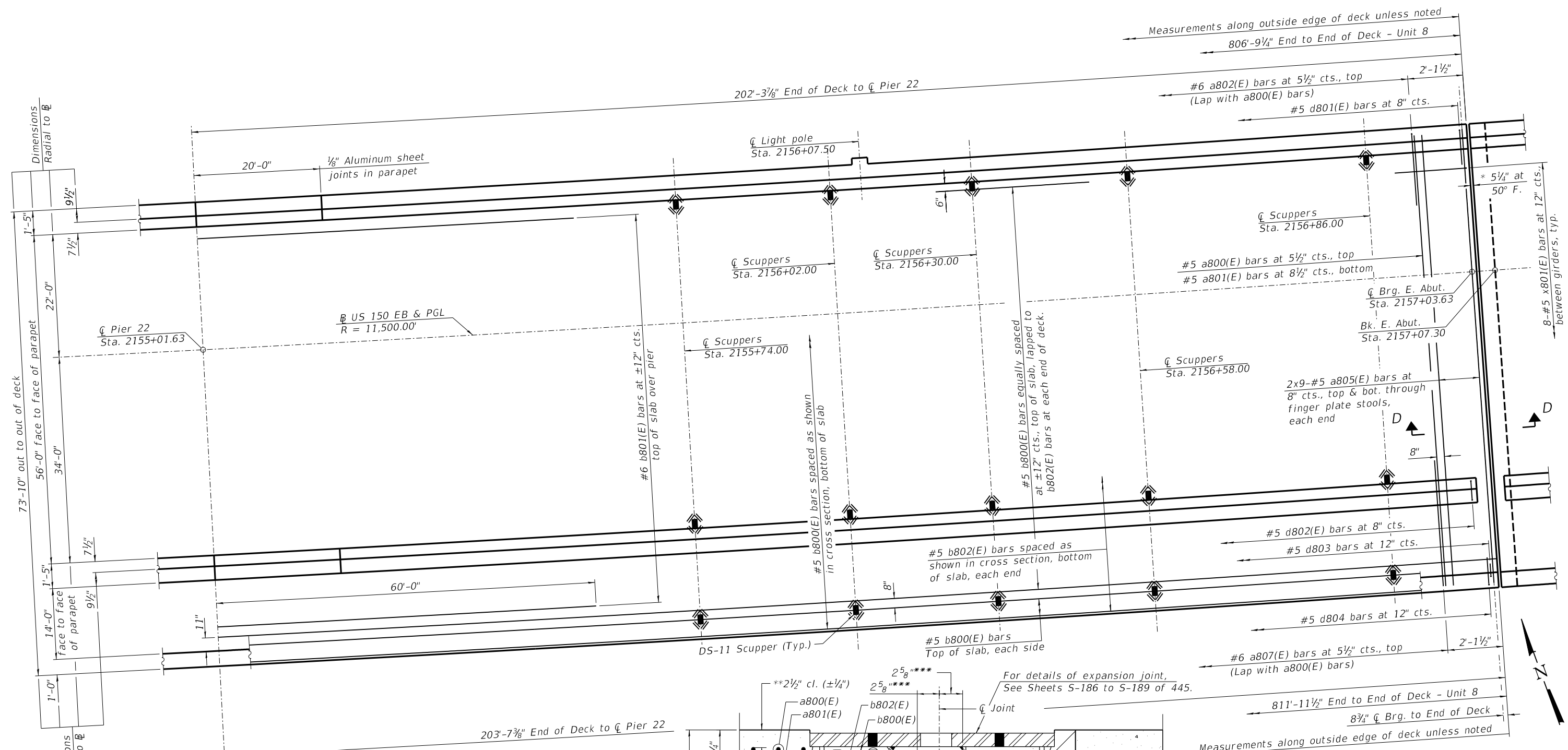


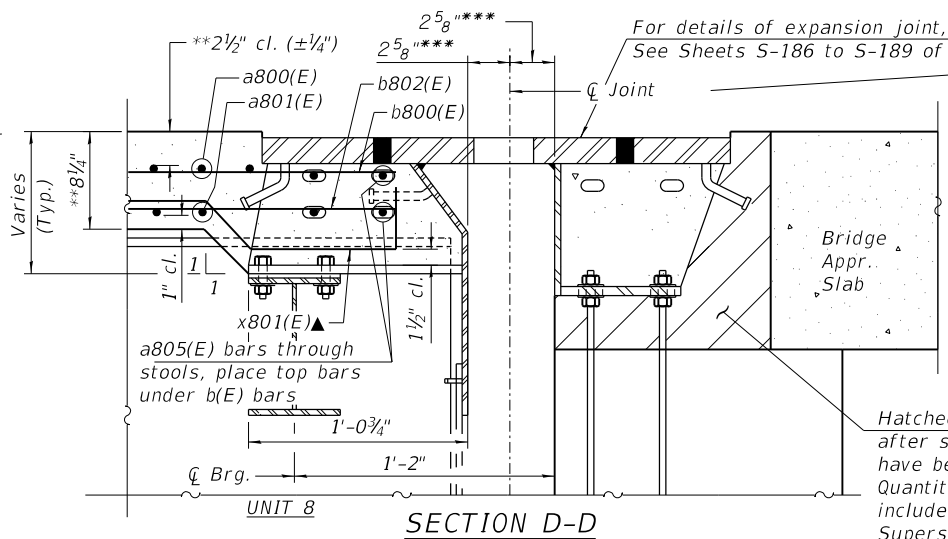
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MINIMUM BAR LAP
 #5 bar = 3'-6"
 #6 bar = 3'-7"

*Dimension showing joint opening. For joint opening see Sheet S-188 of 445.
 **Prior to grinding
 ***At 50°F

▲ See Sheet S-143 of 445 for field bend details.



Notes:
 See Sheets S-143 & S-144 of 445 for superstructure details and Bill of Material.
 Bars indicated thus 72x26-#5 etc. indicates 72 lines of bars with 26 lengths per line.
 Longitudinal reinforcing bars are placed along the curve. Transverse bars are placed radially in the deck with the plan specified spacing along the south side of the deck.
 For reinforcement around scuppers, See Sheet S-144 of 445.

Hatched area to be poured after superstructure forms have been removed. Quantity of concrete included with Concrete Superstructure.



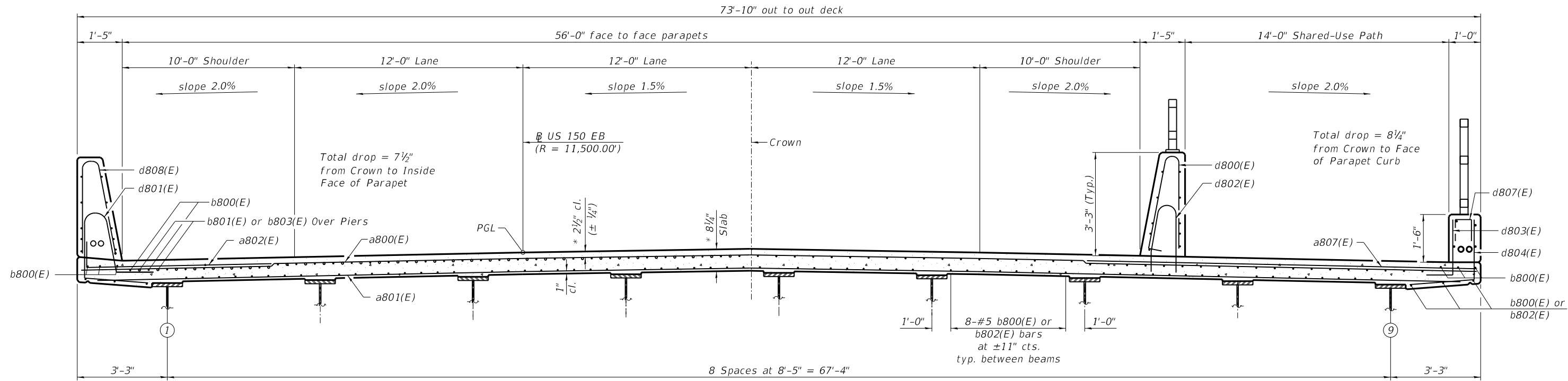
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PLOT DATE = 1/25/2019	DRAWN - DAP	REVISED -
	CHECKED - MNM	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

DECK PLAN - UNIT 8, 4 OF 4
 STRUCTURE NO. 090-0180

SHEET 5-97 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1001
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT NHPP-YRP3(905)		



MINIMUM BAR LAP

#5 bar = 3'-6"
#6 bar = 3'-7"

NEAR PIER

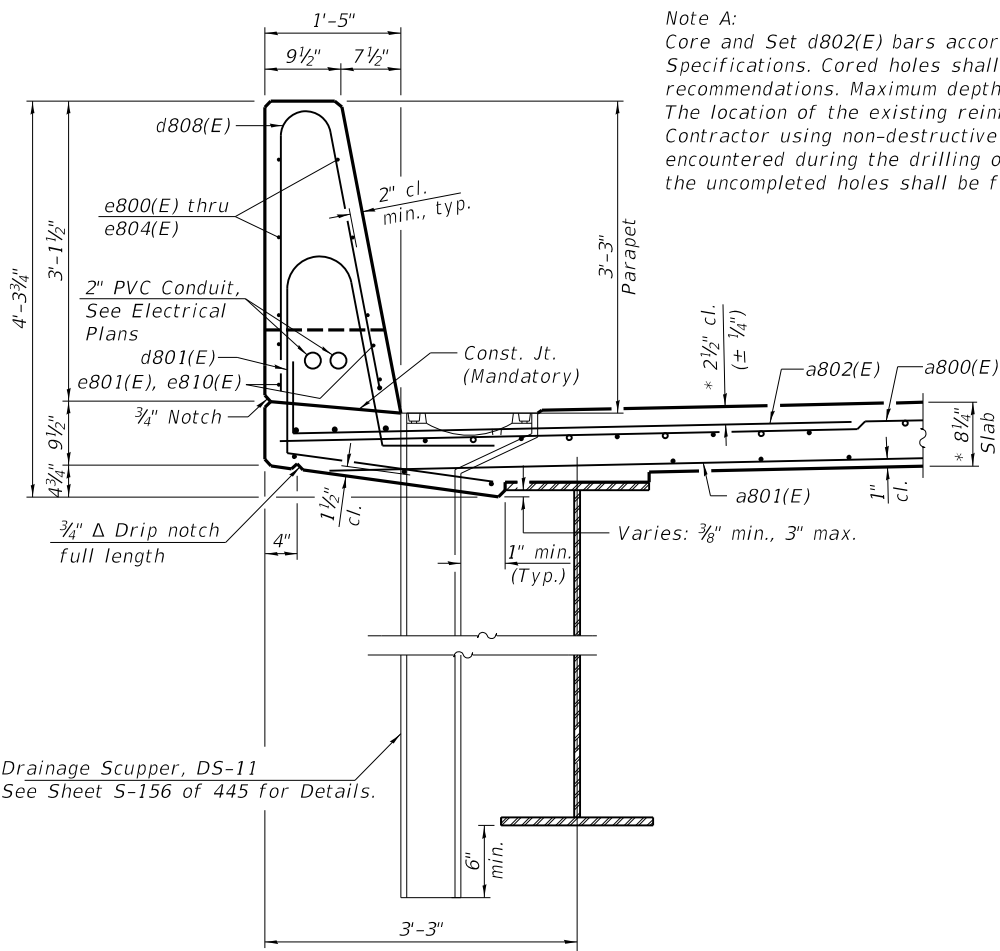
TYPICAL CROSS SECTION

(Looking Upstation - Horizontal dimensions measured radial to US 150 EB)

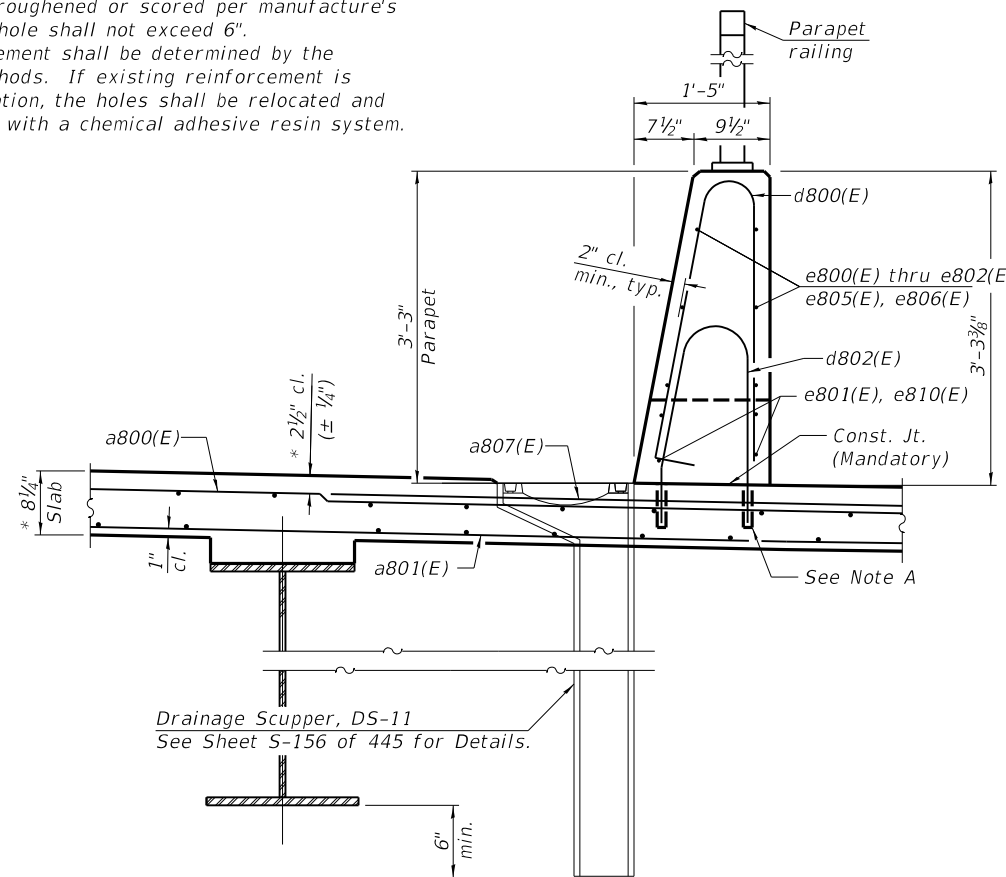
NEAR MIDSPAN

Note A:
Core and Set d802(E) bars according to Article 584 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6". The location of the existing reinforcement shall be determined by the Contractor using non-destructive methods. If existing reinforcement is encountered during the drilling operation, the holes shall be relocated and the uncompleted holes shall be filled with a chemical adhesive resin system.

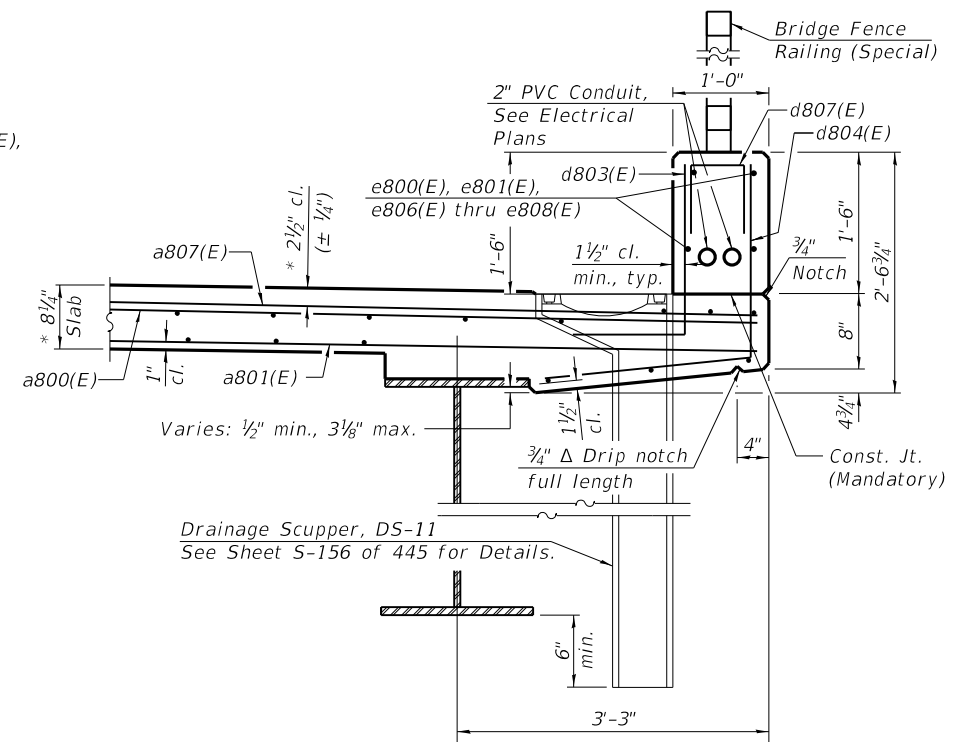
Notes:
See Sheets S-143 & S-144 of 445 for superstructure details and Bill of Material.
Drains shall be located clear of all cross frames.
* Prior to grinding.



SECTION THRU NORTH PARAPET



SECTION THRU SOUTH PARAPET



SECTION THRU SOUTH CURB

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DRAWN - DAP
CHECKED - MNM

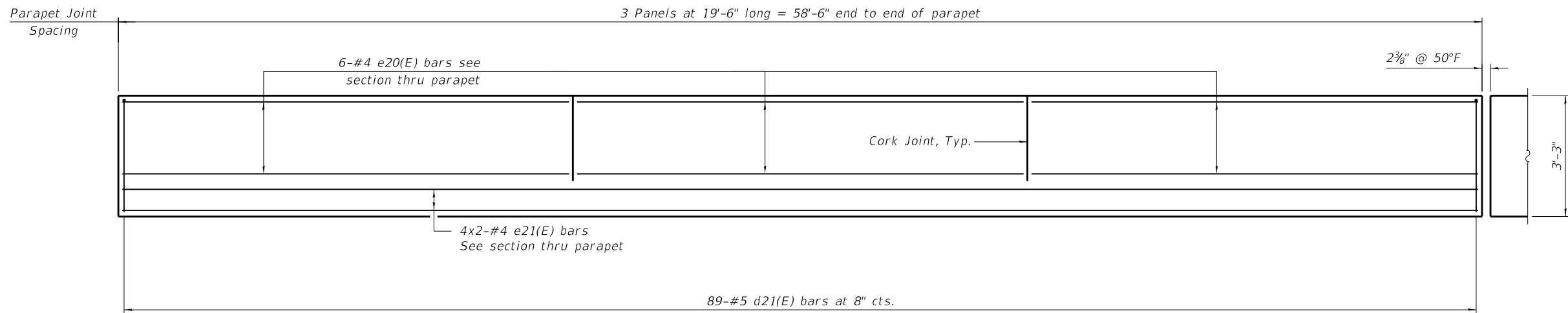
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DEPARTMENT OF TRANSPORTATION**

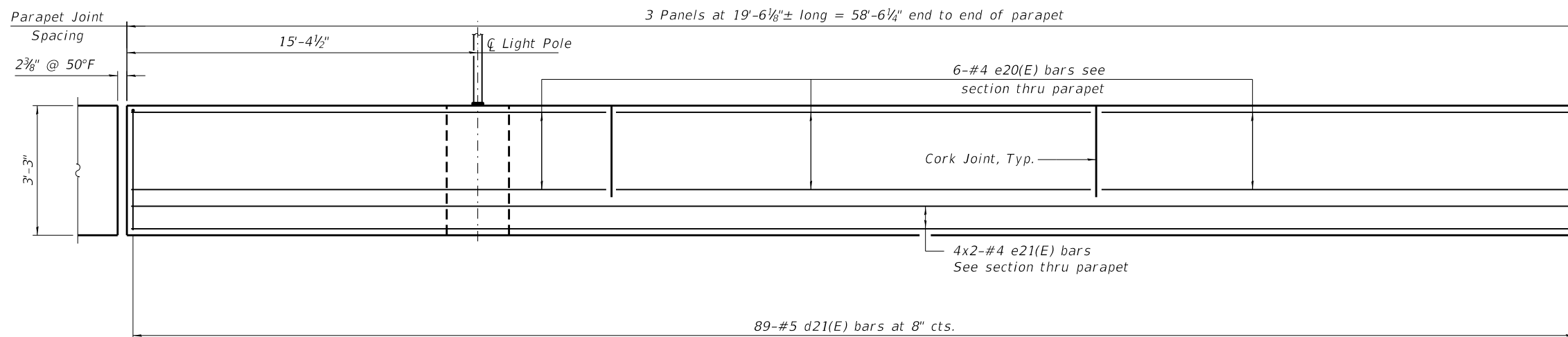
**DECK CROSS SECTION, UNIT 8
STRUCTURE NO. 090-0180**

SHEET 5-98 OF 445 SHEETS

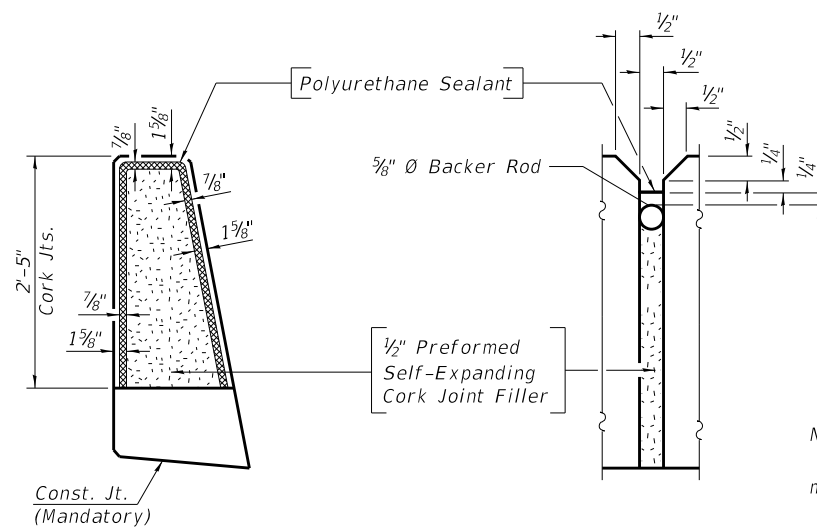
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317	[15B;(102-1),(14HB)]BR	PEO/TAZ	1361	1002
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT NHPP-YRP3(905)		



VAULTED SPAN - INSIDE ELEVATION OF NORTH PARAPET



VAULTED SPAN - INSIDE ELEVATION OF SOUTH PARAPET



PARAPET JOINT DETAILS

Note:
1. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

MIN. LAP LENGTH
#4 = 2'-5"

Note:
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = RHoyos
DESIGNED -
CHECKED -
PLOT SCALE = 16:0,0000 " / in.
DRAWN - CTH
PLOT DATE = 12/12/2018
CHECKED -
REVISED -

DESIGNED -
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DRAWN - CTH
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REVISED -

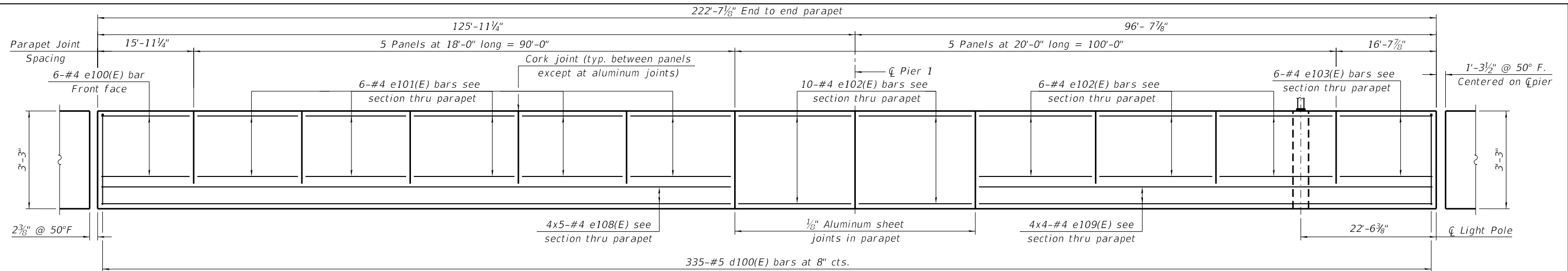
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

VAULTED SPAN PARAPET ELEVATIONS
STRUCTURE NO. 090-0180

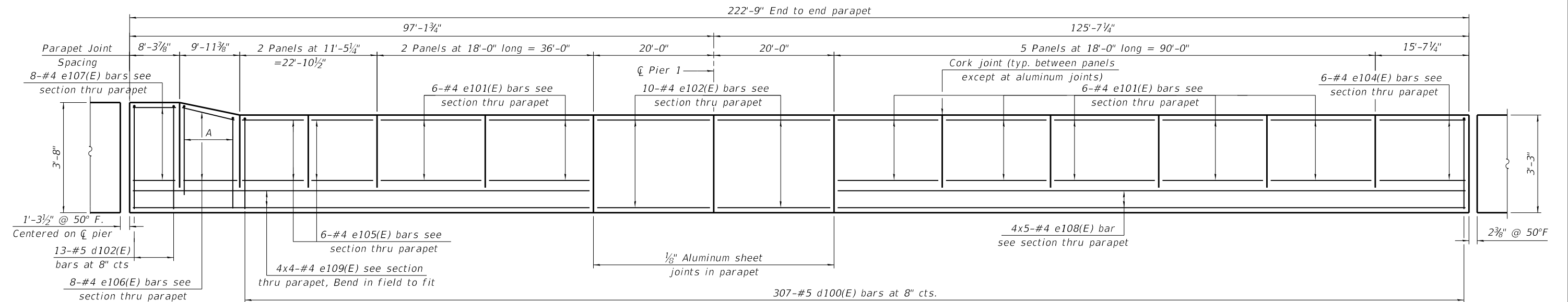
SHEET 5-99 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				

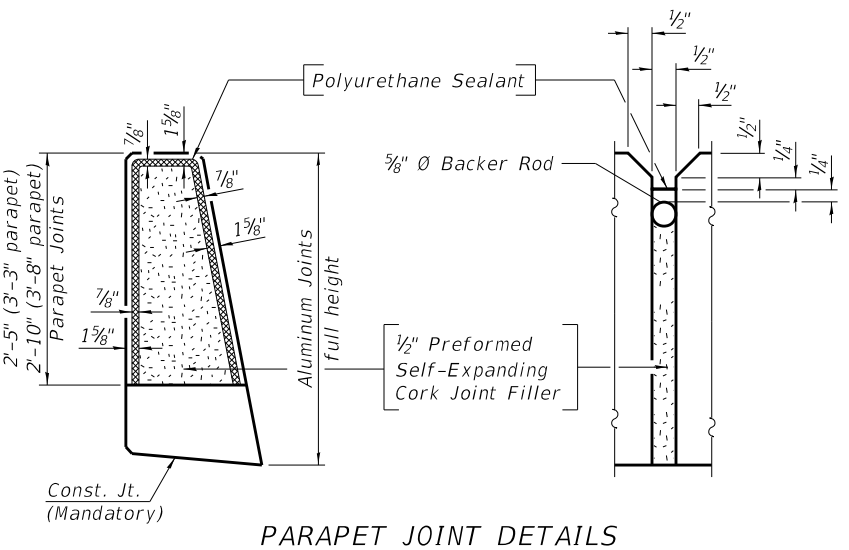
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)



UNIT 1 - INSIDE ELEVATION OF NORTH PARAPET



UNIT 1 - INSIDE ELEVATION OF SOUTH PARAPET



Notes:
 The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

MIN. LAP LENGTH
 #4 = 2'-5"

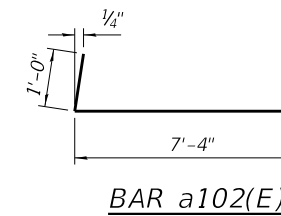
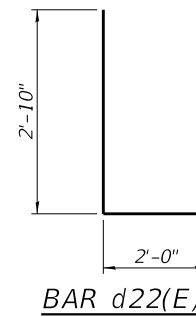
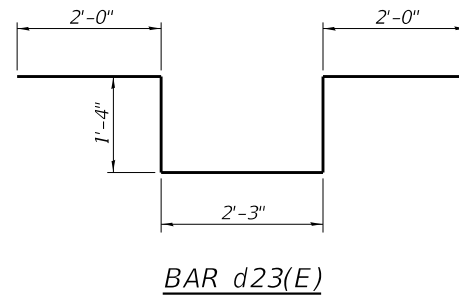
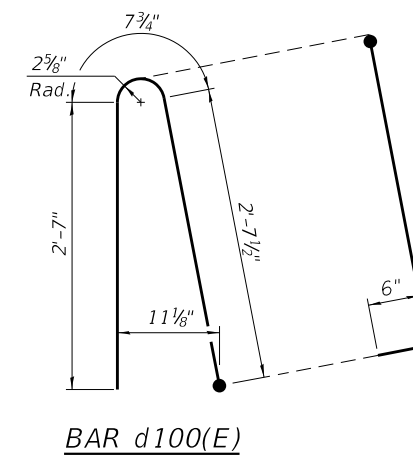
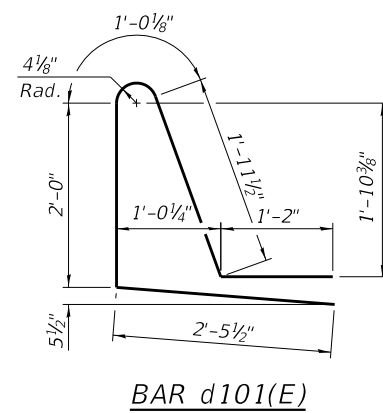
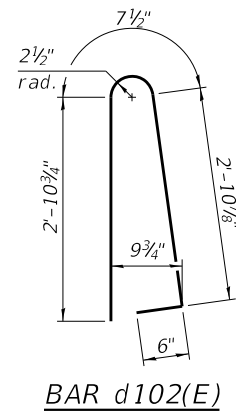
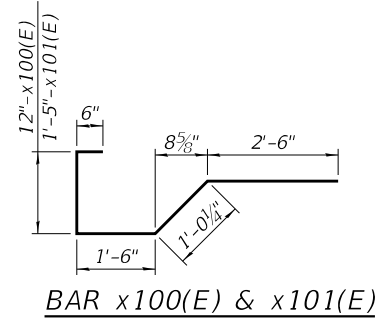
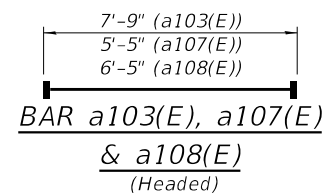
Note:
 1. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

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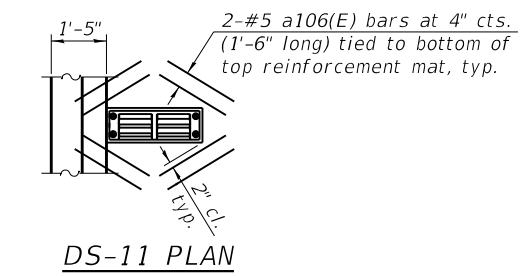
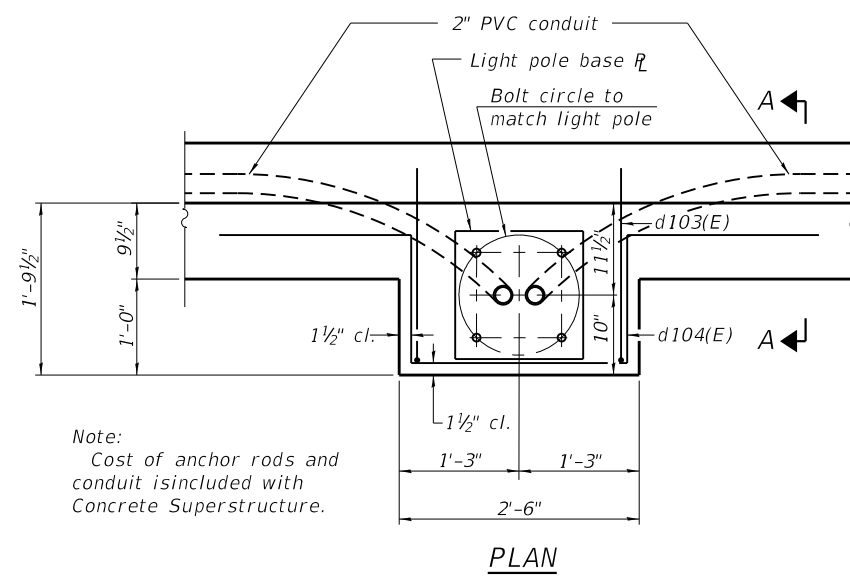
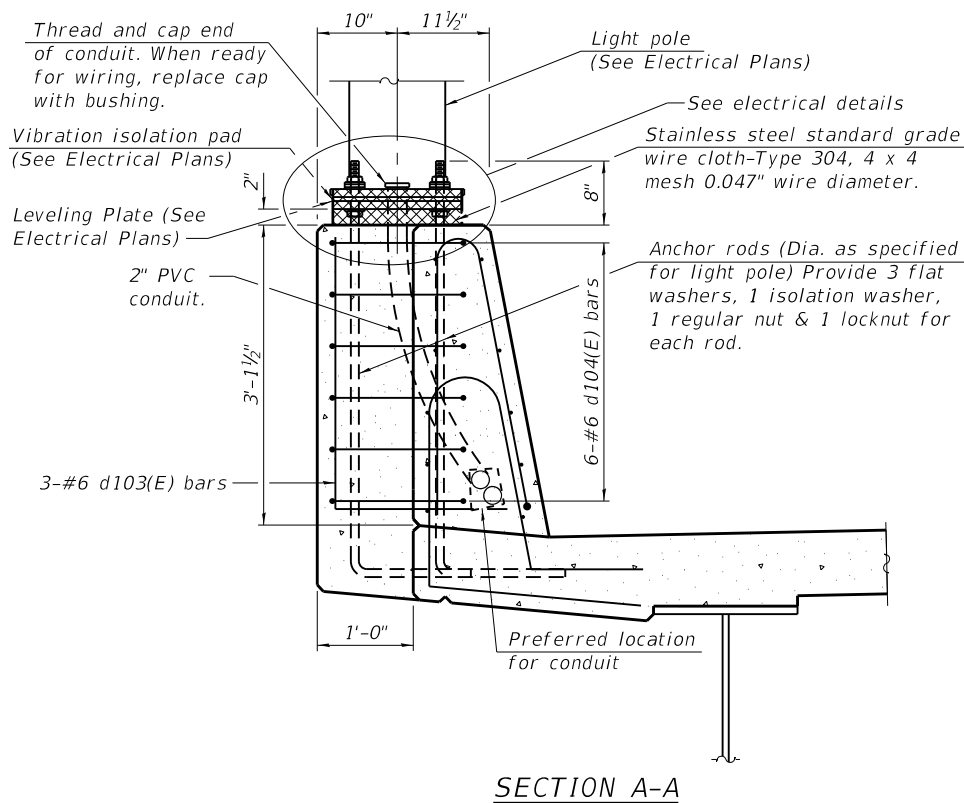
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UNIT 1 - SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a100(E)	966	#5	32'-1"	—
a101(E)	891	#5	22'-7"	—
a102(E)	974	#6	8'-4"	—
a103(E)	35	#6	7'-9"	—
a104(E)	2	#6	32'-0"	—
a105(E)	8	#6	32'-1"	—
a106(E)	80	#5	1'-6"	—
a107(E)	8	#6	5'-5"	—
a108(E)	6	#6	6'-5"	—
b100(E)	390	#5	34'-10"	—
b101(E)	186	#6	28'-7"	—
b102(E)	408	#5	30'-11"	—
d100(E)	657	#5	6'-5"	—
d101(E)	670	#5	8'-7"	—
d102(E)	13	#5	6'-11"	—
d103(E)	3	#6	4'-10"	—
d104(E)	6	#6	8'-11"	—
e100(E)	6	#4	15'-7"	—
e101(E)	72	#4	17'-8"	—
e102(E)	58	#4	19'-8"	—
e103(E)	6	#4	16'-4"	—
e104(E)	6	#4	15'-3"	—
e105(E)	12	#4	11'-1"	—
e106(E)	8	#4	9'-7"	—
e107(E)	8	#4	8'-0"	—
e108(E)	40	#4	23'-2"	—
e109(E)	32	#4	21'-0"	—
x100(E)	62	#5	6'-6"	—
x101(E)	59	#5	6'-11"	—
Reinforcement Bars, Epoxy Coated		Pound	116,450	
Concrete Superstructure		Cu. Yds.	425.5	
Protective Coat		Sq. Yd.	1588	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	932	
Diamond Grinding (Bridge Section)		Sq. Yd.	1328	



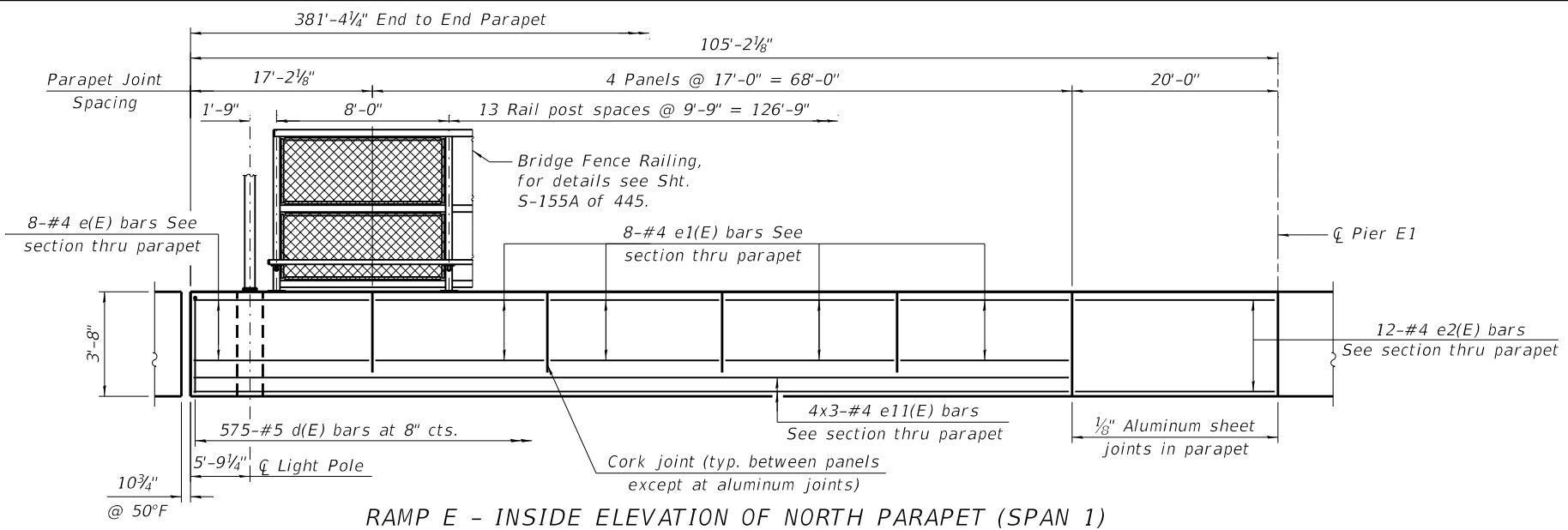
Notes:
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



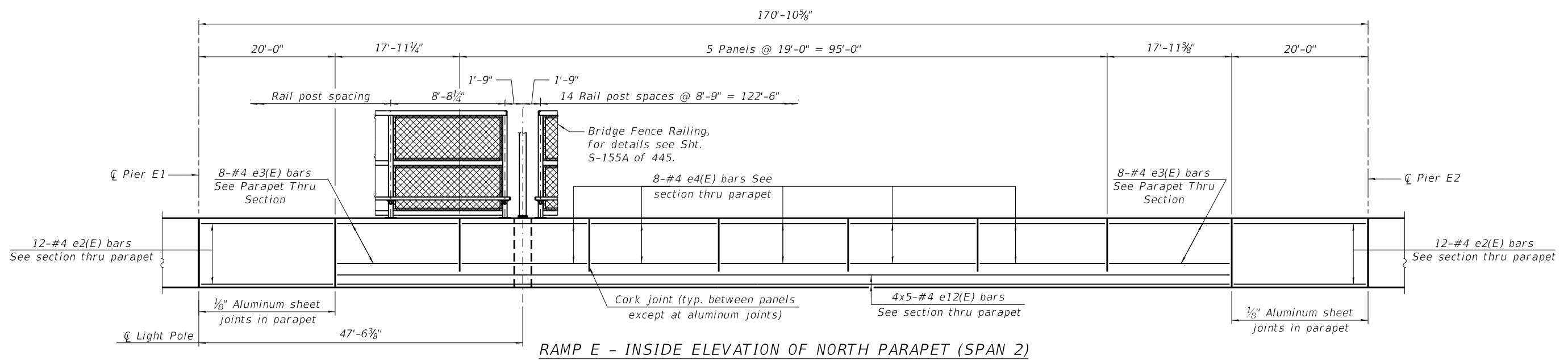
Note:
Cost of anchor rods and conduit is included with Concrete Superstructure.

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

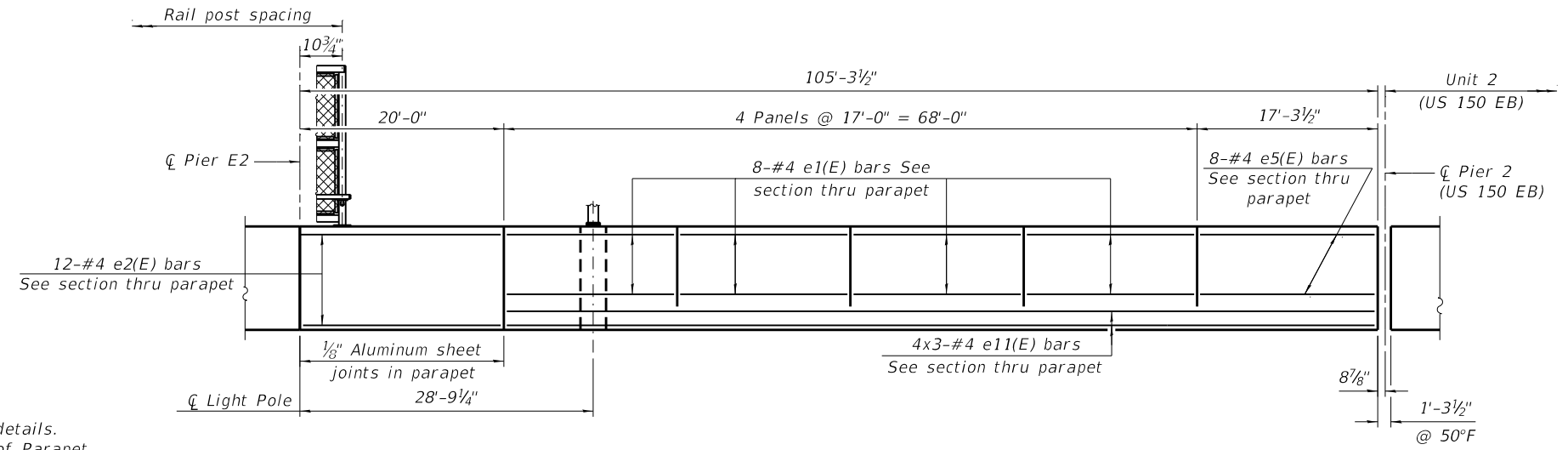
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RAMP E - INSIDE ELEVATION OF NORTH PARAPET (SPAN 1)



RAMP E - INSIDE ELEVATION OF NORTH PARAPET (SPAN 2)



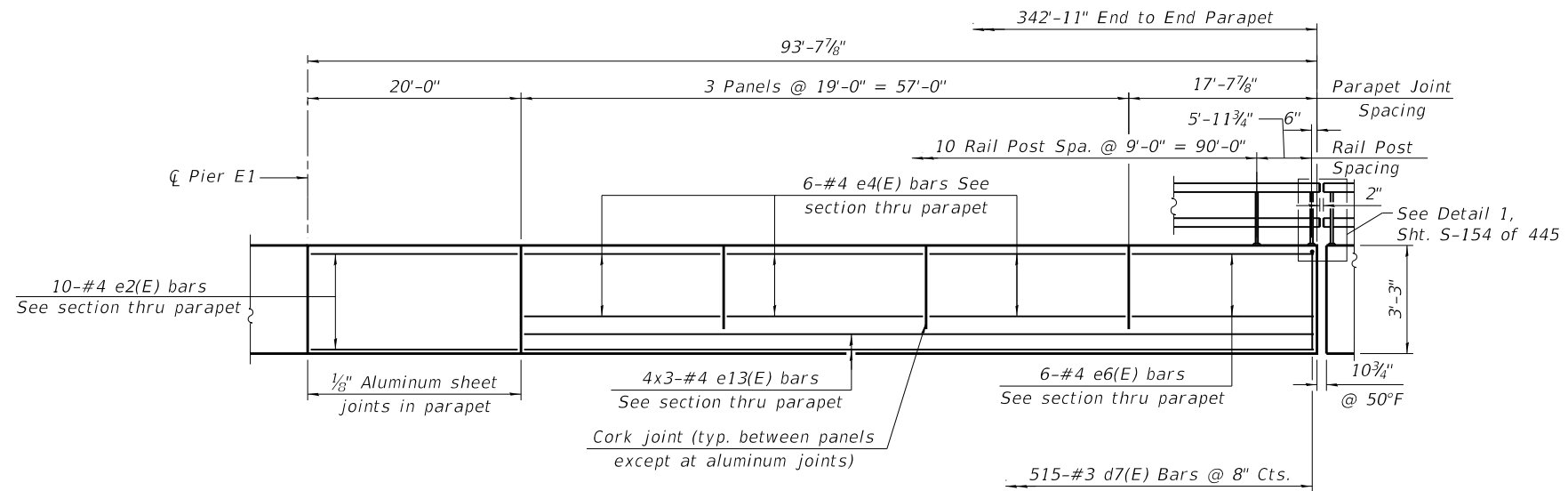
RAMP E - INSIDE ELEVATION OF NORTH PARAPET (SPAN 3)

MIN. LAP LENGTH
#4 = 2'-5"

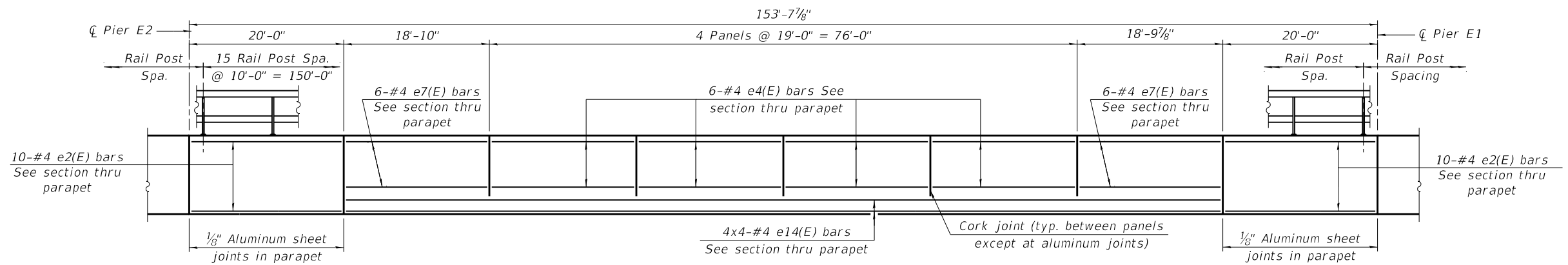
- Notes:
1. See Sheet S-105 of 445 for parapet joint details.
 2. All dimensions measured along inside face of Parapet.
 3. Bars indicated thus 20x3-#5, etc indicates 20 lines of bars with 3 lengths per line.

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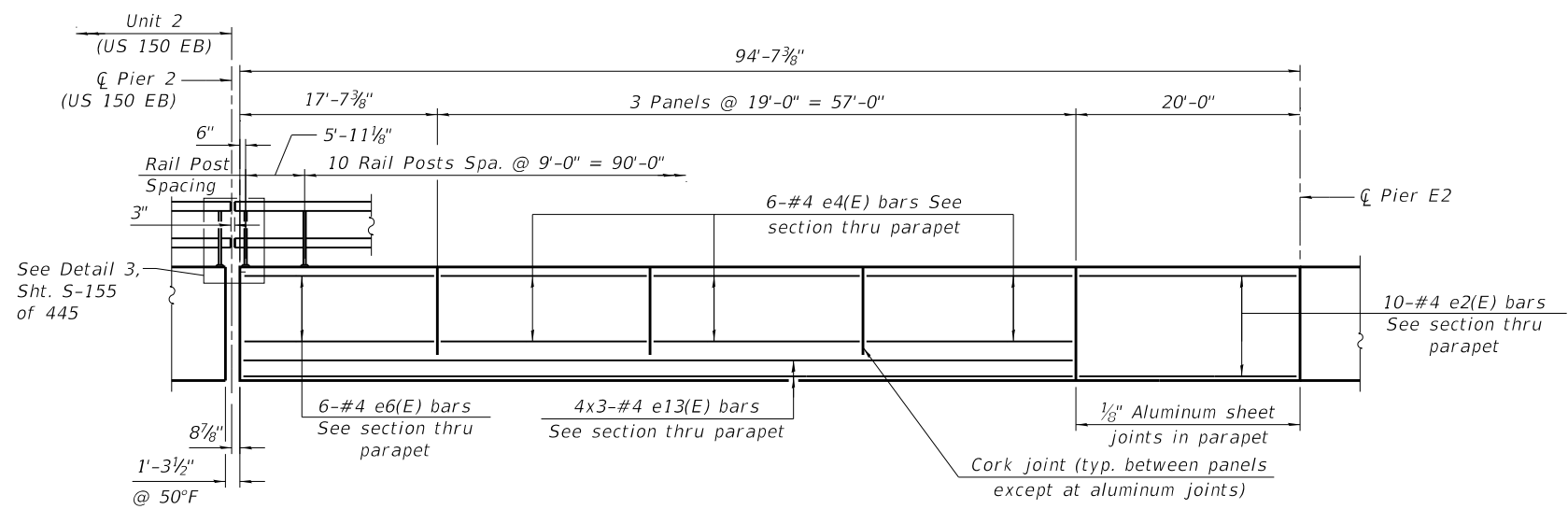
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RAMP E - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 1)



RAMP E - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 2)



RAMP E - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 3)

- Notes:
1. See Sheet S-105 of 445 for parapet joint details.
 2. All dimensions measured along inside face of Parapet.
 3. Bars indicated thus 20x3-#5, etc indicates 20 lines of bars with 3 lengths per line.

MIN. LAP LENGTH
#4 = 2'-5"

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TYLIN INTERNATIONAL
200 S. WACKER DR.
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CHICAGO, IL 60606
TEL: 312-777-2900

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CHECKED -
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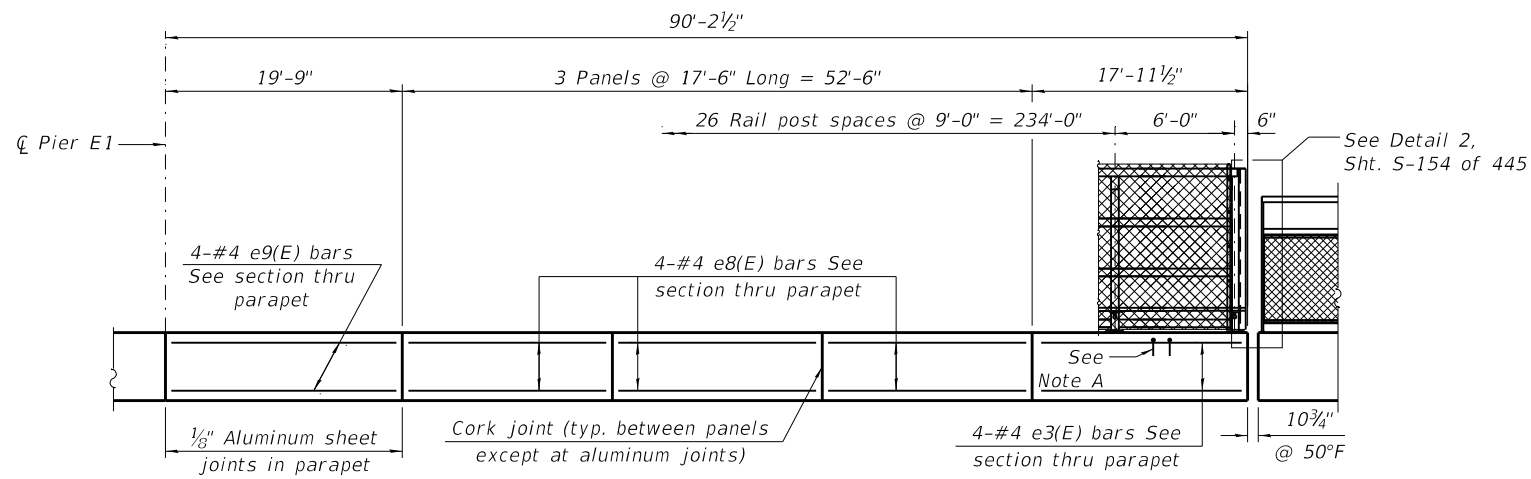
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH PARAPET ELEVATION - RAMP E
STRUCTURE NO. 090-0180

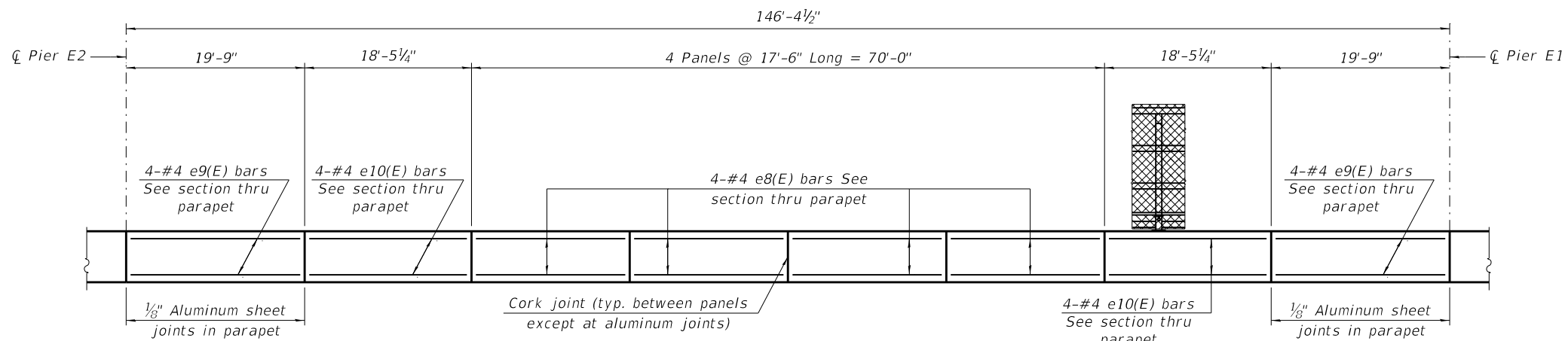
SHEET 5-103 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

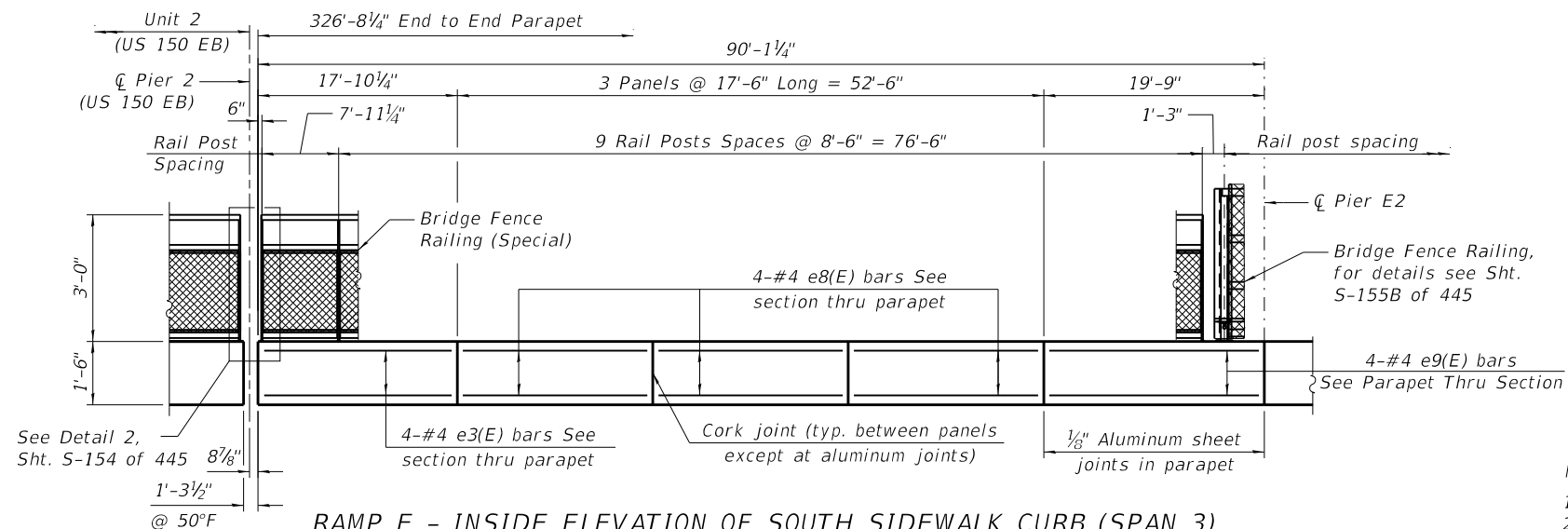


RAMP E - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 1)

Note A: 2-#5 d8(E) bars at each rail post, 78 thus.



RAMP E - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 2)



RAMP E - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 3)

- Notes:
1. See Sheet S-105 of 445 for parapet joint details.
 2. All dimensions measured along inside face of Parapet.
 3. Bars indicated thus 20x3-#5, etc indicates 20 lines of bars with 3 lengths per line.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

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DESIGNED -
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REVISED -

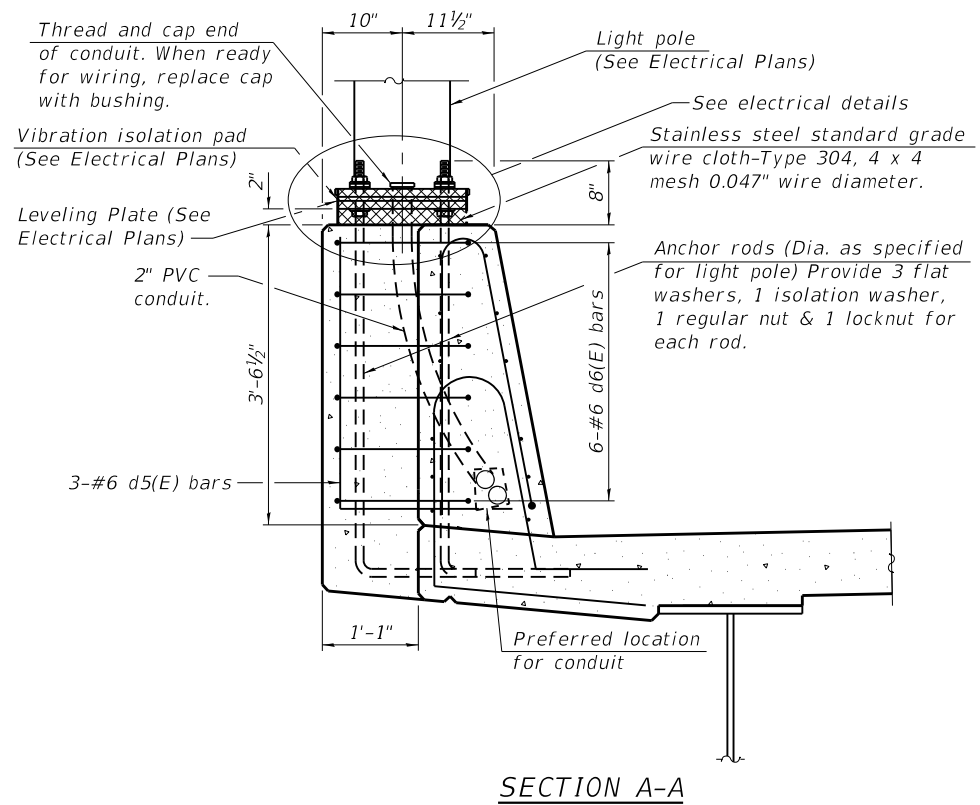
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SHARED-USE PATH CURB ELEVATION - RAMP E
STRUCTURE NO. 090-0180

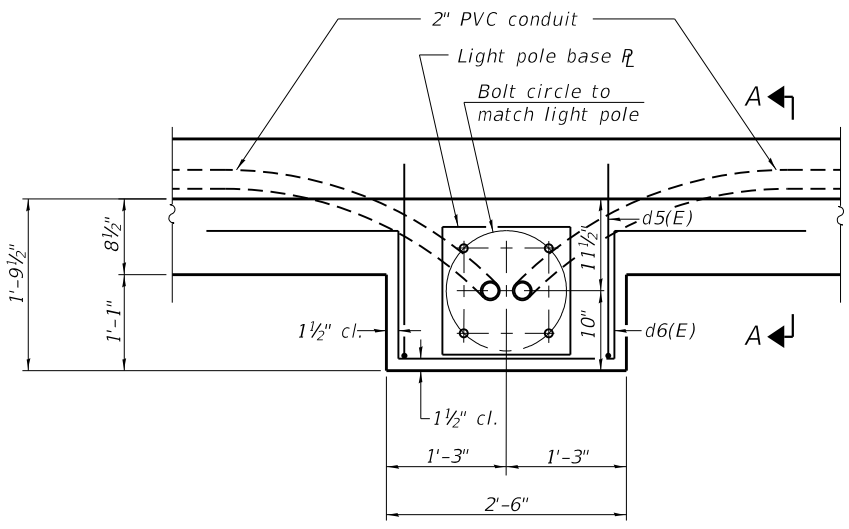
SHEET S-104 OF 445 SHEETS

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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

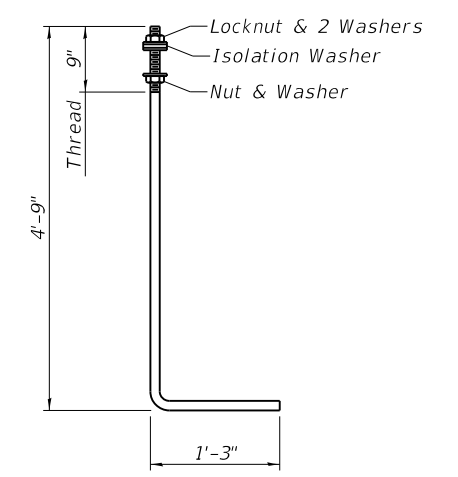
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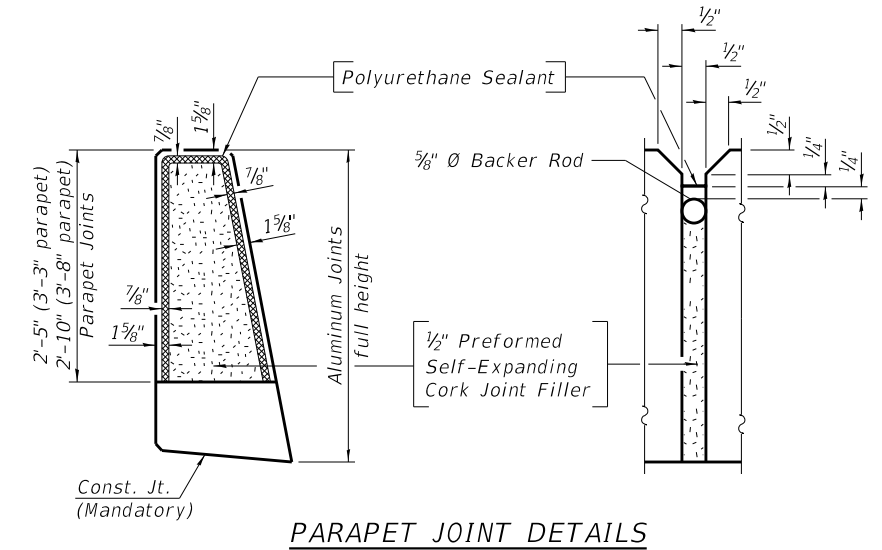
SECTION A-A



PLAN

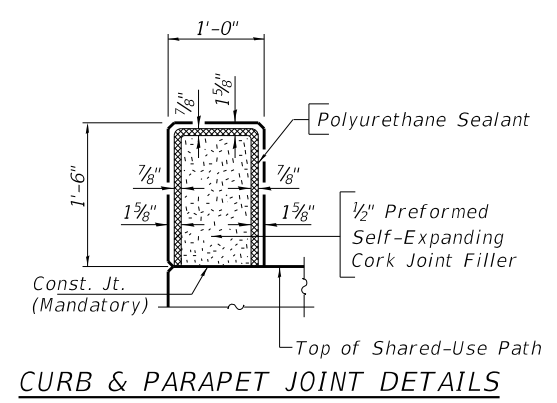


ANCHOR ROD
 Diameter as specified for light poles.
 (ASTM F 1554 Grade 105) Full length hot dipped galvanized.

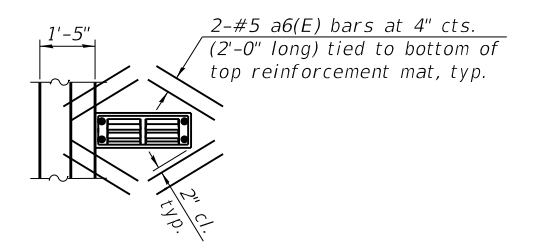


PARAPET JOINT DETAILS

Notes:
 The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

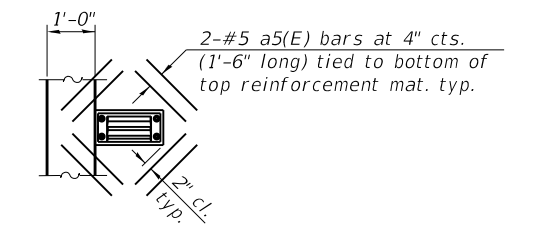


CURB & PARAPET JOINT DETAILS



DS-12 PLAN

Note:
 Cut longitudinal reinforcement to clear drainage scuppers.



DS-11 PLAN

Note:
 Cut longitudinal reinforcement to clear drainage scuppers.

TYLIN INTERNATIONAL 200 S. WACKER DR. SUITE 1400 CHICAGO, IL 60606 TEL: 312-777-2900	USER NAME = CHORBACZ	DESIGNED -	REVISED -
	PLOT SCALE = 5/4" = 1' / in.	CHECKED -	REVISED -
	PLOT DATE = 1/26/2019	DRAWN -	REVISED -
		CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS - RAMP E, 1 OF 2
STRUCTURE NO. 090-0180

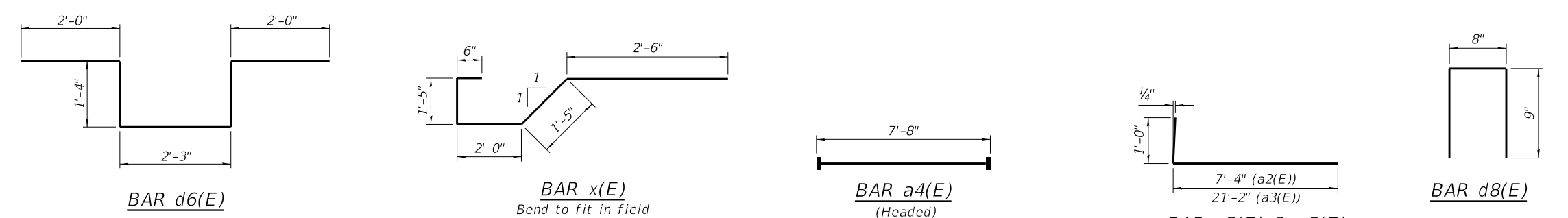
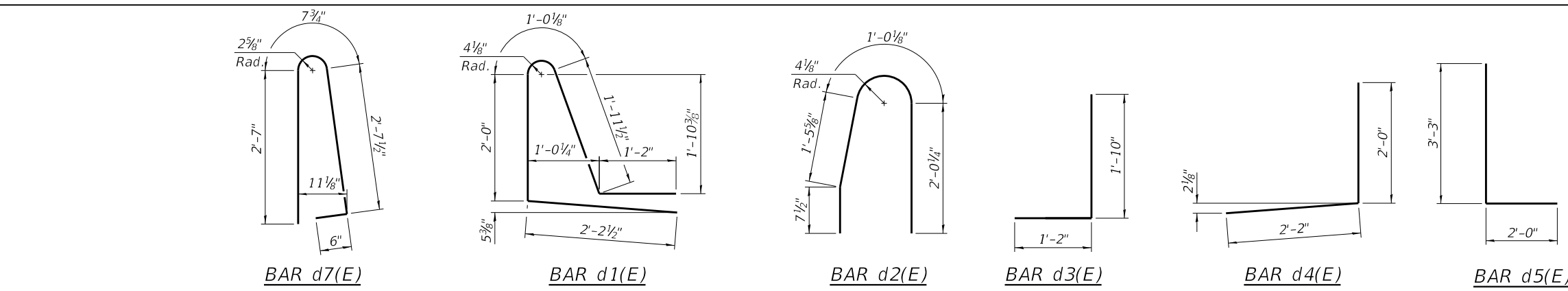
SHEET 5-105 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR]BR	PEO/TAZ	1361	1009
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

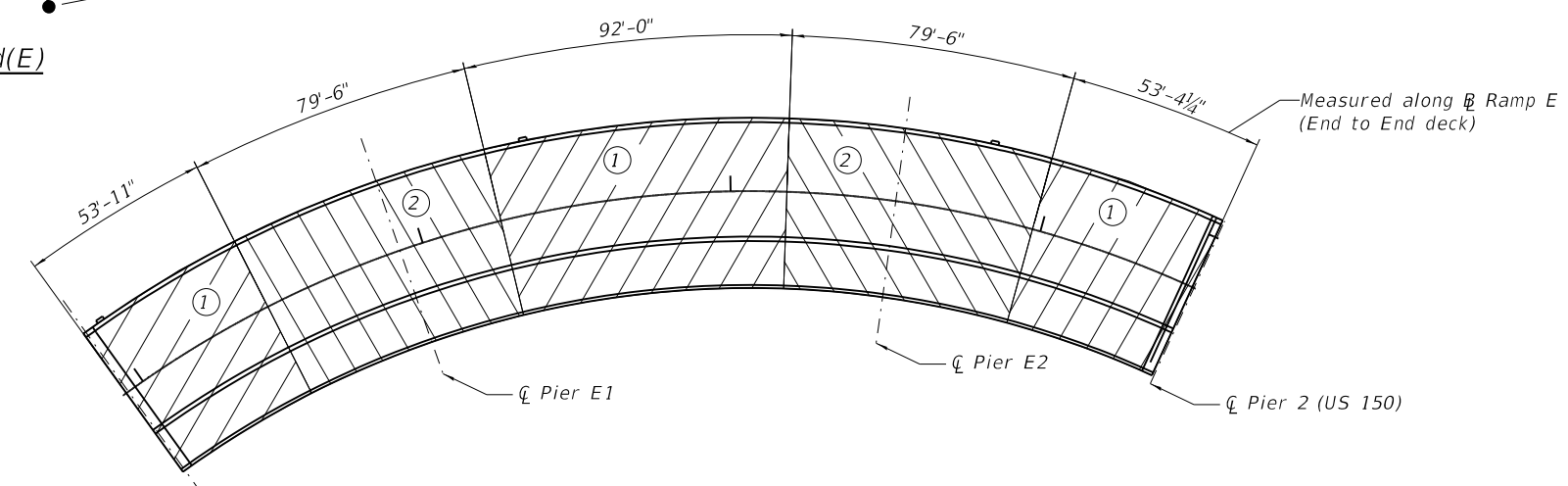
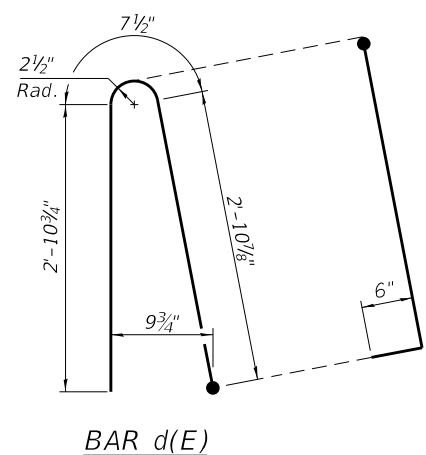
RAMP E - SUPERSTRUCTURE

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	835	#5	54'-0"	—
a1(E)	514	#5	53'-10"	—
a2(E)	821	#5	8'-4"	—
a3(E)	821	#5	22'-2"	—
a4(E)	48	#4	7'-8"	—
a5(E)	32	#5	1'-6"	—
a6(E)	32	#5	2'-0"	—
b(E)	825	#5	28'-10"	—
b1(E)	672	#5	30'-8"	—
b2(E)	336	#6	33'-3"	—
d(E)	575	#5	6'-11"	—
d1(E)	575	#5	8'-4"	—
d2(E)	515	#5	5'-2"	—
d3(E)	328	#5	3'-0"	—
d4(E)	328	#5	4'-2"	—
d5(E)	9	#6	5'-3"	—
d6(E)	18	#6	8'-11"	—
d7(E)	515	#5	6'-5"	—
d8(E)	78	#5	2'-2"	—
e(E)	8	#4	16'-10"	—
e1(E)	64	#4	16'-8"	—
e2(E)	88	#4	19'-8"	—
e3(E)	24	#4	17'-7"	—
e4(E)	100	#4	18'-8"	—
e5(E)	8	#4	17'-0"	—
e6(E)	12	#4	17'-4"	—
e7(E)	12	#4	18'-6"	—
e8(E)	40	#4	17'-3"	—
e9(E)	16	#4	19'-6"	—
e10(E)	8	#4	18'-1"	—
e11(E)	24	#4	30'-0"	—
e12(E)	20	#4	28'-2"	—
e13(E)	24	#4	26'-5"	—
e14(E)	16	#4	30'-3"	—
x1(E)	110	#5	7'-10"	—
Reinforcement Bars, Epoxy Coated		Pound	190,900	
Concrete Superstructure		Cu. Yds.	590.2	
Parapet Railing		Foot	343	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	665	
Bridge Fence Railing (Special)		Foot	84.5	
Diamond Grinding (Bridge Section)		Sq. Yd.	1310	
Protective Coat		Sq. Yd.	2391	
Bridge Fence Railing		Foot	506	



Notes:
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

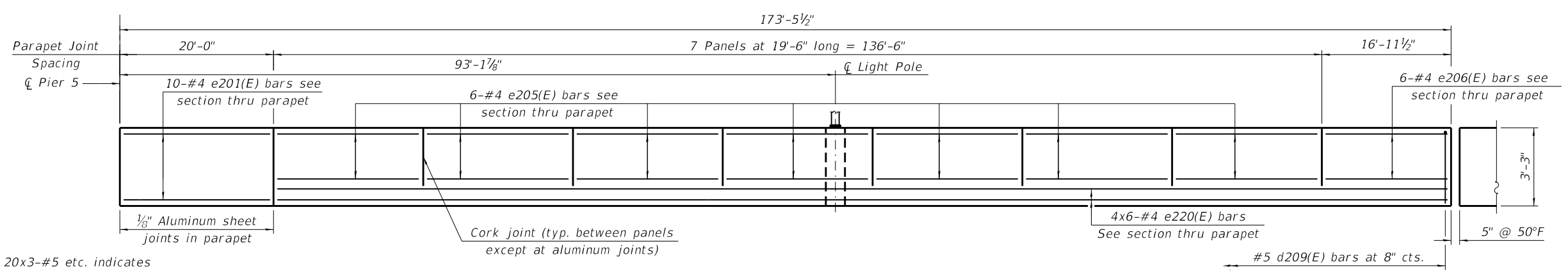
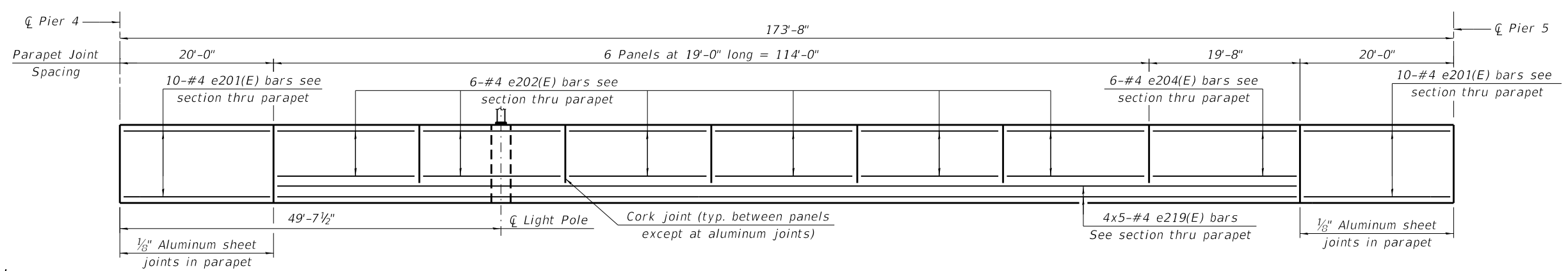
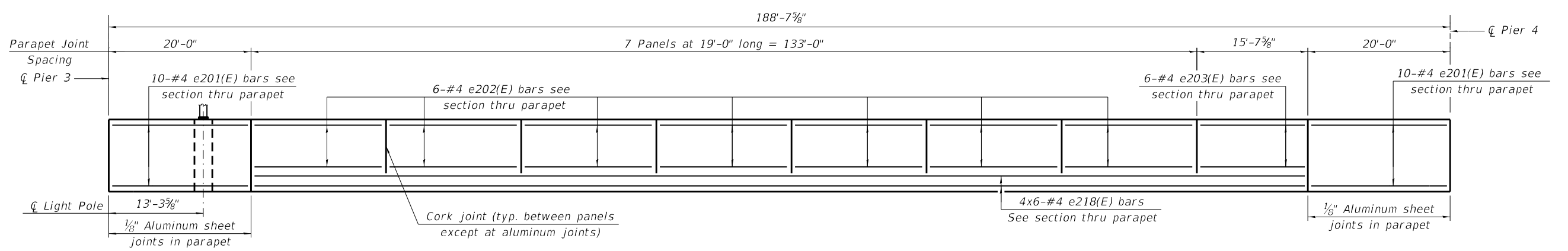
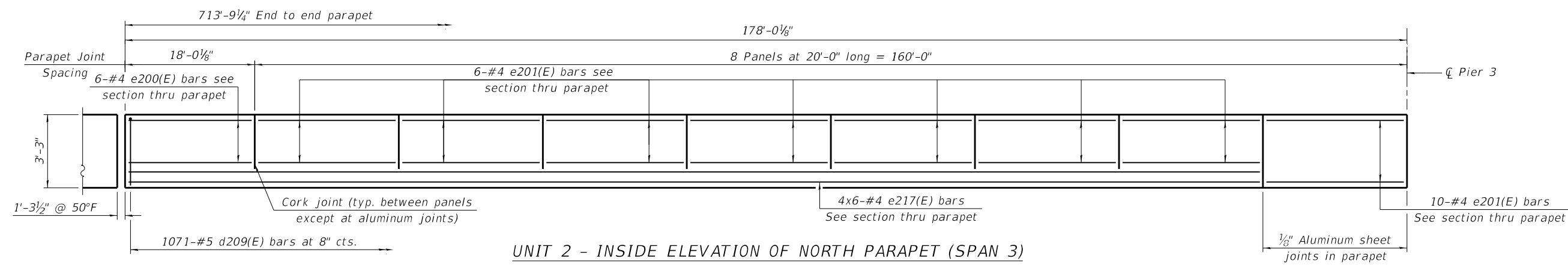


DECK POURING SEQUENCE - RAMP E
 (The pour can start from either end of the deck.)

Notes on Deck Pouring Sequence:
 When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 1) At least 72 hours shall have elapsed from the end of the previous pour.
 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

The Contractor is alerted that camber and dead load deflection values shown on the girder detail drawings were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence will result in changes to camber and elevations that affect dead load deflections. If the Contractor wishes to change the sequence, then the proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by a Licensed Structural Engineer in Illinois.

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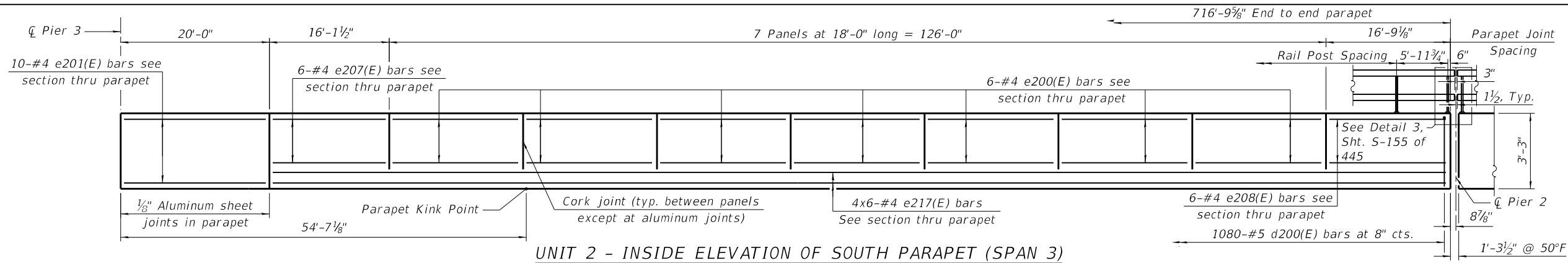


MIN. LAP LENGTH
#4 = 2'-5"

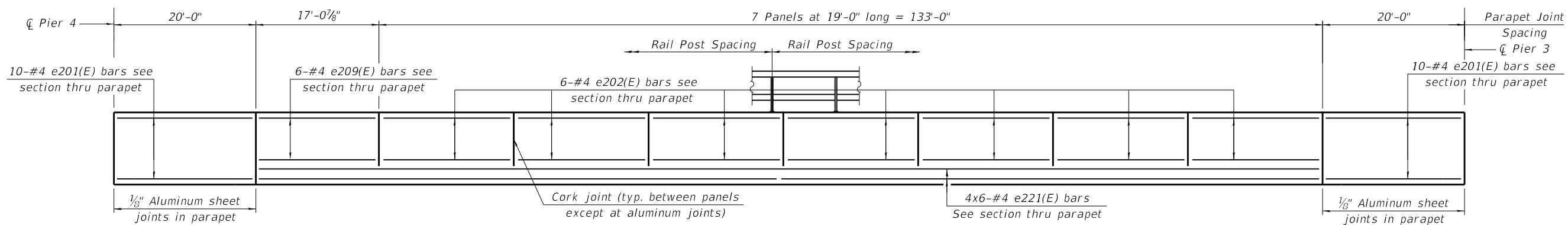
- Note:
1. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 2. See sheet S-111 of 445 for parapet joint details.

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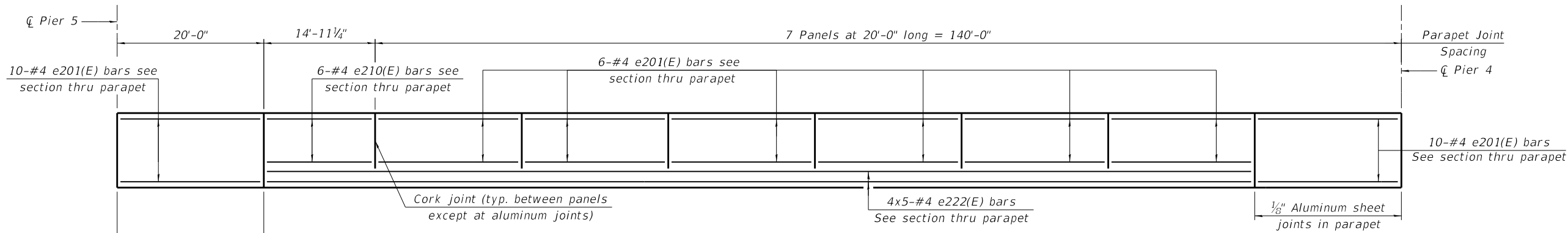
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	PLOT SCALE = 16:0,0000 '"/in.	DRAWN - CTH	REVISED -			CONTRACT NO. 68B46	ILLINOIS FED. AID PROJECT NHPP-YRP3(905)			
PLOT DATE = 1/25/2019	CHECKED -	REVISED -		SHEET S-107 OF 445 SHEETS						



UNIT 2 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 3)

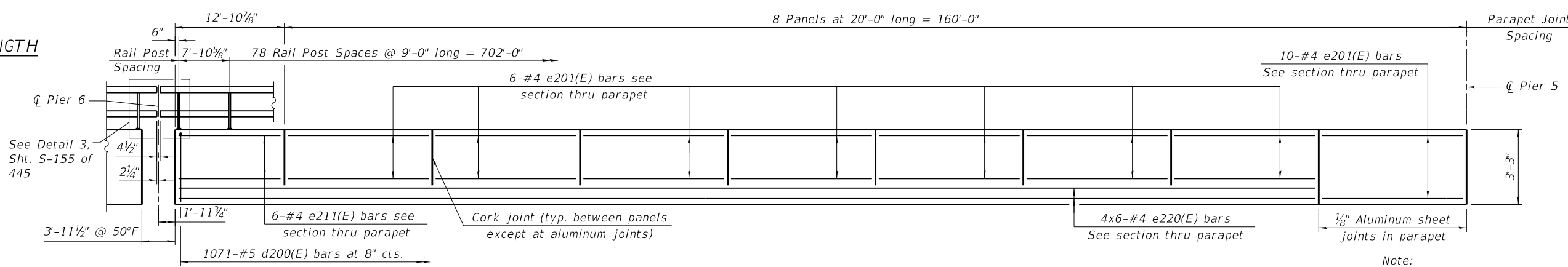


UNIT 2 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 4)



UNIT 2 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 5)

MIN. LAP LENGTH
#4 = 2'-5"

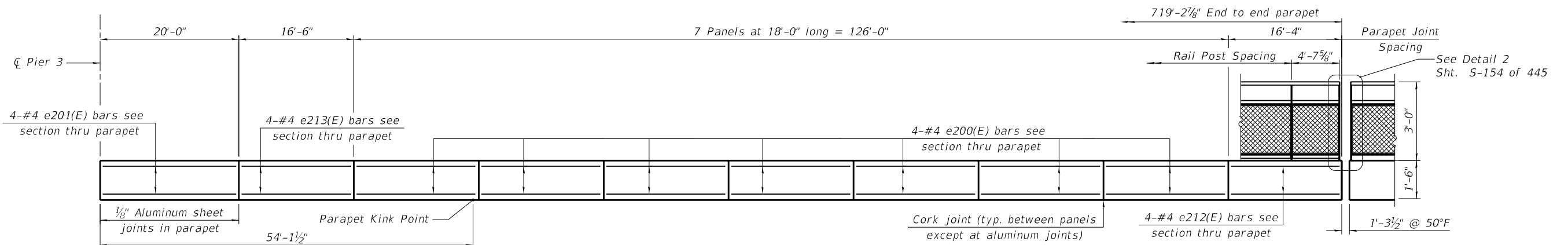


UNIT 2 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 6)

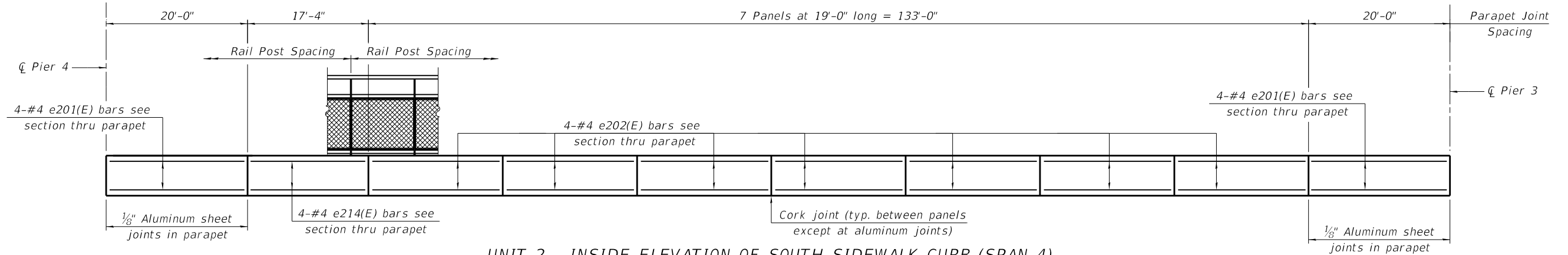
Note:
1. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

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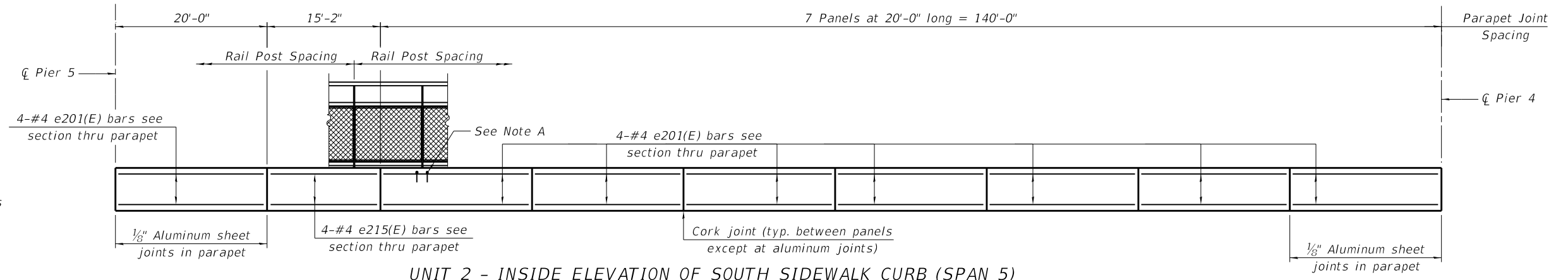
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	PLOT DATE = 1/25/2019	CHECKED -	REVISED -			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				
						SHEET 5-108 OF 445 SHEETS				



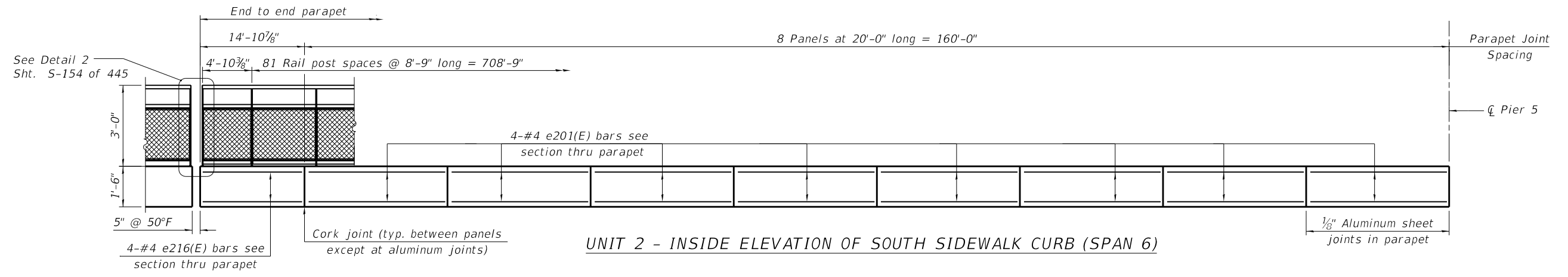
UNIT 2 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 3)



UNIT 2 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 4)



UNIT 2 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 5)



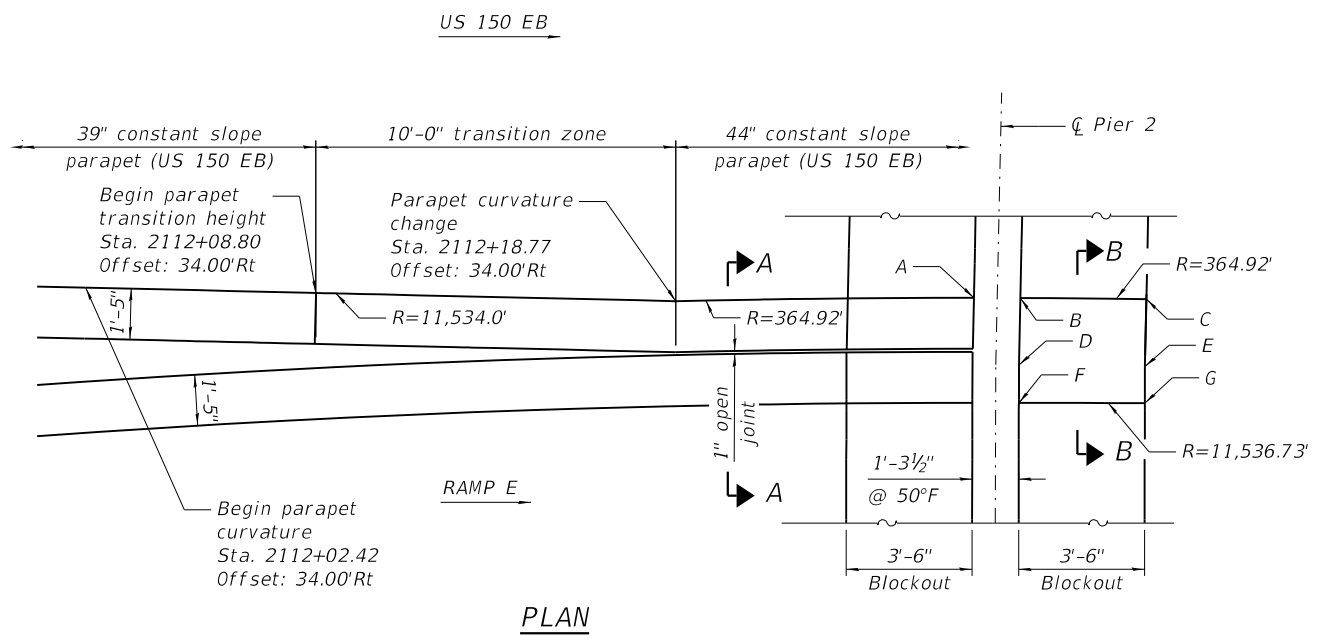
UNIT 2 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 6)

Note A: 2-#5 d208(E) bars at each rail post, 168 thus

MIN. LAP LENGTH
#4 = 2'-5"

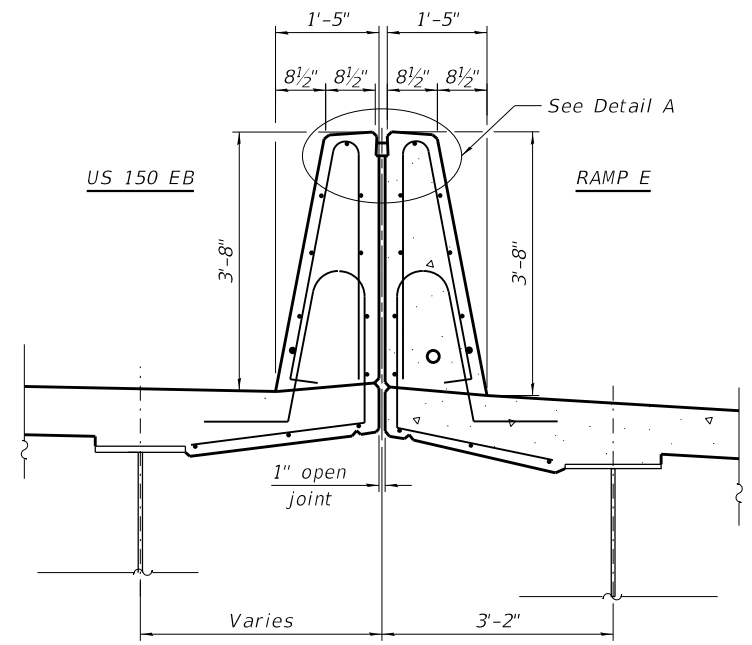
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					ILLINOIS FED. AID PROJECT NHPP-YRP3(905)					

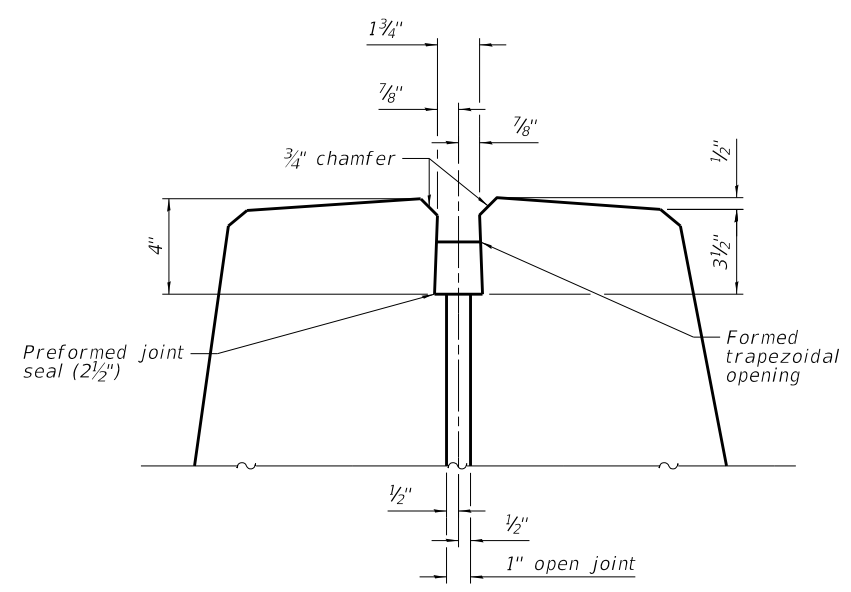


PLAN

- A: Sta. 2112+27.02; Offset: 33.73' Rt.
- B: Sta. 2112+28.31; Offset: 33.70' Rt.
- C: Sta. 2112+31.80; Offset: 33.66' Rt.
- D: Sta. 1509+53.01; Offset: 23.05' Lt. (kink in deck/barrier)
- E: Sta. 1509+56.52; Offset: 23.02' Lt. (kink in barrier)
- F: Sta. 1509+53.01; Offset: 22.0' Lt.
- G: Sta. 1509+56.52; Offset: 22.0' Lt.

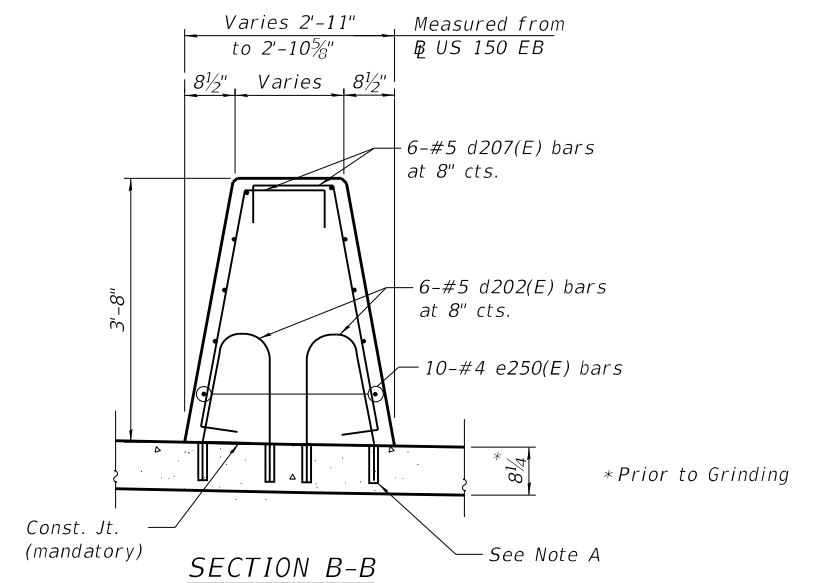


SECTION A-A



DETAIL A

Note A:
 Core and Set d202(E) bars according to Article 584 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of hole shall not exceed 6". The location of the existing reinforcement shall be determined by the Contractor using non-destructive methods. If existing reinforcement is encountered during the drilling operation, the holes shall be relocated and the uncompleted holes shall be filled with a chemical adhesive resin system.



