

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

FEDERAL AID ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	27-38B	FORD	28	1

P-95-013-00

PLAN 1 INCH = 100 FT.
PROFILE, HOR. 1 INCH = 100 FT.
PROFILE, VERT. 1 INCH = 10 FT.
CROSS SECTIONS 1 INCH = 5 FT. VERT.
10 FT. HOR.

F. A. I. ROUTE 57, SECTION 27-38B, FORD COUNTY
PROJECT I-57-5(99)259
CONSTRUCTION JOB NO. C-95-026-67

As Built Plans

FOR SUMMARY OF QUANTITIES, SEE SHEET NO. 3
FOR INDEX OF SHEETS, SEE SHEET NO. 3

INFORMATION ONLY

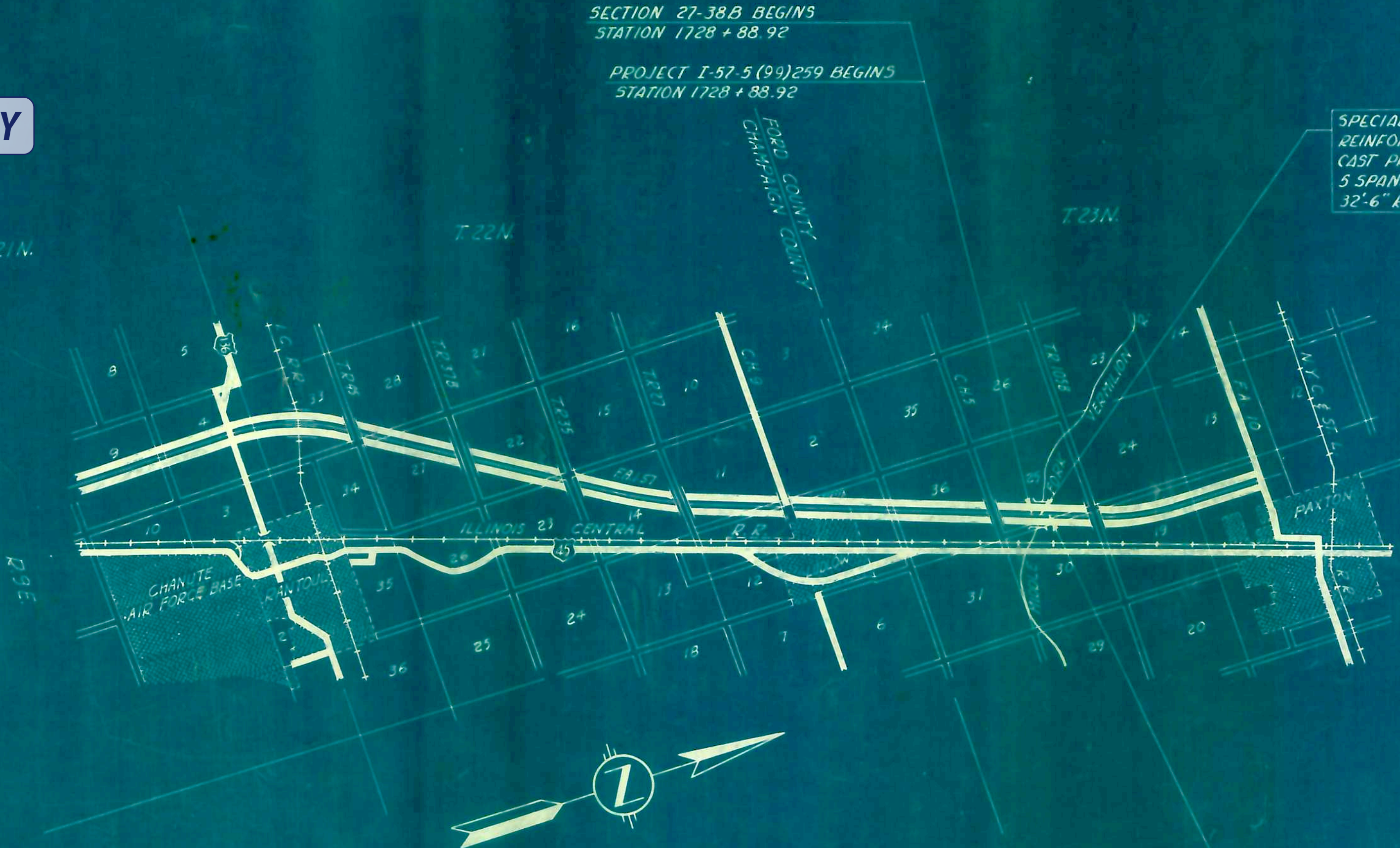
STRUCTURAL DESIGN TRAFFIC
ADT - 11,793 YEAR 1978
PC = 81 %
SU = 10.5 %
MU = 8.5 %
CLASS I ROAD
CBR = 2
PER CENT OF SDT IN DESIGN LANE
U_p = 32 %
U_s = 45 %
U_m = 45 %
TF = 4.51

DESIGN CLASSIFICATION
1825 - T - 70

SECTION 27-38B BEGINS
STATION 1728 + 88.92

PROJECT I-57-5(99)259 BEGINS
STATION 1728 + 88.92

SPECIAL DUAL BRIDGE DESIGN -
REINFORCED CONCRETE DECKS ON PRE-
CAST PRESTRESSED CONCRETE I-BEAMS;
5 SPANS @ 54'7", 55'5", 55'5", 55'5" & 54'7"
32'-6" ROADWAY 10° SKEW



SCALE OF MAP: 1" = 1 MILE (APPROX)

SECTION 27-38B ENDS
STATION 1731 + 68.75

PROJECT I-57-5(99)259 ENDS
STATION 1731 + 68.75

TOTAL LENGTH OF SECTION = 27983 FT. = 0.053 MI
NET LENGTH OF SECTION = 27983 FT. = 0.053 MI
TOTAL LENGTH OF PROJECT = 27983 FT. = 0.053 MI
NET LENGTH OF PROJECT = 27983 FT. = 0.053 MI



LOCATION OF SECTION INDICATED THUS: -

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

SUBMITTED: Sept 13, 1982
EXAMINED: William A. Amstutz
PASSED: W. G. Baumann
APPROVED: W. G. Baumann
APPROVED: Francis J. Baumann

DEPARTMENT OF COMMERCE
BUREAU OF PUBLIC ROADS

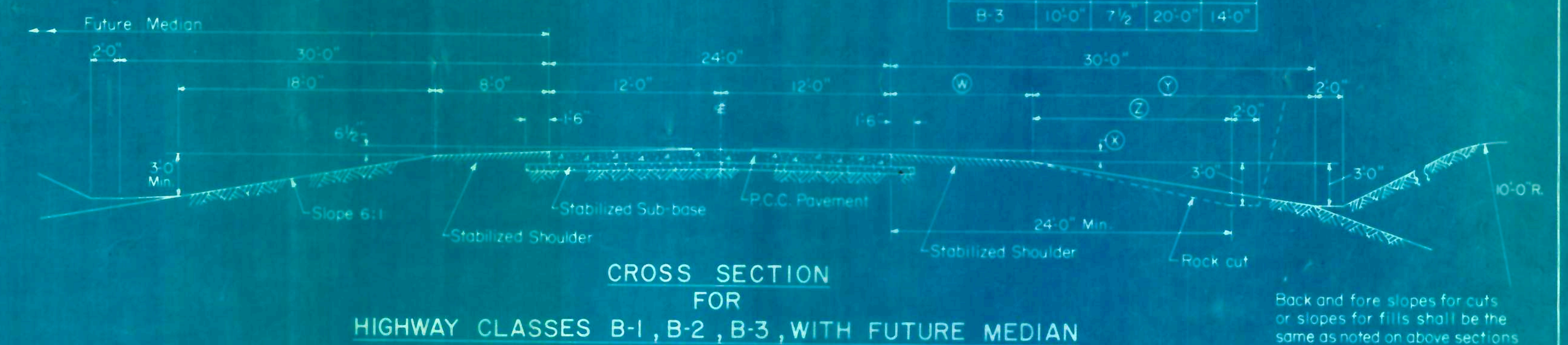
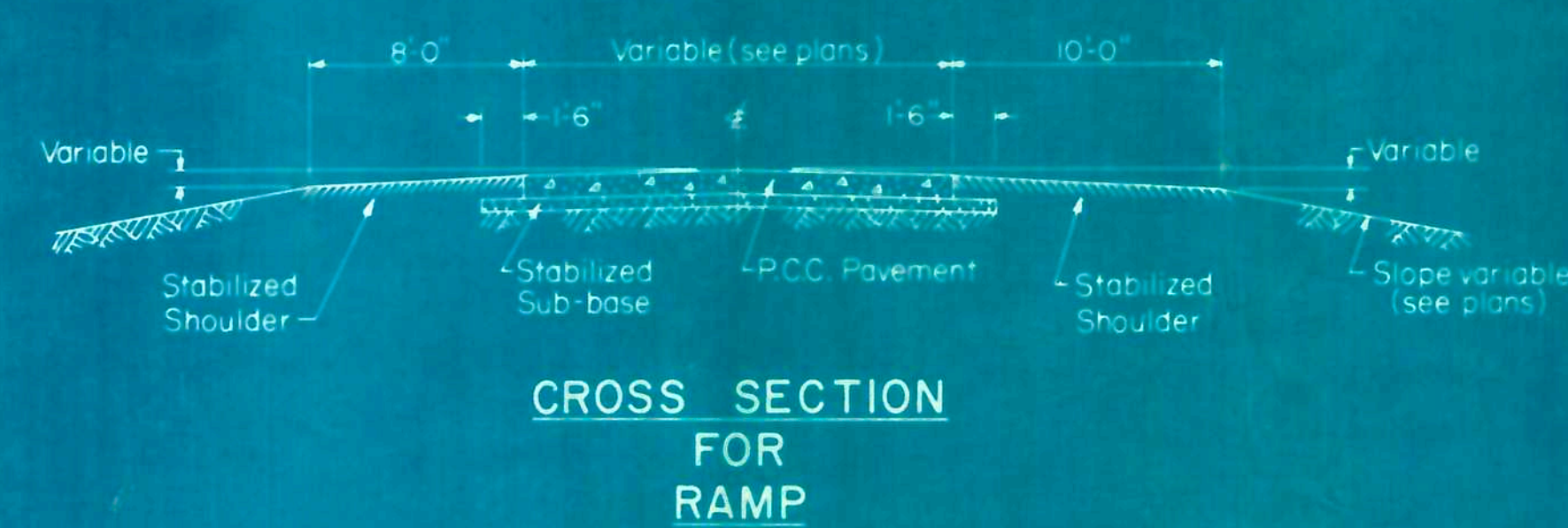
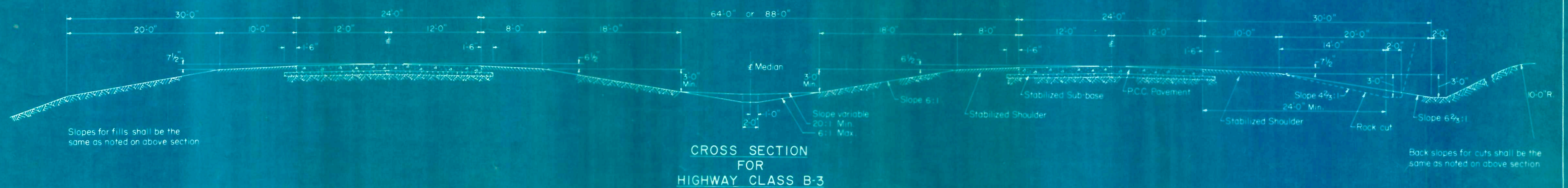
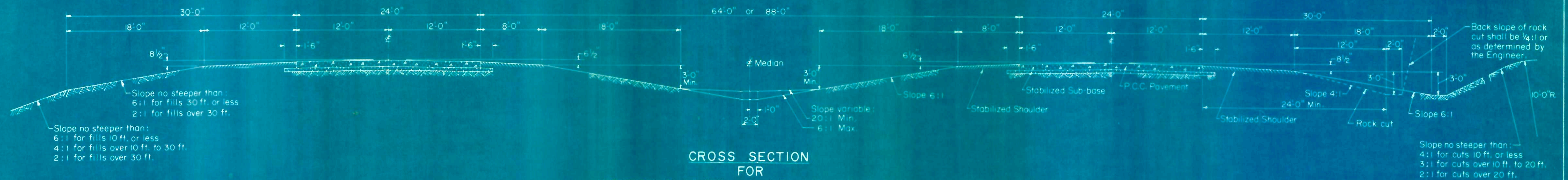
APPROVED:
DIVISION ENGINEER

DATE:

CONTRACT NO. 25014

FORD COUNTY SECTION 27-38B F.A.I. ROUTE 57 PROJECT I-57-5(99)259

STANDARD DESIGN ROADWAY CROSS SECTIONS FOR DUAL 24 FT. P.C.C. PAVEMENT (HIGHWAY CLASSES A-1, A-2, A-3, B-1, B-2, B-3, AND RAMP)



CLASS	(W)	(X)	(Y)	(Z)
B-1 & B-2	12'-0"	8'-0"	18'-0"	12'-0"
B-3	10'-0"	7'-0"	20'-0"	14'-0"

Portland Cement Concrete Pavement:-
The thickness and type of the pavement shall be as shown on the plans or specified in the special provisions.
For detail of the pavement see Standards:-
2179 Standard reinforced pavement.
2224 Continuously reinforced pavement.

Stabilized Sub-base:-
The stabilized sub-base shall be 4 inches thick unless shown otherwise on the plans.
When a slip form paver is used the stabilized sub-base shall if necessary be extended so that the width will be 6 inches greater than the width from outside to outside of the slip form paver tracks. Such extended width will not be measured for payment but shall be considered as being incidental to the contract.

Stabilized Shoulder:-
The stabilized shoulders shall be as detailed on Standard 2237 unless shown otherwise on the plans.

General Notes:-
The superelevation of the pavement shall be as shown on the plans.

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS		ISSUED 7-7-66	
PASSED Aug. 17 1967		REVISIONS	
APPROVED Aug. 17 1967		W.F. 8-17-67	
W.F. Baumann Engineer of Design			

Redrawn 8-17-67

STANDARD 2235-1
(Full Size) W.F.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	2738-B	FORD	28	3
FED. ROAD DIST. NO. 7		ILLINOIS		

GENERAL NOTES

ALL THINGS THAT INTERFERE WITH CONSTRUCTION OPERATIONS ARE TO BE REMOVED AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITIES:

300 IN. DIA. TREE REMOVAL, 6 - 15 IN. DIA.
 300 IN. DIA. TREE REMOVAL, OVER 15 IN. DIA.
 4.0 ACRES TREE REMOVAL, ACRES

THE AREA WITHIN THE TEMPORARY BARRIERS IS TO BE SEEDED WITH CLASS II SEEDING, FERTILIZED AND MULCHED AS DIRECTED BY THE ENGINEER.

ESTIMATED QUANTITIES:

2.2 ACRES SEEDING CLASS II
 500 LBS. PHOSPHOROUS FERTILIZER NUTRIENT
 180 LBS. NITROGEN FERTILIZER NUTRIENT
 180 LBS. POTASSIUM FERTILIZER NUTRIENT
 1 TON STRIP FOR ASPHALT COATED REEF
 300 GAL. EMULSIFIED ASPHALT

WHICHSOEVER REFERENCES IN THESE PLANS TO THE "STANDARD SPECIFICATIONS" IS TO UNDERSTOOD AS ALSO INCLUDING THE "SUPPLEMENTAL SPECIFICATIONS" EFFECTIVE JANUARY 3, 1966.

ALL ELEVATIONS SHOWN ON THESE PLANS ARE ESTABLISHED FROM U.S.M.S. DATUM.

INDEX OF SHEETS

- COVER SHEET
- STANDARD 223-1
- SUMMARY OF QUANTITIES, GENERAL NOTES & INDEX OF SHEETS
- PLAN AND PROFILES F.A.I. ROUTE 57
22. STRUCTURE PLANS
23. PLAN AND PROFILES AND DETAILS FOR CHANNEL CHANGES
- 24-25. STATION CROSS SECTIONS F.A.I. ROUTE 57
26. STATION CROSS SECTIONS PROPOSED CHANNEL CHANGE
27. STANDARD 213-1, 2237-2
28. STANDARD 213-6

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI 57	2738-B	FORD	28	3
FED. ROAD DIST. NO. 7		ILLINOIS		

SUMMARY OF QUANTITIES

LOCATION OF WORK

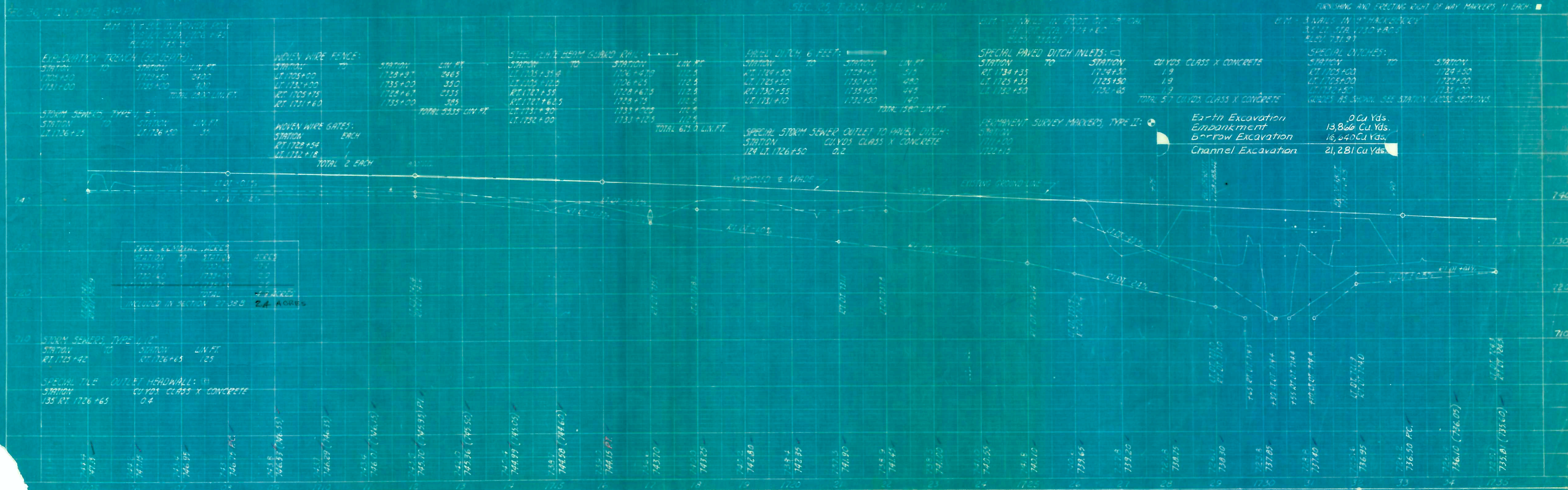
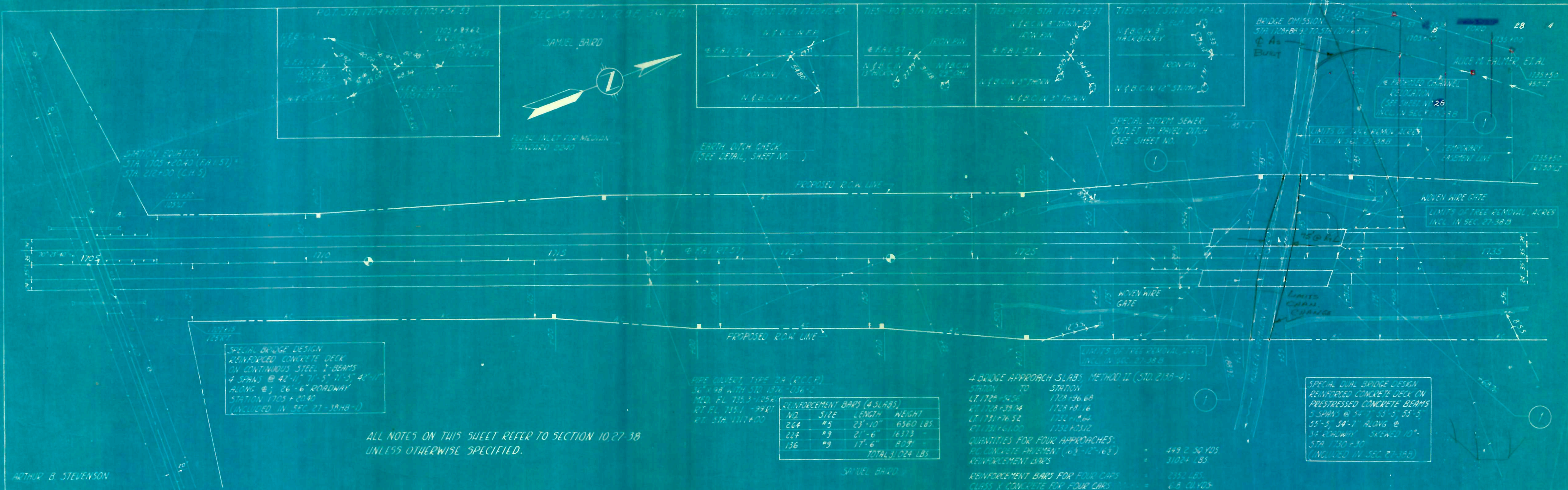
FORD COUNTY PROJECT I-57-5(99) 558

CONSTRUCTION TYPE CODES
 Bridge STA. 1730+10 ROAD STA. 1730+30 STATION CONTROL STA. 1730+30

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	X081	X081	X001
010001	TREE REMOVAL (6 TO 15 INCH DIAMETERS)	IN. DIA.	300		300	
010002	TREE REMOVAL (OVER 15 INCH DIAMETERS)	IN. DIA.	500		500	
010003	TREE REMOVAL, ACRES	ACRES	4.0		4.0	
010001	CHANNEL EXCAVATION	CU. YDS.	21,081	18,540	2,741	
013001	BOTTOM EXCAVATION	CU. YDS.	16,040		16,040	
020001	CLASS A EXCAVATION FOR STRUCTURES	CU. YDS.	613		613	
020002	CLASS B EXCAVATION FOR STRUCTURES	CU. YDS.	663		663	
021000	PRECAST PRESTRESSED CONCRETE					
	I-BEAMS, 48 IN.	LIN. FT.	2,755		2,755	
020002	CLASS A CONCRETE	CU. YDS.	783.8		783.8	
020003	CLASS B CONCRETE	CU. YDS.	830.7		830.7	
020001	PROTECTIVE COAT	SQ. YDS.	2,585		2,585	
051002	FURNISHING AND ERECTING STRUCTURAL STEEL	POUNDS	7,490		7,490	
050001	REINFORCEMENT BARS	POUNDS	201,610		201,610	
060001	FURNISHING UNGRADED FILLS UP TO 30 FEET	LIN. FT.	871		871	
060007	TEST FILL EMBANK	EACH	2		2	
060008	DRIVING TIMBER PILES	LIN. FT.	1,259		1,259	
060043	DRIVING CONCRETE PILES	LIN. FT.	1,993		1,993	
060044	FURNISHING CONCRETE PILES	LIN. FT.	1,993		1,993	
060047	TEST FILL CONCRETE	EACH	2		2	
061001	BASE PLATES	EACH	2		2	
063003	STONE WALL, 6 INCH	SQ. YDS.	1,108		1,108	
110005	SEEDING, CLASS II	ACRES	2.2			2.2
111000	STRIP FOR ASPHALT-COATED REEF	TONS	1			1
111003	EMULSIFIED ASPHALT	GAL.	300			300
113011	NITROGEN FERTILIZER NUTRIENT	POUNDS	180			180
113012	PHOSPHOROUS FERTILIZER NUTRIENT	POUNDS	500			500
113016	POTASSIUM FERTILIZER NUTRIENT	POUNDS	180			180
200004	ALUMINUM HANDRAIL	LIN. FT.	1,111		1,111	
201003	EMULSION SEAT SEALANT	L. LBS.	1		1	
201379	ENGINEER'S FIELD LABORATORY	EACH	1*			
201380	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1*			
060004	FURNISHING CREOSOTED PILES UP TO 20 FEET	LIN. FT.	288		288	

* CONSTRUCTION TYPE CODE C 1-10

PLAN
SECTION
ELEVATION



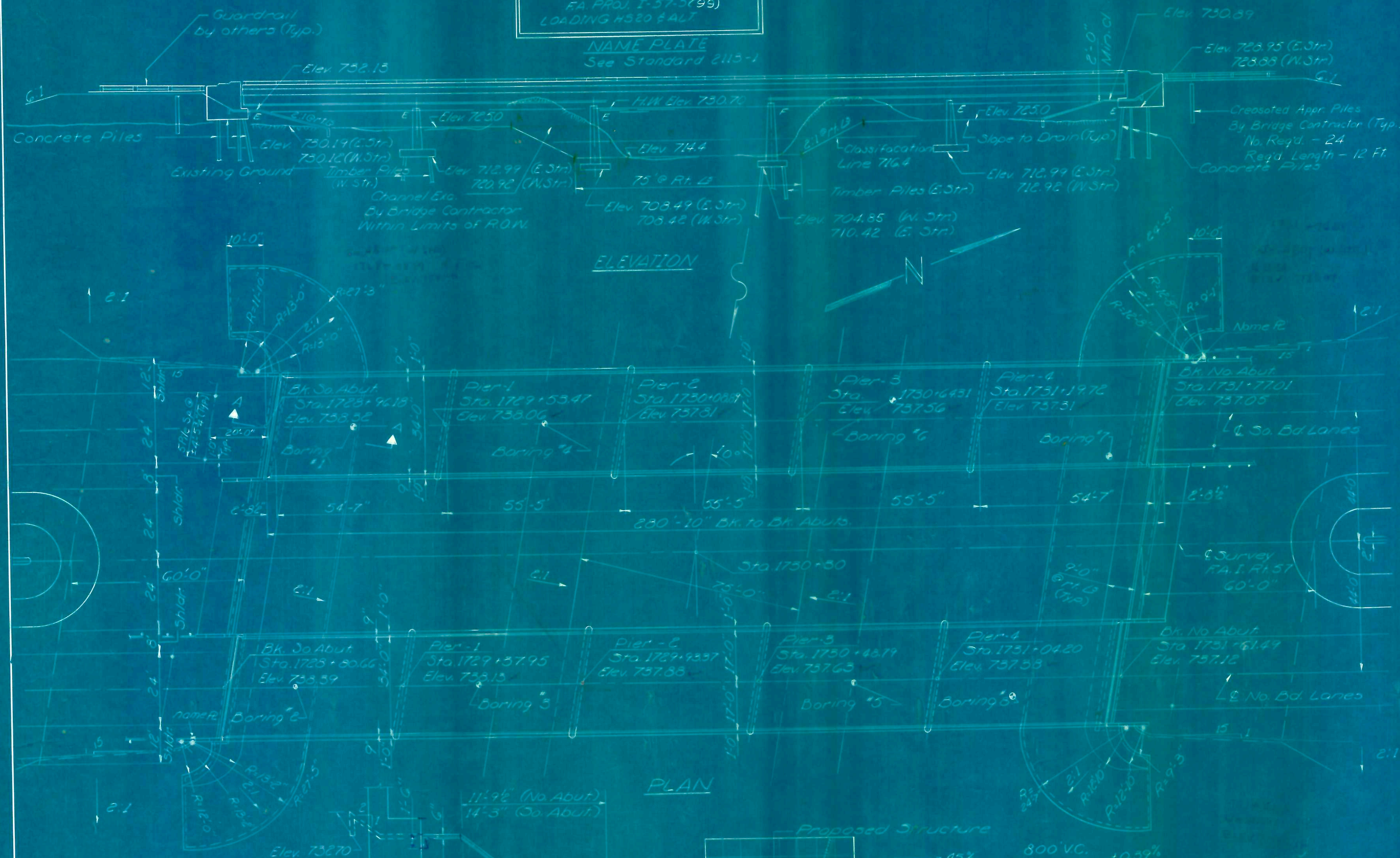
5.M. 3 Nails in 1" Hackberry
35 Lf. Sta. 1730+80.5 Elev. 731.77

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAI 57	27-388	FORD	28	5	10 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-57-5(99)259			

STATION 1730+30
BUILT 196 BY
STATE OF ILLINOIS
FAI RT 57 SEC. 1027-388
FA PROJ. I-57-5(99)
LOADING H320 & ALT.

NAME PLATE
See Standard 2115-1



PLAN

PROFILE FAI RT 57

LOCATION PLAN

DESIGN STRESSES
FIELD UNITS

PRECAST PRESTRESSED UNITS

$f_c = 1400$ psi Super & Sub
 $f_s = 20000$ psi
 $v_c = 75$ psi (Ftgs)
 $n = 10$

$f_c = 5000$ psi
 $f_s = 4000$ psi
 $f_s = 248,000$ psi (Strands)
 $f_s = 173,600$ psi (Strands)

GENERAL NOTES

Coarse aggregate to be used in parapet handrail and end post must be free of chert, flint, limonite, lignite and soft sandstone.
The concrete floor slab will be finished in accordance with Art. 31.19 of the Standard Specifications.
Slope wall shall be reinforced with welded wire fabric 6"x6" mesh 4 wire weighing 58 per 100 sq ft. Layout of slope walls may be varied to suit ground conditions in the field as directed by the Engineer.
All reinforcement bars should be lapped a minimum of 20 diameters unless otherwise shown.
Permanent forms will not be permitted in forming the concrete floor.
All structural steel shall conform to A.S.T.M. Designation A-36.
Exposed surfaces of the expansion devices, inaccessible after erection, shall receive two shop coats of red lead paint. All other surfaces shall be given one shop coat of red lead paint.
Anchor studs shall not be painted.
Expansion devices are included in the quantity of structural steel. Est. Weight = 3670 Lbs.
Excavation for portions of structures in the embankment shall not be classified.
The contractor shall drive two (2) concrete test piles one at North Abut. & Structure, one at South Abut. & Structure, and two (2) timber test piles, one at Pier #1 & Structure, and one at Pier #3 & Structure in permanent locations as directed by the Engineer before ordering the remainder of piles.
An alternate prestressing strand pattern using Extra High Strength Strand (270 ksi) is permitted. See Special Provisions.

TOTAL BILL OF MATERIAL

Item	Super	Sub	Total
Class A Exc for Struct	Cu Yds.	615	615
Class B Exc for Struct	Cu Yds.	663	663
Class X Concrete	Cu Yds.	671.5	671.5
Class A Concrete	Cu Yds.	783.5	783.5
Furnishing & Erecting Precast 18" x 48"	Lin. Ft.	6755	6755
Aluminum Handrail	Lin. Ft.	1111	1111
Concrete Piles	Lin. Ft.	971	971
Untreated Piles (Up to 30')	Lin. Ft.	7490	7490
Structural Steel	Lbs.	102920	102920
Reinforcement Bars	Lbs.	33690	33690
Test Pile (Timber)	Eq.	2	2
Test Pile (Concrete)	Eq.	2	2
Name Plates	Eq.	2	2
Protective Coat	Sq Yds	6565	6565
Slope Wall (6")	Sq Yds	1109	1109
Bridge Seat Sealant	Lump Sum	1	1
Crossed Piles (Up to 20')	Lin. Ft.	258	258

* Includes excavation for slopewall
** Applied at abutments

GENERAL PLAN & ELEVATION

PROJECT I-57-5 (99)259

VERMILION RIVER

FAI RT 57 SEC. 1027-388

FORD COUNTY

STA. 1730+30

LOADING H320-46 ALTERNATE

DESIGNED	L.M. Chau
CHECKED	J. B. Spore
DRAWN	J. R. Zink
CHECKED	J. B. Spore

EXAMINED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED	
APPROVED	ENGINEER OF DESIGN
	CHIEF HIGHWAY ENGINEER

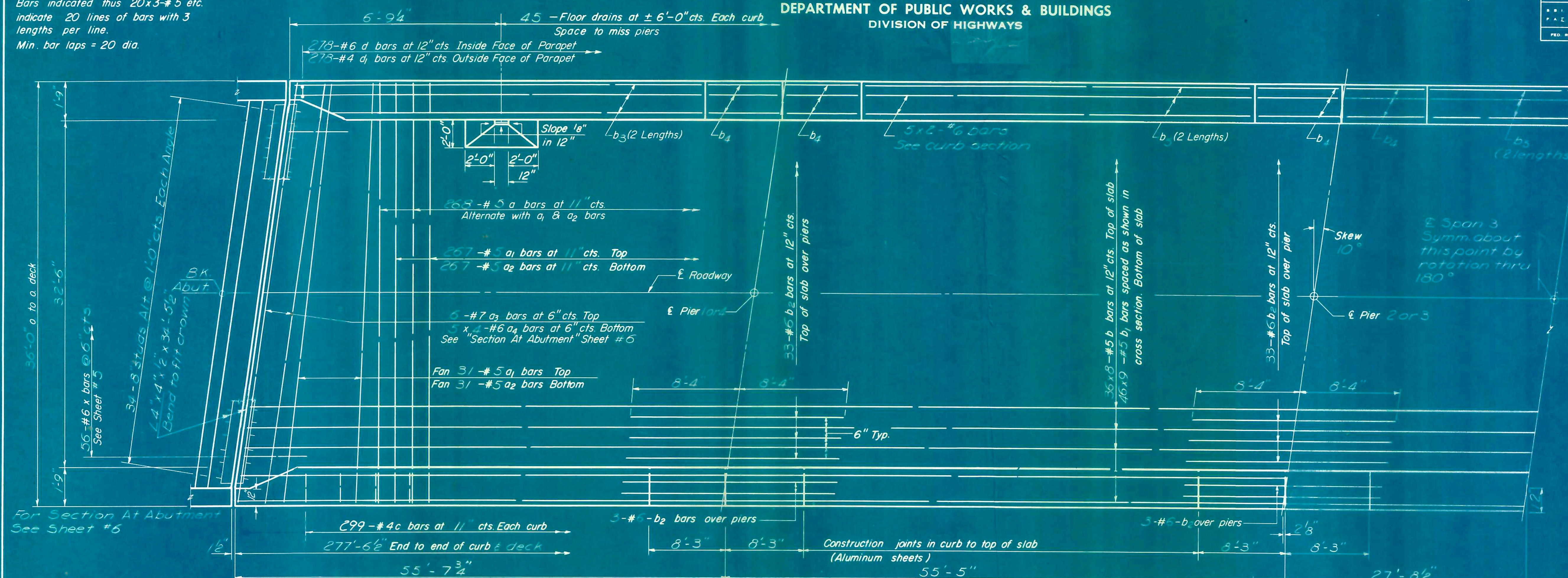
Rev. 5-2-67 Structural Steel from 7330 to 7345 Lbs.
Reinf. Bars from 194200 to 201610 Lbs.
Class X Conc. from 628.9 to 663.7 Cu Yds.
6 piers

Rev. 9-29-67 Added Crossed Apr. Piles, 258

Note
Bars indicated thus 20x3-#5 etc.
indicate 20 lines of bars with 3
lengths per line.
Min. bar laps = 20 dia.

