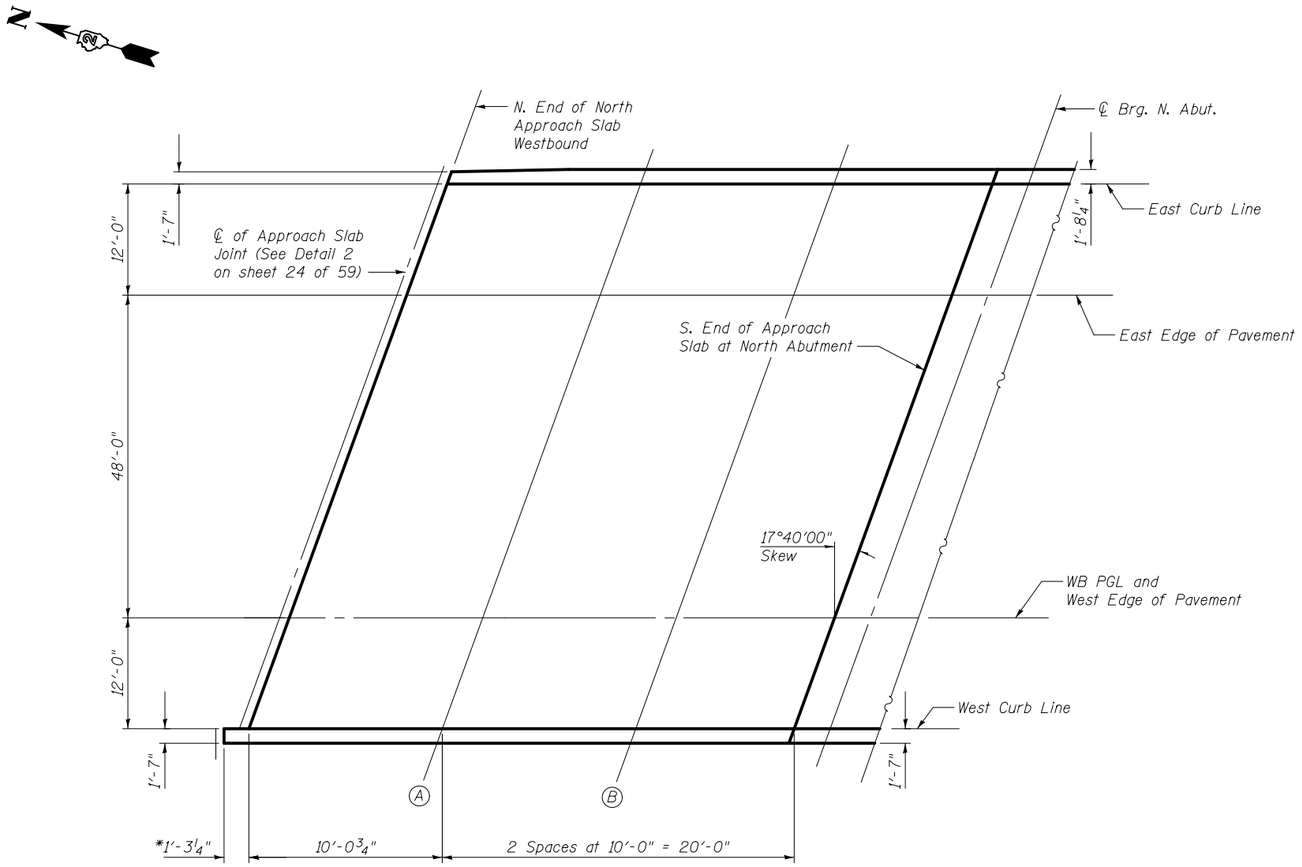
EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab WB	70+81.18	-74.00	675.66
A	70+91.25	-74.00	675.95
B	71+01.25	-74.00	676.23
S. End Appr. Slab at N. Abut.	71+11.25	-74.00	676.51

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab WB	70+77.36	-62.00	675.94
A	70+87.43	-62.00	676.22
B	70+97.43	-62.00	676.49
S. End Appr. Slab at N. Abut.	71+07.43	-62.00	676.75



*Extend the West Parapet and portion of Approach Slab that is under the parapet to Sta. 70+56.98 and offset joint in order to tie in with Retaining Wall 10

PLAN

WB PGL AND WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab WB	70+62.07	-14.00	677.16
A	70+72.14	-14.00	677.39
B	70+82.14	-14.00	677.61
S. End Appr. Slab at N. Abut.	70+92.14	-14.00	677.82

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab WB	70+58.25	-2.00	677.49
A	70+68.32	-2.00	677.70
B	70+78.32	-2.00	677.91
S. End Appr. Slab at N. Abut.	70+88.32	-2.00	678.11

MODJESKI and MASTERS Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS – WESTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 12 OF 59 SHEETS

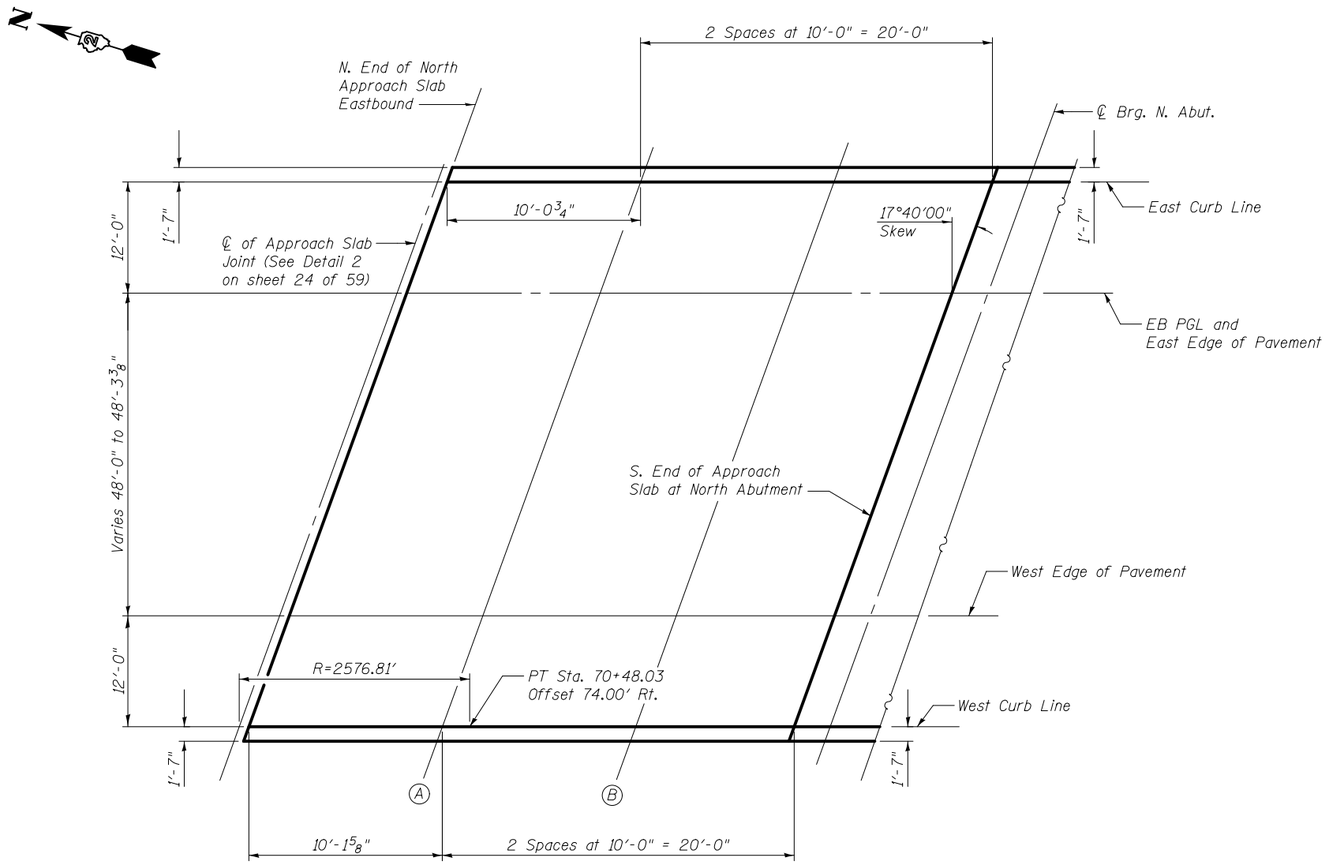
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1101
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab EB	70+56.98	2.00	681.90
A	70+67.04	2.00	682.17
B	70+77.04	2.00	682.44
S. End Appr. Slab at N. Abut.	70+87.04	2.00	682.70

EB PGL AND EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab EB	70+53.16	14.00	682.22
A	70+63.22	14.00	682.48
B	70+73.22	14.00	682.73
S. End Appr. Slab at N. Abut.	70+83.22	14.00	682.98



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab EB	70+38.06	62.20	683.61
A	70+47.93	62.00	683.81
B	70+57.93	62.00	684.01
S. End Appr. Slab at N. Abut.	70+67.93	62.00	684.21

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab EB	70+34.38	74.28	683.98
A	70+44.20	74.08	684.17
B	70+54.11	74.00	684.36
S. End Appr. Slab at N. Abut.	70+64.11	74.00	684.54

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS – EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 13 OF 59 SHEETS

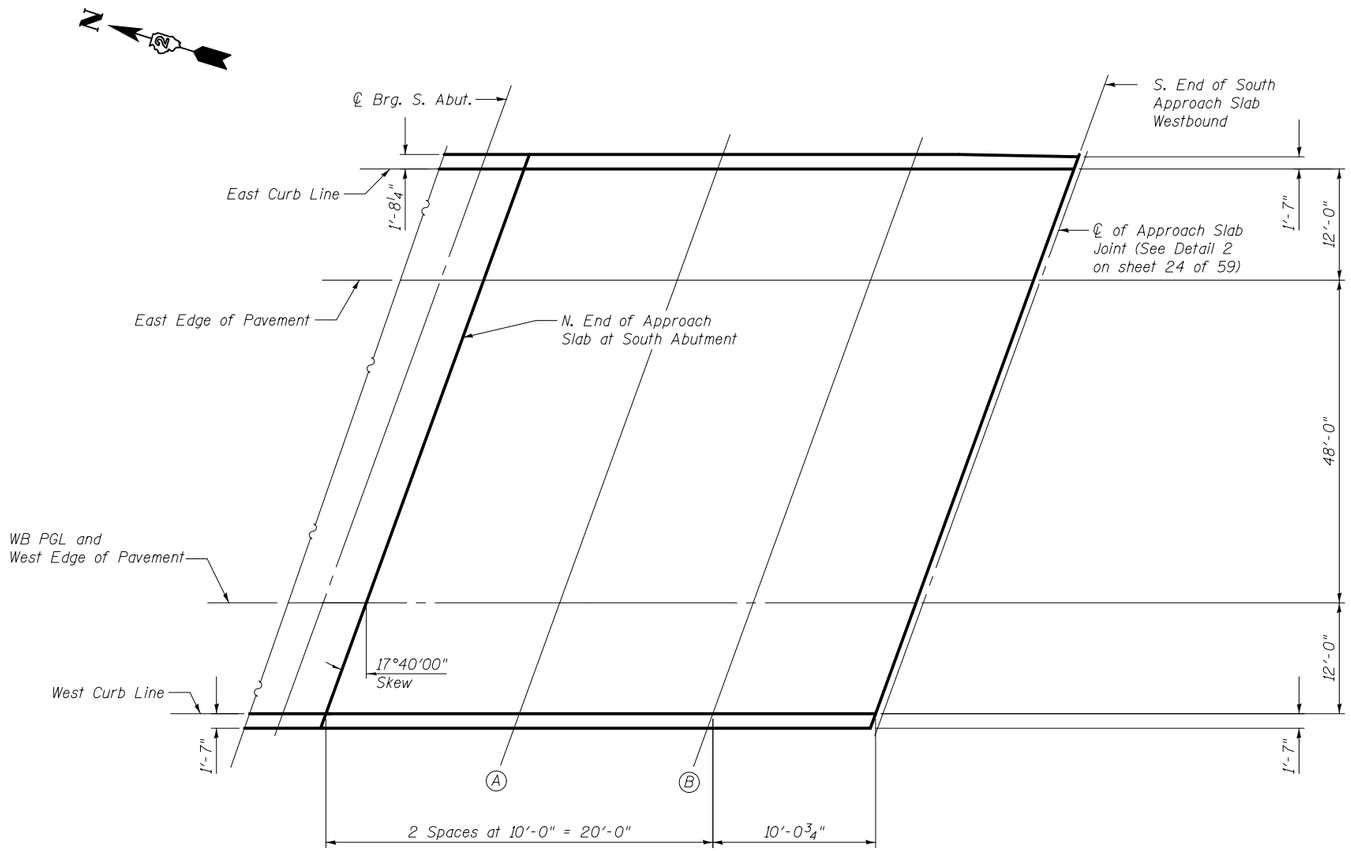
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1102
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+92.17	-74.00	678.57
A	72+02.17	-74.00	678.80
B	72+12.17	-74.00	679.03
S. End South Appr. Slab WB	72+22.24	-74.00	679.25

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+88.35	-62.00	678.71
A	71+98.35	-62.00	678.93
B	72+08.35	-62.00	679.15
S. End South Appr. Slab WB	72+18.41	-62.00	679.36



PLAN

WB PGL AND WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+73.06	-14.00	679.38
A	71+83.06	-14.00	679.55
B	71+93.06	-14.00	679.71
S. End South Appr. Slab WB	72+03.13	-14.00	679.87

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+69.24	-2.00	679.57
A	71+79.24	-2.00	679.73
B	71+89.24	-2.00	679.88
S. End South Appr. Slab WB	71+99.30	-2.00	680.03

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS – WESTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 14 OF 59 SHEETS

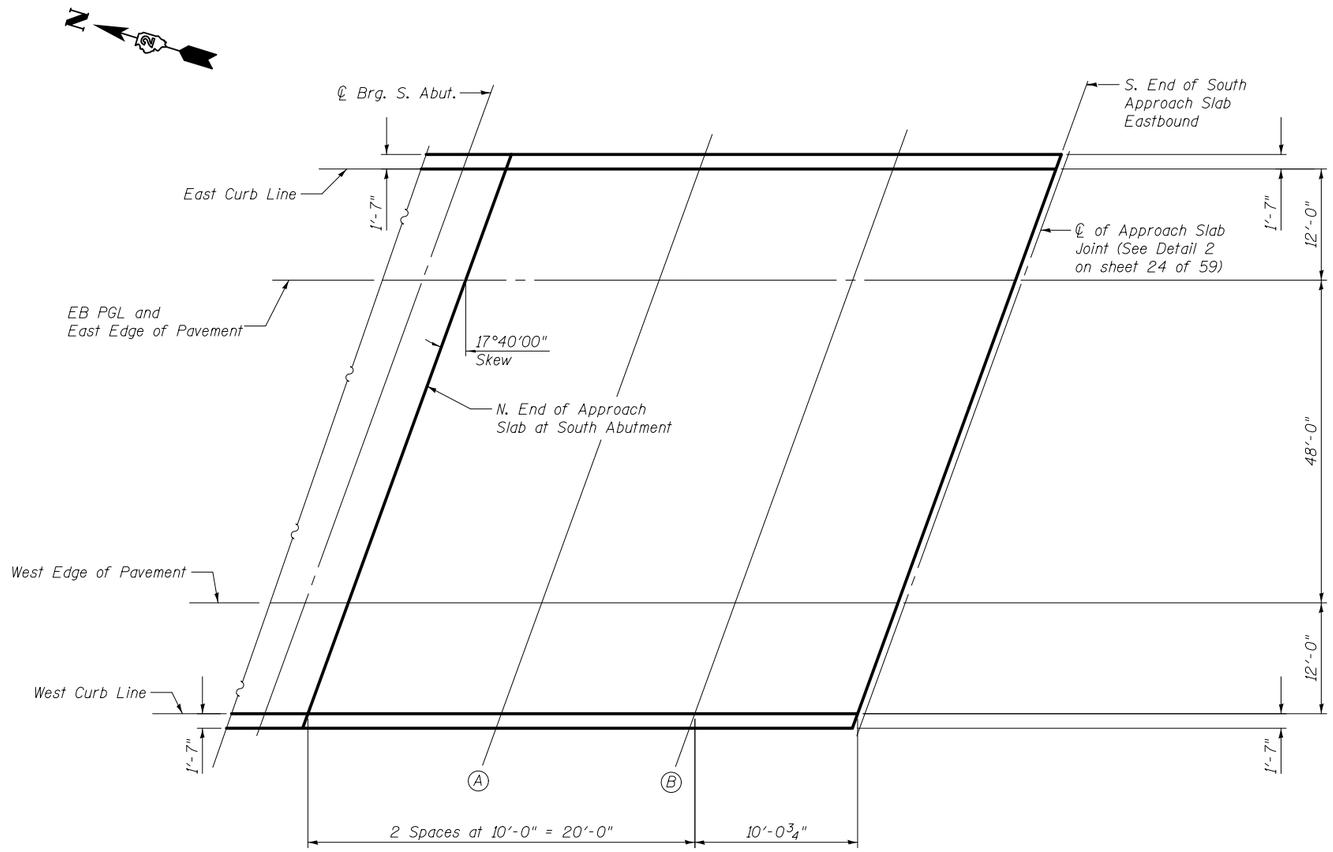
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1103
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+67.96	2.00	684.64
A	71+77.96	2.00	684.86
B	71+87.96	2.00	685.08
S. End South Appr. Slab EB	71+98.03	2.00	685.29

EB PGL AND EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+64.14	14.00	684.83
A	71+74.14	14.00	685.03
B	71+84.14	14.00	685.23
S. End South Appr. Slab EB	71+94.21	14.00	685.43



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+48.85	62.00	685.65
A	71+58.85	62.00	685.81
B	71+68.85	62.00	685.96
S. End South Appr. Slab EB	71+78.92	62.00	686.11

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	71+45.03	74.00	685.88
A	71+55.03	74.00	686.03
B	71+65.03	74.00	686.17
S. End South Appr. Slab EB	71+75.10	74.00	686.30

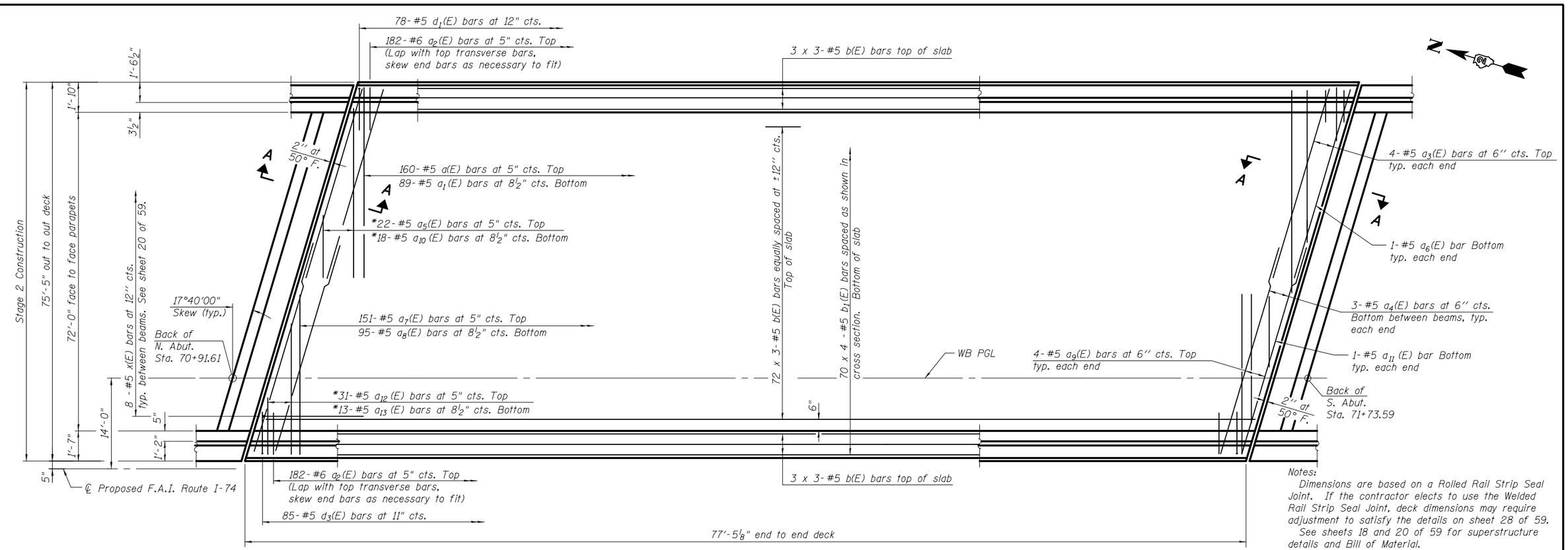
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS – EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 15 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1104
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



* Order a_5(E), a_{10}(E), a_{12}(E) and a_{13}(E) bars full length. Cut to fit skew and use remainder of bars in opposite end. See cutting diagram on sheet 20 of 59.

PLAN - WESTBOUND

MINIMUM BAR LAP

(Slab)

#5 Bar = 3'-3"

Notes:

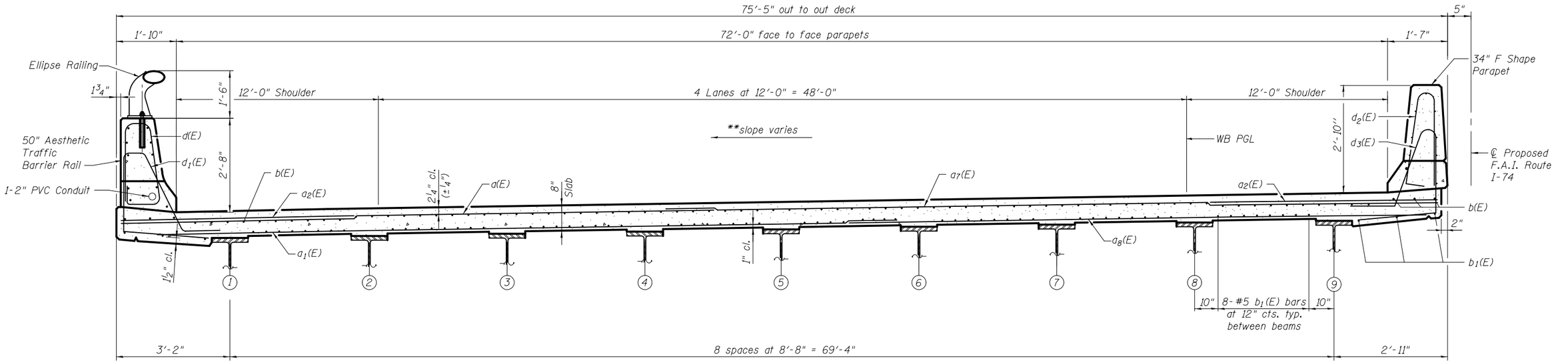
Dimensions are based on a Rolled Rail Strip Seal Joint. If the contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustment to satisfy the details on sheet 28 of 59.

See sheets 18 and 20 of 59 for superstructure details and Bill of Material.

Bars indicated thus 72 x 3-#5 etc. indicates 72 lines of bars with 3 lengths per line.

See sheet 18 of 59 for parapet reinforcement.

See sheet 20 of 59 for Section A-A.



CROSS SECTION

(Looking South)

**See sheet 3 of 59 for superelevation transitions.

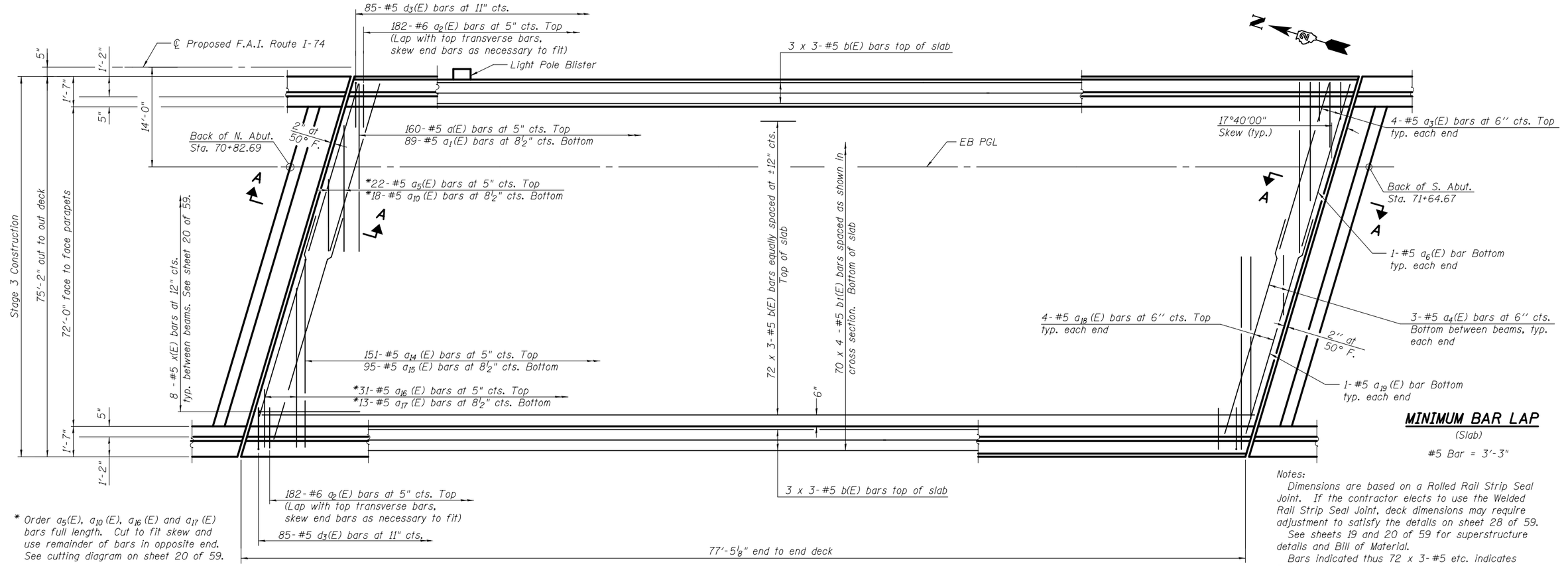
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE - WESTBOUND
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 16 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1105
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



* Order $a_5(E)$, $a_{10}(E)$, $a_{16}(E)$ and $a_{17}(E)$ bars full length. Cut to fit skew and use remainder of bars in opposite end. See cutting diagram on sheet 20 of 59.

PLAN - EASTBOUND

(Noise wall not shown for clarity.)

MINIMUM BAR LAP

(Slab)

#5 Bar = 3'-3"

Notes:

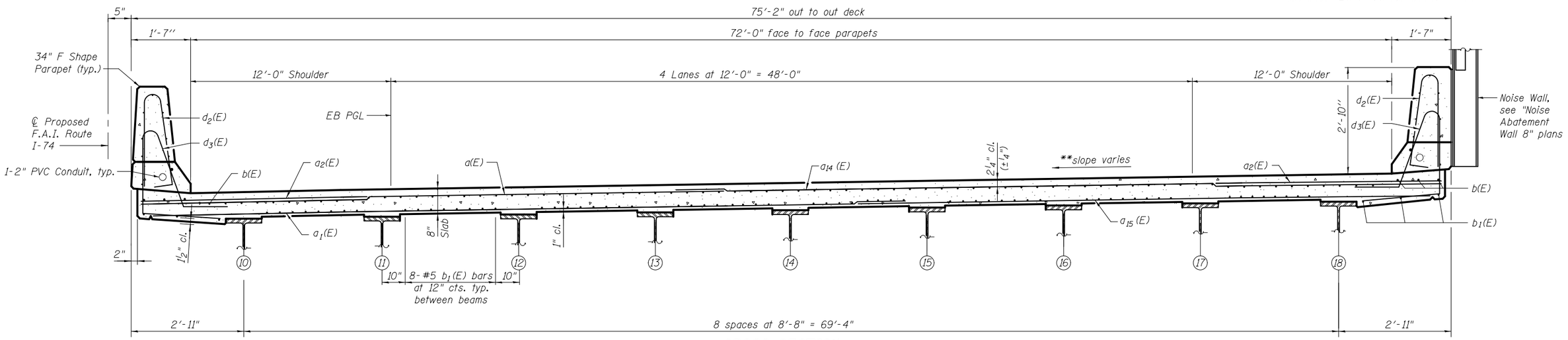
Dimensions are based on a Rolled Rail Strip Seal Joint. If the contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustment to satisfy the details on sheet 28 of 59.

See sheets 19 and 20 of 59 for superstructure details and Bill of Material.

Bars indicated thus 72 x 3- #5 etc. indicates 72 lines of bars with 3 lengths per line.

See sheet 19 of 59 for light pole blister details and parapet reinforcement.

See sheet 20 of 59 for Section A-A.



CROSS SECTION

(Looking South)

(Light pole blister not shown for clarity.)

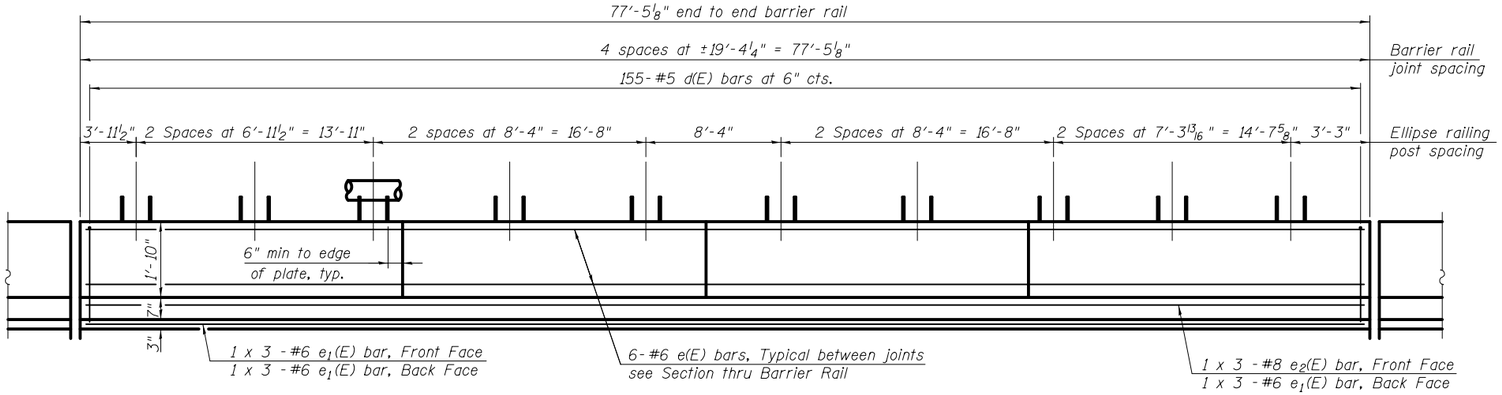
**See sheet 3 of 59 for superelevation transitions.

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - RLM	REVISED
		CHECKED - JMH	REVISED
	PLOT SCALE =	DRAWN - AEC	REVISED
	PLOT DATE = 03/23/2017	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

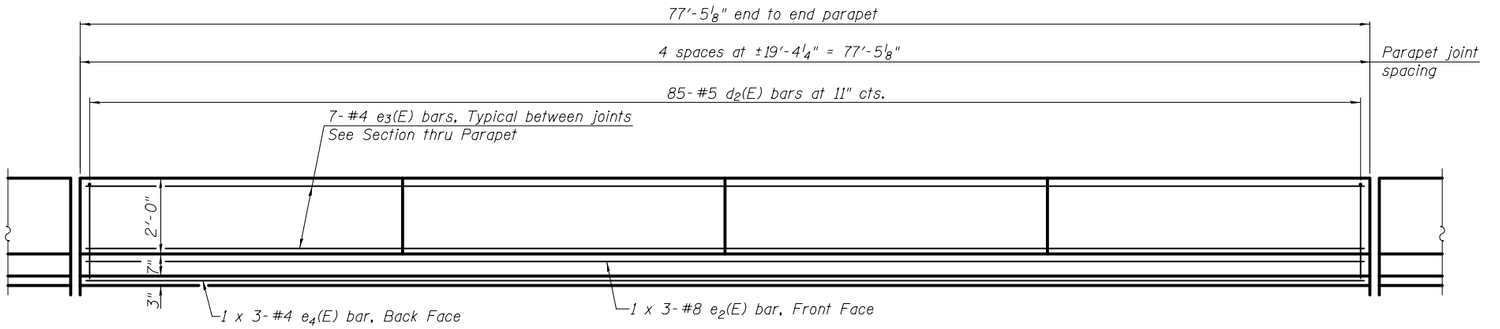
SUPERSTRUCTURE – EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 17 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1106
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



INSIDE ELEVATION OF AESTHETIC TRAFFIC BARRIER RAIL

(Looking East)



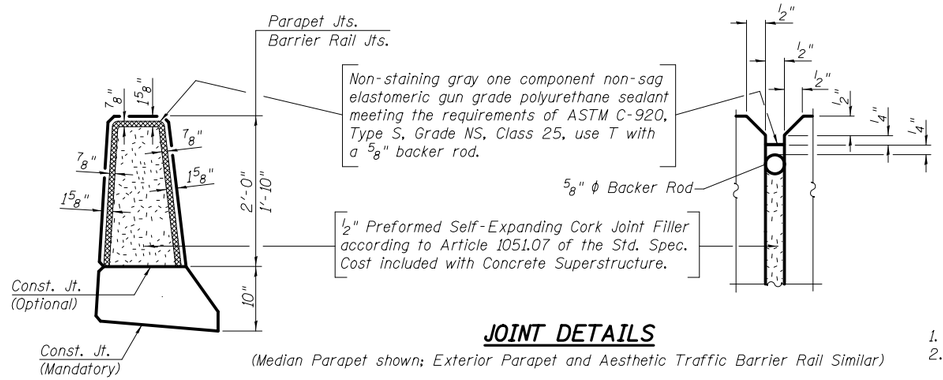
INSIDE ELEVATION OF MEDIAN PARAPET

(Looking West)

* To be used only if slipforming option is selected.

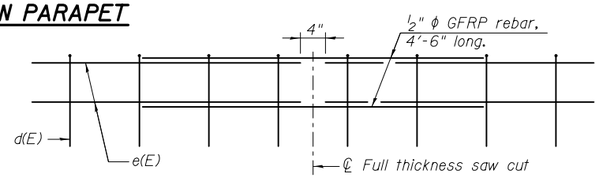
PARAPET DIMENSIONS

Location	A	B	C	D
Westbound Median Parapet	3 1/8"	9 5/8"	5"	3'-11 1/8"
Eastbound Median Parapet	3 1/8"	9 1/2"	4 1/4"	3'-10 1/4"
Eastbound Exterior Parapet	3 1/8"	9 3/4"	5"	3'-11 1/4"



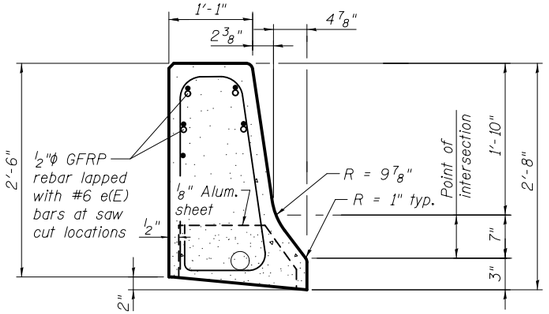
JOINT DETAILS

(Median Parapet shown; Exterior Parapet and Aesthetic Traffic Barrier Rail Similar)



*GFRP REBAR STIFFENING DETAIL

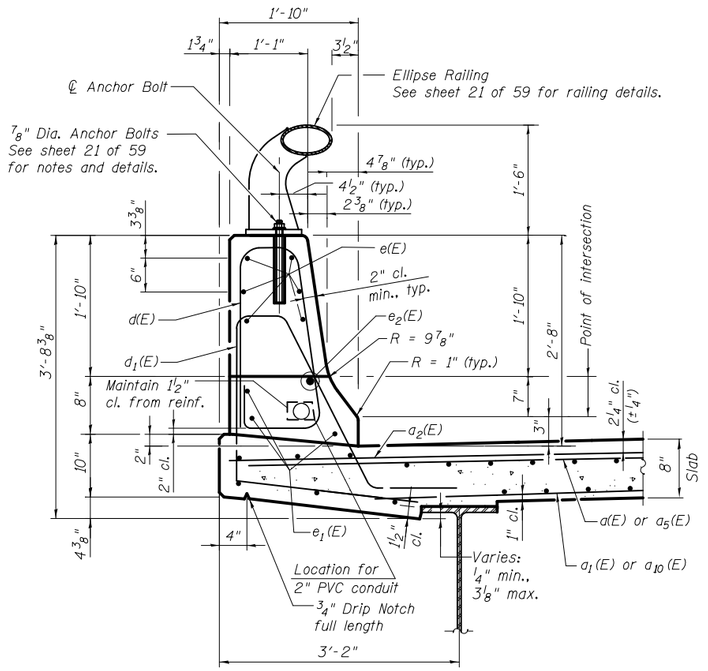
(Place as shown in parapet section at each parapet joint location.)



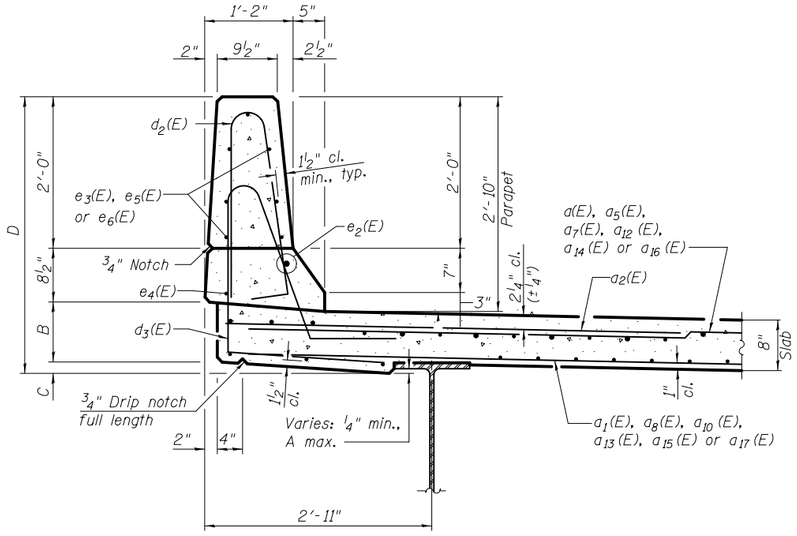
*SLIPFORMED PARAPET JOINT DETAILS

(Ellipse railing not shown for clarity)

1. All dimensions shall remain the same as shown on superstructure details.
2. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.



SECTION THRU BARRIER RAIL



SECTION THRU MEDIAN PARAPET

MINIMUM BAR LAP

(Barrier Rail and Parapet)

#4 bar = 2'-0"
#6 bar = 3'-0"
#8 bar = 5'-2"

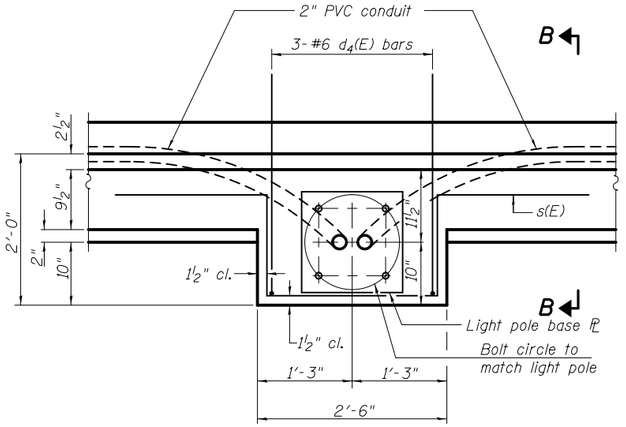
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - RLM	REVISED	
	CHECKED - JMH	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - RLM	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

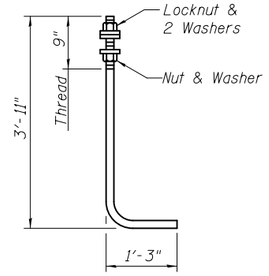
SUPERSTRUCTURE – WESTBOUND DETAILS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 18 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1107
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



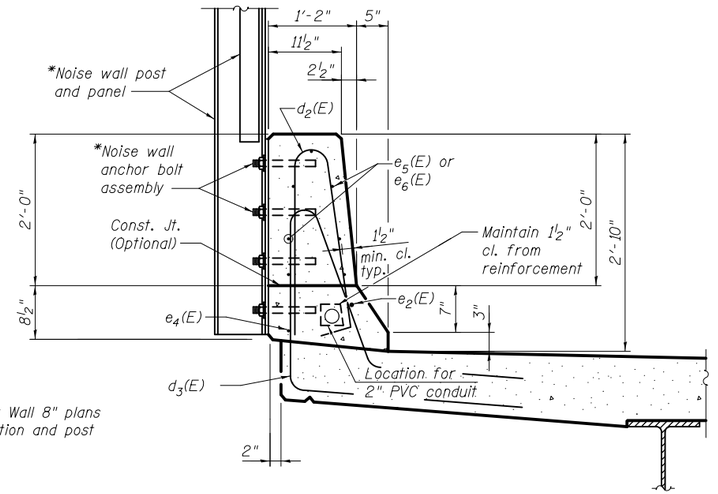
LIGHT POLE BLISTER PLAN

(1 Location Required)
Cost of anchor rods is included with Concrete Superstructures.