SECTION B-B

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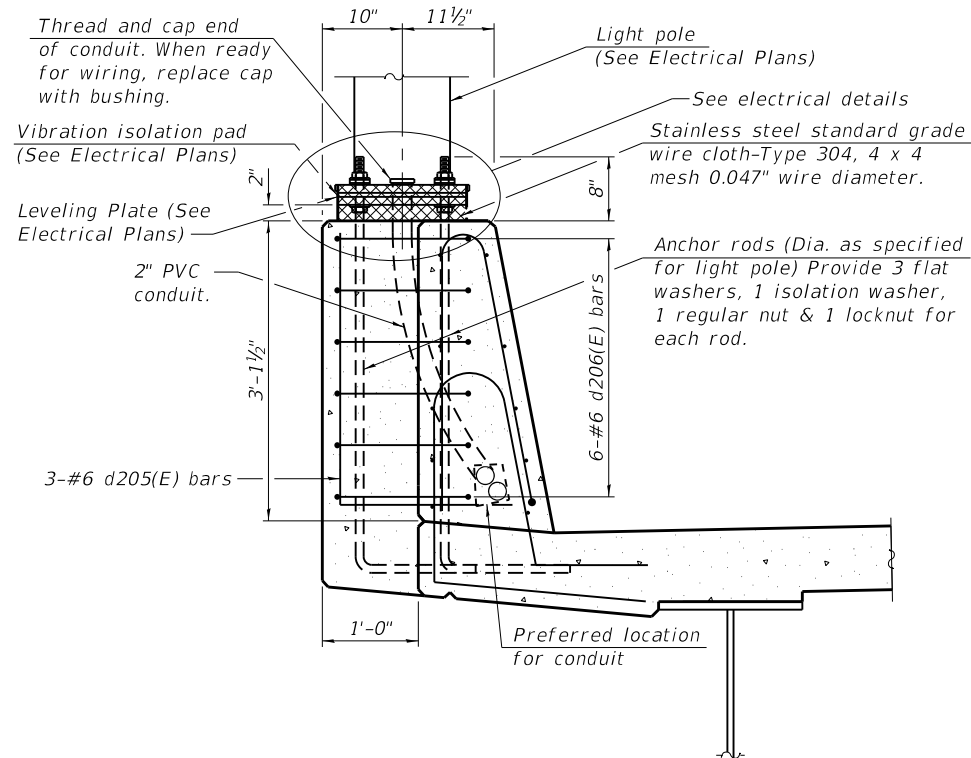
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

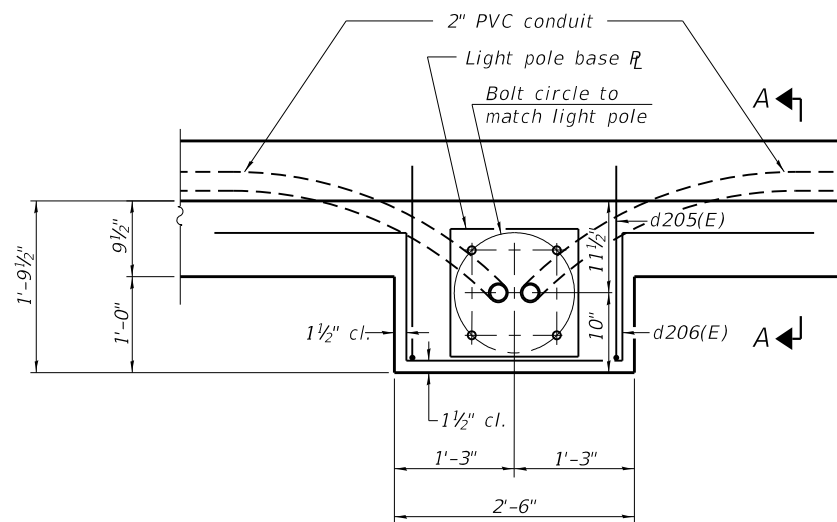
SUPERSTRUCTURE DETAILS - UNIT 2, 1 OF 3
 STRUCTURE NO. 090-0180

SHEET 5-110 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR]BR	PEO/TAZ	1361	1014
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

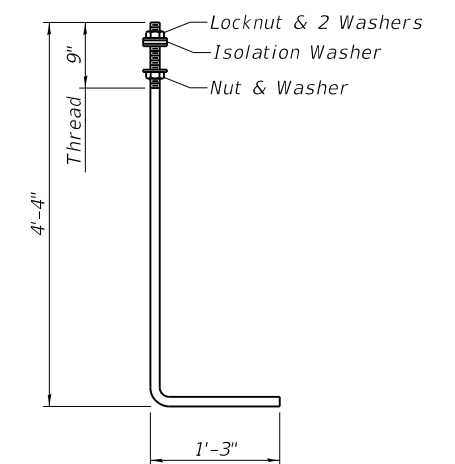


SECTION A-A



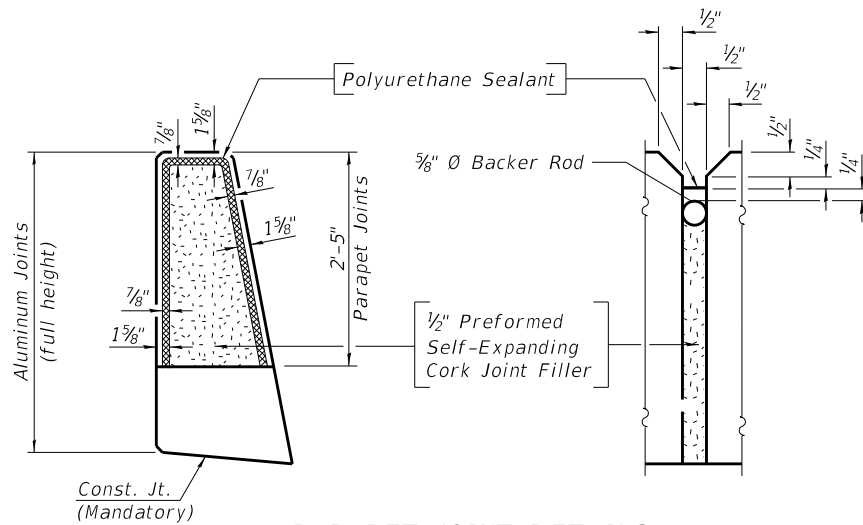
PLAN

Note:
Cost of anchor rods and conduit is included with Concrete Superstructure.

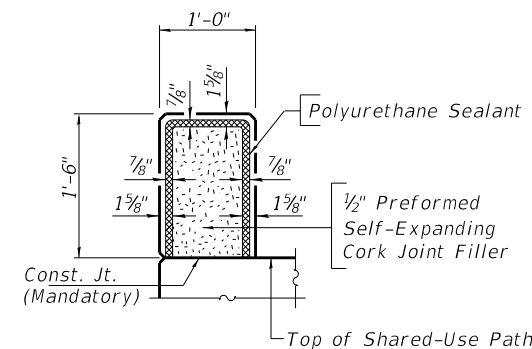


ANCHOR ROD

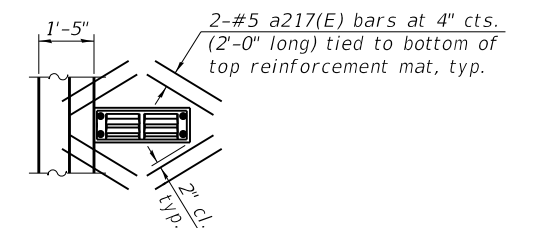
Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized.



PARAPET JOINT DETAILS

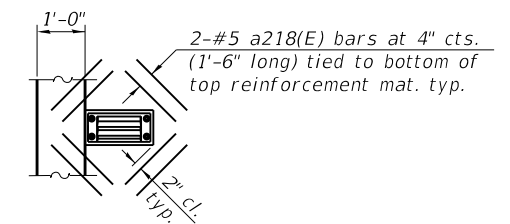


CURB & PARAPET JOINT DETAILS



DS-12 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.



DS-11 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

Notes:
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = CHORBACZ
PLOT SCALE = 5/4" = 1" / in.
PLOT DATE = 1/25/2019

DESIGNED -	REVISIONS -
CHECKED -	REVISIONS -
DRAWN -	REVISIONS -
CHECKED -	REVISIONS -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - UNIT 2, 2 OF 3
STRUCTURE NO. 090-0180**

SHEET 5-111 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1015
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

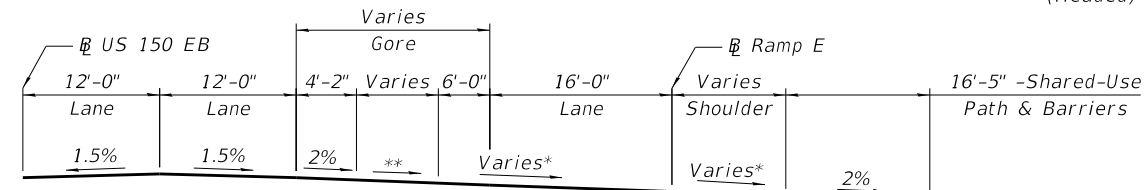
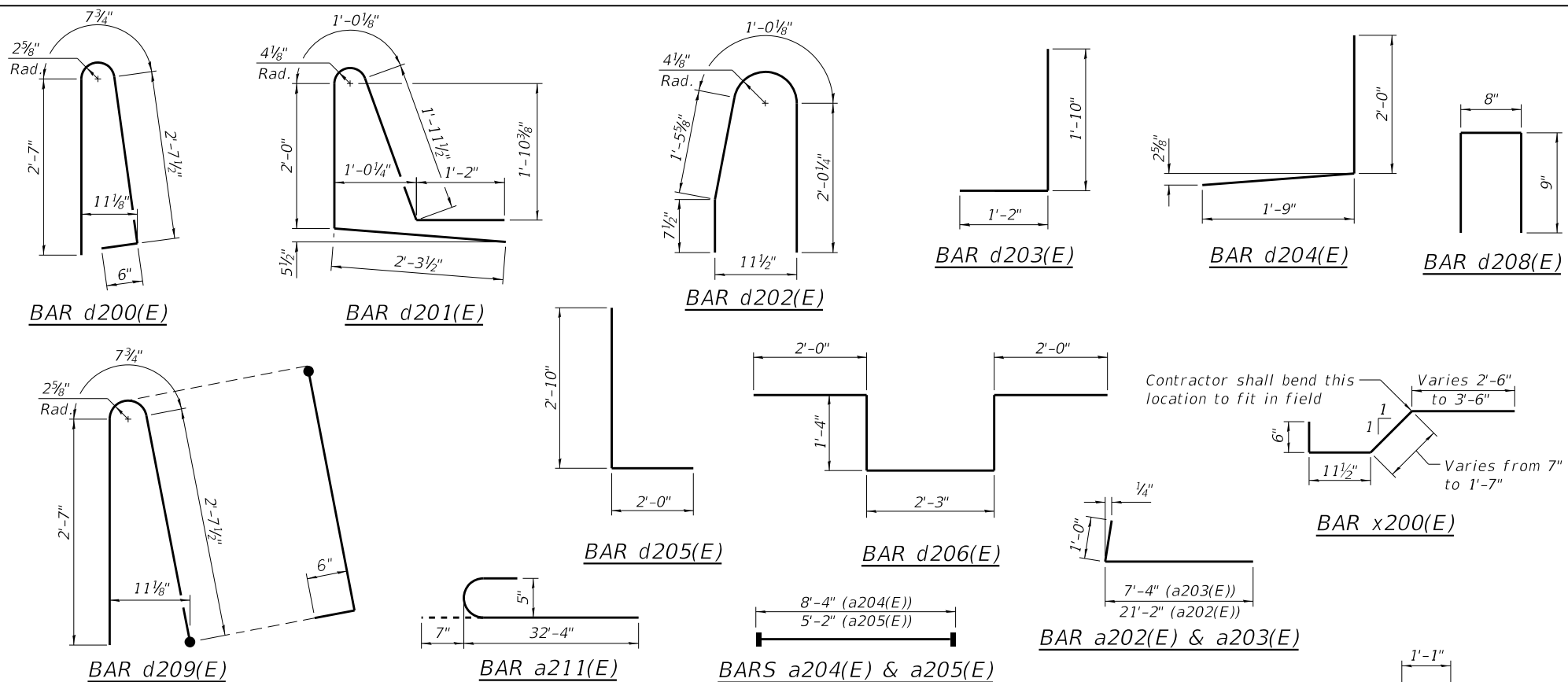
UNIT 2 - SUPERSTRUCTURE

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a200(E)	1555	#5	48'-5"	—
a201(E)	1006	#5	48'-2"	—
a202(E)	1548	#6	21'-6"	—
a203(E)	1548	#6	8'-4"	—
a204(E)	55	#4	22'-2"	—
a205(E)	10	#4	5'-2"	—
a206(E)	1555	#5	25'-10"	—
a207(E)	389	#5	41'-1"	—
a208(E)	411	#5	33'-1"	—
a209(E)	379	#5	29'-3"	—
a210(E)	376	#5	26'-1"	—
a211(E)	1006	#5	32'-11"	—
a212(E)	252	#5	34'-7"	—
a213(E)	266	#5	26'-7"	—
a214(E)	245	#5	22'-9"	—
a215(E)	243	#5	19'-4"	—
a216(E)	12	#5	7'-4"	—
a217(E)	224	#5	2'-0"	—
a218(E)	112	#5	1'-6"	—
a219(E)	24	#5	11'-0"	—
a220(E)	24	#5	10'-6"	—
b200(E)	2295	#5	30'-0"	—
b201(E)	333	#6	41'-5"	—
b202(E)	1976	#5	31'-0"	—
b203(E)	303	#6	33'-11"	—
b204(E)	303	#6	40'-1"	—
b205(E)	256	#5	30'-8"	—
b206(E)	30	#5	26'-11"	—
b207(E)	168	#5	30'-6"	—
b208(E)	48	#5	29'-8"	—
b209(E)	25	#5	28'-3"	—
b210(E)	352	#5	31'-11"	—
b211(E)	330	#5	30'-6"	—
b212(E)	81	#5	30'-0"	—
d200(E)	1080	#5	6'-5"	—
d201(E)	1071	#5	8'-5"	—
d202(E)	1092	#5	5'-2"	—
d203(E)	1080	#5	3'-0"	—
d204(E)	1080	#5	3'-9"	—
d205(E)	9	#6	4'-10"	—
d206(E)	18	#6	8'-11"	—
d207(E)	12	#5	5'-4"	—
d208(E)	168	#5	2'-2"	—
d209(E)	1071	#5	6'-5"	—
x200(E)	206	#5	5'-7"	—

Bar	No.	Size	Length	Shape
e200(E)	76	#4	17'-9"	—
e201(E)	316	#4	19'-9"	—
e202(E)	148	#4	18'-9"	—
e203(E)	6	#4	15'-4"	—
e204(E)	6	#4	19'-5"	—
e205(E)	42	#4	19'-3"	—
e206(E)	6	#4	16'-8"	—
e207(E)	6	#4	15'-10"	—
e208(E)	6	#4	16'-6"	—
e209(E)	6	#4	16'-10"	—
e210(E)	6	#4	14'-8"	—
e211(E)	6	#4	12'-8"	—
e212(E)	4	#4	16'-1"	—
e213(E)	17	#4	16'-3"	—
e214(E)	4	#4	17'-1"	—
e215(E)	4	#4	14'-11"	—
e216(E)	4	#4	14'-7"	—
e217(E)	48	#4	28'-6"	—
e218(E)	24	#4	26'-10"	—
e219(E)	20	#4	28'-8"	—
e220(E)	48	#4	27'-8"	—
e221(E)	24	#4	27'-1"	—
e222(E)	20	#4	29'-0"	—
e250(E)	10	#4	3'-3"	—

Item	Unit	Quantity
Reinforcement Bars, Epoxy Coated	Pound	639,100
Concrete Superstructure	Cu. Yds.	2177.8
Parapet Railing	Foot	717
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	5081
Bridge Fence Railing (Special)	Foot	719.5
Diamond Grinding (Bridge Section)	Sq. Yd.	6352
Protective Coat	Sq. Yd.	8769



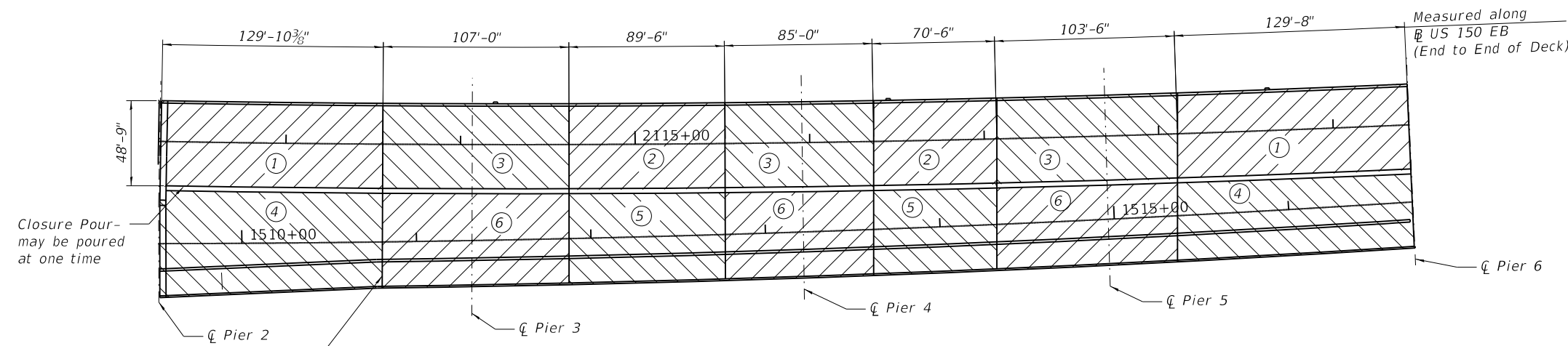
DECK CROSS SLOPE DETAIL

* Varies 6% Sta. 1508+95.19 to 2% Sta. 1510+05.19
 ** Varies, see Table A

TABLE A

Screed Point	Cross Slope %
☐ E. Brg. Pier 2	2.00
CA	1.75
CB	1.96
CC	2.29
CD	2.74
CE	3.32
CF	2.98
CG	2.58
CH	2.27
CI	2.06
CJ	2.00

Note: For all points east of Screed Point CJ, gore cross slope is 2%.



DECK POURING SEQUENCE - UNIT 2
 (The pour can start from either end of the deck.)

Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

Notes on Deck Pouring Sequence:
 When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
 1) At least 72 hours shall have elapsed from the end of the previous pour.
 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

The Contractor is alerted that camber and dead load deflection values shown on the girder detail drawings were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence will result in changes to camber and elevations that affect dead load deflections. If the Contractor wishes to change the sequence, then the proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by a Licensed Structural Engineer in Illinois.

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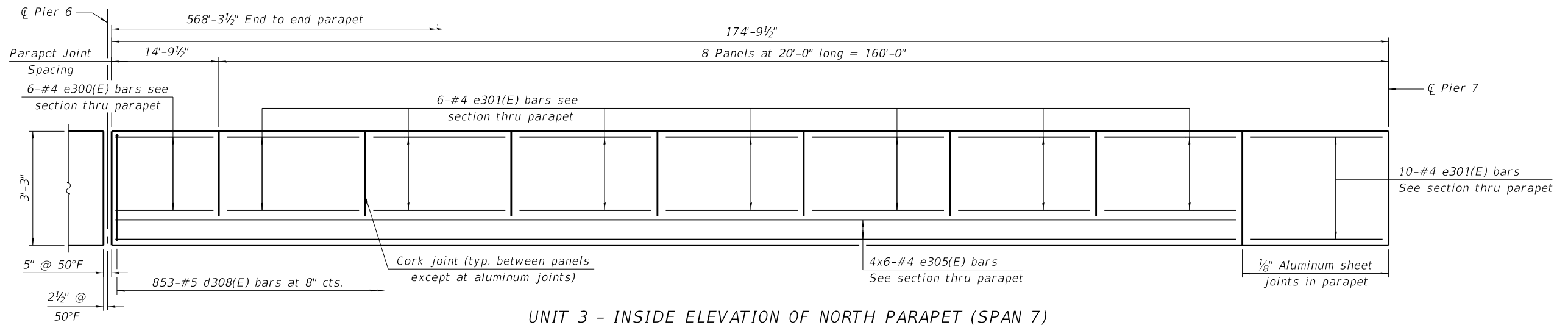
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 200 S. WACKER DR.
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 CHICAGO, IL 60606
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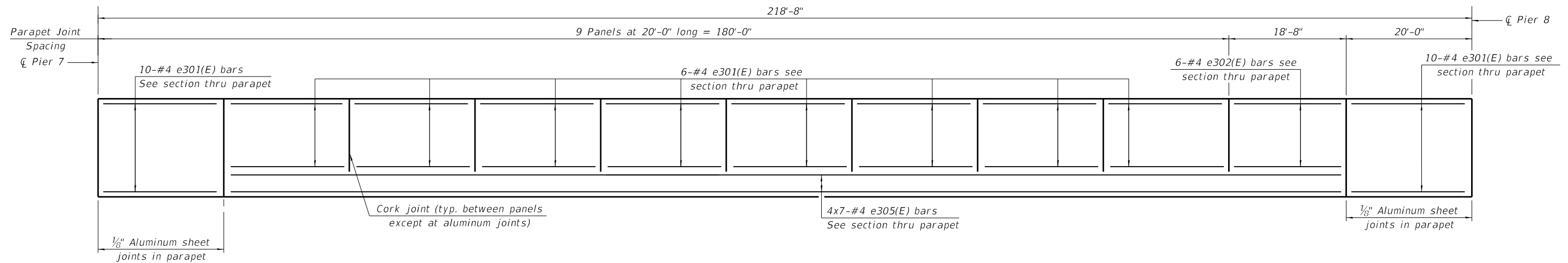
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SUPERSTRUCTURE DETAILS - UNIT 2, 3 OF 3
 STRUCTURE NO. 090-0180
 SHEET 5-112 OF 445 SHEETS

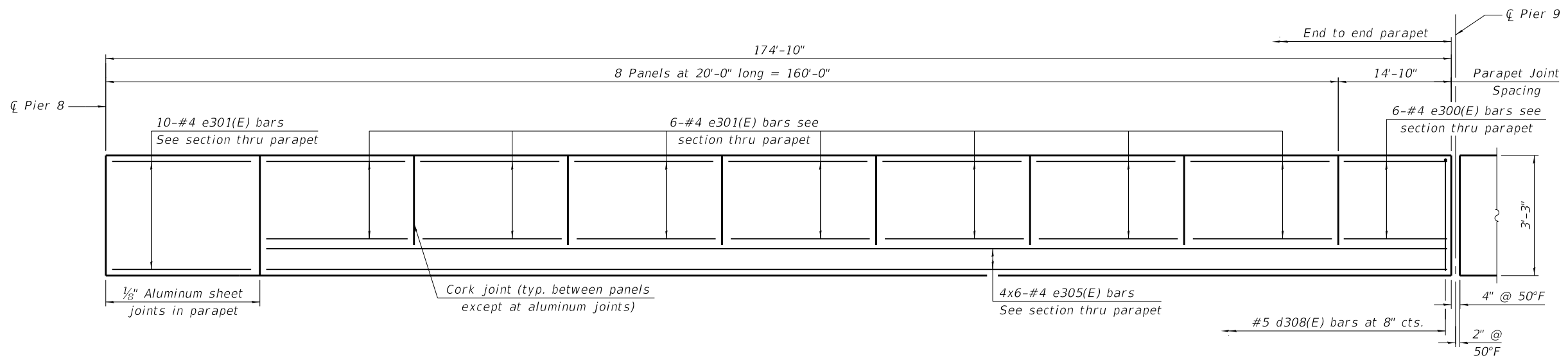
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317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1016
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



UNIT 3 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 7)



UNIT 3 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 8)



UNIT 3 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 9)

MIN. LAP LENGTH
#4 = 2'-5"

- Note:
1. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 2. See sheet S-116 of 445 for parapet joint details.

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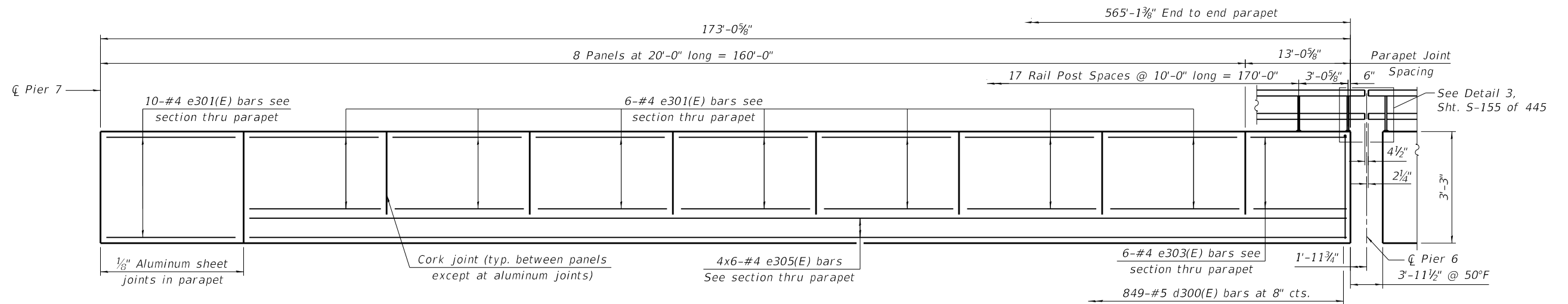
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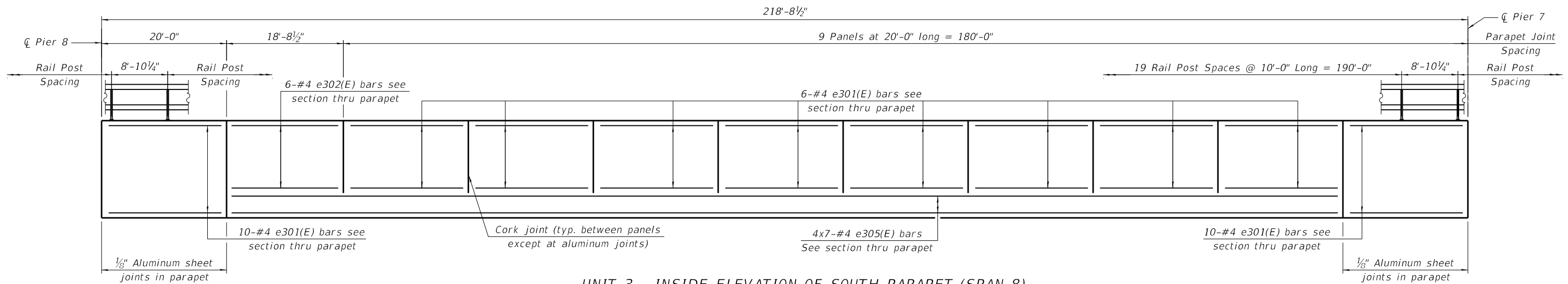
**NORTH PARAPET ELEVATION - UNIT 3
STRUCTURE NO. 090-0180**

SHEET S-113 OF 445 SHEETS

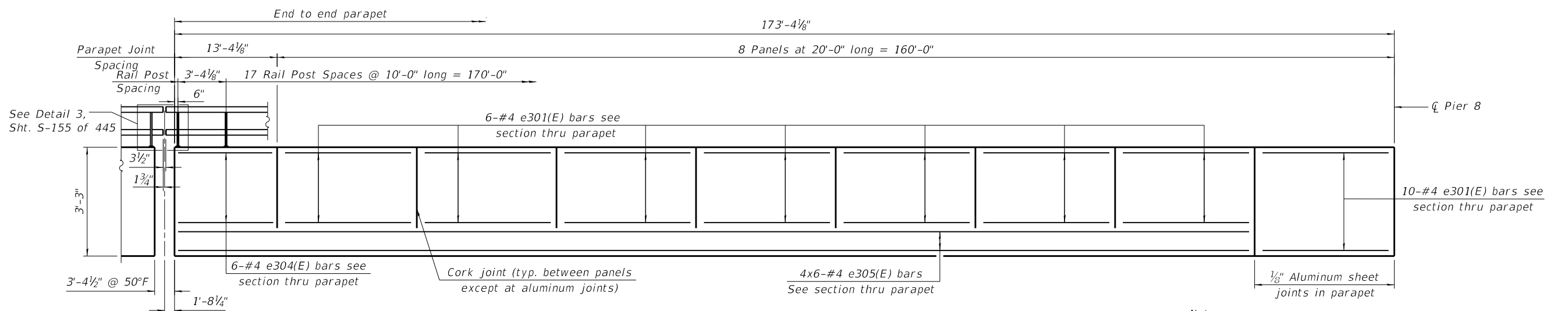
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ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



UNIT 3 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 7)



UNIT 3 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 8)



UNIT 3 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 9)

Notes:

1. See Sheet S-116 of 445 for parapet joint details.
2. All dimensions measured along inside face of Parapet.
3. Bars indicated thus 20x3-#5, etc indicates 20 lines of bars with 3 lengths per line.

MIN. LAP LENGTH

#4 = 2'-5"

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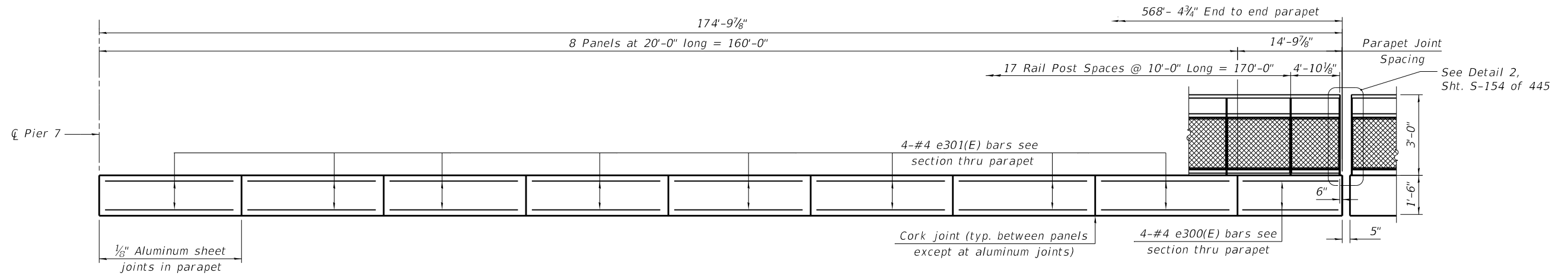
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SOUTH PARAPET ELEVATION - UNIT 3
STRUCTURE NO. 090-0180

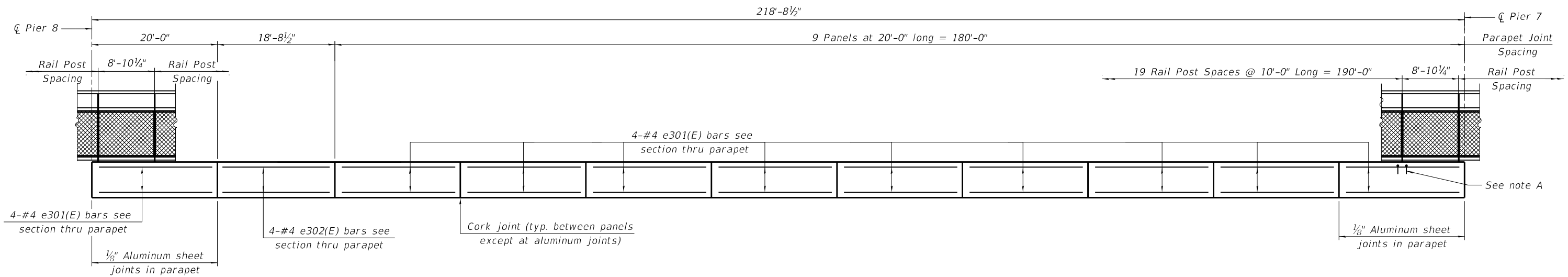
SHEET S-114 OF 445 SHEETS

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CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	



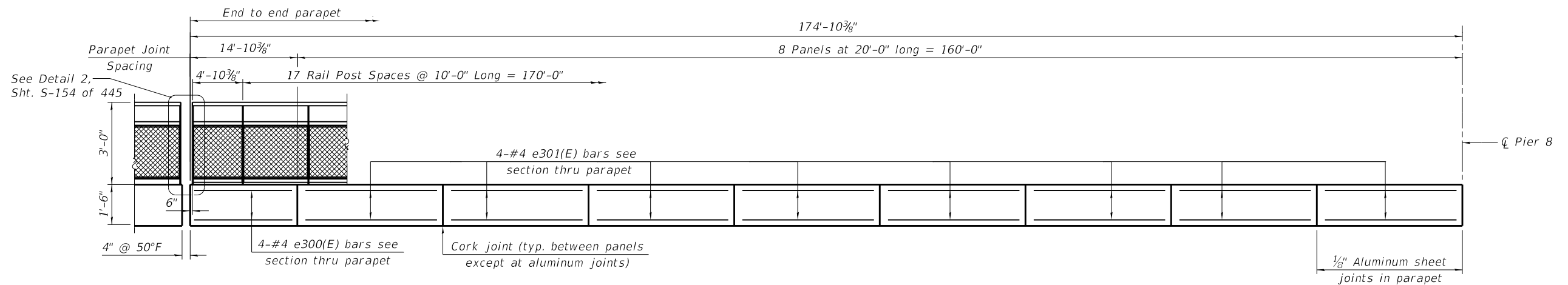
UNIT 3 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 7)

Note A: 2-#5 d307(E) bars at each rail post, 116 thus



UNIT 3 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 8)

- Notes:
1. See Sheet S-116 of 445 for parapet joint details.
 2. All dimensions measured along inside face of Parapet.



UNIT 3 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 9)

MIN. LAP LENGTH
#4 = 2'-5"

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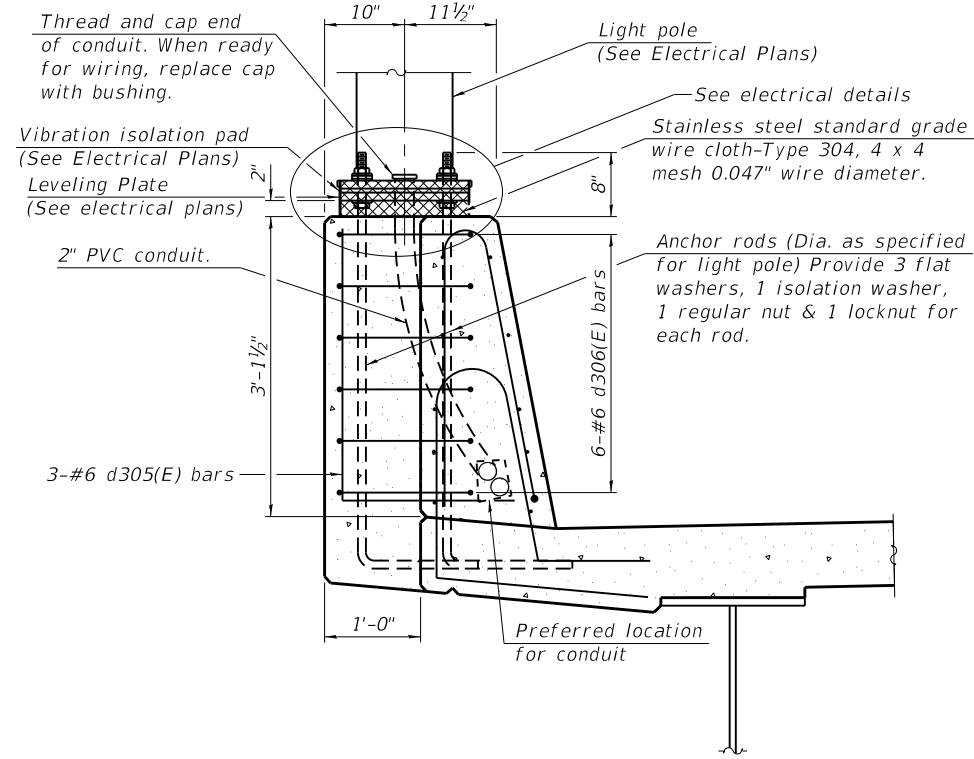
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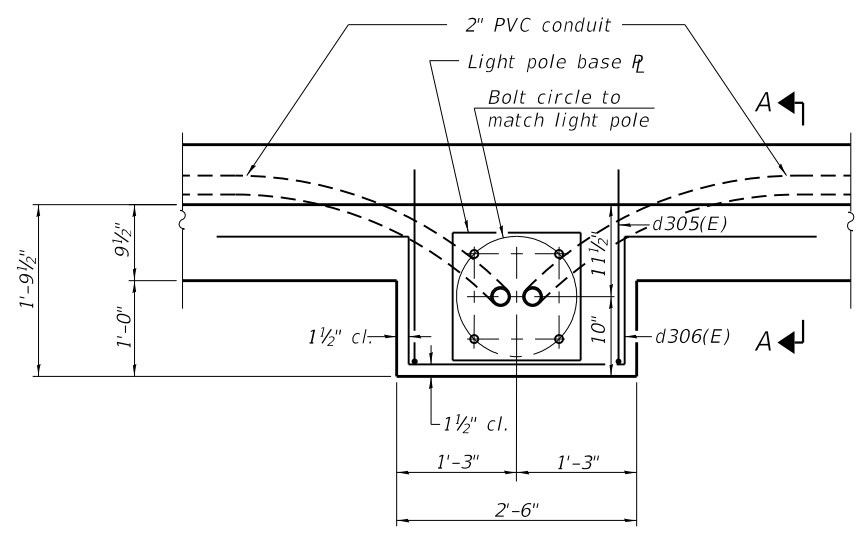
SHARED-USE PATH CURB ELEVATION - UNIT 3
STRUCTURE NO. 090-0180

SHEET S-115 OF 445 SHEETS

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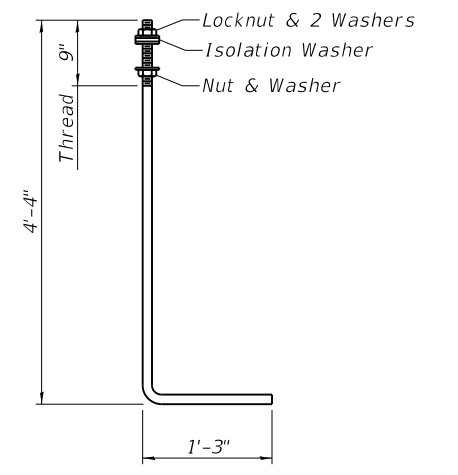


SECTION A-A



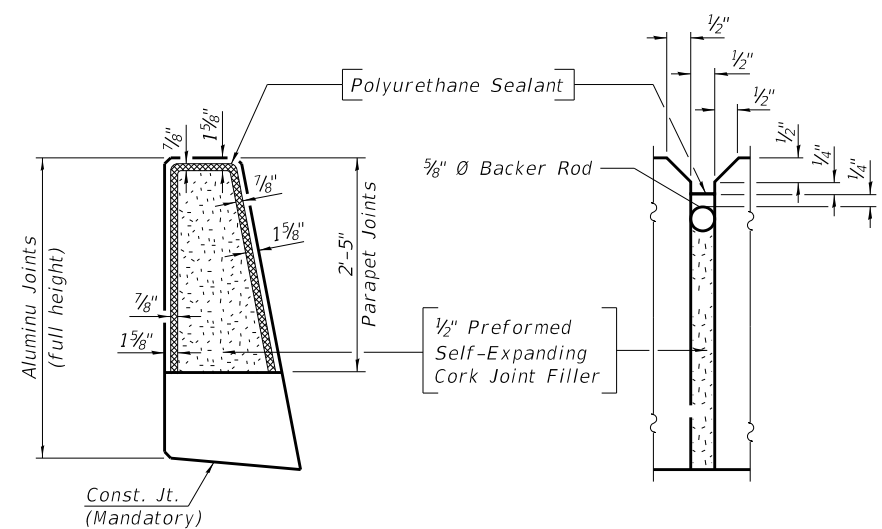
PLAN

Note:
Cost of anchor rods and conduit is included with Concrete Superstructure.

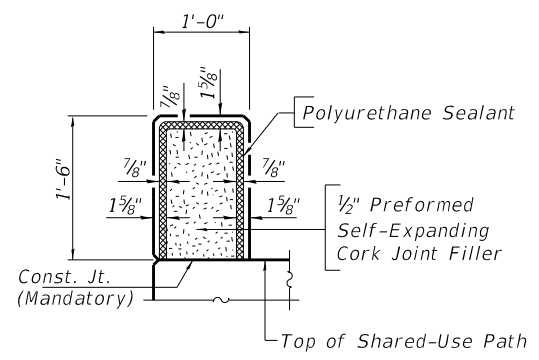


ANCHOR ROD

Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized.

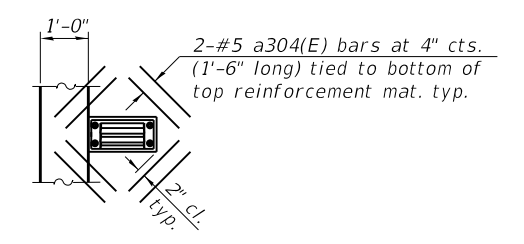


PARAPET JOINT DETAILS



CURB & PARAPET JOINT DETAILS

Notes:
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.



DS-11 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

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**STATE OF ILLINOIS
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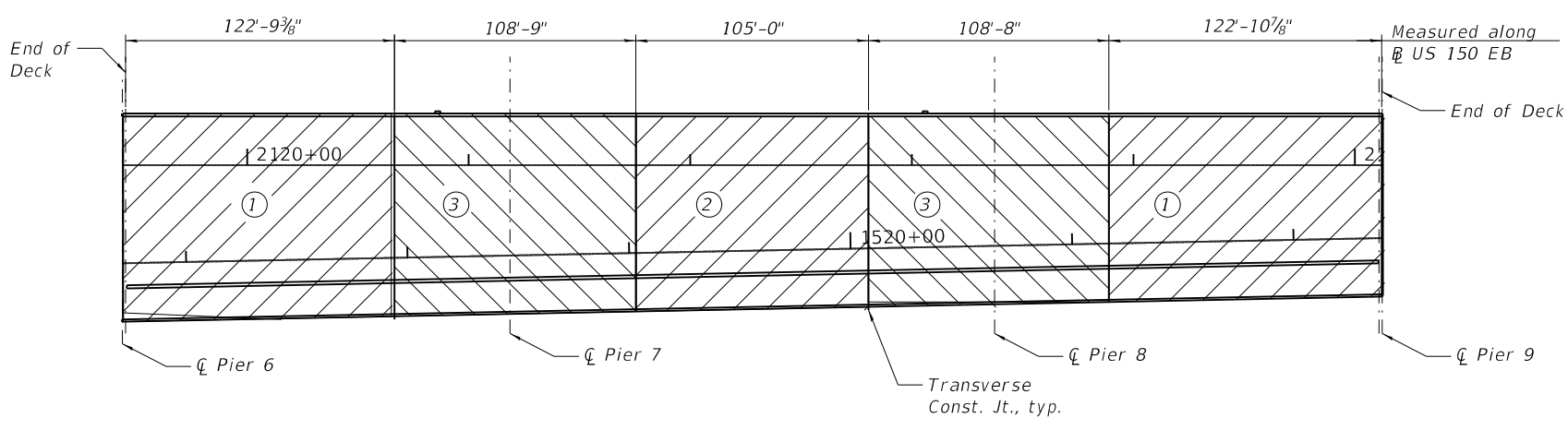
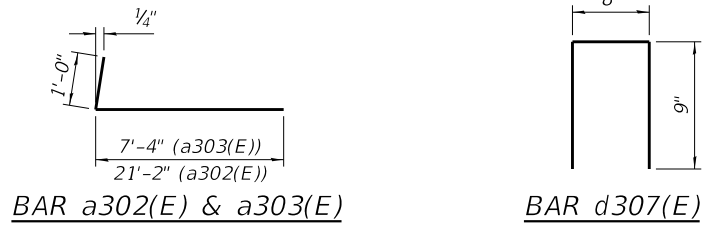
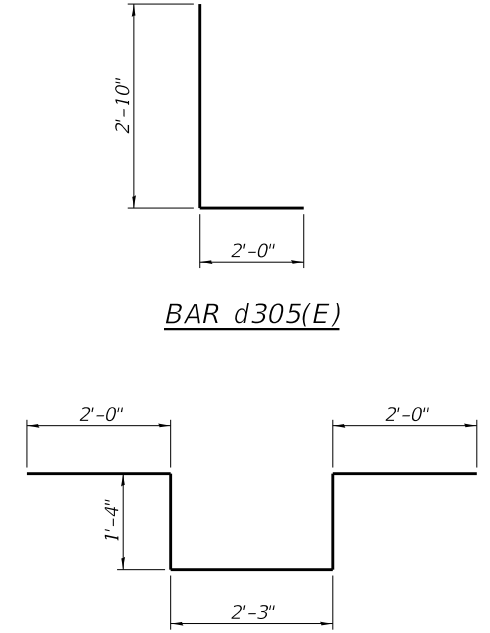
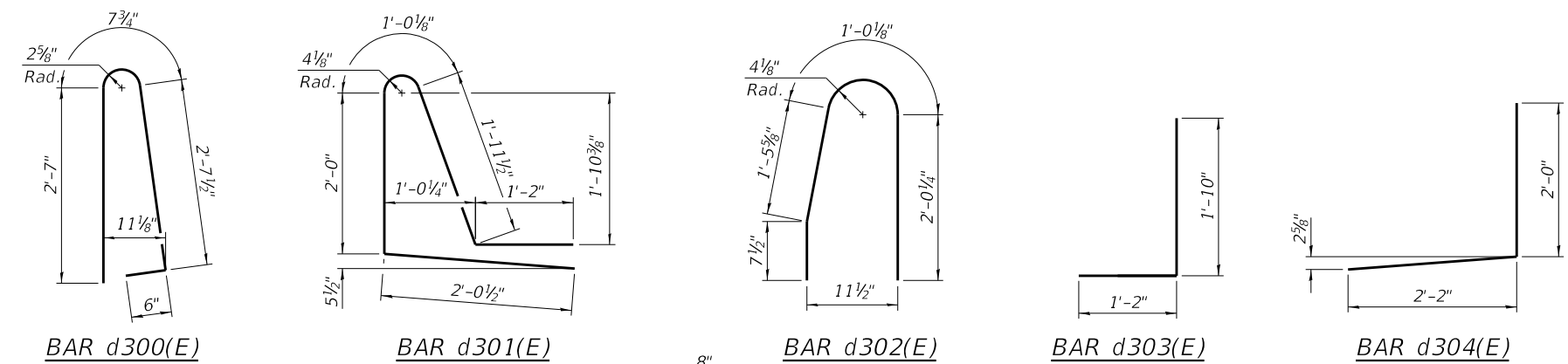
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STRUCTURE NO. 090-0180
SHEET 5-116 OF 445 SHEETS

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ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

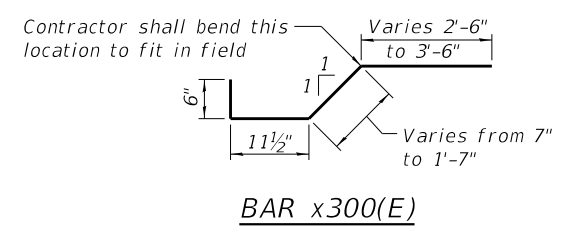
UNIT 3 - SUPERSTRUCTURE

BILL OF MATERIAL

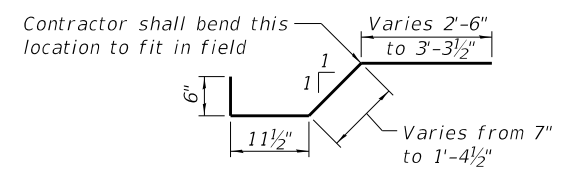
Bar	No.	Size	Length	Shape
a300(E)	4071	#5	33'-8"	—
a301(E)	3396	#5	26'-2"	—
a302(E)	1357	#6	22'-2"	—
a303(E)	1357	#6	8'-4"	—
a304(E)	288	#5	1'-6"	—
a305(E)	40	#5	12'-7"	—
a306(E)	40	#5	11'-6"	—
b300(E)	1960	#5	31'-9"	—
b301(E)	570	#6	41'-4"	—
b302(E)	1634	#5	33'-3"	—
d300(E)	849	#5	6'-5"	⌋
d301(E)	853	#5	8'-2"	⌋
d302(E)	849	#5	5'-2"	⌋
d303(E)	569	#5	3'-0"	⌋
d304(E)	569	#5	4'-2"	⌋
d305(E)	6	#6	4'-10"	⌋
d306(E)	12	#6	8'-11"	⌋
d307(E)	136	#5	2'-2"	⌋
d308(E)	853	#5	6'-5"	⌋
e300(E)	20	#4	14'-6"	—
e301(E)	448	#4	19'-8"	—
e302(E)	16	#4	18'-5"	—
e303(E)	6	#4	12'-9"	—
e304(E)	6	#4	13'-1"	—
e305(E)	152	#4	27'-10"	—
x300(E)	92	#5	5'-7"	⌋
x301(E)	81	#5	5'-4"	⌋
Reinforcement Bars, Epoxy Coated	Pound		494,410	
Concrete Superstructure	Cu. Yds.		1524.2	
Parapet Railing	Foot		565	
Bridge Deck Grooving (Longitudinal)	Sq. Yd.		3194	
Bridge Fence Railing (Special)	Foot		568.5	
Diamond Grinding (Bridge Section)	Sq. Yd.		4204	
Protective Coat	Sq. Yd.		6140	



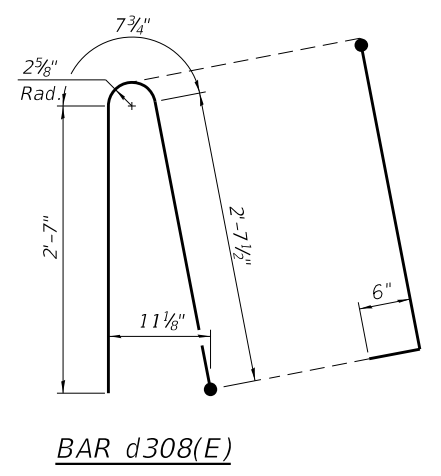
DECK POURING SEQUENCE - UNIT 3
(The pour can start from either end of the deck.)



BAR x300(E)



BAR x301(E)

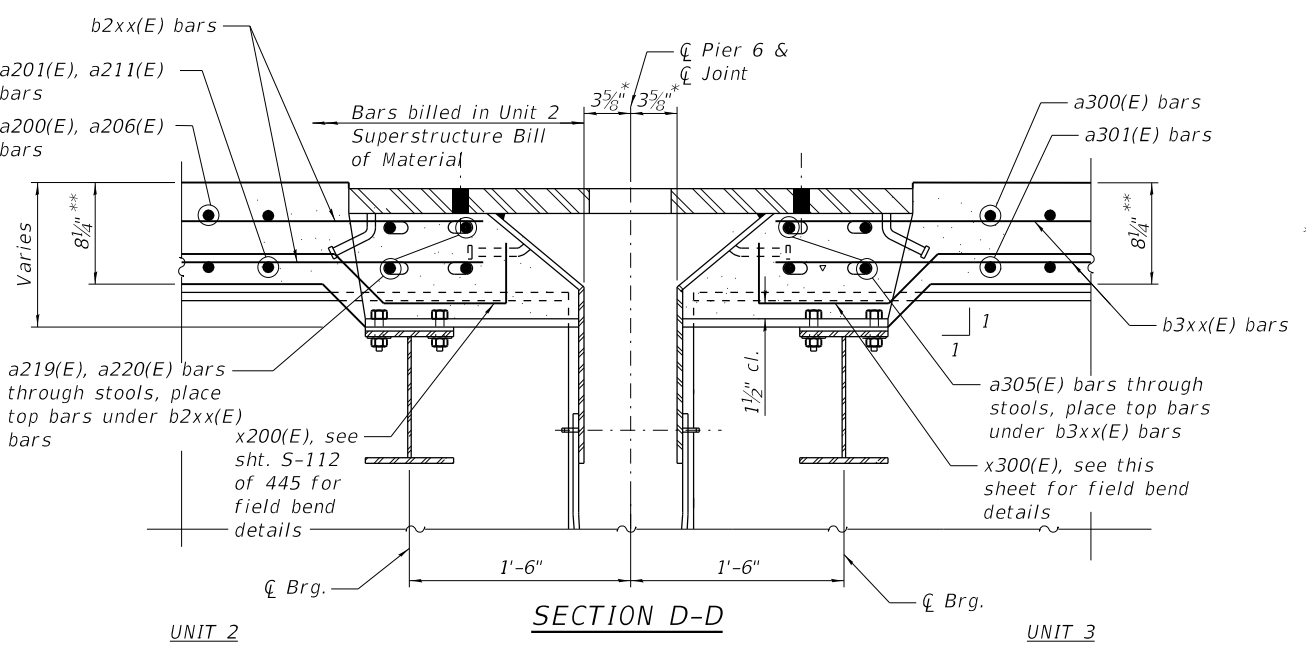


BAR d308(E)

Notes on Deck Pouring Sequence:

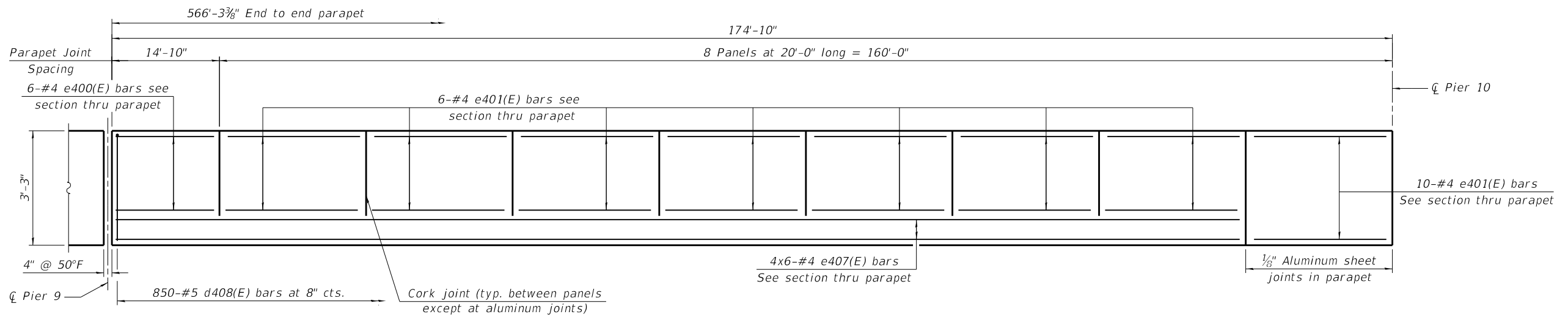
- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
- 1) At least 72 hours shall have elapsed from the end of the previous pour.
 - 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

The Contractor is alerted that camber and dead load deflection values shown on the girder detail drawings were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence will result in changes to camber and elevations that affect dead load deflections. If the Contractor wishes to change the sequence, then the proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by a Licensed Structural Engineer in Illinois.

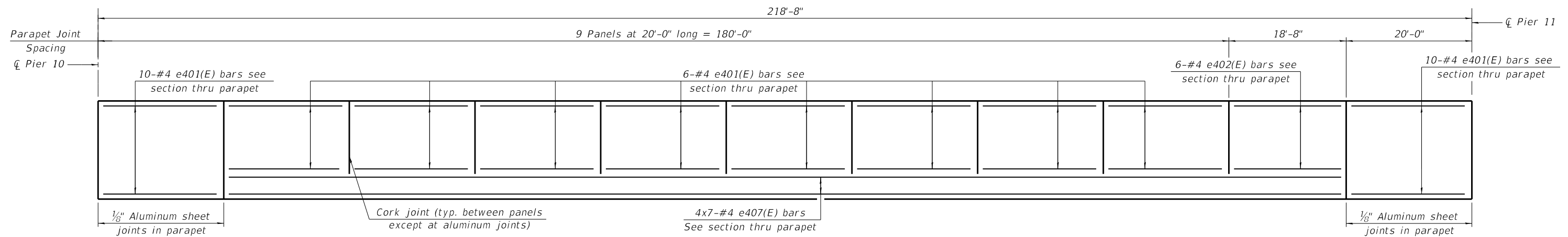


SECTION D-D

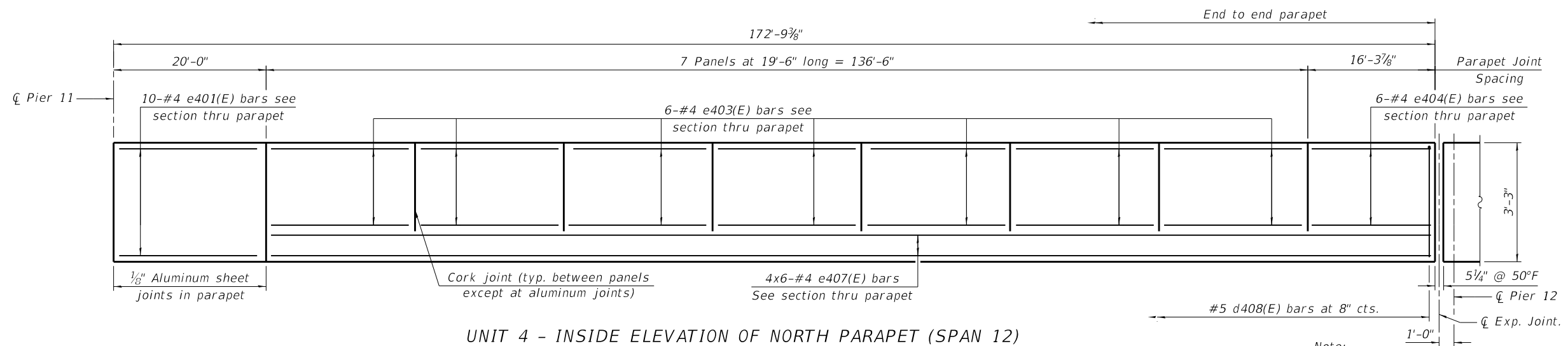
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UNIT 4 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 10)



UNIT 4 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 11)



UNIT 4 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 12)

- Note:
1. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 2. See sheet S-121 of 445 for parapet joint details.

MIN. LAP LENGTH

#4 = 2'-5"

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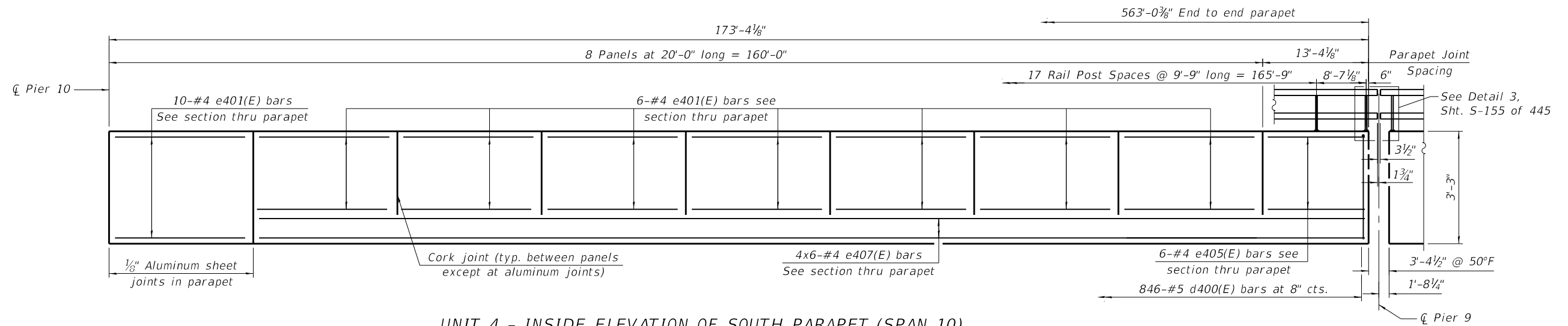
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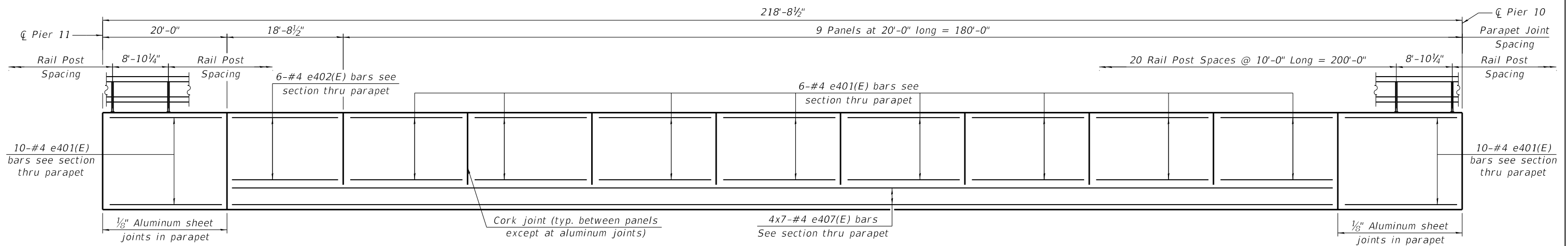
**NORTH PARAPET ELEVATION - UNIT 4
STRUCTURE NO. 090-0180**

SHEET S-118 OF 445 SHEETS

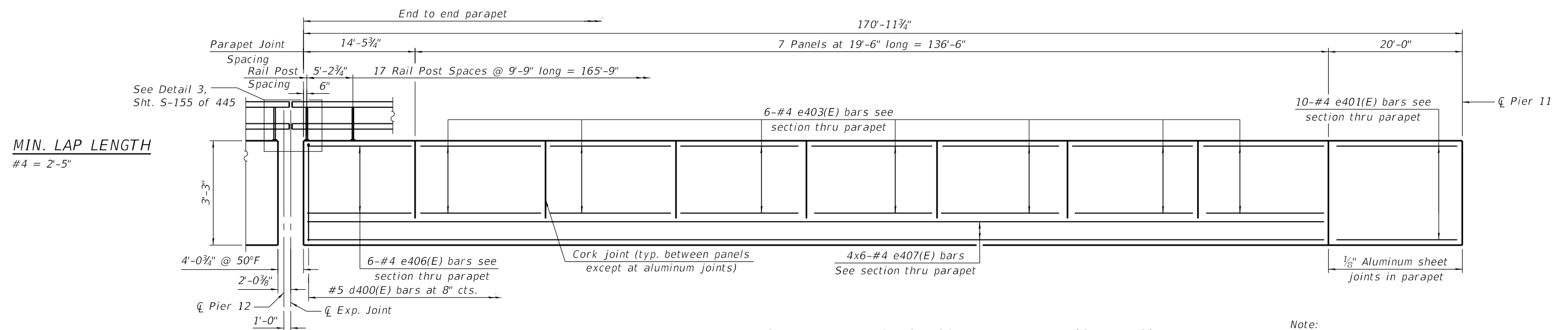
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CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



UNIT 4 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 10)



UNIT 4 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 11)



UNIT 4 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 12)

Note:
1. Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

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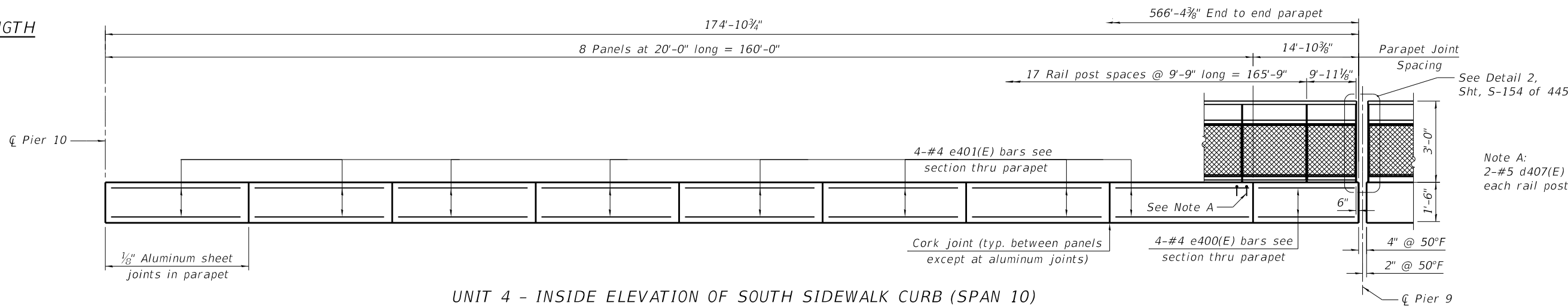
SOUTH PARAPET ELEVATION - UNIT 4
STRUCTURE NO. 090-0180

SHEET 5-119 OF 445 SHEETS

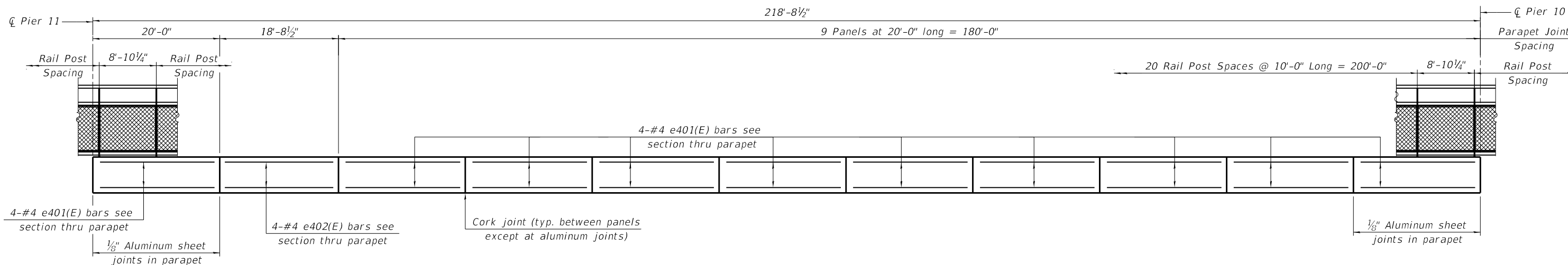
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ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

MIN. LAP LENGTH

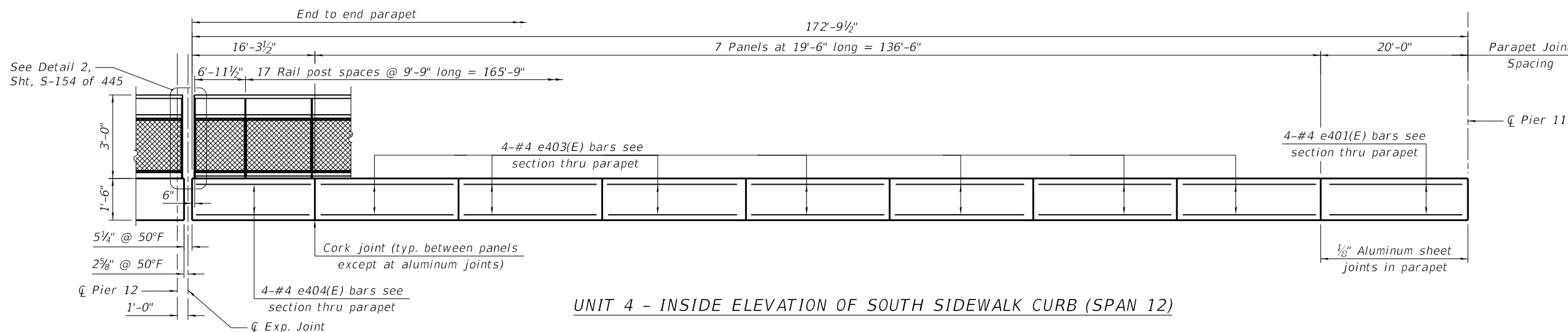
#4 = 2'-5"



UNIT 4 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 10)



UNIT 4 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 11)



UNIT 4 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 12)

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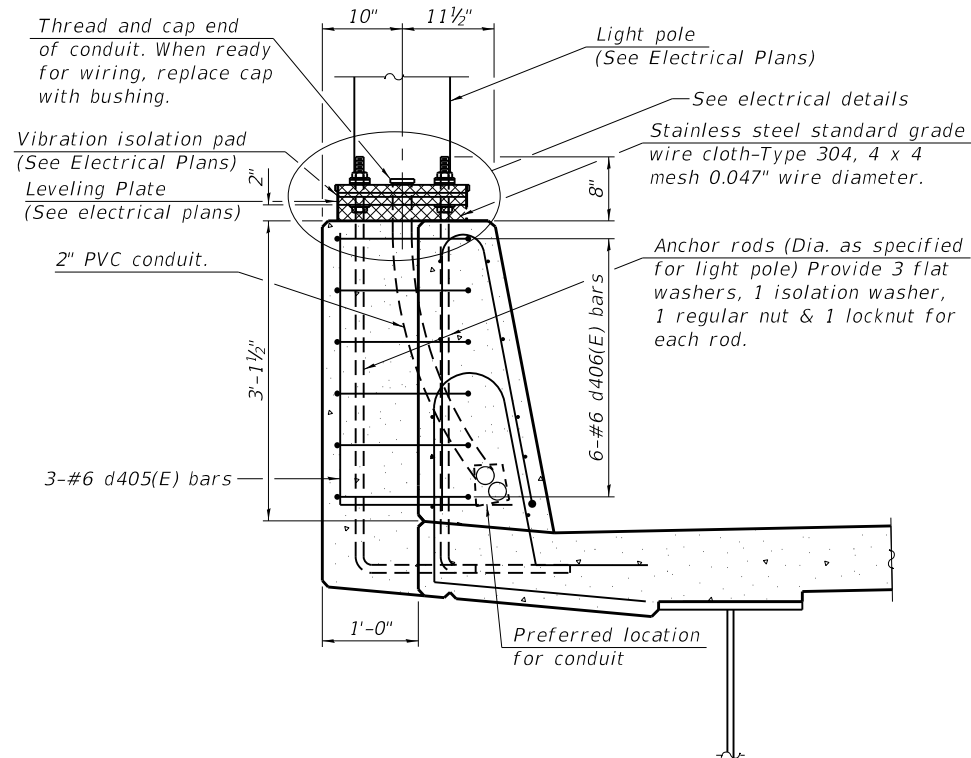
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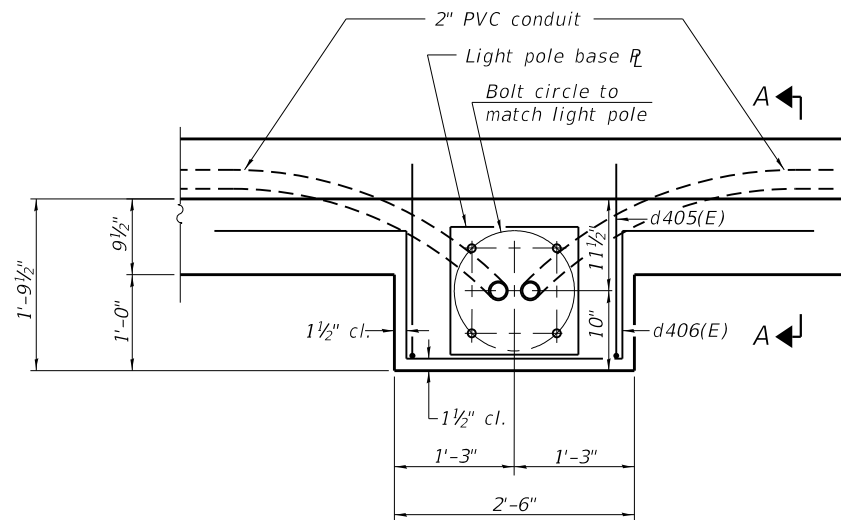
SHARED-USE PATH CURB ELEVATION - UNIT 4
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SHEET 5-120 OF 445 SHEETS

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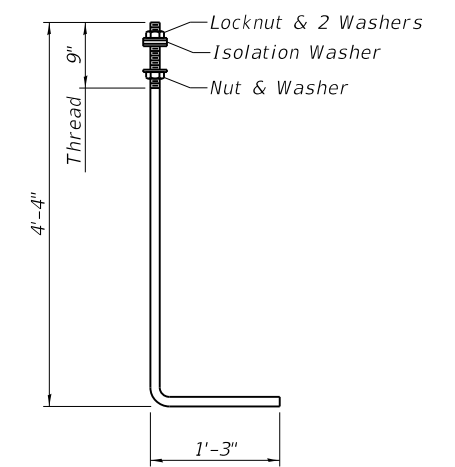


SECTION A-A



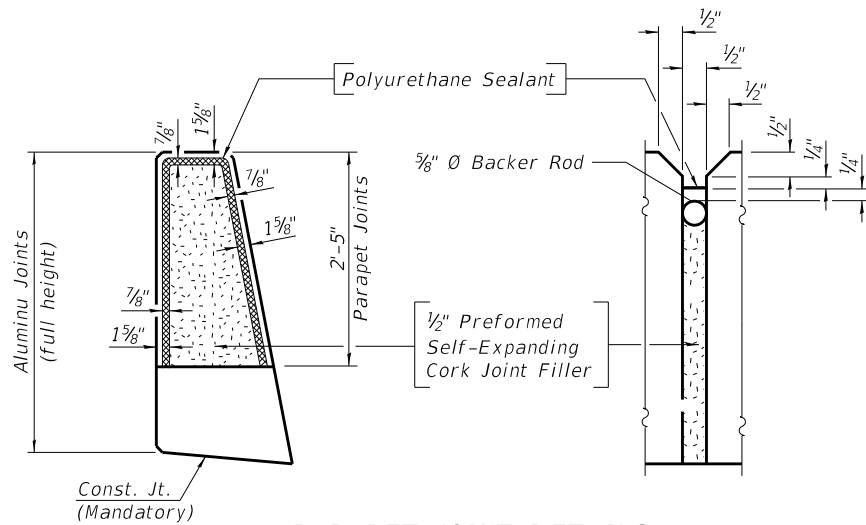
PLAN

Note:
Cost of anchor rods and conduit is included with Concrete Superstructure.

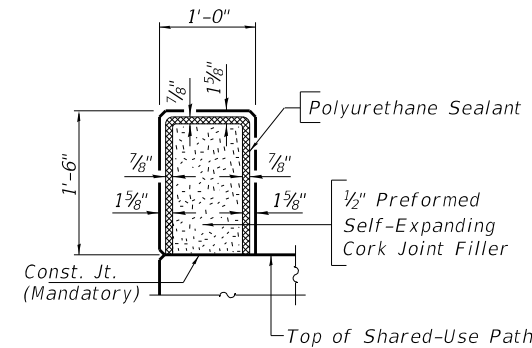


ANCHOR ROD

Diameter as specified for light poles.
(ASTM F 1554 Grade 105) Full length hot dipped galvanized.

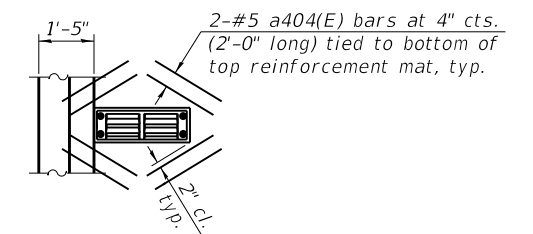


PARAPET JOINT DETAILS



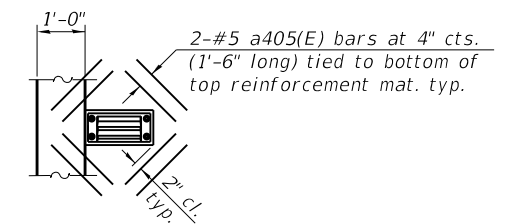
CURB & PARAPET JOINT DETAILS

Notes:
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.



DS-12 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.



DS-11 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = CHORBACZ
DESIGNED -
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PLOT SCALE = 5/4" = 1' / in.
DRAWN - CTH
PLOT DATE = 1/25/2019

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CHECKED -
DRAWN - CTH
CHECKED -

REVISED -
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REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - UNIT 4, 1 OF 2
STRUCTURE NO. 090-0180**

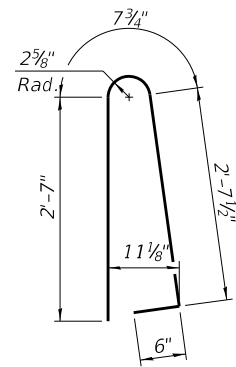
SHEET 5-121 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1025
			CONTRACT NO. 68B46	
ILLINOIS			FED. AID PROJECT NHPY-RP3(905)	

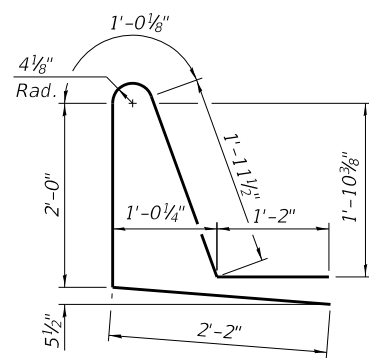
UNIT 4 - SUPERSTRUCTURE

BILL OF MATERIAL

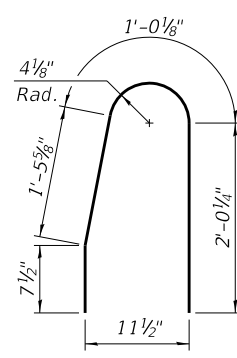
Bar	No.	Size	Length	Shape
a400(E)	2458	#5	43'-0"	—
a401(E)	2388	#5	29'-10"	—
a402(E)	1229	#6	22'-2"	—
a403(E)	1229	#6	8'-4"	—
a404(E)	96	#5	2'-0"	—
a405(E)	48	#5	1'-6"	—
a406(E)	40	#5	11'-6"	—
a407(E)	36	#5	11'-4"	—
b400(E)	1978	#5	28'-0"	—
b401(E)	480	#6	42'-0"	—
b402(E)	1716	#5	29'-2"	—
d400(E)	846	#5	6'-5"	—
d401(E)	850	#5	8'-4"	—
d402(E)	846	#5	4'-10"	—
d403(E)	567	#5	3'-0"	—
d404(E)	567	#5	4'-3"	—
d405(E)	9	#6	4'-10"	—
d406(E)	18	#6	8'-11"	—
d407(E)	118	#5	2'-2"	—
d408(E)	850	#5	6'-5"	—
e400(E)	8	#4	14'-6"	—
e401(E)	336	#4	19'-8"	—
e402(E)	16	#4	18'-5"	—
e403(E)	112	#4	19'-3"	—
e404(E)	10	#4	16'-0"	—
e405(E)	6	#4	13'-1"	—
e406(E)	6	#4	14'-1"	—
e407(E)	152	#4	27'-10"	—
x400(E)	81	#5	5'-4"	—
x401(E)	72	#5	5'-2"	—
Reinforcement Bars, Epoxy Coated	Pound	420,190		
Concrete Superstructure	Cu. Yds.	1358.2		
Parapet Railing	Foot	564		
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	2548		
Bridge Fence Railing (Special)	Foot	567.5		
Diamond Grinding (Bridge Section)	Sq. Yd.	3556		
Protective Coat	Sq. Yd.	5489		



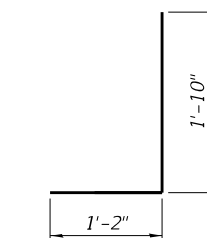
BAR d400(E)



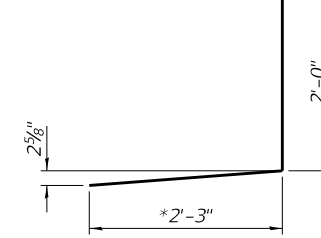
BAR d401(E)



BAR d402(E)

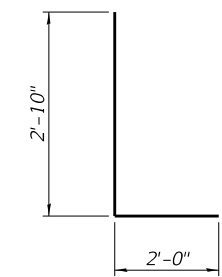


BAR d403(E)

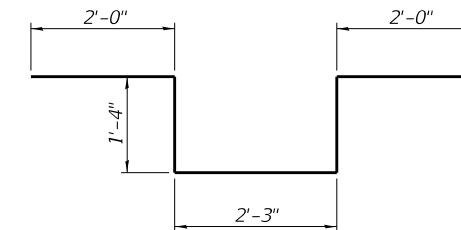


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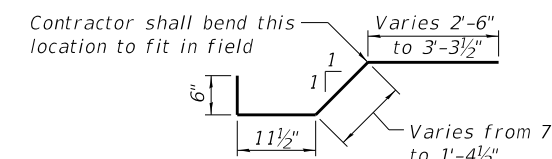
* Cut To Fit



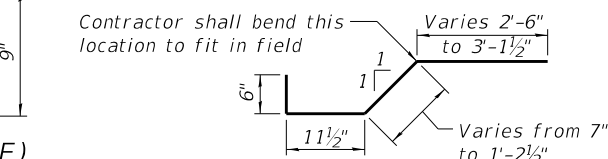
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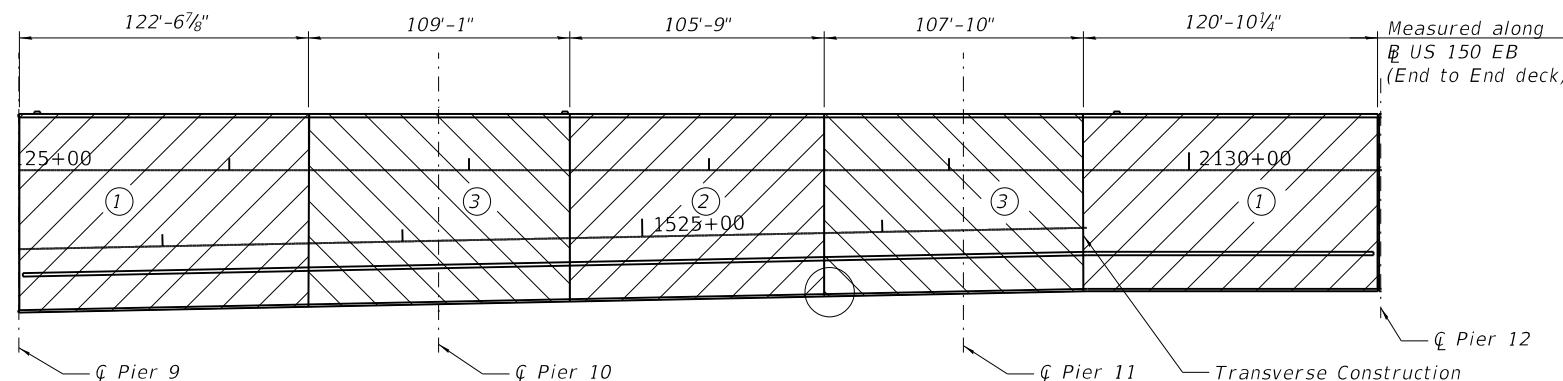
BAR d406(E)



BAR x400(E)

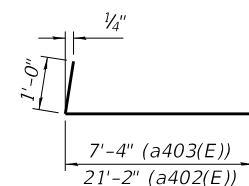


BAR x401(E)

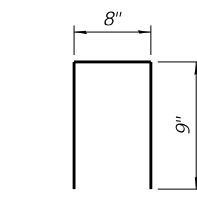


DECK POURING SEQUENCE - UNIT 4

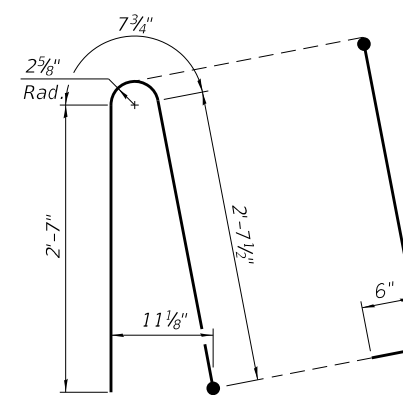
(The pour can start from either end of the deck.)



BAR a402(E) & a403(E)



BAR d407(E)

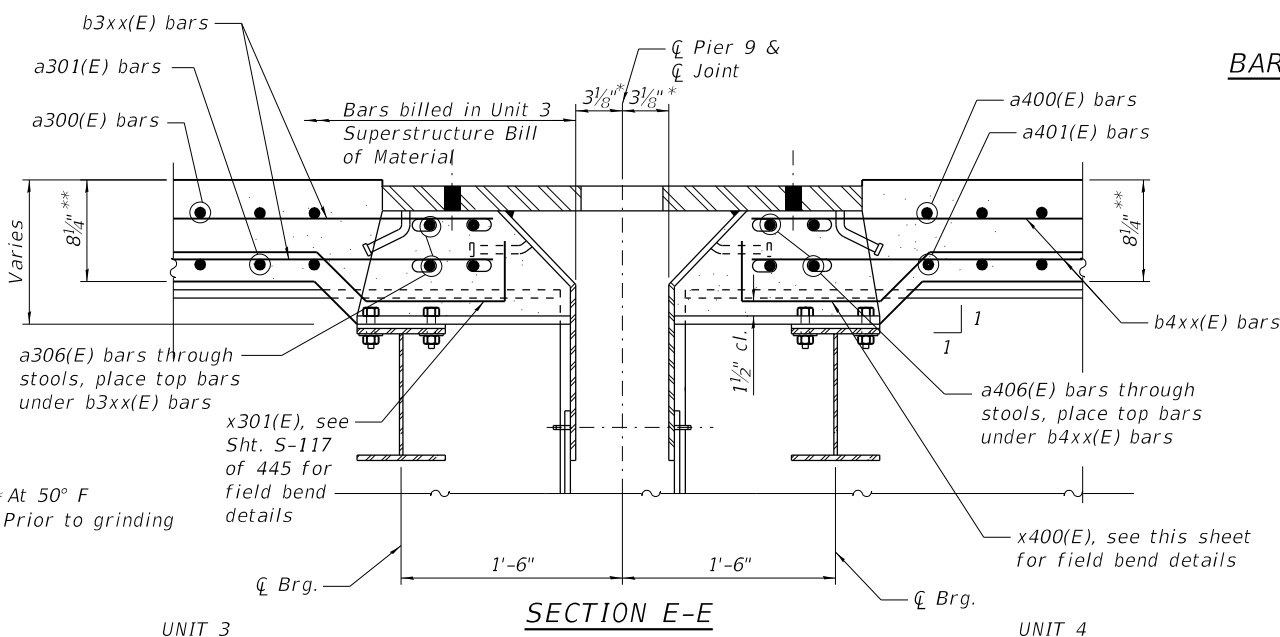


BAR d408(E)

Notes on Deck Pouring Sequence:

- When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:
- 1) At least 72 hours shall have elapsed from the end of the previous pour.
 - 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

The Contractor is alerted that camber and dead load deflection values shown on the girder detail drawings were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence will result in changes to camber and elevations that affect dead load deflections. If the Contractor wishes to change the sequence, then the proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by a Licensed Structural Engineer in Illinois.



UNIT 3

SECTION E-E

UNIT 4

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200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
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USER NAME = CHORBACZ
DESIGNED -
CHECKED -
PLOT SCALE = 5/4" = 1" / in.
DRAWN -
PLOT DATE = 1/27/2019
CHECKED -
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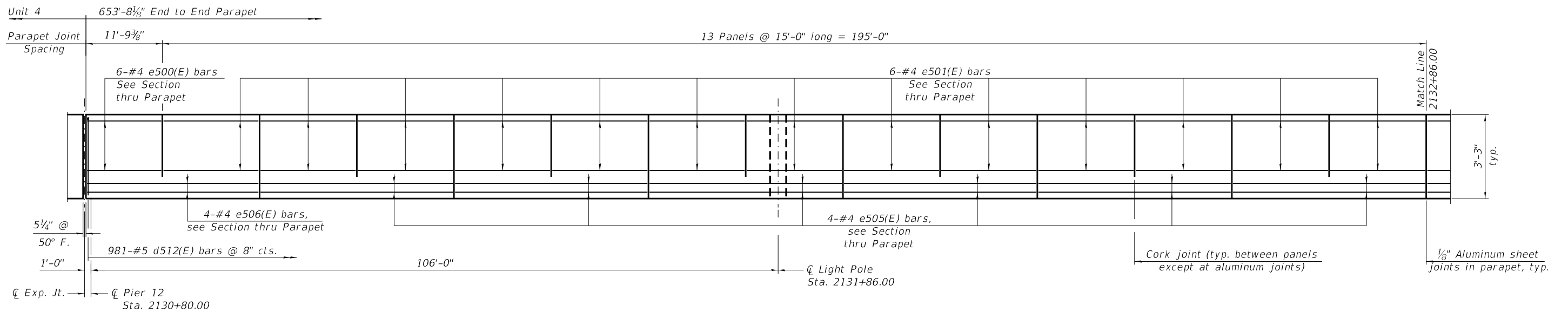
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

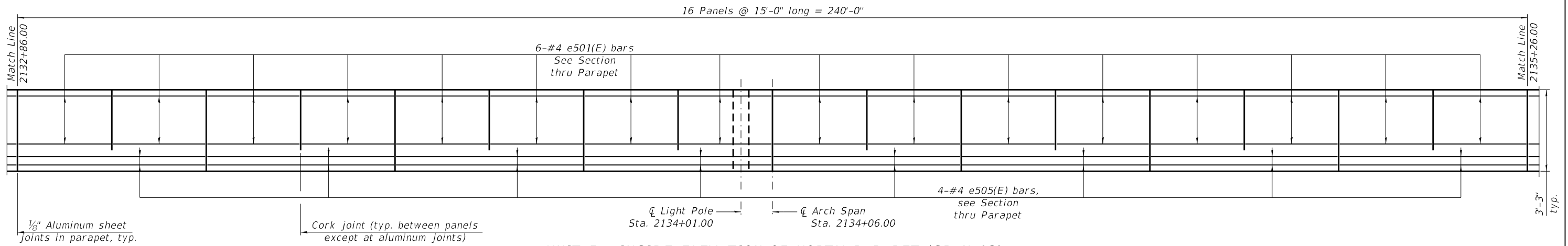
SUPERSTRUCTURE DETAILS - UNIT 4, 2 OF 2
STRUCTURE NO. 090-0180

SHEET 5-122 OF 445 SHEETS

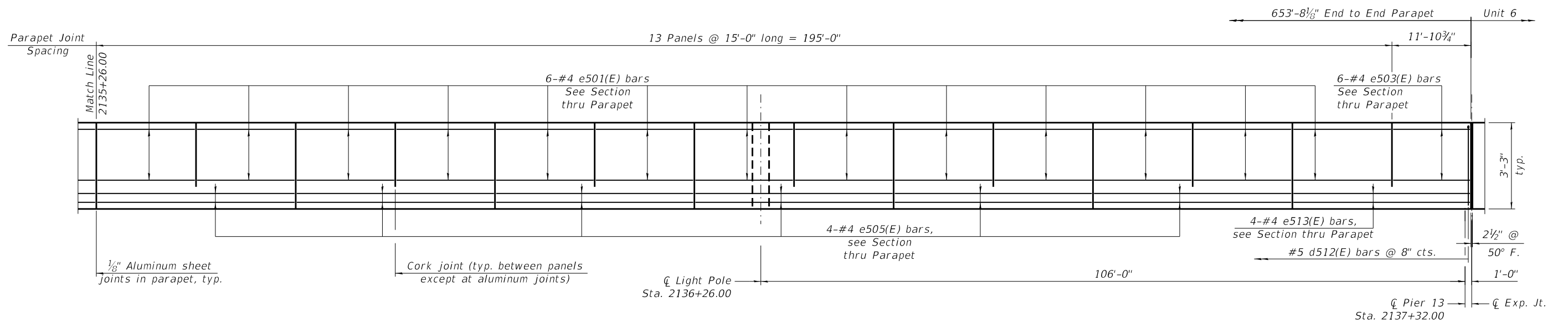
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317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1026
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



UNIT 5 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 13)



UNIT 5 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 13)



UNIT 5 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 13)

Note:
1. All dimensions shown are parallel or perpendicular to a true horizontal line and measured along stationing. Contractor to adjust for grade.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = jyding
DESIGNED - ER
CHECKED - MM
DRAWN - JR
PLOT SCALE = 0:2.0000 " = 1" / in.
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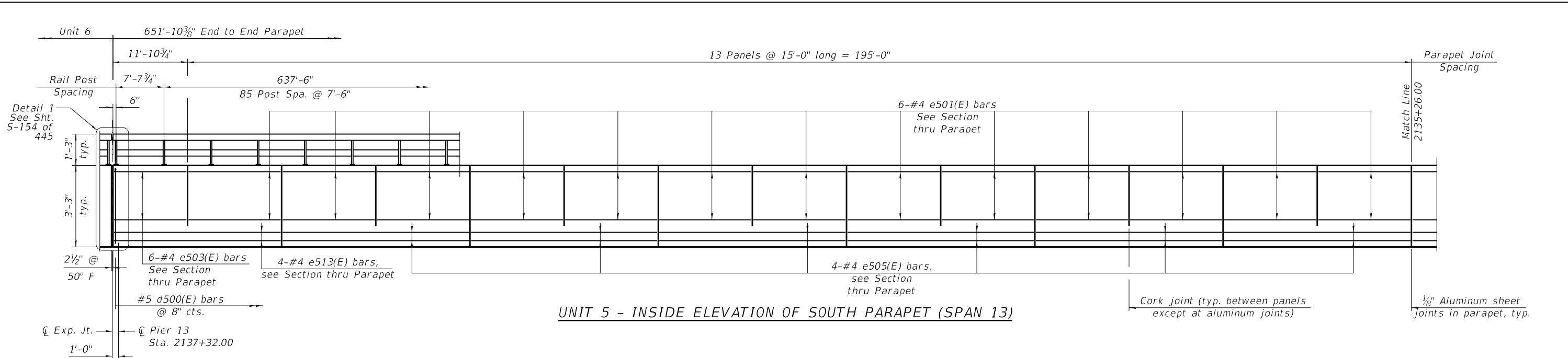
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

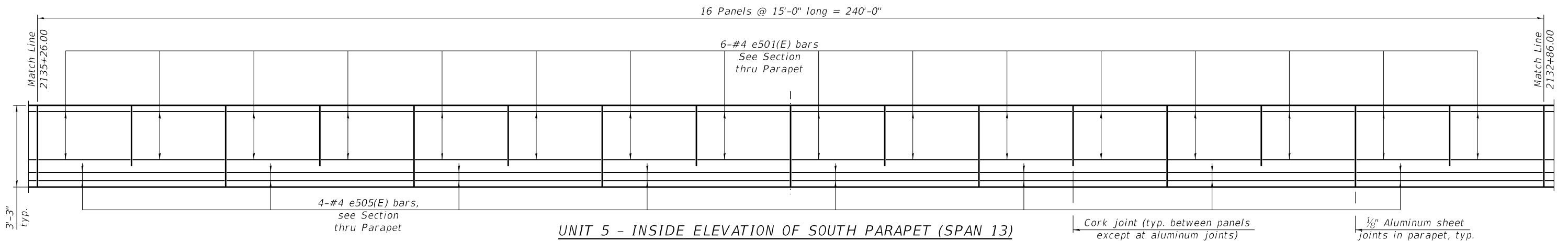
UNIT 5 - NORTH PARAPET ELEVATION
STRUCTURE NO. 090-0180

SHEET 5-123 OF 445 SHEETS

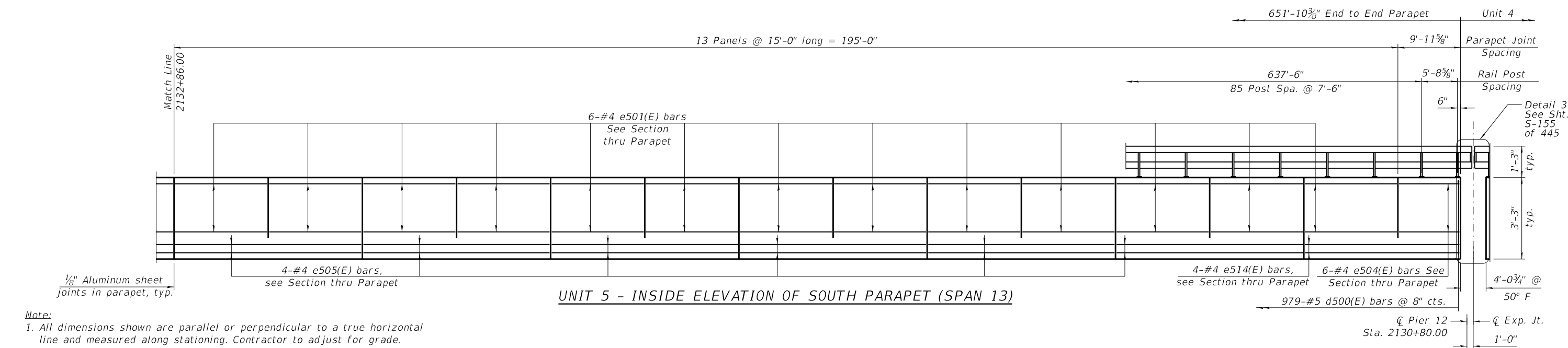
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317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1027
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



UNIT 5 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 13)



UNIT 5 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 13)



UNIT 5 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 13)

Note:
1. All dimensions shown are parallel or perpendicular to a true horizontal line and measured along stationing. Contractor to adjust for grade.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = jyding
DESIGNED - ER
CHECKED - MM
DRAWN - JR
PLOT SCALE = 0:2.0000 " = 1/8" / in.
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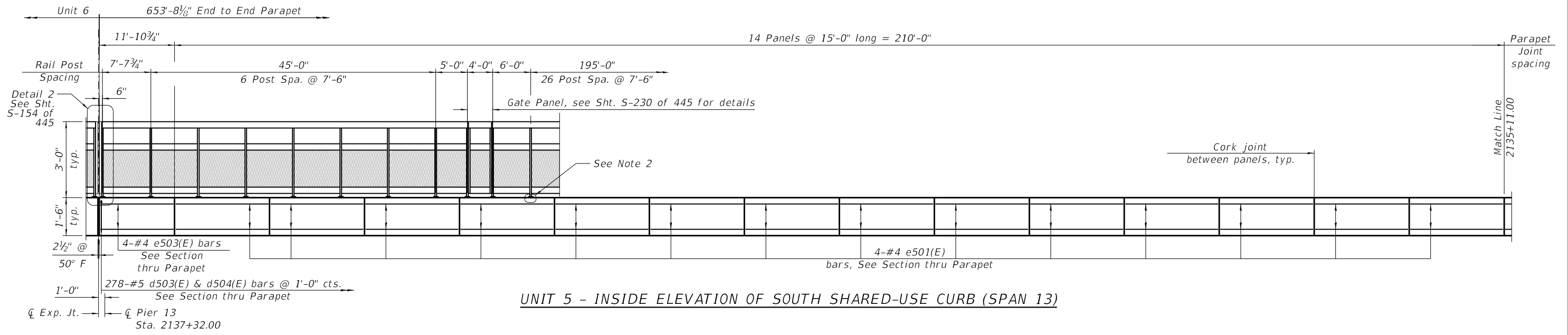
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

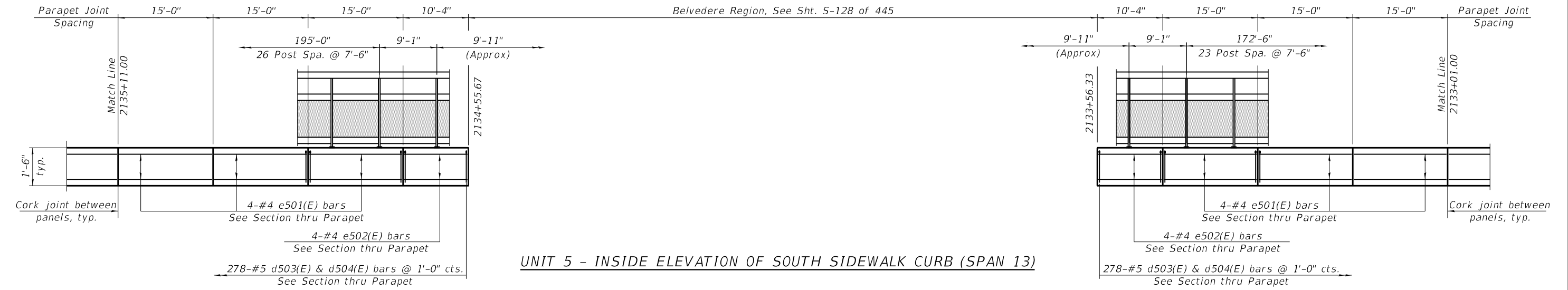
UNIT 5 - SOUTH PARAPET ELEVATION
STRUCTURE NO. 090-0180

SHEET 5-124 OF 445 SHEETS

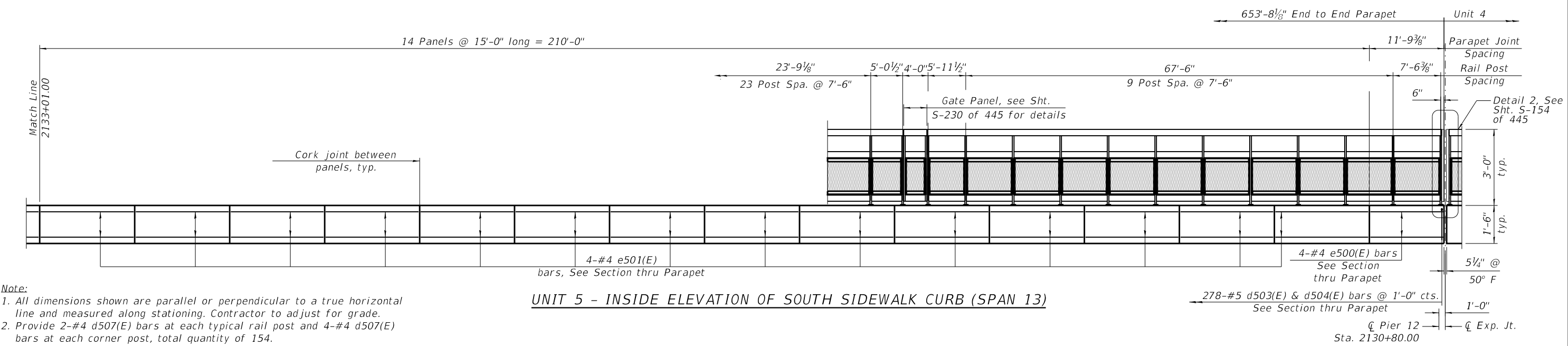
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CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



UNIT 5 - INSIDE ELEVATION OF SOUTH SHARED-USE CURB (SPAN 13)



UNIT 5 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 13)



UNIT 5 - INSIDE ELEVATION OF SOUTH SIDEWALK CURB (SPAN 13)

Note:
 1. All dimensions shown are parallel or perpendicular to a true horizontal line and measured along stationing. Contractor to adjust for grade.
 2. Provide 2-#4 d507(E) bars at each typical rail post and 4-#4 d507(E) bars at each corner post, total quantity of 154.

