

INDEX OF SHEETS **06-12-2020 LETTING ITEM 120**

1	COVER SHEET
2	TYPICAL SECTIONS & SUMMARY OF QUANTITIES
3	PLAN & PROFILE
4-12	BRIDGE PLANS
13	BORINGS
14-15	EXISTING BRIDGE PLANS

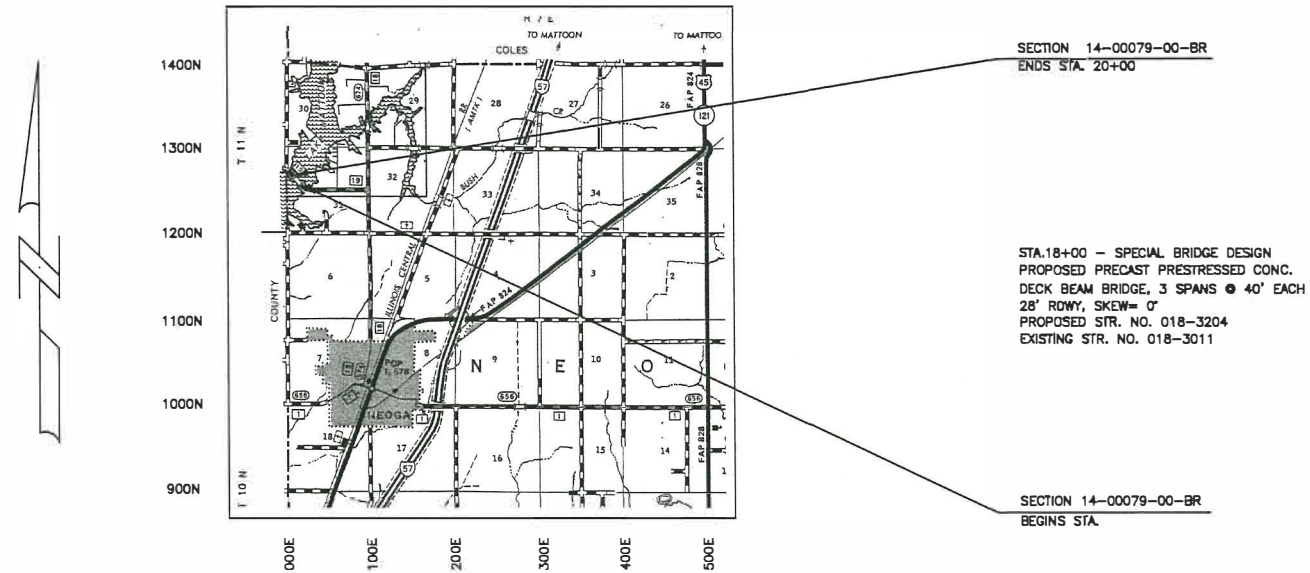
STANDARDS:
(SEE PROPOSAL)

- 515001-04 - NAME PLATES
- 631032-09 - TRAF BARRIER TERMINALS, TYPE 6A
- 701901-08 - TRAFFIC CONTROL DEVICES
- BLR 21-9 - TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
SURFACE TRANSPORTATION PROGRAM-BRIDGES
CUMBERLAND COUNTY
SECTION 14-00079-00-BR
STRUCTURE NO. 018-3204
PROJECT NO. W 949 (544)
JOB NO. C-97-053-19
COUNTY HIGHWAY 19

SCALES

PLAN	1 INCH = 50 FEET
PROFILE HORZ.	1 INCH = 50 FEET
PROFILE VERT.	1 INCH = 10 FEET



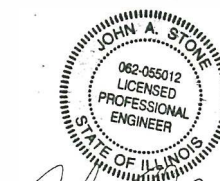
SECTION 14-00079-00-BR
ENDS STA. 20+00

STA.18+00 - SPECIAL BRIDGE DESIGN
PROPOSED PRECAST PRESTRESSED CONC.
DECK BEAM BRIDGE, 3 SPANS @ 40' EACH
28' ROWY, SKEW= 0'
PROPOSED STR. NO. 018-3204
EXISTING STR. NO. 018-3011

SECTION 14-00079-00-BR
BEGINS STA.

FUNCTIONAL CLASS: RURAL MINOR COLLECTOR
ADT = 700
DESIGN SPEED = 50 MPH

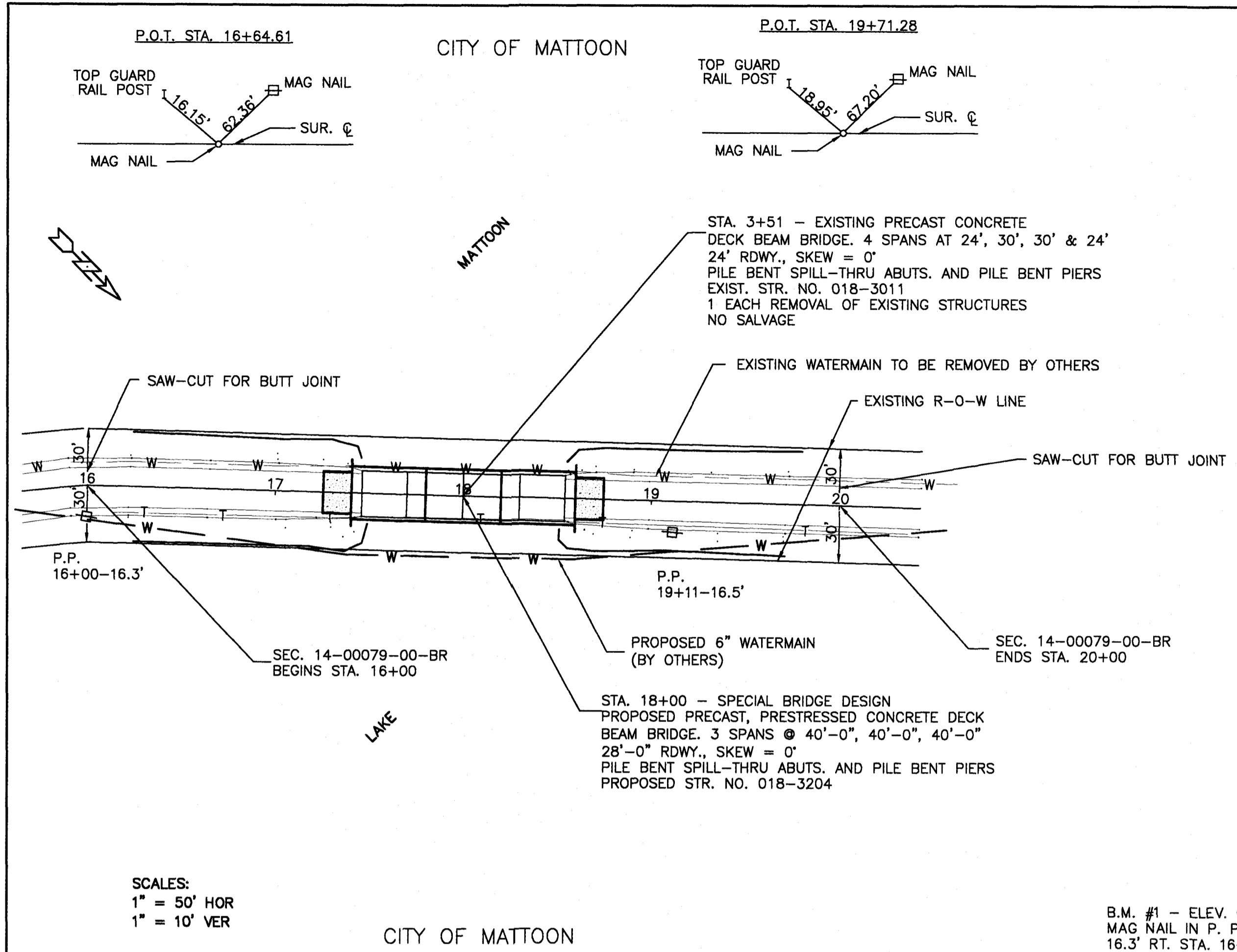
TOLL FREE JOINT UTILITY LOCATING
INFORMATION FOR EXCAVATORS (J.U.L.I.E.)
TELEPHONE NO. 1-800-892-0123



John A. Stone 04/07/2020
ILLINOIS REGISTERED PROFESSIONAL ENGINEER # 55012
LICENSE EXPIRES NOVEMBER 30, 2021
PROFESSIONAL DESIGN FIRM #184-000832

ILLINOIS DEPARTMENT OF TRANSPORTATION	
APPROVED:	<i>[Signature]</i> 04/07/2020 LOCAL AGENCY, COUNTY ENGINEER
PASSED:	4-8-2020 <i>[Signature]</i> 2020 DISTRICT SEVEN ENGINEER OF LOCAL ROADS & STREETS
RELEASING FOR BID BASED ON LIMITED REVIEW	4-8-2020 <i>[Signature]</i> 2020 REGION FOUR ENGINEER

SECTION	14-00079-00-BR	TOTAL SHEETS	15	SHEET NO.	3
COUNTY	WAYNE	C.H.	19		
STA. 16+00		TO STA. 20+00			

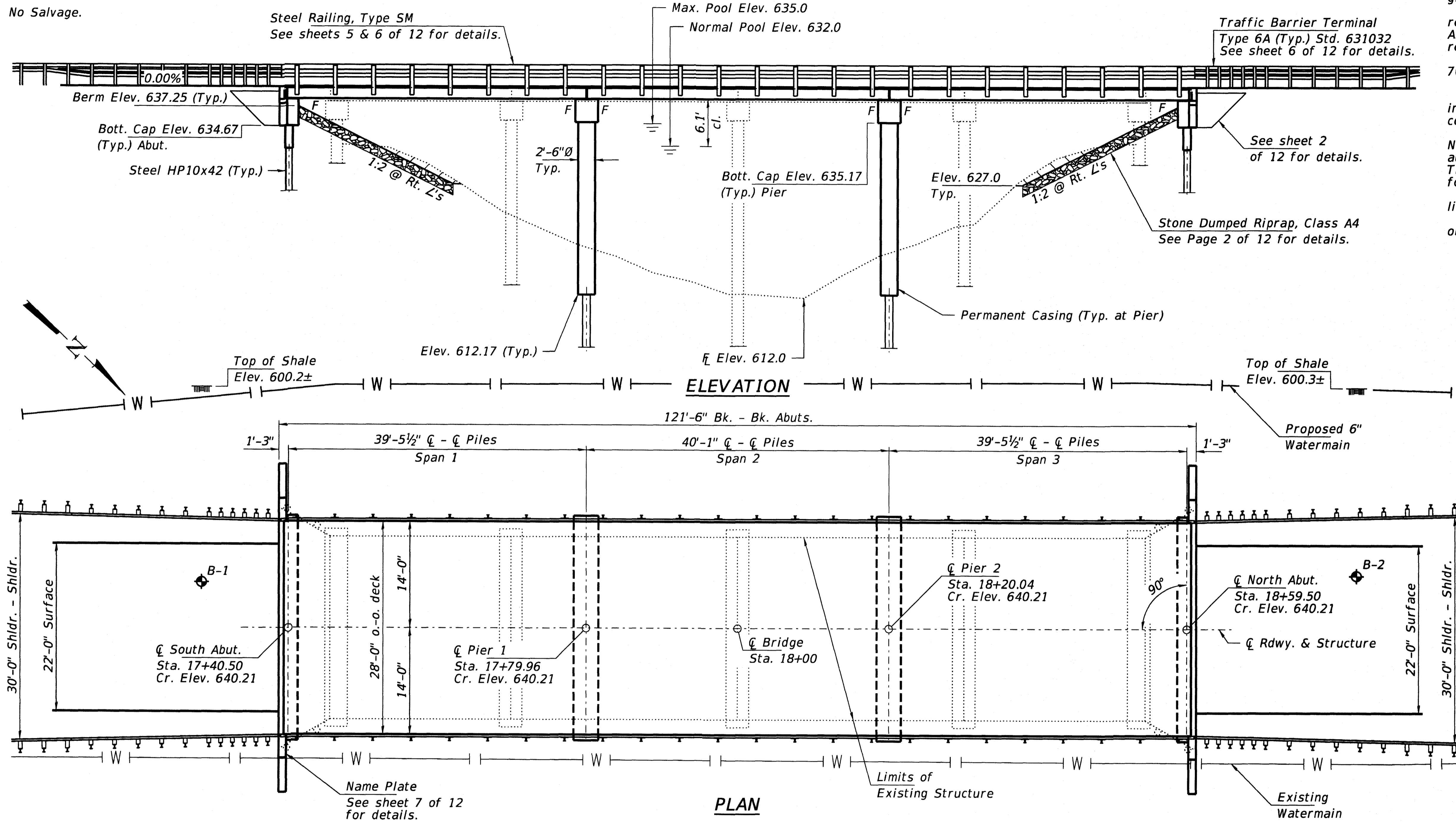


<p>PCC BASE COURSE 8"</p> <p>SOUTH END BRIDGE = 38 SQ YD NORTH END BRIDGE = 38 SQ YD TOTAL = 76 SQ YD (SEE SPECIAL PROVISIONS)</p>		<p>HOT-MIX ASPHALT SURFACE COURSE, MIC "C", N70</p> <p>SOUTH END BRIDGE = 38 TON NORTH END BRIDGE = 38 TON OVER BRIDGE = 49 TON TOTAL = 125 TON</p>		<p>GUARDRAIL REMOVAL</p> <p>LT. & RT. STA. 17+03 TO STA. 17+46 = 86 FOOT LT. & RT. STA. 18+54 TO STA. 18+97 = 86 FOOT TOTAL = 172 FOOT</p>		<p>TRAFFIC BARRIER TERMINALS, TYPE 6A</p> <p>EACH CORNER OF BRIDGE = 4 EACH</p>		<p>When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Cumberland County Highway Department as to the location of such utilities and is only included for the convenience of the bidder.</p>	
<p>BITUMINOUS MATERIALS (PRIME COAT)</p> <p>SOUTH END BRIDGE = 190 POUND NORTH END BRIDGE = 190 POUND TOTAL = 380 POUND</p>		<p>UTILITIES</p> <p>ELECTRIC: COLES MOULTRIE ELECTRIC 104 DEWITT AVE. E. MATTOON, IL 61938 618-432-7223</p> <p>WATER: LAKE MATTOON PWD P.O. BOX 491 NEOGA, IL 62447 217-895-2313</p> <p>TELEPHONE: FRONTIER COMMUNICATIONS 1205 S CENTRAL AVE PARIS, IL 61944 217-463-3129</p>		<p>EXISTING CENTERLINE GRADE</p> <p>PROPOSED CENTERLINE GRADE (TOP 2" HMA SURFACE)</p> <p>NORMAL POOL ELEV. 632.0 MAX. POOL ELEV. 635.0</p> <p>F.L. 612.0</p> <p>PROPOSED 6" WATERMAIN (BY OTHERS)</p>		<p>640</p> <p>635</p> <p>630</p> <p>625</p> <p>620</p> <p>615</p> <p>610</p>		<p>640</p> <p>635</p> <p>630</p> <p>625</p> <p>620</p> <p>615</p> <p>610</p>	
<p>640.0 640.0</p>		<p>640.0 640.15 640.21</p>		<p>640.0 640.21</p>		<p>640.0 640.15 640.0</p>		<p>640.0</p>	
<p>16+00</p>		<p>17+00</p>		<p>18+00</p>		<p>19+00</p>		<p>20+00</p>	

EXISTING STRUCTURE NO. 018-3011: Sta. 3+51 - Four span precast concrete channel beam bridge on precast concrete pile bent spill-thru abutments and precast concrete pile bent piers.

Structure closed to traffic during construction.

No Salvage.

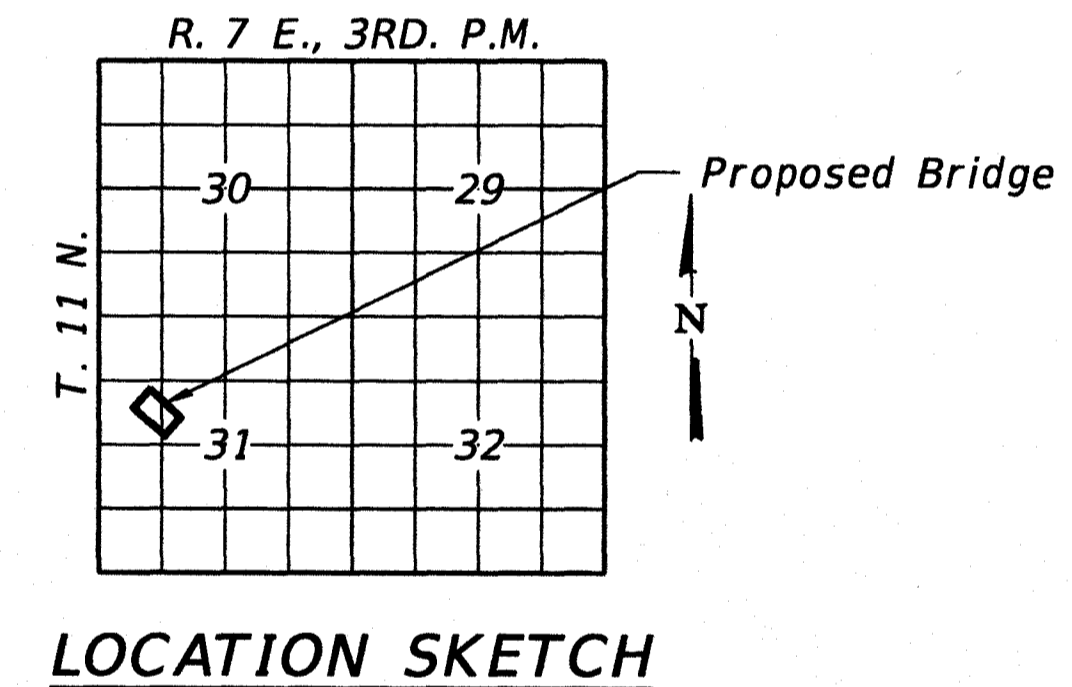


GENERAL NOTES

Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer. The Contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at South Abutment & Pier 2 or approved by the Engineer before ordering the remainder of piles. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (1L Modified). See Special Provisions. All bars to be epoxy coated. Excavation required to construct the Abutments and Piers shall be included in the cost of Concrete Structures. No additional compensation will be allowed for Structure Excavation. All proposed construction activities shall be in accordance with Nationwide Permit number 14 of the Department of the Army authorized under Section 404 of the Clean Water Act. The IEPA has issued Section 401 Water Quality Certification for this activity. See Special Provisions for conditions. Existing Concrete Piling can be cut at the existing ground line for removal. See Special Provisions. Permanent Encasement shall be removed above elevation 631.0 once the concrete caps are in place.

INDEX OF STRUCTURE SHEETS

1. General Plan & Elevation
2. Riprap Details
3. 17"x48" PPC Deck Beam
4. 17"x48" PPC Deck Beam Details
5. Superstructure Details
6. Steel Railing, Type SM
7. Abutments
8. Piers
9. HP Pile Details
10. Borings
- 11-12. Existing Plans



DESIGN SPECIFICATIONS

2017 AASHTO LRFD Bridge Design Specifications, 8th Edition with all interims.

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f'ci = 5,000 psi
fpu = 270,000 psi (1/2"Ø low lax. strands)
fpbt = 201,960 psi (1/2"Ø low lax. strands)
fy = 60,000 psi (Reinf.)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.188g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.400g
Soil Site Class = D

WATERWAY INFORMATION

Drainage Area = 52.6 Sq. Mi. Low Grade Elev. 640.0 @ Sta. 16+00									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	20	6117	1020	1064	635.4	0	0	635.4	635.4
Base	100	9270	1321	1360	636.8	0	0	636.8	636.8

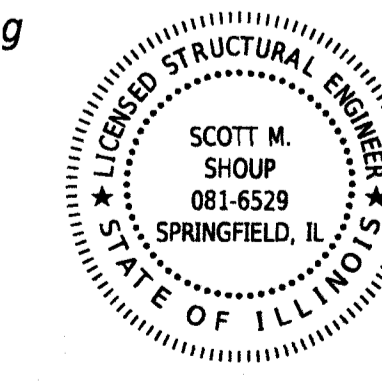
* The water level of the lake is controlled by a spillway 1.5 miles downstream.
** Normal Pool Elevation 632.0 feet.