LIGHT POLE ANCHOR ROD

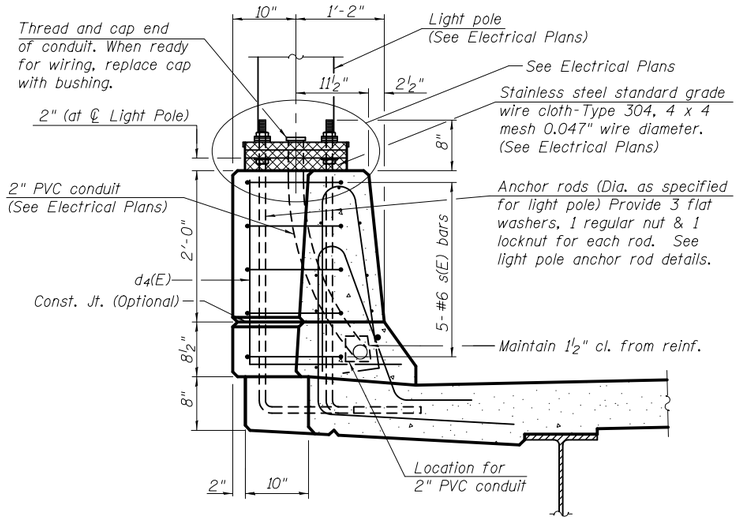
Diameter as specified for light poles. (ASTM F 1554 Grade 105). Full length hot dipped galvanized. (4 Required)



* See "Noise Abatement Wall 8" plans for noise wall connection and post spacing details.

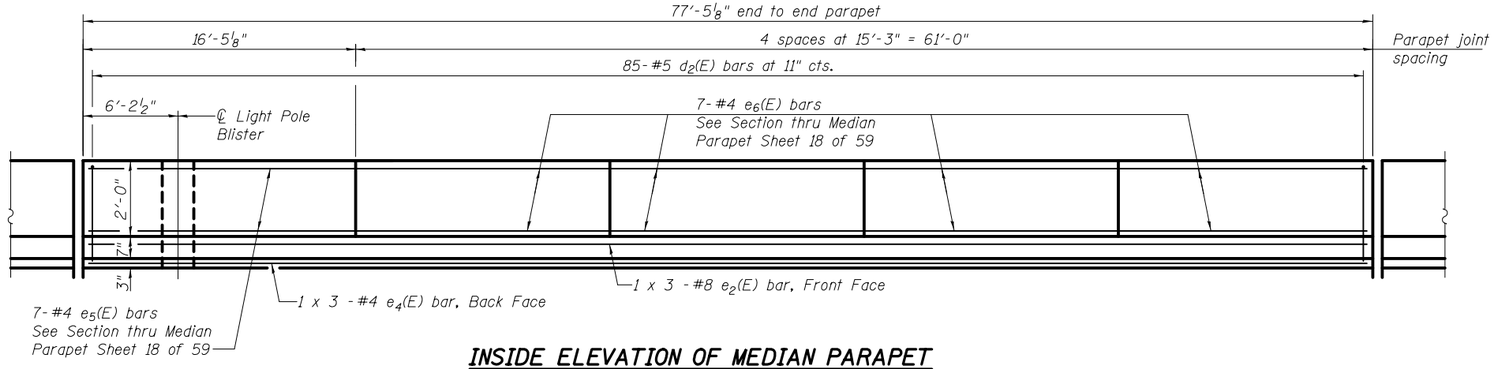
SECTION THRU EXTERIOR PARAPET

(See Section Thru Median Parapet on sheet 18 of 59 for slab details.)



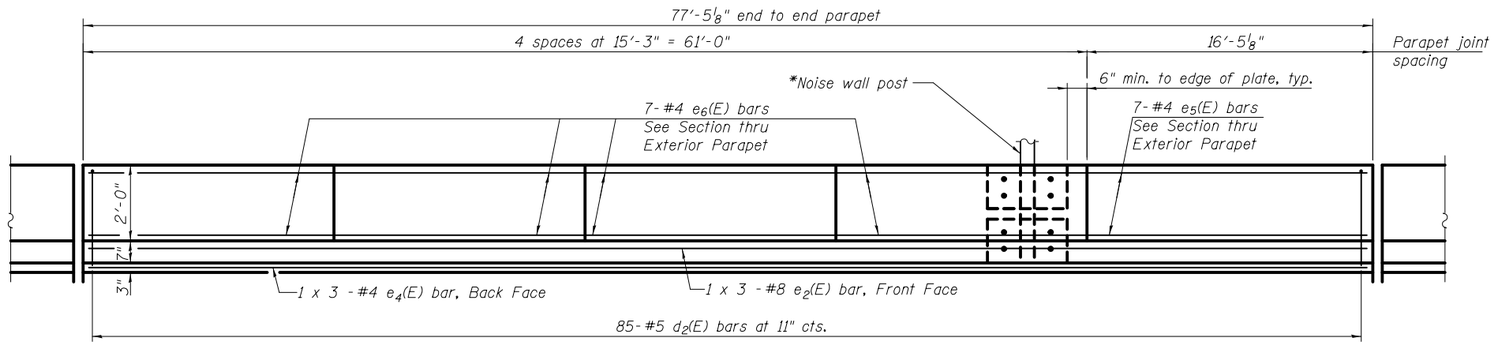
SECTION B-B

Slab reinforcement not shown for clarity.



INSIDE ELEVATION OF MEDIAN PARAPET

(Looking East)



INSIDE ELEVATION OF EXTERIOR PARAPET

(Looking West)

Notes:
See sheet 18 of 59 for parapet joint details.
Apply Protective Coat according to Article 503.19 and to the top surface of the light pole blister.

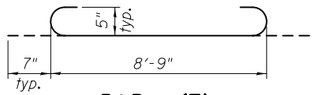
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - RLM	REVISED

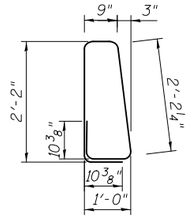
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE – EASTBOUND DETAILS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 19 OF 59 SHEETS

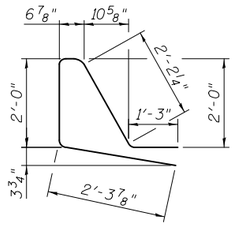
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1108
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



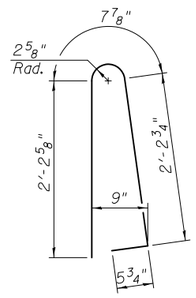
BAR a_4(E)



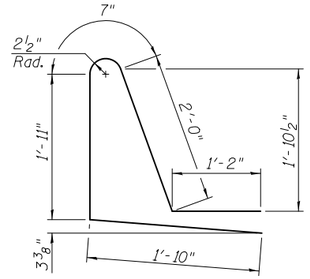
BAR d(E)



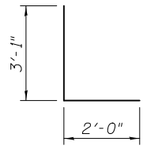
BAR d_1(E)



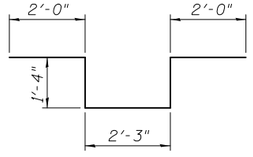
BAR d_2(E)



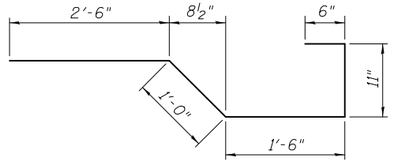
BAR d_3(E)



BAR d_4(E)



BAR s(E)



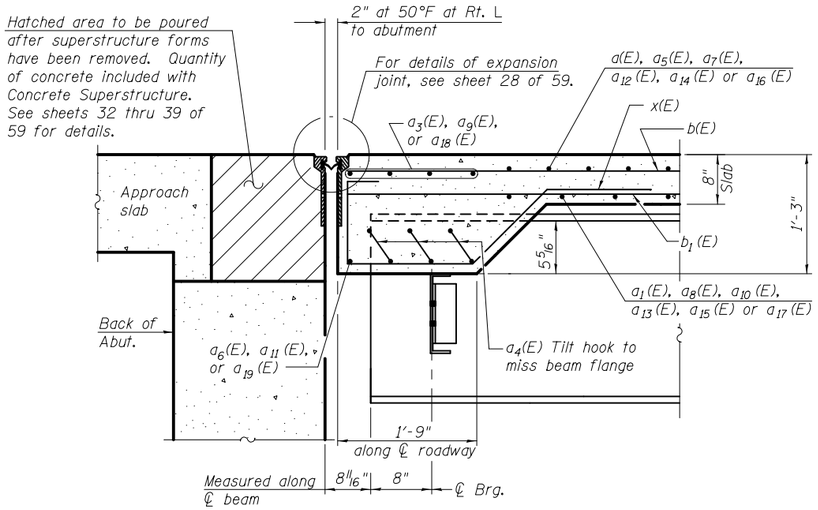
BAR x(E)

SUPERSTRUCTURE BILL OF MATERIAL (WB)

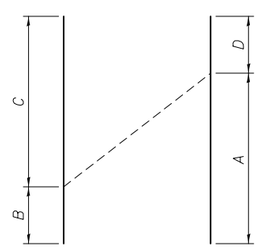
Bar	No.	Size	Length	Shape
a(E)	160	#5	33'-3"	
a_1(E)	89	#5	44'-3"	
a_2(E)	364	#6	6'-6"	
a_3(E)	8	#5	34'-11"	
a_4(E)	48	#5	9'-11"	
a_5(E)	22	#5	37'-5"	
a_6(E)	2	#5	46'-5"	
a_7(E)	151	#5	45'-0"	
a_8(E)	95	#5	32'-6"	
a_9(E)	8	#5	47'-3"	
a_{10} (E)	18	#5	48'-7"	
a_{11} (E)	2	#5	34'-1"	
a_{12} (E)	31	#5	49'-2"	
a_{13} (E)	13	#5	34'-7"	
b(E)	234	#5	27'-10"	
b_1(E)	280	#5	21'-9"	
d(E)	155	#5	7'-10"	
d_1(E)	78	#5	8'-4"	
d_2(E)	85	#5	5'-7"	
d_3(E)	85	#5	7'-6"	
e(E)	24	#6	19'-0"	
e_1(E)	9	#6	27'-8"	
e_2(E)	6	#8	29'-2"	
e_3(E)	28	#4	19'-0"	
e_4(E)	3	#4	27'-0"	
x(E)	128	#5	6'-5"	
Concrete Superstructure			Cu. Yd.	187.0
Bridge Deck Grooving			Sq. Yd.	620
Protective Coat			Sq. Yd.	686
Reinforcement Bars, Epoxy Coated			Pound	46,660

SUPERSTRUCTURE BILL OF MATERIAL (EB)

Bar	No.	Size	Length	Shape
a(E)	160	#5	33'-3"	
a_1(E)	89	#5	44'-3"	
a_2(E)	364	#6	6'-6"	
a_3(E)	8	#5	34'-11"	
a_4(E)	48	#5	9'-11"	
a_5(E)	22	#5	37'-5"	
a_6(E)	2	#5	46'-5"	
a_{10} (E)	18	#5	48'-7"	
a_{14} (E)	151	#5	44'-7"	
a_{15} (E)	95	#5	32'-1"	
a_{16} (E)	31	#5	48'-9"	
a_{17} (E)	13	#5	34'-2"	
a_{18} (E)	8	#5	46'-10"	
a_{19} (E)	2	#5	33'-8"	
b(E)	234	#5	27'-10"	
b_1(E)	280	#5	21'-9"	
d_2(E)	170	#5	5'-7"	
d_3(E)	170	#5	7'-6"	
d_4(E)	3	#6	4'-5"	
e_2(E)	6	#8	29'-2"	
e_4(E)	6	#4	27'-0"	
e_5(E)	14	#4	16'-1"	
e_6(E)	56	#4	14'-11"	
s(E)	5	#6	8'-11"	
x(E)	128	#5	6'-5"	
Concrete Superstructure			Cu. Yd.	185.9
Bridge Deck Grooving			Sq. Yd.	620
Protective Coat			Sq. Yd.	686
Reinforcement Bars, Epoxy Coated			Pound	46,260



SECTION A-A



CUTTING DIAGRAM

See table for bar designations

CUTTING DIAGRAM TABLE

Bar	North End		South End	
	A	B	C	D
a_5(E)	32'-5"	5'-0"	32'-5"	5'-0"
a_{10} (E)	43'-2"	5'-5"	43'-2"	5'-5"
a_{12} (E)	44'-1"	4'-10"	44'-4"	5'-1"
a_{13} (E)	30'-2"	3'-6"	31'-1"	4'-5"
a_{16} (E)	43'-8"	4'-5"	44'-4"	5'-1"
a_{17} (E)	29'-9"	3'-1"	31'-1"	4'-5"

Note:
See sheets 16 and 17 of 59 for location of Section A-A.

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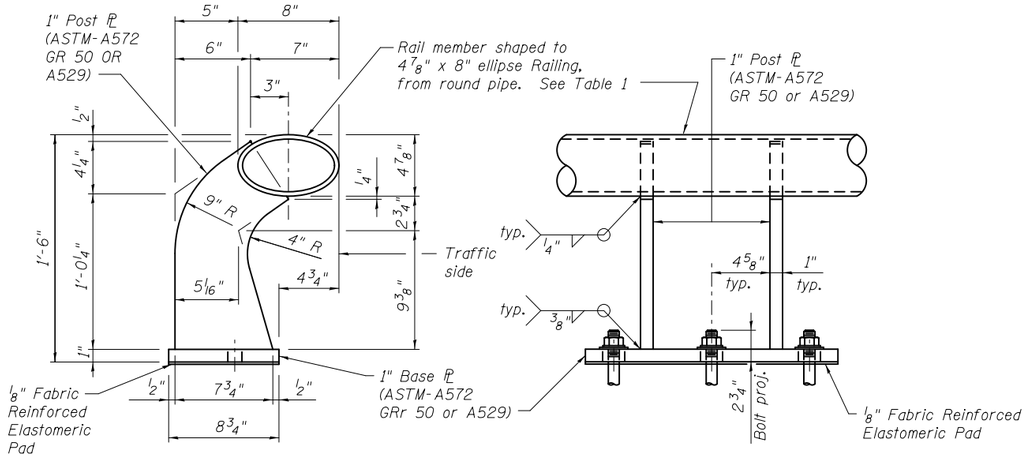
USER NAME =	DESIGNED - RLM	REVISED	
	CHECKED - JMH	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

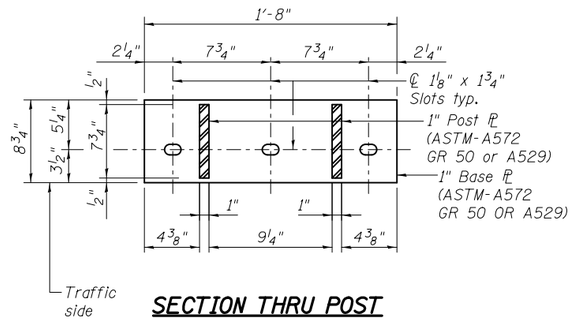
SUPERSTRUCTURE - MISCELLANEOUS DETAILS
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 20 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1109
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



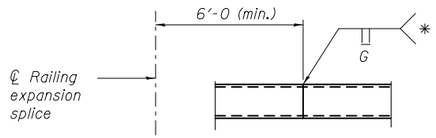
SIDE VIEW

ELEVATION



SECTION THRU POST

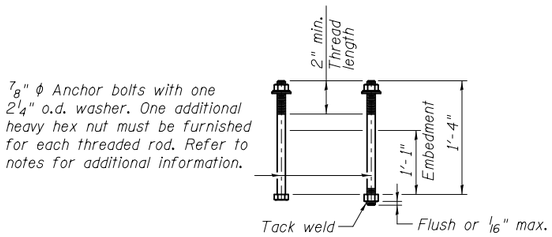
ELLIPTICAL TUBE WITH RAIL POST AND ANCHORAGE DETAILS



RAILING SHOP SPLICE DETAIL

* Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove, double vee groove, or single groove. Grind smooth.

TABLE 1		
APPROVED RAILING MATERIAL		
4 7/8"x 8" Ellipse Railing	Sleeve Member (at railing splice)	
Material	Material	Thickness
6" Dia. Std. Pipe ASTM-A53 E OR S GRADE B	ASTM-A53-B	0.353"
	A36 or A500 GR. B	0.339"
	API-5LX52	0.224"
6" Dia. 0.280" Wall thickness ASTM-A501	ASTM-A53-B	0.353"
	A36 or A500 GR. B	0.339"
	API-5LX52	0.224"
6 5/8" O.D. x 0.188" Tube API-5LX52	ASTM-A53-B	0.339"
	A36 or A500 GR. B	0.325"
	API-5LX52	0.216"



CAST-IN-PLACE ANCHOR BOLT OPTIONS

Notes:

See Sheet 18 of 59 for post spacing.

Steel Railing (Special) shall be fabricated and installed in accordance with Article 509 of the Standard Specifications, unless otherwise noted.

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

The Steel Railing (Special) is to be bid on a per linear foot basis measured from end to end of steel railing.

Payment for Steel Railing (Special) shall include full compensation for furnishing all material, and all the equipment and labor required to erect the rail in accordance with these plans and the Standard Specifications.

Anchor bolts shall be 7/8" ϕ, ASTM A-193 GR. B7, fully threaded with heavy hex nuts and one hardened washer and one 2 1/4" O.D. washer each. Embed threaded rods 10 1/2" min. into concrete parapet. Material for these items shall be in accordance with the adhesive manufacturer's requirements to be capable of obtaining an ultimate load per threaded rod of 36 kips in tension, considering spacing and edge distance. See Standard Specification 509.06 for further details on setting anchor bolts. Cost of anchor bolts included with Steel Railing (Special).

Optional cast-in-place anchor bolts to comply with ASTM F-1554 Grade 105. Hex nuts to comply with AASHTO M291, washers to comply with AASHTO M-293. Galvanizing in accordance with AASHTO M-232.

Provide one 1/8" and two 1/16" galvanized steel shims for 25% of rail posts, to be used as required. Shims shall be similar to base plates in size and holes. Cost included with Steel Railing (Special).

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Steel Railing (Special)	Foot	78

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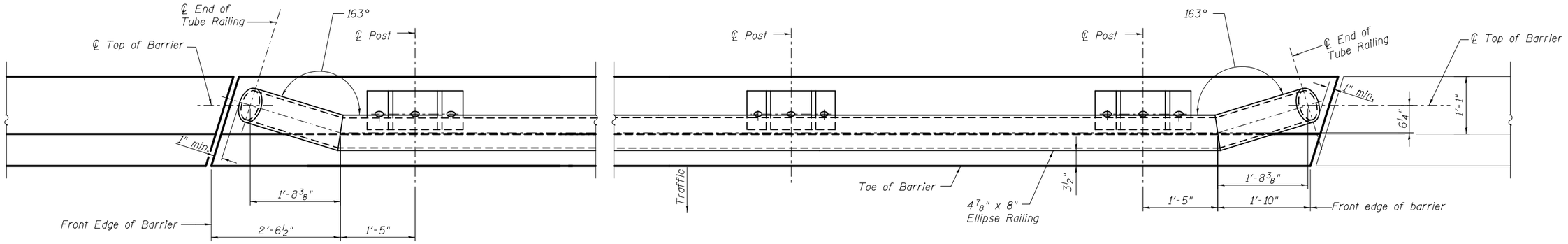
	CHECKED - JBN	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

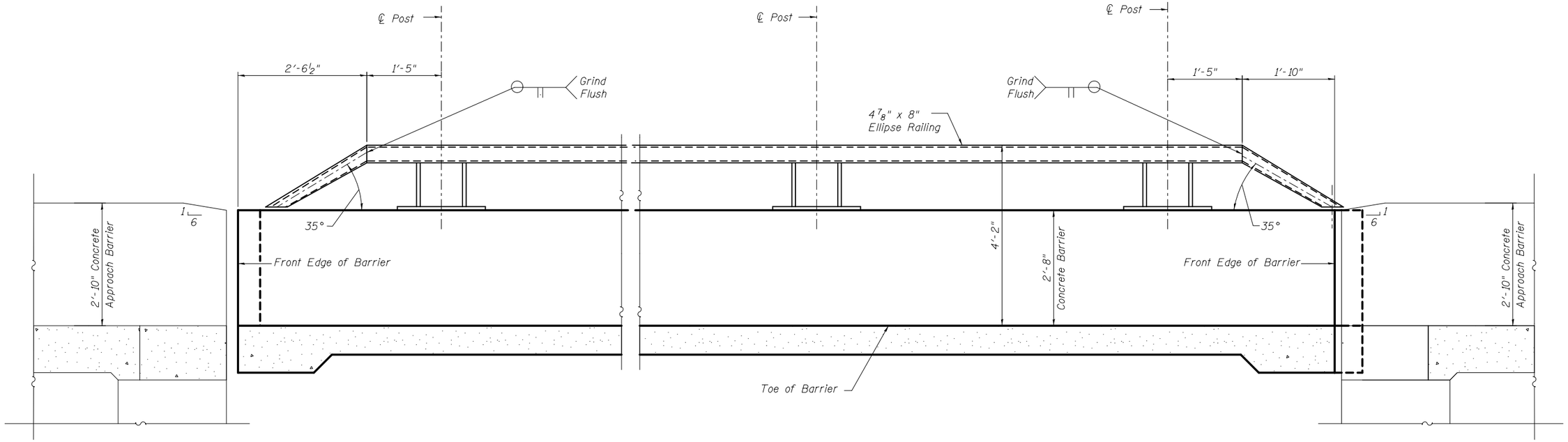
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AESTHETIC TRAFFIC BARRIER RAIL DETAIL – 1
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 21 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1110
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN



INSIDE ELEVATION

Notes:

Edge of base plate shall not be less than 6" from any cold joint or barrier discontinuity including the back of the abutment.

See sheet 18 of 59 for post spacing and barrier details.

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Experience great bridges.

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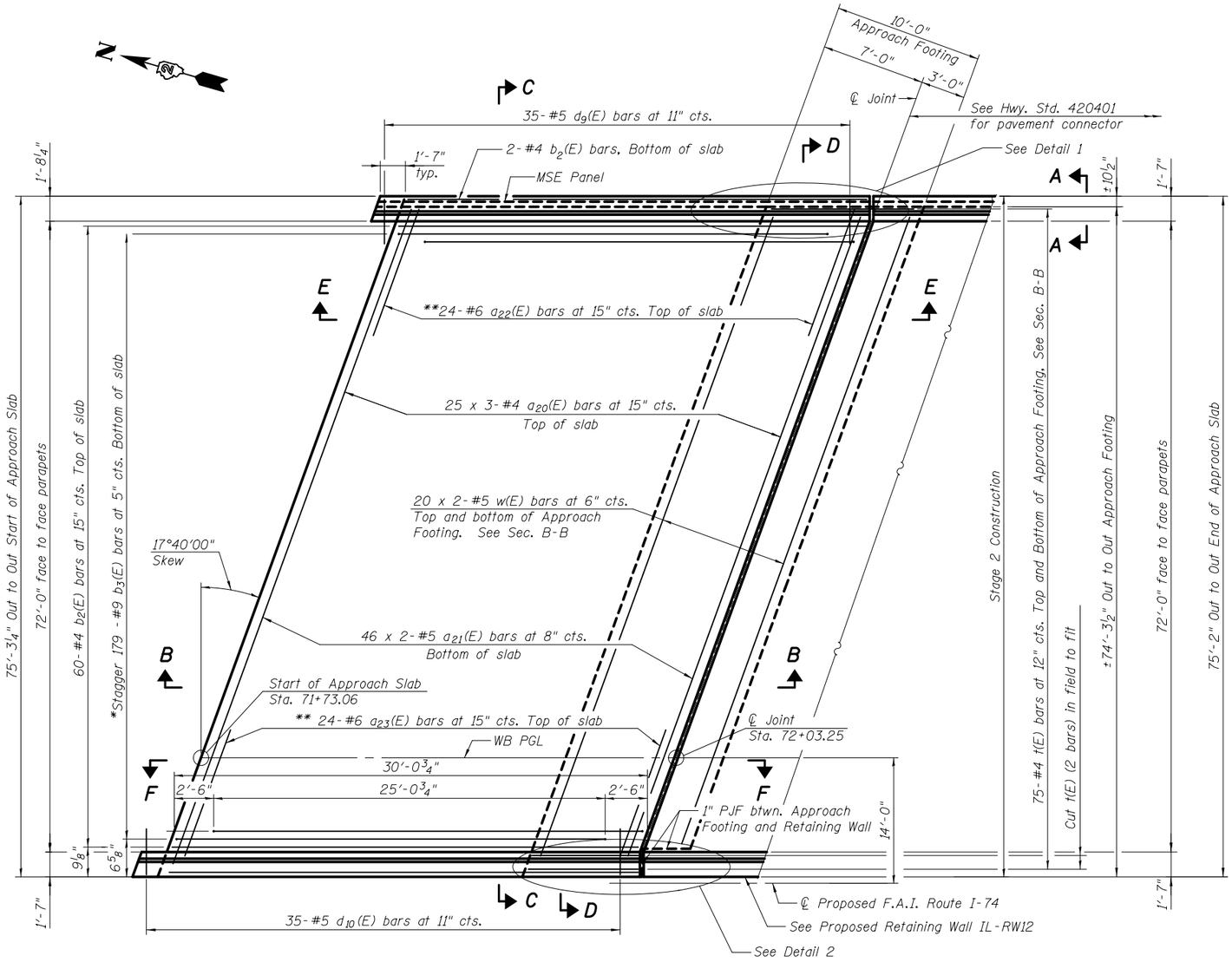
	CHECKED - JBM	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

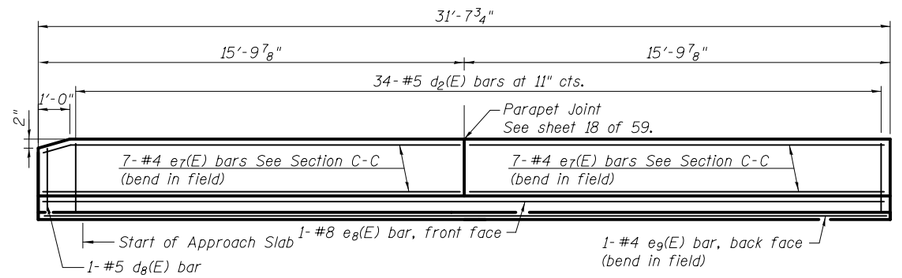
AESTHETIC TRAFFIC BARRIER RAIL DETAIL – 2
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 22 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1111
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



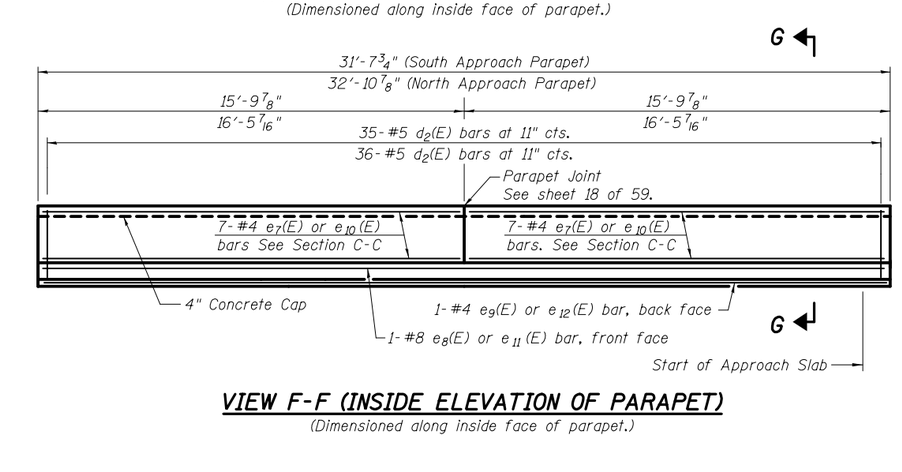
PLAN

(South Approach Slab shown, North Approach Slab similar.)



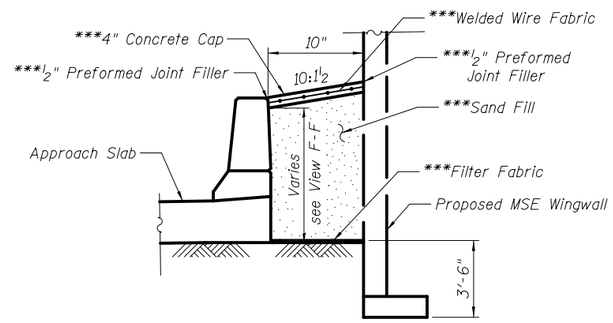
VIEW E-E (INSIDE ELEVATION OF PARAPET)

(South Approach Parapet Shown, North Approach Parapet Similar.)
(Dimensioned along inside face of parapet.)



VIEW F-F (INSIDE ELEVATION OF PARAPET)

(Dimensioned along inside face of parapet.)



SECTION G-G

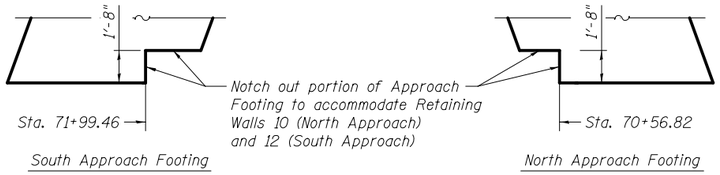
*** Cost included with Concrete Structures

* Tilt #9 b_3(E) bars as required to maintain clearance.
** Space between a_{20}(E) bars.

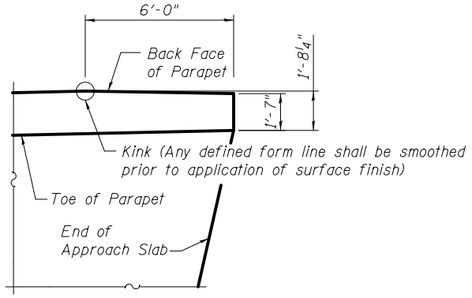
MINIMUM BAR LAP

(Approach Slab)

#4 Bar = 2'-7"
#5 Bar = 3'-3"



DETAIL 2



DETAIL 1

Notes:
See sheet 24 of 59 for View A-A and Sections B-B, C-C and D-D.
See sheet 27 of 59 for reinforcement details and Bill of Material.
All d(E) bar spacings measured along ℄ Rdwy.
See SN 081-6017 and SN 081-6020 for MSE wall details.
Bars indicated thus 25 x 3-#4 etc. indicates 25 lines of bars with 3 lengths per line.

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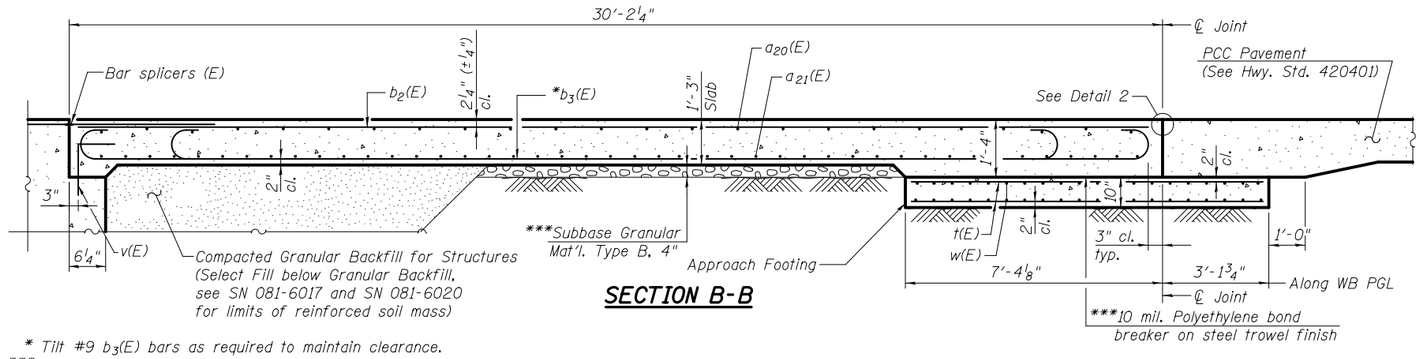
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

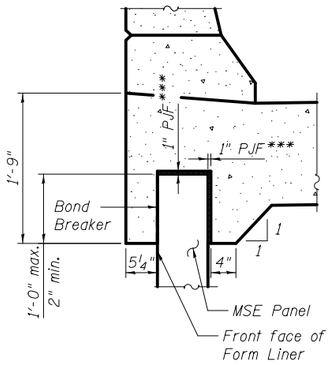
BRIDGE APPROACH SLAB – WESTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 23 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1112
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

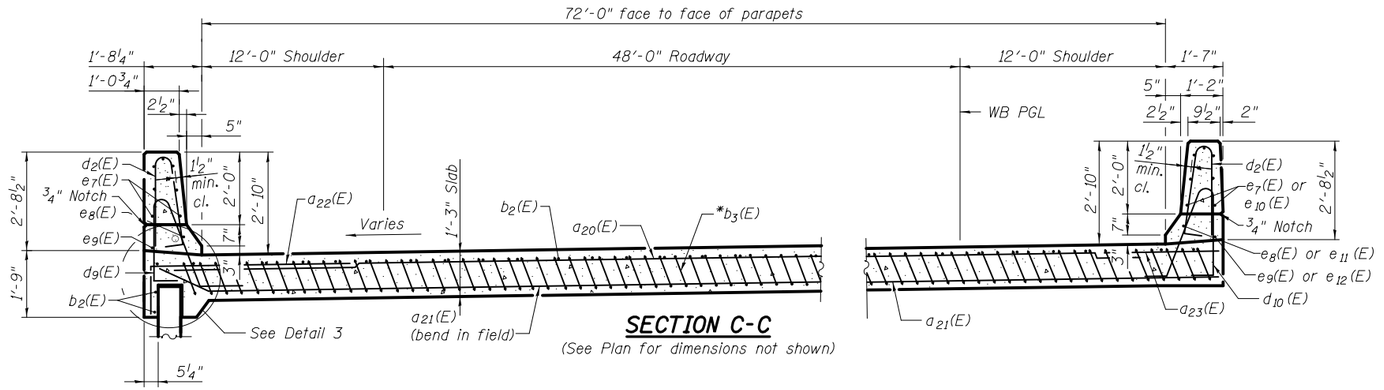


SECTION B-B

* Tilt #9 b_3(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.

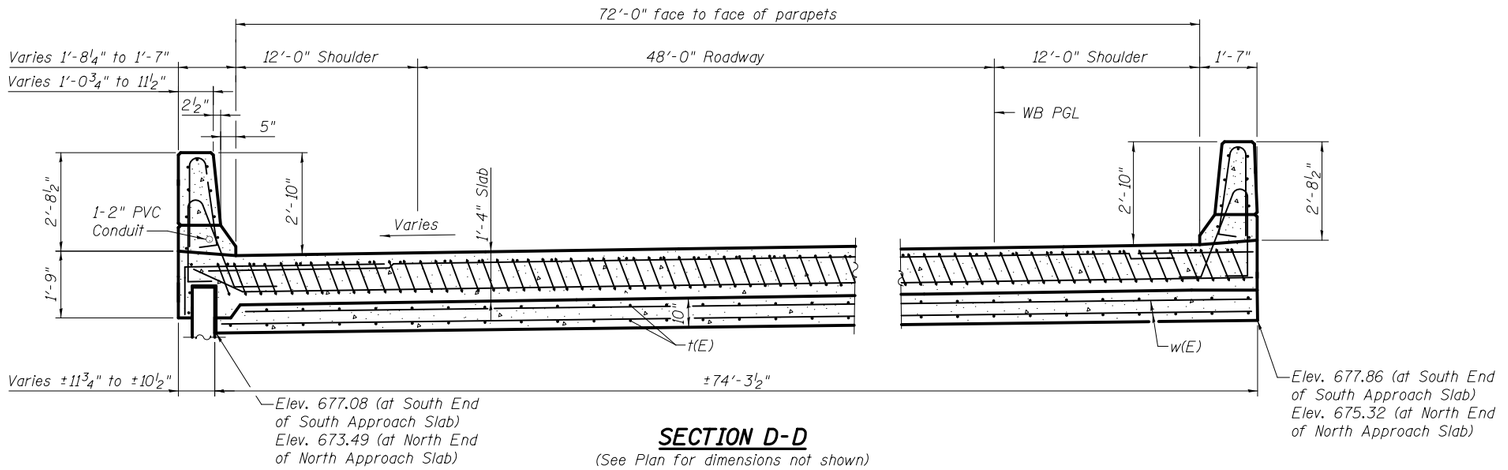


DETAIL 3



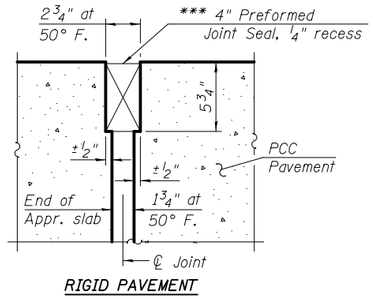
SECTION C-C

(See Plan for dimensions not shown)



SECTION D-D

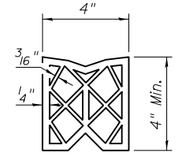
(See Plan for dimensions not shown)



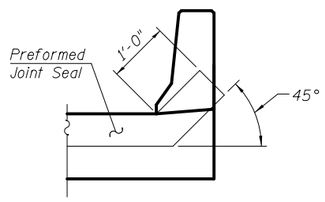
RIGID PAVEMENT

DETAIL 2

*** Cost included with Concrete Superstructure.



PREFORMED JOINT SEAL



VIEW A-A

Notes:
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 32 thru 40 of 59.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 51 of 59.
Cost of excavation for approach footing included with Concrete Structures.
For Compacted Granular Backfill for Structures and drainage treatment details, see sheet 3 of 59.
Transverse dimensions shown are measured perpendicular to WB PGL.
See SN 081-6017 and SN 081-6020 for MSE wall details.