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TYLIN INTERNATIONAL
 200 S. WACKER DR.
 SUITE 1400
 CHICAGO, IL 60606
 TEL: 312-777-2900

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PLOT DATE = 1/24/2019	DRAWN - JR	REVISED -
	CHECKED - NS	REVISED -

STATE OF ILLINOIS
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UNIT 5 - SHARED-USE PATH CURB ELEVATION
 STRUCTURE NO. 090-0180

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1029
CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	

UNIT 5 - SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a500(E)	3136	#5	38'-7"	—
a501(E)	2781	#5	27'-0"	—
a502(E)	1568	#6	8'-4"	└
a505(E)	32	#5	13'-0"	—
a507(E)	72	#6	11'-0"	—
a508(E)	144	#5	1'-6"	—
a509(E)	1568	#6	22'-0"	—
a510(E)	247	#5	17'-10"	—
a511(E)	32	#5	19'-5"	—
a513(E)	19	#5	19'-5"	—
a515(E)	24	#5	9'-0"	—
a516(E)	6	#5	3'-0"	<

b501(E)	3972	#5	33'-8"	—
b502(E)	1460	#6	33'-9"	—
b503(E)	72	#5	51'-1"	—
b505(E)	195	#5	28'-0"	—
b506(E)	73	#6	28'-1"	—
b507(E)	195	#5	28'-7"	—
b508(E)	73	#6	28'-8"	—
b509(E)	24	#5	9'-0"	—

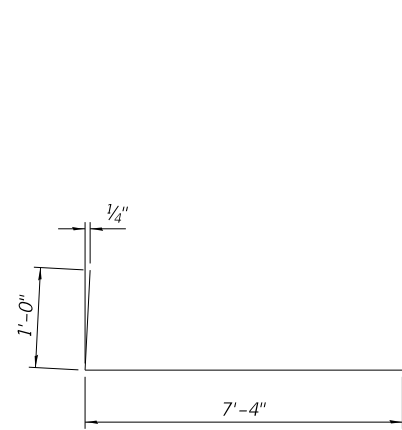
d500(E)	979	#5	6'-5"	└
d501(E)	981	#5	8'-4"	└
d502(E)	979	#5	5'-2"	└
d503(E)	689	#5	3'-0"	└
d504(E)	689	#5	4'-0"	└
d505(E)	6	#5	5'-8"	└
d506(E)	24	#5	5'-5"	└
d507(E)	154	#4	2'-2"	└
d510(E)	18	#6	8'-11"	└
d511(E)	9	#6	5'-3"	└
d512(E)	981	#5	6'-5"	└

e500(E)	10	#4	11'-5"	—
e501(E)	640	#4	14'-8"	—
e502(E)	8	#4	10'-0"	—
e503(E)	16	#4	11'-7"	—
e504(E)	6	#4	9'-8"	—
e505(E)	160	#4	29'-8"	—
e506(E)	4	#4	26'-5"	—
e507(E)	8	#4	11'-11"	—
e508(E)	12	#4	17'-8"	—
e509(E)	4	#4	9'-11"	└
e510(E)	4	#4	9'-3"	└
e511(E)	4	#4	9'-1"	└
e512(E)	4	#4	9'-8"	└
e513(E)	8	#4	26'-7"	—
e514(E)	4	#4	24'-8"	—

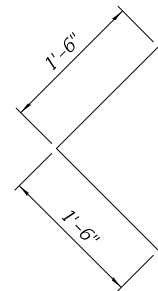
x500(E)	64	#5	4'-10"	└
x501(E)	64	#5	5'-8"	└

Reinforcement Bars, Epoxy Coated	Lbs.	563,230
Concrete Superstructure	Cu. Yds.	1,520.9
Parapet Railing	Foot	651
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	2604
Bridge Fence Railing (Special)	Foot	672
Diamond Grinding (Bridge Section)	Sq. Yd.	3762
Protective Coat	Sq. Yd.	6134

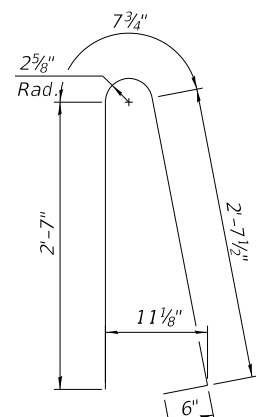
Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



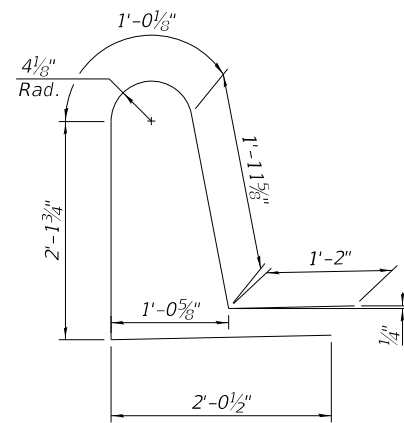
BAR a502(E)



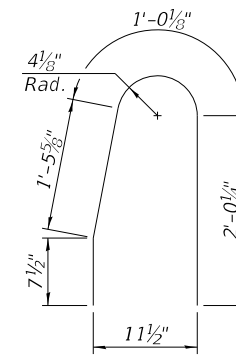
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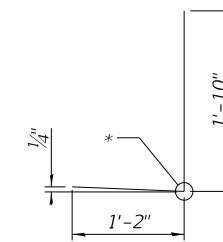
BAR d500(E)



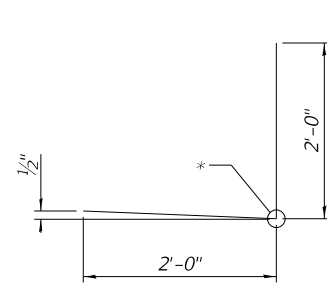
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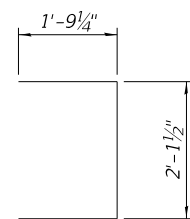
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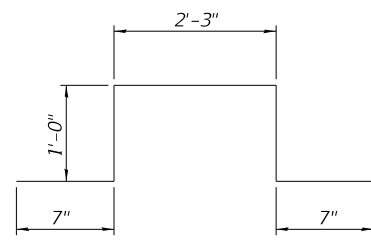
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* At Belvedere, Contractor shall bend this location to fit in field.



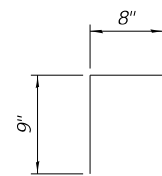
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* At Belvedere, Contractor shall bend this location to fit in field.



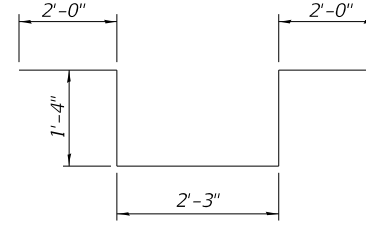
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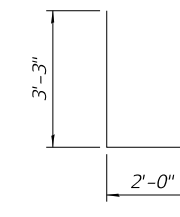
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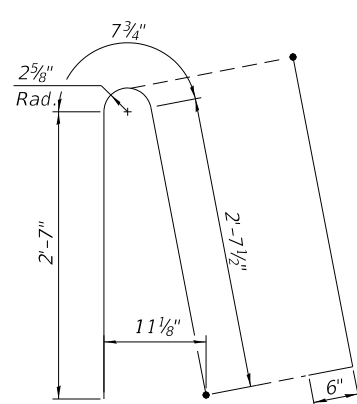
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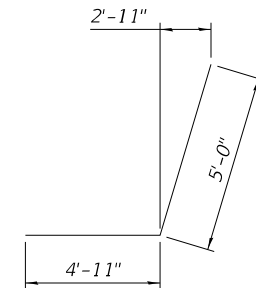
BAR d510(E)



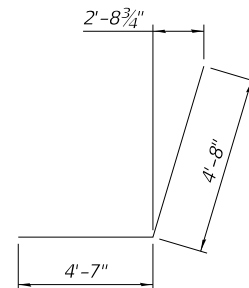
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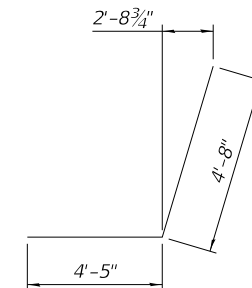
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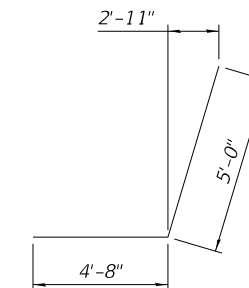
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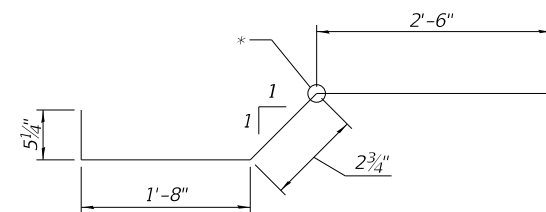
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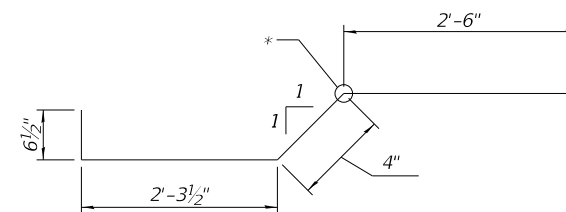
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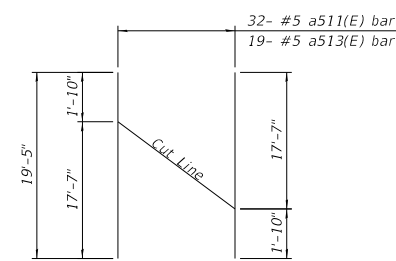
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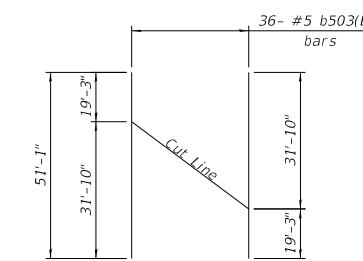
BAR x500(E)
* Contractor shall bend this location to fit in field.



BAR x501(E)
* Contractor shall bend this location to fit in field.



FIELD CUTTING DIAGRAM
Order full length. Cut as shown and use remainder of bars in opposite face.



FIELD CUTTING DIAGRAM
Order full length. Cut as shown and use remainder of bars in opposite face.

MODEL: Default
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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

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DESIGNED - ER
CHECKED - MM
PLOT SCALE = 0:2.0000 " = 1" / in.
DRAWN - JR
PLOT DATE = 1/24/2019
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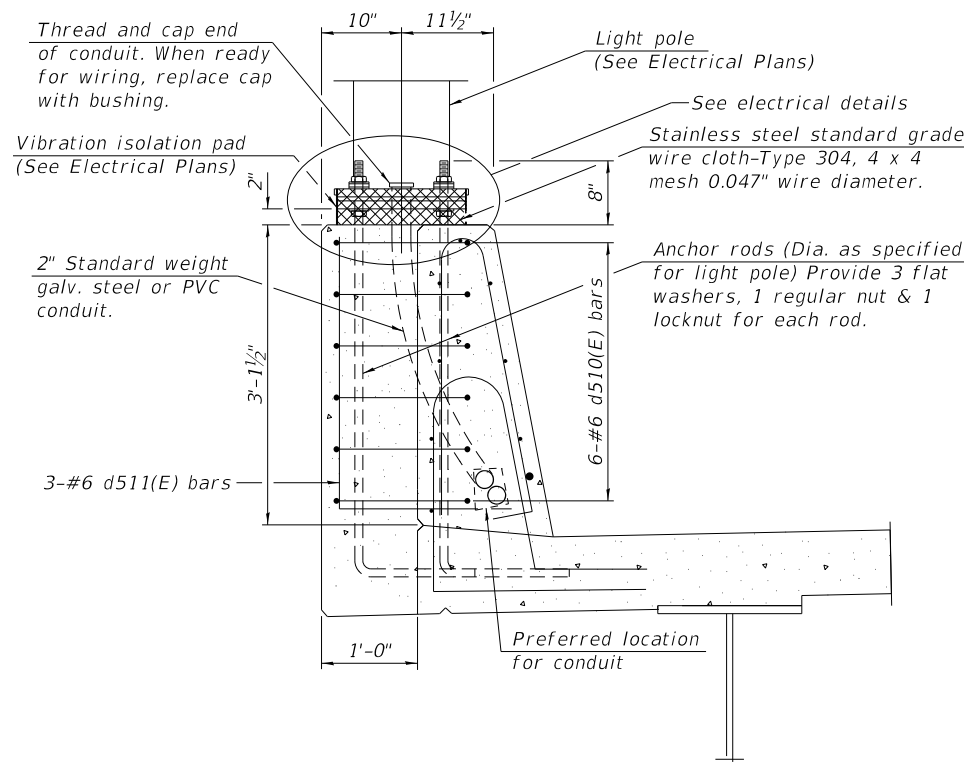
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REVISED -

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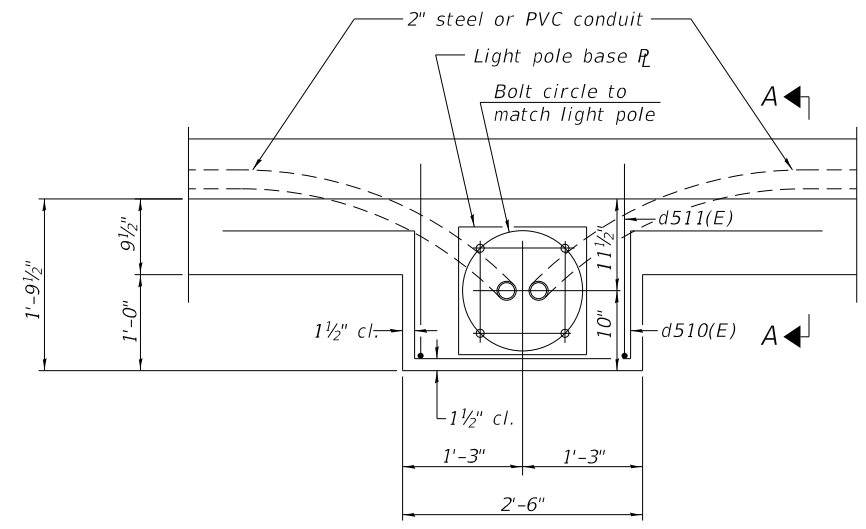
UNIT 5 - SUPERSTRUCTURE DETAILS, 1 OF 4
STRUCTURE NO. 090-0180

SHEET 5-126 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1030
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

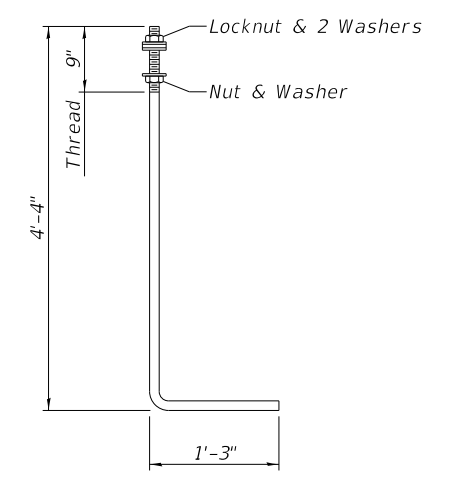


SECTION A-A



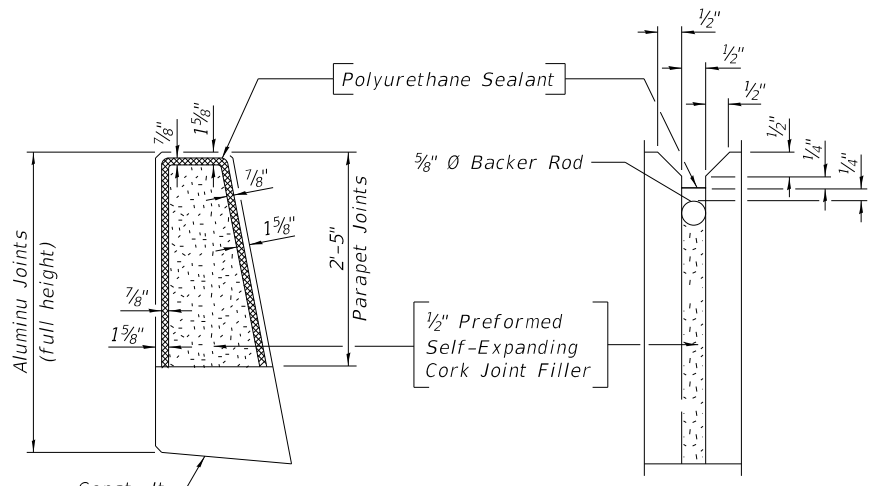
PLAN

Note:
Cost of anchor rods and conduit is included with Concrete Superstructure.

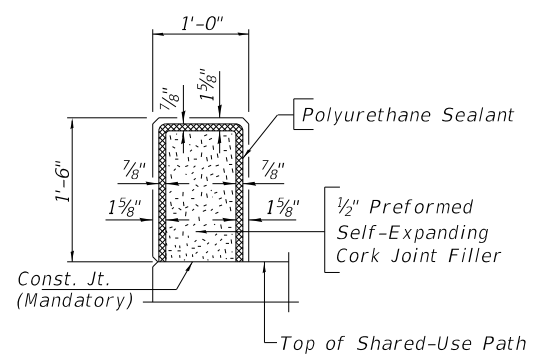


ANCHOR ROD

Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized.



PARAPET JOINT DETAILS



CURB & PARAPET JOINT DETAILS

Notes:
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

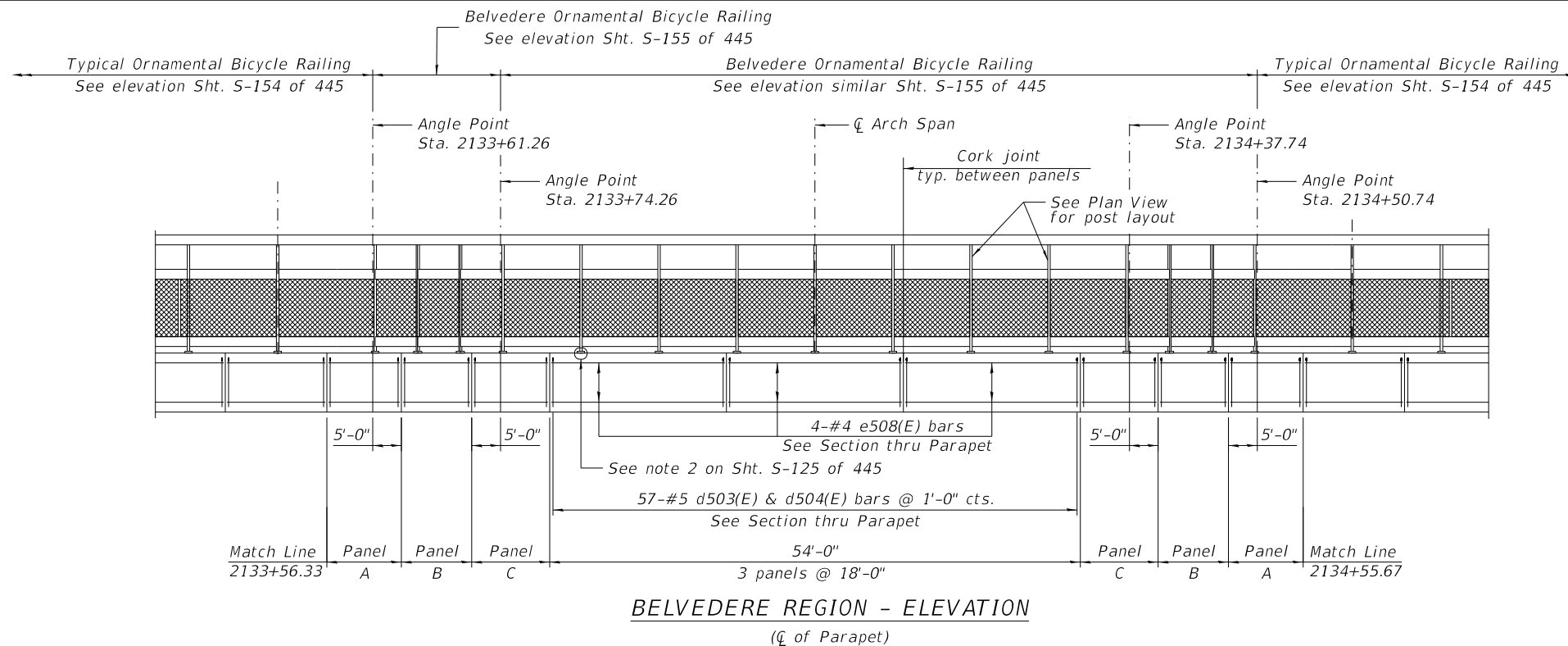
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STATE OF ILLINOIS
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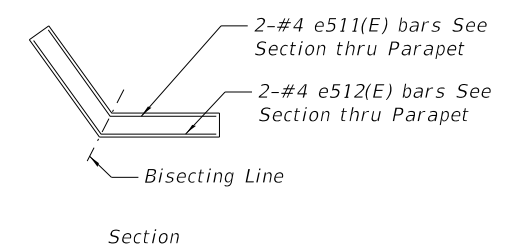
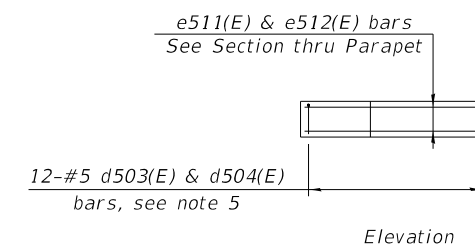
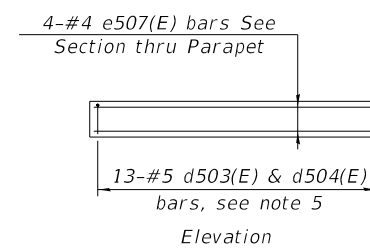
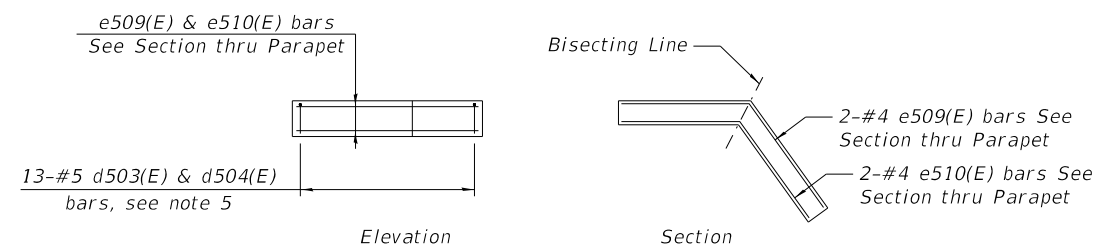
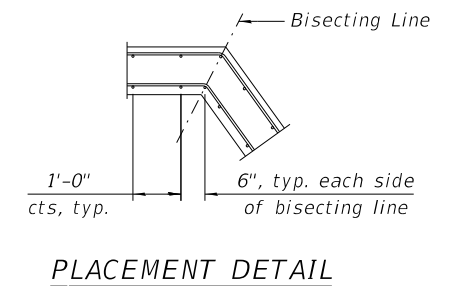
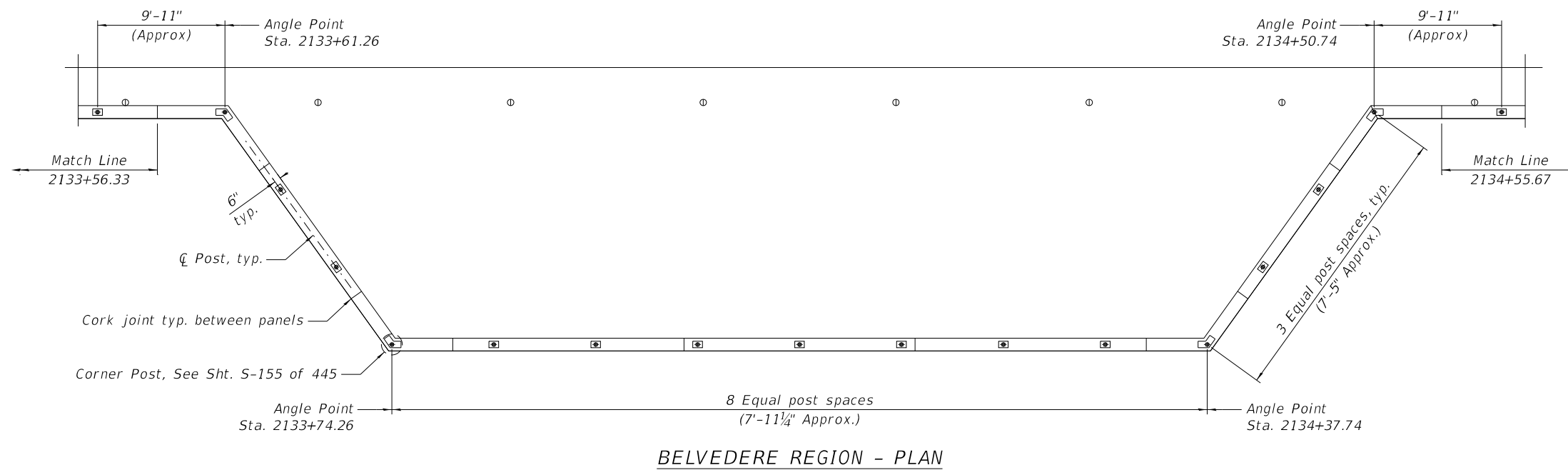
UNIT 5 - SUPERSTRUCTURE DETAILS, 2 OF 4
STRUCTURE NO. 090-0180

SHEET 5-127 OF 445 SHEETS

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317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1031
ILLINOIS			CONTRACT NO. 68B46	
FED. AID PROJECT			NHPP-YRP3(905)	



- Notes:**
1. All dimensions shown are parallel or perpendicular to a true horizontal line and measured along stationing. Contractor to adjust for grade.
 2. All dimensions shown are measured at Cl of parapet.
 3. See Shts. S-81, S-82 of 445 for Belvedere layout and dimensions.
 4. Rail segment identified as 'Typical Zone' are detailed per Ornamental Bicycle Railing Elevation on Sht. S-154 of 445, except for HSS Post at Angle Point.
 5. Place d503(E) & d504(E) bars at 1'-0" on center max and 2" clear of Cork Joint. Place bars at angle point according to Placement Detail. Flare tail with 2" clear at angle point. See Section thru parapet.



PANEL A
(2 locations)

PANEL B
(2 locations)

PANEL C
(2 locations)

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200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

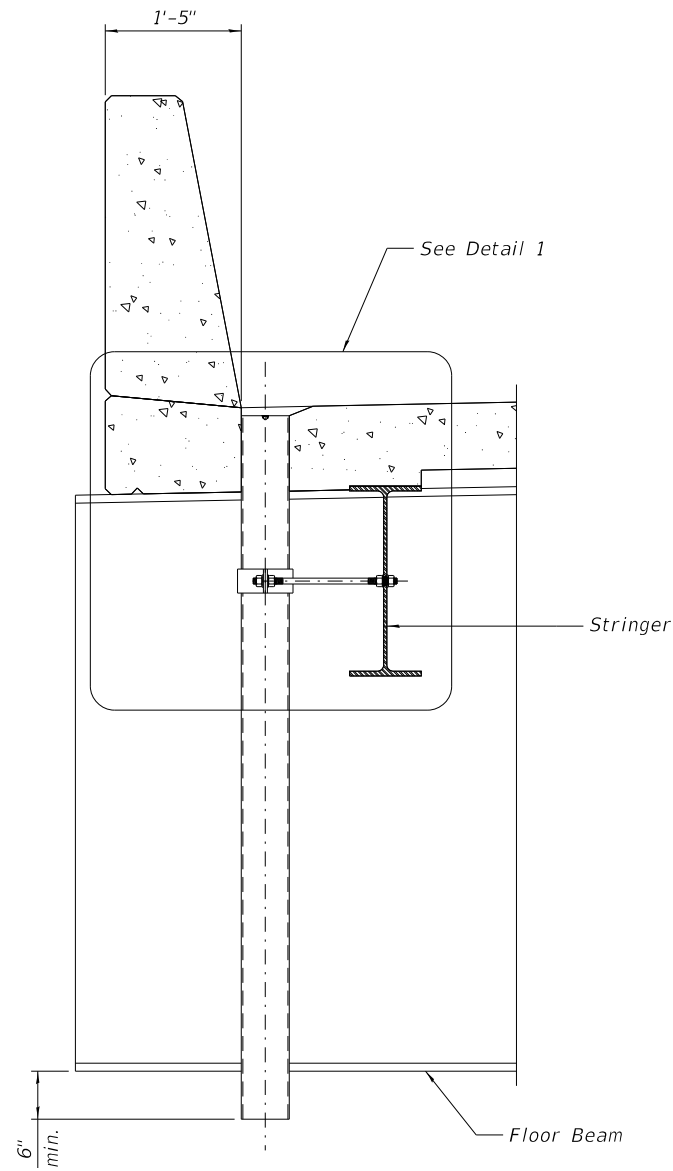
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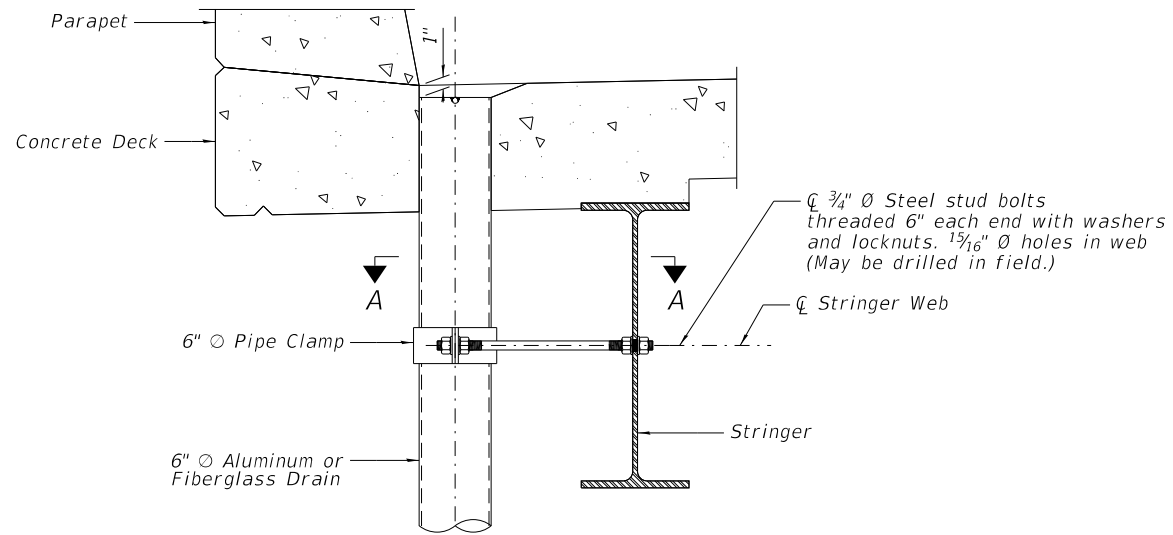
UNIT 5 - SUPERSTRUCTURE DETAILS, 3 OF 4
STRUCTURE NO. 090-0180

SHEET 5-128 OF 445 SHEETS

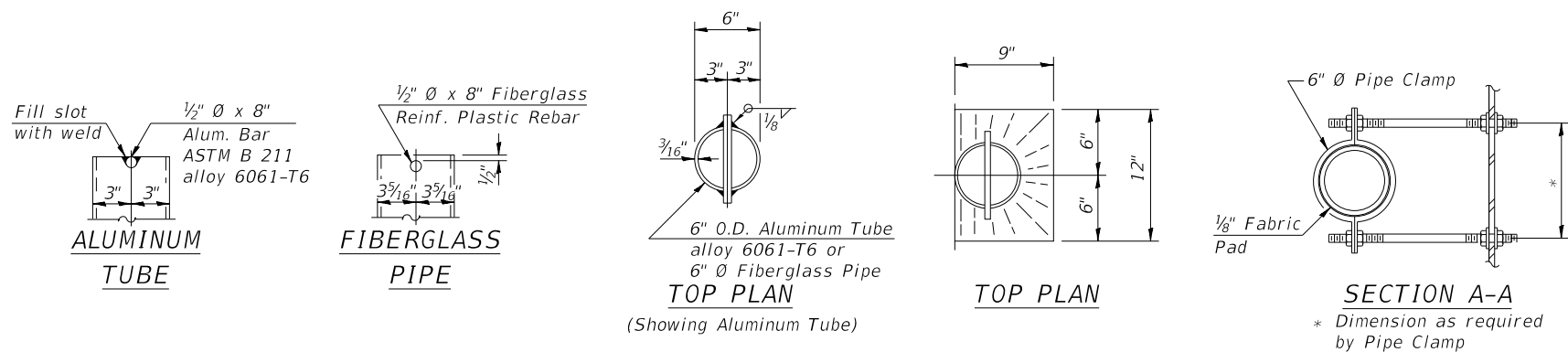
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1032
CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	



FLOOR DRAIN DETAIL



DETAIL 1



Notes:

1. Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
2. The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings' Spec. SSPC-SP1 prior to painting.
3. The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete.
4. The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

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200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = jyding
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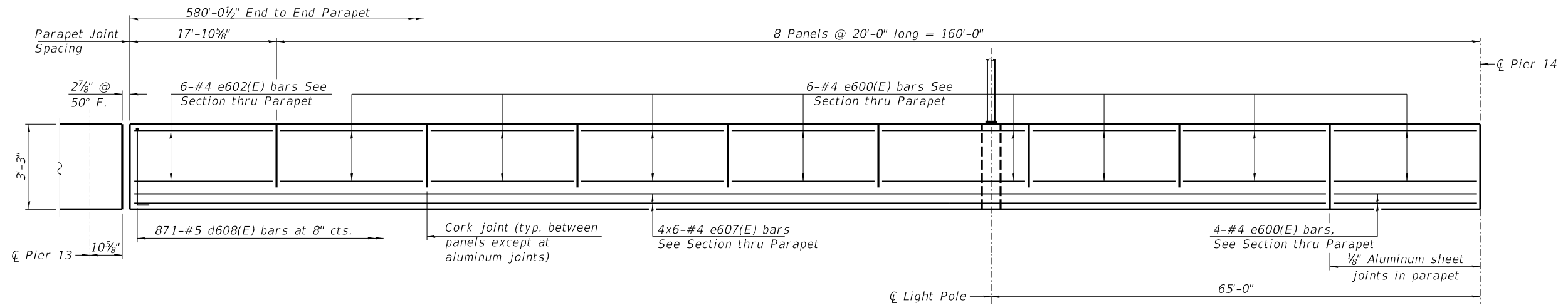
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UNIT 5 - SUPERSTRUCTURE DETAILS, 4 OF 4
STRUCTURE NO. 090-0180

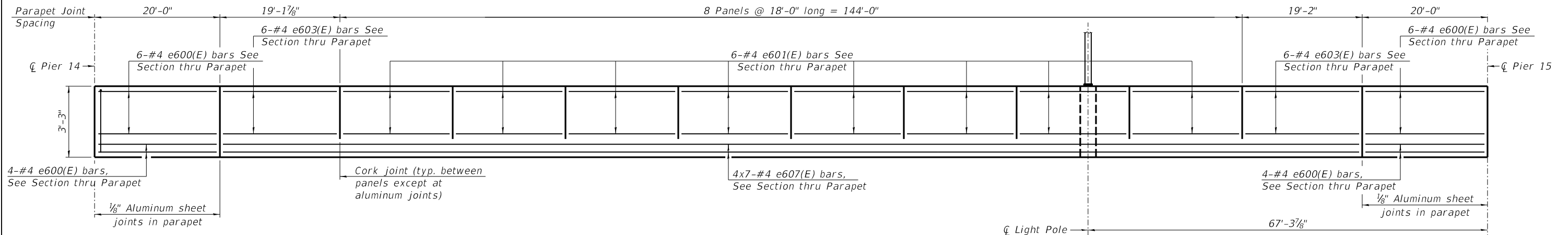
SHEET 5-129 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

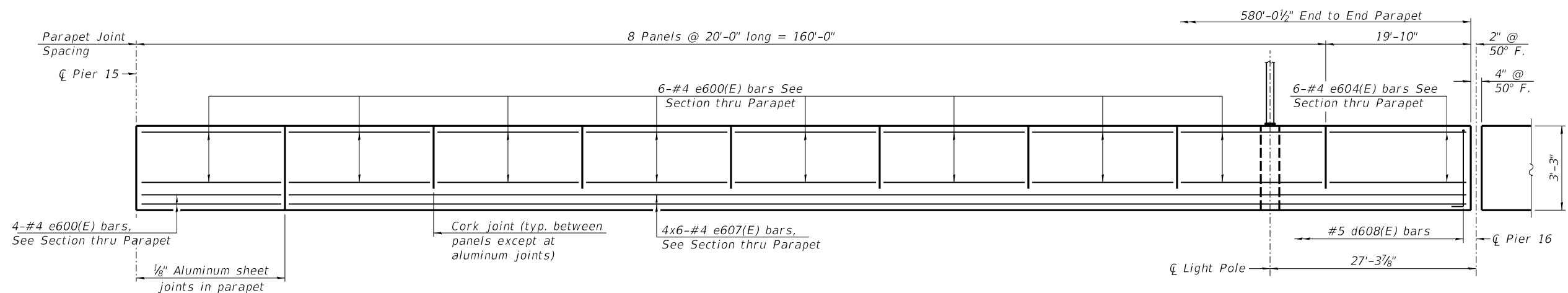


UNIT 6 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 14)

MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-5"



UNIT 6 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 15)



UNIT 6 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 16)

Notes:
Bars indicated thus 4x6-#4 etc. indicates 4 lines of bars with 6 lengths per line.

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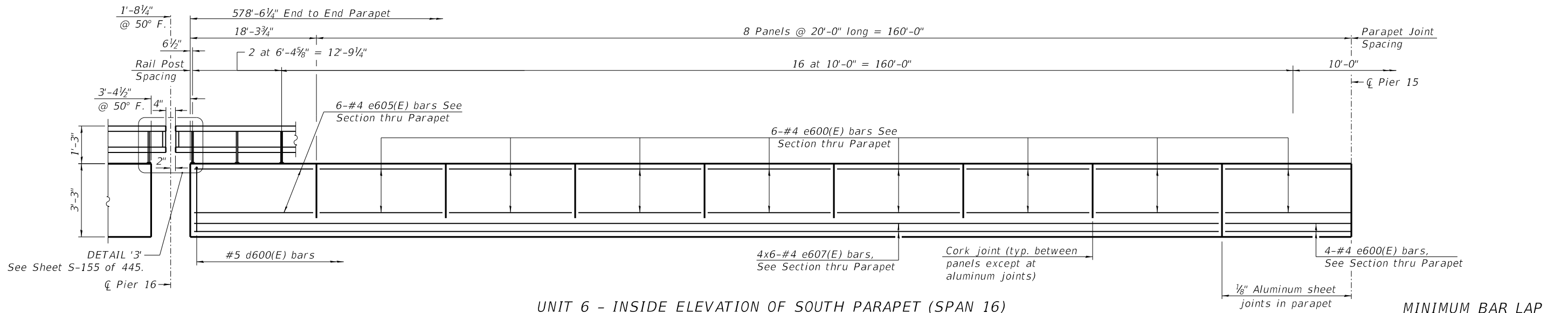
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NORTH PARAPET ELEVATION - UNIT 6
STRUCTURE NO. 090-0180

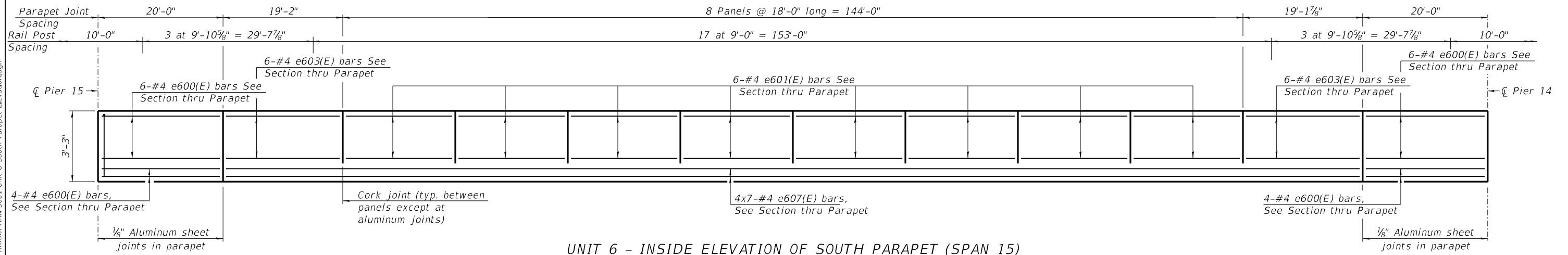
SHEET 5-130 OF 445 SHEETS

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FED. AID PROJECT			NHPP-YRP3(905)	

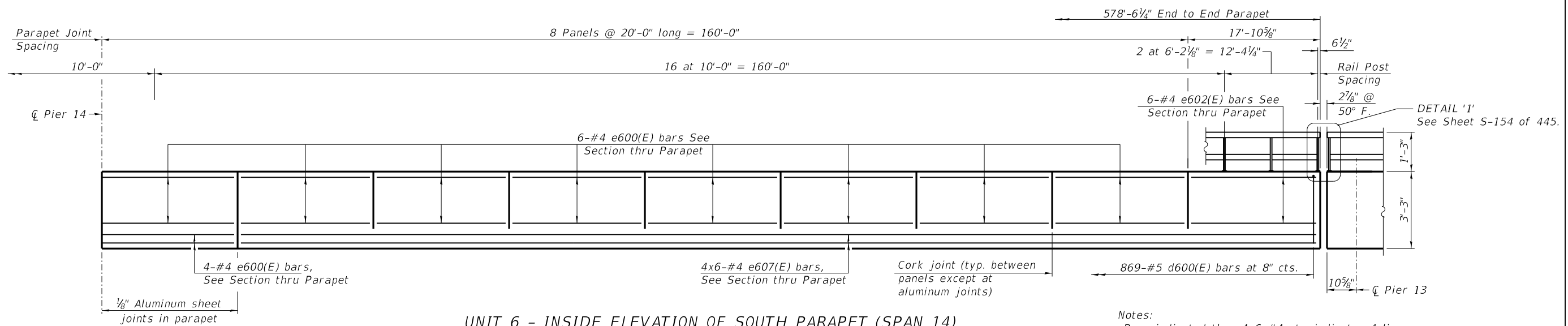


UNIT 6 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 16)

MINIMUM BAR LAP
 (Parapet)
 #4 bar = 2'-5"



UNIT 6 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 15)



UNIT 6 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 14)

Notes:
 Bars indicated thus 4x6-#4 etc. indicates 4 lines of bars with 6 lengths per line.

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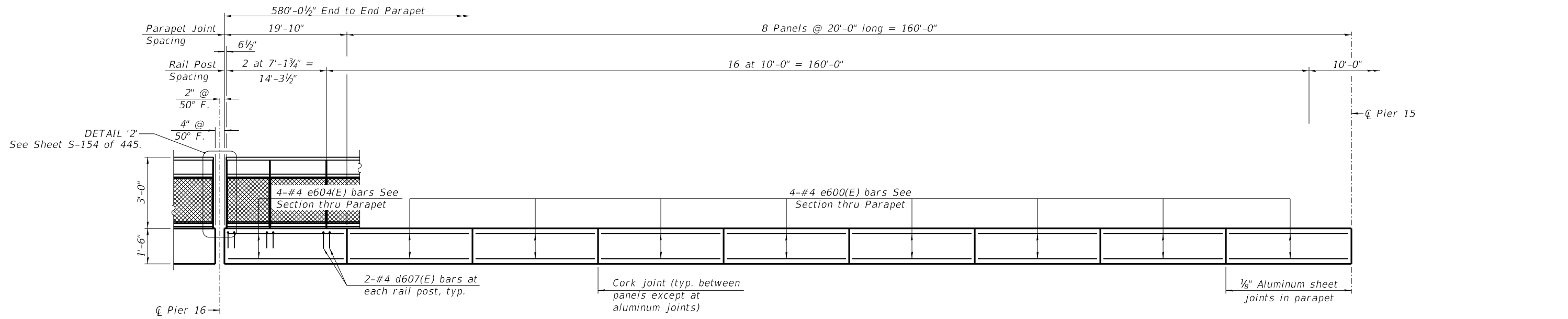
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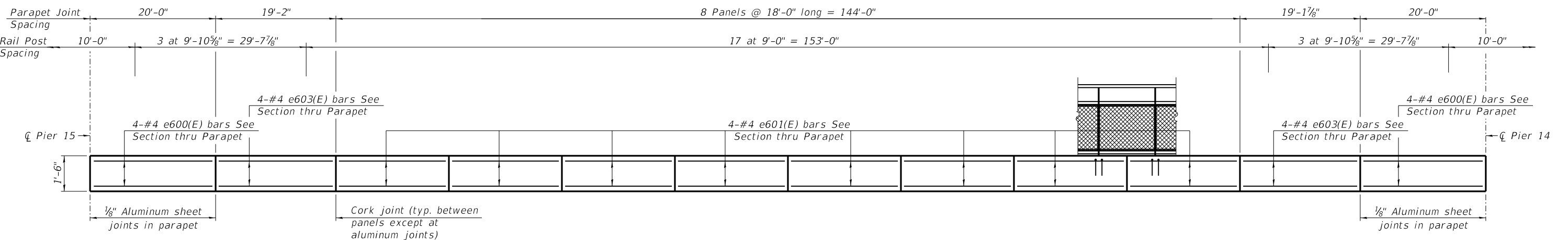
SOUTH PARAPET ELEVATION - UNIT 6
 STRUCTURE NO. 090-0180

SHEET S-131 OF 445 SHEETS

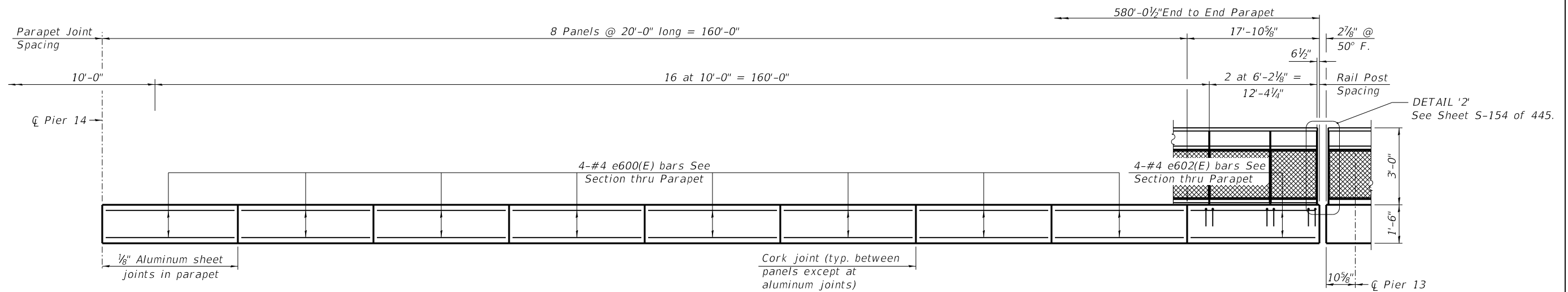
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		ILLINOIS		FED. AID PROJECT NHPY-RP3(905)



UNIT 6 - INSIDE ELEVATION OF SOUTH CURB (SPAN 16)



UNIT 6 - INSIDE ELEVATION OF SOUTH CURB (SPAN 15)



UNIT 6 - INSIDE ELEVATION OF SOUTH CURB (SPAN 14)

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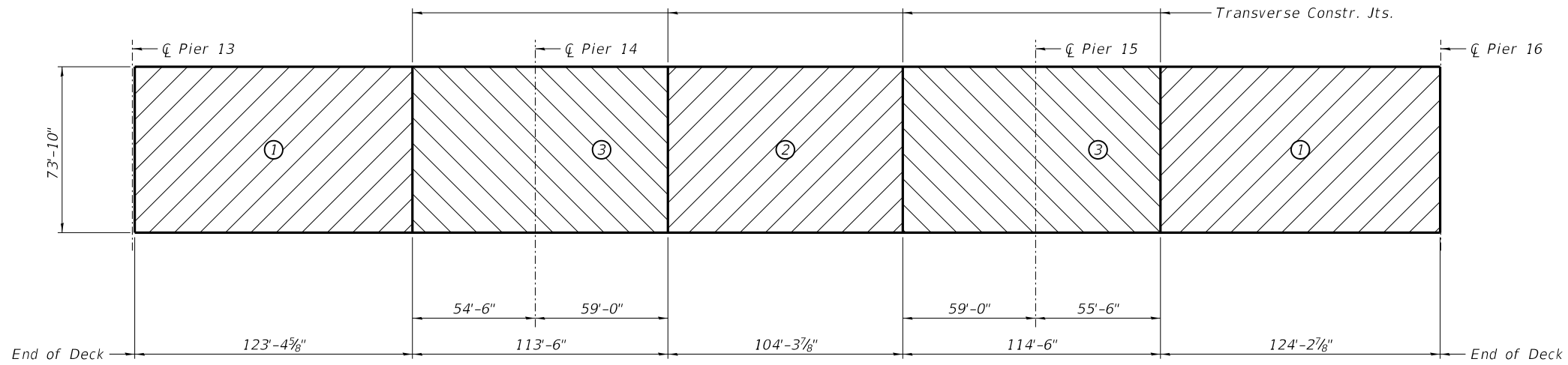
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 REVISED -

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SHARED-USE PATH CURB ELEVATION - UNIT 6
 STRUCTURE NO. 090-0180

SHEET 5-132 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR	PEO/TAZ	1361	1036
CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	



DECK POURING SEQUENCE - UNIT 6
 (The pour can start from either end of the deck.)

When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

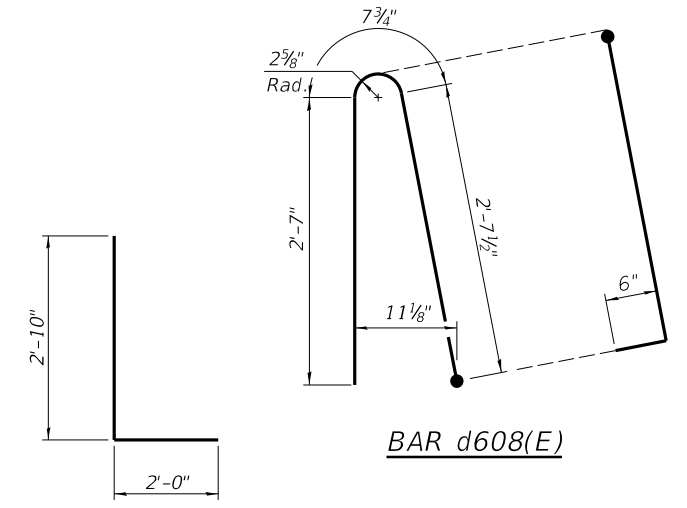
- 1) At least 72 hours shall have elapsed from the end of the previous pour.
- 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

The Contractor is alerted that camber and dead load deflection values shown on the girder detail drawings were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence will result in changes to camber and elevations that affect dead load deflections. If the Contractor wishes to change the sequence, then the proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by a Licensed Structural Engineer in Illinois.

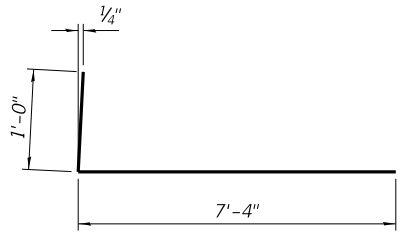
Notes:
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.

UNIT 6 - SUPERSTRUCTURE
BILL OF MATERIAL

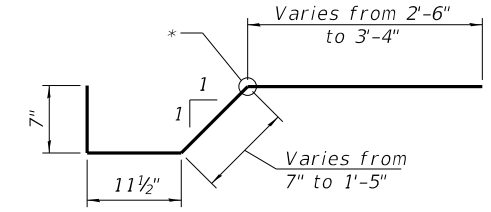
Bar	No.	Size	Length	Shape
a600(E)	2514	#5	38'-7"	—
a601(E)	2442	#5	27'-0"	—
a602(E)	1257	#6	8'-4"	—
a603(E)	24	#6	8'-0"	—
a604(E)	3	#6	27'-0"	—
a605(E)	8	#6	38'-9"	—
a606(E)	120	#5	1'-6"	—
a608(E)	36	#5	12'-0"	—
a609(E)	1257	#6	22'-0"	—
b600(E)	2870	#5	32'-6"	—
b601(E)	560	#6	33'-9"	—
b602(E)	140	#5	18'-0"	—
d600(E)	869	#5	6'-5"	—
d601(E)	871	#5	8'-3"	—
d602(E)	869	#5	5'-2"	—
d603(E)	581	#5	3'-0"	—
d604(E)	581	#5	4'-0"	—
d605(E)	9	#6	4'-10"	—
d606(E)	18	#6	8'-11"	—
d607(E)	124	#4	2'-2"	—
d608(E)	871	#5	6'-5"	—
e600(E)	320	#4	19'-8"	—
e601(E)	128	#4	17'-8"	—
e602(E)	16	#4	17'-6"	—
e603(E)	32	#4	18'-10"	—
e604(E)	10	#4	19'-6"	—
e605(E)	6	#4	17'-11"	—
e607(E)	152	#4	28'-8"	—
x600(E)	64	#5	6'-10"	—
x601(E)	64	#5	5'-6"	—
Reinforcement Bars, Epoxy Coated		Lbs.	395810	
Concrete Superstructure		Cu. Yds.	1334.8	
Protective Coat		Sq. Yds.	5410	
Bridge Deck Grooving (Longitudinal)		Sq. Yds.	2320	
Diamond Grinding (Bridge Section)		Sq. Yds.	3351	
Bridge Fence Railing (Special)		Foot	579	
Parapet Railing		Foot	580	



BAR d608(E)

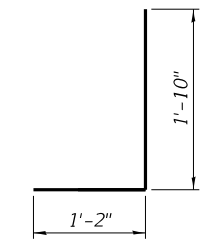


BAR a602(E)



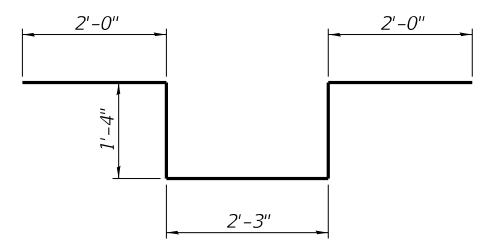
BAR x601(E)

* Contractor shall bend this location to fit in field.

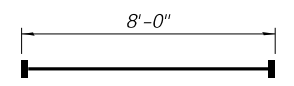


BAR d603(E)

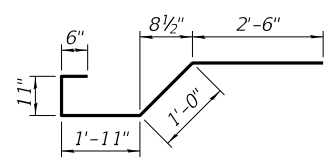
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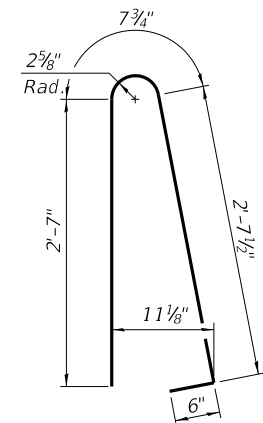
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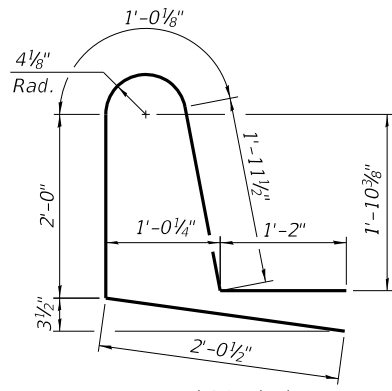
BAR a603(E)
(Headed)



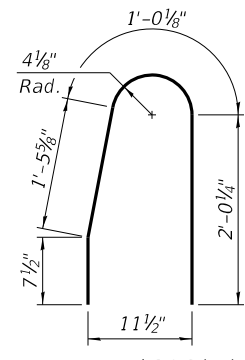
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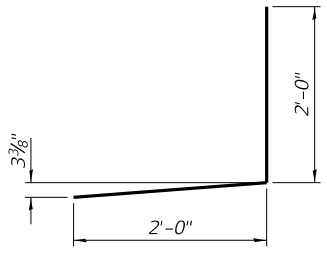
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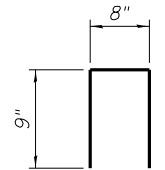
BAR d601(E)



BAR d602(E)



BAR d604(E)



BAR d607(E)

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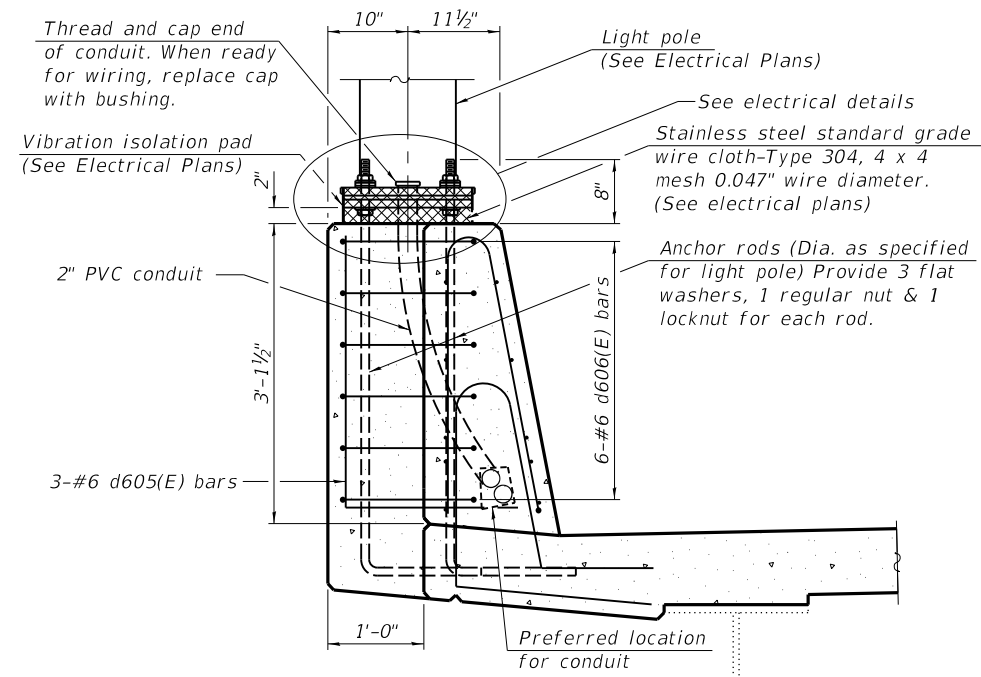
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 DEPARTMENT OF TRANSPORTATION

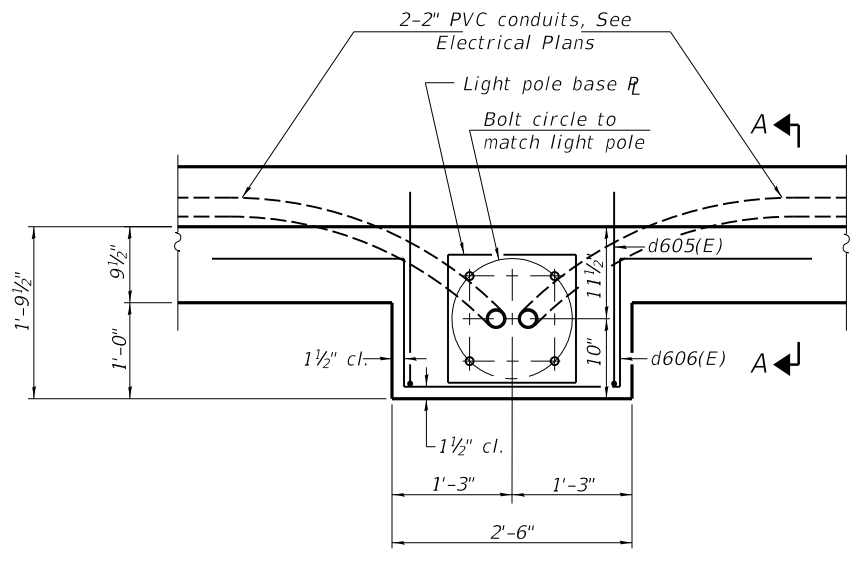
SUPERSTRUCTURE DETAILS - UNIT 6, 1 OF 2
 STRUCTURE NO. 090-0180

SHEET 5-133 OF 445 SHEETS

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317	[15B;(102-1),(14HB)]BR	PEO/TAZ	1361	1037
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

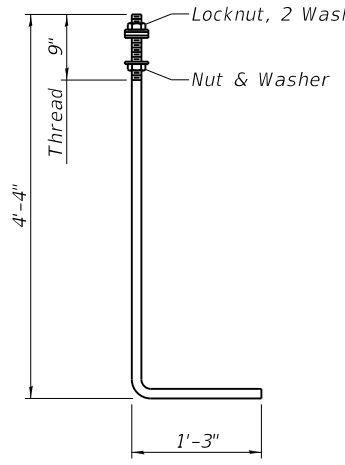


SECTION A-A



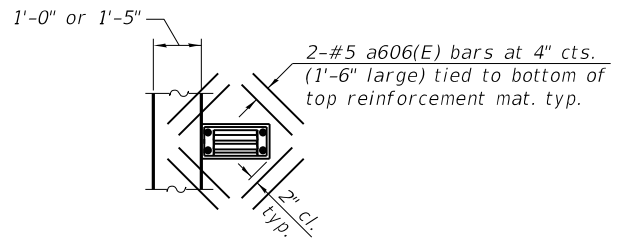
LIGHT POLE PLAN

Note:
Cost of anchor rods is included with Concrete Superstructure.



ANCHOR ROD

Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized.

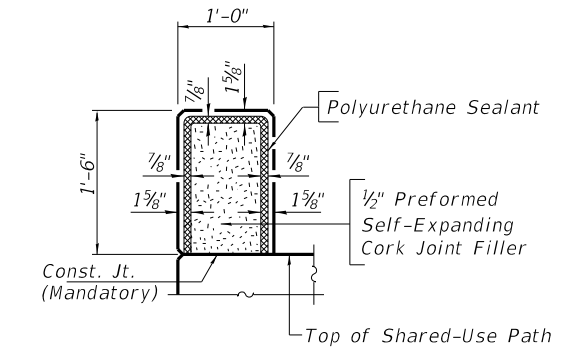
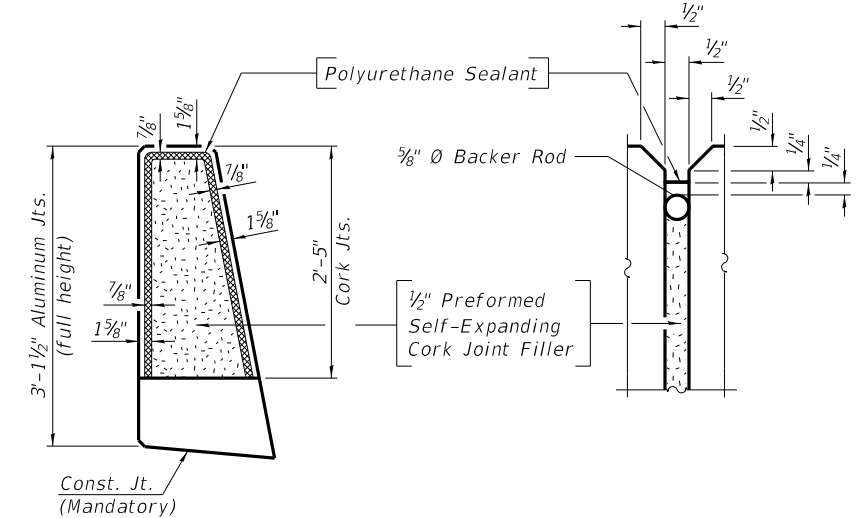


DS-11 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.

Notes:

The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.



CURB & PARAPET JOINT DETAILS

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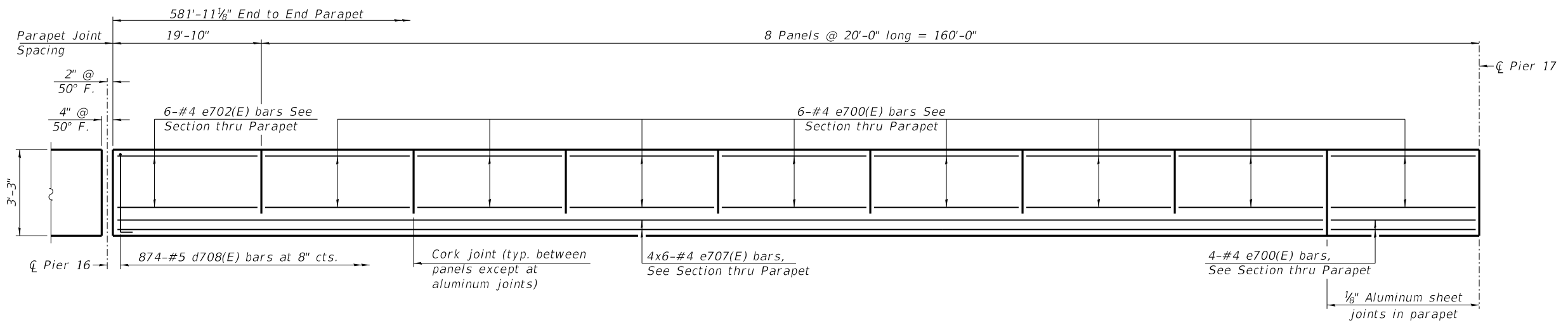
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - UNIT 6, 2 OF 2
STRUCTURE NO. 090-0180**

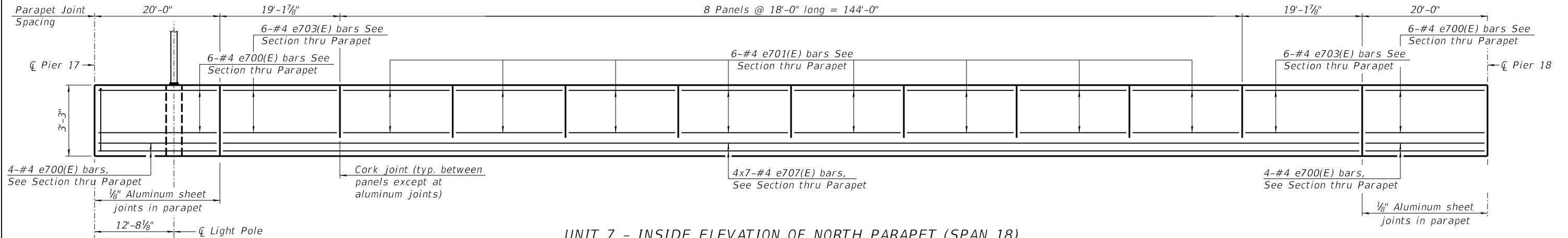
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CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPY-RP3(905)	

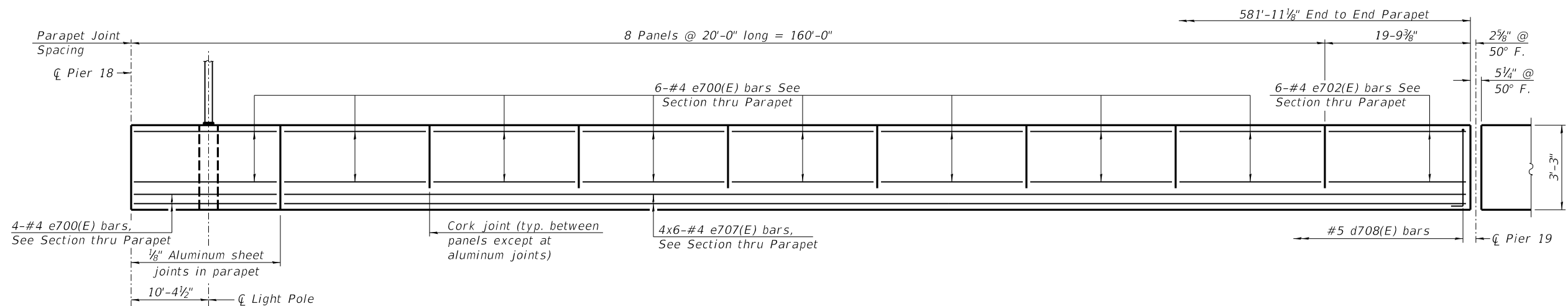


UNIT 7 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 17)

MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-5"



UNIT 7 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 18)



UNIT 7 - INSIDE ELEVATION OF NORTH PARAPET (SPAN 19)

Notes:
Bars indicated thus 4x6-#4 etc. indicates 4 lines of bars with 6 lengths per line.

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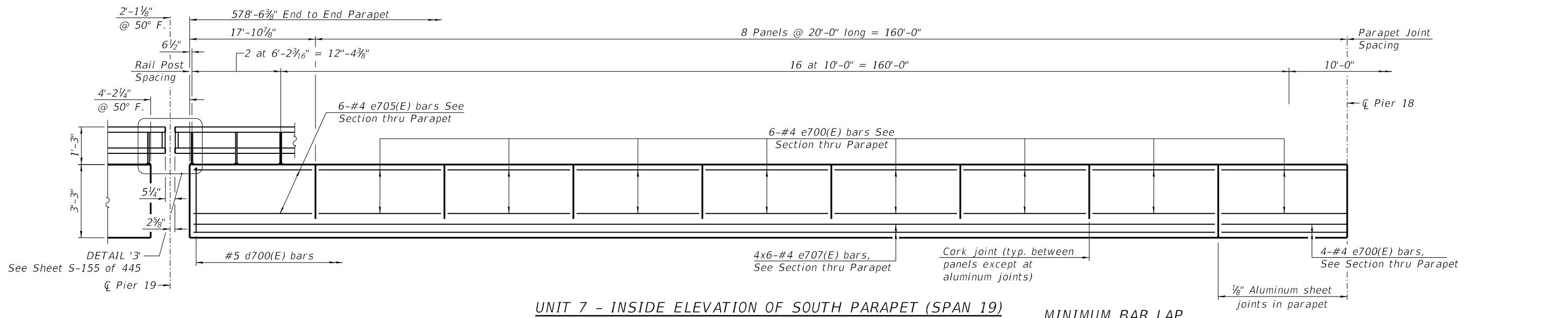
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NORTH PARAPET ELEVATION - UNIT 7
STRUCTURE NO. 090-0180

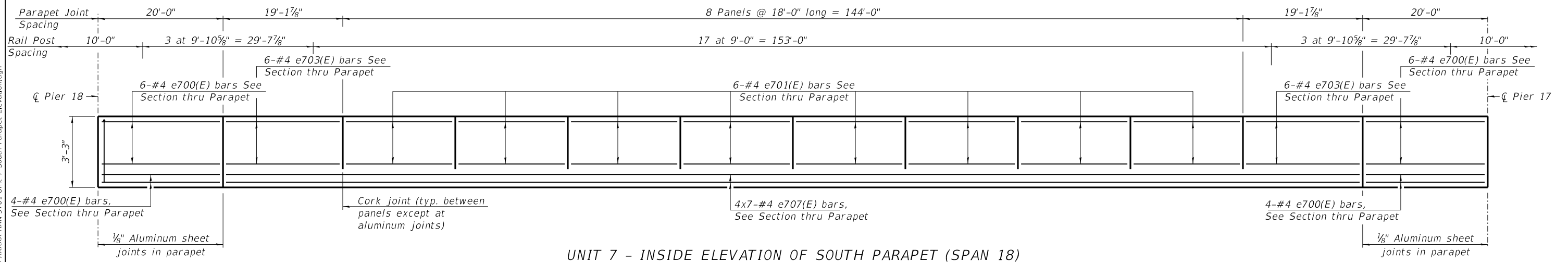
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 68B46	
NHPY-RP3(905)				

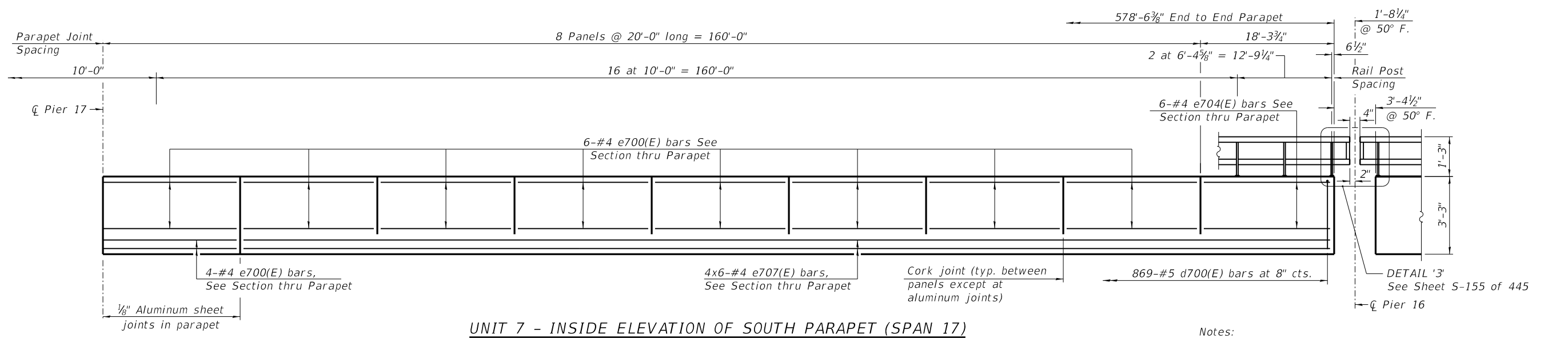


UNIT 7 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 19)

MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-5"



UNIT 7 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 18)



UNIT 7 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 17)

Notes:
Bars indicated thus 4x6-#4 etc. indicates 4 lines of bars with 6 lengths per line.

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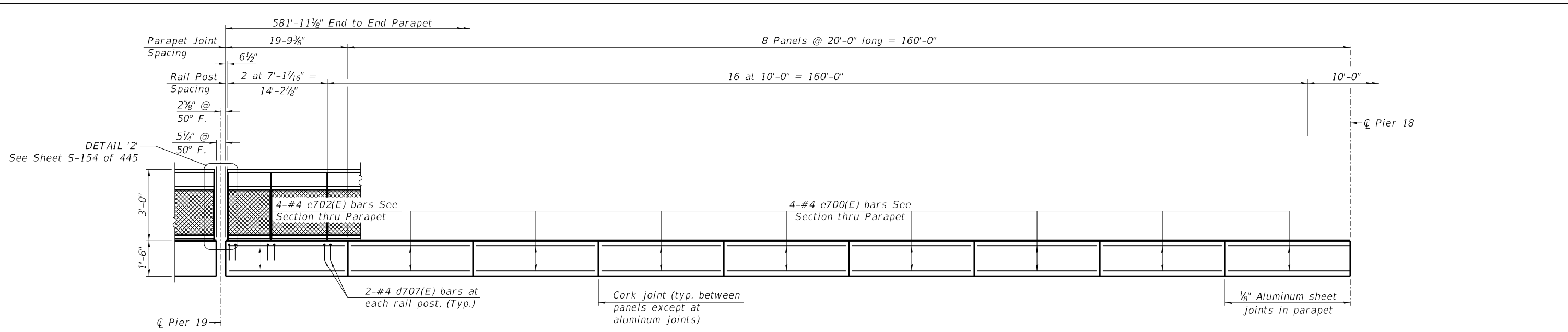
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STATE OF ILLINOIS
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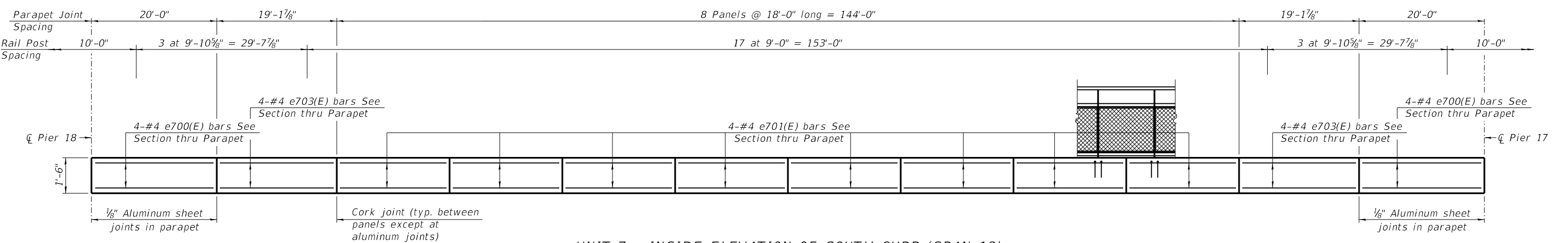
SOUTH PARAPET ELEVATION - UNIT 7
STRUCTURE NO. 090-0180

SHEET 5-136 OF 445 SHEETS

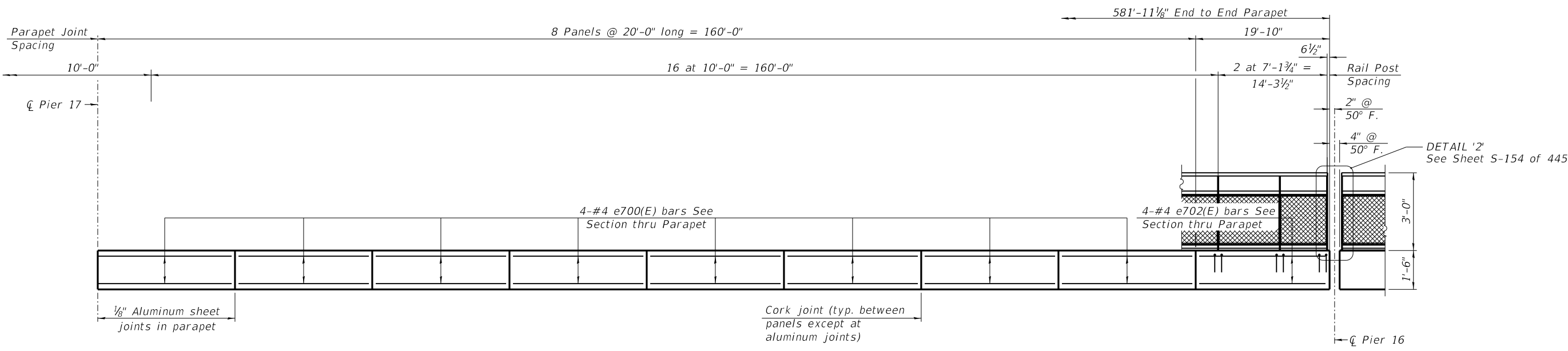
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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT NHPP-YRP3(905)		



UNIT 7 - INSIDE ELEVATION OF SOUTH CURB (SPAN 19)



UNIT 7 - INSIDE ELEVATION OF SOUTH CURB (SPAN 18)



UNIT 7 - INSIDE ELEVATION OF SOUTH CURB (SPAN 17)

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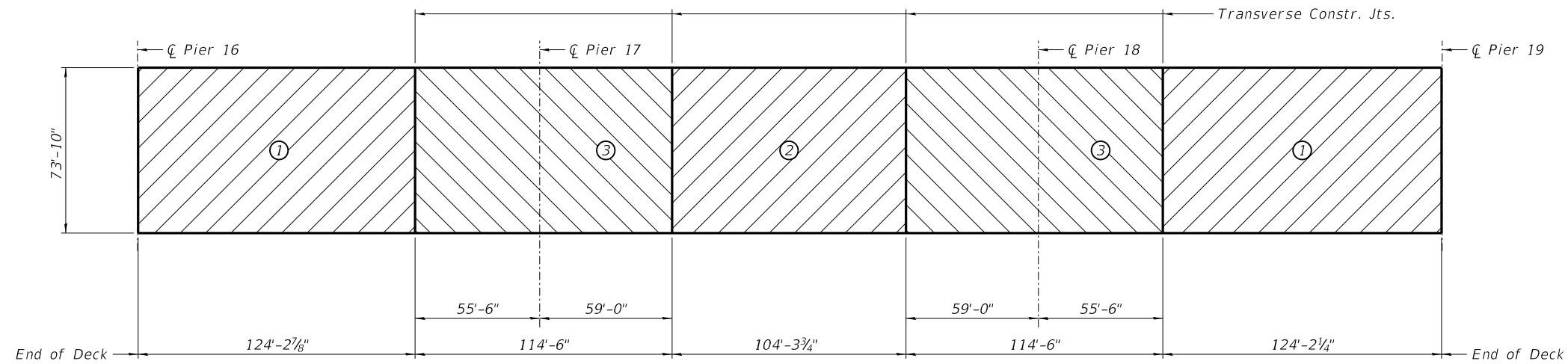


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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHARED-USE PATH CURB ELEVATION - UNIT 7
 STRUCTURE NO. 090-0180
 SHEET 5-137 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1041
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



DECK POURING SEQUENCE - UNIT 7
(The pour can start from either end of the deck.)

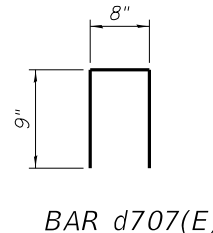
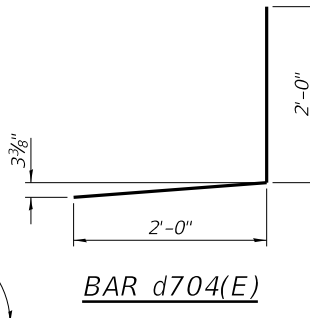
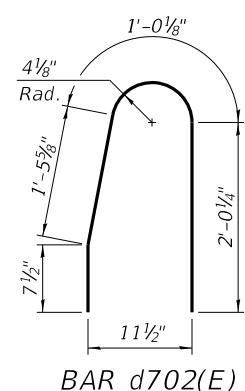
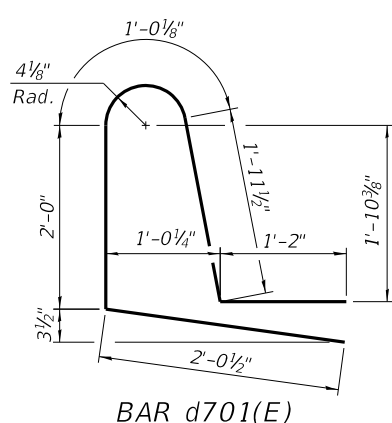
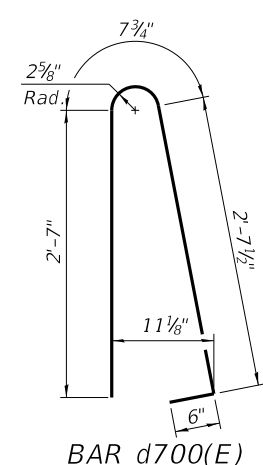
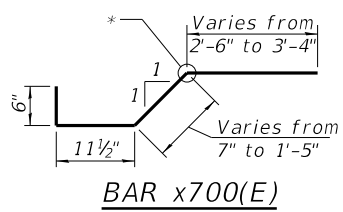
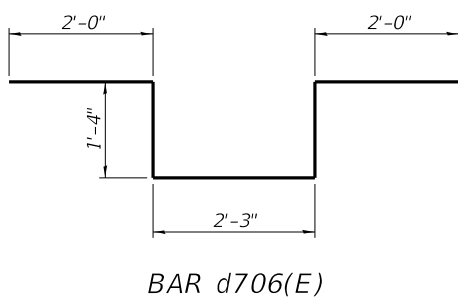
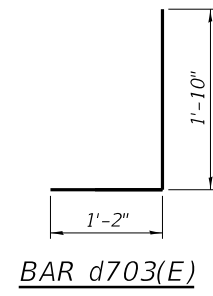
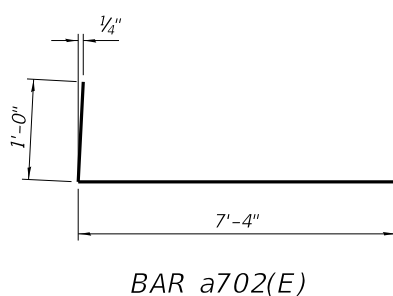
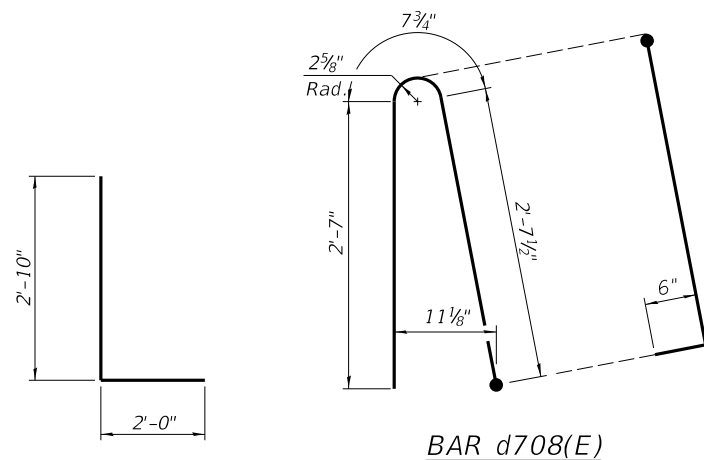
When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

- 1) At least 72 hours shall have elapsed from the end of the previous pour.
- 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

The Contractor is alerted that camber and dead load deflection values shown on the girder detail drawings were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence will result in changes to camber and elevations that affect dead load deflections. If the Contractor wishes to change the sequence, then the proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by a Licensed Structural Engineer in Illinois.

UNIT 7 - SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a700(E)	2522	#5	38'-7"	—
a701(E)	2451	#5	27'-0"	—
a702(E)	1261	#6	8'-4"	—
a705(E)	72	#5	12'-0"	—
a706(E)	144	#5	1'-6"	—
a707(E)	1261	#6	22'-0"	—
b700(E)	2870	#5	32'-6"	—
b701(E)	560	#6	33'-9"	—
b702(E)	140	#5	18'-0"	—
d700(E)	869	#5	6'-5"	—
d701(E)	874	#5	8'-3"	—
d702(E)	869	#5	5'-2"	—
d703(E)	583	#5	3'-0"	—
d704(E)	583	#5	4'-0"	—
d705(E)	6	#6	4'-10"	—
d706(E)	12	#6	8'-11"	—
d707(E)	124	#4	2'-2"	—
d708(E)	874	#5	6'-5"	—
e700(E)	320	#4	19'-8"	—
e701(E)	128	#4	17'-8"	—
e702(E)	20	#4	19'-6"	—
e703(E)	32	#4	18'-10"	—
e704(E)	6	#4	18'-0"	—
e705(E)	6	#4	17'-7"	—
e707(E)	152	#4	28'-8"	—
x700(E)	128	#5	5'-5"	—
Reinforcement Bars, Epoxy Coated		Lbs.	396060	
Concrete Superstructure		Cu. Yds.	1337.1	
Protective Coat		Sq. Yds.	5426	
Bridge Deck Grooving (Longitudinal)		Sq. Yds.	2327	
Diamond Grinding (Bridge Section)		Sq. Yds.	3361	
Bridge Fence Railing (Special)		Foot	581	
Parapet Railing		Foot	582	



* Contractor shall bend this location to fit in field.

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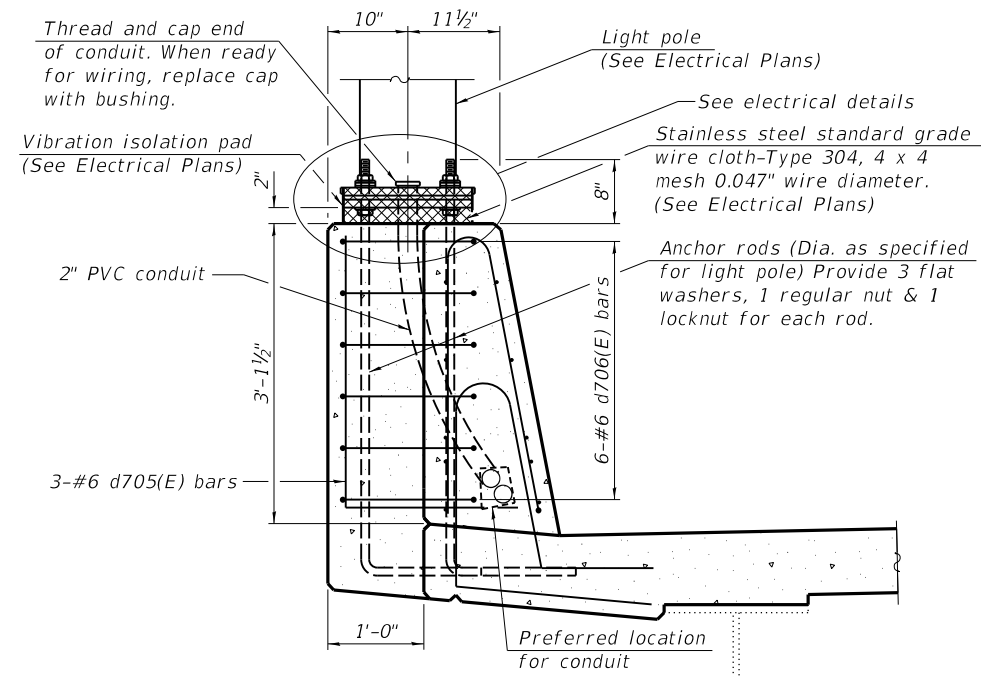
SUPERSTRUCTURE DETAILS - UNIT 7, 1 OF 2
STRUCTURE NO. 090-0180

SHEET 5-138 OF 445 SHEETS

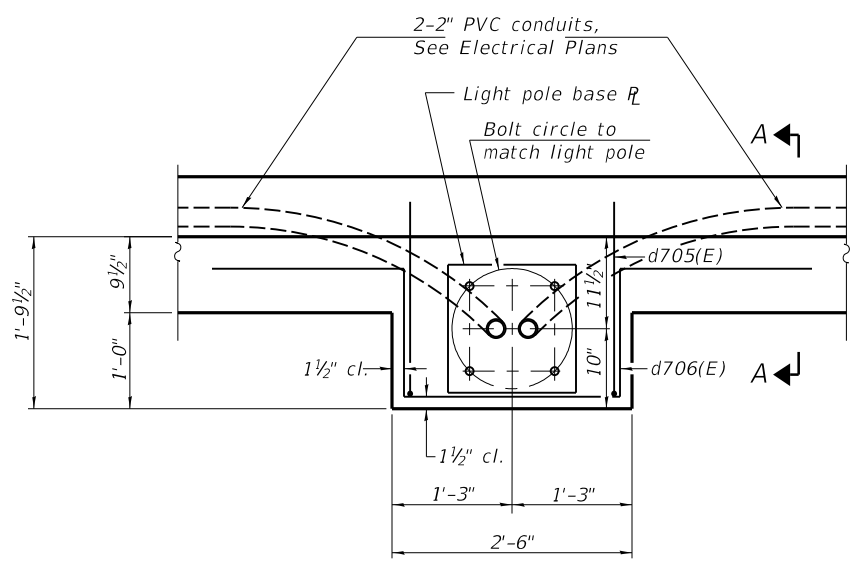
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CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



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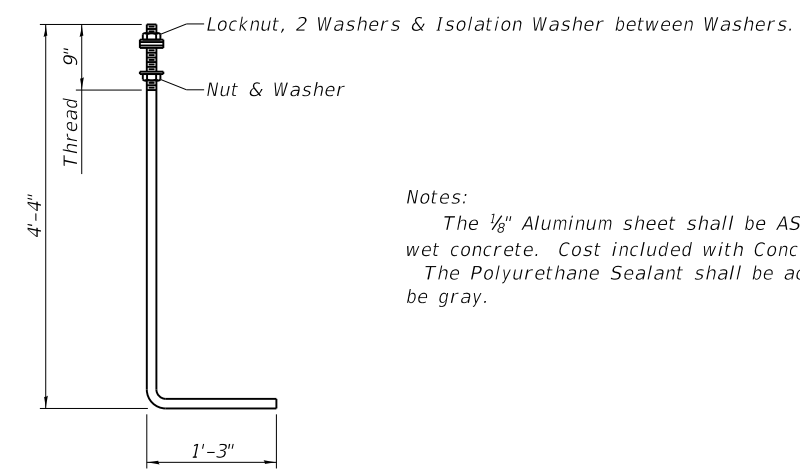


SECTION A-A



LIGHT POLE PLAN

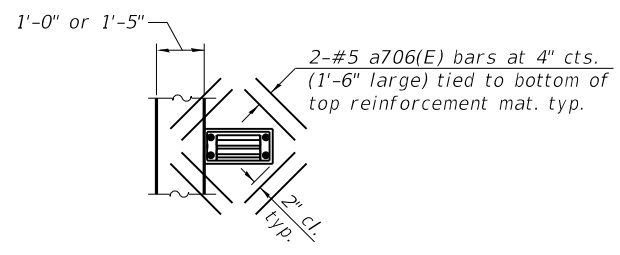
Note:
Cost of anchor rods is included with Concrete Superstructure.



ANCHOR ROD

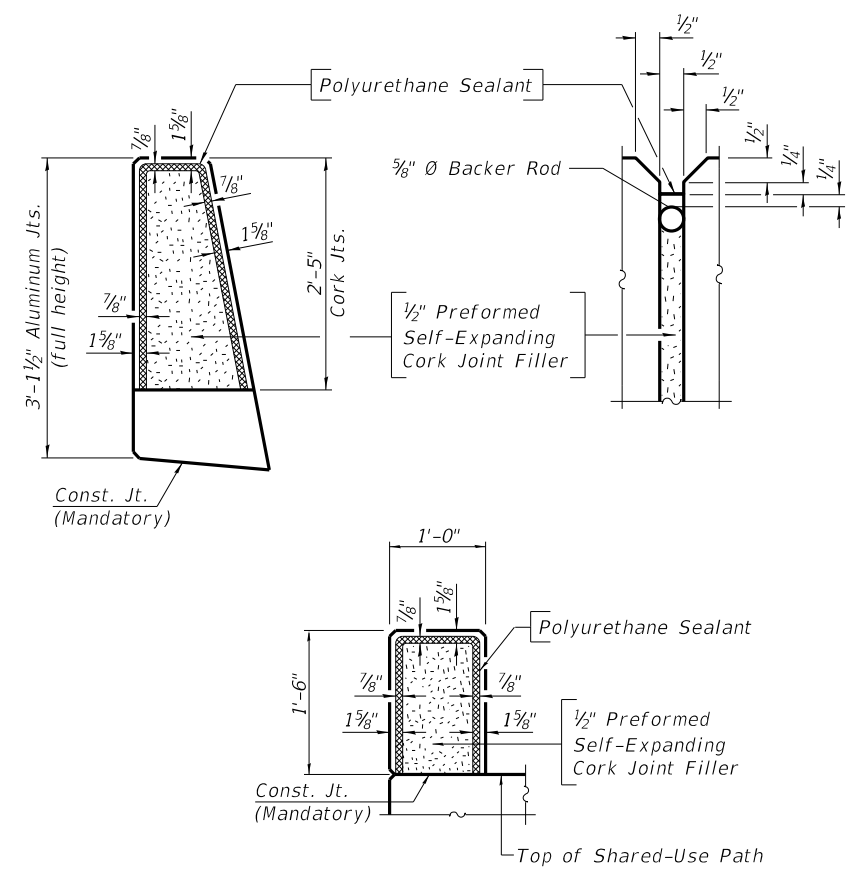
Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized.

Notes:
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.



DS-11 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.



CURB & PARAPET JOINT DETAILS

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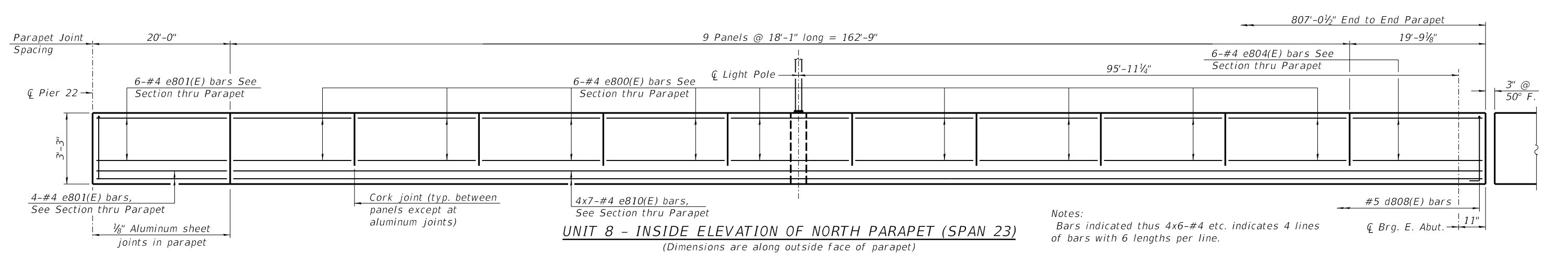
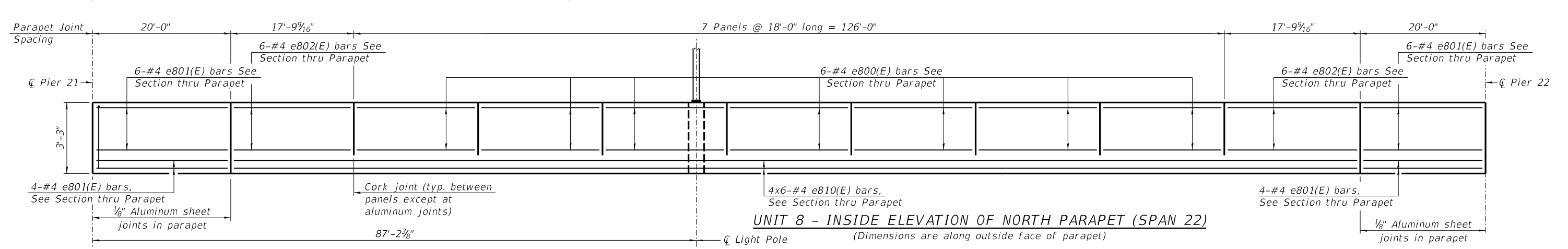
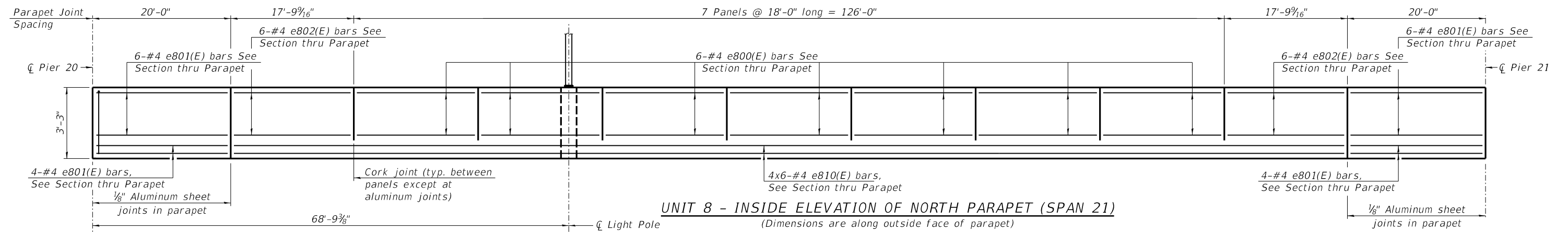
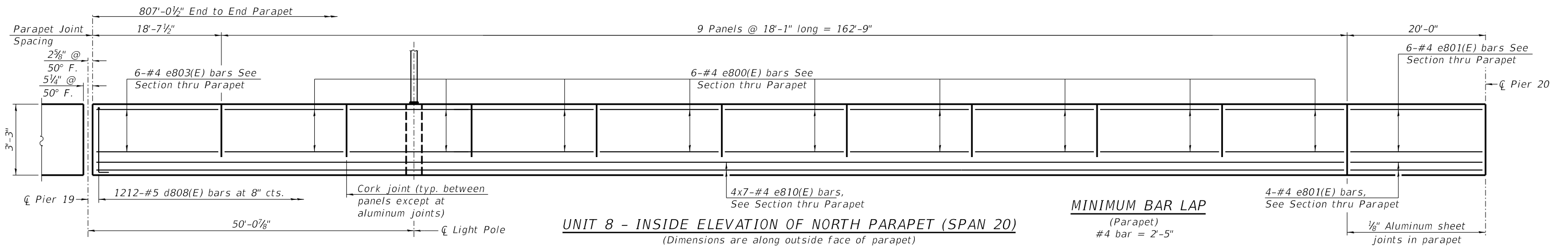
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - UNIT 7, 2 OF 2
STRUCTURE NO. 090-0180**

SHEET 5-139 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



Notes:
Bars indicated thus 4x6-#4 etc. indicates 4 lines of bars with 6 lengths per line.

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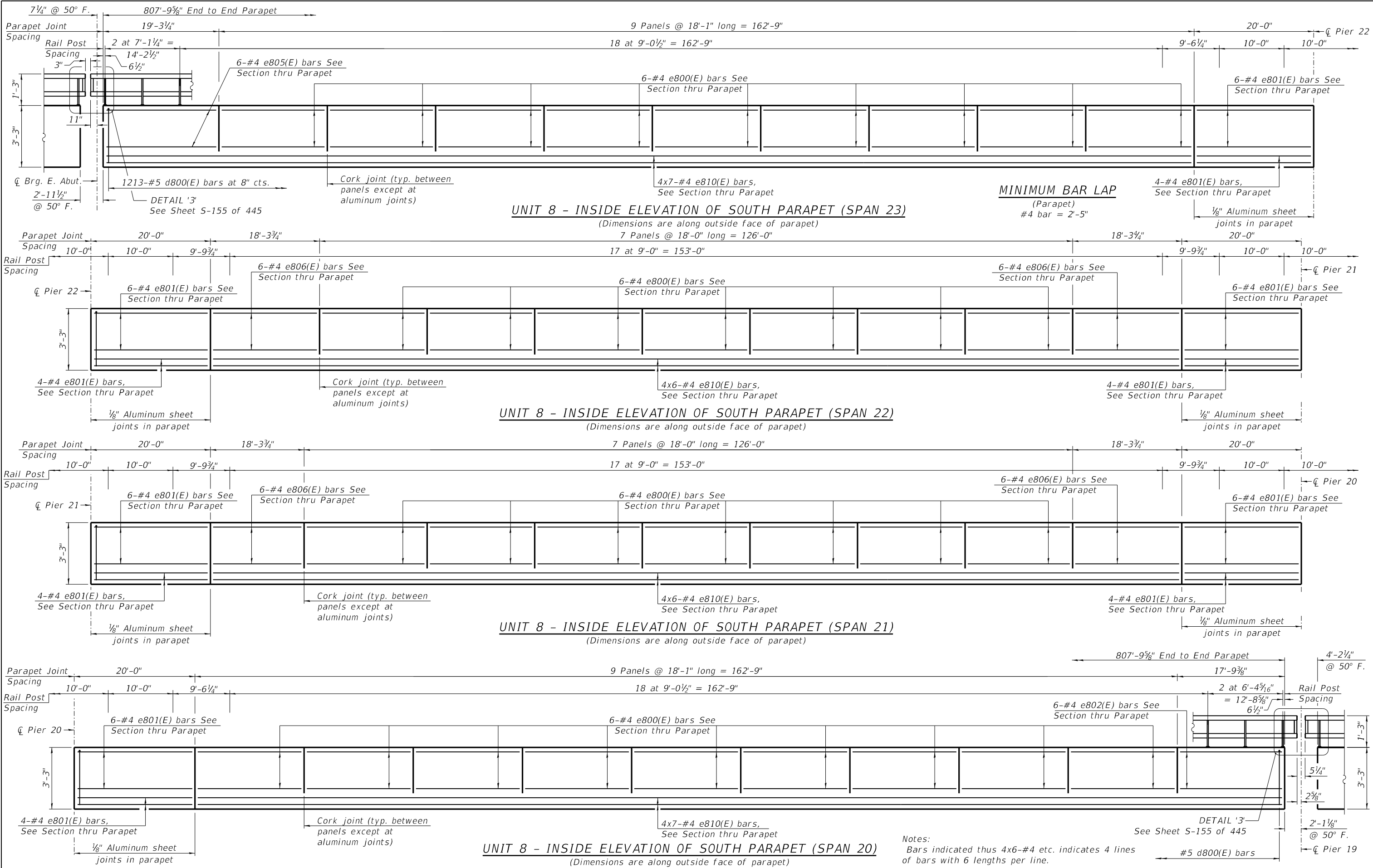
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**NORTH PARAPET ELEVATION - UNIT 8
STRUCTURE NO. 090-0180**

SHEET 5-140 OF 445 SHEETS

F.A.P. RTE. 317	SECTION [15B;(102-1),(14HB)BR]BR	COUNTY PEO/TAZ	TOTAL SHEETS 1361	SHEET NO. 1044
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68B46 NHPP-YRP3(905)	



UNIT 8 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 23)
 (Dimensions are along outside face of parapet)

UNIT 8 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 22)
 (Dimensions are along outside face of parapet)

UNIT 8 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 21)
 (Dimensions are along outside face of parapet)

UNIT 8 - INSIDE ELEVATION OF SOUTH PARAPET (SPAN 20)
 (Dimensions are along outside face of parapet)

Notes:
 Bars indicated thus 4x6-#4 etc. indicates 4 lines of bars with 6 lengths per line.

