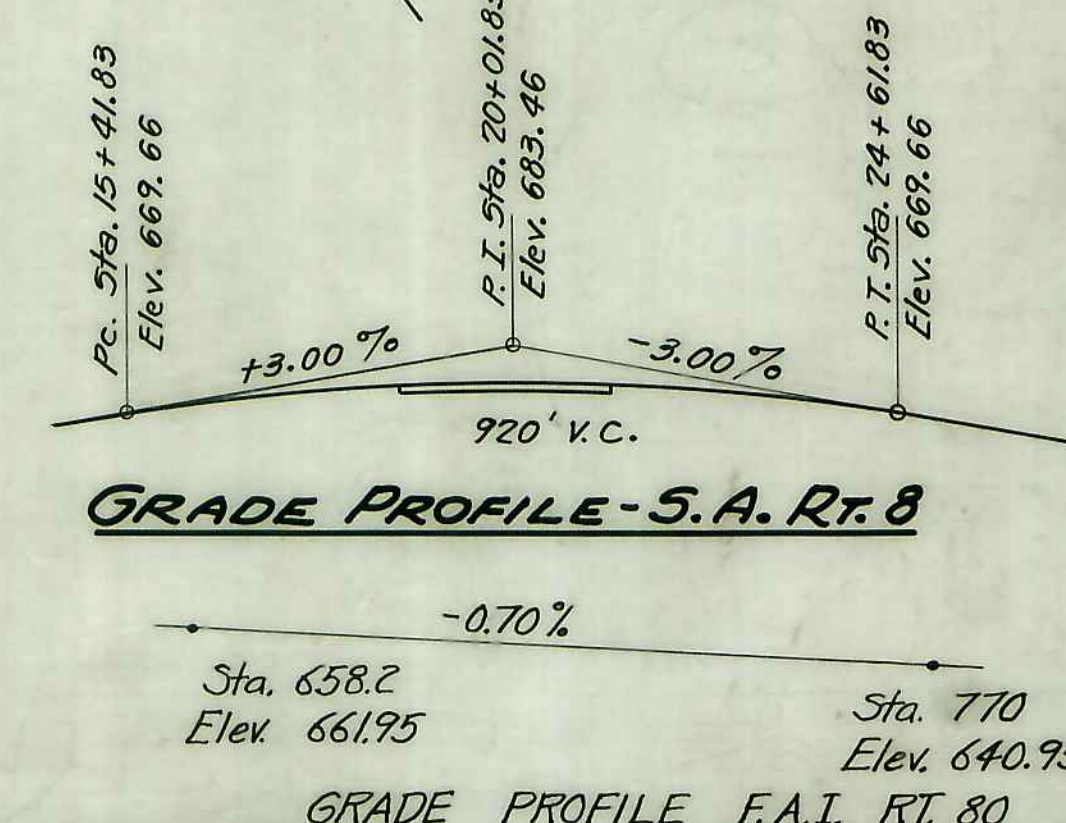
F.A.I. RT. 80-SEC. 06-3HB-1

BUREAU COUNTY

STATION 745+74.52



LOCATION SKETCH



GRADE PROFILE-S.A. Rt. 8

GRADE PROFILE F.A.I. RT. 80

DESIGN STRESSES
Fc - - - 1400 #/sq. in. Super & Sub.
Ft - - - 75 #/sq. in. Ftg.
Fs - - - 20000 #/sq. in. Reinf.
Ft - - - 18000 #/sq. in. Struct.
n - - - 10

Loading H15-512-44

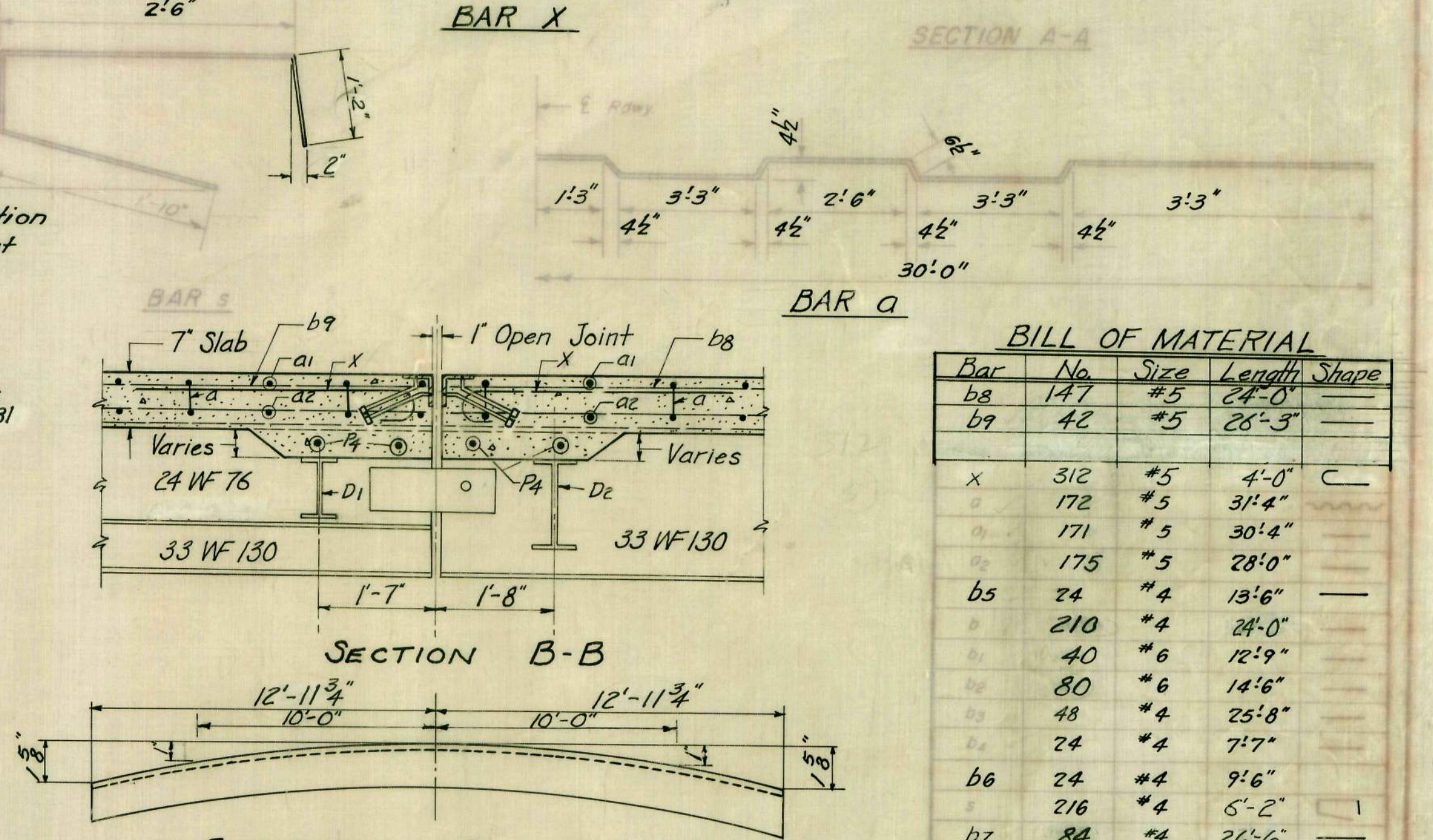
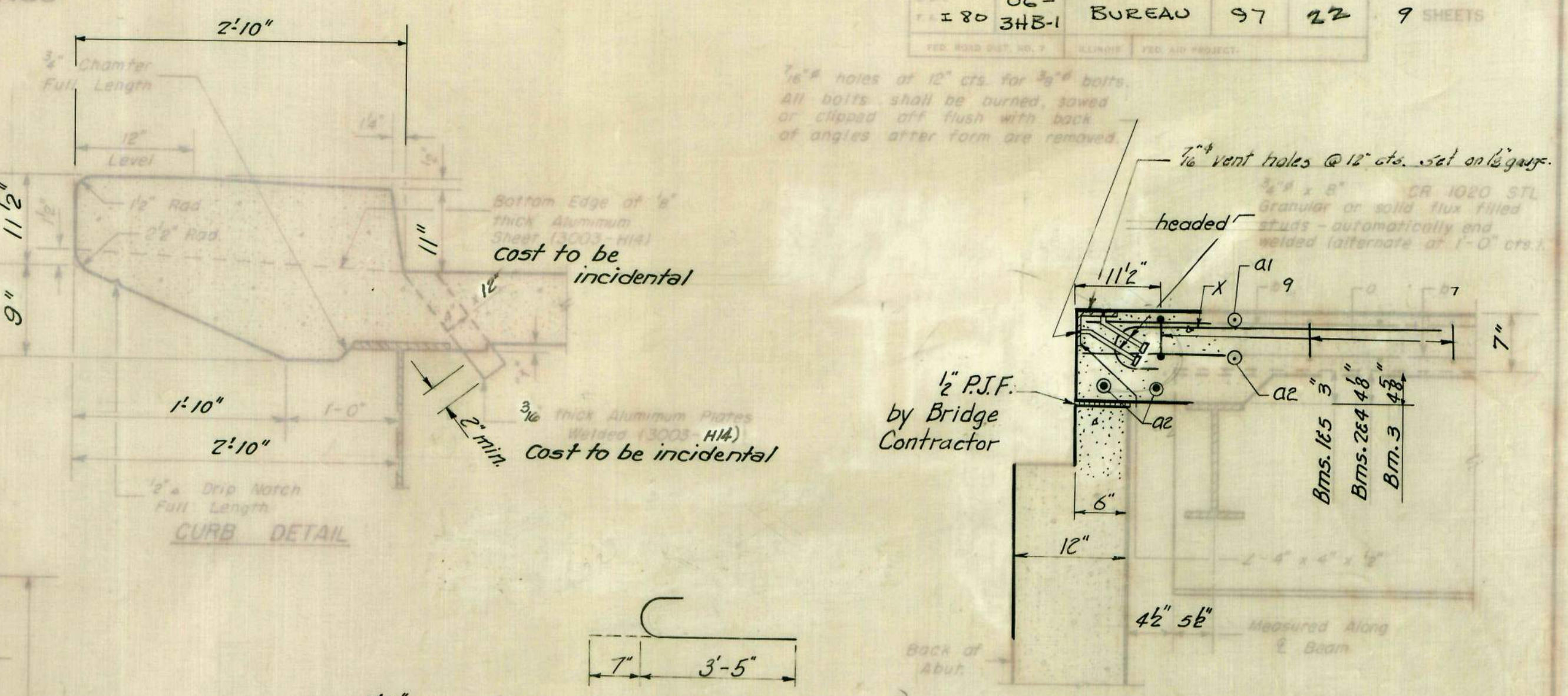
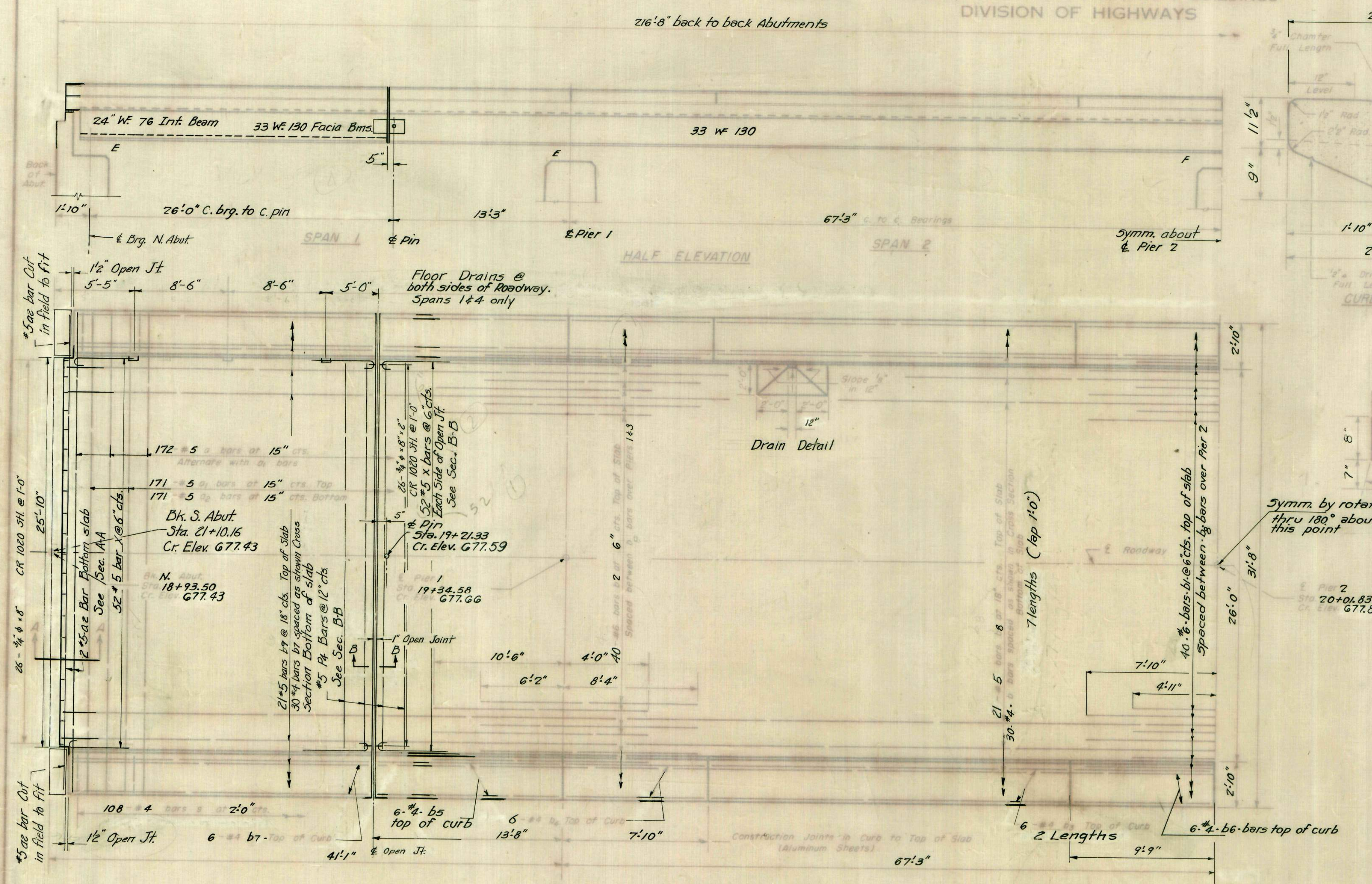
Revised 8-27-63 H.P.G. Project Number Revised in Name Plate Lettering
Revised 1-3-61 J.M.J. Change Clearance from 15'-0" to 16'-3" Changed all Cr. Elev. and revised Total Bill of Material.