DESIGN SCOUR ELEVATION TABLE

Event/Limit State	Design Scour Elevations (ft.)				Item 113
	W. Abut.	Pier 1	Pier 2	E. Abut.	
Q100	634.6	600.3	600.3	634.6	5
Q200	634.6	600.3	600.3	634.6	
Design	634.6	600.3	600.3	634.6	
Check	634.6	600.3	600.3	634.6	

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO LRFD Specifications."

Scott M. Shoup
12/09/2019
ILLINOIS STRUCTURAL NO. 081-6529



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Ton		100	100
Stone Dumped Riprap, Class A4	Ton			500
Hot-Mix Asphalt Surface Course, IL-9.5, Mix "C", N70	Ton	51		51
Removal of Existing Structures	Each			1
Concrete Structures	Cu. Yd.		47.2	47.2
Concrete Encasement	Cu. Yd.		26.0	26.0
Concrete Cut-off Wall	Cu. Yd.		6.6	6.6
Precast Prestressed Conc. Deck Beams (17" Depth)	Sq. Ft.	3,360		3,360
Reinforcement Bars, Epoxy Coated	Pound		5,190	5,190
Steel Railing, Type SM	Foot	242		242
Furnishing Steel Piles HP10x42	Foot		667	667
Driving Piles	Foot		667	667
Test Pile Steel HP10x42	Each		2	2
Name Plates	Each		1	1
Permanent Casing	Foot		230	230
Waterproofing Membrane System	Sq. Yd.	378		378
P.C. Mortar Fairing Course	Foot	180		180

FILE NAME = 150193-ah-bridge.dgn	USER NAME = rthoick	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3045 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - S.M.S.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184.200968	PLOT DATE = 2/27/2020	DRAWN - M.M.P.	REVISED -
		CHECKED - S.W.M.	REVISED -

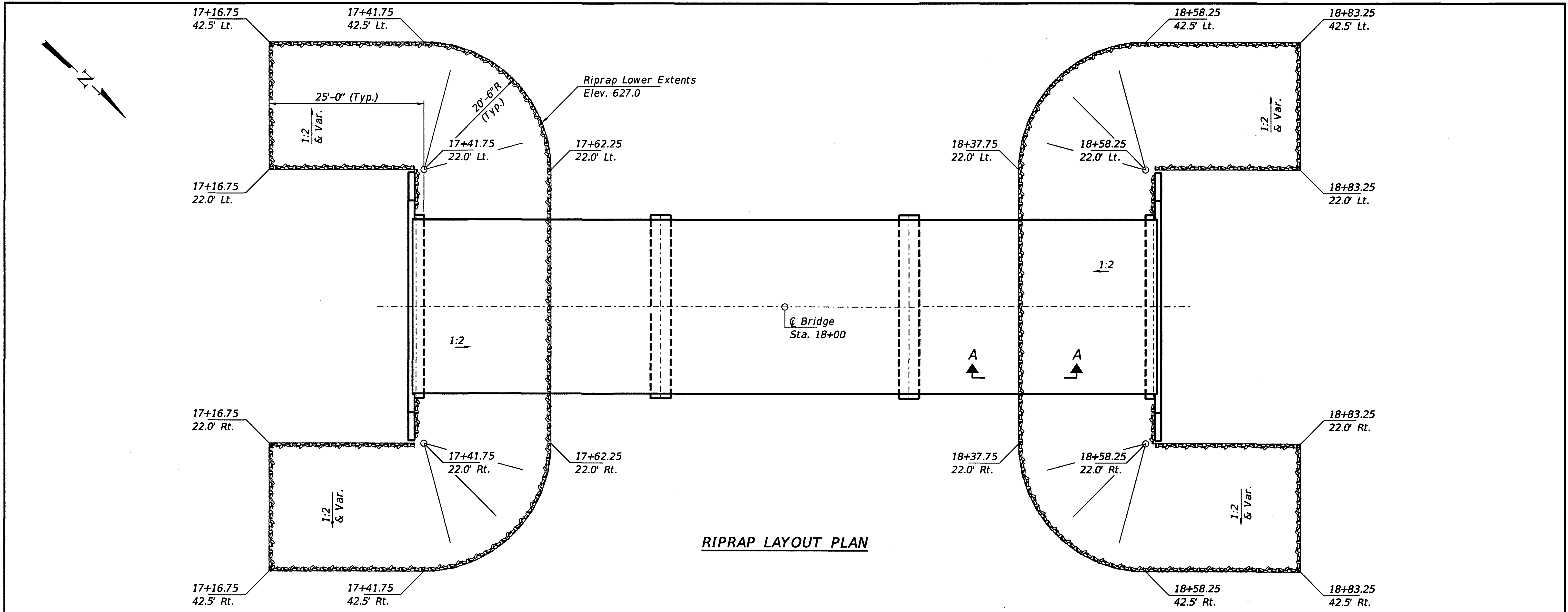
STATE OF ILLINOIS
CUMBERLAND COUNTY HIGHWAY DEPARTMENT

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 018-3204

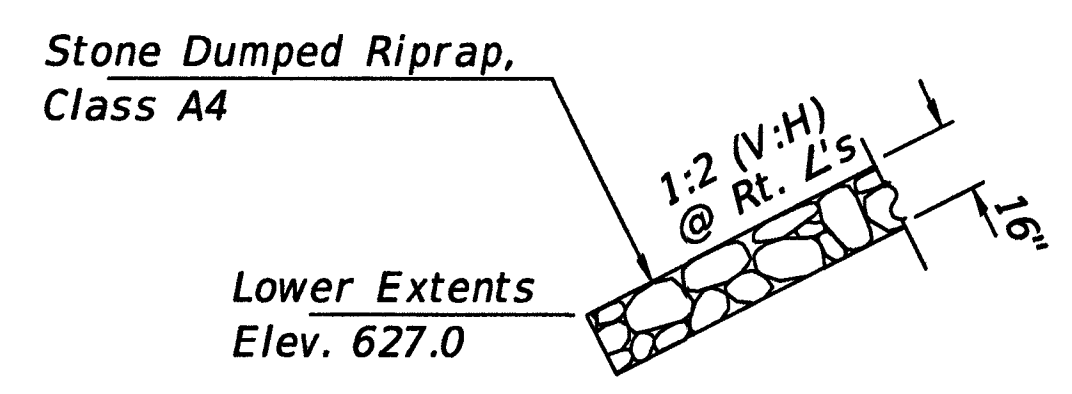
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
19	14-0079-00-BR	CUMBERLAND	15	4
CONTRACT NO. 95862				

SHEET NO. 1 OF 12 SHEETS

ILLINOIS FED. AID PROJECT



RIPRAP LAYOUT PLAN

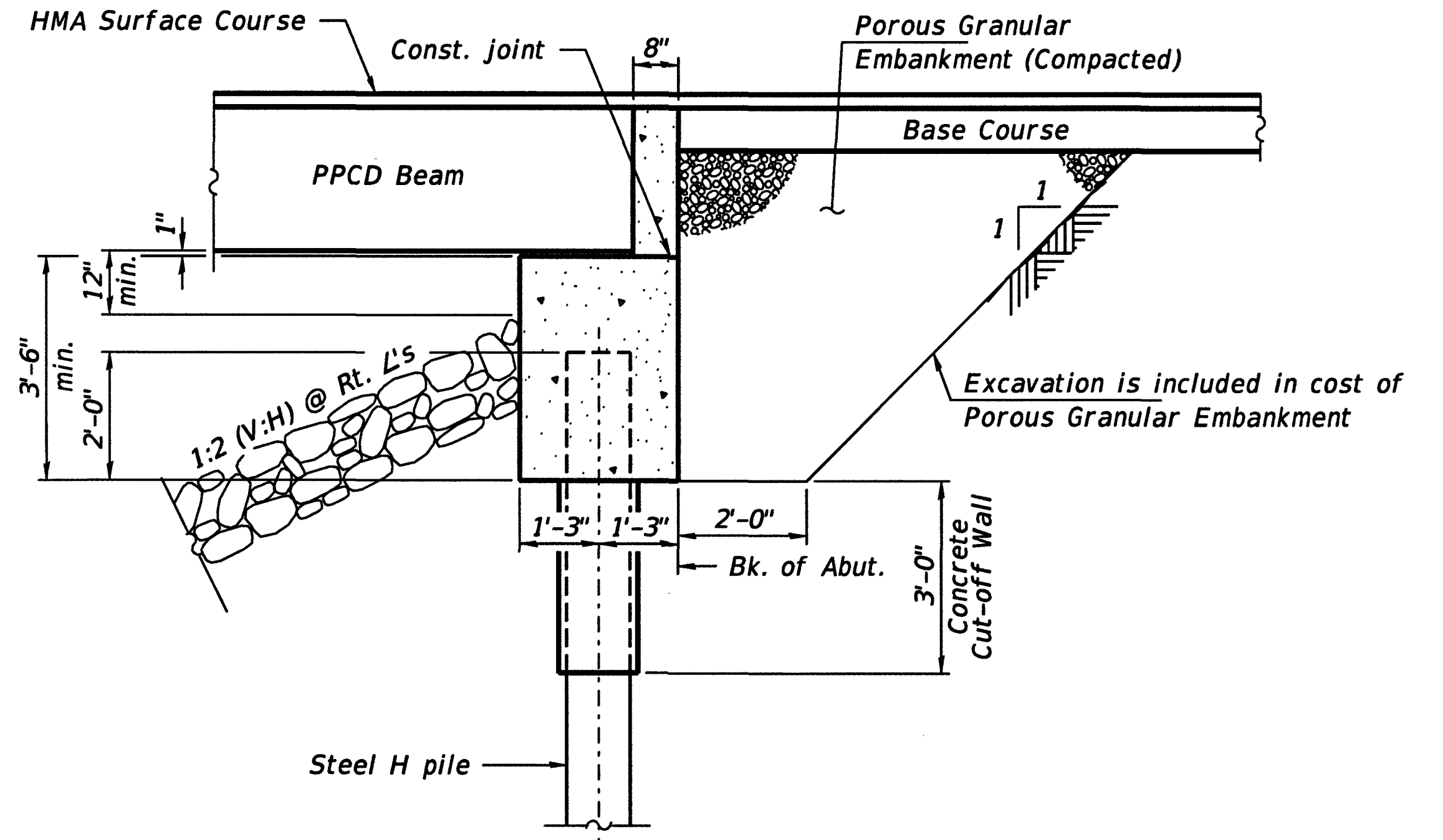


SECTION A-A

Note: See Special Provisions for Stone Dumped Riprap, Class A4.

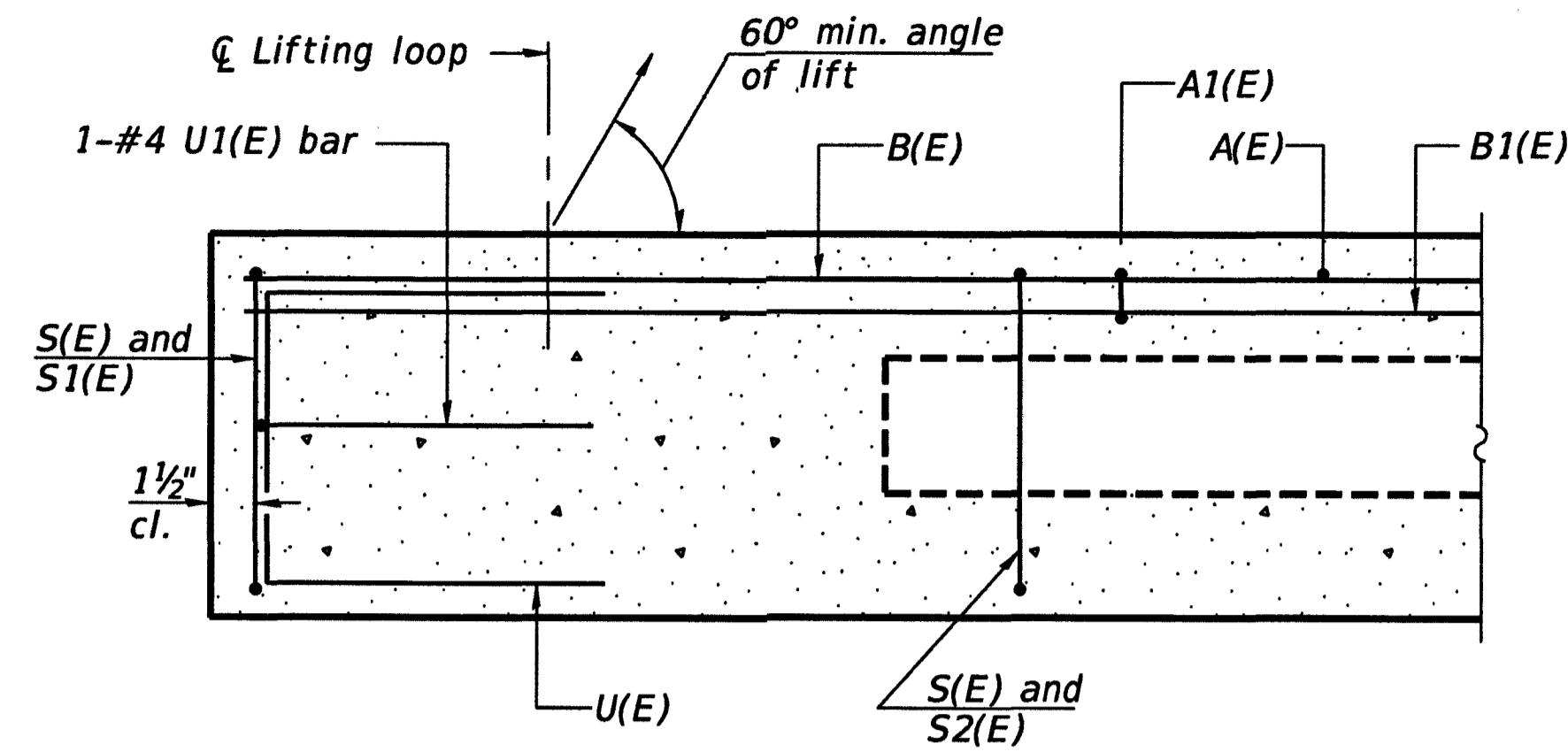
LAKE MATTOON
BUILT 201 BY
CUMBERLAND COUNTY
SEC. 14-00079-00-BR
STR. NO. 018-3204
LOADING HL-93

NAME PLATE
See Std. 515001

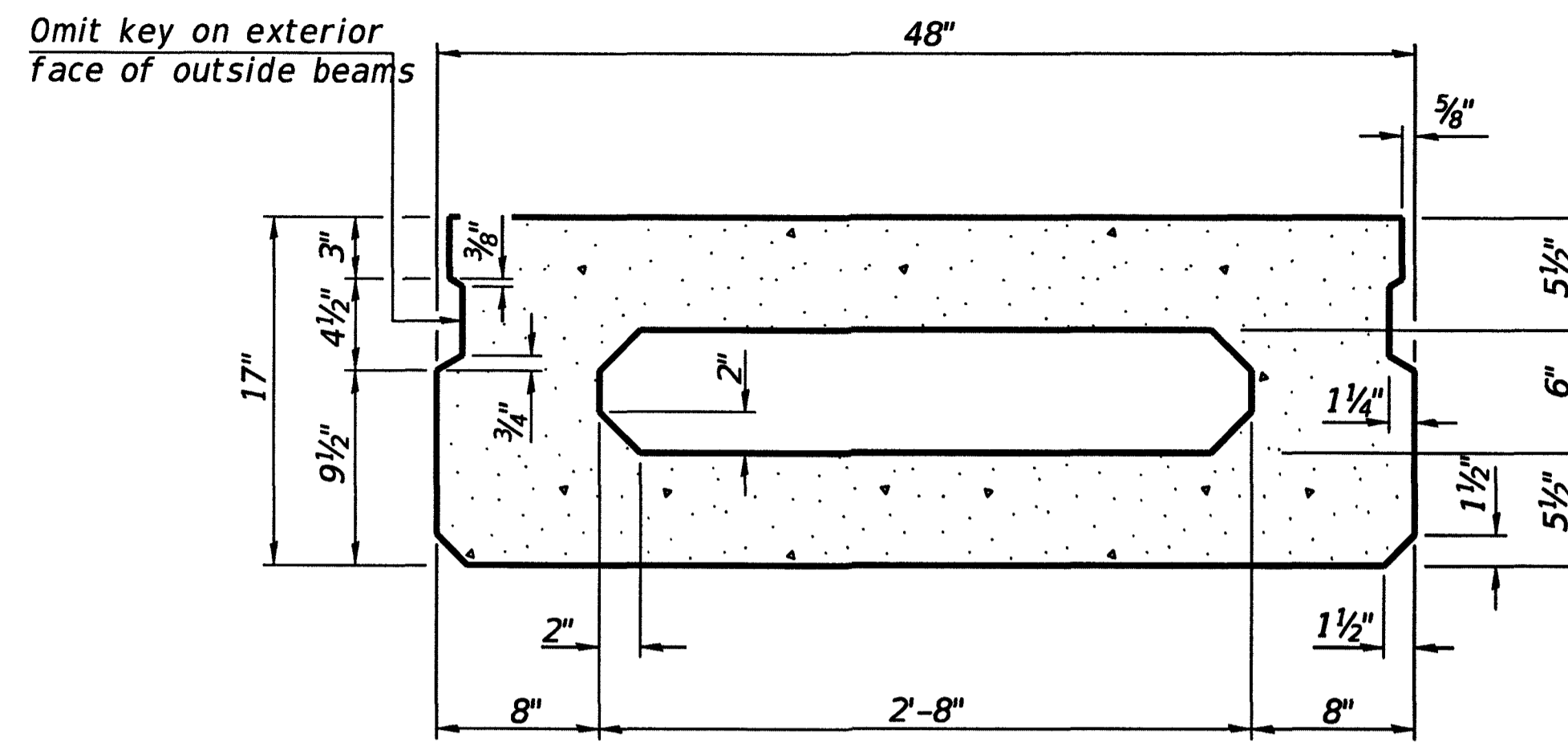


SECTION THRU ABUTMENT
(Horiz. dim. @ Rt. L's)