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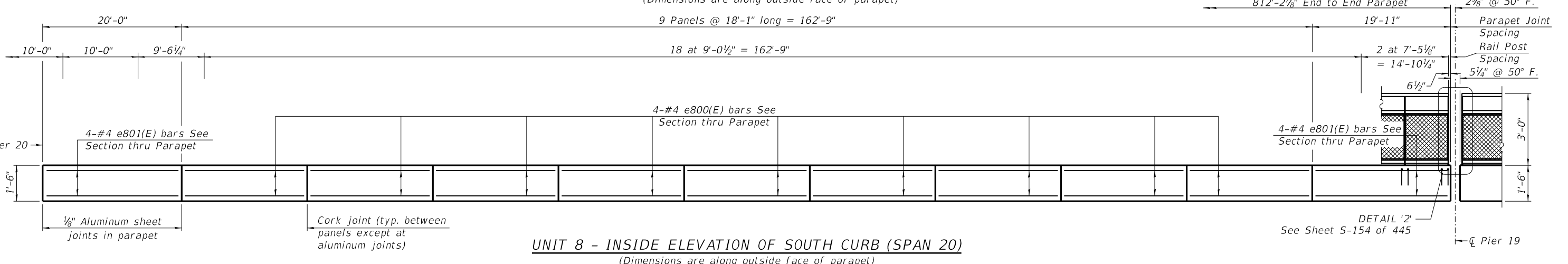
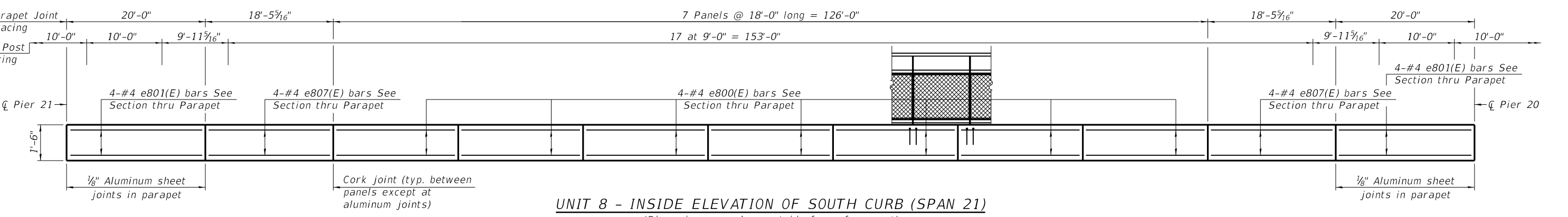
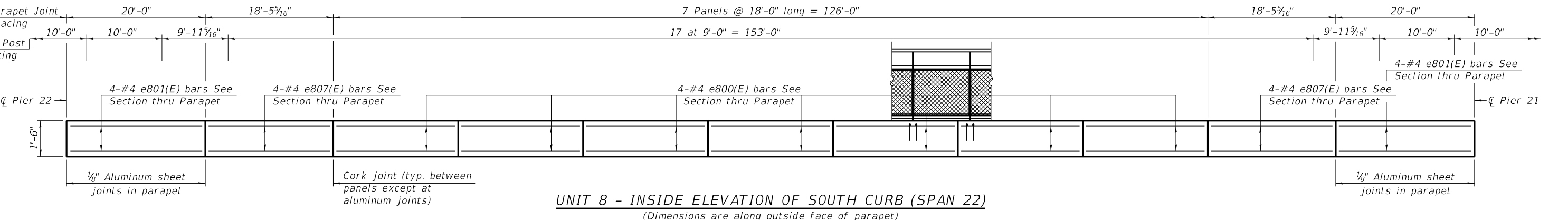
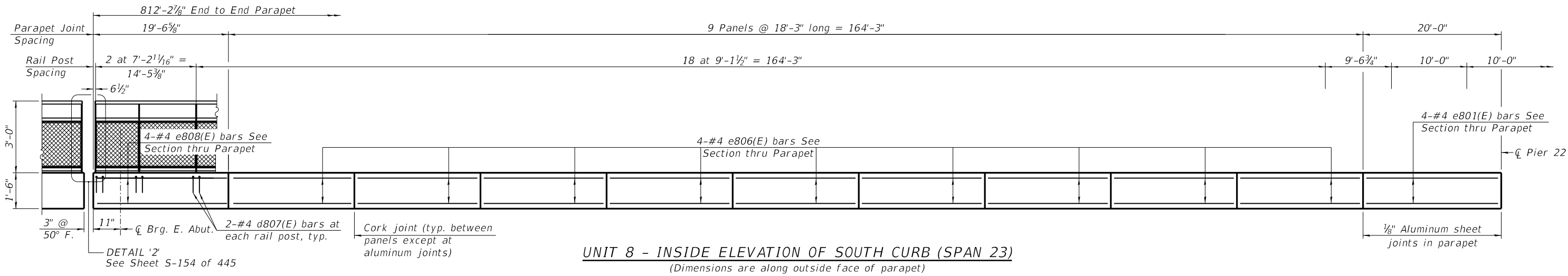
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**SOUTH PARAPET ELEVATION - UNIT 8
 STRUCTURE NO. 090-0180**

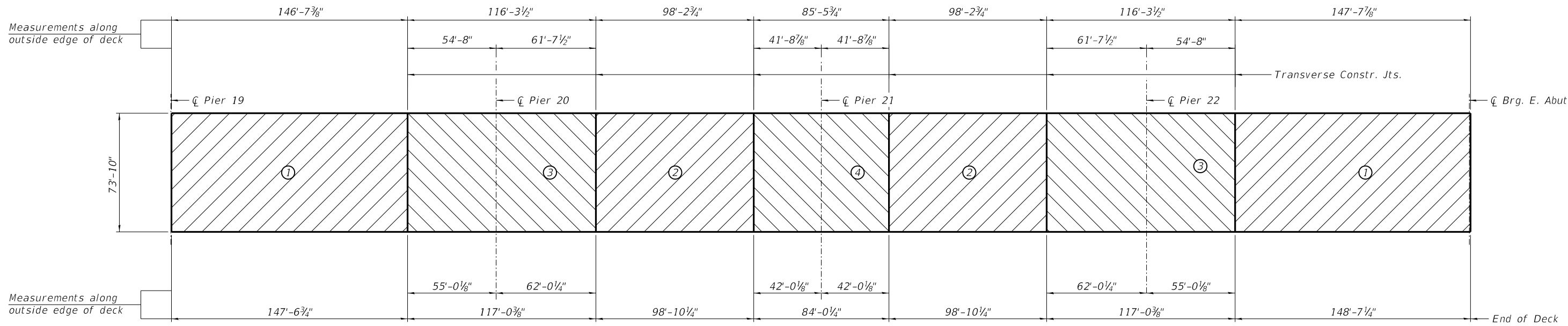
SHEET 5-141 OF 445 SHEETS

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ILLINOIS FED. AID PROJECT			NHPP-YRP3(905)	

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	USER NAME = johns00944	DESIGNED - MNM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SHARED-USE PATH CURB ELEVATION - UNIT 8 STRUCTURE NO. 090-0180	F.A.P. RTE. = 317	SECTION = [15B;(102-1),(14HB)BR]BR	COUNTY = PEO/TAZ	TOTAL SHEETS = 1361	SHEET NO. = 1046
	PLOT SCALE = 0:2.0000 '"/in.	DRAWN - DAP	REVISED -			CONTRACT NO. 68B46				
	PLOT DATE = 12/11/2018	CHECKED - MNM	REVISED -			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				
	SHEET 5-142 OF 445 SHEETS									



DECK POURING SEQUENCE - UNIT 8
 (The pour can start from either end of the deck.)

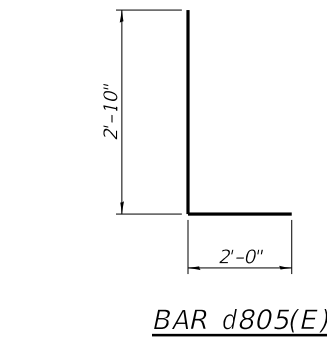
When the deck pour is stopped for the day at one or more of the transverse bonded construction joints in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

- 1) At least 72 hours shall have elapsed from the end of the previous pour.
- 2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.

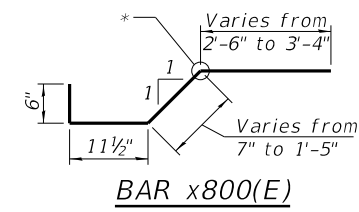
The Contractor is alerted that camber and dead load deflection values shown on the girder detail drawings were developed based on the deck pouring sequence shown. Any deviation from this pouring sequence will result in changes to camber and elevations that affect dead load deflections. If the Contractor wishes to change the sequence, then the proposed plan revisions and design calculations shall be submitted to the Engineer for review and approval. The calculations shall be prepared and sealed by a Licensed Structural Engineer in Illinois.

UNIT 8 - SUPERSTRUCTURE
BILL OF MATERIAL

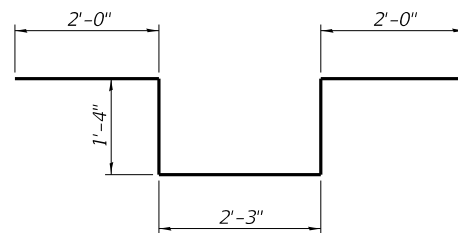
Bar	No.	Size	Length	Shape
a800(E)	3528	#5	38'-7"	—
a801(E)	3426	#5	27'-0"	—
a802(E)	1764	#6	8'-4"	—
a805(E)	72	#5	12'-0"	—
a806(E)	192	#5	1'-6"	—
a807(E)	1764	#6	22'-0"	—
b800(E)	3752	#5	34'-8"	—
b801(E)	560	#6	36'-6"	—
b802(E)	140	#5	19'-1"	—
b803(E)	280	#6	26'-9"	—
d800(E)	1213	#5	6'-5"	—
d801(E)	1212	#5	8'-3"	—
d802(E)	1213	#5	5'-2"	—
d803(E)	813	#5	3'-0"	—
d804(E)	813	#5	4'-0"	—
d805(E)	12	#6	4'-10"	—
d806(E)	24	#6	8'-11"	—
d807(E)	180	#4	2'-2"	—
d808(E)	1212	#5	6'-5"	—
e800(E)	476	#4	17'-8"	—
e801(E)	148	#4	19'-8"	—
e802(E)	30	#4	17'-5"	—
e803(E)	6	#4	18'-4"	—
e804(E)	6	#4	19'-5"	—
e805(E)	6	#4	18'-11"	—
e806(E)	60	#4	17'-11"	—
e807(E)	16	#4	18'-1"	—
e808(E)	4	#4	19'-2"	—
e810(E)	208	#4	29'-2"	—
x800(E)	64	#5	5'-5"	—
x801(E)	64	#5	5'-3"	—
Reinforcement Bars, Epoxy Coated			Lbs.	554070
Concrete Superstructure			Cu. Yds.	1861.7
Protective Coat			Sq. Yds.	7550
Bridge Deck Grooving (Longitudinal)			Sq. Yds.	3238
Diamond Grinding (Bridge Section)			Sq. Yds.	4676
Bridge Fence Railing (Special)			Foot	811
Parapet Railing			Foot	811



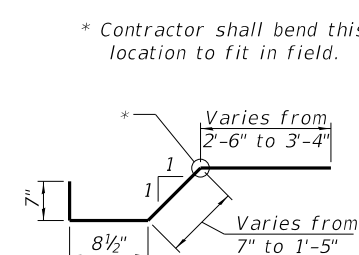
BAR d805(E)



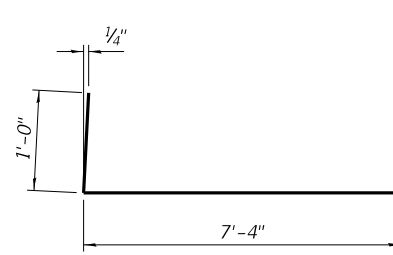
BAR x800(E)



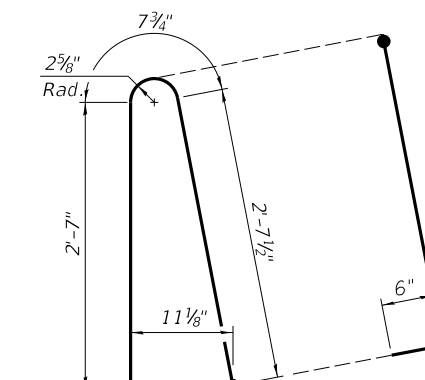
BAR d806(E)



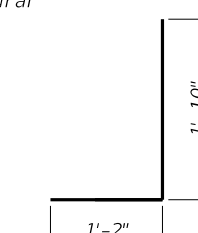
BAR x801(E)



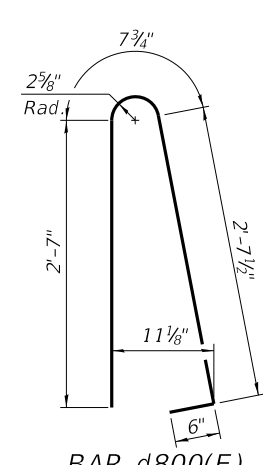
BAR a802(E)



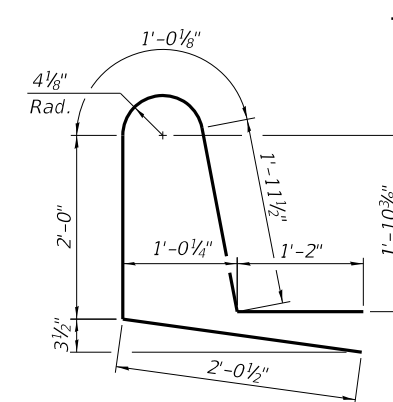
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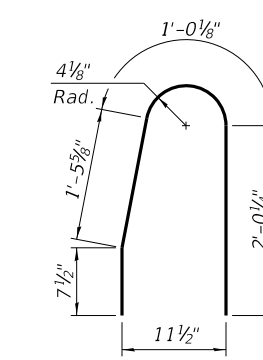
BAR d803(E)



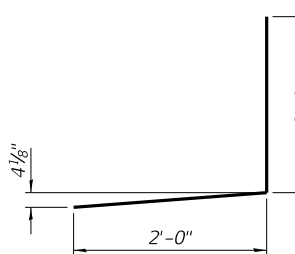
BAR d800(E)



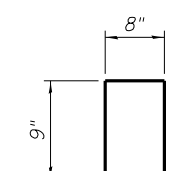
BAR d801(E)



BAR d802(E)



BAR d804(E)



BAR d807(E)

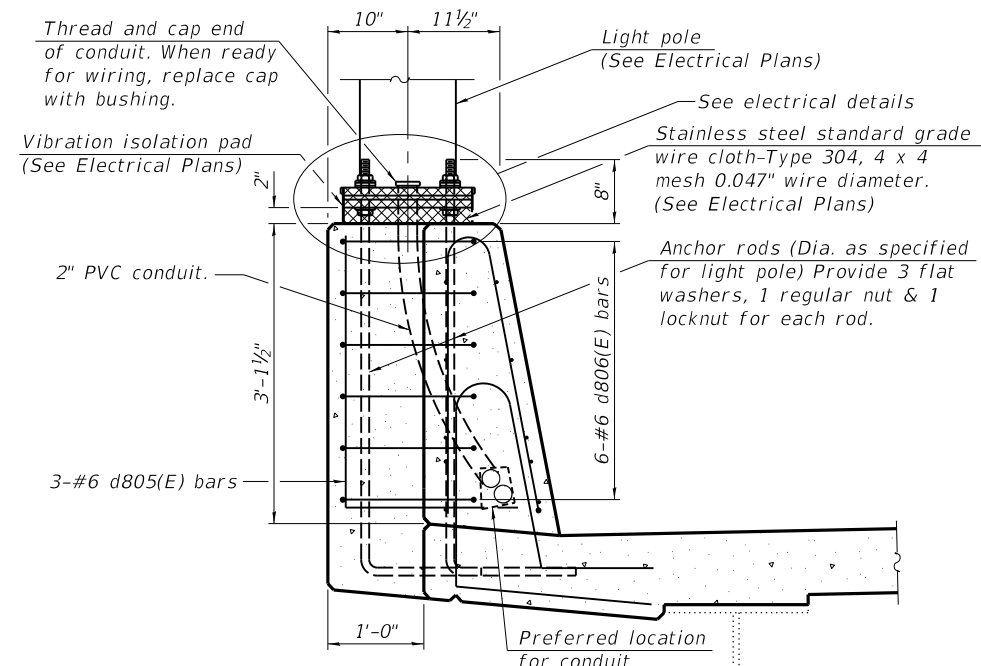
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS - UNIT 8, 1 OF 2
 STRUCTURE NO. 090-0180

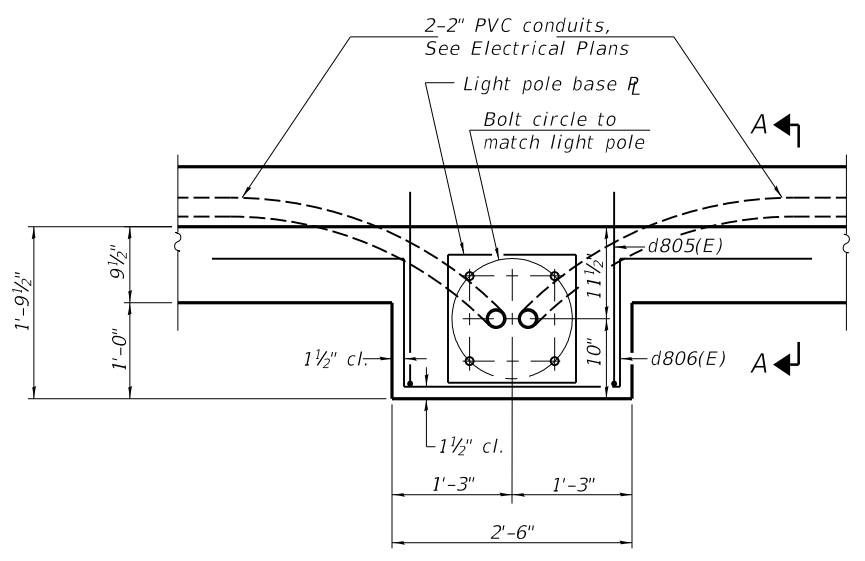
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1047
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

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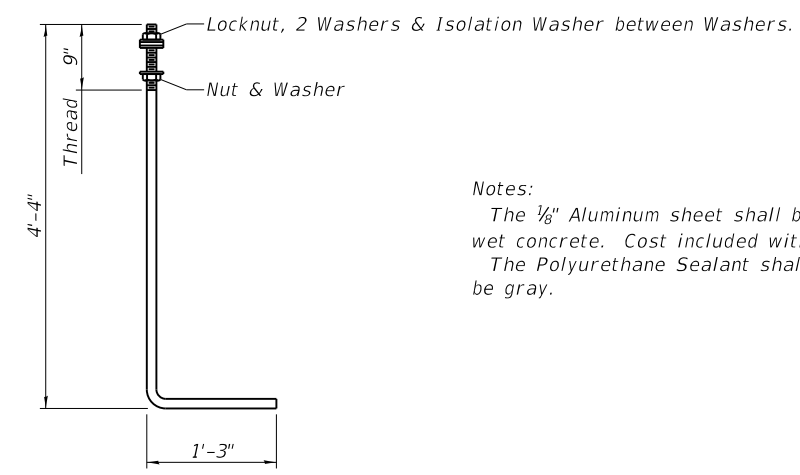


SECTION A-A



LIGHT POLE PLAN

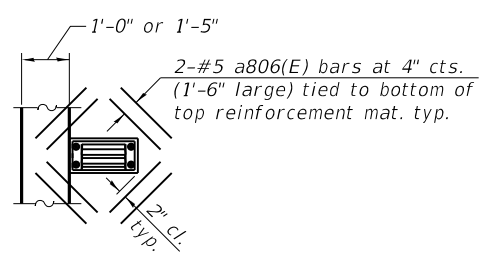
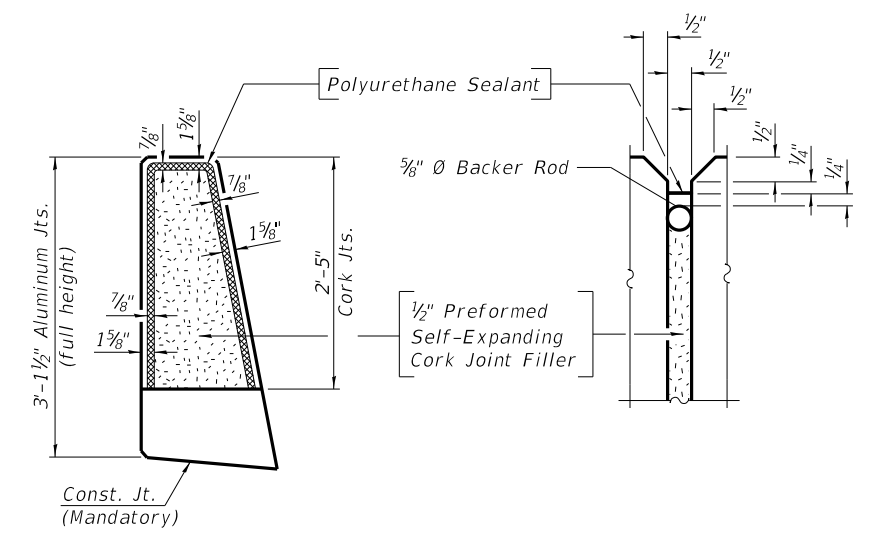
Note:
Cost of anchor rods is included with Concrete Superstructure.



ANCHOR ROD

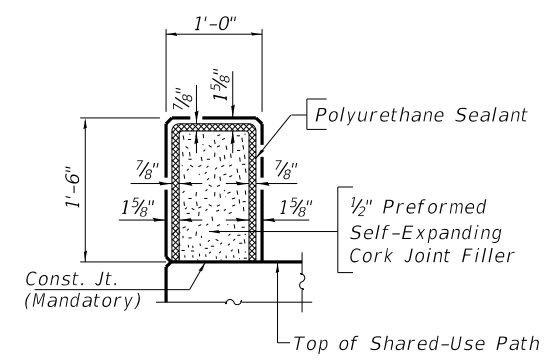
Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized.

Notes:
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.



DS-11 PLAN

Note:
Cut longitudinal reinforcement to clear drainage scuppers.



CURB & PARAPET JOINT DETAILS

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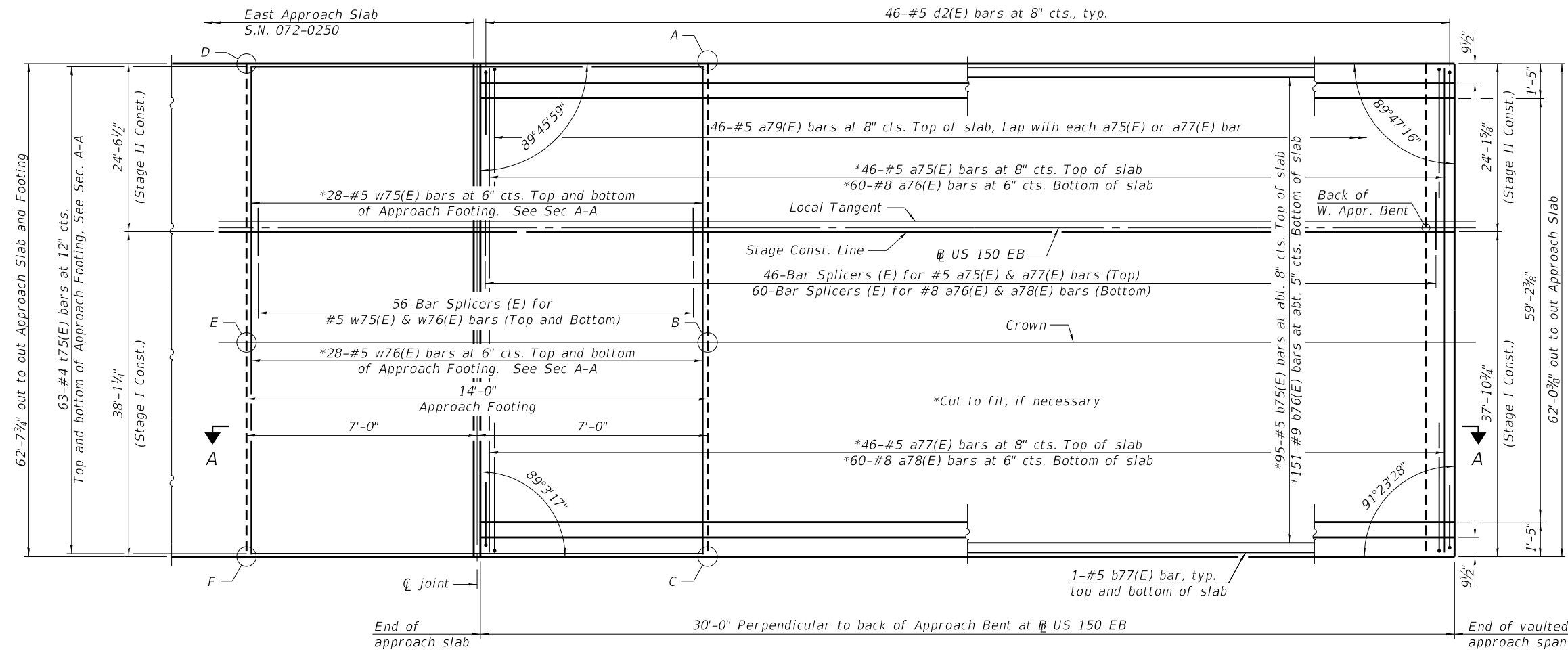
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS - UNIT 8, 2 OF 2
STRUCTURE NO. 090-0180**

SHEET 5-144 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 68B46	
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

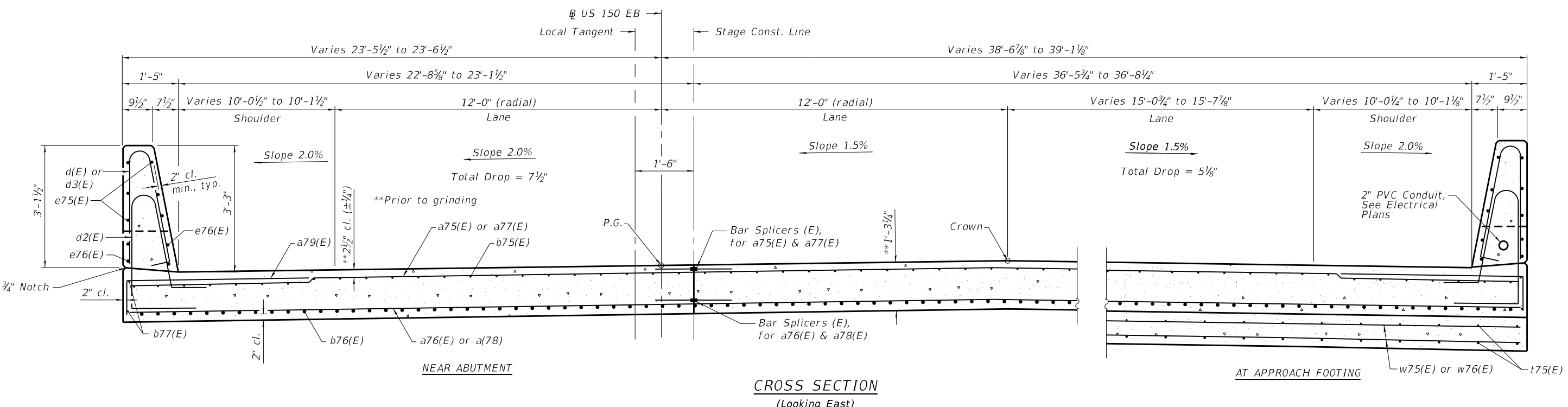
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PLAN

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

Point	Top	Bottom
A	506.05	505.22
B	506.70	505.87
C	506.24	505.40
D	506.32	505.49
E	506.97	506.14
F	506.51	505.68



CROSS SECTION
(Looking East)

EFK • Moen, LLC
Civil Engineering Design

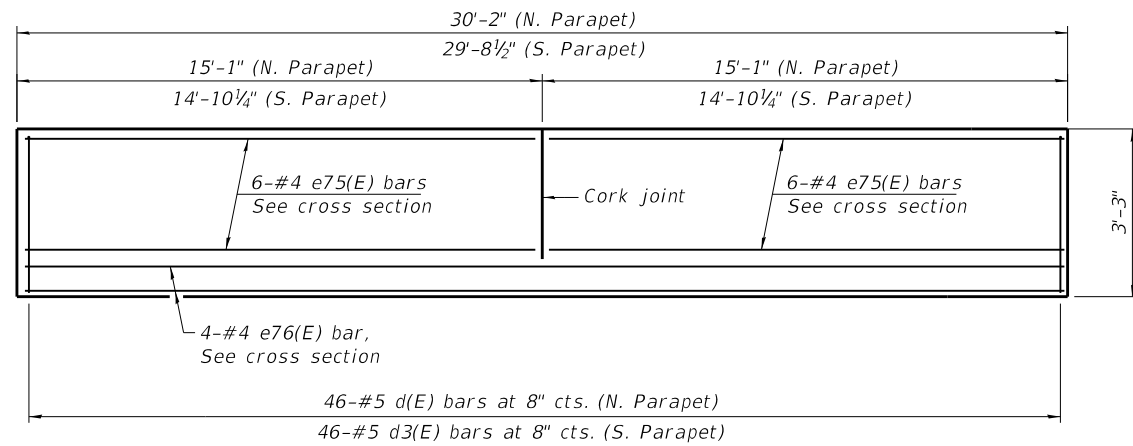
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

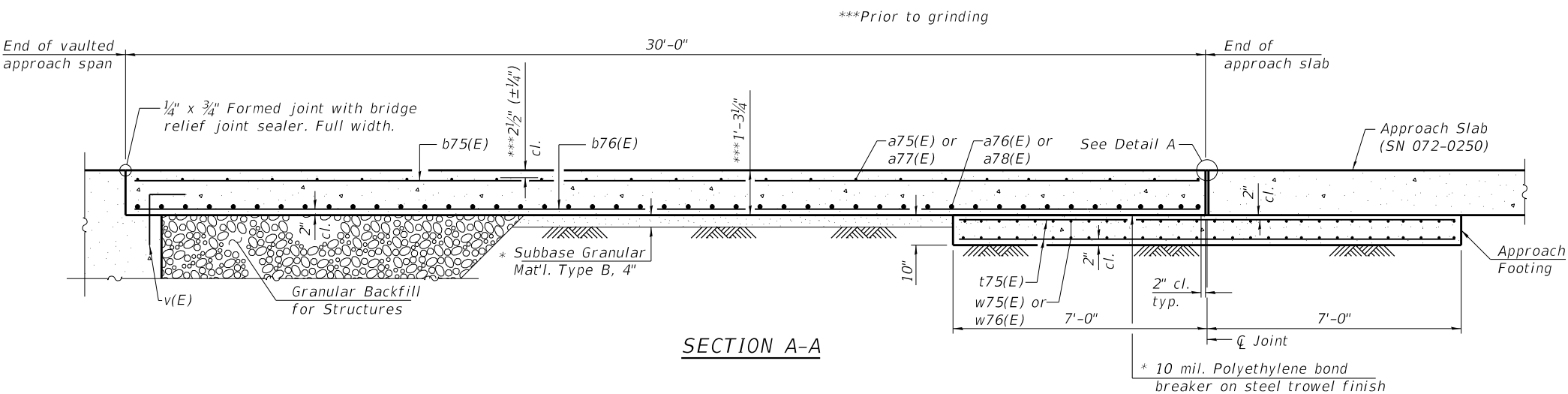
WEST APPROACH SLAB
STRUCTURE NO. 090-0180

SHEET 5-145 OF 445 SHEETS

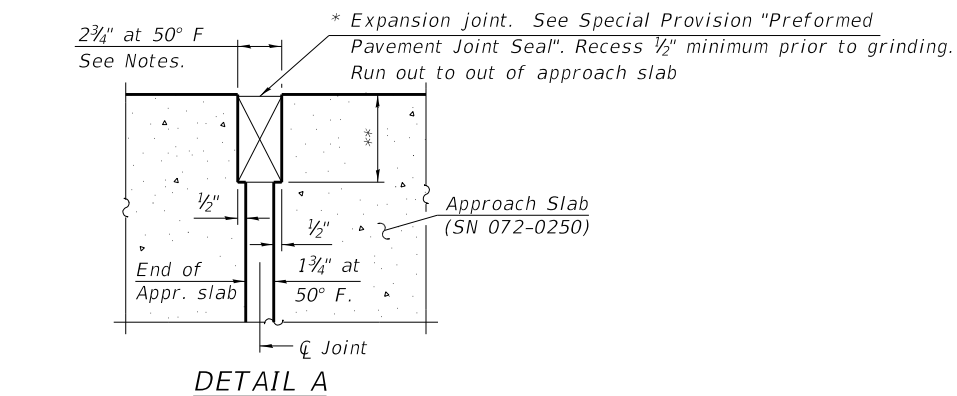
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CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



INSIDE ELEVATION OF PARAPET



SECTION A-A



DETAIL A

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

Notes:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to the total length of the vaulted span plus the length of the bridge approach slab.

Parapet concrete shall be paid for as Concrete Superstructure.

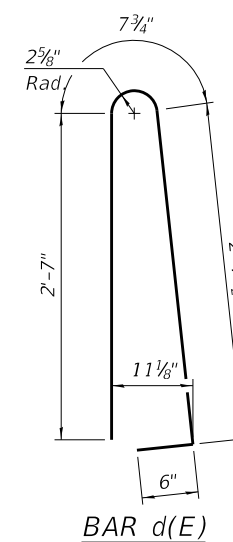
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

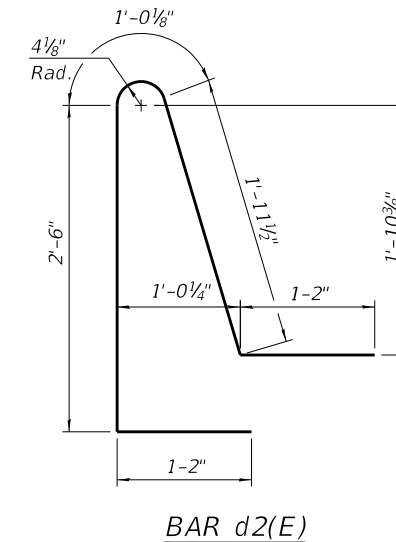
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

For Granular Backfill for Structures and drainage treatment details, see sheet S-7 of 445.



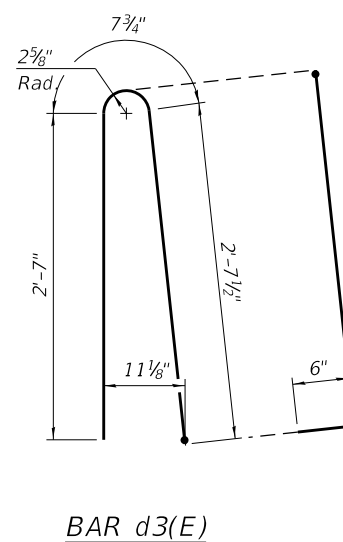
BAR d(E)



BAR d2(E)

WEST APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a75(E)	46	#5	24'-3"	U
a76(E)	60	#8	24'-3"	U
a77(E)	46	#5	37'-9"	U
a78(E)	60	#8	37'-9"	U
a79(E)	92	#5	7'-4"	U
b75(E)	95	#5	29'-8"	U
b76(E)	151	#9	29'-8"	U
b77(E)	4	#5	29'-8"	U
d(E)	46	#5	6'-5"	U
d2(E)	92	#5	7'-10"	U
d3(E)	46	#5	6'-5"	U
e75(E)	24	#4	14'-7"	U
e76(E)	8	#4	29'-7"	U
t75(E)	126	#4	13'-8"	U
w75(E)	56	#5	24'-3"	U
w76(E)	56	#5	37'-9"	U
Concrete Structures			Cu. Yd.	27.1
Concrete Superstructure			Cu. Yd.	7.8
Protective Coat			Sq. Yd.	225
Concrete Superstructure (Approach Slab)			Cu. Yd.	88.1
Reinforcement Bars, Epoxy Coated			Pound	38,440
Bridge Deck Grooving (Longitudinal)			Sq. Yd.	131
Diamond Grinding (Bridge Section)			Sq. Yd.	185



BAR d3(E)



BAR a79(E)

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EFK • Moen, LLC
Civil Engineering Design

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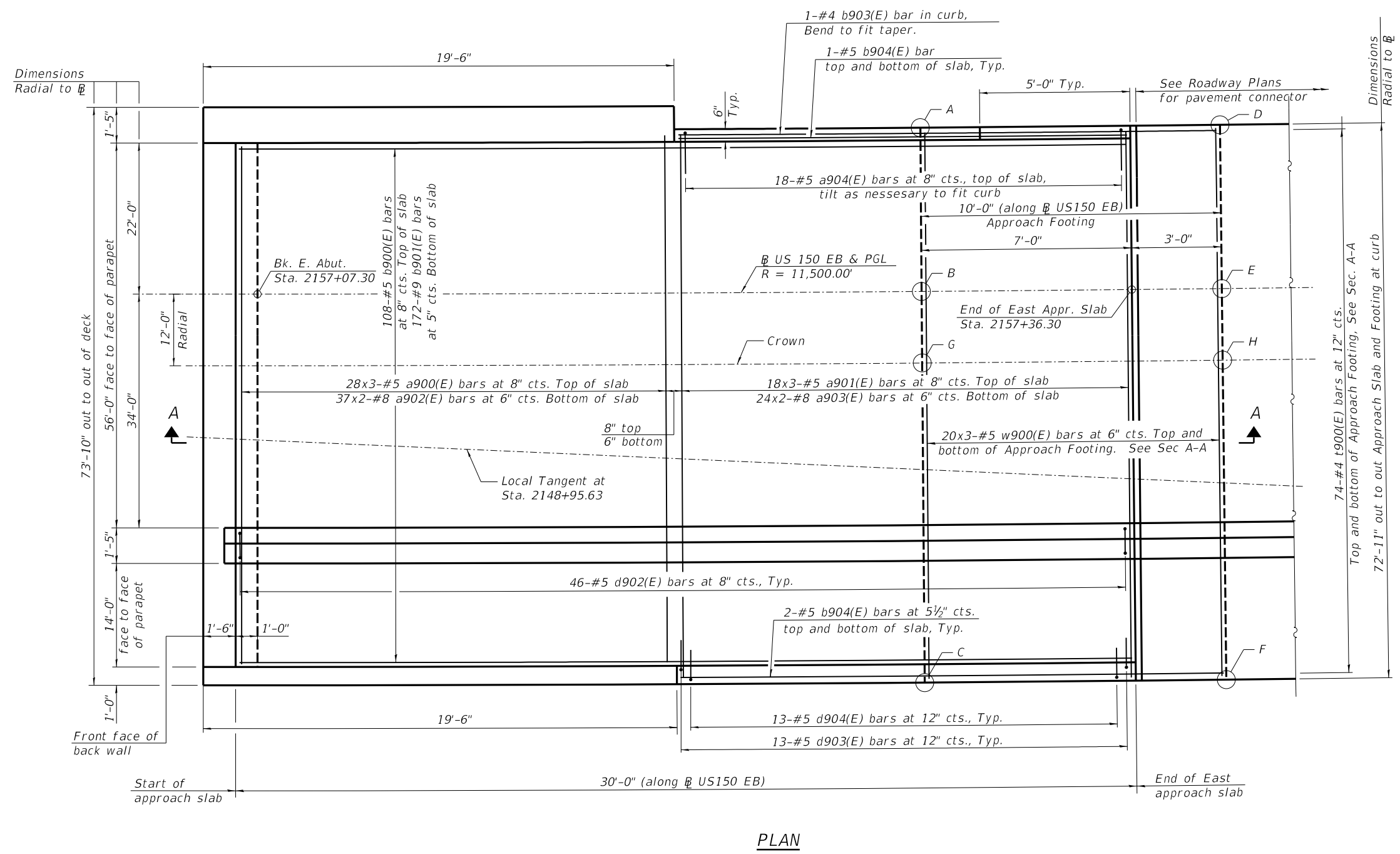
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST APPROACH SLAB DETAILS
STRUCTURE NO. 090-0180

SHEET 5-146 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1050
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

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PLAN

TOP AND BOTTOM ELEVATIONS
 FOR APPROACH FOOTING

Point	East Approach	
	Top	Bottom
A	469.94	469.11
B	470.39	469.56
C	469.86	469.03
D	469.74	468.90
E	470.19	469.35
F	469.66	468.82
G	470.57	469.74
H	470.37	469.53

MINIMUM BAR LAP

#5 bar = 3'-7"
 #8 bar = 8'-2"

Notes:
 Bars indicated thus 28x3-#5 etc. indicates 28 lines of bars with 3 lengths per line.



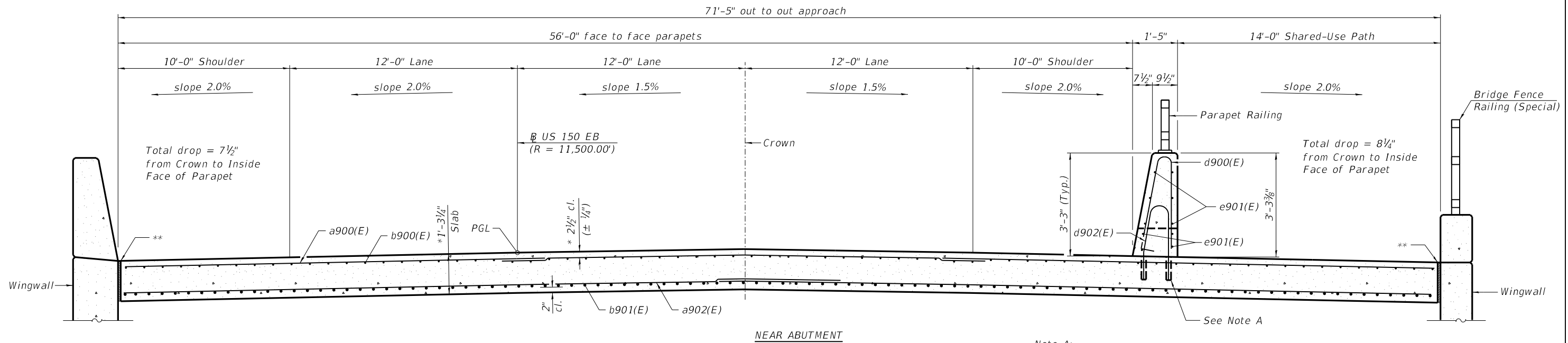
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	CHECKED - MNM	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EAST APPROACH SLAB
 STRUCTURE NO. 090-0180

SHEET 5-147 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1051
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



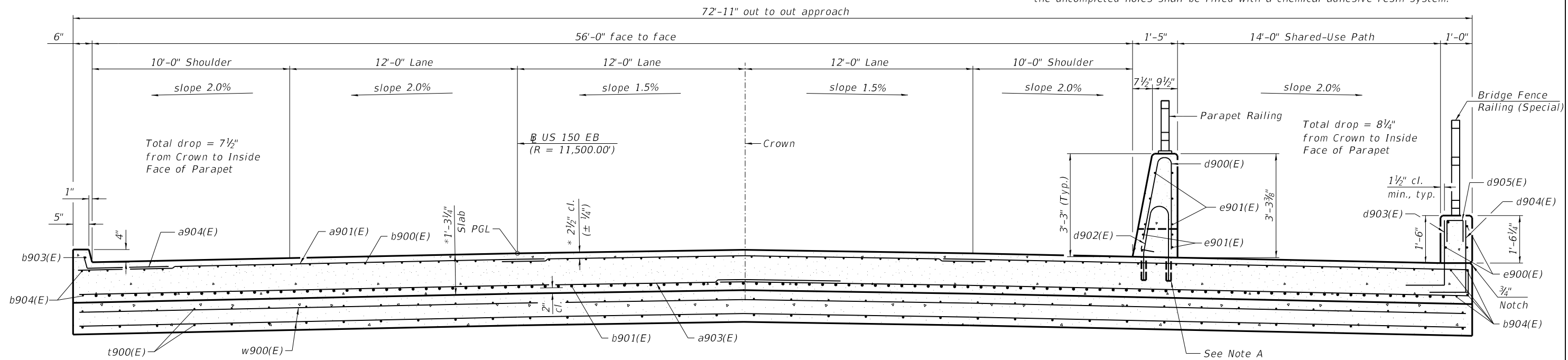
*Prior to grinding

**Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet.

(Looking Upstation - Horizontal dimensions mesured radial to US 150 EB)

CROSS SECTION

Note A:
 Core and Set d902(E) bars according to Article 584 of the Standard Specifications. Cored holes shall be roughened or scored per manufacture's recommendations. Maximum depth of hole shall not exceed 6".
 The location of the existing reinforcement shall be determined by the Contractor using non-destructive methods. If existing reinforcement is encountered during the drilling operation, the holes shall be relocated and the uncompleted holes shall be filled with a chemical adhesive resin system.



AT APPROACH FOOTING

CROSS SECTION

(Looking Upstation - Horizontal dimensions mesured radial to US 150 EB)

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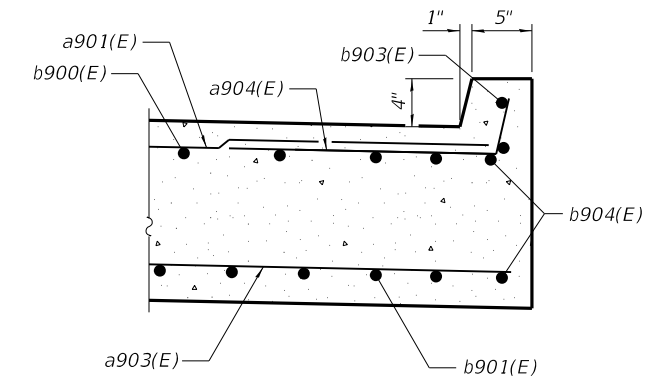
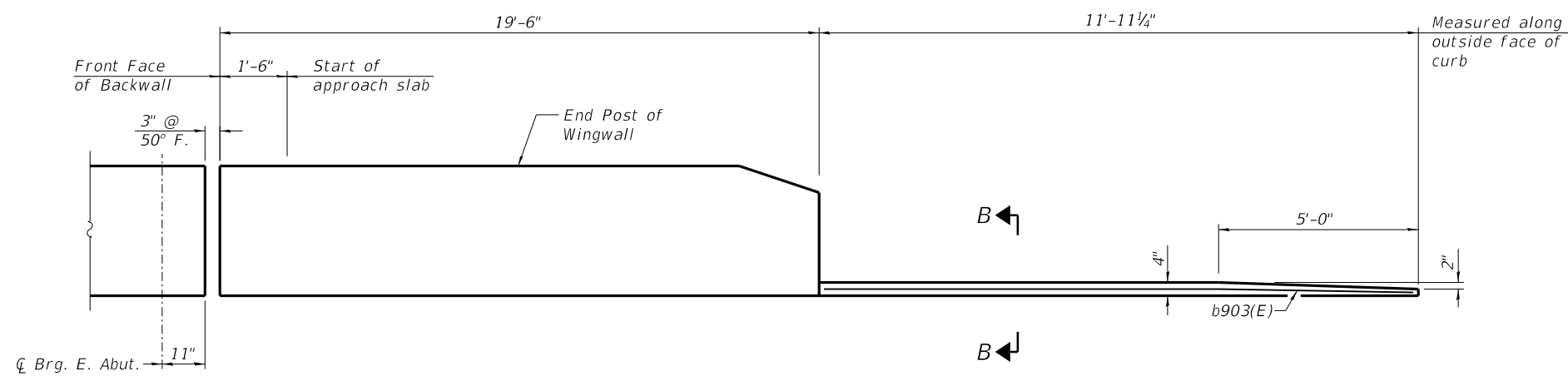
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EAST APPROACH SLAB DETAILS, 1 OF 3
 STRUCTURE NO. 090-0180

SHEET 5-148 OF 445 SHEETS

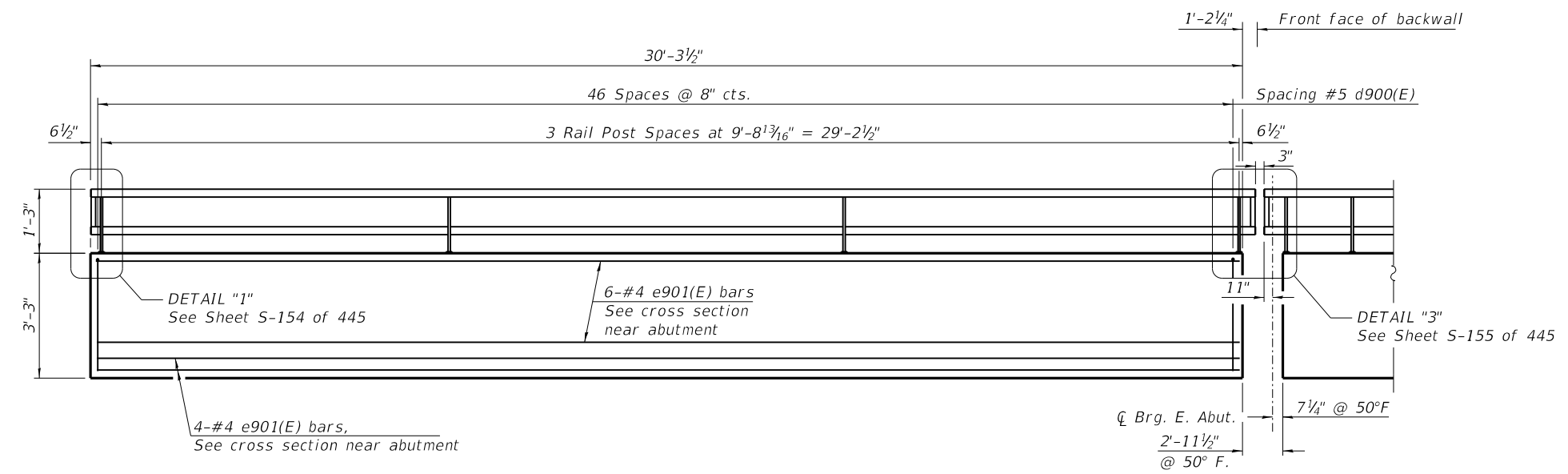
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CONTRACT NO. 68B46				

ILLINOIS FED. AID PROJECT NHPP-YRP3(905)

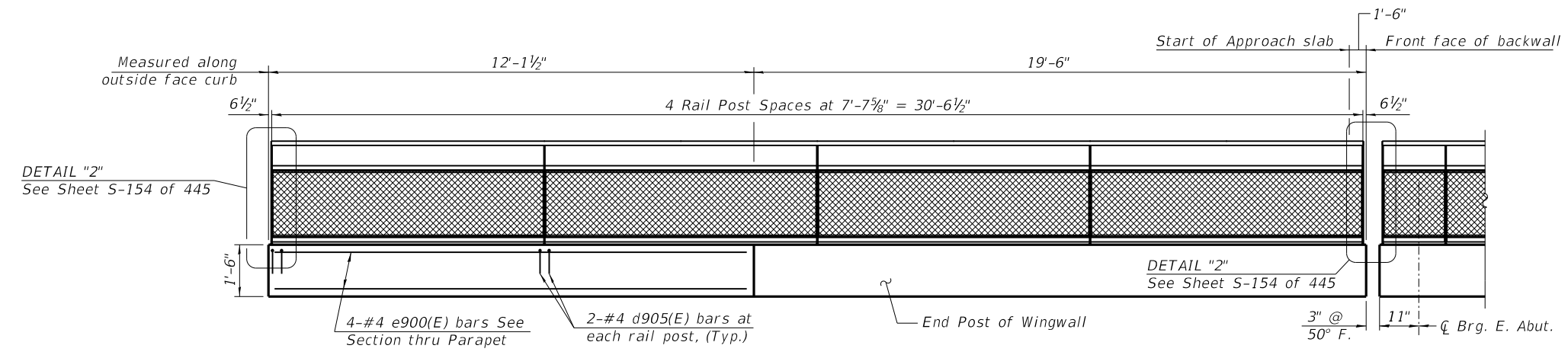


INSIDE ELEVATION OF NORTH PARAPET AND CURB - EAST APPROACH
(Looking North)

SECTION B-B



INSIDE ELEVATION OF SOUTH PARAPET - EAST APPROACH
(Looking South)



INSIDE ELEVATION OF SOUTH SHARED-USE PATH CURB - EAST APPROACH
(Looking South)

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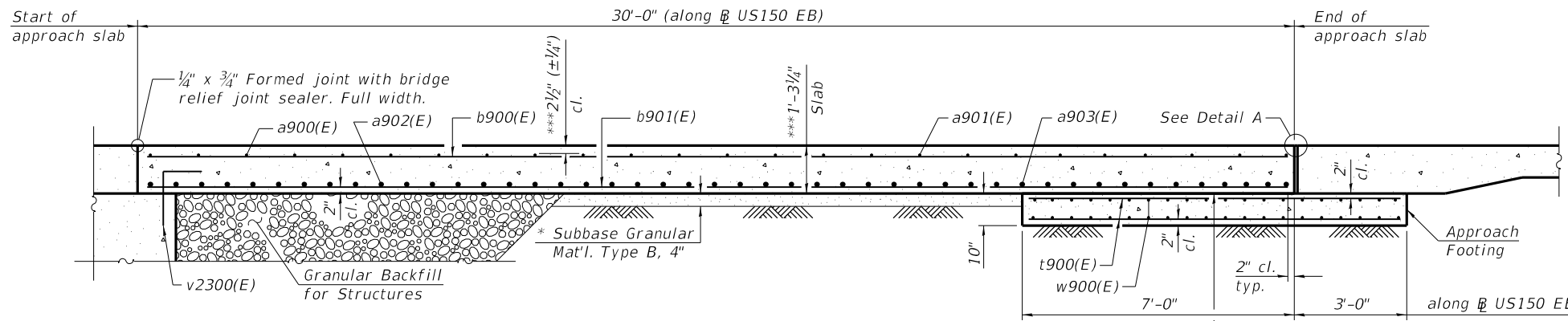
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EAST APPROACH SLAB DETAILS, 2 OF 3
STRUCTURE NO. 090-0180**

SHEET 5-149 OF 445 SHEETS

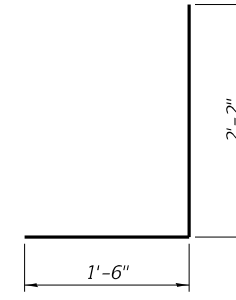
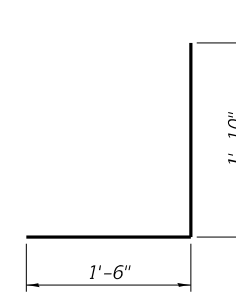
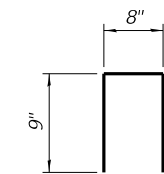
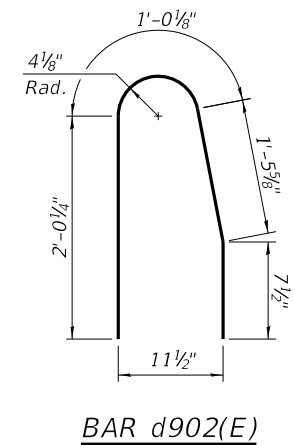
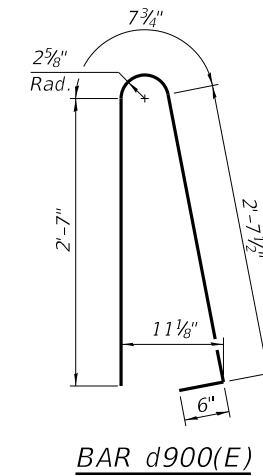
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR]BR	PEO/TAZ	1361	1053
			CONTRACT NO. 68B46	
ILLINOIS			FED. AID PROJECT NHPY-RP3(905)	



SECTION A-A

* 10 mil. Polyethylene bond breaker on steel trowel finish

Notes:
 South parapet and shared-use path curb concrete shall be paid for as Concrete Superstructure.
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see Sheet S-7 of 445.



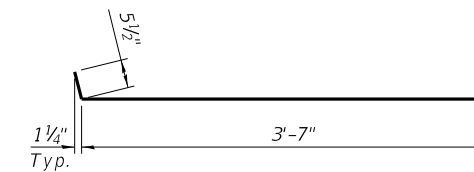
BAR d905(E)

BAR d903(E)

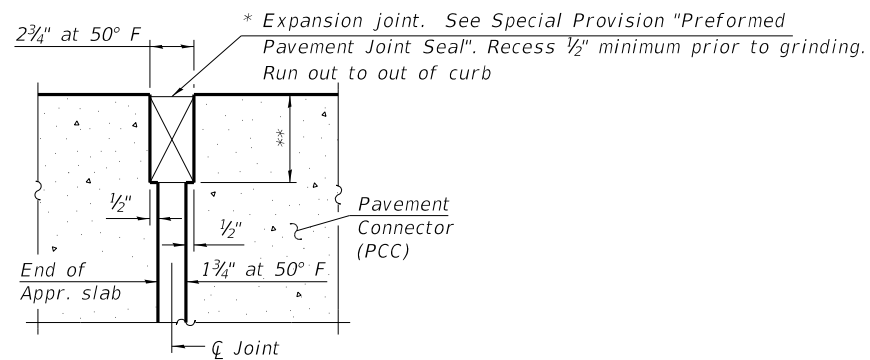
BAR d904(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a900(E)	84	#5	26'-2"	U
a901(E)	54	#5	26'-9"	U
a902(E)	74	#8	39'-8"	U
a903(E)	48	#8	40'-6"	U
a904(E)	18	#5	4'-1"	U
b900(E)	108	#5	29'-8"	U
b901(E)	172	#9	29'-8"	U
b903(E)	1	#4	11'-7"	U
b904(E)	6	#5	11'-7"	U
d900(E)	46	#5	6'-5"	U
d902(E)	46	#5	5'-2"	U
d903(E)	13	#5	3'-4"	J
d904(E)	13	#5	3'-8"	J
d905(E)	10	#4	2'-2"	U
e900(E)	4	#4	11'-9"	U
e901(E)	10	#4	29'-11"	U
t900(E)	148	#4	9'-8"	U
w900(E)	120	#5	26'-9"	U
Concrete Superstructure (Approach Slab)		Cu. Yd.	4.7	
Concrete Structures		Cu. Yd.	109.8	
Reinforcement Bars, Epoxy Coated		Pound	22.5	
Protective Coat		Sq. Yds.	42870	
Bridge Deck Grooving (Longitudinal)		Sq. Yds	280	
Diamond Grinding (Bridge Section)		Sq. Yds.	120	
Bridge Fence Railing (Special)		Foot	173	
Parapet Railing		Foot	31	



BAR a904(E)



DETAIL A

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

*** Prior to grinding

MODEL: Default
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PLOT DATE = 12/11/2018	DRAWN - DAP	REVISED -
	CHECKED - MNM	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EAST APPROACH SLAB DETAILS, 3 OF 3
 STRUCTURE NO. 090-0180

SHEET 5-150 OF 445 SHEETS

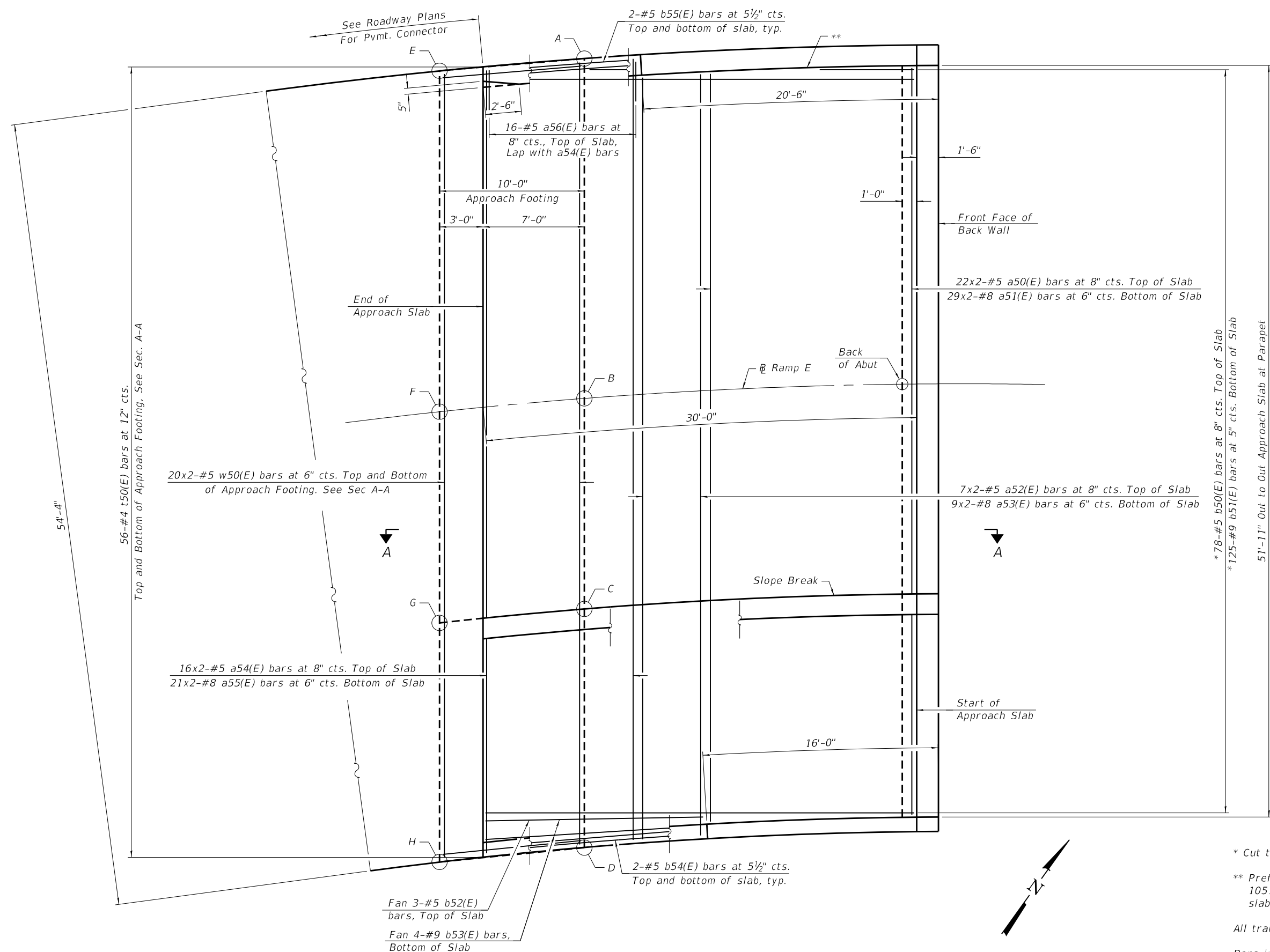
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR	PEO/TAZ	1361	1054
			CONTRACT NO. 68B46	
			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	

**TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING**

Point	Top	Bottom
A	499.22	498.38
B	497.75	496.91
C	496.83	496.00
D	496.44	495.61
E	498.84	498.01
F	497.34	496.51
G	496.41	495.58
H	496.00	495.17

MINIMUM BAR LAP

#5 bar = 3'-4"
#8 bar = 4'-9"



PLAN

* Cut to fit, if necessary
** Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Typ. each parapet.
All transverse dimensions are measured radially.
Bars indicated thus 20x3-#5 bars etc. indicates 20 lines of bars with 3 lengths per line.

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Projects\Documents\13\1301106\Phase-III\CAD\Struct\Sheet\0900180-XXXXX-EFK-4200-Ramp E Approach Slab-1.dgn

EFK Moen, LLC
Civil Engineering Design

USER NAME = ABenz	DESIGNED -	REVISED -
PLOT SCALE = 0.1667' / in.	CHECKED -	REVISED -
PLOT DATE = 12/11/2018	DRAWN -	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

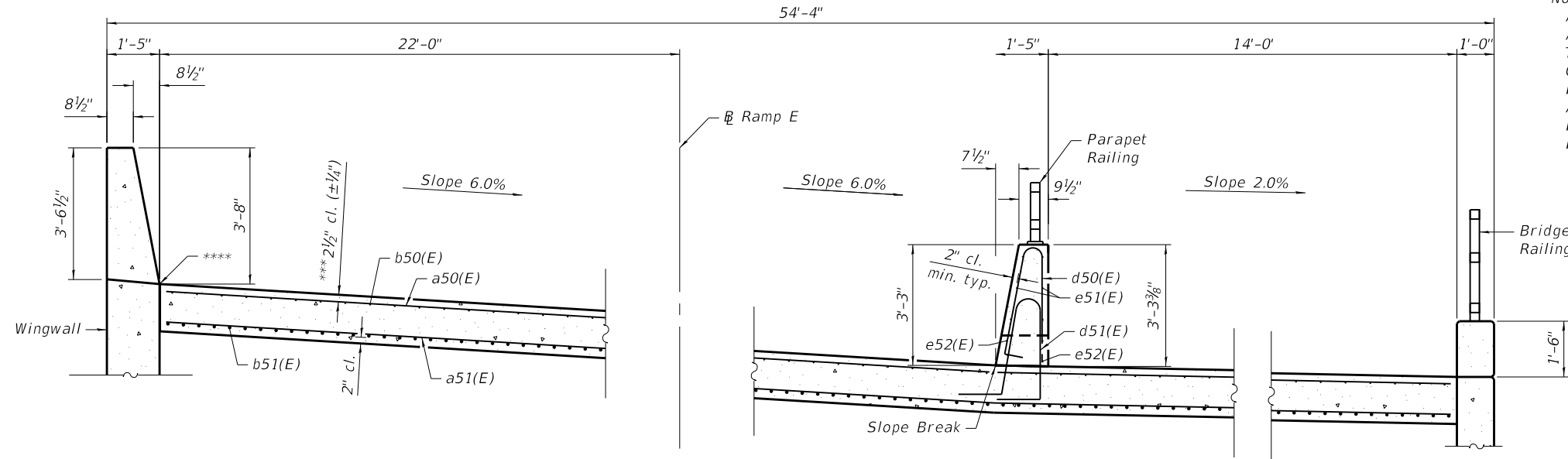
RAMP E APPROACH SLAB
STRUCTURE NO. 090-0180

SHEET 5-151 OF 445 SHEETS

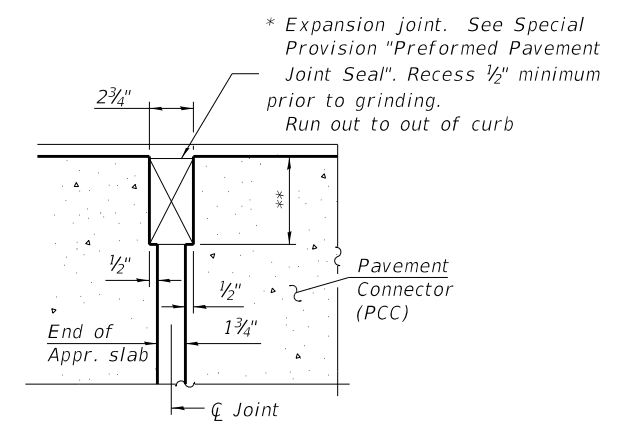
F.A.P. RTE. 317	SECTION [15B;(102-1),(14HB)]BR]BR	COUNTY PEO/TAZ	TOTAL SHEETS 1361	SHEET NO. 1055
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68B46	
NHPP-YRP3(905)				

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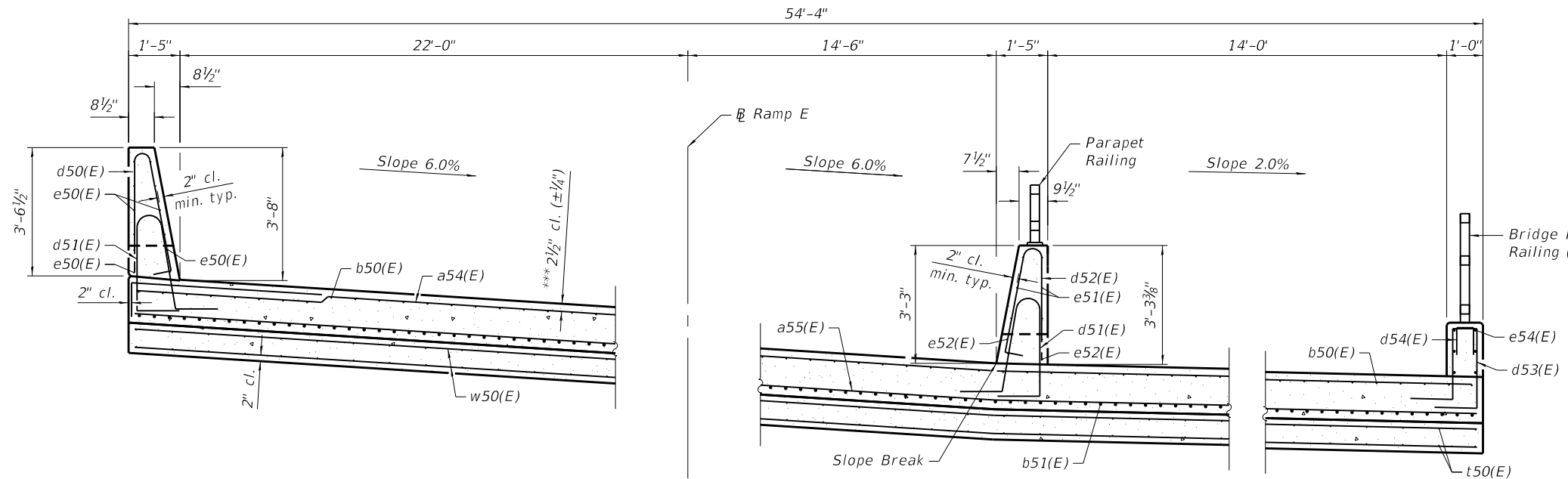
Notes:
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures and drainage treatment details, see sheet S-7 of 445.
 All transverse dimensions are measured radially.
 For details of Parapet Railing, see Sheet S-154 of 445.
 For details of Bridge Fence Railing (Special), see Sheet S-154 & S-155 of 445.



CROSS SECTION
 Near Abutment
 (Looking Ahead)

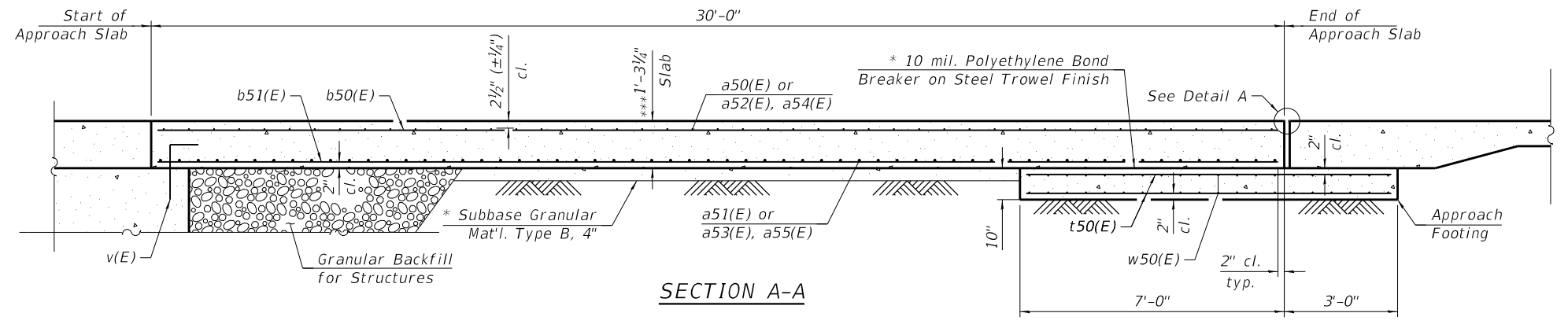


DETAIL A
 (Detail A shown, applies to Highway Standard 420401 only.
 Detail A for pavement connector (HMA) may be found on Highway Standard 420406.)



CROSS SECTION
 At Approach Footing
 (Looking Ahead)

* Cost included with Concrete Superstructure (Approach Slab).
 ** Per manufacturer recommendations
 *** Prior to grinding
 **** Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet. Typ. each parapet.



SECTION A-A

EFK • Moen, LLC
 Civil Engineering Design

USER NAME = ABenz	DESIGNED -	REVISED -
PLOT SCALE = 0.2" = 1' / in.	CHECKED -	REVISED -
PLOT DATE = 1/24/2019	DRAWN -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

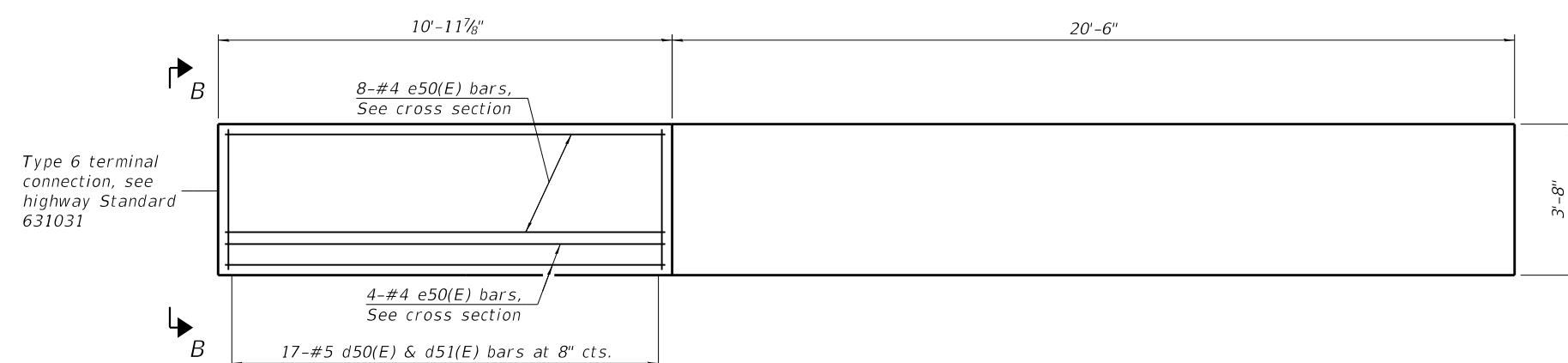
RAMP E APPROACH SLAB DETAILS, 1 OF 2
 STRUCTURE NO. 090-0180

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1056
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

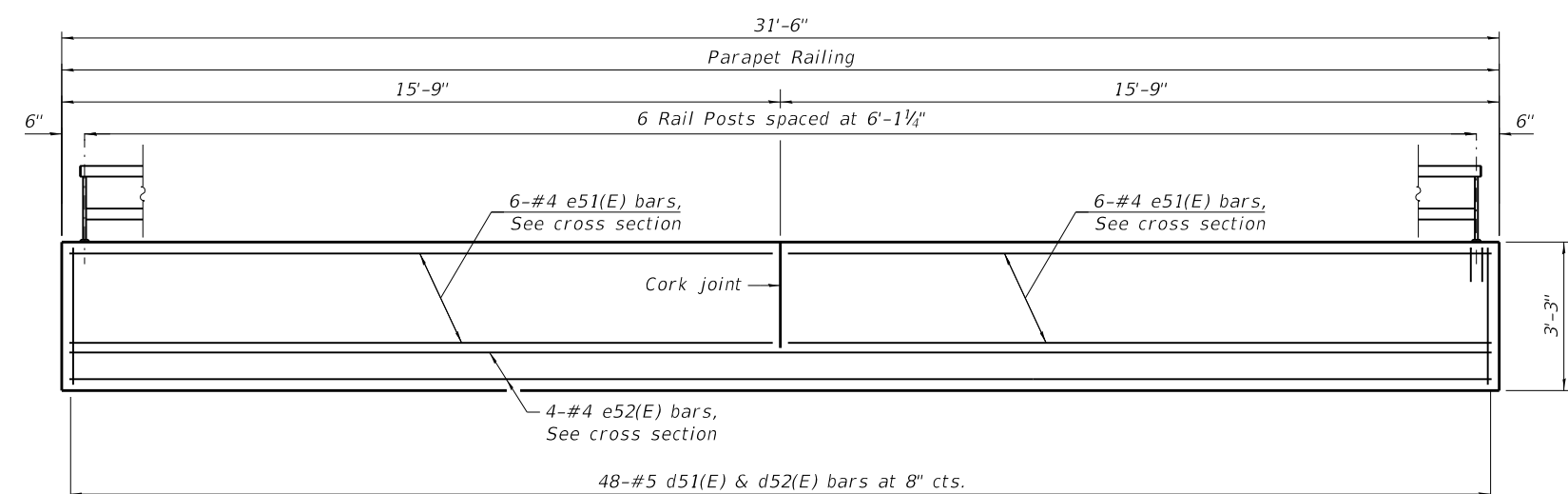
**RAMP E APPROACH
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a50(E)	44	#5	27'-6"	————
a51(E)	58	#8	28'-2"	————
a52(E)	14	#5	28'-1"	————
a53(E)	18	#8	28'-9"	————
a54(E)	32	#5	28'-8"	————
a55(E)	42	#8	29'-5"	————
a56(E)	16	#5	7'-4"	┌————
b50(E)	78	#5	29'-7"	————
b51(E)	125	#9	29'-7"	————
b52(E)	3	#5	15'-2"	————
b53(E)	4	#9	15'-2"	————
b54(E)	2	#5	15'-2"	————
b55(E)	2	#5	10'-7"	————
d50(E)	17	#5	7'-0"	┌————
d51(E)	65	#5	7'-4"	┌————
d52(E)	48	#5	6'-5"	┌————
d53(E)	23	#5	7'-4"	┌————
d54(E)	6	#4	2'-3"	n
e50(E)	12	#4	10'-8"	————
e51(E)	12	#4	15'-5"	————
e52(E)	4	#4	31'-2"	————
e53(E)	6	#4	15'-2"	————
t50(E)	56	#4	9'-6"	————
w50(E)	80	#5	28'-10"	————
Concrete Structures		Cu. Yd.	16.9	
Concrete Superstructure		Cu. Yd.	11.5	
Protective Coat		Sq. Yd.	219	
Concrete Superstructure (Approach Slab)		Cu. Yd.	74.9	
Reinforcement Bars, Epoxy Coated		Pound	31,320	
Parapet Railing		Foot	32	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	54	
Bridge Fence Railing (Special)		Foot	32	
Diamond Grinding (Bridge Section)		Sq. Yd.	149	

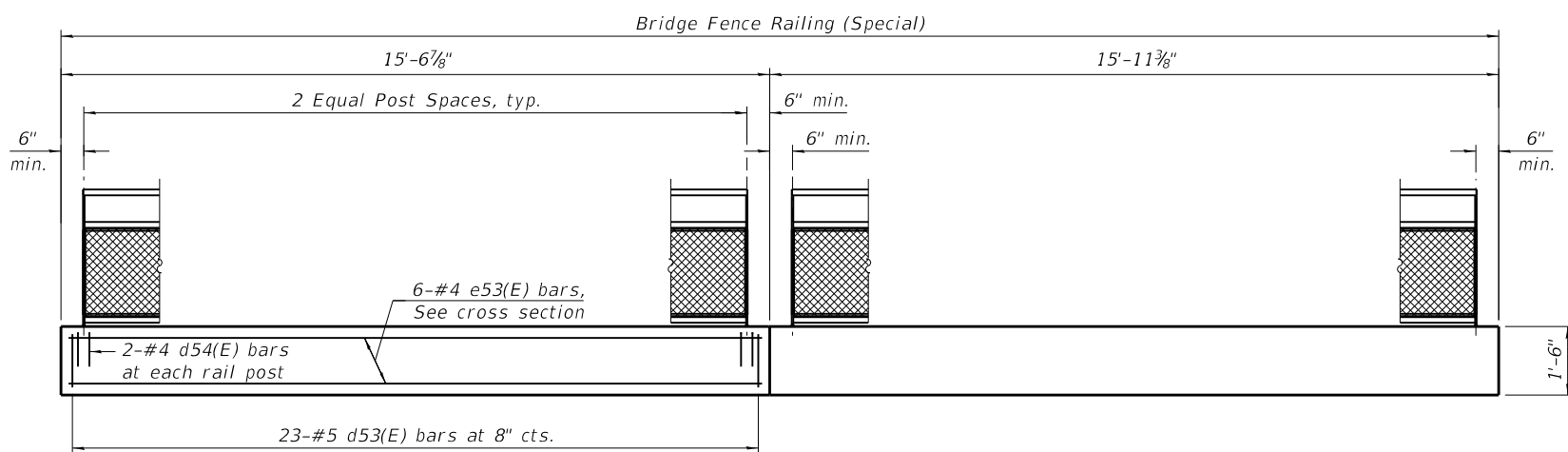
Notes:
 For details of Parapet Railing, see sheet S-154 of 445.
 For details of Bridge Fence Railing (Special), see sheet S-154 & S-155 of 445.



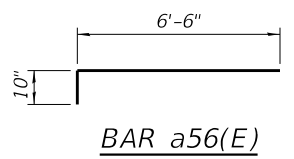
RAMP E - INSIDE ELEVATION OF NORTH PARAPET



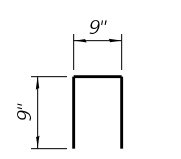
RAMP E - OUTSIDE ELEVATION OF SOUTH PARAPET



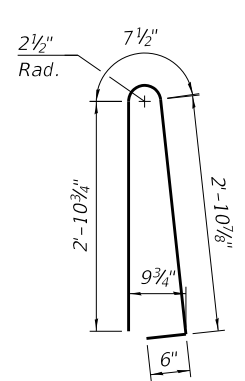
RAMP E - OUTSIDE ELEVATION OF SOUTH SIDEWALK CURB



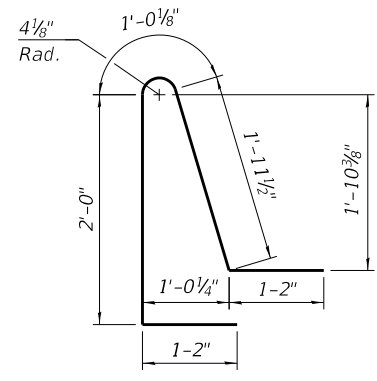
BAR a56(E)



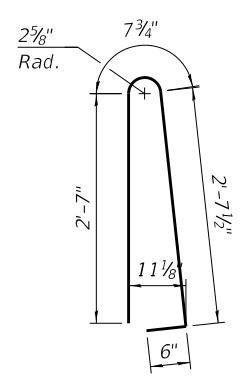
BAR d54(E)



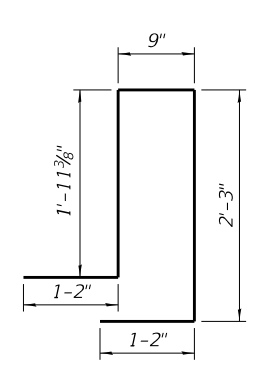
BAR d50(E)



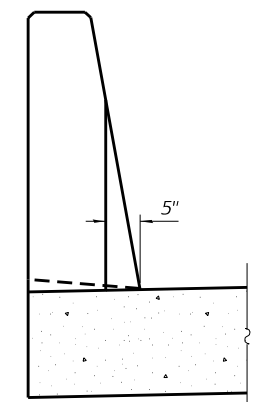
BAR d51(E)



BAR d52(E)



BAR d53(E)



VIEW B-B

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EFK • Moen, LLC
 Civil Engineering Design

USER NAME = ABenz
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 PLOT DATE = 1/24/2019

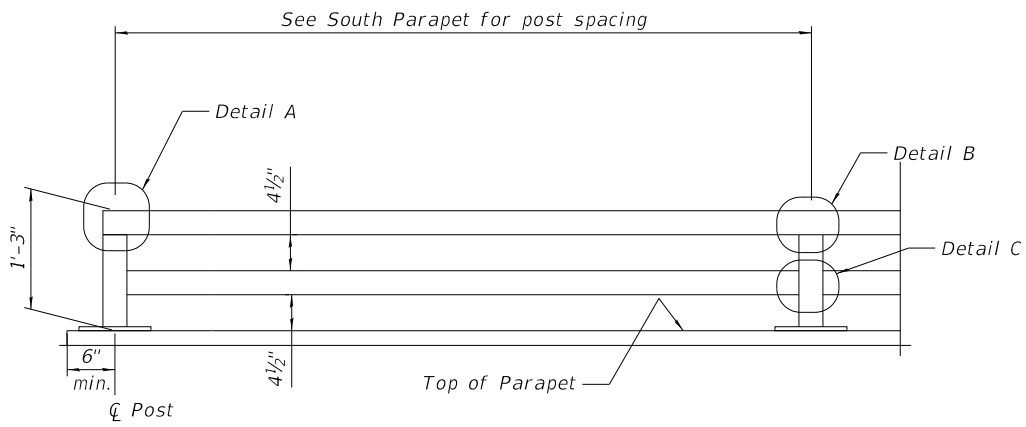
DESIGNED -
 CHECKED -
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 REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

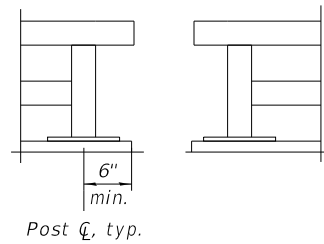
RAMP E APPROACH SLAB DETAILS, 2 OF 2
 STRUCTURE NO. 090-0180

SHEET 5-153 OF 445 SHEETS

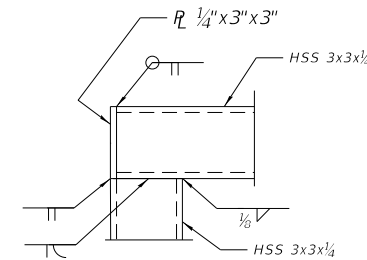
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317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1057
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT NHPP-YRP3(905)		



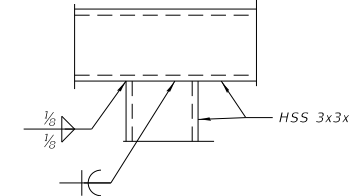
PARAPET RAILING ELEVATION
(Inside Face of Two Element Rail)



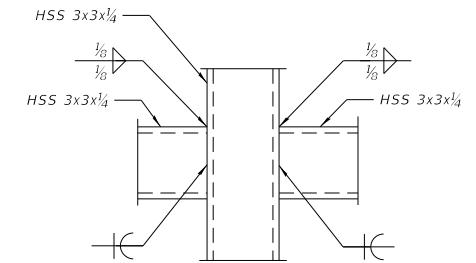
DETAIL 1
(At Expansion Joints, see
Detail 3 for Pier 12)



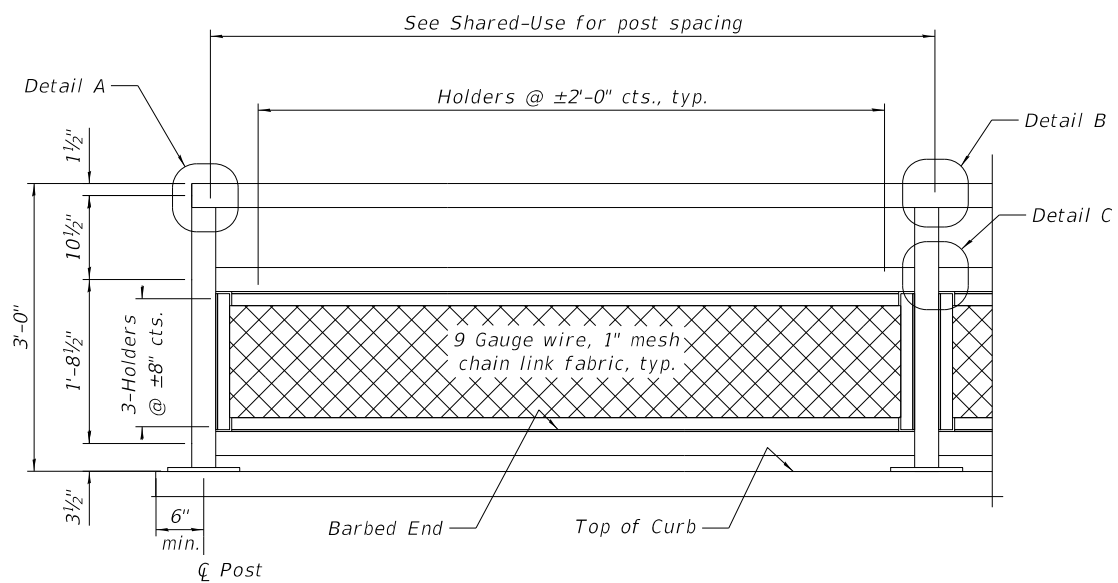
DETAIL A



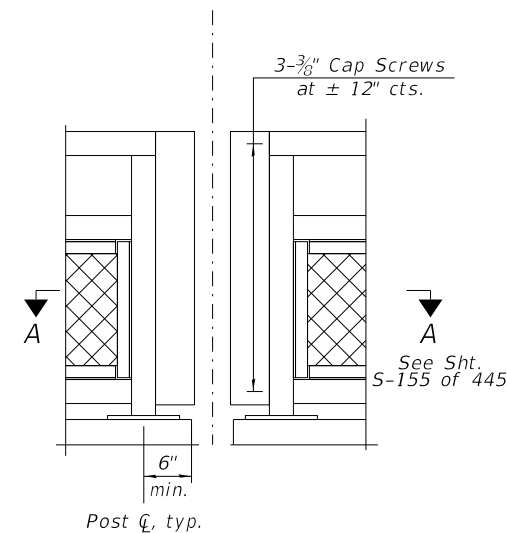
DETAIL B



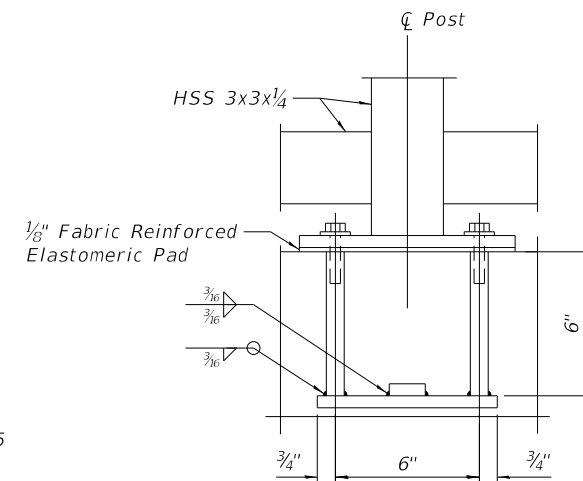
DETAIL C



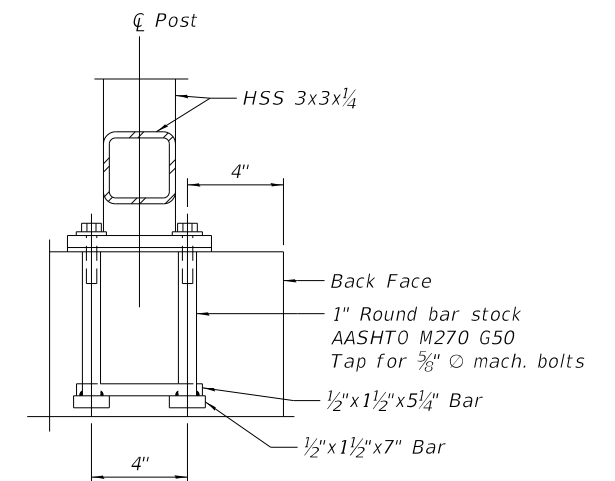
TYPICAL BRIDGE FENCE RAILING (SPECIAL) ELEVATION
see Sht. S-155 of 445 for Belvedere



DETAIL 2
(At Expansion Joint)



ANCHOR BOLT DETAILS
(See Note 4)

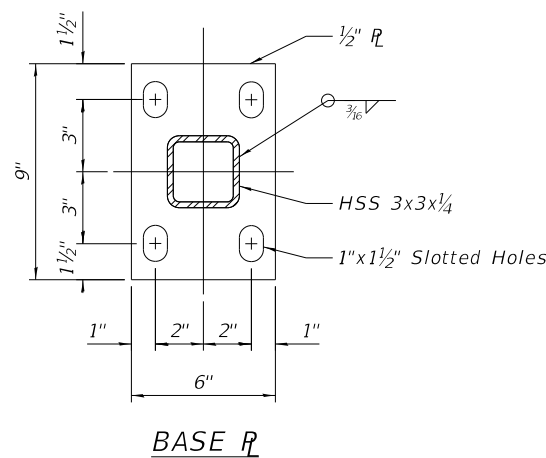


BILL OF MATERIAL

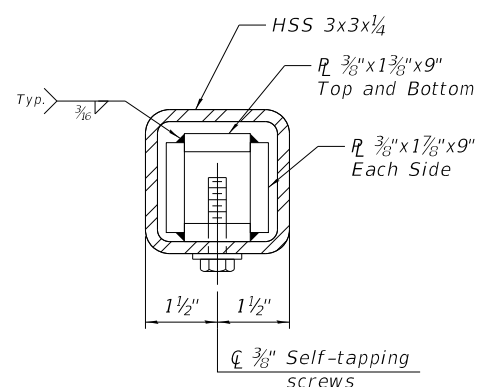
Item	Pay Unit	Quantity
Bridge Fence Railing (Special)	Foot	4,646
Parapet Railing	Foot	4,876

Notes:

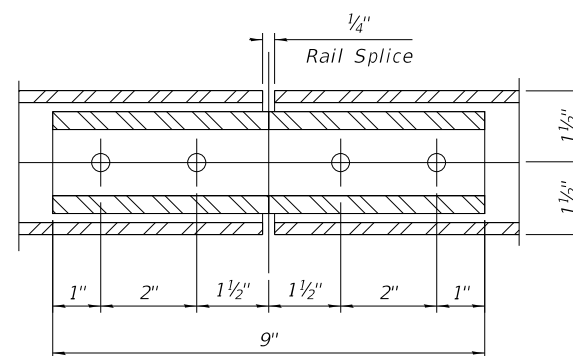
- All structural steel tubing, post, and railing for parapet shall be CVN tested according to 1006.34(b) of the Standard Specifications. CVN testing may be omitted for the Bridge Fence Railing (Special).
- All structural steel rail elements, including posts, railing, splices, anchor devices, plates, and fasteners, shall be galvanized and painted in accordance with Special Provision, "Hot Dip Galvanizing for Structural Steel". The color shall be Blue, Munsell No. 10B 3/6.
- All chain link fence elements, including chain link fabric, ties, tensioning components, and fittings, shall be Type IV Class B (polyvinyl chloride (PVC)-coated steel) in accordance with AASHTO M 181. The color shall be Blue, Munsell No. 10B 3/6.
- In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 3/8" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

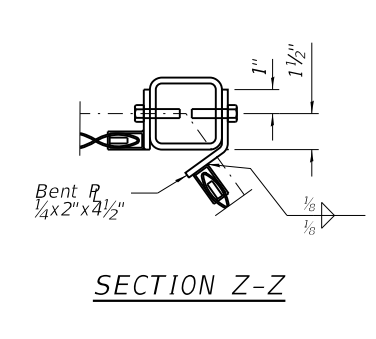
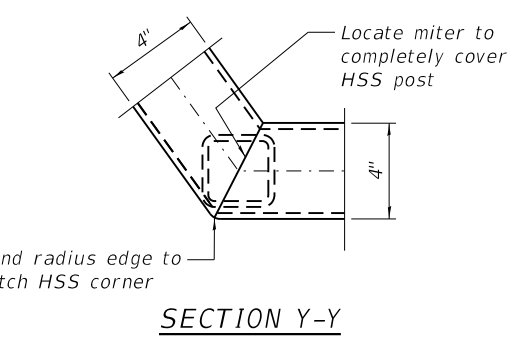
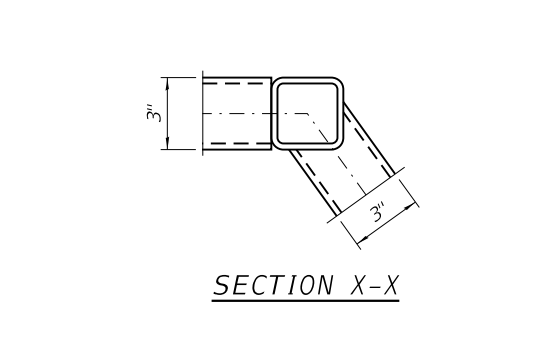
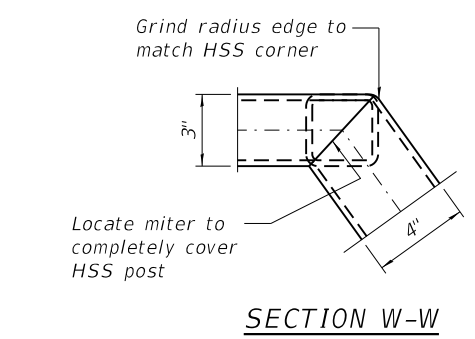
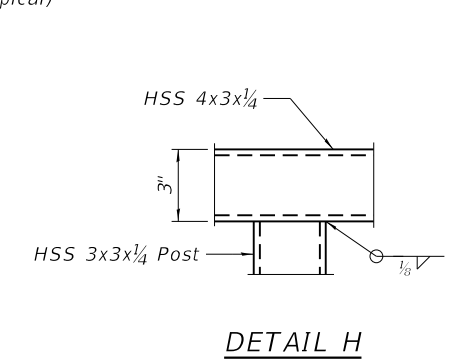
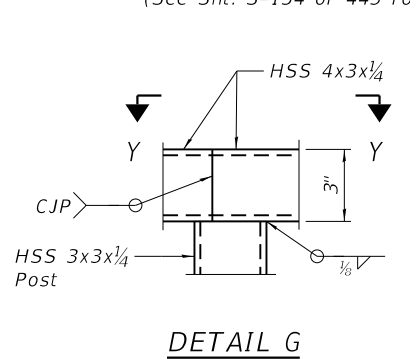
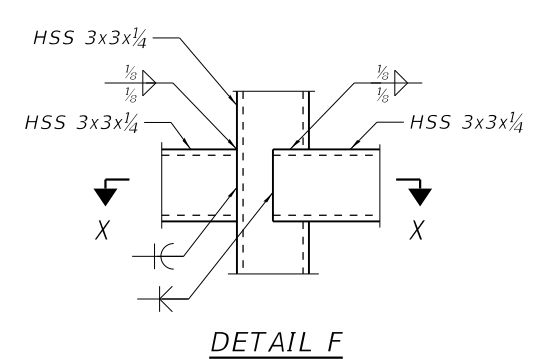
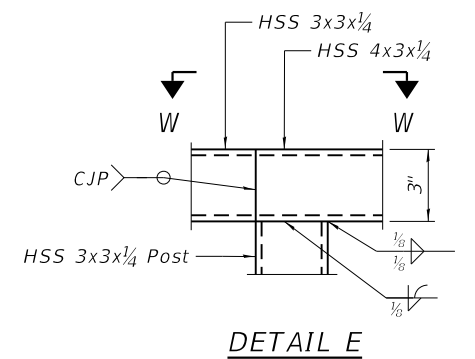
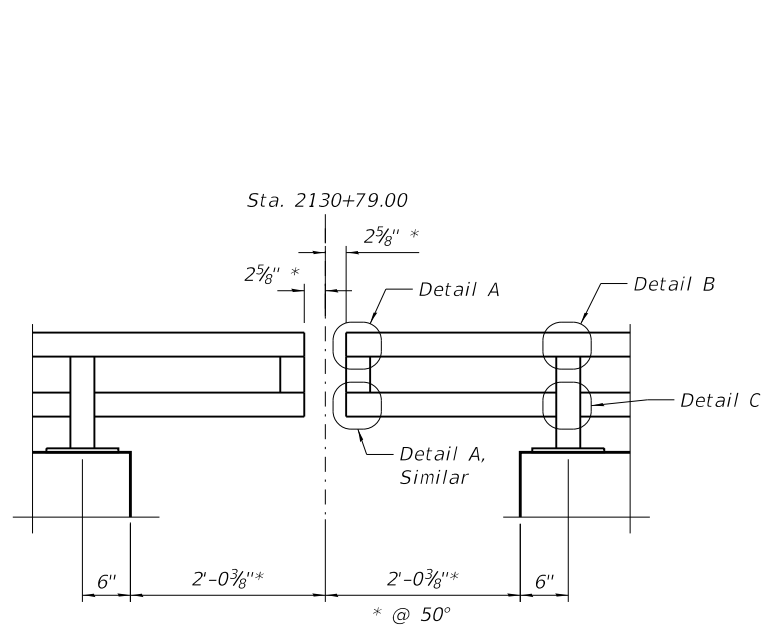
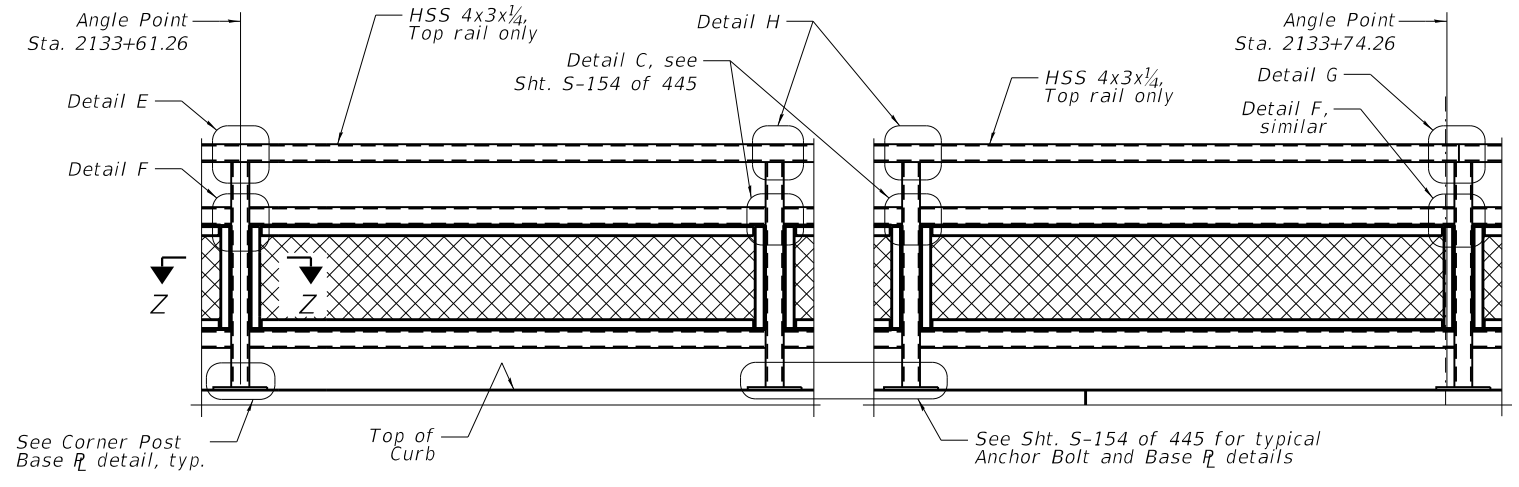
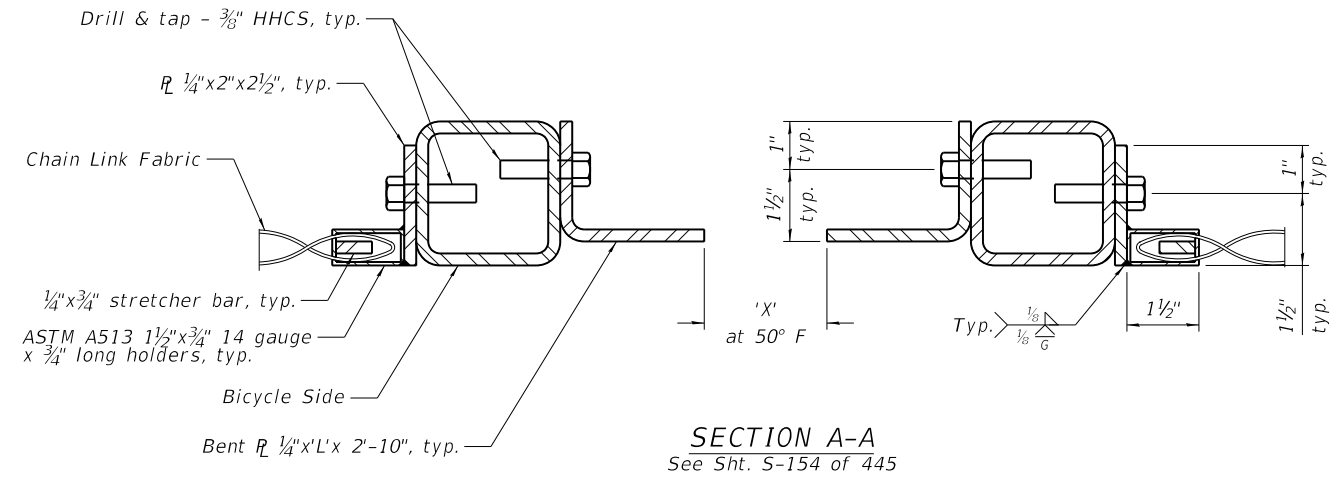