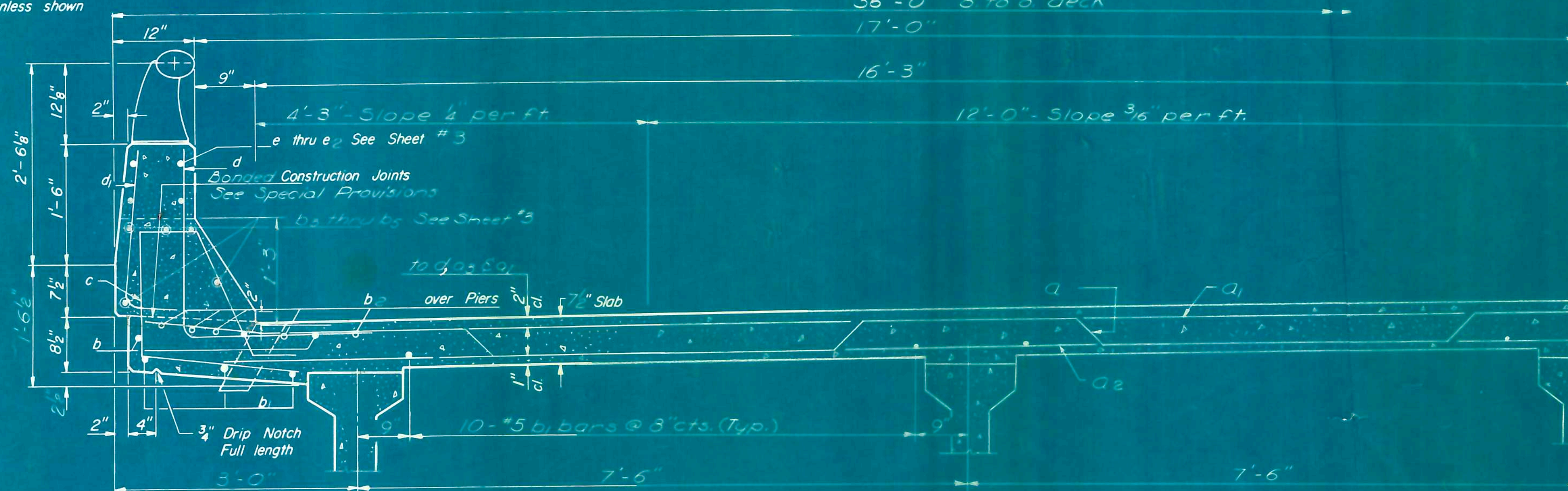
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
27-38B	FORD	28	6	15	15 SHEETS



HALF PLAN

All clearances shall
be 1/2" unless shown
otherwise.

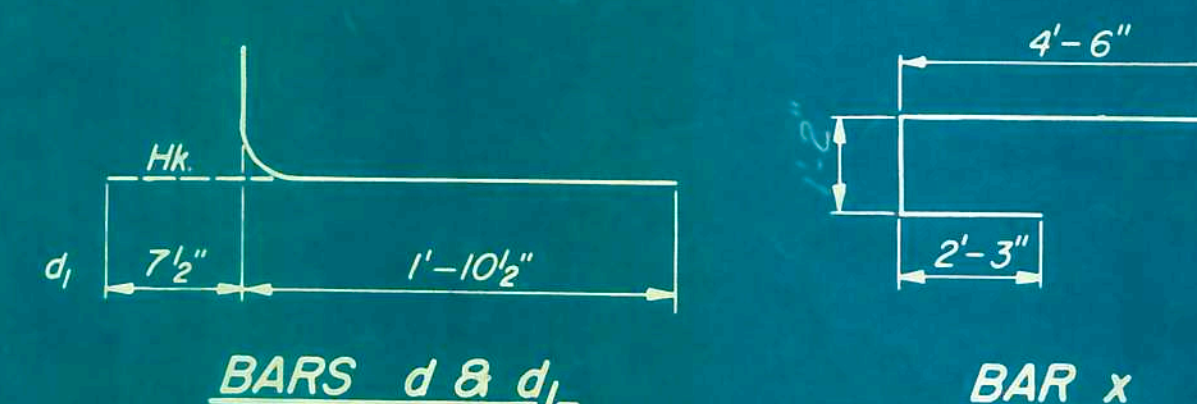


HALF SECTION

DETAIL OF 5 ALUMINUM SHEET
ASTM B209 Alloy 3003-H14
Cast Incidental to Class X Concrete

BAR c

BAR d



3/4" x 1'-1" Aluminum Bar A.S.T.M.: B211
alloy 6061-T6



3/16" Aluminum Sheets Welded
A.S.T.M.: B209 alloy 6061-T6

FLOOR DRAIN

Cast incidental to Class X Concrete

Note
Work this sheet with sheet #3

TWO SUPERSTRUCTURES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	536	#5	36.7	
a1	658	#5	35.3	
a2	658	#5	33.9	
a3	24	#7	35.9	
a4	80	#6	6.10	
b	576	#5	35.8	
b1	828	#5	31.10	
b2	316	#6	16.8	
c	1112	#4	6.1	
d	1112	#6	5.9	
d1	1112	#4	2.6	
m	208	#4	6.10	
m1	64	#6	5.7	
m2	80	#4	5.6	
s	160	#4	10.0	
s1	200	#4	7.10	
x	224	#6	7.11	
Reinforcement Bars			lbs.	15433
Structural Steel			lbs.	7890
Class X Concrete			Cu. Yds.	9444

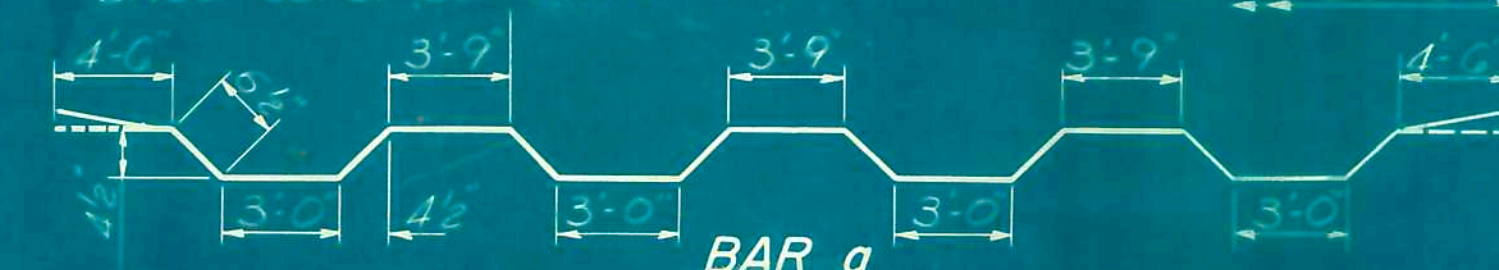
For locations and details of bars m, m1, m2,
s and s1; see sheets 5 & 6.
The quantities of longitudinal reinforcement
and concrete in parapets & curbs are billed separately
on sheet #3 and are not included above.

SUPERSTRUCTURE
F.A.I. RT. 57 SEC. 10, 27-38B
FORD COUNTY
STA. 1730+30

DESIGNED	Aug 16 1966
CHECKED	EXAMINED
DRAWN-James R. Carmain	PASSED
CHECKED	APPROVED

PI-1-L (≤ 14°) 1-27-66

Detail of a bar - Bend in field
180° on a and a1 bars
under curb. Bend in field.

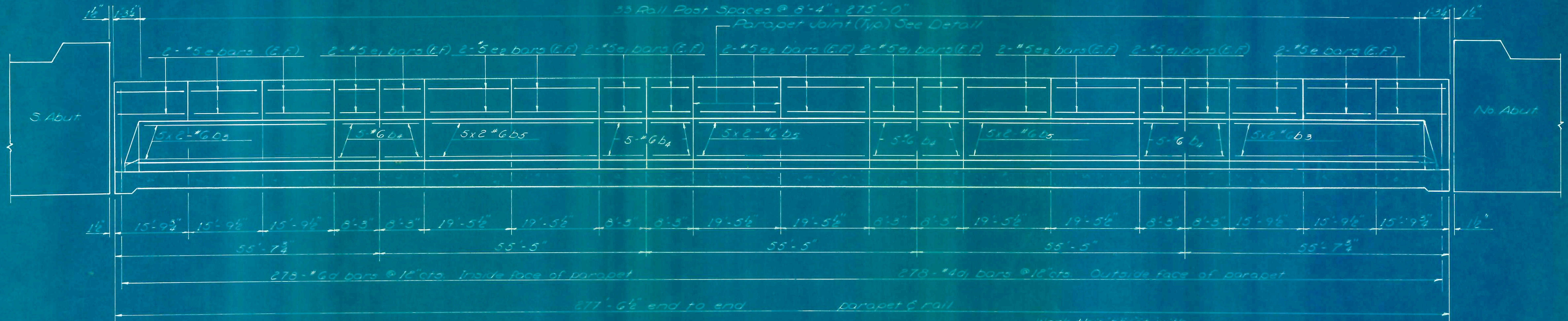


Rev. 8-2-67 Structural Steel from 7330 lbs. to 7490 lbs.
Reinf. from 150,970 to 150,000 Class X Concrete from 915.2 to 966.9 Cu. Yds.

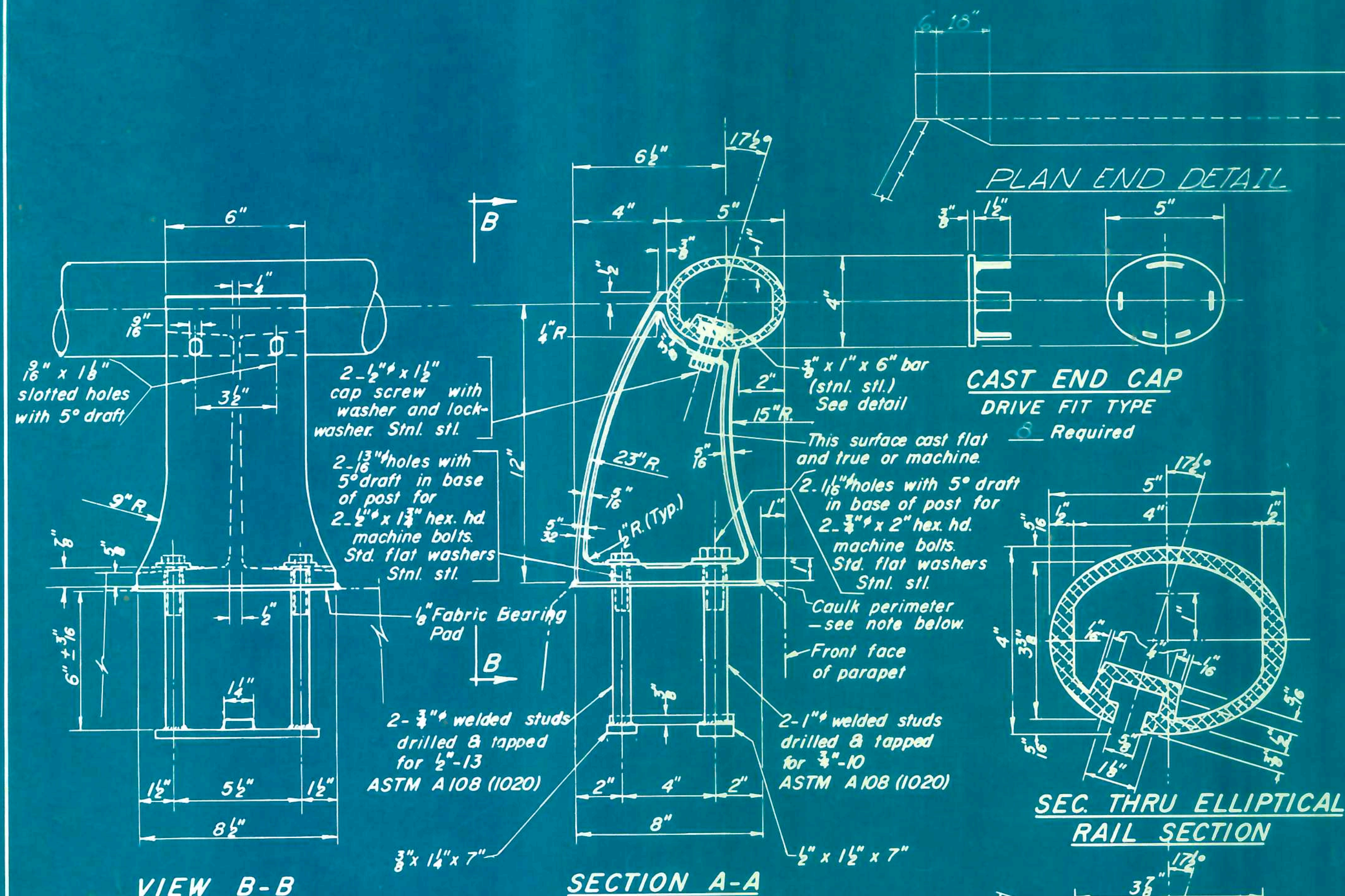
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
17-38B		FORD	28	7
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 3
13 SHEETS



INSIDE ELEVATION

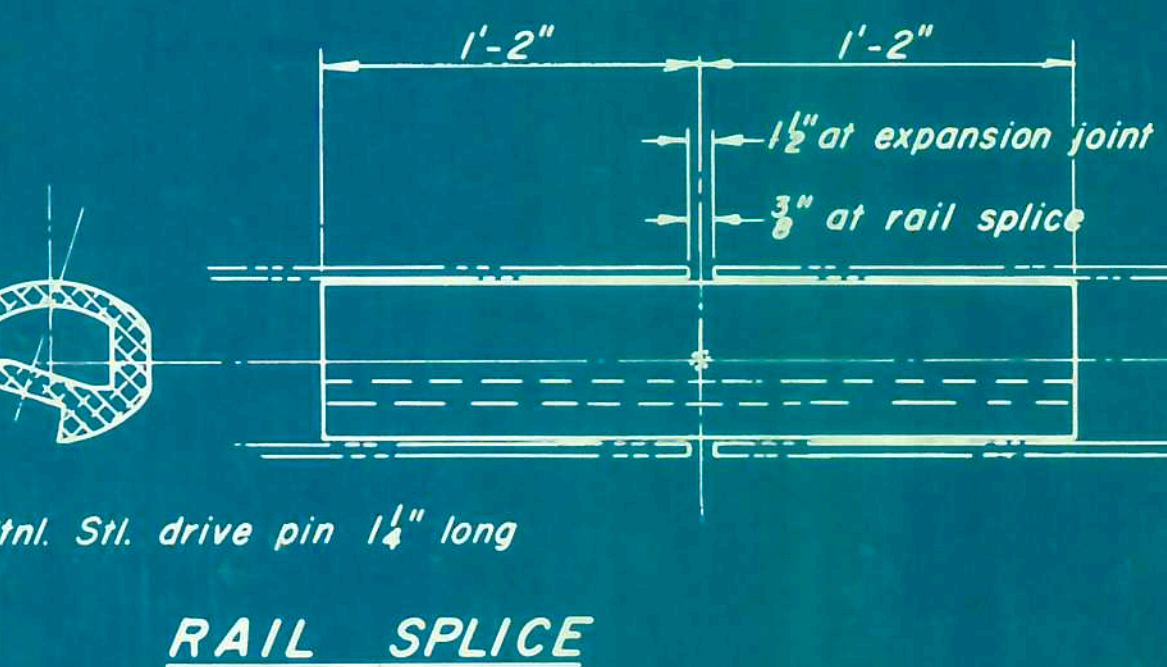


VIEW B-B

SECTION A-A

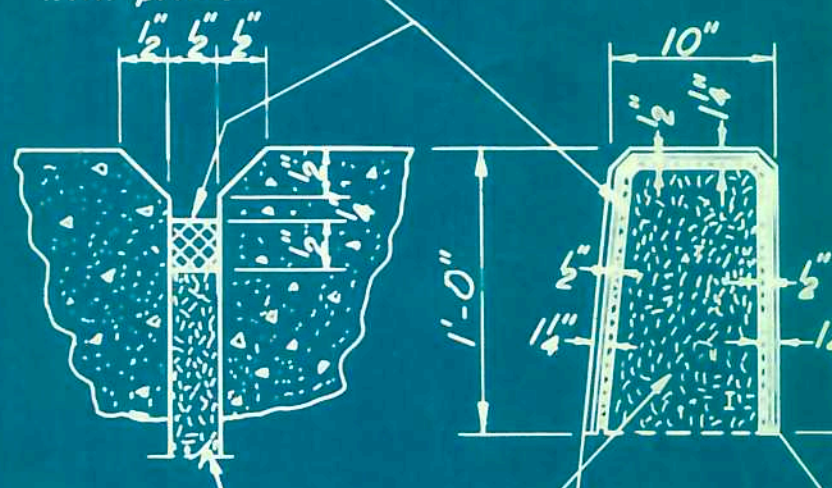
SEC. THRU ELLIPTICAL RAIL SECTION

SEC. THRU SPLICE

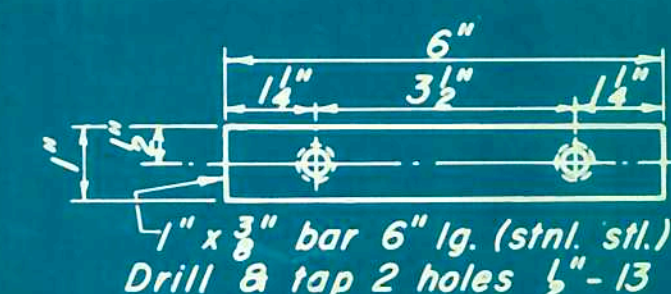


RAIL SPLICE

Two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer.



PARAPET JOINT DETAIL



CLAMP BAR

NOTES:

- All Posts shall be normal to parapet.
- All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6 and shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.
- All joints in rail shall be spliced per detail.
- See Special Provisions for following Material Specifications:
Cast Aluminum Alloy Bridge Post—Alloy A344-T4.
Stainless Steel Bars, Cap Screws, Washers and Lockwashers.
Fabric Bearing Pad.
- METHOD of MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.
- BASIS of PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.
- Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.
- Provide 1- 1/8" and 2- 1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade—high spots shall be ground, and low spots shimmed.

PARAPETS & RAILS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
8a	30	#6	24'-0"	—
8b	160	#6	7'-11"	—
8c	120	#6	19'-10"	—
8d	96	#5	15'-6"	—
8e	128	#5	8'-0"	—
8f	96	#5	19'-2"	—
Class X Concrete			Cu. Yds.	104.67
Reinforcement Bars			Lbs	12920
Aluminum Handrail			Lin. Ft.	1111

ALUMINUM HANDRAIL

FAI RT. 57 SEC. 10, 27-38B

FORD COUNTY

STA 1730 +30

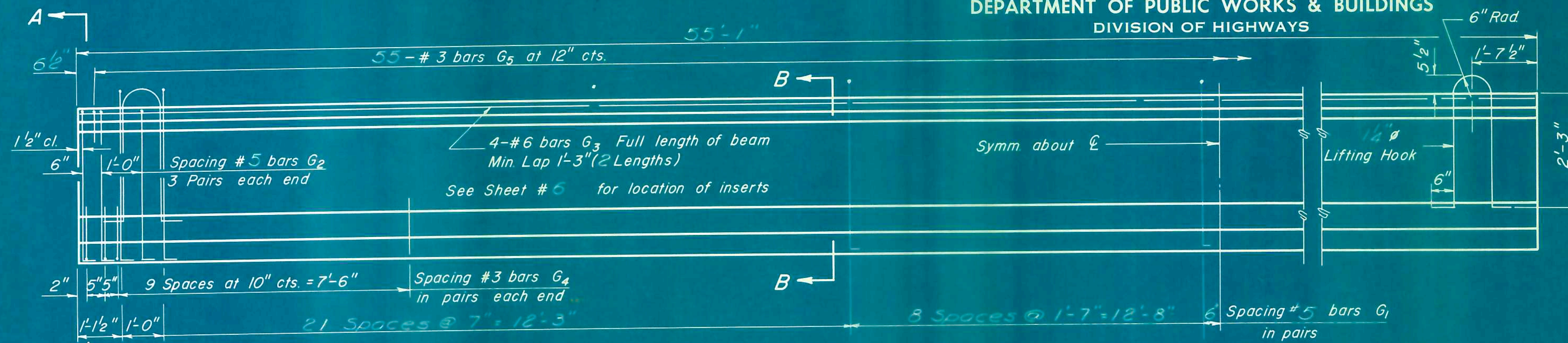
DESIGNED	George H. Dazl
CHECKED	Samuel D. Dazl
DRAWN	Wm. M. Best
CHECKED	

EXAMINED	19
PASSED	
APPROVED	

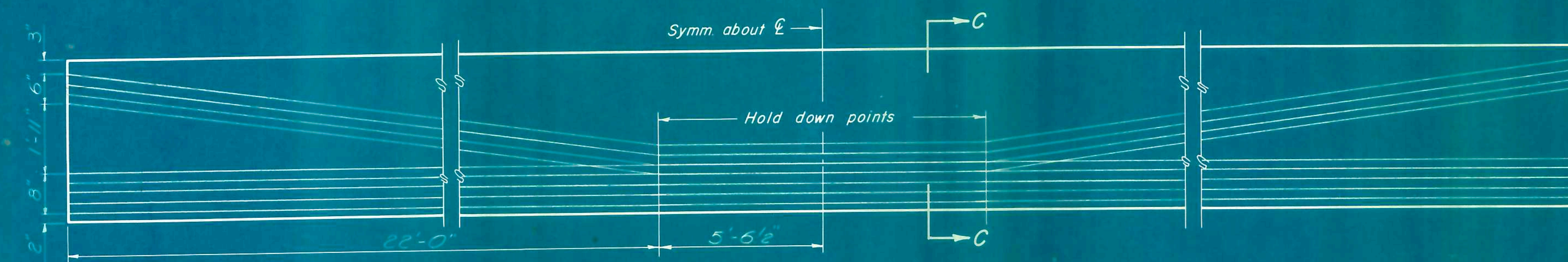
Note:
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers—gun grade with primer.

STATE OF ILLINOIS
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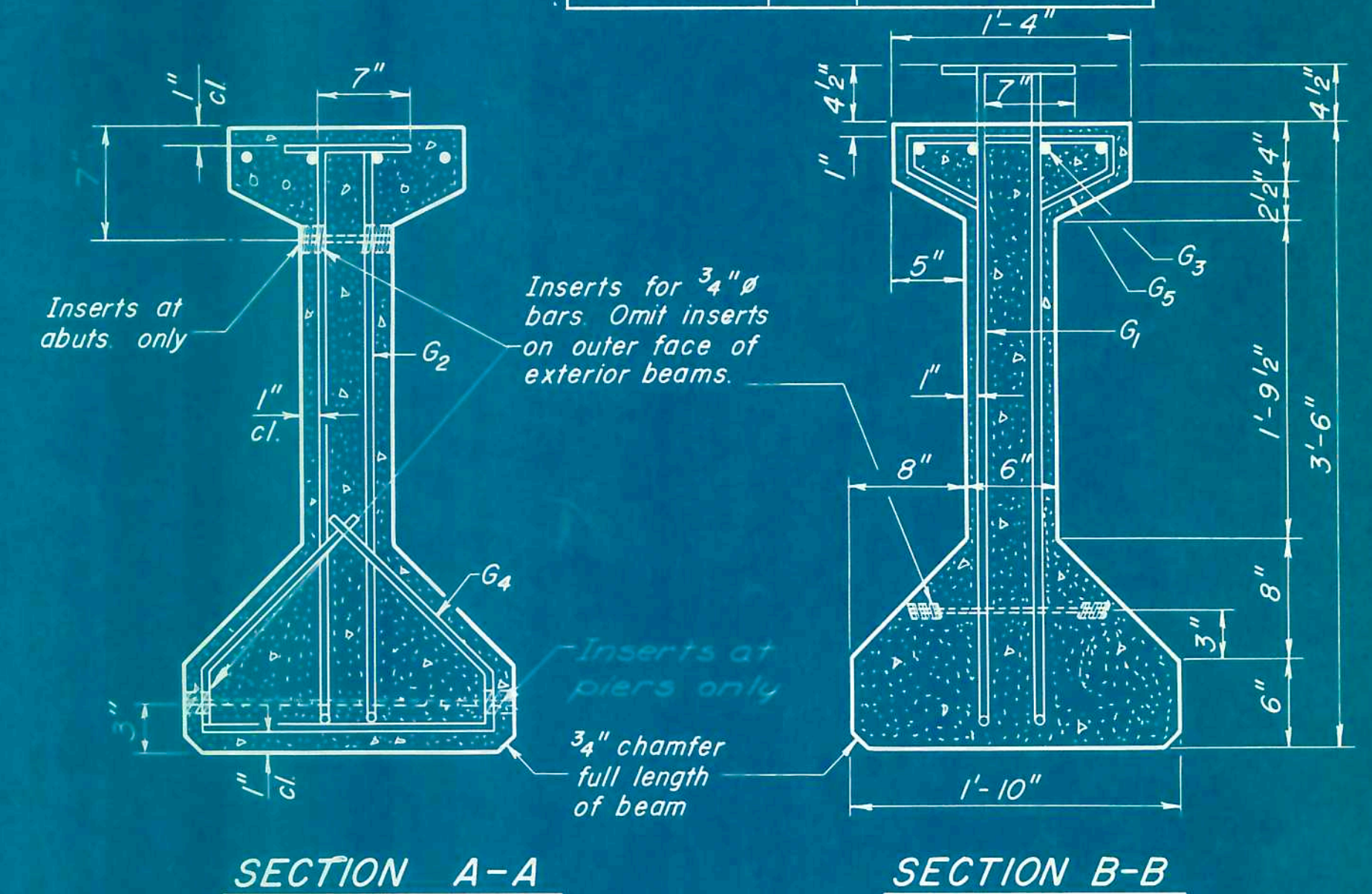
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
27-388	FORD	28	8	13	13 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:			



ELEVATION OF BEAMS-ALL SPANS
Showing Reinforcement & Dimensions

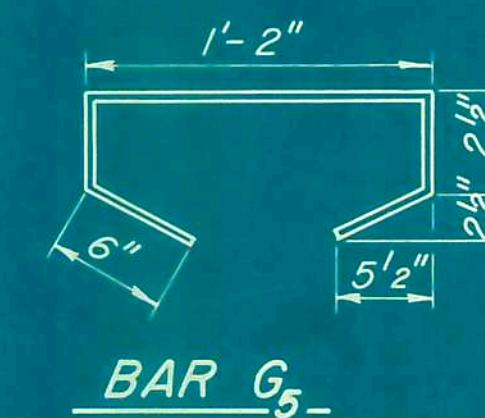


ELEVATION OF BEAMS-ALL SPANS
Showing Prestressing Steel



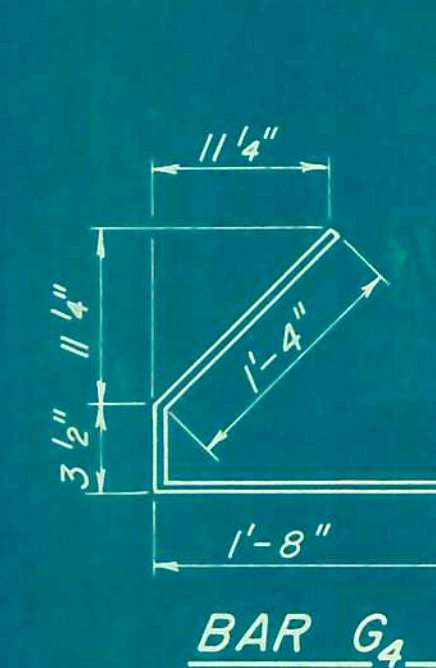
SECTION A-A

SECTION B-B

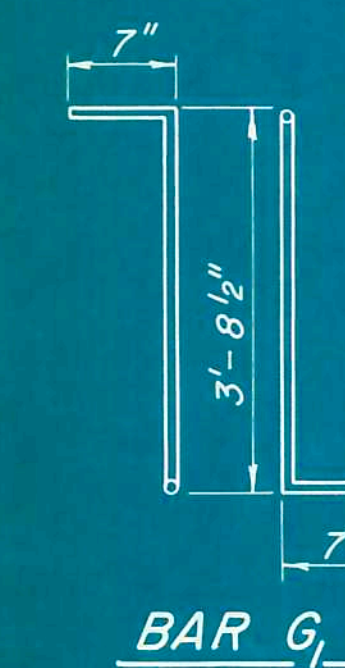


BAR G5

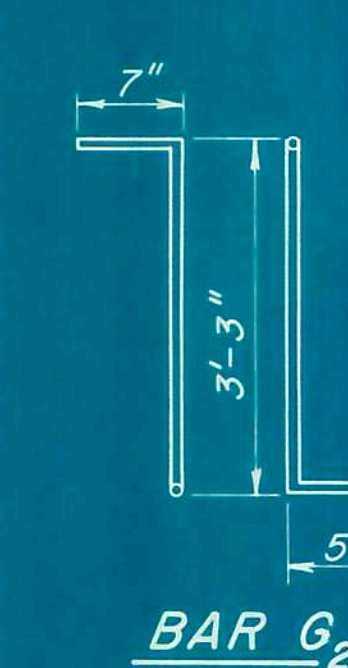
DETAIL AT END OF BEAMS OVER PIERS



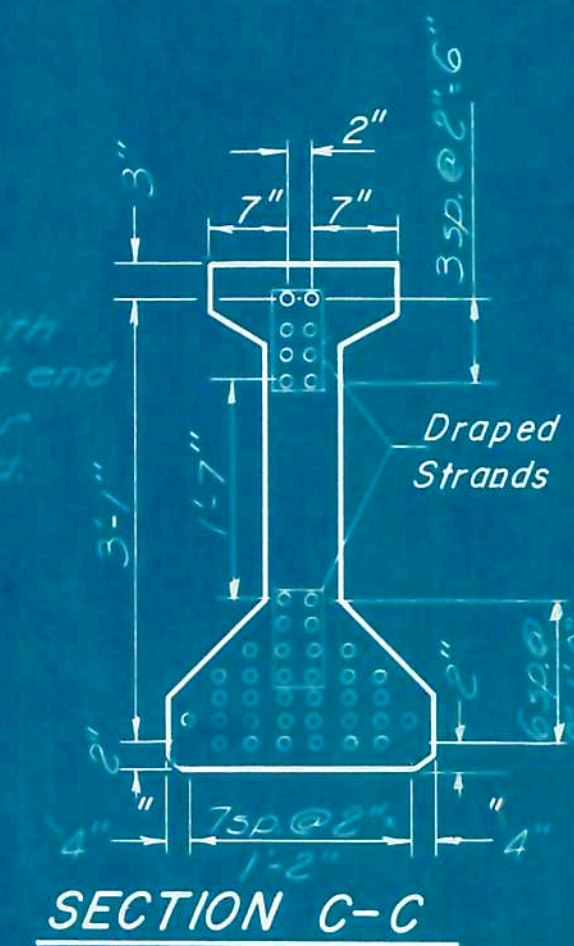
BAR G4



BAR G1



BAR G2



SECTION C-C

***BAR LIST**

Bar	No	Size	Length	Shape
G1	24	#5	4'-10 1/2"	TL
G2	12	#5	4'-3"	TL
G3	8	#6	3'-0"	—
G4	48	#3	3'-3 1/2"	∠
G5	55	#3	2'-7"	□

* For one beam only

BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 42"	Lin. Ft.	2755

NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 42 In."

See Supplemental Specifications for additional information regarding materials, Prestressing equipment, construction and handling methods and other requirements for Precast Prestressed Concrete I-Beams.

Prestressing Steel shall have a nominal diameter of 7/16"

Inserts for 3/4" threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams.

Steel for lifting hooks shall be non-deformed bars of structural or intermediate grade billet steel.

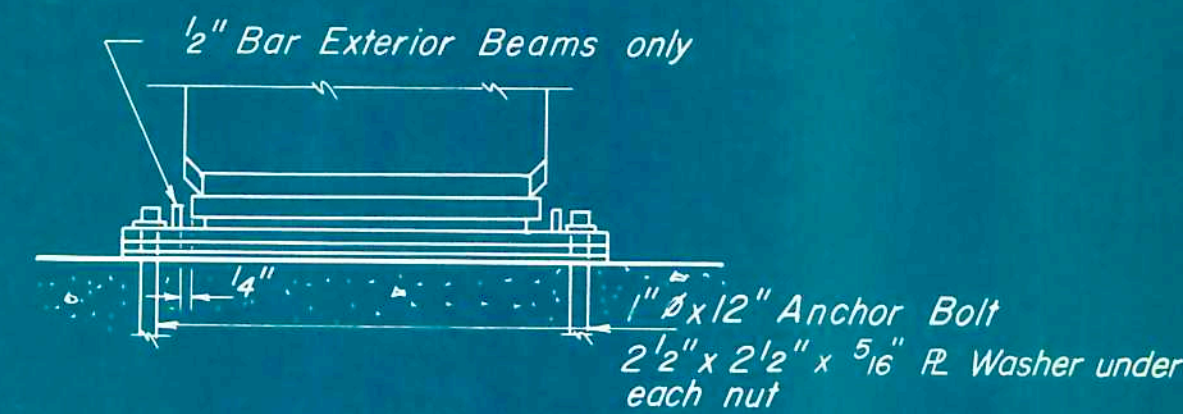
Ends of beams to be encased with cast in place Concrete shall not be coated with asphalt paint.