Revised 12/31/61: In ELEVATION removed construction items at Abut. Emb. 2680, borrow 2200, 50 Abut. Emb. 2500, borrow 2000, and 50' F.O.F. between slope wall and abut. cap. In PLAN removed stationing 745+74.52 under paved ditch. In GENERAL NOTES add note for 4-3c steel. In TOTAL BILL OF MATERIAL removed BORROW EXCAVATION etc. 2411.

DESIGNED J. M. J. J. J. J.	EXAMINED	SEPT. 22 19 59
CHECKED R. D. P.	PASSED	
DRAWN J. M. J. J. J. J.	APPROVED	
CHECKED R. D. P.		

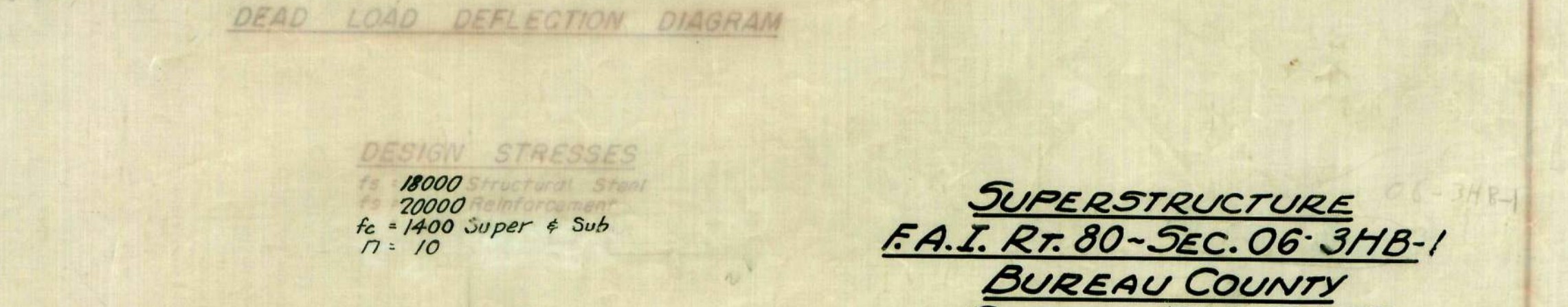
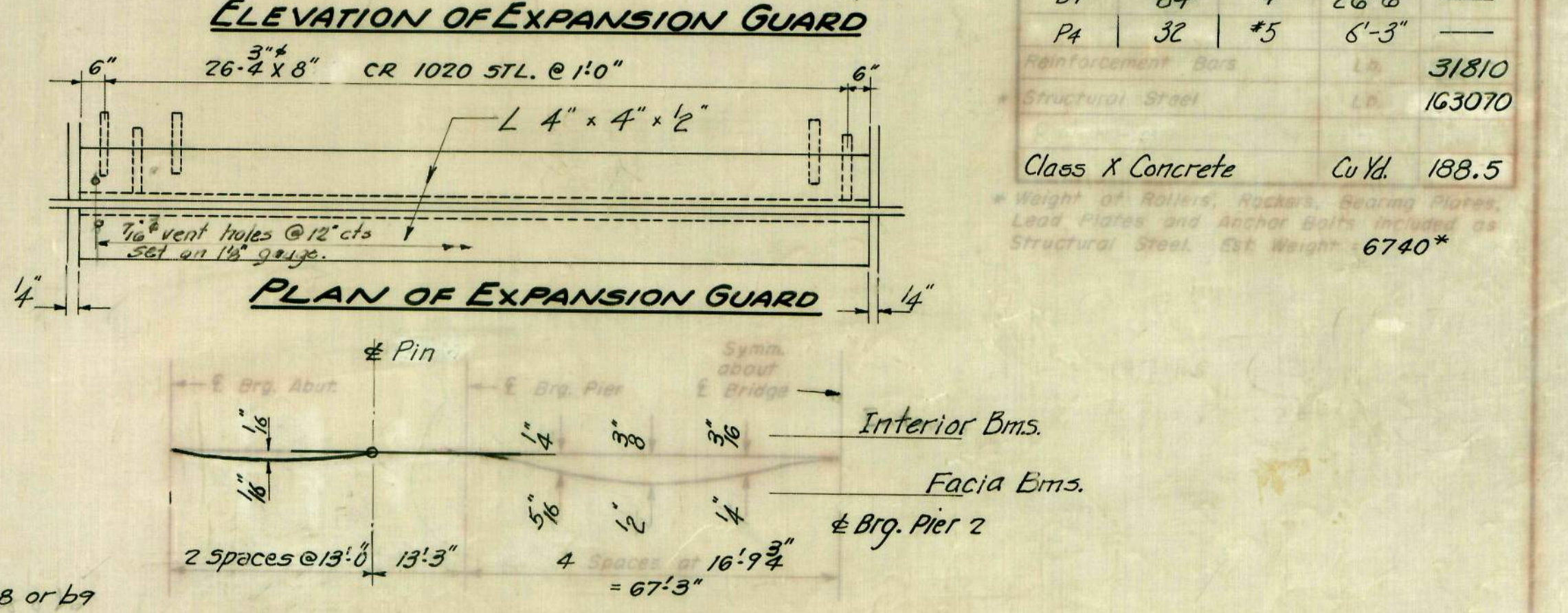
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO.	26-3, 06-1	COUNTY	BUREAU	97	22	SHEET NO. 2
DATE	1-80	3HB-1				9 SHEETS



BILL OF MATERIAL

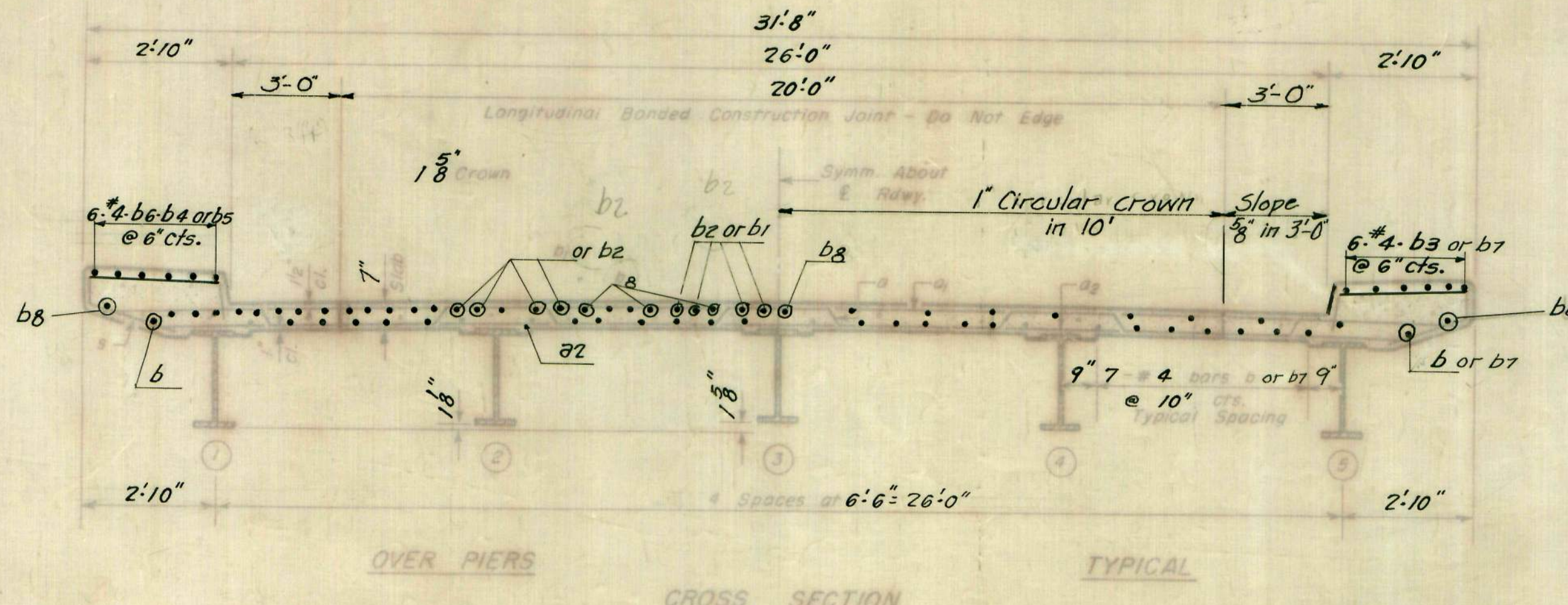
Bar	No.	Size	Length	Shape
b8	147	#5	24'-0"	
b9	42	#5	28'-3"	
X	312	#5	4'-0"	
a	172	#5	31'-4"	
a1	171	#5	30'-4"	
a2	175	#5	28'-0"	
b5	24	#4	13'-6"	
b	210	#4	24'-0"	
b1	40	#6	12'-9"	
b2	80	#6	14'-6"	
b3	48	#4	25'-8"	
b4	24	#4	7'-7"	
b6	24	#4	9'-6"	
s	216	#4	6'-2"	
b7	84	#4	26'-6"	
Pt	32	#5	8'-3"	
Reinforcement Bars			31810	
Structural Steel			163070	
Class X Concrete			188.5	
Weight of Bolters, Shackles, Bearing Plates, Lead Plates and Anchor Bolts, etc. as Structural Steel, C&G Weight			6740*	



METHOD OF DETERMINING FILLET HEIGHT "f"
After all Structural Steel has been erected elevations of the top flanges of the beams shall be taken at intervals not to exceed 10 ft. From these elevations subtract the increment of deflections for these points, determined from the D.L. Deflection Diagram. The elevations so obtained subtracted from the theoretical grade elevations, minus floor thickness equals the fillet heights above top of beam.

DESIGNED J.M. Tjornhom
CHECKED R.D. Pearson
DRAWN M. Miller
CHECKED R.D.P.

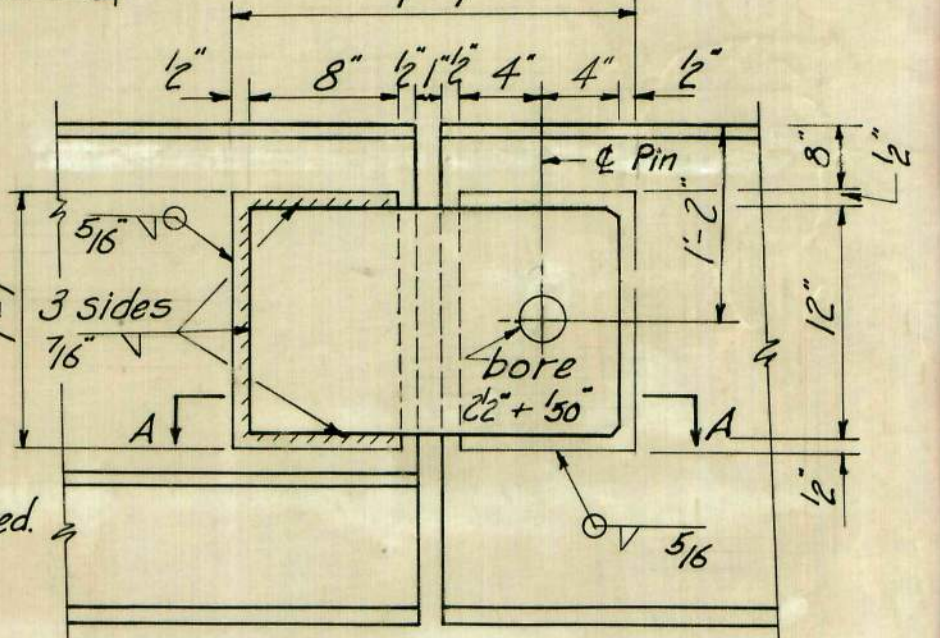
SEPT. 22 59
EXAMINED M. Romine
APPROVED R.K. Partelsmeyer



Revised 1-3-61 J.M.J. Changed Curb Height from 9" to 11". Revised studs and quantity of Class X Concrete.

Revised 12/31/62 In HALF PLAN and CURB DETAIL, changed drawing from 4"x6"x6" to 4"x12"x6". In SECTION A-A and PLAN of EXPANSION GUARD add installation 1/2" vent holes @ 12" cts. on 1/2" gauge.