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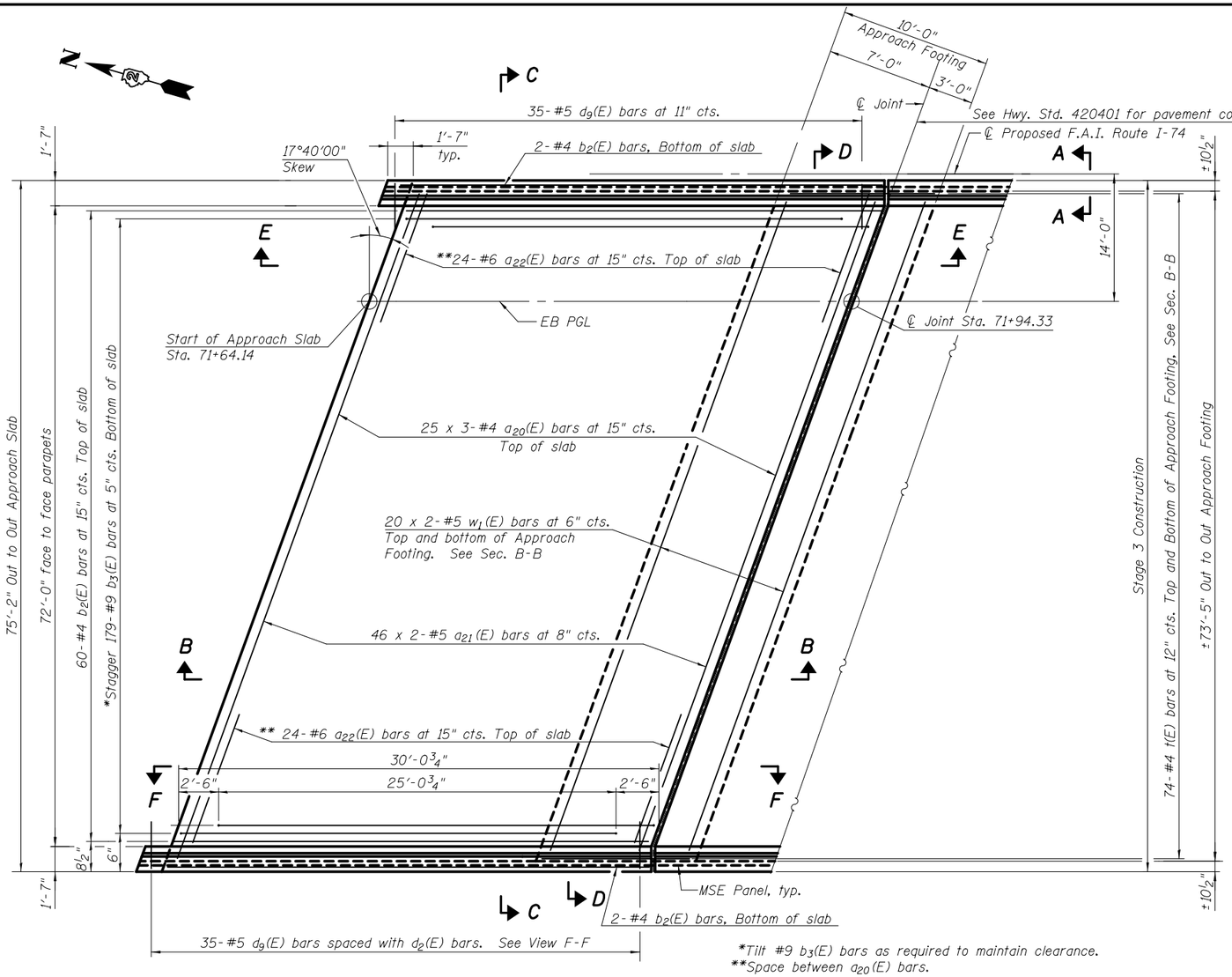
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS - WESTBOUND
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 24 OF 59 SHEETS

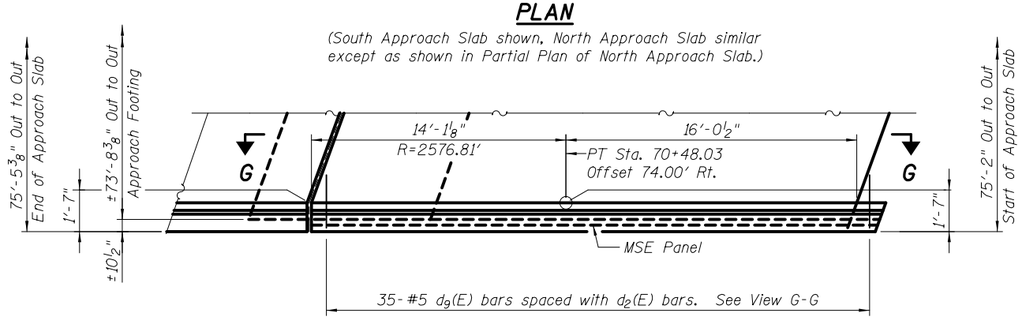
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1113
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



*Tilt #9 b_3(E) bars as required to maintain clearance.
**Space between a_{20}(E) bars.

PLAN

(South Approach Slab shown, North Approach Slab similar except as shown in Partial Plan of North Approach Slab.)

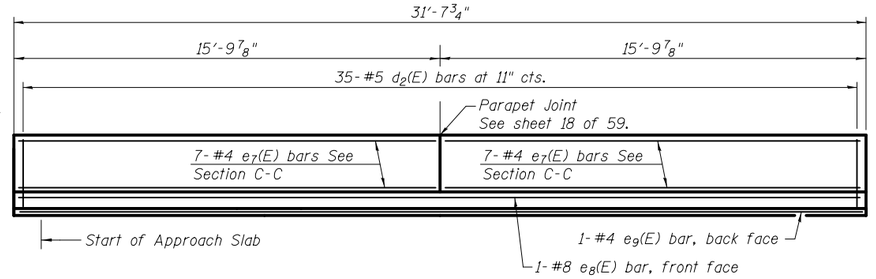


PARTIAL PLAN OF NORTH APPROACH SLAB

MINIMUM BAR LAP

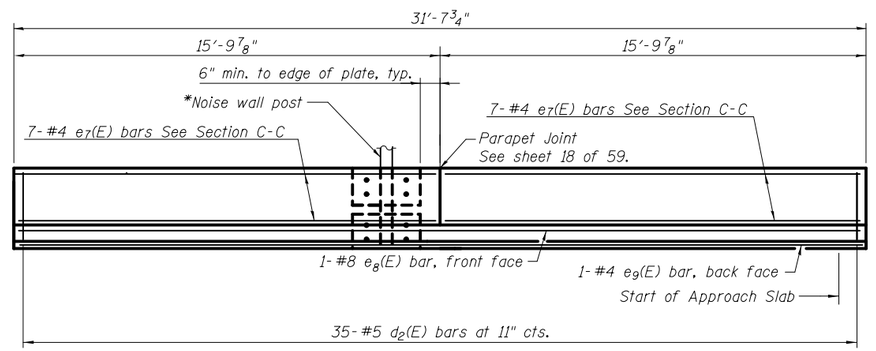
(Approach Slab)

#4 Bar = 2'-7"
#5 Bar = 3'-3"



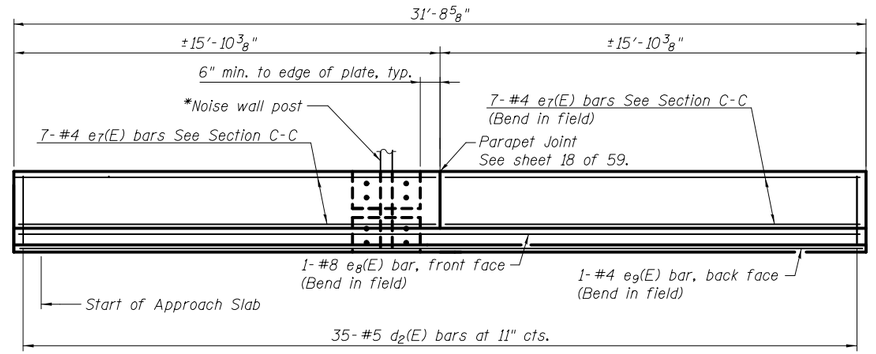
VIEW E-E (INSIDE ELEVATION OF PARAPET)

(South Approach Parapet shown, North Approach Parapet similar.)
(Dimensioned along inside face of parapet.)



VIEW F-F (INSIDE ELEVATION OF PARAPET)

(Dimensioned along inside face of parapet.)



VIEW G-G (INSIDE ELEVATION OF PARAPET)

(Dimensioned along inside face of parapet.)

* See "Noise Abatement Wall 8" plans for noise wall connection and post spacing details.

Notes:
See sheet 24 of 59 for View A-A.
See sheet 26 of 59 for Sections B-B, C-C and D-D.
See sheet 27 of 59 for reinforcement details and Bill of Material.
All d(E) bar spacings measured along ℄ Rdwy.
See SN 081-6017 and SN 081-6020 for MSE wall details.
Bars indicated thus 25 x 3- #4 etc. indicates 25 lines of bars with 3 lengths per line.

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PLOT SCALE =	DRAWN - AEC	REVISED
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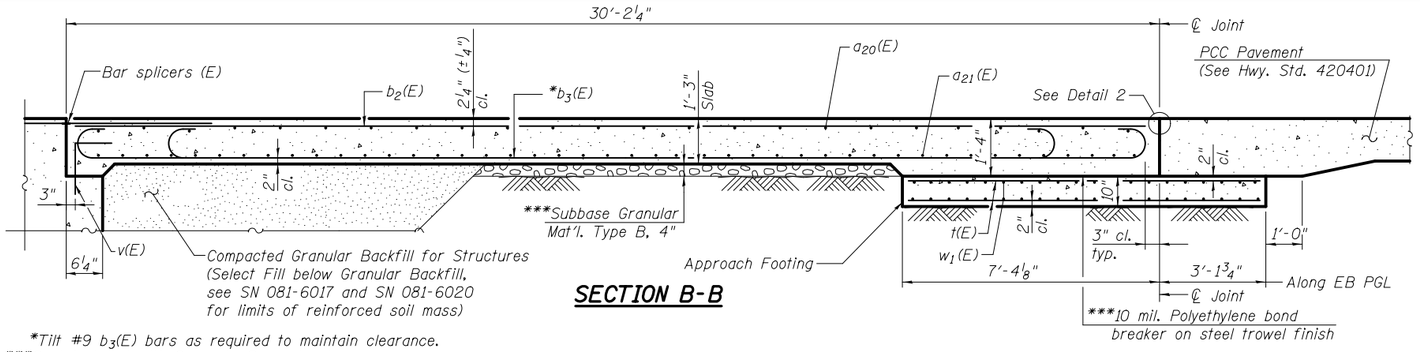
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

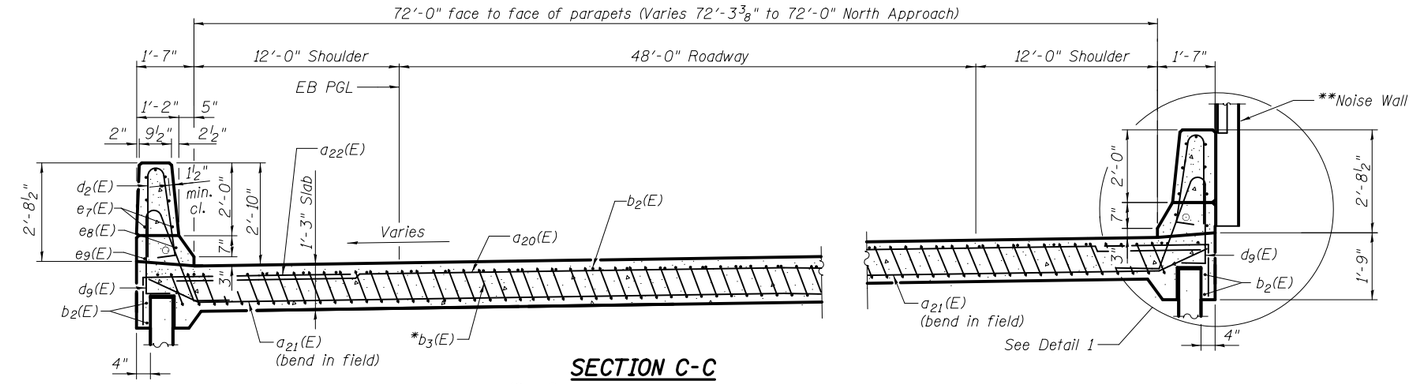
BRIDGE APPROACH SLAB – EASTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 25 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1114
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



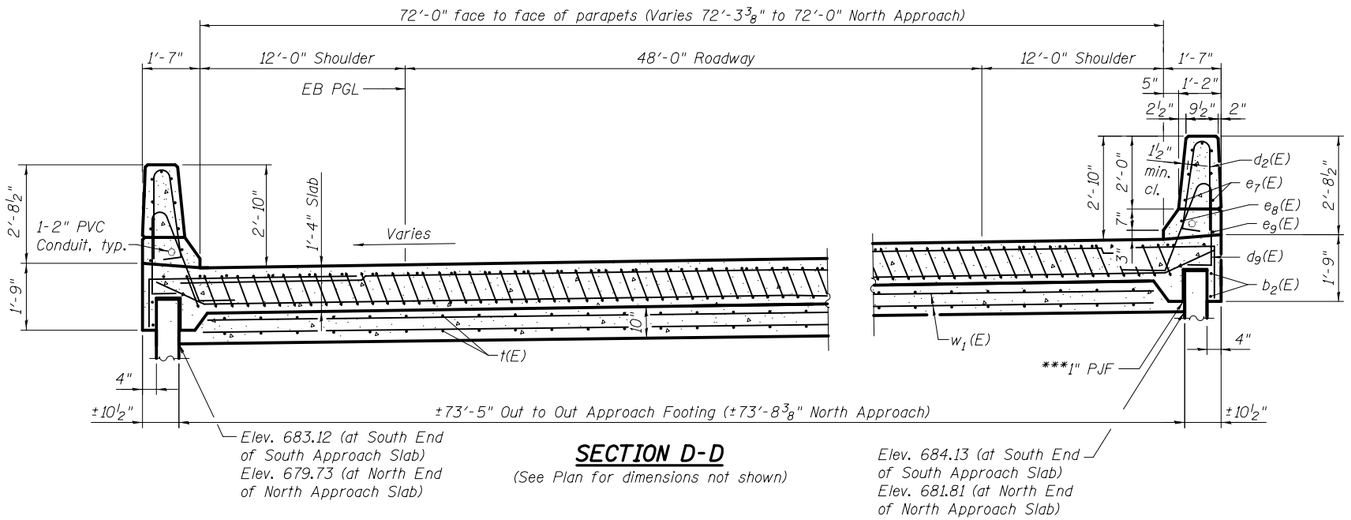
SECTION B-B

*Tilt #9 b_3(E) bars as required to maintain clearance.
***Cost included with Concrete Superstructure.



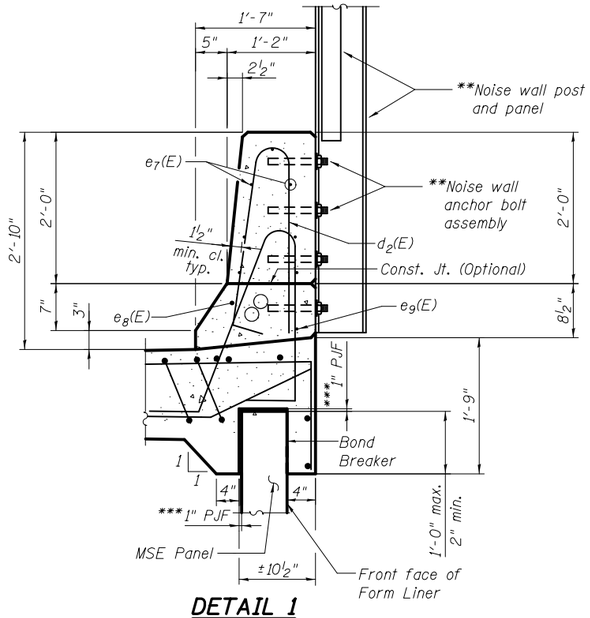
SECTION C-C

(See Plan for dimensions not shown)



SECTION D-D

(See Plan for dimensions not shown)



DETAIL 1

** See "Noise Abatement Wall 8" plans for noise wall details.

Notes:
See Sheet 24 of 59 for Detail 2 and Preformed Joint Seal details.
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v(E) bar details, see sheet 32 thru 40 of 59.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 51 of 59.
Cost of excavation for approach footing included with Concrete Structures.
For Compacted Granular Backfill for Structures and drainage treatment details, see sheet 3 of 59.
Transverse dimensions shown are measured perpendicular to EB PGL.
Apply Protective Coat according to Article 503.19.
See SN 081-6017 and SN 081-6020 for MSE wall details.

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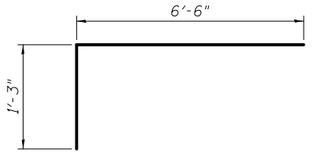
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

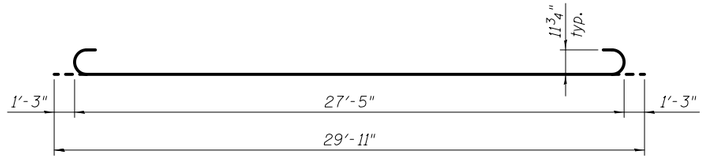
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS – EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 26 OF 59 SHEETS

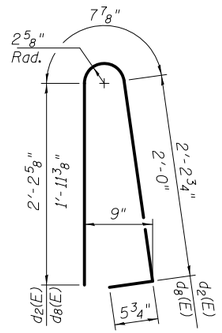
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1115
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



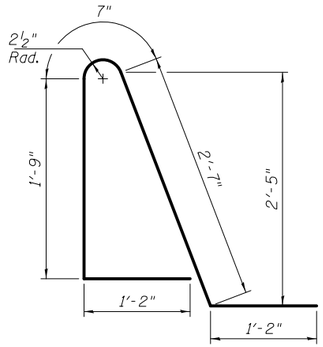
BAR a_{22}(E)



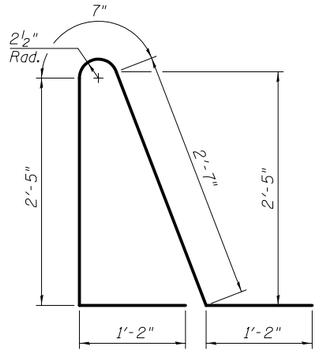
BAR b_3(E)



BARS d_2(E) and d_8(E)



BAR d_9(E)



BAR d_{10}(E)

TWO APPROACHES
BILL OF MATERIAL (WB)

Bar	No.	Size	Length	Shape
a_{20}(E)	150	#4	27'-9"	
a_{21}(E)	184	#5	40'-8"	
a_{22}(E)	48	#6	7'-9"	
a_{23}(E)	48	#6	6'-6"	
b_2(E)	124	#4	29'-8"	
b_3(E)	358	#9	29'-11"	
d_2(E)	139	#5	5'-7"	
d_8(E)	2	#5	5'-1"	
d_9(E)	70	#5	7'-3"	
d_{10}(E)	70	#5	7'-11"	
e_7(E)	42	#4	15'-6"	
e_8(E)	3	#8	31'-5"	
e_9(E)	3	#4	31'-5"	
e_{10}(E)	14	#4	16'-2"	
e_{11}(E)	1	#8	32'-7"	
e_{12}(E)	1	#4	32'-7"	
t(E)	300	#4	10'-2"	
w(E)	160	#5	40'-2"	
Concrete Structures			Cu. Yd.	48.2
Concrete Superstructure			Cu. Yd.	230.5
Bridge Deck Grooving			Sq. Yd.	483
Protective Coat			Sq. Yd.	539
Reinforcement Bars, Epoxy Coated			Pound	62,170

TWO APPROACHES
BILL OF MATERIAL (EB)

Bar	No.	Size	Length	Shape
a_{20}(E)	150	#4	27'-9"	
a_{21}(E)	184	#5	40'-8"	
a_{22}(E)	96	#6	7'-9"	
b_2(E)	128	#4	29'-8"	
b_3(E)	358	#9	29'-11"	
d_2(E)	140	#5	5'-7"	
d_9(E)	140	#5	7'-3"	
e_7(E)	56	#4	15'-6"	
e_8(E)	4	#8	31'-5"	
e_9(E)	4	#4	31'-5"	
t(E)	296	#4	10'-2"	
w_1(E)	160	#5	39'-8"	
Concrete Structures			Cu. Yd.	47.2
Concrete Superstructure			Cu. Yd.	229.4
Bridge Deck Grooving			Sq. Yd.	484
Protective Coat			Sq. Yd.	538
Reinforcement Bars, Epoxy Coated			Pound	62,160

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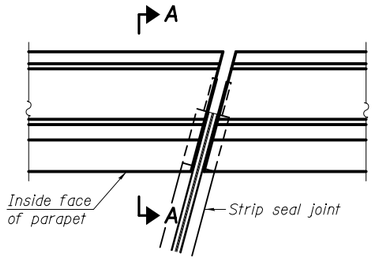
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - RLM	REVISED

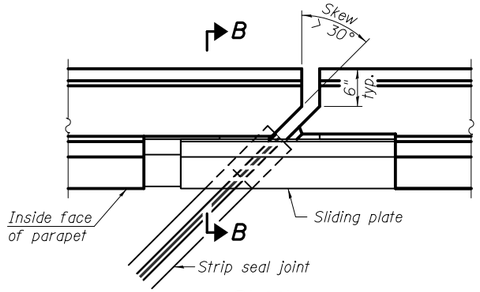
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB – MISCELLANEOUS DETAILS
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 27 OF 59 SHEETS

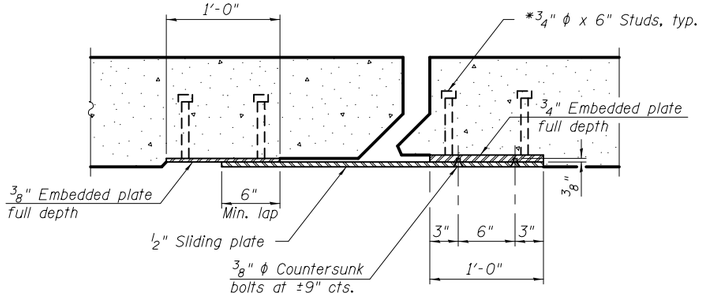
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1116
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



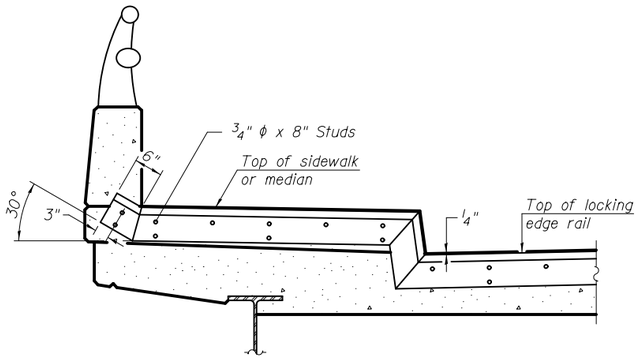
PLAN
(For skews ≤ 30°)



PLAN
(For skews > 30°)
Showing point block

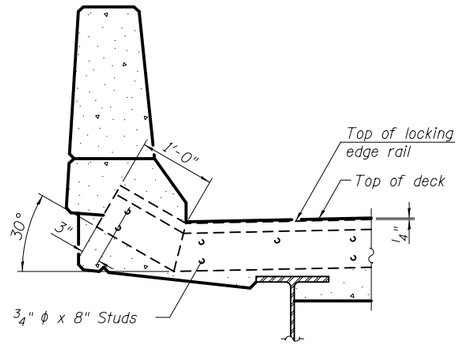


SECTION C-C

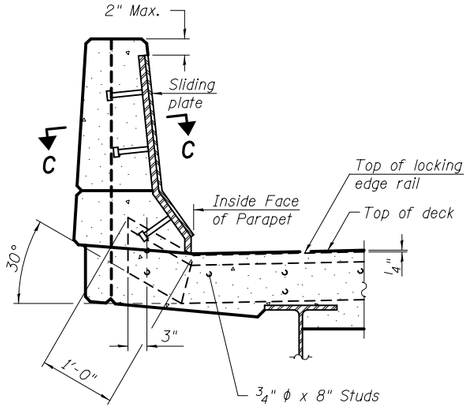


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

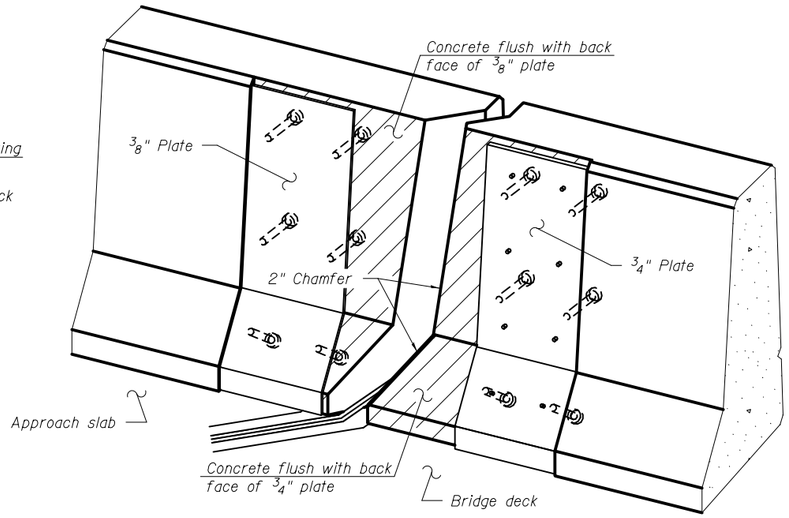
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A



SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)

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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

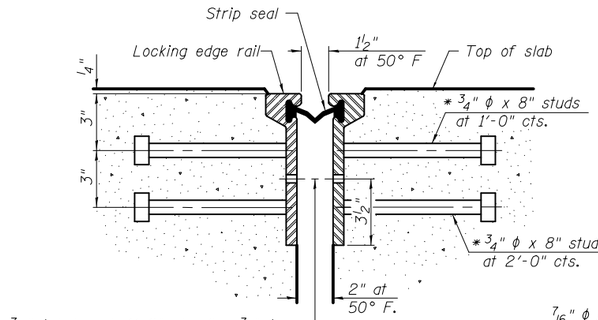
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

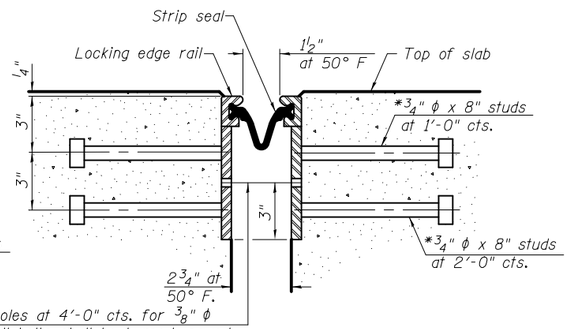
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.



7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

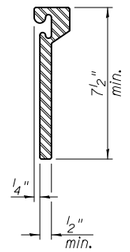
SECTION THRU ROLLED RAIL JOINT



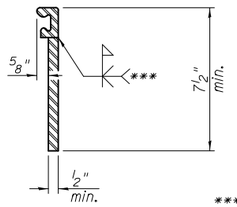
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

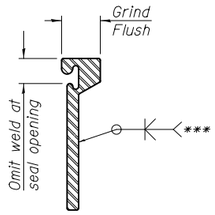
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



*** 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.

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	312

EJ-SSJ 1-27-12

USER NAME =	DESIGNED - KJP	REVISED	
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PLOT SCALE =	DRAWN - ATH	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

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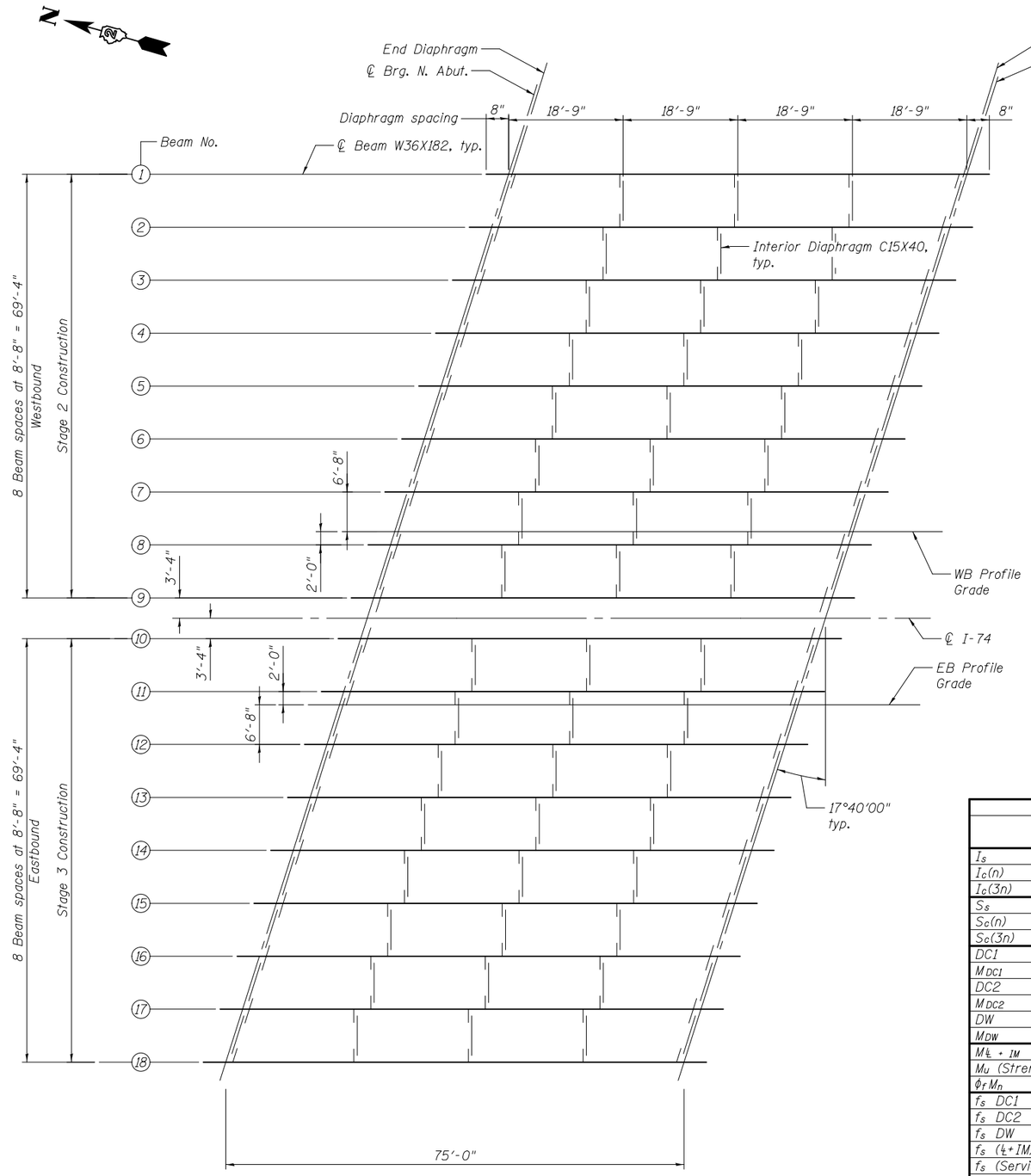
PREFORMED JOINT STRIP SEAL
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 28 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1117
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



FRAMING PLAN

WESTBOUND

REACTION TABLE			
		Interior Girder Abut.	Exterior Girder Abut.
R_{DC1}	(k)	41.0	38.5
R_{DC2}	(k)	7.05	7.05
R_{DW}	(k)	15.0	15.0
R_{L+IM}	(k)	98.8	79.5
R_{Total}	(k)	162	140

EASTBOUND

REACTION TABLE			
		Interior Girder Abut.	Exterior Girder Abut.
R_{DC1}	(k)	41.0	37.3
R_{DC2}	(k)	10.13	10.13
R_{DW}	(k)	15.0	15.0
R_{L+IM}	(k)	98.8	79.5
R_{Total}	(k)	165	142

WESTBOUND

MOMENT TABLE			
		Interior Girder 0.5 Sp. 1	Exterior Girder 0.5 Sp. 1
I_s	(in^4)	11,300	11,300
$I_c(n)$	(in^4)	27,592	26,646
$I_c(3n)$	(in^4)	20,441	19,595
S_s	(in^3)	623	623
$S_c(n)$	(in^3)	871	862
$S_c(3n)$	(in^3)	792	780
DC1	(k/')	1.092	1.025
M_{DC1}	('k)	768	721
DC2	(k/')	0.188	0.188
M_{DC2}	('k)	132	132
DW	(k/')	0.400	0.400
M_{DW}	('k)	281	281
M_{L+IM}	('k)	1,257	1,296
M_u (Strength I)	('k)	3,747	3,757
$\phi_f M_n$	('k)	4,484	4,363
f_s DC1	(ksi)	14.79	13.88
f_s DC2	(ksi)	2.00	2.03
f_s DW	(ksi)	4.26	4.33
f_s (L+IM)	(ksi)	17.32	18.04
f_s (Service II)	(ksi)	43.6	43.7
$0.95R_hF_{yf}$	(ksi)	47.5	47.5
f_s (Total)(Strength I)	(ksi)	-	-
$\phi_f F_n$	(ksi)	-	-
V_f	(k)	58.9	57.7

EASTBOUND

MOMENT TABLE			
		Interior Girder 0.5 Sp. 1	Exterior Girder 0.5 Sp. 1
I_s	(in^4)	11,300	11,300
$I_c(n)$	(in^4)	27,592	26,421
$I_c(3n)$	(in^4)	20,441	19,403
S_s	(in^3)	623	623
$S_c(n)$	(in^3)	871	859
$S_c(3n)$	(in^3)	792	777
DC1	(k/')	1.092	0.995
M_{DC1}	('k)	768	700
DC2	(k/')	0.270	0.270
M_{DC2}	('k)	190	190
DW	(k/')	0.400	0.400
M_{DW}	('k)	281	281
M_{L+IM}	('k)	1,257	1,296
M_u (Strength I)	('k)	3,819	3,802
$\phi_f M_n$	('k)	4,484	4,336
f_s DC1	(ksi)	14.79	13.48
f_s DC2	(ksi)	2.88	2.93
f_s DW	(ksi)	4.26	4.34
f_s (L+IM)	(ksi)	17.32	18.11
f_s (Service II)	(ksi)	44.5	44.3
$0.95R_hF_{yf}$	(ksi)	47.5	47.5
f_s (Total)(Strength I)	(ksi)	-	-
$\phi_f F_n$	(ksi)	-	-
V_f	(k)	58.9	57.7

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.^{4} and in.^{3}).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) due to short-term composite live loads (in.^{4} and in.^{3}).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: 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.).

M_{DC2}: 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.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25\ (M_{DC1} + M_{DC2}) + 1.5\ M_{DW} + 1.75\ M_{L+IM}$

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(n)$ or $M_{L+IM} / S_c(cr)$ as applicable.

f_s (Service II): Sum of stresses as computed below (ksi).
$f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3\ f_{sL+IM}$

$0.95R_hF_yf$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25\ (f_{sDC1} + f_{sDC2}) + 1.5\ f_{sDW} + 1.75\ f_{sL+IM}$

$\phi_f F_n$: Non-Compact composite positive stress capacity for Strength I loading according to Article 6.10.7 (ksi).

V_f: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

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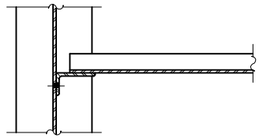
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED	
	CHECKED - YSS	REVISED	
PLOT SCALE =	DRAWN - ATH	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

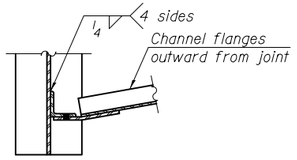
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 29 OF 59 SHEETS

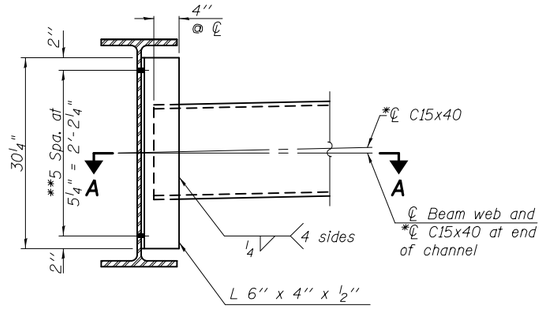
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1118
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



SECTION A-A

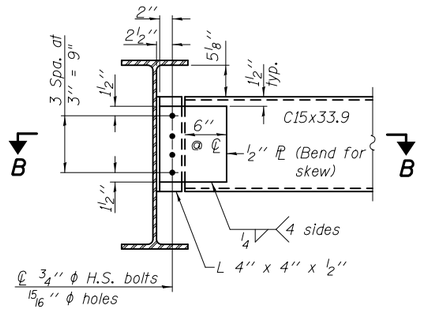


SECTION B-B



INTERIOR DIAPHRAGM C15x40

(48 Required)



END DIAPHRAGM

(32 Required)

Notes:

*C15x50 can be used as an alternate channel size. Alternate channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.

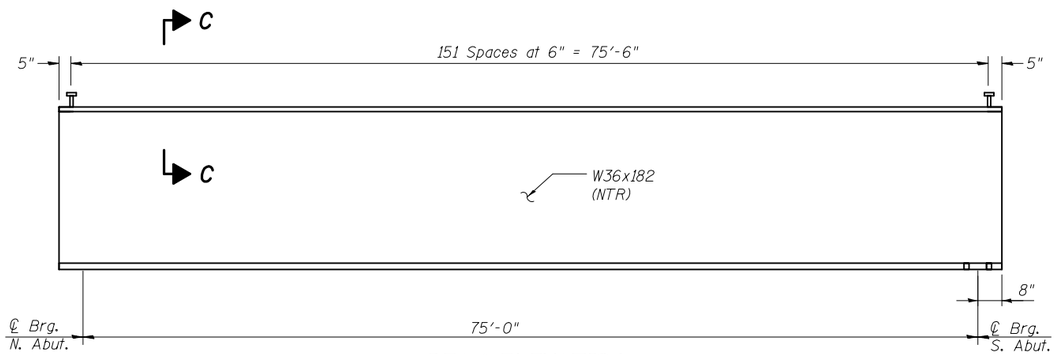
The alternate, if utilized, shall be provided at no additional cost to the Department.

**¾" ϕ HS bolts, 15/16" ϕ holes

TOP OF BEAM ELEVATIONS

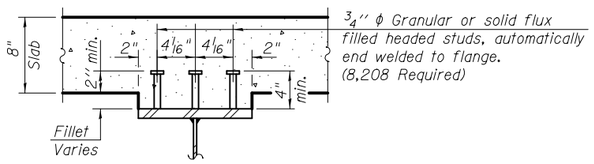
Location	Westbound								
	Beam 1	Beam 2	Beam 3	Beam 4	Beam 5	Beam 6	Beam 7	Beam 8	Beam 9
℄ Brg. N. Abut.	675.91	676.08	676.26	676.44	676.63	676.82	677.02	677.22	677.43
℄ Brg. S. Abut.	677.81	677.91	678.02	678.13	678.25	678.38	678.51	678.65	678.79

Location	Eastbound								
	Beam 10	Beam 11	Beam 12	Beam 13	Beam 14	Beam 15	Beam 16	Beam 17	Beam 18
℄ Brg. N. Abut.	682.10	682.30	682.50	682.72	682.93	683.15	683.38	683.61	683.85
℄ Brg. S. Abut.	683.89	684.02	684.16	684.30	684.45	684.61	684.77	684.93	685.10



BEAM ELEVATION

(18 Required)



¾" ϕ Granular or solid flux filled headed studs, automatically end welded to flange. (8,208 Required)

SECTION C-C

(W36X182)

Notes:

Two hardened washers required for each set of oversized holes.

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

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Experience great bridges.

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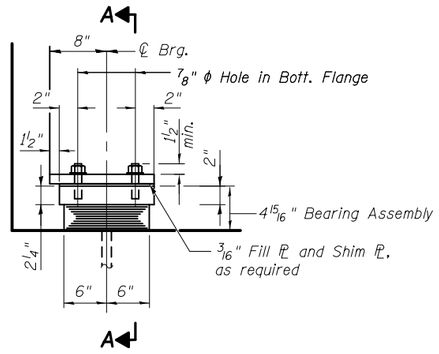
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

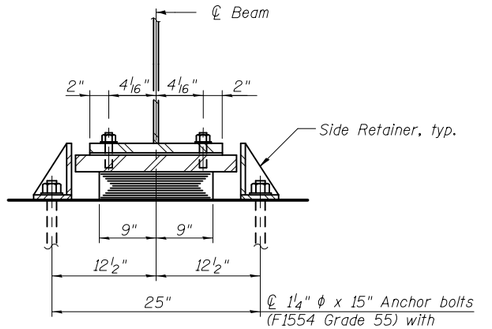
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 30 OF 59 SHEETS

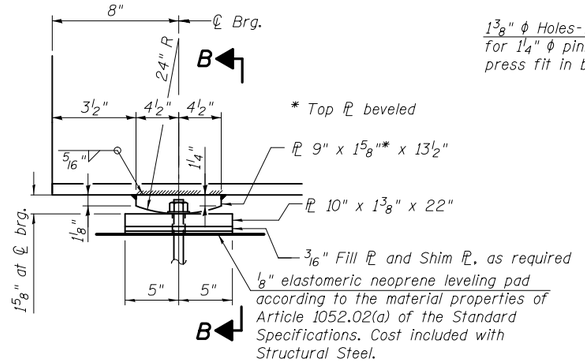
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1119
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



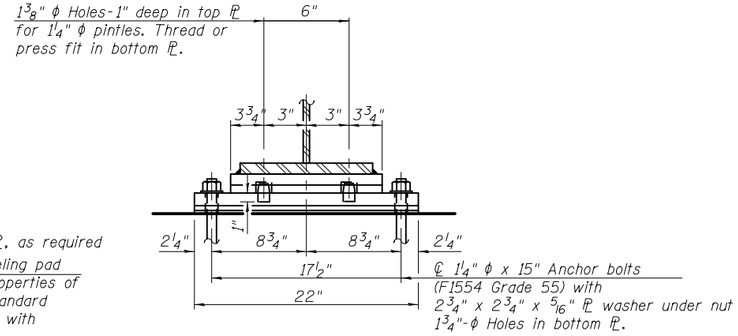
ELEVATION AT SOUTH ABUT.



SECTION A-A

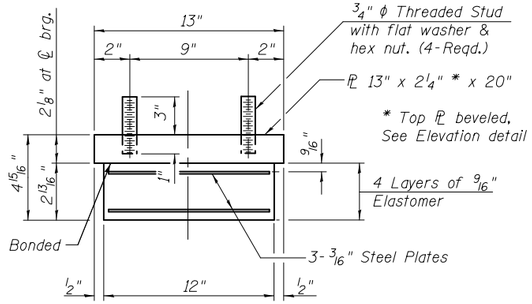


ELEVATION AT NORTH ABUT.