BASE R



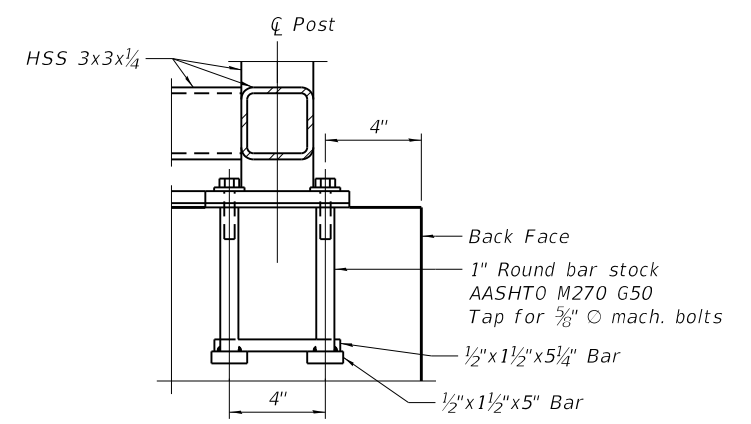
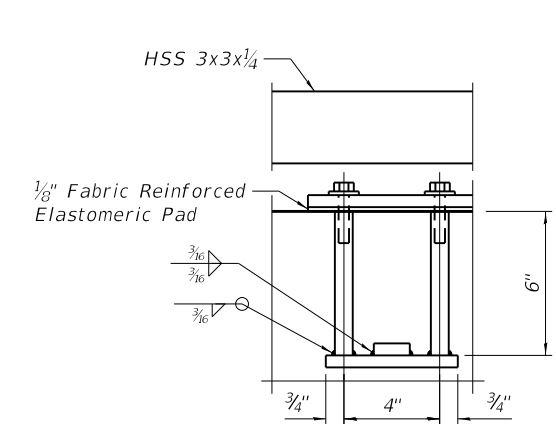
RAIL SPLICE





EXPANSION JOINT PARAMETERS

Location	'X' at 50° F	Plate 'L'
Abut 1	2"	7"
Pier 2	3"	7"
Pier 6	4 1/2"	7"
Pier 9	3 1/2"	7"
Pier 12	5 1/4"	7"
Pier 13	2 1/4"	7"
Pier 16	4"	7 1/2"
Pier 19	5 1/4"	7 1/2"
Abut 2	3"	7 1/2"



ANCHORAGE BOLT AT CORNER POST
 (2 Anchor Bolt Groups per Corner Post)

CORNER POST BASE R DETAIL
 (4 Locations)

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TYLIN INTERNATIONAL
 200 S. WACKER DR.
 SUITE 1400
 CHICAGO, IL 60606
 TEL: 312-777-2900

USER NAME = jyding
 DESIGNED - ER
 CHECKED - MM
 PLOT SCALE = 0:2.0000 "/in.
 DRAWN - JR
 PLOT DATE = 12/12/2018
 CHECKED - NS

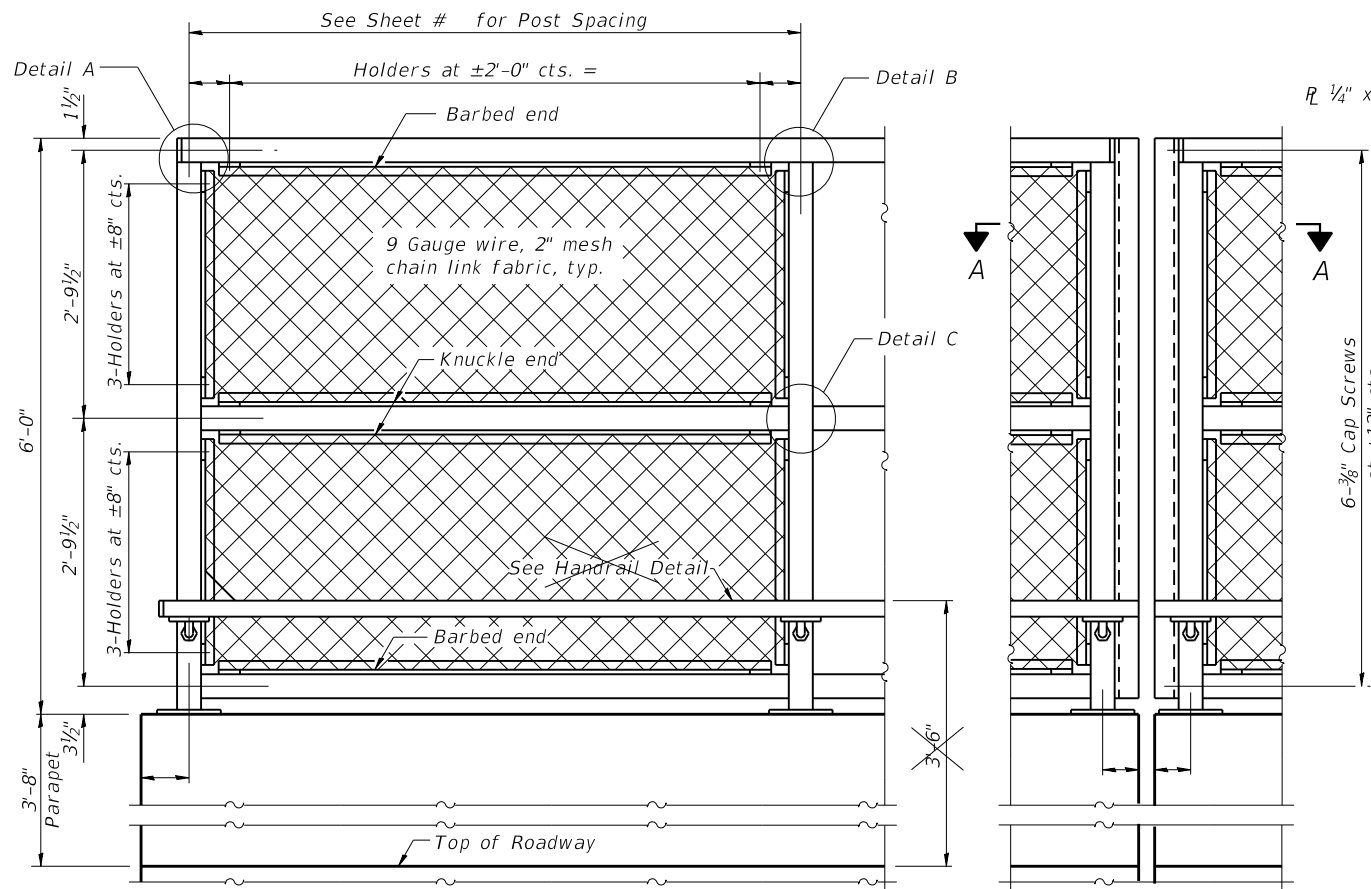
REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET RAILING AND BRIDGE FENCE (SPECIAL), 2 OF 2
 STRUCTURE NO. 090-0180

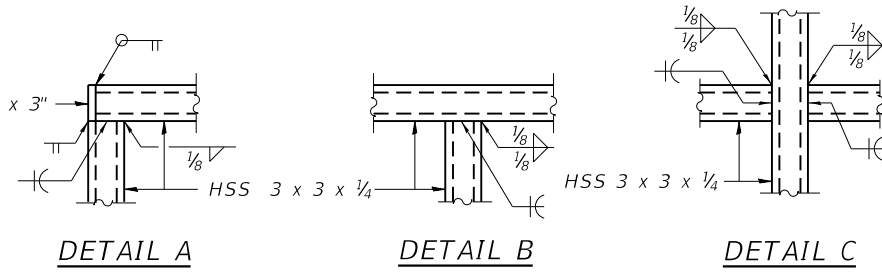
SHEET S-155 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1059
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



ELEVATION
(Inside Face)

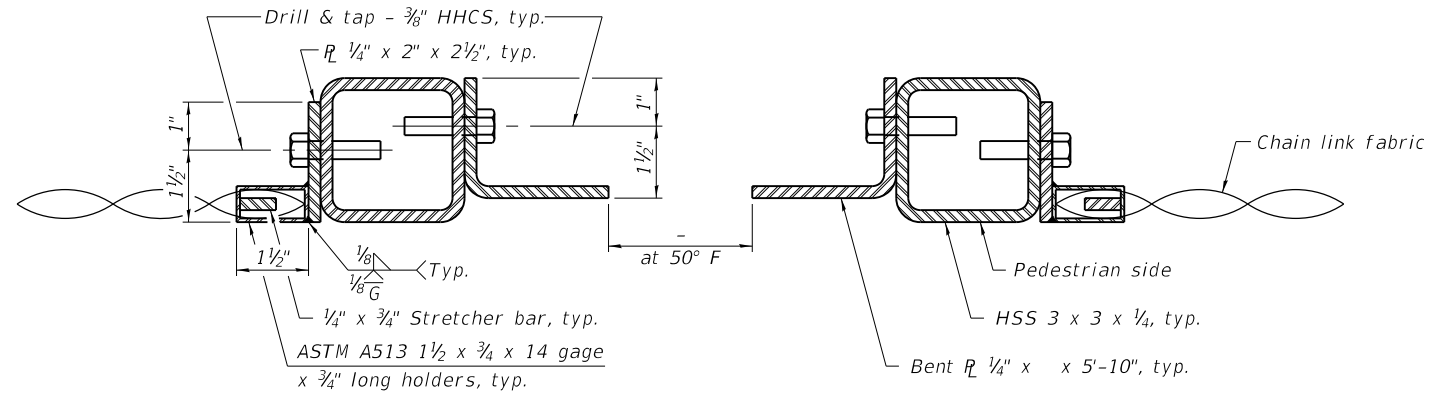
ELEVATION
(At Expansion Joint)



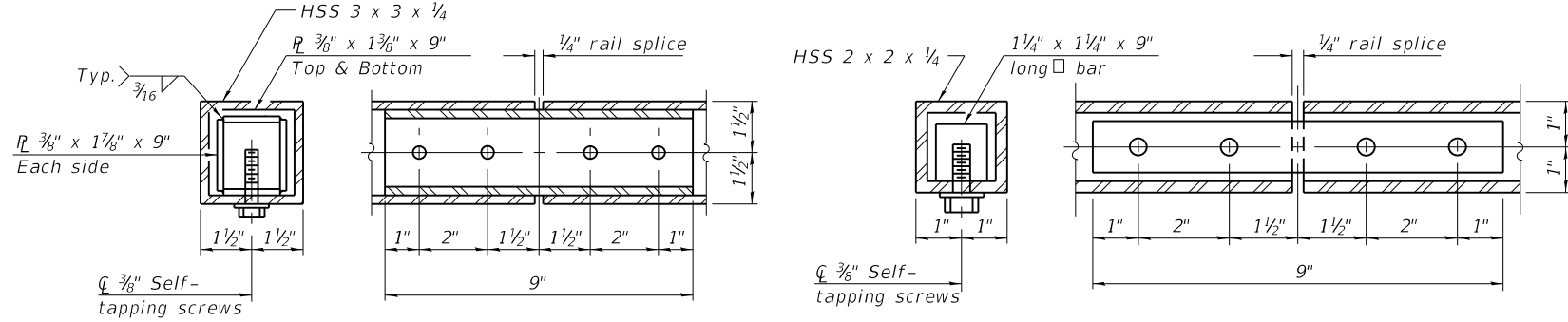
DETAIL A

DETAIL B

DETAIL C

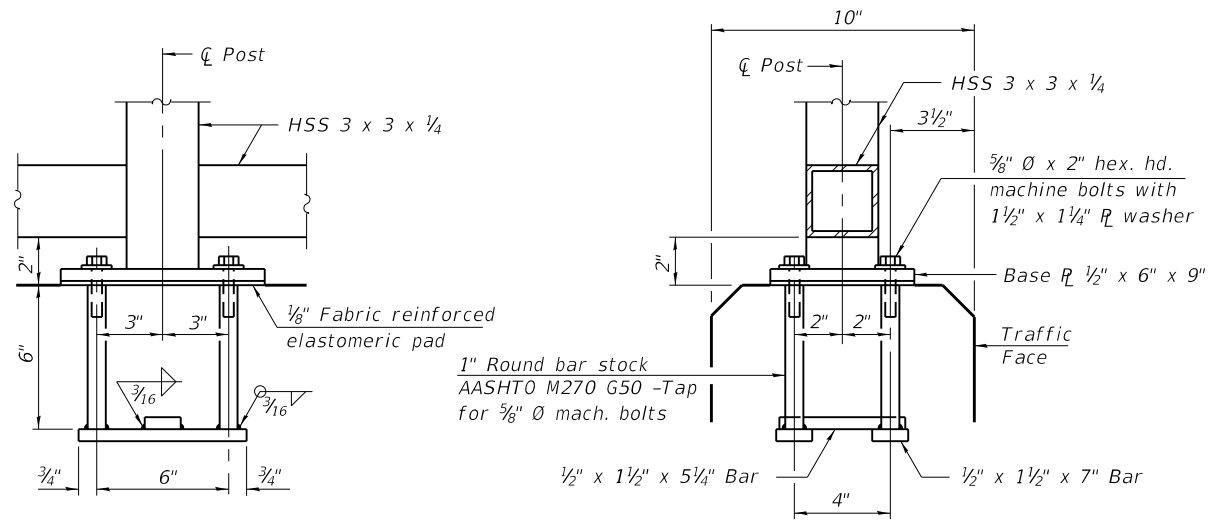


SECTION A-A



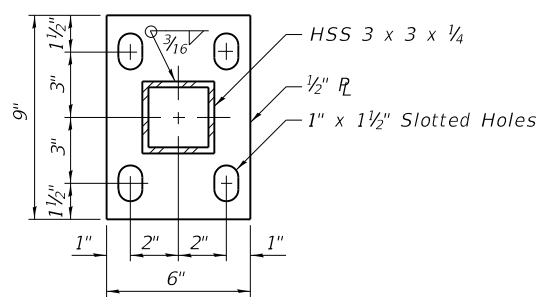
RAIL SPLICE

HANDRAIL SPLICE

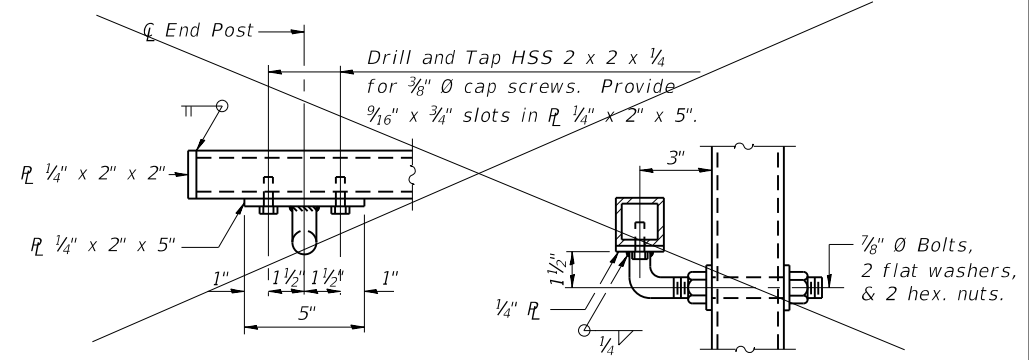


ANCHOR BOLT DETAILS

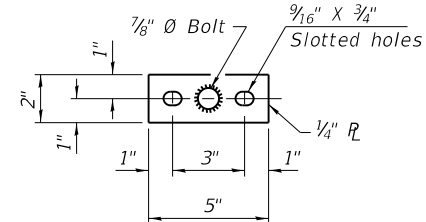
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



BASE R



HANDRAIL DETAIL



BASE R
(Handrail)

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	266

MODEL: Default
FILE NAME: pw:\v\sp\sv\306\hanson_projects\documents\13\jobs\13\H0106\Phase-III\CAD\Struct\Sheet\0900180-XXXX-TYLL-4350-Bridge Fence Railing Lt. Edge.dgn

R-28

8-11-2017

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = RHoyos
DESIGNED - SP
CHECKED -
PLOT SCALE = 0:2.0000" = 1" / in.
DRAWN -
PLOT DATE = 12/12/2018
CHECKED -
REVISED -

DESIGNED - SP
CHECKED -
DRAWN -
CHECKED -
REVISED -

REVISED -
REVISED -
REVISED -
REVISED -

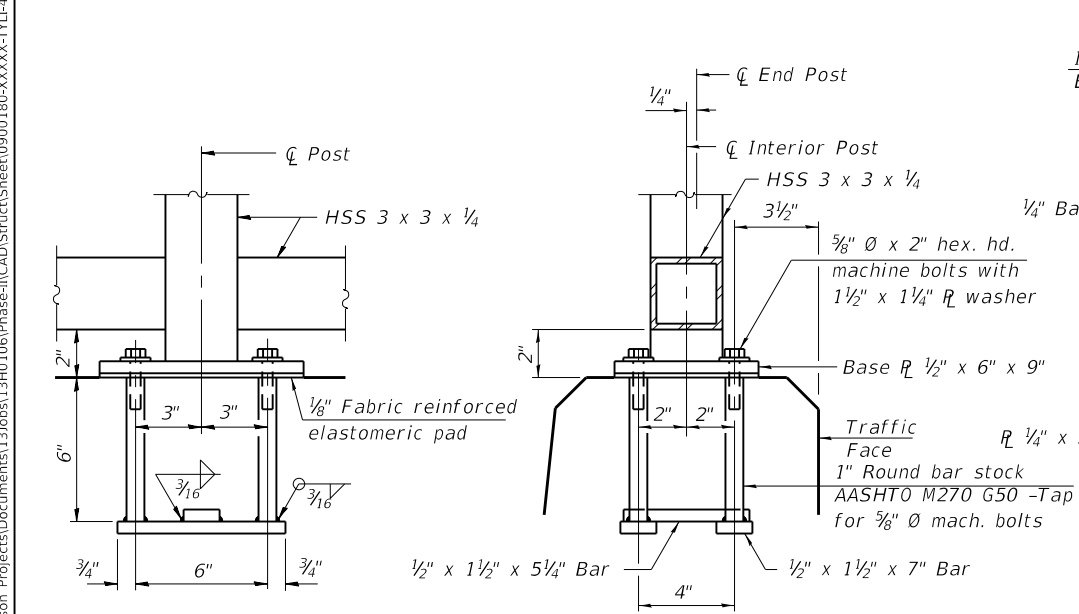
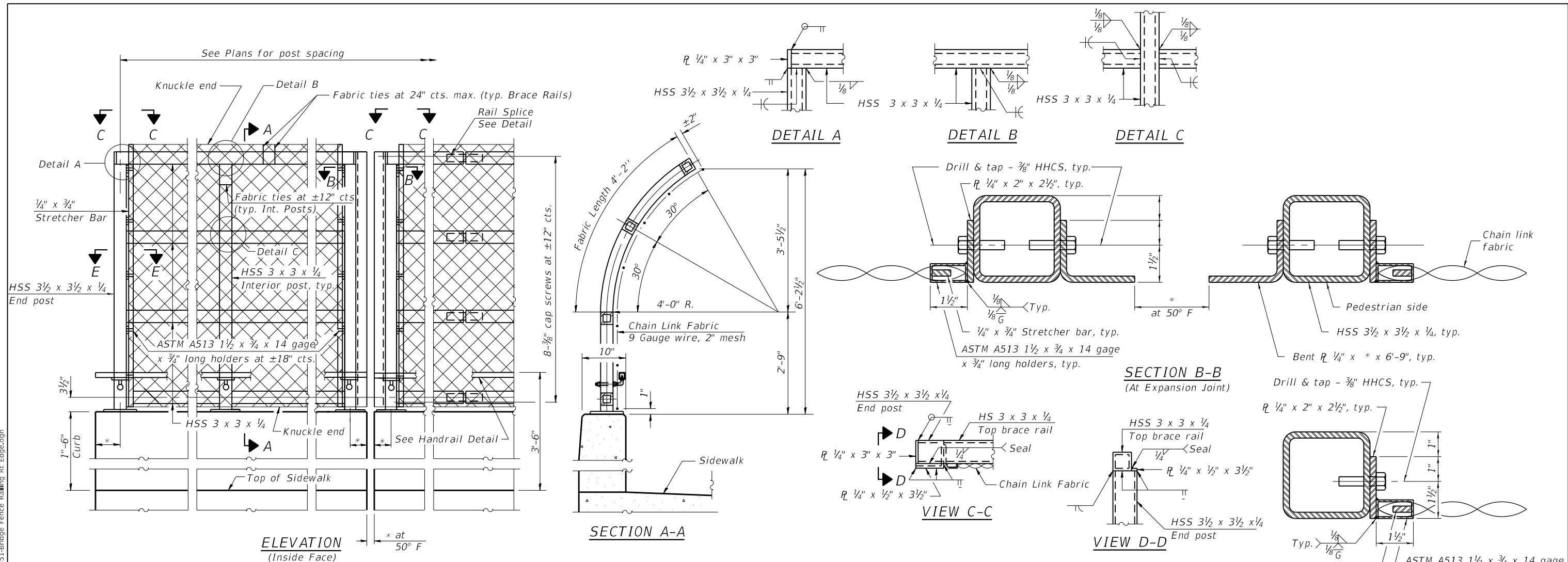
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE FENCE RAILING, PARAPET MOUNTED - LT. BARRIER
STRUCTURE NO. 090-0180

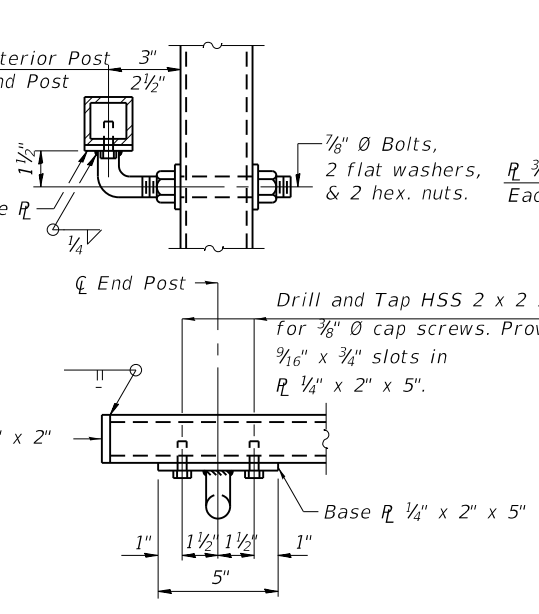
SHEET 155A OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1060
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

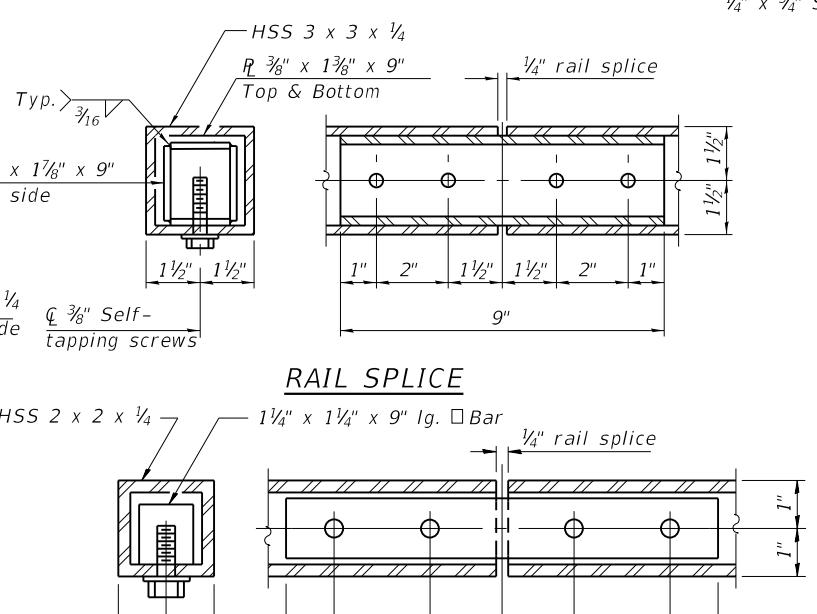
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 12/12/2018 10:28:39 AM



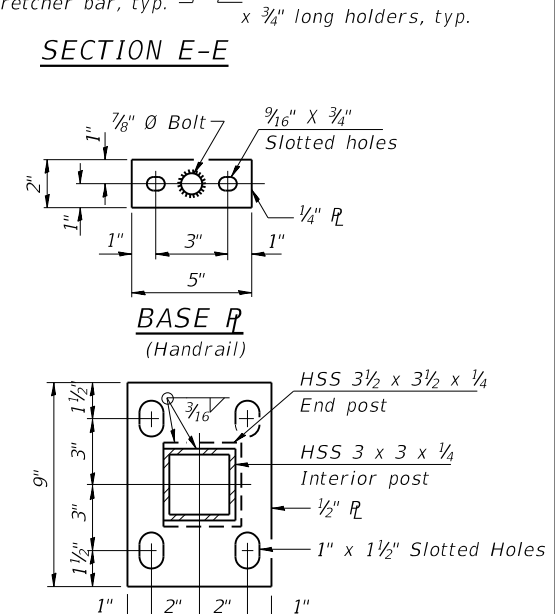
ANCHOR BOLT DETAILS
 In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" Ø anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.



HANDRAIL DETAIL



RAIL SPLICE



BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing	Foot	240

Note:
 CVN testing may be omitted for the railing.

R-32 8-11-2017 *Variable - See Plans

TYLIN INTERNATIONAL
 200 S. WACKER DR.
 SUITE 1400
 CHICAGO, IL 60606
 TEL: 312-777-2900

USER NAME = RHoyos
 DESIGNED - SP
 CHECKED -
 PLOT SCALE = 0:2.0000' = 1" / in.
 DRAWN -
 PLOT DATE = 12/12/2018
 CHECKED -
 REVISED -

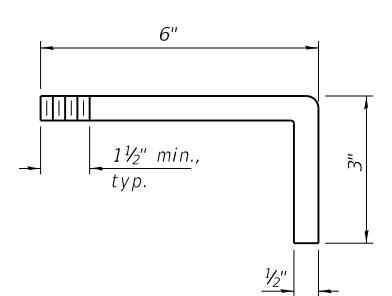
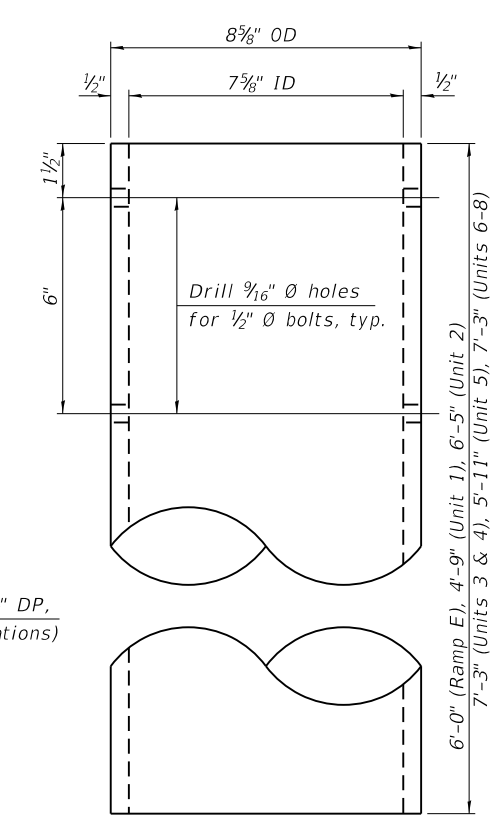
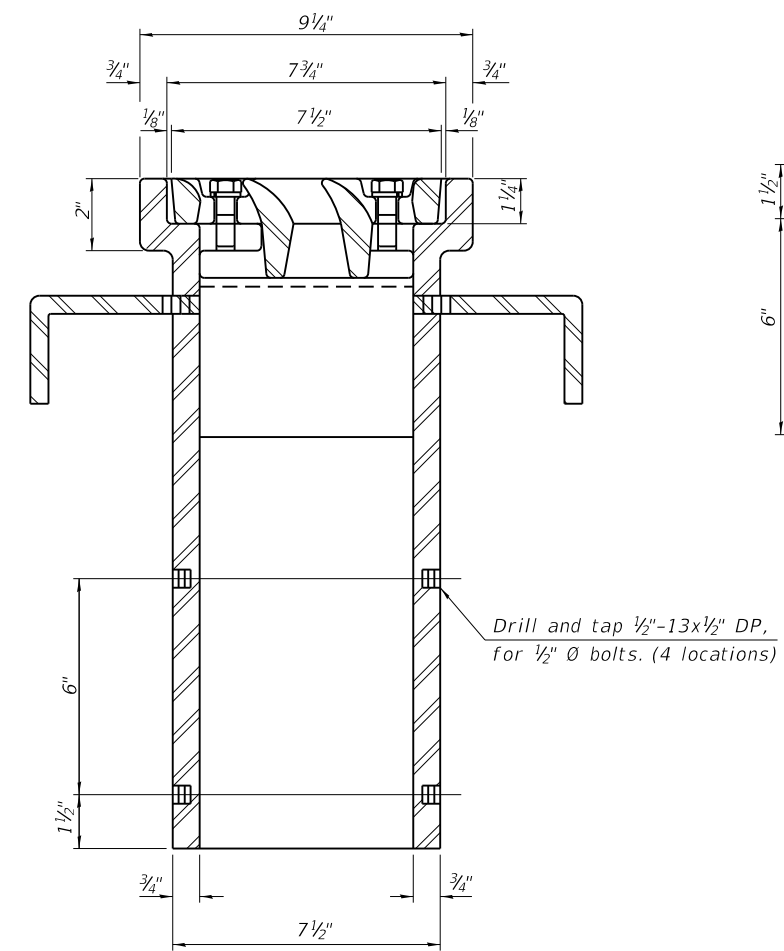
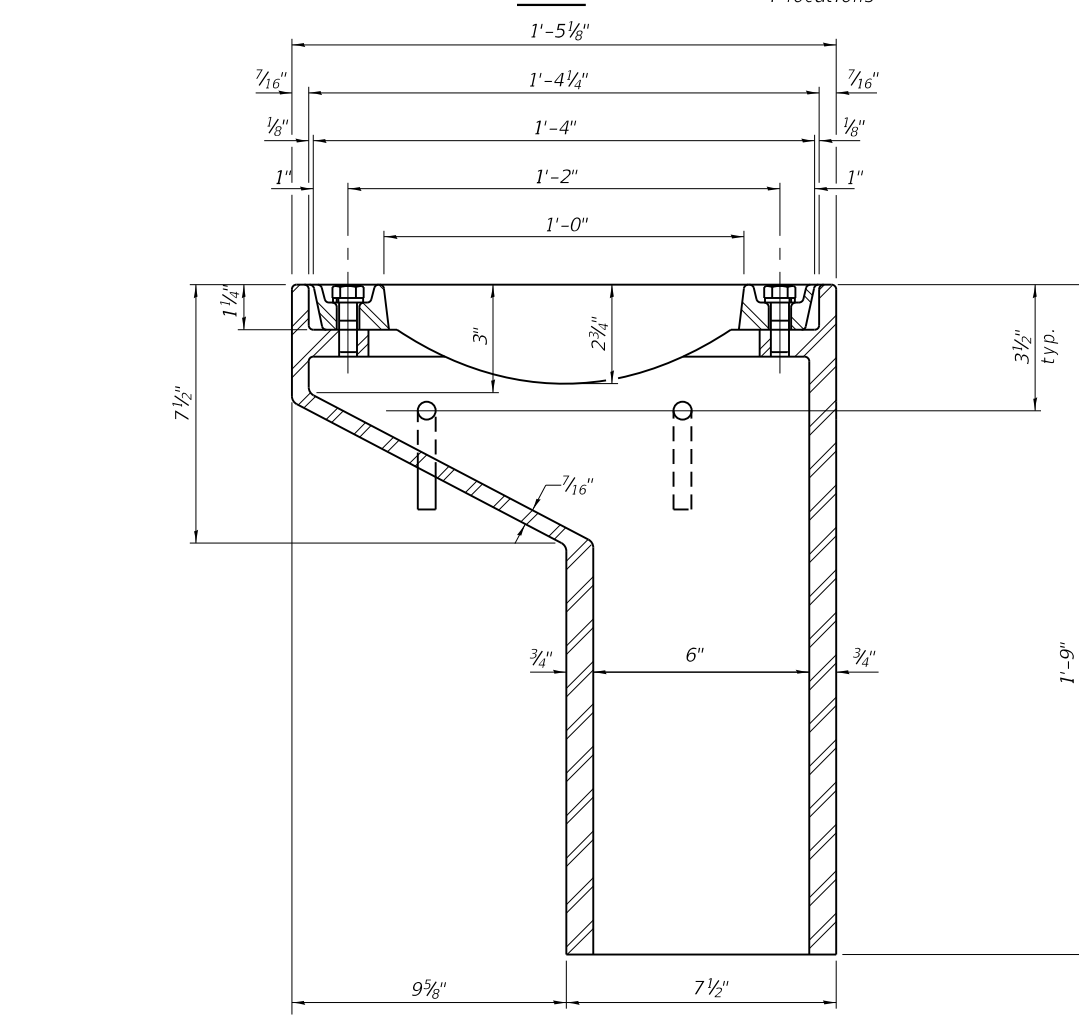
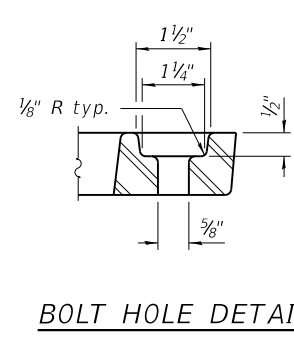
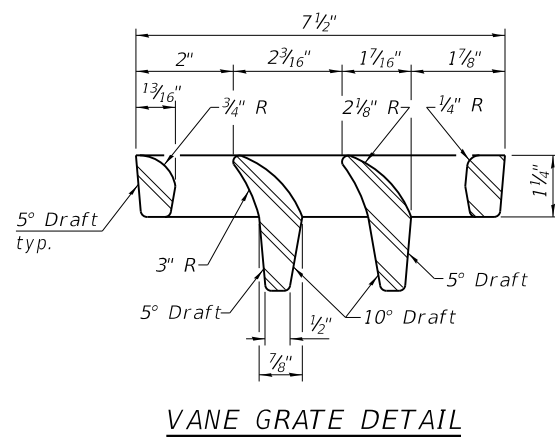
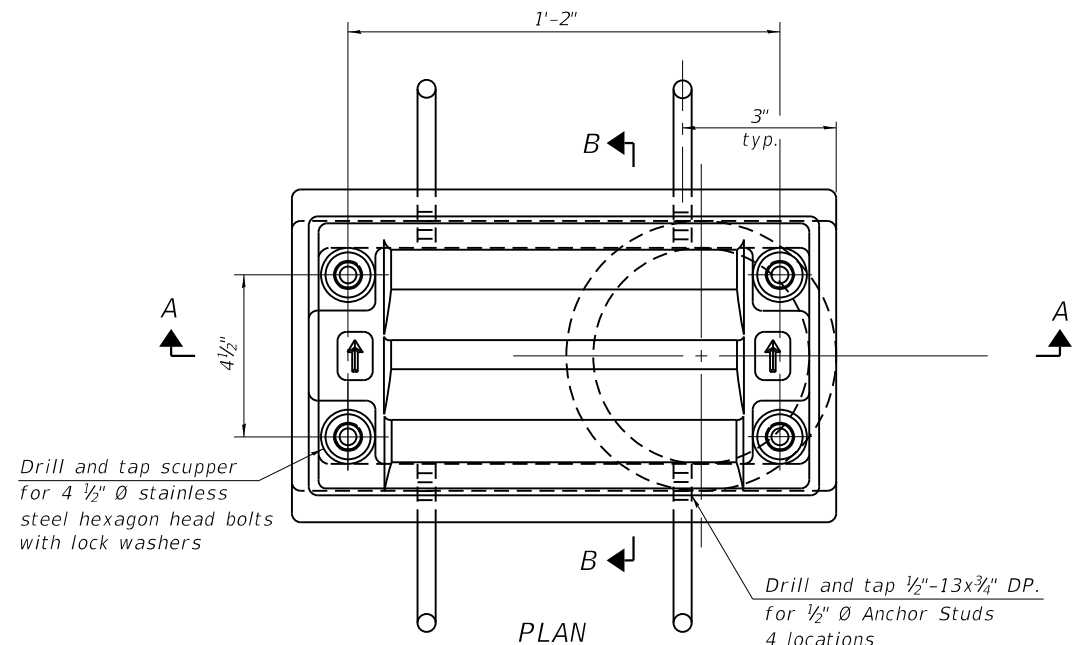
DESIGNED - SP
 CHECKED -
 DRAWN -
 CHECKED -
 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE FENCE RAILING, PARAPET RAILING - RT. CURB
 STRUCTURE NO. 090-0180

SHEET 155B OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1);(14HB)BR)BR	PEO/TAZ	1361	1061
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



See sheet of for scupper location relative to parapet.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	145

DS-11 2-17-2017

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = RHoyos	DESIGNED -	REVISED -
PLOT SCALE = 0:2.0000 " = 1 in.	CHECKED -	REVISED -
PLOT DATE = 12/12/2018	DRAWN -	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

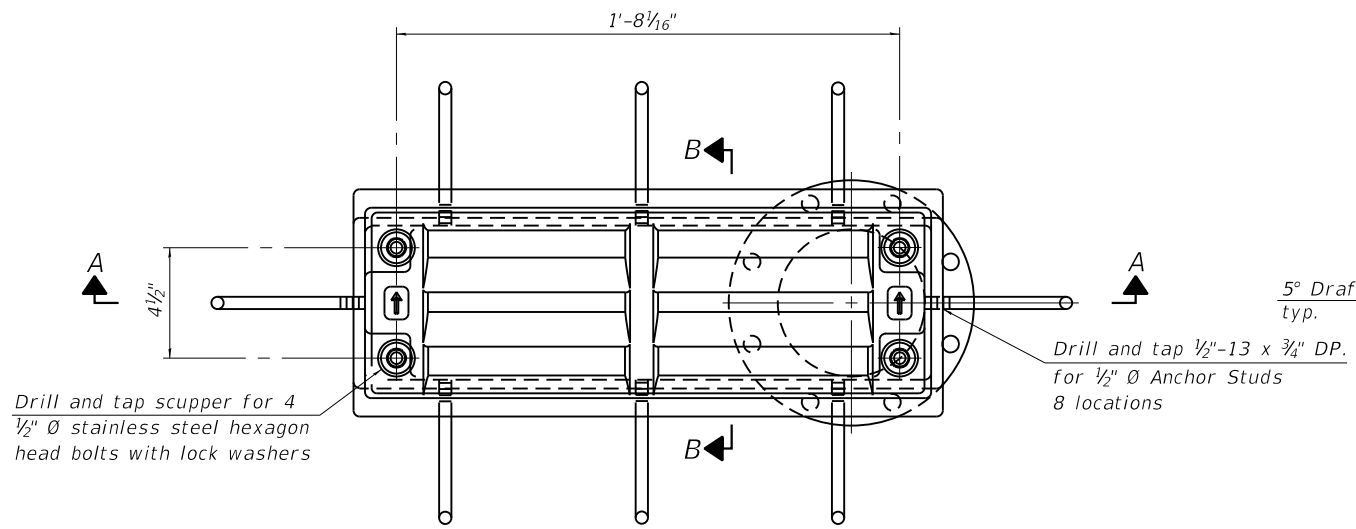
**DRAINAGE SCUPPER, DS-11
STRUCTURE NO. 090-0180**

SHEET 5-156 OF 445 SHEETS

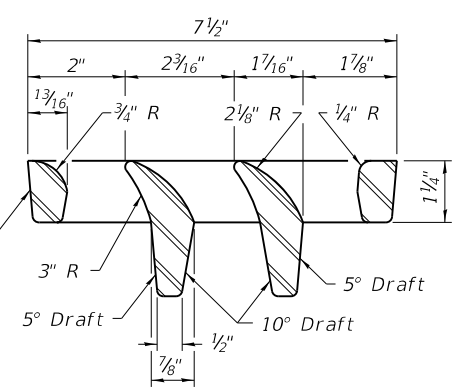
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1062
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

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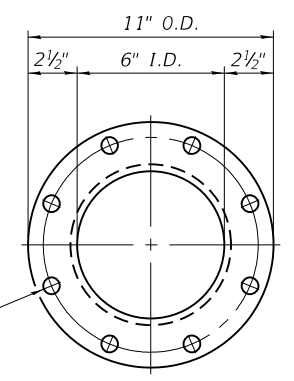
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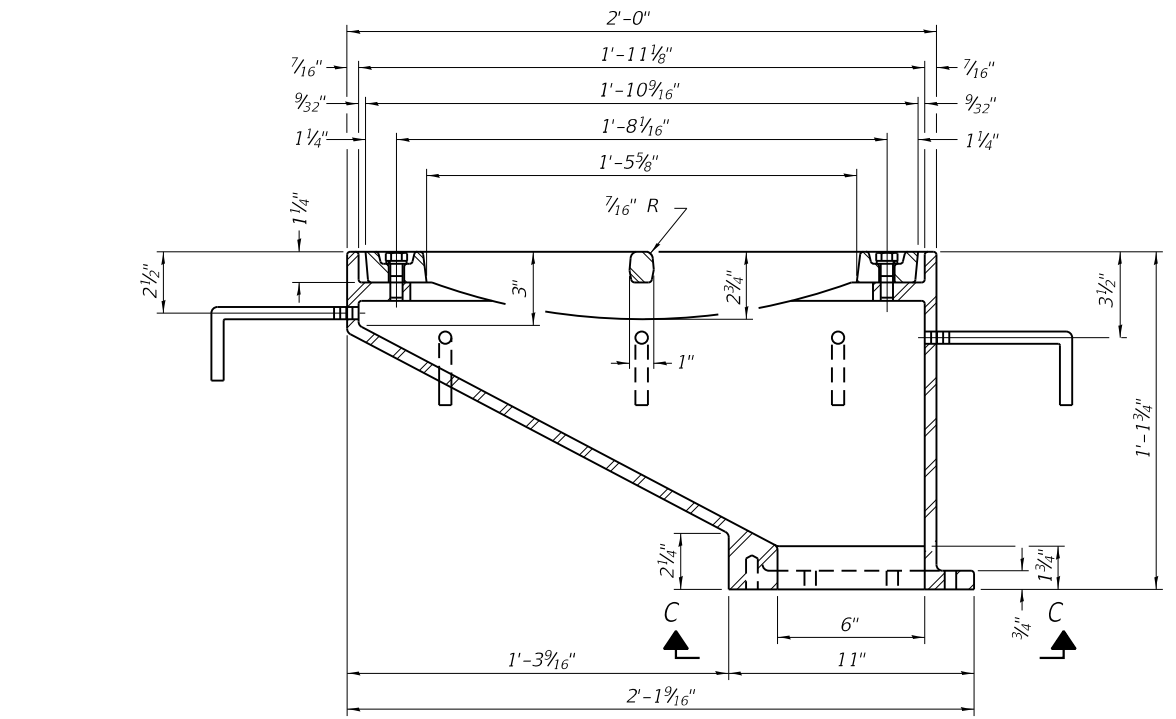
PLAN



VANE GRATE DETAIL

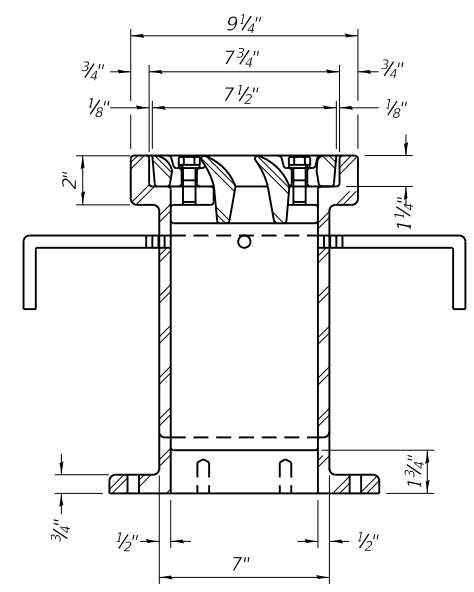


VIEW C-C

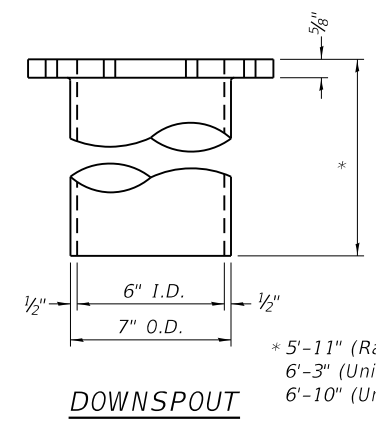


SECTION A-A

See sheet of for scupper location relative to parapet.

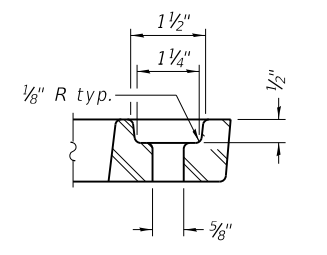


SECTION B-B

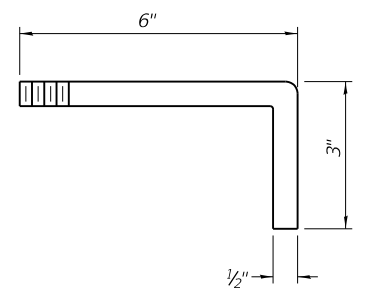


DOWNSPOUT

* 5'-11" (Ramp E),
6'-3" (Unit 2),
6'-10" (Unit 4)



BOLT HOLE DETAIL



ANCHOR STUD DETAIL

Drill and tap 8 holes for 1/2"-13 bolts on a 9 1/2" Ø bolt circle. (2 blind holes are 1 1/4" deep, 6 thru holes)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-12	Each	44

DS-12

2-17-2017

TYLIN INTERNATIONAL
 200 S. WACKER DR.
 SUITE 1400
 CHICAGO, IL 60606
 TEL: 312-777-2900

USER NAME = RHoyos
 DESIGNED -
 CHECKED -
 PLOT SCALE = 0:2.0000 " = 1 in.
 DRAWN -
 PLOT DATE = 12/12/2018
 CHECKED -
 REVISED -

DESIGNED -
 CHECKED -
 DRAWN -
 CHECKED -
 REVISED -
 REVISED -
 REVISED -
 REVISED -

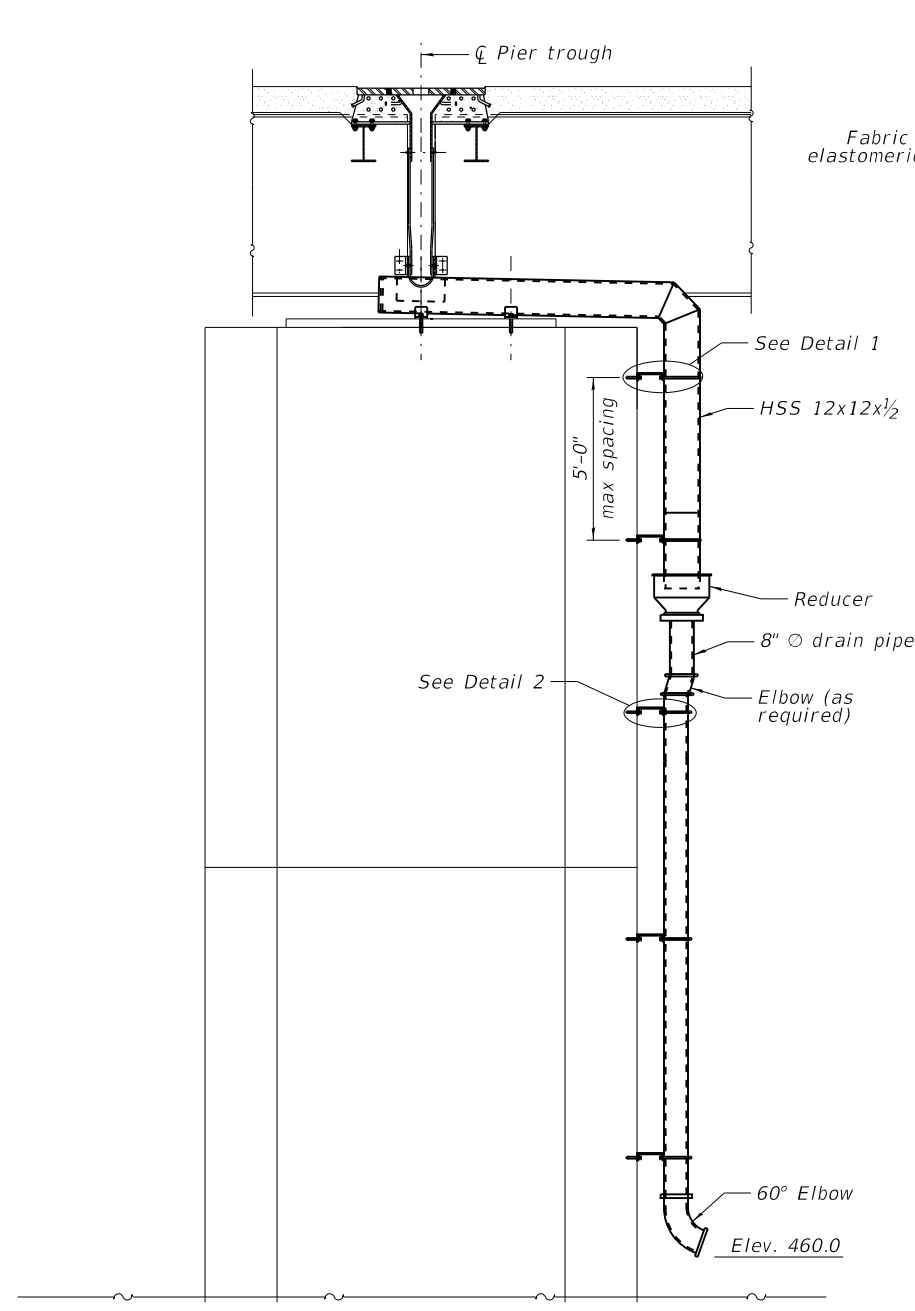
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER, DS-12
STRUCTURE NO. 090-0180

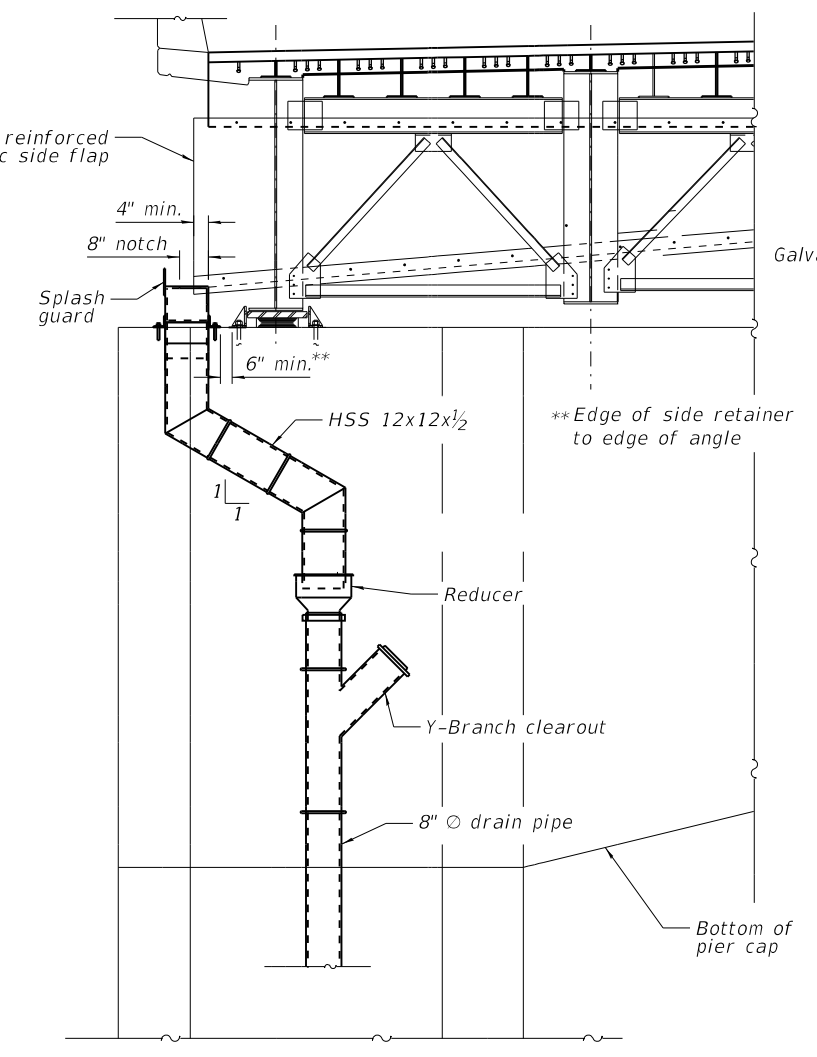
SHEET 5-157 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1063
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

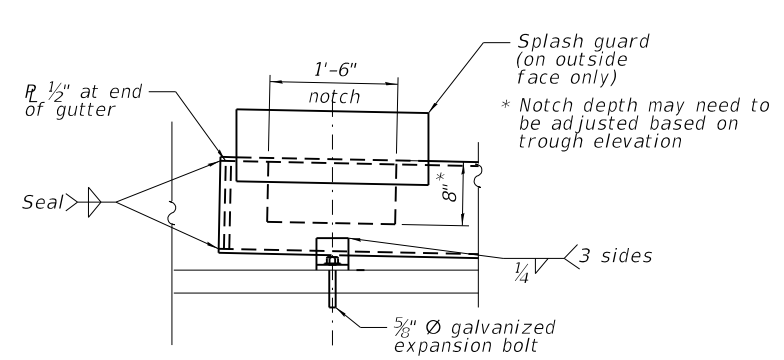
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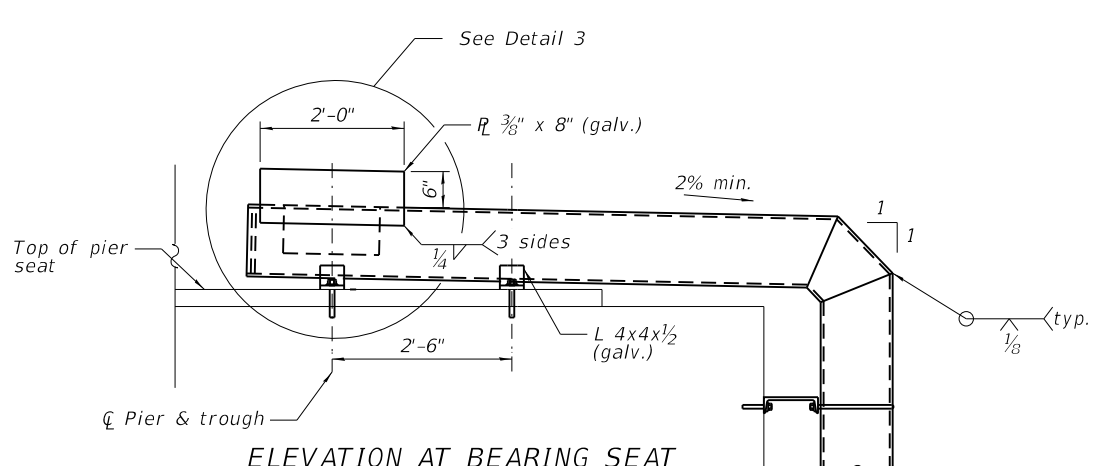
END VIEW



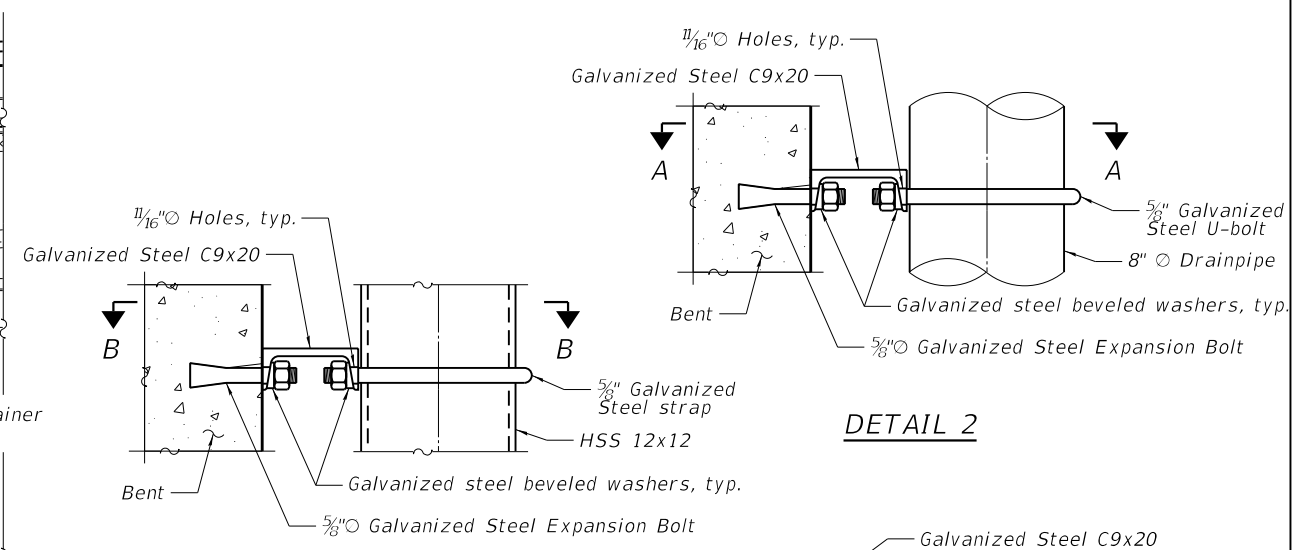
ELEVATION



DETAIL 3

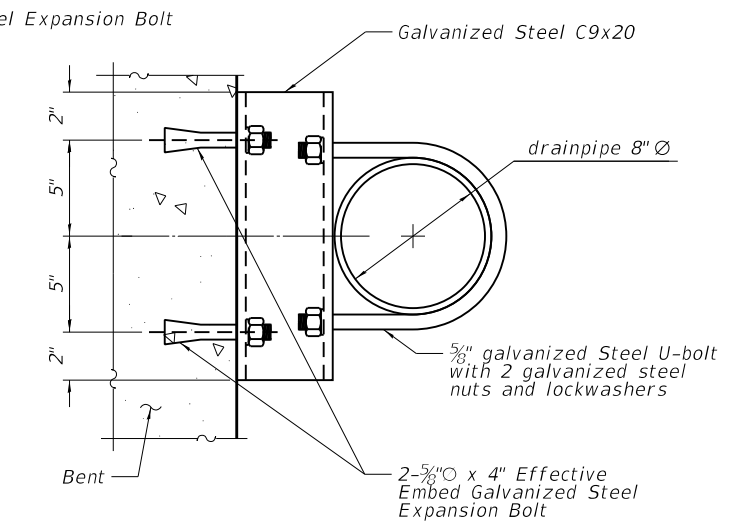


ELEVATION AT BEARING SEAT

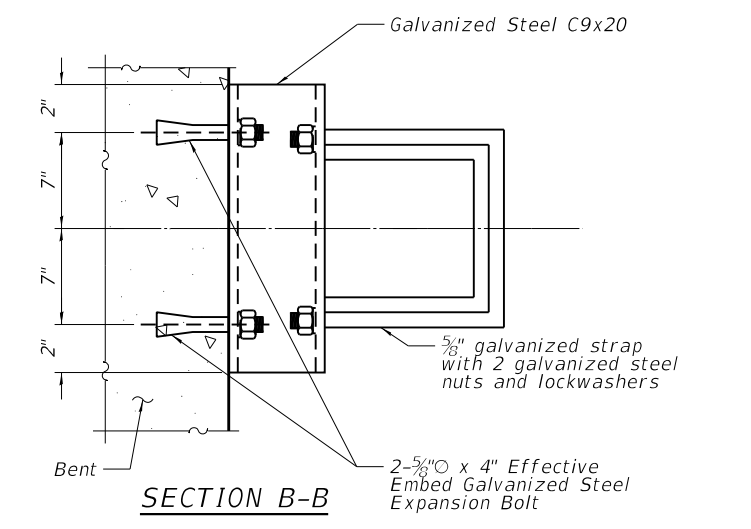


DETAIL 1

DETAIL 2



SECTION A-A



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Drainage System (Special)	L Sum	0.8

Notes:
 For additional information, see Special Provisions.
 Details applicable at Piers 6, 9, 16 and 19.

TYLIN INTERNATIONAL
 200 S. WACKER DR.
 SUITE 1400
 CHICAGO, IL 60606
 TEL: 312-777-2900

USER NAME = RHoyos	DESIGNED - SP	REVISED -
PLOT SCALE = 0:2.0000" = 1" / in.	CHECKED -	REVISED -
PLOT DATE = 12/12/2018	DRAWN -	REVISED -
	CHECKED -	REVISED -

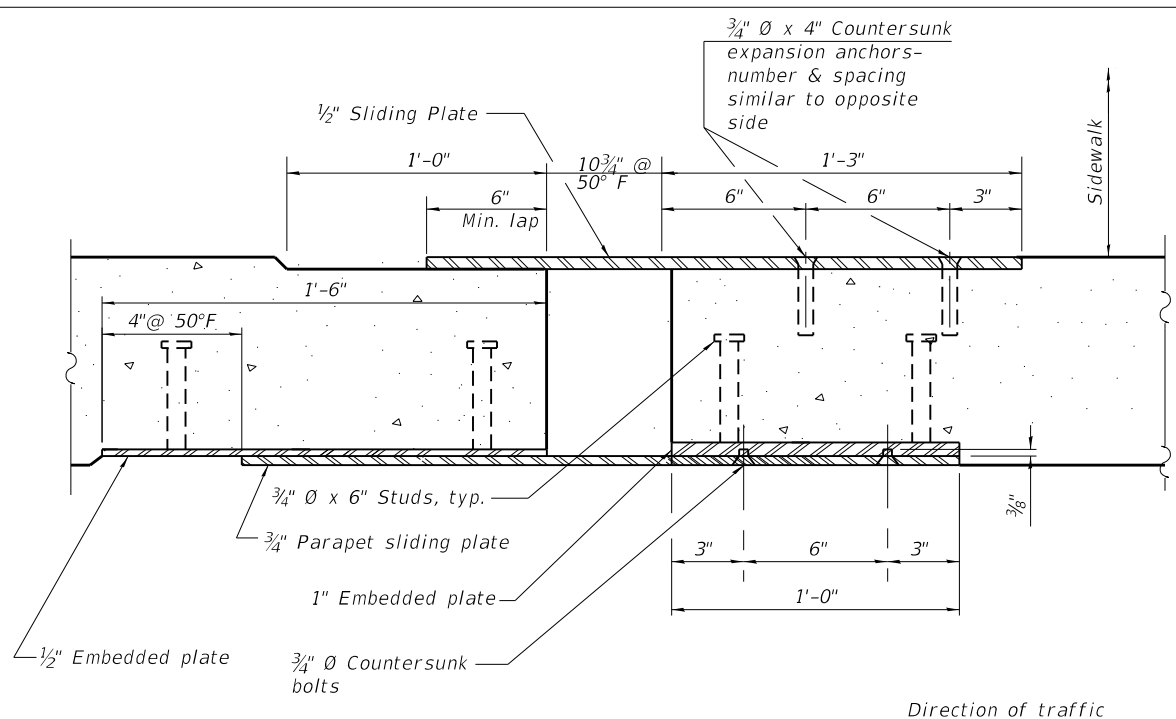
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SYSTEM (SPECIAL)
 STRUCTURE NO. 090-0180**

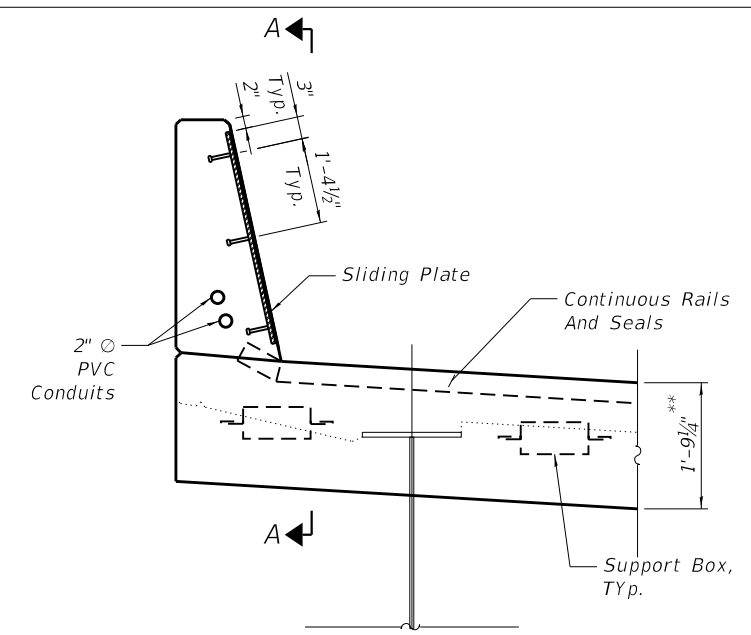
SHEET 5-158 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1064
CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	

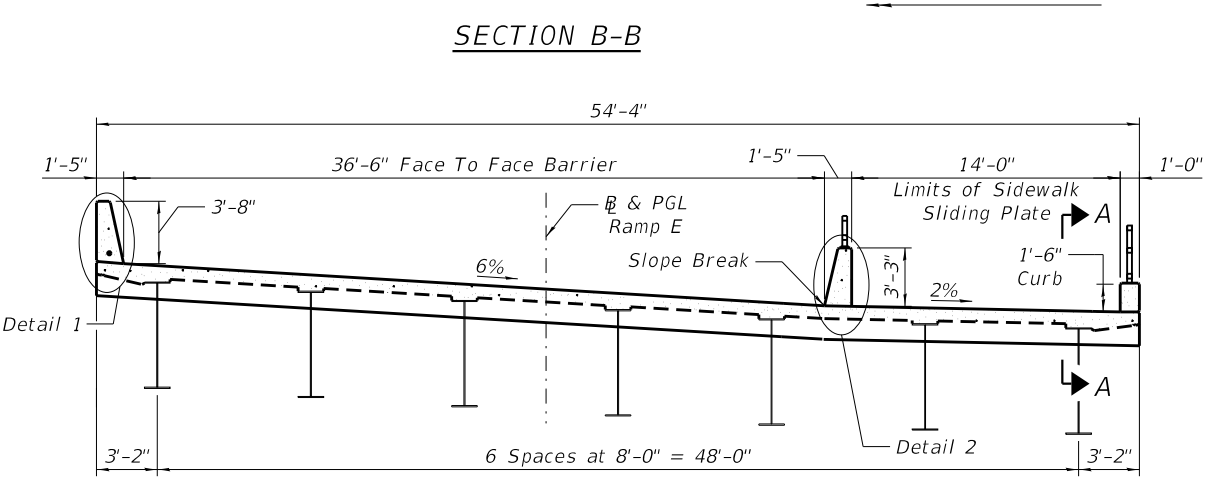
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 12/12/2018 10:26:41 AM



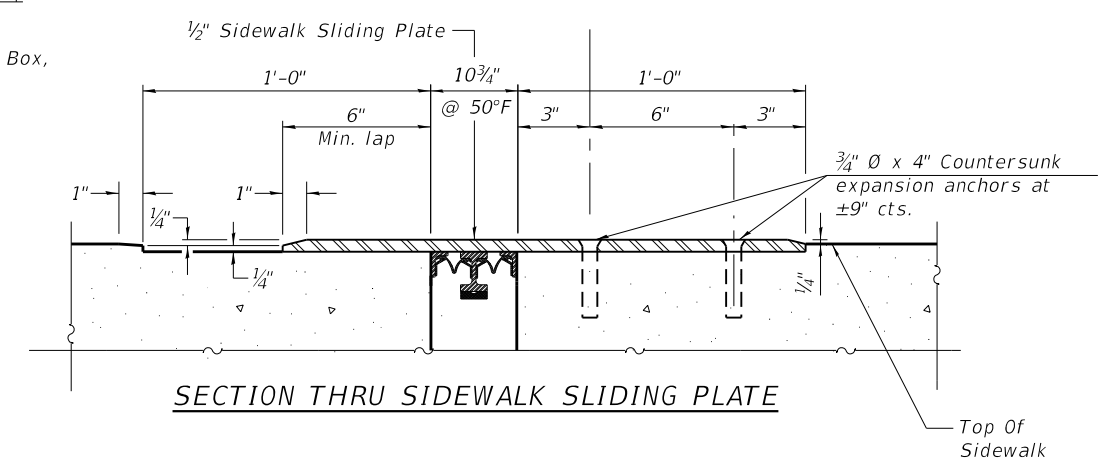
SECTION B-B



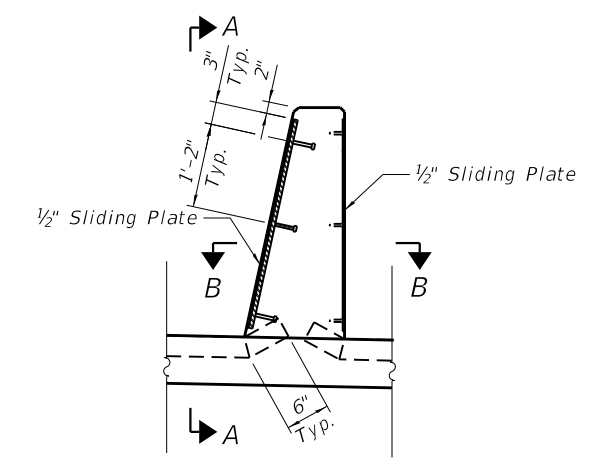
DETAIL 1



DECK CROSS SECTION
 (Looking Upstation)



SECTION THRU SIDEWALK SLIDING PLATE



DETAIL 2

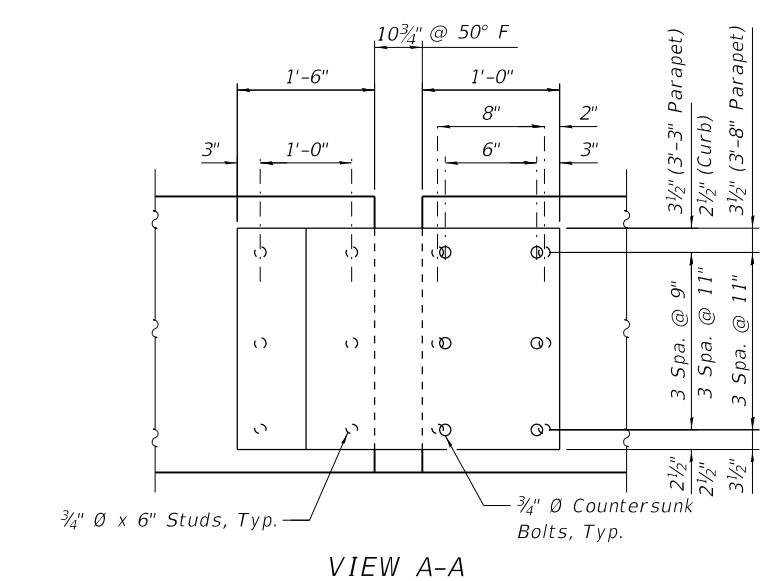
- Notes:
1. The structural steel plates of the barrier plate assemblies shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to AASHTO M111 after fabrication.
 2. Joint opening shall be adjusted according to Article 520.04 of the Standard Specifications when the concrete blockout is cast at an ambient temperature other than 50° F.
 3. Countersunk bolts shall be in accordance with ASTM A307, Grade A.
 4. Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
 5. The top surface of the sidewalk sliding plates shall have a raised pattern according to ASTM A786.
 6. 3/4" Ø x 6" Studs shall be granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications.
 7. Scissor spacer type joints are not allowed.
 8. Apply anti-seize compound to all countersunk bolts and anchors in sidewalk sliding plate and parapet embedded plate.

REQUIRED MOVEMENT

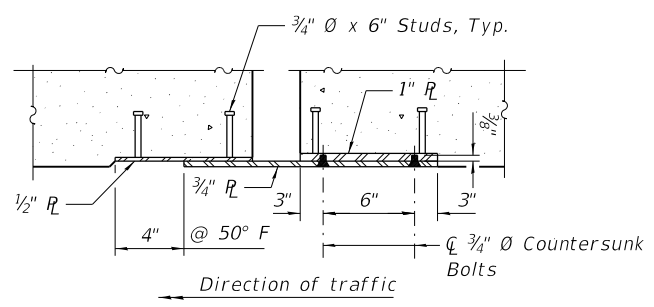
Location	Amount
South Abutment	4"

BILL OF MATERIAL

Item	Unit	Total
Modular Expansion Joint-Swivel 6"	Foot	54.5



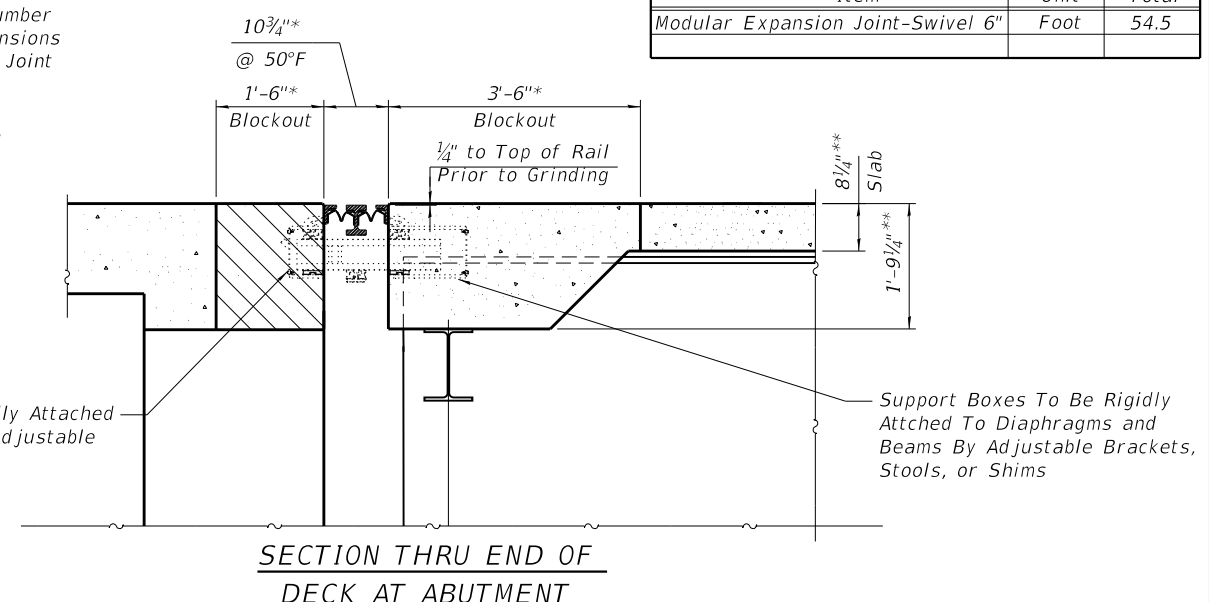
VIEW A-A



HORIZONTAL SECTION OF
 PARAPET & CURB AT JOINT

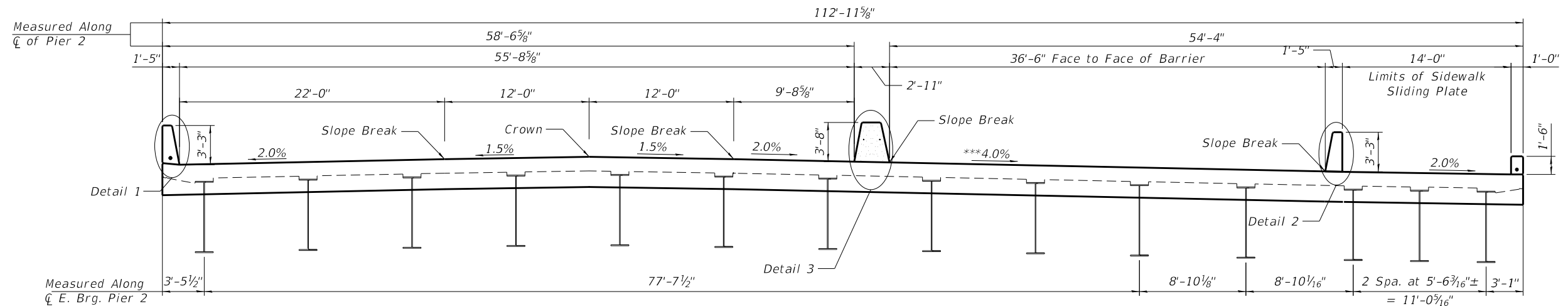
* Contractor to verify number of rails, blockout dimensions and joint opening with Joint manufacturer.
 ** Prior to Deck Grinding.

Support Boxes To Be Rigidly Attached To Abutment Backwall By Adjustable Brackets, Stools, or Shims



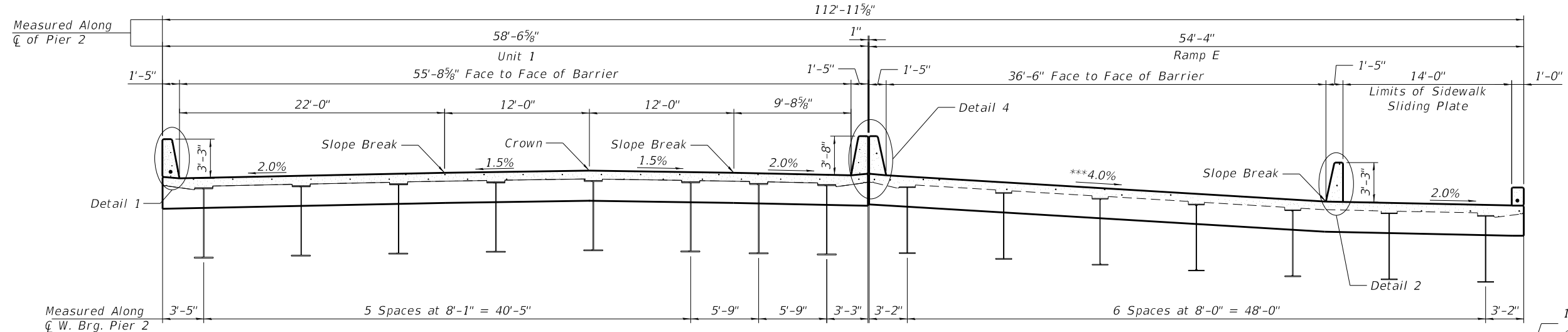
SECTION THRU END OF
 DECK AT ABUTMENT

Support Boxes To Be Rigidly Attached To Diaphragms and Beams By Adjustable Brackets, Stools, or Shims

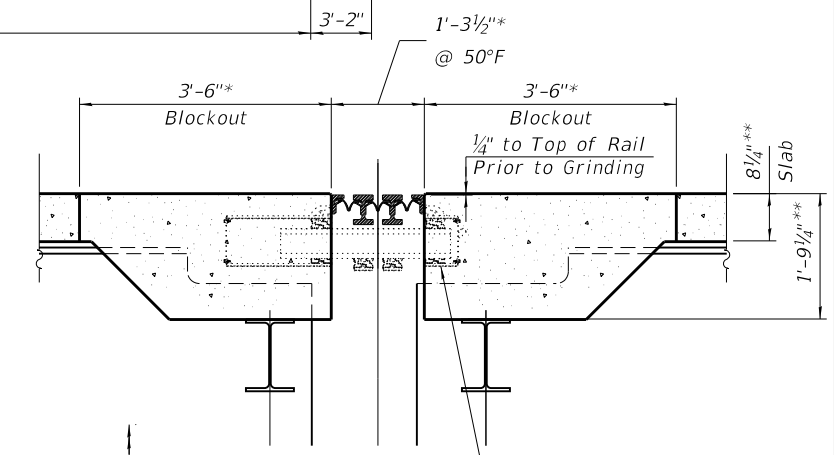


EAST OF JOINT DECK CROSS SECTION
(Looking Upstation)

*** Cross slope taken at \bar{C} Pier 2.



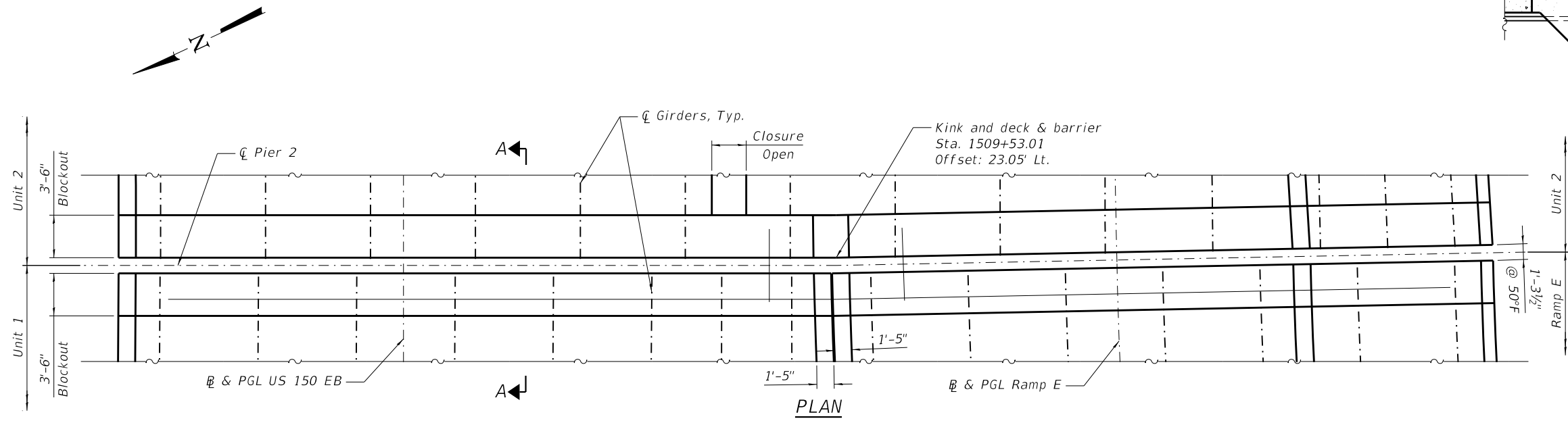
WEST OF JOINT DECK CROSS SECTION
(Looking Upstation)



SECTION A-A
Support Boxes To Be Rigidly Attached To Diaphragms and Beams By Adjustable Brackets, Stools, or Shims, typ.

* Contractor to verify number of rails, blockout dimensions and joint opening with Joint manufacturer.

** Prior to Deck Grinding.



PLAN

MODEL: Default
FILE NAME: p:\v\sp\sv\306\hanson\Projects\Documents\13\obs\13\H0106\Phase-III\CAD\Struct\Sheet\0900180-XXXX-TYLI-4520-Modular Expansion Joint - Pier 2 (1 of 2).dgn
12/12/2018 10:26:49 AM

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = RHoyos
DESIGNED - RH
CHECKED -
PLOT SCALE = 0:2.0000' = 1" / in.
DRAWN - SP
PLOT DATE = 12/12/2018

REVISOR -
REVISOR -
REVISOR -
REVISOR -

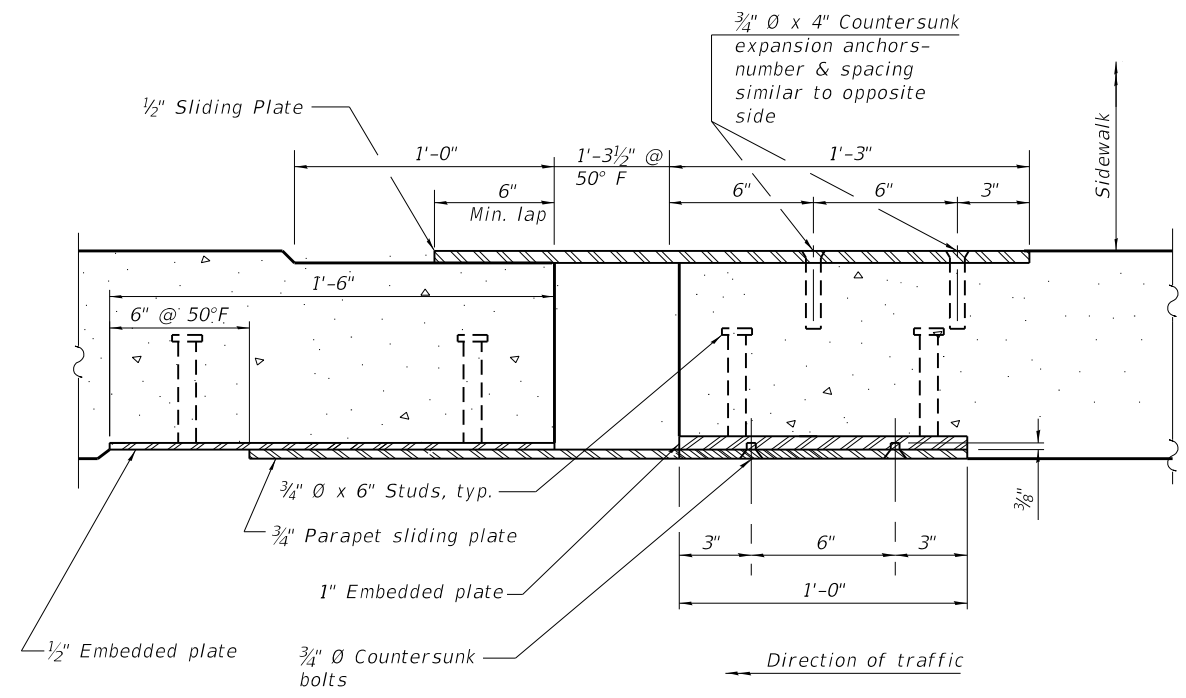
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR EXPANSION JOINT - PIER 2, 1 OF 2
STRUCTURE NO. 090-0180

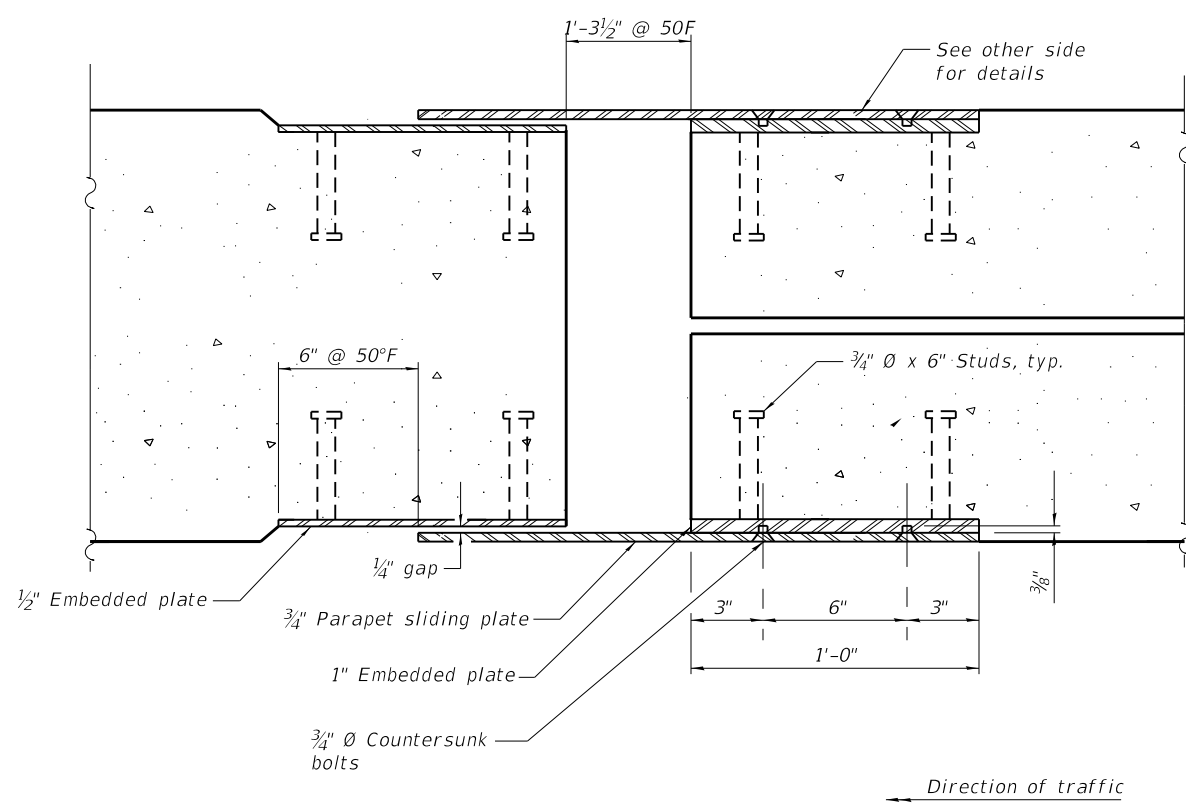
SHEET 5-160 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1066
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

MODEL: Default
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SECTION C-C



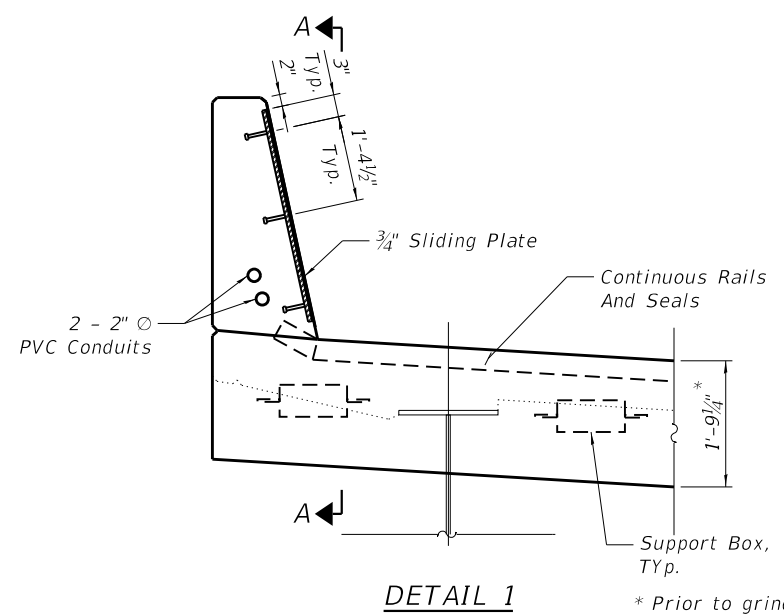
SECTION D-D

REQUIRED MOVEMENT

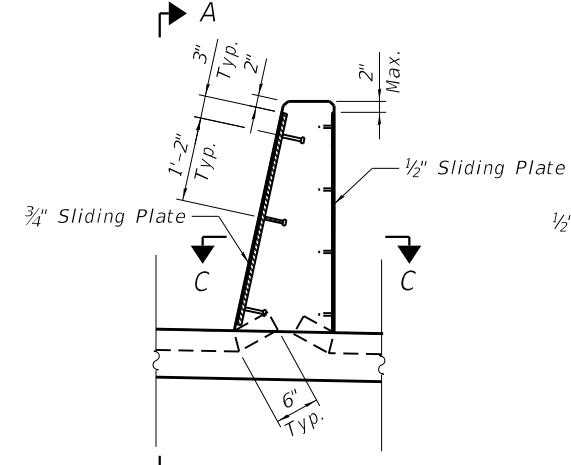
Total Longitudinal (Open/Close)	
Location	Amount
Pier 2	6 1/4"

BILL OF MATERIAL

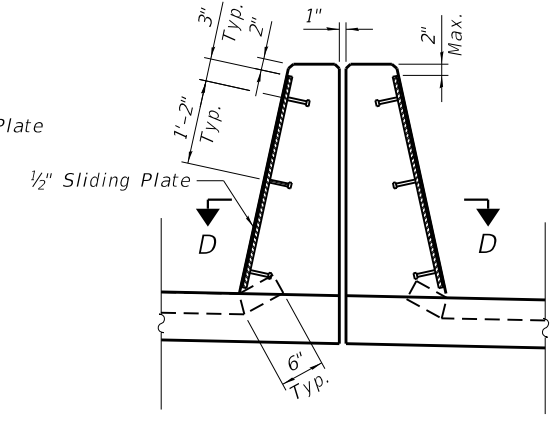
Item	Unit	Total
Modular Expansion Joint-Swivel 6"	Foot	113.0



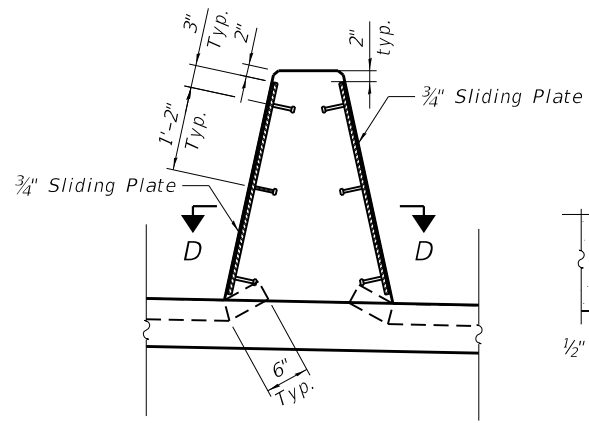
DETAIL 1



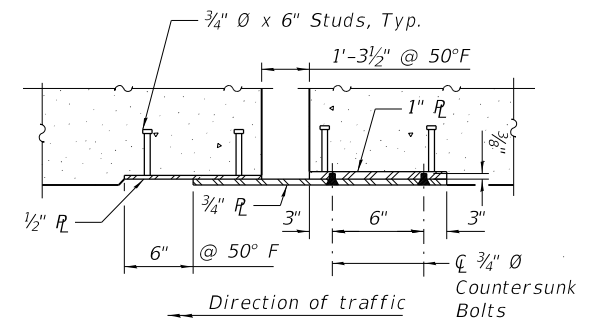
DETAIL 2



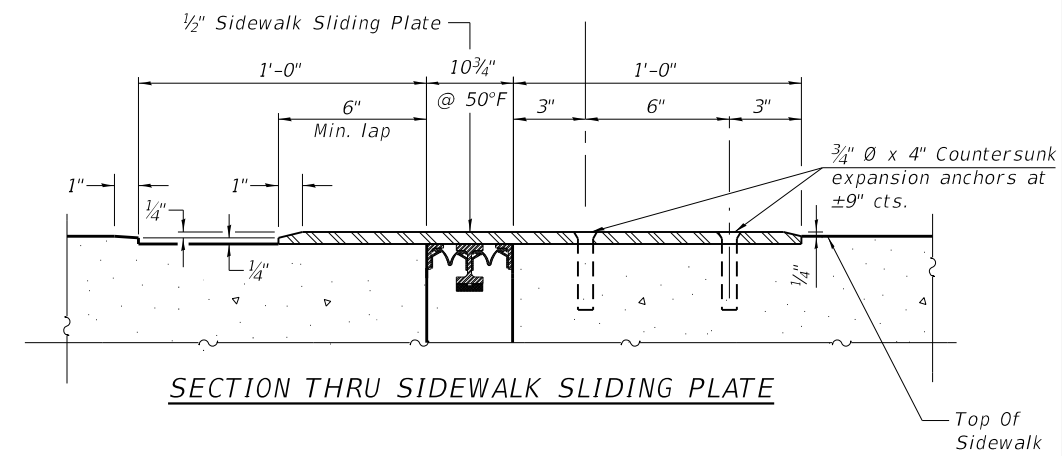
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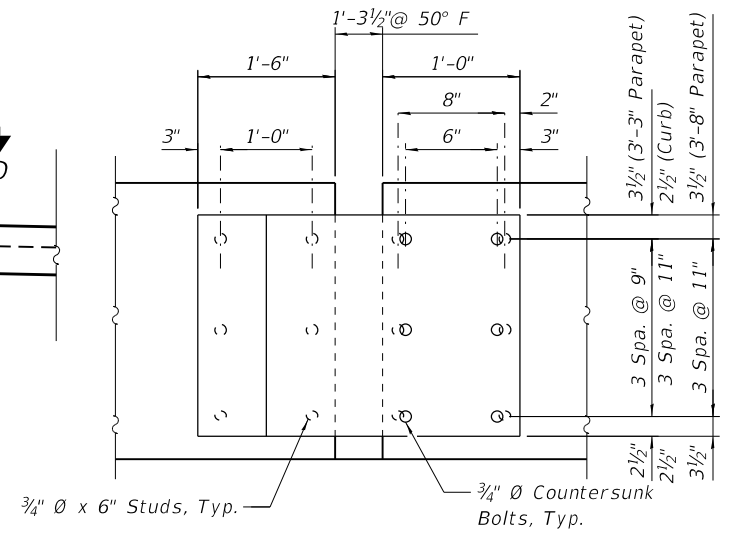
DETAIL 3



HORIZONTAL SECTION OF PARAPET & CURB AT JOINT



SECTION THRU SIDEWALK SLIDING PLATE



VIEW A-A

- Notes:**
- The structural steel plates of the barrier plate assemblies shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to AASHTO M111 after fabrication.
 - Joint opening shall be adjusted according to Article 520.04 of the Standard Specifications when the concrete blockout is cast at an ambient temperature other than 50° F.
 - Countersunk bolts shall be in accordance with ASTM A307, Grade A.
 - Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
 - The top surface of the sidewalk sliding plates shall have a raised pattern according to ASTM A786.
 - 3/4" x 6" Studs shall be granular or solid flux filled headed studs conforming to Article 1006.32 of the Standard Specifications.
 - Scissor spacer type joints are not allowed.
 - Apply anti-seize compound to all countersunk bolts and anchors in sidewalk sliding plate and parapet embedded plate.