SUPERSTRUCTURE
F.A.I. Rt. 80-SEC. 06-3HB-1
BUREAU COUNTY
STATION 745+74.52



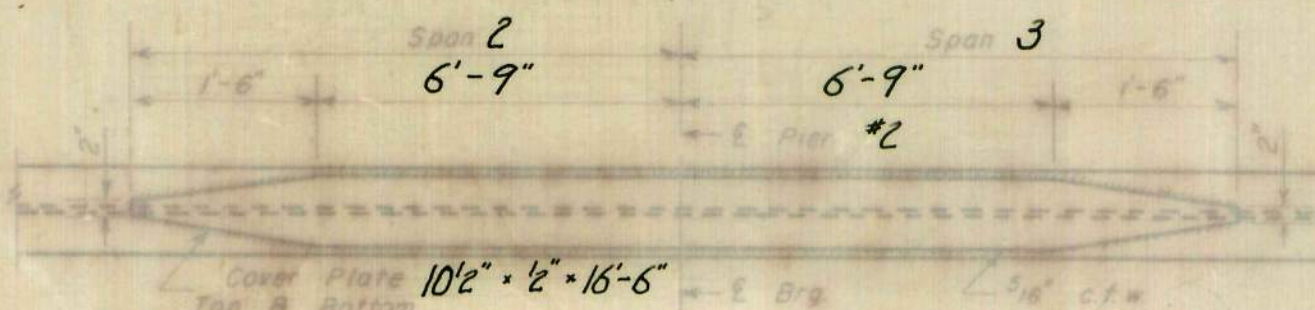
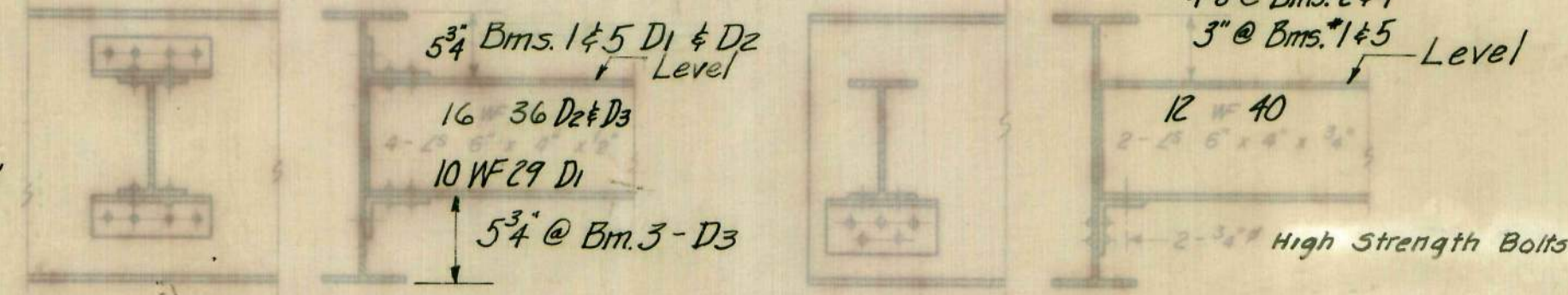
Nuts should be snugged up
finger tight and threads burred.

PIN DETAIL

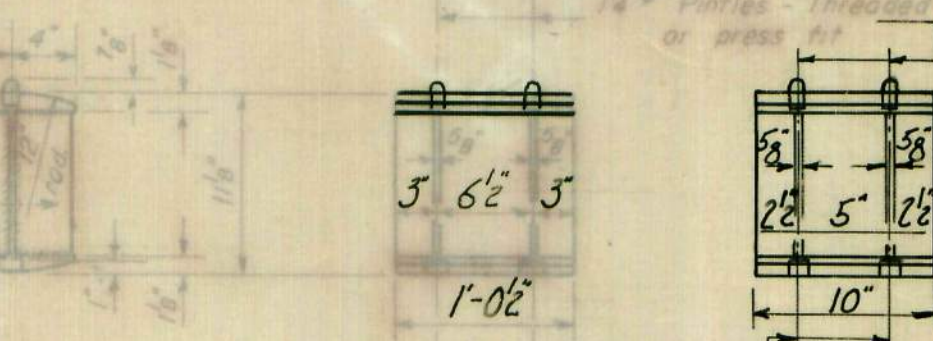
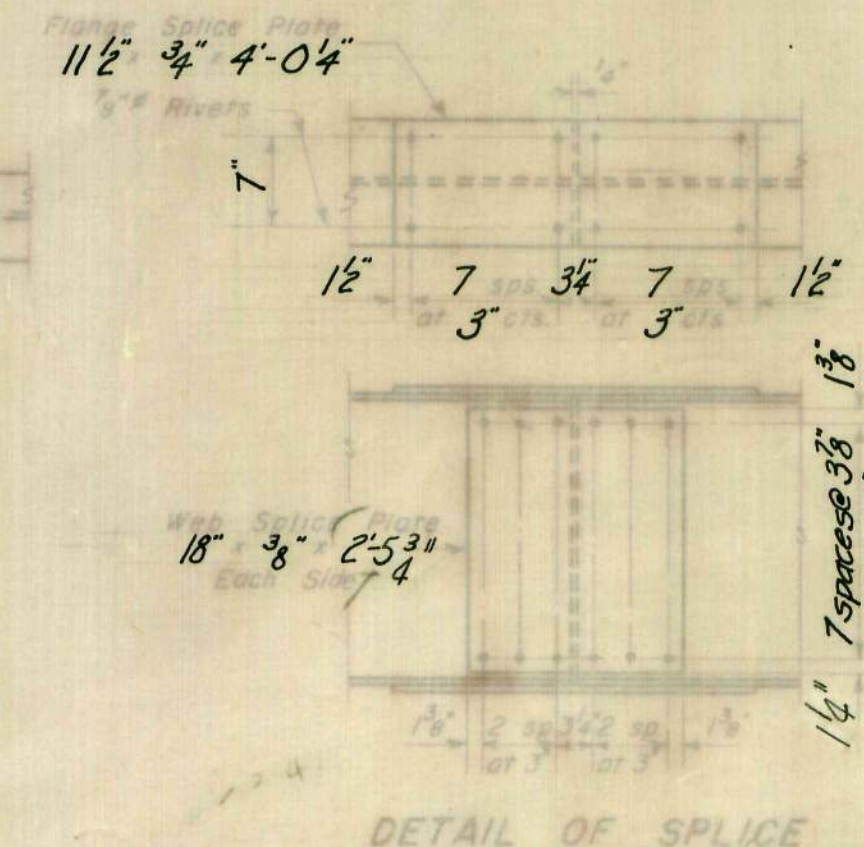
Note: Elevations refer to top flanges of beams irrespective of cover plates & splice plates.

Location	1	2	3	4	5
♂ Brg. N. Abut.	G76.72	G76.82	G76.86	G76.82	G76.72
♂ Pin #1	G76.88	G76.98	G77.02	G76.98	G76.88
♂ Brg. Pier ¹	G76.93	G77.03	G77.07	G77.03	G76.93
♂ Splice #1	G77.02	G77.12	G77.16	G77.12	G77.02
♂ Brg. Pier ²	G77.03	G77.13	G77.17	G77.13	G77.03
♂ Splice #2	G77.02	G77.12	G77.16	G77.12	G77.02
♂ Brg. Pier ³	G76.93	G77.03	G77.07	G77.03	G76.93
♂ Pin #2	G76.88	G76.98	G77.02	G76.98	G76.88
♂ Brg. S. Abut.	G76.72	G76.82	G76.86	G76.82	G76.72

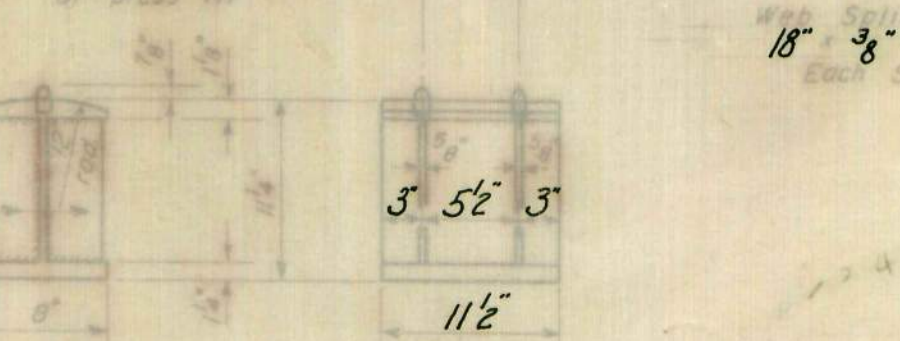
Cover plates and all stringers to which they are attached shall conform to structural steel for welding A.S.T.M. Designation A-7



DETAIL OF COVER PLATES
Pier 2 Only



DETAIL OF BEARING
AT ABUTMENT
for Interior Beams



DETAIL OF BEARING
AT PIER 2

Station Beams	£ Brg at Abuts.	a	b	£ Pins	£ Piers 1 & 3	c	d	e	f	£ Splices	g	£ Pier 2
1 & 5	677.30	677.36	677.42	677.46	677.53	677.57	677.60	677.63	677.65	677.67	677.68	677.68
2 & 4	677.40	677.46	677.51	677.56	677.62	677.67	677.70	677.73	677.75	677.76	677.77	677.77
3	677.44	677.50	677.55	677.60	677.66	677.71	677.74	677.77	677.79	677.80	677.81	677.81

TOP OF SLAB ELEVATIONS (Does not include Dead Load Deflections)

Revised 8-27-63 H.P.G. Note concerning the use of A-7 steel eliminated since General Notes state A-36 steel is to be used through out.

Revised 1-3-61 J.M.J. Increased Top of Beam and Top of Slab Elevations by 1'-3".
123162 In DIAPHRAGM D detail change 2x8 bolts to 2x8 High Strength Bolts.

DESIGNED	J. M. Tzanook
CHECKED	R. D. Pearson
DRAWN	J. R. F. Tiley
	W. A. Sausaman
CHECKED	R. D. P.

SEPT. 22 1959
EXAMINED
PASSED
APPROVED
M. McRomine
E. Heron
R.R. Bartelmann

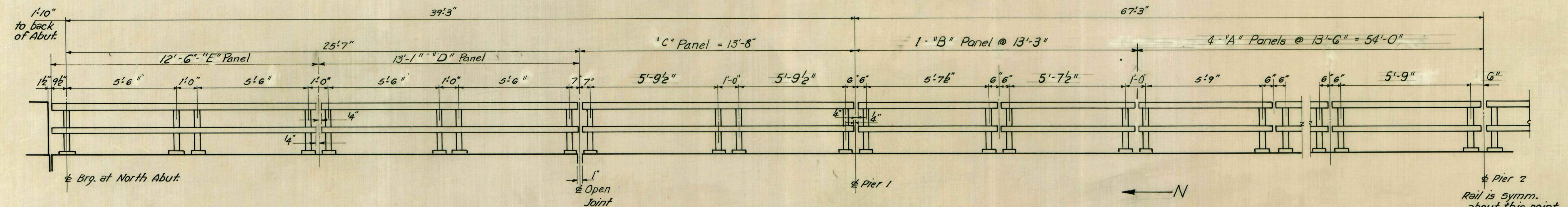
DETAIL OF BEARING
AT PIERS 1 & 3

£ for Facia Beams
@ Abutment

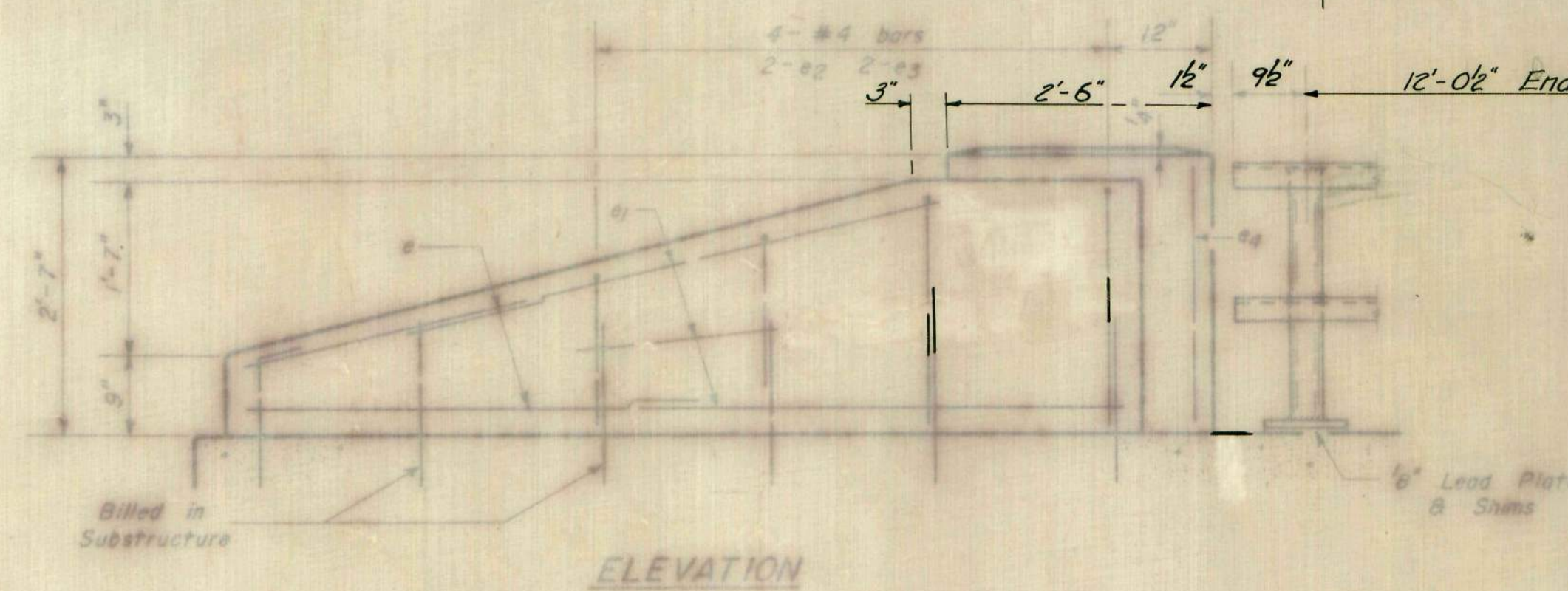
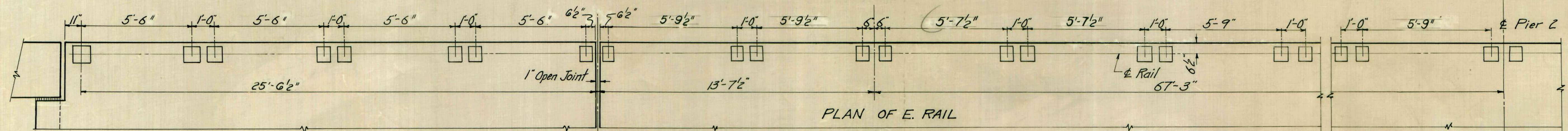
STRUCTURAL STEEL
F.A.I. RT. 80 SEC. 06-3HB-1
BUREAU COUNTY
STA. 745+74.52