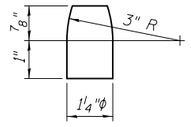


SECTION B-B

FIXED BEARING

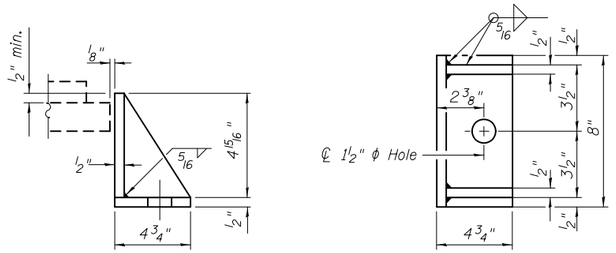


BEARING ASSEMBLY



PINTLE

(36 Required)



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

Note:
Shim plates shall not be placed under Bearing Assembly.

TYPE I ELASTOMERIC EXP. BRG.

Notes:

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50.

Structural steel plates and pintles for fixed bearings shall conform to the requirements of AASHTO M270 Grade 50.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Cost of Fixed Bearing shall be included in Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	18
Anchor Bolts, 1 1/4"	Each	72

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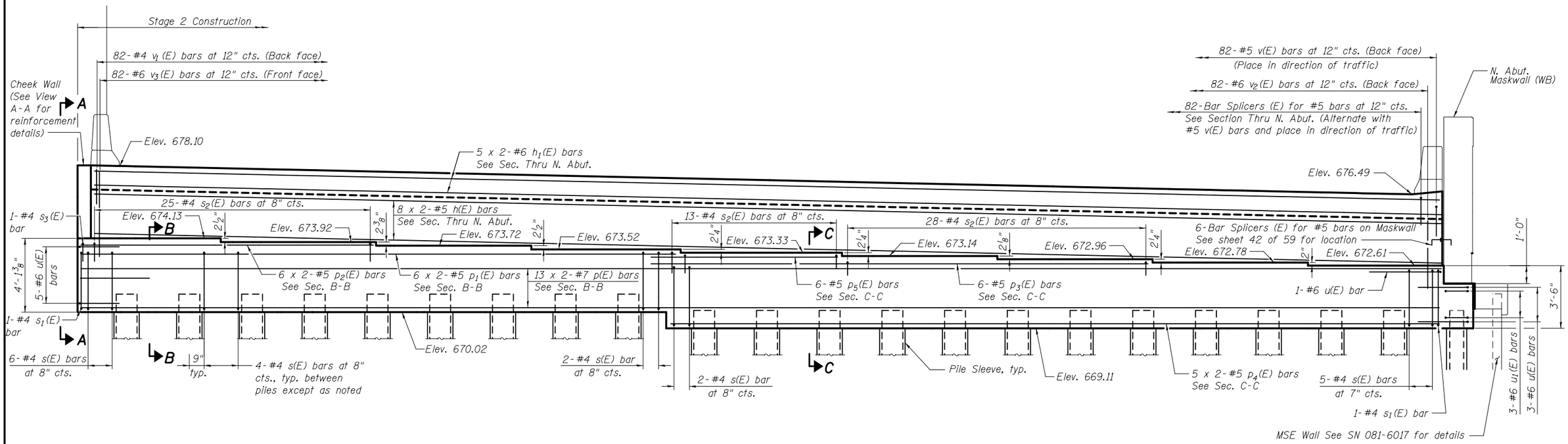
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 31 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1120
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



ELEVATION - WESTBOUND

(Looking North)

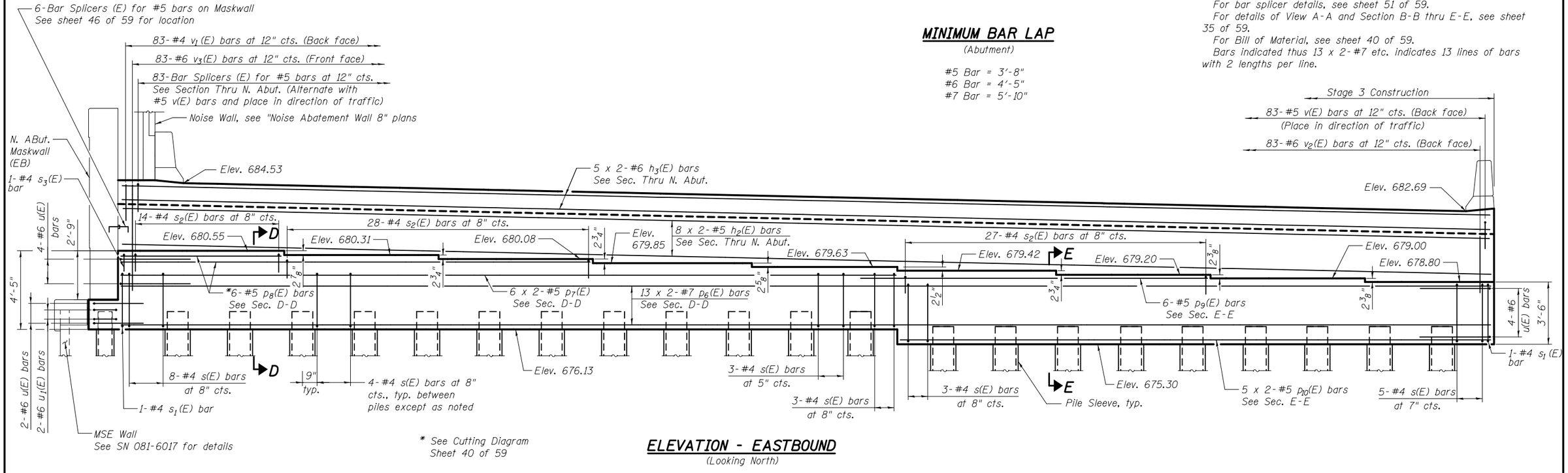
Notes:

Pour steps monolithically with cap.
For details of westbound maskwall, see sheets 41 and 42 of 59.
For details of eastbound maskwall, see sheets 45 and 46 of 59.
For bar splicer details, see sheet 51 of 59.
For details of View A-A and Section B-B thru E-E, see sheet 35 of 59.
For Bill of Material, see sheet 40 of 59.
Bars indicated thus 13 x 2-#7 etc. indicates 13 lines of bars with 2 lengths per line.

MINIMUM BAR LAP

(Abutment)

#5 Bar = 3'-8"
#6 Bar = 4'-5"
#7 Bar = 5'-10"



* See Cutting Diagram Sheet 40 of 59

ELEVATION - EASTBOUND

(Looking North)

USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

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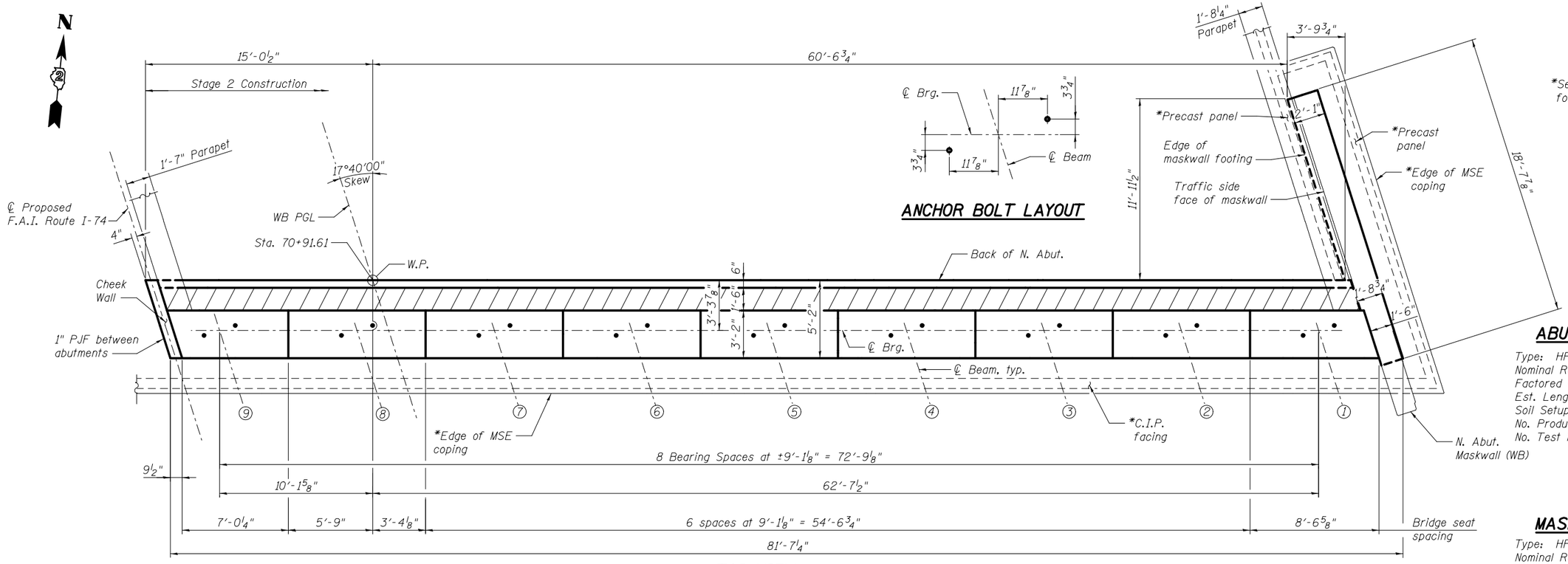
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT ELEVATION – WESTBOUND & EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 32 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1121
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



Notes:

Space reinforcement in cap to miss anchor bolts.

For details of maskwall, see sheets 41 and 42 of 59.

For details of piles, see sheet 50 of 59.

For details of section F-F, see sheet 35 of 59.

Pile sleeves shall be sized to provide at least 1 1/2" inches of clearance around the pile and shall extend from bottom of abutment to bottom of reinforced soil mass.

The area between the pile and the sleeve shall be backfilled with dry, loose sand and the cost included in Driving Piles.

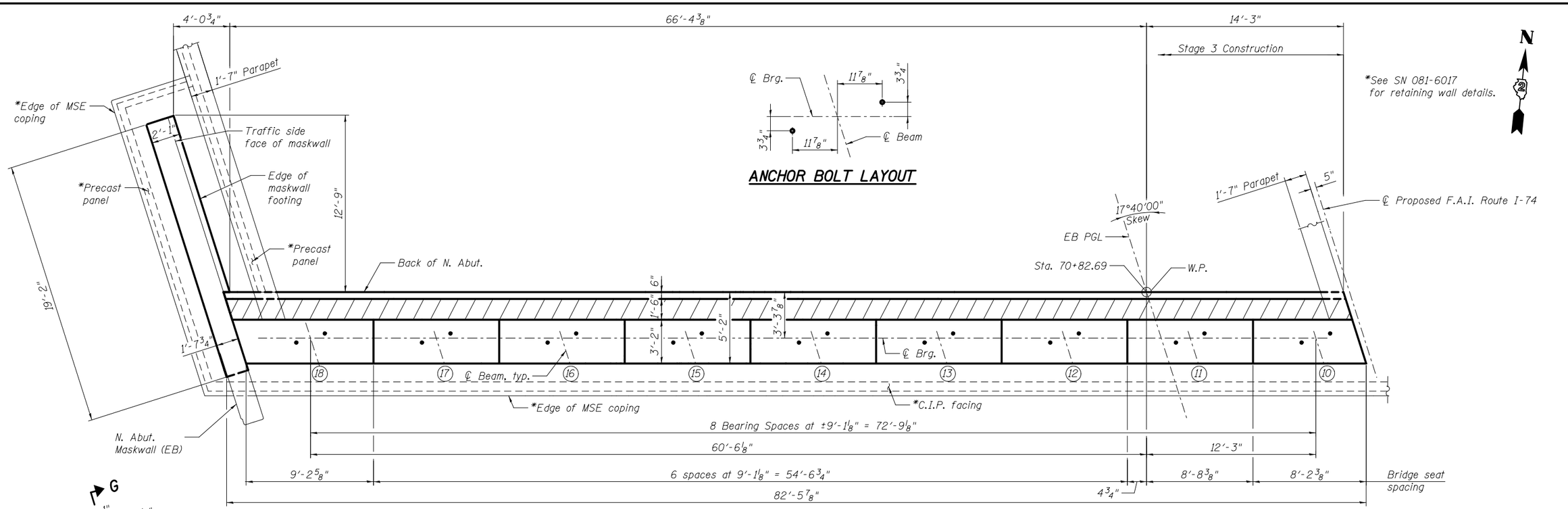
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT PLAN – WESTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 33 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1122
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



ABUTMENT PILE DATA

Type: HP14x73
Nominal Required Bearing: 305 Kips
Factored Resistance Available: 183 Kips
Est. Length: 68 foot
Soil Setup Pile Length: 113 foot
No. Production Piles: 20
No. Test Piles: 1

MASKWALL PILE DATA

Type: HP10x42
Nominal Required Bearing: 100 Kips
Factored Resistance Available: 60 Kips
Est. Length: 39 foot
Soil Setup Pile Length: 66 foot
No. Production Piles: 2
No. Test Piles: 0

Notes:
Space reinforcement in cap to miss anchor bolts.
For details of maskwall, see sheets 45 and 46 of 59.
For details of piles, see sheet 50 of 59.
For details of section G-G, see sheet 35 of 59.
Pile sleeves shall be sized to provide at least 1 1/2" inches of clearance around the pile and shall extend from bottom of abutment to bottom of reinforced soil mass.
The area between the pile and the sleeve shall be backfilled with dry, loose sand and the cost included in Driving Piles.

MODJESKI and MASTERS
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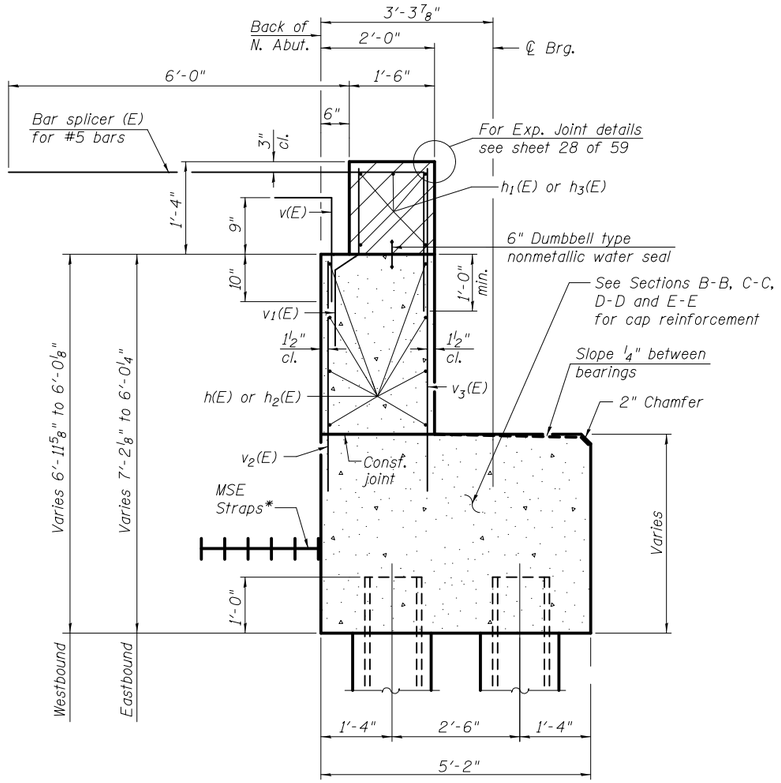
USER NAME =	DESIGNED - JBN	REVISED	
	CHECKED - YSS	REVISED	
PLOT SCALE =	DRAWN - ATH	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT PLAN – EASTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 34 OF 59 SHEETS

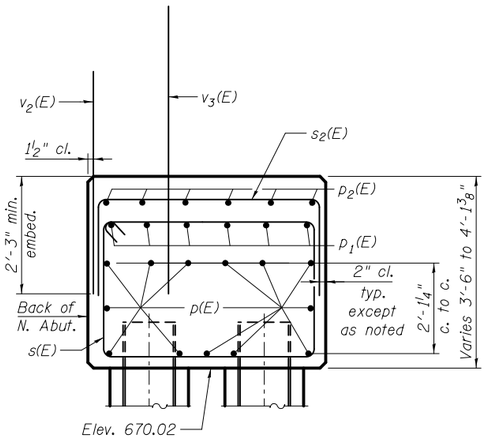
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1123
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



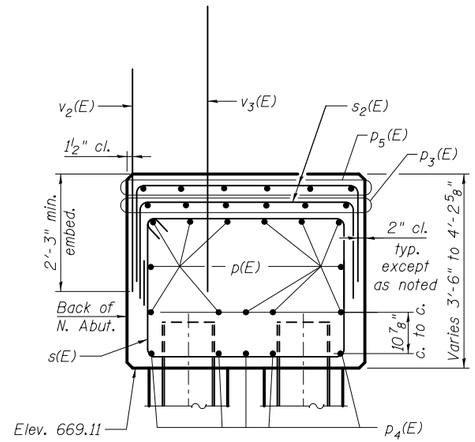
SECTION THRU NORTH ABUTMENT

(Horiz. dim at right angles)

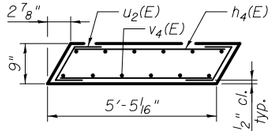
*See SN 081-6017 for retaining wall details.



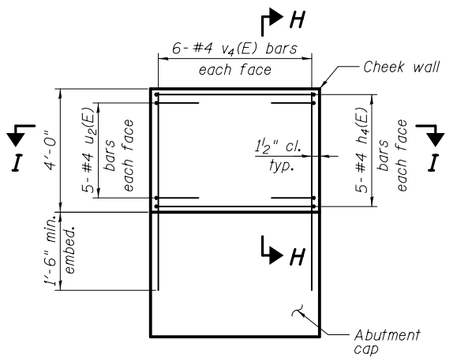
SECTION B-B



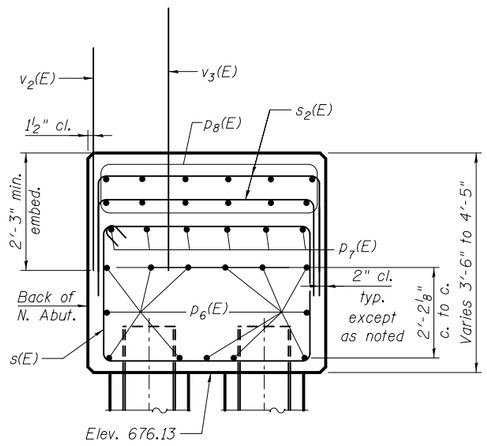
SECTION C-C



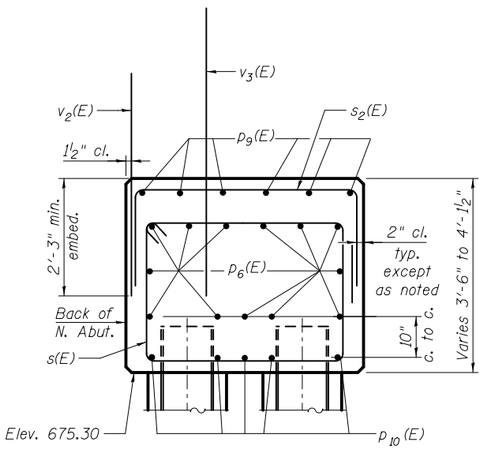
SECTION I-I



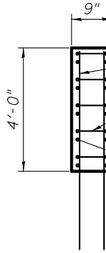
VIEW A-A



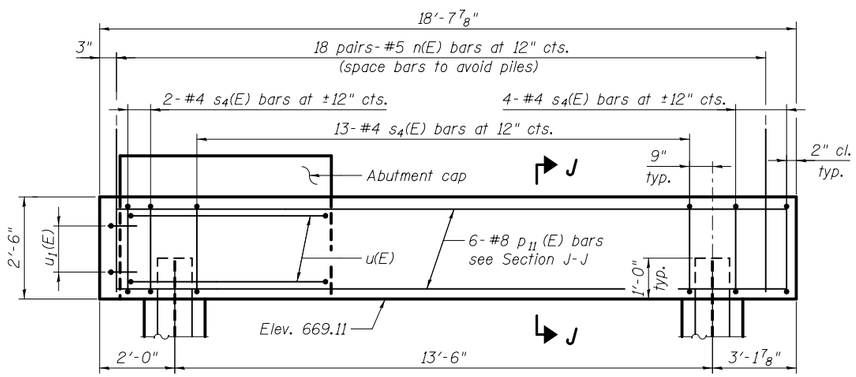
SECTION D-D



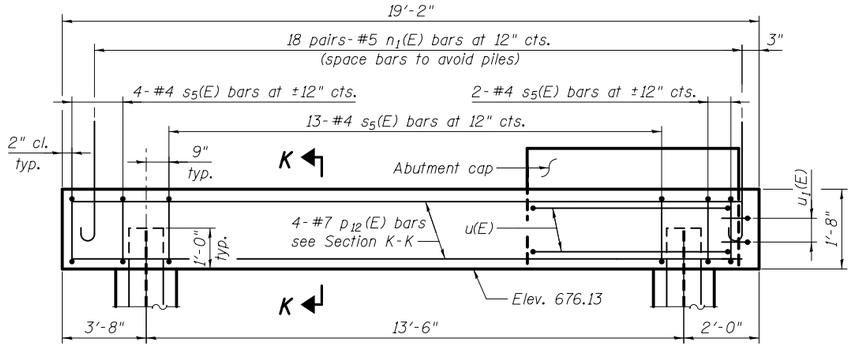
SECTION E-E



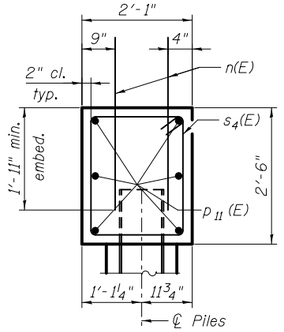
SECTION H-H



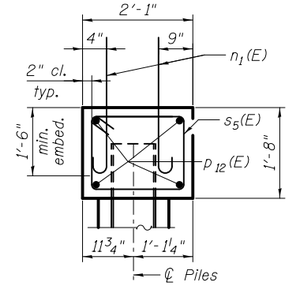
SECTION F-F



SECTION G-G



SECTION J-J



SECTION K-K

Notes:

Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructures on sheet 20 of 59.

See sheets 32 thru 34 of 59 for location of sections.

See sheet 40 of 59 for bar details and bill of material.

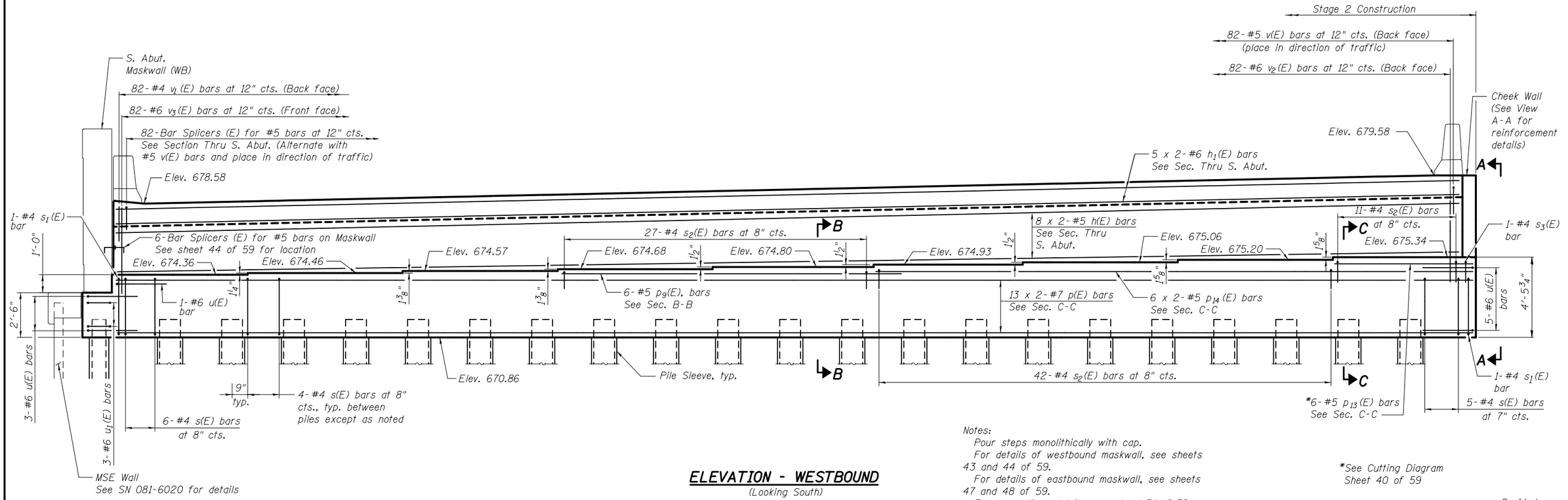
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 35 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1124
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



ELEVATION - WESTBOUND

(Looking South)

Notes:

Pour steps monolithically with cap.

For details of westbound maskwall, see sheets 43 and 44 of 59.

For details of eastbound maskwall, see sheets 47 and 48 of 59.

For bar splicer details, see sheet 51 of 59.

For details of View A-A and Section B-B thru E-E, see sheet 39 of 59.

For Bill of Material, see sheet 40 of 59.

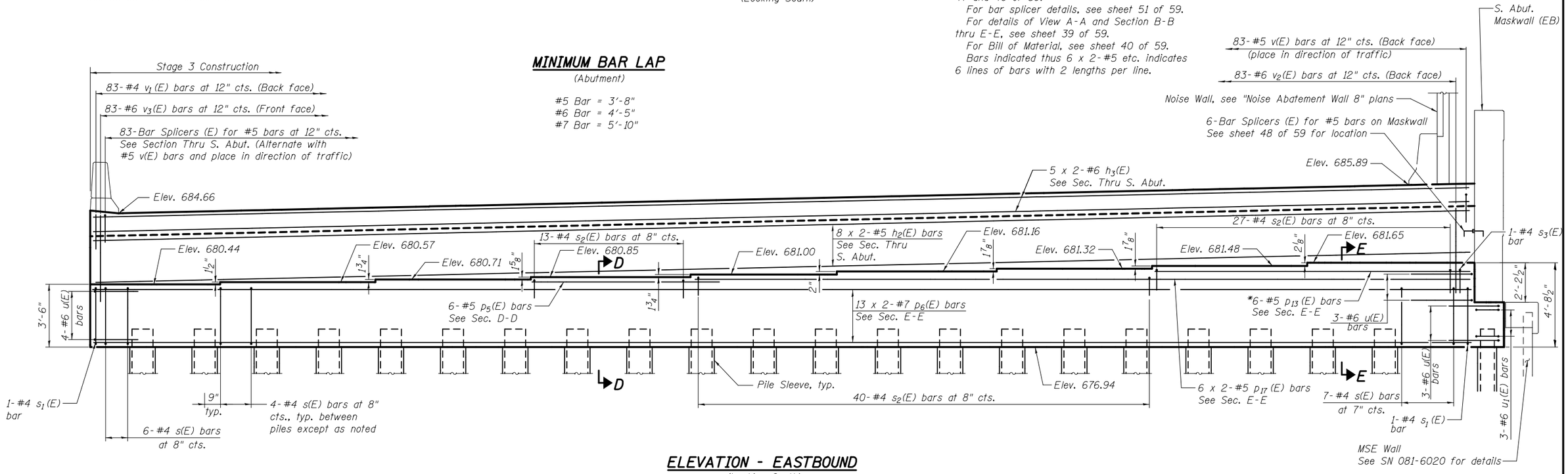
Bars indicated thus 6 x 2-#5 etc. indicates 6 lines of bars with 2 lengths per line.

*See Cutting Diagram Sheet 40 of 59

MINIMUM BAR LAP

(Abutment)

#5 Bar = 3'-8"
#6 Bar = 4'-5"
#7 Bar = 5'-10"



ELEVATION - EASTBOUND

(Looking South)

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - JBN	REVISED
		CHECKED - YSS	REVISED
	PLOT SCALE =	DRAWN - ATH	REVISED
	PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT ELEVATION – WESTBOUND & EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 36 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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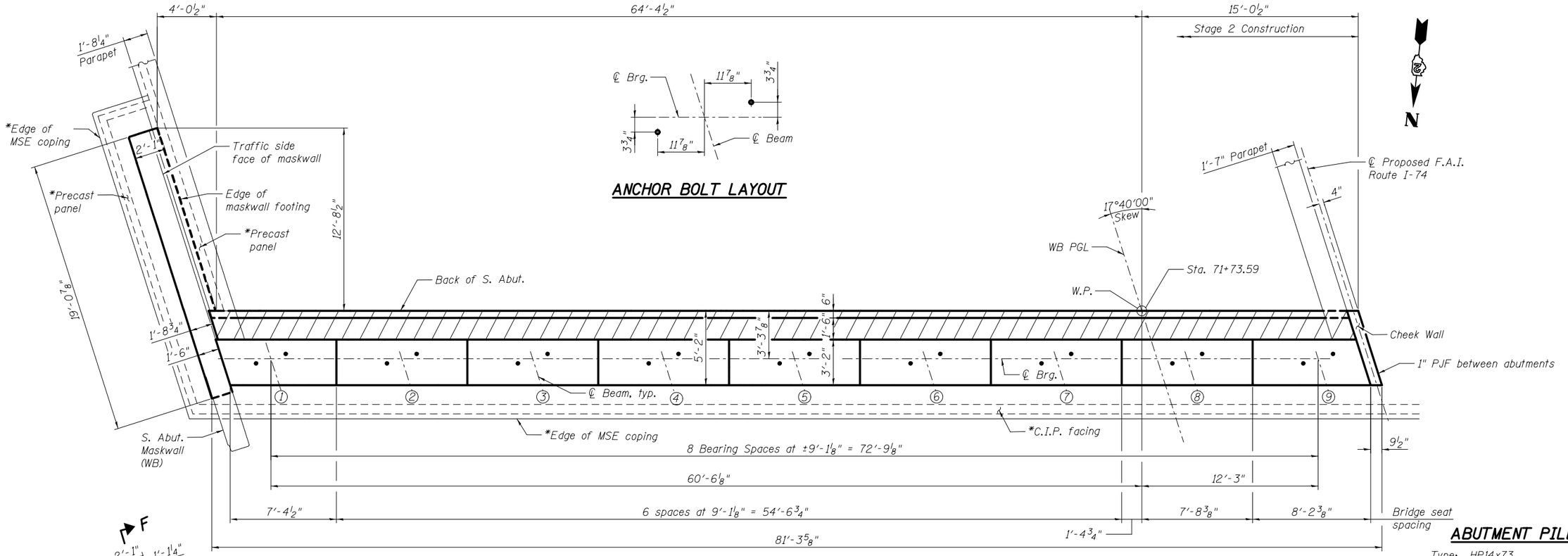
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



TOP VIEW

PLAN - PILE CAP

(s_2(E) and s_3(E) not shown for clarity)

ANCHOR BOLT LAYOUT

ABUTMENT PILE DATA

Type: HP14x73
Nominal Required Bearing: 303 Kips
Factored Resistance Available: 182 Kips
Est. Length: 61 foot
Soil Setup Pile Length: 92 foot
No. Production Piles: 20
No. Test Piles: 1

MASKWALL PILE DATA

Type: HP10x42
Nominal Required Bearing: 100 Kips
Factored Resistance Available: 60 Kips
Est. Length: 38 foot
Soil Setup Pile Length: 56 foot
No. Production Piles: 2
No. Test Piles: 0

Notes:
Space reinforcement in cap to miss anchor bolts.
For details of maskwall, see sheets 43 and 44 of 59.
For details of piles, see sheet 50 of 59.
For details of section F-F, see sheet 39 of 59.
Pile sleeves shall be sized to provide at least 1 1/2" inches of clearance around the pile and shall extend from bottom of abutment to bottom of reinforced soil mass.
The area between the pile and the sleeve shall be backfilled with dry, loose sand and the cost included in Driving Piles.

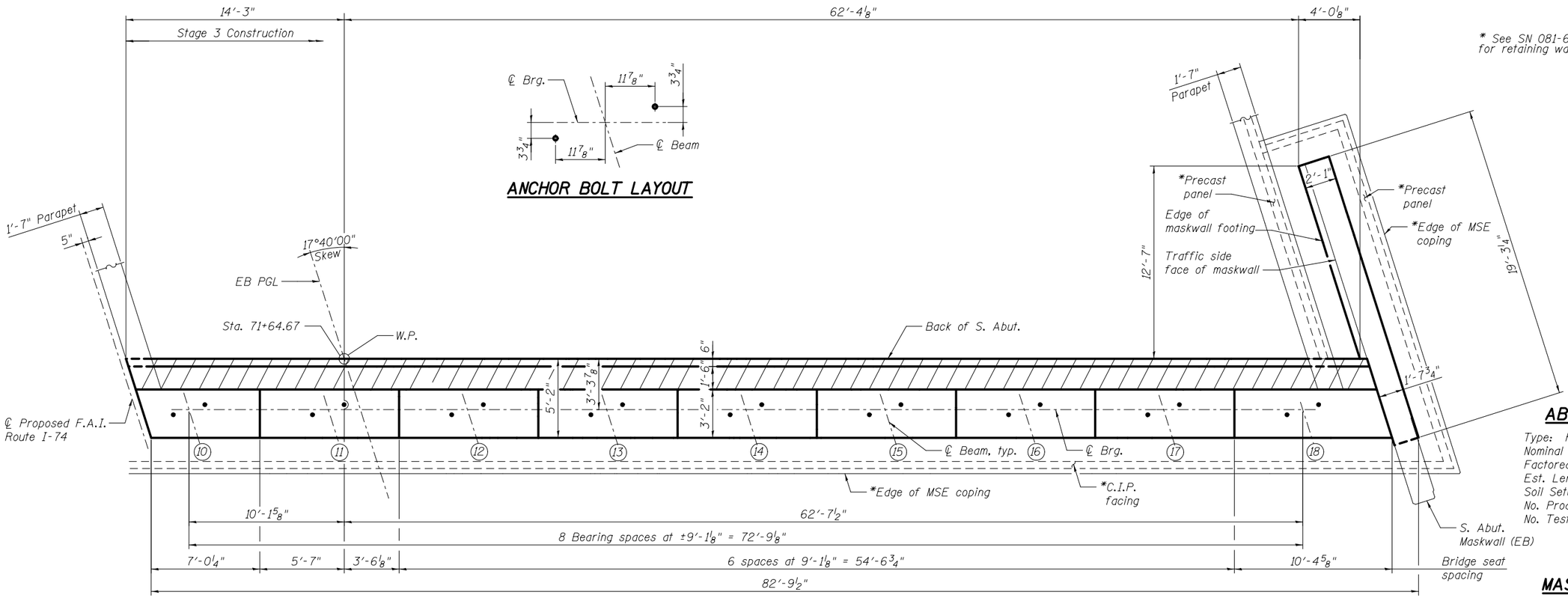
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

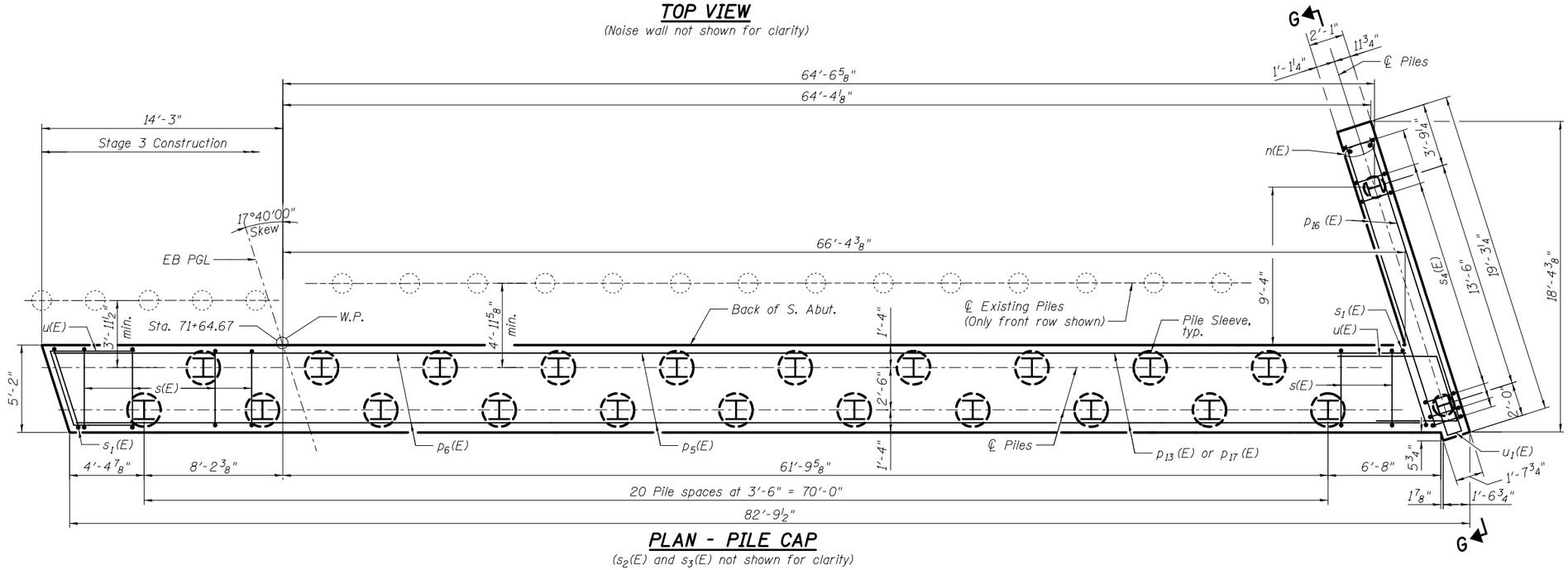
SOUTH ABUTMENT PLAN – WESTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 37 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1126
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



TOP VIEW

(Noise wall not shown for clarity)



PLAN - PILE CAP

($s_2(E)$ and $s_3(E)$ not shown for clarity)

ABUTMENT PILE DATA

Type: HP14x73
Nominal Required Bearing: 305 Kips
Factored Resistance Available: 183 Kips
Est. Length: 77 foot
Soil Setup Pile Length: 127 foot
No. Production Piles: 20
No. Test Piles: 1

MASKWALL PILE DATA

Type: HP10x42
Nominal Required Bearing: 100 Kips
Factored Resistance Available: 60 Kips
Est. Length: 43 foot
Soil Setup Pile Length: 68 foot
No. Production Piles: 2
No. Test Piles: 0

Notes:
Space reinforcement in cap to miss anchor bolts.
For details of maskwall, see sheets 47 and 48 of 59.
For details of piles, see sheet 50 of 59.
For details of section G-G, see sheet 39 of 59.
Pile sleeves shall be sized to provide at least 1 1/2" inches of clearance around the pile and shall extend from bottom of abutment to bottom of reinforced soil mass.
The area between the pile and the sleeve shall be backfilled with dry, loose sand and the cost included in Driving Piles.

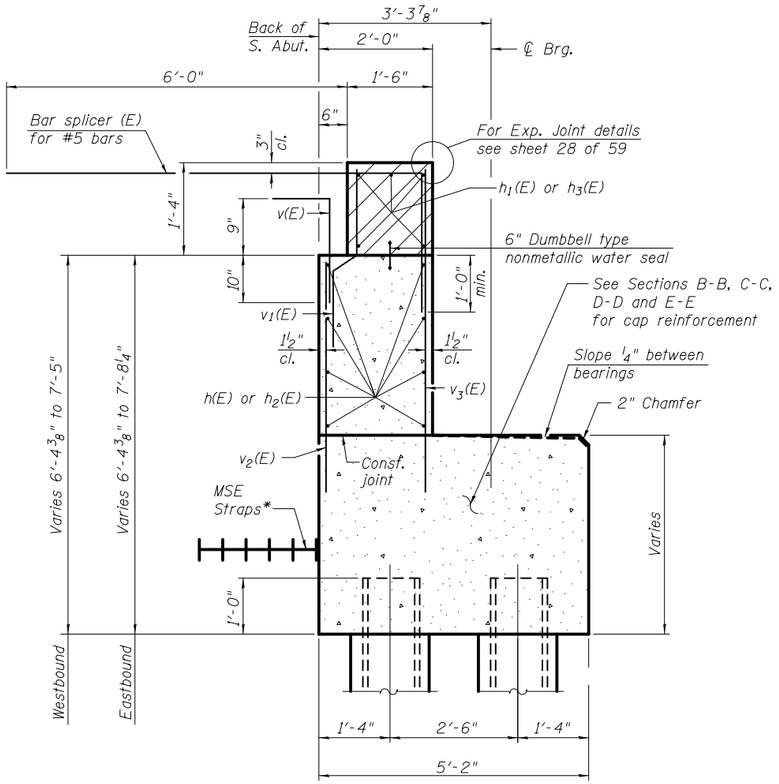
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT PLAN – EASTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 38 OF 59 SHEETS

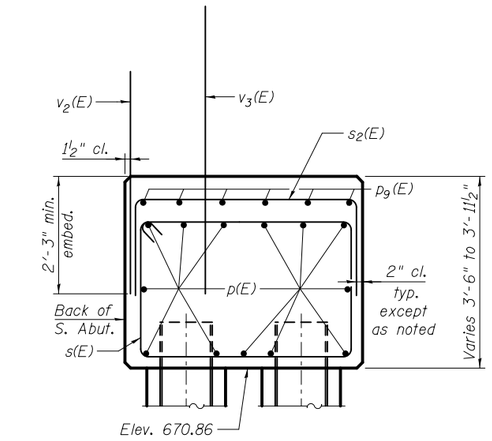
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1127
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



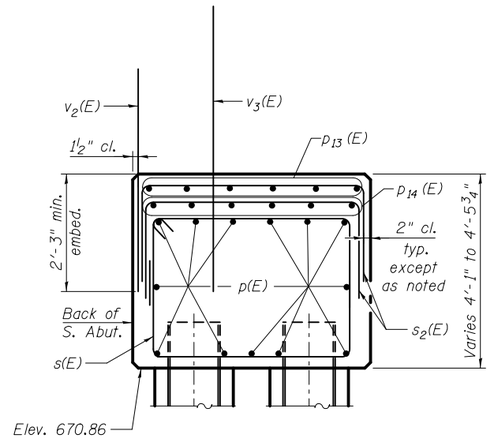
SECTION THRU SOUTH ABUTMENT

(Horiz. dim at right angles)

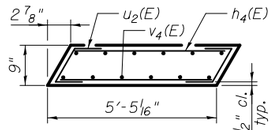
*See SN 081-6020 for retaining wall details.