DESIGNED <i>Liu-ming Chen</i>	EXAMINED <i>Aug. 16 1966</i>
CHECKED <i>Thomas B. Fuller</i>	PASSED <i>W. J. Alton</i>
DRAWN <i>Thomas B. Fuller</i>	APPROVED <i>W. J. Alton</i>
CHECKED <i>W. J. Alton</i>	

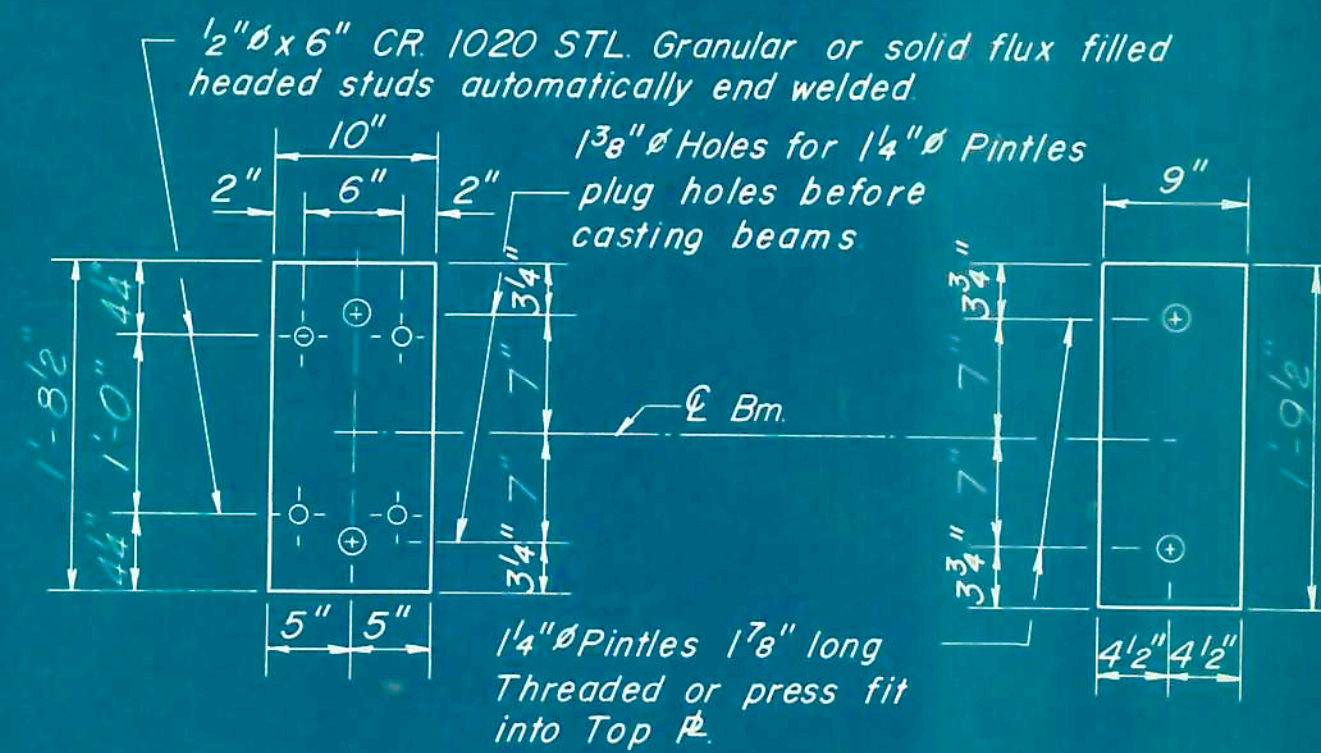
BEAM DETAILS
F.A.I. RT. 57 SEC. 10, 27-388
FORD COUNTY
STA. 1730+30

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
57	27-388	FORD	28	9	13 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

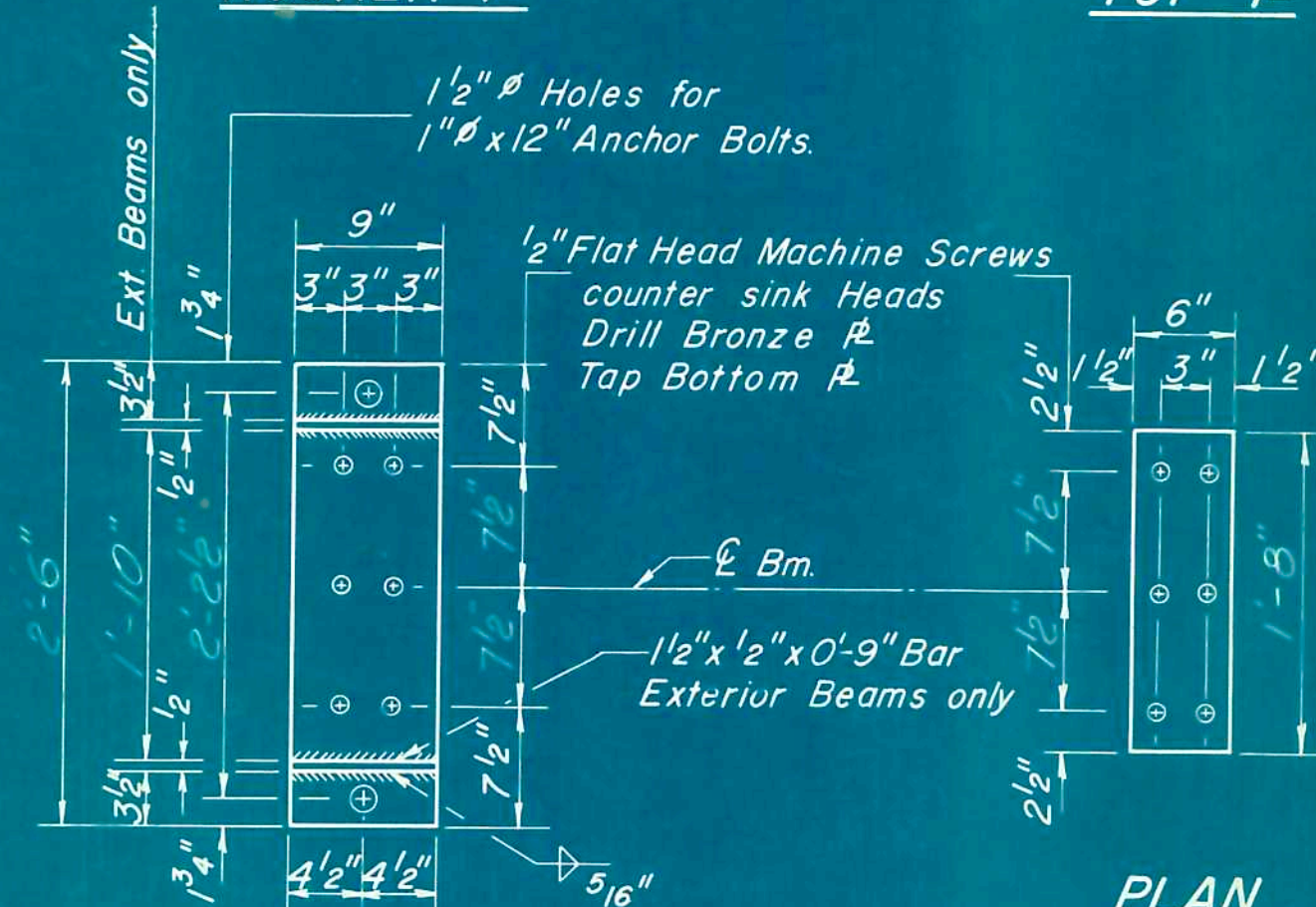


CROSS SECTION AT ABUTMENT



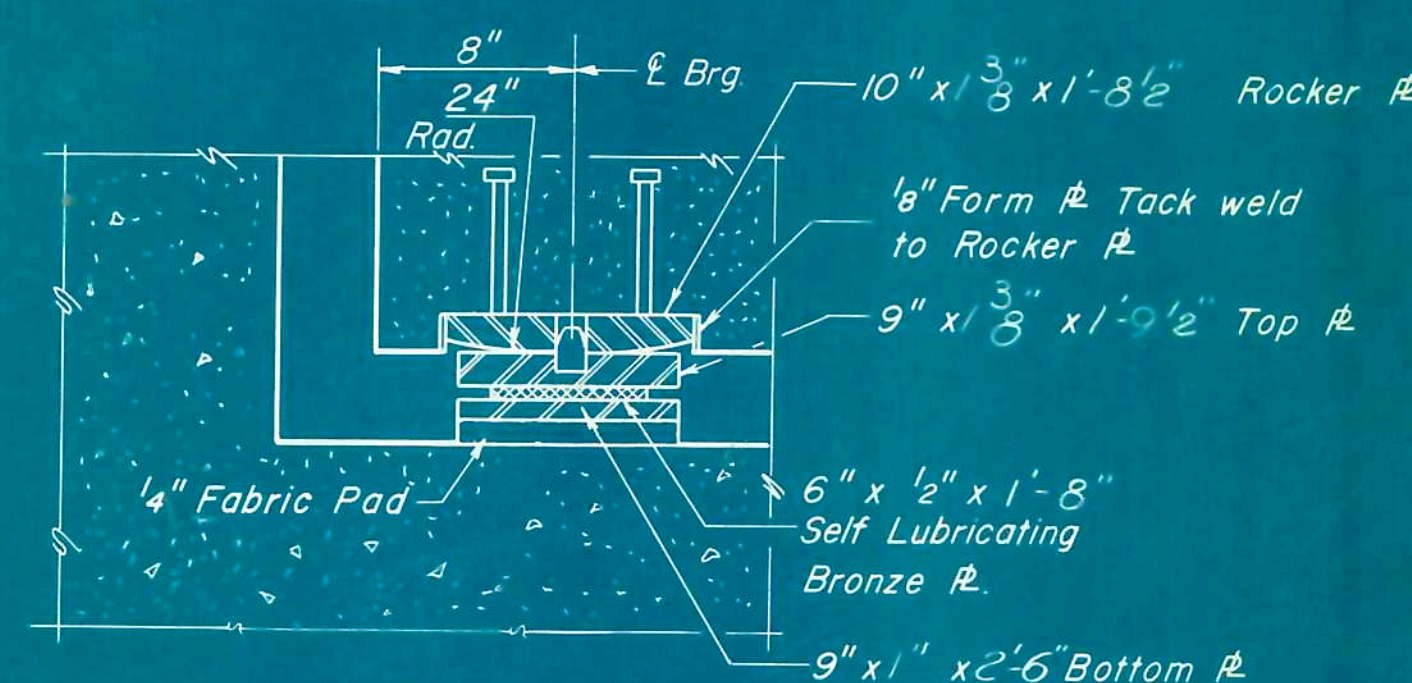
PLAN ROCKER

PLAN TOP



PLAN BRONZE

PLAN BOTTOM

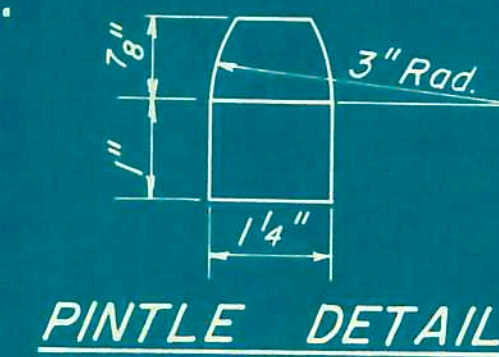


SECTION AT ABUTMENT
(Dimensions Along $\bar{L}$ of Beam)

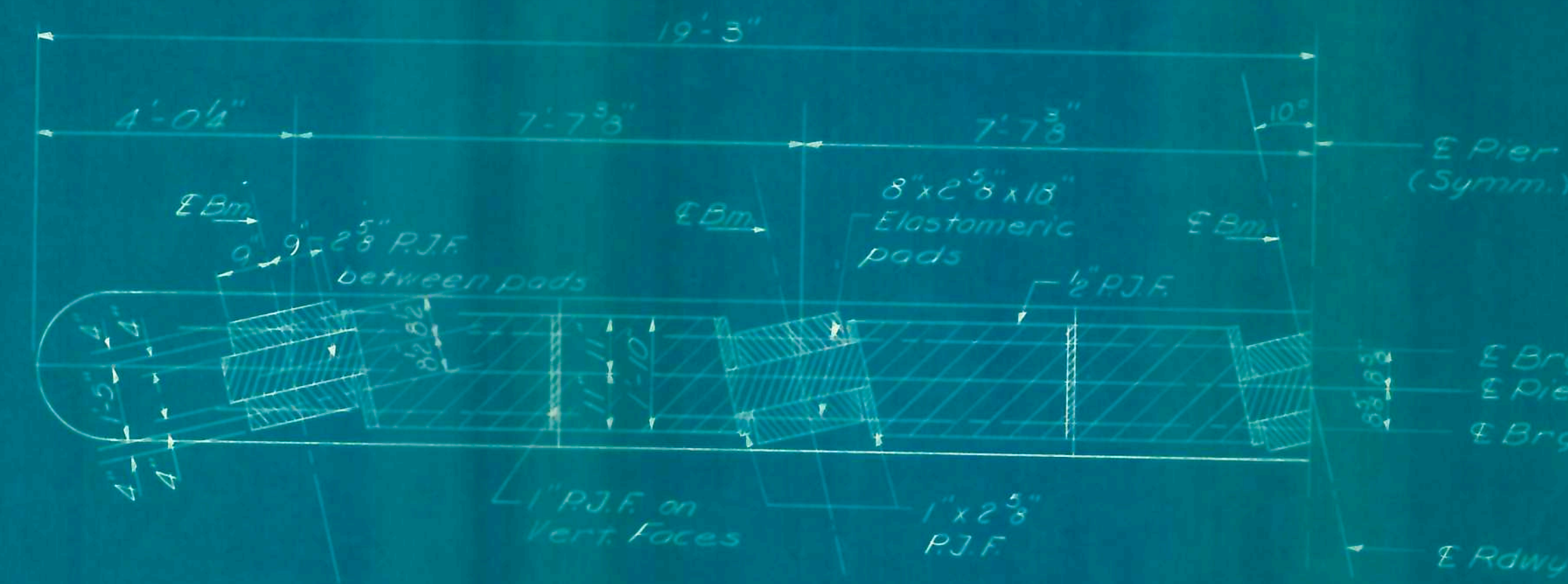
DESIGNED	W. J. M. J. M.
CHECKED	W. J. M. J. M.
DRAWN	T. B. Fuller
CHECKED	D. L. Beemer

EXAMINED	W. J. M. J. M.
PASSED	W. J. M. J. M.
APPROVED	W. J. M. J. M.

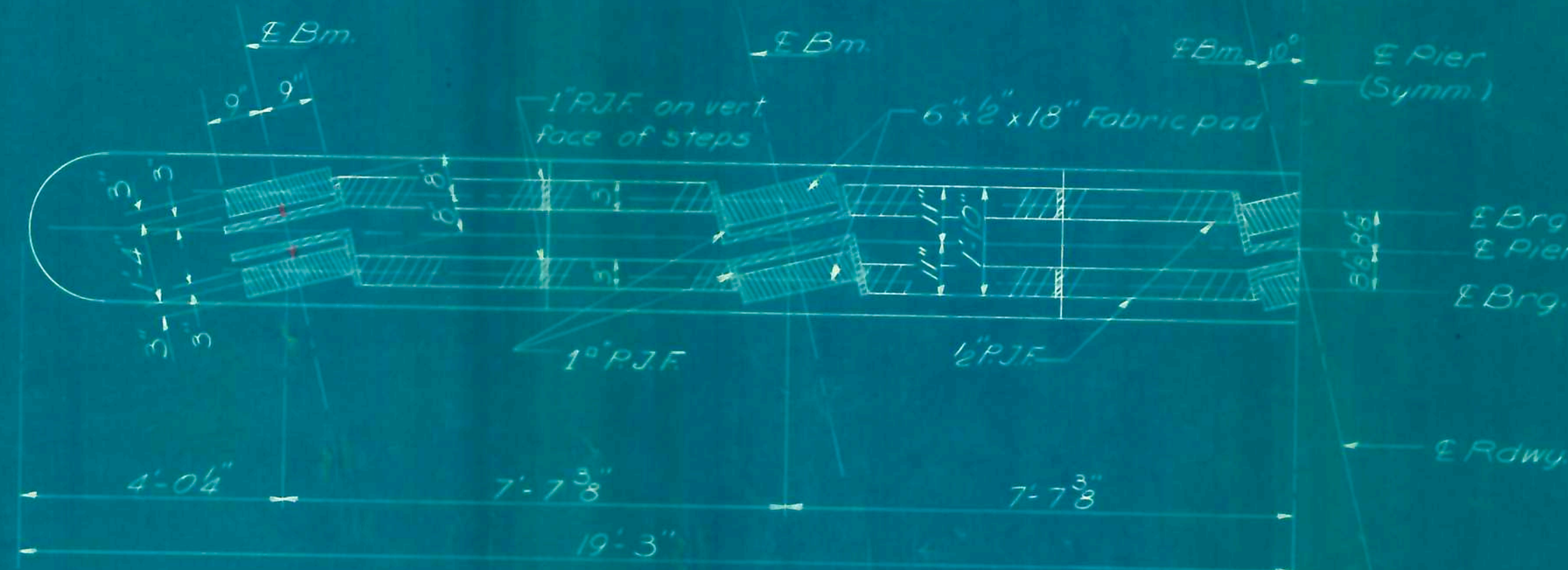
PI-3 8-1-63 Rev. 1-2-64 Rev. 1-27-66



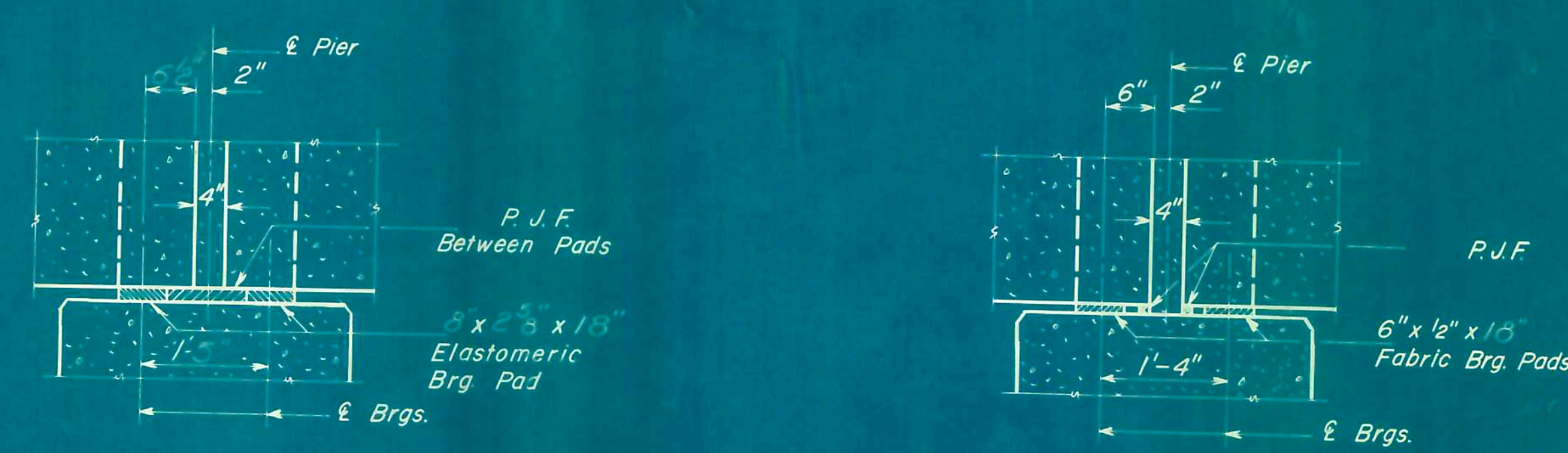
PINTLE DETAIL



HALF PLAN PIERS 1, 2 & 4
Showing Bearing pads & P.J.F.



HALF PLAN PIER 3
Showing Bearing pads & P.J.F.

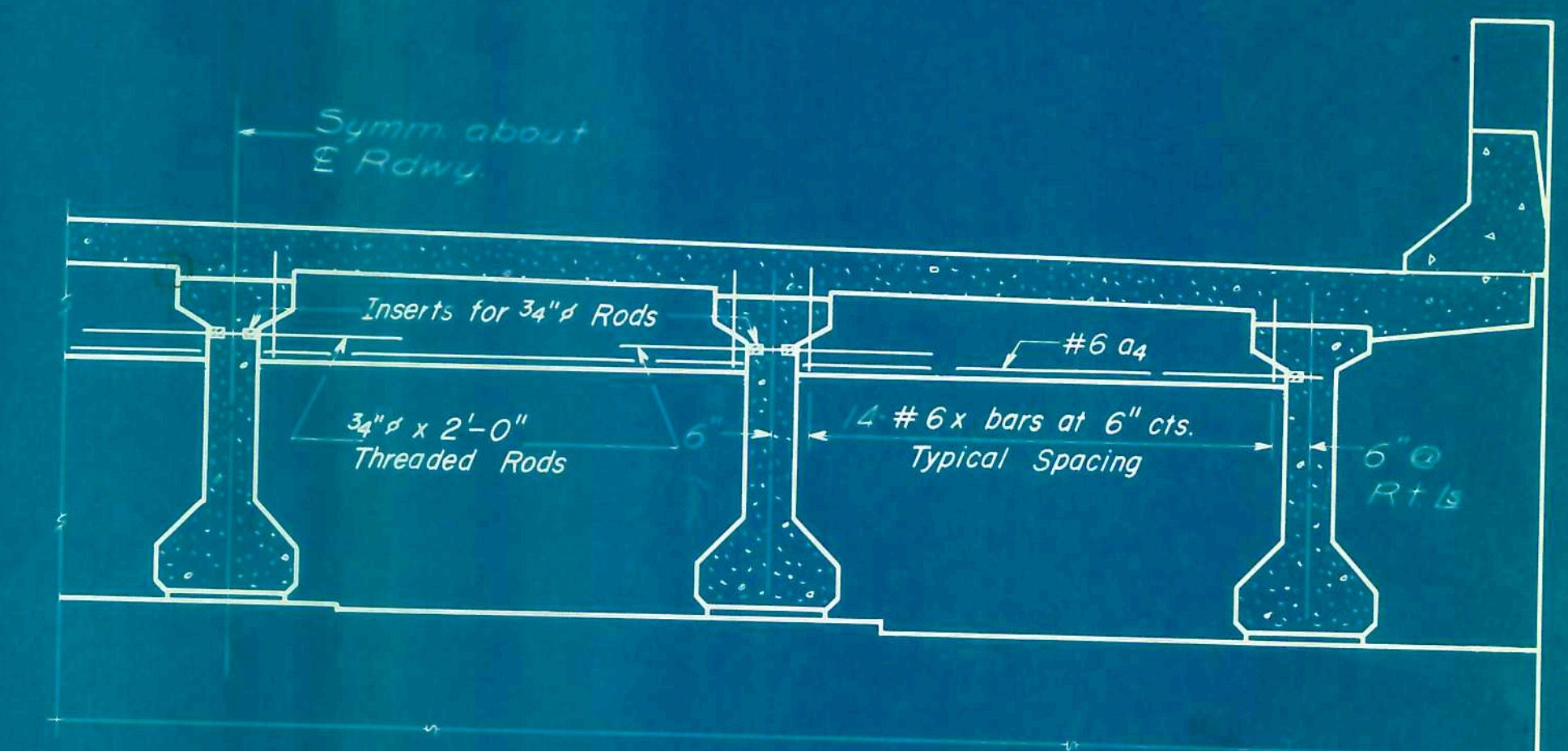


PIERS 1, 2 & 4
(Dimensions Along $\bar{L}$ of Beam)

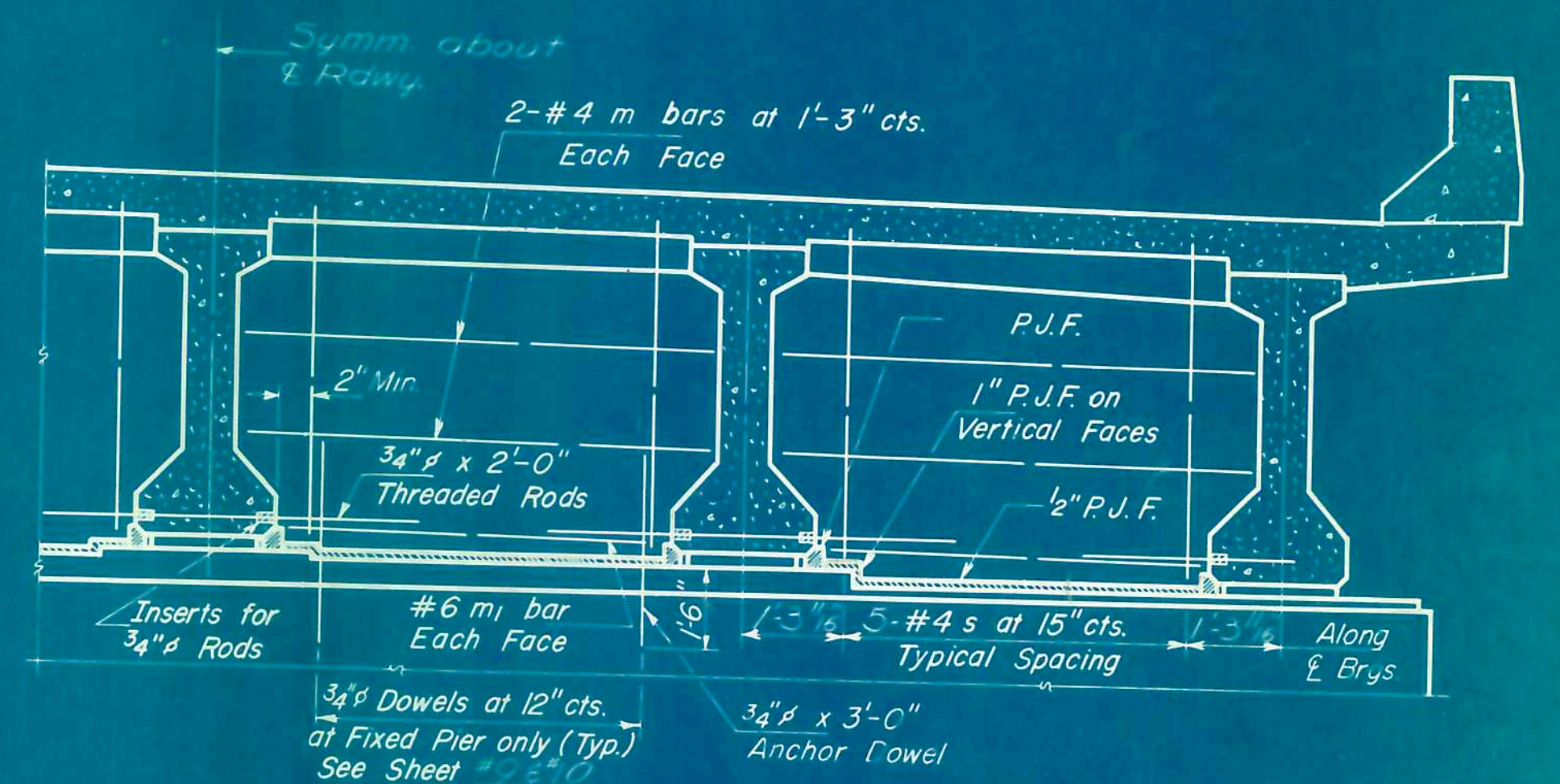
PIER 3
(Dimensions Along $\bar{L}$ of Beam)

Note:
Weight of Armor Angles and Studs; Top Plates, Bottom Plates, Bronze Plates and Shim Plates of Bearing Assemblies is included in the weight of Structural Steel on Sheet #2.

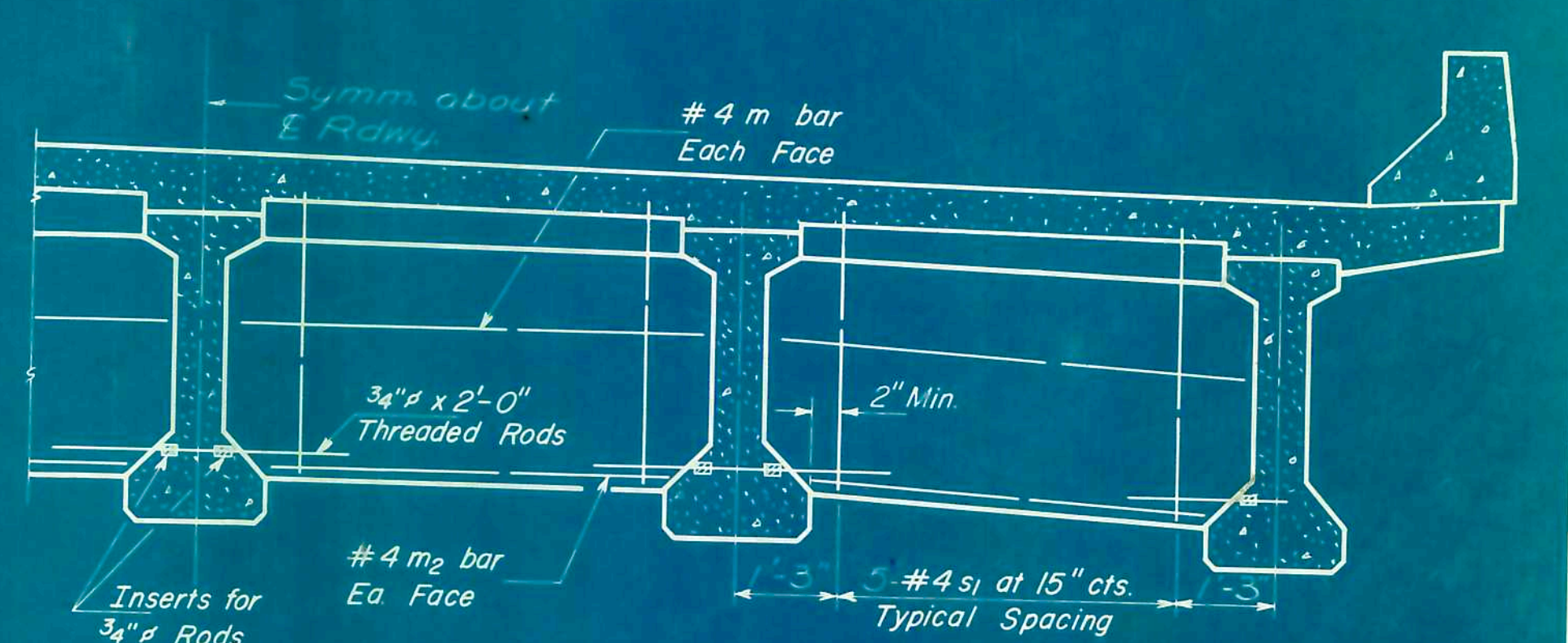
Cost of Rocker $\bar{L}$ cast into beam is included in the cost of "Furnishing and Erecting Precast Prestressed Concrete I-Beams."



DIAPHRAGM AT ABUTMENTS



DIAPHRAGM AT PIERS

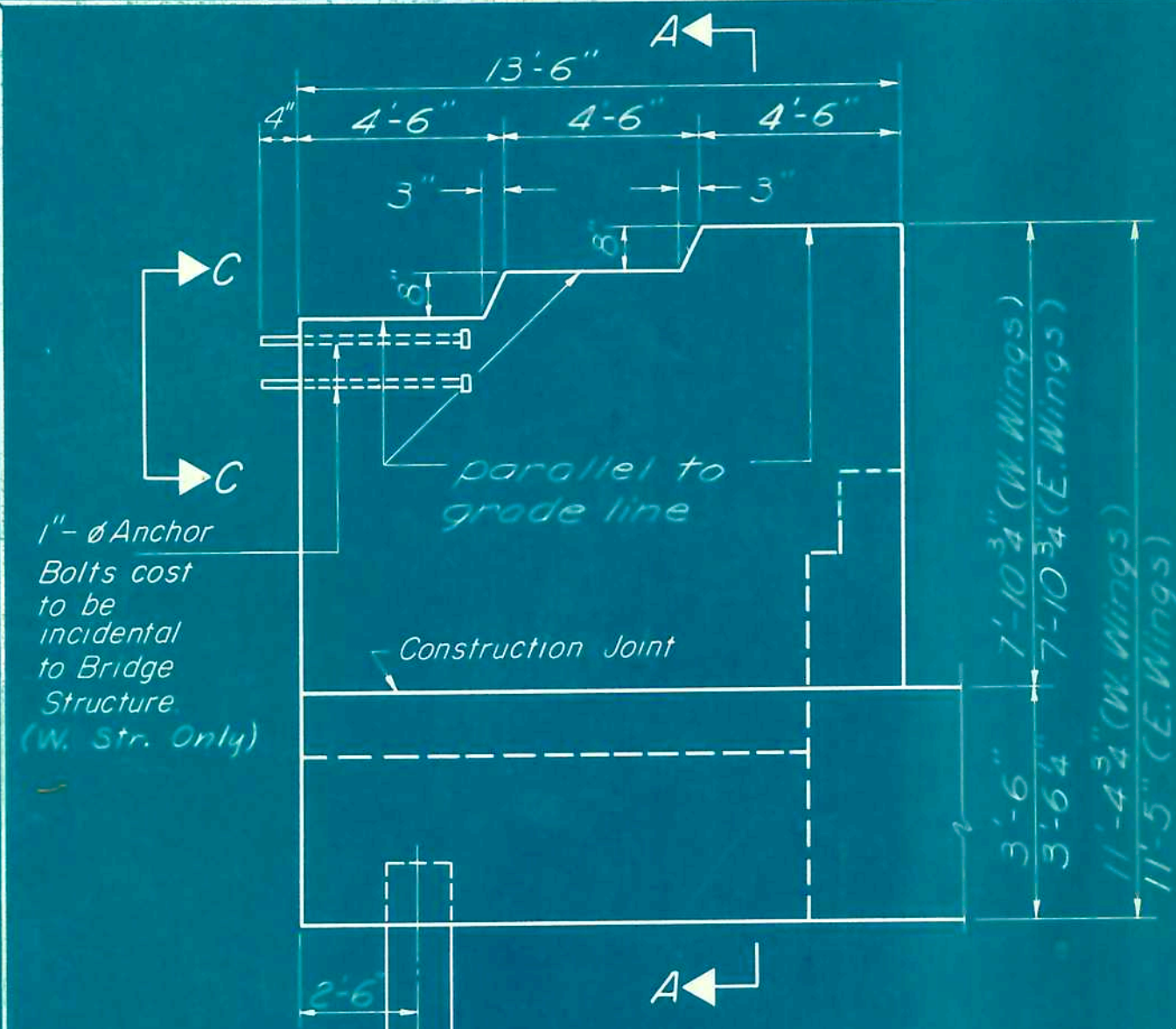


INTERIOR DIAPHRAGMS

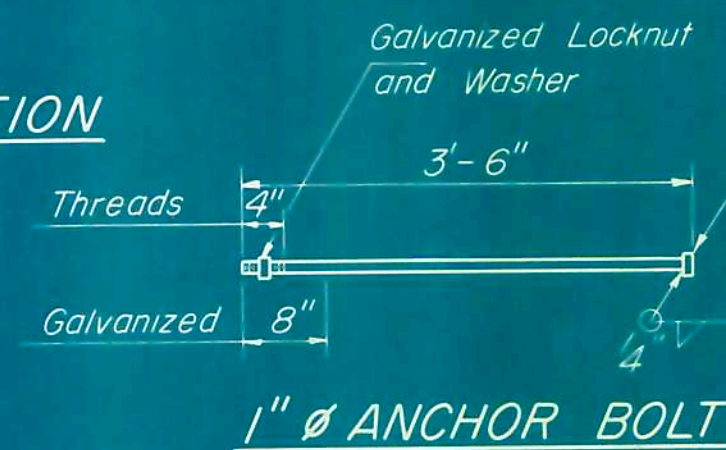
BEARING DETAILS
F.A.I.R.T. 57 SEC. 1027-38B
FORD COUNTY
STA. 1730+30

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

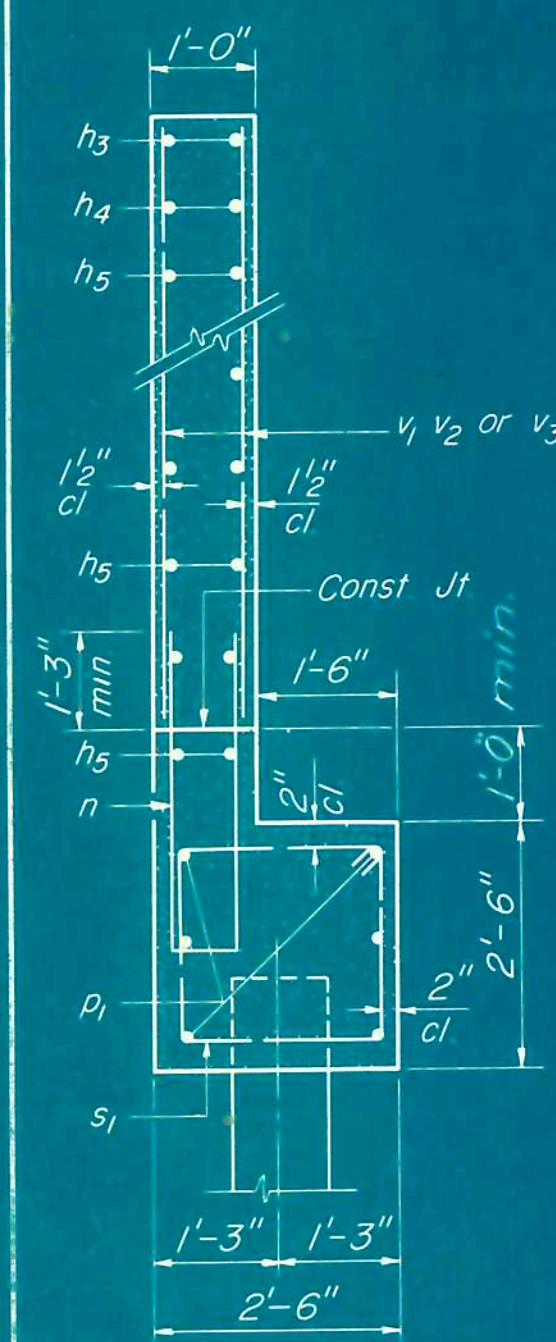
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
57	27-388	FORD	28	11	13 SHEETS