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

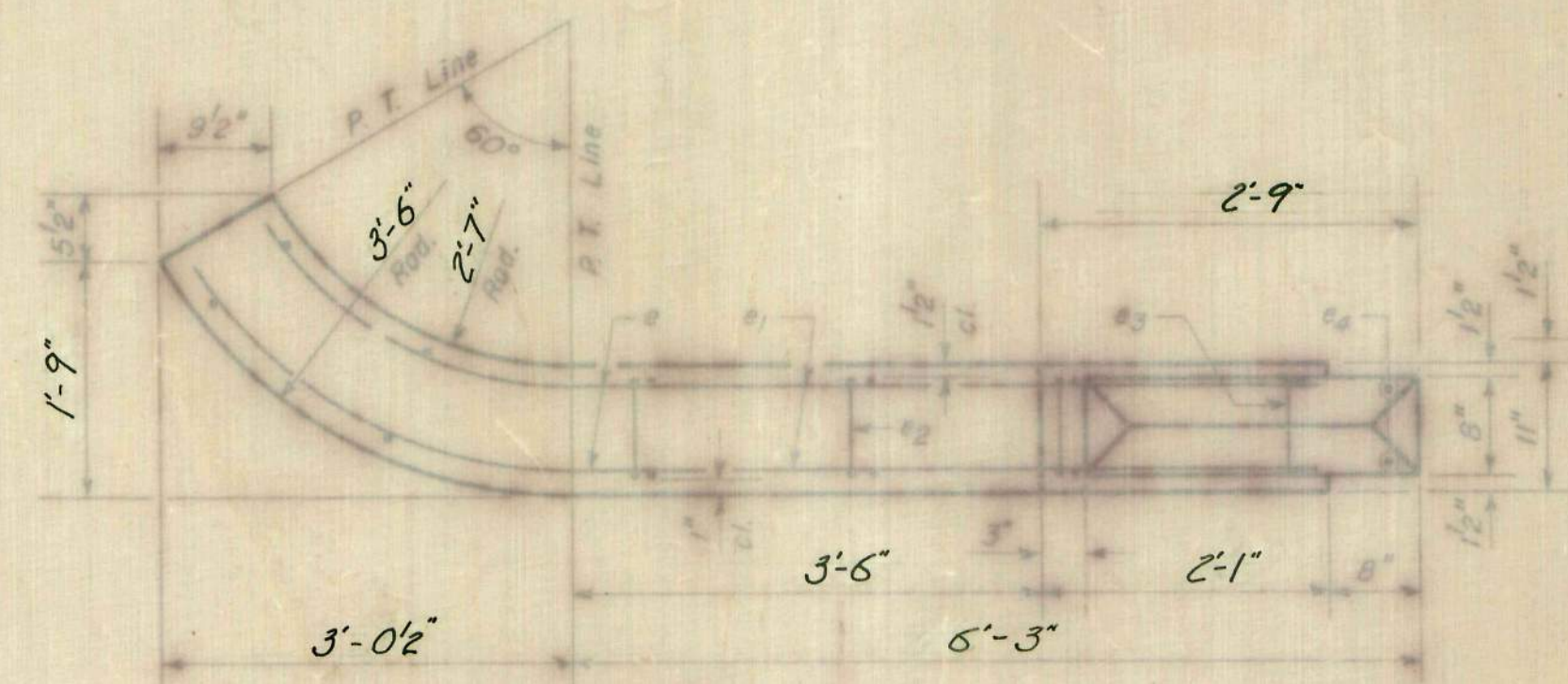
06-31	BUREAU	97	24	9
1 80 3HB-1				



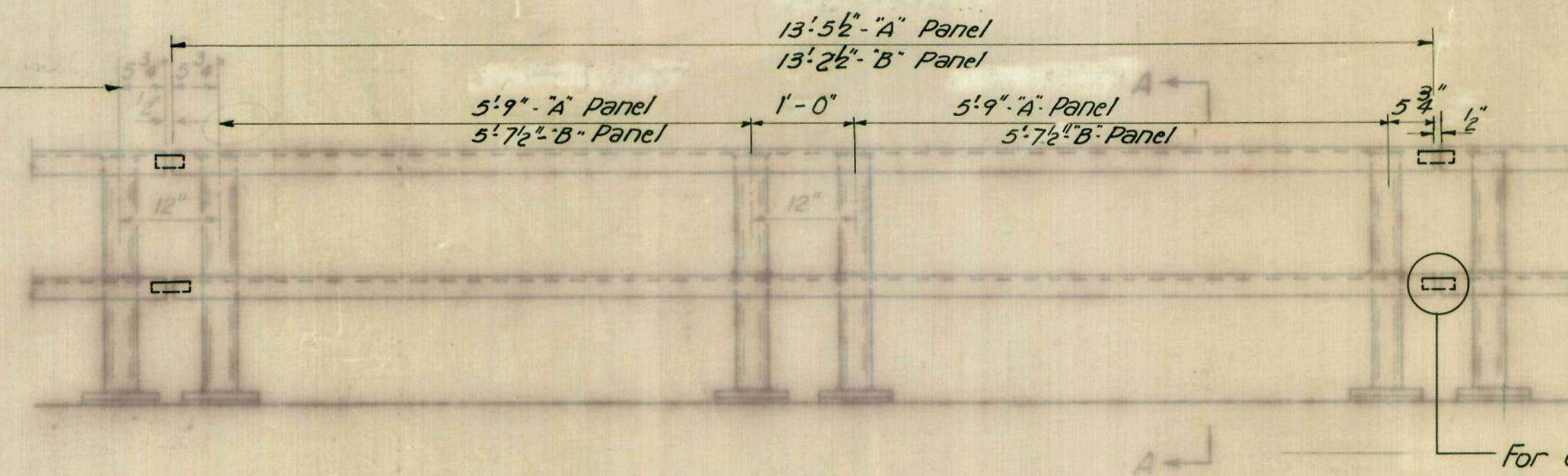
ELEVATION- INSIDE FACE OF E. RAIL
West Rail Similar



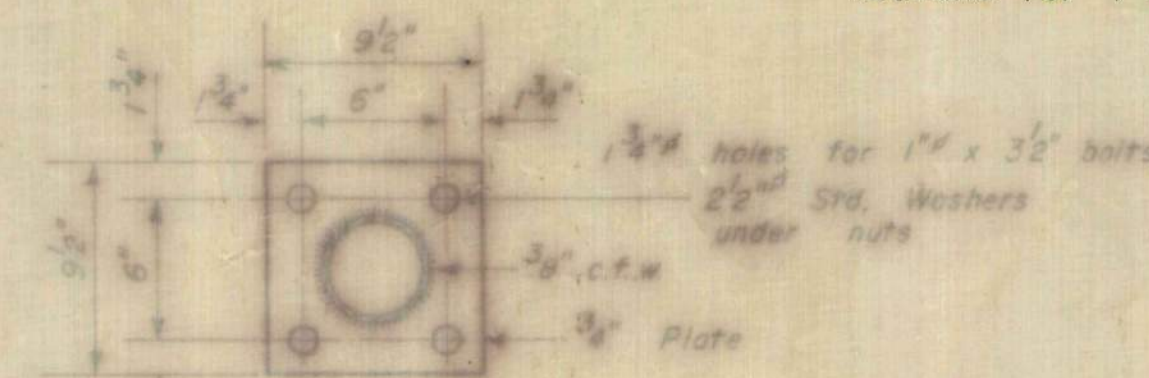
ELEVATION



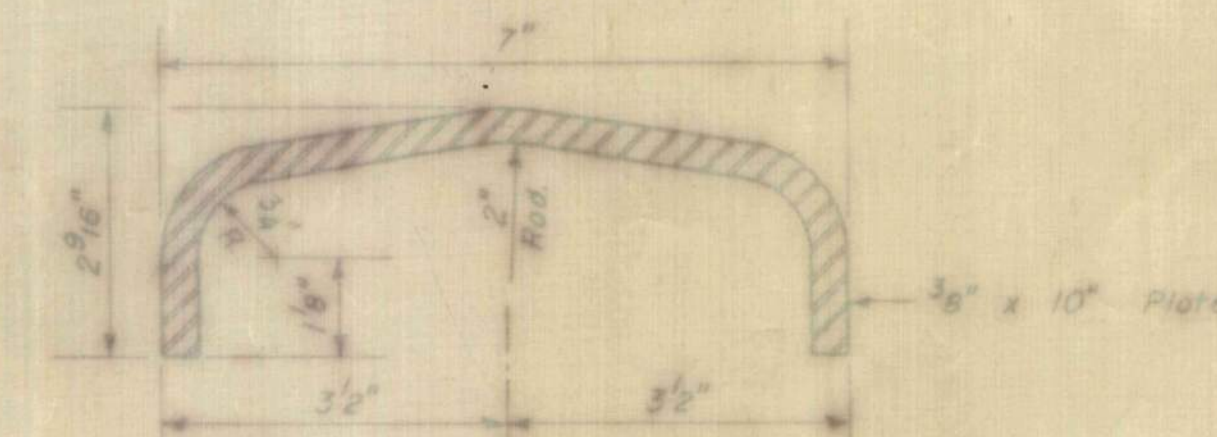
PLAN - END POST



ELEVATION TYPICAL PANELS A & B
(Details for Panels C, D and E, see above.)



BASE PLATE
ALL POSTS - SUPERSTRUCTURE



DETAIL OF RAIL

BILL OF MATERIAL		
Handrail Concrete	Cu Yd.	2.3
* Reinforcement Bars	Lbs.	180
Metal Handrail	Lin Ft.	430

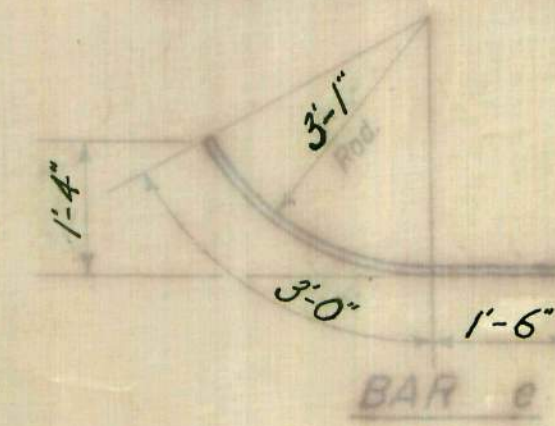
GENERAL NOTES

All End Posts shall be Handrail Concrete.
Provide 1'-6" and 2'-10" Shims for 50% of the Posts.
After erection all bolts and washers shall be spot painted with one coat of red lead paint, and painted with two coats of aluminum paint.
* Included with total quantity of Superstructure. Sheet No 1

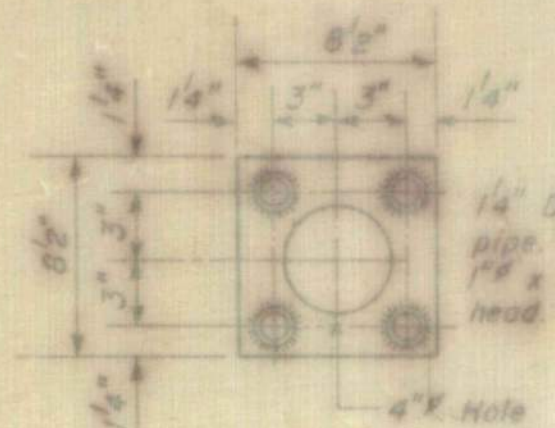
DESIGNED	J. M. J.
CHECKED	R. D. Pearson
DRAWN	J. R. M. Miller
CHECKED	R. D. P.

SEPT. 22 59
EXAMINED
PASSED
APPROVED

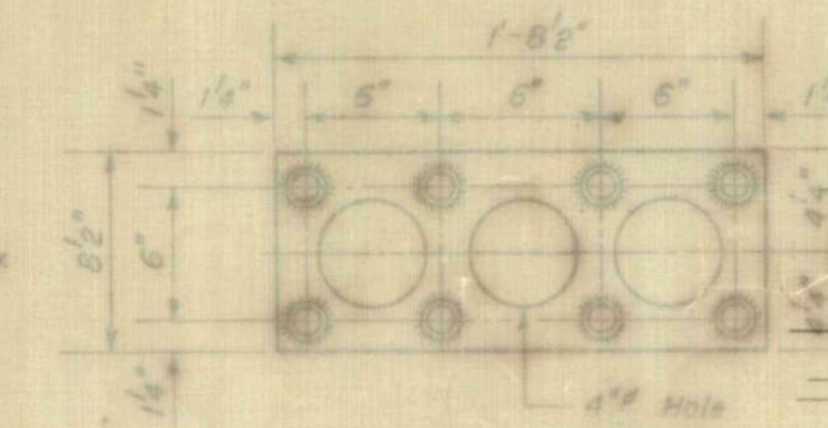
Bar	No.	Size	Length	Shape
#1	16	#4	4'-6"	
#2	24	#4	4'-9"	
#3	8	#4	3'-4"	
#4	8	#4	5'-0"	
#5	8	#4	2'-5"	



BAR 1

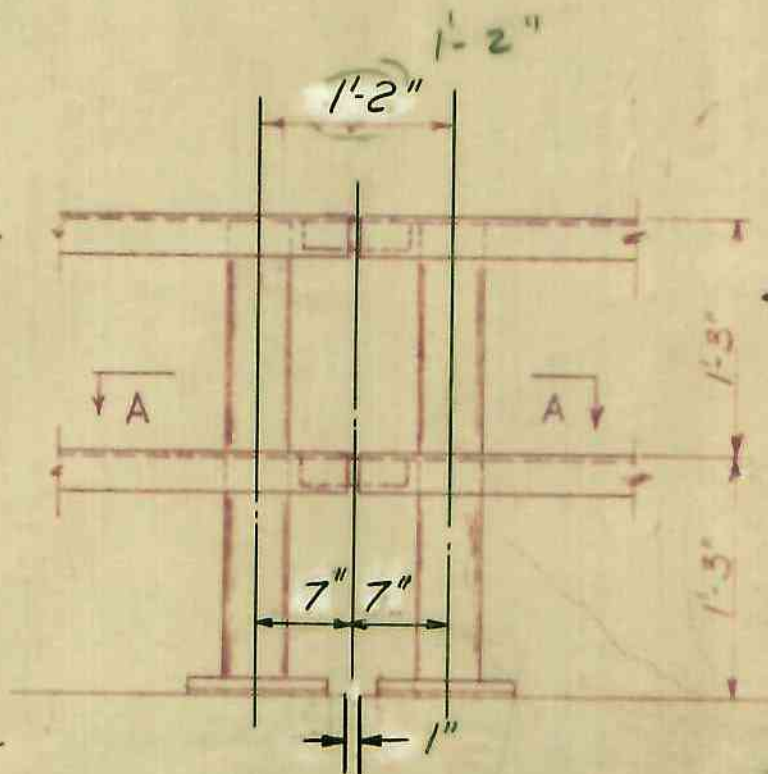


ANCHOR DEVICE
For Single Post at each end of Panel
24 Req'd.