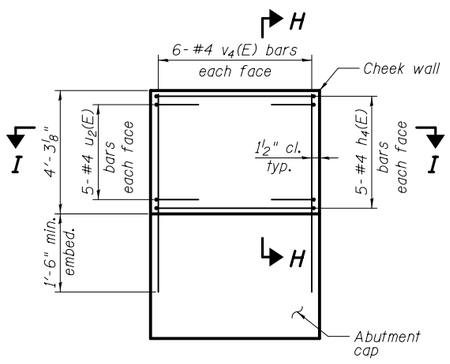
SECTION B-B



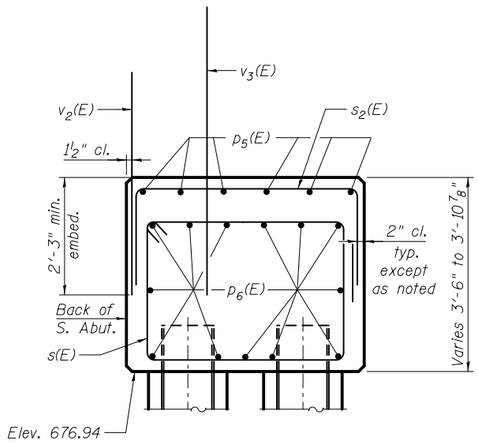
SECTION C-C



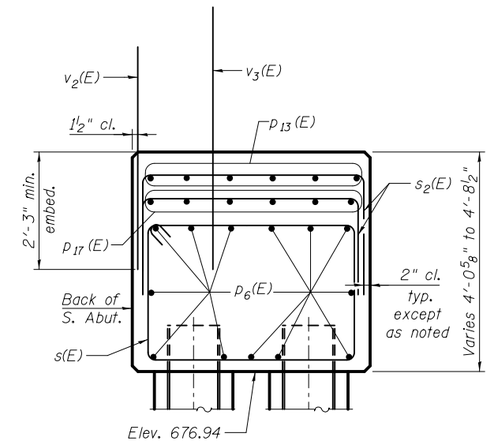
SECTION I-I



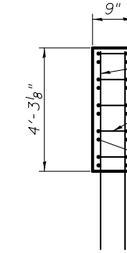
VIEW A-A



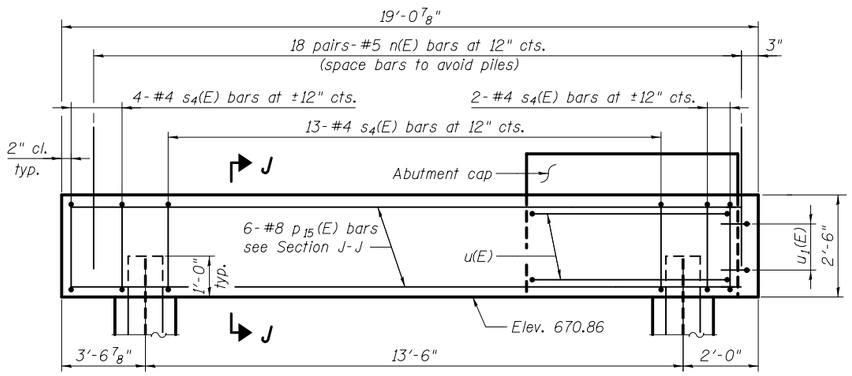
SECTION D-D



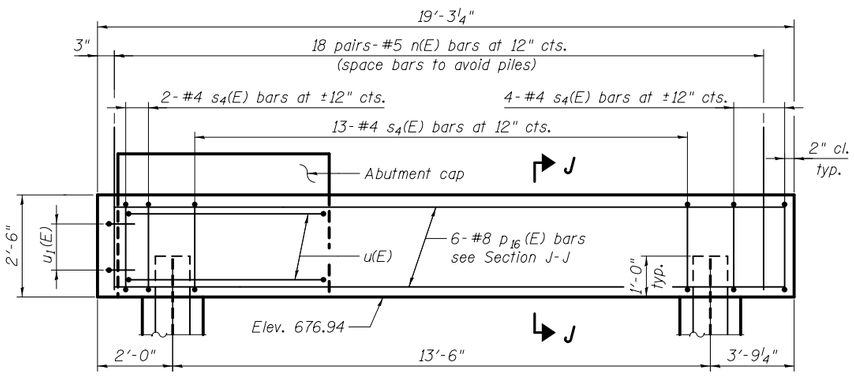
SECTION E-E



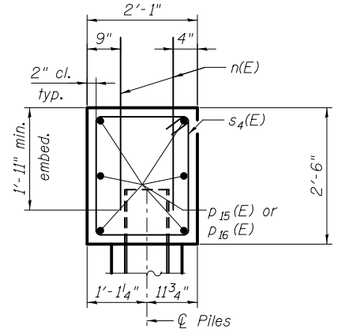
SECTION H-H



SECTION F-F



SECTION G-G



SECTION J-J

Notes:
Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructures on sheet 20 of 59.
See sheets 36 thru 38 of 59 for location of sections.
See sheet 40 of 59 for bar details and bill of material.

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 39 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1128
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

NORTH ABUTMENT (WB) BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	41'-2"	
h_1(E)	10	#6	41'-6"	
h_4(E)	10	#4	5'-2"	
n(E)	36	#5	4'-5"	
p(E)	26	#7	42'-7"	
p_1(E)	12	#5	20'-1"	
p_2(E)	12	#5	10'-11"	
p_3(E)	6	#5	30'-3"	
p_4(E)	10	#5	25'-2"	
p_5(E)	6	#5	12'-0"	
p 11(E)	6	#8	17'-10"	
s(E)	91	#4	16'-9"	
s_1(E)	2	#4	17'-1"	
s_2(E)	66	#4	9'-10"	
s_3(E)	1	#4	10'-0"	
s_4(E)	19	#4	8'-7"	
u(E)	9	#6	16'-4"	
u_1(E)	3	#6	4'-6"	
u_2(E)	10	#4	3'-6"	
v(E)	82	#5	3'-6"	
v_1(E)	82	#4	3'-0"	
v_2(E)	82	#6	5'-2"	
v_3(E)	82	#6	6'-4"	
v_4(E)	12	#4	5'-8"	

Concrete Structures	Cu. Yd.	78.0
Reinforcement Bars, Epoxy Coated	Pound	8,760
Furnishing Steel Piles HP10X42	Foot	82
Furnishing Steel Piles HP14X73	Foot	1,360
Driving Piles	Foot	1,442
Test Pile Steel HP14x73	Each	1
Concrete Sealer	Sq. Ft.	897

NORTH ABUTMENT (EB) BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_2(E)	16	#5	42'-2"	
h_3(E)	10	#6	42'-7"	
n_1(E)	36	#5	4'-7"	
p_6(E)	26	#7	43'-3"	
p_7(E)	12	#5	25'-3"	
p_8(E)	6	#5	37'-9"	
p_9(E)	6	#5	21'-2"	
p 10(E)	10	#5	19'-6"	
p 12(E)	4	#7	18'-4"	
s(E)	94	#4	16'-9"	
s_1(E)	2	#4	17'-1"	
s_2(E)	69	#4	9'-10"	
s_3(E)	1	#4	10'-0"	
s_5(E)	19	#4	6'-11"	
u(E)	10	#6	16'-4"	
u_1(E)	2	#6	4'-6"	
v(E)	83	#5	3'-6"	
v_1(E)	83	#4	3'-0"	
v_2(E)	83	#6	5'-2"	
v_3(E)	83	#6	6'-4"	

Concrete Structures	Cu. Yd.	78.7
Reinforcement Bars, Epoxy Coated	Pound	8,640
Furnishing Steel Piles HP10X42	Foot	78
Furnishing Steel Piles HP14X73	Foot	1,360
Driving Piles	Foot	1,438
Test Pile Steel HP14x73	Each	1
Concrete Sealer	Sq. Ft.	904

SOUTH ABUTMENT (WB) BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	16	#5	41'-2"	
h_1(E)	10	#6	41'-6"	
h_4(E)	10	#4	5'-2"	
n(E)	36	#5	4'-5"	
p(E)	26	#7	42'-7"	
p_9(E)	6	#5	21'-2"	
p 13(E)	6	#5	26'-4"	
p 14(E)	12	#5	19'-10"	
p 15(E)	6	#8	18'-3"	
s(E)	91	#4	16'-9"	
s_1(E)	2	#4	17'-1"	
s_2(E)	80	#4	9'-10"	
s_3(E)	1	#4	10'-0"	
s_4(E)	19	#4	8'-7"	
u(E)	9	#6	16'-4"	
u_1(E)	3	#6	4'-6"	
u_2(E)	10	#4	3'-6"	
v(E)	82	#5	3'-6"	
v_1(E)	82	#4	3'-0"	
v_2(E)	82	#6	5'-2"	
v_3(E)	82	#6	6'-4"	
v_4(E)	12	#4	5'-8"	

Concrete Structures	Cu. Yd.	81.9
Reinforcement Bars, Epoxy Coated	Pound	8,490
Furnishing Steel Piles HP10X42	Foot	76
Furnishing Steel Piles HP14X73	Foot	1,220
Driving Piles	Foot	1,296
Test Pile Steel HP14x73	Each	1
Concrete Sealer	Sq. Ft.	930

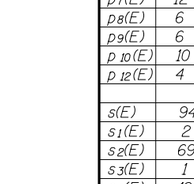
SOUTH ABUTMENT (EB) BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_2(E)	16	#5	42'-2"	
h_3(E)	10	#6	42'-7"	
n(E)	36	#5	4'-5"	
p_5(E)	6	#5	12'-0"	
p_6(E)	26	#7	43'-3"	
p 13(E)	*	#5	26'-4"	
p 16(E)	6	#8	18'-5"	
p 17(E)	12	#5	25'-8"	
s(E)	93	#4	16'-9"	
s_1(E)	2	#4	17'-1"	
s_2(E)	80	#4	9'-10"	
s_3(E)	1	#4	10'-0"	
s_4(E)	19	#4	8'-7"	
u(E)	10	#6	16'-4"	
u_1(E)	3	#6	4'-6"	
v(E)	83	#5	3'-6"	
v_1(E)	83	#4	3'-0"	
v_2(E)	83	#6	5'-2"	
v_3(E)	83	#6	6'-4"	

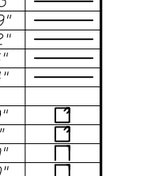
Concrete Structures	Cu. Yd.	84.6
Reinforcement Bars, Epoxy Coated	Pound	8,380
Furnishing Steel Piles HP10X42	Foot	86
Furnishing Steel Piles HP14X73	Foot	1,540
Driving Piles	Foot	1,626
Test Pile Steel HP14x73	Each	1
Concrete Sealer	Sq. Ft.	943

*Quantity and weight included with South Abutment (WB).

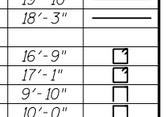
BAR n_1(E)



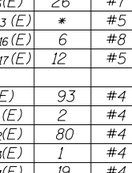
BARS s(E) and s_1(E)



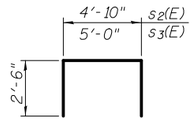
BARS s_4(E) and s_5(E)



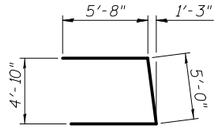
BAR u_1(E)



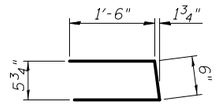
BAR v(E)



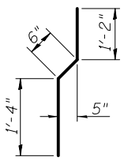
BARS s_2(E) and s_3(E)



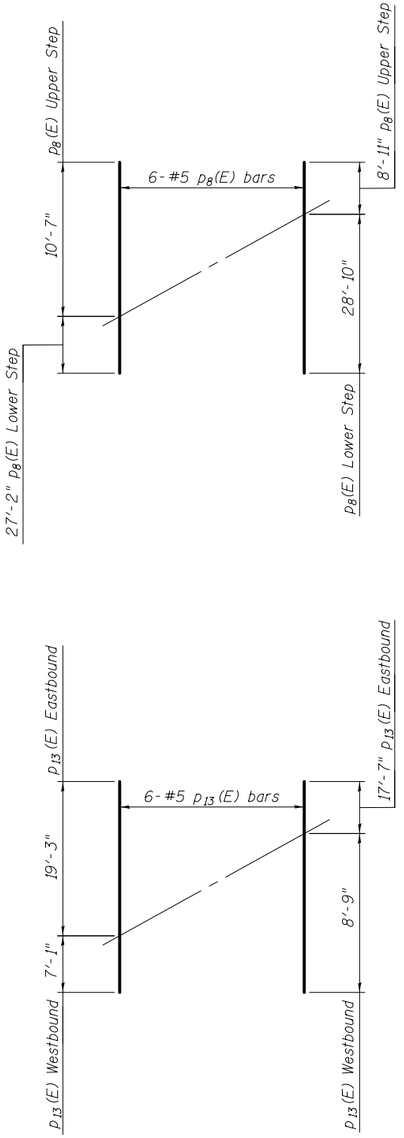
BAR u(E)



BAR u_2(E)



BAR v_1(E)



CUTTING DIAGRAMS

Notes:
For details of piles, see sheet 50 of 59.

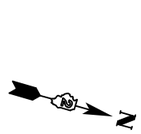
MODJESKI and MASTERS
Experience great bridges.

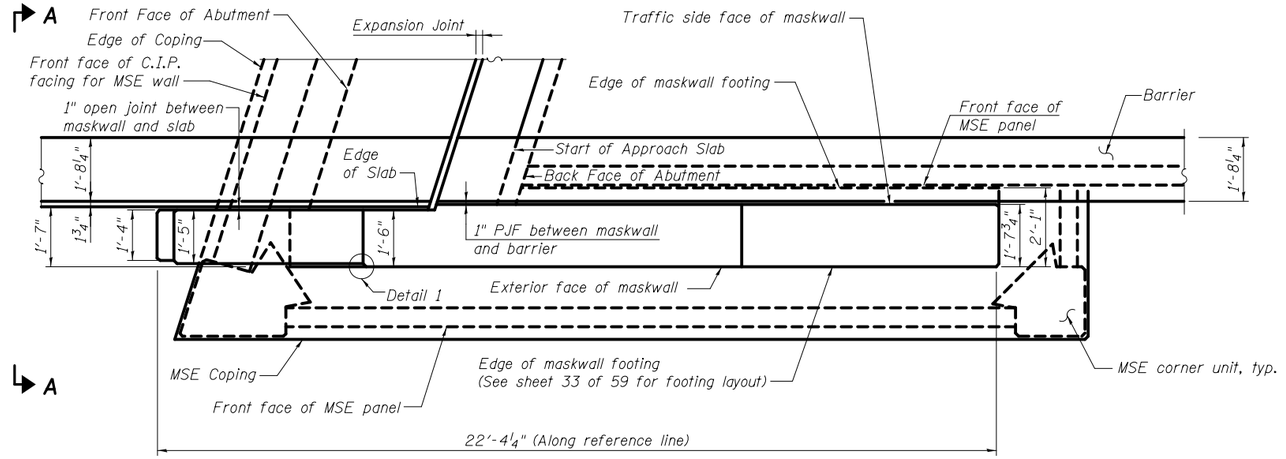
USER NAME =	DESIGNED - YSS	REVISED	
	CHECKED - RLM	REVISED	
PLOT SCALE =	DRAWN - AEC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT REINFORCEMENT AND BILL OF MATERIAL
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 40 OF 59 SHEETS

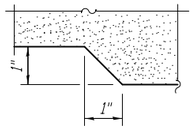
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1129
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



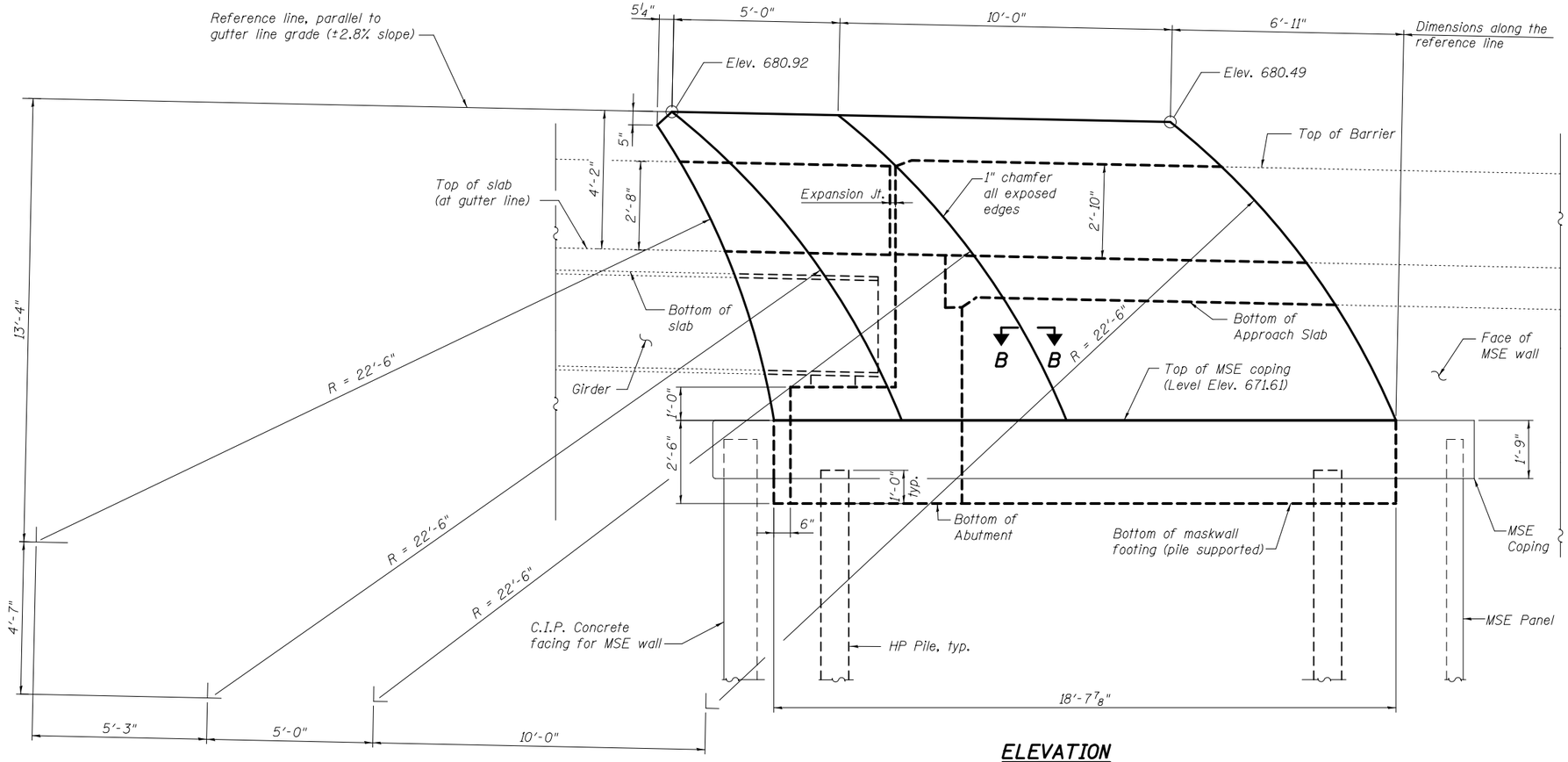


MASKWALL PLAN

(Aesthetic Railing not shown for clarity)

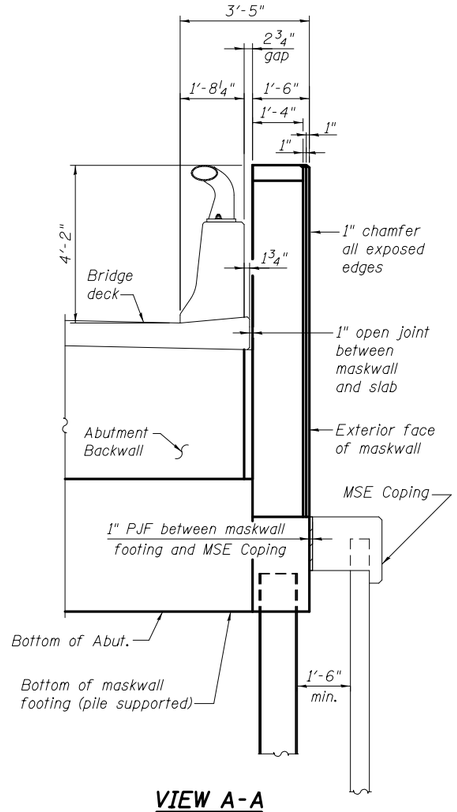


SECTION B-B - DETAIL 1



ELEVATION

(Aesthetic Railing not shown for clarity)



VIEW A-A

Notes:

Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.

The maskwalls are to be poured after the adjacent barrier railings are poured on the bridge slab, the wingwalls and the approach slab.

See SN 081-6017 for MSE wall details.

MODJESKI and MASTERS
Experience greet bridges.

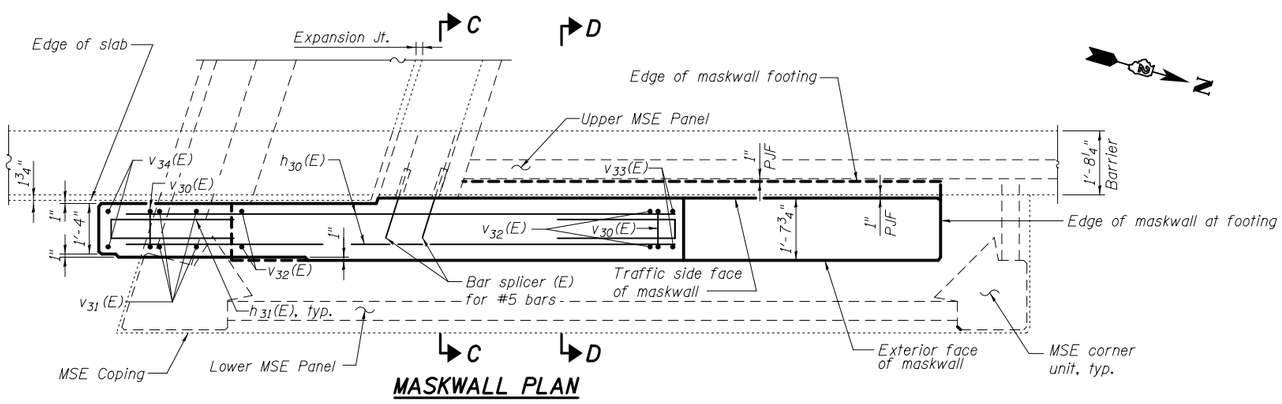
USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - TER	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

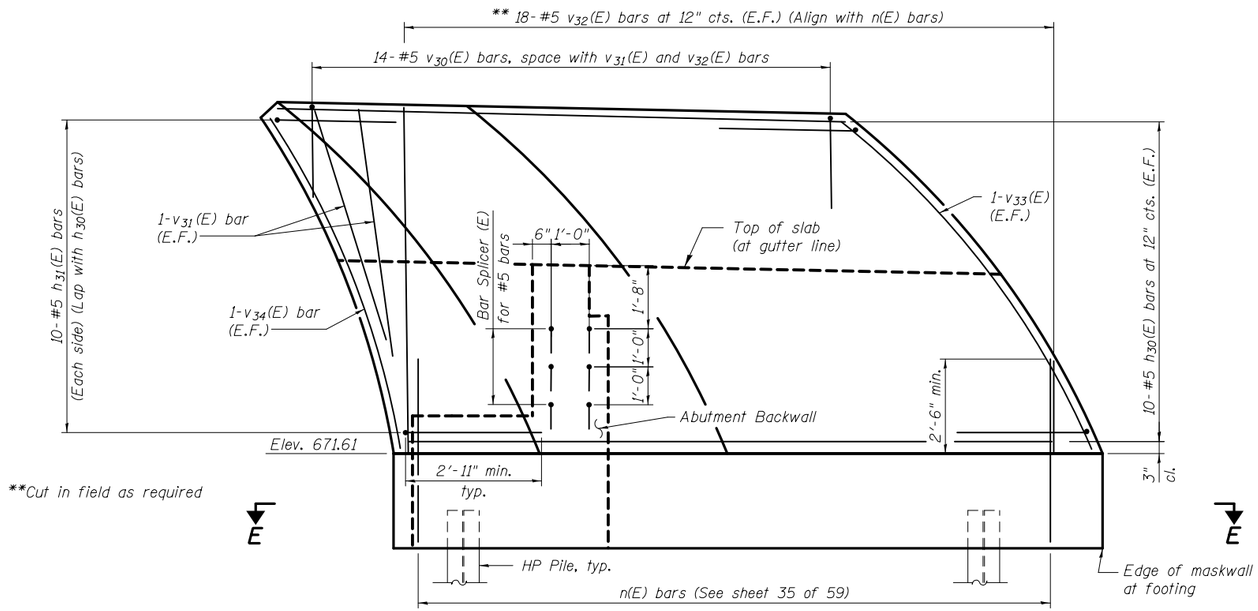
NORTH MASKWALL PLAN AND ELEVATION – WESTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB

SHEET NO. 41 OF 59 SHEETS

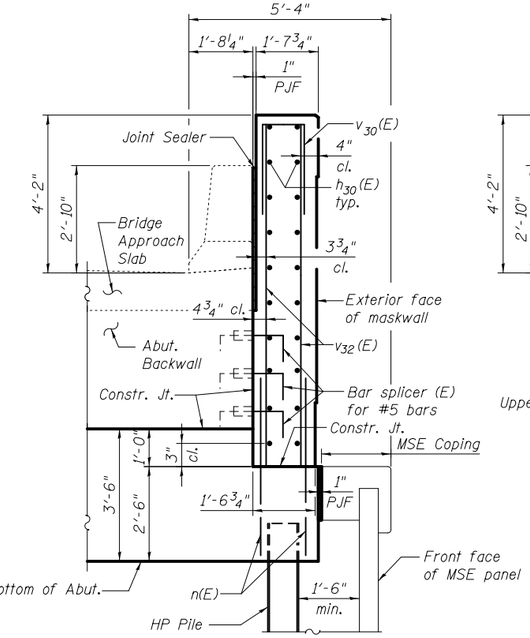
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1130
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



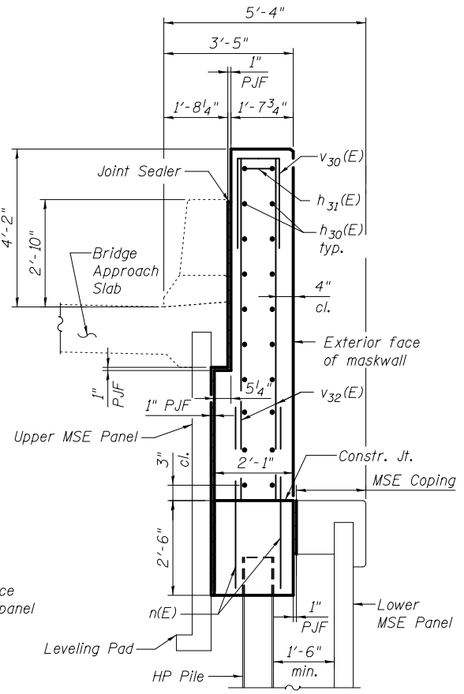
MASKWALL PLAN



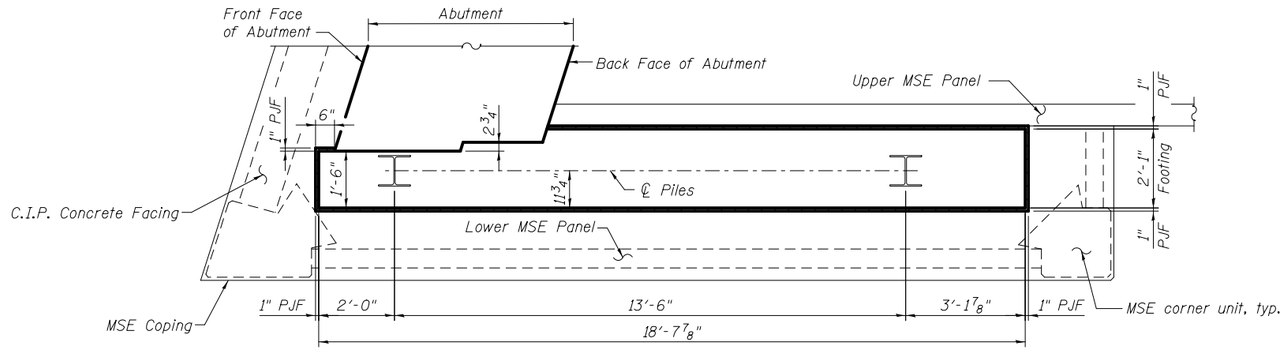
ELEVATION



SECTION C-C



SECTION D-D



SECTION E-E
(Footing Partial Plan)

Notes:
- See SN 081-6017 for MSE wall details.
- Two inch clear concrete cover unless noted otherwise.
- The joint sealer shall be light gray nonsag latex caulking sealer marketed for outdoor use. Cost of the joint sealer shall be included with Concrete Structures.
- See sheets 32 thru 35 and 40 of 59 for maskwall footing bar detailing.
- When exterior face of barrier is exposed, use rubbed finish same as maskwall.
- For details of bar splicer, see sheet 51 of 59.

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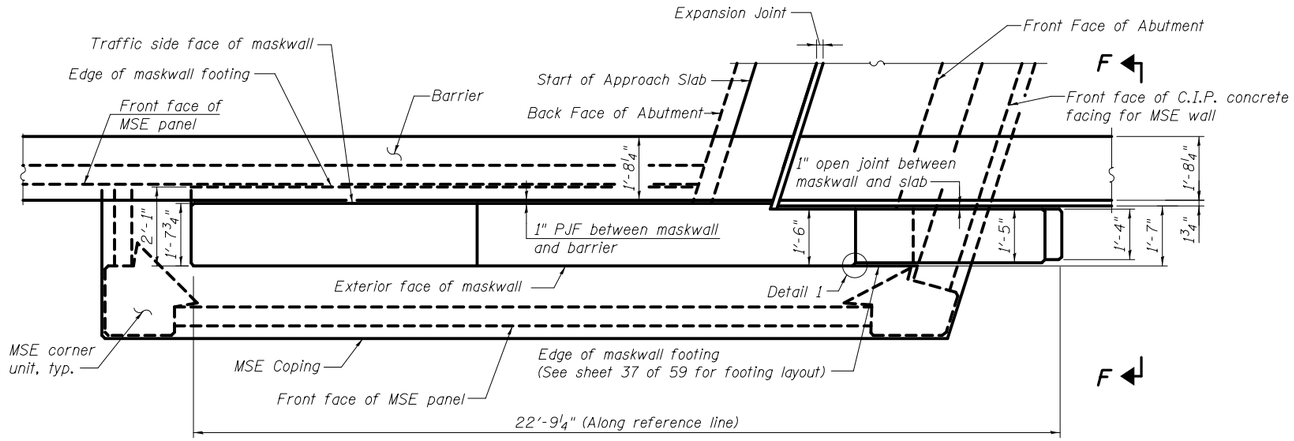
	CHECKED - TER	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

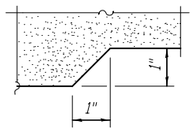
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH MASKWALL DETAILS – WESTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 42 OF 59 SHEETS

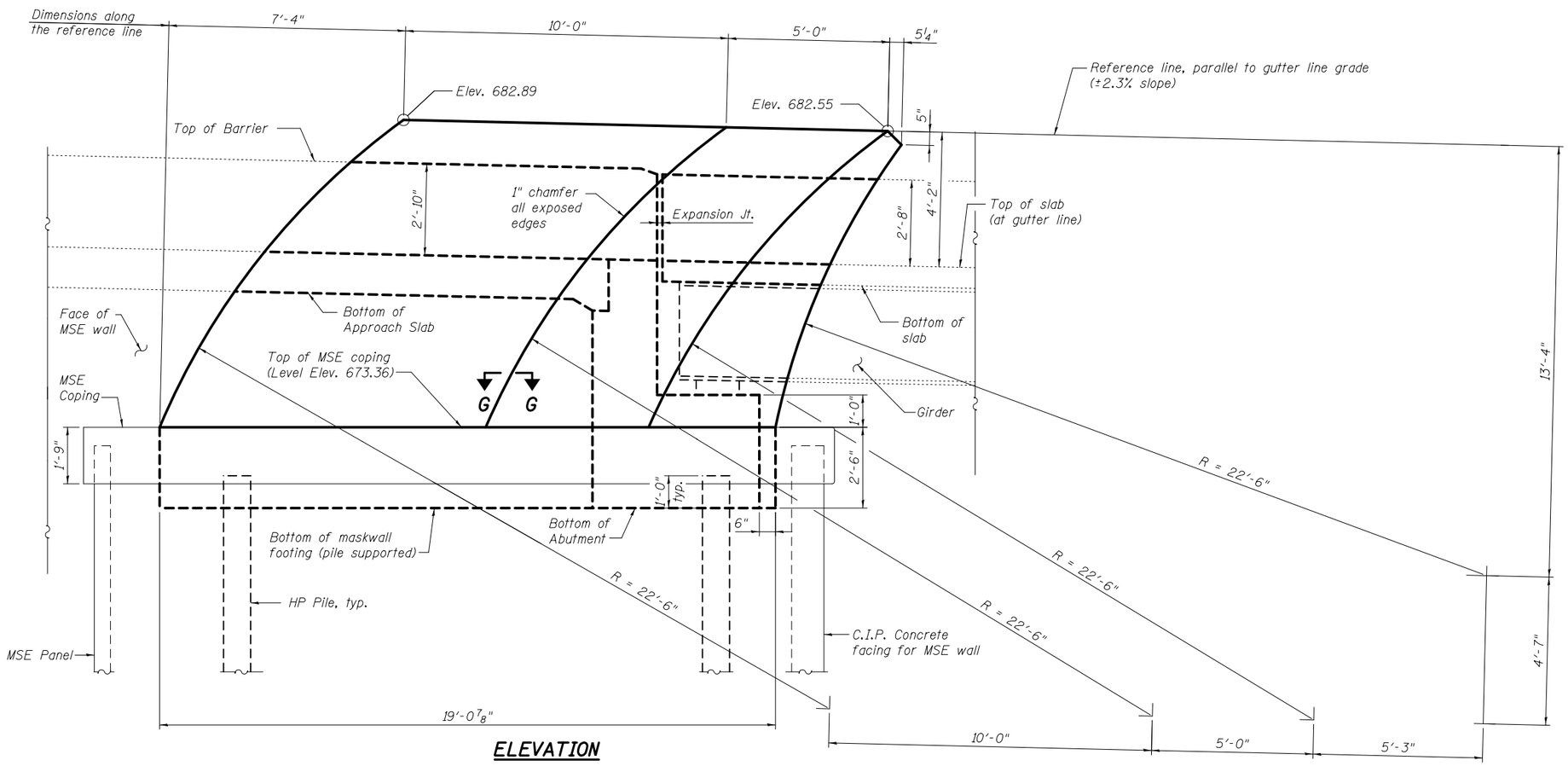
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1131
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



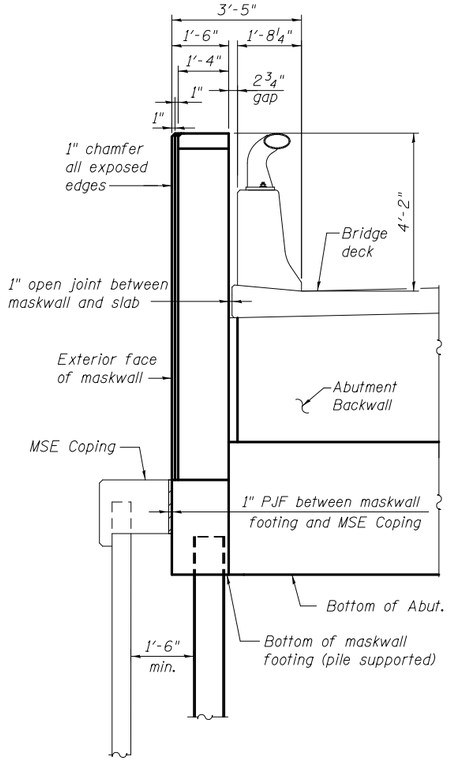
MASKWALL PLAN



SECTION G-G - DETAIL 1



ELEVATION



VIEW F-F

Notes:

Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.

The maskwalls are to be poured after the adjacent barrier railings are poured on the bridge slab, the wingwalls and the approach slab.

See SN 081-6020 for MSE wall details.