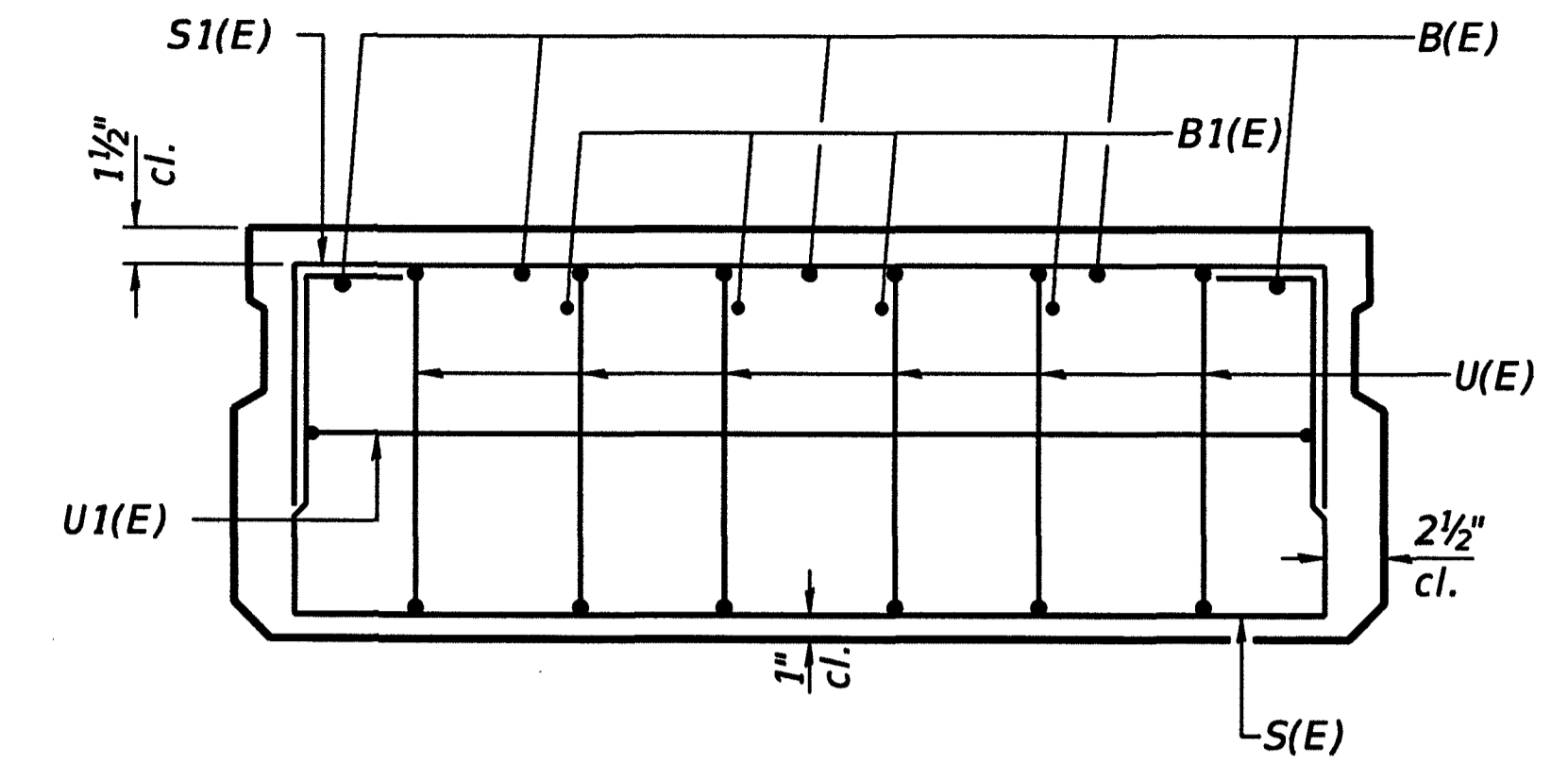
FILE NAME = 150183-ehb-bridge.dgn	USER NAME = rhoelck	DESIGNED - J.W.F.	REVISIONS -	STATE OF ILLINOIS CUMBERLAND COUNTY HIGHWAY DEPARTMENT	RIPRAP DETAILS STRUCTURE NO. 018-3204	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3093 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - S.M.S.	REVISIONS -			19	14-00079-00-BR	CUMBERLAND	15	5	
ILLINOIS PROFESSIONAL DESIGN FIRM 1.8 / P.E. / S.E. CORP. 184.000059	PLOT DATE = 12/9/2019	DRAWN - M.M.P.	REVISIONS -			CONTRACT NO. 95862					
		CHECKED - S.W.M.	REVISIONS -			ILLINOIS FED. AID PROJECT					



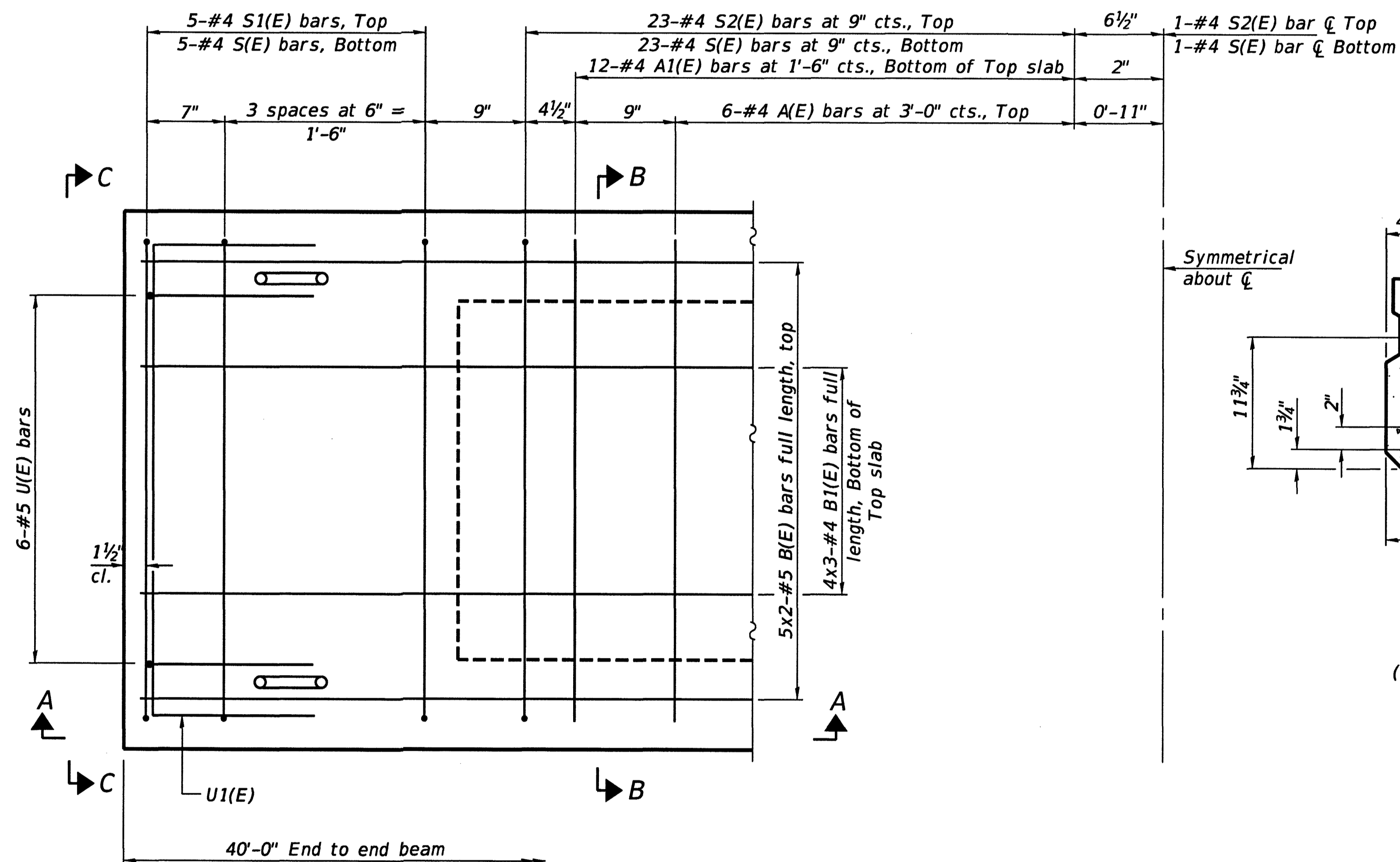
SECTION A-A



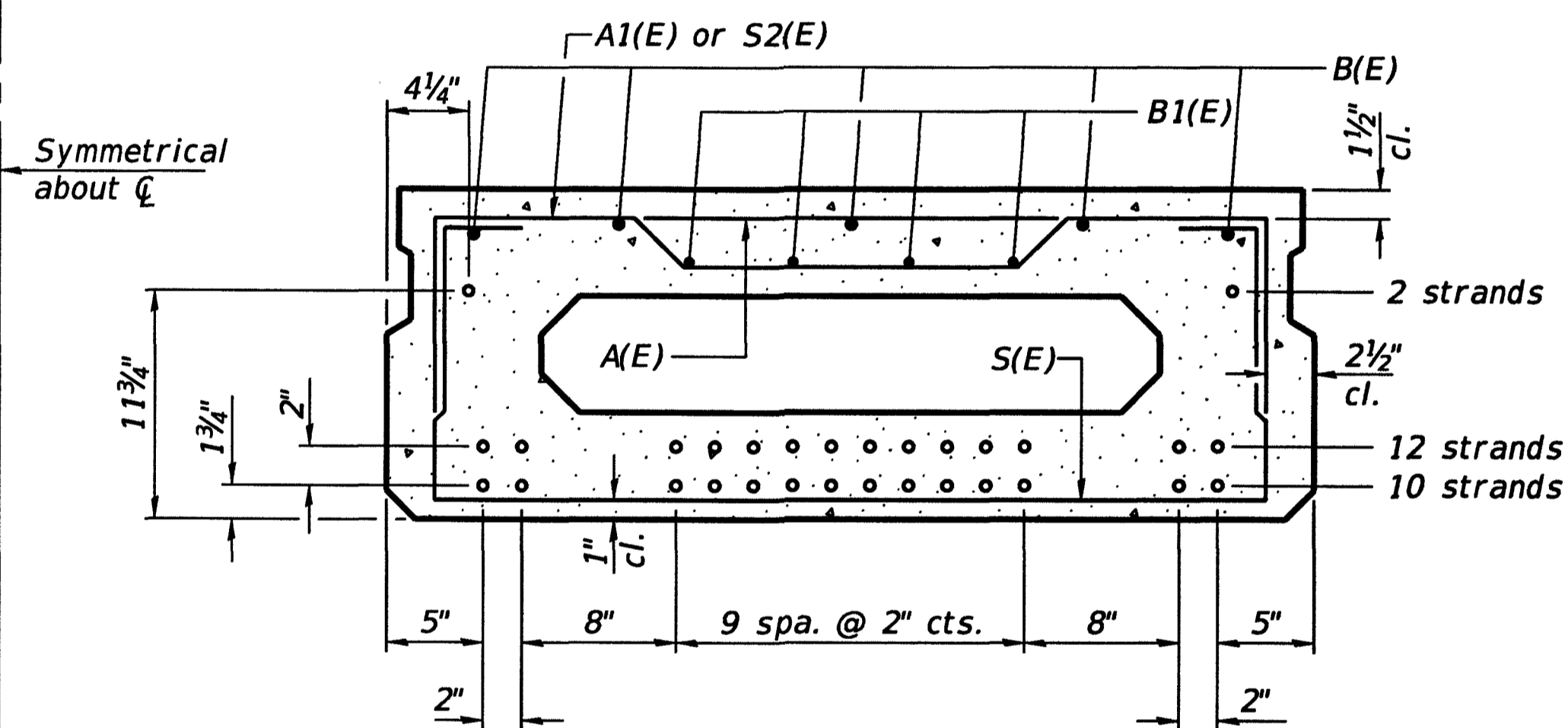
SECTION B-B
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B
(Showing reinforcement and permissible strand locations)
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

MINIMUM BAR LAP
#4 bar = 1'-11"
#5 bar = 2'-6"

BAR LIST
ONE BEAM ONLY
(For information only)

Bar	No.	Size	Length	Shape
A(E)	12	#4	3'-7"	—
A1(E)	24	#4	3'-10"	—
B(E)	10	#5	21'-2"	—
B1(E)	12	#4	14'-7"	—
S(E)	57	#4	6'-9"	□
S1(E)	10	#4	5'-3"	□
S2(E)	47	#4	5'-6"	□
U(E)	12	#5	3'-8"	□
U1(E)	2	#4	6'-0"	□

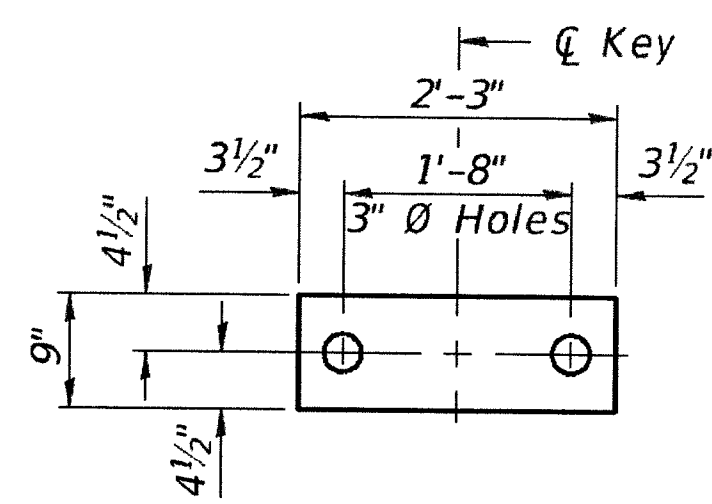
Note: See sheet 3 & 4 of 12 for additional details and Bill of Material.

Notes:
Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.
Bars indicated thus 5x2-#5 etc. indicates 5 lines of bars with 2 lengths per line.

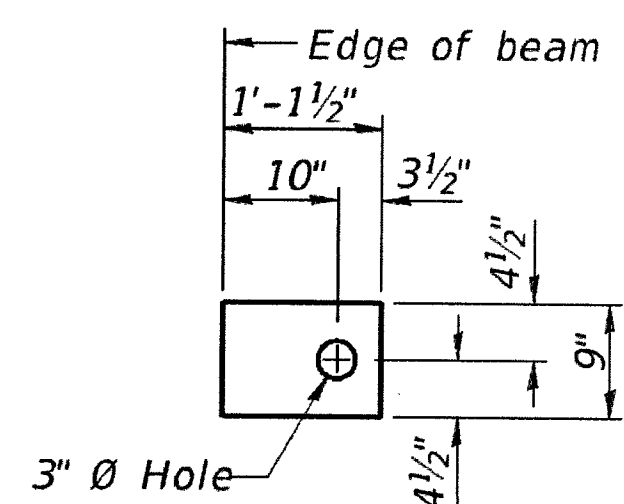
PD-1748-0

2-17-2017

FILE NAME = 150199-ah-bridge.dgn	USER NAME = mroslak	DESIGNED - J.W.F.	REVISIONS -	STATE OF ILLINOIS CUMBERLAND COUNTY HIGHWAY DEPARTMENT	17" x 48" PPC DECK BEAM SPANS 1, 2, & 3 STRUCTURE NO. 018-3204	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3046 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L3 / PE / SE CORP. 184-000098	PLOT SCALE =	CHECKED - S.M.S.	REVISIONS -			19	14-00079-00-BR	CUMBERLAND	15	6	
	PLOT DATE = 12/9/2019	DRAWN - M.M.P.	REVISIONS -			CONTRACT NO. 95862					
		CHECKED - S.W.M.	REVISIONS -			SHEET NO. 3 OF 12 SHEETS					



FABRIC BEARING PAD
(Interior - 36 Req'd.)

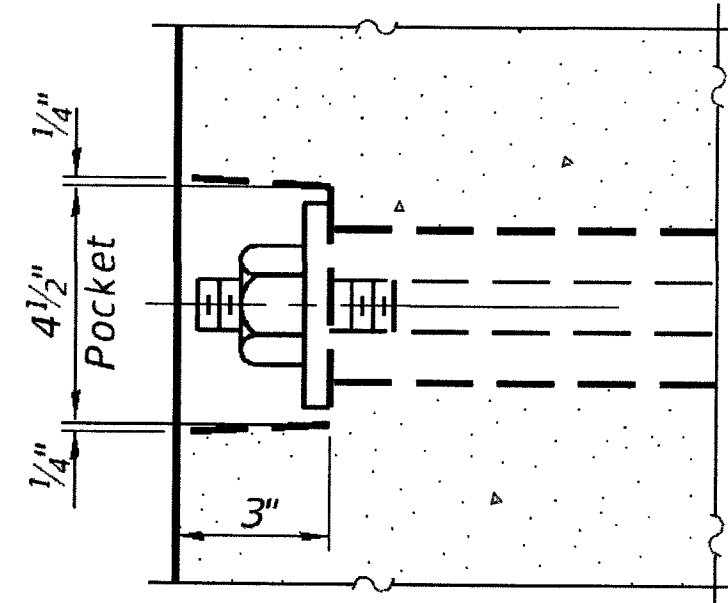


FABRIC BEARING PAD
(Exterior - 12 Req'd.)

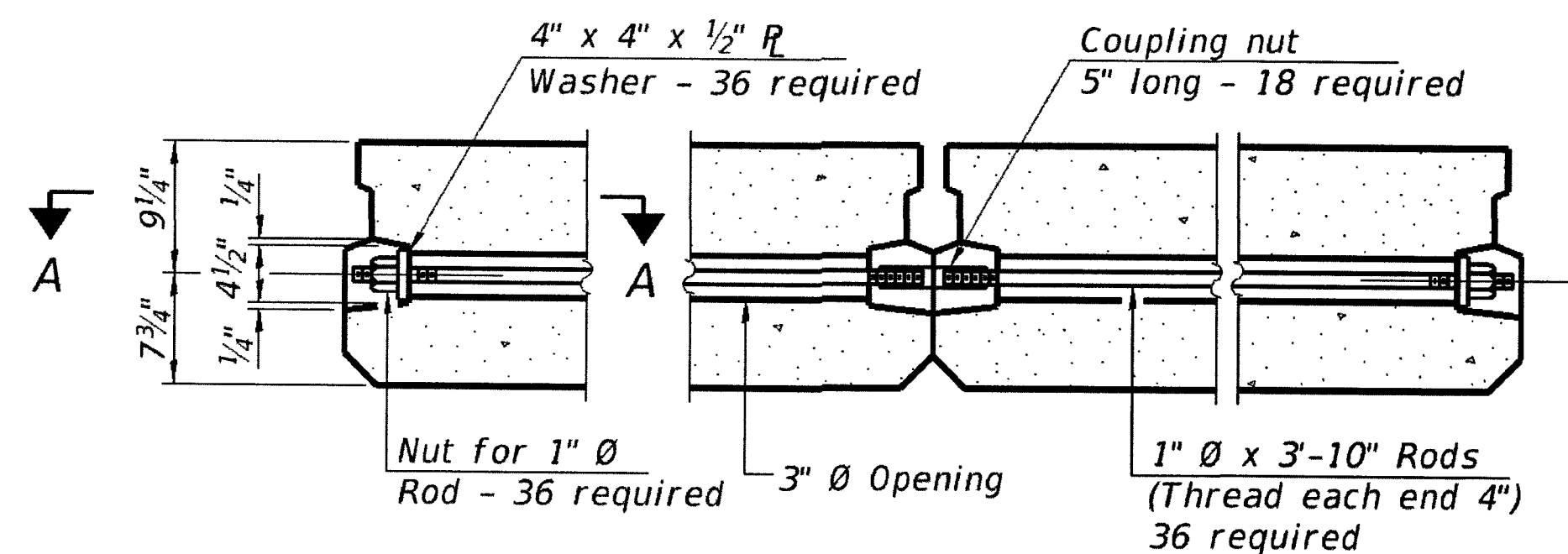
FIXED

Notes:

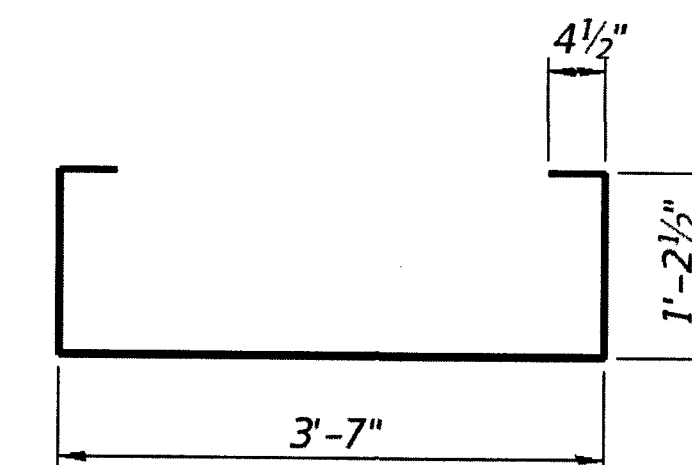
- All bearing pads shall be 1" thick.
- Omit holes when using expansion bearings.
- Expansion bearing pad shall be bonded to the substructure.