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USER NAME = RHoyos
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 CHECKED - SP
 PLOT SCALE = 0:2.0000" = 1" / in.
 DRAWN -
 PLOT DATE = 12/12/2018
 CHECKED -
 REVISED -

DESIGNED - RH
 CHECKED - SP
 DRAWN -
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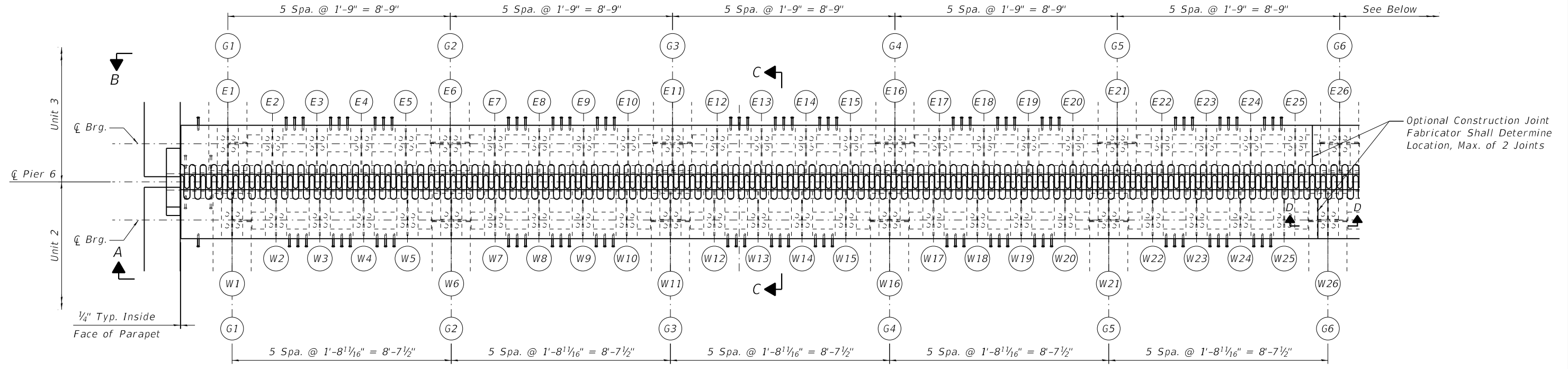
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR EXPANSION JOINT - PIER 2, 2 OF 2
 STRUCTURE NO. 090-0180

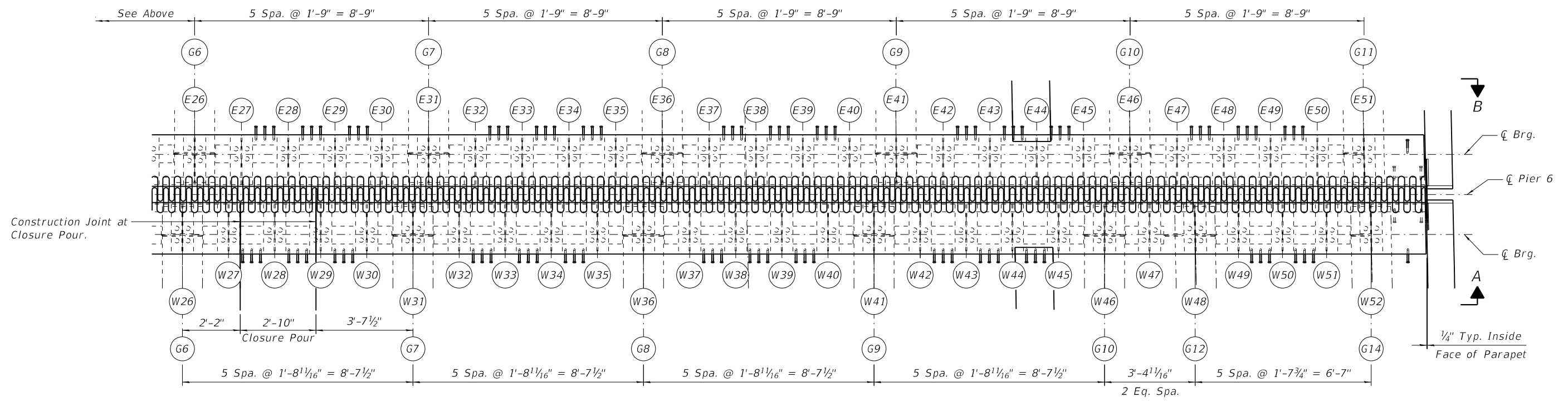
SHEET 5-161 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1067
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

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PLAN AT PIER 6



PLAN AT PIER 6

Note:
For Section D-D, see sht. S-165 of 445.

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USER NAME = RHoyos
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 CHECKED -
 PLOT SCALE = 0:2.0000 "/>

DESIGNED -
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 PLOT DATE = 12/12/2018

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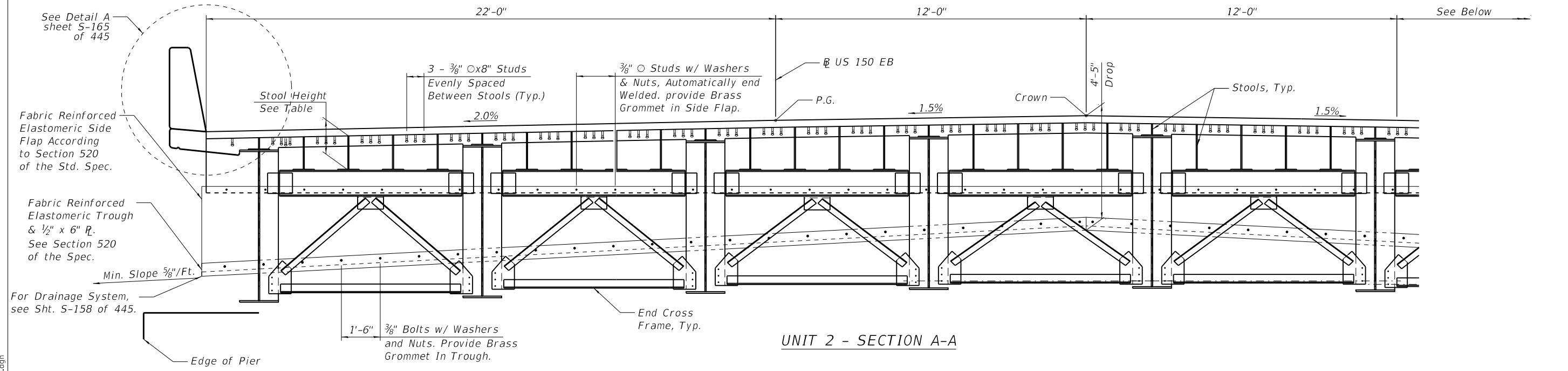
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT PLAN - PIER 6
 STRUCTURE NO. 090-0180

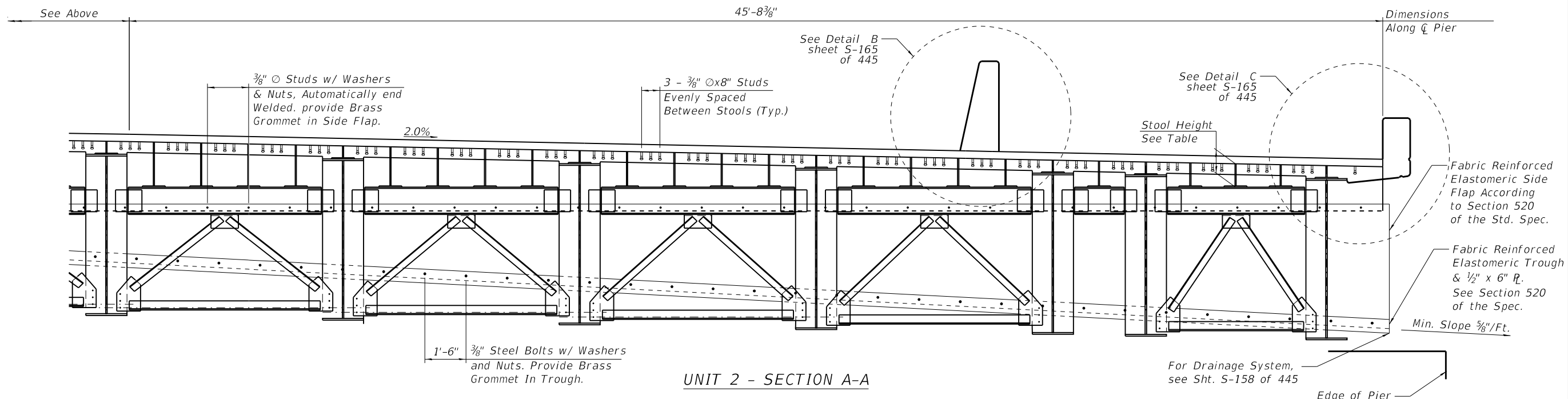
SHEET S-162 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 68B46	
		ILLINOIS	FED. AID PROJECT	NHPP-YRP3(905)

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UNIT 2 - SECTION A-A



UNIT 2 - SECTION A-A

STOOL MARK (UNIT 2)	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21
STOOL HEIGHT	6 ⁹ / ₁₆ "	16 ³ / ₈ "	16 ¹³ / ₁₆ "	17 ¹ / ₄ "	17 ³ / ₈ "	6 ⁹ / ₁₆ "	18 ¹ / ₂ "	18 ³ / ₈ "	19 ³ / ₁₆ "	19 ¹ / ₁₆ "	6 ⁹ / ₁₆ "	20 ⁹ / ₁₆ "	20 ¹³ / ₁₆ "	21 ¹ / ₄ "	21 ³ / ₁₆ "	6 ⁹ / ₁₆ "	22 ¹ / ₈ "	22 ¹ / ₁₆ "	22 ³ / ₄ "	22 ¹³ / ₁₆ "	6 ⁹ / ₁₆ "

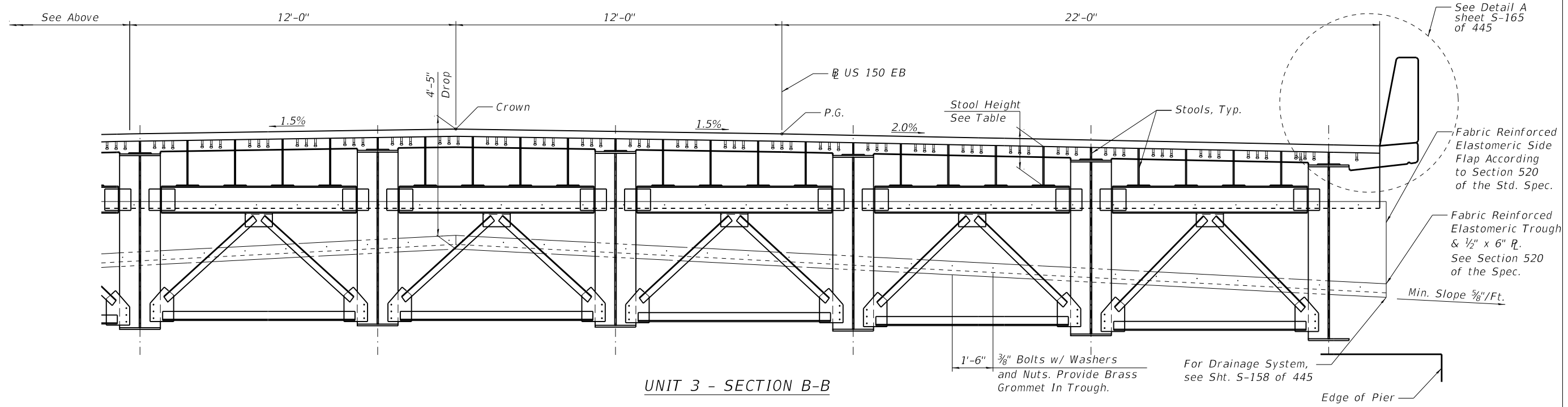
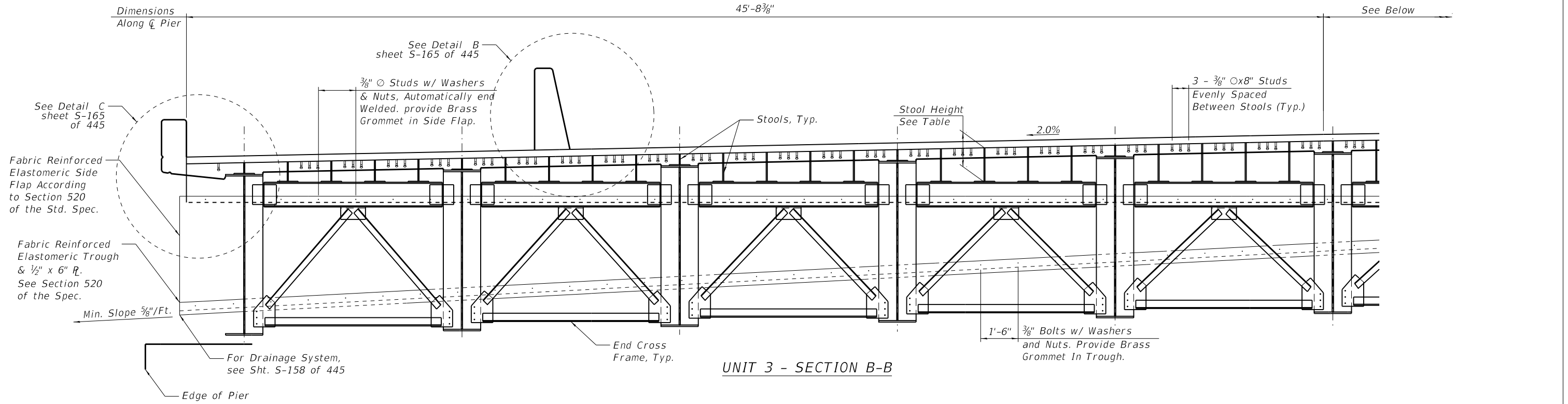
STOOL MARK (UNIT 2)	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41	W42
STOOL HEIGHT	22 ³ / ₁₆ "	21 ⁷ / ₈ "	21 ⁹ / ₁₆ "	21 ¹ / ₄ "	6 ⁹ / ₁₆ "	20 ⁹ / ₁₆ "	20 ¹ / ₈ "	19 ³ / ₄ "	19 ⁵ / ₁₆ "	6 ⁹ / ₁₆ "	18 ¹ / ₂ "	18 ¹ / ₁₆ "	17 ¹ / ₁₆ "	17 ¹ / ₄ "	6 ⁹ / ₁₆ "	16 ⁷ / ₁₆ "	16	15 ⁵ / ₈ "	15 ³ / ₁₆ "	6 ⁹ / ₁₆ "	14 ³ / ₈ "

STOOL MARK (UNIT 2)	W43	W44	W45	W46	W47	W48	W49	W50	W51	W52
STOOL HEIGHT	13 ¹ / ₁₆ "	13 ¹ / ₂ "	12 ¹ / ₈ "	6 ⁹ / ₁₆ "	11 ³ / ₁₆ "	6 ⁹ / ₁₆ "	11 ¹ / ₂ "	11 ¹ / ₈ "	10 ¹ / ₁₆ "	6 ⁹ / ₁₆ "

- NOTES:
- Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
 - Finger plates and sliding plates shall conform to the requirements of AASHTO M270, Grade 50.
 - All steel components of the expansion joint including hardware assembled with the trough system and sliding plates shall be galvanized after fabrication according to Section 520.03 of the Standard Specifications.

TYLIN INTERNATIONAL 200 S. WACKER DR. SUITE 1400 CHICAGO, IL 60606 TEL: 312-777-2900	USER NAME = RHoyos	DESIGNED - RH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FINGER PLATE EXP. JOINT ELEVATION - PIER 6, 1 OF 2 STRUCTURE NO. 090-0180	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 0:2.0000" = 1" / in.	CHECKED - SP	REVISED -			317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1069
	PLOT DATE = 12/12/2018	CHECKED -	REVISED -			CONTRACT NO. 68B46		SHEET 5-163 OF 445 SHEETS		ILLINOIS FED. AID PROJECT NHPP-YRP3(905)

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STOOL MARK (UNIT 3)	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20	E21
STOOL HEIGHT	6 ⁹ / ₁₆ "	16 ³ / ₁₆ "	16 ³ / ₄ "	17 ¹ / ₈ "	17 ⁹ / ₁₆ "	6 ⁹ / ₁₆ "	18 ³ / ₈ "	18 ¹ / ₁₆ "	18 ³ / ₈ "	19 ¹ / ₁₆ "	6 ⁹ / ₁₆ "	20 ¹ / ₂ "	20 ⁷ / ₁₆ "	20 ³ / ₁₆ "	21 ¹ / ₂ "	6 ⁹ / ₁₆ "	21 ¹ / ₈ "	22 ⁷ / ₁₆ "	22 ³ / ₄ "	22 ¹ / ₁₆ "	6 ⁹ / ₁₆ "

STOOL MARK (UNIT 3)	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32	E33	E34	E35	E36	E37	E38	E39	E40	E41	E42
STOOL HEIGHT	22 ¹ / ₁₆ "	21 ³ / ₄ "	21 ¹ / ₁₆ "	20 ¹ / ₈ "	6 ⁹ / ₁₆ "	20 ³ / ₈ "	19 ⁵ / ₁₆ "	19 ¹ / ₁₆ "	19 ¹ / ₈ "	6 ⁹ / ₁₆ "	18 ⁷ / ₁₆ "	17 ⁷ / ₈ "	17 ¹ / ₁₆ "	17"	6 ⁹ / ₁₆ "	16 ³ / ₁₆ "	15 ³ / ₄ "	15 ³ / ₈ "	14 ¹ / ₁₆ "	6 ⁹ / ₁₆ "	14 ¹ / ₁₆ "

STOOL MARK (UNIT 3)	E43	E44	E45	E46	E47	E48	E49	E50	E51
STOOL HEIGHT	13 ¹ / ₁₆ "	13 ¹ / ₄ "	12 ³ / ₁₆ "	6 ⁹ / ₁₆ "	12"	11 ¹ / ₁₆ "	11 ¹ / ₈ "	10 ³ / ₄ "	6 ⁹ / ₁₆ "

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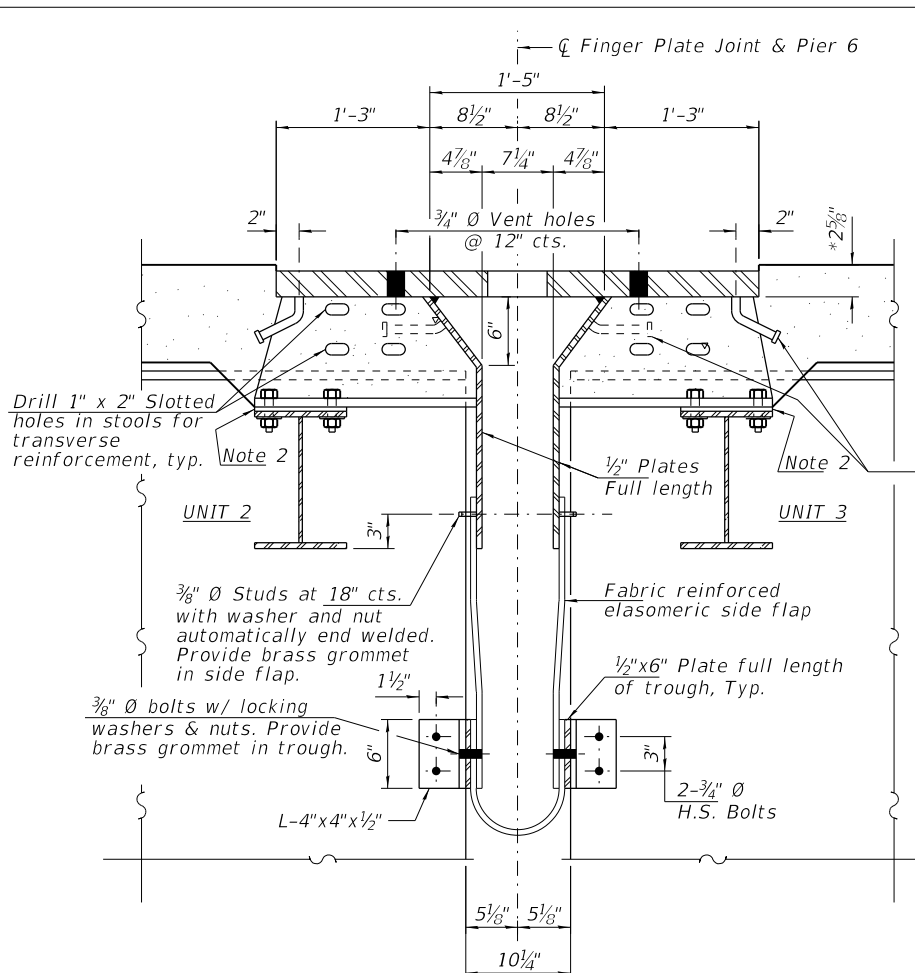
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

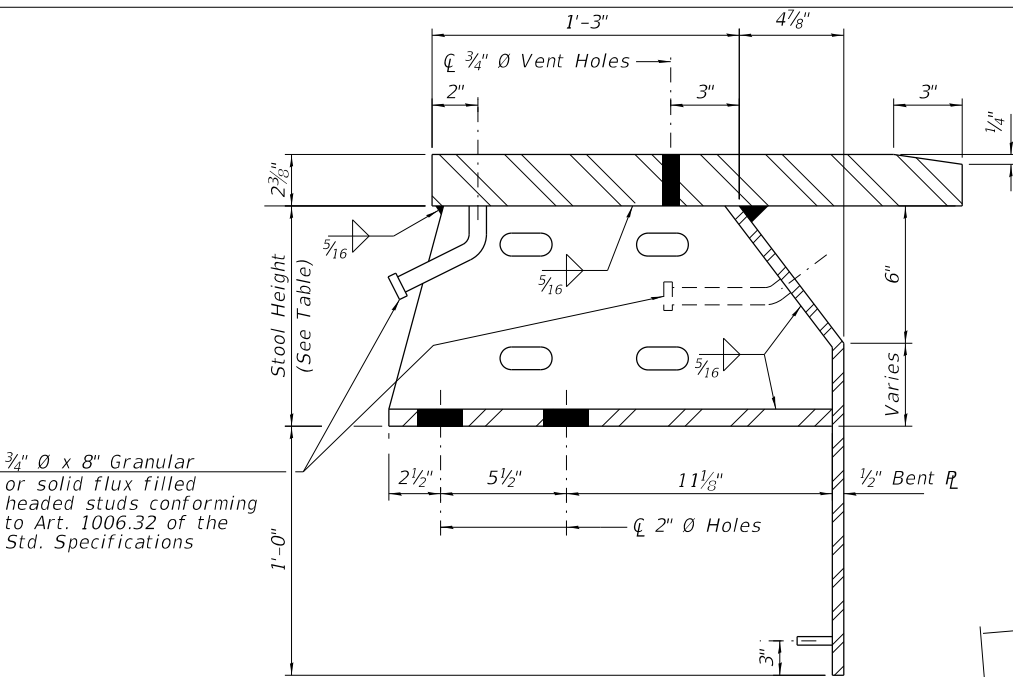
FINGER PLATE EXP. JOINT ELEVATION - PIER 6, 2 OF 2
 STRUCTURE NO. 090-0180

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1070
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

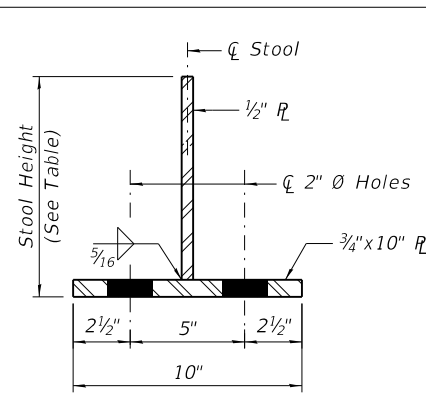
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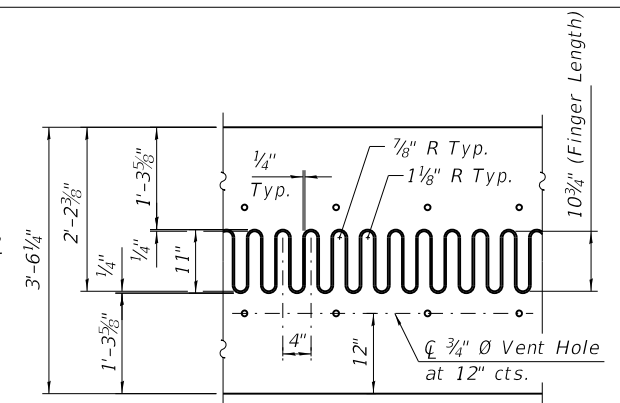
SECTION C-C
(Horizontal dimensions are at 50° F.)



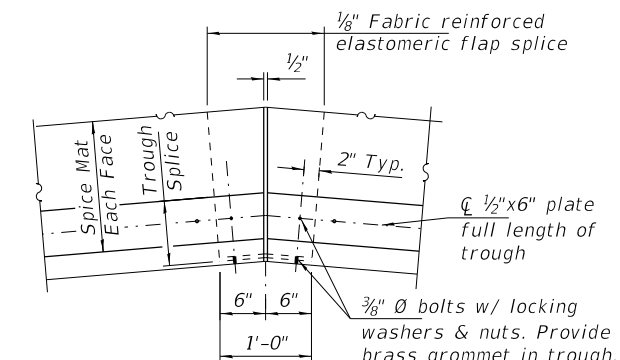
STOOL DETAIL



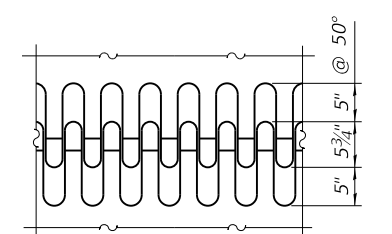
SECTION THRU STOOL



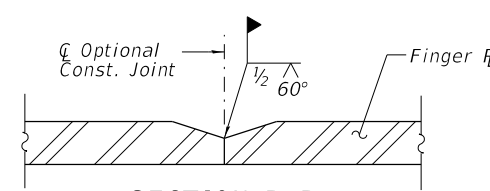
FLAME CUTTING DIAGRAM
Cut from $R\ 2\frac{3}{8}'' \times 3'-6\frac{1}{4}'' \times 91'-7\frac{7}{8}''$



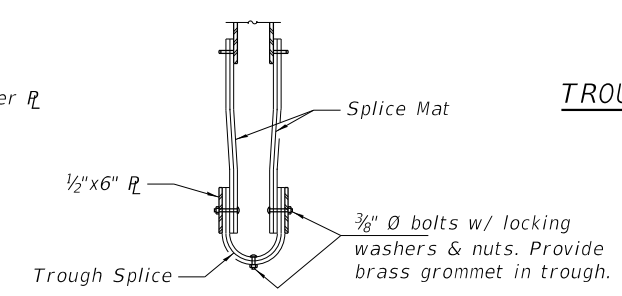
TROUGH SPLICE DETAIL



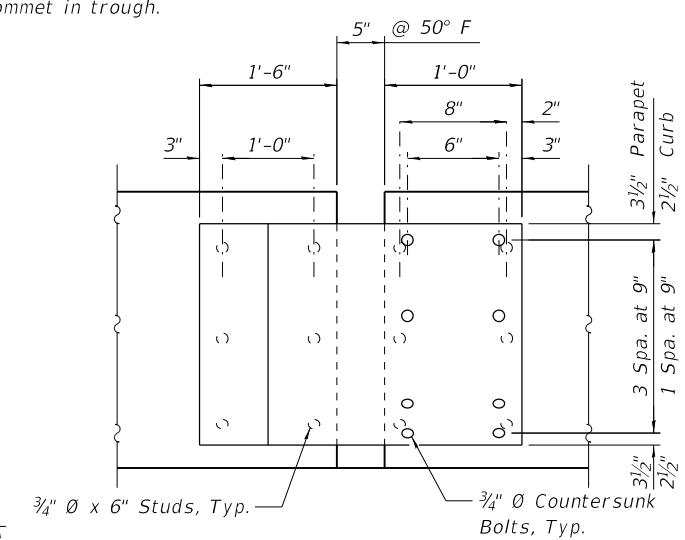
FINGER PLATE SETTING DIAGRAM



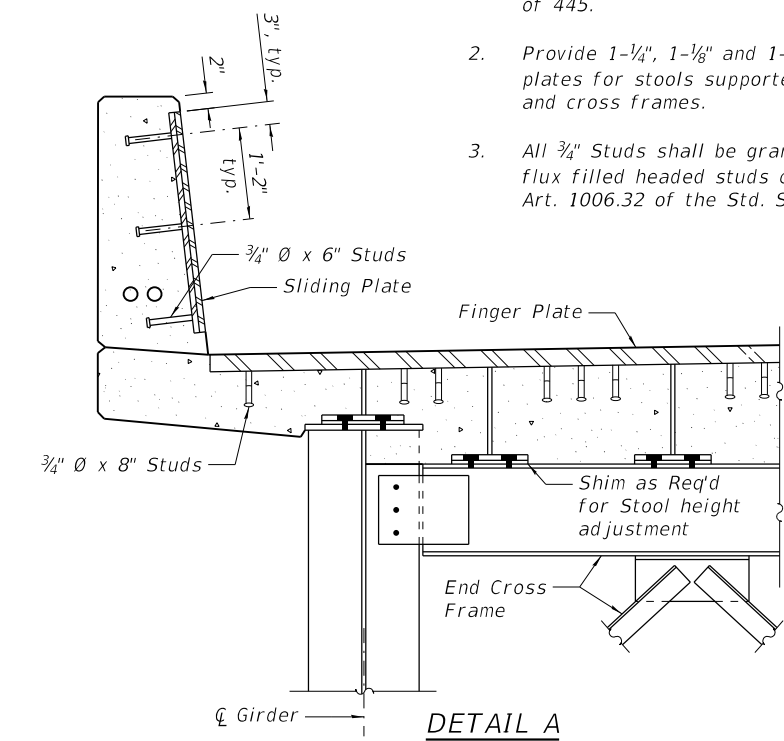
SECTION D-D



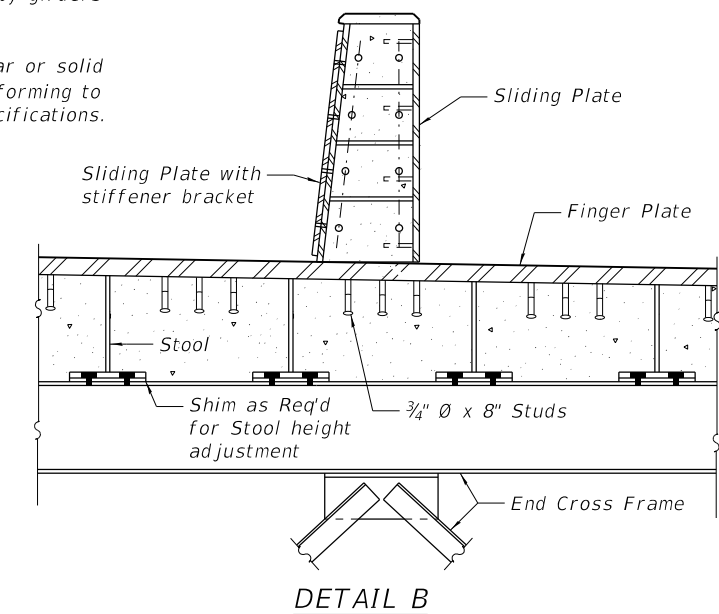
SECTION THRU TROUGH SPLICE



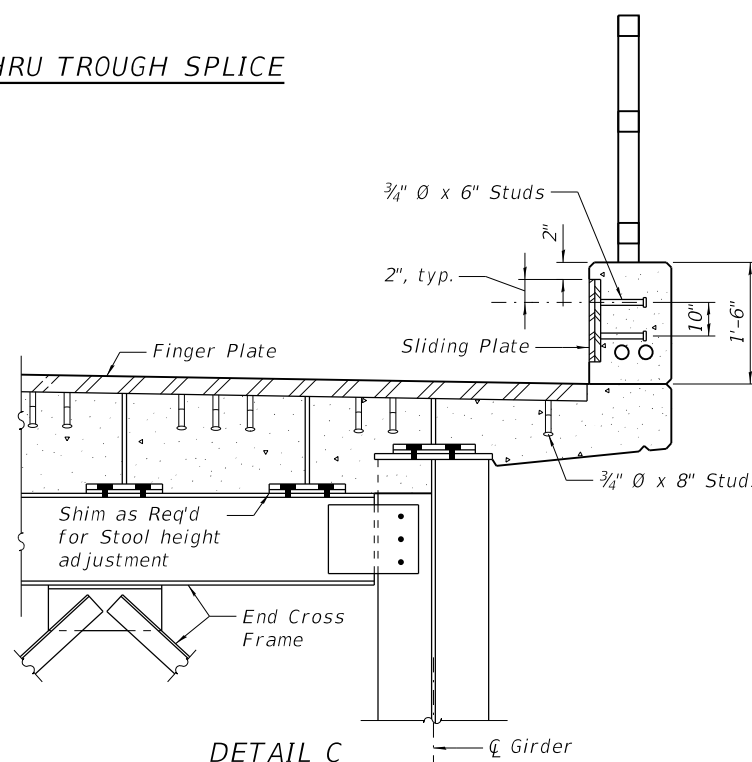
INSIDE ELEVATION OF PARAPET & CURB AT JOINT



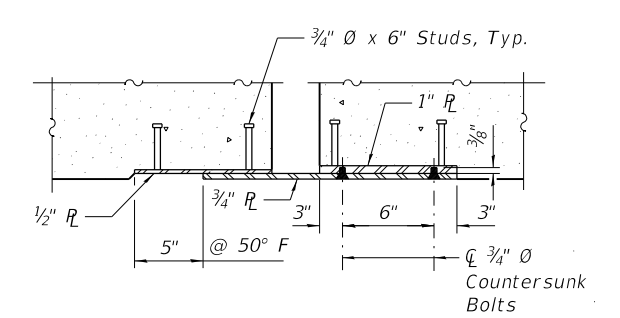
DETAIL A



DETAIL B



DETAIL C



HORIZONTAL SECTION OF PARAPET AT JOINT

- NOTES:**
1. Work this sheet with sheets S-162 thru S-166 of 445.
 2. Provide 1-1/4 inch, 1-1/8 inch and 1-1/16 inch shim plates for stools supported by girders and cross frames.
 3. All 3/4 inch Studs shall be granular or solid flux filled headed studs conforming to Art. 1006.32 of the Std. Specifications.

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USER NAME = RHoyos
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 PLOT SCALE = 0:2.0000 "/>

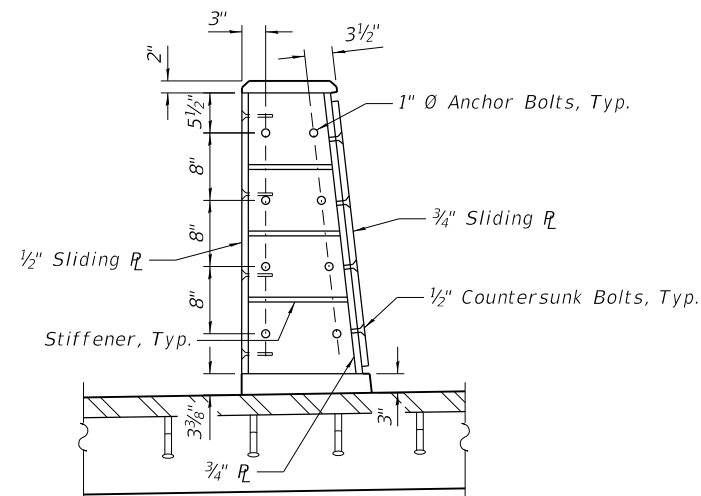
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 CHECKED - SP
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 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

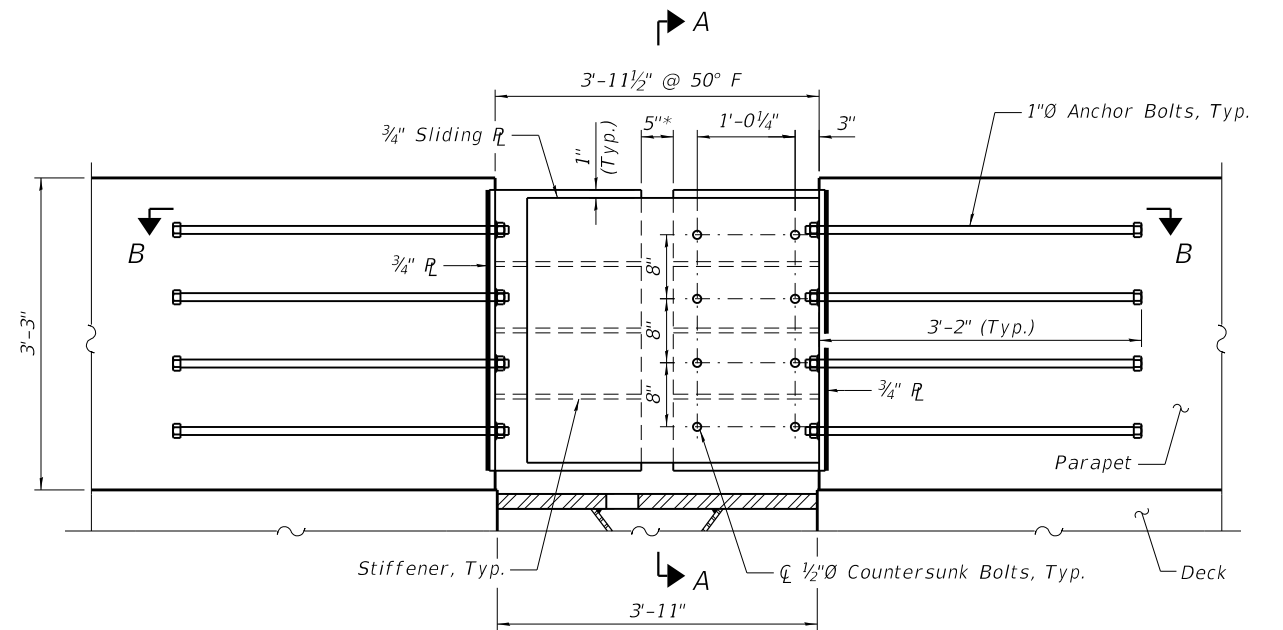
FINGER PLATE EXP. JOINT DETAILS - PIER 6, 1 OF 2
 STRUCTURE NO. 090-0180

SHEET 5-165 OF 445 SHEETS

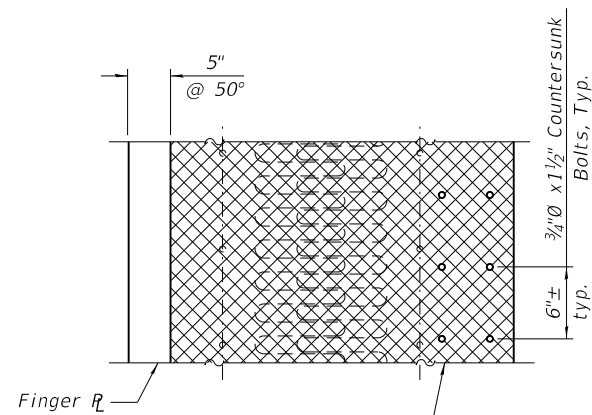
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1071
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT NHPP-YRP3(905)		



SECTION A-A

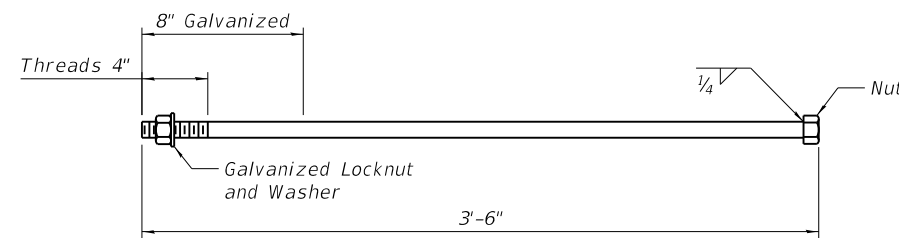


FRONT FACE OF SOUTH PARAPET AT JOINT
Parapet Railing omitted for clarity

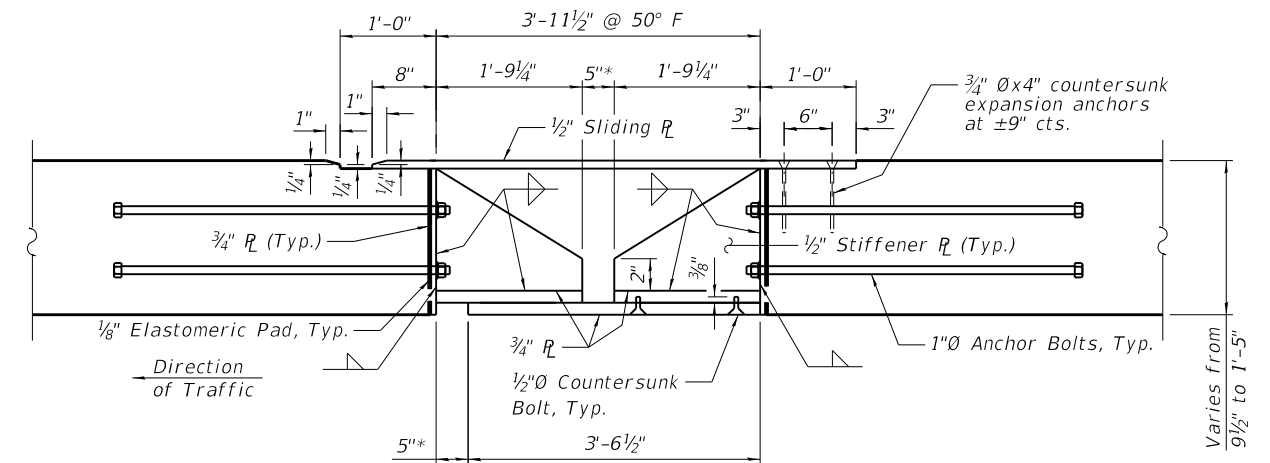


The top surface of Shared Use Path shall have a raised pattern according to ASTM A786

SIDEWALK SLIDING COVER R PLAN



1" Ø ANCHOR BOLT



SECTION B-B
* at 50° F

BILL OF MATERIAL

Item	Unit	Total
Finger Plate Expansion Joint, 5"	Foot	92

Notes:

- The structural steel plates of the barrier sliding plate assemblies and stiffener brackets shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to AASHTO M111 after fabrication.
- Countersunk bolts shall be in accordance with ASTM A307, Grade A.
- Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
- Cost for furnishing and installing barrier sliding plate assemblies and stiffener brackets shall be included in the cost of Finger Plate Expansion Joint.
- Apply anti-seize compound to all countersunk bolts and anchors in sidewalk sliding plate and parapet embedded plate.

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12/12/2018 10:27:33 AM

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TEL: 312-777-2900

USER NAME = RHoyos
DESIGNED - RH
CHECKED - SP
PLOT SCALE = 0:2.0000 " = 1" / in.
DRAWN -
PLOT DATE = 12/12/2018
CHECKED -
REVISED -

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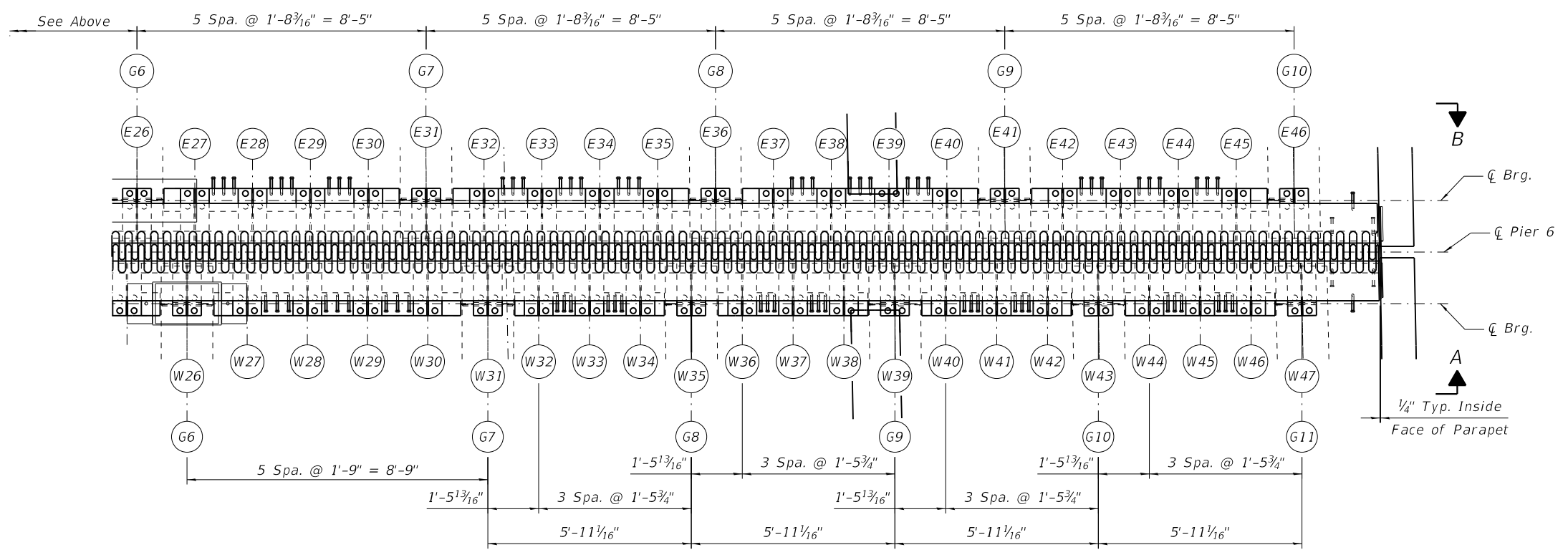
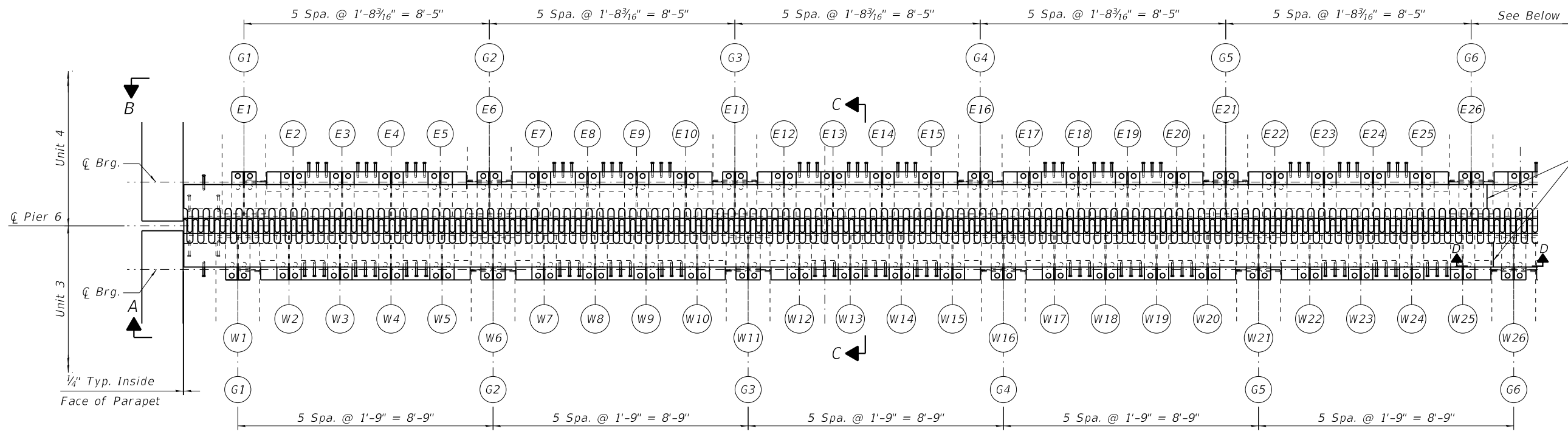
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXP. JOINT DETAILS - PIER 6, 2 OF 2
STRUCTURE NO. 090-0180

SHEET 5-166 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR]BR	PEO/TAZ	1361	1072
ILLINOIS			CONTRACT NO. 68B46	
FED. AID PROJECT			NHPP-YRP3(905)	

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Note:
 For Section D-D, see sht. S-170 of 445.

TYLIN INTERNATIONAL
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 SUITE 1400
 CHICAGO, IL 60606
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USER NAME = RHoyos
 DESIGNED -
 CHECKED -
 PLOT SCALE = 0:2.0000 " = 1" / in.
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 REVISED -

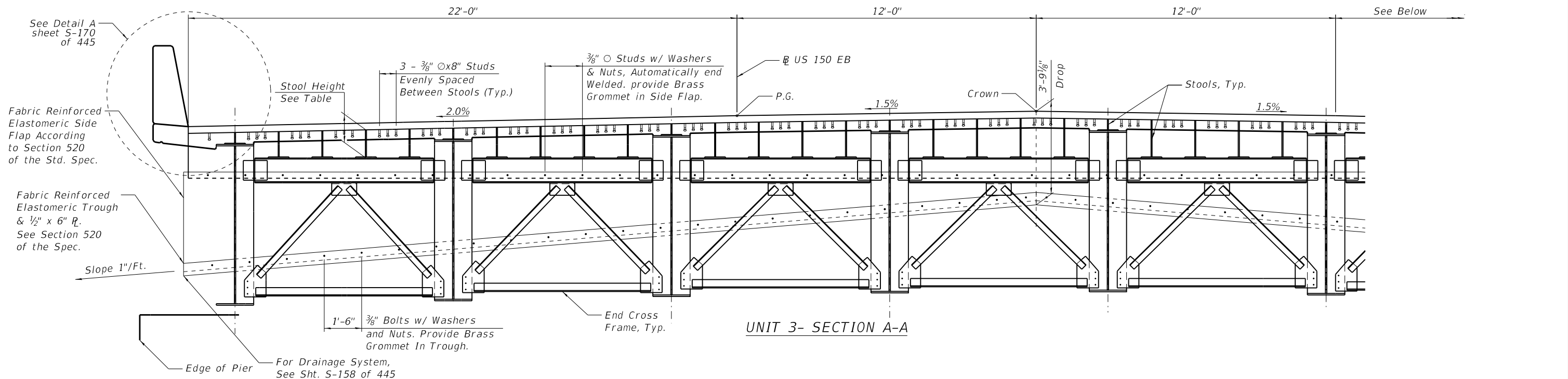
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT PLAN - PIER 9
 STRUCTURE NO. 090-0180

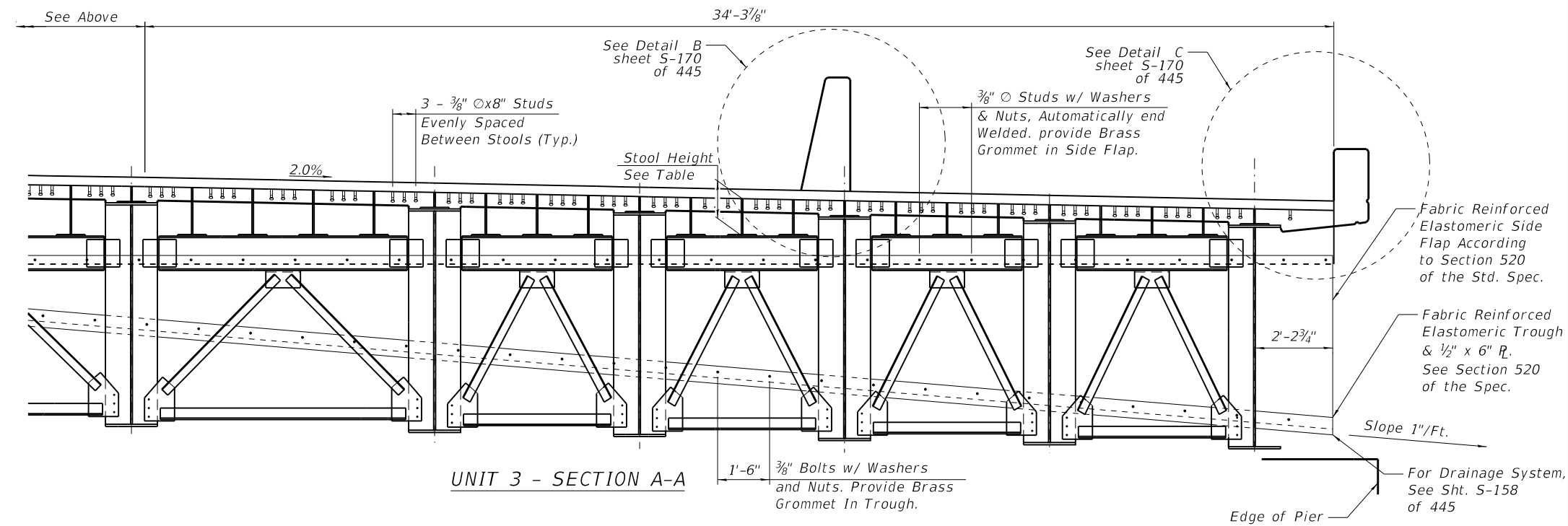
SHEET S-167 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

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UNIT 3 - SECTION A-A



UNIT 3 - SECTION A-A

- NOTES:
1. Finger plate expansion joints shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
 2. Finger plates and sliding plates shall conform to the requirements of AASHTO M270, Grade 50.
 3. All steel components of the expansion joint including hardware assembled with the trough system and sliding plates shall be galvanized after fabrication according to Section 520.03 of the Standard Specifications.

STOOL MARK (UNIT 3)	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21
STOOL HEIGHT	6 ¹ / ₁₆ "	13 ¹ / ₁₆ "	14 ³ / ₁₆ "	14 ³ / ₁₆ "	15 ¹ / ₄ "	6 ¹ / ₁₆ "	16 ¹ / ₁₆ "	16 ¹ / ₂ "	16 ⁷ / ₈ "	17 ³ / ₁₆ "	6 ¹ / ₁₆ "	18 ³ / ₁₆ "	18 ³ / ₁₆ "	18 ⁷ / ₈ "	19 ³ / ₁₆ "	6 ¹ / ₁₆ "	19 ³ / ₁₆ "	20 ¹ / ₈ "	20 ⁷ / ₁₆ "	20 ³ / ₁₆ "	6 ¹ / ₁₆ "

STOOL MARK (UNIT 3)	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41	W42
STOOL HEIGHT	19 ¹ / ₁₆ "	19 ³ / ₁₆ "	19 ¹ / ₁₆ "	18 ³ / ₄ "	6 ¹ / ₁₆ "	18 ¹ / ₁₆ "	17 ⁷ / ₈ "	17 ³ / ₁₆ "	16 ¹ / ₁₆ "	6 ¹ / ₁₆ "	16"	15 ⁵ / ₈ "	15 ⁵ / ₁₆ "	6 ¹ / ₁₆ "	14 ⁹ / ₁₆ "	14 ¹ / ₄ "	13 ⁷ / ₈ "	6 ¹ / ₁₆ "	13 ³ / ₁₆ "	12 ³ / ₁₆ "	12 ¹ / ₁₆ "

STOOL MARK (UNIT 3)	W43	W44	W45	W46	W47
STOOL HEIGHT	6 ¹ / ₁₆ "	11 ³ / ₄ "	11 ³ / ₈ "	11 ¹ / ₁₆ "	6 ¹ / ₁₆ "

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USER NAME = RHoyos	DESIGNED - RH	REVISIONS
PLOT SCALE = 0:2.0000' = 1" / in.	CHECKED - SP	REVISIONS
PLOT DATE = 12/12/2018	DRAWN -	REVISIONS
	CHECKED -	REVISIONS

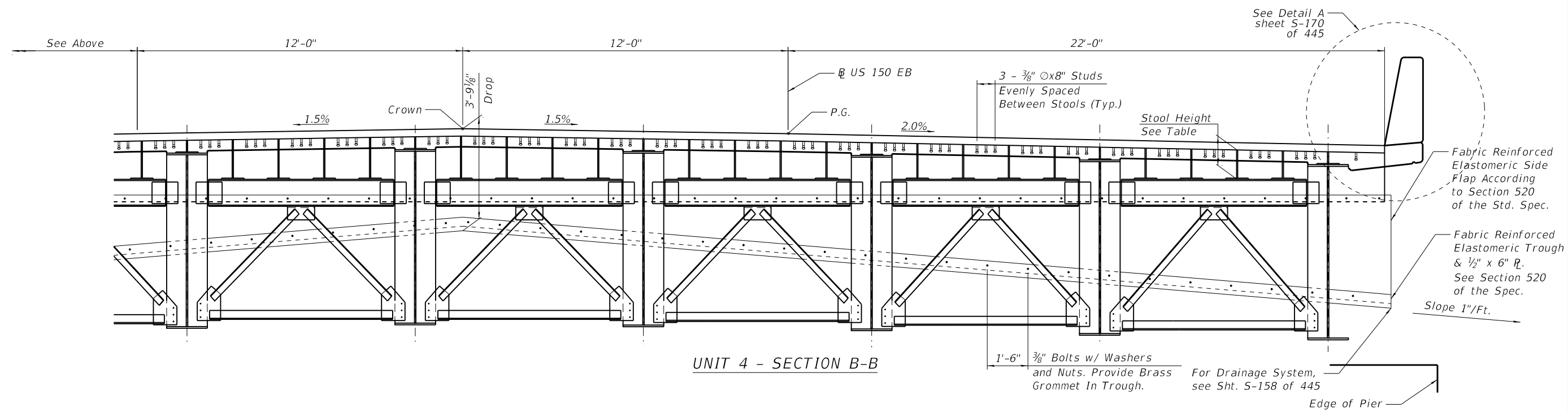
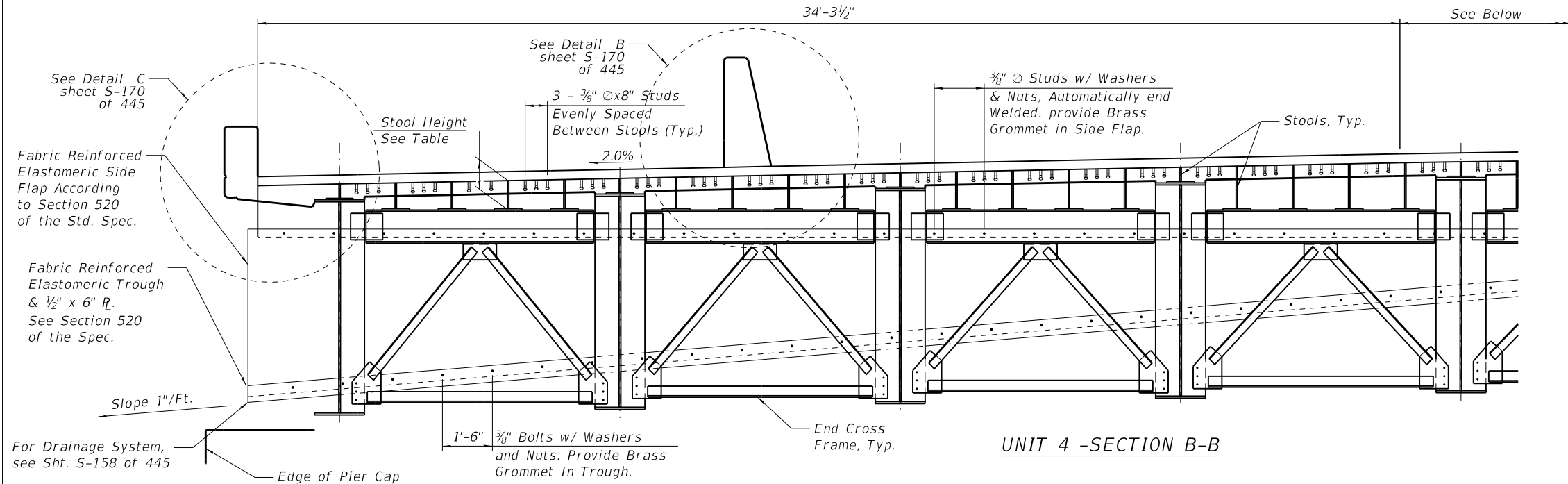
STATE OF ILLINOIS
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FINGER PLATE EXP. JOINT ELEVATION - PIER 9, 1 OF 2
 STRUCTURE NO. 090-0180

SHEET 5-168 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1074
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

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STOOL MARK (UNIT 4)	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20	E21
STOOL HEIGHT	6 1/16"	13 1/16"	14 3/8"	14 3/4"	15 1/8"	6 1/16"	15 1/16"	16 3/8"	16 3/4"	17 3/16"	6 1/16"	18"	18 3/8"	18 1/16"	19"	6 1/16"	19 1/16"	19 7/8"	20 3/16"	20 7/16"	6 1/16"

STOOL MARK (UNIT 4)	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32	E33	E34	E35	E36	E37	E38	E39	E40	E41	E42
STOOL HEIGHT	19 7/8"	19 9/16"	19 1/4"	18 1/16"	6 1/16"	18 3/8"	17 1/16"	17 7/16"	17 1/8"	6 1/16"	16 3/16"	15 1/16"	15 1/2"	15 1/8"	6 1/16"	14 5/16"	13 1/16"	13 1/2"	13 3/8"	6 1/16"	12 5/16"

STOOL MARK (UNIT 4)	E43	E44	E45	E46
STOOL HEIGHT	11 7/8"	11 1/2"	11 1/16"	6 1/16"

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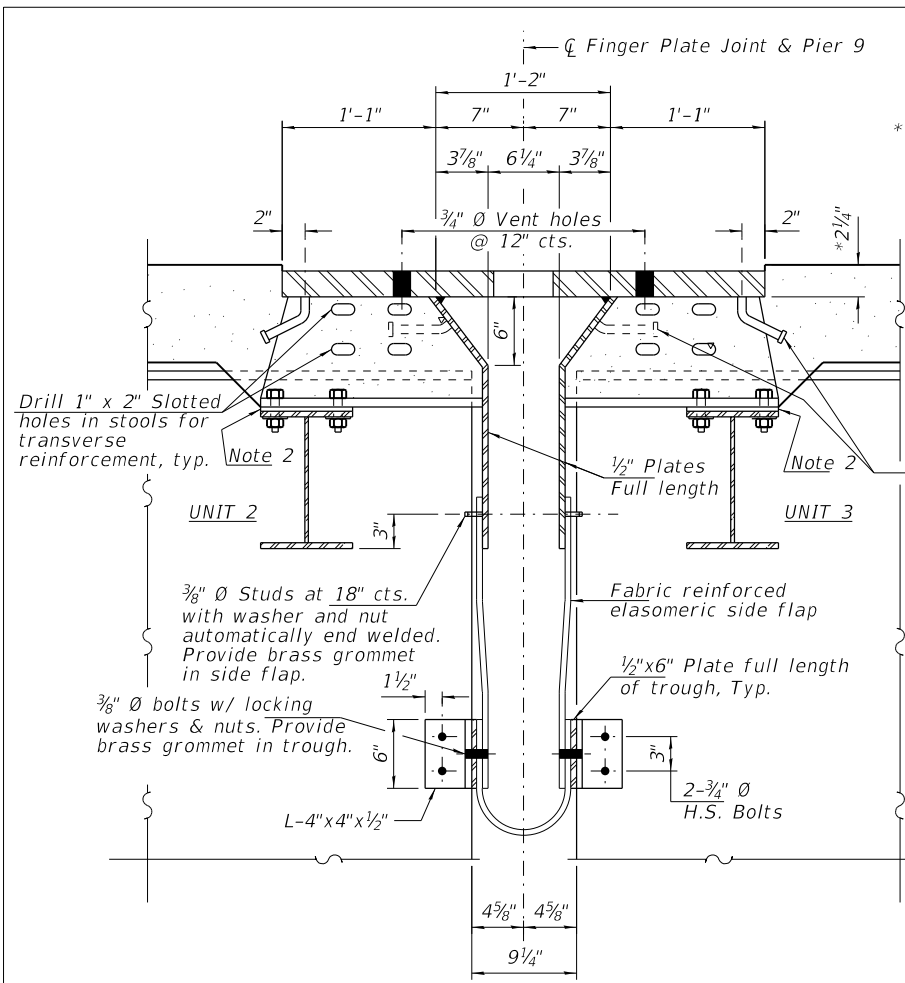
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PLOT SCALE = 0:2.0000" = 1" / in.	CHECKED - SP	REVISED -
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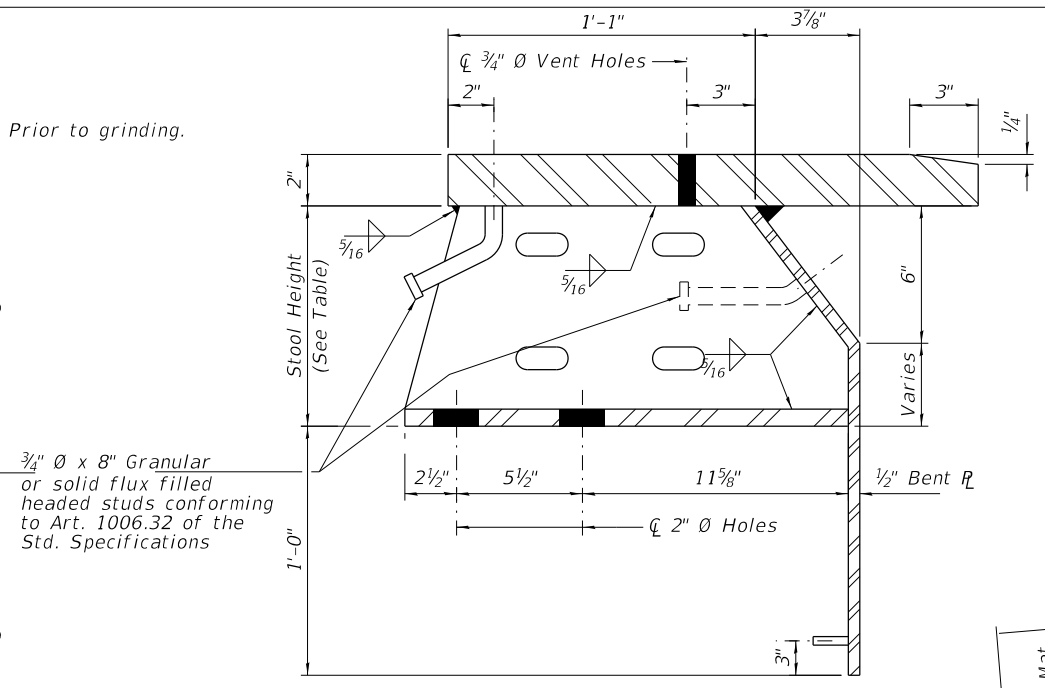
FINGER PLATE EXP. JOINT ELEVATION - PIER 9, 2 OF 2
 STRUCTURE NO. 090-0180

SHEET 5-169 OF 445 SHEETS

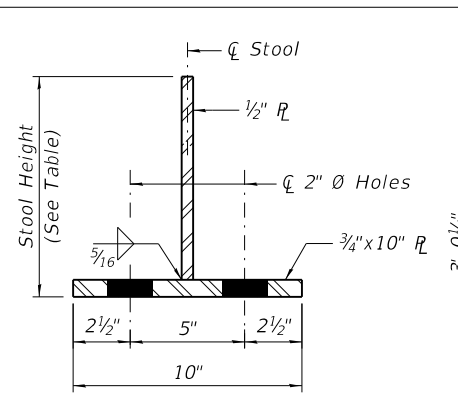
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317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1075
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



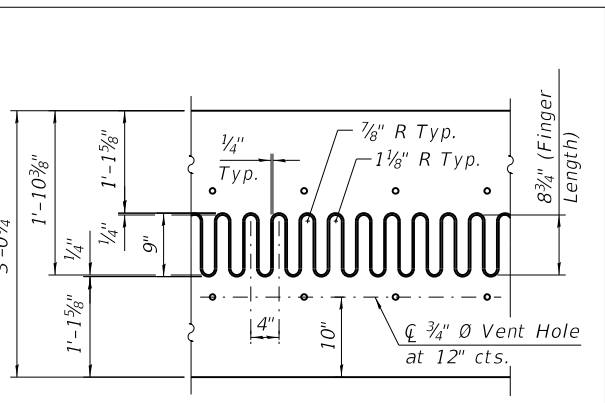
SECTION C-C
(Horizontal dimensions are at 50° F.)



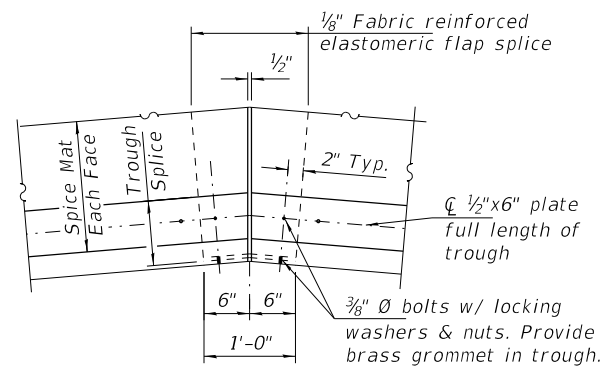
STOOL DETAIL



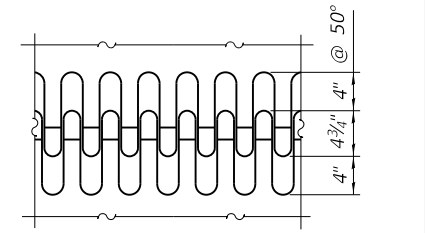
SECTION THRU STOOL



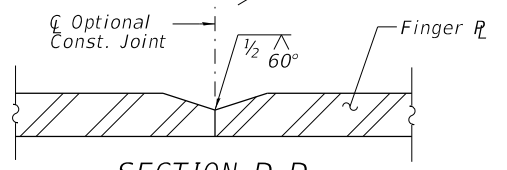
FLAME CUTTING DIAGRAM
Cut from R 2" x 3'-20 1/4" x 80'-3 3/8"



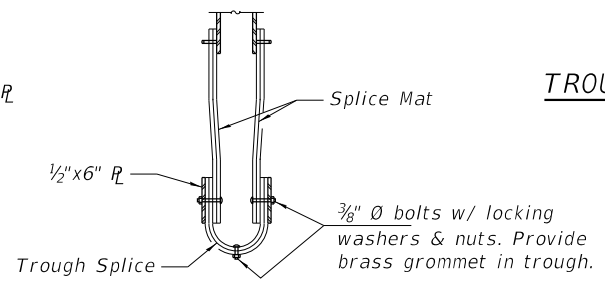
TROUGH SPLICE DETAIL



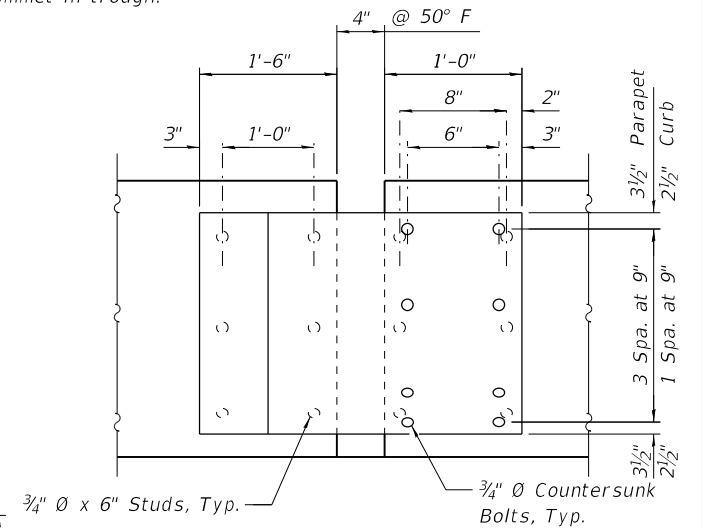
FINGER PLATE SETTING DIAGRAM



SECTION D-D

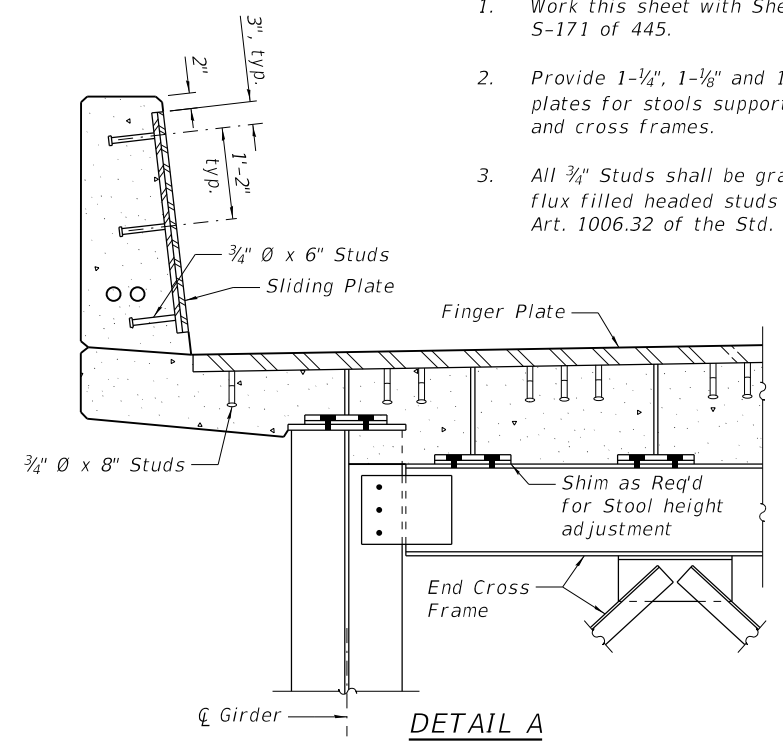


SECTION THRU TROUGH SPLICE

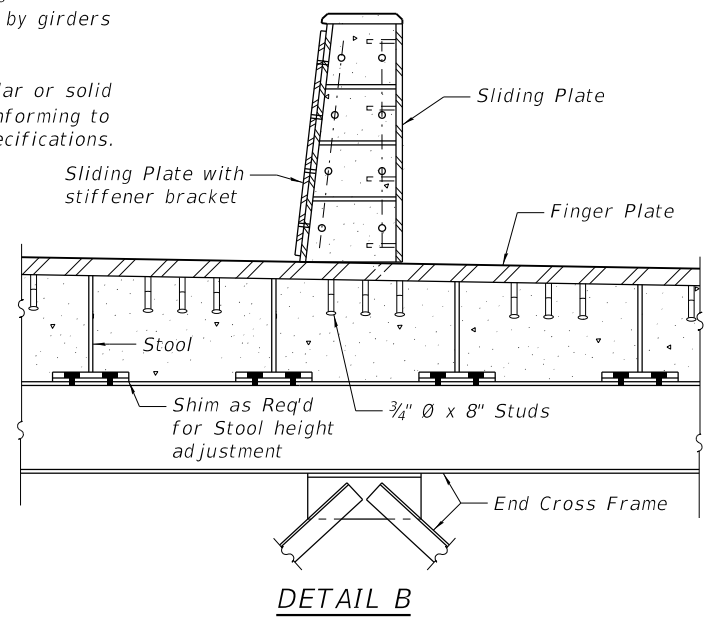


INSIDE ELEVATION OF PARAPET & CURB AT JOINT

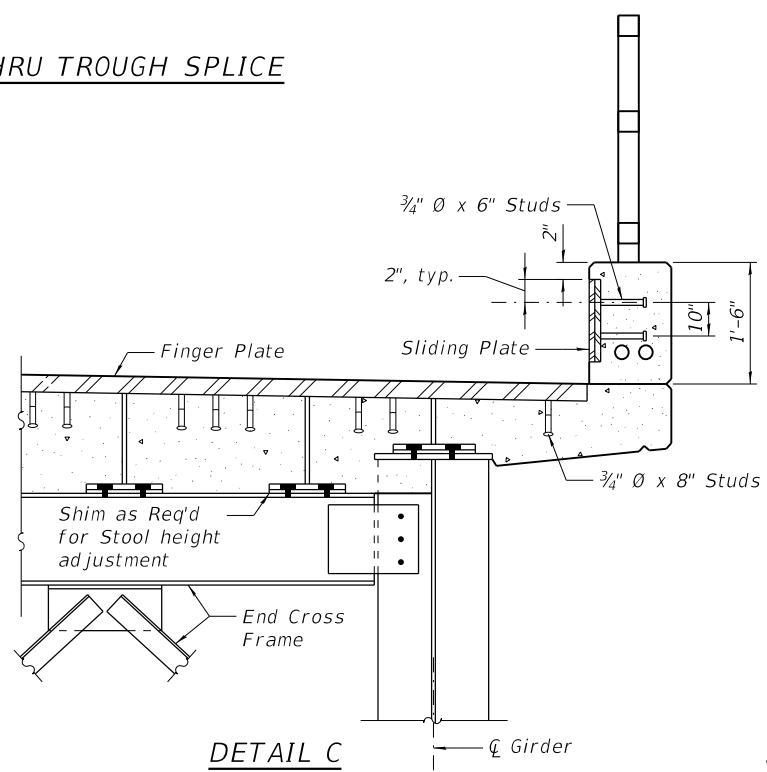
- NOTES:**
1. Work this sheet with Sheets S-167 thru S-171 of 445.
 2. Provide 1-1/4", 1-1/8" and 1-1/16" shim plates for stools supported by girders and cross frames.
 3. All 3/4" Studs shall be granular or solid flux filled headed studs conforming to Art. 1006.32 of the Std. Specifications.



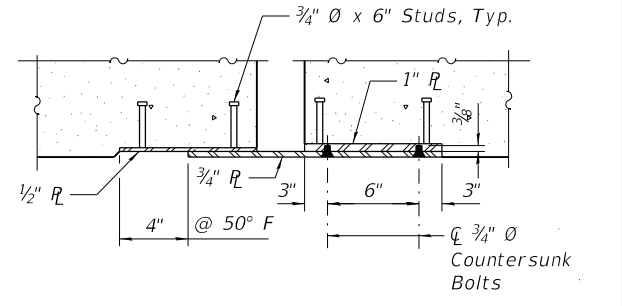
DETAIL A



DETAIL B



DETAIL C



HORIZONTAL SECTION OF PARAPET AT JOINT

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USER NAME = RHoyos
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CHECKED - SP
PLOT SCALE = 0:2.0000 " = 1" / in.
DRAWN -
PLOT DATE = 12/12/2018

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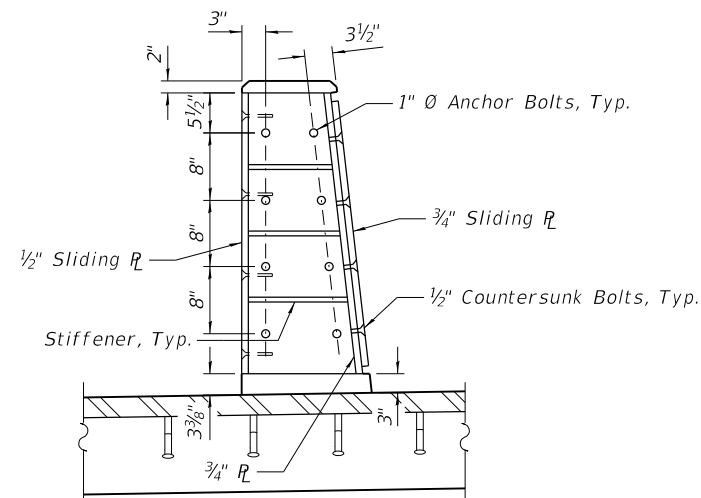
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REVISED -

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DEPARTMENT OF TRANSPORTATION**

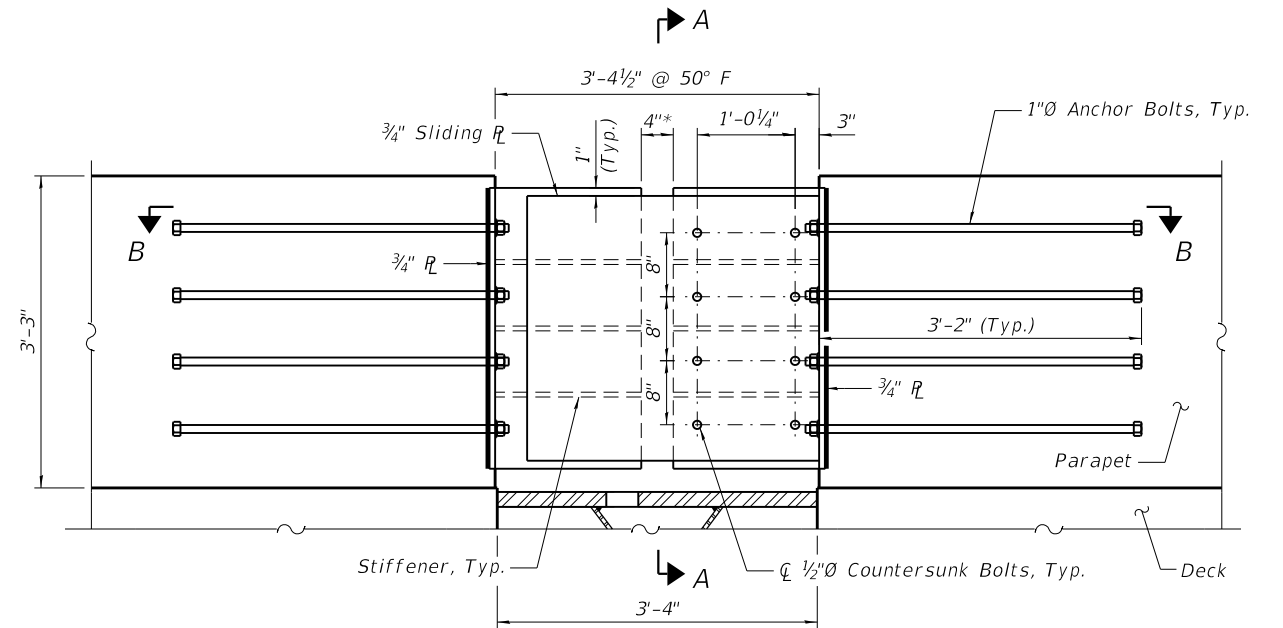
FINGER PLATE EXP. JOINT DETAILS - PIER 9, 1 OF 2
STRUCTURE NO. 090-0180

SHEET S-170 OF 445 SHEETS

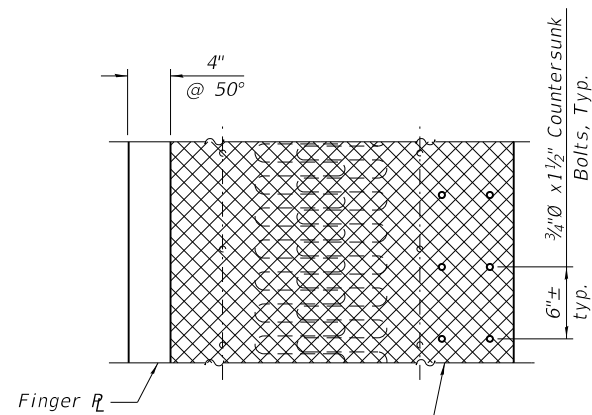
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1076
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT NHPP-RP3(905)		



SECTION A-A

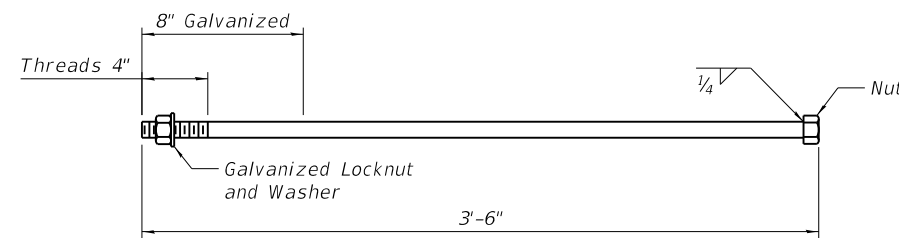


FRONT FACE OF SOUTH PARAPET AT JOINT
Parapet Railing omitted for clarity

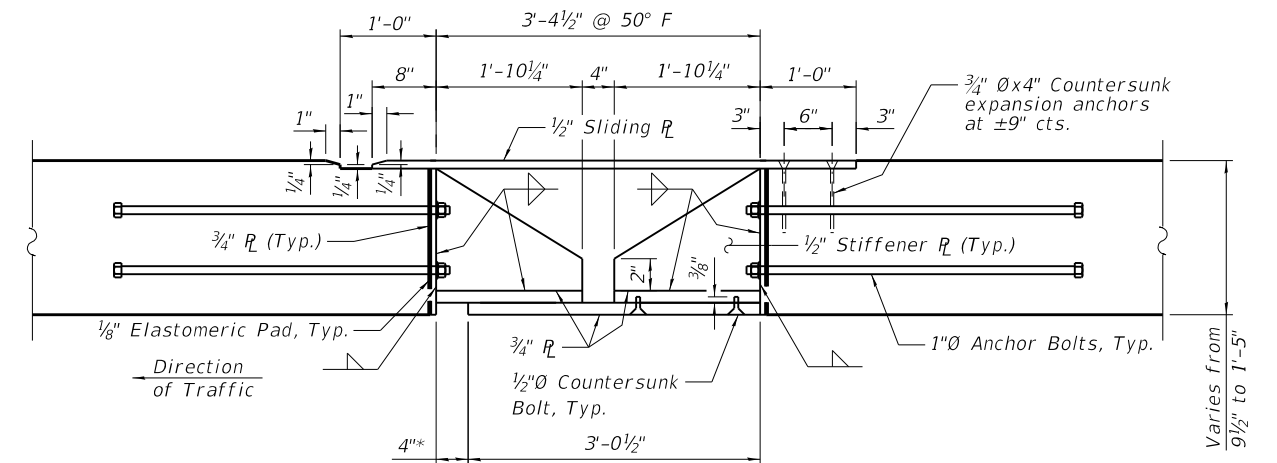


The top surface of Shared Use Path shall have a raised pattern according to ASTM A786

SIDEWALK SLIDING COVER R PLAN



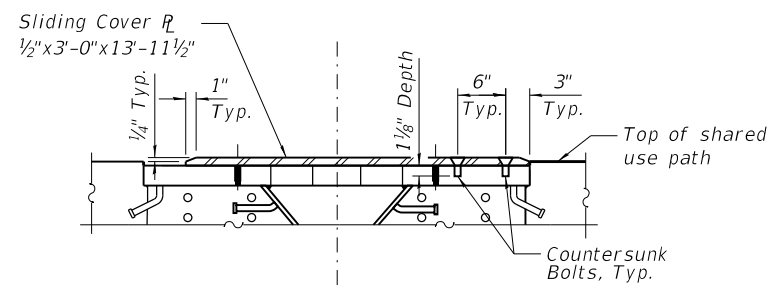
1" Ø ANCHOR BOLT



SECTION B-B
* at 50° F

BILL OF MATERIAL

Item	Unit	Total
Finger Plate Expansion Joint, 4"	Foot	80.5



SIDEWALK SLIDING COVER R ELEVATION

Notes:

- The structural steel plates of the barrier sliding plate assemblies and stiffener brackets shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to ASHTO M111 after fabrication.
- Countersunk bolts shall be in accordance with ASTM A307, Grade A.
- Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
- Cost for furnishing and installing barrier sliding plate assemblies and stiffener brackets shall be included in the cost of Finger Plate Expansion Joint.
- Apply anti-seize compound to all countersunk bolts and anchors in sidewalk sliding plate and parapet embedded plate.

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CHICAGO, IL 60606
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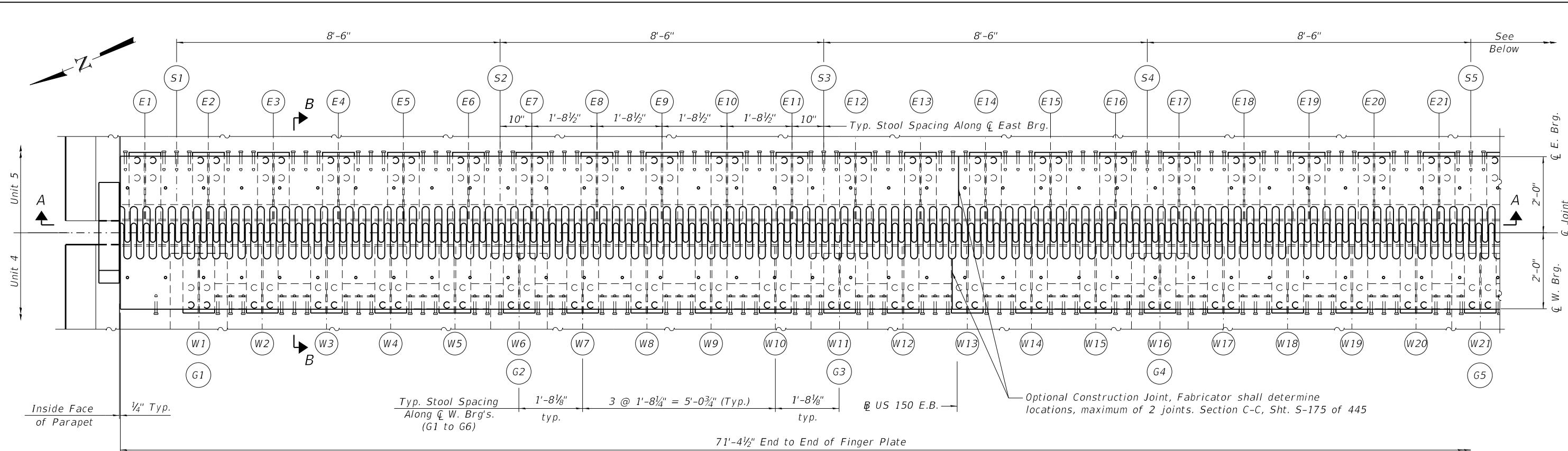
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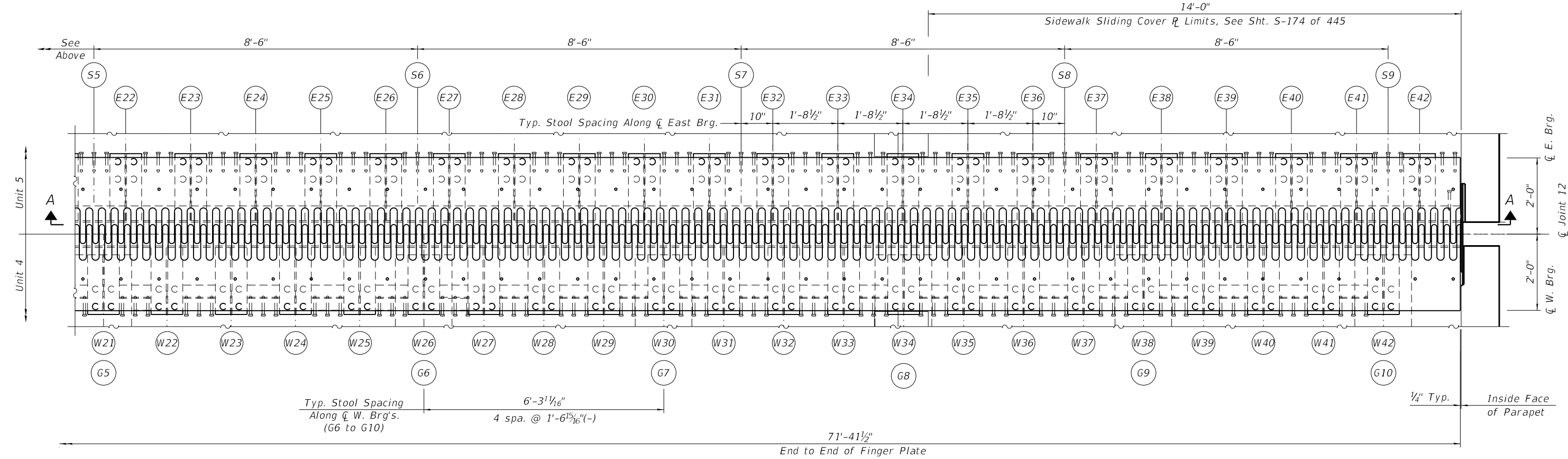
FINGER PLATE EXP. JOINT DETAILS - PIER 9, 2 OF 2
STRUCTURE NO. 090-0180

SHEET 5-171 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1077
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



PLAN AT PIER 12



PLAN AT PIER 12

- Notes:
 1. See Sht. S-173 of 445 for section A-A Unit 5 and Sht. S-174 of 445 for section A-A Unit 4.
 2. See Sht. S-175 of 445 for section B-B and section C-C.

TYLIN INTERNATIONAL
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USER NAME = CHORBACZ
 DESIGNED - KA
 CHECKED - MM
 PLOT SCALE = 0:2.0000 " = 1 / in.
 DRAWN - JR
 CHECKED - NS
 PLOT DATE = 1/4/2019

DESIGNED - KA
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 REVISED -
 REVISED -
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 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

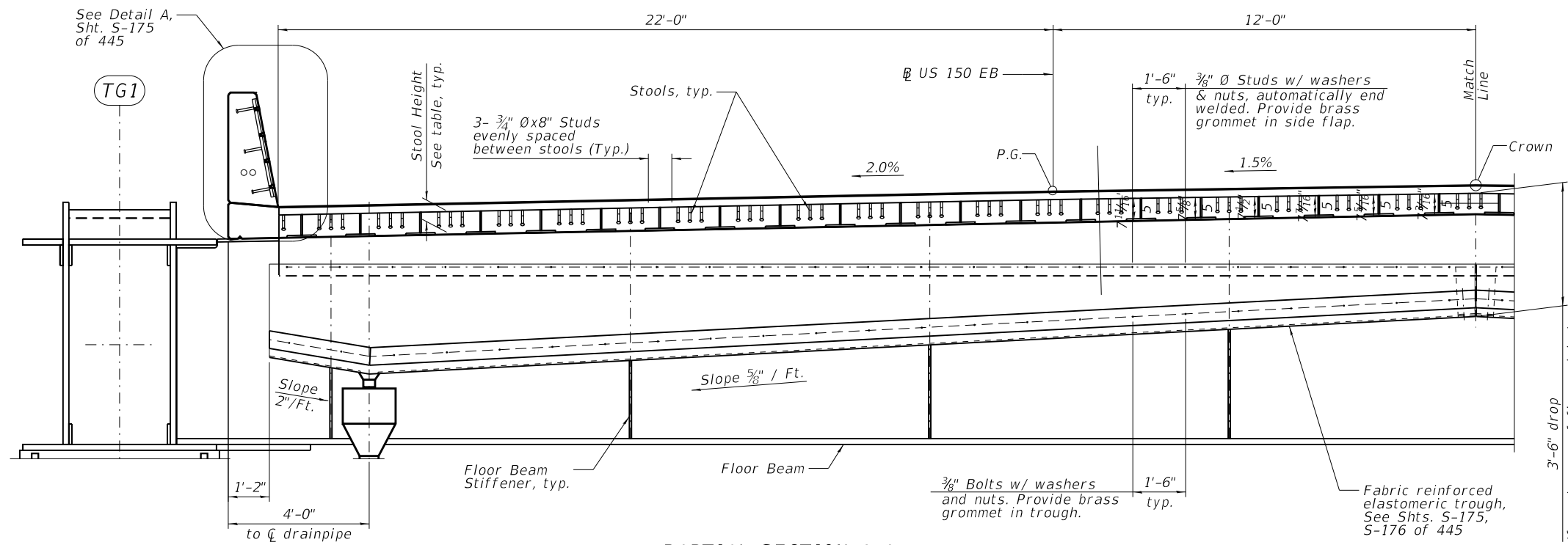
FINGER PLATE EXPANSION JOINT PLAN - PIER 12
 STRUCTURE NO. 090-0180

SHEET 5-172 OF 445 SHEETS

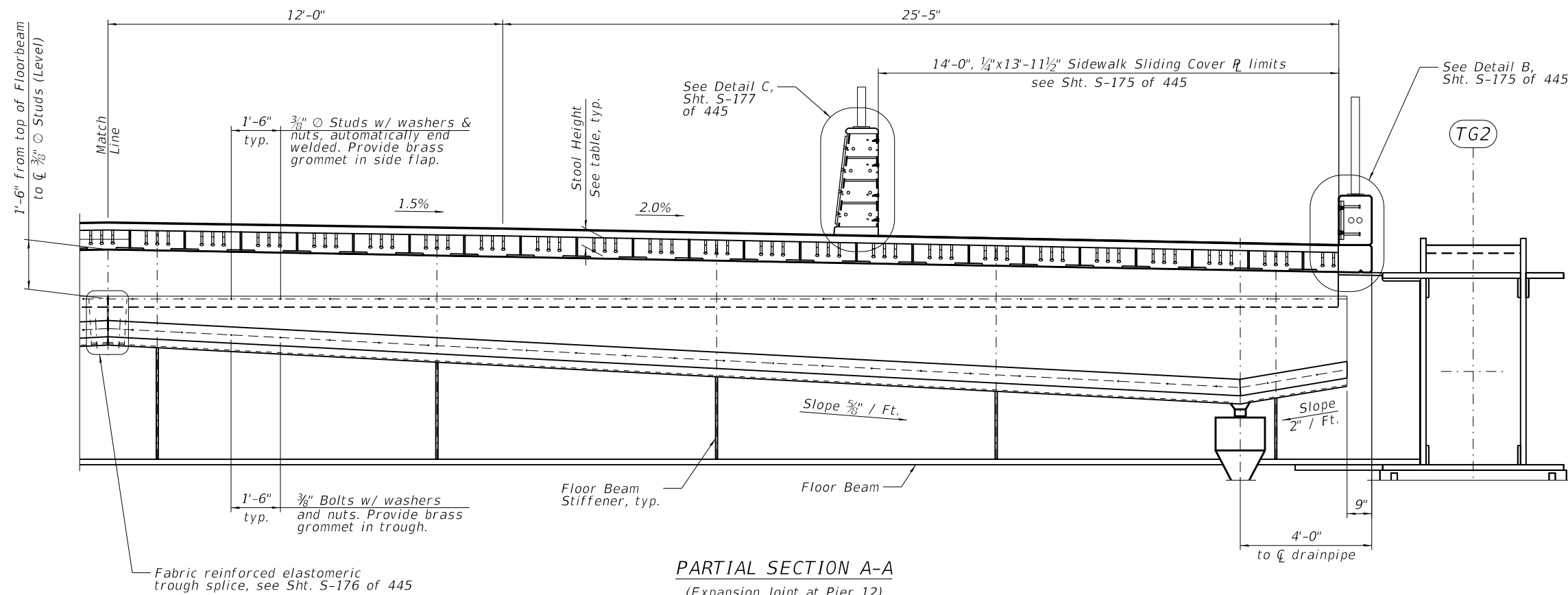
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	(15B)(102-1)(14HB)BR/BR	PEO/TAZ	1361	1078
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

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UNIT 5	
STOOL MARK	STOOL HEIGHT
E1	7 ¹³ / ₁₆ "
E2	7 ¹³ / ₁₆ "
E3	7 ¹³ / ₁₆ "
E4	7 ¹³ / ₁₆ "
E5	7 ¹³ / ₁₆ "
E6	7 ¹³ / ₁₆ "
E7	7 ¹³ / ₁₆ "
E8	7 ¹³ / ₁₆ "
E9	7 ¹³ / ₁₆ "
E10	7 ¹³ / ₁₆ "
E11	7 ¹³ / ₁₆ "
E12	7 ¹³ / ₁₆ "
E13	7 ¹³ / ₁₆ "
E14	7 ¹³ / ₁₆ "
E15	7 ¹¹ / ₁₆ "
E16	7 ⁵ / ₈ "
E17	7 ¹ / ₂ "
E18	7 ¹ / ₂ "
E19	7 ⁵ / ₁₆ "
E20	7 ³ / ₁₆ "
E21	7 ³ / ₁₆ "
E22	7 ¹ / ₄ "
E23	7 ⁵ / ₁₆ "
E24	7 ³ / ₈ "
E25	7 ¹ / ₁₆ "
E26	7 ¹ / ₂ "
E27	7 ⁹ / ₁₆ "
E28	7 ⁹ / ₁₆ "
E29	7 ⁹ / ₁₆ "
E30	7 ⁹ / ₁₆ "
E31	7 ¹ / ₂ "
E32	7 ¹ / ₂ "
E33	7 ¹ / ₁₆ "
E34	7 ³ / ₈ "
E35	7 ³ / ₈ "
E36	7 ⁵ / ₁₆ "
E37	7 ¹ / ₄ "
E38	7 ¹ / ₄ "
E39	7 ³ / ₁₆ "
E40	7 ³ / ₁₆ "
E41	7 ¹ / ₈ "
E42	7 ¹ / ₈ "



PARTIAL SECTION A-A
(Expansion Joint at Pier 12)

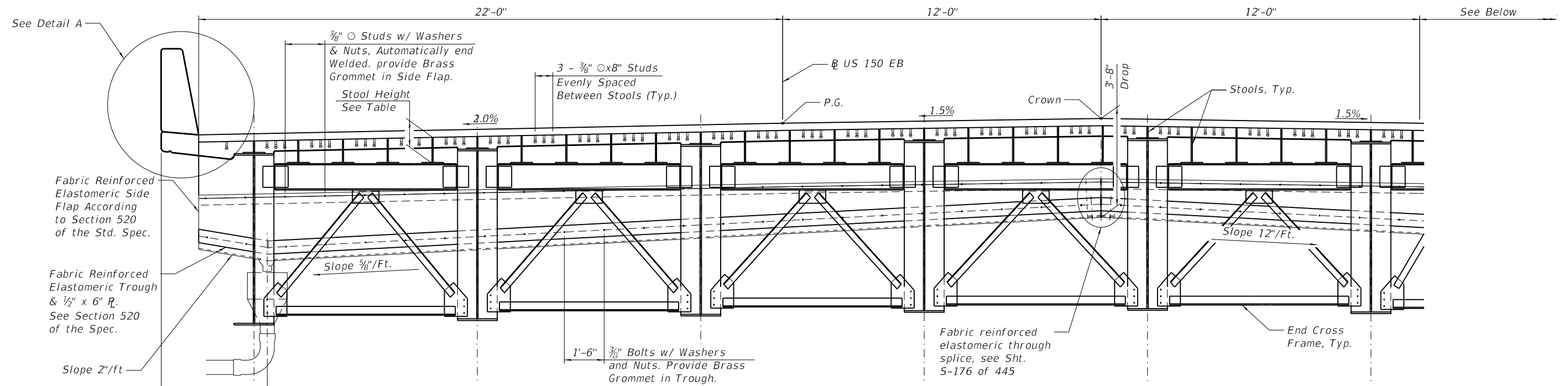


PARTIAL SECTION A-A
(Expansion Joint at Pier 12)

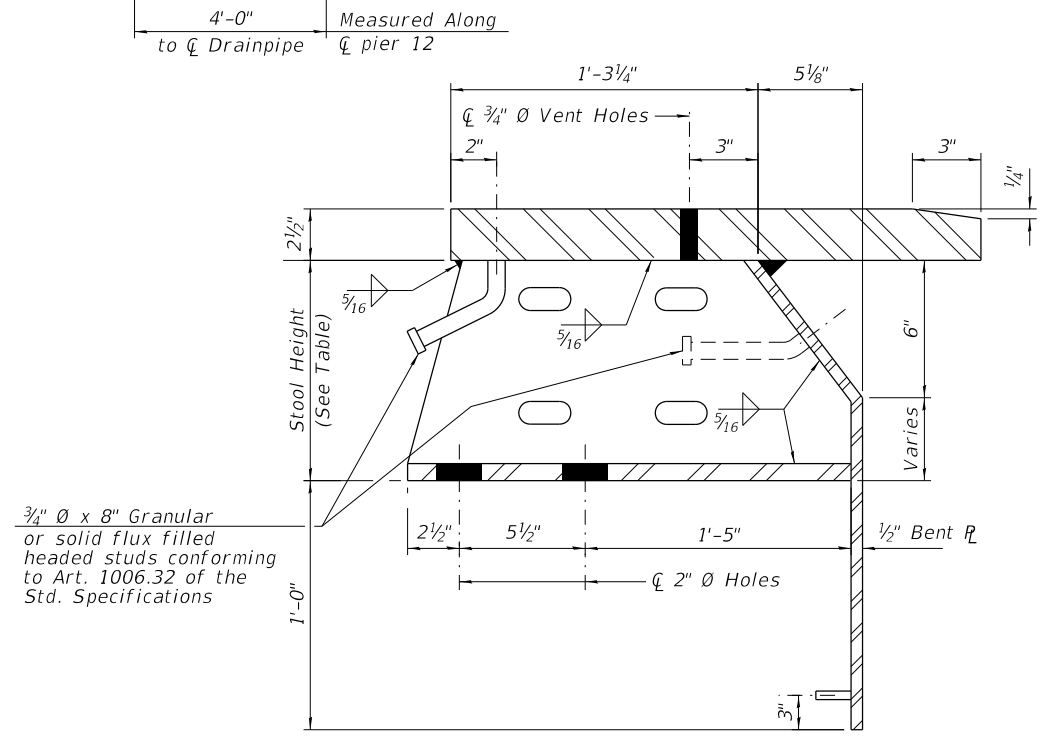
- Notes:**
- M270 Grade 50W steel shall be used for the finger plates and attachments.
 - Finger plate expansion joint shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
 - All steel components of the expansion joint including hardware assembled with the trough system and sliding plates shall be galvanized after fabrication according to Section 520.03 of the Standard Specifications.