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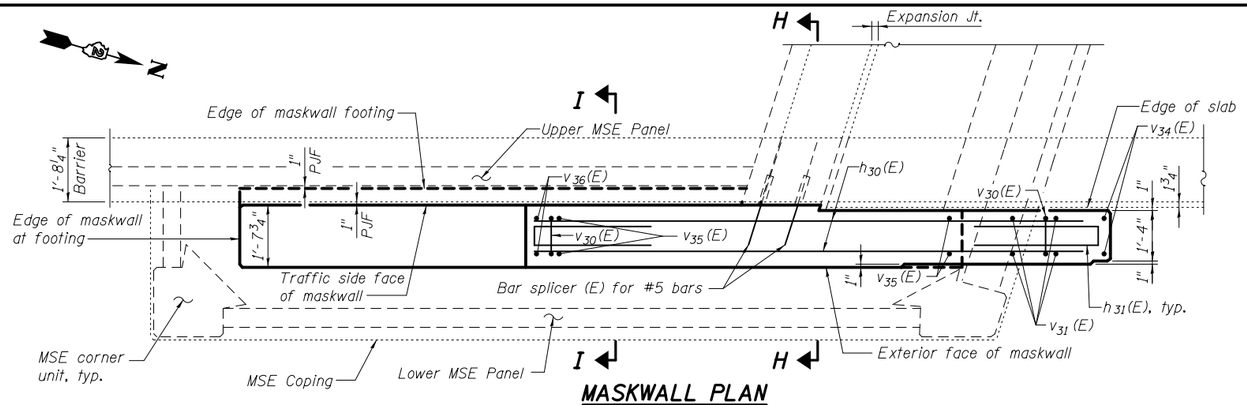
	CHECKED - TER	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

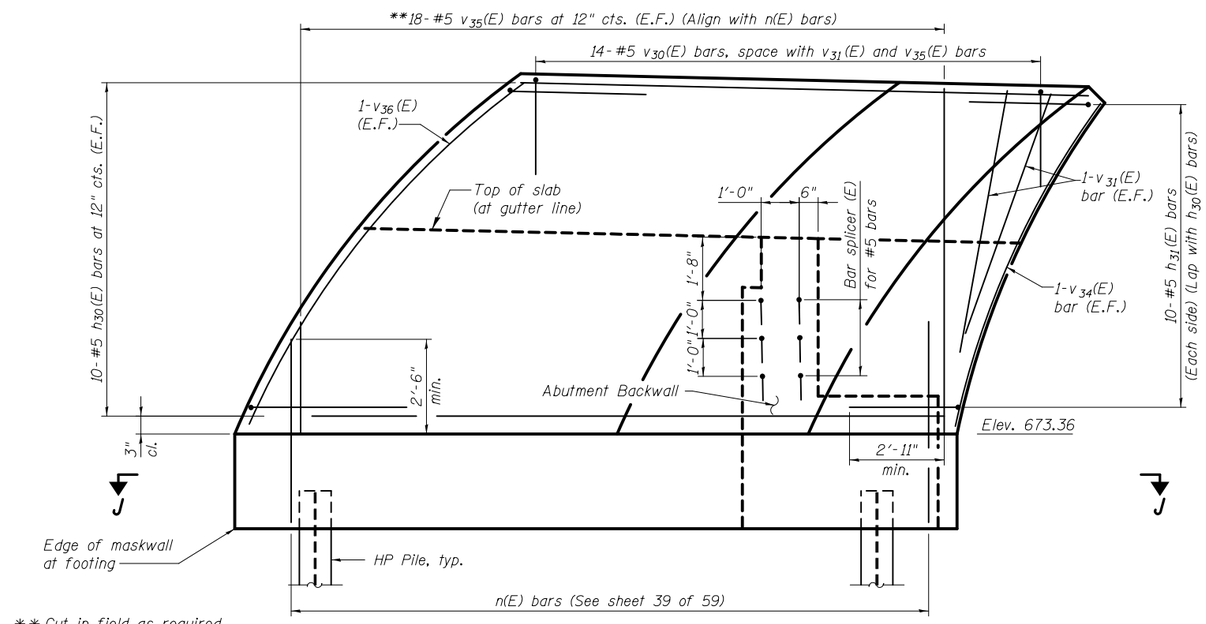
SOUTH MASKWALL PLAN AND ELEVATION – WESTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB

SHEET NO. 43 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1132
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

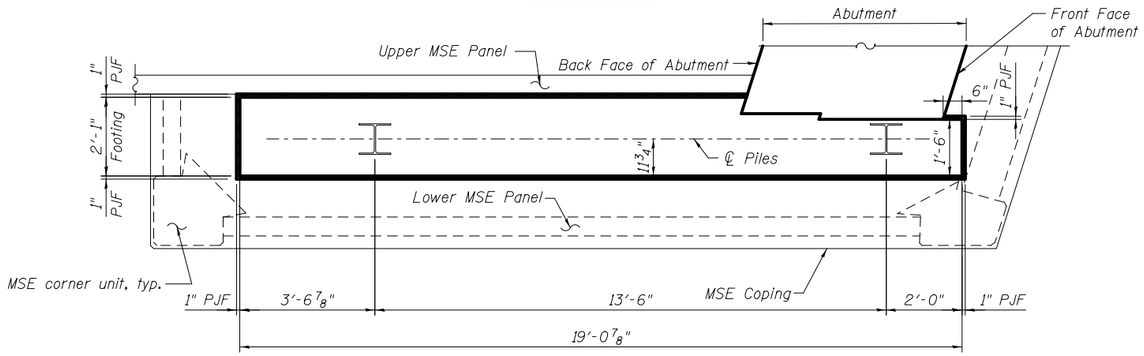


MASKWALL PLAN



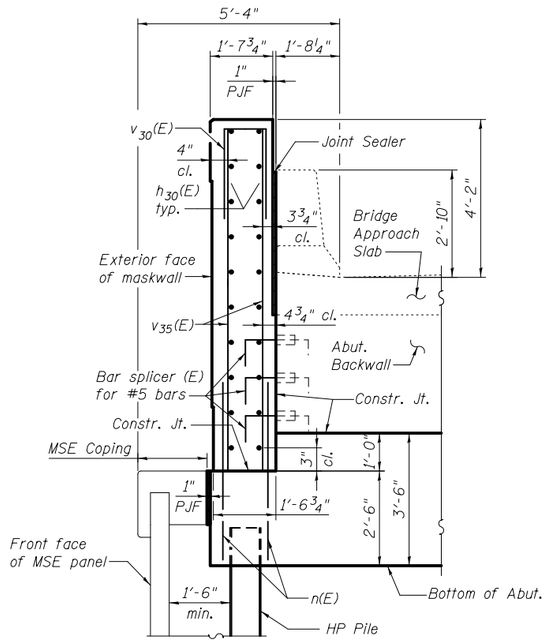
** Cut in field as required

ELEVATION

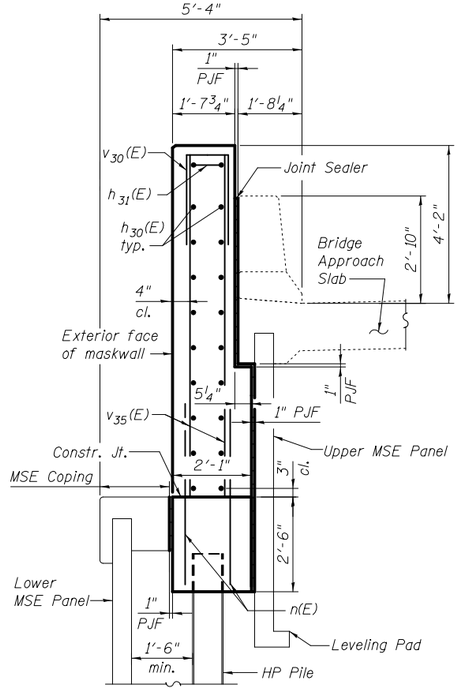


SECTION J-J

(Footing Partial Plan)



SECTION H-H



SECTION I-I

Notes:

See SN 081-6020 for MSE wall details.

Two inch clear concrete cover unless noted otherwise.

The joint sealer shall be light gray nonsag latex caulking sealer marketed for outdoor use. Cost of the joint sealer shall be included with Concrete Structures.

See sheets 36 thru 40 of 59 for maskwall footing bar detailing.

When exterior face of barrier is exposed, use rubbed finish same as maskwall.

For details of bar splicers, see sheet 51 of 59.

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	CHECKED - TER	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
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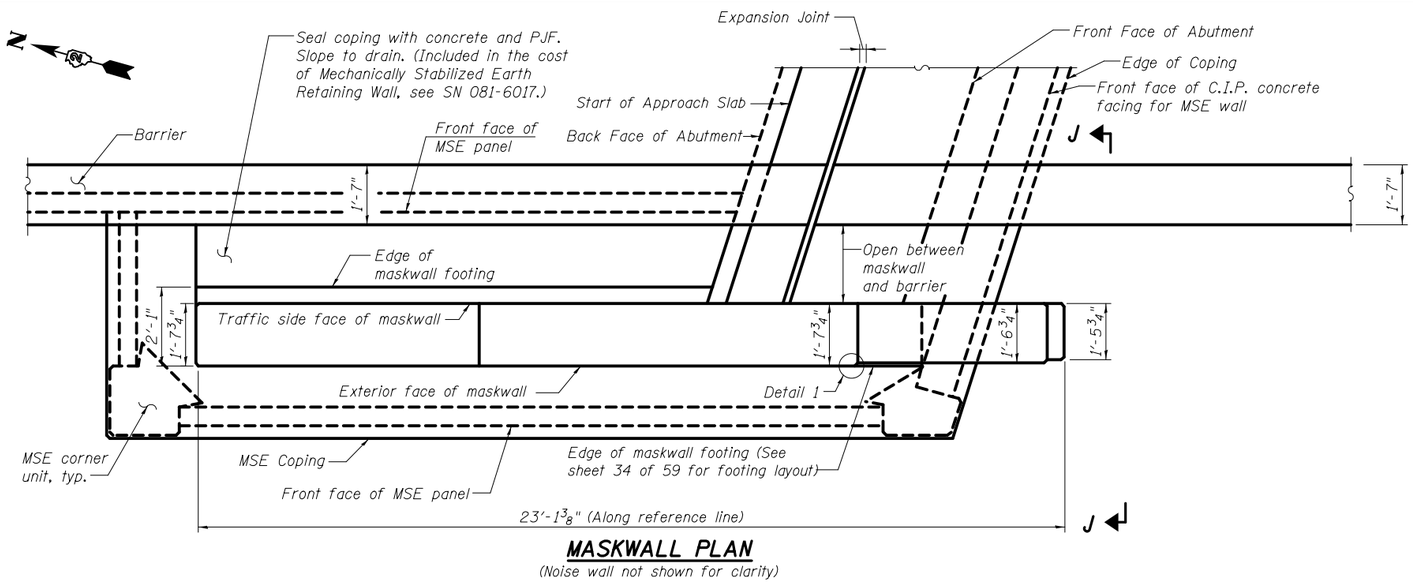
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

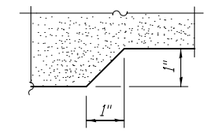
SOUTH MASKWALL DETAILS – WESTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 44 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1133
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

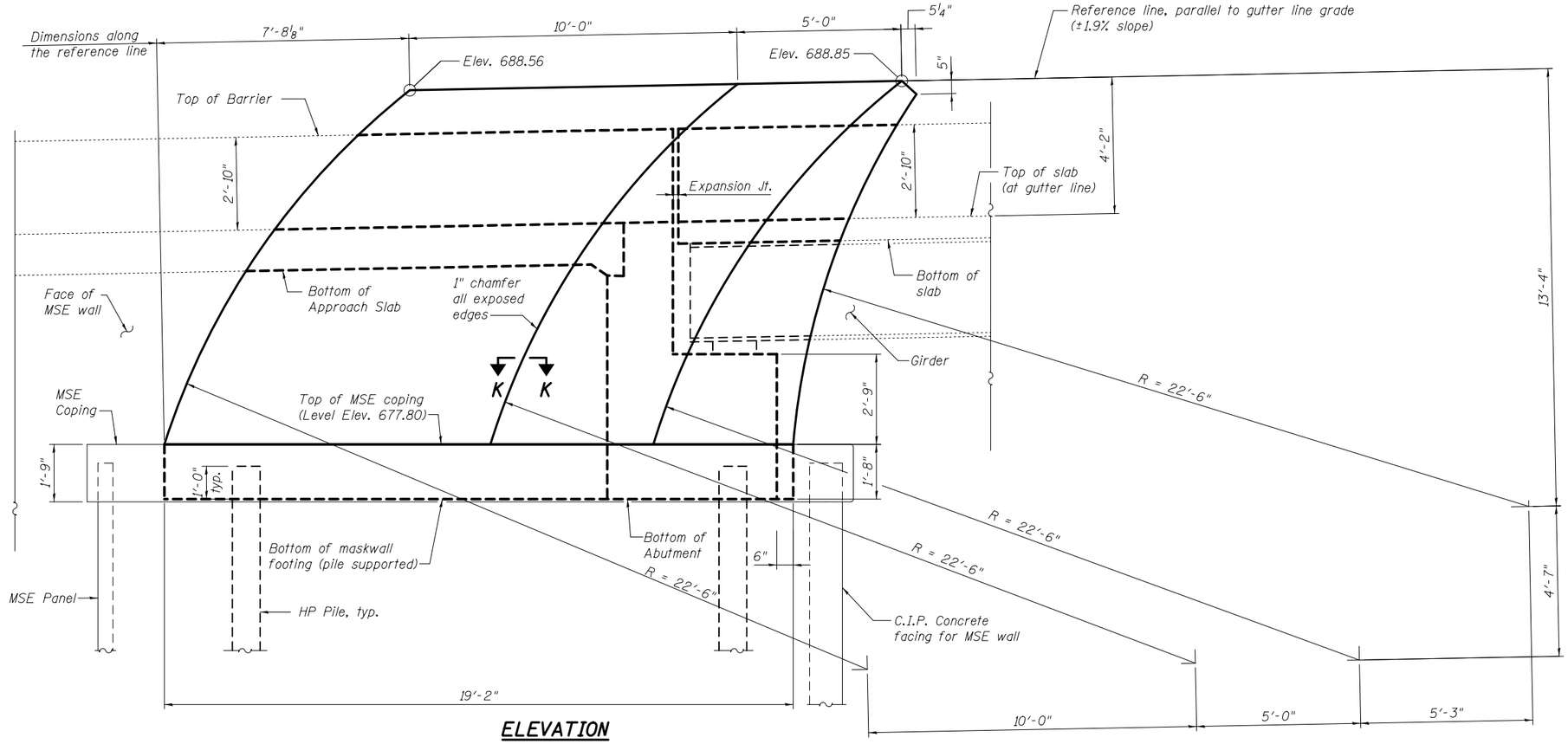


MASKWALL PLAN

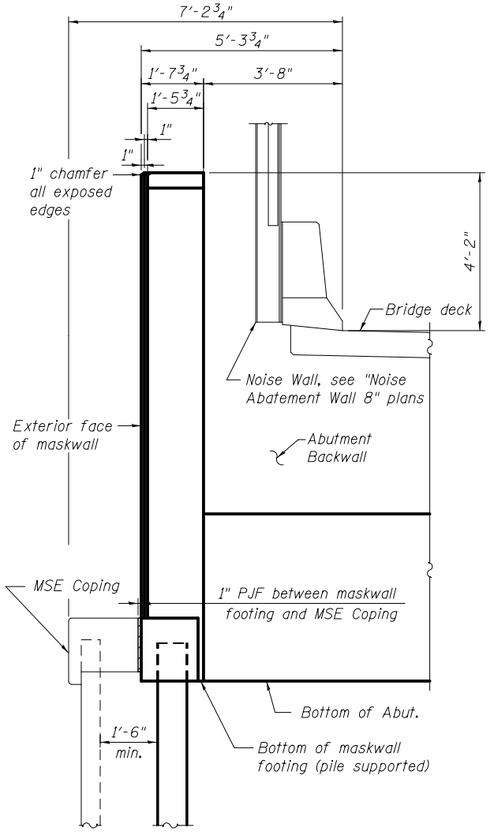
(Noise wall not shown for clarity)



SECTION K-K - DETAIL 1



ELEVATION



VIEW J-J

Notes:

Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.

The maskwalls are to be poured after the adjacent barrier railings are poured on the bridge slab, the wingwalls and the approach slab.

See SN 081-6017 for MSE wall details.

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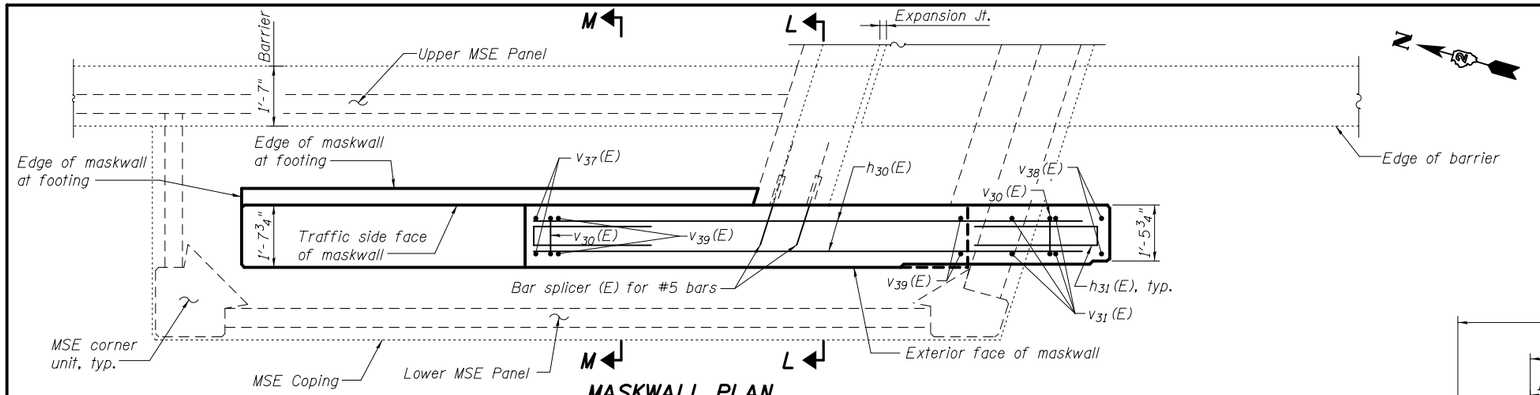
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH MASKWALL PLAN AND ELEVATION – EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB

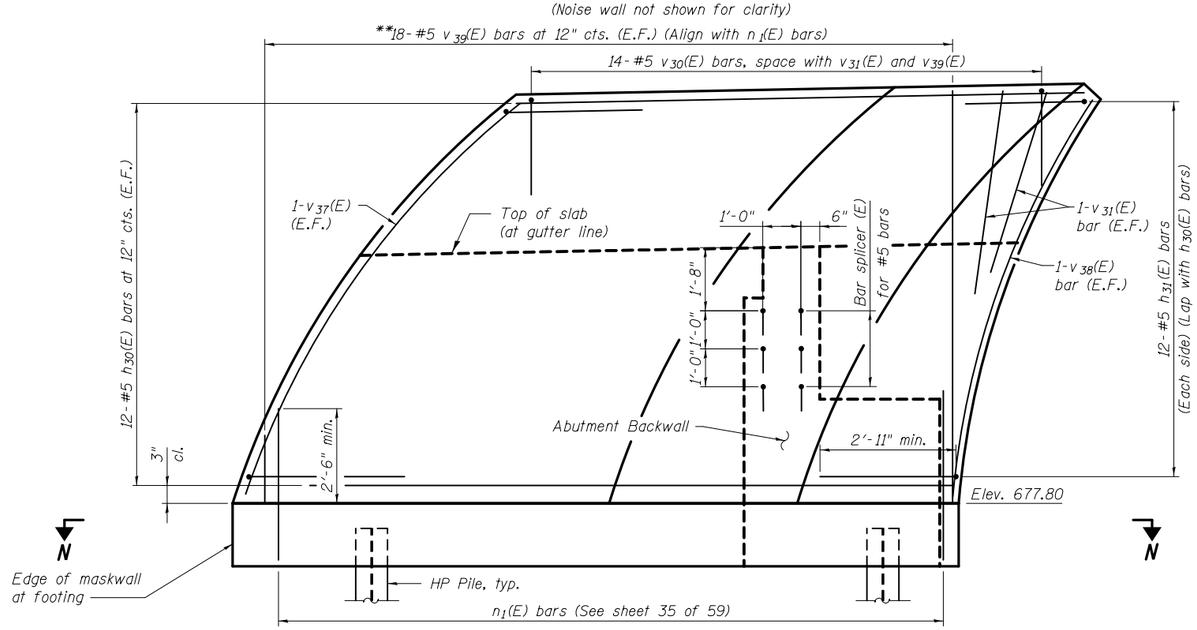
SHEET NO. 45 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1134
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



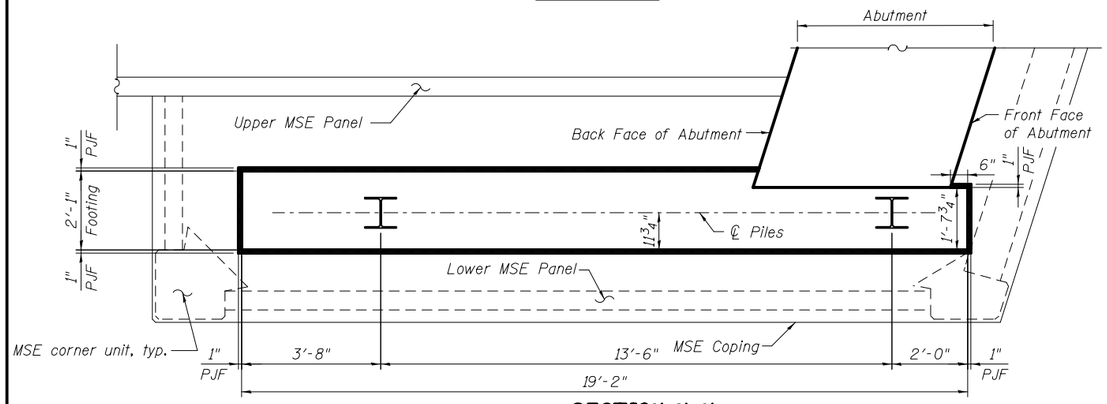
MASKWALL PLAN

(Noise wall not shown for clarity)



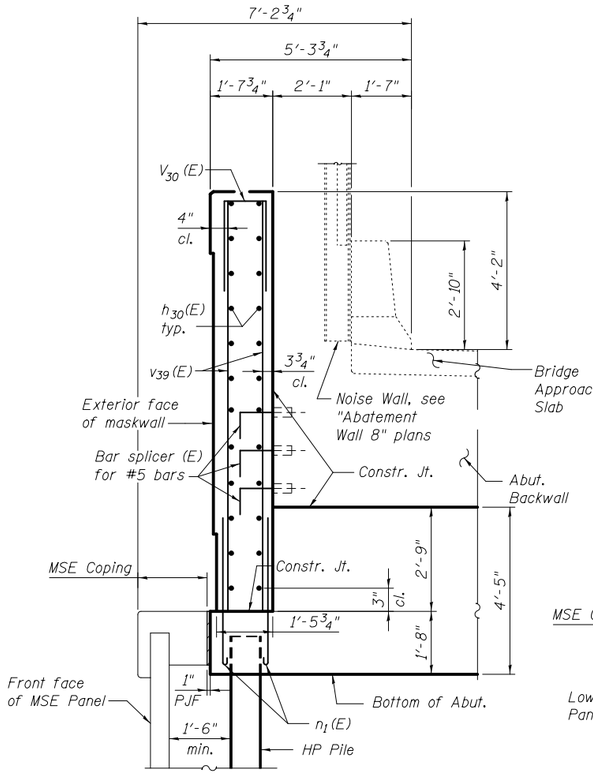
**Cut in field as required

ELEVATION

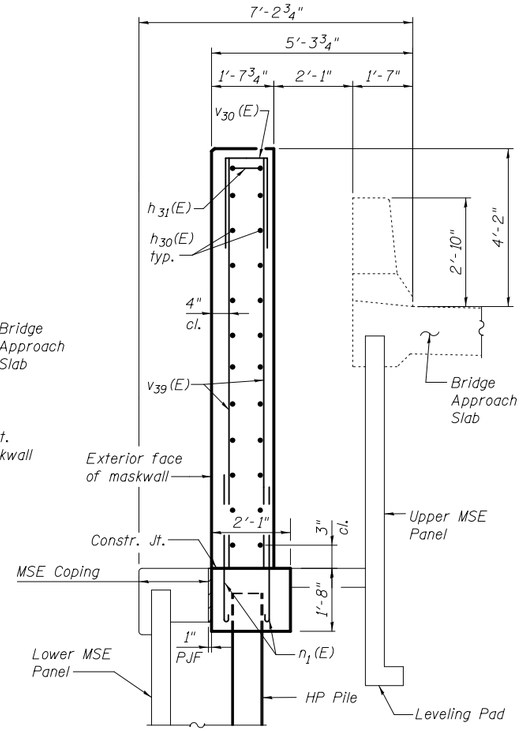


SECTION N-N

(Footing Partial Plan)



SECTION L-L



SECTION M-M

Notes:

See SN 081-6017 for MSE wall details.

Two inch clear concrete cover unless noted otherwise.

The joint sealer shall be light gray nonsag latex caulking sealer marketed for outdoor use. Cost of the joint sealer shall be included with Concrete Structures.

See sheets 32 thru 35 and 40 of 59 for maskwall footing bar detailing.

When exterior face of barrier is exposed, use rubbed finish same as maskwall.

For details at bar splicer, see sheet 51 of 59.

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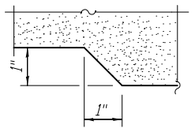
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

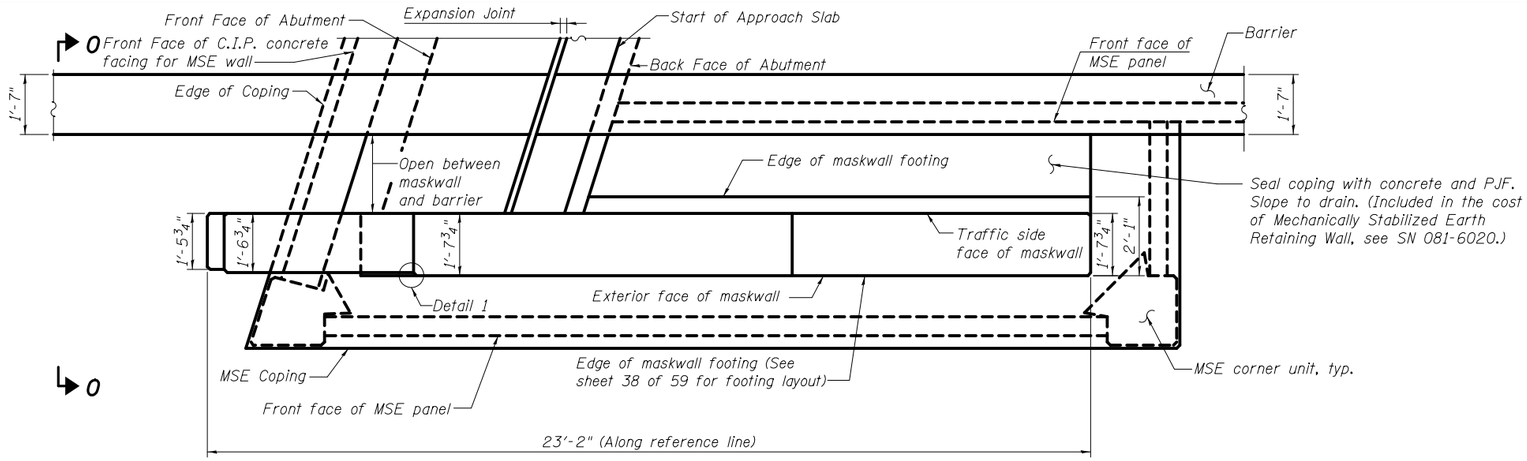
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH MASKWALL DETAILS – EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 46 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1135
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

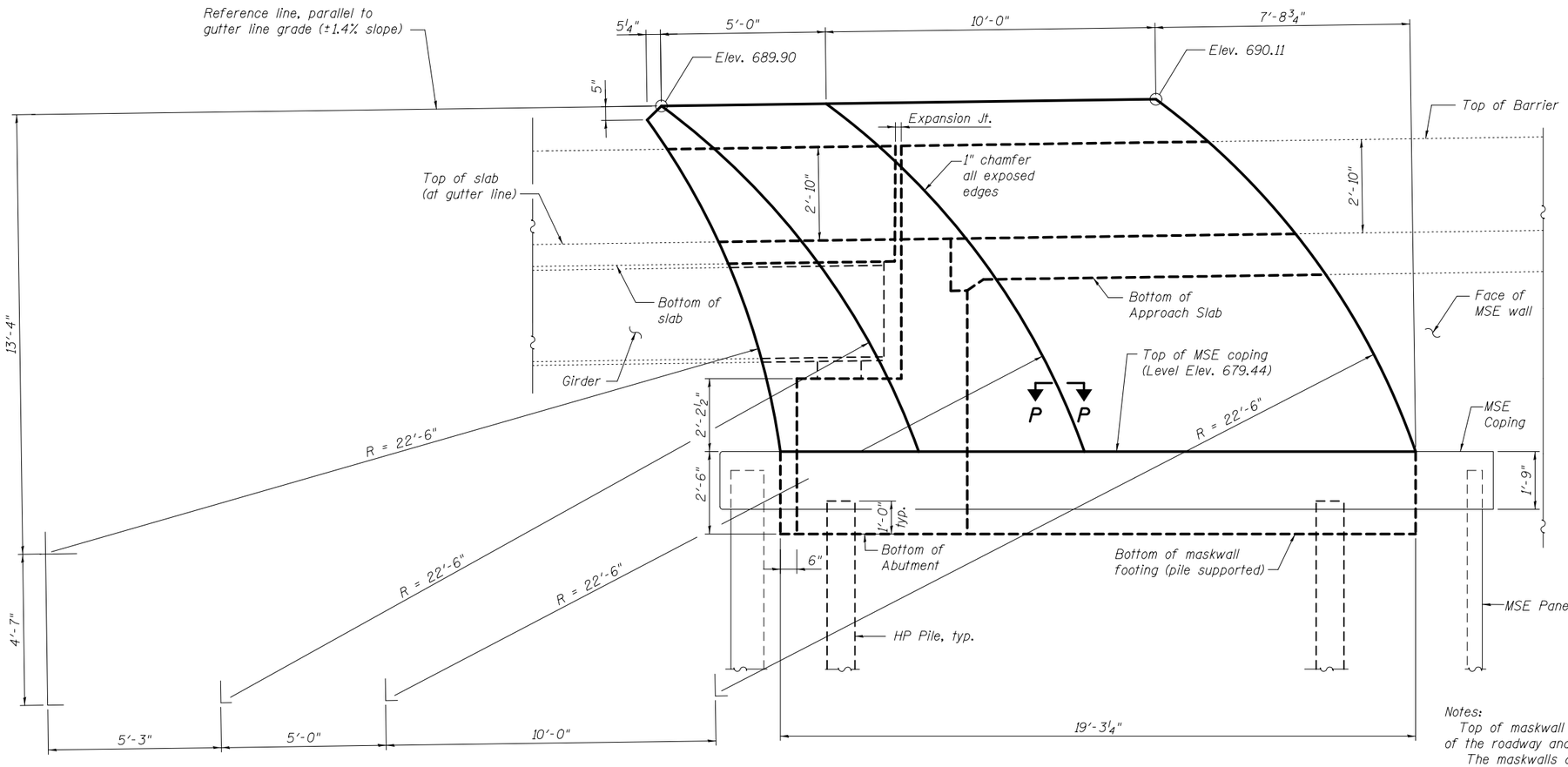


SECTION P-P - DETAIL 1

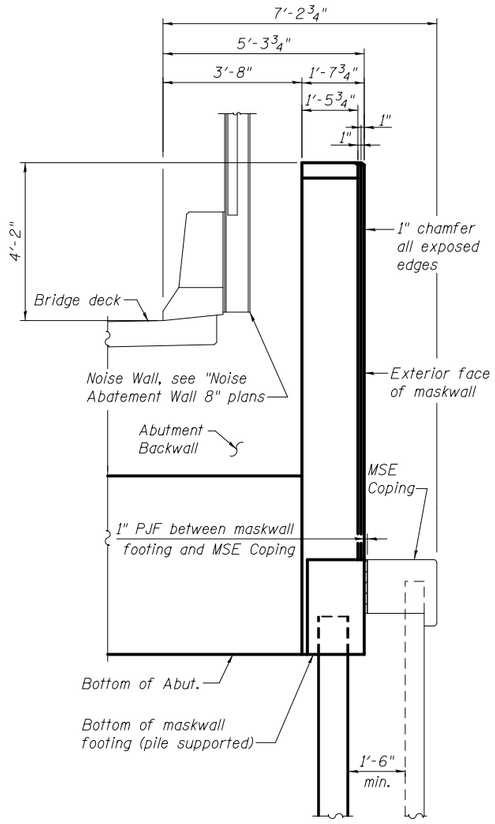


MASKWALL PLAN

(Noise wall not shown for clarity)



ELEVATION



VIEW O-O

Notes:

Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.

The maskwalls are to be poured after the adjacent barrier railings are poured on the bridge slab, the wingwalls and the approach slab.

See SN 081-6020 for MSE wall details.

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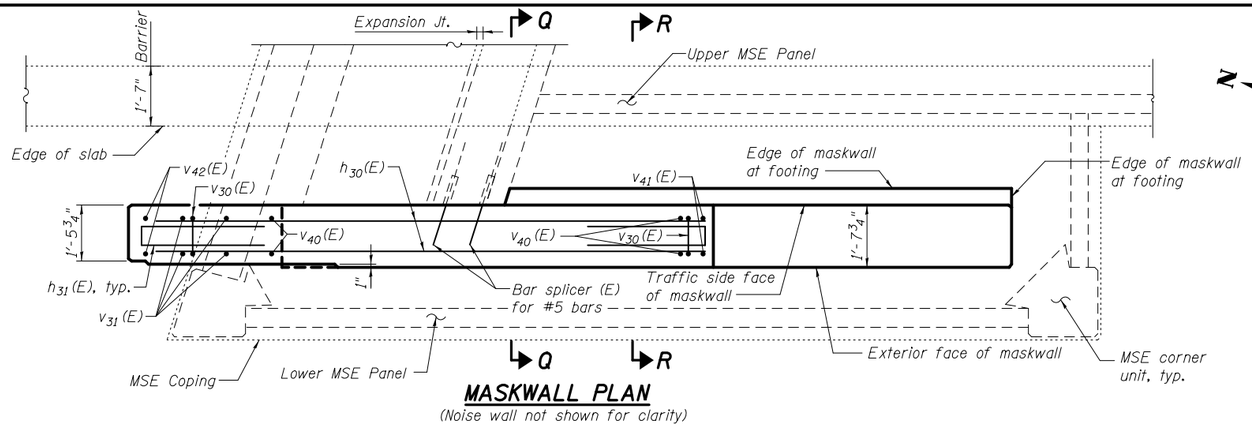
	CHECKED - TER	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

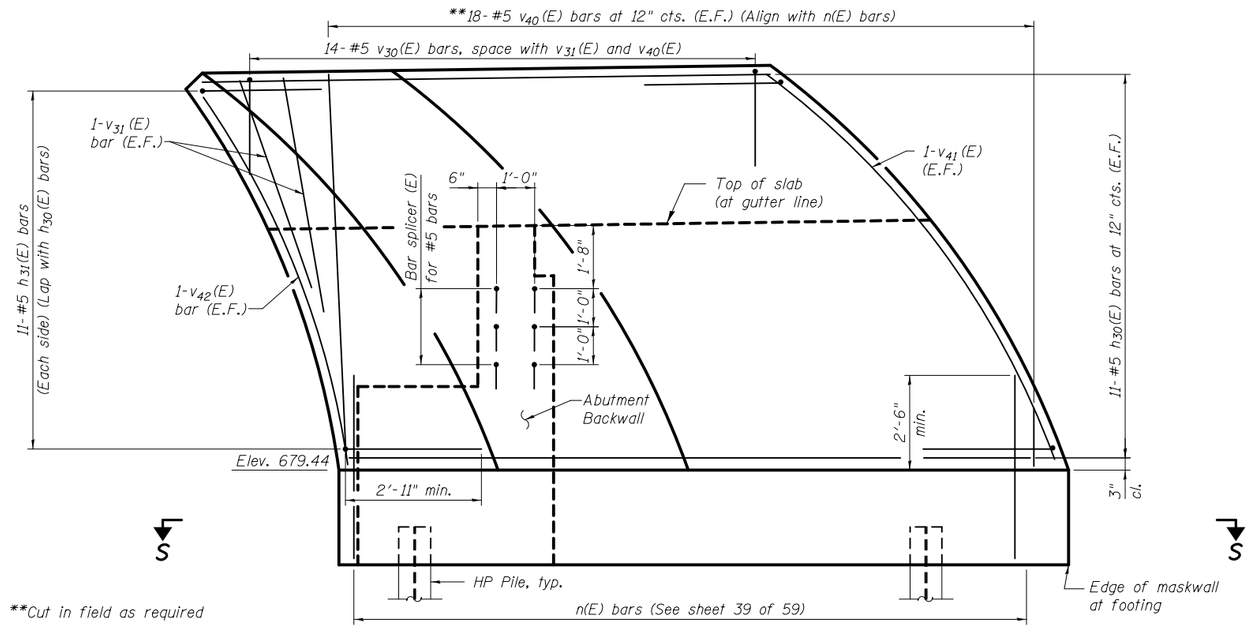
SOUTH MASKWALL PLAN AND ELEVATION – EASTBOUND
I-74 OVER 12TH AVE. – STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 47 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1136
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



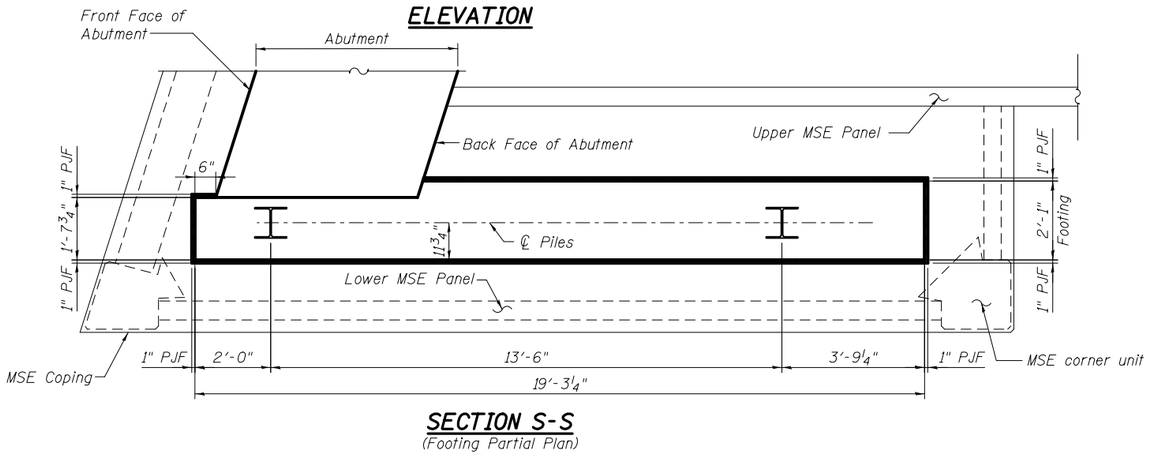
MASKWALL PLAN

(Noise wall not shown for clarity)



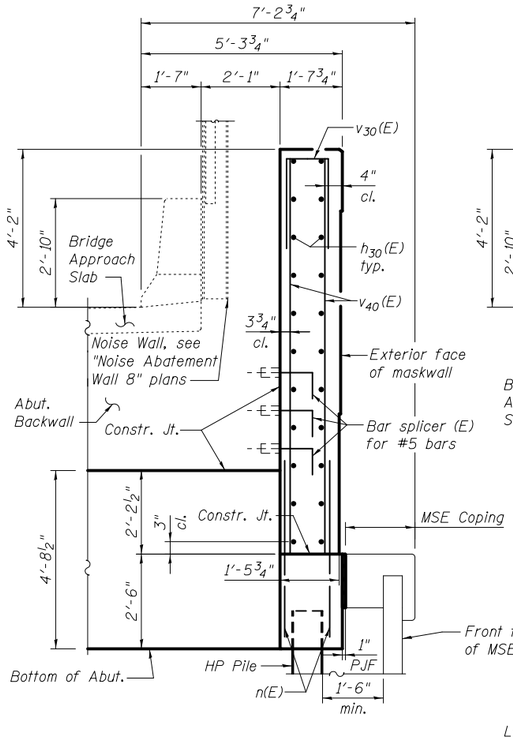
**Cut in field as required

ELEVATION

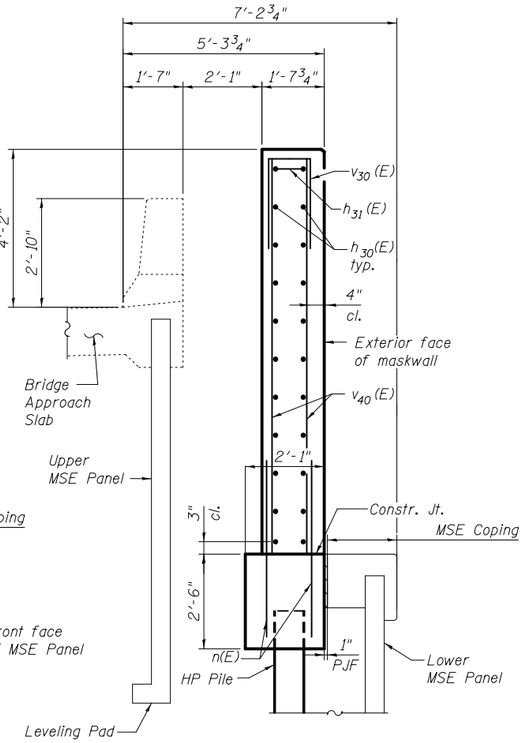


SECTION S-S

(Footing Partial Plan)



SECTION Q-Q



SECTION R-R

Notes:

See SN 081-6020 for MSE wall details.

Two inch clear concrete cover unless noted otherwise.

The joint sealer shall be light gray nonsag latex caulking sealer marketed for outdoor use. Cost of the joint sealer shall be included with Concrete Structures.

See sheets 36 thru 40 of 59 for maskwall footing bar detailing.

When exterior face of barrier is exposed, use rubbed finish same as maskwall.

For details of bar splicer, see sheet 51 of 59.

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - JBN	REVISED
	CHECKED - TER	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH MASKWALL DETAILS – EASTBOUND
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 48 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1137
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

MASKWALL FINISHING NOTES

If form ties are used in forming the maskwall, arrange ties to be regularly spaced and in a consistent geometric grid pattern. Do not locate ties at edges of concrete rusticications.

Following form removal, a rubbed surface finish in accordance with Article 503.15 (b) of the Standard Specifications shall be required but with the following additional requirements:

1. Demonstrate hole and void patching operations in accordance with Article 503.15 (b) of the Standard Specifications on a four foot section of vertical maskwall located in an inconspicuous area. Begin patching demonstration by using a mortar mix comprised of 1 part white cement, 2 parts standard portland cement, 6 parts mortar sand, and water. The quantity of water used shall produce a mortar consistency as dry as possible to use effectively.