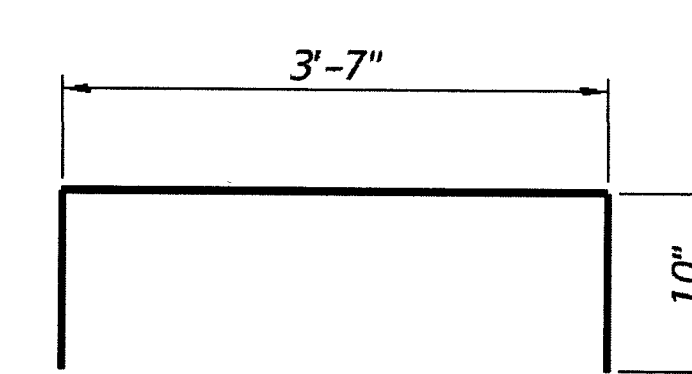
SECTION A-A



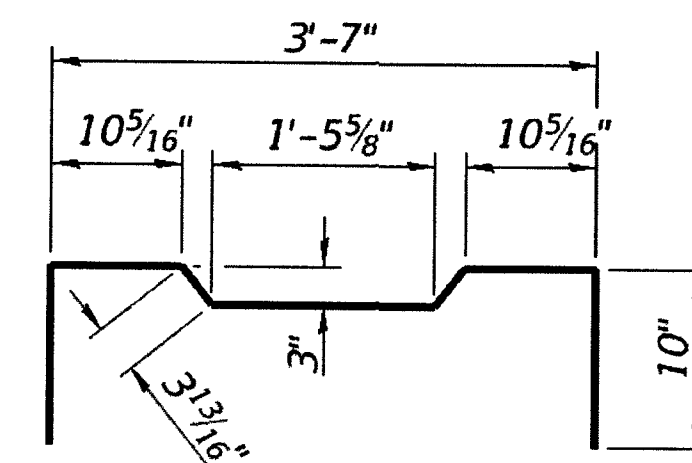
TYPICAL TRANSVERSE TIE ASSEMBLY



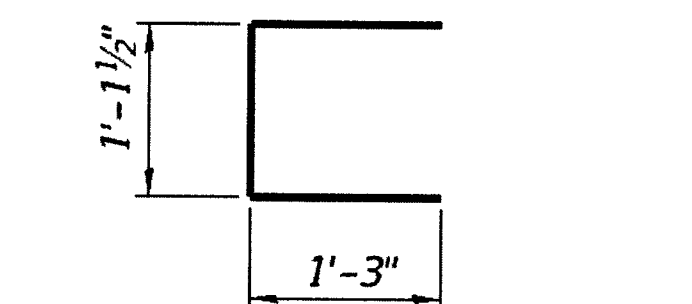
BAR S(E)



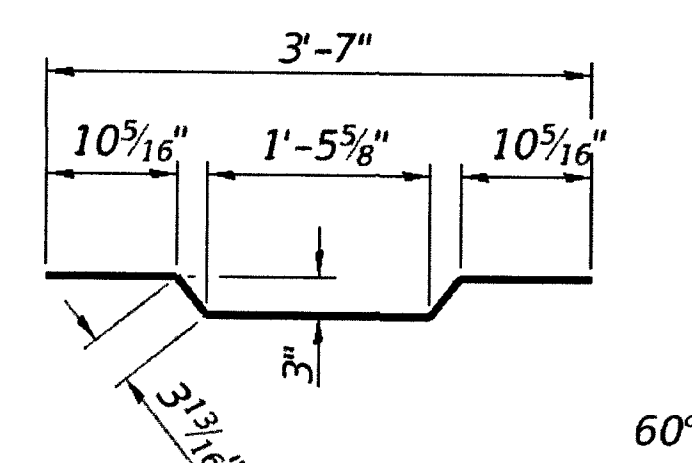
BAR S1(E)



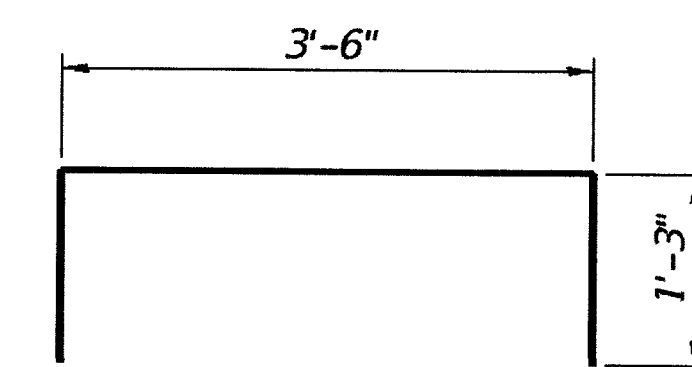
BAR U(E)



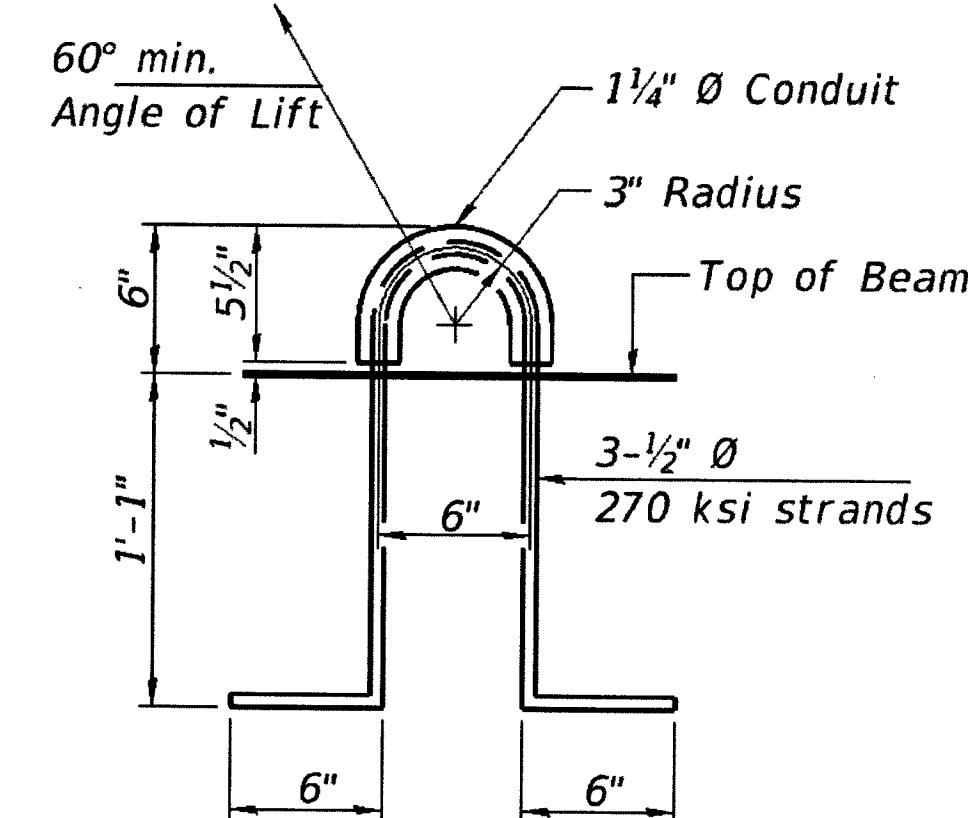
BAR U1(E)



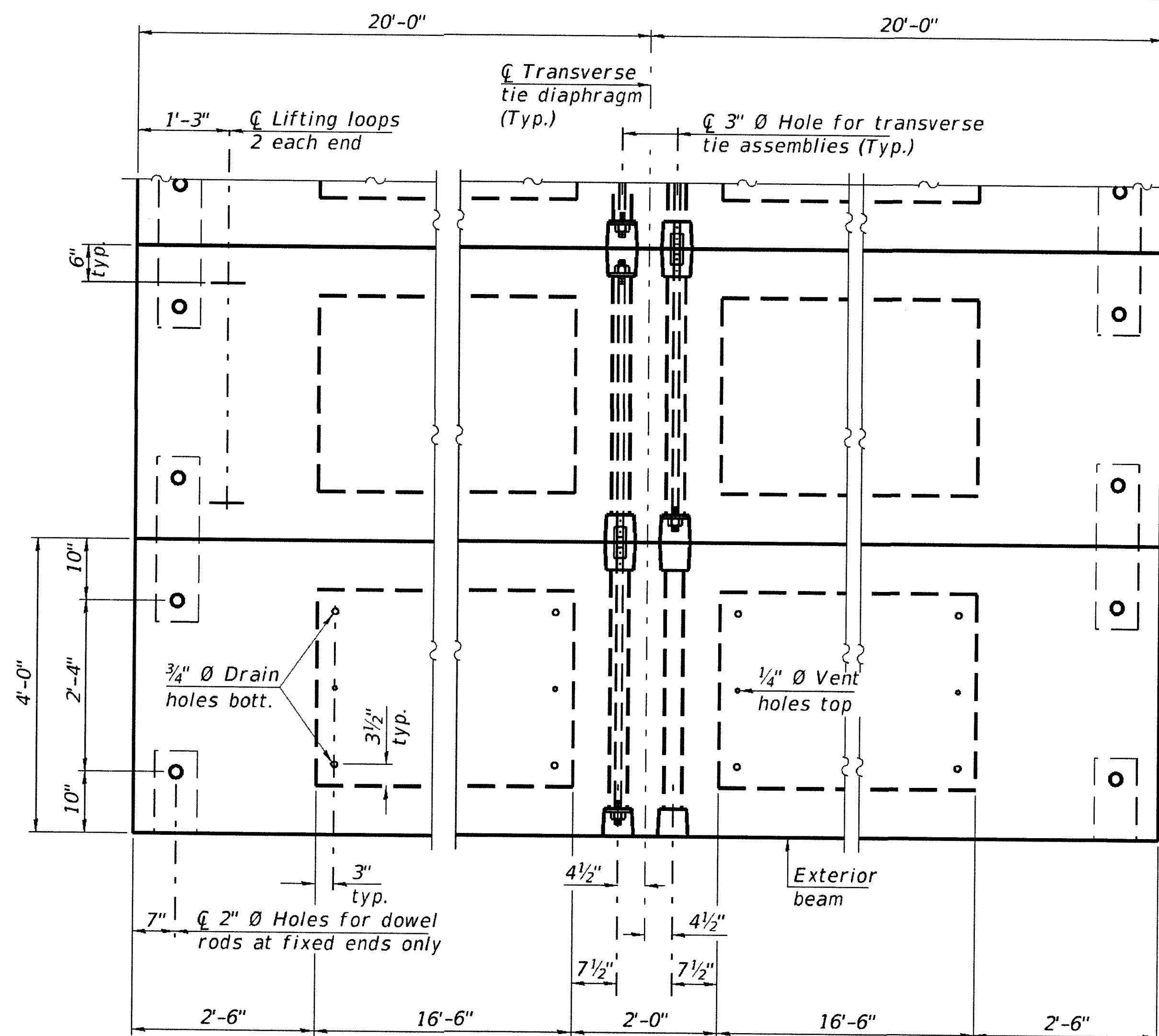
BAR A1(E)



BAR U2(E)



LIFTING LOOP DETAIL



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.

NOTES

- Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
- The 1" \emptyset rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.
- Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.
- A minimum 2 1/2" \emptyset lifting pin shall be used to engage the lifting loops during handling.
- Corrosion Inhibitor, per Article 1020.05(b)(10) and 1021.07 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.
- Compressive strength of prestressed concrete, f'c, shall be 6000 psi.
- Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.
- Reinforcement bars designated (E) shall be epoxy coated.

BILL OF MATERIAL

Material	Unit	Quantity
Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	3,360
Hot-Mix Asphalt Surface Course, IL-9.5, Mix "C", N70	Ton	51
Waterproofing Membrane Sys.	Sq. Yd.	378
PC Mortar Fairing Course	Foot	180

PD-1748-0D 2-17-2017

FILE NAME = 150193-sht-bridge.dgn	USER NAME = rhesick	DESIGNED - J.W.F.	REVISED -
HAMPTON, LENZINI AND RENWICK, INC. 3021 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703	PLOT SCALE =	CHECKED - S.M.S.	REVISED -
ILLINOIS PROFESSIONAL DESIGN FIRM LS / PE / SE CORP. 184-020019	PLOT DATE = 1/10/2020	DRAWN - M.M.P.	REVISED -
		CHECKED - S.W.M.	REVISED -

STATE OF ILLINOIS
CUMBERLAND COUNTY HIGHWAY DEPARTMENT

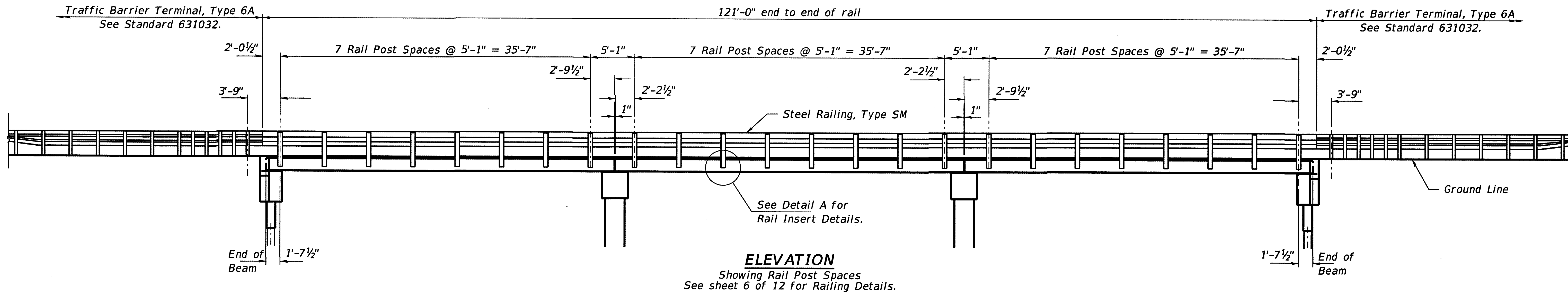
17" x 48" PPC DECK BEAM DETAILS SPANS 1, 2, & 3
STRUCTURE NO. 018-3204

SHEET NO. 4 OF 12 SHEETS

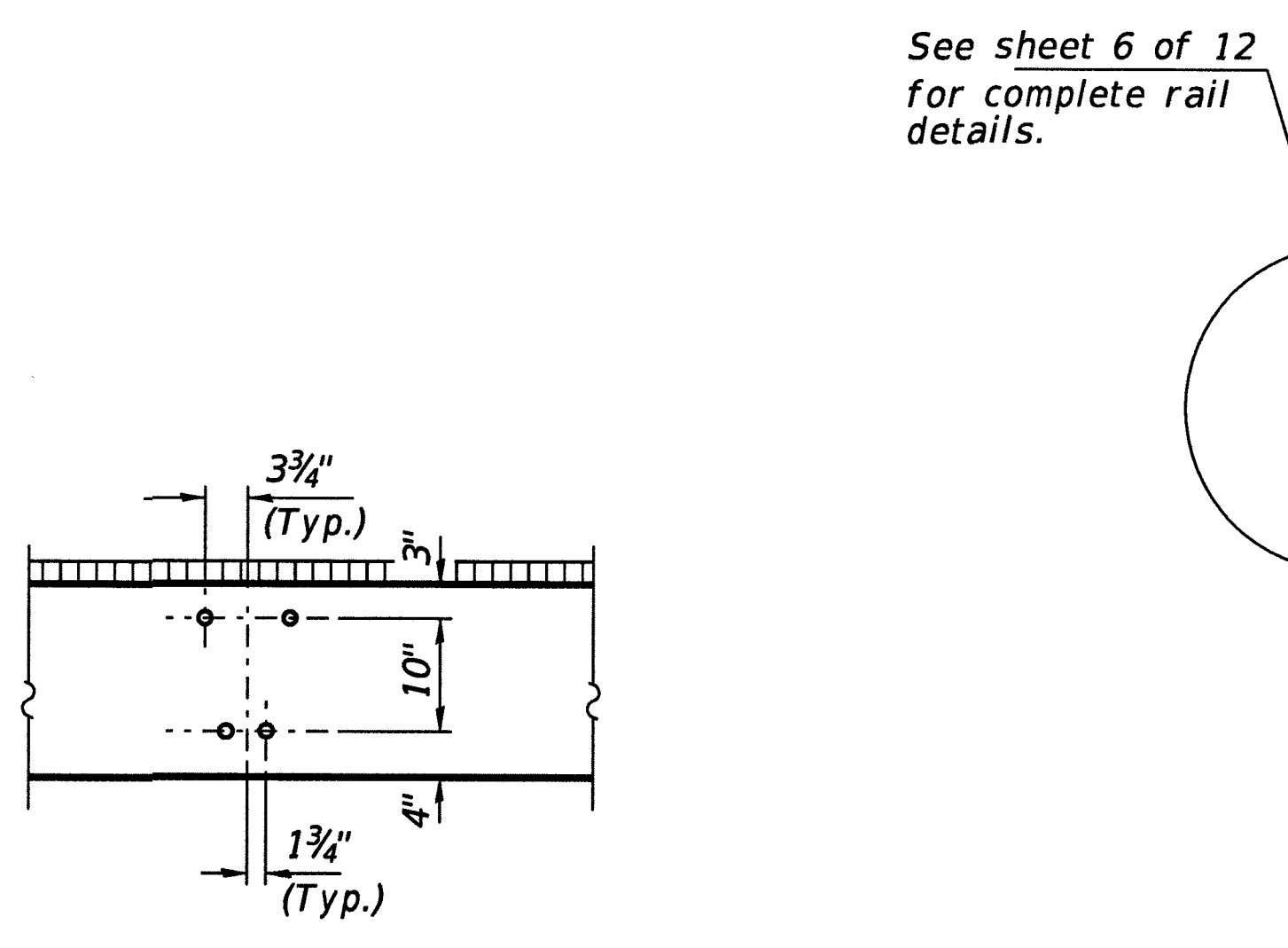
C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
19	14-00079-00-BR	CUMBERLAND	15	7

CONTRACT NO. 95862

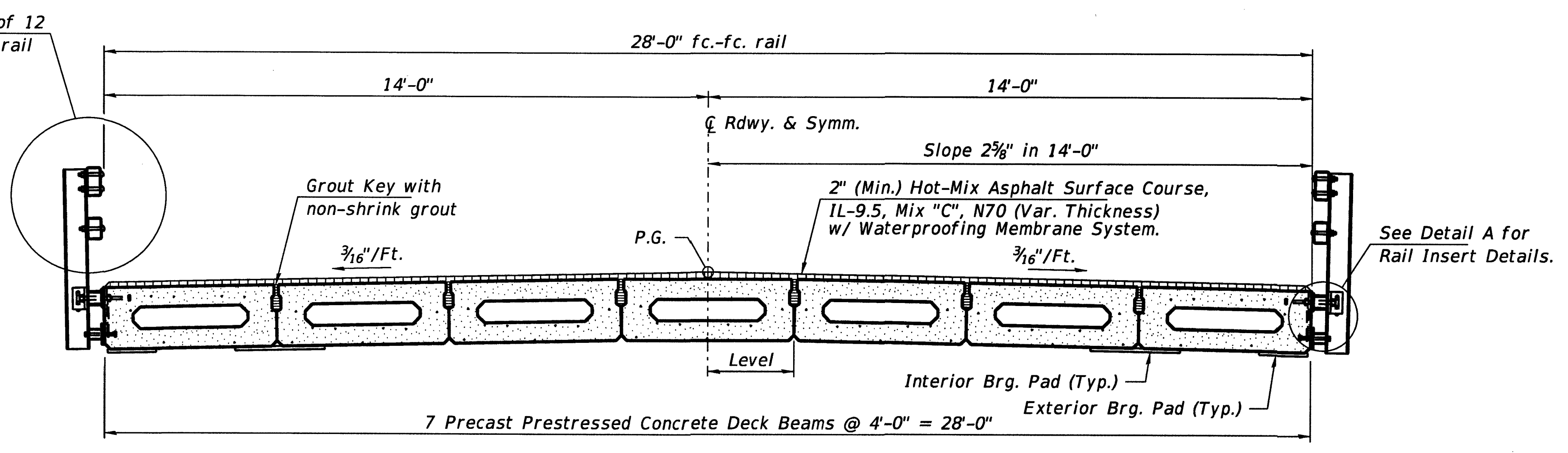
ILLINOIS FED. AID PROJECT



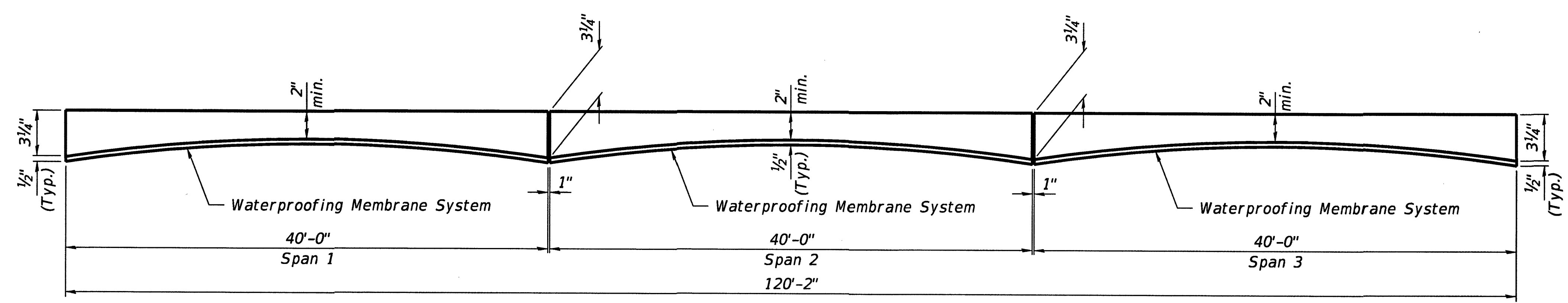
ELEVATION
Showing Rail Post Spaces
See sheet 6 of 12 for Railing Details.