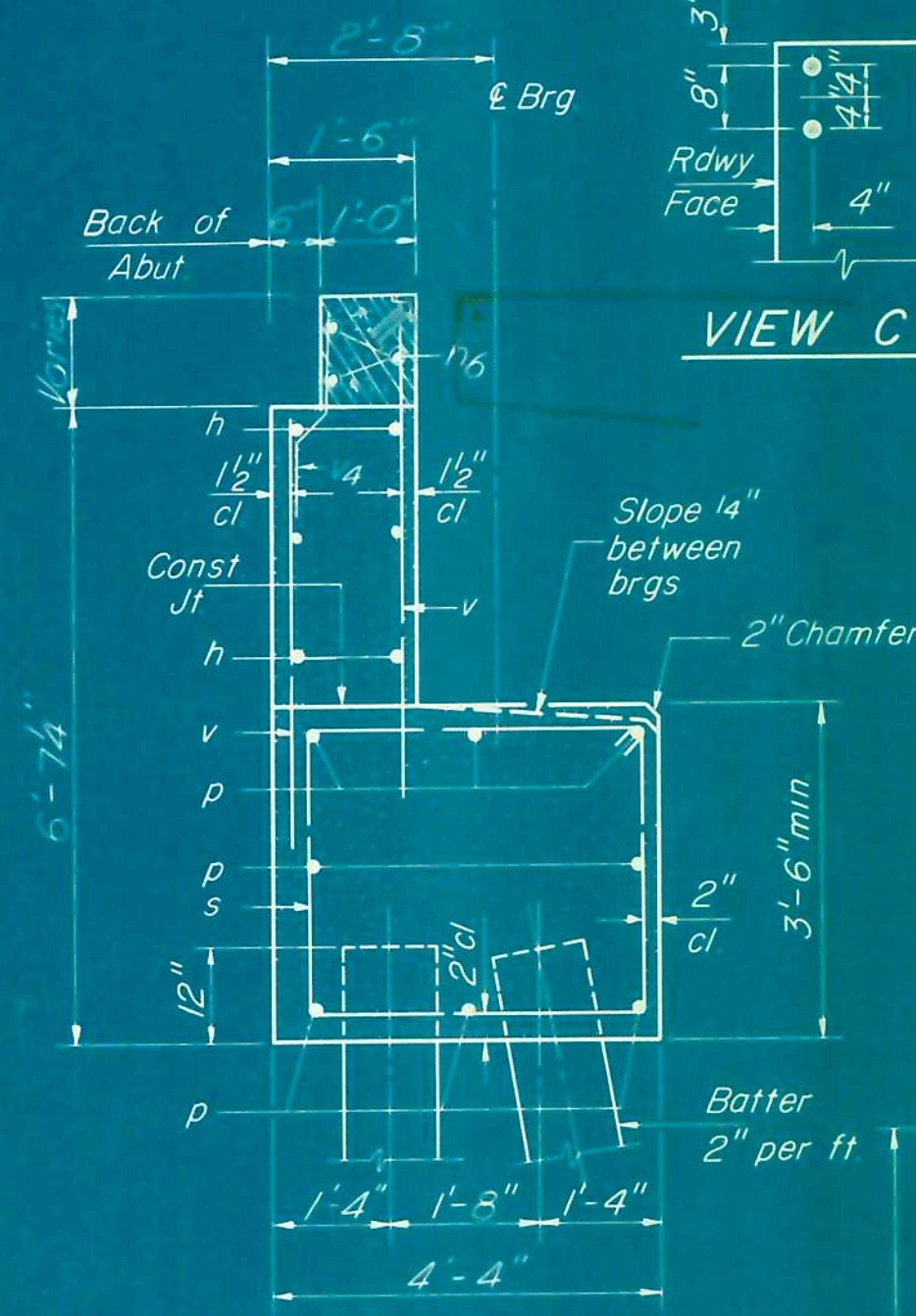
WING WALL ELEVATION



1" Ø ANCHOR BOLT

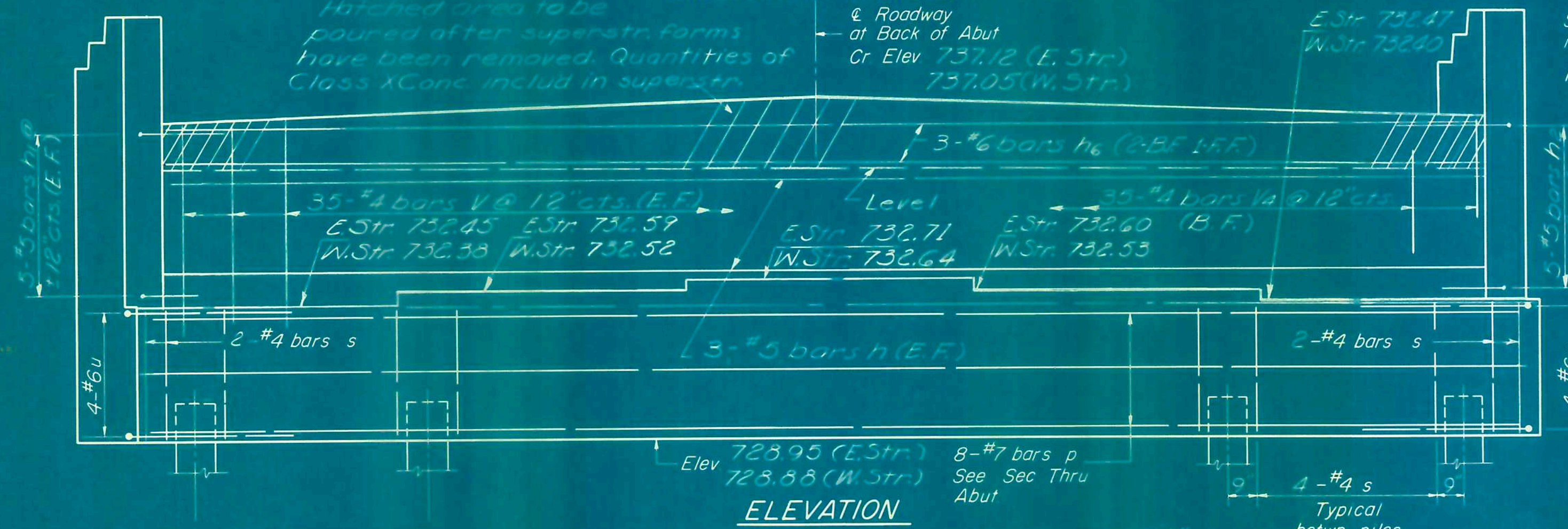


SEC. A-A

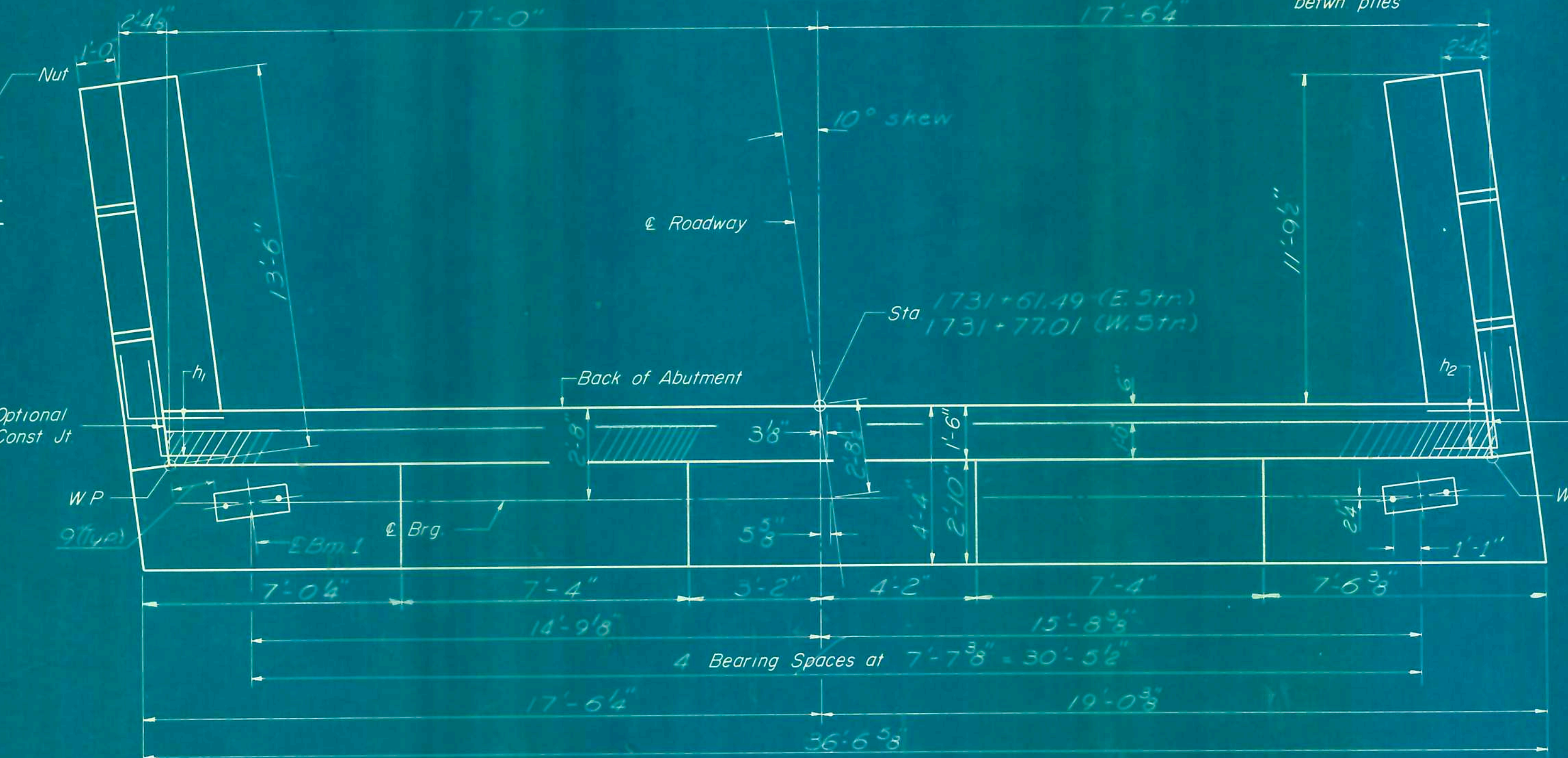


SEC. THRU ABUT.

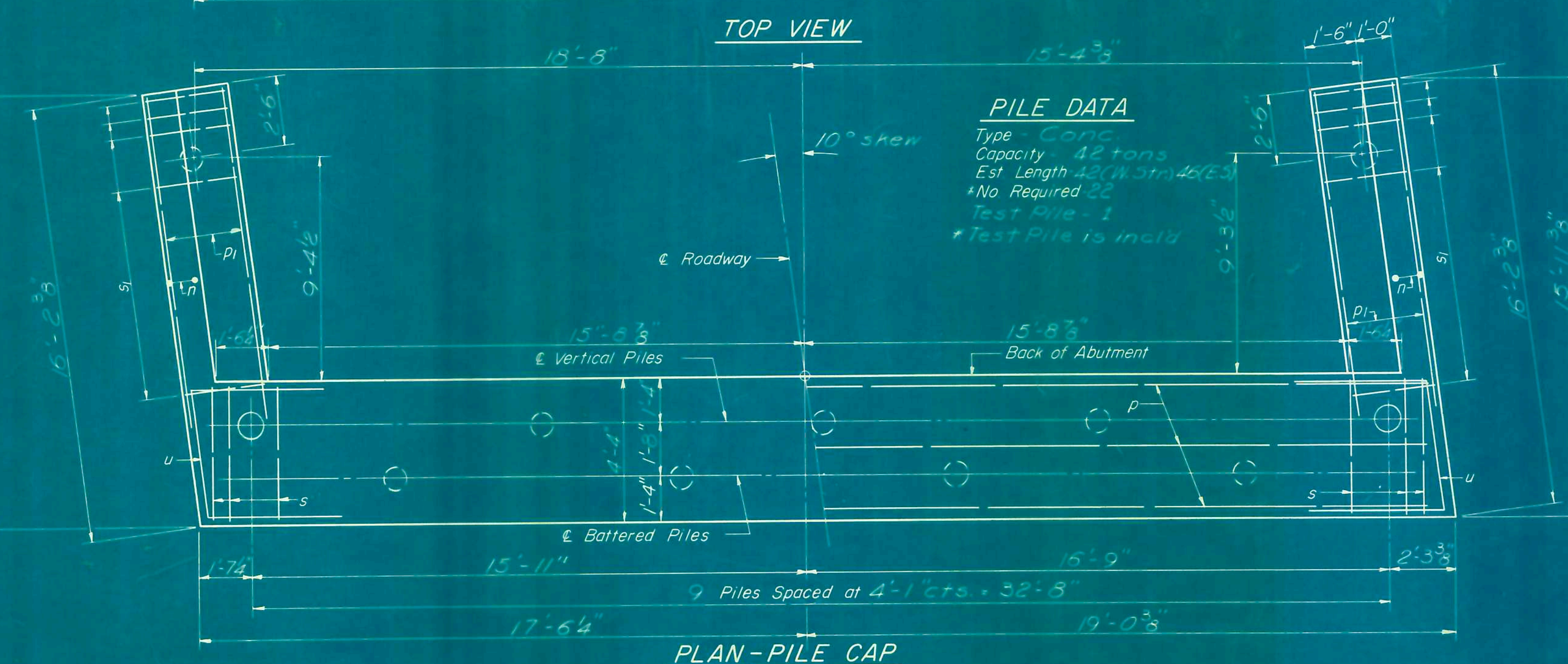
VIEW C-C



ELEVATION

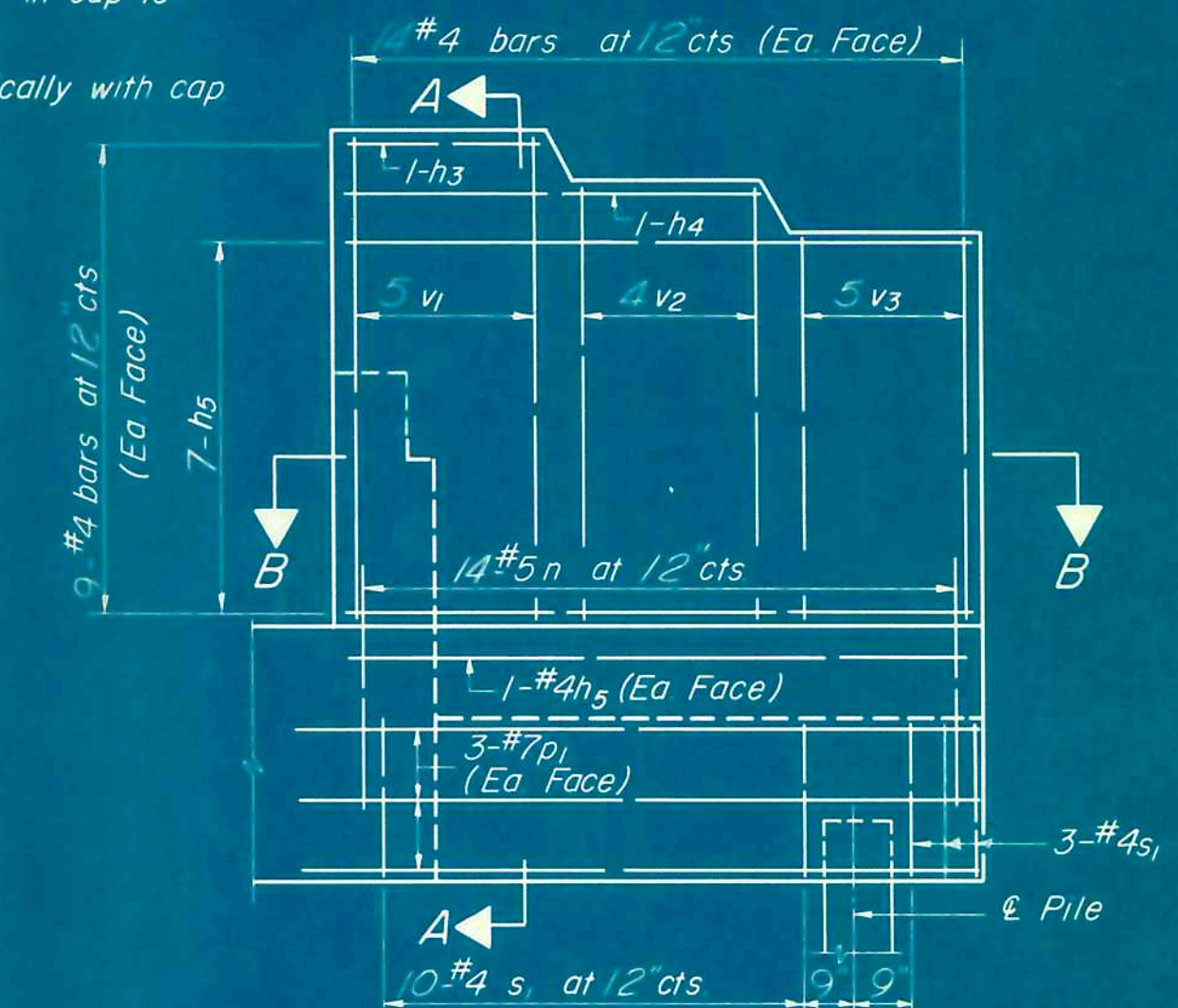


TOP VIEW

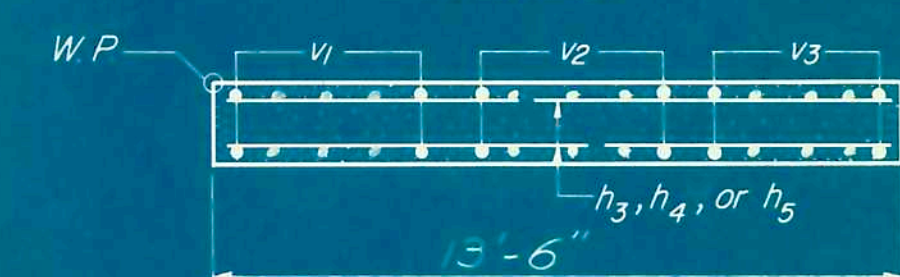


PLAN-PILE CAP

Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.



WING WALL ELEVATION Reinforcement



SEC. B-B

TWO ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	12	#5	34'-3"	
h1	20	#5	4'-0"	
h2	20	#5	4'-0"	
h3	8	#4	4'-2"	
h4	8	#4	8'-8"	
h5	64	#4	13'-2"	
h6	6	#6	34'-3"	
n	56	#5	7'-9"	
p	16	#7	36'-0"	
p1	24	#7	13'-3"	
s	72	#4	15'-1"	
s1	52	#4	9'-5"	
u	16	#6	9'-0"	
v	140	#4	5'-6"	
v1	40	#4	7'-9"	
v2	32	#4	7'-1"	
v3	40	#4	6'-5"	
v4	70	#4	3'-2"	
Class X Concrete				Cu. Yds. 80.6
Reinforcement Bars				Lbs. 6280
Concrete Piles				Lin Ft. 922
Test Piles Concrete				Ea. 1

NORTH ABUTMENT
F.A.I. RT. 57 SEC. 10, 27-338
FORD COUNTY
STA. 1730+30

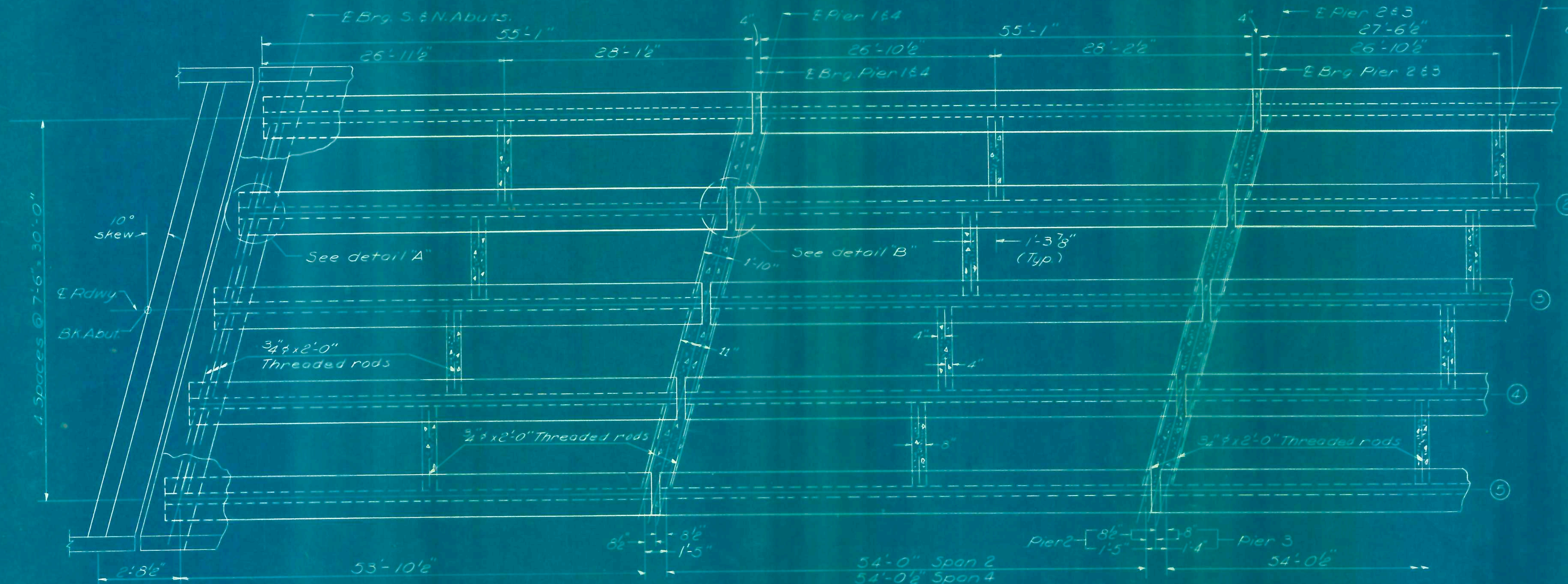
DESIGNED	H. J. Cheng
CHECKED	D. E. H. H. H.
DRAWN	SG Ferchow
CHECKED	JP Zink

EXAMINED	Aug. 16, 1966
PASSED	R. J. Altos
APPROVED	O. E. Staff

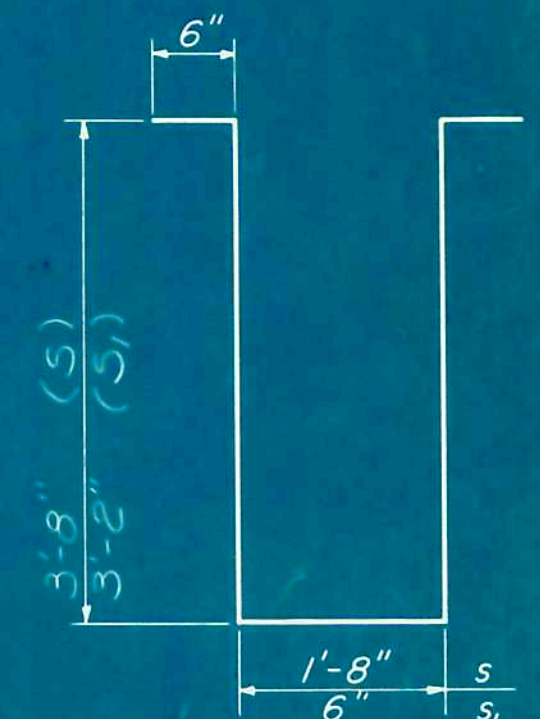
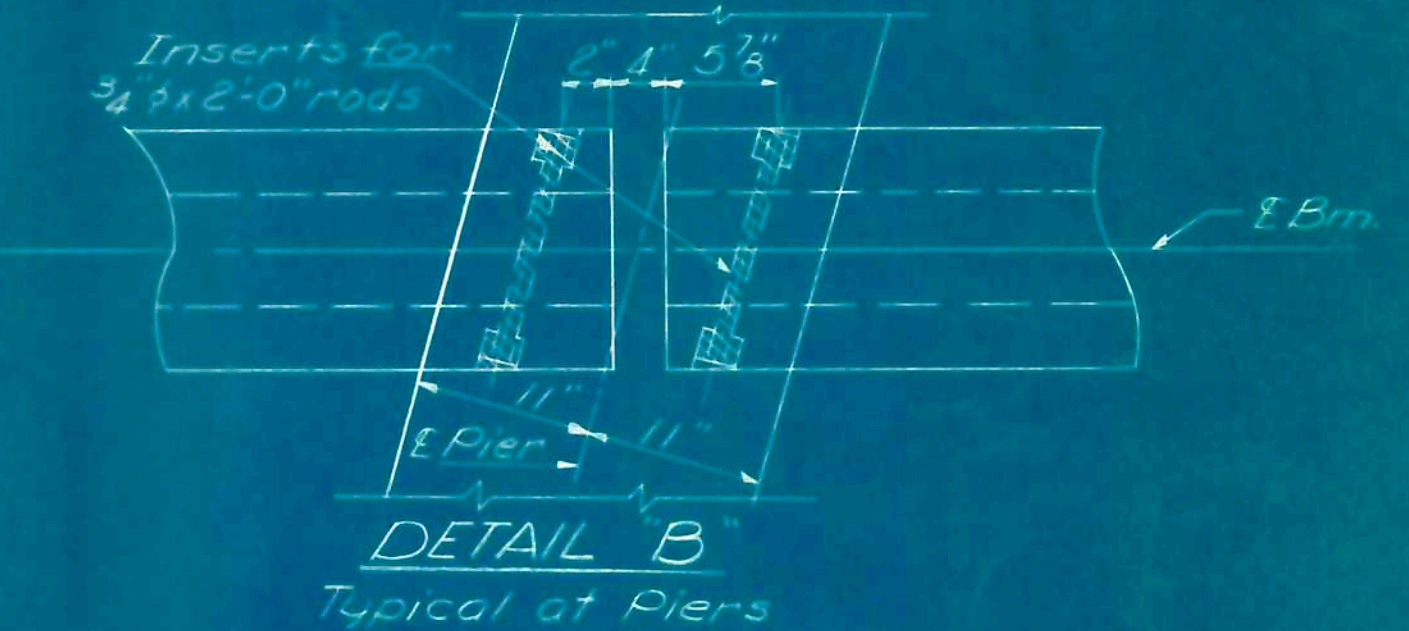
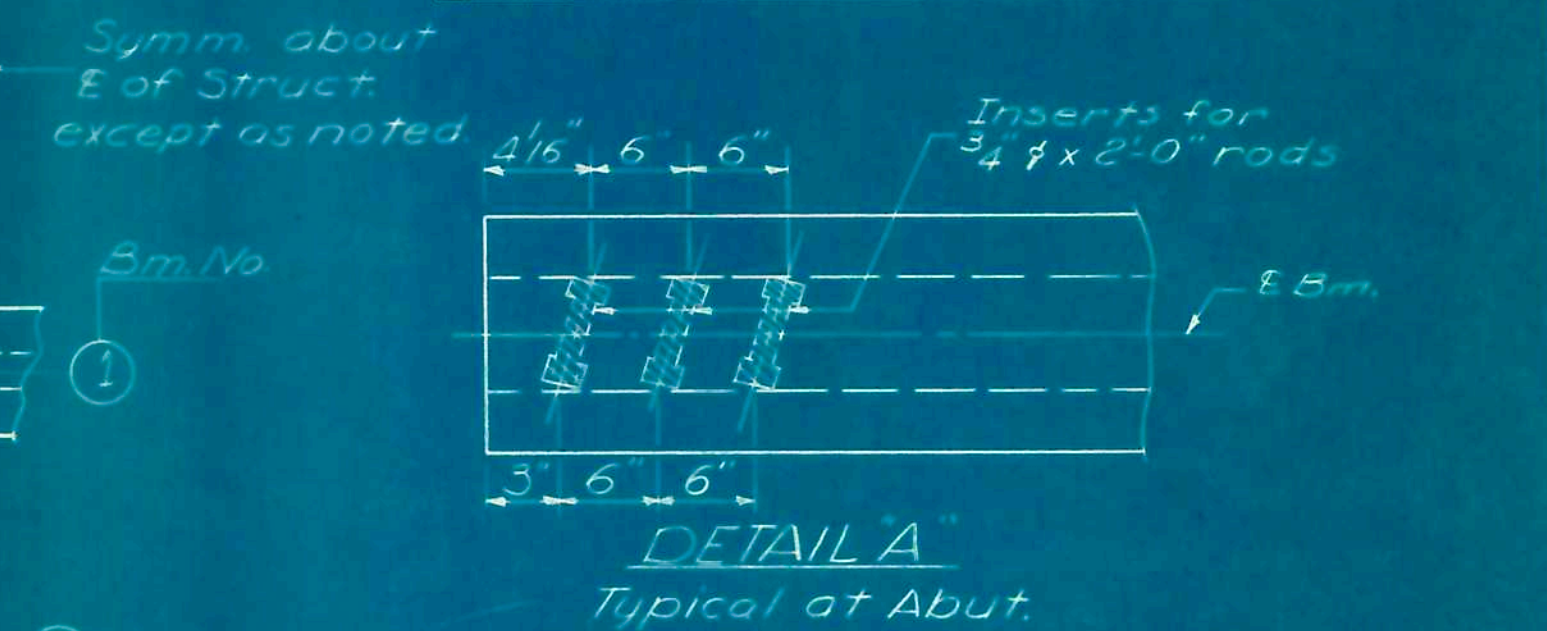
A-9-L (1°-14°) 2-1-66

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

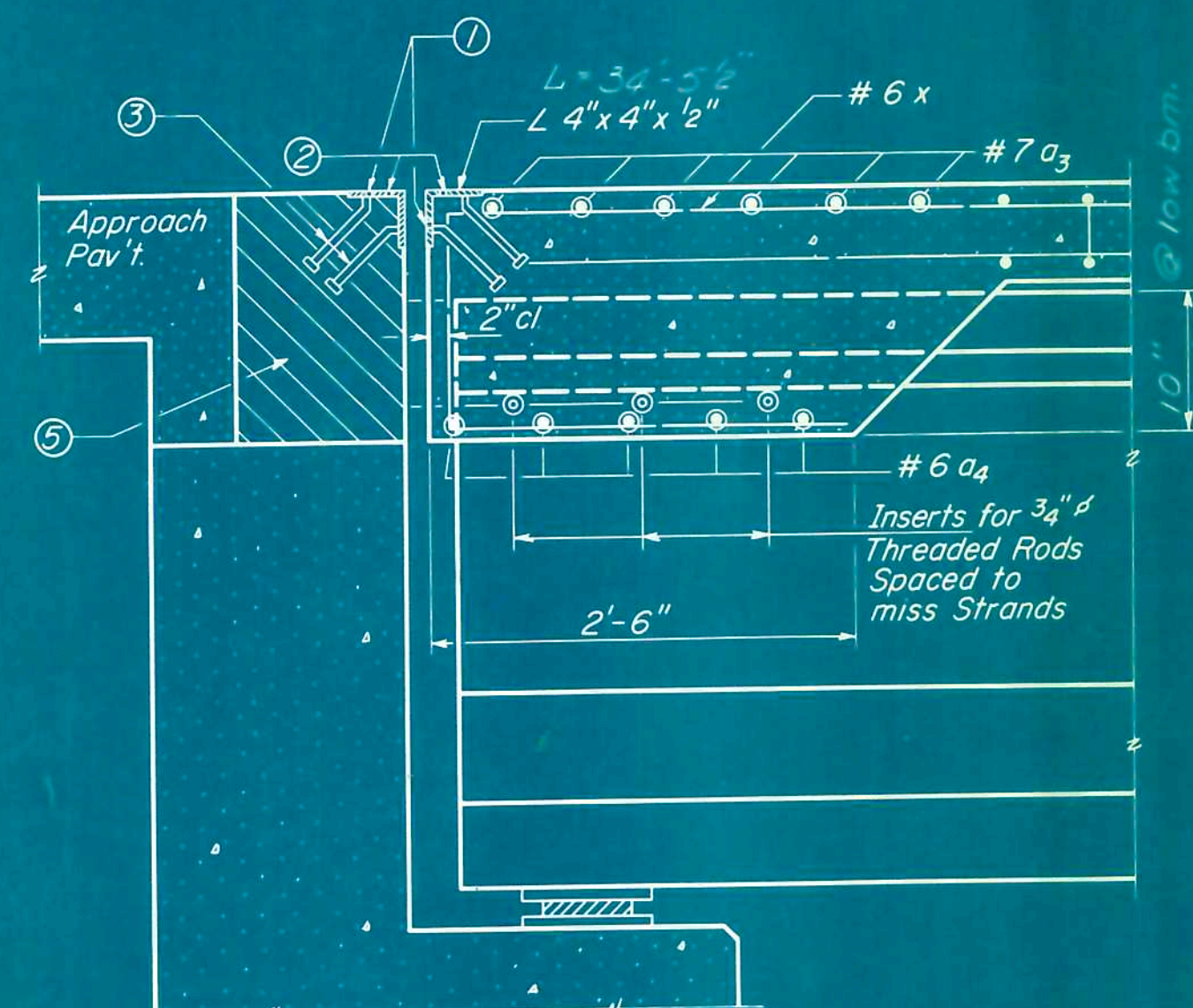
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
1730	27-38B	FORD	28	10	10
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			