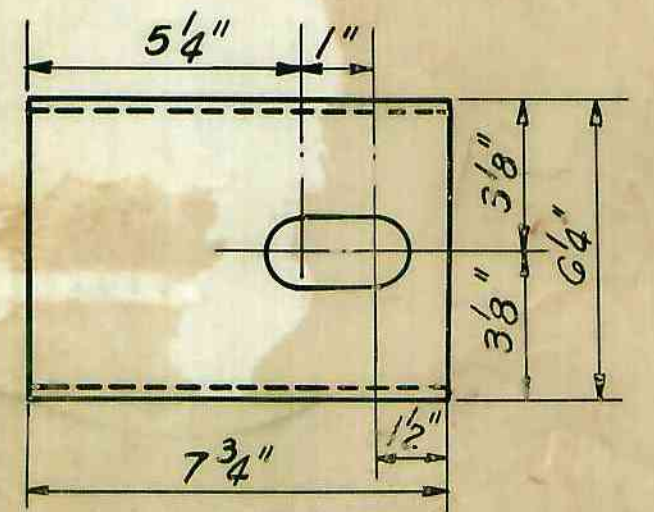


ANCHOR DEVICE
For Double Post Within Ea. Panel.
52 Req'd.

METAL HANDRAIL DETAILS
F.A.I. R. 80-SEC. 06-3HB-1
BUREAU COUNTY
STATION 745+74.52

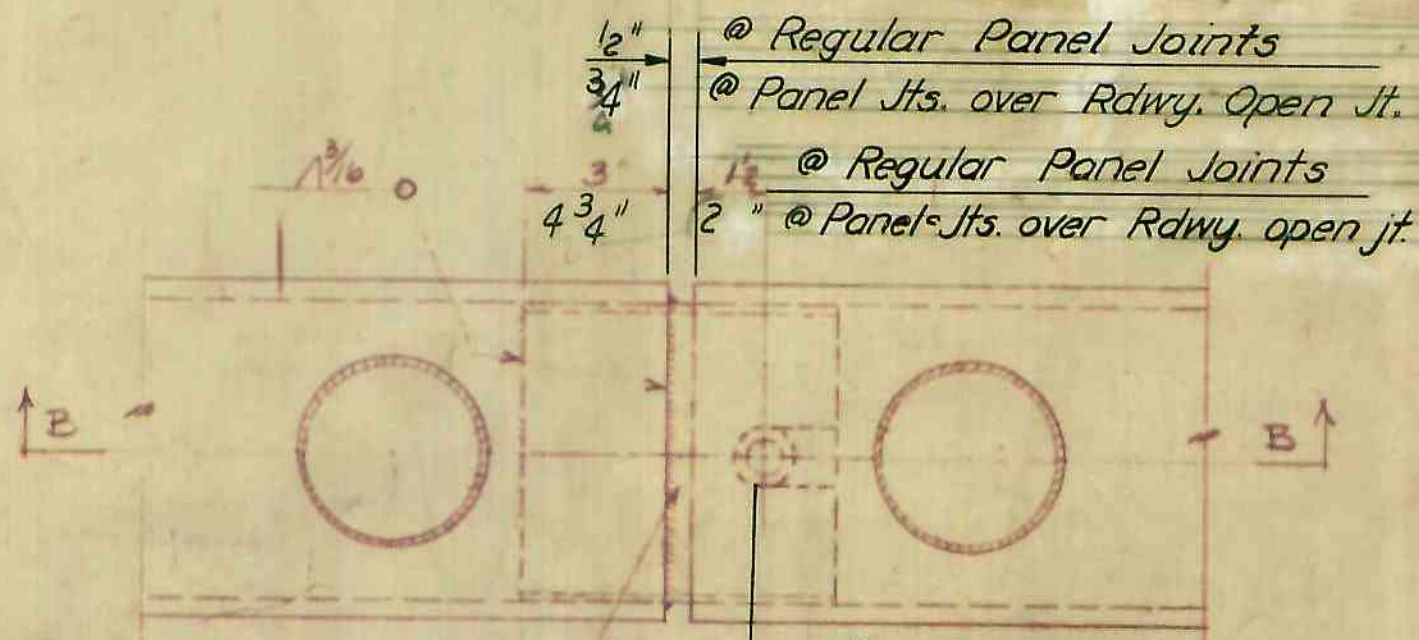


SEC. @ OPEN JOINT



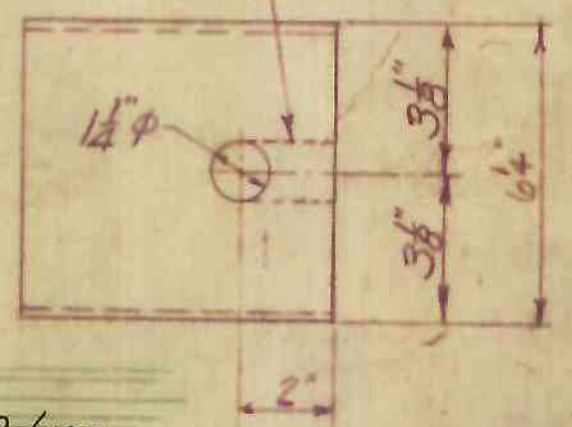
PLAN

Bent Plate to be use @ Panel Joints over Rdwy. open Jts.



- 1/2" @ Regular Panel Joints
- 3 1/4" @ Panel Jts. over Rdwy. Open Jt.
- 4 3/4" @ Regular Panel Joints
- 2" @ Panel Jts. over Rdwy. open jt.

Use 1/4" punched hole at all panel joints. Use open slot at all expansion joints.

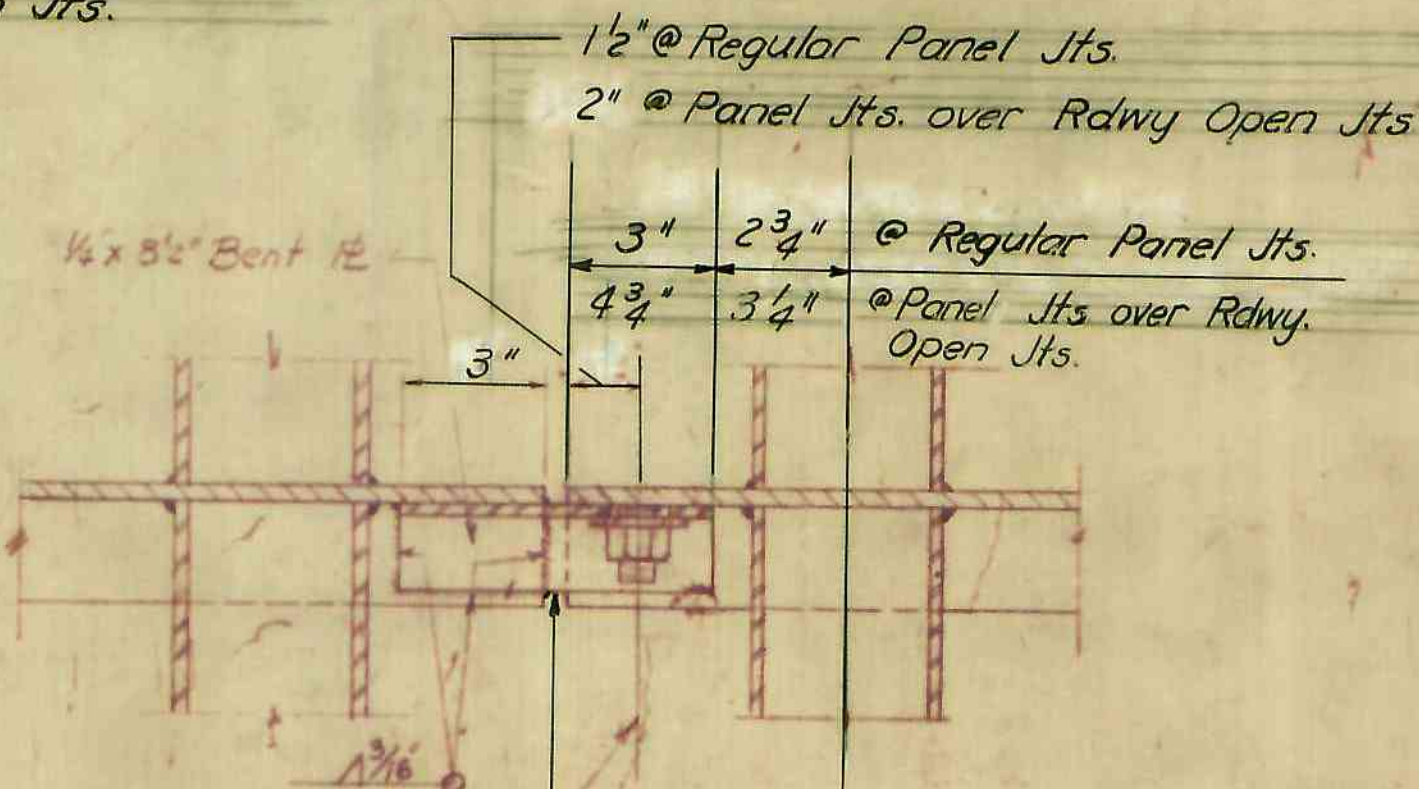


PLAN

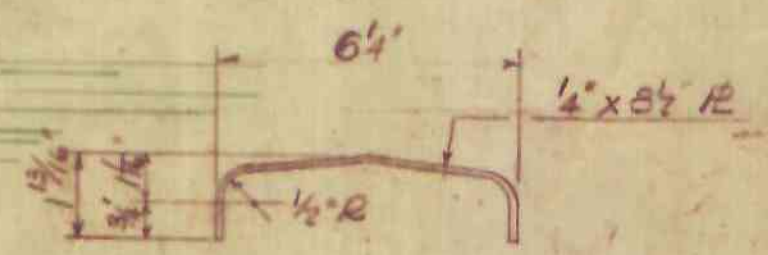
8 1/2" x 1/4" x 6 1/2" Bent Pl @ Regular Panel Joints.
8 1/2" x 1/4" x 7 3/4" Bent Pl @ Panel Jts over Rdwy. Open Jts.

1/4" hole @ Regular Panel Jts
1/4" x 2 1/4" slotted hole @ Panel Jts over Rdwy Open Jts.

Bent Plate to be use @ Regular Panel Jts.



- 1/2" @ Regular Panel Jts.
- 3 1/4" @ Panel Jts. over Rdwy Open Jts.
- 4 3/4" @ Regular Panel Jts.
- 3 1/4" @ Panel Jts over Rdwy. Open Jts.



END VIEW

DETAIL 1/4" BENT PL

8 1/2" x 1/4" x 6 1/2" Bent Pl @ Regular Panel Jts.
8 1/2" x 1/4" x 7 3/4" Bent Pl @ Panel Jts. over Rdwy. Open Jts.