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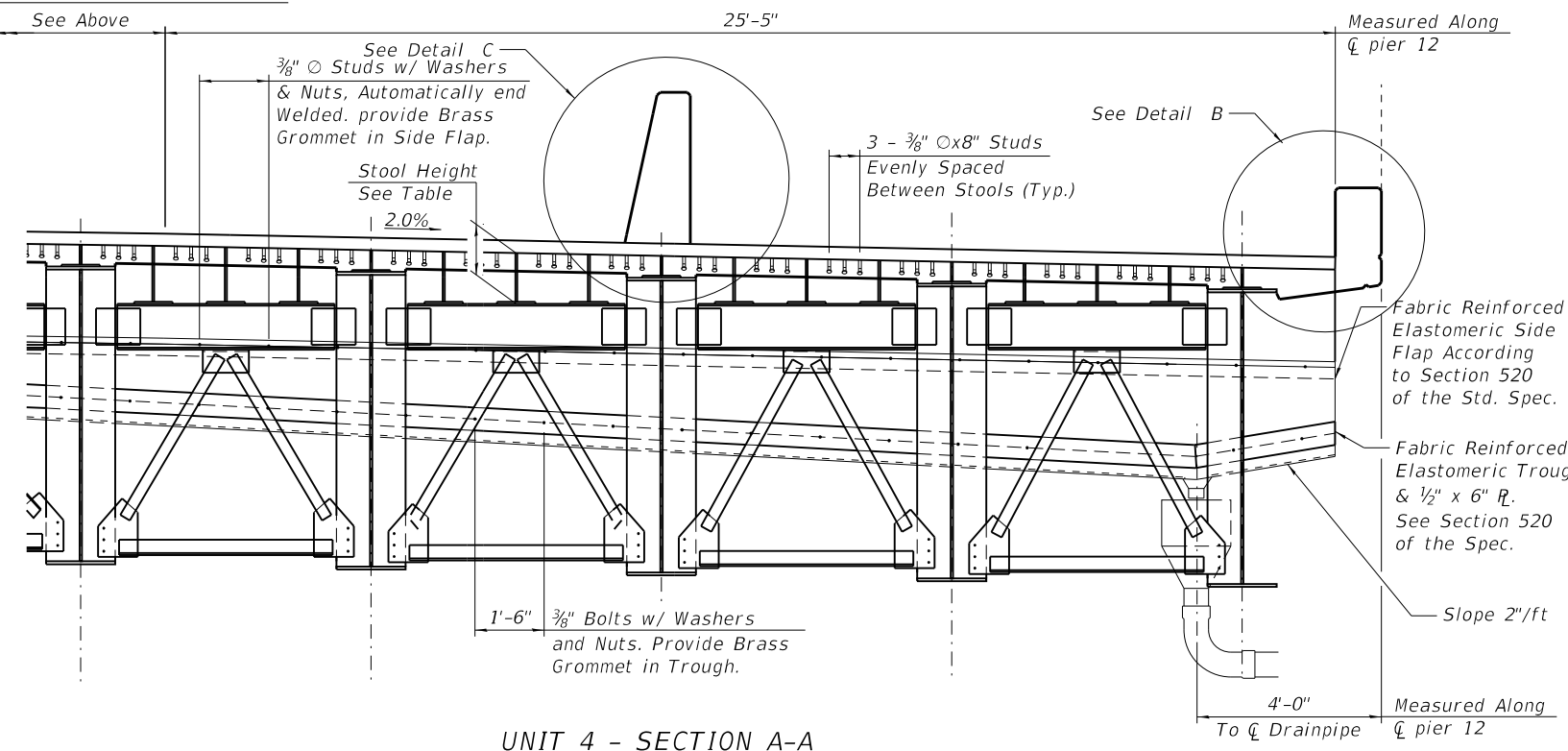
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PLOT DATE = 12/12/2018	CHECKED - NS	REVISED -		SHEET 5-173 OF 445 SHEETS						



UNIT 4 - SECTION A-A



STOOL DETAIL - UNIT 4



UNIT 4 - SECTION A-A

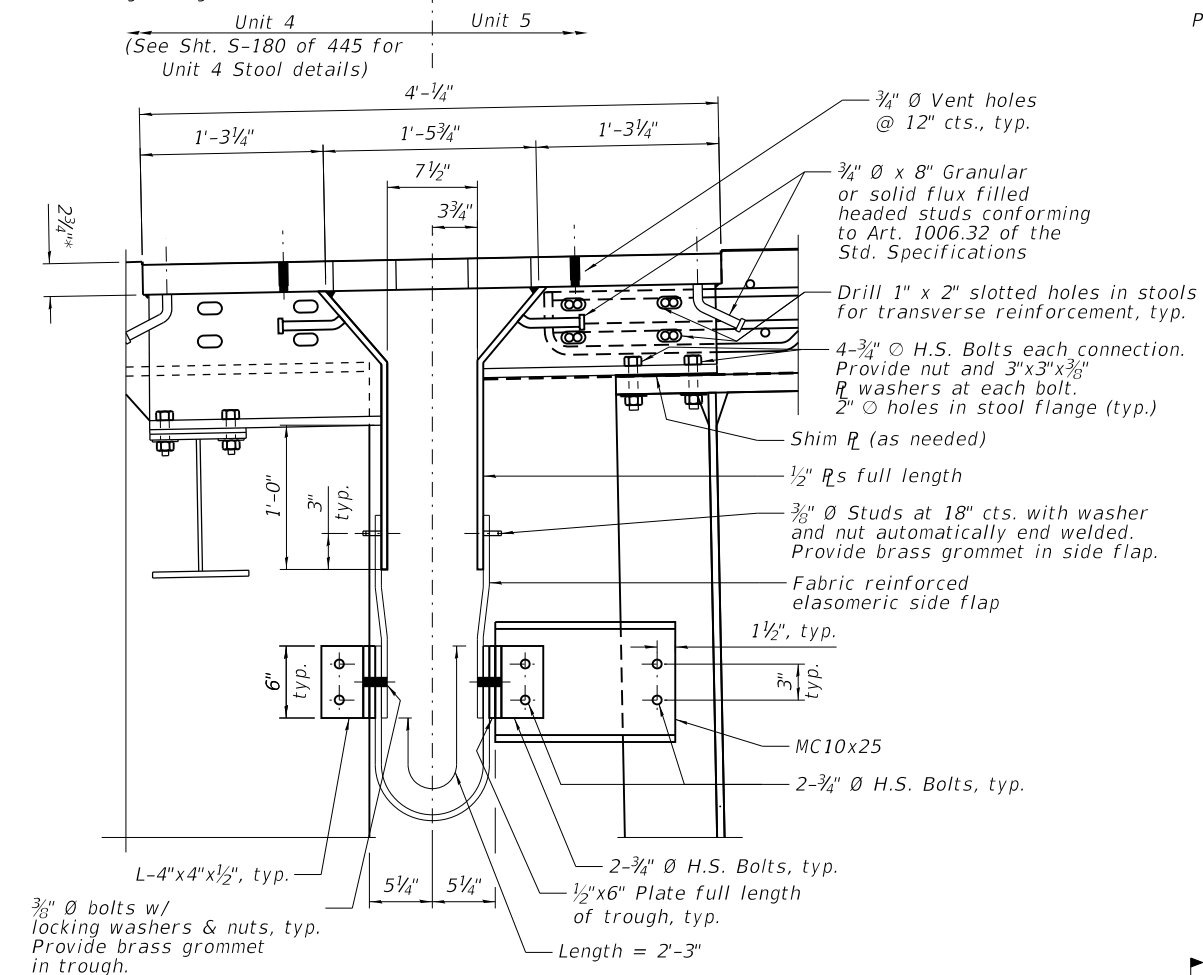
STOOL MARK (UNIT 4)	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21
STOOL HEIGHT	6 1/16"	11 1/16"	11 13/16"	12 1/4"	12 5/8"	6 1/16"	13 1/16"	13 13/16"	14 1/4"	14 5/8"	6 1/16"	15 1/16"	15 5/8"	16 1/8"	16 1/16"	6 1/16"	17 1/16"	17 3/8"	17 11/16"	17 13/16"	6 1/16"

STOOL MARK (UNIT 4)	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41	W42
STOOL HEIGHT	17 3/16"	17 1/16"	16 3/4"	16 1/16"	6 1/16"	15 13/16"	15 1/2"	15 5/8"	6 1/16"	14 3/16"	13 13/16"	13 3/16"	6 1/16"	12 13/16"	12 1/16"	12 1/16"	6 1/16"	11 3/16"	10 15/16"	10 9/16"	6 1/16"

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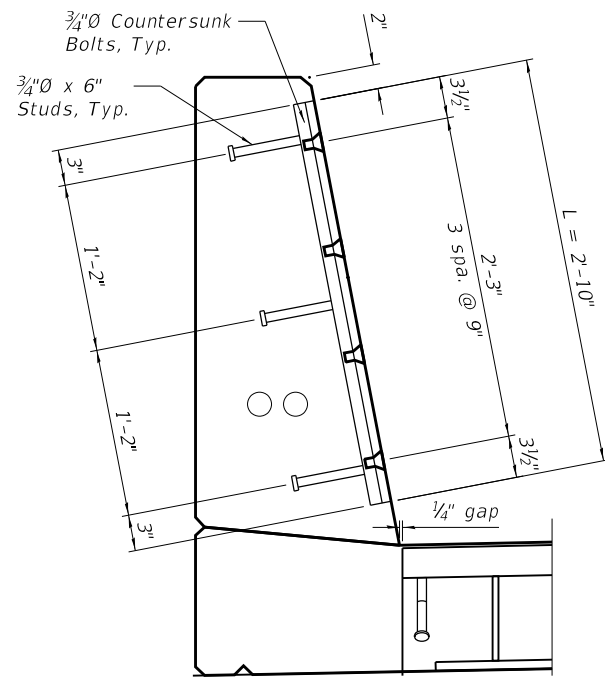
TYLIN INTERNATIONAL 200 S. WACKER DR. SUITE 1400 CHICAGO, IL 60606 TEL: 312-777-2900	USER NAME = jyding	DESIGNED - RH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FINGER PLATE EXP. JOINT ELEVATION - PIER 12, 2 OF 2 STRUCTURE NO. 090-0180	F.A.P. RTE. 317	SECTION [15B;(102-1),(14HB)BR]BR	COUNTY PEO/TAZ	TOTAL SHEETS 1361	SHEET NO. 1080
	PLOT SCALE = 0:2.0000'"/in.	CHECKED - SP	REVISED -			CONTRACT NO. 68B46	ILLINOIS FED. AID PROJECT NHPP-YRP3(905)			
	PLOT DATE = 12/12/2018	DRAWN -	REVISED -	SHEET 5-174 OF 445 SHEETS						

* Prior to grinding



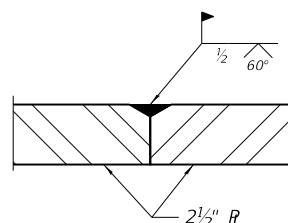
SECTION B-B

(Horizontal dimensions are at 50° F.)



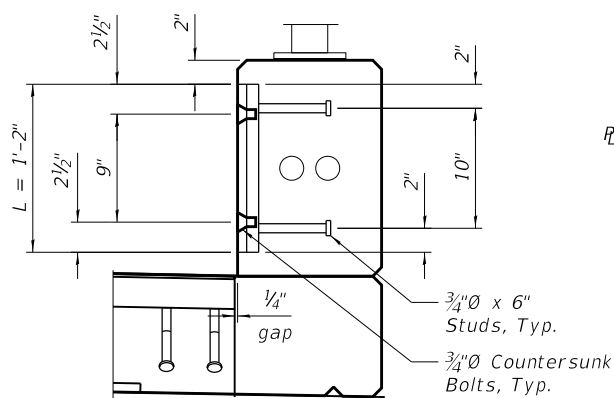
DETAIL A

NB PARAPET SLIDING COVER R



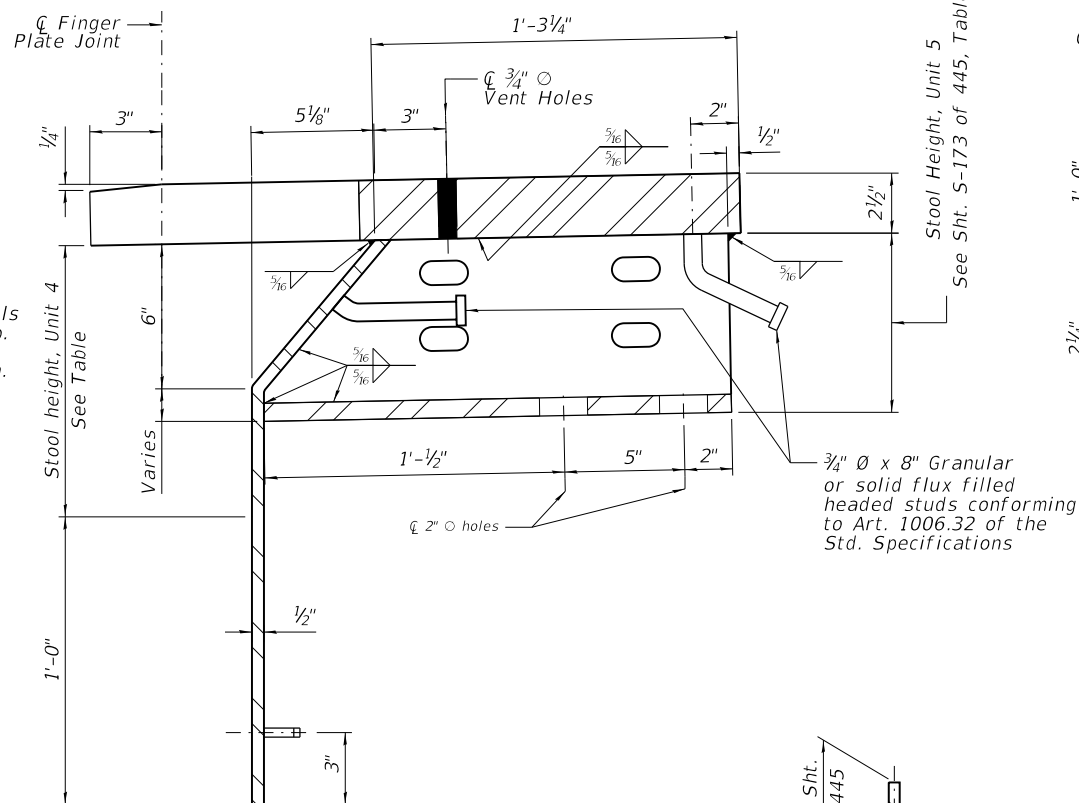
SECTION C-C

Finger R Splice Detail

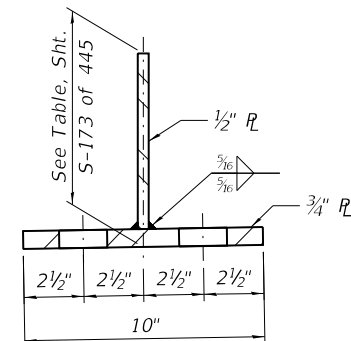


DETAIL B

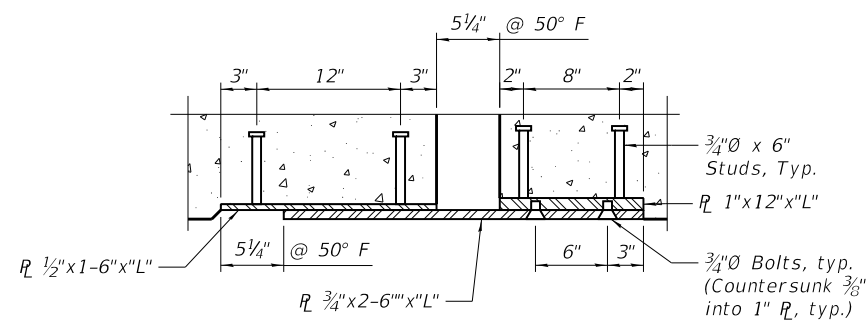
MULTI-USE CURB SLIDING COVER R



STOOL DETAIL



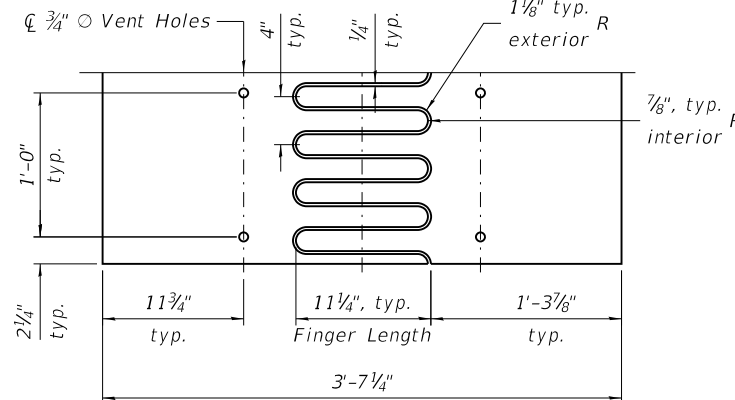
SECTION THRU STOOL



HORIZONTAL SECTION OF PARAPET & CURB AT JOINT

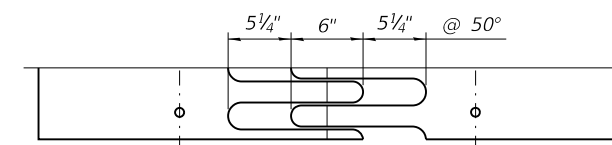
NOTES:

1. At optional construction joint, grind off galvanizing prior to field welding according to ASTM A780.
2. Provide 1-1/4", 1-1/8" and 1-1/16" shim plates for stools supported by girders and cross frames.
3. All 3/4" Studs shall be granular or solid flux filled headed studs conforming to Art. 1006.32 of the Std. Specifications.

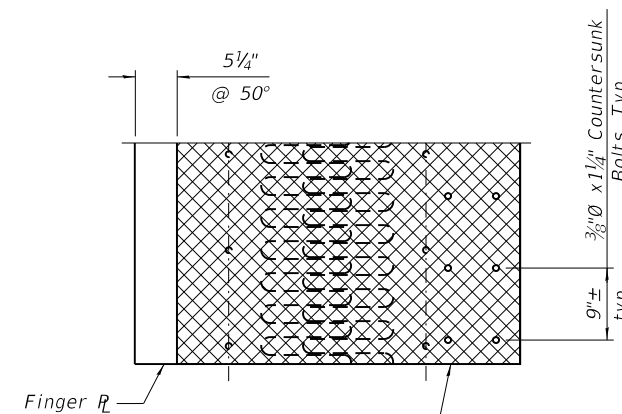


FLAME CUTTING DIAGRAM

Cut from R 2 1/2" x 3'-7 1/4" x 71'-4 1/2"

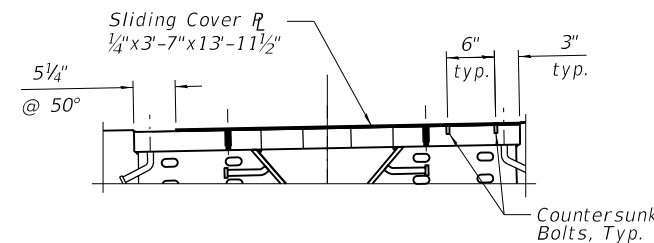


FINGER PLATE SETTING DIAGRAM



The top surface of Shared Use Path shall have a raised pattern according to ASTM A786

SIDEWALK SLIDING COVER R PLAN



SIDEWALK SLIDING COVER R ELEVATION

MODEL: Default
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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = jyding
DESIGNED - KA
CHECKED - MM
PLOT SCALE = 0:2.0000 " = 1" / in.
DRAWN - JR
PLOT DATE = 12/12/2018
CHECKED - NS

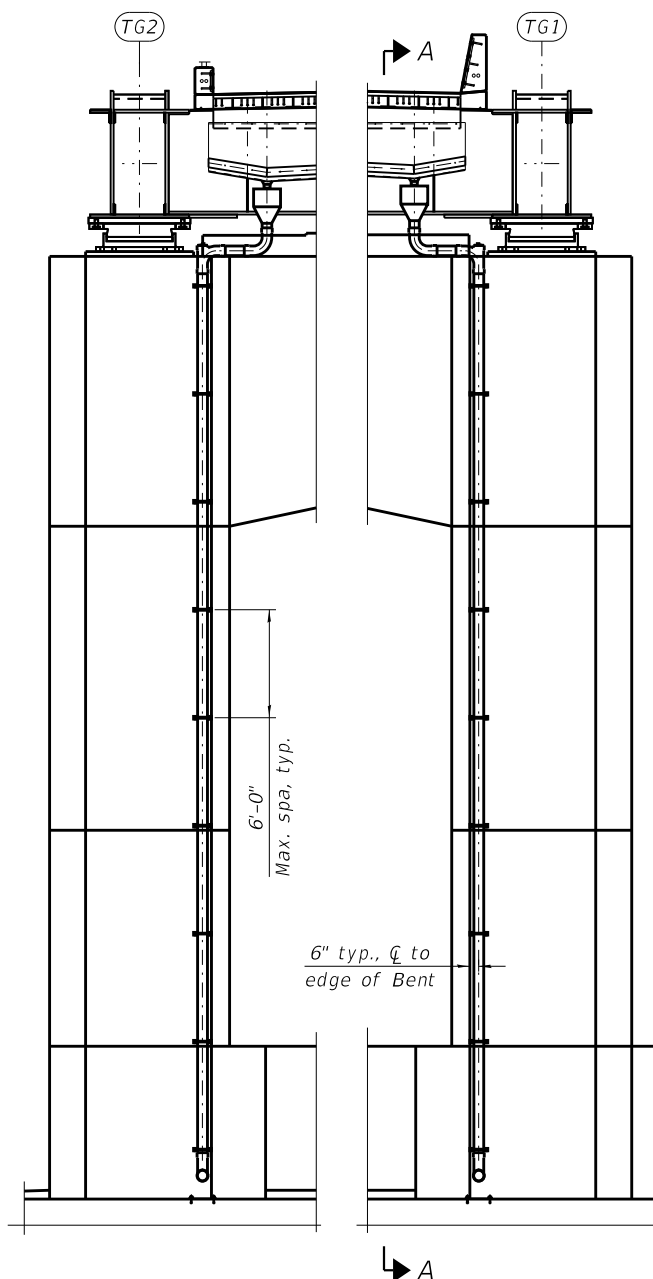
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

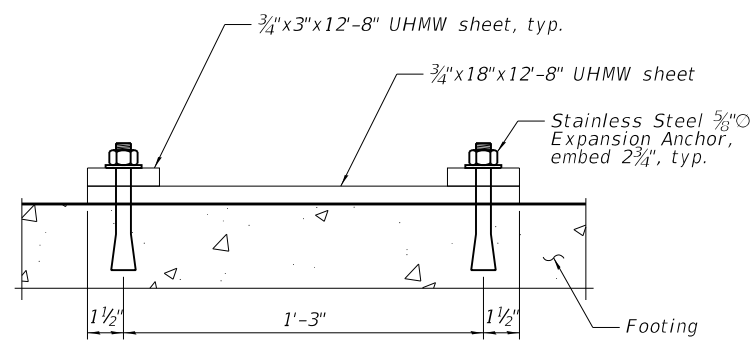
FINGER PLATE EXPANSION JOINT DETAILS - PIER 12, 1 OF 3
STRUCTURE NO. 090-0180

SHEET 5-175 OF 445 SHEETS

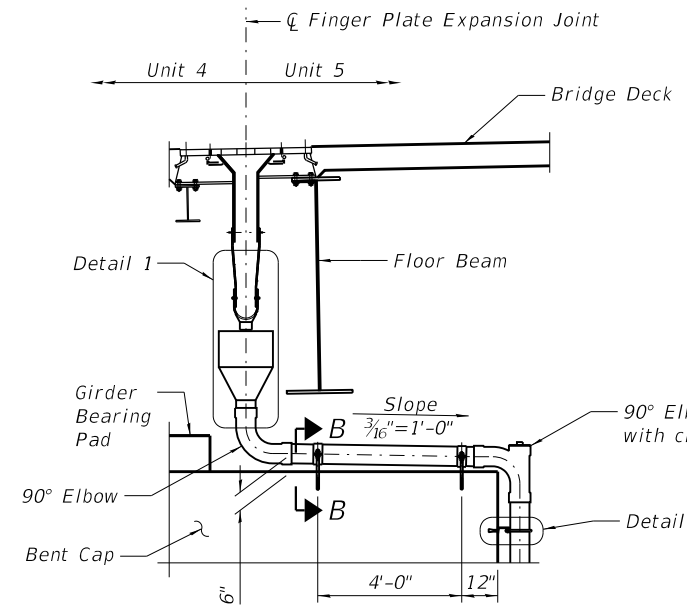
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317	(15B;(102-1),(14HB)BR)BR	PEO/TAZ	1361	1081
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



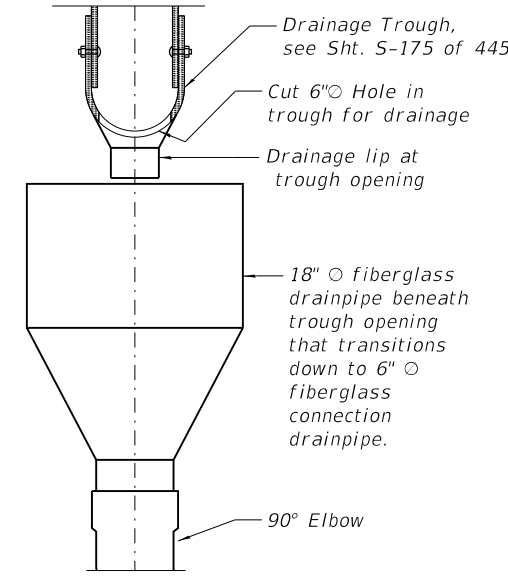
PIER 12 - EXPANSION JOINT DRAINPIPE DETAIL
(Looking Downstation)



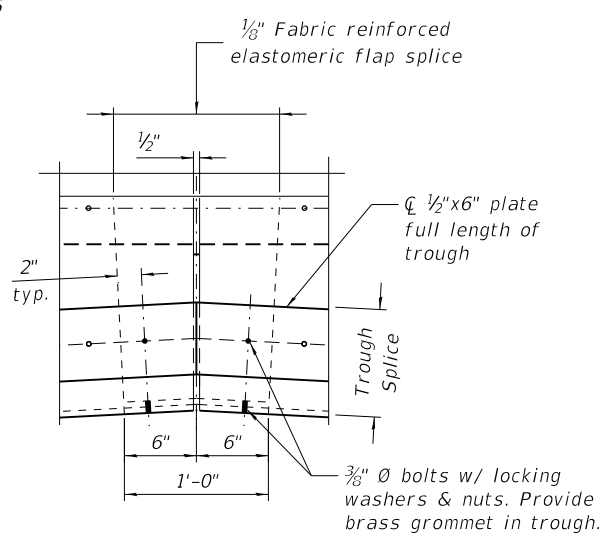
SECTION D-D



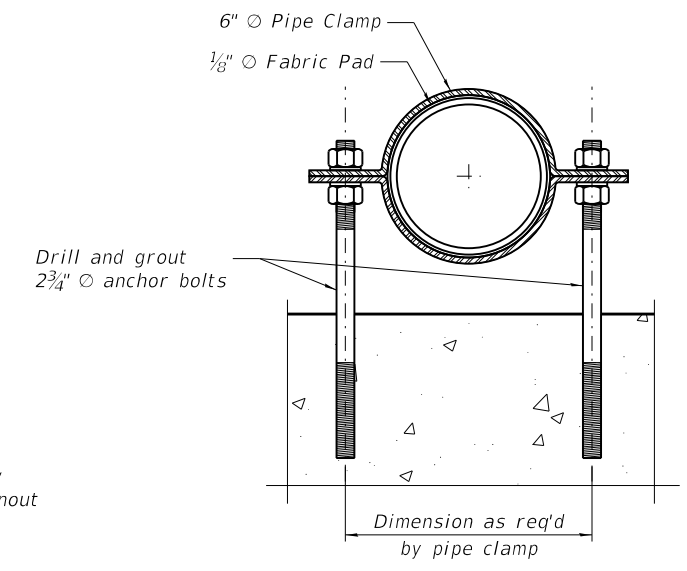
SECTION A-A



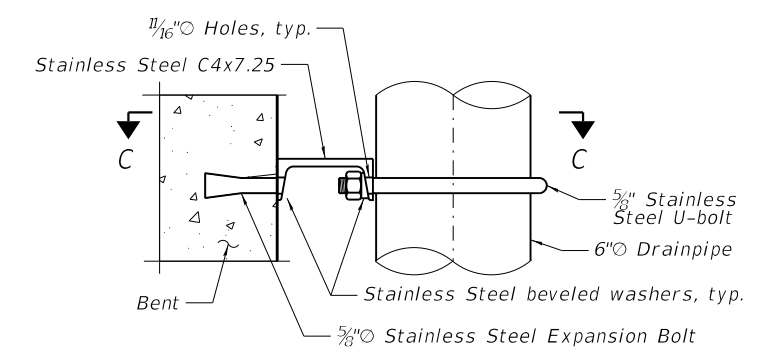
DETAIL 1



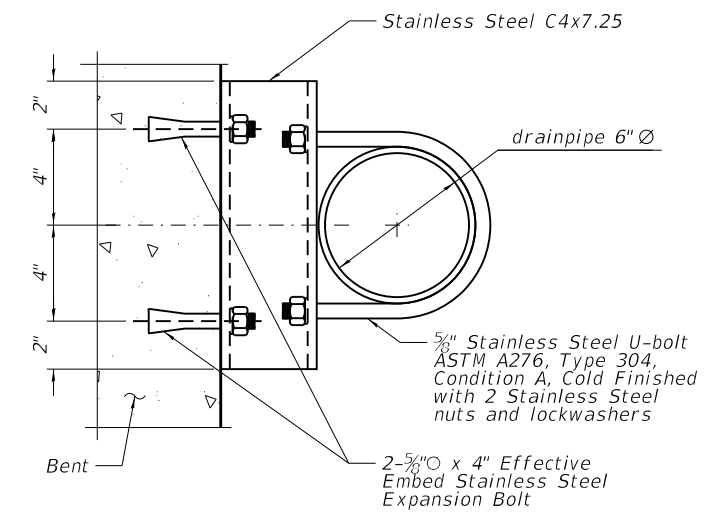
TROUGH SPLICE



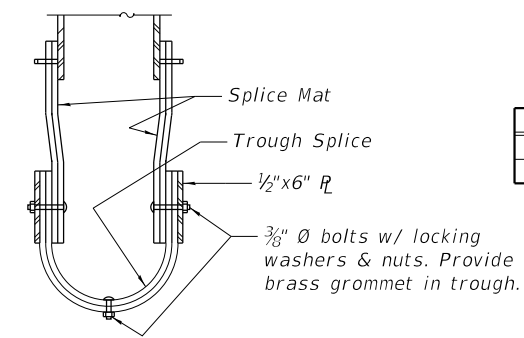
SECTION B-B



DETAIL 2



SECTION C-C



SECTION THRU TROUGH SPLICE

BILL OF MATERIAL

Item	Unit	Total
Drainage System (Special)	L Sum	0.2

- Notes:
1. Work this sheet with Sht. S-173 of 445.
 2. Fiberglass pipe shall conform to ASTM D 2996 with short-term rupture strength of 30,000 psi minimum. The surface of the fiberglass pipe shall be free of bond inhibiting agents. Fiberglass items shall be pigmented a color similar to concrete.
 3. Provide UHMW drain trough in accordance with ASTM D6712.
 4. All fiberglass pipe, elbows, connections, pipe clamps, brackets, reducers, anchor bolts, attaching hardware and UHMW drain trough are included in the cost of "Drainage System (Special)".

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12/12/2018 8:46:42 AM

TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

USER NAME = jyding
DESIGNED - KA
CHECKED - MM
DRAWN - JR
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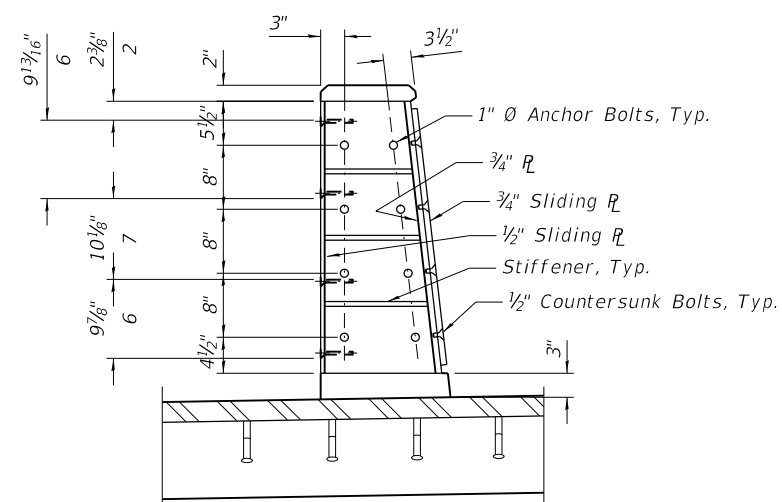
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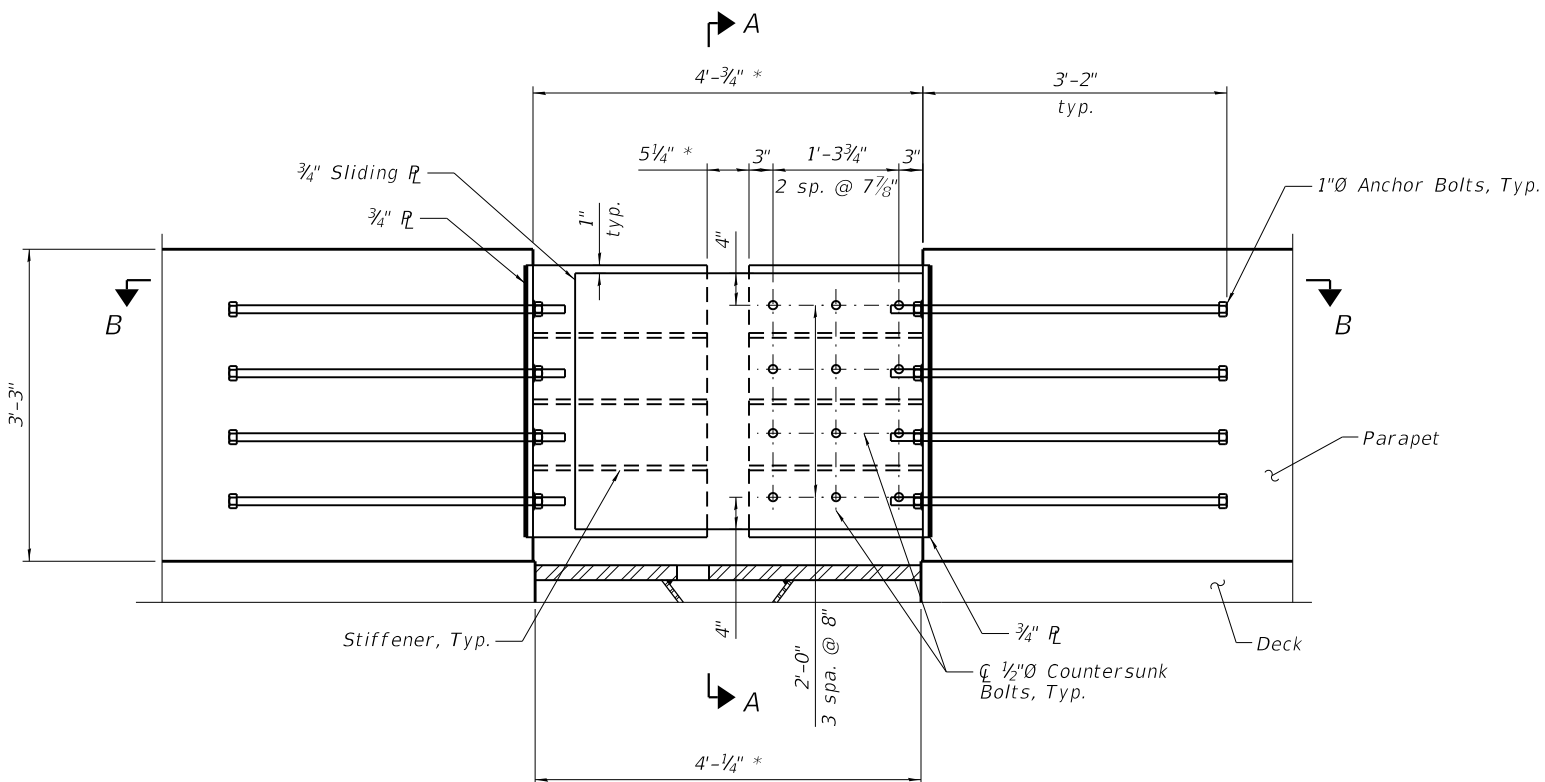
FINGER PLATE EXPANSION JOINT DETAILS - PIER 12, 2 OF 3
STRUCTURE NO. 090-0180

SHEET S-176 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

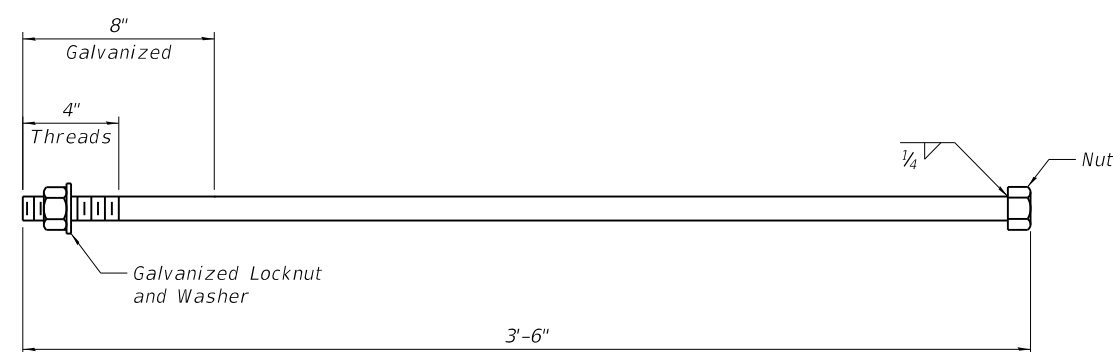


SECTION A-A

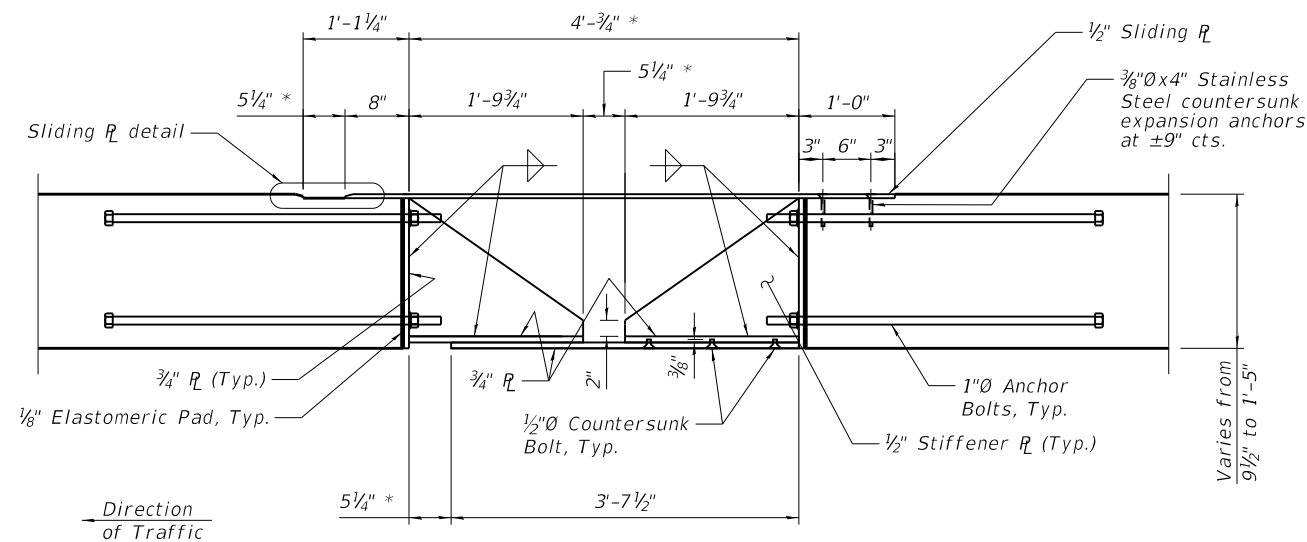


DETAIL C - FRONT FACE OF SOUTH PARAPET AT JOINT

Parapet Railing omitted for clarity

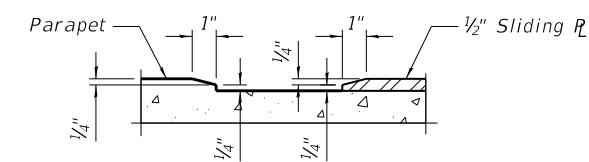


1" Ø ANCHOR BOLT



SECTION B-B

* at 50° F



SLIDING R DETAIL

BILL OF MATERIAL

Item	Unit	Total
Finger Plate Expansion Joint, 5"	Foot	71.5

Notes:

1. The structural steel plates of the barrier sliding plate assemblies and stiffener brackets shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to ASHTO M111 after fabrication.
2. Countersunk bolts shall be in accordance with ASTM A307, Grade A.
3. Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
4. Cost for furnishing and installing barrier sliding plate assemblies and stiffener brackets shall be included in the cost of Finger Plate Expansion Joint.

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

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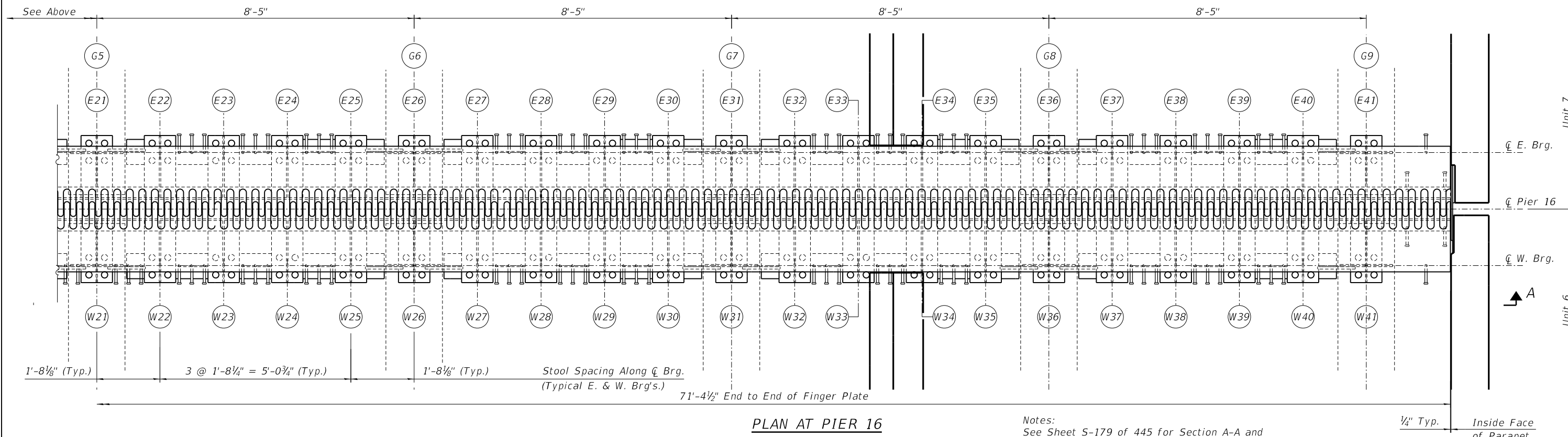
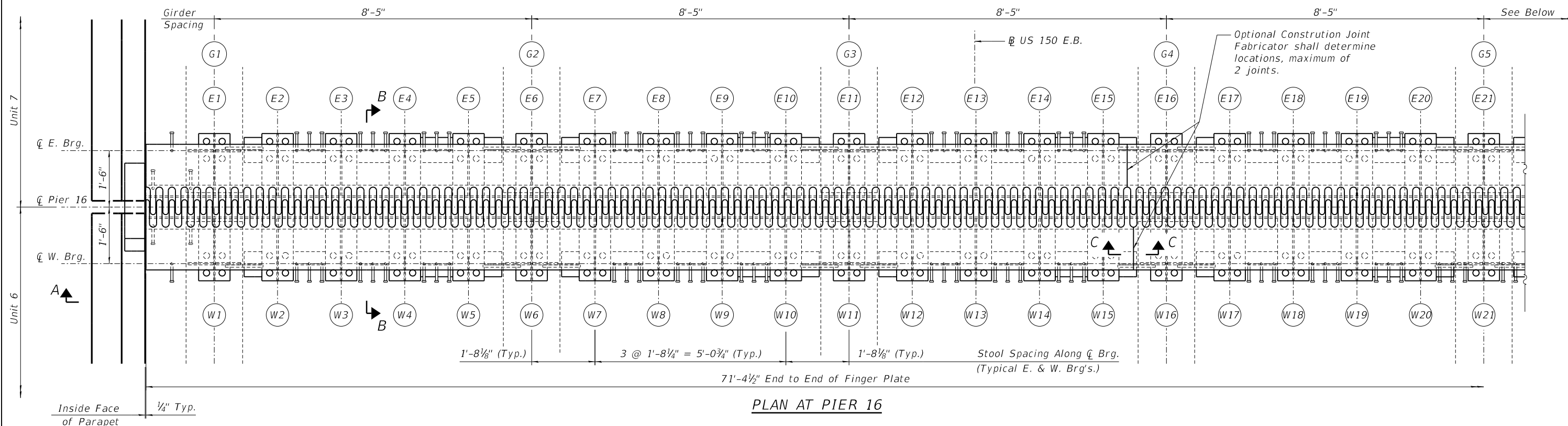
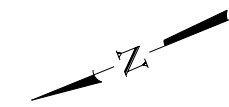
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CHECKED - NS
REVISOR -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FINGER PLATE EXPANSION JOINT DETAILS - PIER 12, 3 OF 3
STRUCTURE NO. 090-0180

SHEET 5-177 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1083
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



Notes:
See Sheet S-179 of 445 for Section A-A and
Sheet S-180 of 445 for Section B-B and C-C.

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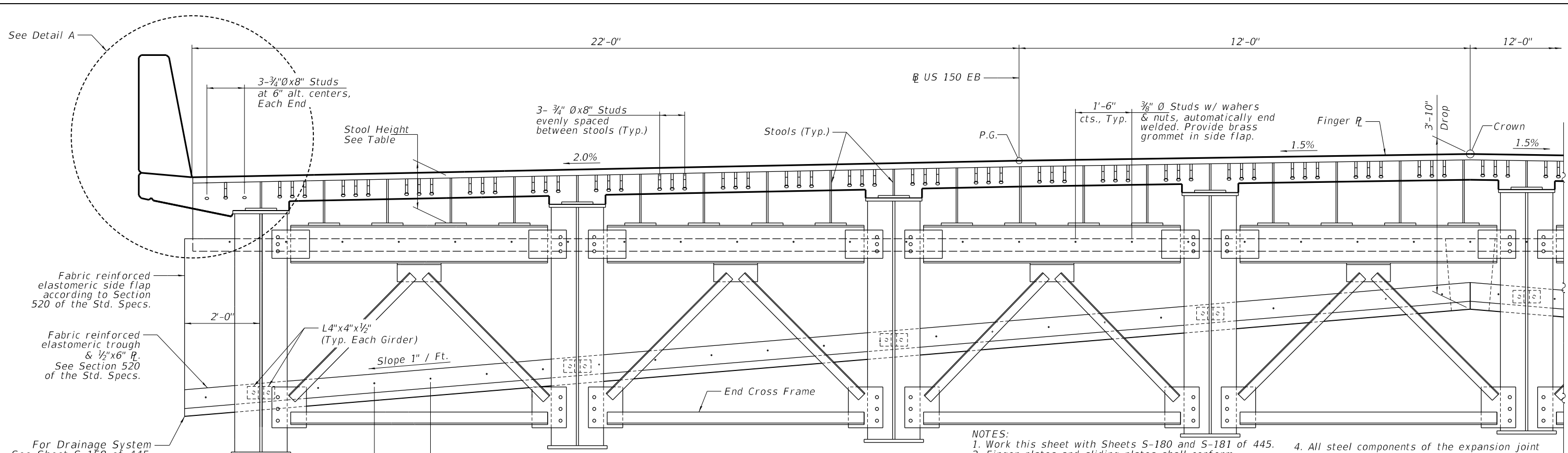
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FINGER PLATE EXPANSION JOINT PLAN - PIER 16
STRUCTURE NO. 090-0180**

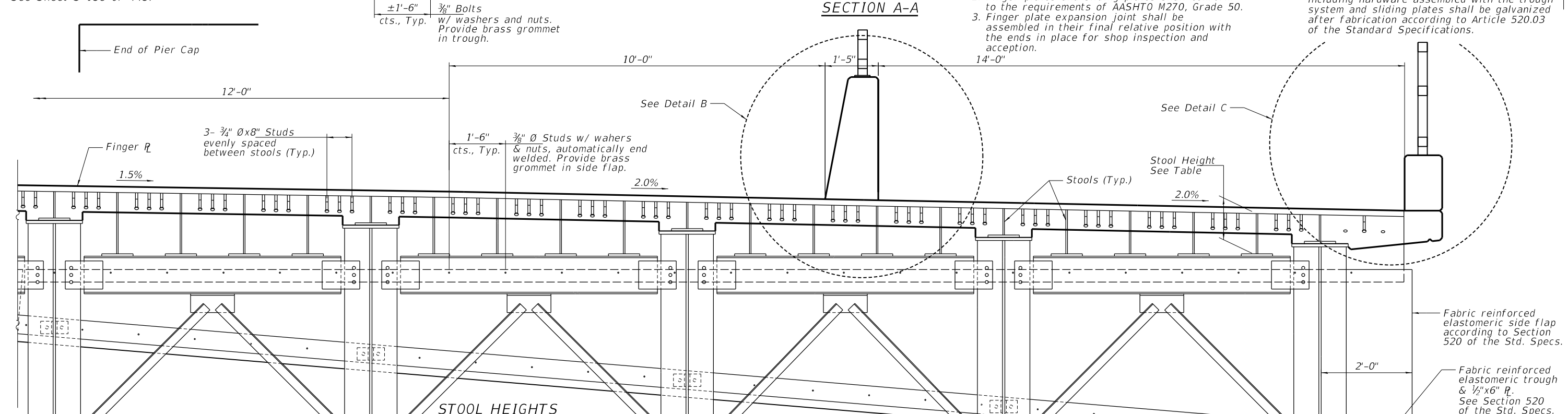
SHEETS 5-178 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				

ILLINOIS FED. AID PROJECT NHPP-YRP3(905)



- NOTES:**
1. Work this sheet with Sheets S-180 and S-181 of 445.
 2. Finger plates and sliding plates shall conform to the requirements of AASHTO M270, Grade 50.
 3. Finger plate expansion joint shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
 4. All steel components of the expansion joint including hardware assembled with the trough system and sliding plates shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.



STOOL MARK (UNIT 6)	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20
STOOL HEIGHT	6 ¹ / ₁₆ "	11 ⁹ / ₁₆ "	12"	12 ³ / ₈ "	12 ³ / ₁₆ "	6 ¹ / ₁₆ "	13 ³ / ₈ "	14"	14 ⁷ / ₁₆ "	14 ¹³ / ₁₆ "	6 ¹ / ₁₆ "	15 ⁵ / ₈ "	16"	16 ⁵ / ₁₆ "	16 ³ / ₈ "	6 ¹ / ₁₆ "	17 ¹ / ₄ "	17 ⁹ / ₁₆ "	17 ⁷ / ₈ "	18 ¹ / ₈ "
STOOL MARK (UNIT 7)	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20
STOOL HEIGHT	6 ¹ / ₁₆ "	11 ⁹ / ₁₆ "	12"	12 ³ / ₈ "	12 ³ / ₁₆ "	6 ¹ / ₁₆ "	13 ³ / ₈ "	14"	14 ⁷ / ₁₆ "	14 ¹³ / ₁₆ "	6 ¹ / ₁₆ "	15 ⁵ / ₈ "	16"	16 ⁵ / ₁₆ "	16 ³ / ₈ "	6 ¹ / ₁₆ "	17 ¹ / ₄ "	17 ⁹ / ₁₆ "	17 ⁷ / ₈ "	18 ¹ / ₈ "

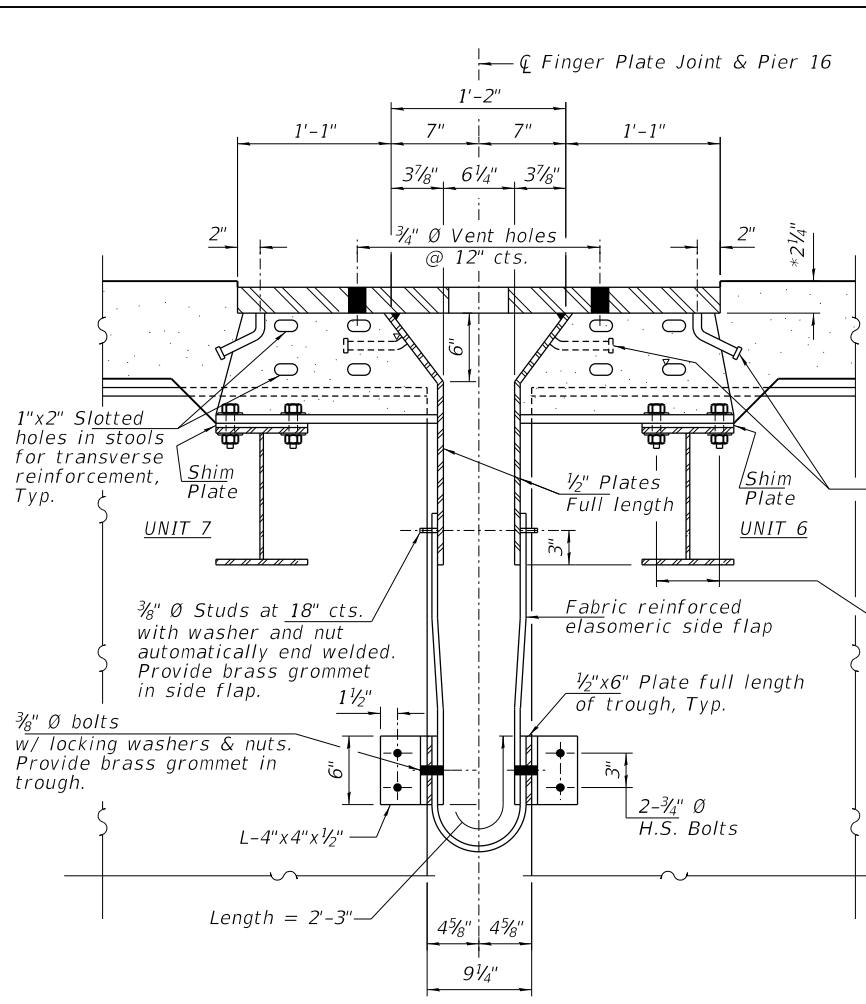
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STOOL HEIGHT	6 ¹ / ₁₆ "	17 ³ / ₈ "	17 ³ / ₁₆ "	17"	16 ¹ / ₁₆ "	6 ¹ / ₁₆ "	16 ³ / ₈ "	15 ¹ / ₁₆ "	15 ³ / ₁₆ "	14 ⁷ / ₈ "	6 ¹ / ₁₆ "	14 ³ / ₈ "	13 ¹ / ₁₆ "	13 ³ / ₁₆ "	12 ³ / ₈ "	6 ¹ / ₁₆ "	12 ¹ / ₁₆ "	11 ¹ / ₁₆ "	11 ¹ / ₄ "	10 ³ / ₈ "	6 ¹ / ₁₆ "
STOOL MARK (UNIT 7)	E21	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32	E33	E34	E35	E36	E37	E38	E39	E40	E41
STOOL HEIGHT	6 ¹ / ₁₆ "	17 ³ / ₈ "	17 ³ / ₁₆ "	17"	16 ¹ / ₁₆ "	6 ¹ / ₁₆ "	16 ³ / ₈ "	15 ¹ / ₁₆ "	15 ³ / ₁₆ "	14 ⁷ / ₈ "	6 ¹ / ₁₆ "	14 ³ / ₈ "	13 ¹ / ₁₆ "	13 ³ / ₁₆ "	12 ³ / ₈ "	6 ¹ / ₁₆ "	12 ¹ / ₁₆ "	11 ¹ / ₁₆ "	11 ¹ / ₄ "	10 ³ / ₈ "	6 ¹ / ₁₆ "

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	PLOT DATE = 12/11/2018	DRAWN - RSJ	REVISED -			CONTRACT NO. 68B46				
		CHECKED - MNM	REVISED -			ILLINOIS FED. AID PROJECT NHPP-YRP(905)				

SHEET 5-179 OF 445 SHEETS

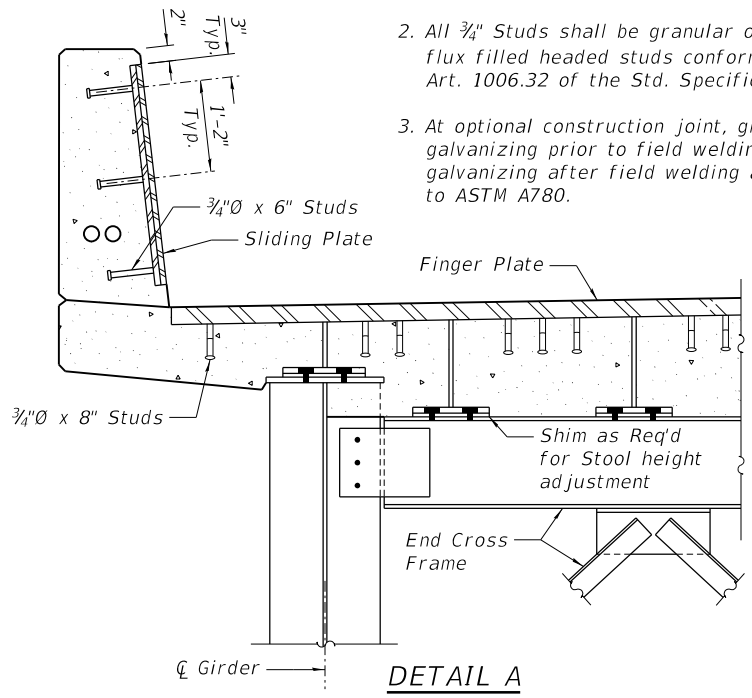
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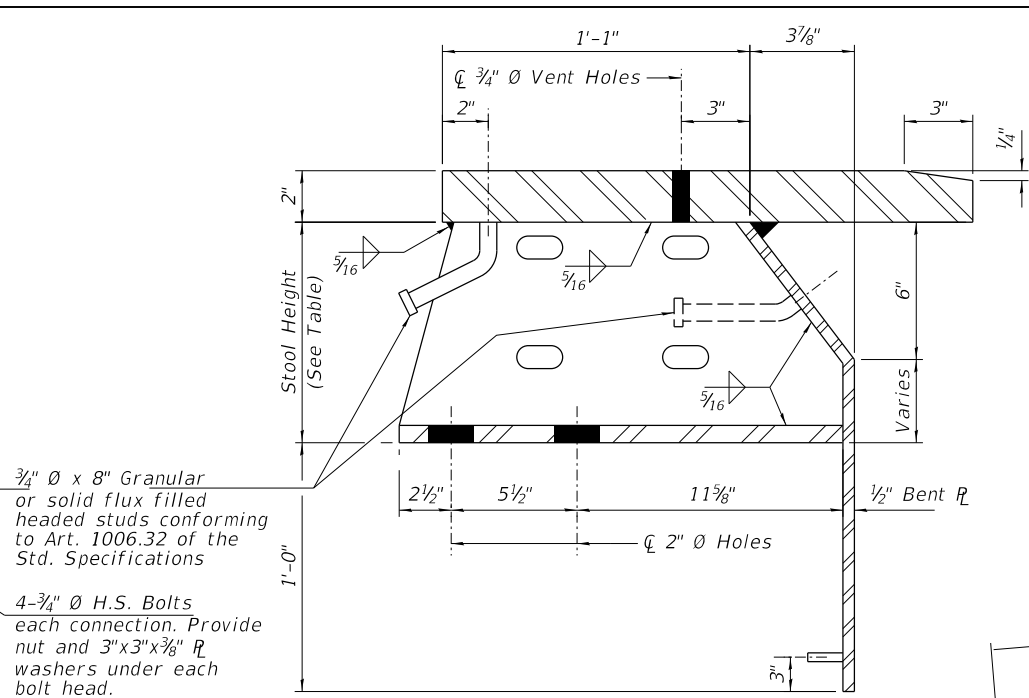


SECTION B-B
 (Horizontal dimensions are at 50° F.)

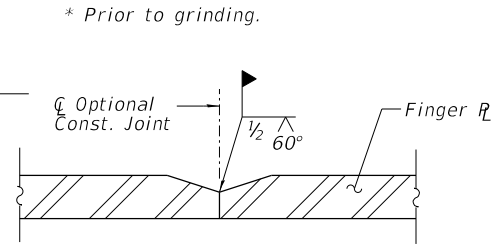
- NOTES:**
1. Provide 1-1/4", 1-1/8" and 1-1/16" shim plates for stools supported by girders and cross frames.
 2. All 3/4" Studs shall be granular or solid flux filled headed studs conforming to Art. 1006.32 of the Std. Specifications.
 3. At optional construction joint, grind off galvanizing prior to field welding. Repair galvanizing after field welding according to ASTM A780.



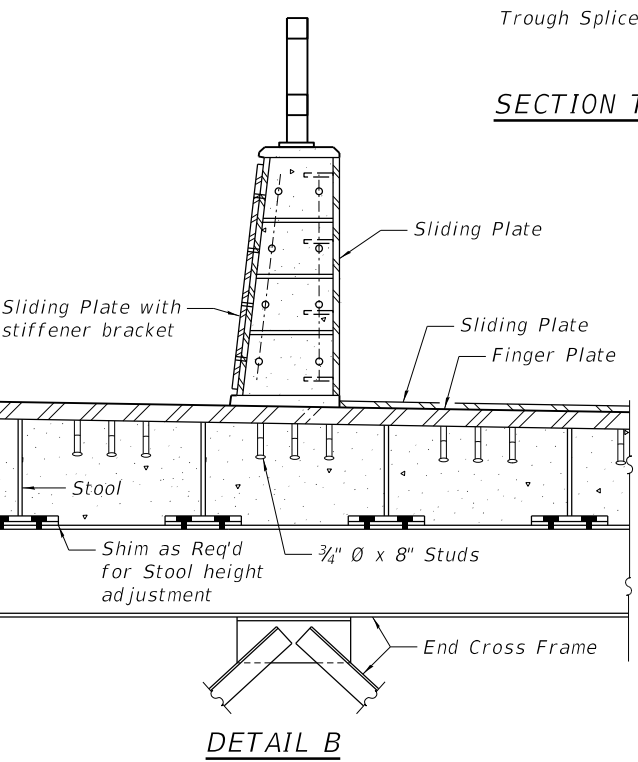
DETAIL A



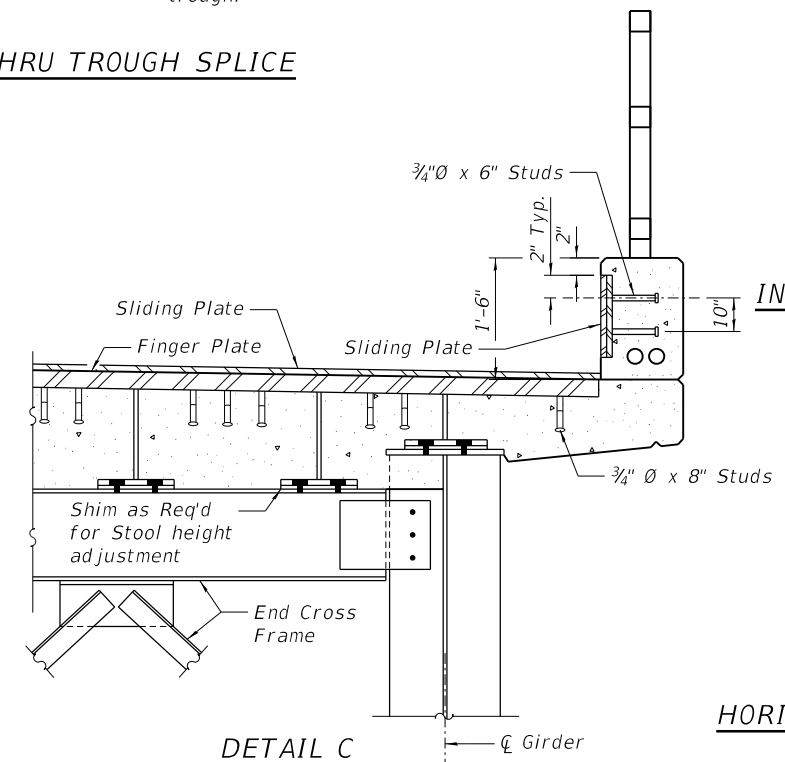
STOOL DETAIL



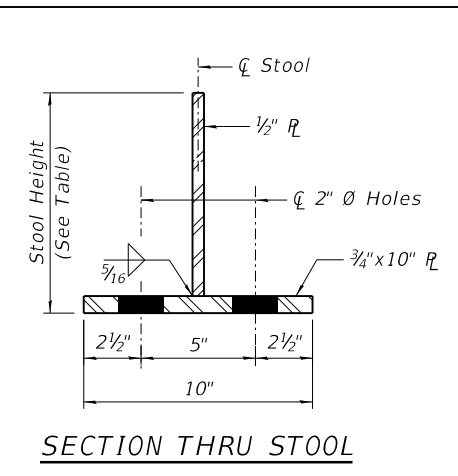
SECTION C-C



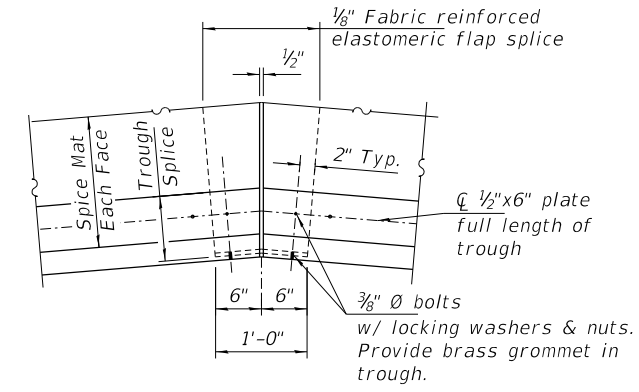
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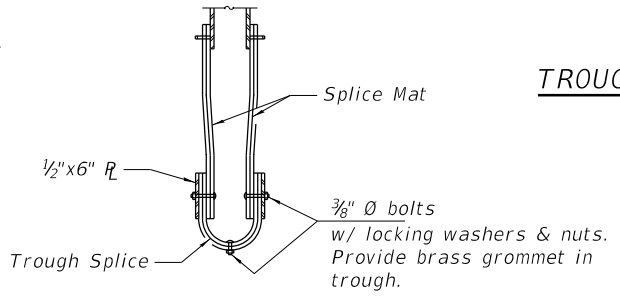
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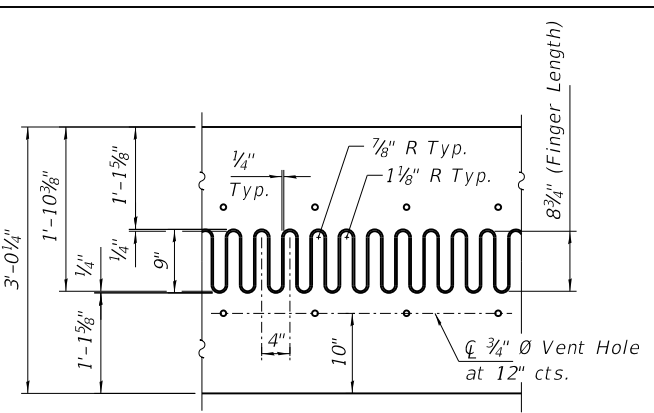
SECTION THRU STOOL



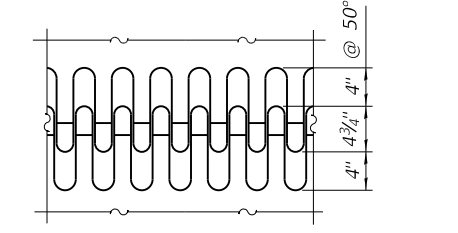
TROUGH SPLICE DETAIL



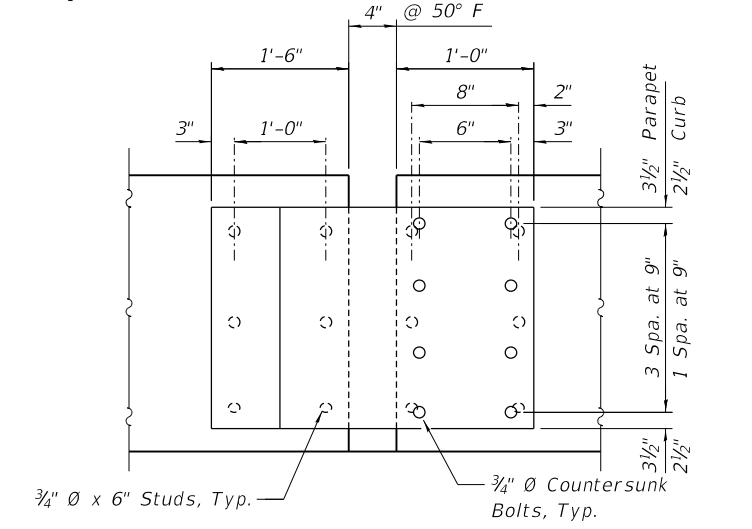
SECTION THRU TROUGH SPLICE



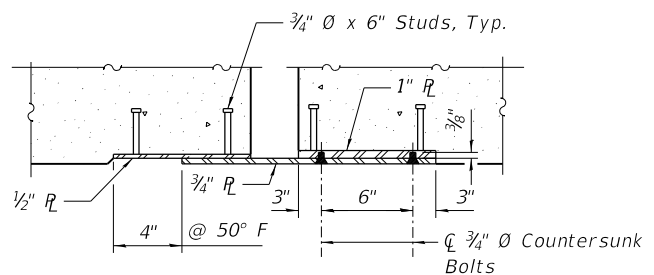
FLAME CUTTING DIAGRAM
 Cut from R 2" x 3'-0 1/4" x 71'-4 1/2"



FINGER PLATE SETTING DIAGRAM



INSIDE ELEVATION OF PARAPET & CURB AT JOINT



HORIZONTAL SECTION OF PARAPET & CURB AT JOINT

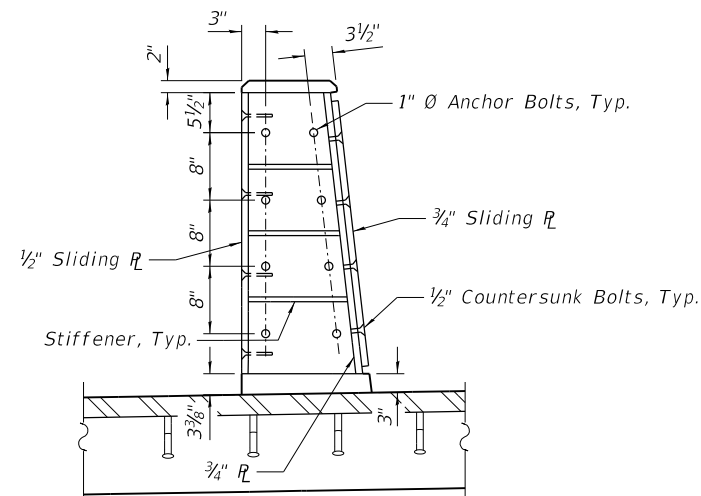


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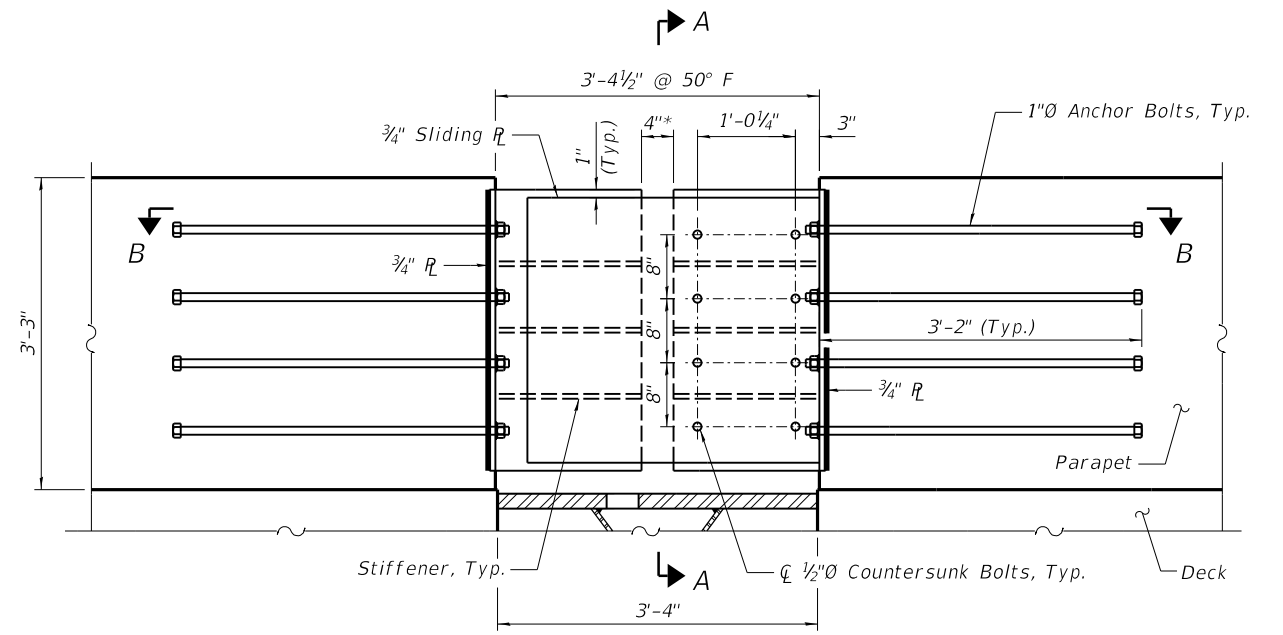
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

FINGER PLATE EXPANSION JOINT DETAILS - PIER 16, 1 OF 2
 STRUCTURE NO. 090-0180
 SHEET 5-180 OF 445 SHEETS

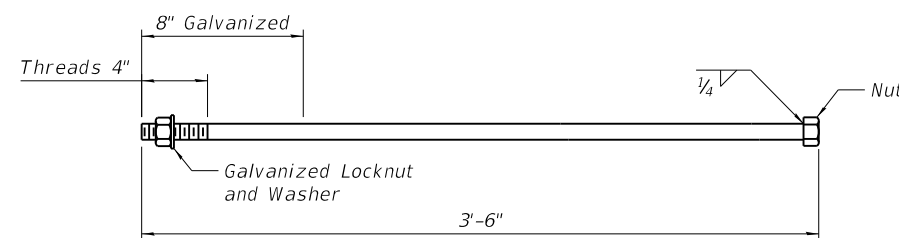
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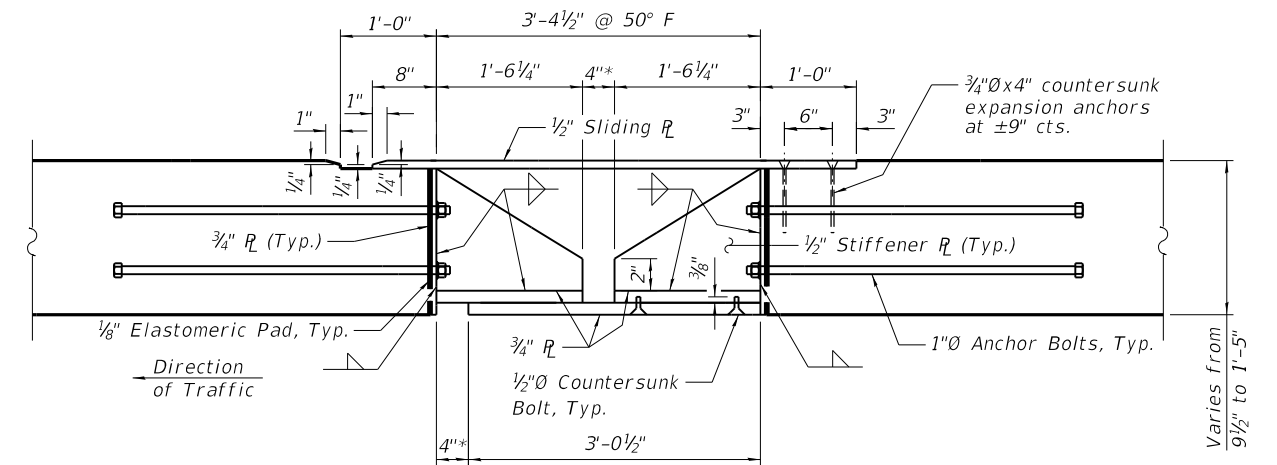
SECTION A-A



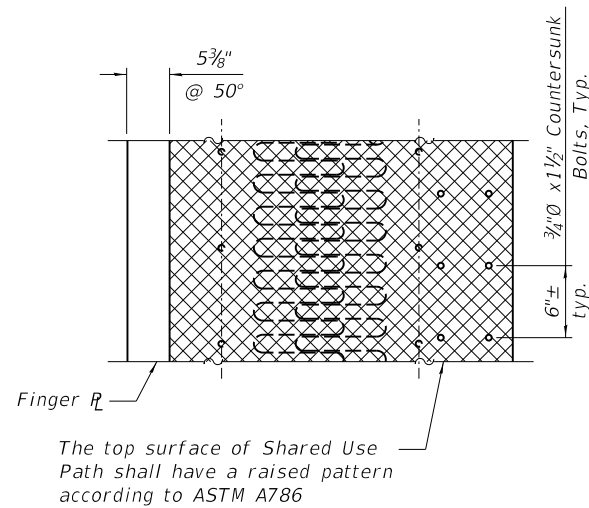
FRONT FACE OF SOUTH PARAPET AT JOINT
Parapet Railing omitted for clarity



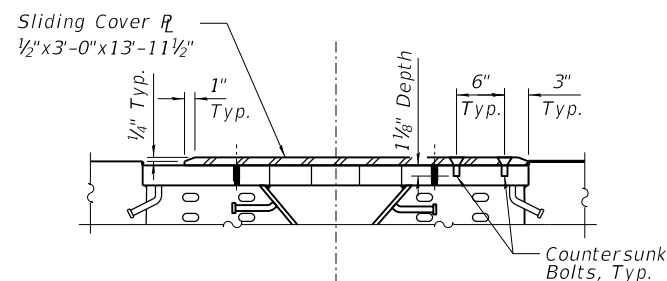
1" Ø ANCHOR BOLT



SECTION B-B
* at 50° F



SIDEWALK SLIDING COVER R PLAN



SIDEWALK SLIDING COVER R ELEVATION

BILL OF MATERIAL

Item	Unit	Total
Finger Plate Expansion Joint, 4"	Foot	71.5

Notes:

- The structural steel plates of the barrier sliding plate assemblies and stiffener brackets shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to ASHTO M111 after fabrication.
- Countersunk bolts shall be in accordance with ASTM A307, Grade A.
- Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
- Cost for furnishing and installing barrier sliding plate assemblies and stiffener brackets shall be included in the cost of Finger Plate Expansion Joint.
- Countersunk bolts and expansion anchors shall have the threads coated with anti-seize compound.

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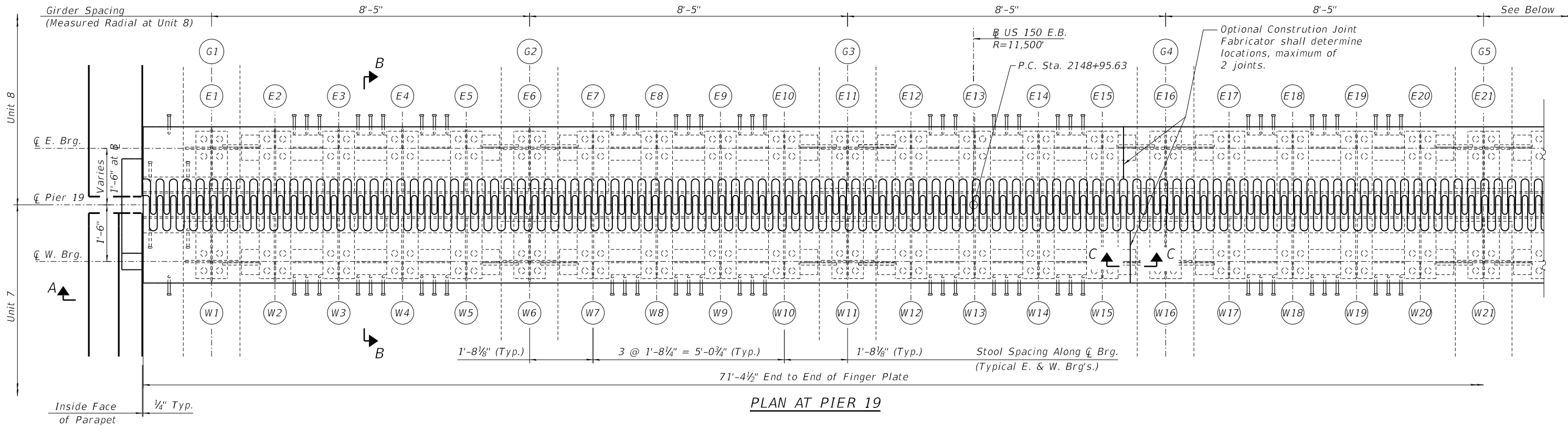
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DESIGNED - MNM
CHECKED - SEG
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DRAWN - RSJ
PLOT DATE = 12/11/2018
CHECKED - MNM
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

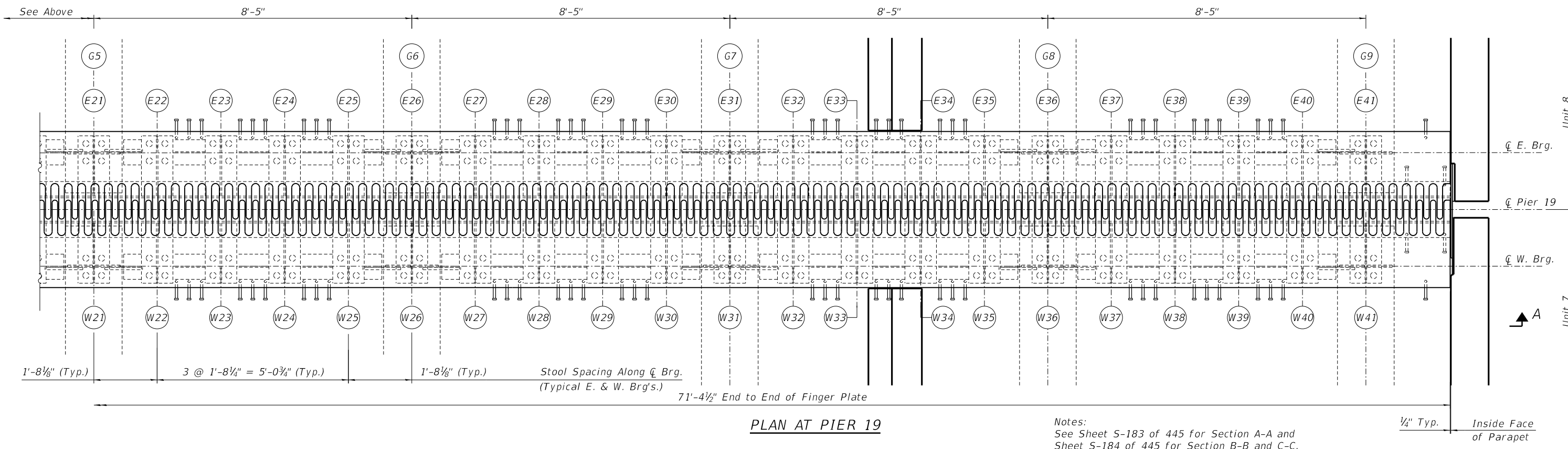
FINGER PLATE EXPANSION JOINT DETAILS - PIER 16, 2 OF 2
STRUCTURE NO. 090-0180

SHEET 5-181 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1087
CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	



PLAN AT PIER 19



PLAN AT PIER 19

Notes:
See Sheet S-183 of 445 for Section A-A and
Sheet S-184 of 445 for Section B-B and C-C.

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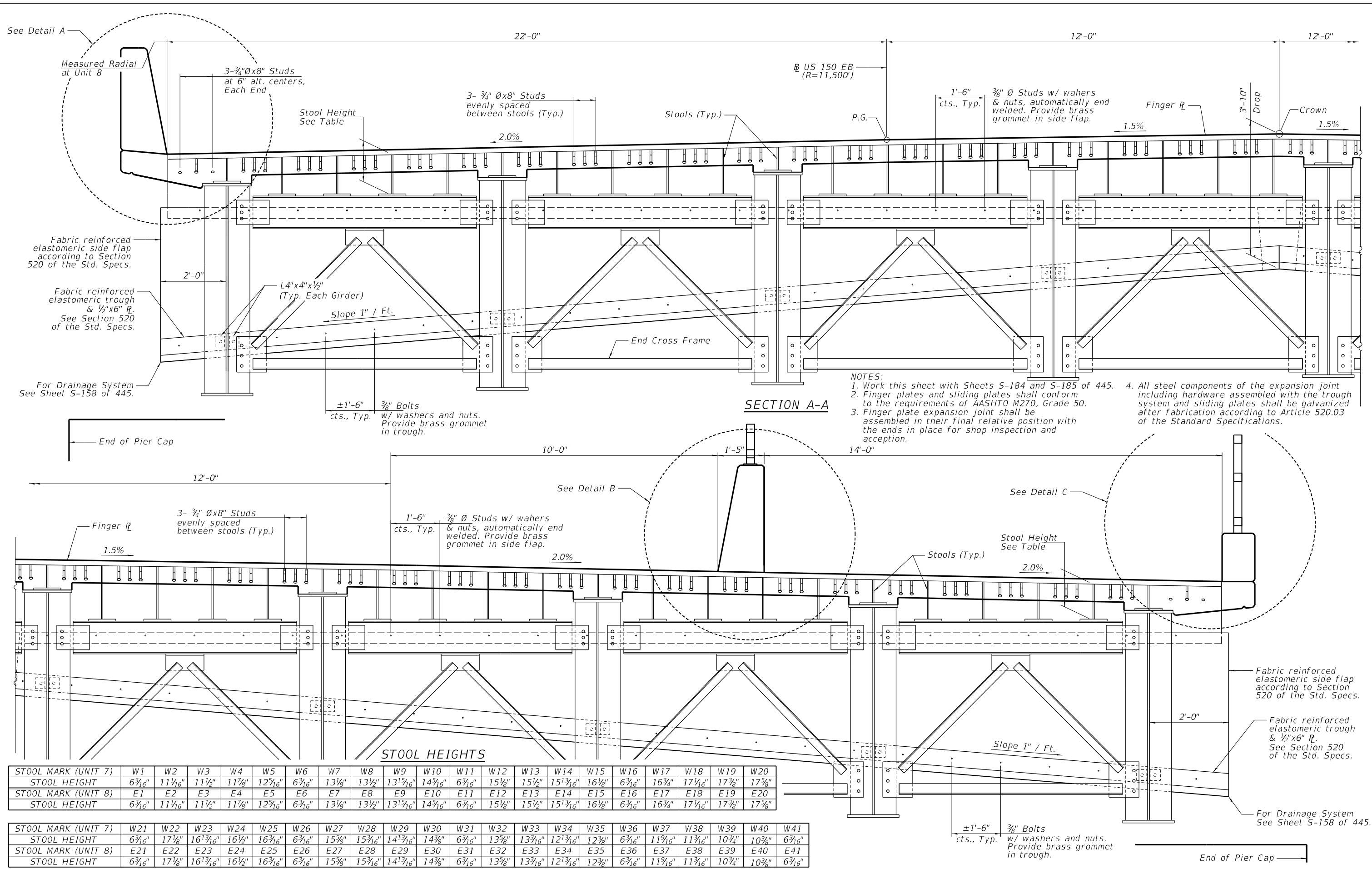
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT PLAN - PIER 19
STRUCTURE NO. 090-0180

SHEET 5-182 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR]BR	PEO/TAZ	1361	1088
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				

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- NOTES:**
1. Work this sheet with Sheets S-184 and S-185 of 445.
 2. Finger plates and sliding plates shall conform to the requirements of AASHTO M270, Grade 50.
 3. Finger plate expansion joint shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
 4. All steel components of the expansion joint including hardware assembled with the trough system and sliding plates shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

STOOL HEIGHTS

STOOL MARK (UNIT 7)	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20
STOOL HEIGHT	6 ³ / ₁₆ "	11 ¹ / ₁₆ "	11 ¹ / ₂ "	11 ⁷ / ₈ "	12 ⁵ / ₁₆ "	6 ³ / ₁₆ "	13 ³ / ₈ "	13 ¹ / ₂ "	13 ⁵ / ₁₆ "	14 ⁵ / ₁₆ "	6 ³ / ₁₆ "	15 ¹ / ₈ "	15 ¹ / ₂ "	15 ³ / ₁₆ "	16 ¹ / ₈ "	6 ³ / ₁₆ "	16 ³ / ₄ "	17 ¹ / ₁₆ "	17 ³ / ₈ "	17 ⁵ / ₈ "
STOOL MARK (UNIT 8)	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20
STOOL HEIGHT	6 ³ / ₁₆ "	11 ¹ / ₁₆ "	11 ¹ / ₂ "	11 ⁷ / ₈ "	12 ⁵ / ₁₆ "	6 ³ / ₁₆ "	13 ³ / ₈ "	13 ¹ / ₂ "	13 ⁵ / ₁₆ "	14 ⁵ / ₁₆ "	6 ³ / ₁₆ "	15 ¹ / ₈ "	15 ¹ / ₂ "	15 ³ / ₁₆ "	16 ¹ / ₈ "	6 ³ / ₁₆ "	16 ³ / ₄ "	17 ¹ / ₁₆ "	17 ³ / ₈ "	17 ⁵ / ₈ "

STOOL MARK (UNIT 7)	W21	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41
STOOL HEIGHT	6 ³ / ₁₆ "	17 ¹ / ₈ "	16 ¹ / ₁₆ "	16 ¹ / ₂ "	16 ³ / ₁₆ "	6 ³ / ₁₆ "	15 ⁵ / ₈ "	15 ³ / ₁₆ "	14 ¹ / ₁₆ "	14 ³ / ₈ "	6 ³ / ₁₆ "	13 ³ / ₈ "	13 ¹ / ₁₆ "	12 ¹ / ₁₆ "	12 ³ / ₈ "	6 ³ / ₁₆ "	11 ¹ / ₁₆ "	11 ¹ / ₁₆ "	10 ³ / ₄ "	10 ³ / ₈ "	6 ³ / ₁₆ "
STOOL MARK (UNIT 8)	E21	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32	E33	E34	E35	E36	E37	E38	E39	E40	E41
STOOL HEIGHT	6 ³ / ₁₆ "	17 ¹ / ₈ "	16 ¹ / ₁₆ "	16 ¹ / ₂ "	16 ³ / ₁₆ "	6 ³ / ₁₆ "	15 ⁵ / ₈ "	15 ³ / ₁₆ "	14 ¹ / ₁₆ "	14 ³ / ₈ "	6 ³ / ₁₆ "	13 ³ / ₈ "	13 ¹ / ₁₆ "	12 ¹ / ₁₆ "	12 ³ / ₈ "	6 ³ / ₁₆ "	11 ¹ / ₁₆ "	11 ¹ / ₁₆ "	10 ³ / ₄ "	10 ³ / ₈ "	6 ³ / ₁₆ "



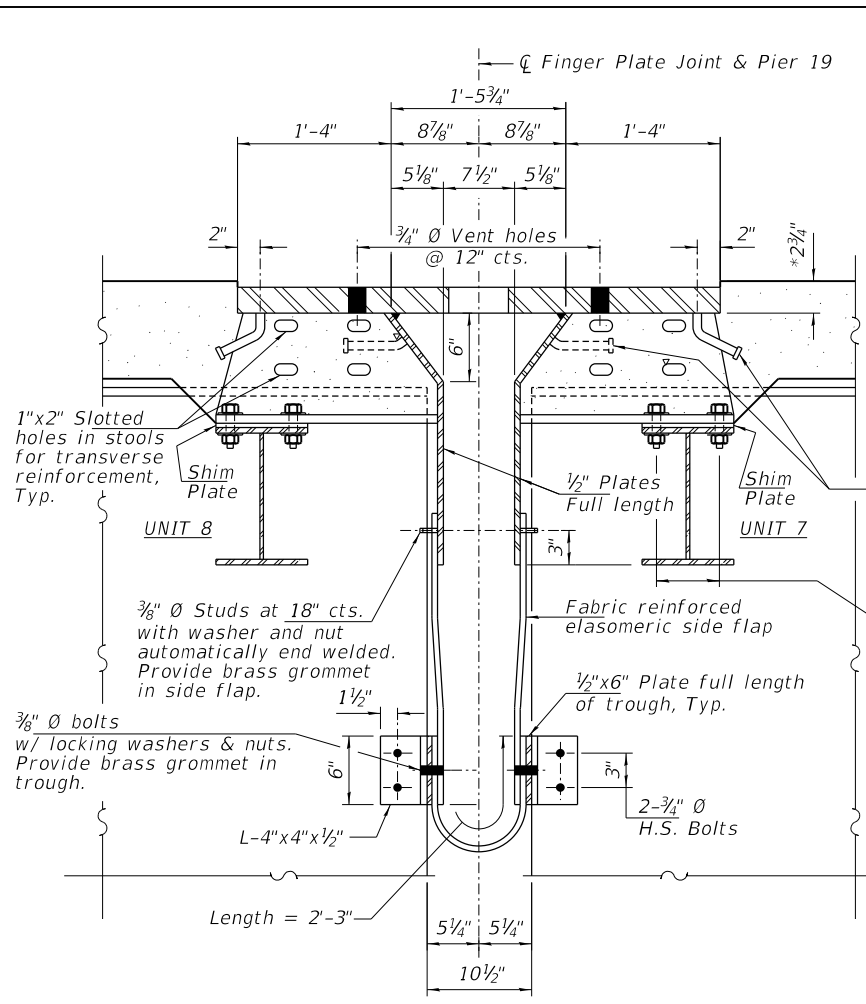
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PLOT DATE = 12/11/2018	CHECKED - MNM	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FINGER PLATE EXPANSION JOINT ELEVATION - PIER 19
 STRUCTURE NO. 090-0180**

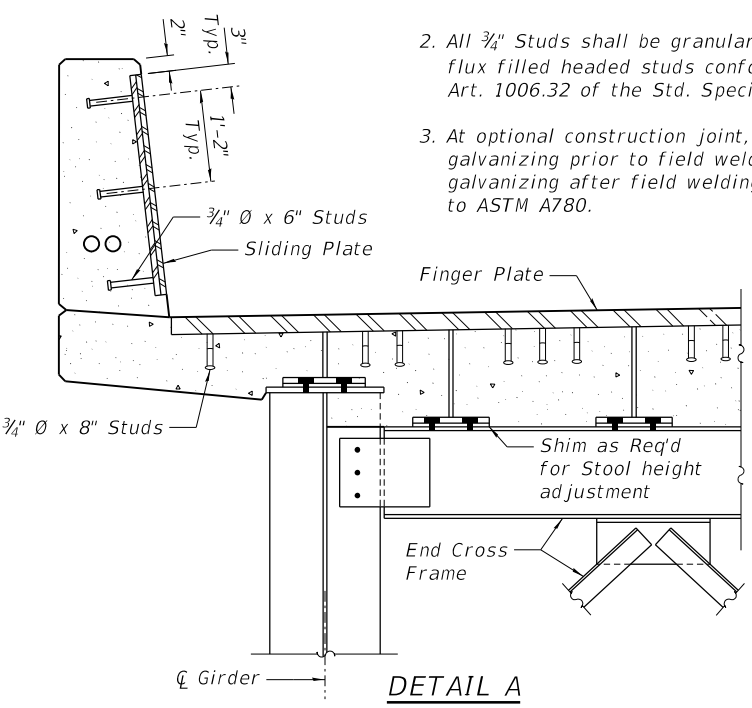
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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP(905)	

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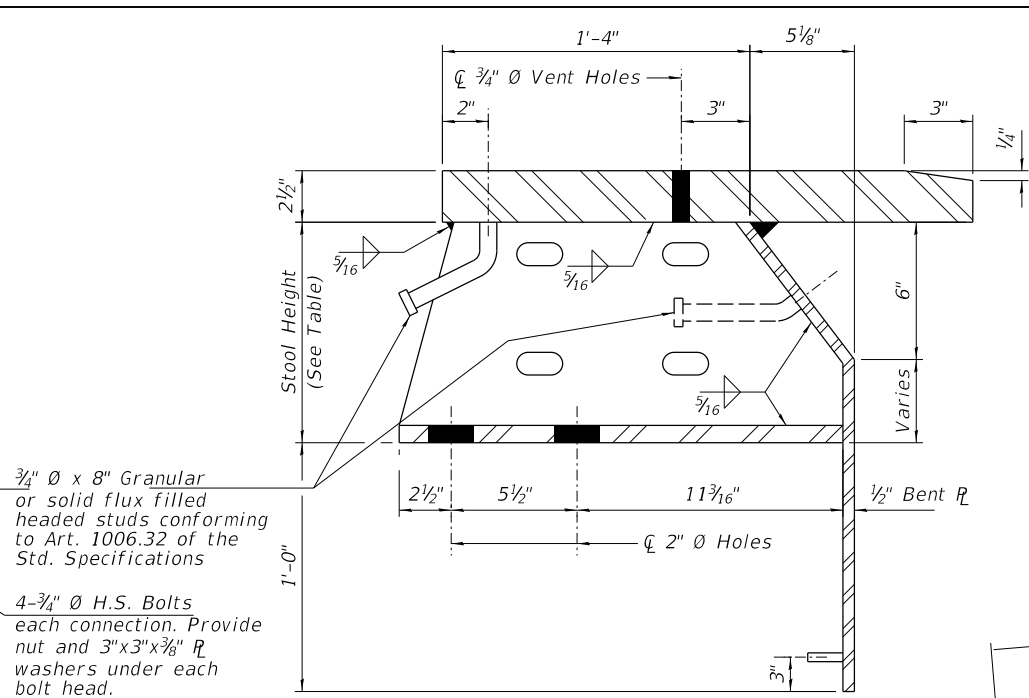


SECTION B-B
 (Horizontal dimensions are at 50° F.)

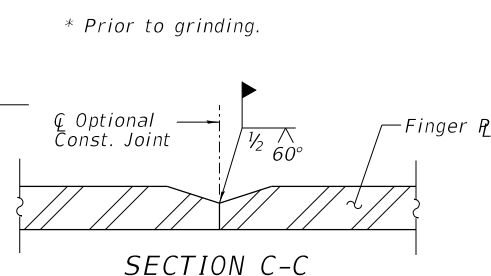
- NOTES:**
1. Provide 1-1/4", 1-1/8" and 1-1/16" shim plates for stools supported by girders and cross frames.
 2. All 3/4" Studs shall be granular or solid flux filled studs conforming to Art. 1006.32 of the Std. Specifications.
 3. At optional construction joint, grind off galvanizing prior to field welding. Repair galvanizing after field welding according to ASTM A780.