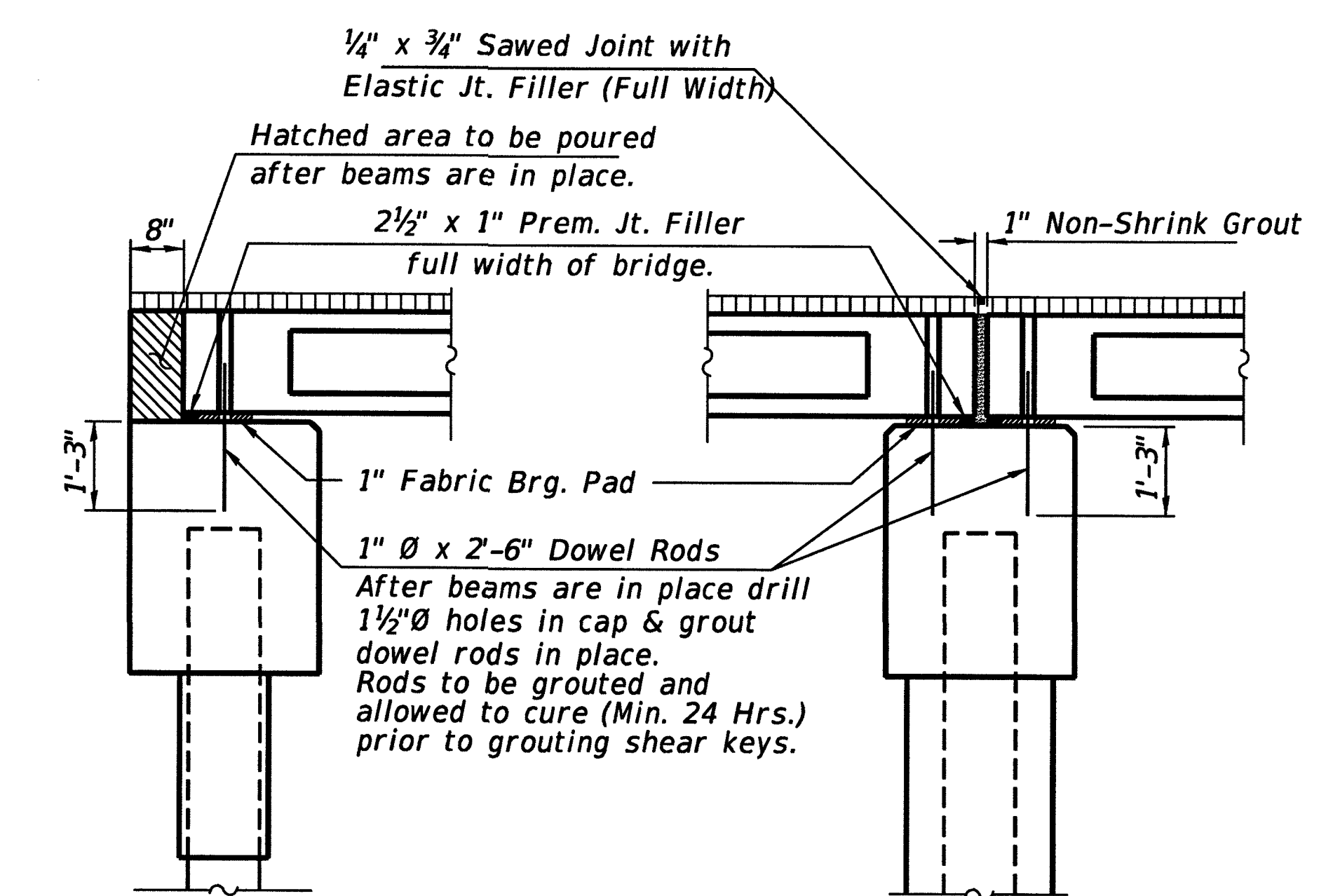
DETAIL A



CROSS SECTION
See sheets 3 & 4 of 12 for Superstructure.



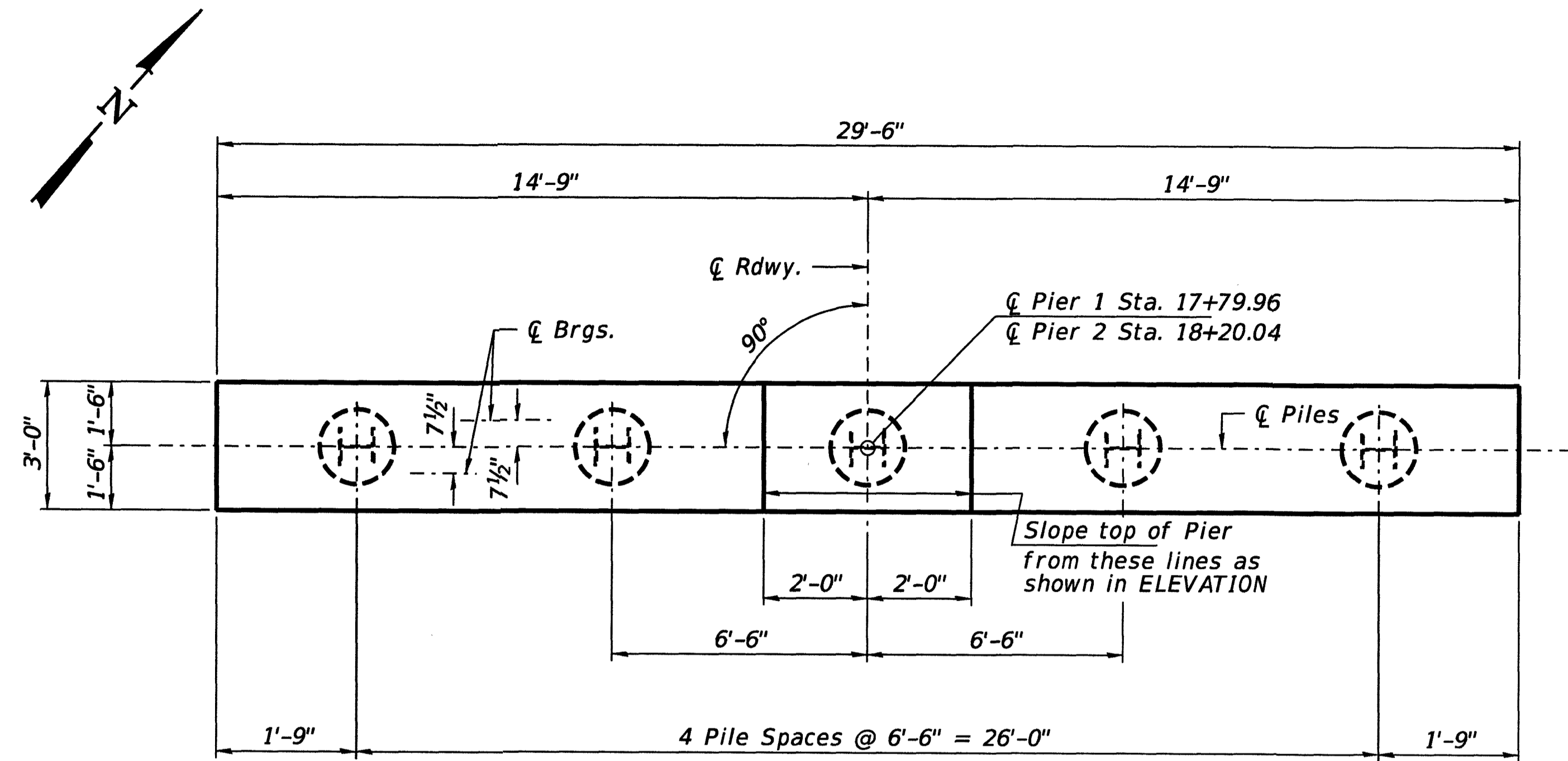
ANTICIPATED HMA WEARING SURFACE PROFILE
(For information only - beam camber may vary in field.)



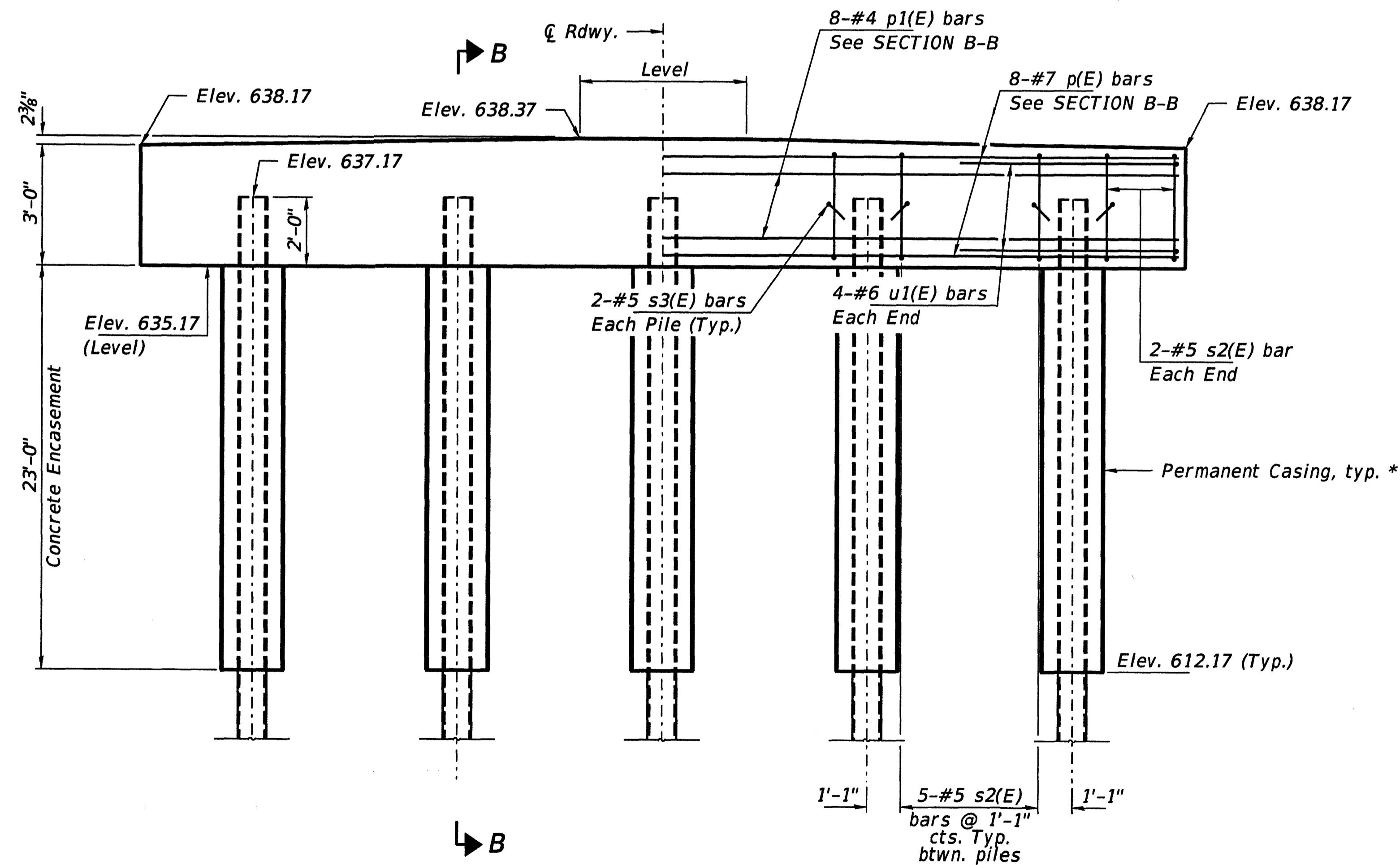
SECTION AT ABUTMENTS
@ Rt. L's

SECTION AT PIERS
@ Rt. L's

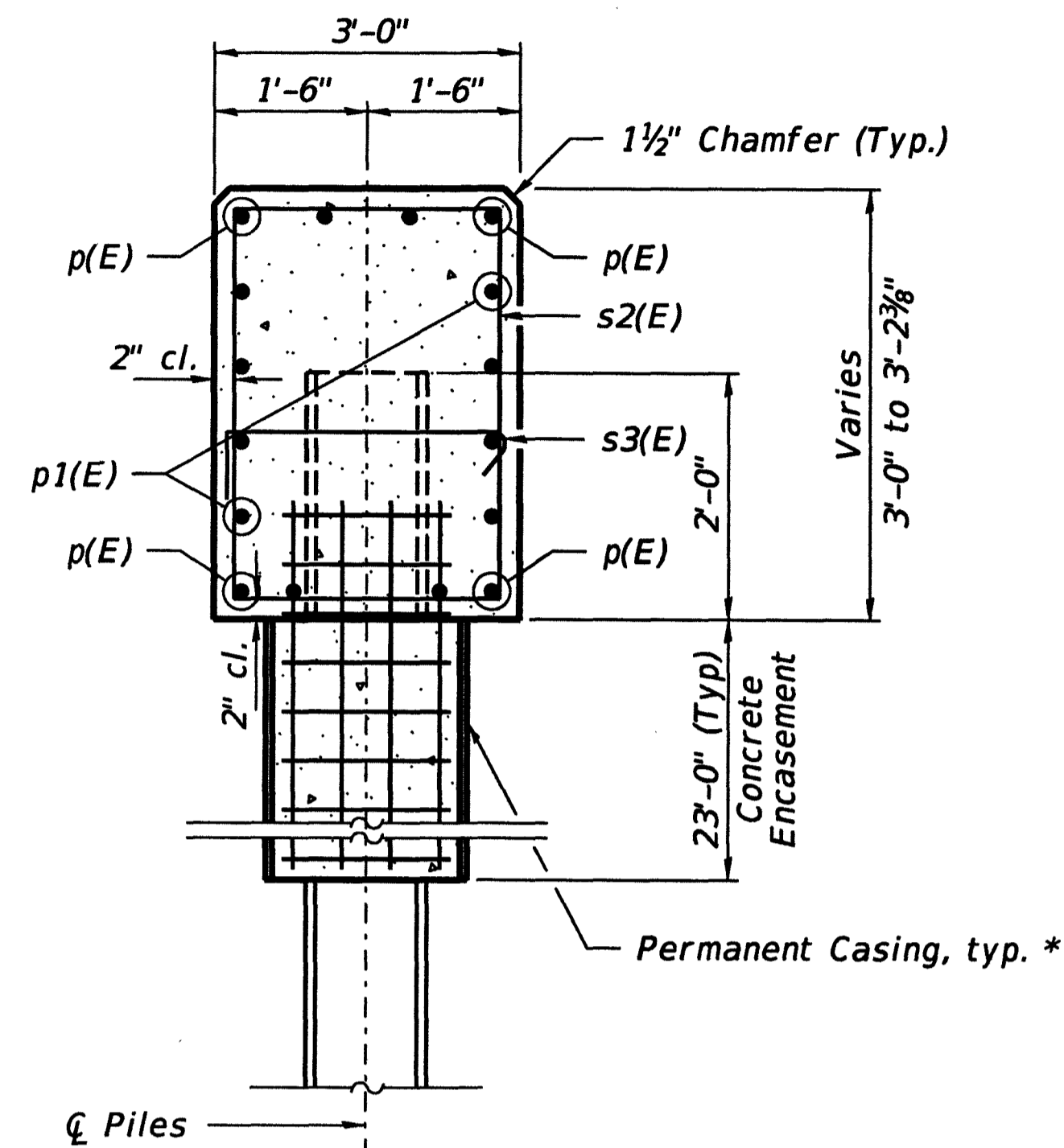
FILE NAME = 150193-ahh-bridge.dgn	USER NAME = rhesick	DESIGNED - J.W.F.	REVISD -	STATE OF ILLINOIS CUMBERLAND COUNTY HIGHWAY DEPARTMENT	SUPERSTRUCTURE DETAILS STRUCTURE NO. 018-3204	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3086 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184.000959	PLOT SCALE =	CHECKED - S.M.S.	REVISD -			19	14-00079-00-BR	CUMBERLAND	15	8	
PLOT DATE = 1/10/2020	DRAWN - M.M.P.	REVISD -				CONTRACT NO. 95862					
	CHECKED - S.W.M.	REVISD -				ILLINOIS FED. AID PROJECT					
						SHEET NO. 5 OF 12 SHEETS					



PLAN

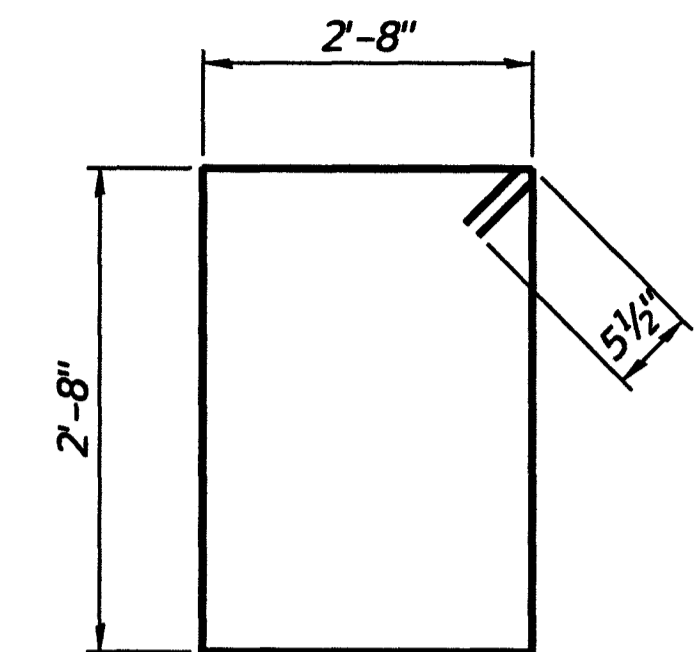


ELEVATION
(Looking North)

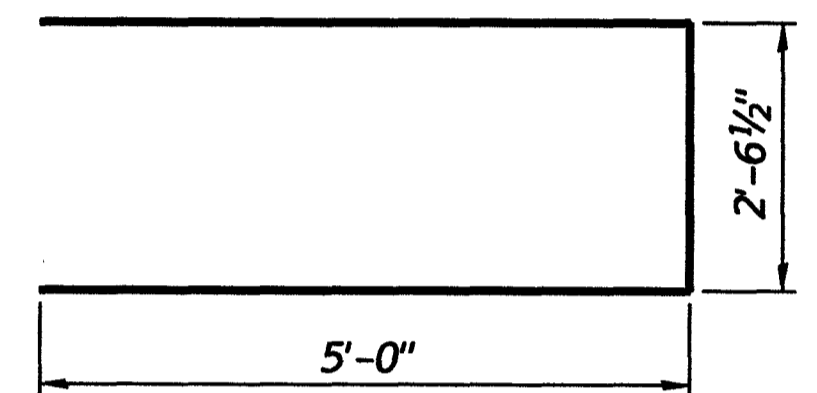


SECTION B-B

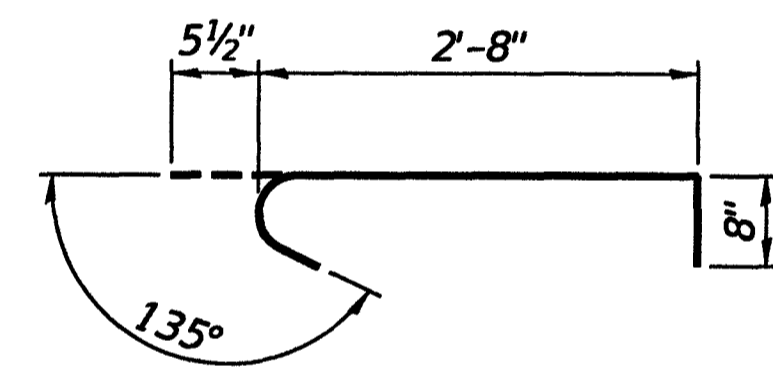
* The Contractor is responsible for determining the casing thickness and the actual tip elevation to be used. See Article 516.06(d) and 1006.05(d) of the Standard Specifications. Pay limits for the permanent casing shall be based on the minimum length shown.