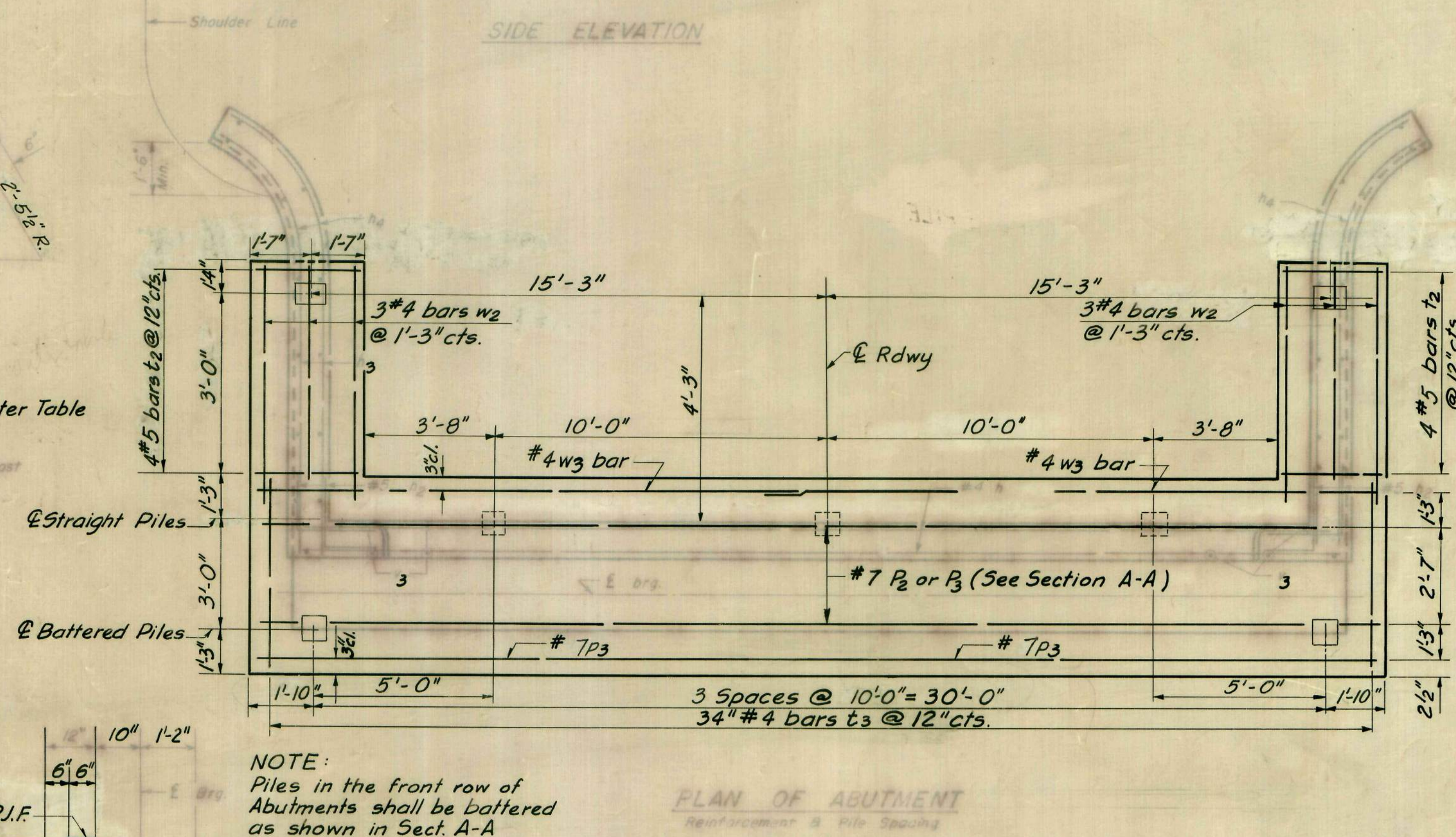
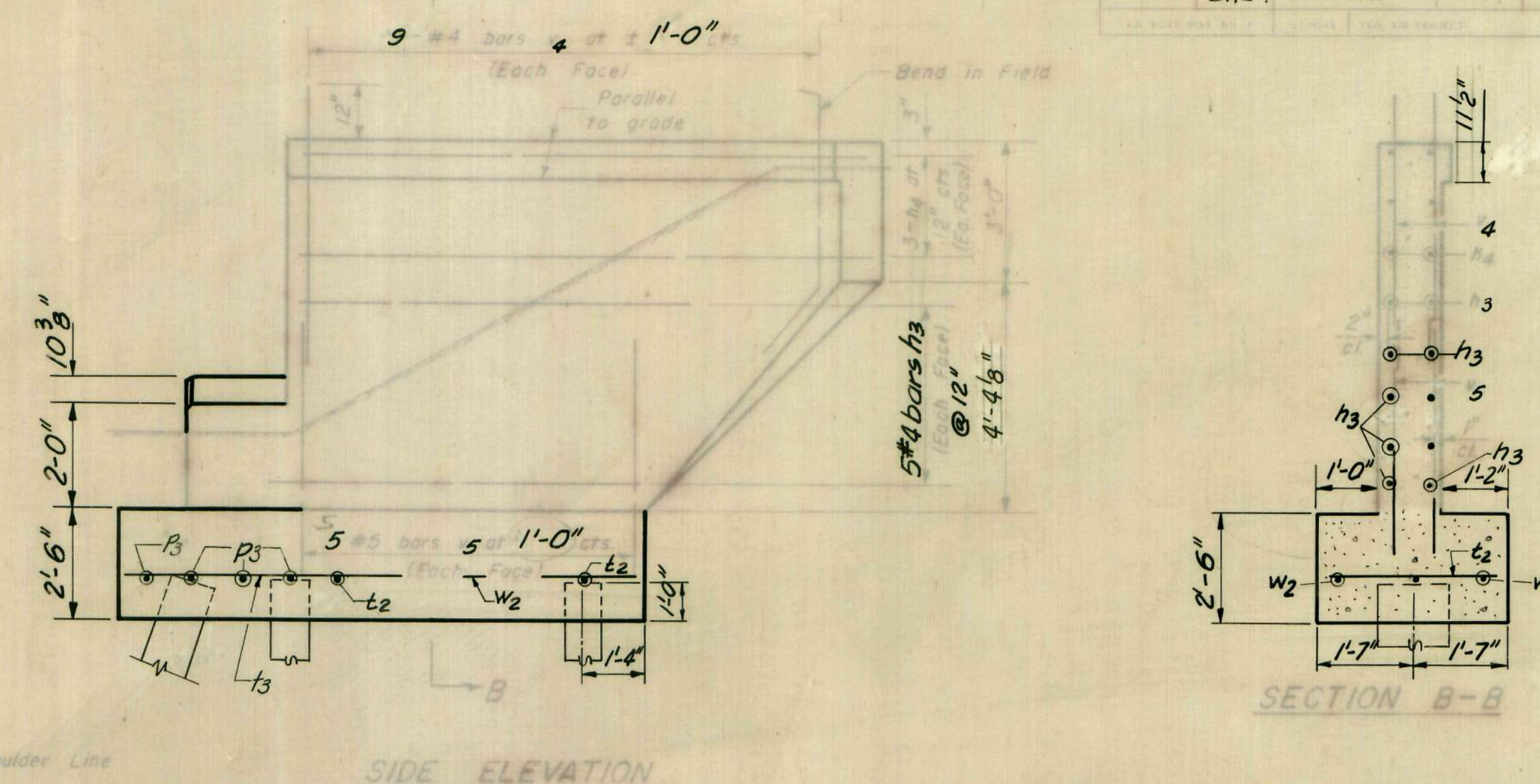
3/4" x 1 1/4" GRANULAR OR SOLID FLUX
FILLED STUD. THREADED FULL
LENGTH - AUTOMATICALLY END WELDED
OR 3/4" x 1 1/4" FULLY THREADED STUD
WELDED WITH 1/8" GFW. PROVIDE
WASHER AND LOCKNUT

SECTION B-B

EXAMINED Nov. 10, 1959
M. Romine
BRIDGE ENGINEER
DESIGNED BY
APPROVED
CHIEF HIGHWAY ENGINEER

Rev 11-30-59 12-9-59

CONNECTION DETAILS
FOR BENT PLATE
RAIL PANELS



Item	Unit	Quantity
Class X Concrete	Cu. Yd.	71.8
Reinforcement Bars	Lb.	4,170
Concrete Piles	Lin. Ft.	544
Test Piles (Concrete)	Ea.	1

ABUTMENTS
F.A.I. RT. 80 SEC. 06-3HB-1
BUREAU COUNTY
STA. 745+7452

Sept. 22 59
 EXAMINED
 PASSED
 APPROVED
 Wm. Lomine
 Ed. Lundy
 R. B. Bartelomey

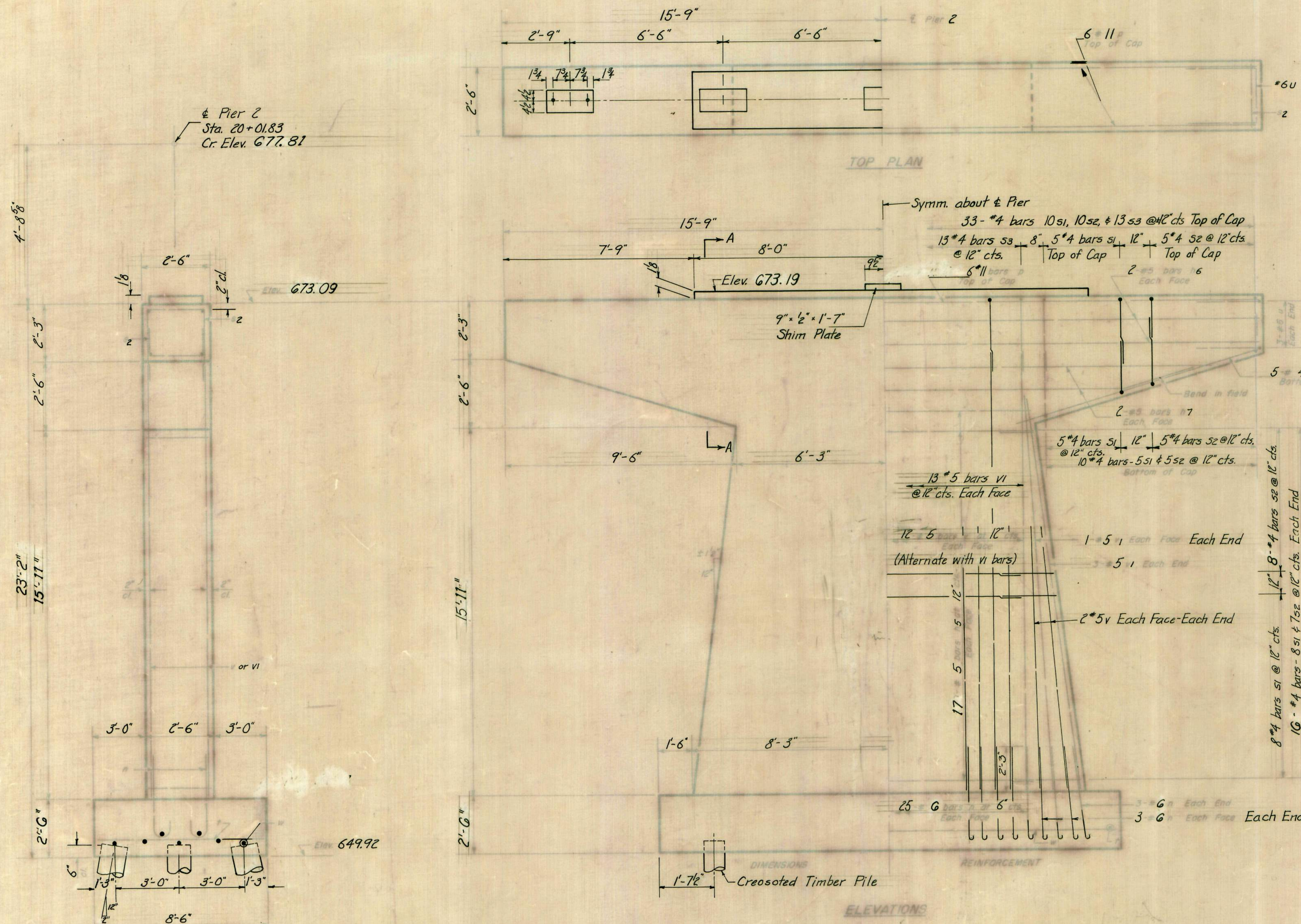
A-3 Drawn 5-21-58 Rev. 9-26-58

Revised 1-3-67 J.M.J. Change Curb Heights to 11" and revised quantity of Class X Concrete.

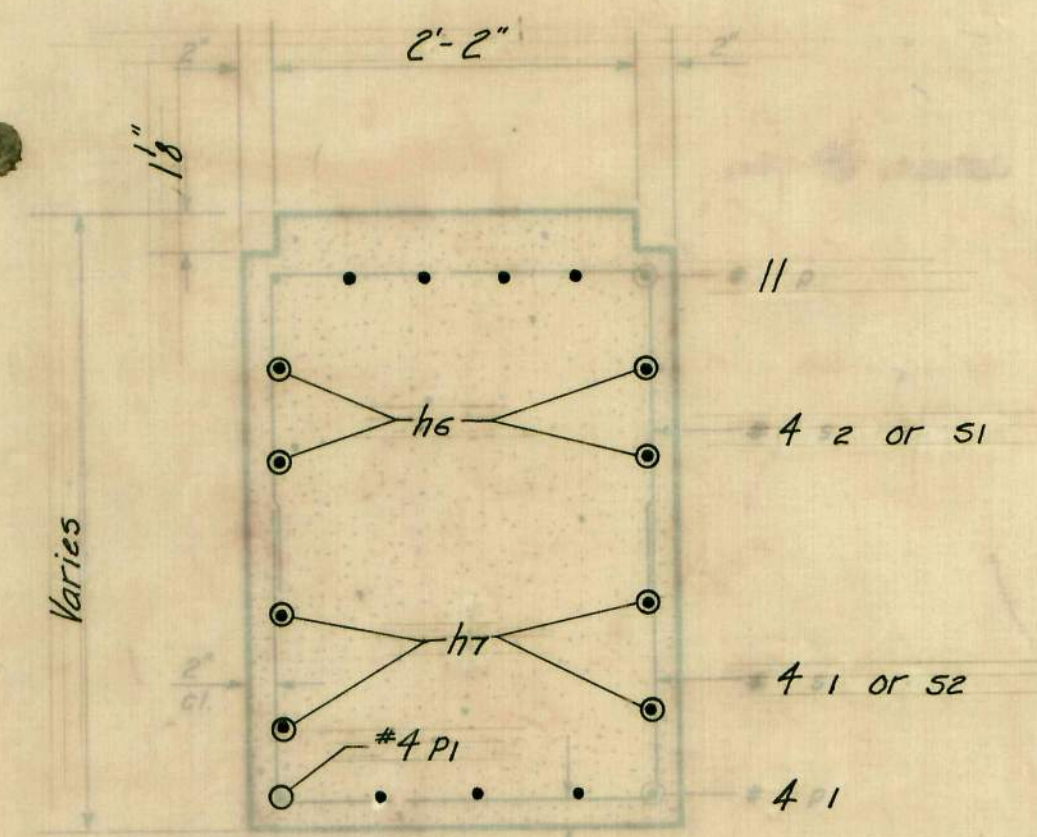
Revised 8-27-63 H.P.G. Seat elevation right of centerline changed
from 671.57 to 672.81

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

PROJECT NO.	06-3- 06-2	DATE	1959	SHEET NO.	6
PROJECT NAME	RT. 80 3HB-1	BUREAU	97	26	9 SHEETS
DESIGNED BY	J.M.J.	CHECKED BY	R.D.P.	DATE	9-2-59



Note: All angles shall have standard 45° chamfers except bearings.