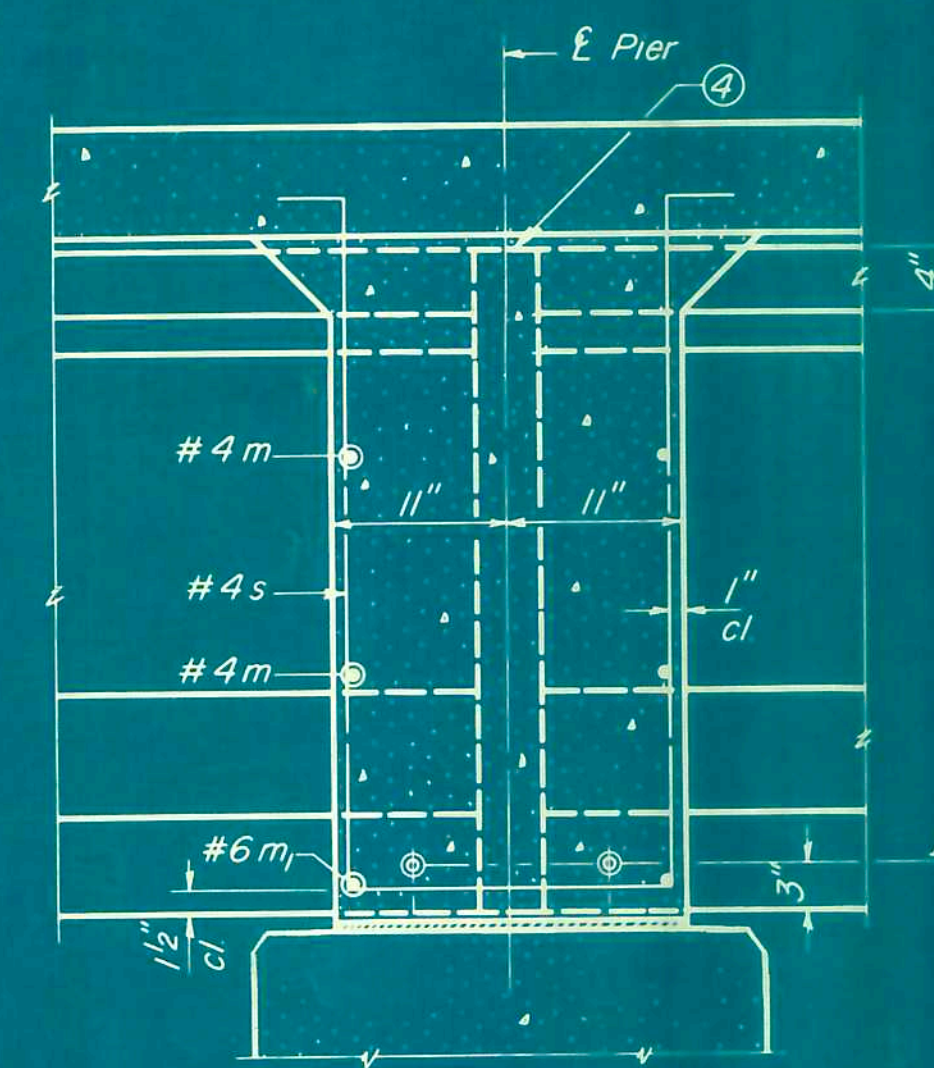
FRAMING PLAN



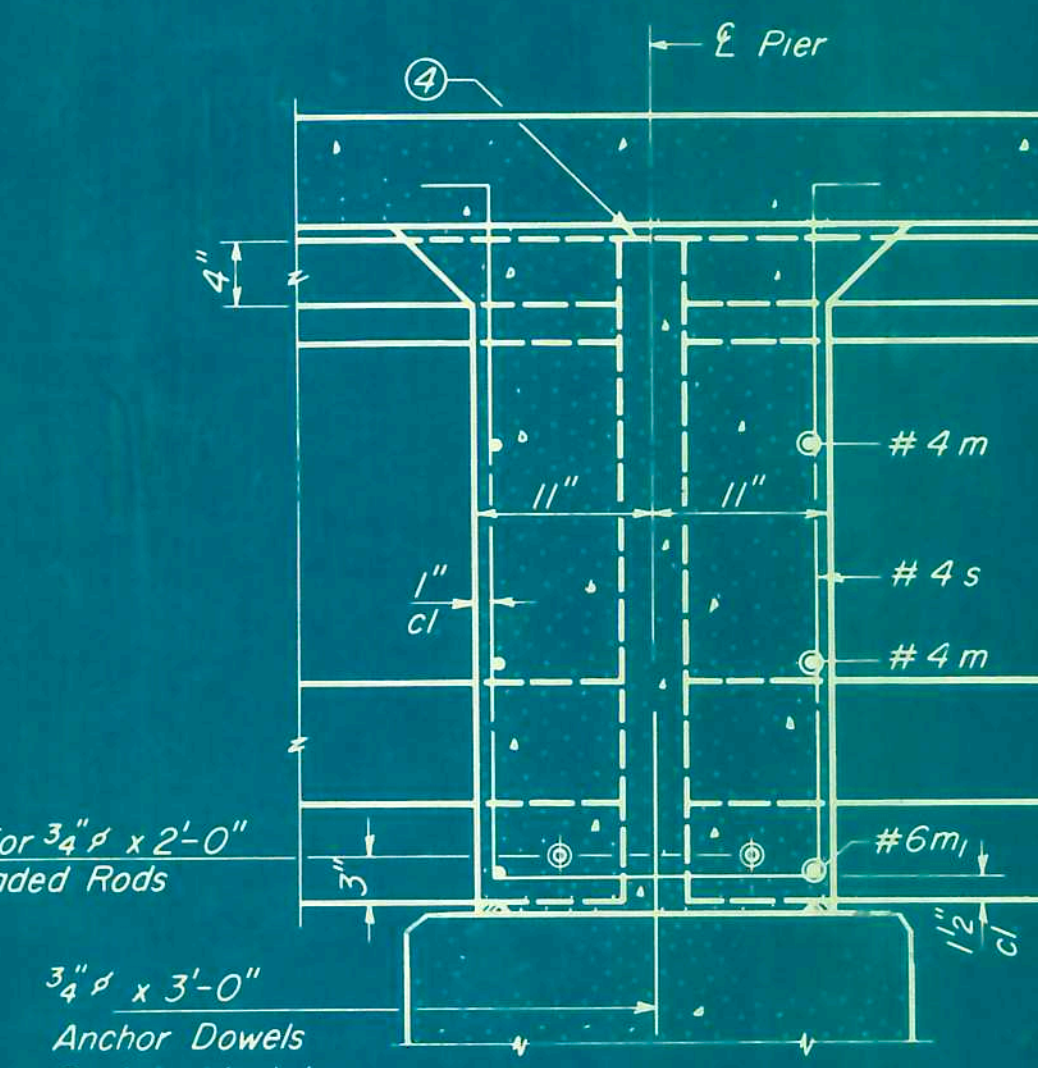
BARS s & s1



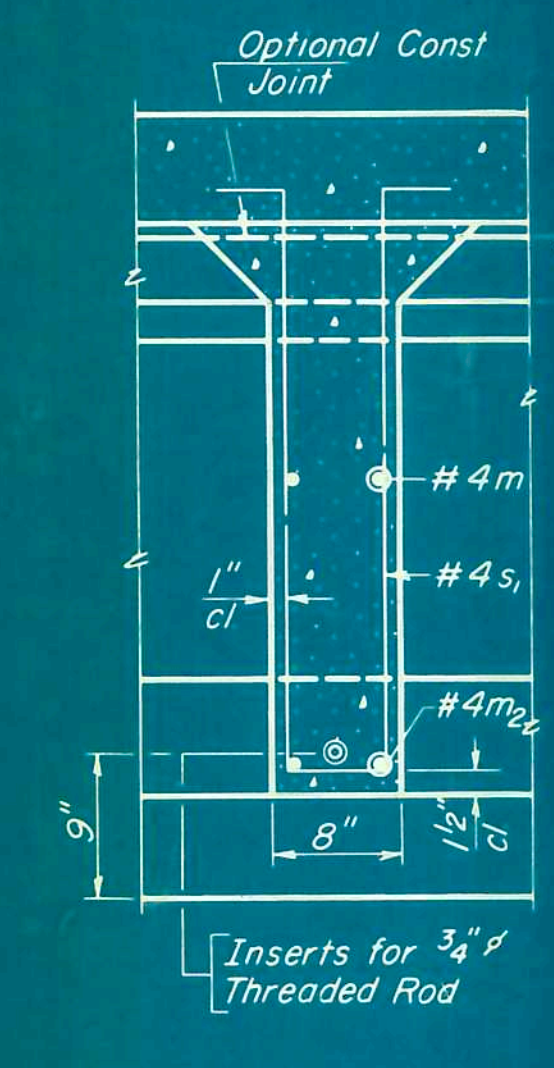
SECTION AT ABUTMENT



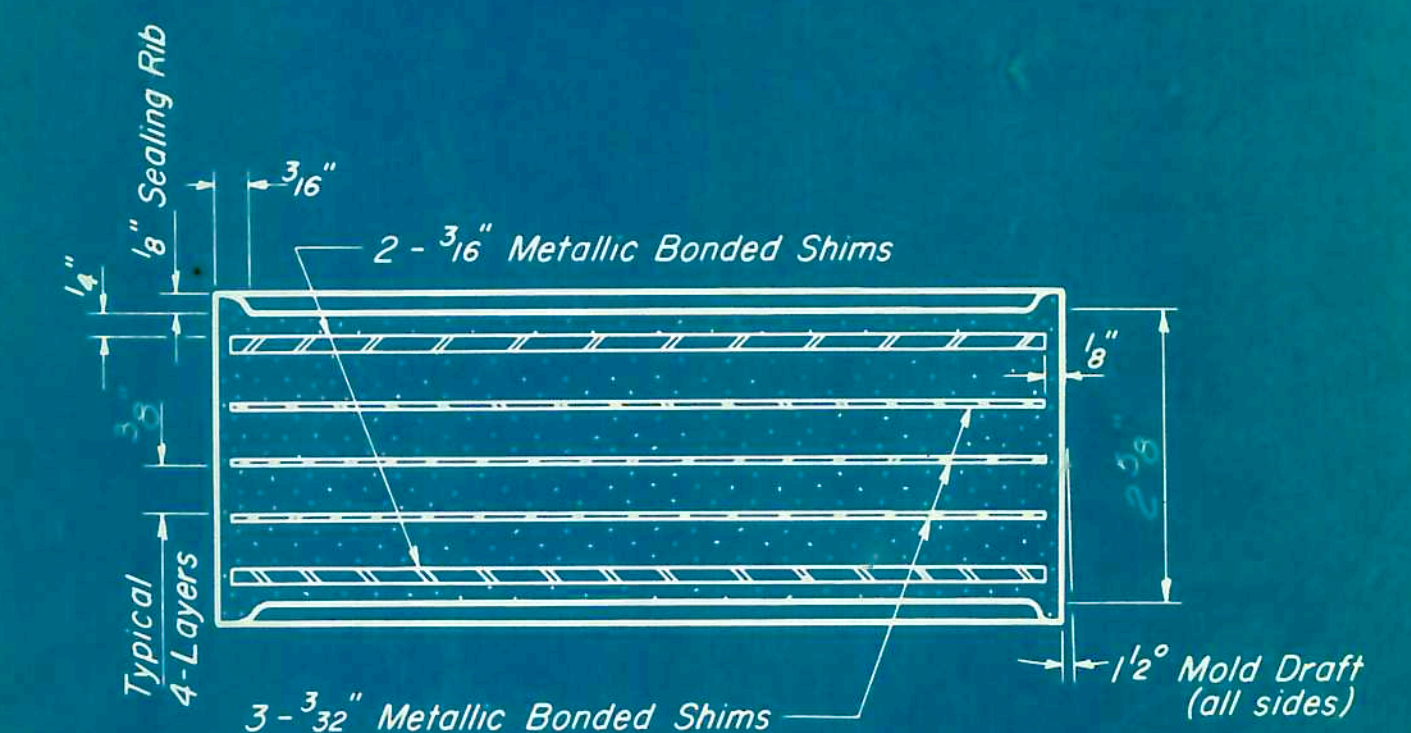
PIERS 1 & 2



PIER 3



SEC. AT INT. DIAPHRAGM



ELASTOMERIC BEARING DETAIL
See Sheet # 5

DESIGNED	Li-ming Chen
CHECKED	J. R. Zink
DRAWN	Wanless
CHECKED	W.E. Slaff

PI-2J 1-27-66

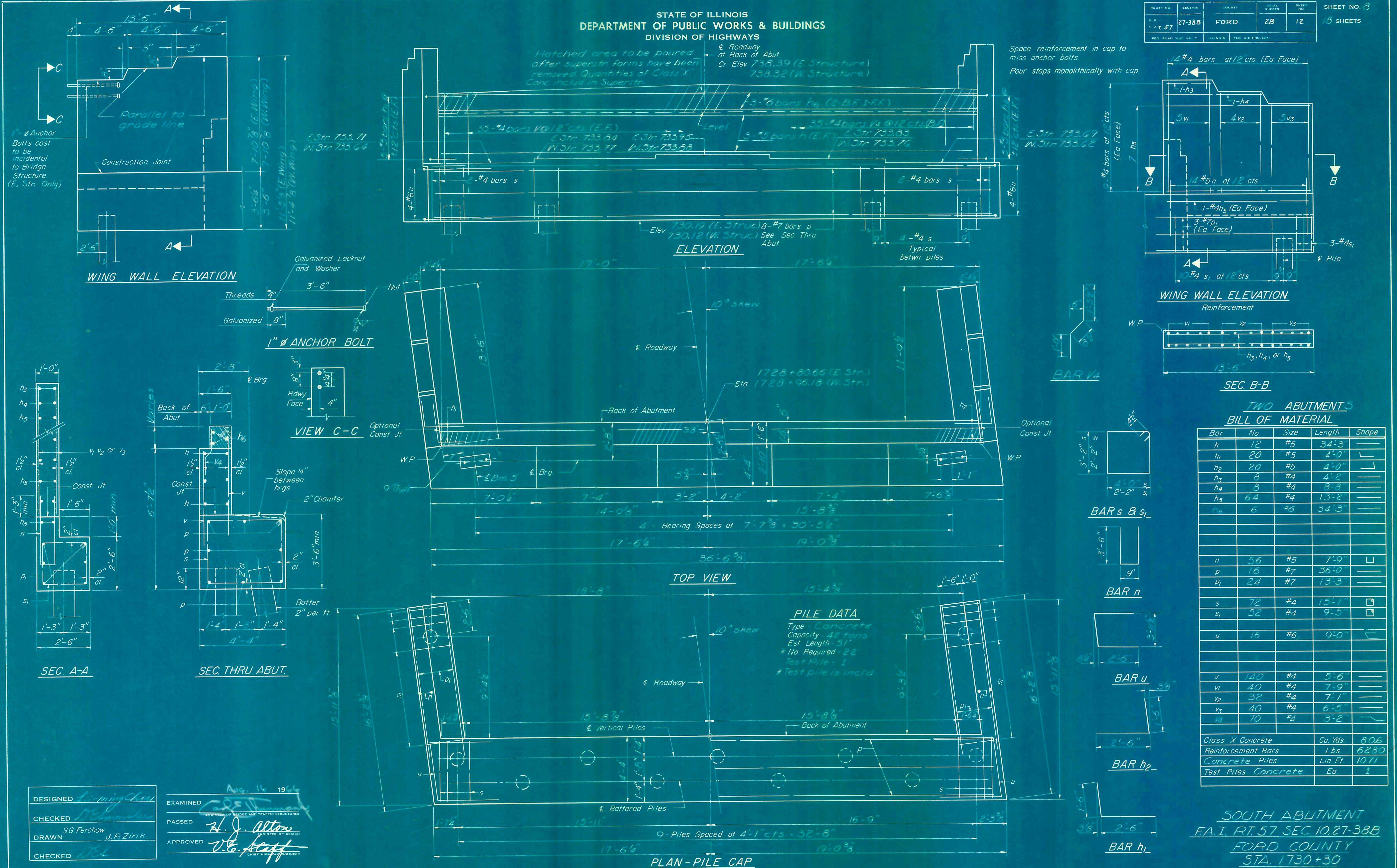
EXAMINED	Aug. 16, 1966
PASSED	H. J. Olson
APPROVED	W.E. Slaff

- 1/16" holes at 12" cts for 3/8" bolts set on normal gage line. All bolts shall be burned, sawed or chipped off flush with the back of angles after forms are removed.
- 1/16" vent holes at 12" cts set on 13/8" gage line.
- 3/4" x 8" CR 1020 STL granular or solid flux filled headed studs—automatically end welded (alternate at 1'-0" cts).
- Pour diaphragm flush with top of beam. Concrete in slab above this line shall be placed not less than 45 minutes nor more than 90 minutes after diaphragm has been poured.
- Hatched area to be poured after Superstructure forms have been removed. Quantity of Class X Concrete included with Superstructure.

Bars a3, a4; m1, m2;
s & s1 are included in Bill
of Material on Sheet # 2

FRAMING DETAILS
F.A.I. RT. 57 SEC 1027-38B
FORD COUNTY
STA. 1730+30

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 8 18 SHEETS
S B C F A L 57	27-38B	FORD	28	12	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

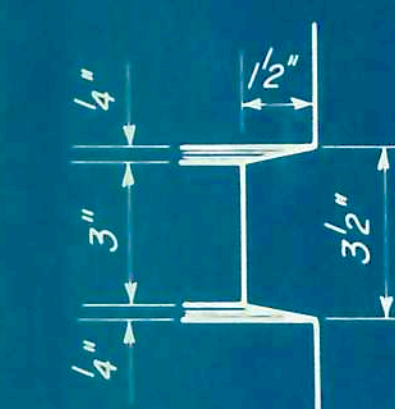
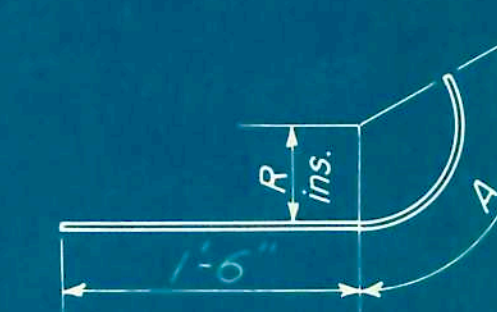
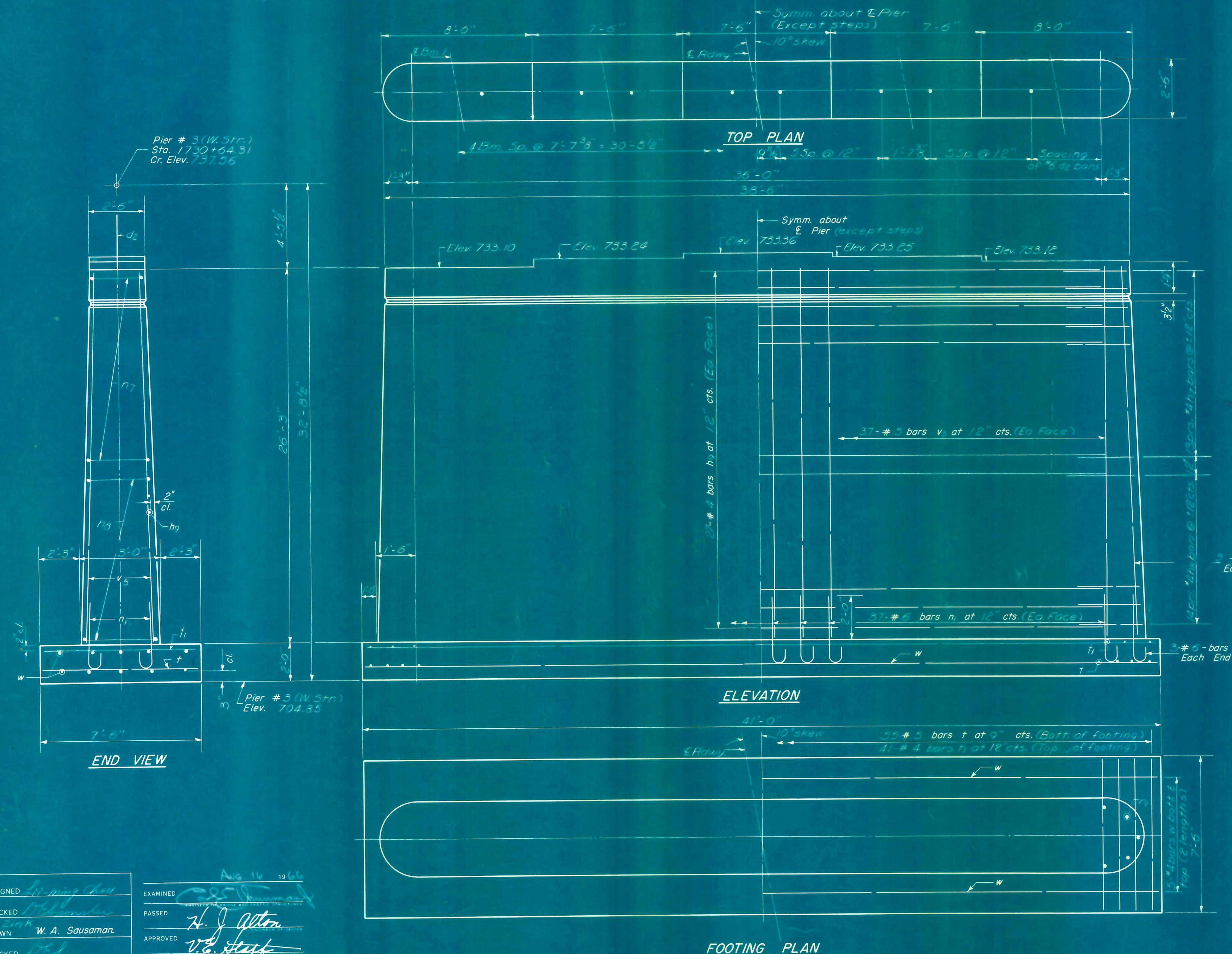


A-9-L (1°-14°) 2-1-66

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
57	27-38B	FORD	28	12	15 SHEETS
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

Max. Footing pressure = 3.7 tons/sq. ft.



NOTCH DETAIL

Bar	R	A
h ₇	1'-0 1/2"	2'-4"
h ₈	1'-2"	2'-6"

DETAIL OF BARS

h₇ & h₈

Note:
All edges shall have standard 3/4" chamfer except as noted. Four steps monolithically with pier stem.



BAR n₁

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₈	24	#6	3'-0"	—
h ₇	32	#4	3'-10"	—
h ₈	56	#4	4'-0"	—
h ₉	54	#4	35'-0"	—
n ₁	80	#6	4'-5"	—
t	55	#5	7'-0"	—
t ₁	41	#4	7'-0"	—
v ₅	30	#5	26'-2"	—
w	20	#4	20'-9"	—
Class "A" Concrete			Cu. Yds.	125.1
Reinforcement Bars			Lbs.	5270

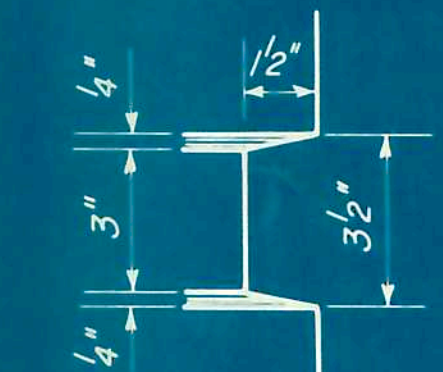
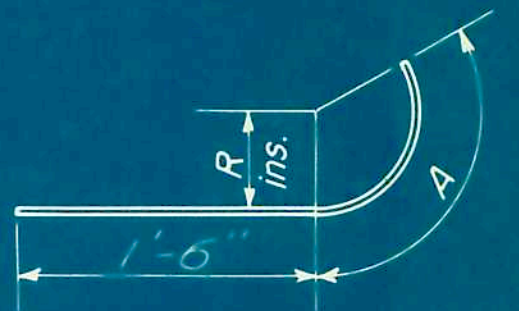
PIER 3
WEST STRUCTURE
F.A.I. RT. 57 SEC. 10 27-38B
FORD COUNTY
STA. 1730+30

DESIGNED *William Hall*
CHECKED *W. A. Sausaman*
DRAWN *W. A. Sausaman*
CHECKED *W. A. Sausaman*

EXAMINED *W. J. Alton*
PASSED *W. J. Alton*
APPROVED *W. J. Alton*

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. <i>10</i> <i>18</i> SHEETS
S R R F A I 57	27-38B	FORD	28	14	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

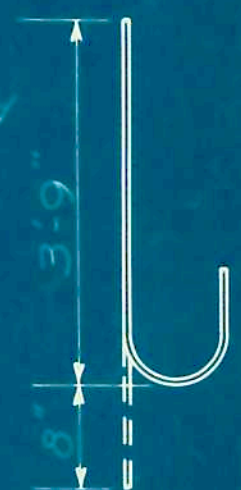
TOP PLAN



NOTCH DETAIL

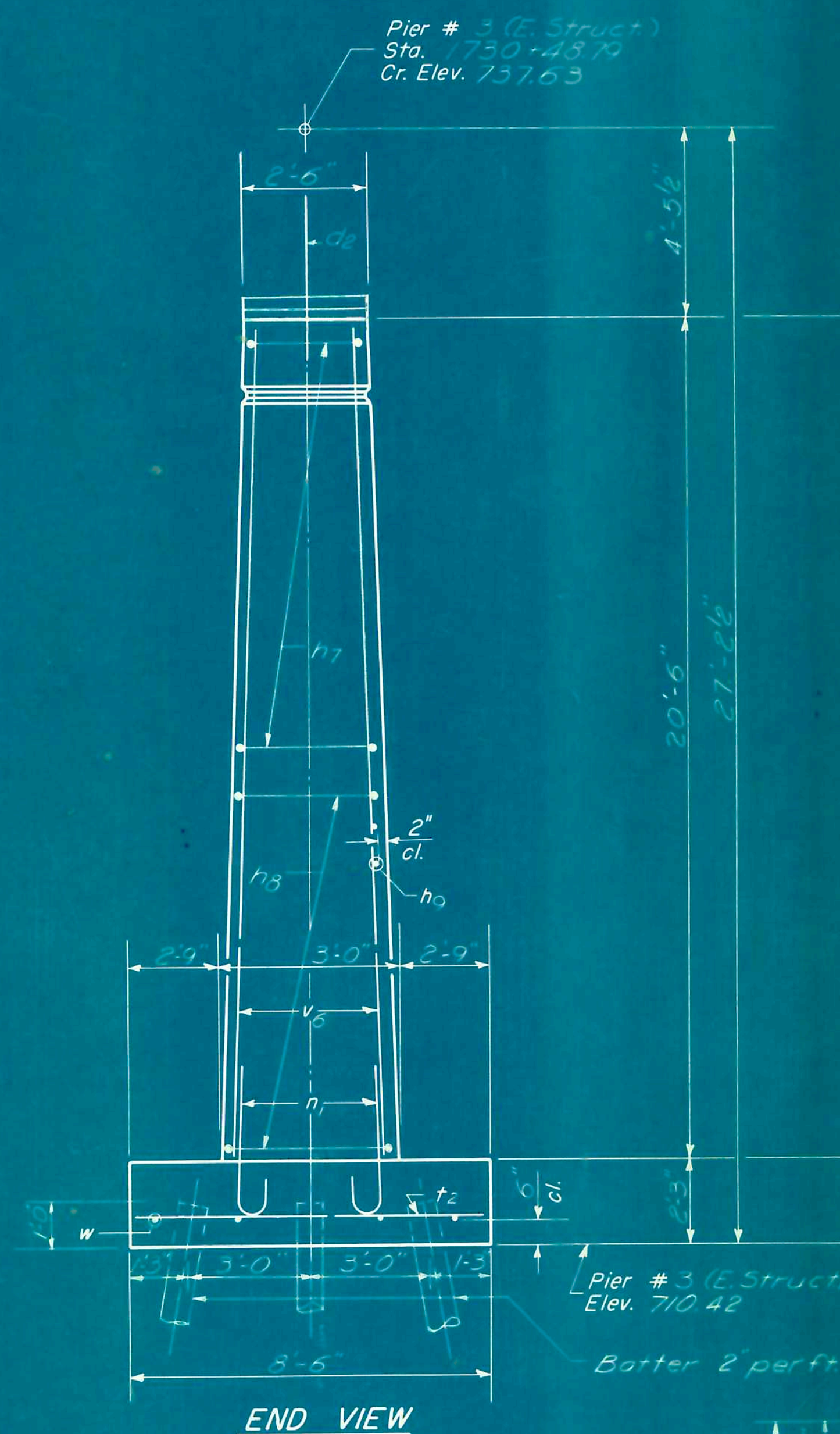
[illegible]

DETAIL OF BARS

$$h_7 \in h_8$$


BAR n_i

Bar	No.	Size	Length	Shape
d2	24	#6	3'-0"	—
d7	40	#4	3'-10"	—
d8	44	#4	4'-0"	—
d9	42	#4	3'-0"	—
n1	78	#6	4'-5"	C
t2	56	#5	8'-0"	—
v6	78	#5	20'-4"	—
w	8	#4	20'-9"	—
Class "A" Concrete			Cu. Yds.	1082
Reinforcement Bars			Lbs.	4110
Untreated Piles			Lin. Ft.	546
Test Pile (Timber)			Each	1



END VIEW

ELEVATION

FOOTING PLAN

DESIGNED	<i>Lix-ming Choo</i>
CHECKED	<i>P. J. Janssen</i>
DRAWN	<i>W. A. Sausaman.</i>
CHECKED	<i>P. J.</i>

APR 16 1969

EXAMINED

ENGINEER OR SURVEYOR

PASSED

APPROVED

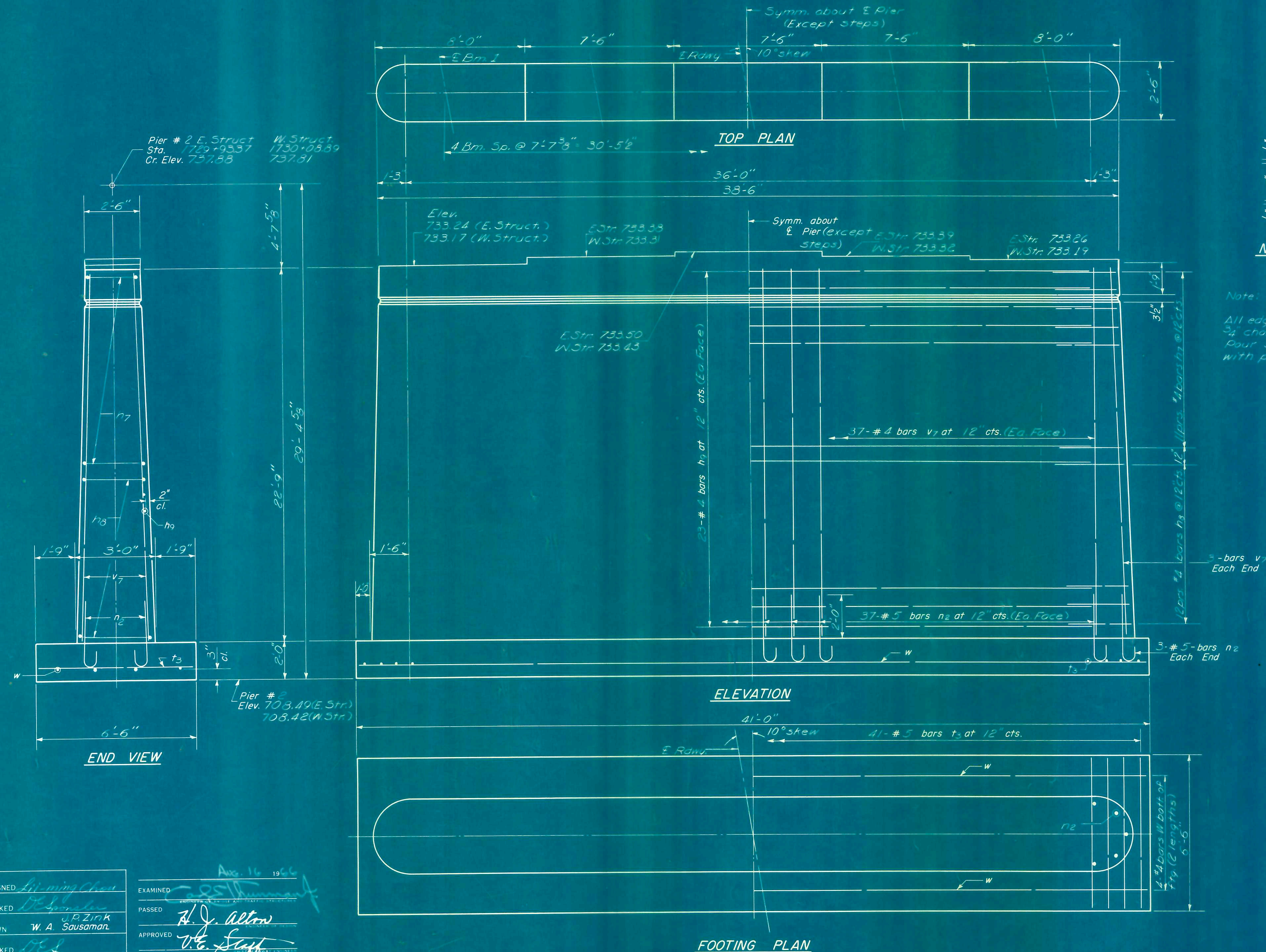
H. J. Alton

V. E. Searcy

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 11
FAI 57	27-388	FORD	28	15	18 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Maximum Footing Pressure = 2.1 tons/sq. Ft.



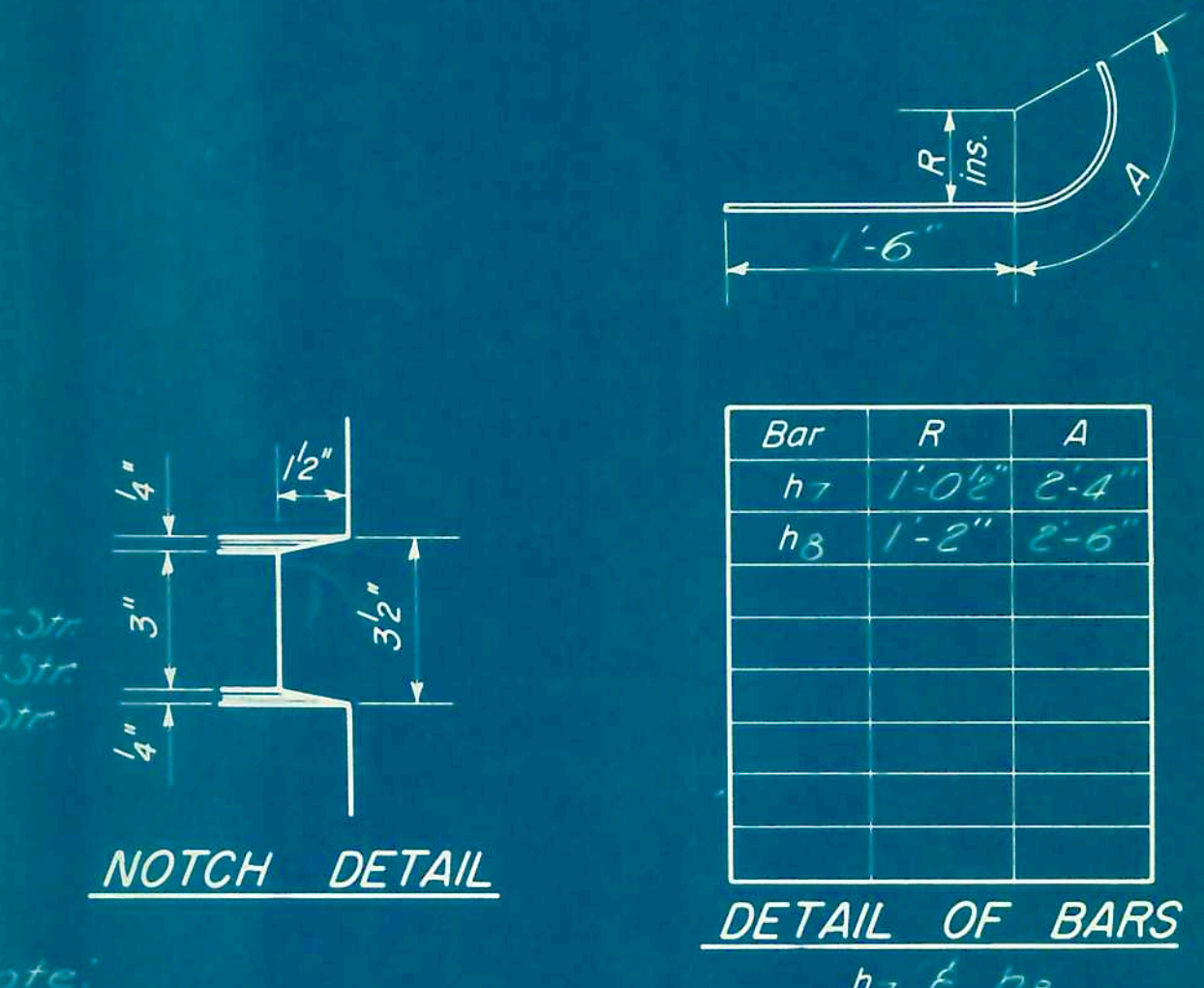
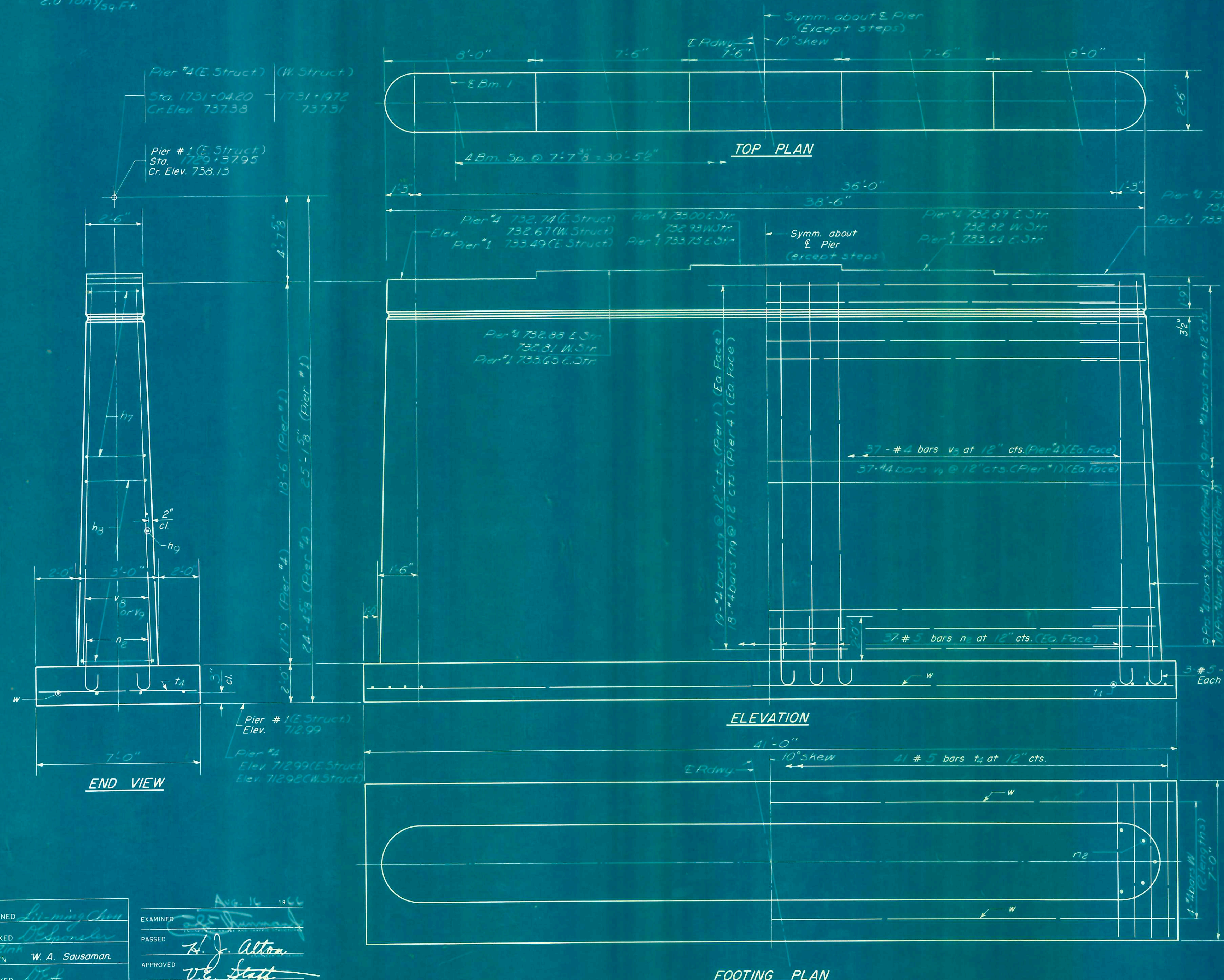
DESIGNED *Lij-ming Chen*
CHECKED *W. A. Sausaman*
DRAWN *W. A. Sausaman*
CHECKED *W. A. Sausaman*

EXAMINED *Aug. 16 1966*
PASSED *H. J. Alton*
APPROVED *V. E. Saff*

Max. Footing Pressure
2.0 Ton/sq. Ft.