2. When patching test areas have set, saturate with water and rub with a fine carborundum stone until surfaces are smooth in texture. Remove loose powder and other contaminants by rubbing with burlap and rinsing with water. After surfaces have dried, patch color and texture of surfaces will be reviewed by the Engineer. Patches should match or be slightly lighter than surrounding concrete. If results are unsatisfactory, adjust patching mortar mix proportions and perform another demonstration until results are deemed satisfactory by the Engineer.

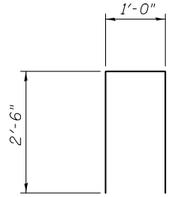
3. Use the patching mortar mix proportions that are approved by the Engineer as a result of the satisfactory demonstration. Do not use patching mortar that is more than 1 hour old.

4. Finished maskwall concrete shall be smooth and show no wood grain or other texture from the face of the forms used. All costs for repair or covering wood grain or other textures on these surfaces shall be the responsibility of the Contractor.

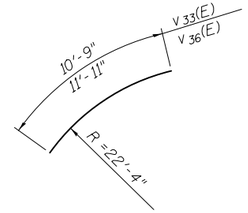
5. Do not apply curing compounds, sealers, or other coatings to the finished maskwalls.

NOTE:

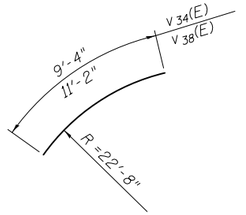
Contractor shall exercise all due care to assure that the maskwall surface finish is intact and the overall appearance is aesthetically pleasing at completion of the project. If the maskwalls are constructed before the deck, approach slab or parapets, additional effort may be required in forming and placing the deck, approach slab and/or parapet concrete, and precautions shall be taken to protect the maskwalls during these operations. If the maskwalls are constructed after deck, approach slab or parapets, temporary earth retention may be required. In either case, any costs for protecting the maskwalls, working around them or temporary earth retention and final grading shall be included in the cost of Concrete Structures.



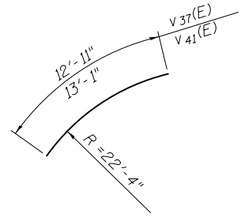
BAR $v_{30}(E)$



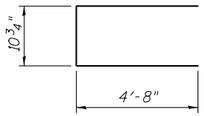
BARS $v_{33}(E)$ AND $v_{36}(E)$



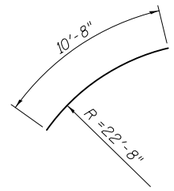
BARS $v_{34}(E)$ AND $v_{38}(E)$



BARS $v_{37}(E)$ AND $v_{41}(E)$



BAR $h_{31}(E)$



BAR $v_{42}(E)$

BILL OF MATERIAL
NORTH ABUTMENT (WB) MASKWALL

Bar	No.	Size	Length	Shape
$h_{30}(E)$	20	#5	15'-0"	—
$h_{31}(E)$	20	#5	10'-3"	⊏
$v_{30}(E)$	14	#5	6'-0"	⊏
$v_{31}(E)$	4	#5	6'-3"	—
$v_{32}(E)$	36	#5	9'-0"	—
$v_{33}(E)$	2	#5	10'-9"	⌒
$v_{34}(E)$	2	#5	9'-4"	⌒
Concrete Structures			Cu. Yd.	9.8
Reinforcement Bars, Epoxy Coated			Pound	1,030

BILL OF MATERIAL
SOUTH ABUTMENT (WB) MASKWALL

Bar	No.	Size	Length	Shape
$h_{30}(E)$	20	#5	15'-0"	—
$h_{31}(E)$	20	#5	10'-3"	⊏
$v_{30}(E)$	14	#5	6'-0"	⊏
$v_{31}(E)$	4	#5	6'-3"	—
$v_{34}(E)$	2	#5	9'-4"	⌒
$v_{35}(E)$	36	#5	9'-4"	—
$v_{36}(E)$	2	#5	11'-11"	⌒
Concrete Structures			Cu. Yd.	10.5
Reinforcement Bars, Epoxy Coated			Pound	1,040

BILL OF MATERIAL
NORTH ABUTMENT (EB) MASKWALL

Bar	No.	Size	Length	Shape
$h_{30}(E)$	24	#5	15'-0"	—
$h_{31}(E)$	24	#5	10'-3"	⊏
$v_{30}(E)$	14	#5	6'-0"	⊏
$v_{31}(E)$	4	#5	6'-3"	—
$v_{37}(E)$	2	#5	12'-11"	⌒
$v_{38}(E)$	2	#5	11'-2"	⌒
$v_{39}(E)$	36	#5	10'-9"	—
Concrete Structures			Cu. Yd.	11.3
Reinforcement Bars, Epoxy Coated			Pound	1,200

BILL OF MATERIAL
SOUTH ABUTMENT (EB) MASKWALL

Bar	No.	Size	Length	Shape
$h_{30}(E)$	22	#5	15'-0"	—
$h_{31}(E)$	22	#5	10'-3"	⊏
$v_{30}(E)$	14	#5	6'-0"	⊏
$v_{31}(E)$	4	#5	6'-3"	—
$v_{40}(E)$	36	#5	10'-6"	—
$v_{41}(E)$	2	#5	13'-1"	⌒
$v_{42}(E)$	2	#5	10'-8"	⌒
Concrete Structures			Cu. Yd.	11.2
Reinforcement Bars, Epoxy Coated			Pound	1,140

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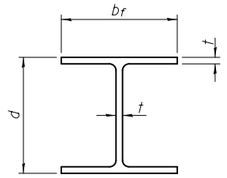
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

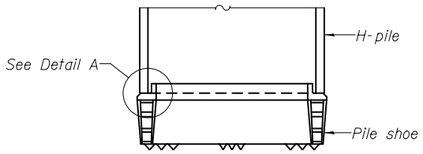
MASKWALL NOTES AND BILL OF MATERIAL
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 49 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1138
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

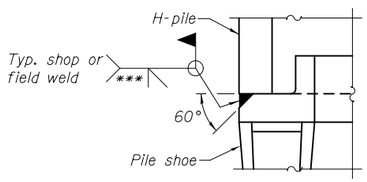


STEEL PILE TABLE

Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	$14\frac{1}{4}''$	$14\frac{7}{8}''$	$\frac{13}{16}''$	30″
x102	14″	$14\frac{3}{4}''$	$\frac{11}{16}''$	30″
x89	$13\frac{7}{8}''$	$14\frac{3}{4}''$	$\frac{5}{8}''$	30″
x73	$13\frac{5}{8}''$	$14\frac{5}{8}''$	$\frac{1}{2}''$	30″
HP 12x84	$12\frac{1}{4}''$	$12\frac{1}{4}''$	$\frac{11}{16}''$	24″
x74	$12\frac{1}{8}''$	$12\frac{1}{4}''$	$\frac{5}{8}''$	24″
x63	12″	$12\frac{1}{8}''$	$\frac{1}{2}''$	24″
x53	$11\frac{3}{4}''$	12″	$\frac{7}{16}''$	24″
HP 10x57	10″	$10\frac{1}{4}''$	$\frac{9}{16}''$	24″
x42	$9\frac{3}{4}''$	$10\frac{1}{8}''$	$\frac{7}{16}''$	24″
HP 8x36	8″	$8\frac{1}{8}''$	$\frac{7}{16}''$	18″

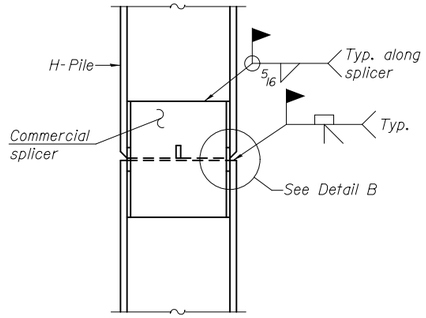


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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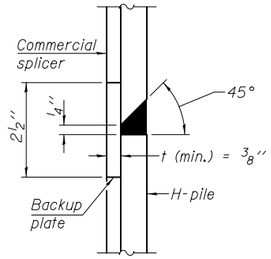
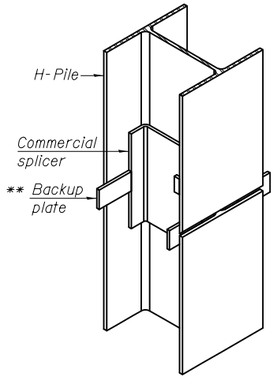
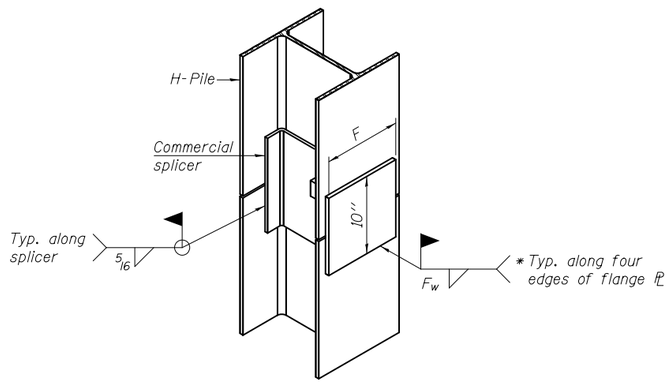


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



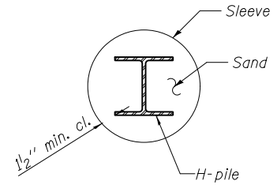
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds ¼″ from end of web and/or each flange.

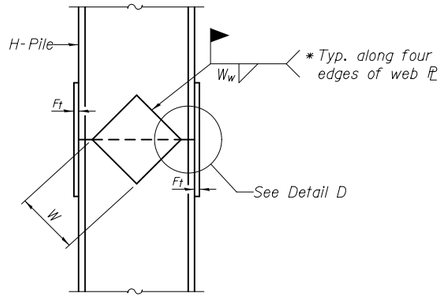
** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer ($\frac{5}{16}''$ min.).

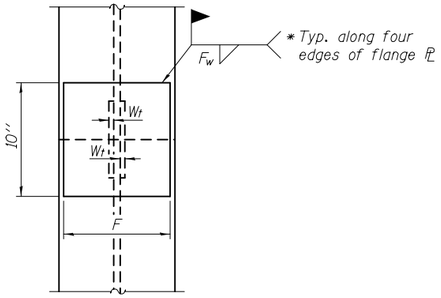


PILE SLEEVE SECTION

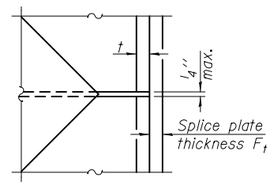
Notes:
Set pile sleeves prior to construction of the MSE walls.
Sleeves should extend from the bottom of the abutment to the bottom of the reinforced soil mass.
Piles shall be driven after the MSE wall is constructed to the abutment level and the subgrade is allowed to settle.
After piles have been driven the pile sleeves shall be filled with dry loose sand according to Section 512.09(c) of the Standard Specifications.
Cost of pile sleeves, setting pile sleeves, dry loose sand, and placing dry loose sand is included in the cost of Driving Piles.
See SN 081-6017 and SN 081-6020 for ground improvement requirements and MSE details.



ELEVATION



END VIEW

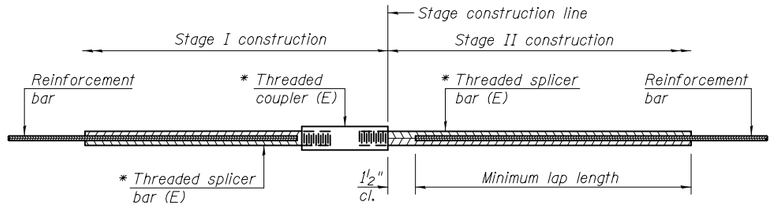


DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	$12\frac{1}{2}''$	1″	$\frac{7}{8}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x102	$12\frac{1}{2}''$	$\frac{7}{8}''$	$\frac{3}{4}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x89	$12\frac{1}{2}''$	$\frac{3}{4}''$	$\frac{11}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x73	$12\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{9}{16}''$	$7\frac{3}{4}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
HP 12x84	10″	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x74	10″	$\frac{7}{8}''$	$\frac{11}{16}''$	$6\frac{1}{2}''$	$\frac{5}{8}''$	$\frac{1}{2}''$
x63	10″	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x53	10″	$\frac{5}{8}''$	$\frac{1}{2}''$	$6\frac{1}{2}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 10x57	8″	$\frac{3}{4}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
x42	8″	$\frac{5}{8}''$	$\frac{9}{16}''$	$5\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$
HP 8x36	7″	$\frac{5}{8}''$	$\frac{7}{16}''$	$4\frac{1}{4}''$	$\frac{1}{2}''$	$\frac{3}{8}''$

WELDED PLATE FIELD SPLICE

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



STANDARD BAR SPLICER ASSEMBLY

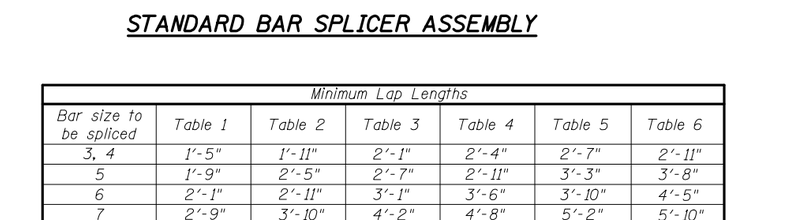
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

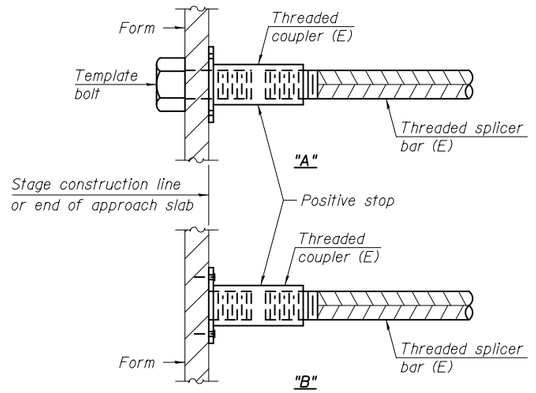
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length



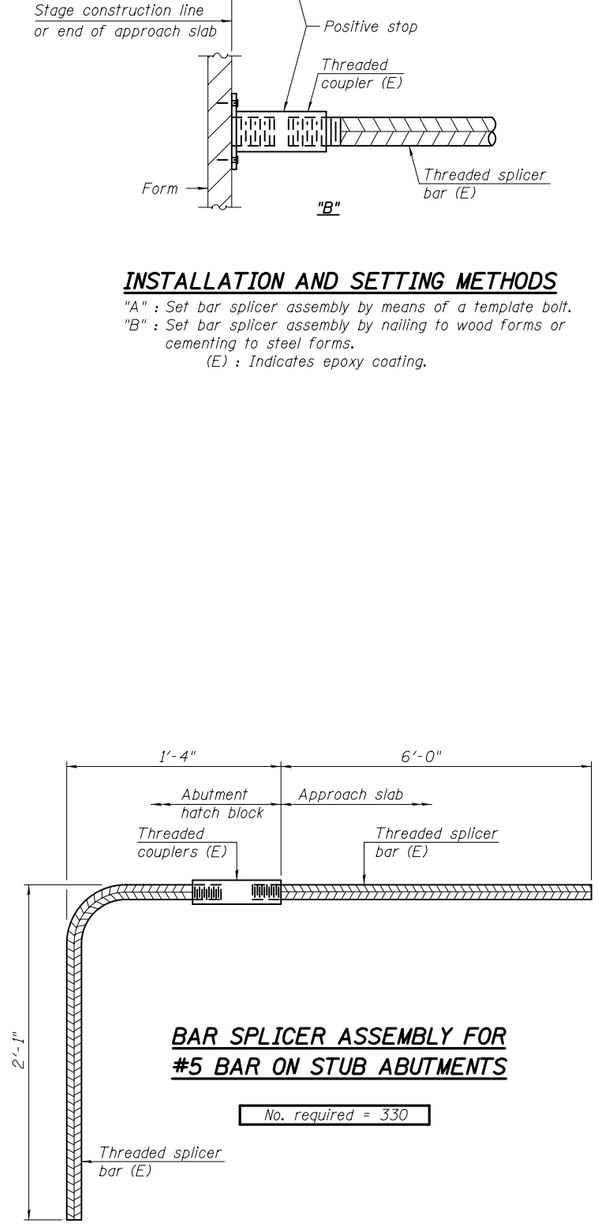
BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 0



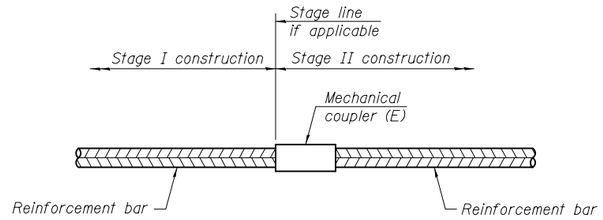
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



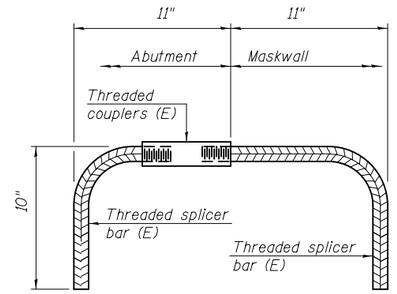
BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 330



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON MASKWALL

No. required = 24

Notes:
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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USER NAME =	DESIGNED - RLM	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - RLM	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 51 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1140
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/6/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560798.355, E=2459947.258), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. PB1001
Station 71+03
Offset 82' Lt.
Ground Surface Elev. 655.49 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 647.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Asphalt
				2.5 inches of asphalt followed by gravel sub-base□Hole offset 9' east of abutment wall
654.49				
	2			
	3			**Silty Clay (CL)**
	3			Light grayish brown, moist, stiff, low plasticity, with iron oxide staining and small metal and miscellaneous fill material, possibly fill
652.49	4			
	2			**Sandy Lean Clay, Trace Gravel (CL)**
	8	4.5		Reddish brown, moist, hard, low plasticity, fine sand with fine to coarse, subrounded-subangular gravel embedded throughout, possibly fill
	5	P		
650.49	10			
-5	5			**Silty Clay (CL)**
	12	2.0		Reddish brown, moist/dry, stiff, some gravel, possibly loess
	14	P		Reddish brown, wet, soft, trace very fine sand, loess
	15			Power auger to 7', start HSA
	4			
▼	9	0.3		**Sandy Lean Clay, Trace Gravel (CL)**
	9	P		Brown to dark gray, moist, fine rounded-subrounded gravel embedded throughout, hard, glacial till
646.49	8			Dark gray
	4			
-10	6	<0.25	4.5+	
	7		P	
	8			
	4	4.5		
	8	P		
	12			
	13			
	4	3.0		
	8	P		
	9			
-15	9			
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	2			**Sandy Lean Clay, Trace Gravel (CL)**
	5	2.5		Brown to dark gray, moist, fine rounded-subrounded gravel embedded throughout, hard, glacial till *(continued)*
	6	P		
	7			
-25				
	4			
	6	2.3		
	7	P		
	9			
	5			
-30				
	7	3.5		
	9	P		
	10			
	6			
-35				
	7	4.0		
	10	P		
	10			
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/6/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560798.355, E=2459947.258), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. PB1001
Station 71+03
Offset 82' Lt.
Ground Surface Elev. 655.49 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 647.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	7			**Sandy Lean Clay, Trace Gravel (CL)**
	10	2.0		Brown to dark gray, moist, fine rounded-subrounded gravel embedded throughout, hard, glacial till *(continued)*
	12	P		
	13			
-45				
	7			
	8	2.5		
	14	P		
	12			
	6			
-50				
	7	3.0		
	9	P		
	11			
	6			
-55				
	6			
	9	2.8		
	11	P		
	13			
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	6			**Sandy Lean Clay, Trace Gravel (CL)**
	9	2.3		Brown to dark gray, moist, fine rounded-subrounded gravel embedded throughout, hard, glacial till *(continued)*
	11	P		
	13			
-65				
	6			
	8	2.5		
	11	P		
	12			
	6			
-70				
	7	2.0		
	15	P		
	14			
	6			
-75				
	6			
	10	3.0		
	16	P		
	14			
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/6/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560798.355, E=2459947.258), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. PB1001
Station 71+03
Offset 82' Lt.
Ground Surface Elev. 655.49 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 647.5 ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	6			**Sandy Lean Clay, Trace Gravel (CL)**
	10	3.5		Brown to dark gray, moist, fine rounded-subrounded gravel embedded throughout, hard, glacial till *(continued)*
	16	P		
	24			
-85				
	14			Fine sand in shoe
	26	4.5		
	50/3	P		
-90				
	50/6			Poorly graded sand seam, gray, wet, very dense, fine to medium sand, rapid dilatancy, estimated 50% fines, this seam extends to about 93'
-95				
	36			
	50/2	3.8		
		P		
558.49				
				Shale
				Dark gray/black, moderately weathered, weak rock□Possible bedrock at 97'
	28			
556.24				
	50/3			End of Boring
-100				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED	
	CHECKED - JBN	REVISED	
PLOT SCALE =	DRAWN - ATH	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS – 1
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 52 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1141
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/15/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560656.718, E=2459835.618), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW601
Station 72+00
Offset 70' Rt.
Ground Surface Elev. 687.16 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 655.2 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
686.16				**Asphalt Cement Concrete** 1' asphalt cement concrete Hole offset to shoulder of I-74 Eastbound gps point #49
	4			
	5	4.5		**Silty Clay (CL)** Greenish gray, moist, stiff, low plasticity, with fine rounded to subrounded gravel, fill Power auger for 1ft, HSA to 40ft Possibly pounded on gravel, no recovery
	5	P		
	4			
	6			
	5	0.8		
	4	P		
-5	3			
	2			Brown, moist, soft, medium plasticity, fine rounded-subrounded gravel, fill Soil frozen until 5'
	2			
	2			
	3			
	WOH			Brown, dark gray, trace organics, faint organic odor, no gravel, fill
	WOH			
	3			
	4			
	WOH			Dark gray, soft, moist, with brick pieces, fill
-10	2			
	3			
	4			
18.0				
	2			Grayish brown, moist, stiff, low plasticity, fine to coarse, subrounded-subangular gravel, fill
	4			
	6			
-15	8			
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4			**Silty Clay (CL)** Greenish gray, moist, stiff, low plasticity, with fine rounded to subrounded gravel, fill Power auger for 1ft, HSA to 40ft *(continued)* Brown, moist, stiff, low plasticity, fine to coarse, subrounded-subangular gravel, fill
	5			
	7			
	8			
-25	1			Brick pieces, dry
	2			
	1			
	2			
-30	3			Brown silty clay, moist, wet at 32', sandy at 31.5', trace organics, medium plasticity, fill
	3			
655.16 ▼	5			
	5			**Sandy Lean Clay Trace Gravel (CL)** Reddish brown, stiff, dry, low plasticity, fine to coarse, subangular-angular gravel, fill-rubble till Possible water at 32' while drilling
-35	7			
	9			
	10			
	11			
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/15/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560656.718, E=2459835.618), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW601
Station 72+00
Offset 70' Rt.
Ground Surface Elev. 687.16 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 655.2 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	5			**Sandy Lean Clay Trace Gravel (CL)** Reddish brown, stiff, dry, low plasticity, fine to coarse, subangular-angular gravel, fill-rubble till Possible water at 32' while drilling *(continued)* Brown, moist, very stiff, low plasticity, fine to coarse, rounded-subrounded gravel embedded throughout, weathered till Start mud rotary at 40' after sampling
	8			
	12			
	13			
-45	5			
	7			
	11			
	12			
-50	7			
	9			
	13			
	15			
-55	5			Grayish brown, unweathered glacial clay Switch to 10' sampling frequency at 55'
	8			
	12			
	14			
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Sandy Lean Clay Trace Gravel (CL) Reddish brown, stiff, dry, low plasticity, fine to coarse, subangular-angular gravel, fill-rubble till Possible water at 32' while drilling *(continued)*
-65	6			
	7			
	12			
	14			
-70				
-75	6			
	9			
	12			
	16			
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/15/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560656.718, E=2459835.618), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW601
Station 72+00
Offset 70' Rt.
Ground Surface Elev. 687.16 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 655.2 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Sandy Lean Clay Trace Gravel (CL) Reddish brown, stiff, dry, low plasticity, fine to coarse, subangular-angular gravel, fill-rubble till Possible water at 32' while drilling *(continued)*
-85	6			
	8			
	10			
	13			
-90				
-95	5			
	7			
	10			
590.16	12			End of Boring
-100				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/13/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560773.1, E=2459776.703), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW701
Station 70+70
Offset 87' Rt.
Ground Surface Elev. 669.09 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	6			**Topsoil** 668.59
	10			Grass root matter□Hole offset to bottom of slope adjacent to existing manhole gps point #48 667.59
	10			**Silty Clay (CL-ML)**
	6			Gray brown, stiff, dry, fine to coarse, rounded-subrounded gravel, fill
	4			
	4			
	2			
	6			**Poorly Graded Sand With Gravel (SP)**
	2			Brown, dry, fine to coarse, fine to medium rounded-subrounded gravel, fill
-5	2			
	3			
	2			
	3			
	1			
	1			
	2			
	2			Soft silty clay with wood piece in shoe followed by dark reddish brown sand and silty clay and old concrete pieces, fill
	1			
	1			
659.09 -10	6			**Silty Clay (CL-ML)**
	3			Gray, moist/wet, soft, high plasticity, fine to coarse, subangular-angular gravel, fill
	1	1.3		
	2	P		
657.09	3			**Sandy Lean Clay Trace Gravel (CL)**
	3			Gray, moist, soft/stiff, medium plasticity, fine to medium, rounded-subrounded gravel, till
	4	1.3		
	6	P		
	6			
-15				
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4			**Sandy Lean Clay Trace Gravel (CL)**
	8	4.5		Gray, moist, soft/stiff, medium plasticity, fine to medium, rounded-subrounded gravel, till
	12	P		*(continued)*
	14			Piece of coarse gravel in toe, possibly caused poor recovery
				Stop for day at 3:30 pm, Start on 12/14/05 at 8:30 am, start mud rotary at 20' after sampling
-25				
	4			
	5	1.5		
	7	P		
	7			
-30				
	4			No recovery, possibly pounded on gravel
	6			
	8			
	10			
-35				
	2			
	2	2.5		
	5	P		
	6			
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/13/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560773.1, E=2459776.703), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW701
Station 70+70
Offset 87' Rt.
Ground Surface Elev. 669.09 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	3			**Sandy Lean Clay Trace Gravel (CL)**
	3	2.0		Gray, moist, soft/stiff, medium plasticity, fine to medium, rcunded-subrounded gravel, till
	7	P		*(continued)*
	8			
-45				
	4			
	6			
	9			
	11			
-50				
-55				
	5			Gray, unweathered glacial clay
	6	2.5		
	10	P		
	11			
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Sandy Lean Clay Trace Gravel (CL)
				Gray, moist, soft/stiff, medium plasticity, fine to medium, rounded-subrounded gravel, till
				(continued)
-65				
	5			
	7	2.5		
	10	P		
	12			
-70				
-75				
	6			
	9	2.5		
	14	P		
	15			
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/13/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560773.1, E=2459776.703), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW701
Station 70+70
Offset 87' Rt.
Ground Surface Elev. 669.09 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				Sandy Lean Clay Trace Gravel (CL)
				Gray, moist, soft/stiff, medium plasticity, fine to medium, rounded-subrounded gravel, till
				(continued)
-85				
	6			
	9	2.5		
	11	P		
	13			
-90				
-95				
	6			
	10	2.3		
	14	P		
	15			
572.09				End of Boring
-100				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/8/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560683.901, E=2459983.026), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW801
Station 71+80
Offset 83' Lt.
Ground Surface Elev. 651.98 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
651.48				**Concrete**
				P.C. Cement concrete sidewalk underlain by 3" of crushed gravel
	4			
	2	1.3		**Silty Clay (CL)**
	2	P		Light to dark brown, moist, stiff, sand with iron oxide staining, fill
	1			
	4			Brown, moist/dry, soft, with crushed limestone gravel, fill
	3	0.3		
	2	P		
-5	3			
	2			Brown, moist/wet, stiff, medium plasticity with scattered black, oily asphalt and burnt wood particles, fill
	2	2.5		
	2	P		
644.98	3			
				Sandy Lean Clay, Trace Gravel (CL)
		2.0	21.0	Brown, moist, stiff, low-medium plasticity, trace rounded-subrounded gravel and silty clay mixed, gumbotil
		P		
	3			
-10	3	3.5		
	3	P		
640.98	4			
	4			**Sandy Lean Clay, Trace Gravel (CL)**
	6	4.5		Brown, moist, hard, low plasticity, fine to coarse, rounded-subrounded gravel embedded throughout, possibly weathered till
	9	P		
	5			
	6	4.3		
	9	P		
-15	9			
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	5			**Sandy Lean Clay, Trace Gravel (CL)**
	7	4.0		Brown, moist, hard, low plasticity, fine to coarse, rounded-subrounded gravel embedded throughout, possibly weathered till *(continued)*
	9	P		
	11			
-25	7			Turning gray at bottom 2"
	9	4.3	13.0	
	12	P		
	13			
				Gray, unweathered glacial clay Start mud rotary at 30' after sampling
-30	6			
	7		14.0	
	10			
	10			
-35	6			
	9	3.5		
	12	P		
	14			
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Date 12/8/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560683.901, E=2459983.026), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW801
Station 71+80
Offset 83' Lt.
Ground Surface Elev. 651.98 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	5			**Sandy Lean Clay, Trace Gravel (CL)**
	7	3.0		Brown, moist, hard, low plasticity, fine to coarse, rcunded-subrounded gravel embedded throughout, possibly weathered till *(continued)*
	11	P		
	13			
-45	5			
	9	2.5		
	13	P		
	15			
-50	5			
	9	2.3		
	12	P		
	14			
-55	5			
	7	2.5		
	9	P		
	12			
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	5			**Sandy Lean Clay, Trace Gravel (CL)**
	7	2.5		Brown, moist, hard, low plasticity, fine to coarse, rounded-subrounded gravel embedded throughout, possibly weathered till *(continued)*
	12	P		
	14			
-65	5			
	9	2.5		
	12	P		
	15			
-70	6			
	9	2.5		
	13	P		
	14			
-75				
-80				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Date 12/8/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY B. Karnik

SECTION I-74 Bridge over Mississippi River LOCATION (N=560683.901, E=2459983.026), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station

BORING NO. RW801
Station 71+80
Offset 83' Lt.
Ground Surface Elev. 651.98 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	18			**Sandy Lean Clay, Trace Gravel (CL)**
	29	4.5		Brown, moist, hard, low plasticity, fine to coarse, rounded-subrounded gravel embedded throughout, possibly weathered till *(continued)* With sand and medium to coarse with rounded-subrounded gravel seams throughout
	27	P		
	36			
-85				
-90				
561.98	50/2			**Shale** Possibly gray shale (no recovery description based on field observation only) No recovery, possibly pounded on gravel or hard shale, possible shale at 90'
-95	50/3			
554.98				End of Boring
-100				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JBN	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS - 4
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 55 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1144
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SOIL BORING LOG

Page 1 of 1

Date 6/24/10

ROUTE F.A.I. 74 DESCRIPTION I-74 Over Mississippi River LOGGED BY JMB

SECTION 81-1-2 LOCATION SW¼ of SEC. 33, TWP. 18N, RNG. 1W, 4th P.M.

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO. 081-6017
Station
BORING NO. RW 11-1
Station 71+08
Offset 2' Rt.
Ground Surface Elev. 659.9 ft

Surface Water Elev.
Stream Bed Elev.

Groundwater Elev.:
First Encounter NE ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
ASPHALT 659.70 / CONCRETE 659.10				
Gray with brown mottles, moist, stiff, silty CLAY	2	4 4 5	0.96S	20
Brown with gray mottles, moist, stiff, silty CLAY with trace very-fine grained sand 656.90	4		2.13S	20
			1.10S	19
Brown, moist, very stiff, silty CLAY with trace sand 653.90	6	5 7 10	1.77B	17
Brown, wet, very stiff, sandy clayey SILT with trace sand and gravel 652.65 / 652.40	8		0.42S	21
Brown, slightly moist, very stiff, SILT with trace sand and clay			2.00P	19
	10		2.24S	18
Gray, slightly moist, very stiff, silty CLAY with trace sand and gravel 648.40	12	10 13 16	3.44S	13
	14	7 15 18	5.01B	10
End of Boring 644.90				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

SOIL BORING LOG

Page 1 of 1

Date 6/24/10

ROUTE F.A.I. 74 DESCRIPTION I-74 Over Mississippi River LOGGED BY JMB

SECTION 81-1-2 LOCATION NW¼ of SEC. 4, TWP. 17N, RNG. 1W, 4th P.M.

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO. 081-6020
Station
BORING NO. RW 13-1
Station 71+47
Offset 5' Lt.
Ground Surface Elev. 658.5 ft

Surface Water Elev.
Stream Bed Elev.

Groundwater Elev.:
First Encounter NE ft
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
ASPHALT 658.30 / CONCRETE 657.60				
Dark brown, moist, medium stiff, silty CLAY with trace gravel	2	2 3 3	0.50P	22
Brown, moist, sandy CLAY 655.00	4		1.80P	19
			1.30P	19
			2.00P	14
			2.00P	15
Brown, moist, silty CLAY 652.50	6			
651.50				
Hole terminated due to equipment problems. Deformed auger tooth caused sample disturbance. End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

SOIL BORING LOG

Page 1 of 1

Date 6/24/10

ROUTE F.A.I. 74 DESCRIPTION I-74 Over Mississippi River LOGGED BY JMB

SECTION 81-1-2 LOCATION NW¼ of SEC. 4, TWP. 17N, RNG. 1W, 4th P.M.

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE Auto

STRUCT. NO. 081-6020
Station
BORING NO. RW 13-1A
Station 71+49
Offset 8' Lt.
Ground Surface Elev. 658.1 ft

Surface Water Elev.
Stream Bed Elev.

Groundwater Elev.:
First Encounter ft
Upon Completion 647.1 ft ▽
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
ASPHALT 657.90 / CONCRETE 657.20				
Brown and gray, moist, medium stiff, silty CLAY with trace sand	2	3 4 4	0.56B	11
	4		1.75B	15
			2.17S	13
652.10	6		3.10B	15
Brown, moist, very stiff, clayey SILT with trace sand and gravel			4.60S	15
	8	50/5"		20
648.10	10			
Gray, moist,hard, silty CLAY with trace sand and gravel ▽	12	8 12 13	4.50P	11
	14	7 12 18	3.55B	11
643.10 End of Boring				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 8/30/10

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station

BORING NO. B-1
Station 121+88
Offset 32.00ft Lt CL
Ground Surface Elev. 663.1 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Asphalt parking lot				VERY STIFF gray SILTY CLAY LOAM TILL	3		
660.60				641.60	5 9	2.7 B	14
STIFF tan SILT	8			VERY STIFF gray SILTY CLAY LOAM TILL	3		
659.10	12 13	1.3 S	20	639.10	5 8	2.1 B	13
-5				-25			
MEDIUM tan SILT with SAND lens	10			VERY STIFF gray SILTY CLAY LOAM TILL	3		
656.10	11 16	0.7 B	21	636.60	5 9	2.5 B	14
HARD gray SILTY CLAY LOAM TILL	6			VERY STIFF gray SILTY CLAY LOAM TILL	2		
654.10	9 13	6.2 B	11	634.10	5 10	3.3 B	13
-10				-30			
VERY STIFF gray SILTY CLAY LOAM TILL	6			VERY STIFF olive-green CLAY LOAM TILL with SAND lens	2		
651.60	8 11	3.3 B	13	631.60	5 8	2.9 B	17
VERY STIFF gray SILTY CLAY LOAM TILL	3			VERY STIFF gray CLAY LOAM TILL	3		
649.10	5 8	3.5 B	13	629.10	7 10	3.5 B	14
-15				-35			
VERY STIFF gray SILTY CLAY LOAM TILL	3			VERY STIFF gray CLAY LOAM TILL	3		
646.60	6 8	2.7 B	14	626.60	5 9	2.9 B	13
VERY STIFF gray SILTY CLAY LOAM TILL	2			VERY STIFF gray CLAY LOAM TILL	3		
644.10	5 7	3.1 B	13	624.10	6 11	2.9 B	14
-20				-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 8/30/10

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station

BORING NO. B-1
Station 121+88
Offset 32.00ft Lt CL
Ground Surface Elev. 663.1 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray CLAY LOAM TILL	3			VERY STIFF gray CLAY LOAM TILL	5		
621.60	7 11	3.3 B	14	601.60	7 10	2.7 B	14
VERY STIFF gray CLAY LOAM TILL	3			VERY STIFF gray CLAY LOAM TILL	3		
619.10	7 9	3.1 B	14	599.10	6 10	2.7 B	14
-45				-65			
VERY STIFF gray CLAY LOAM TILL	4			VERY STIFF gray CLAY LOAM TILL	4		
616.60	8 11	3.7 B	16	596.60	7 10	2.9 B	13
VERY STIFF gray CLAY LOAM TILL	3			End of Boring			
614.10	6 10	3.5 B	14				
HARD tan/gray CLAY LOAM TILL	4			-70			
611.60	10 14	5.2 B	12				
VERY STIFF gray CLAY LOAM TILL	3						
609.10	5 9	2.7 B	14	-75			
-55							
VERY STIFF gray CLAY LOAM TILL	2						
606.60	6 10	2.5 B	15				
9/3/10							
VERY STIFF gray CLAY LOAM TILL	3						
604.10	6 10	2.3 B	13				
-60				-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JBN	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS - 6
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 57 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1146
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 2/16/11

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station 121+20

BORING NO. B-2
Station 120+32
Offset 16.00ft Rt CL
Ground Surface Elev. 673.8 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 626.3 ft
Upon Completion 584.8 ft
After 24 Hrs. 618.8 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Pavement 9" Concrete, 3" Asphalt			
671.30			
STIFF tan SILTY LOAM	1 2 4	1.1 P	23
669.80			
-5			
STIFF light gray SILTY LOAM	3 5 5	1.7 S	25
667.30			
VERY STIFF gray/tan SILTY CLAY LOAM	2 3 5	2.0 B	25
664.80			
-10			
VERY STIFF gray/tan SILTY CLAY LOAM	2 3 6	2.0 B	23
662.30			
SOFT tan SANDY LOAM	1 3 4	0.3 P	19
659.30			
-15			
STIFF gray LOAM TILL	1 5 7	1.3 B	16
657.30			
VERY STIFF gray LOAM TILL	6 8 12	2.3 P	12
654.30			
-20			
DENSE gray dirty SAND with GRAVEL	15 18 16		8
651.80			
VERY STIFF gray CLAY LOAM TILL	8 7 10	2.3 B	13
649.80			
-25			
VERY STIFF gray CLAY LOAM TILL	4 6 9	2.1 B	15
647.30			
VERY STIFF gray CLAY LOAM TILL	2 4 7	2.1 B	14
644.80			
-30			
VERY STIFF gray CLAY LOAM TILL	3 6 9	2.5 B	14
642.30			
VERY STIFF gray CLAY LOAM TILL	2 5 9	2.3 B	14
639.80			
-35			
VERY STIFF gray CLAY LOAM TILL	3 6 10	3.1 B	13
637.30			
VERY STIFF gray CLAY LOAM TILL	3 5 10	2.3 B	14
634.80			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 2/16/11

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station 121+20

BORING NO. B-2
Station 120+32
Offset 16.00ft Rt CL
Ground Surface Elev. 673.8 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 626.3 ft
Upon Completion 584.8 ft
After 24 Hrs. 618.8 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray CLAY LOAM TILL	4 7 11	3.3 B	14
632.30			
VERY STIFF gray CLAY LOAM TILL	3 6 10	2.5 B	14
629.80			
-45			
VERY STIFF gray CLAY LOAM TILL	3 5 10	3.5 B	13
627.30			
VERY STIFF gray CLAY LOAM TILL	4 7 12	3.5 B	14
624.80			
-50			
VERY STIFF gray CLAY LOAM TILL	5 9 13	3.1 B	14
622.30			
VERY STIFF gray CLAY LOAM TILL	4 6 12	2.1 B	16
619.80			
-55			
VERY STIFF gray CLAY LOAM TILL	5 8 13	2.9 B	16
617.30			
VERY STIFF gray CLAY LOAM TILL	5 7 12	3.1 B	14
614.80			
-60			
VERY STIFF gray CLAY LOAM TILL	5 7 12	3.1 B	14
612.30			
VERY STIFF gray CLAY LOAM TILL	4 8 12	3.1 B	14
609.80			
-65			
VERY STIFF gray CLAY LOAM TILL	5 7 14	3.7 B	14
607.30			
2/17/11 VERY STIFF gray CLAY LOAM TILL	7 10 13	2.9 B	15
604.80			
-70			
VERY STIFF gray CLAY LOAM TILL	7 9 13	3.1 B	15
602.30			
VERY STIFF gray CLAY LOAM TILL	6 9 13	2.9 B	15
599.80			
-75			
VERY STIFF gray CLAY LOAM TILL	9 12 16	2.9 B	15
597.30			
VERY STIFF gray CLAY LOAM TILL	7 9 14	2.9 B	15
594.80			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 2/16/11