SECTION A-A

A & B DIMENSIONS

Bar	A	B
#1	2'-2"	2'-9"
#2	2'-2"	1'-9"
#3	2'-2"	3'-6"

PIER 2
BILL OF MATERIAL

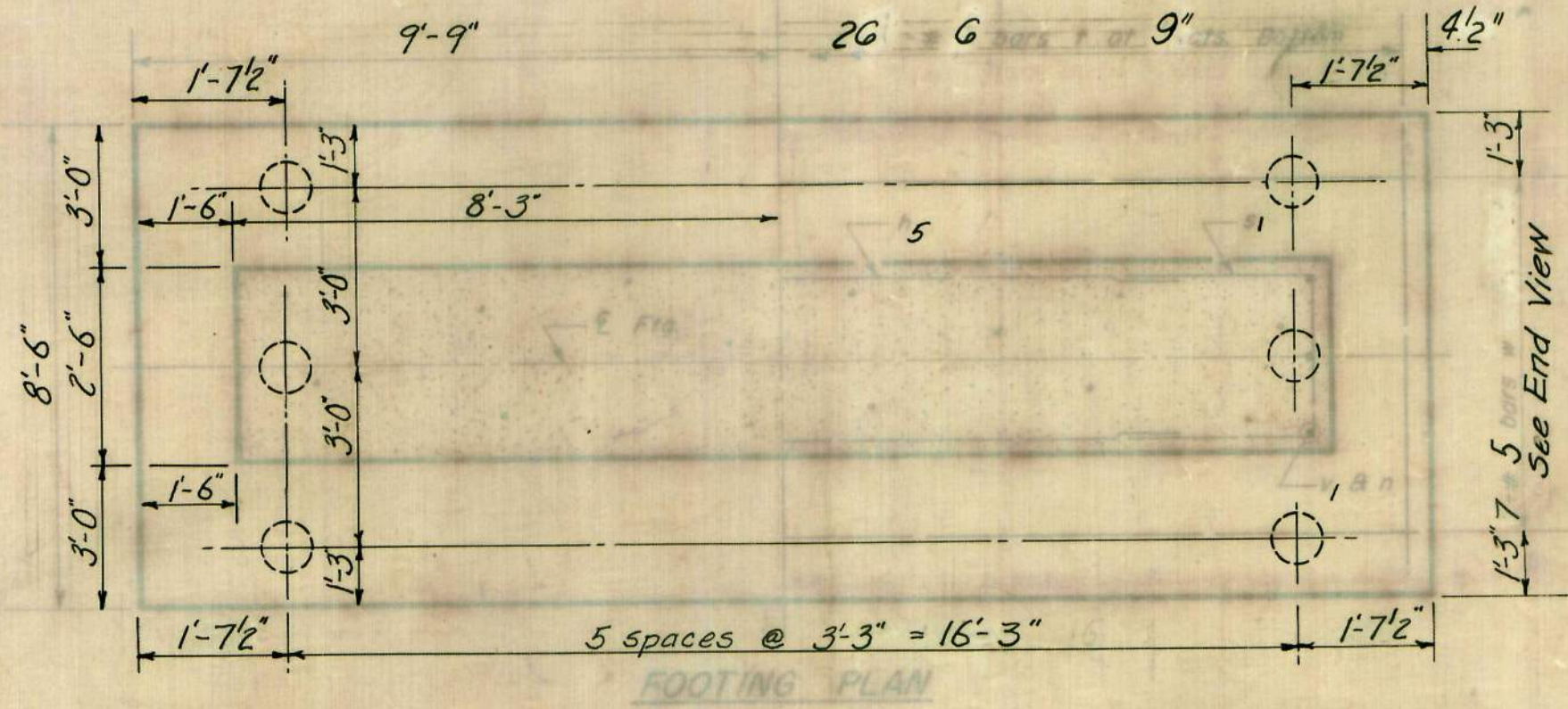
Bar	No.	Size	Length	Shape
#5	34	#5	12'-3"	
#6	4	#5	31'-3"	
#7	4	#5	29'-3"	
	68	#6	4'-8"	
	6	#11	31'-3"	
#1	10	#4	11'-0"	
#1	36	#4	7'-8"	
#2	36	#4	5'-8"	
#3	13	#4	9'-2"	
	26	#6	8'-3"	
#4	6	#6	8'-0"	
#5	32	#5	10'-0"	
#6	36	#5	17'-3"	
	7	#5	19'-3"	
Class X Concrete			Cu Yd	48.2
Reinforcement Bars			Lb	4140
Creosoted Piles			Lin. Ft.	270

PILE DATA
Capacity 20 Tons
No. required 18
Est. Length 15'
Type: Creosoted timber

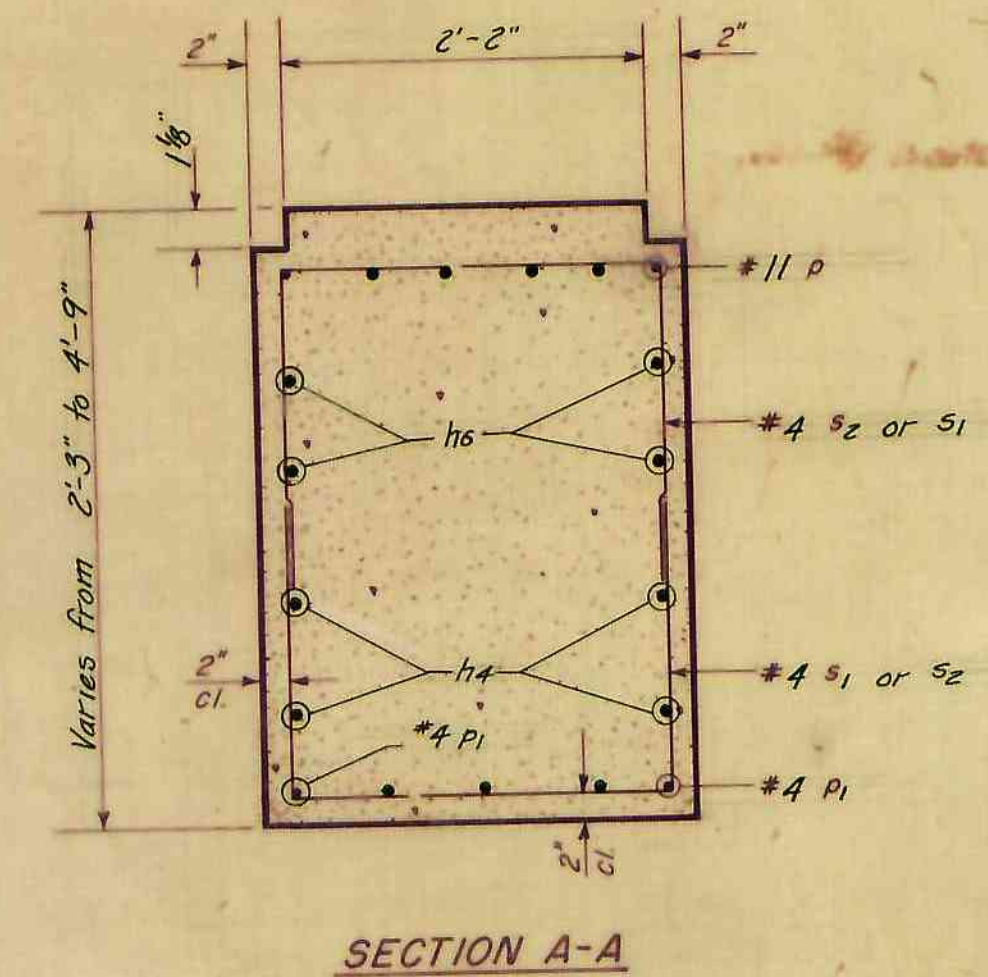
PIER 2
F.A.I. RT. 80 SEC. 06-3HB-1
BUREAU COUNTY
STA. 745 + 74.52

DESIGNED J.M.J.
CHECKED R.D.P.
DRAWN F. Tiley
APPROVED R.D.P.
DATE Sept. 22, 1959
BY R.D.P.

Piles in the outside rows shall be battered 2:12.



Revised 1-3-61 J.M.J. Increased Pier Height by 1'-3"



PIERS 1 & 3				
BILL OF MATERIAL				
Bar	No.	Size	Length	Shape
#5	60	#5	18'-3"	—
#6	8	#5	31'-3"	—
#7	8	#5	29'-3"	—
#1	72	#5	4'-7"	U
#	12	#11	31'-3"	—
#1	20	#4	11'-0"	—
#1	68	#4	7'-8"	□
#2	68	#4	5'-8"	□
#3	26	#4	9'-2"	□
#1	38	#5	5'-3"	—
#	12	#6	8'-0"	□
#2	72	#5	15'-0"	—
#1	8	#5	18'-3"	—
Class X Concrete			Cu Yd	79.7
Reinforcement Bars			Lb.	6080
Greasated Piles			Lin.ft	360
Test Piles (Timber)			Each	1

PILE DATA

Capacity	20 Ton
No. required	24
Est. Length	15'
Type	Creosoted Timber

PIERS 1 & 3
F.A.I. Rt. 80 - SEC. 06-3HB-1
BUREAU COUNTY
STA. 745 + 74.52

DESIGNED	J. M. Tjander
CHECKED	R. O. Pearson
DRAWN	F. Tiley W. A. Sausaman J. M. J.
CHECKED	R. O. P.