BAR s2(E)



BAR u1(E)



BAR s3(E)

PILE DATA

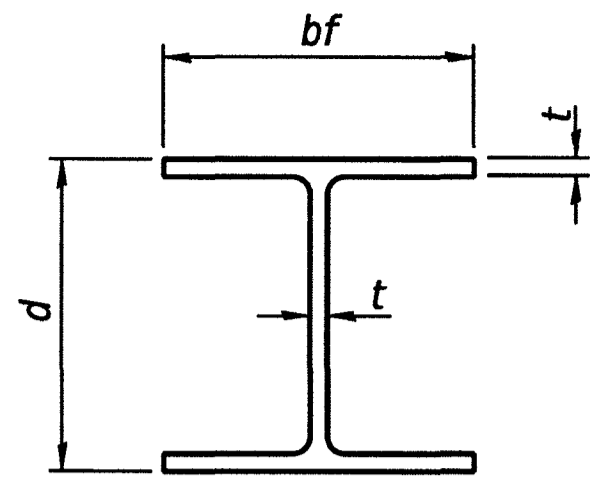
Type _____ Steel HP10x42
 No. Production Piles _____ 9
 No. Test Piles _____ 1
 Factored Resistance Available (Rf) _____ 184 Kips/Pile
 Nominal Required Bearing (Rn) _____ 335 Kips/Pile
 Est. Length _____ 43 Ft./Pile

Notes:
 Test pile to be driven in a permanent location at Pier 2.

The test pile shall be driven to 110 percent of the Nominal Required Bearing indicated in the pile data information.

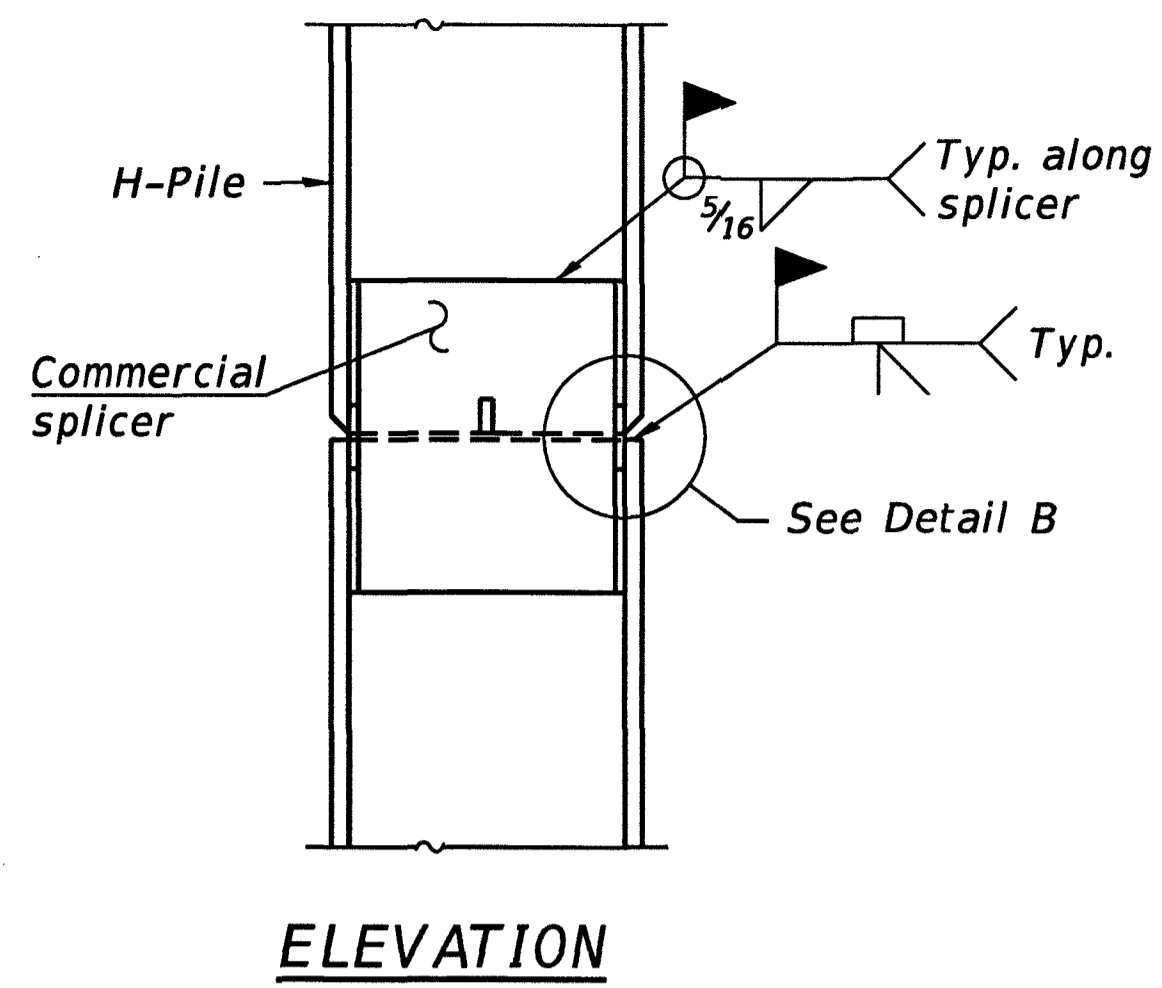
BILL OF MATERIAL - 2 PIERS

BAR	NO.	SIZE	LENGTH	SHAPE	
p(E)	16	#7	29'-2"	—	
p1(E)	16	#4	29'-2"	—	
s2(E)	48	#5	11'-7"	□	
s3(E)	20	#5	3'-10"	U	
u1(E)	16	#6	12'-7"	U	
Concrete Structures				Cu. Yd.	20.4
Concrete Encasement				Cu. Yd.	26.0
Reinforcement Bars, Epoxy Coated				Pound	1,970
Furnishing Steel Piles HP10x42				Foot	387
Test Piles Steel HP10x42				Each	1
Permanent Casing				Foot	230

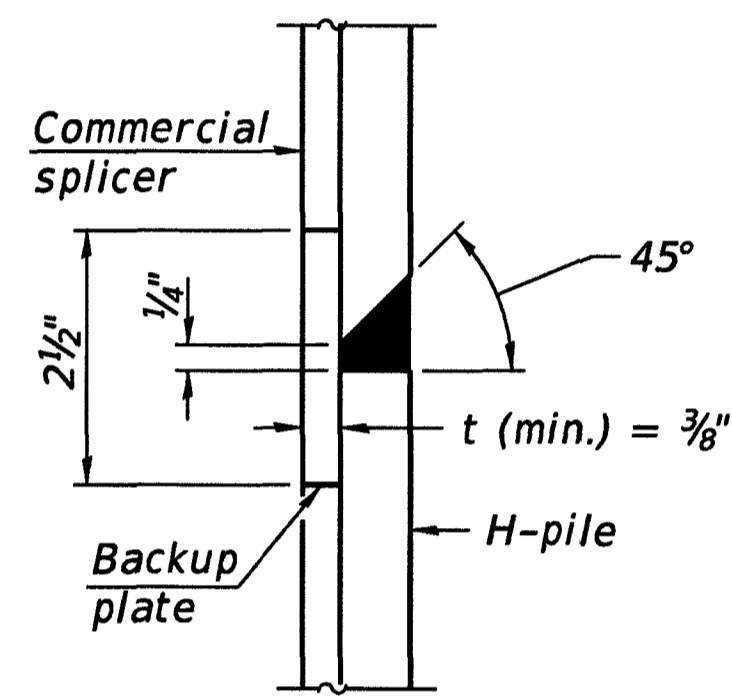


STEEL PILE TABLE

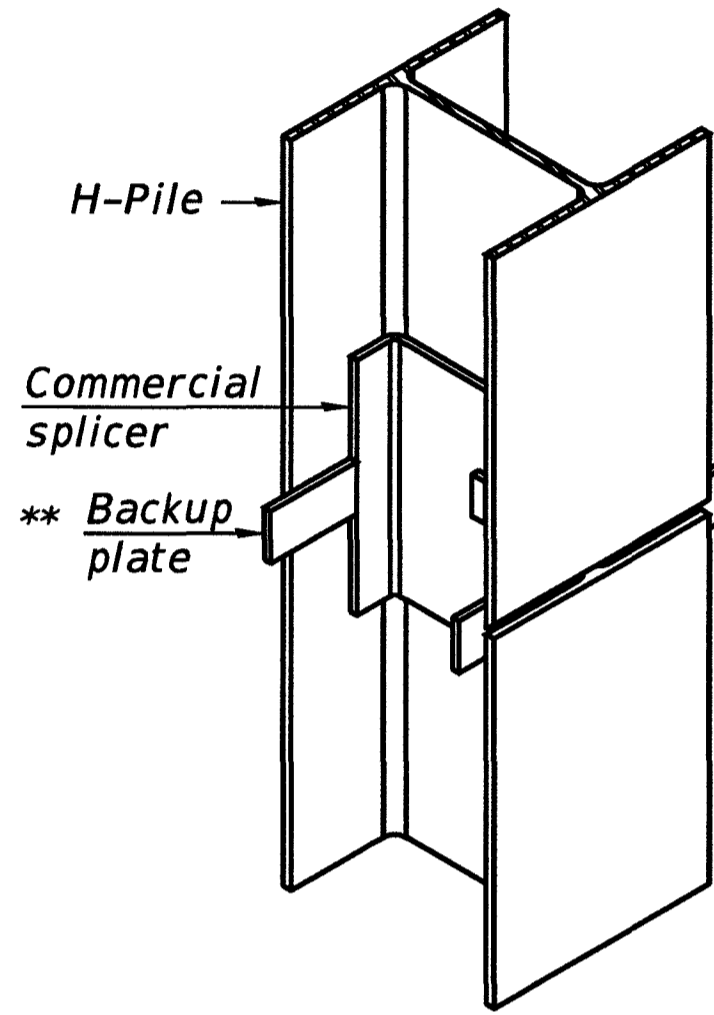
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 3/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

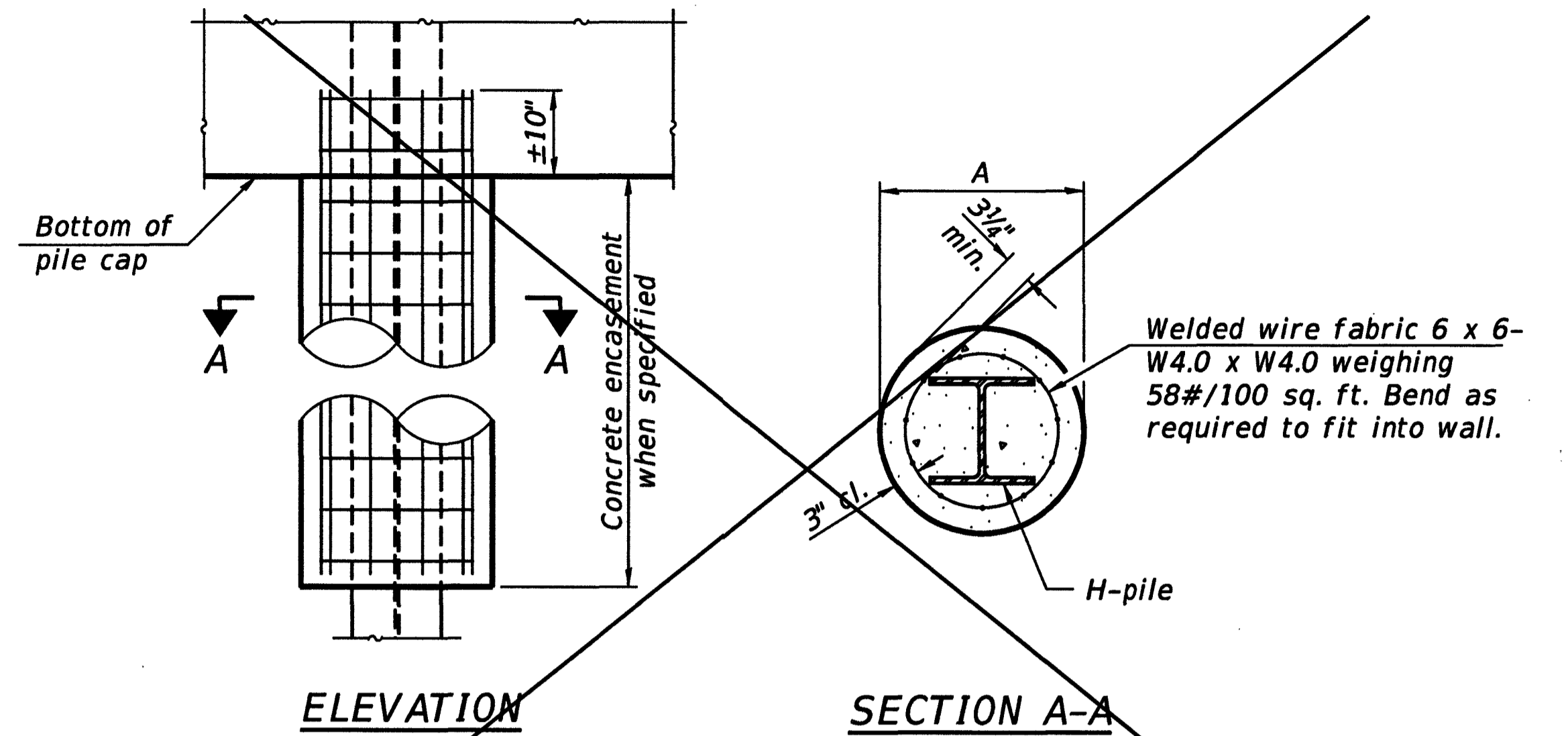


DETAIL "B"



ISOMETRIC VIEW

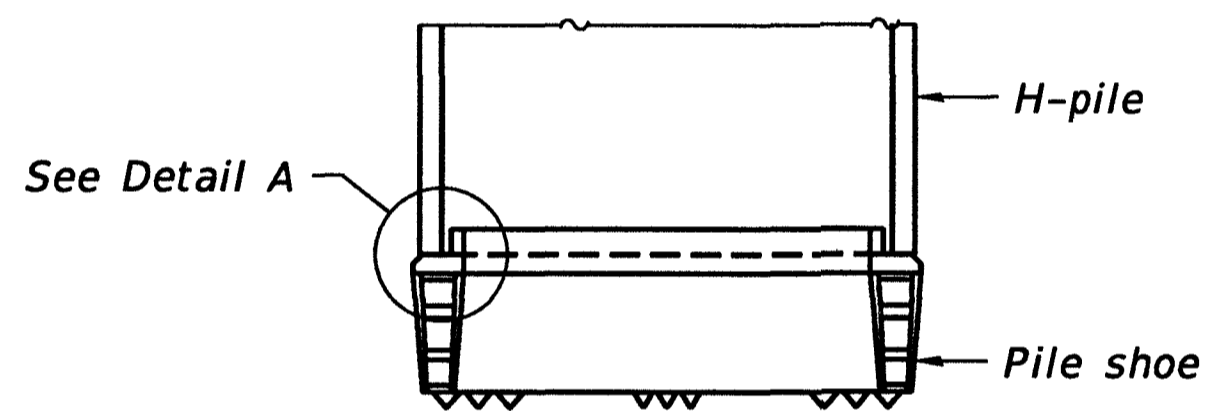
WELDED COMMERCIAL SPLICE



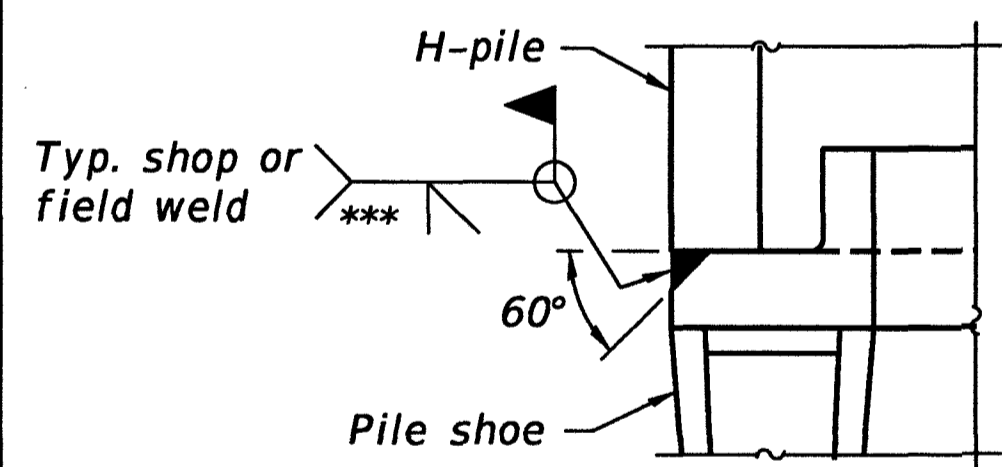
ELEVATION

SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT - (NOT REQUIRED)
(Forms for encasement may be omitted when soil conditions permit).