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
57	27-38B	FORD	28	16	13 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			



Note:
All edges shall have standard 3/4" chamfer except as noted.
Pour steps monolithically with pier stem.

BAR n₂

THREE PIERS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h ₁	108	#4	3'-10"	—
h ₃	112	#4	4'-0"	—
h ₂	110	#4	36'-0"	—
n ₂	240	#5	4'-4"	C
t ₁	123	#5	6'-6"	—
v ₃	160	#4	17'-7"	—
w ₉	80	#4	18'-4"	—
w	24	#4	20'-9"	—
Class "A" Concrete			Cu. Yds.	274.9
Reinforcement Bars			Lbs.	6330

PIER 1 (E. STR.) & PIERS 4
FA.I. RT. 57 1027-38B
FORD COUNTY
STA 1730+30

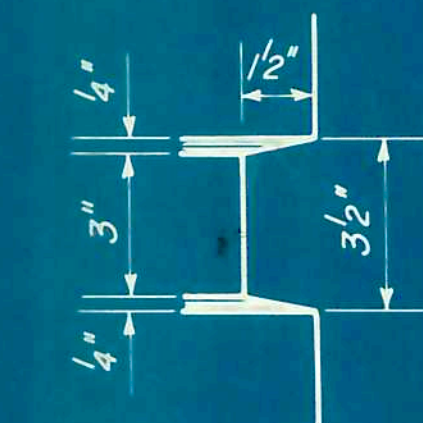
DESIGNED *Lit-ming Chen*
CHECKED *W. A. Sausaman*
DRAWN *W. A. Sausaman*
CHECKED *W. A. Sausaman*

EXAMINED *W. A. Sausaman*
PASSED *W. A. Sausaman*
APPROVED *W. A. Sausaman*

Aug. 16 1966

ROUTE NO	SECTION	COUNTY	TOTAL SHEETS	SHEET NO	SHEET NO. 13 18 SHEETS
S B L F A T. 57	27-38 B	FORD	28	17	
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		

TOP PLAN

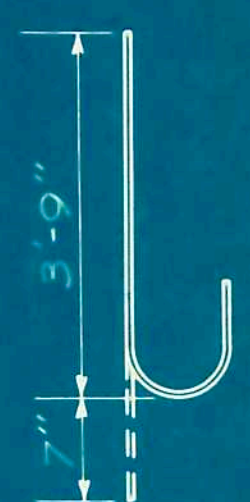


NOTCH DETAIL

[illegible]

DETAIL OF BARS

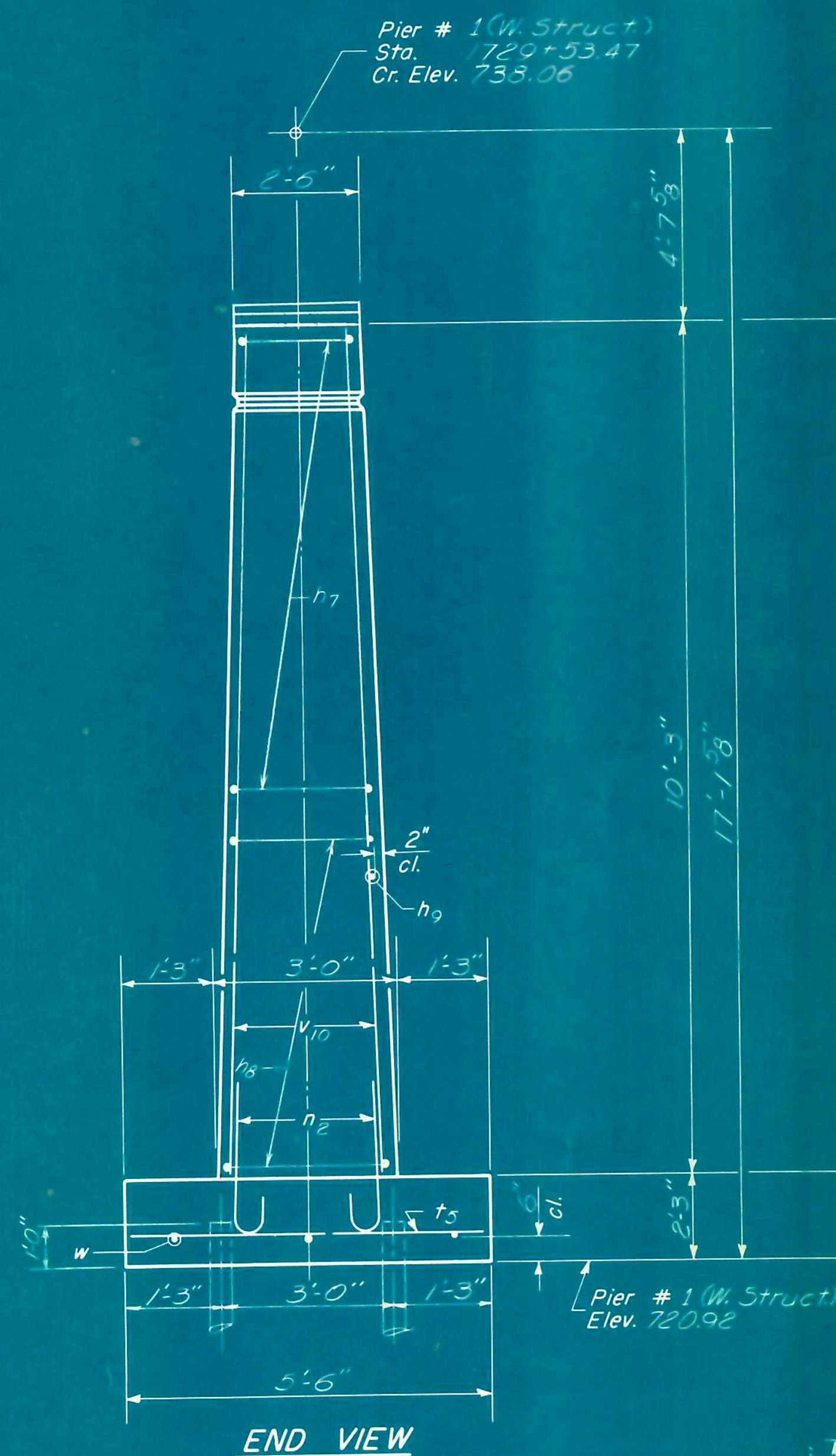
h_7 or h_8



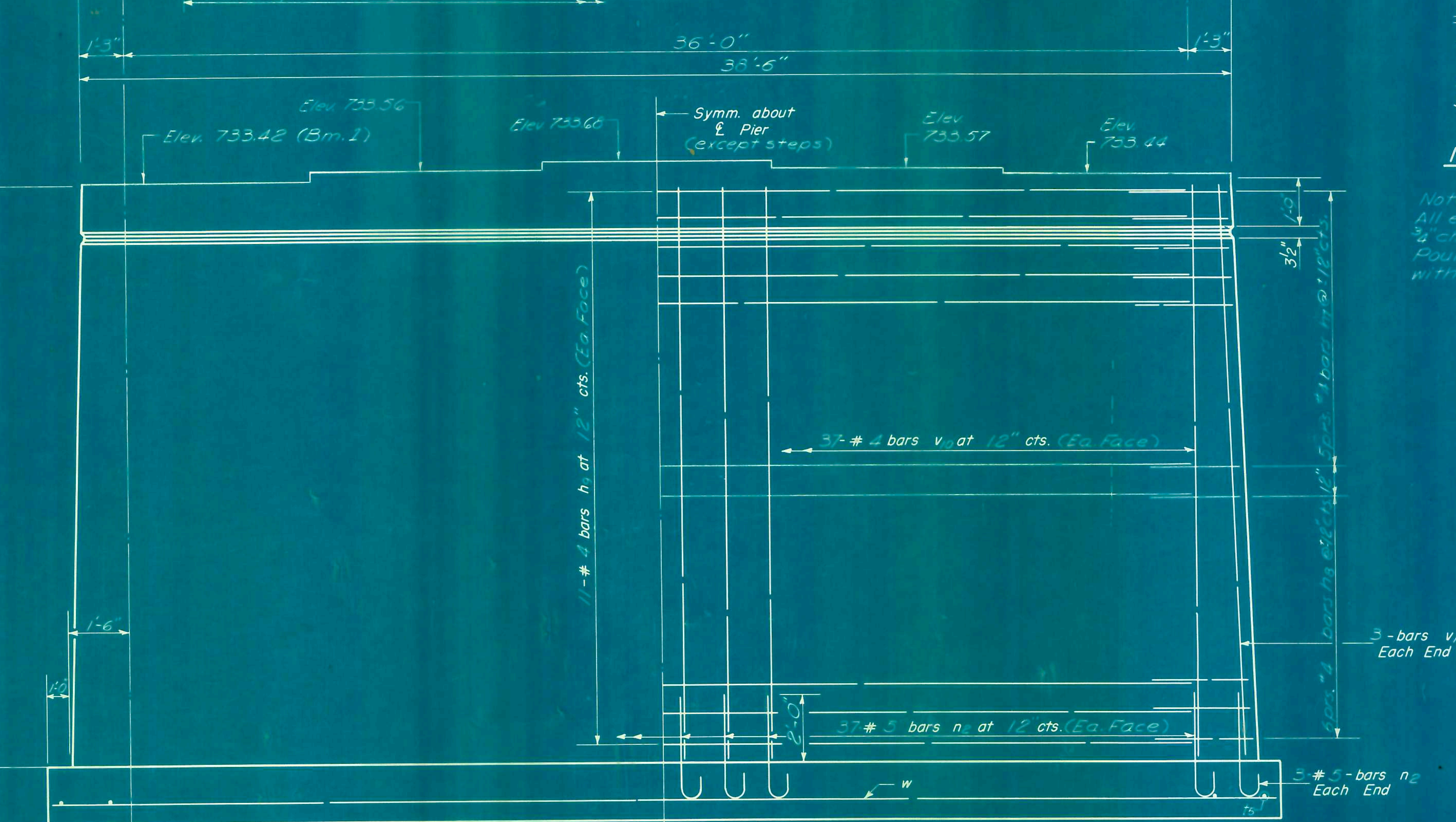
BAR n_2

Bar	No.	Size	Length	Shape
h ₁	20	#4	3'-0"	U
h ₂	24	#4	4'-0"	U
n ₉	22	#4	36'-0"	—
n ₂	80	#5	4'-4"	C
t ₃	42	#5	5'-0"	—
v ₁₀	80	#4	10'-1"	—
w	6	#4	20'-9"	—
Class A Concrete			Cu. Yds.	53.5
Reinforcement Bars			Lbs.	850
Untreated Piles			Lin. Ft.	425
Test Pile (Timber)			Each	1

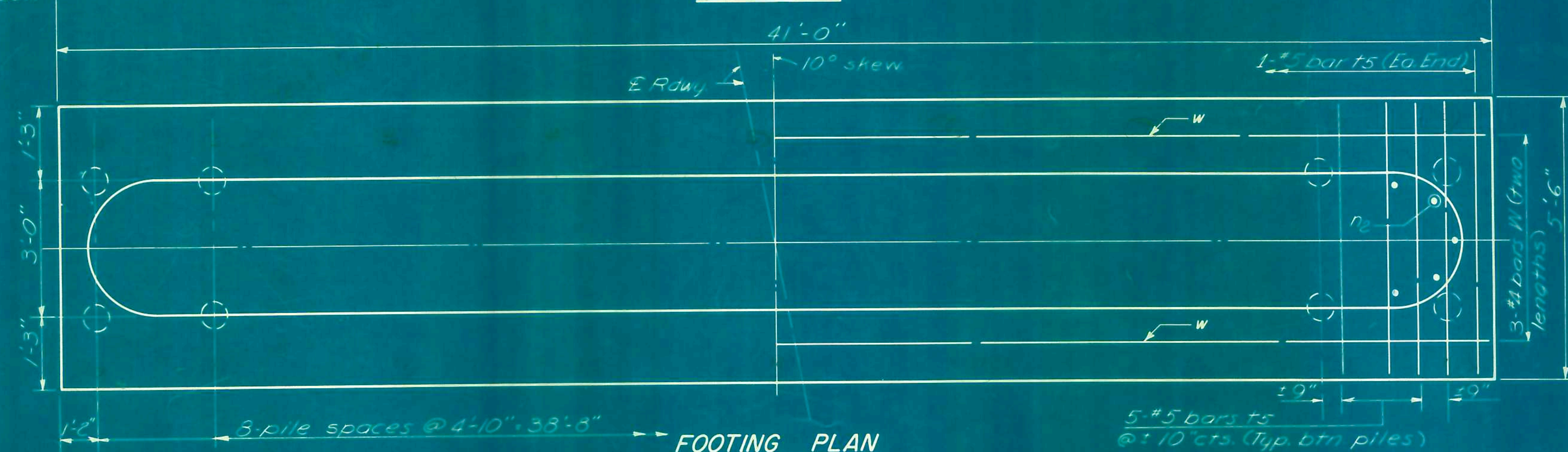
STA. 1730+30



END VIEW



ELEVATION



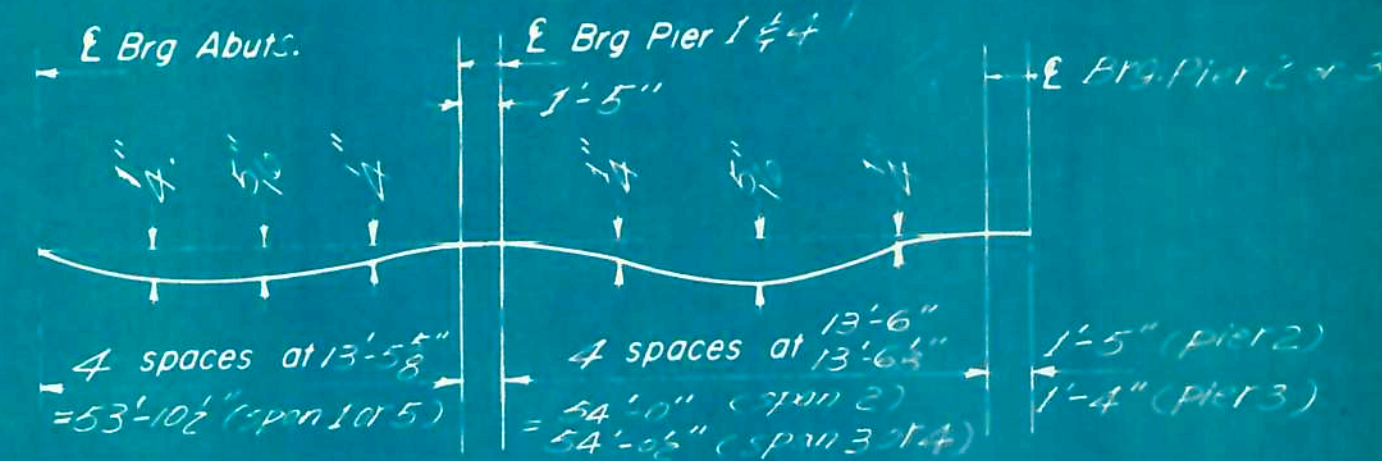
FOOTING PLAN

DESIGNED	<i>Lie-ming Chen</i>
CHECKED	<i>D. Sponsler</i>
DRAWN	<i>W. A. Sausaman</i>
CHECKED	<i>DEL</i>

EXAMINED
PASSED
APPROVED

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

SHEET NO. 14
18 SHEETS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)
Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

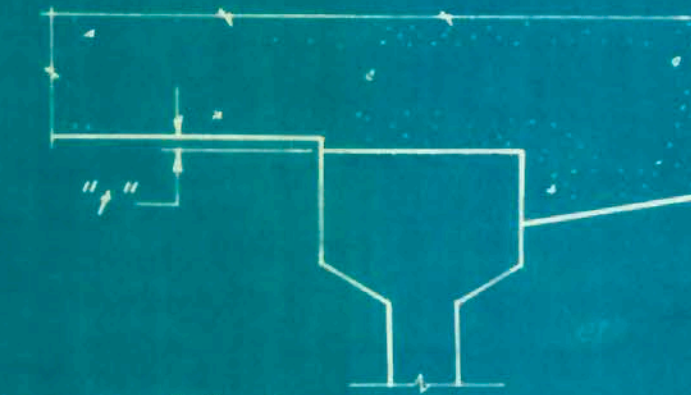
To determine "t" After the beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

DECK ELEV. RAISED 1" TO COMPENSATE FOR CAMBER IN R.R. ONE BEAMS TO ELIMINATE NEG. FILLET - NEXT STRUCTURE ONLY.

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
E Brg. Abut.	1	17283.535	15.000	736.079	736.079
	2	17284.858	7.500	736.156	736.156
	3	17286.180	0.000	736.317	736.317
	4	17287.502	7.500	736.194	736.194
	5	17288.825	15.000	736.055	736.055
E Brg. Pier 1	1	17289.143	15.000	736.067	736.067
	2	17290.466	7.500	736.194	736.194
	3	17291.788	0.000	736.305	736.305
	4	17293.111	7.500	736.182	736.182
	5	17294.433	15.000	736.043	736.043
A	1	17295.756	15.000	736.022	736.037
	2	17297.078	7.500	736.149	736.164
	3	17298.401	0.000	736.260	736.275
	4	17299.723	7.500	736.137	736.152
	5	17301.046	15.000	737.998	738.014
B	1	17302.368	15.000	737.977	738.000
	2	17303.691	7.500	738.104	738.127
	3	17305.013	0.000	738.215	738.238
	4	17306.336	7.500	738.092	738.115
	5	17307.658	15.000	737.953	737.977
C	1	17308.981	15.000	737.932	737.957
	2	17310.303	7.500	738.059	738.084
	3	17311.626	0.000	738.170	738.195
	4	17312.948	7.500	738.047	738.072
	5	17314.271	15.000	737.908	737.933
D	1	17315.593	15.000	737.887	737.908
	2	17316.916	7.500	738.014	738.035
	3	17318.238	0.000	738.125	738.146
	4	17319.561	7.500	738.002	738.023
	5	17320.883	15.000	737.863	737.884
E Brg. Pier 2	1	17322.206	15.000	737.842	737.863
	2	17323.528	7.500	737.969	737.990
	3	17324.851	0.000	738.080	738.101
	4	17326.173	7.500	737.957	737.978
	5	17327.496	15.000	737.818	737.839
F	1	17328.818	15.000	737.797	737.818
	2	17330.141	7.500	737.924	737.945
	3	17331.463	0.000	738.035	738.056
	4	17332.786	7.500	737.912	737.933
	5	17334.108	15.000	737.773	737.794
G	1	17335.431	15.000	737.752	737.773
	2	17336.753	7.500	737.879	737.899
	3	17338.076	0.000	737.990	738.011
	4	17339.398	7.500	737.867	737.888
	5	17340.721	15.000	737.728	737.749
H	1	17342.043	15.000	737.707	737.728
	2	17343.366	7.500	737.834	737.855
	3	17344.688	0.000	737.945	737.966
	4	17346.011	7.500	737.822	737.843
	5	17347.333	15.000	737.683	737.704
I	1	17348.656	15.000	737.662	737.683
	2	17349.978	7.500	737.789	737.810
	3	17351.301	0.000	737.900	737.921
	4	17352.623	7.500	737.777	737.798
	5	17353.946	15.000	737.638	737.659
J	1	17355.268	15.000	737.617	737.638
	2	17356.591	7.500	737.744	737.765
	3	17357.913	0.000	737.855	737.876
	4	17359.236	7.500	737.732	737.753
	5	17360.558	15.000	737.593	737.614
K	1	17361.881	15.000	737.572	737.593
	2	17363.203	7.500	737.700	737.721
	3	17364.526	0.000	737.811	737.832
	4	17365.848	7.500	737.688	737.709
	5	17367.171	15.000	737.549	737.570
L	1	17368.493	15.000	737.528	737.549
	2	17369.816	7.500	737.655	737.676
	3	17371.138	0.000	737.766	737.787
	4	17372.461	7.500	737.643	737.664
	5	17373.783	15.000	737.504	737.525
M	1	17375.106	15.000	737.483	737.504
	2	17376.428	7.500	737.610	737.631
	3	17377.751	0.000	737.721	737.742
	4	17379.073	7.500	737.598	737.619
	5	17380.396	15.000	737.459	737.480
N	1	17381.718	15.000	737.438	737.459
	2	17383.041	7.500	737.565	737.586
	3	17384.363	0.000	737.676	737.697
	4	17385.686	7.500	737.553	737.574
	5	17387.008	15.000	737.414	737.435
O	1	17388.331	15.000	737.393	737.414
	2	17389.653	7.500	737.520	737.541
	3	17390.976	0.000	737.631	737.652
	4	17392.298	7.500	737.508	737.529
	5	17393.621	15.000	737.369	737.390
P	1	17394.943	15.000	737.348	737.369
	2	17396.266	7.500	737.475	737.496
	3	17397.588	0.000	737.586	737.607
	4	17398.911	7.500	737.463	737.484
	5	17400.233	15.000	737.324	737.345
Q	1	17401.556	15.000	737.303	737.324
	2	17402.878	7.500	737.430	737.451
	3	17404.201	0.000	737.541	737.562
	4	17405.523	7.500	737.418	737.439
	5	17406.846	15.000	737.279	737.300
R	1	17408.168	15.000	737.258	737.279
	2	17409.491	7.500	737.385	737.406
	3	17410.813	0.000	737.496	737.517
	4	17412.136	7.500	737.373	737.394
	5	17413.458	15.000	737.234	737.255
S	1	17414.781	15.000	737.213	737.234
	2	17416.103	7.500	737.340	737.361
	3	17417.426	0.000	737.451	737.472
	4	17418.748	7.500	737.328	737.349
	5	17419.071	15.000	737.189	737.210
T	1	17420.393	15.000	737.168	737.189
	2	17421.716	7.500	737.295	737.316
	3	17423.038	0.000	737.406	737.427
	4	17424.361	7.500	737.283	737.304
	5	17425.683	15.000	737.144	737.165
E Brg. Pier 3	1	17427.006	15.000	737.123	737.144
	2	17428.328	7.500	737.250	737.271
	3	17429.651	0.000	737.361	737.382
	4	17430.973	7.500	737.238	737.259
	5	17432.296	15.000	737.099	737.120
E Brg. Pier 4	1	17433.618	15.000	737.078	737.099
	2	17434.941	7.500	737.205	737.226
	3	17436.263	0.000	737.316	737.337
	4	17437.586	7.500	737.193	737.214
	5	17438.908	15.000	737.054	737.075
E Brg. Abut.	1	17440.231	15.000	737.033	737.054
	2	17441.553	7.500	737.160	737.181
	3	17442.876	0.000	737.271	737.292
	4	17444.198	7.500	737.148	737.169
	5	17445.521	15.000	737.009	737.030
E Brg. Pier 5	1	17446.843	15.000	736.988	736.988
	2	17448.166	7.500	737.115	737.136
	3	17449.488	0.000	737.226	737.247
	4	17450.811	7.500	737.103	737.124
	5	17452.133	15.000	736.964	736.964
E Brg. Pier 6	1	17453.456	15.000	736.943	736.943
	2	17454.778	7.500	737.070	737.091
	3	17456.101	0.000	737.181	737.202
	4	17457.423	7.500	737.058	737.079
	5	17458.746	15.000	736.919	736.919
E Brg. Pier 7	1	17459.068	15.000	736.898	736.898
	2	17460.391	7.500	737.025	737.046
	3	17461.713	0.000	737.136	737.157
	4	17463.036	7.500	737.013	737.034
	5	17464.358	15.000	736.874	736.874
E Brg. Pier 8	1	17465.681	15.000	736.853	736.853
	2	17467.003	7.500	736.980	736.980
	3	17468.326	0.000	737.091	737.112
	4	17469.648	7.500	736.968	736.968
	5	17470.971	15.000	736.829	736.829
E Brg. Pier 9	1	17472.293	15.000	736.808	736.808
	2	17473.616	7.500	736.935	736.935
	3	17474.938	0.000	737.046	737.067
	4	17476.261	7.500	736.923	736.923
	5	17477.583	15.000	736.784	736.784
E Brg. Pier 10	1	17478.906	15.000	736.763	736.763
	2	17480.228	7.500	736.890	736.890
	3	17481.551	0.000	737.001	737.022
	4	17482.873	7.500	736.878	736.878
	5	17484.196	15.000	736.739	736.739
E Brg. Pier 11	1	17485.518	15.000	736.718	736.718
	2	17486.841	7.500	736.845	736.845
	3	17488.163	0.000	736.956	736.956
	4	17489.486	7.500	736.833	736.833
	5	17490.808	15.000	736.694	736.694
E Brg. Pier 12	1	17492.131	15.000	736.673	736.673
	2	17493.453	7.500	736.800	736.800
	3	17494.776	0.000	736.911	736.911
	4	17496.098	7.500	736.788	736.788
	5	17497.421	15.000	736.649	736.649
E Brg. Pier 13	1	17498.743	15.000	736.628	7

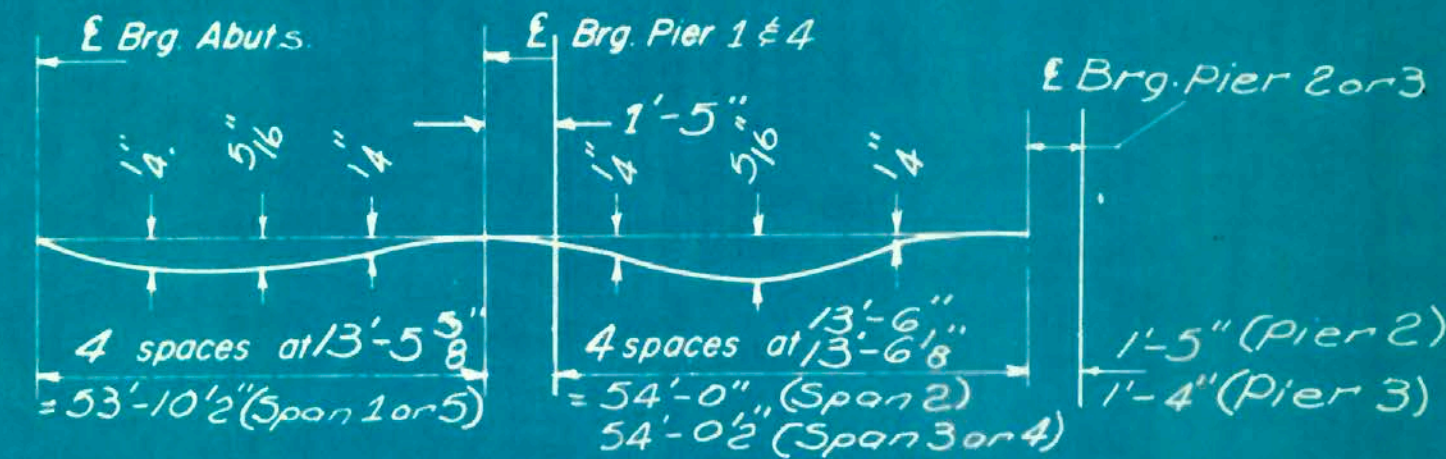
STATE OF ILLINOIS
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To determine "f": After the beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "f" above top flange of beams.

FILLET HEIGHTS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
27-38-B	FORD	28	19	13	SHEETS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.

Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection	Location	Beam	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. S. Abut.	5	172878.015	15.000	738.149	738.149	F	5	172956.015	15.000	737.798	737.821	L	5	173031.432	15.000	737.459	737.480	E Brg. Pier 4	5	173100.845	15.000	737.146	737.146
	4	172879.338	7.500	738.276	738.276		4	172957.338	7.500	737.925	737.948		4	173032.754	7.500	737.585	737.606		4	173102.168	7.500	737.273	737.273
	3	172880.660	0.000	738.387	738.387		3	172958.660	0.000	738.036	738.059		3	173034.077	0.000	737.697	737.718		3	173103.490	0.000	737.384	737.384
	2	172881.982	7.500	738.264	738.264		2	172959.982	7.500	737.913	737.936		2	173035.399	7.500	737.574	737.595		2	173104.812	7.500	737.261	737.261
	1	172883.305	15.000	738.125	738.125		1	172961.305	15.000	737.774	737.798		1	173036.722	15.000	737.435	737.456		1	173106.135	15.000	737.122	737.122
E Brg. S. Abut.		172880.723	15.000	738.137	738.137			172966.015	15.000	737.753	737.778			173045.473	15.000	737.395	737.396			173102.262	15.000	737.140	737.140
		172882.046	7.500	738.264	738.264			172967.338	7.500	737.880	737.905			173046.796	7.500	737.522	737.522			173103.584	7.500	737.257	737.257
		172883.368	0.000	738.375	738.375			172968.660	0.000	737.991	738.016			173048.118	0.000	737.633	737.634			173104.907	0.000	737.378	737.378
		172884.691	7.500	738.252	738.252			172969.982	7.500	737.868	737.893			173049.441	7.500	737.510	737.510			173106.229	7.500	737.255	737.255
		172886.013	15.000	738.113	738.113			172971.305	15.000	737.729	737.754			173050.763	15.000	737.372	737.372			173107.552	15.000	737.116	737.116
		172890.723	15.000	738.092	738.107			172976.015	15.000	737.708	737.729			173051.987	15.000	737.372	737.372			173112.262	15.000	737.095	737.110
		172892.046	7.500	738.234	738.234			172977.338	7.500	737.835	737.856			173053.210	7.500	737.504	737.504			173113.584	7.500	737.222	737.237
		172893.368	0.000	738.330	738.345			172978.660	0.000	737.946	737.967			173054.433	0.000	737.615	737.615			173114.907	0.000	737.333	737.348
		172894.691	7.500	738.207	738.222			172979.982	7.500	737.823	737.844			173055.656	7.500	737.504	737.504			173116.229	7.500	737.210	737.225
		172896.013	15.000	738.068	738.083			172981.305	15.000	737.684	737.705			173056.879	15.000	737.366	737.366			173117.552	15.000	737.071	737.087
		172900.723	15.000	738.047	738.070			172990.015	15.000	737.645	737.645			173058.102	15.000	737.344	737.360			173122.262	15.000	737.050	737.073
		172902.046	7.500	738.174	738.197			172991.338	7.500	737.772	737.772			173059.325	7.500	737.471	737.487			173123.584	7.500	737.177	737.200
		172903.368	0.000	738.285	738.308			172992.660	0.000	737.883	737.883			173060.548	0.000	737.582	737.598			173124.907	0.000	737.288	737.311
		172904.691	7.500	738.162	738.185			172993.982	7.500	737.760	737.760			173061.771	7.500	737.693	737.709			173126.229	7.500	737.165	737.188
		172906.013	15.000	738.023	738.046			172995.305	15.000	737.621	737.621			173062.994	15.000	737.504	737.520			173127.552	15.000	737.026	737.049
		172910.723	15.000	738.002	738.027			172996.628	15.000	737.502	737.502			173064.217	15.000	737.381	737.397			173132.262	15.000	737.005	737.030
		172912.046	7.500	738.129	738.153			172997.951	7.500	737.613	737.613			173065.440	7.500	737.468	737.484			173133.584	7.500	737.132	737.157
		172913.368	0.000	738.240	738.265			172999.274	0.000	737.724	737.724			173066.663	0.000	737.553	737.569			173134.907	0.000	737.243	737.268
		172914.691	7.500	738.117	738.142			173000.597	7.500	737.835	737.835			173067.886	7.500	737.638	737.654			173136.229	7.500	737.120	737.145
		172916.013	15.000	737.978	738.003			173001.920	15.000	737.696	737.696			173069.109	15.000	737.520	737.536			173137.552	15.000	736.981	737.006
		172920.723	15.000	737.957	737.978			173003.243	15.000	737.557	737.557			173070.332	15.000	737.401	737.417			173142.262	15.000	736.960	736.981
		172922.046	7.500	738.084	738.106			173004.566	7.500	737.668	737.668			173071.555	7.500	737.482	737.498			173143.584	7.500	737.087	737.108
		172923.368	0.000	738.195	738.216			173005.889	0.000	737.779	737.779			173072.778	0.000	737.563	737.579			173144.907	0.000	737.198	737.219
		172924.691	7.500	738.072	738.093			173007.212	7.500	737.890	737.890			173074.001	7.500	737.644	737.660			173146.229	7.500	737.075	737.096
		172926.013	15.000	737.933	737.954			173008.535	15.000	737.751	737.751			173075.224	15.000	737.725	737.741			173147.552	15.000	736.936	736.957
		172934.598	15.000	737.894	737.894			173009.858	15.000	737.612	737.612			173076.447	15.000	737.606	737.622			173156.137	15.000	736.897	736.897
		172935.921	7.500	738.021	738.021			173011.181	7.500	737.523	737.523			173077.670	7.500	737.697	737.713			173157.459	7.500	737.024	737.024
		172937.243	0.000	738.132	738.132			173012.504	0.000	737.634	737.634			173078.893	0.000	737.770	737.786			173158.782	0.000	737.135	737.135
		172938.566	7.500	738.009	738.009			173013.827	7.500	737.745	737.745			173080.116	7.500	737.851	737.867			173160.104	7.500	737.012	737.012
		172939.888	15.000	737.871	737.871			173015.150	15.000	737.856	737.856			173081.339	15.000	737.962	737.978			173161.427	15.000	736.874	736.874
		172940.211	7.500	738.000	738.000			173016.473	7.500	737.967	737.967			173082.562	7.500	738.063	738.079			173158.845	15.000	736.885	736.885
		172941.534	15.000	737.834	737.834			173017.796	15.000	737.878	737.878			173083.785	15.000	738.164	738.180			173160.168	7.500	737.012	737.012
		172942.857	7.500	738.000	738.000			173019.119	7.500	737.989	737.989			173085.008	7.500	738.265	738.281			173161.490	7.500	737.123	737.123
		172944.180	0.000	738.111	738.111			173020.442	0.000	738.100	738.100			173086.231	0.000	738.366	738.382			173162.812	7.500	737.000	737.000
		172945.503	7.500	738.000	738.000			173021.765	7.500	738.211	738.211			173087.454	7.500	738.467	738.483			173164.135	15.000	736.861	736.861
		172946.826	15.000	737.843	737.843			173023.088	15.000	738.322	738.322			173088.677	15.000	738.568	738.584						
		172948.149	7.500	738.000	738.000			173024.411	7.500	738.433	738.433			173089.900	7.500	738.669	738.685						
		172949.472	0.000	738.111	738.111			173025.734	0.000	738.544	738.544			173091.123	0.000	738.770	738.786						
		172950.795	7.500	738.000	738.000			173027.057	7.500	738.655	738.655			173092.346	7.500	738.871	738.887						
		172952.118	15.000	737.819	737.819			173028.380	15.000	738.766	738.766			173093.569	15.000	738.972	738.988						

FOR LAYOUT SEE Sh. #14

DESIGNED *Liu-ming Chen*
CHECKED *P. G. Barnett*
DRAWN *P. G. Barnett*
CHECKED *P. G. Barnett*
E-S

EXAMINED *P. G. Barnett*
PASSED *P. G. Barnett*
APPROVED *P. G. Barnett*
CHIEF HIGHWAY ENGINEER

ELEVATIONS
EAST STRUCTURE
F.A.I. RT. 57 SEC. 10, 27-38-B
FORD COUNTY
STA. 1730+30

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

PROJECT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 16
17-57	27-38B	FORD	28	20	18 SHEETS
FED. H. & C. DIST. NO. 7					
SHEET NO.					