SEPT. 22 1959

EXAMINED *J. M. Romine*
IN CHARGE OF BRIDGE AND TRAFFIC STRUCTURES

PASSED *E. C. Hunt*
IN CHARGE OF DESIGN

APPROVED *R. P. Bartschmey*
CHIEF HIGHWAY ENGINEER

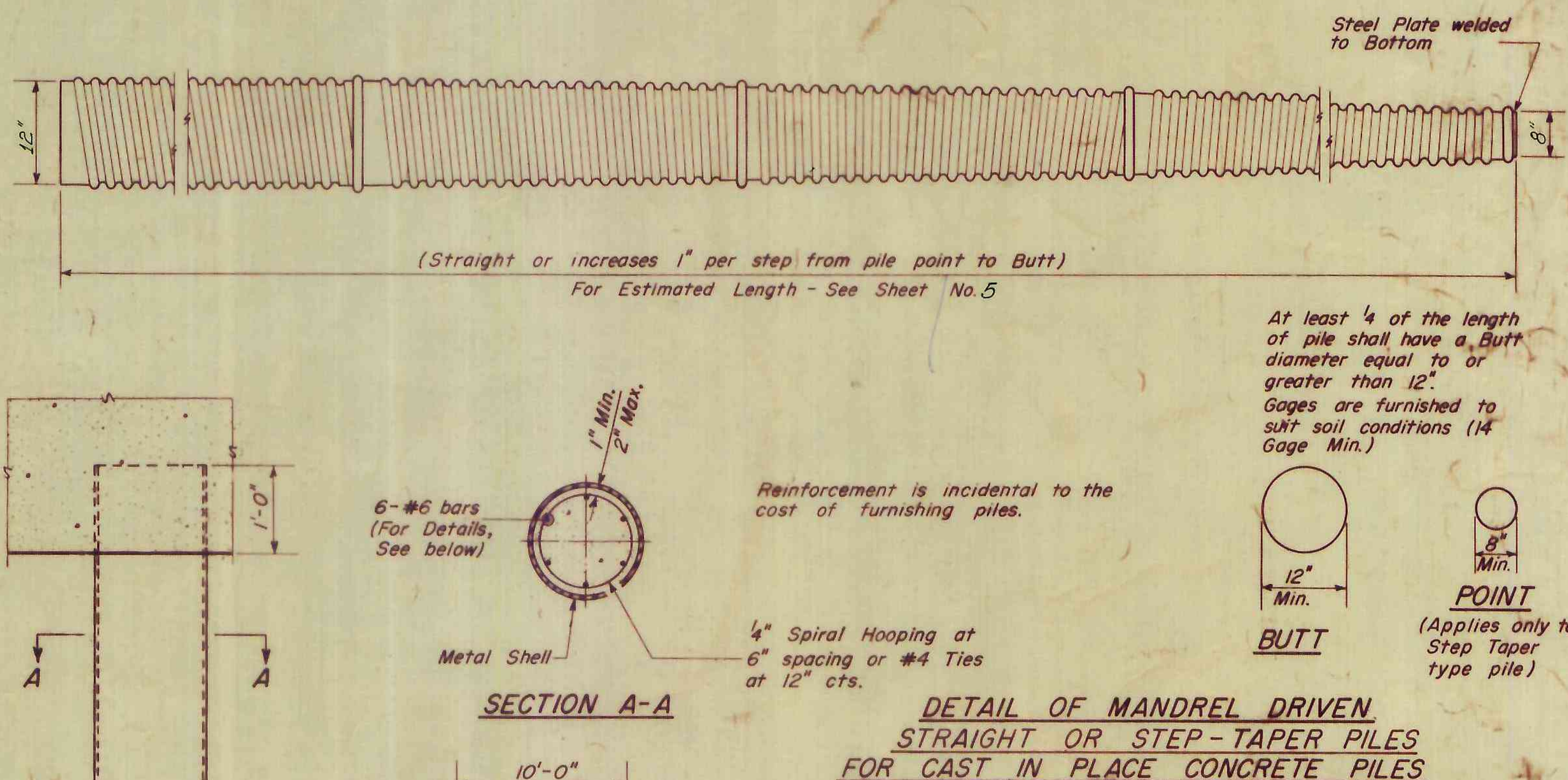
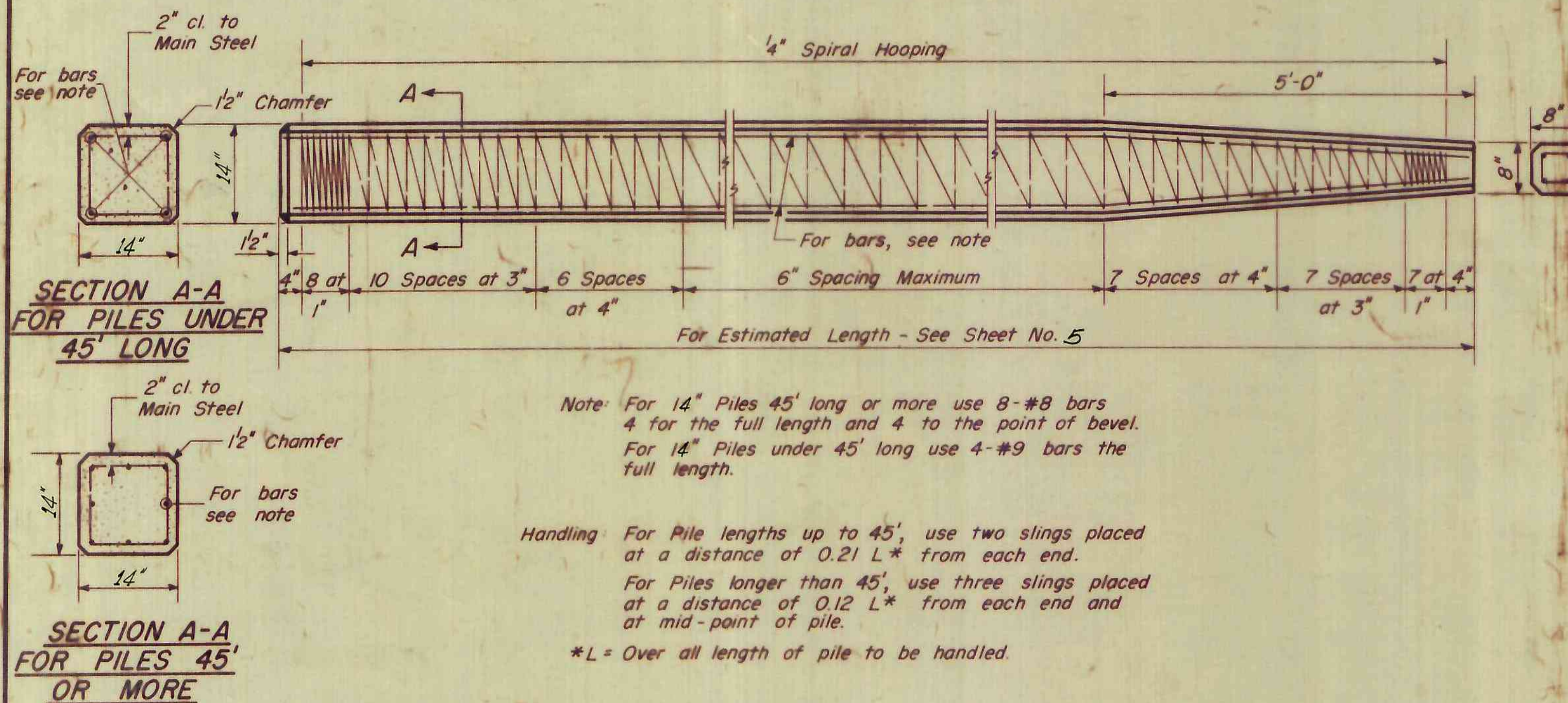
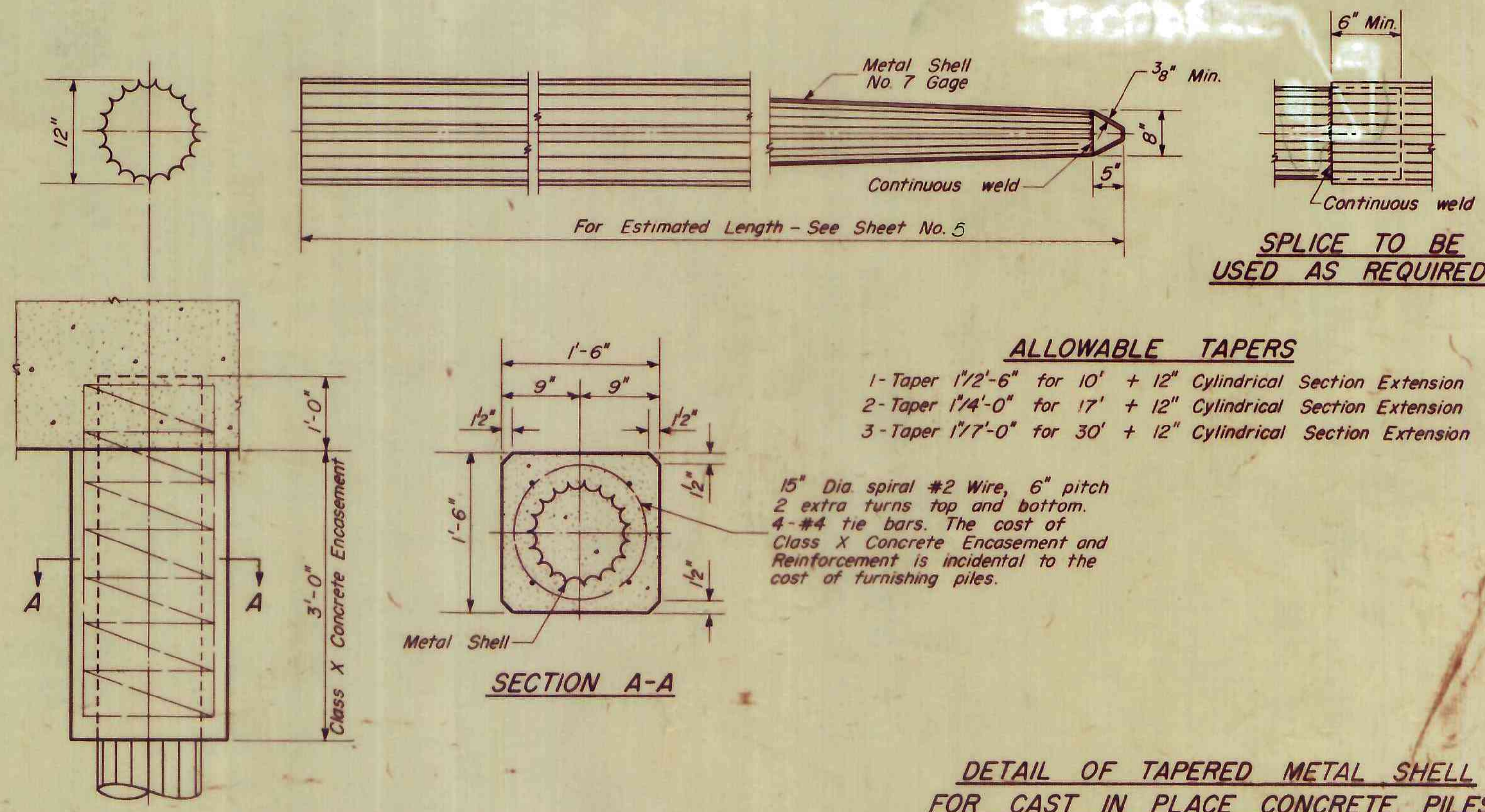
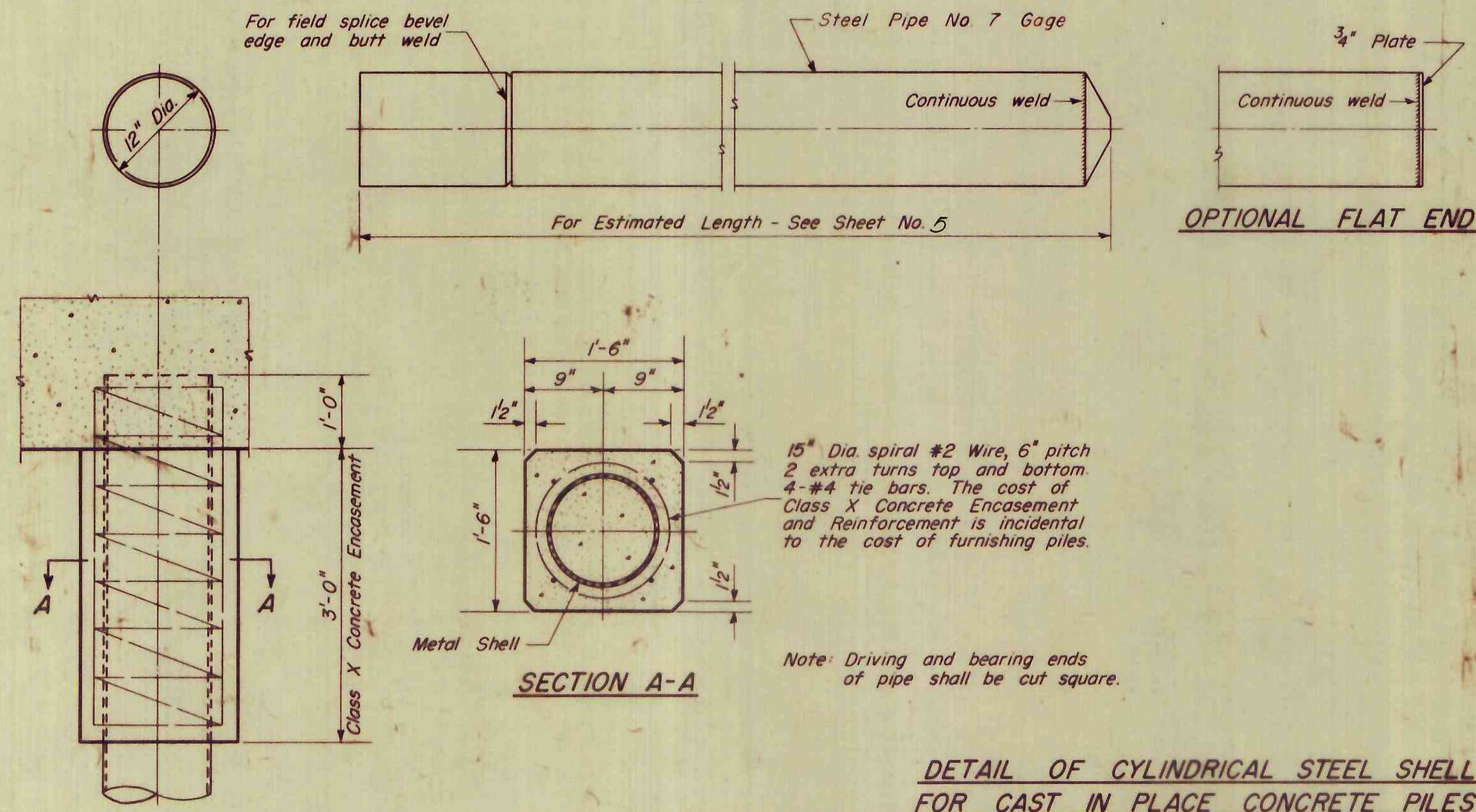
P-2 DRAWN 4-9-57

Revised 13 Gi J.M.J Increased Pier height by 1'-3"

Revised 8-27-63 H.P.G. Elevation Top of Pier Block changed from 671.82 to 673.07

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8
80	06-3B-1	BUREAU	97	28	9 SHEETS
F.A.I. 80	3HB-1	ILLINOIS	FED. AID PROJECT		



DESIGNED	J.M. Javonick	EXAMINED	May 17 1961 H.E. Bauman
CHECKED	R.D. Pearson	PASSED	E. J. Javonick
DRAWN	W.A. Sausaman	APPROVED	R.H. Bauman
CHECKED	R.D.P.		

X-1 Rev. 5-12-61

REVISED 3-21-63

DETAIL OF PRECAST CONCRETE PILES

Revised 5/17/61 - Replaced standard X1 dated 4-6-59 by 5B X1 dated 5/12/61 A.B.

PILE DETAILS
F.A.I. RT. 80 SEC. 06-3HB-1
BUREAU COUNTY
STA. 745+74.52

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
180	3HB-1	BUREAU	9	29
FED. ROAD DIST. NO. 1				

Sheet No. 9
9 Sheets

Form No. B.D. 137 Rev. **FOUNDATION BORINGS** Sheet 1 of 3 Sheets

Project Bridge Station 745+74.52
Route FAI 80
Section 06-3-HB-1
County Bureau

Date June 59
Boring made by William Carter

Elevation	Blows per Foot	Qu
Boring No. 1 Boring located at Station 18+95, 24 Ft Lt Centerline.		
Surface of Ground. 656.1		
Stiff black silty clay. 654.0		
Stiff brown very sandy clay till. 651.0	10	1.96
Free water level 652.4 650.0		
648.5	17	Lost
647.5		
647.0		
Very stiff gray clay till with silt lenses. 646.0	15	2.62
645.0		
644.0		
Very stiff gray pebbly clay till, silt lenses. 643.5	19	2.57
642.5		
642.0		
641.0		
Very stiff gray pebbly clay till. 640.0	22	2.86
638.5		
637.5	14	2.36
637.0		
Hard gray pebbly clay till. 636.5	31	4.94

Form No. B.D. 137 Rev. **FOUNDATION BORINGS** Sheet 2 of 3 Sheets

Project Bridge Station 745+74.52
Route FAI 80
Section 06-3HB-1
County Bureau

Date June 59
Boring made by Gordon R. Benson

Elevation	Blows per Foot	Qu
Boring No. 2 Boring located at Station 20+02, 24 Ft Lt Centerline.		
Surface of Ground. 656.7		
Stiff black silty clay. 655.5		
Stiff brown very sandy clay till. 629.0		
Free water level 653.3		
651.5	10	1.68
650.5		
649.5		
Medium gray clay till. 649.0	6	0.82
648.0		
637.0		
646.5	10	1.72
645.5		
Stiff gray pebbly clay till. 644.0	15	Lost
643.0		
641.5		
640.5	12	1.30
639.5		
639.0		
Very stiff gray pebbly clay till. 638.0	17	2.20

Form No. B.D. 137 Rev. **FOUNDATION BORINGS** Sheet 3 of 3 Sheets

Project Bridge Station 745+74.52
Route FAI 80
Section 06-3HB-1
County Bureau

Date June 59
Boring made by Gordon R. Benson

Elevation	Blows per Foot	Qu
Boring No. 3 Boring located at Station 21+09, 24 Ft Lt Centerline.		
Surface of Ground. 657.1		
Stiff black silty clay. 656.0		
Stiff yellow sandy clay till. 652.0	6	1.43
651.0		
649.5	21 (Stone)	
648.5		
648.0		
Stiff gray pebbly clay till. 647.0	14	1.65
646.0		
645.0		
644.5	21	Lost
643.5		
Very stiff gray pebbly clay till. 642.0	35	1.92
641.0		
639.5	14	2.16
638.5		
637.5		

Blows per foot = Penetration of Sampling Spoon.
Hammer Weight = 350 Lbs.
Drop = 12"
Qu = Unconfined Compressive Strength in Tons per square foot.

DESIGNED J. M. Szwed
CHECKED R. D. Benson
DRAWN W. A. Sausaman
CHECKED R. D. P.

EXAMINED McRinn
PASSED Edwards
APPROVED R. K. Bartholme

Sept 22 1959

BORING DATA
PROJ. I-80-1()
F.A.I. RT. 80 SEC. 06-3-HB-1
BUREAU COUNTY
STA. 745 + 74.52