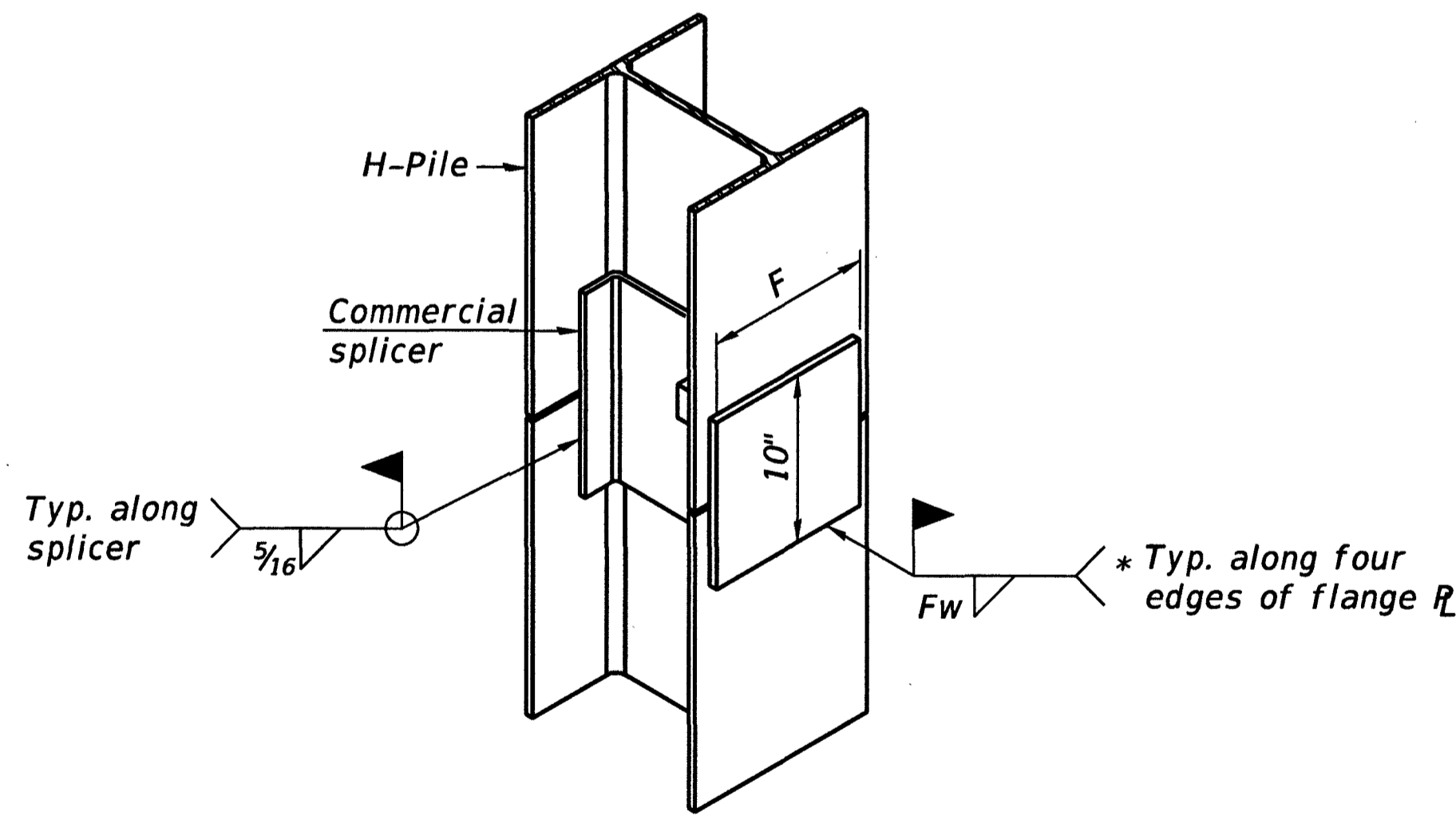
ELEVATION



DETAIL A

SHOE ATTACHMENT

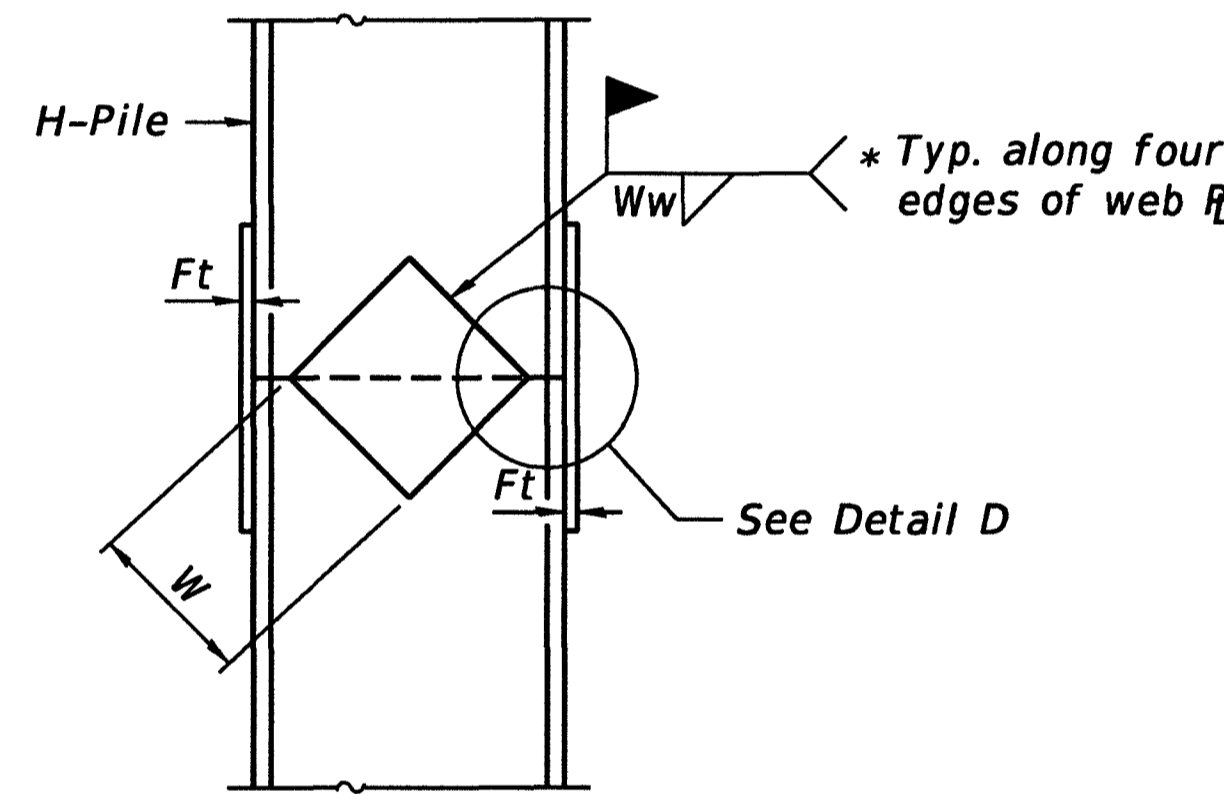
Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



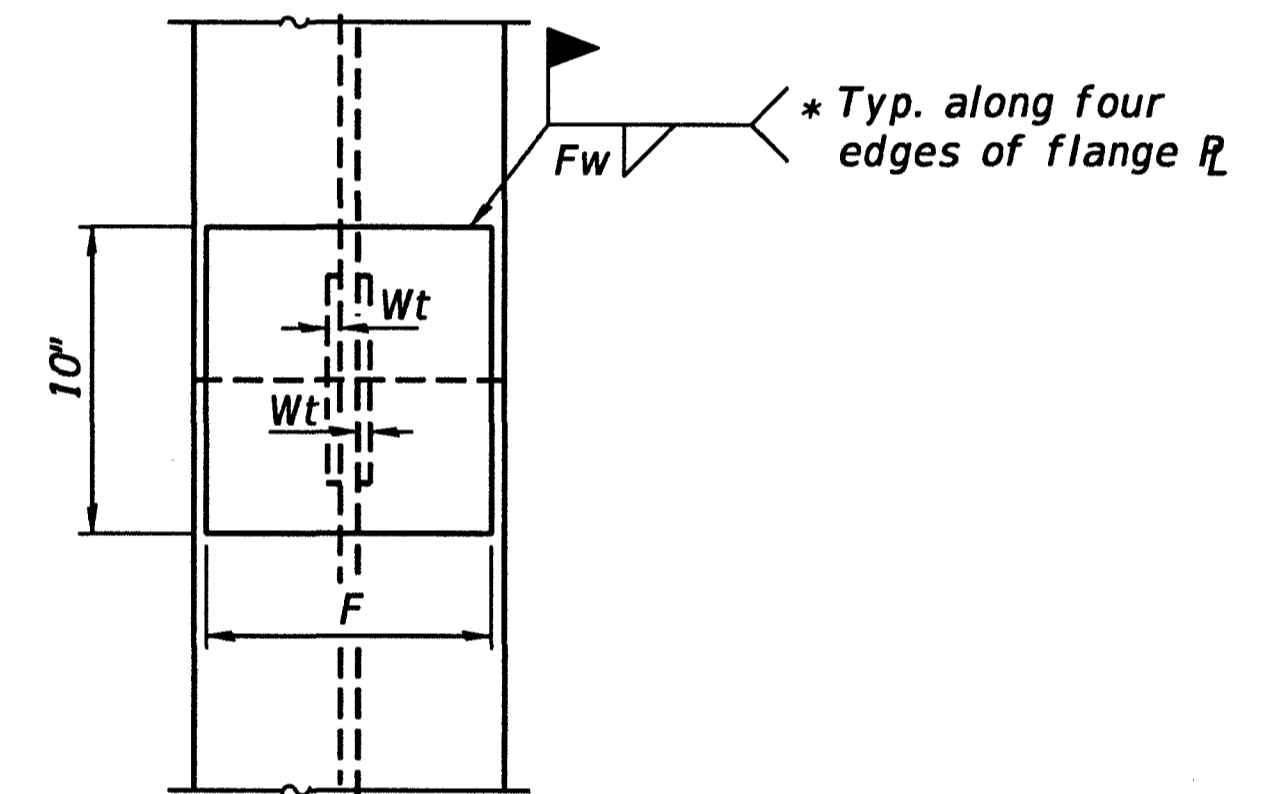
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

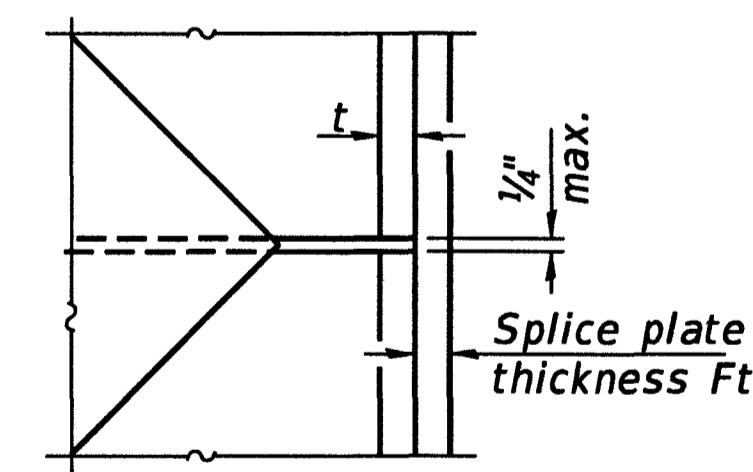
- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).



ELEVATION



END VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1 1/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

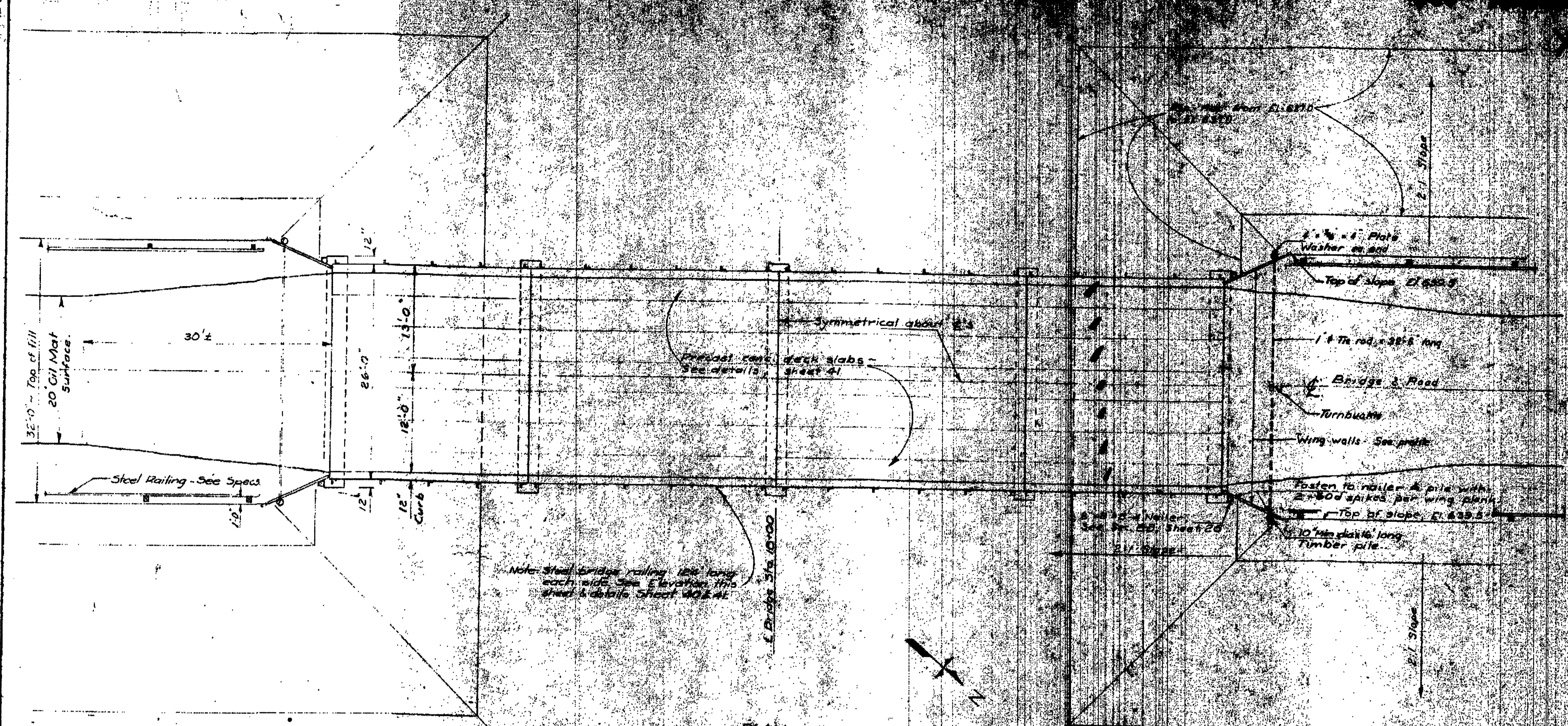
F-HP

8-11-2017

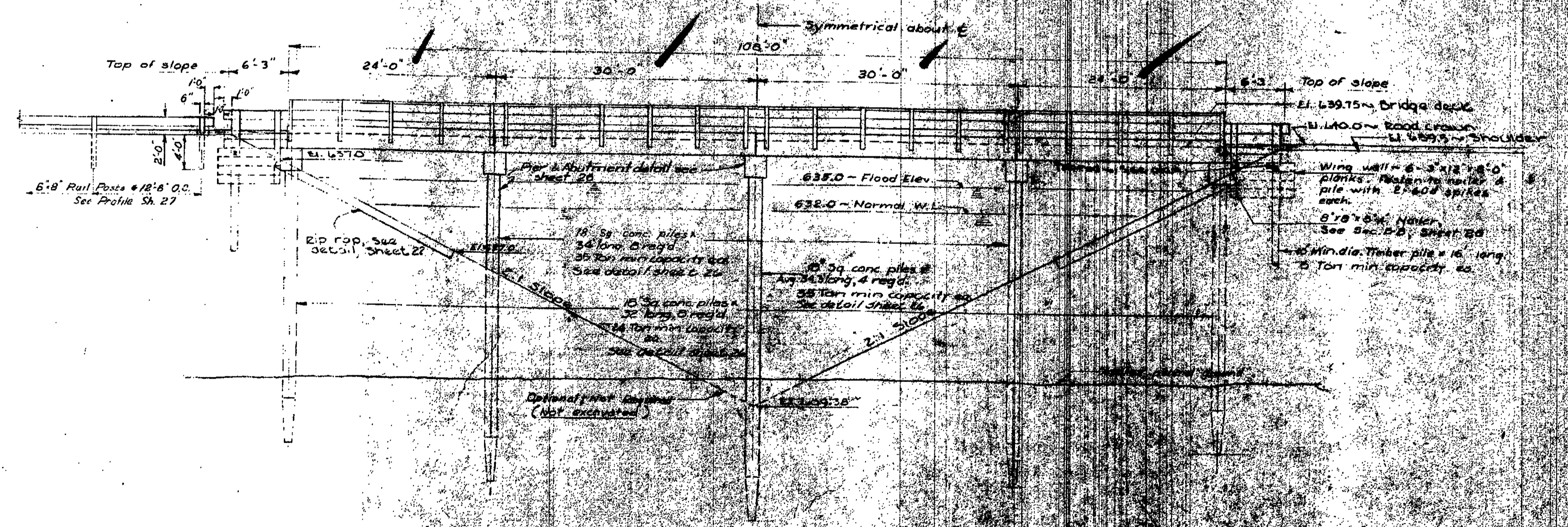
FILE NAME = 150183-ahb-bridge.dgn	USER NAME = rfoelck	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS CUMBERLAND COUNTY HIGHWAY DEPARTMENT	HP PILE DETAILS STRUCTURE NO. 018-3204	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3038 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62703 ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184.000888	PLOT SCALE =	CHECKED - S.M.S.	REVISED -			19	14-00079-00-BR	CUMBERLAND	15	12	
	PLOT DATE = 12/29/2019	DRAWN - M.M.P.	REVISED -			CONTRACT NO. 95862					
		CHECKED - S.W.M.	REVISED -			SHEET NO.9 OF 12 SHEETS					

ILLINOIS FED. AID PROJECT

Year Built 1958
 All Concrete On Cast



PLAN
 Scale: 1/4" = 1'-0"



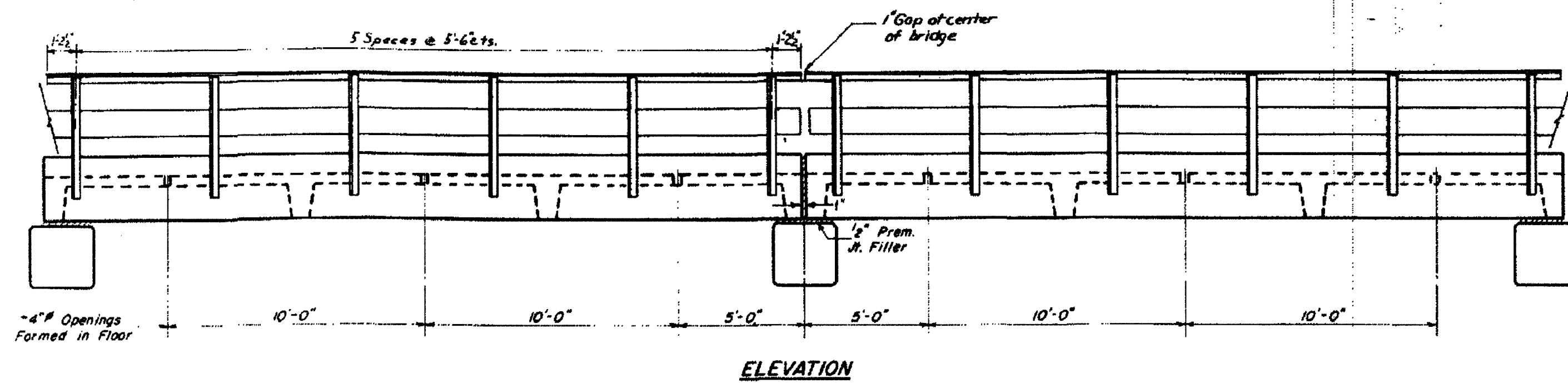
ELEVATION
 Scale: 1/4" = 1'-0"

The County anticipates placing the bridge on this structure and would like to know what rating will be after the bridge is in place.