Boring No.	Station	Offset	Elevation	N	Q	U	P
1	1729+21	44' LT.					
Ground Surface			726.1	0			
STIFF DARK BROWN CLAY				13	2.0E		
			722.1				
VERY STIFF BROWN GRAY MOTTLED CLAY				11	2.5	22	
			720.1				
STIFF BROWN GRAY MOTTLED CLAY LOAM				5	1.0B	20	
			716.6				
SOFT GRAY SAND LOAM				2	0.5E		
			-10				
FREE WATER			712.1				
			-15				
MEDIUM TO VERY STIFF GRAY CLAY TILL				4	2.0B	22	
			-20				
				5	0.8	21	
			-20				
				4	2.3B	24	
STIFF GRAY CLAY TILL WITH LENSES OF SAND				5	1.0B	25	
			702.6				
STIFF GRAY SILT LOAM WITH LENSES OF CLAY				8	1.0B	27	
			700.6				
LOOSE GRAY COARSE SAND WITH LENSES OF SILT LOAM				8			
			697.6				
FREE WATER							
			-30				
MEDIUM COARSE GRAY SAND AND GRAVEL				16			
			-35				
				20			
			688.1				
HARD GRAY BROWN CLAY LOAM TILL							
			-40				
				53	8.2	9	
			687.8				
VERY DENSE GRAY COARSE SAND AND GRAVEL (MUDDY)				78			
			-45				
				64			

Boring No.	Station	Offset	Elevation	N	Q	U	P
1 (CONT.)	1729+21	44' LT.					
Ground Surface			-45				
FREE WATER							
			-50				
VERY DENSE TO DENSE GRAY COARSE SAND AND GRAVEL (MUDDY)				75			
			-55				
				86			
			-60				
LIMIT OF BORING			665.6				

Surface Water El. —
Groundwater El. at Completion VASH BORING
After 72 Hours 703.6

Boring No.	Station	Offset	Elevation	N	Q	U	P
2	1729+00	44' RT.					
Ground Surface			727.6	0			
STIFF DARK BROWN CLAY LOAM ALLUVIAL				8	1.2F		
			723.1				
VERY STIFF DARK BROWN TO BLACK CLAY				11	3.6	26	
			721.1				
STIFF BROWN GRAY MOTTLED CLAY				7	1.7B	23	
			718.1				
VERY LOOSE GRAY BROWN SAND LOAM				2			
			-10				
FREE WATER			716.1				
			-15				
MEDIUM GRAY BROWN COARSE SAND AND GRAVEL				19			
			714.1				
HARD TO VERY STIFF GRAY CLAY TILL				20	7.6B	15	
			-20				
				15	3.5B	20	
			-20				
				11	2.9B	21	
VERY STIFF GRAY CLAY TILL				7	2.7B	24	
			-25				
				8	2.7B	23	
			701.6				
STIFF GRAY SILT LOAM WITH LENSES OF GRAY FINE SAND				21	1.7	20	
			-30				
				17	1.7	22	
			696.6				
LOOSE GRAY BROWN SAND AND SILT LOAM INTERLAYERED				7			
			694.1				
FREE WATER							
			-35				
VERY LOOSE TO LOOSE GRAY COARSE SAND AND GRAVEL (MUDDY)				4			
			-40				
				4			
			686.6				
HARD DARK BROWN CLAY WITH LENSES OF SAND				53	8.2	18	
			-45				
				50	8.4	11	

Boring No.	Station	Offset	Elevation	N	Q	U	P
2 (CONT.)	1729+00	44' RT.					
Ground Surface			-45				
HARD GRAY SANDY CLAY LOAM TILL				73	4.6	9	
			-50				
				78	5.7	9	
			694.1				
DENSE GRAY COARSE SAND AND GRAVEL				35			
			-55				
LIMIT OF BORING			672.1				

Surface Water El. —
Groundwater El. at Completion VASH BORING
After 24 Hours 717.6

Boring No.	Station	Offset	Elevation	N	Q	U	P
3	1729+62	44' RT.					
Ground Surface			731.7	0			
STIFF BROWN MOTTLED CLAY SPOIL BANK							
			683.2				
			-50				
				48	7.7	8	
			724.7				
STIFF DARK BROWN CLAY							
			721.7				
			-10				
				50	8.1	8	
			-55				
STIFF BROWN MOTTLED CLAY							
			716.7				
MEDIUM GRAY COARSE SAND AND GRAVEL (MUDDY)				12			
			715.2				
HARD GRAY CLAY TILL				13	6.6B	17	
			-20				
				19	6.0B	17	
			708.2				
			-25				
				15	3.3B	21	
VERY STIFF GRAY CLAY TILL				10	3.1B	23	
			702.7				
VERY STIFF TO STIFF GRAY SILT LOAM WITH LENSES OF FINE SAND				12	2.4B	24	
			-30				
				15	1.7	21	
			697.7				
MEDIUM GRAY FINE SAND LOAM WITH LENSES OF COARSE GRAY SAND				22			
			695.7				
MEDIUM - LOOSE GRAY FINE TO COARSE SAND				12			
			-40				
				9			
			688.7				
VERY STIFF DARK BROWN CLAY LOAM							
			-45				
				22	3.0E		

Boring No.	Station	Offset	Elevation	N	Q	U	P
3 (CONT.)	1729+62	44' RT.					
Ground Surface			-45				
VERY STIFF DARK BROWN CLAY LOAM				44	3.1	8	
			683.2				
			-50				
				48	7.7	8	
			724.7				
HARD TO VERY STIFF GRAY SANDY CLAY LOAM TILL							
			-55				
				50	8.1	8	
			-60				
LIMIT OF BORING			671.2				

Surface Water El. —
Groundwater El. at Completion VASH BORING
After 8 Hours 698.7

DESIGNED *L. W. Munch*
CHECKED *D. E. Spaulding*
DRAWN *J. R. Zink*
CHECKED *DEL*

EXAMINED *Aug. 16 1946*
PASSED *R. D. Nelson*
APPROVED *V. E. Staff*

11-Standard Penetration Test
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140# hammer falling 30"

Qu-Unconfined Compressive
Strength - γ_{st}
w - Water Content - percentage
of oven dry weight - %

Type failure:
B-Bulge Failure
S-Shear Failure
E-Estimated γ_{st}
P-Penetrometer

BORINGS
F.A.I. RT 57 SEC. 10-27-38B
FORD COUNTY
STA. 1730+30

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

PROJECT NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
17-38B	27-38B	FORD	28	21
18 SHEETS				

Boring No.	Station	Offset	Elevation	N	Q	U	P
4	1729+85	45' LT.	730.7	0			
Ground Surface							
VERY STIFF BROWN, GRAY AND BLACK CLAY AND CLAY LOAM TILL							
			723.2	-5			
VERY STIFF BLACK CLAY							
			721.7	-10			
STIFF BROWN MOTTLED CLAY							
			718.7	-15			
MEDIUM - LOOSE COARSE SAND LOAM AND GRAVEL							
			717.2	-15	7	4.1B	17
STIFF BROWN AND GRAY CLAY LOAM TILL							
			716.2	-15			
HARD GRAY CLAY TILL WITH LENSES OF SILT AT 15'							
			714.2	-16	6.2B	12	
VERY STIFF GRAY CLAY TILL							
			713.2	-20	14	5.2B	19
			711.2	-20	13	2.5B	21
			709.2	-25	9	2.7B	23
			707.2	-25	10	2.7B	23
STIFF GRAY CLAY WITH SILT LENSES							
			700.2	-30	12	1.9B	22
GRAY SILTY CLAY TO SILT LOAM WITH WATER							
			698.2	-30	12	4.4S	25
HARD TO VERY STIFF GRAY SILT LOAM							
			696.2	-35	9	3.5S	12
LENSES OF COARSE SAND LOAM							
			692.2	-40	12	2.8S	12
VERY LOOSE FINE TO MEDIUM GRAY SAND							
			689.2	-40	4		
FREE WATER							
			689.2	-40	44	8.5S	9
HARD GRAY SANDY CLAY LOAM TILL							
			685.2	-45	28	9.7	9
LIMIT OF BORING							

Surface Water El.
Groundwater El. at Completion
After 48 Hours

699.2

Boring No.	Station	Offset	Elevation	N	Q	U	P
5	1730+82	45' RT.	729.0	0			
Ground Surface							
STIFF BROWN GRAY AND BLACK CLAY AND CLAY LOAM SPOIL BANK							
			723.0	-5			
STIFF BLACK CLAY TOP SOIL							
			721.0	-10			
STIFF - MEDIUM BROWN AND GRAY MOTTLED CLAY LOAM ALLUVIUM							
			715.5	-15	21	5.6B	17
HARD TO VERY STIFF GRAY CLAY TILL							
			713.5	-15	15	3.7B	20
			711.5	-20	10	3.1B	23
			709.5	-20	10	2.7B	23
VERY STIFF GRAY CLAY TILL							
			704.0	-25	7		
LOOSE GRAY VERY FINE SAND LOAM							
			702.5	-25	12		
MEDIUM GRAY FINE TO COARSE SAND AND GRAVEL							
			697.8	-30	16		
HARD GRAY CLAY LOAM TO SANDY CLAY LOAM TILL							
			695.3	-35	26	5.0B	17
HARD GRAY INTERBEDDED CLAY AND SILTY CLAY LOAM							
			693.8	-35	27		
MEDIUM GRAY SAND WITH WATER							
			689.5	-40	44	10.9+	9
HARD GRAY CLAY LOAM TO SANDY CLAY LOAM TILL							
			685.5	-45	44	10.9+	10
HARD LIGHT BROWN MOTTLED SANDY CLAY LOAM TILL							
			683.5	-45	51	7.4	11
LIMIT OF BORING							

Surface Water El.
Groundwater El. at Completion
After 24 Hours

WASH BORED
PLUGGED

Boring No.	Station	Offset	Elevation	N	Q	U	P
6	1730+98	50' LT.	729.30	0			
Ground Surface							
HARD TO VERY STIFF BROWN GRAY AND BLACK MOTTLED CLAY AND CLAY LOAM SPOIL BANK							
			719.3	-10			
LOOSE COARSE SAND AND GRAVEL							
			716.8	-15	21	8.3B	17
HARD TO VERY STIFF GRAY CLAY TILL							
			714.8	-15	12	2.7B	23
			712.8	-20	13	3.3B	23
LOOSE FINE GRAY SAND							
			704.8	-25	35	8.15	9
HARD GRAY CLAY LOAM TO SANDY CLAY LOAM TILL							
			697.8	-30	39	10+	10
HARD GRAY INTERBEDDED CLAY AND SILTY CLAY LOAM							
			695.3	-35	26	5.0B	17
MEDIUM GRAY SAND WITH WATER							
			693.8	-35	27		
LIMIT OF BORING							

Surface Water El.
Groundwater El. at Completion
After 48 Hours

DRY
PLUGGED 28'

Boring No.	Station	Offset	Elevation	N	Q	U	P
7	1731+51	30' LT.	725.9	0			
Ground Surface							
STIFF BLACK CLAY TOP SOIL							
			723.9	-5	17	3.0B	14
VERY STIFF BLACK AND BROWN MOTTLED CLAY							
			719.9	-5	15	3.0B	15
VERY STIFF RED BROWN AND BLACK MOTTLED SANDY CLAY LOAM							
			716.9	-10	17	3.0B	14
HARD TO VERY STIFF GRAY CLAY TILL							
			710.9	-15	12	5.0B	20
			710.4	-15	21	7.8B	18
STIFF GRAY SILT LOAM							
			710.4	-15	19	3.3B	23
DENSE LIGHT BROWN COARSE SAND AND GRAVEL							
			706.9	-20	35		
HARD GRAY CLAY LOAM TILL							
			704.9	-20	45	8.1	9
			702.9	-20	41	8.9	9
HARD GRAY CLAY LOAM TILL							
			700.9	-25	26	6.0S	11
SAND LENSES							
			696.9	-25	27	8.5B	10
HARD GRAY CLAY							
			694.9	-30	26	7.4B	19
MEDIUM GRAY SAND WITH WATER							
			695.4	-30	26	7.4B	19
LIMIT OF BORING							

Surface Water El.
Groundwater El. at Completion
After 48 Hours

PLUGGED

Boring No.	Station	Offset	Elevation	N	Q	U	P
8	1731+36	50' RT.	725.4	0			
Ground Surface							
STIFF BLACK CLAY							
			721.9	-5	7	1.0B	-
STIFF BLACK CLAY LOAM ALLUVIAL							
			717.9	-5	6	1.0B	-
MEDIUM GRAY SAND AND GRAVEL							
			714.4	-10	6	1.0B	-
FREE WATER							
			714.4	-10	25		-
VERY STIFF GRAY CLAY TILL							
			705.4	-20	14	3.9B	18
			702.6	-20	10	2.7B	23
LOOSE GRAY VARVED SILT LOAM TO LOAM							
			702.6	-20	12		-
LOOSE LIGHT GRAY BROWN SAND							
			700.4	-25	13	4.7B	11
HARD GRAY CLAY LOAM TILL							
			696.9	-30	24	6.2S	11
MEDIUM TO DENSE INTERLENSSED SAND, SAND LOAM, AND SANDY CLAY LOAM							
			690.4	-35	26		-
FREE WATER							
			689.4	-35	41		-
VERY STIFF TO HARD GRAY LENSES SILTY CLAY LOAM AND SANDY CLAY LOAM							
			689.9	-35	32		17
HARD GRAY CLAY LOAM TO SANDY CLAY LOAM TILL							
			686.4	-40	51	9.4S	10
VERY DENSE LIGHT BROWN SAND LOAM TILL							
			684.9	-40	75		-
LIMIT OF BORING							

Surface Water El.
Groundwater El. at Completion
After 48 Hours

710.4

DESIGNED *L. J. Zink*
CHECKED *D. E. Zink*
DRAWN *J. S. Zink*
CHECKED *D. E. Zink*

EXAMINED *D. E. Zink*
PASSED *N. L. Zink*
APPROVED *D. E. Zink*

WASH BORED
PLUGGED

N-Standard Penetration Test
Blows per foot to drive 2"
O.D. Split Spoon Sampler 12" with
140# hammer falling 30"

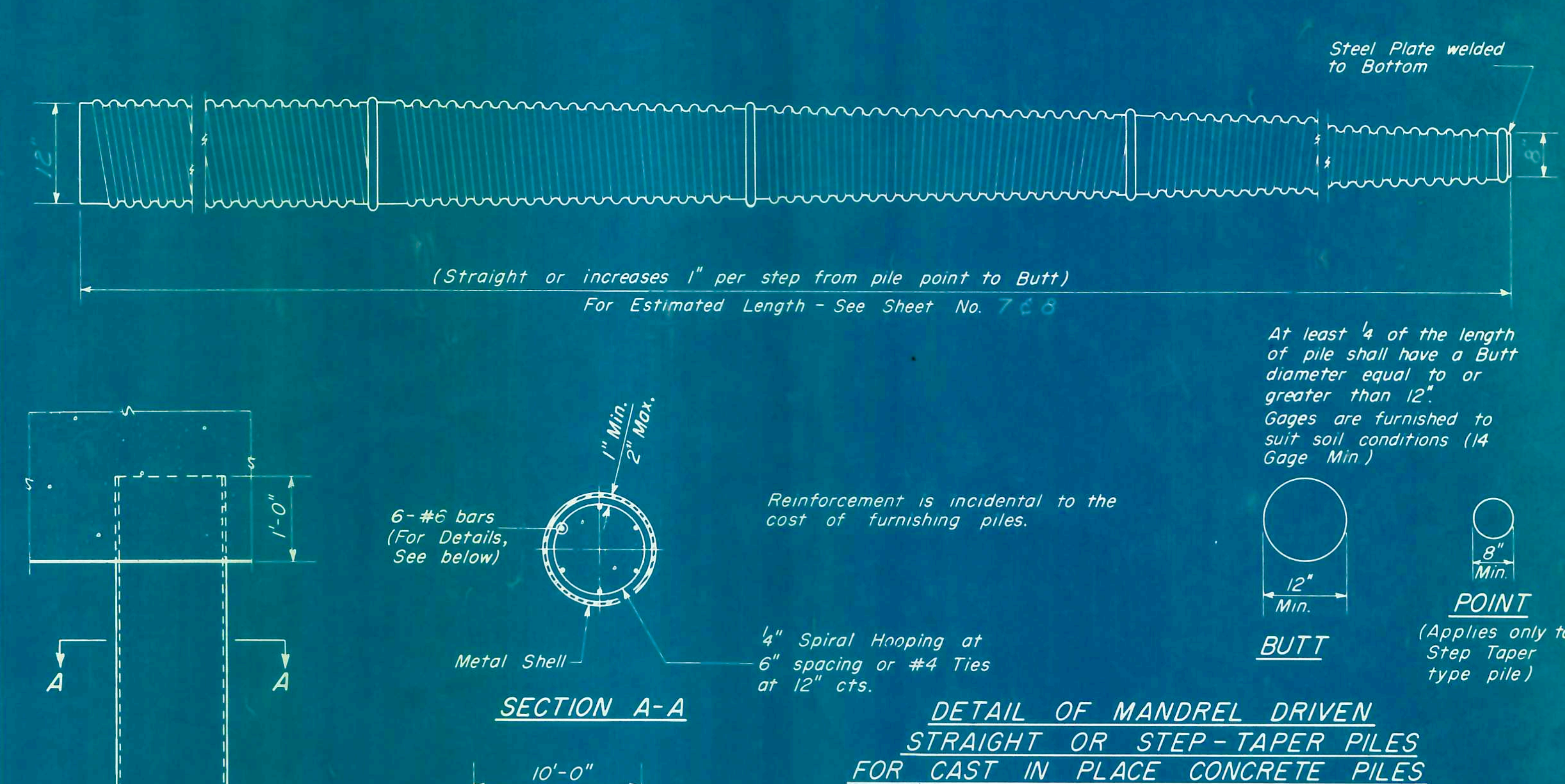
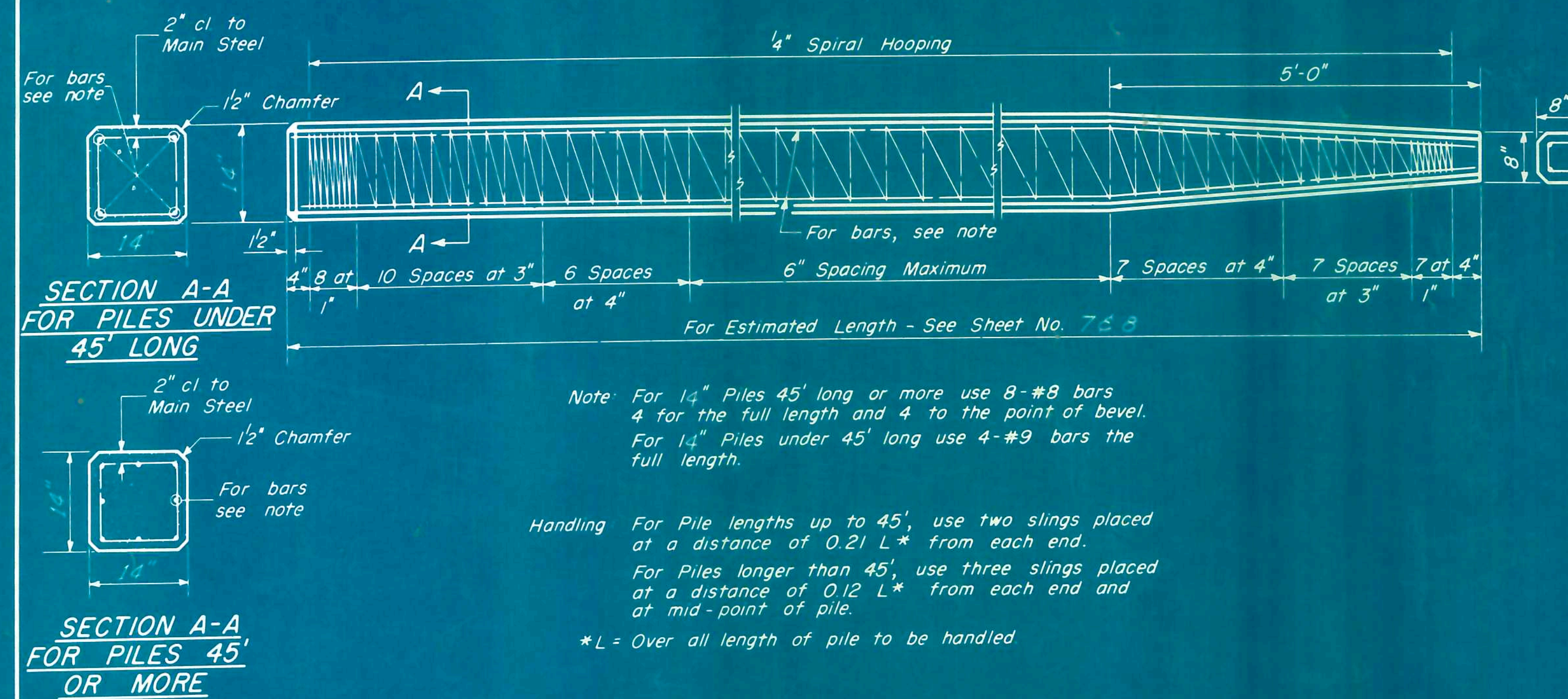
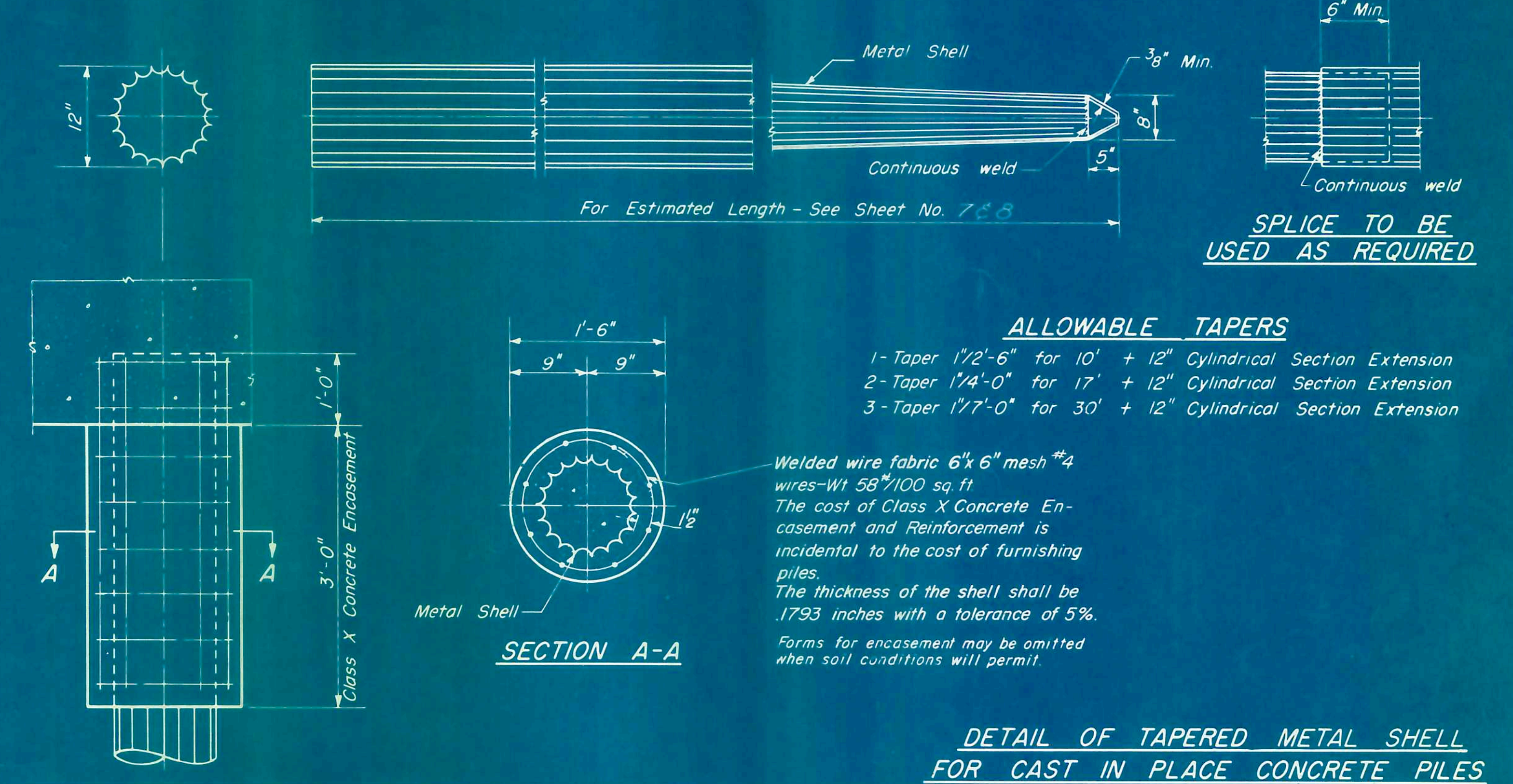
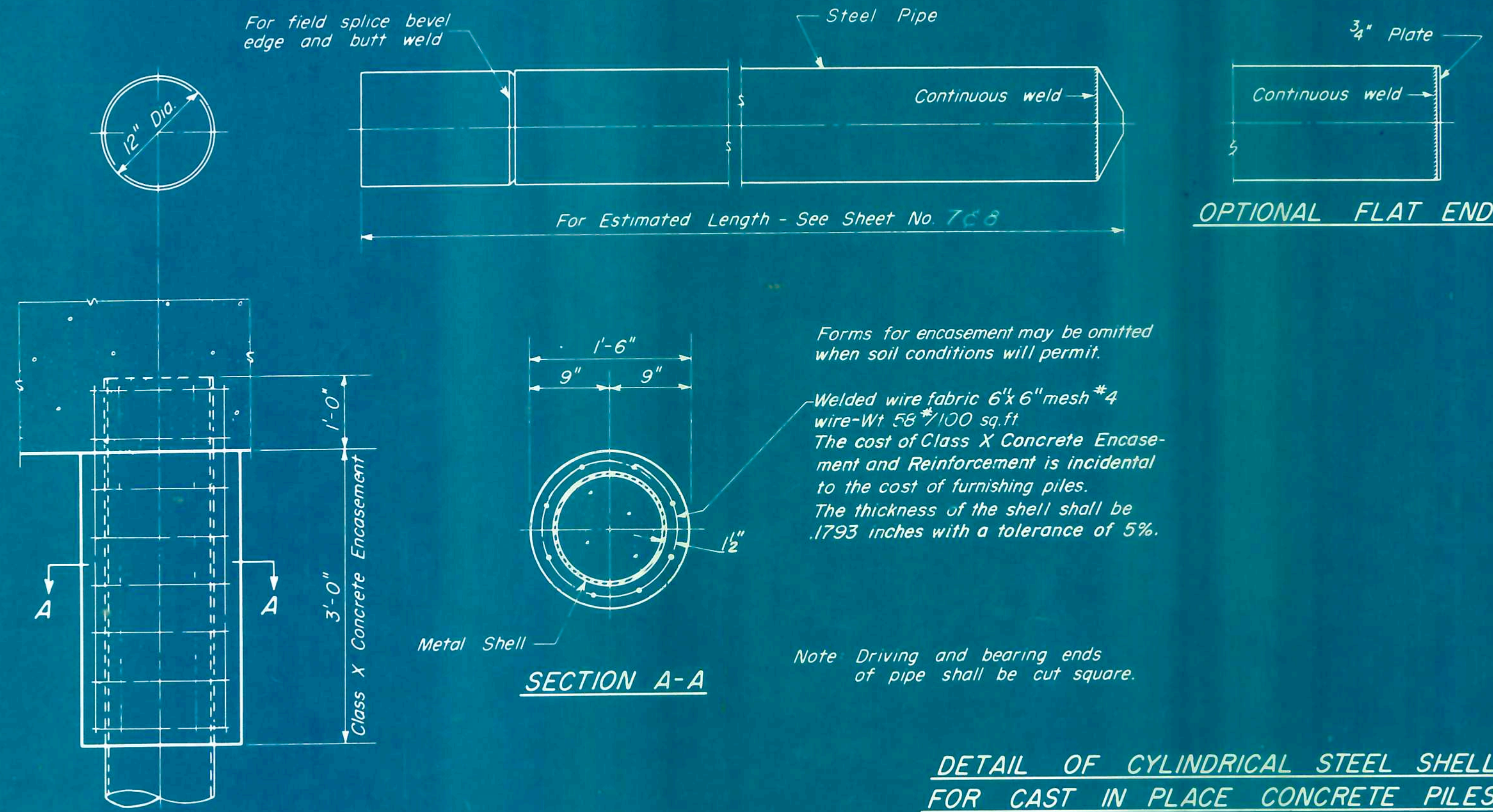
Qu-Unconfined Compressive
Strength - $\frac{1}{2}$ ft.
w - Water Content - percentage
of oven dry weight - %

Type failure:
B-Bulge Failure
S-Shear Failure
E-Estimated Value
P-Penetrometer

BORINGS
F.A.I. RT. 57 SEC. 10, 27-38B
FORD COUNTY
STA. 1730+30

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

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO.
1 A 2 57	27-38B	FORD	28	22	18
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT			18 SHEETS



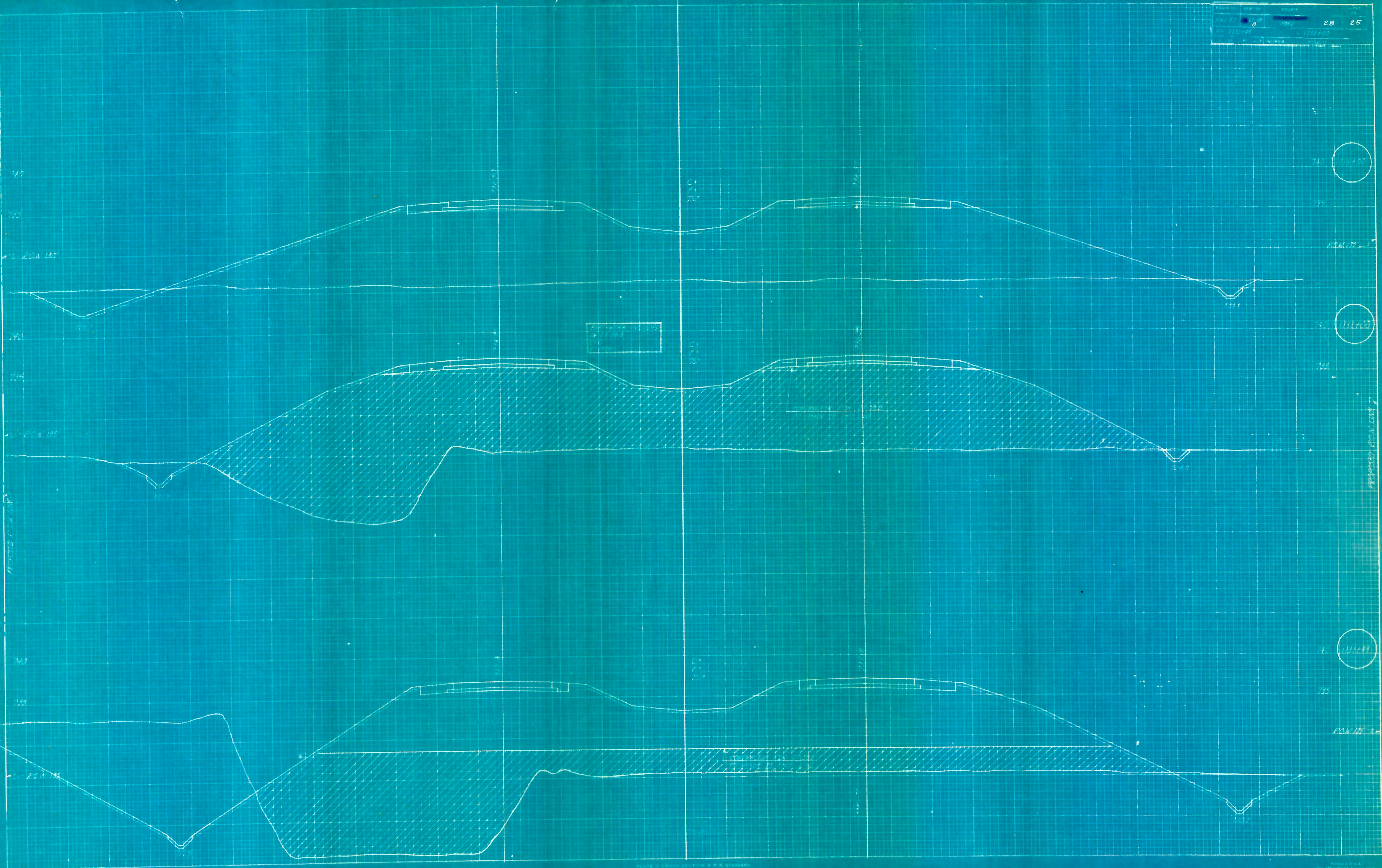
DESIGNED	George H. Bazi	EXAMINED	
CHECKED	Samuel T. Deane	PASSED	ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
DRAWN	W. A. Sausaman	APPROVED	ENGINEER OF DESIGN
CHECKED	S. D.		CHIEF HIGHWAY ENGINEER