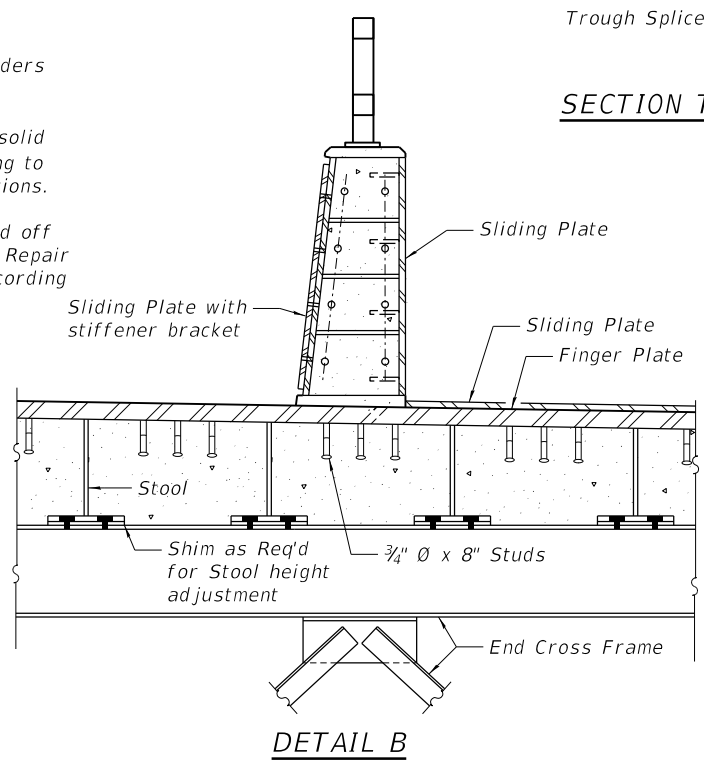
DETAIL A



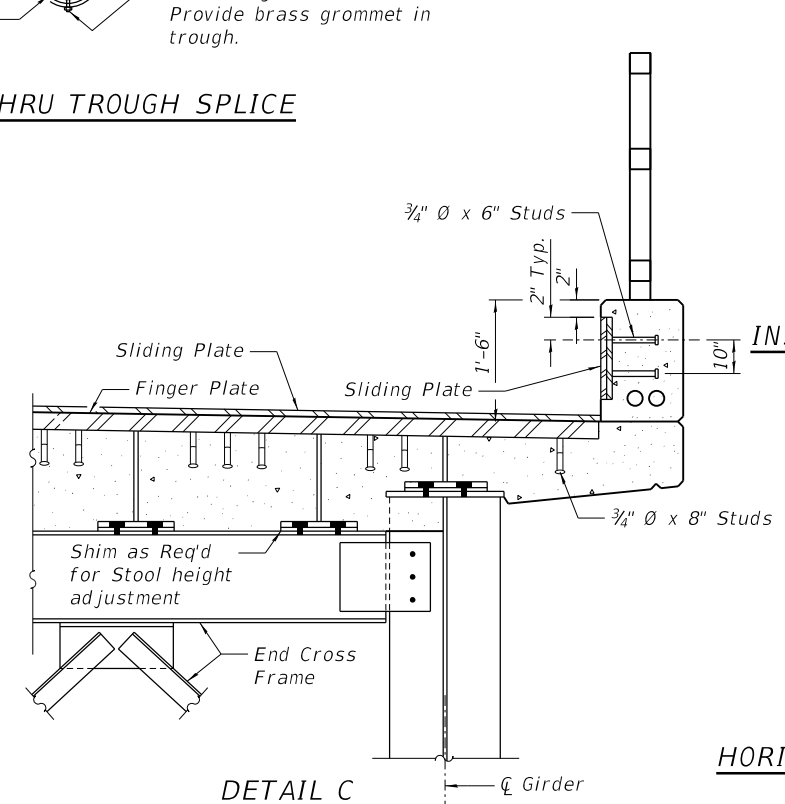
STOOL DETAIL



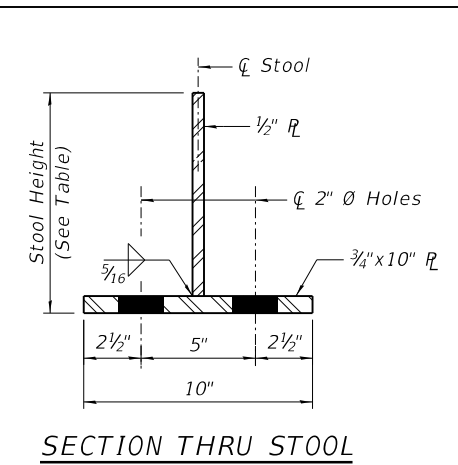
SECTION C-C



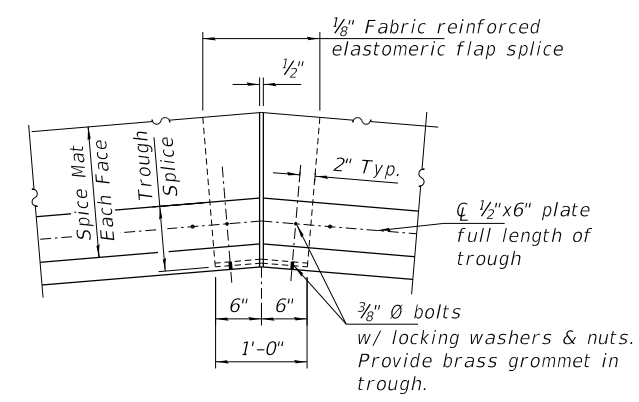
DETAIL B



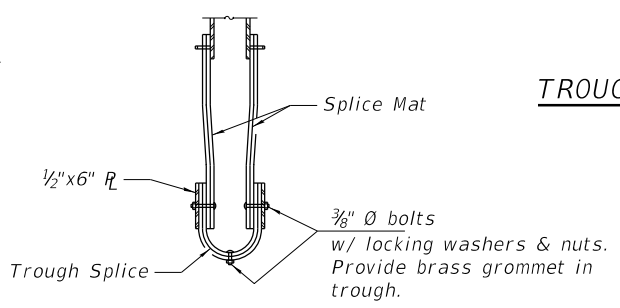
DETAIL C



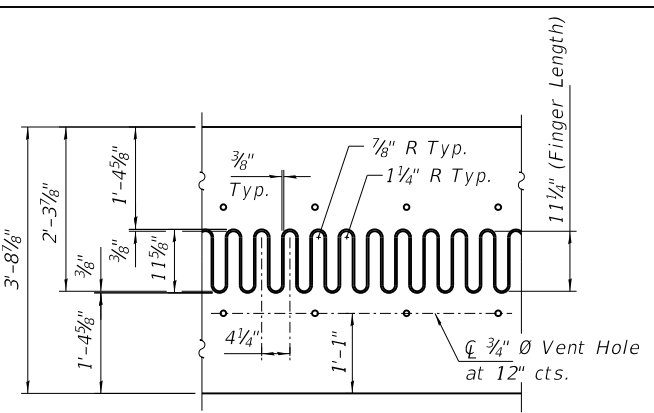
SECTION THRU STOOL



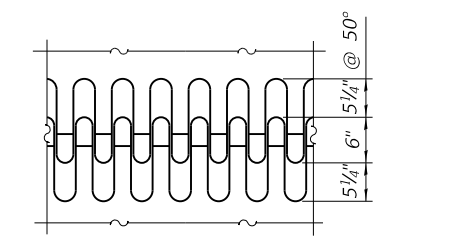
TROUGH SPLICE DETAIL



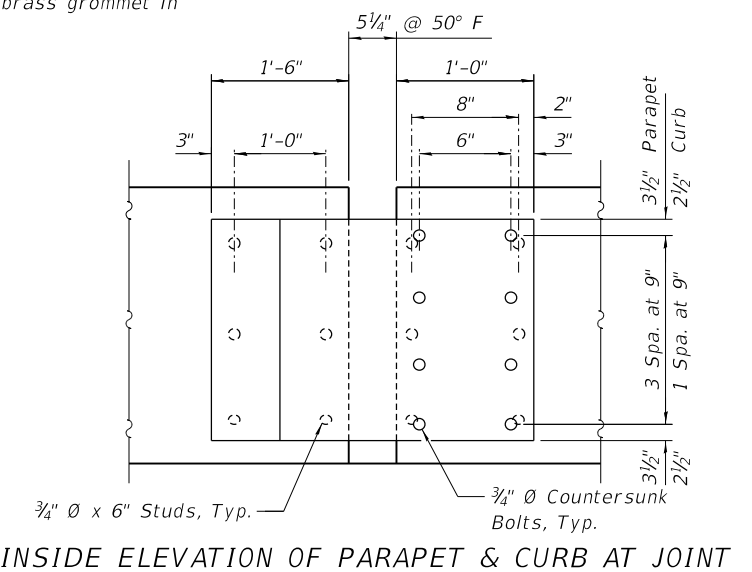
SECTION THRU TROUGH SPLICE



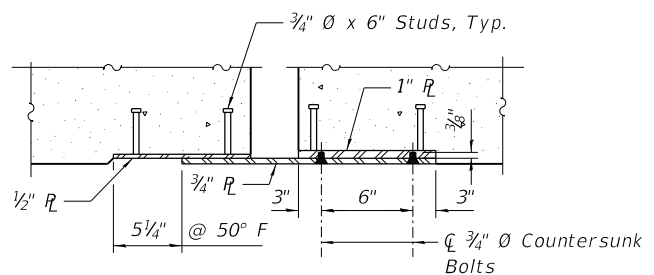
FLAME CUTTING DIAGRAM
 Cut from R 2 1/2" x 3'-8 1/8" x 71'-4 1/2"



FINGER PLATE SETTING DIAGRAM



INSIDE ELEVATION OF PARAPET & CURB AT JOINT



HORIZONTAL SECTION OF PARAPET & CURB AT JOINT



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CHECKED - SEG	REVISIONS -	
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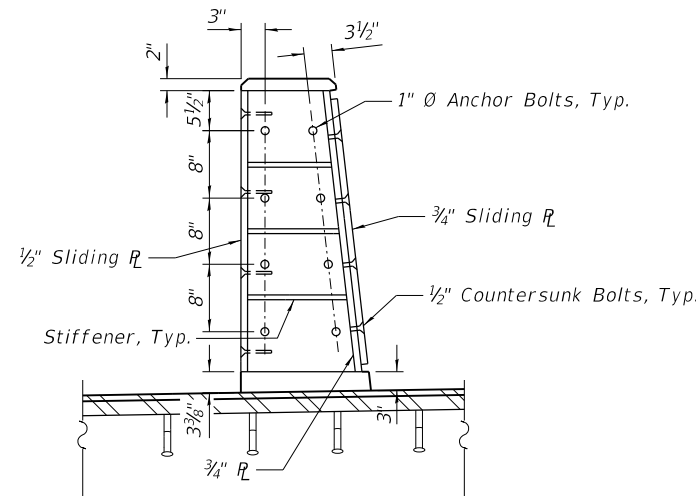
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FINGER PLATE EXPANSION JOINT DETAILS - PIER 19, 1 OF 2
 STRUCTURE NO. 090-0180**

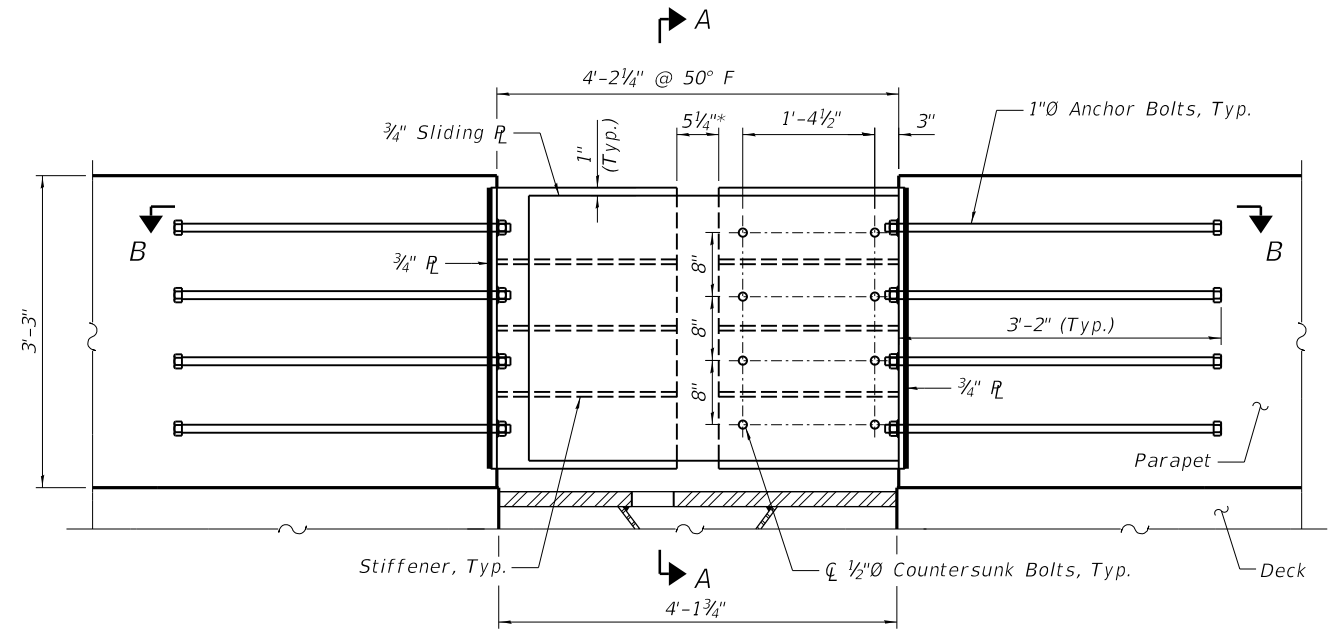
SHEET 5-184 OF 445 SHEETS

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CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-RP3(905)	

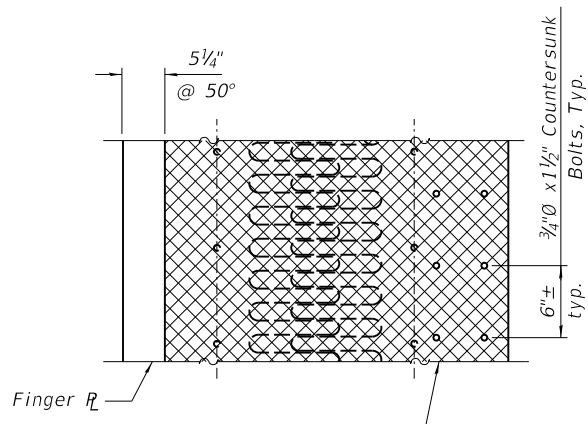
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SECTION A-A

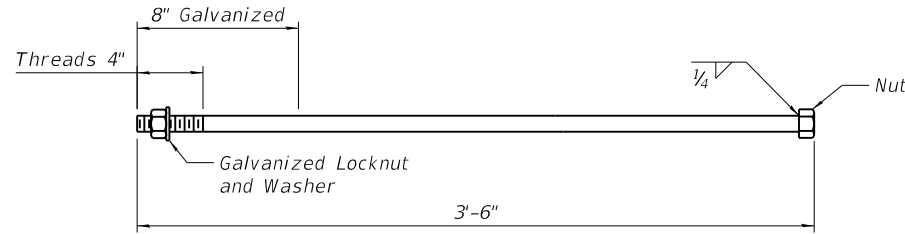


FRONT FACE OF SOUTH PARAPET AT JOINT
 Parapet Railing omitted for clarity

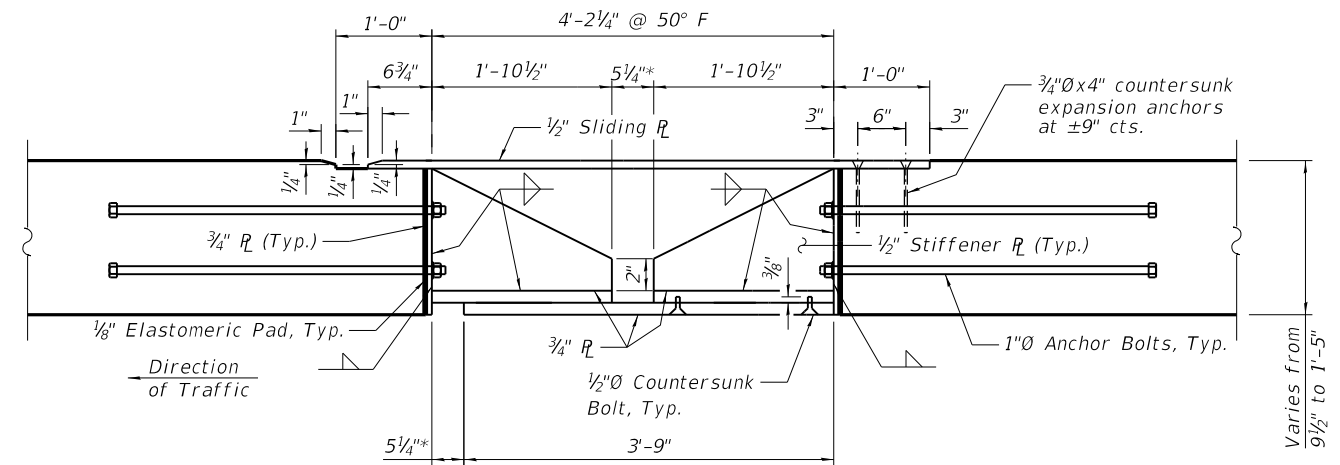


The top surface of Shared Use Path shall have a raised pattern according to ASTM A786

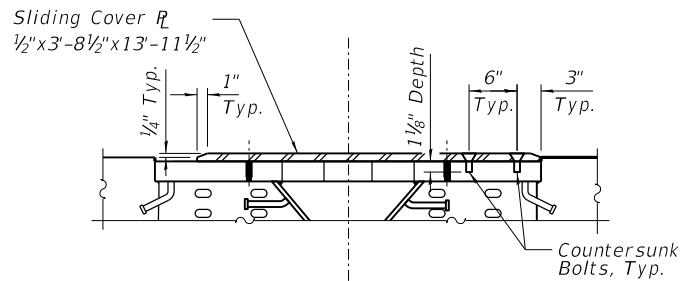
SIDEWALK SLIDING COVER R PLAN



1" Ø ANCHOR BOLT



SECTION B-B
 * at 50° F



SIDEWALK SLIDING COVER R ELEVATION

BILL OF MATERIAL

Item	Unit	Total
Finger Plate Expansion Joint, 5"	Foot	71.5

- Notes:
- The structural steel plates of the barrier sliding plate assemblies and stiffener brackets shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to ASHTO M111 after fabrication.
 - Countersunk bolts shall be in accordance with ASTM A307, Grade A.
 - Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
 - Cost for furnishing and installing barrier sliding plate assemblies and stiffener brackets shall be included in the cost of Finger Plate Expansion Joint.
 - Countersunk bolts and expansion anchors shall have the threads coated with anti-seize compound.



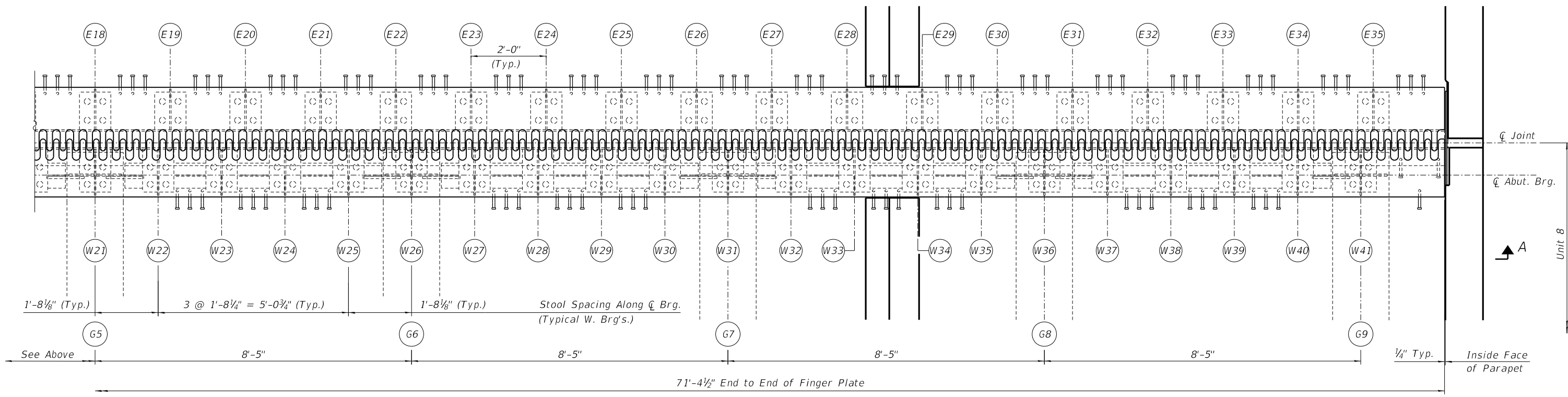
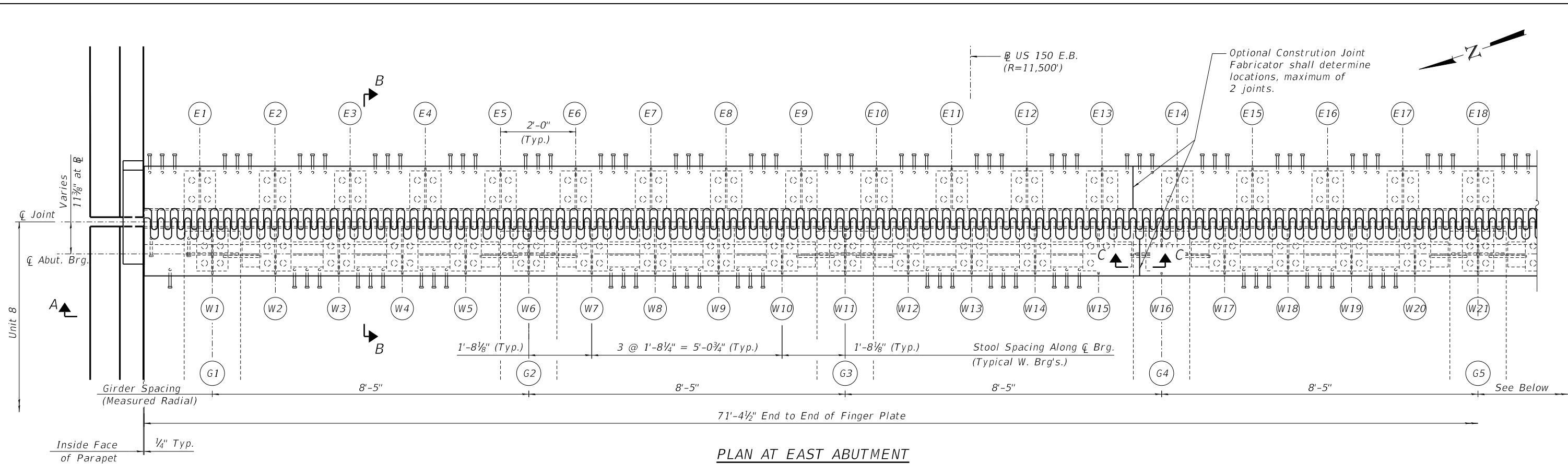
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PLOT DATE = 12/11/2018	DRAWN - RSJ	REVISED -
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STATE OF ILLINOIS
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FINGER PLATE EXPANSION JOINT DETAILS - PIER 19, 2 OF 2
 STRUCTURE NO. 090-0180
 SHEET 5-185 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1091
			CONTRACT NO. 68B46	
			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	

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Notes:
 See Sheet S-187 of 445 for Section A-A and
 Sheet S-188 of 445 for Section B-B and C-C.



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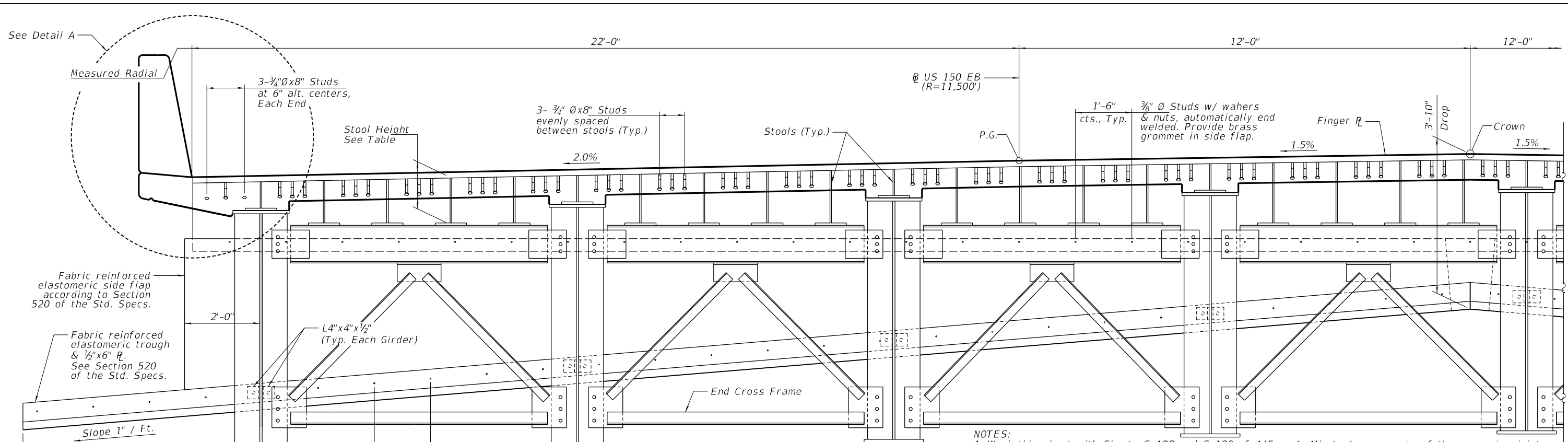
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT PLAN - EAST ABUTMENT
 STRUCTURE NO. 090-0180

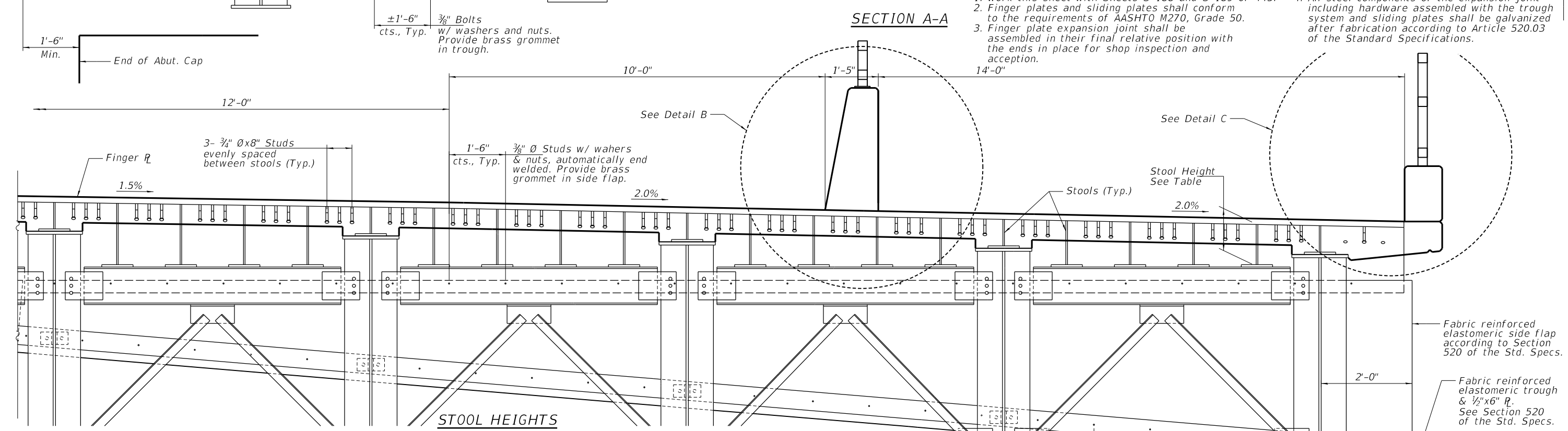
SHEET 5-186 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-YRP3(905)	

12/11/2018 3:59:19 PM



- NOTES:**
1. Work this sheet with Sheets S-188 and S-189 of 445.
 2. Finger plates and sliding plates shall conform to the requirements of AASHTO M270, Grade 50.
 3. Finger plate expansion joint shall be assembled in their final relative position with the ends in place for shop inspection and acceptance.
 4. All steel components of the expansion joint including hardware assembled with the trough system and sliding plates shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.



STOOL MARK (UNIT 8)	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20
STOOL HEIGHT	6 ¹ / ₁₆ "	11 ⁹ / ₁₆ "	12"	12 ³ / ₈ "	12 ³ / ₁₆ "	6 ¹ / ₁₆ "	13 ³ / ₈ "	14"	14 ⁷ / ₁₆ "	14 ¹³ / ₁₆ "	6 ¹ / ₁₆ "	15 ⁵ / ₈ "	16"	16 ⁵ / ₁₆ "	16 ³ / ₈ "	6 ¹ / ₁₆ "	17 ¹ / ₄ "	17 ⁹ / ₁₆ "	17 ⁷ / ₈ "	18 ¹ / ₈ "
STOOL MARK (E. ABUT.)	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20
STOOL HEIGHT	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "

STOOL MARK (UNIT 8)	W21	W22	W23	W24	W25	W26	W27	W28	W29	W30	W31	W32	W33	W34	W35	W36	W37	W38	W39	W40	W41
STOOL HEIGHT	6 ¹ / ₁₆ "	17 ³ / ₈ "	17 ³ / ₁₆ "	17"	16 ¹ / ₁₆ "	6 ¹ / ₁₆ "	16 ³ / ₈ "	15 ¹ / ₁₆ "	15 ³ / ₁₆ "	14 ⁷ / ₈ "	6 ¹ / ₁₆ "	14 ³ / ₈ "	13 ¹ / ₁₆ "	13 ³ / ₁₆ "	12 ³ / ₈ "	6 ¹ / ₁₆ "	12 ¹ / ₁₆ "	11 ¹ / ₁₆ "	11 ¹ / ₄ "	10 ³ / ₈ "	6 ¹ / ₁₆ "
STOOL MARK (E. ABUT.)	E21	E22	E23	E24	E25	E26	E27	E28	E29	E30	E31	E32	E33	E34	E35						
STOOL HEIGHT	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "	8 ¹ / ₂ "						

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

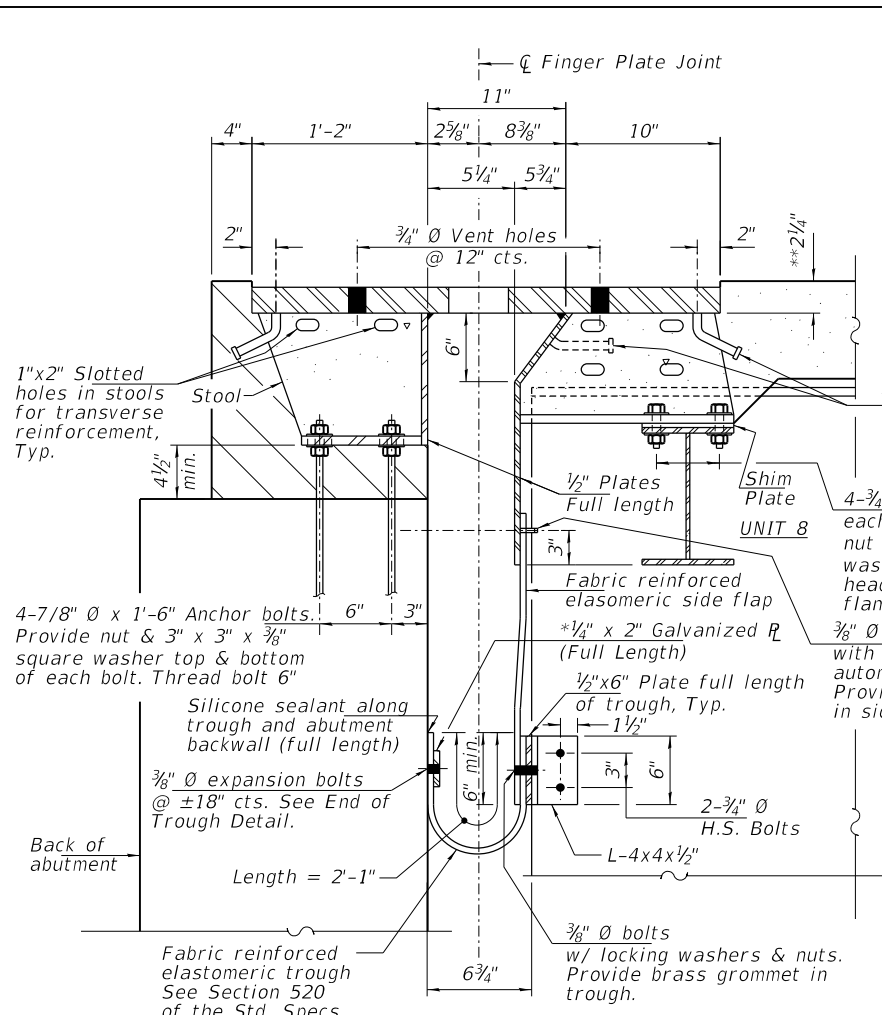
FINGER PLATE EXPANSION JOINT ELEV - EAST ABUTMENT
STRUCTURE NO. 090-0180

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SHEET 5-187 OF 445 SHEETS

ILLINOIS FED. AID PROJECT NHPP-YRP3(905)

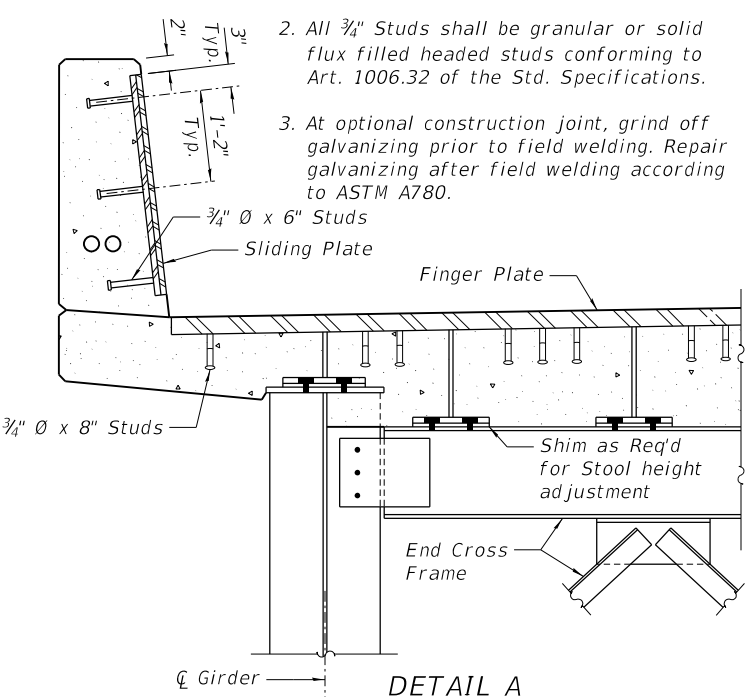
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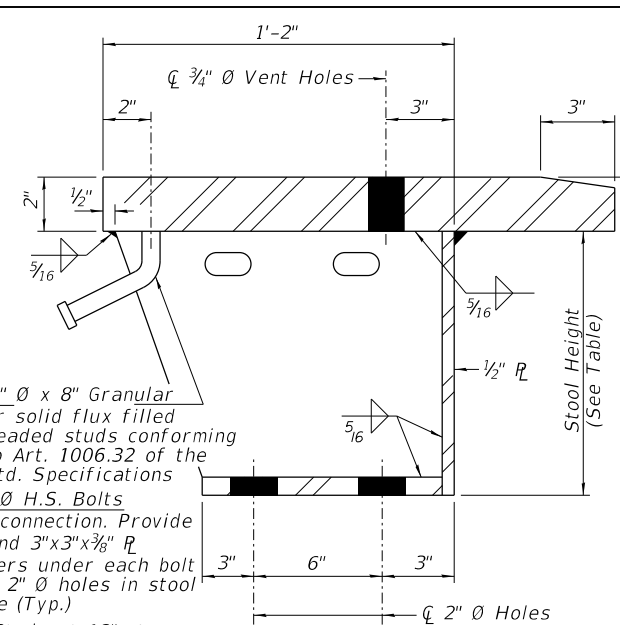
SECTION B-B

(Horizontal dimensions are at 50° F.)

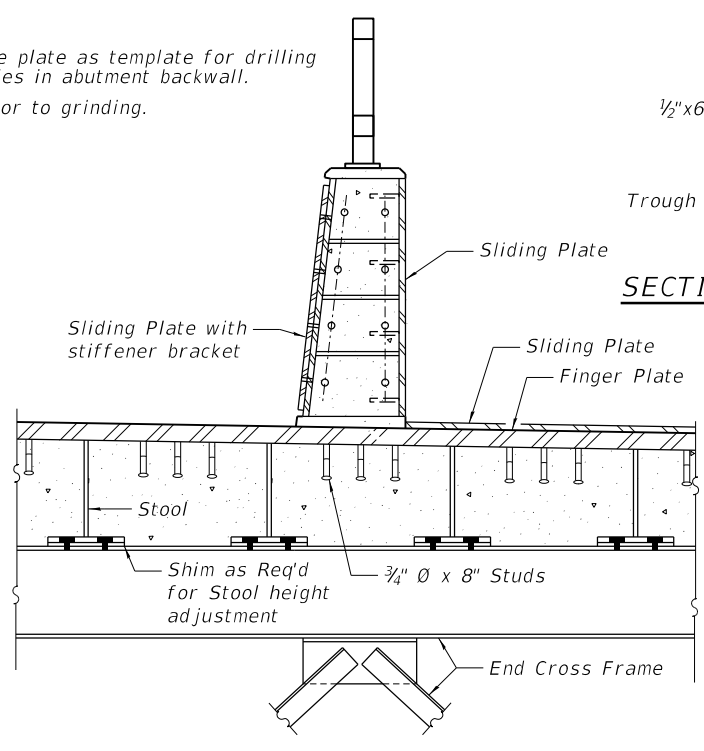
- NOTES:**
1. Provide 1-1/4", 1-1/8" and 1-1/16" shim plates for stools supported by girders and cross frames.
 2. All 3/4" Studs shall be granular or solid flux filled headed studs conforming to Art. 1006.32 of the Std. Specifications.
 3. At optional construction joint, grind off galvanizing prior to field welding. Repair galvanizing after field welding according to ASTM A780.



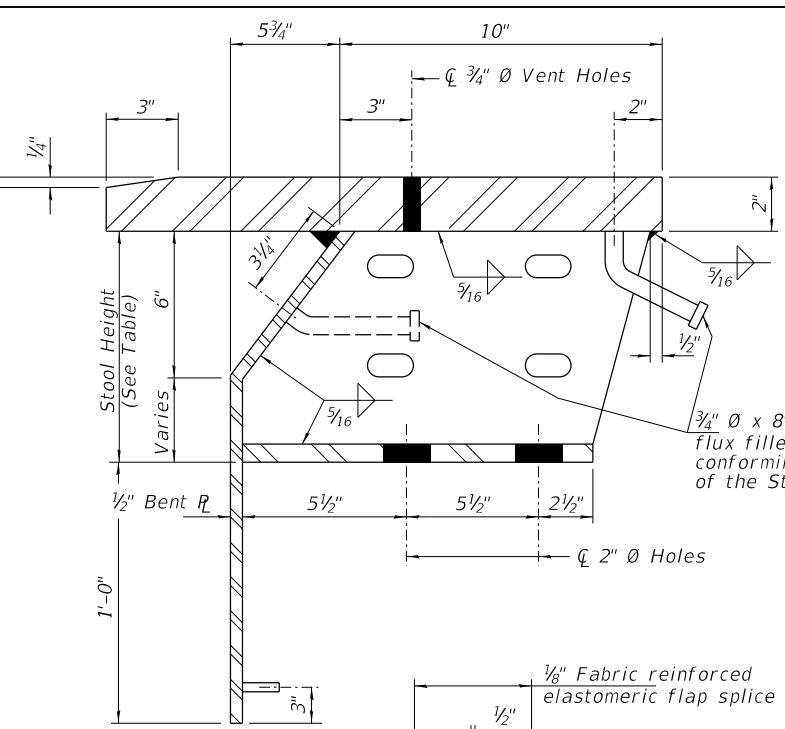
DETAIL A



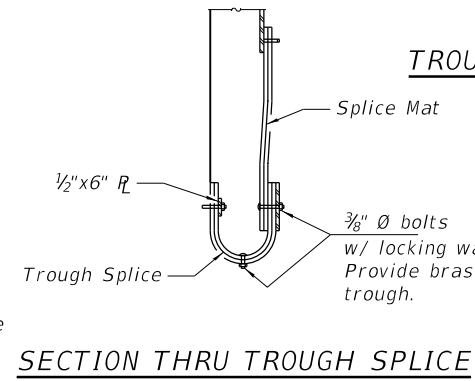
SECTION THRU STOOL



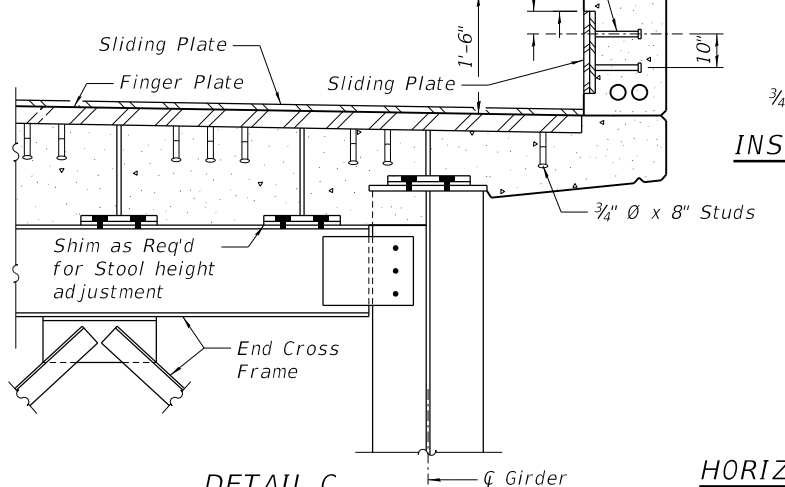
DETAIL B



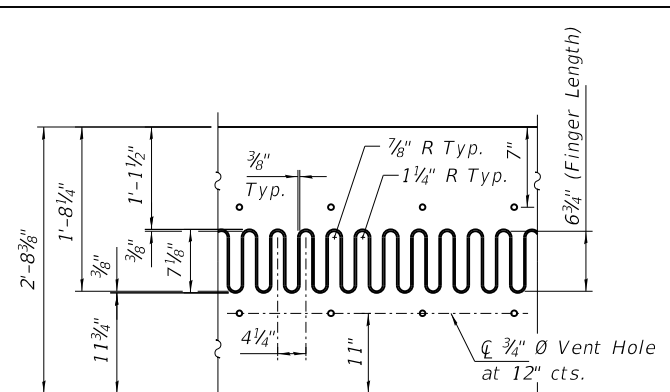
TROUGH SPLICE DETAIL



SECTION THRU TROUGH SPLICE

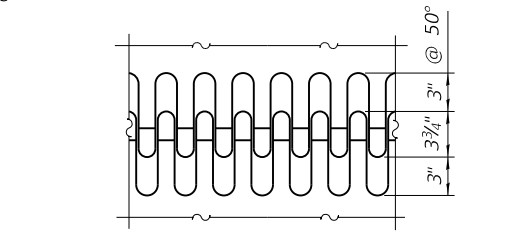


DETAIL C

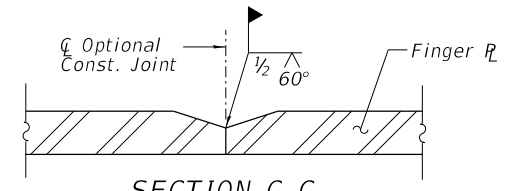


FLAME CUTTING DIAGRAM

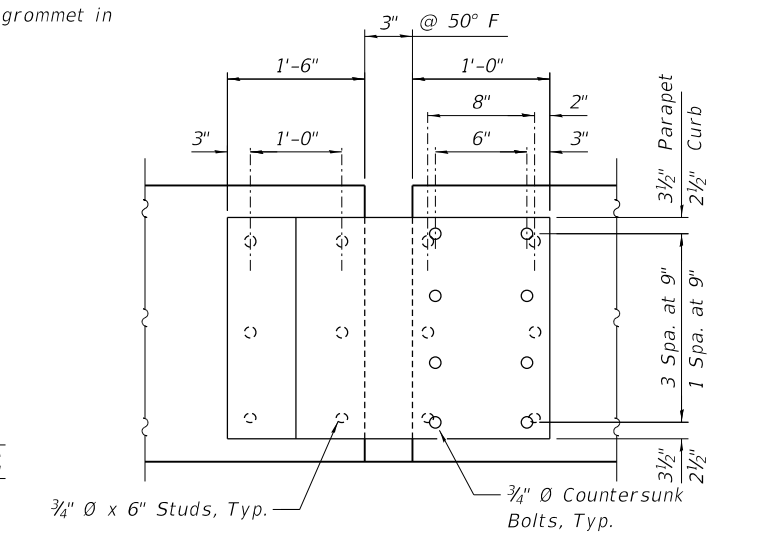
Cut from PL 2" x 2'-8 1/4" x 71'-4 1/2"



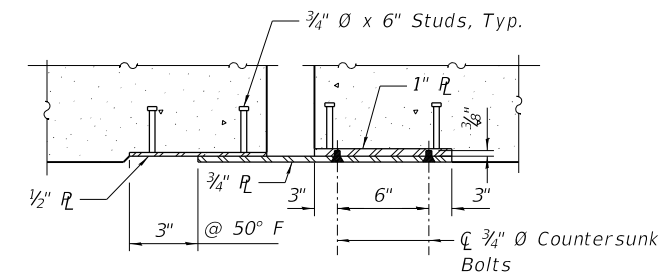
FINGER PLATE SETTING DIAGRAM



SECTION C-C



INSIDE ELEVATION OF PARAPET & CURB AT JOINT



HORIZONTAL SECTION OF PARAPET & CURB AT JOINT



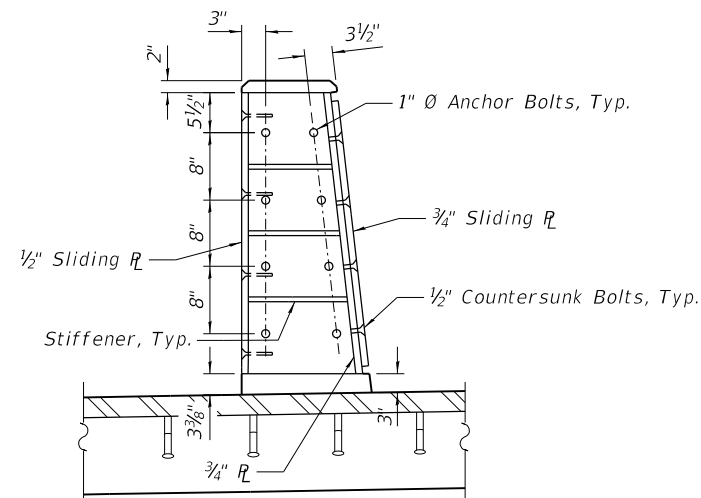
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

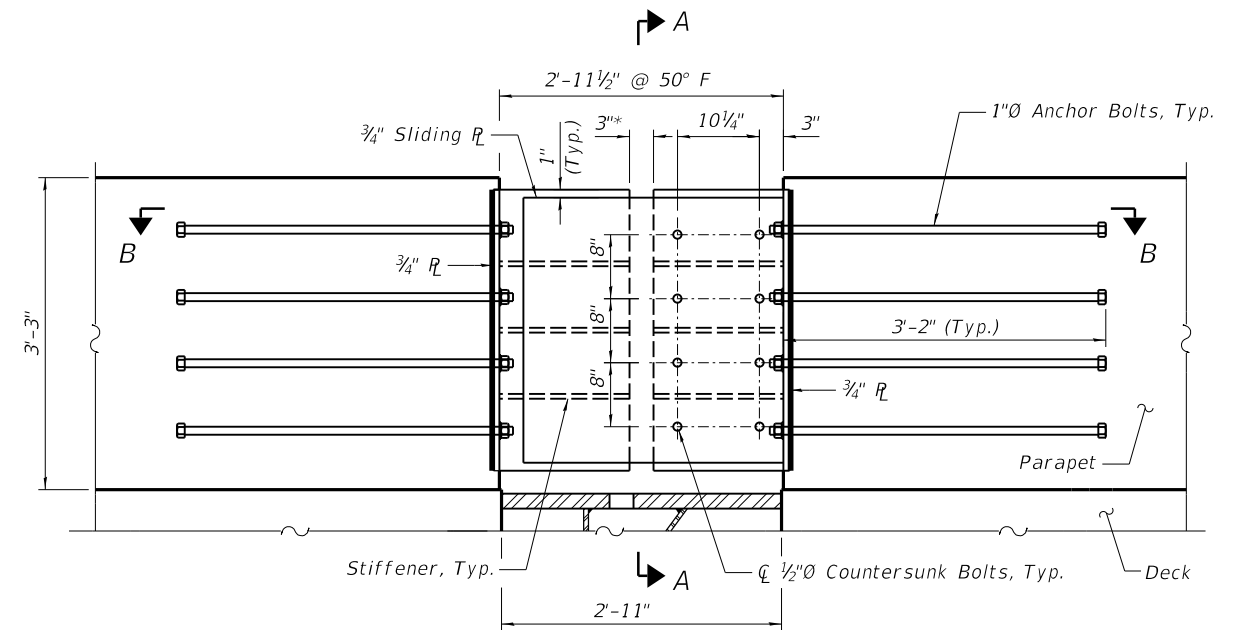
**FINGER PLATE EXPANSION JOINT DETAILS - E. ABUT, 1 OF 2
 STRUCTURE NO. 090-0180**

SHEET 5-188 OF 445 SHEETS

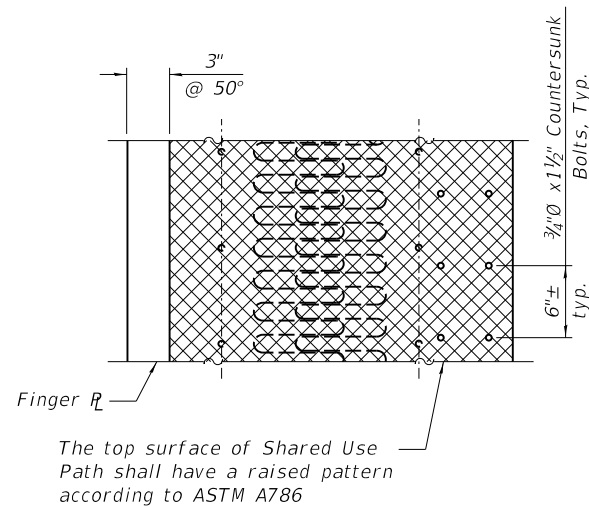
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CONTRACT NO. 68B46			ILLINOIS FED. AID PROJECT NHPP-RP(905)	



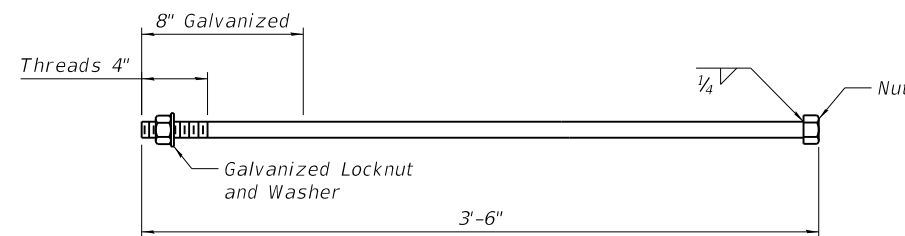
SECTION A-A



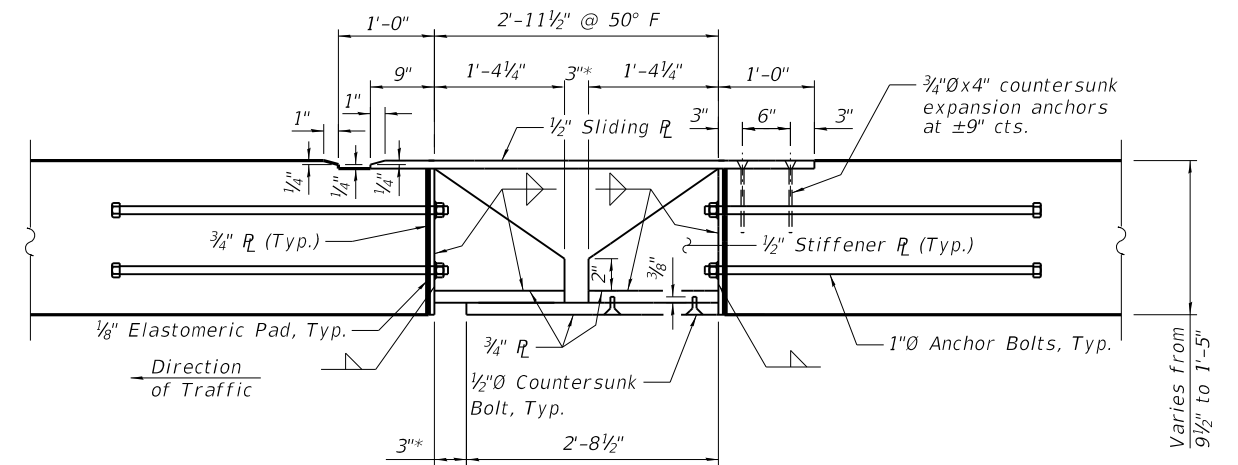
FRONT FACE OF SOUTH PARAPET AT JOINT
Parapet Railing omitted for clarity



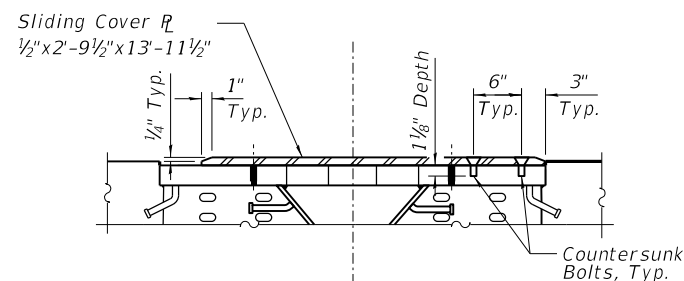
SIDEWALK SLIDING COVER R PLAN



1" Ø ANCHOR BOLT



SECTION B-B
* at 50° F



SIDEWALK SLIDING COVER R ELEVATION

BILL OF MATERIAL

Item	Unit	Total
Finger Plate Expansion Joint, 3"	Foot	71.5

Notes:

- The structural steel plates of the barrier sliding plate assemblies and stiffener brackets shall conform to the requirements of AASHTO M270 Grade 36, and hot-dipped galvanized according to ASHTO M111 after fabrication.
- Countersunk bolts shall be in accordance with ASTM A307, Grade A.
- Countersunk bolts and concrete inserts shall be hot-dipped galvanized according to AASHTO M232.
- Cost for furnishing and installing barrier sliding plate assemblies and stiffener brackets shall be included in the cost of Finger Plate Expansion Joint.
- Countersunk bolts and expansion anchors shall have the threads coated with anti-seize compound.

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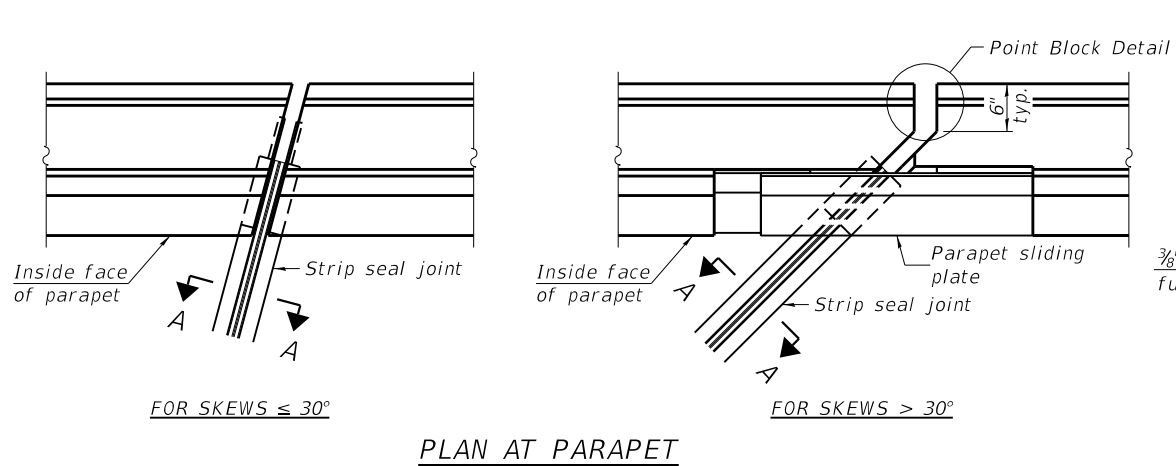
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FINGER PLATE EXPANSION JOINT DETAILS - E. ABUT, 2 OF 2
STRUCTURE NO. 090-0180

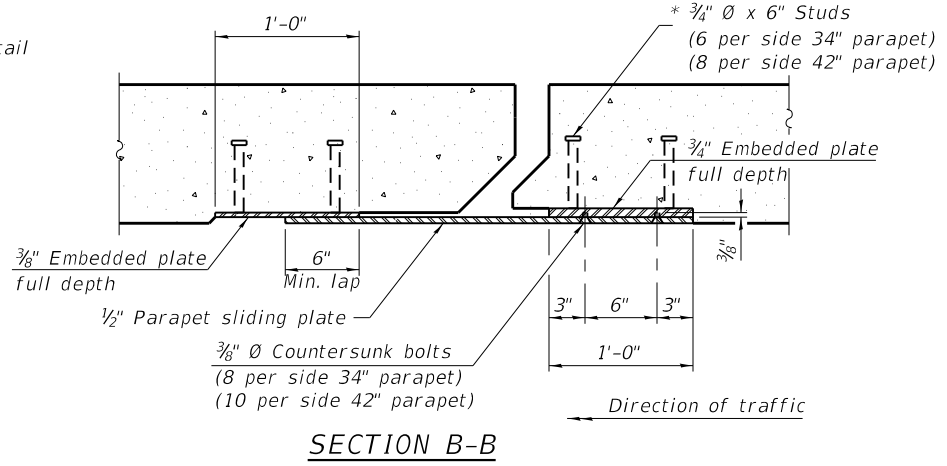
SHEET 5-189 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	

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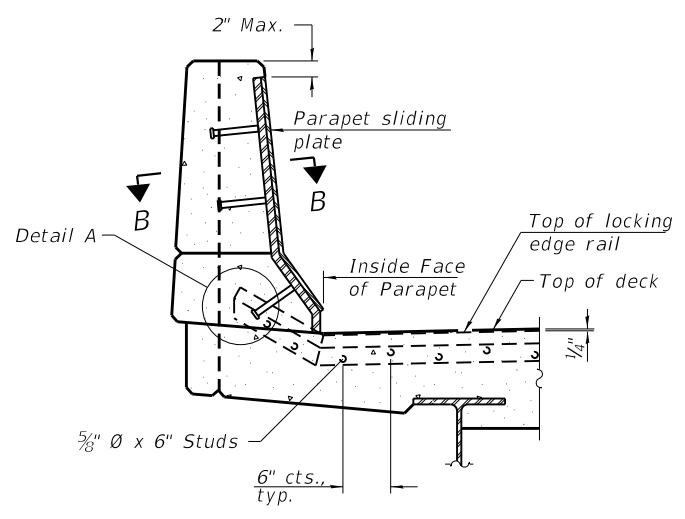


PLAN AT PARAPET



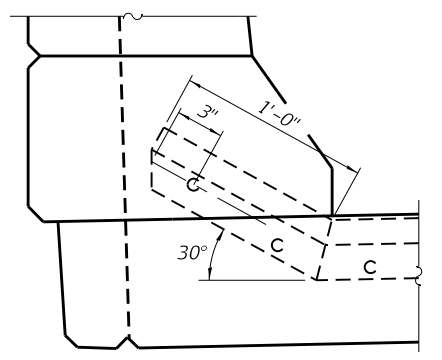
SECTION B-B

Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.
 The manufacturer's recommended installation methods shall be followed.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.
 The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.
 Cost of parapet sliding plates, sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.
 34" F-shape barrier shown, 42" F-shape similar as noted.
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.
 Apply anti-seize compound to all countersunk bolts and anchors in sidewalk sliding plate and parapet embedded plate.

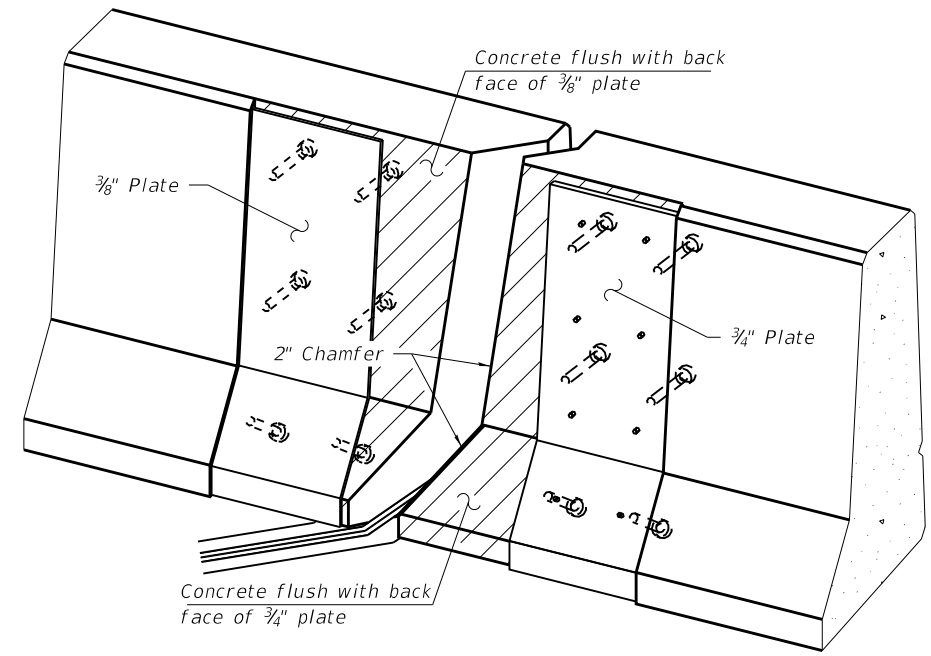


ELEVATION AT PARAPET

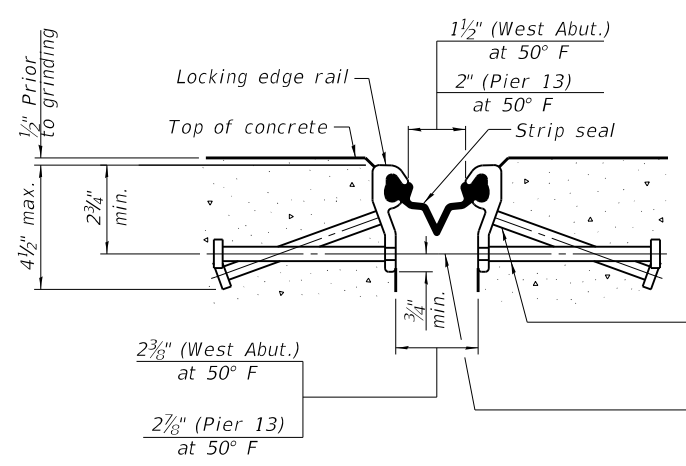
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A

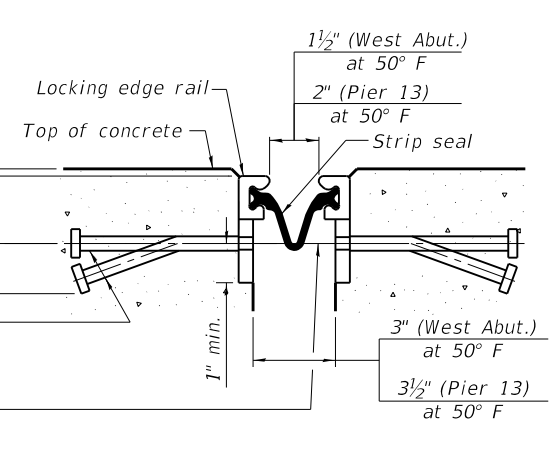


TRIMETRIC VIEW
(Showing embedded plates only)

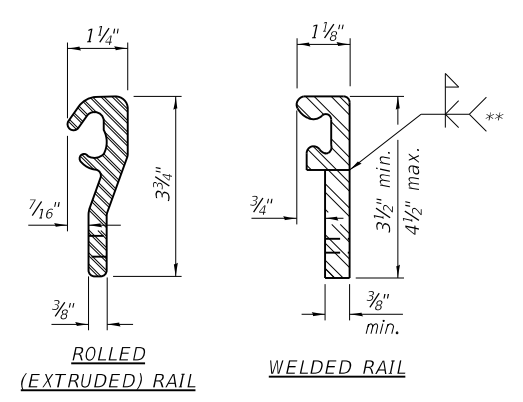


SHOWING ROLLED RAIL JOINT

* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" Ø threaded rods in 7/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

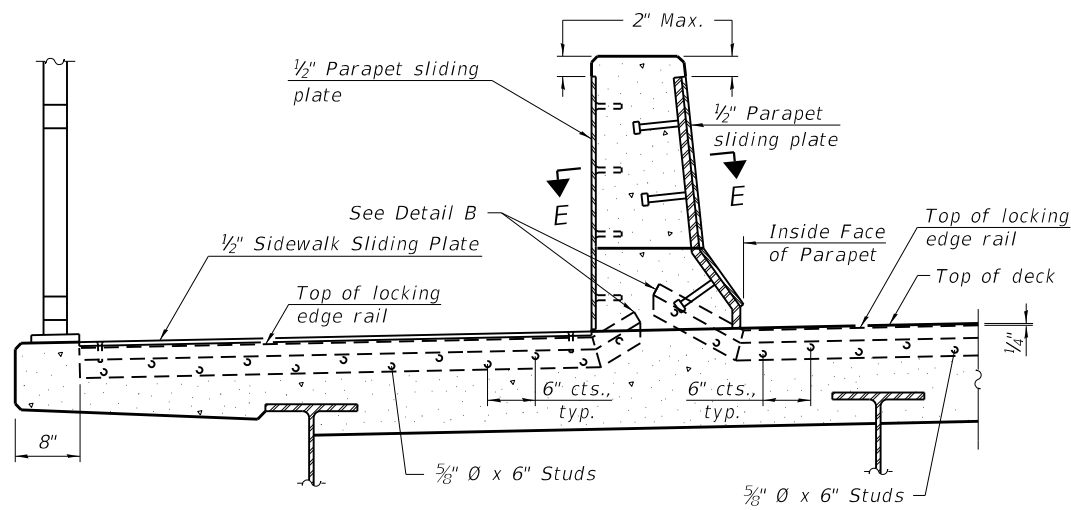
BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	133.5

60' at West Abutment
 73.5' at Pier 13

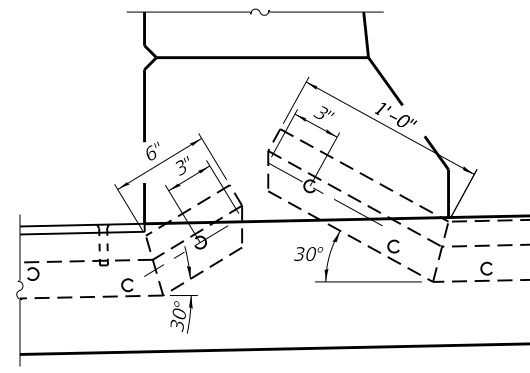
THIS SHEET TO BE REPLACED WITH PENDING BASE SHEET FOR CONSTANT-SLOPE PARAPET

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

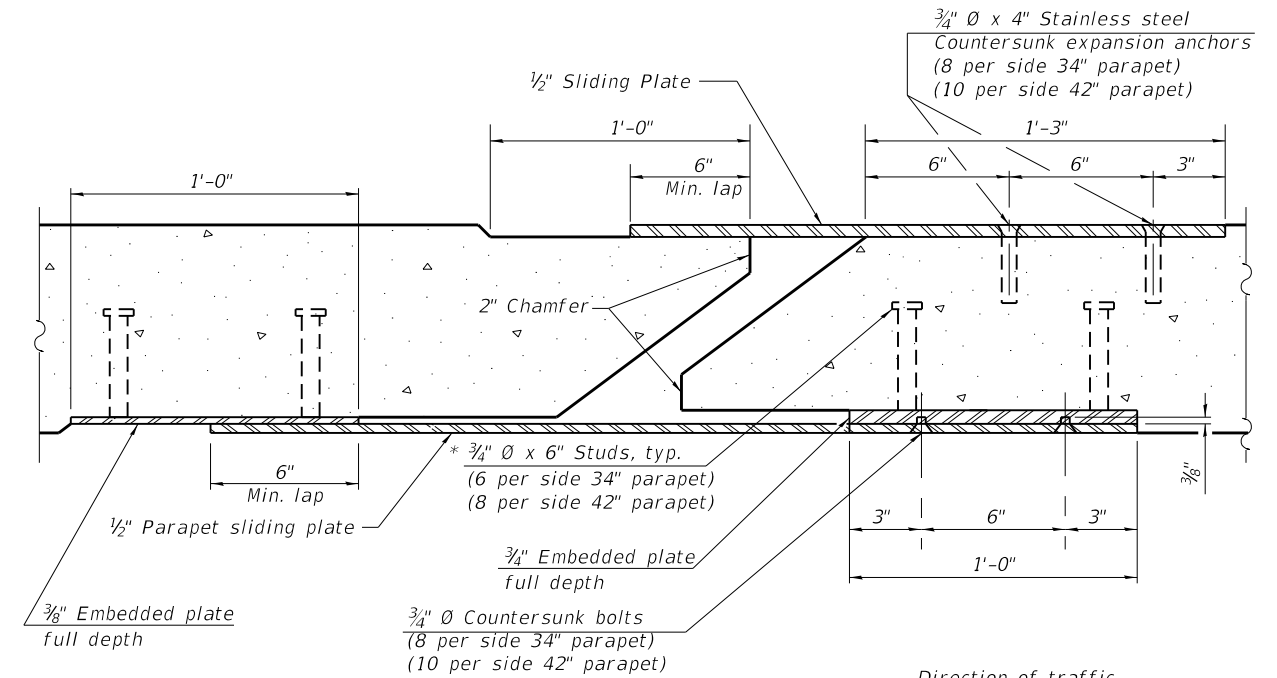


ELEVATION AT DECK LEVEL SIDEWALK

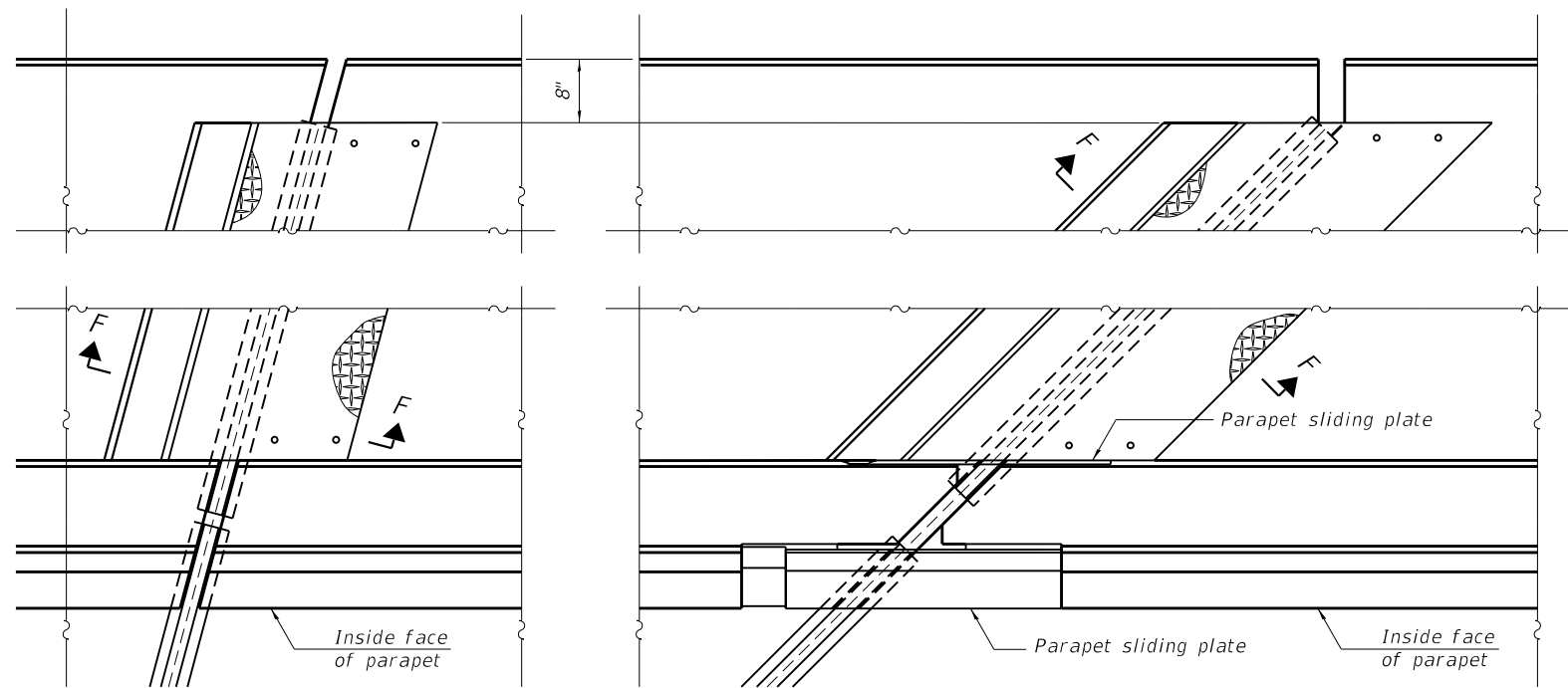
(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL B



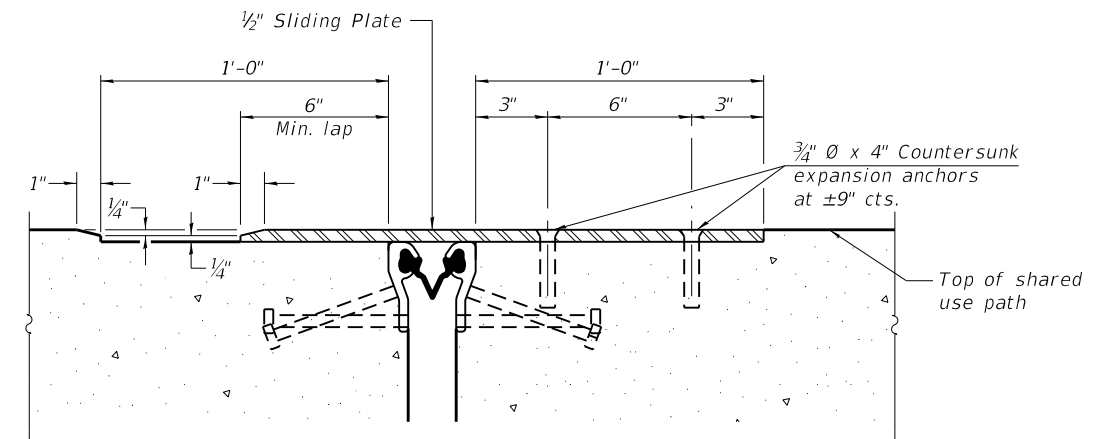
SECTION E-E



(FOR SKEWS ≤ 30°)

(FOR SKEWS > 30°)

PLAN AT DECK LEVEL SIDEWALK



SECTION F-F

THIS SHEET TO BE REPLACED WITH PENDING BASE SHEET FOR CONSTANT-SLOPE PARAPET

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

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DESIGNED - SP
CHECKED -
PLOT SCALE = 0:2.0000 " = 1" / in.
DRAWN -
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CHECKED -
REVISED -

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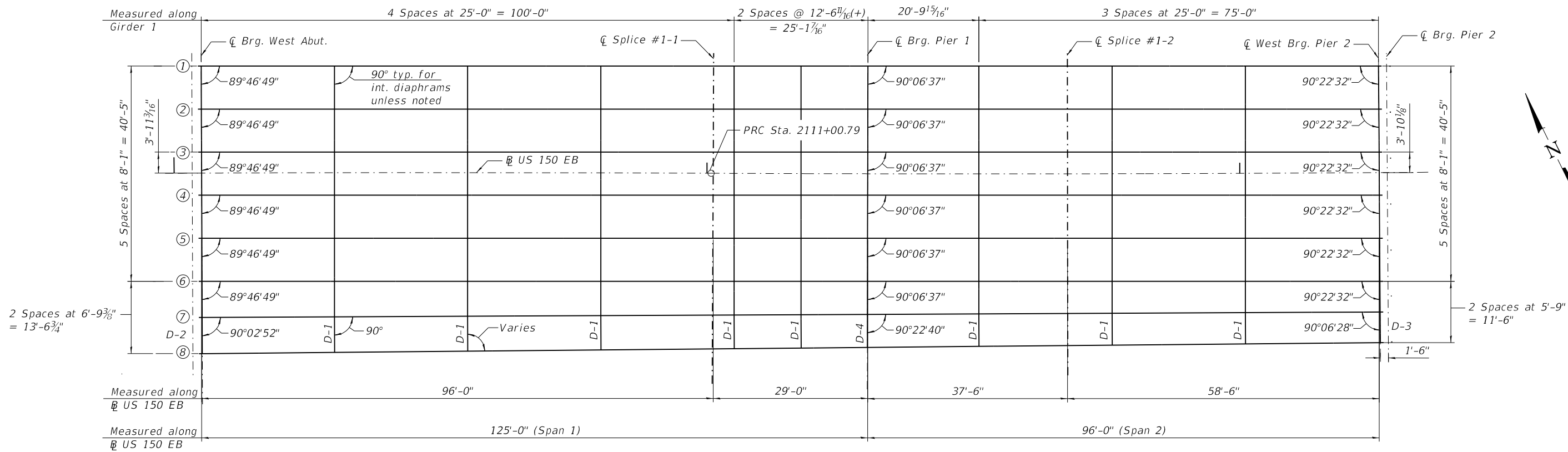
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

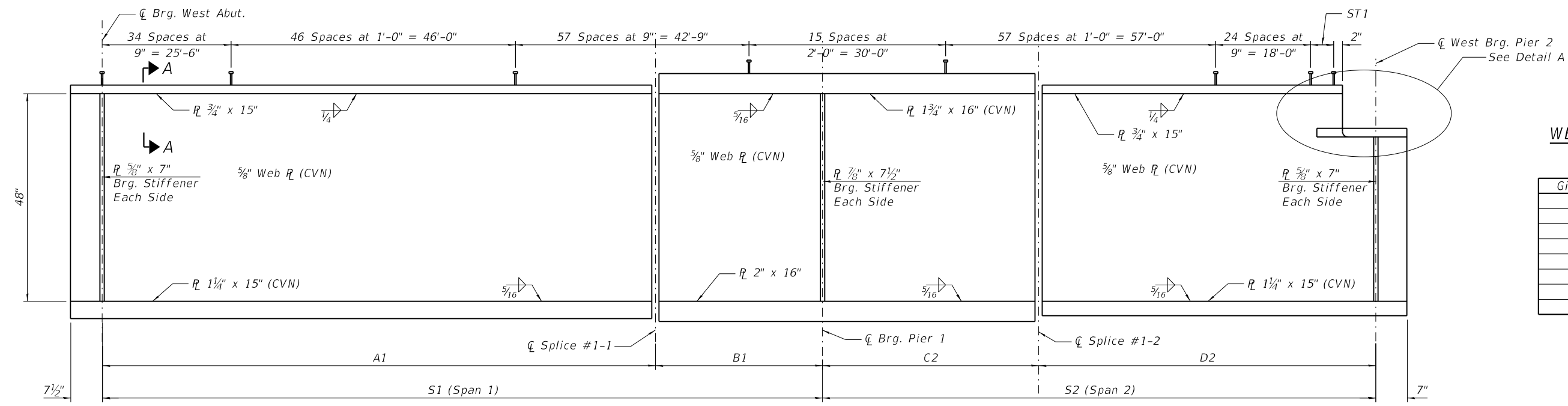
MODIFIED PREFORMED JOINT STRIP SEAL, 2 OF 2
STRUCTURE NO. 090-0180

SHEET 5-191 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1097
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



UNIT 1 - FRAMING PLAN



WELDED STUD SPACING

Girder	ST1
1	5 3/8"
2	5 5/8"
3	5 7/8"
4	6 3/16"
5	6 7/16"
6	6 11/16"
7	6 7/8"
8	7 1/8"

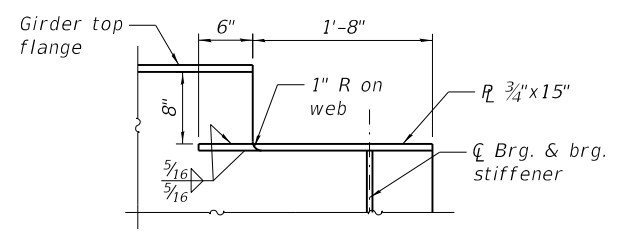
GIRDER DIMENSIONS

Girder	S1	S2	A1	B1	C2	D2
1	125'-1 1/16"	95'-9 15/16"	96'-2 1/16"	28'-11 3/8"	37'-5 3/16"	58'-4 3/4"
2	125'-0 7/8"	95'-10 3/4"	96'-1 1/4"	28'-11 7/8"	37'-5 1/2"	58'-5 1/4"
3	125'-0 7/16"	95'-11 3/16"	96'-0 7/16"	28'-11 1/8"	37'-5 3/16"	58'-5 3/4"
4	124'-11 3/4"	96'-0 1/16"	95'-11 3/8"	29'-0 1/8"	37'-6 3/16"	58'-6 1/4"
5	124'-11 3/16"	96'-1 1/4"	95'-10 7/8"	29'-0 5/16"	37'-6 1/2"	58'-6 3/4"
6	124'-10 3/8"	96'-2 1/16"	95'-10 1/16"	29'-0 3/16"	37'-6 3/16"	58'-7 1/4"
7	124'-10 3/16"	96'-2 1/16"	95'-9 7/16"	29'-0 3/16"	37'-7 1/16"	58'-7 3/8"
8	124'-9 13/16"	96'-3 3/16"	95'-8 13/16"	29'-1"	37'-7 3/16"	58'-8"

UNIT 1 - GIRDER ELEVATION

"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.

- Notes:
1. \bar{C} Brg. West Abutment, \bar{C} Brg. Pier 1 & \bar{C} Brg. Pier 2 are placed radial to the \bar{C} US 150 EB. \bar{C} West Brg. Pier 2 is parallel to the \bar{C} Brg. Pier 2.
 2. All diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
 3. See Sheet S-193 of 445 for Section A-A.



DETAIL A

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TYLIN INTERNATIONAL
 200 S. WACKER DR.
 SUITE 1400
 CHICAGO, IL 60606
 TEL: 312-777-2900

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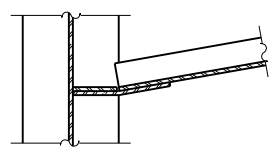
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

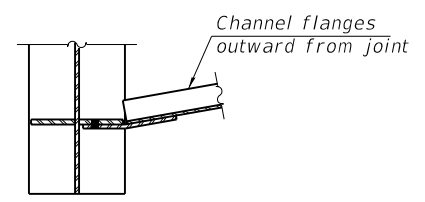
FRAMING PLAN - UNIT 1
 STRUCTURE NO. 090-0180

SHEET 5-192 OF 445 SHEETS

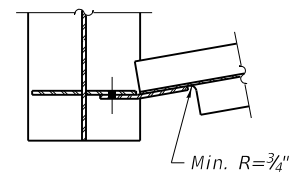
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317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1098
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				



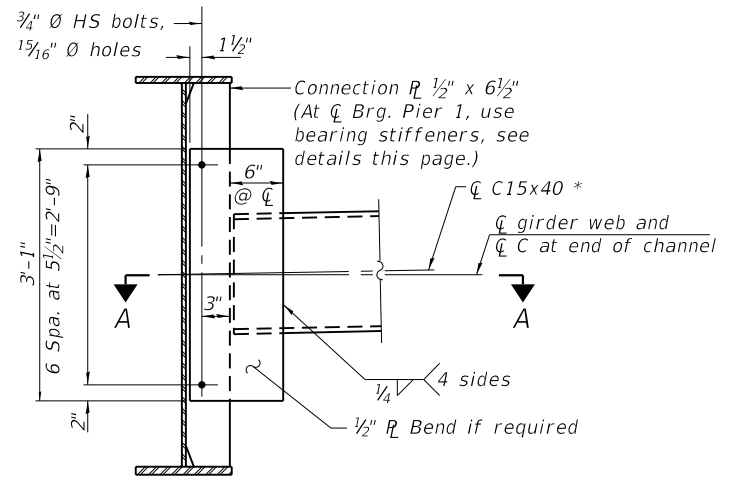
SECTION A-A



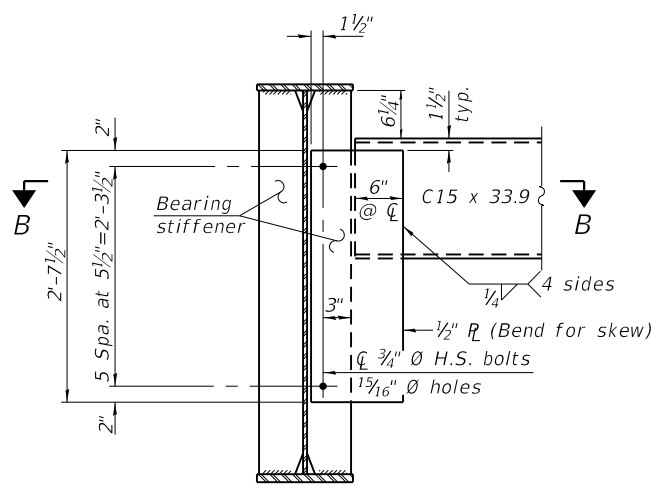
SECTION B-B



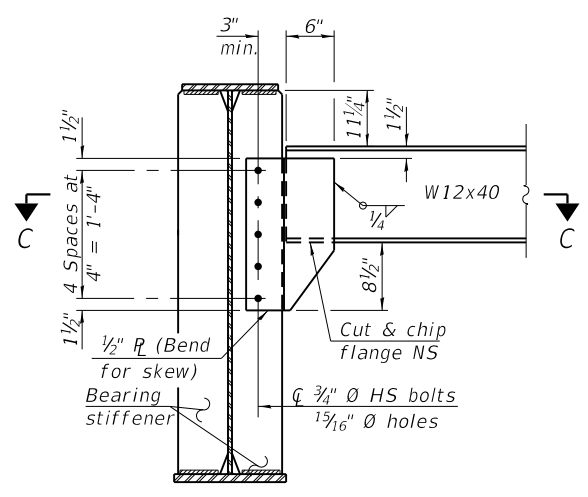
SECTION C-C



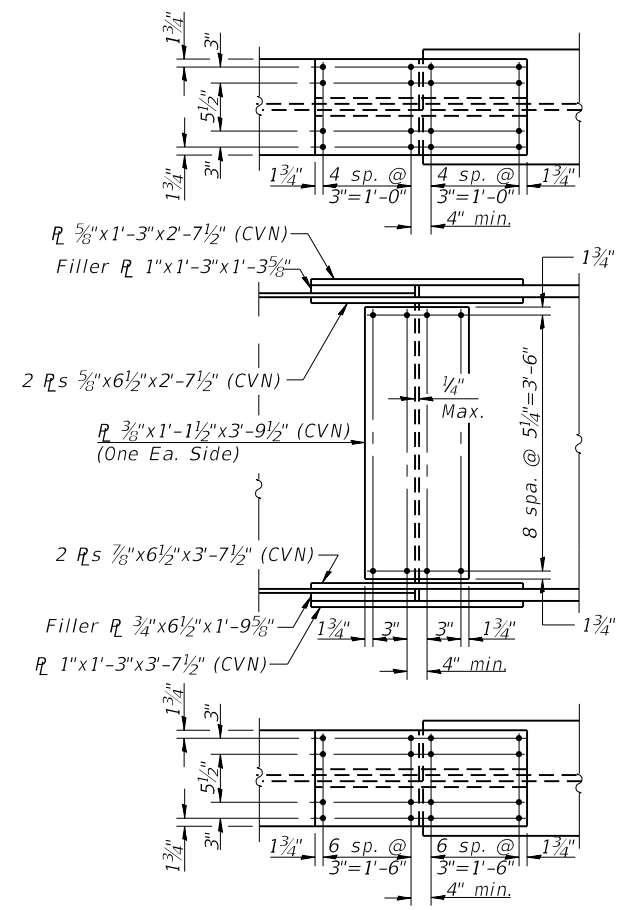
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(56 Required)



END DIAPHRAGM - D-2
(7 Required)



END DIAPHRAGM - D-3
(7 Required)

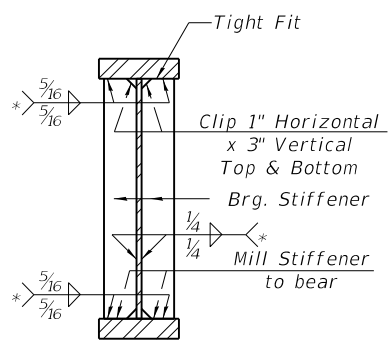


FIELD SPLICE 1-1
& 1-2 DETAIL

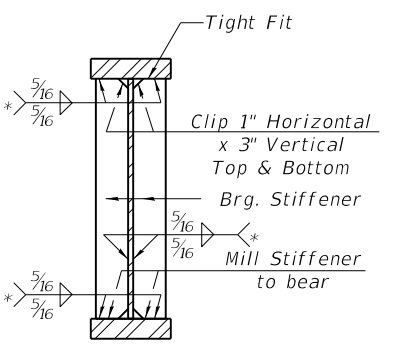
Note:
Two hardened washers required for each set of oversized holes.
*Alternative channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the C15x40 sections. The alternative, if utilized, shall be provided at no extra cost to the Department.

Note:
Two hardened washers required for each set of oversized holes.

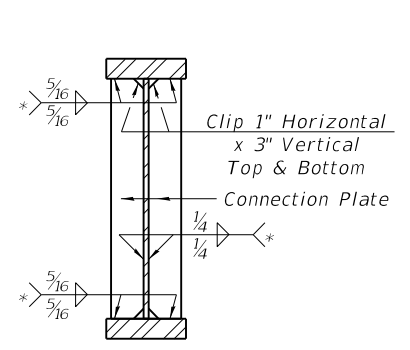
Note: Two hardened washers required for each set of oversized holes.



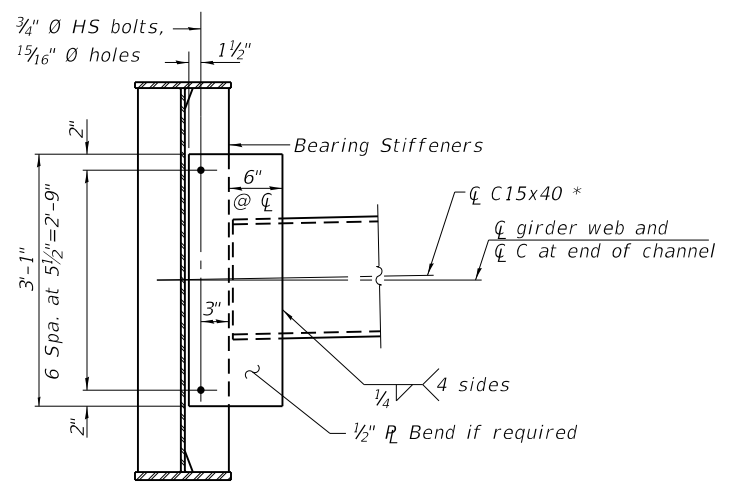
BEARING STIFFENERS
(At W. Abut. & Pier 2)



BEARING STIFFENERS
(At Pier 1)

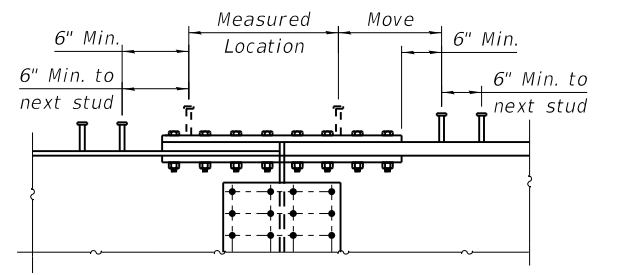


CONNECTION PLATE



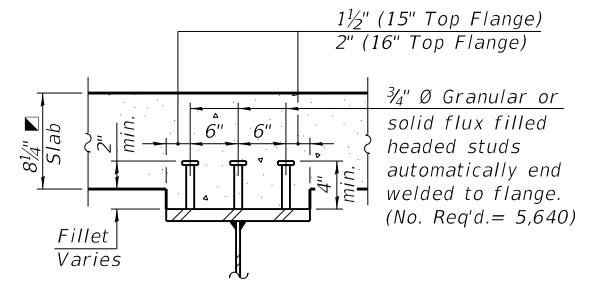
INT. DIAPHRAGM - D-4
(7 Required)

Note:
Two hardened washers required for each set of oversized holes.
*Alternative channels C15x50 are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the C15x40 sections. The alternative, if utilized, shall be provided at no extra cost to the Department.



SHEAR STUD DETAIL AT SPLICES
AND FLANGE TRANSITIONS

Do not place shear studs on splice plates. Move row of studs to 6" beyond nearest edge of splice plate from measured location. Similarly, move studs as required to maintain 6" clear between studs and welded flange transitions.



SECTION A-A

■ prior to grinding

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TYLIN INTERNATIONAL
200 S. WACKER DR.
SUITE 1400
CHICAGO, IL 60606
TEL: 312-777-2900

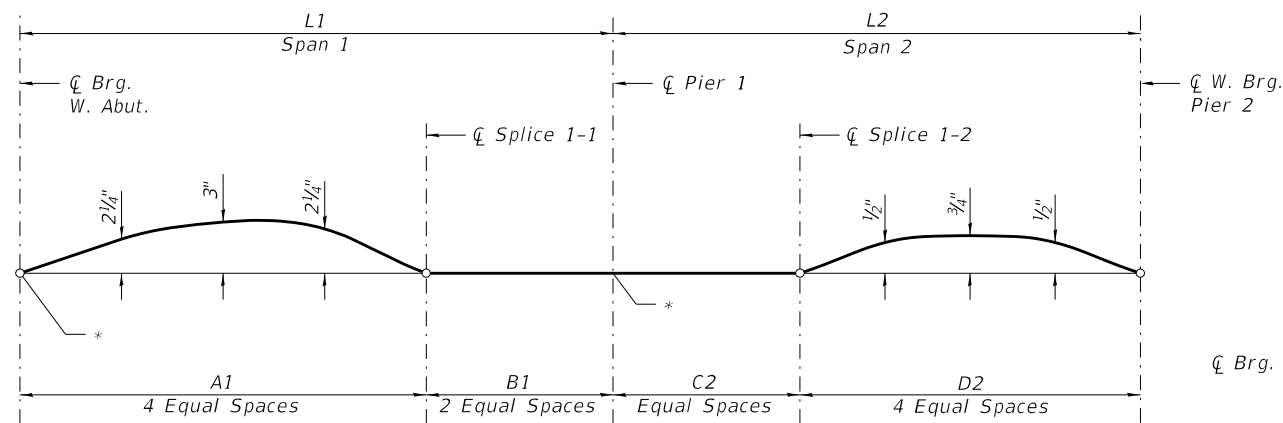
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PLOT DATE = 1/28/2019	DRAWN - SP	REVISED -
	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GIRDER DETAILS - UNIT 1, 1 OF 2
STRUCTURE NO. 090-0180

SHEET 5-193 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)]BR/BR	PEO/TAZ	1361	1099
CONTRACT NO. 68B46				
ILLINOIS		FED. AID PROJECT	NHPP-YRP3(905)	



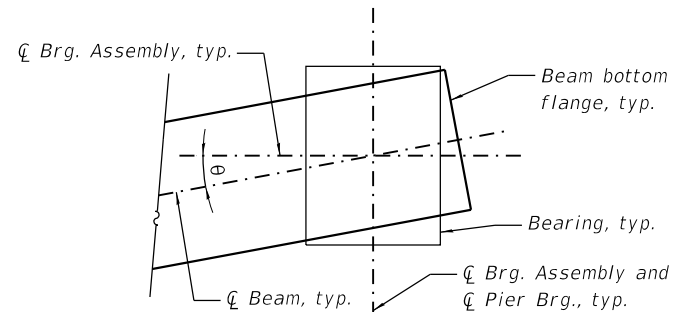
CAMBER DIAGRAM - UNIT 1

* See Table for final top of web elevations at abutments and piers.

***TOP OF WEB ELEVATIONS

	Girder 1	Girder 2	Girder 3	Girder 4	Girder 5	Girder 6	Girder 7	Girder 8
UNIT 1								
℄ Brg. W. Abut.	504.96	505.12	505.28	505.42	505.54	505.41	505.31	505.17
℄ Splice 1-1	503.05	503.21	503.37	503.51	503.64	503.51	503.39	503.27
℄ Pier 1	502.42	502.58	502.75	502.89	503.00	502.88	502.77	502.65
℄ Splice 1-2	501.61	501.77	501.93	502.08	502.20	502.07	501.96	501.85
℄ W. Brg. Pier 2	500.65	500.81	500.97	501.11	501.22	501.10	501.01	500.89

*** For Fabrication Only



Note: Positive angle shown. For negative angle, ℄ Beam will be on opposite side of ℄ Brg. Assembly

BEARING ORIENTATION

Pier	Girder	θ
W. Abut.	7	0°2'52"
	8	0°18'55"
2	7	-0°6'28"
	8	0°9'35"

INTERIOR GIRDER MOMENT TABLE				
	0.4 Sp. 1	Pier 1	0.6 Sp. 2	
Is	(in ⁴)	23,231	42,984	23,231
Ic(n)	(in ⁴)	62,268	-	62,268
Ic(3n)	(in ⁴)	45,559	-	45,559
Ic(cr)	(in ⁴)	-	50,289	-
Ss	(in ³)	1,050	1,730	1,050
Sc(n)	(in ³)	1,474	-	1,474
Sc(3n)	(in ³)	1,352	-	1,352
Sc(cr)	(in ³)	-	1,831	-
DC1	(k')	1.086	1.188	1.086
MDC1	(k)	1,219	2,094	387
DC2	(k')	0.131	0.131	0.131
MDC2	(k)	152	235	51
DW	(k')	0.404	0.404	0.404
MDW	(k)	468	724	157
LLDF		0.590	0.633	0.633
M _℄ + I _M	(k)	1,704	1,908	1,363
Mu (Strength I)	(k)	5,398	7,336	3,168
∅f Mn	(k)	7,079	-	7,615
fs DC1	(ksi)	13.93	14.53	4.42
fs DC2	(ksi)	1.35	1.54	0.45
fs DW	(ksi)	4.15	4.74	1.39
fs (℄+IM)	(ksi)	13.87	12.50	11.10
fs (Service II)	(ksi)	37.46	37.07	20.69
0.95Rh Fyf	(ksi)	47.50	47.50	47.50
fs (Total)(Strength I)	(ksi)	-	49.15	-
∅f Fn	(ksi)	-	50.00	-
Vf	(k)	30.30	32.00	30.90

GIRDER REACTION TABLE						
	West Abut.		Pier 1		Pier 2	
	Interior	Exterior	Interior	Exterior	Interior	Exterior
LLDF	0.820	0.656	0.820	0.656	0.820	0.656
OCF	—	1.0	—	1.0	—	1.0
RDC1 (k)	52.6	51.3	164.2	160.7	31.9	31.2
RDC2 (k)	6.3	6.3	18.8	18.8	3.8	3.8
RDW (k)	19.5	14.4	58.0	43.4	11.9	8.9
R _℄ (k)	80.9	64.7	158.4	126.6	74.3	59.4
R _{IM} (k)	17.5	14.0	29.9	24.0	17.2	13.8
R _{Total} (k)	176.8	150.7	429.3	373.5	139.1	117.1

- Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).
- Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).
- Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).
- Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M_℄ + I_M: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- Mu (Strength I): Factored design moment (kip-ft.).
1.25 (MDC1 + MDC2) + 1.5 MDW + 1.75 M_℄ + I_M
- ∅f Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
- fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
MDC1/ Snc
- fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
MDC2/ Sc(3n) or MDC2/ Sc(cr) as applicable.
- fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
MDW/ Sc(3n) or MDW/ Sc(cr) as applicable.
- fs (℄+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
M_℄ + I_M / Sc(n) or M_℄ + I_M / Sc(cr) as applicable.
- fs (Service II): Sum of stresses as computed below (ksi).
fsDC1 + fsDC2 + fsDW + 1.3 fs(℄ + IM)
- 0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- fs (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs(℄ + IM)
- ∅f Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).
- Vf: Maximum factored shear range in span computed according to Article 6.10.10.
- LLDF: Live Load Distribution factor
- OCF: obtuse Correction Factor

Note:
M_℄ and R_℄ include the effects of centrifugal force and superelevation.

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USER NAME = spantazis
DESIGNED - SP/RH
CHECKED - SP
DRAWN - RH
PLOT SCALE = 0:2.0000 " = 1/8" / in.
PLOT DATE = 1/29/2019

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GIRDER DETAILS - UNIT 1, 2 OF 2
STRUCTURE NO. 090-0180

SHEET 5-194 OF 445 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
317	[15B;(102-1),(14HB)BR]BR	PEO/TAZ	1361	1100
CONTRACT NO. 68B46				
ILLINOIS FED. AID PROJECT NHPP-YRP3(905)				