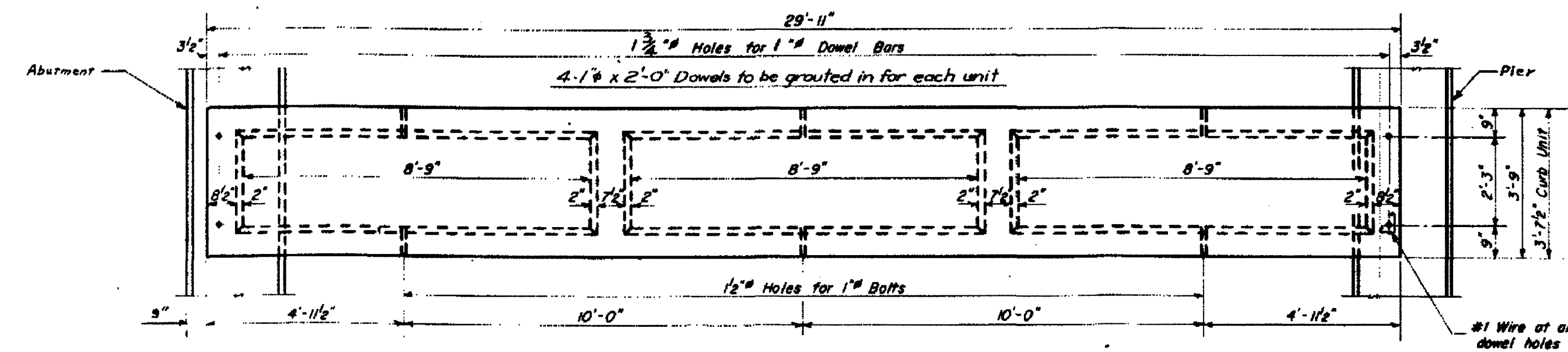
WILSON & ANDERSON
 CONSULTING ENGINEERS
 CHAMPAIGN, ILLINOIS

ROAD ITEM	CONSTRUCTION
UTILITY	
OTHER	

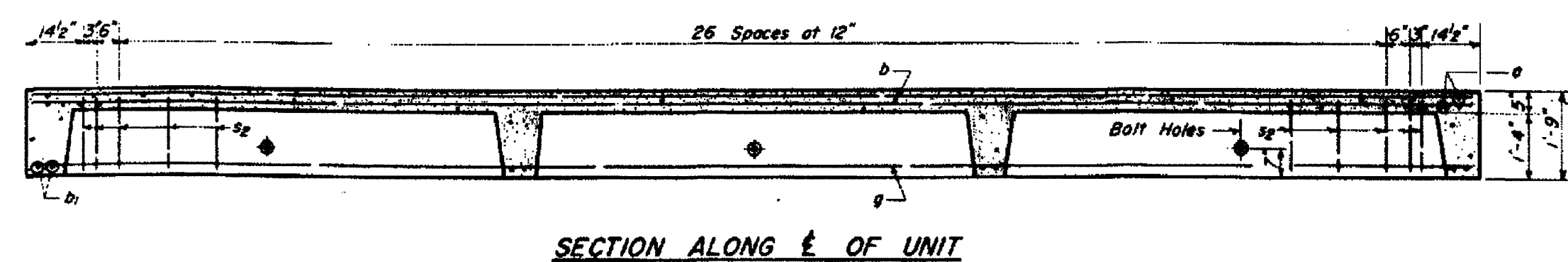
FILE NAME = 150193-eh-bridge.dgn	USER NAME = rhesick	DESIGNED - J.W.F.	REVISED -	STATE OF ILLINOIS CUMBERLAND COUNTY HIGHWAY DEPARTMENT	EXISTING PLANS STRUCTURE NO. 018-3204	C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
HAMPTON, LENZINI AND RENWICK, INC. 3008 STEVENSON DRIVE, SUITE 201 SPRINGFIELD, ILLINOIS 62779	PLOT SCALE =	CHECKED - S.M.S.	REVISED -			19	14-00079-00-BR	CUMBERLAND	15	14	
HLR ILLINOIS PROFESSIONAL DESIGN FIRM L8 / PE / SE CORP. 184.200969	PLOT DATE = 12/8/2019	DRAWN - M.M.P.	REVISED -			CONTRACT NO. 95862					
		CHECKED - S.W.M.	REVISED -			SHEET NO.11 OF 12 SHEETS					
						ILLINOIS FED. AID PROJECT					



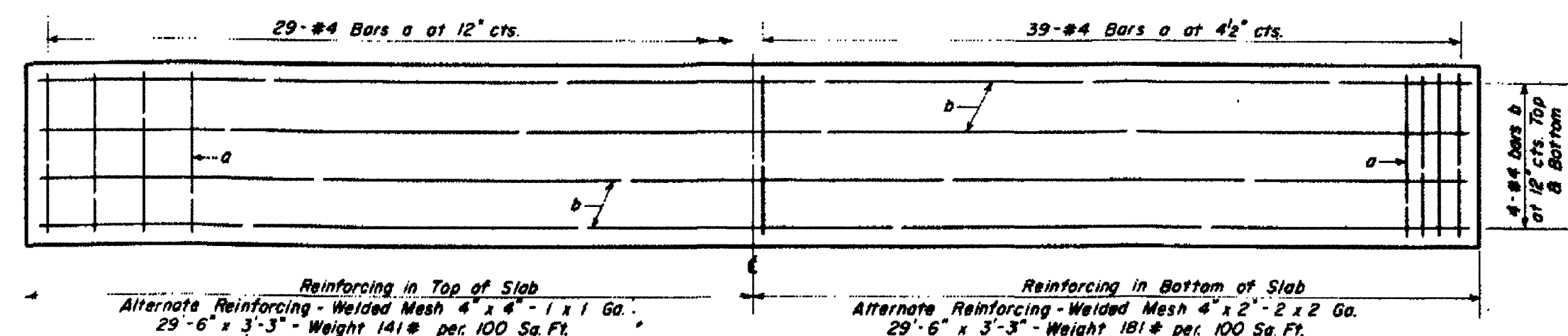
ELEVATION



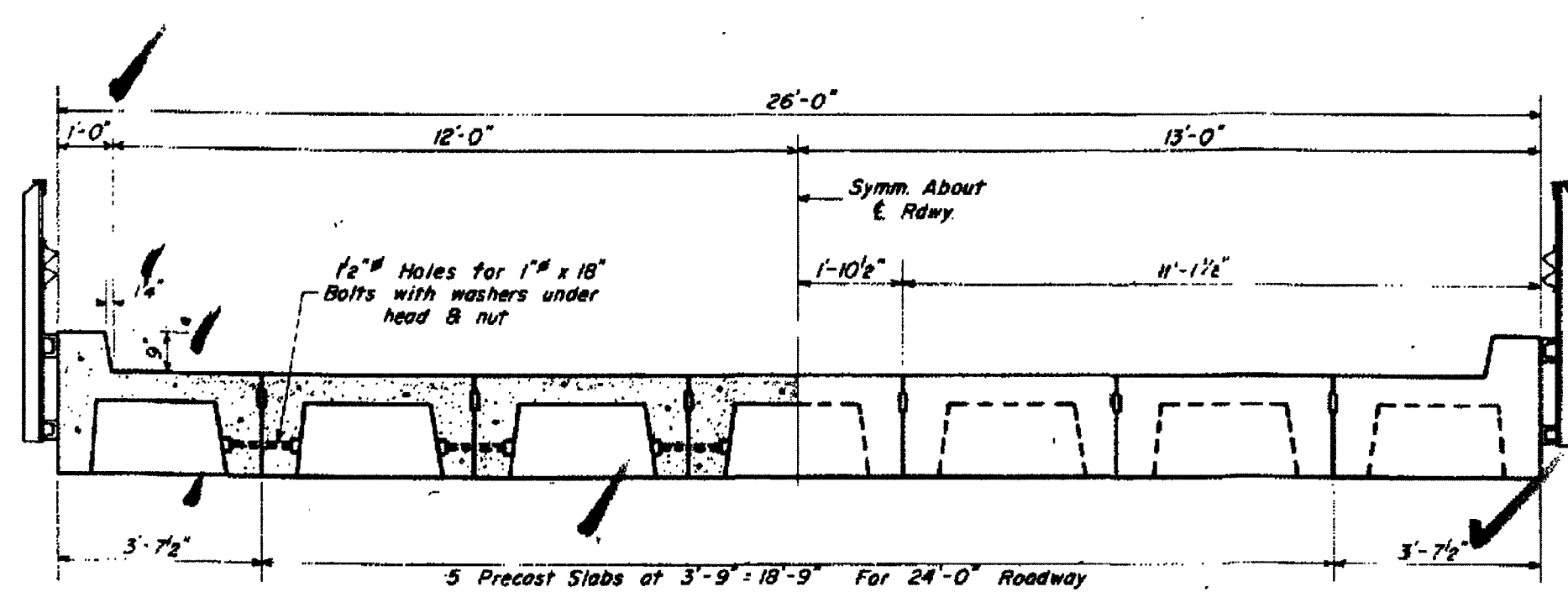
PLAN OF ONE INTERIOR UNIT



SECTION ALONG E OF UNIT

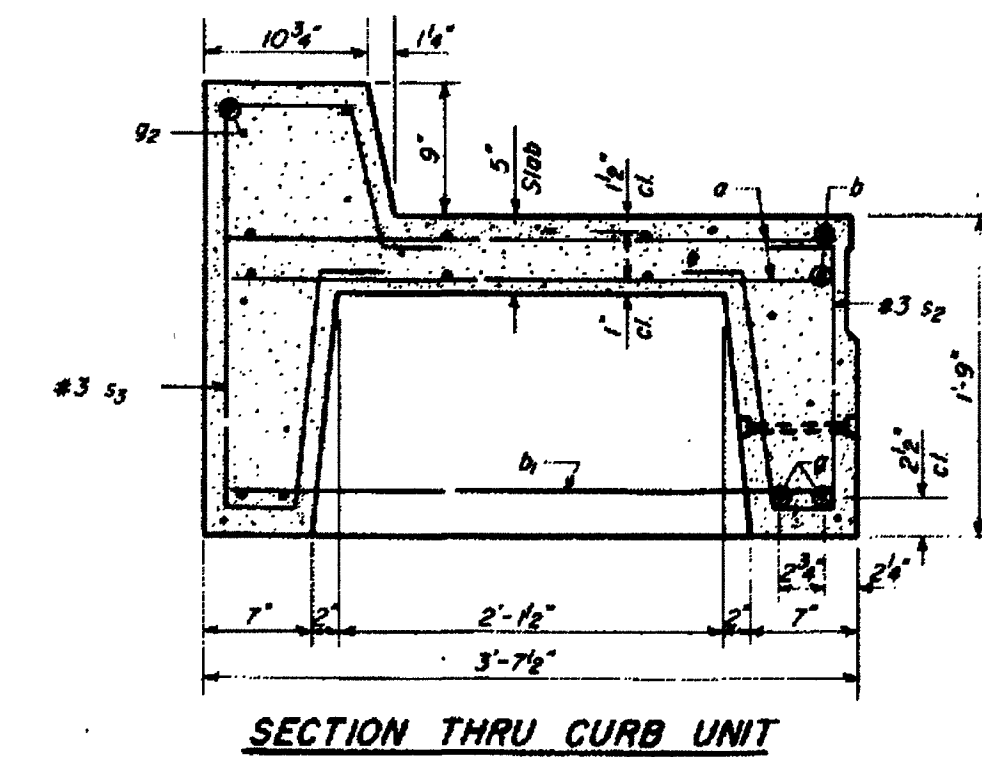


PLAN SHOWING SLAB REINFORCEMENT

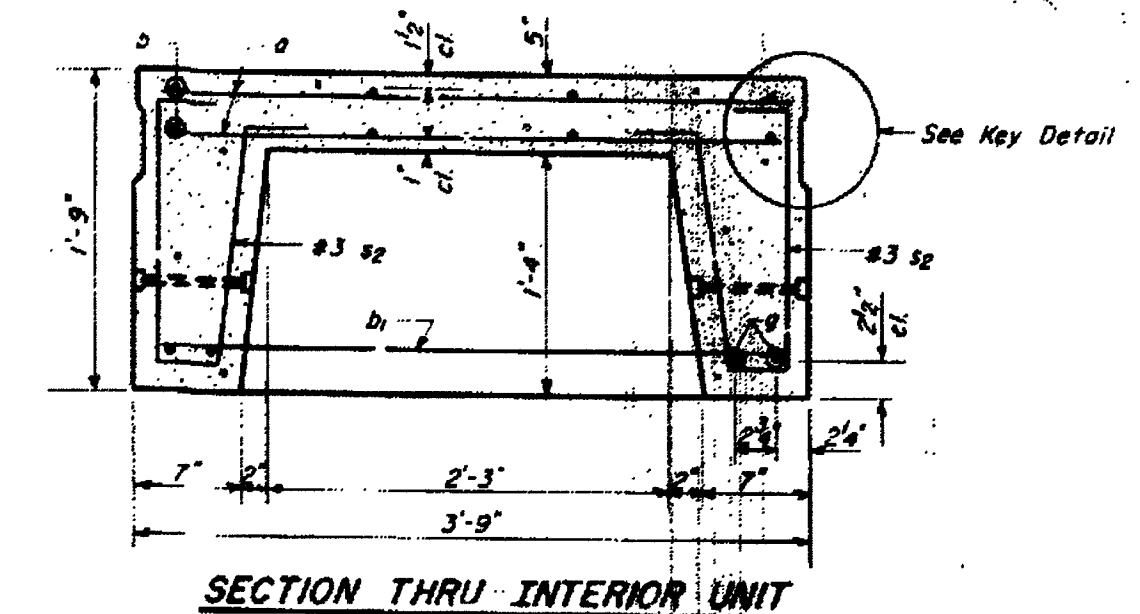


HALF SECTION

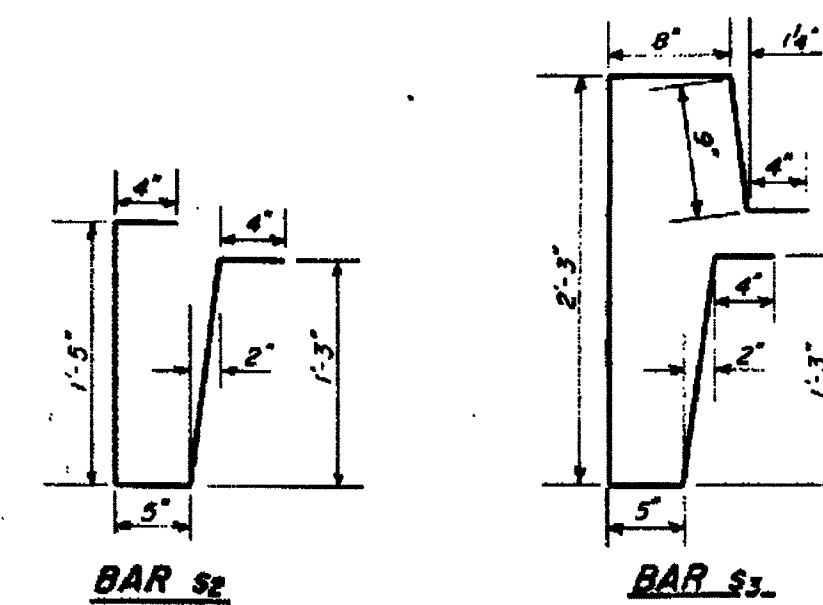
HALF END ELEVATION



SECTION THRU CURB UNIT

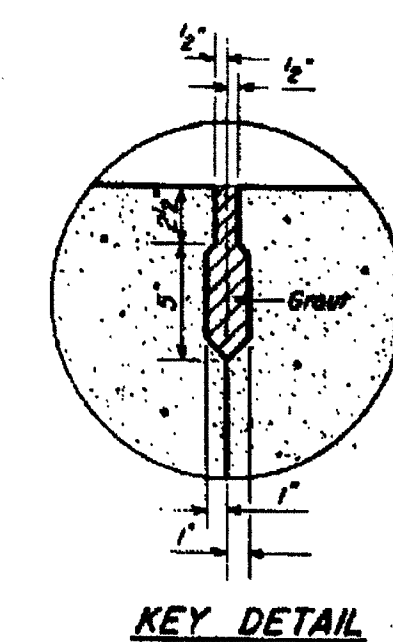


SECTION THRU INTERIOR UNIT

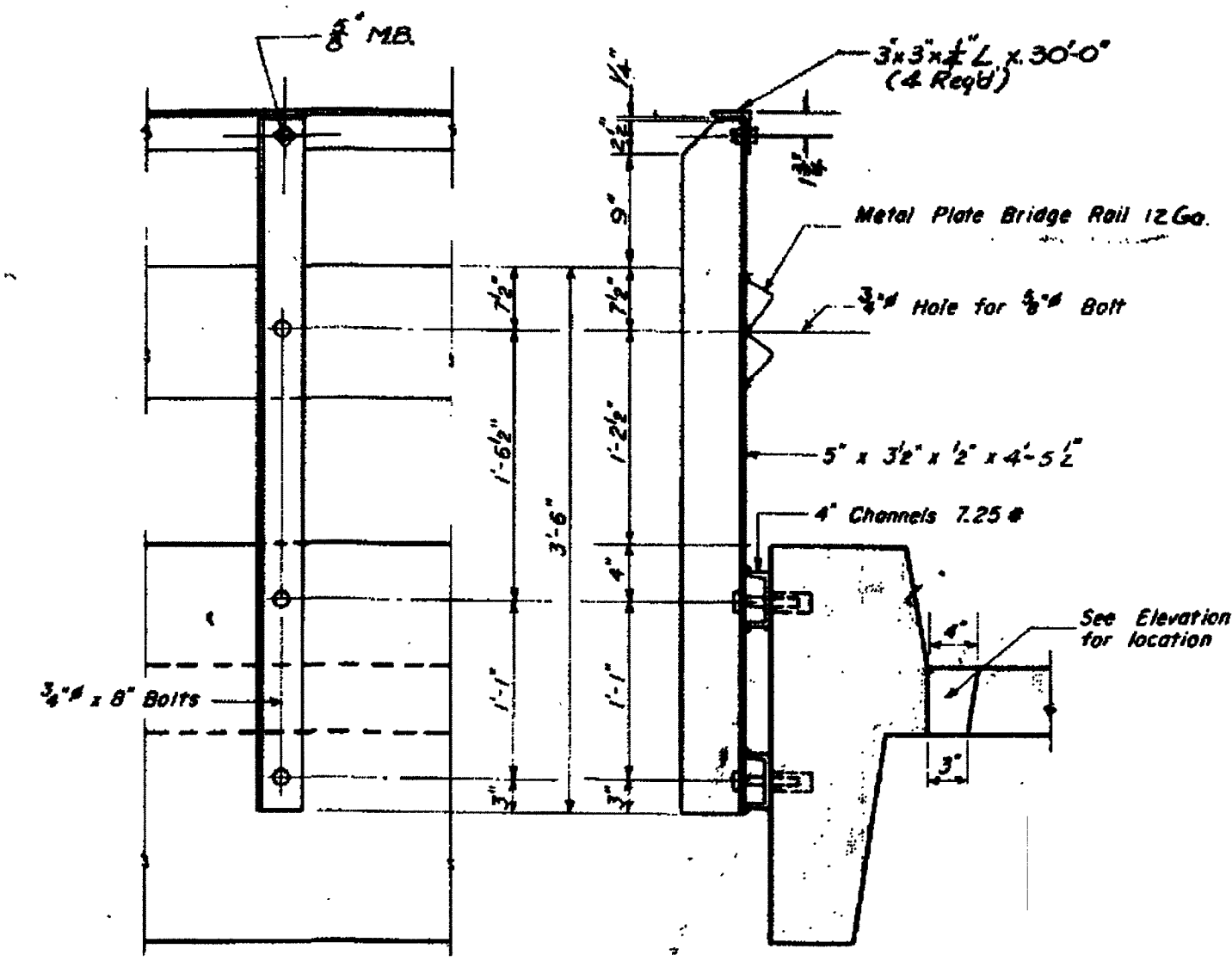


BAR #2

BAR #3



KEY DETAIL



METAL PLATE BRIDGE RAIL

PRECAST SLAB BILL OF MATERIAL

30' Span	Curb Unit			Interior Unit				
	Bar	Size	No.	Length	Weight	No.	Length	Weight
a	#4	107	3'-3"	232	107	3'-3"	232	
b	#4	8	29'-6"	158	8	29'-6"	158	
bi	#4	8	3'-3"	17	8	3'-3"	17	
g	#11	4	29'-6"	627	4	29'-6"	627	
g ₂	#4	2	29'-6"	39				
g ₃	#3	31	3'-9"	64	62	3'-9"	68	
g ₄	#3	31						
Reinforcing Steel				Lb.				1122
Class X Concrete				Cu Yd	4.8			4.0

STRESSES
 Fc = 4500 psi.
 fc = 1800 psi.
 fs = 20,000 psi.

LOADING HIS-SIR-44

WILSON & ANDERSON
 CONSULTING ENGINEERS
 CHAMPAIGN, ILLINOIS

DETAILS OF 30 FT. PRECAST BRIDGE DECK

LITTLE WABASH RESERVOIR
 FOR
CITY OF MATTOON, ILLINOIS
 WATER DEPARTMENT

DATE: NOV. 19, 1956 SHEET 41 OF 41