DETAIL OF PRECAST CONCRETE PILES

CONCRETE PILES
F.A.I.R.T. 57 SEC. 1027-38B
FORD COUNTY
STA. 1730+30

FINAL SURVEY
 SITE NO. 111149
 AREA 111149

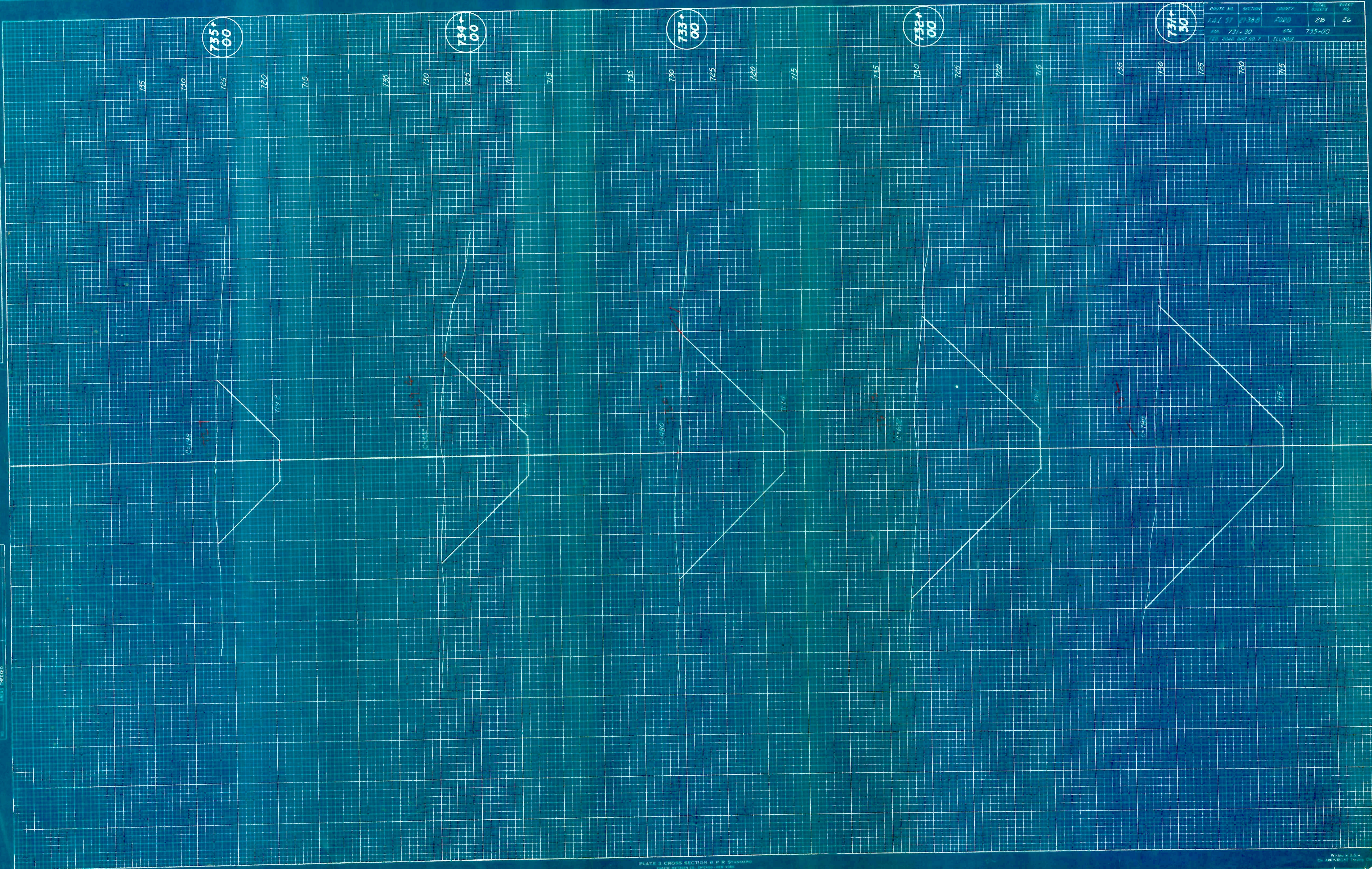
FINAL SURVEY
 SITE NO. 111149
 AREA 111149



ROUTE NO.	SECTION	COUNTY	TOTAL SHEET'S	SHEET NO.
FAI 57	2136.8	FOXD	28	26
STA	731+30	STA	735+00	
FED. ROAD DIST. NO. 7		ILLINOIS		

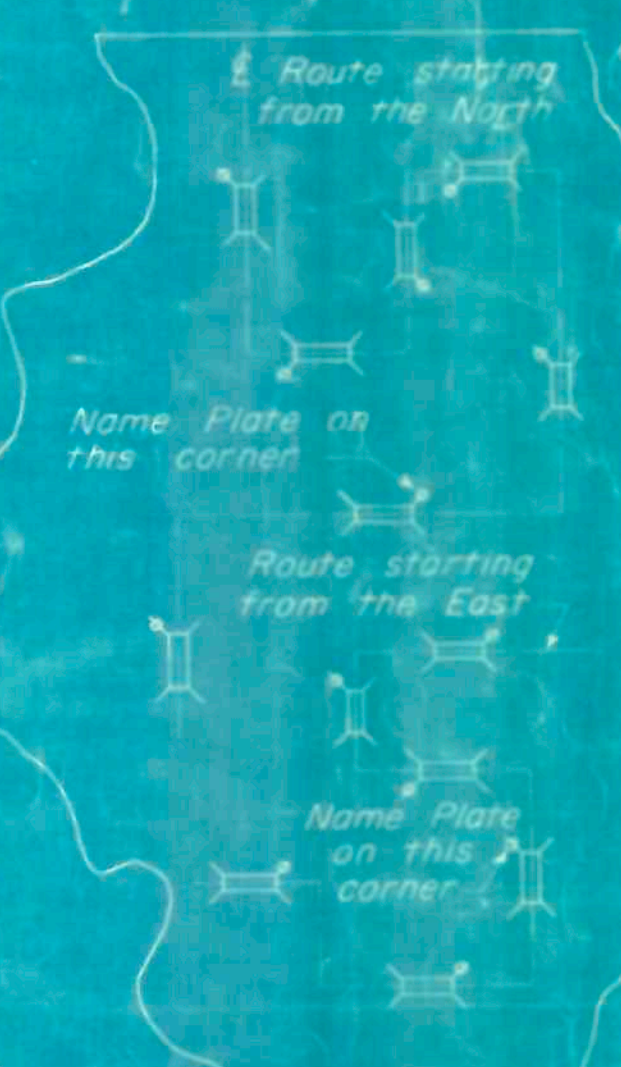
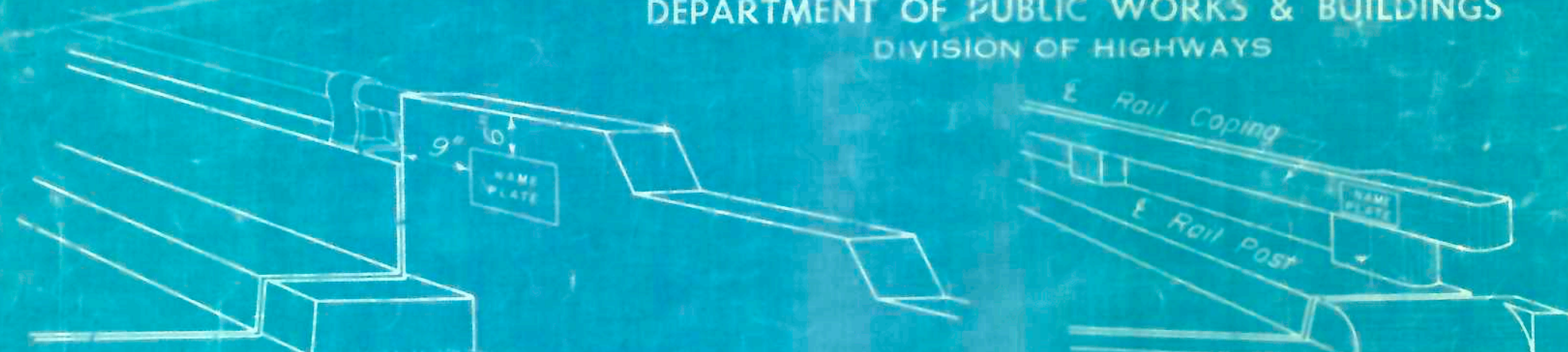
FINAL SURVEY NOTE BOOK NO.	SURVEYED PLOTTED TEMPLATE AREA CHECKED	BY	DATE

ORIGINAL SURVEY NOTE BOOK NO.	DESIGNED PLANNED TEMPLATE AREAS CHECKED	BY	DATE



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

Sheet 1 of 1



FOR MULTI-SPAN CULVERTS

Note: Unless otherwise noted on the plans, Name Plates are not required for single box culverts.

FOR TRUSSES

SEE DESIGN PLANS
FOR
LETTERING

Lettering For

5 Lines

6 Lines

7 Lines

SECTIONS A-A

Center of $\frac{1}{8}$ " countersunk holes for bolts when required

- Material: Best quality brass or bronze
- Border: Raised $\frac{1}{8}$ inch. Square cut and not tapered. Top surface polished.
- Lettering: Raised $\frac{1}{8}$ inch. Square cut and not tapered. Top surface polished.
- For Concrete Rails, Culvert Headwalls & Subways: Four lugs at least three inches long, cast on back of plate.
- For Steel Truss Span: Plate to be fastened on steel member at fabricating shop by brazing around entire perimeter of plate.
- For Steel Rails: Plate to be bolted on with 4 - $\frac{1}{2}$ " brass or bronze hex head bolts.
- For Concrete Rails: Plate to be centered on E of rail post and E of handrail coping.
- For Steel Truss Span: Bronze to end post about five feet above roadway.
- For Steel Rails: Place midway between horizontal rail members.
- For Subways: See design plans for location.

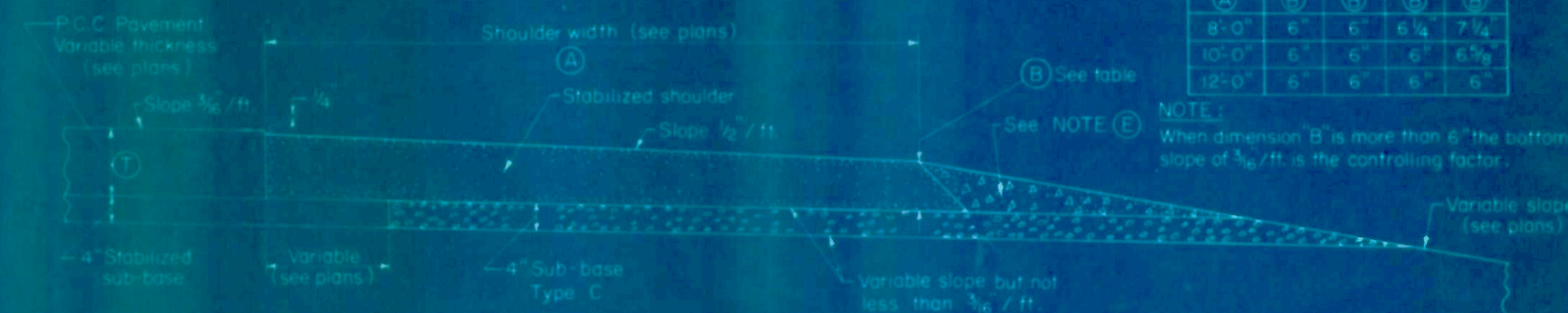
DETAIL OF NAME PLATE FOR BRIDGES

STD. 2113-1

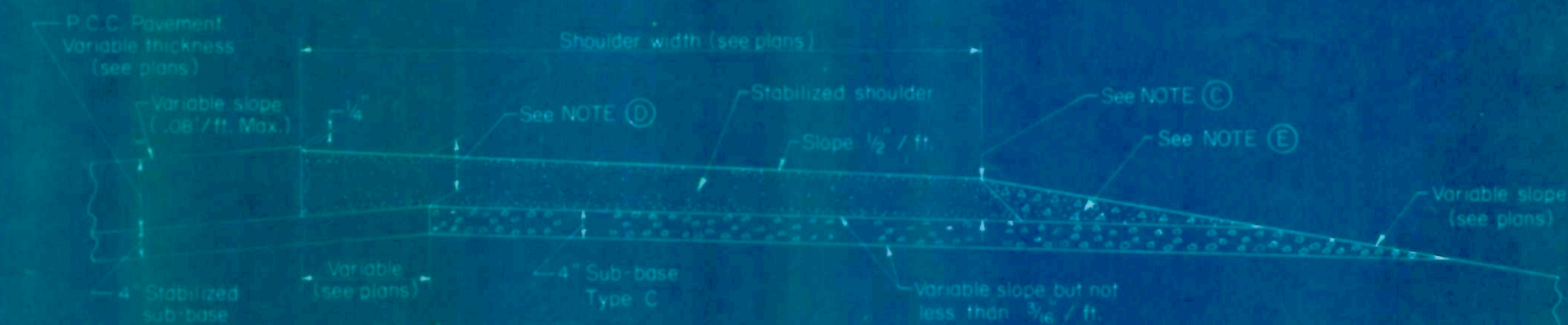
STANDARD DESIGN
STABILIZED SHOULDER DETAILS FOR P.C.C. PAVEMENT
(FULL WIDTH OF SHOULDER)

Shld. width	Pavt. thickness	T
(A) 7'	(B) 8"	(C) 9"
8'-0"	6"	6"
10'-0"	6"	6"
12'-0"	6"	6"

NOTE: When dimension B is more than 6" the bottom slope of $\frac{1}{4}$ " / ft. is the controlling factor.

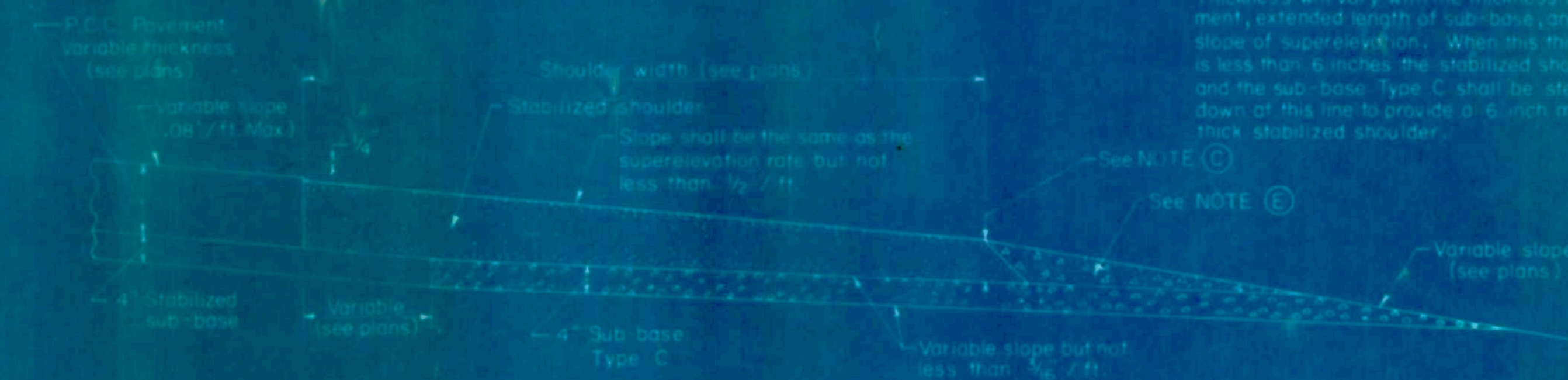


SHOULDERS FOR TANGENT PAVEMENT



SHOULDERS FOR SUPERELEVATED PAVEMENT
(OUTSIDE OF CURVE)

NOTE "C": Thickness shall be 6 inches, but because of the variations in the thickness of pavement and the slope of super-elevation it may be necessary to increase this thickness so that the bottom slope will not be less than $\frac{1}{4}$ " / ft.



SHOULDERS FOR SUPERELEVATED PAVEMENT
(INSIDE OF CURVE)

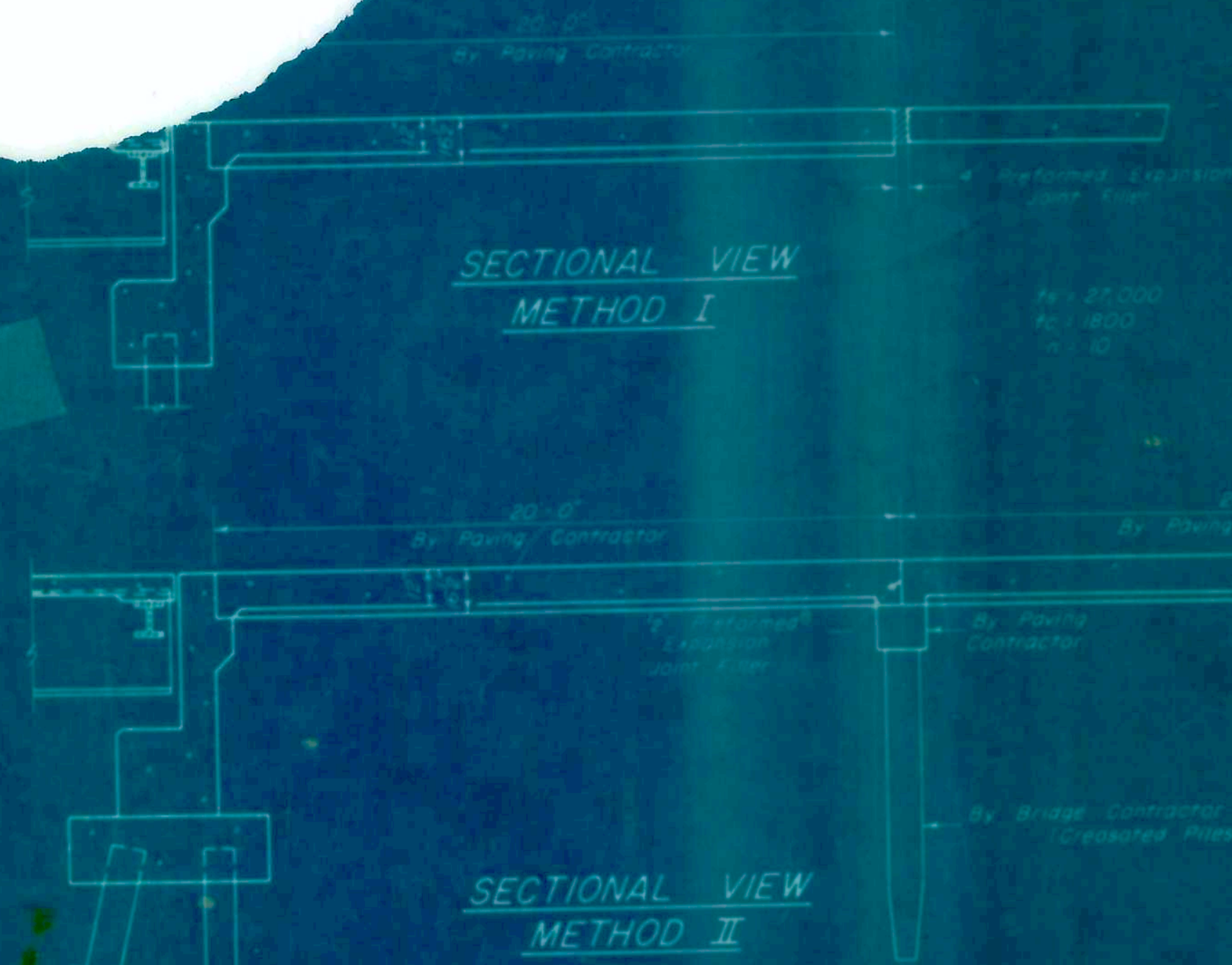
NOTE "E": At the option of the contractor, topsoil or gravel or crushed stone grade 7, 8, or 9 shall be used for this area. This work will not be paid for separately but shall be considered incidental to stabilized shoulders.

STATE OF ILLINOIS DEPARTMENT OF PUBLIC WORKS & BUILDINGS DIVISION OF HIGHWAYS		ISSUED 7-7-66	
PASSED	1967	REVISED	9-8-67
APPROVED			

STANDARD 2237-2

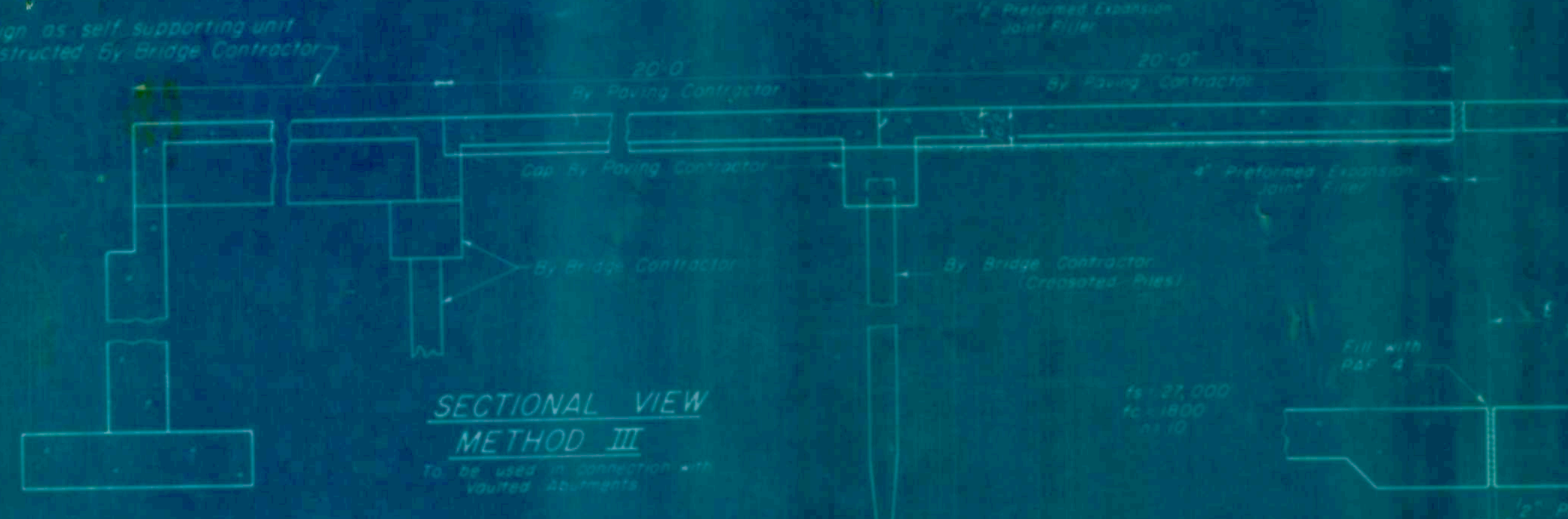
DETAILS OF BRIDGE APPROACHES FOR FEDERAL AID INTERSTATE ROUTES

SECTIONAL VIEW
METHOD I



SECTIONAL VIEW
METHOD II

Design as self-supporting unit
Constructed by bridge contractor



Note: Details of Approach Slab by
Paving Contractor same as
shown for Method II

SECTIONAL VIEW
METHOD III

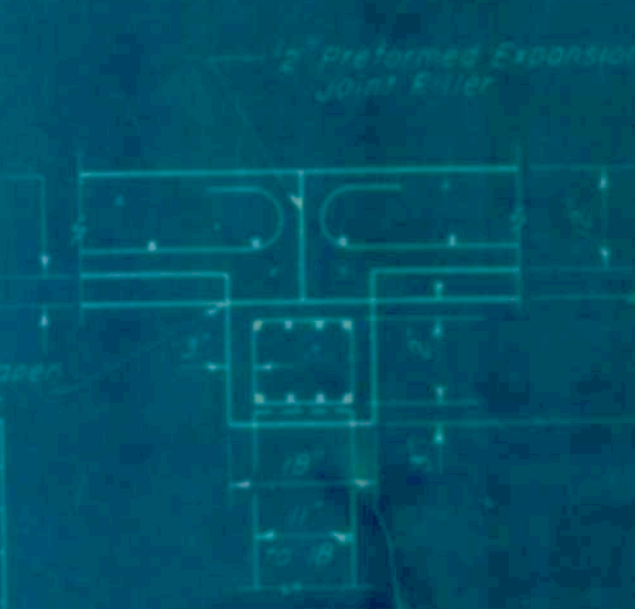
To be used in connection with
vaulted abutments



DETAIL OF
MUD JACK CYLINDER

SECTION A-A

Variable for crown
or super-elevation
Similar construction
at abutment ends



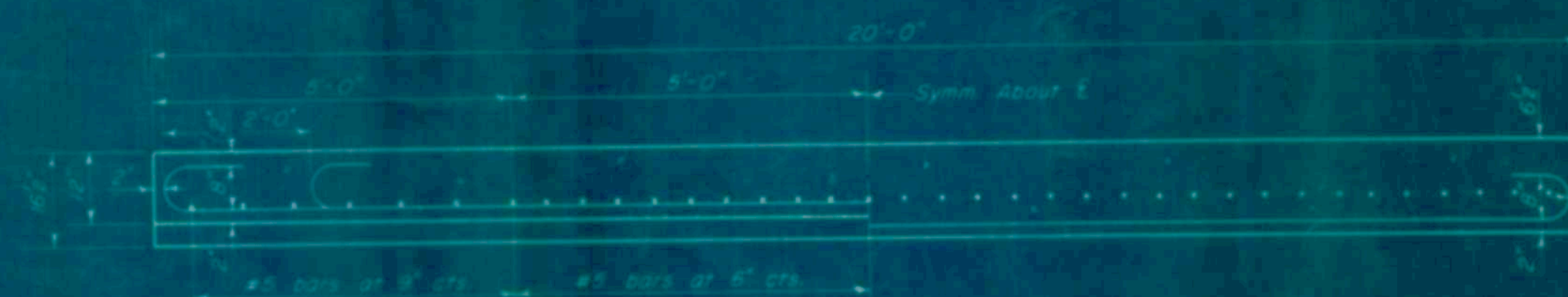
OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

As approved by the Engineer, the Contractor may elect
to reduce the widths of pour by use of the Optional
Longitudinal Construction Joint shown.
Joint shall be located at the edge of Traffic Lane.



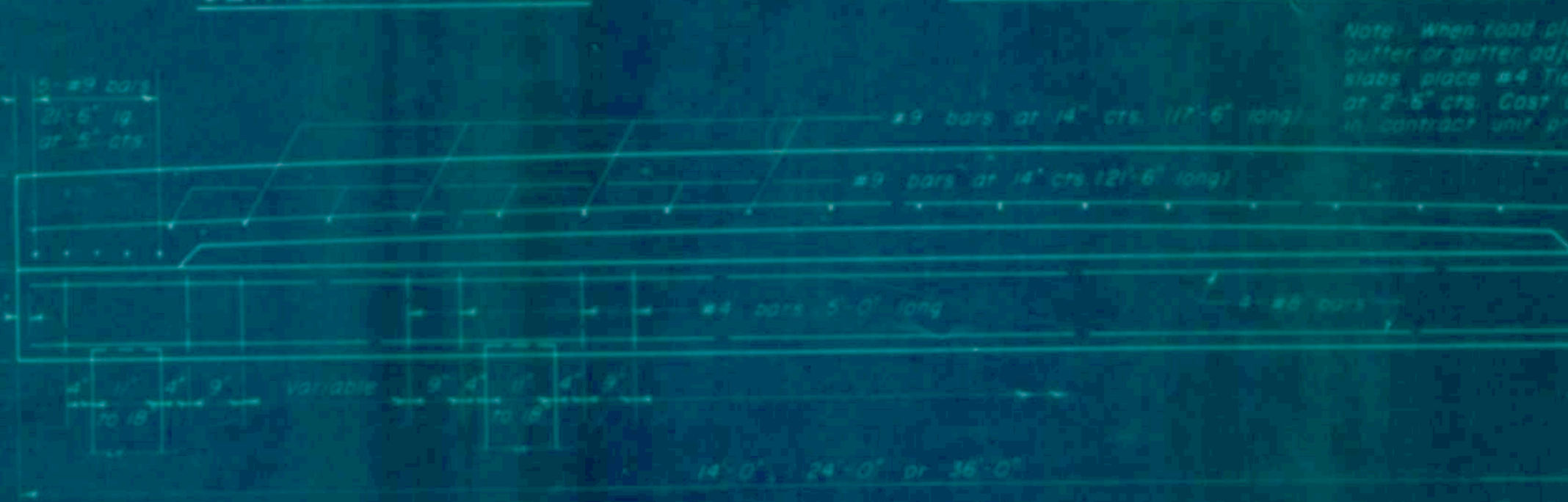
LONGITUDINAL EXPANSION JOINT

To be used when Approach Slabs are greater than 36'-0" wide.
Joint shall be placed at edge of Traffic Lane nearest to the
E of the total width of Approach Slab.

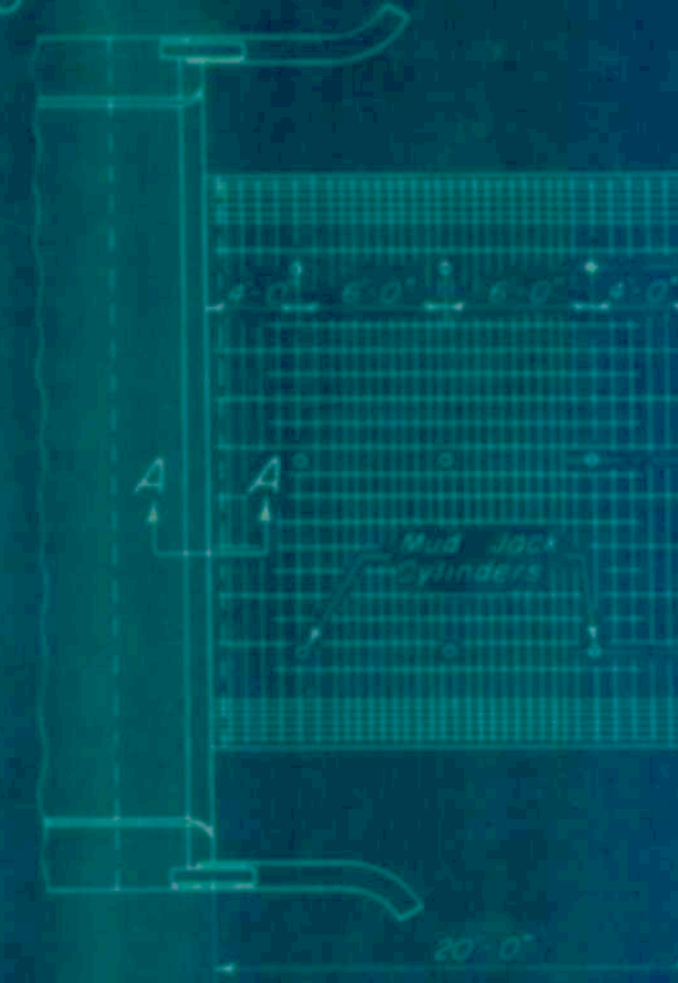


LONGITUDINAL SECTION THRU
CENTER OF SLAB

LONGITUDINAL SECTION THRU
THICKENED EDGE OF SLAB



SECTIONAL VIEW OF CONCRETE SLAB AND CAP



PLAN
METHOD I

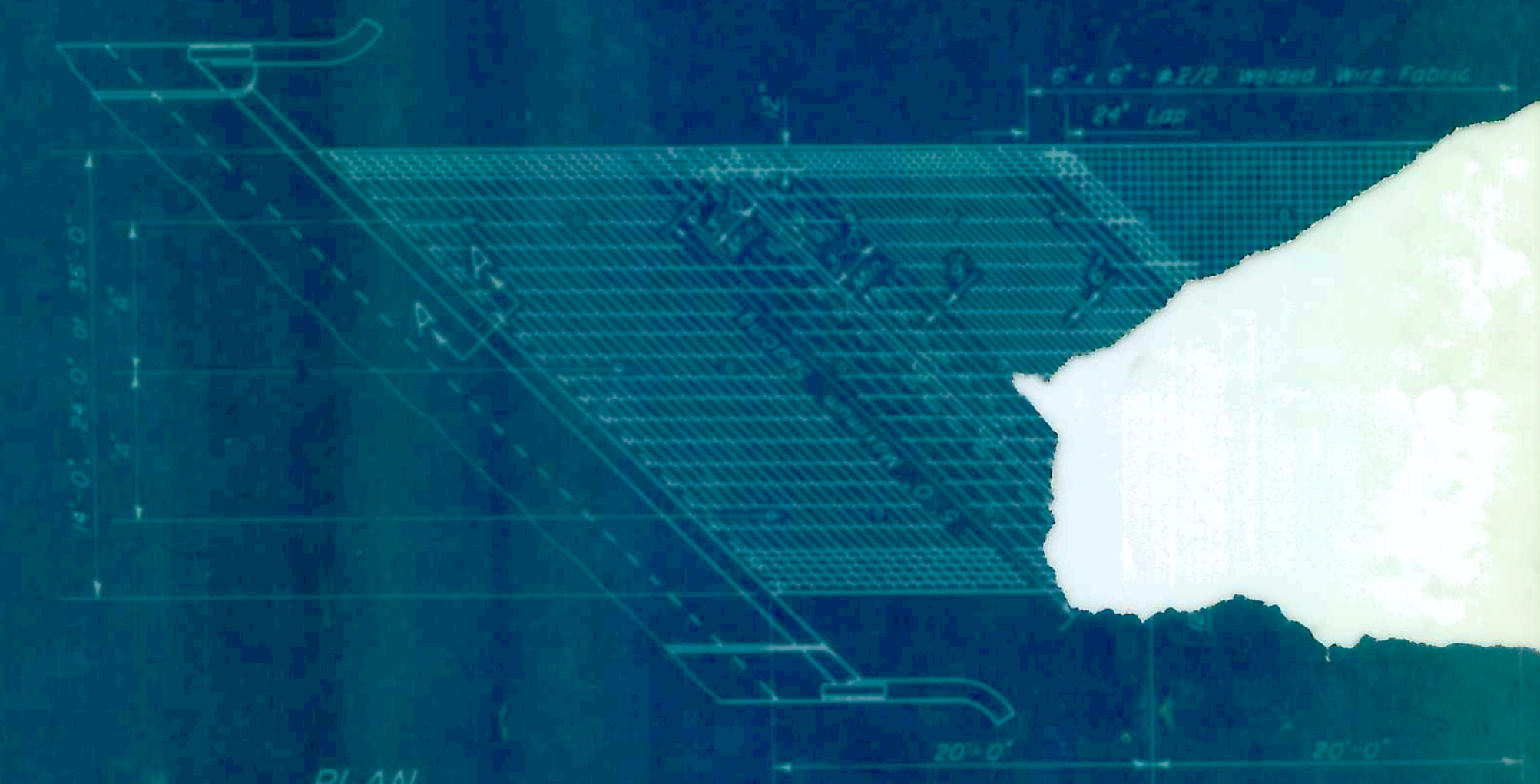
For skew of less than 10°
omit wire fabric for skew
of 10° or more use #2 Welded
Wire Fabric, 6" x 6", placed 2' x
below top of slab.



TABLE OF "A" DIMENSIONS

Width of Approach Slab	Dimension A (Spacing of Mud Jack Cylinders)
14'	6'-0"
24'	8'-0"
36'	12'-0" Spaces at 8'-0"

Expanded Metal weighing not less than 75 Lbs.
per 100 sq ft. or a welded bar mat weighing
not less than 75 Lbs. per 100 sq ft. having
members of equal size in both directions and
spaced not over 8" apart may be used instead
of the #2 Welded Wire Fabric, 6" x 6", provided
the expanded metal or bar mat is furnished
at no additional cost to the State.



PLAN
METHOD II

GENERAL NOTES

The slab or slabs will be paid for at the contract unit price for
PORTLAND CEMENT CONCRETE PAVEMENT (16'-0" x 12" x 16'-0").
The concrete slab will be paid for at the contract unit price
for CLASS 4 CONCRETE.
4a. Reinforcement Bars will be paid for at the contract unit price for
REINFORCEMENT BARS, except as noted.
The Welded Wire Fabric, Mud Jack Cylinders and Preformed
Expansion Joint Filler shall be included in the unit price bid for
PORTLAND CEMENT CONCRETE PAVEMENT (16'-0" x 12" x 16'-0").
Preformed Expansion Joint Filler shall conform to Section 102
of the Standard Specifications.
Width of Bridge Approach Slab pours shall be determined before
the reinforcement bars are fabricated.
The Contractor shall, after completion of the finishing operations, mark
the location of the Mud Jack Cylinders.

The transition for gutter shall be made in
100 feet and will be paid for as CONCRETE
GUTTER, of the type specified.

The transition for curb and gutter shall be made in
100 feet and will be paid for as COMBINATION
CURB and GUTTER, of the type specified.

STATE OF ILLINOIS	ISSUED 2-10-66	For: House
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS		
DIVISION OF HIGHWAYS		
PASSED July 15, 1967	WAS 2-2-59	AT 5-10-67
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES	CET 10-22-59	AT 7-15-67
APPROVED July 15, 1967	WAS 2-9-59	
ENGINEER OF DESIGN	WAS 2-10-62	
	WAS 1-10-64	