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station 121+20

BORING NO. B-2
Station 120+32
Offset 16.00ft Rt CL
Ground Surface Elev. 673.8 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 626.3 ft
Upon Completion 584.8 ft
After 24 Hrs. 618.8 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray CLAY LOAM TILL	7 10 14	3.1 B	15
592.30			
VERY STIFF gray CLAY LOAM TILL	4 8 11	2.9 B	15
589.80			
-85			
VERY STIFF gray CLAY LOAM TILL	5 9 13	2.9 B	15
587.30			
VERY STIFF gray CLAY LOAM TILL	7 10 15	3.3 B	16
584.80			
-90			
VERY STIFF gray CLAY LOAM TILL	5 8 12	2.9 B	15
582.30			
End of Boring			
-95			
-100			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JBN	REVISED
PLOT SCALE =	DRAWN - ATH	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS – 7
I–74 OVER 12TH AVE. – STRUCTURE NO. 081–0182 WB & 081–0183 EB
SHEET NO. 58 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1147
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 4/7/11

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station

BORING NO. B-3
Station 299+62
Offset 14.00ft Lt CL
Ground Surface Elev. 685.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter None ft
Upon Completion Dry ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
STIFF brown SILTY CLAY LOAM			1.1 P	14
	683.10			
STIFF gray LOAM		6 7 10	1.5 B	13
	681.60			
	-5			
STIFF tan SILTY CLAY LOAM		3 6 7	1.7 B	14
	679.10			
STIFF tan/gray SILTY CLAY LOAM		1 2 4	1.3 P	15
	676.60			
	-10			
VERY STIFF tan SILTY CLAY LOAM		5 5 9	3.1 B	15
	674.10			
VERY STIFF light gray SILTY LOAM		6 12 11	3.5 P	18
	671.60			
	-15			
SOFT light gray SILT		2 2 5	0.3 B	24
	669.10			
VERY STIFF brown CLAY LOAM		1 4 6	2.1 B	23
	666.60			
	-20			
STIFF light brown SILTY CLAY		2 4 8	1.6 B	22
	664.10			
MEDIUM light brown SILTY CLAY		1 3 9	0.7 B	18
	661.60			
	-25			
STIFF light brown SANDY LOAM		5 7 10	1.2 S	13
	659.10			
STIFF tan SANDY LOAM		5 12 18	1.6 S	10
	656.10			
	-30			
VERY STIFF tan LOAM TILL		5 11 15	2.9 B	12
	654.10			
VERY STIFF gray CLAY LOAM TILL		7 10 12	2.3 P	13
	651.60			
	-35			
No Recovery		20 23 26		
	649.10			
VERY STIFF gray CLAY LOAM TILL		5 6 12	2.3 B	13
	646.60			
	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 4/7/11

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station

BORING NO. B-3
Station 299+62
Offset 14.00ft Lt CL
Ground Surface Elev. 685.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter None ft
Upon Completion Dry ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray CLAY LOAM TILL		2 4 12	2.7 B	13
	644.10			
VERY STIFF gray CLAY LOAM TILL		4 8 11	3.1 P	13
	641.60			
	-45			
VERY STIFF gray CLAY LOAM TILL		9 9 14	3.5 B	12
	639.10			
VERY STIFF gray CLAY LOAM TILL		4 9 11	3.5 B	12
	636.60			
	-50			
VERY STIFF gray CLAY LOAM TILL		5 9 14	3.5 P	14
	634.10			
HARD gray CLAY LOAM TILL		13 9 14	4.1 B	13
	631.60			
	-55			
VERY STIFF gray CLAY LOAM TILL		7 12 18	3.3 B	13
	629.10			
VERY STIFF gray CLAY LOAM TILL		6 10 14	2.5 P	13
	626.60			
	-60			
No Recovery		8 13 16		
	624.10			
VERY STIFF gray CLAY LOAM TILL		3 7 12	2.9 B	14
	621.60			
	-65			
VERY STIFF gray CLAY LOAM TILL		4 9 14	3.5 B	14
	618.10			
HARD gray CLAY LOAM TILL		3 9 13	4.5 B	12
	616.60			
	-70			
HARD gray CLAY LOAM TILL		4 8 13	4.3 B	14
	614.10			
HARD gray CLAY LOAM TILL		8 11 16	4.1 B	14
	611.60			
	-75			
No Recovery		4 10 12		
	609.10			
VERY STIFF gray CLAY LOAM TILL		3 7 12	3.7 B	14
	606.60			
	-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 4/7/11

ROUTE I-74 DESCRIPTION 081-0101, 0102 I-74 Bridge over 12th Avenue in Moline LOGGED BY W. Garza

SECTION LOCATION Moline Twp. - 4NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE B-53 Diedrich Automatic

STRUCT. NO. 081-0101, 0102
Station

BORING NO. B-3
Station 299+62
Offset 14.00ft Lt CL
Ground Surface Elev. 685.6 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter None ft
Upon Completion Dry ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray CLAY LOAM TILL		4 9 14	2.3 B	14
	604.10			
VERY STIFF gray CLAY LOAM TILL		4 9 12	3.3 B	14
	601.60			
	-85			
VERY STIFF gray CLAY LOAM TILL		2 8 13	3.1 B	14
	599.10			
End of Boring				
	-90			
	-95			
	-100			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - KJP	REVISED	
	CHECKED - JBN	REVISED	
PLOT SCALE =	DRAWN - ATH	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

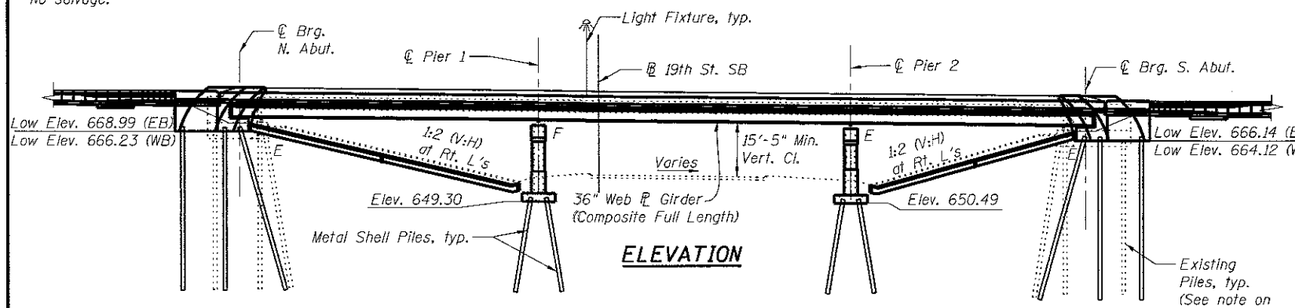
BORING LOGS - 8
I-74 OVER 12TH AVE. - STRUCTURE NO. 081-0182 WB & 081-0183 EB
SHEET NO. 59 OF 59 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR-1	ROCK ISLAND	2042	1148
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Bench Mark: Chiseled "X" in base of overhead sign structure median foundation, I-74 Sta. 83+00. NAVD 88 elevation = 683.600

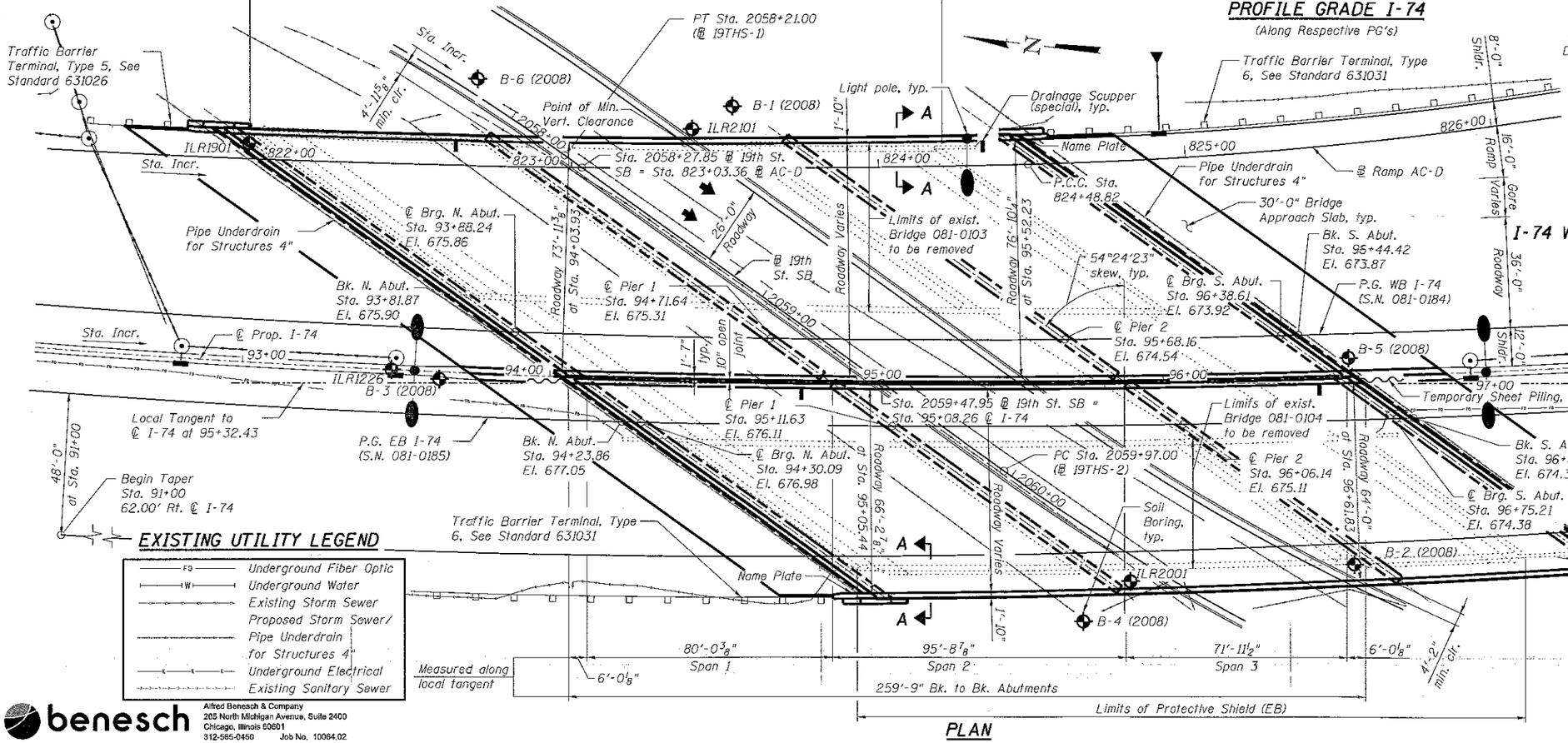
Existing Structures: The existing structures, 081-0103 (WB) and 081-0104 (EB), were built in 1971 as a part of FAI-74. The existing dual structures are three-span continuous, composite W36 beam supporting a reinforced concrete deck. The out-to-out dimension of the EB bridge is a constant 42'-0" while the WB bridge varies from 49'-10" to 54'-2". The abutments are stub type supported by concrete piles. The piers are multi-column, trapezoidal column bents with cap beams and crashwalls supported by timber piles. The existing structures are approximately 225'-10 (WB) and 222'-8 (EB) back-to-back of abutments along the existing baselines. Staged construction is to be utilized. I-74 WB traffic will be detoured during Stage 2.

No salvage.



ELEVATION

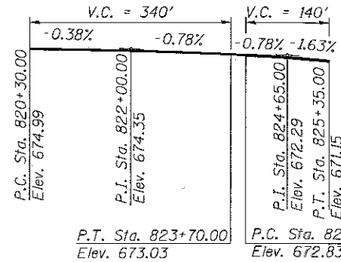
NOTE:
See sheet S2 for section A-A



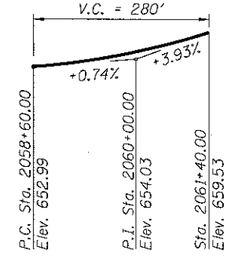
PLAN

EXISTING UTILITY LEGEND

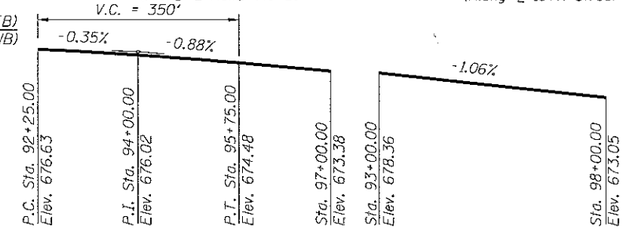
- FO — Underground Fiber Optic
- W — Underground Water
- Existing Storm Sewer
- Proposed Storm Sewer/ Pipe Underdrain for Structures 4"
- Underground Electrical
- Existing Sanitary Sewer



PROFILE GRADE RAMP AC-D
(Along ℄ Ramp AC-D)

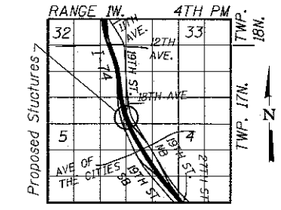


PROFILE GRADE 19TH ST. SB
(Along ℄ 19TH Street SB)



(WB I-74 Along P.G.)
(EB I-74 Along P.G.)

PROFILE GRADE I-74
(Along Respective PG's)



LOCATION SKETCH

LOADING HL-93

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

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition with 2013 Interims

DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S^{D1}) = 0.06g
Design Spectral Acceleration at 0.2 sec. (S^{DS}) = 0.095g
Soil Site Class = C

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

ANDREW J. KEASCHALL
081-008784
LICENSED STRUCTURAL ENGINEER
OF ILLINOIS
EXPIRATION DATE 11-30-2018
DATE: 3/27/17

GENERAL PLAN & ELEVATION
I-74 OVER 19TH STREET SB
F.A.I. ROUTE 74 SECTION 81-1HB-2
ROCK ISLAND COUNTY
STATION 95+08.26
STRUCTURE NO. 081-0184 (WB)
STRUCTURE NO. 081-0185 (EB)

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-001-General_Plan_and_Elevation.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)

SHEET NO. S1 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1149
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

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GENERAL NOTES

1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$", open holes $\frac{15}{16}$", unless otherwise noted.

2. Westbound (081-0184)
   Calculated weight of Structural Steel = 440,930 lbs
   M 270 Grade 36: 55,630 lbs
   M 270 Grade 50: 385,300 lbs
   Eastbound (081-0185)
   Calculated weight of Structural Steel = 391,720 lbs
   M 270 Grade 36: 47,640 lbs
   M 270 Grade 50: 344,080 lbs

   The Contractor may substitute Grade 50 for Grade 36 at no additional cost to the Contract.

3. No field welding is permitted except as specified in the contract documents.

4. Reinforcement bars designated (E) shall be epoxy coated.

5. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

6. The concrete for bridge decks finished according to Article 503.16(a) of the Standard Specifications shall be placed and compacted parallel to the skew in uniform increments along centerline of bridge. The machine used for finishing shall be set parallel to the skew for striking off and screeding the concrete.

7. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 in. (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

8. Concrete Sealer shall be applied to the exposed faces of the North Abutment, South Abutment, Pier 1, and Pier 2.

9. The existing structural steel coating contains lead. The contractor shall take appropriate precautions to deal with the presence of lead on this project.

10. The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surfaces and the bottom of the bottom flange of fascia beams, masked off connection surfaces, and field installed fasteners, all of which shall be touched up and finish coated in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1.

    The exterior and bottom flange of the fascia beams and fascia bearings shall be finish coated with a fluoropolymer paint. The color of the final finish coat for the exterior and bottom flange of the fascia beams and bearings shall be Federal Standard 595C Color 26099 (gray-blue). See Special Provision for "Cleaning and Painting Structural Steel".

11. See Civil Plans for limits of special waste.

12. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

13. Slip forming of the median parapet is not allowed. Slip forming of the Aesthetic Traffic Barrier is allowed.

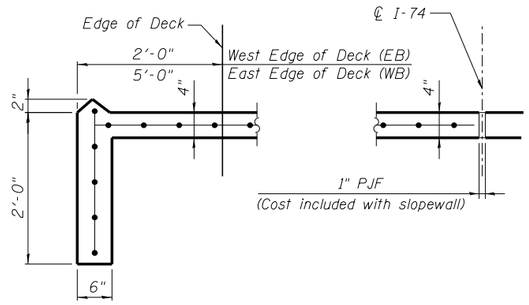
INDEX OF SHEETS

TOTAL BILL OF MATERIAL

	ITEM	UNIT	WESTBOUND		EASTBOUND		TOTAL
			SUPER	SUB	SUPER	SUB	
	Aggregate Subgrade Improvement 12"	Sq Yd	-	39	-	55	94
	Stabilized Subbase 4"	Sq Yd	-	39	-	49	88
	Combination Curb and Gutter Removal	Foot	-	135	-	142	277
*	Removal of Existing Structures No. 4	Each	0.5	-	0.5	-	1
	Protective Shield	Sq Yd	1268	-	1007	-	2,275
	Structure Excavation	Cu Yd	-	1858	-	1399	3,257
	Concrete Structures	Cu Yd	-	896.7	-	778.9	1,675.6
	Concrete Superstructure	Cu Yd	875.5	-	750.7	-	1,626.2
	Bridge Deck Grooving	Sq Yd	2552	-	2127	-	4,679
	Protective Coat	Sq Yd	2965	-	2526	-	5,491
**	Furnishing and Erecting Structural Steel	L Sum	0.13	-	0.12	-	0.25
	Stud Shear Connectors	Each	13,935	-	12,438	-	26,373
	Reinforcement Bars, Epoxy Coated	Pound	233,280	110,040	204,110	95,990	643,420
	Bar Splicers	Each	267	14	225	15	521
	Slope Wall 4 Inch	Sq Yd	-	1173	-	970	2,143
	Furnishing Metal Shell Piles 12"x0.250"	Foot	-	5398	-	4834	10,232
	Driving Piles	Foot	-	5398	-	4834	10,232
	Test Pile Metal Shells	Each	-	4	-	-	4
	Pile Shoes	Each	-	112	-	94	206
	Name Plates	Each	1	-	1	-	2
	Preformed Joint Strip Seal	Foot	265.0	-	223.0	-	488
	Elastomeric Bearing Assembly, Type I	Each	20	-	18	-	38
	Elastomeric Bearing Assembly, Type II	Each	10	-	9	-	19
	Anchor Bolts, 3/4"	Each	52	-	48	-	100
	Anchor Bolts, 1 1/4"	Each	12	-	12	-	24
	Temporary Sheet Piling	Sq Ft	-	363	-	-	363
	Concrete Sealer	Sq Ft	-	10,188	-	9004	19,192
	Geocomposite Wall Drain	Sq Yd	-	206	-	172	378
	Pipe Underdrain, Type 2, 6"	Foot	-	135	-	94	229
	Combination Concrete Curb and Gutter, Type B-6.24	Foot	-	135	-	142	277
	Steel Railing (Special)	Foot	256	-	240	-	496
	Drainage Scuppers (Special)	Each	2	-	2	-	4
	Pipe Underdrains For Structures 4"	Foot	-	356	-	314	670
	Granular Backfill For Structures	Cu Yd	-	415	-	345	760

* Light poles and luminaires mounted on the existing structure shall be removed. None are to be salvaged. Cost included with "Removal of Existing Structures No. 4".

** Remainder of this item installed with other structures in this Contract



SECTION A-A

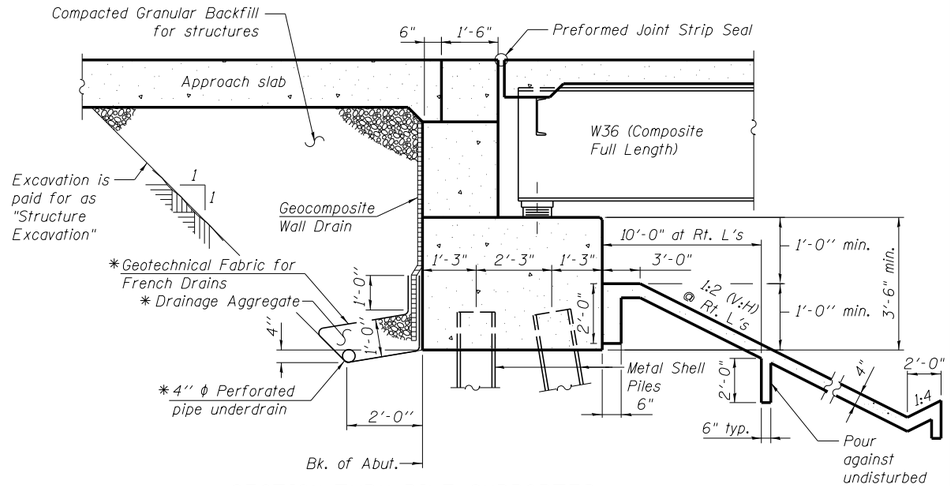
Slopewall shall be reinforced with welded wire fabric. 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.) Cost included with slopewall.

STATION 95+08.26
BUILT BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC 81-1HB-2
LOADING HL-93
STRUCTURE NO. 081-0184

WB NAME PLATE
See Std. 515001

STATION 95+08.26
BUILT BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC 81-1HB-2
LOADING HL-93
STRUCTURE NO. 081-0185

EB NAME PLATE
See Std. 515001



SECTION THRU PILE SUPPORTED STUB ABUTMENT (NORTH ABUTMENT)

(Horiz. dim. at Rt. L's to back of abutment)

* Included in the cost of Pipe Underdrain Structures. (See Special Provisions)
All drainage system components shall slope from west to east starting at the intersection of the west wingwall and the abutment back wall and extend parallel to the abutment back wall. The pipe shall extend under the east wingwall until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).

benesch
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205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, INDEX OF SHEETS, TOTAL BILL OF MATERIALS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S2 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1150
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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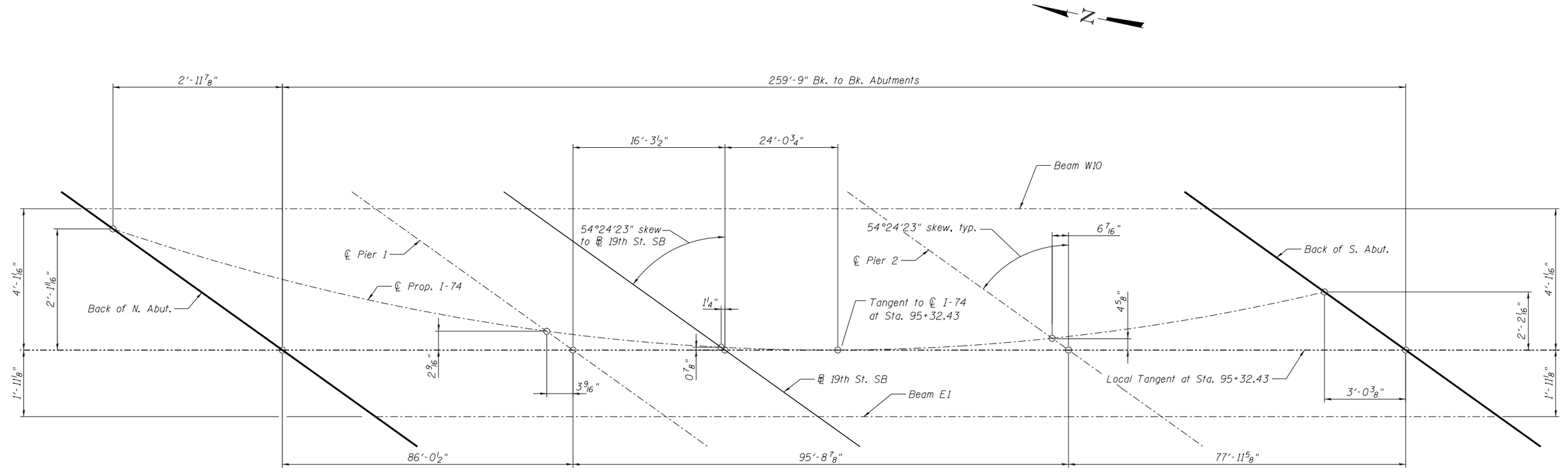

OFFSET SKETCH
(Not to Scale)

CURVE DATA
PROP. CURVE ML100CL5

PI Sta = 94+70.39
Δ = 23° 17' 39" (LT)
D = 1° 27' 52"
R = 3,912.17'
T = 806.40'
L = 1,590.53'
E = 82.25'
e = 4.1%
P.C. Sta = 86+63.98
P.C.C. Sta = 102+54.51

CURVE DATA
PROP. CURVE 19THS 1

PI Sta = 2057+01.61
Δ = 20° 38' 44" (RT)
D = 8° 33' 06"
R = 670.00'
T = 122.03'
L = 241.42'
E = 11.02'
e = 4.0%
P.C. Sta = 2055+79.58
P.T. Sta = 2058+21.00

CURVE DATA
PROP. CURVE 19THS 2

PI Sta = 2062+51.82
Δ = 40° 29' 04" (LT)
D = 8° 17' 30"
R = 691.00'
T = 254.82'
L = 488.25
E = 45.49
e = 4.0%
P.C. Sta = 2059+97.00
P.T. Sta = 2064+85.26

CURVE DATA
PROP. CURVE RAC-D-1

PI Sta = 822+24.66
Δ = 6° 40' 38" (LT)
D = 1° 29' 16"
R = 3,851.18'
T = 224.66'
L = 448.82'
E = 6.55'
e = 4.10%
P.C. Sta = 820+00.00
P.C.C. Sta = 824+48.82

CURVE DATA
PROP. CURVE RAC-D-2

PI Sta = 827+14.82
Δ = 22° 17' 37" (LT)
D = 4° 14' 39"
R = 1,350.00'
T = 266.00'
L = 525.28'
E = 25.96'
e = 5.30%
P.C.C. Sta = 824+48.82
P.T. Sta = 829+74.10

S.E. DATA - ℄ 19th St. SB

4.0% S.E. = Sta. 2056+08.83 to Sta. 2057+91.67
4.0% to 0.0% S.E. = Sta. 2057+91.67 to Sta. 2059+09.00
0.0% to -4.0% S.E. = Sta. 2059+09.00 to Sta. 2060+26.33
-4.0% S.E. = Sta. 2060+26.33 to Sta. 2064+56.01

S.E. DATA - ℄ RAMP AC-D

4.1% S.E. = Sta. 820+00.00 to Sta. 824+27.00
4.1% to 5.3% S.E. = Sta. 824+27.00 to Sta. 824+72.00
5.3% S.E. = Sta. 824+72.00 to Sta. 829+17.50

NOTES:

1. Beams W2-W10 & E1-E7 are all parallel to Local tangent at Sta. 95+32.43.
2. See sheet S9 for Deck Cross Slope Details.

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205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

OFFSET SKETCH & CURVE DATA
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S3 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1151
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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N. ABUT. WORK POINTS

W.P.	Station	Offset
1	92+77.49	72.71′ Lt.
2	92+77.44	75.21′ Lt.
4	92+77.41	77.05′ Lt.
5	92+89.12	72.91′ Lt.
6	92+93.62	75.74′ Lt.
7	92+94.13	75.75′ Lt.
8	92+94.11	77.33′ Lt.
9	94+03.58	00.37′ Rt.
9-1	94+03.86	00.04′ Lt.
10	94+10.47	00.74′ Lt.
10-1	94+10.01	00.04′ Lt.

All stations and offsets are measured from ℄ I-74

PIER 1 WORK POINTS

W.P.	Station	Offset
11	93+76.08	72.92′ Lt.
12	93+80.56	79.61′ Lt.
13	94+85.15	0.25′ Rt.
14	94+89.74	6.31′ Lt.

All stations and offsets are measured from ℄ I-74

PIER 2 WORK POINTS

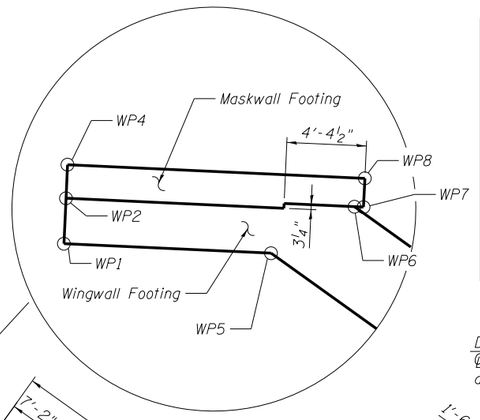
W.P.	Station	Offset
15	94+74.79	74.78′ Lt.
16	94+79.45	81.35′ Lt.
17	95+80.86	0.24′ Rt.
18	95+85.60	6.20′ Lt.

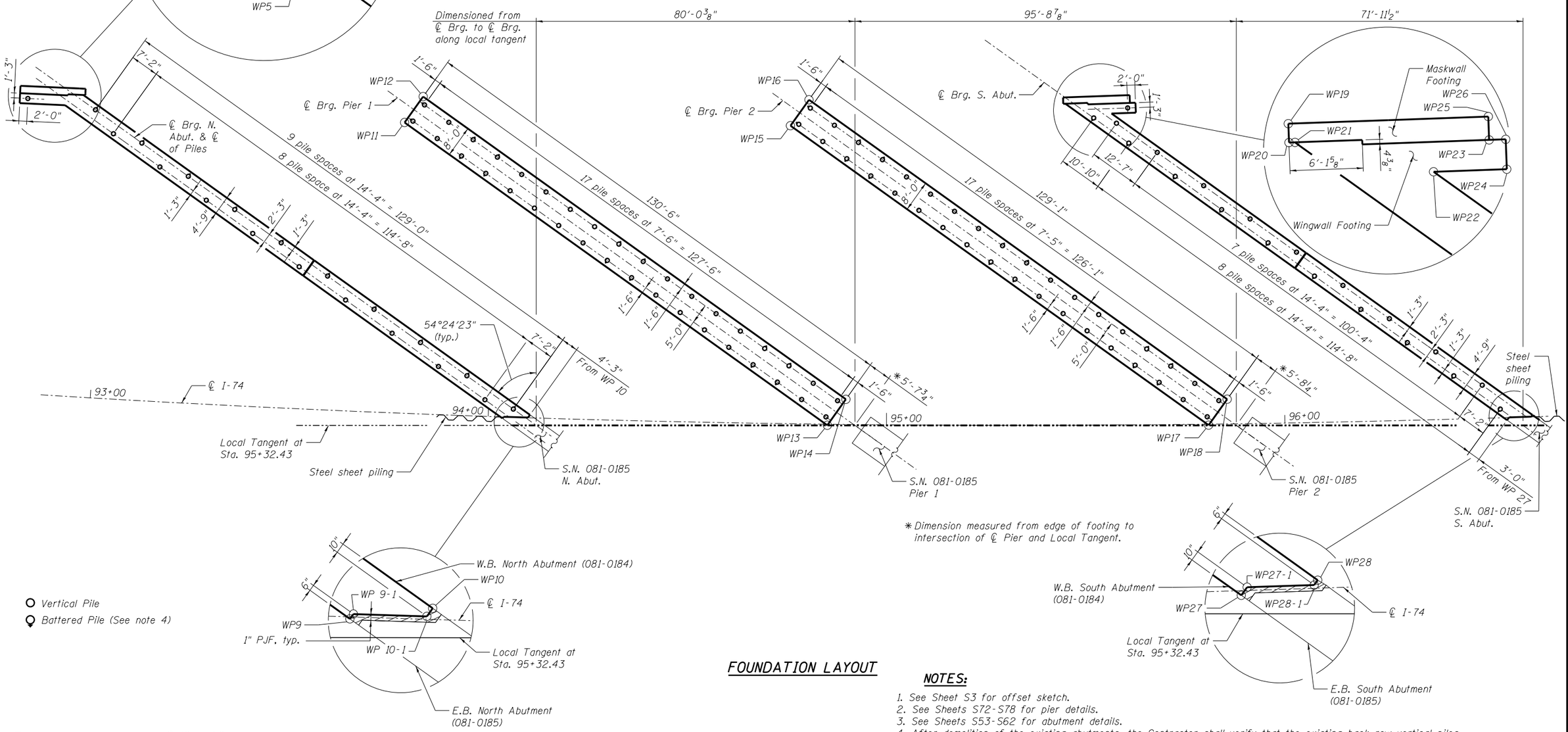
All stations and offsets are measured from ℄ I-74

S. ABUT. WORK POINTS

W.P.	Station	Offset
19	95+44.57	82.26′ Lt.
20	95+44.62	80.67′ Lt.
21	95+45.13	80.69′ Lt.
22	95+56.96	78.18′ Lt.
23	95+61.72	80.81′ Lt.
24	95+63.21	78.35′ Lt.
25	95+61.67	82.76′ Lt.
26	95+63.14	80.85′ Lt.
27	96+55.78	00.62′ Rt.
27-1	96+56.29	00.04′ Lt.
28	96+62.21	00.44′ Lt.
28-1	96+61.91	00.04′ Lt.

All stations and offsets are measured from ℄ I-74





*Dimension measured from edge of footing to intersection of ℄ Pier and Local Tangent.

FOUNDATION LAYOUT

NOTES:

1. See Sheet S3 for offset sketch.
2. See Sheets S72-S78 for pier details.
3. See Sheets S53-S62 for abutment details.
4. After demolition of the existing abutments, the Contractor shall verify that the existing back row vertical piles will not conflict with driving the proposed abutment batter piles. The Contractor shall inform the Engineer of any potential conflicts before driving piles.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB FOUNDATION LAYOUT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S4 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1152
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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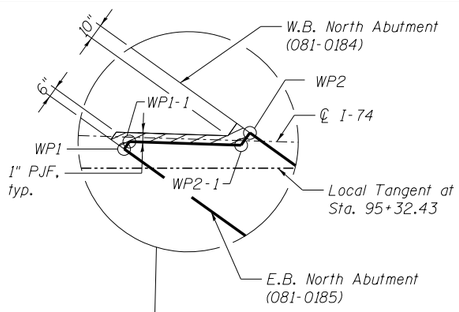


N. ABUT. WORK POINTS

W.P.	Station	Offset
1	94+03.71	00.46′ Rt.
1-1	94+03.99	00.04′ Rt.
2	94+10.60	00.65′ Lt.
2-1	94+10.13	00.04′ Rt.
3	94+93.00	67.63′ Rt.
4	94+93.04	70.13′ Rt.
5	94+96.16	70.07′ Rt.
6	94+96.19	71.89′ Rt.
7	95+00.71	67.50′ Rt.
8	95+12.38	70.07′ Rt.
9	95+12.87	70.06′ Rt.
10	95+12.89	71.64′ Rt.

All stations and offsets are measured from ℄ I-74

PIER 1 WORK POINTS

W.P.	Station	Offset
11	94+91.33	4.57′ Rt.
12	94+95.92	1.98′ Lt.
13	95+81.09	69.56′ Rt.
14	95+85.75	63.12′ Rt.

All stations and offsets are measured from ℄ I-74

PIER 2 WORK POINTS

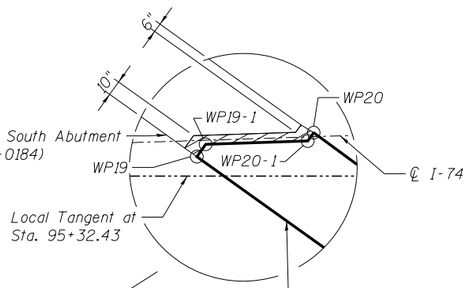
W.P.	Station	Offset
15	95+87.04	4.79′ Rt.
16	95+91.79	1.64′ Lt.
17	96+70.65	68.40′ Rt.
18	96+75.45	62.06′ Rt.

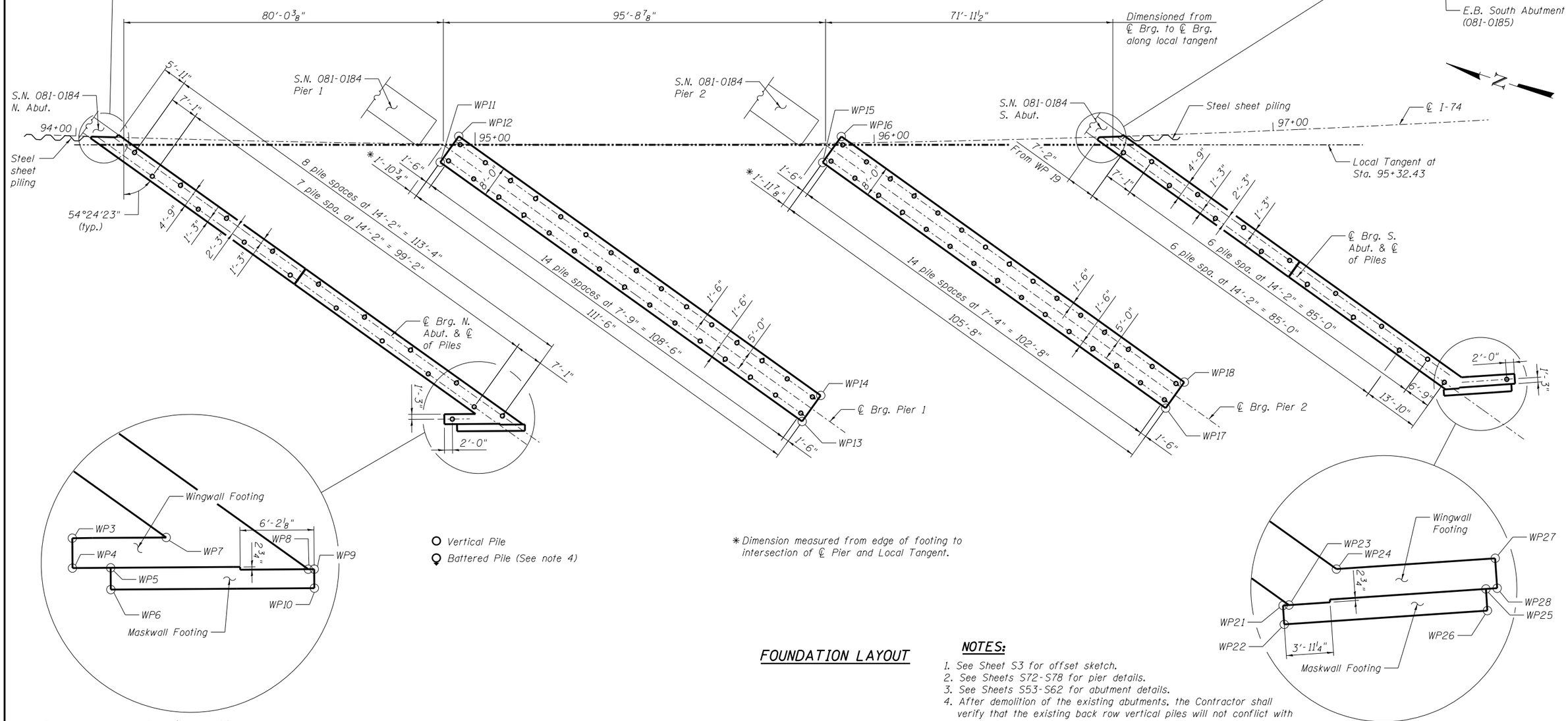
All stations and offsets are measured from ℄ I-74

S. ABUT. WORK POINTS

W.P.	Station	Offset
19	96+55.89	00.70′ Rt.
19-1	96+56.40	00.04′ Rt.
20	96+62.32	00.36′ Lt.
20-1	96+62.02	00.04′ Rt.
21	97+39.23	66.81′ Rt.
22	97+39.25	68.39′ Rt.
23	97+39.72	66.80′ Rt.
24	97+43.77	64.01′ Rt.
25	97+55.94	66.37′ Rt.
26	97+55.96	68.18′ Rt.
27	97+56.84	63.86′ Rt.
28	97+56.86	66.36′ Rt.

All stations and offsets are measured from ℄ I-74





○ Vertical Pile

Ⓞ Battered Pile (See note 4)

* Dimension measured from edge of footing to intersection of ℄ Pier and Local Tangent.

FOUNDATION LAYOUT

NOTES:

1. See Sheet S3 for offset sketch.
2. See Sheets S72-S78 for pier details.
3. See Sheets S53-S62 for abutment details.
4. After demolition of the existing abutments, the Contractor shall verify that the existing back row vertical piles will not conflict with driving the proposed abutment batter piles. The Contractor shall inform the Engineer of any potential conflicts before driving piles.

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10064.02

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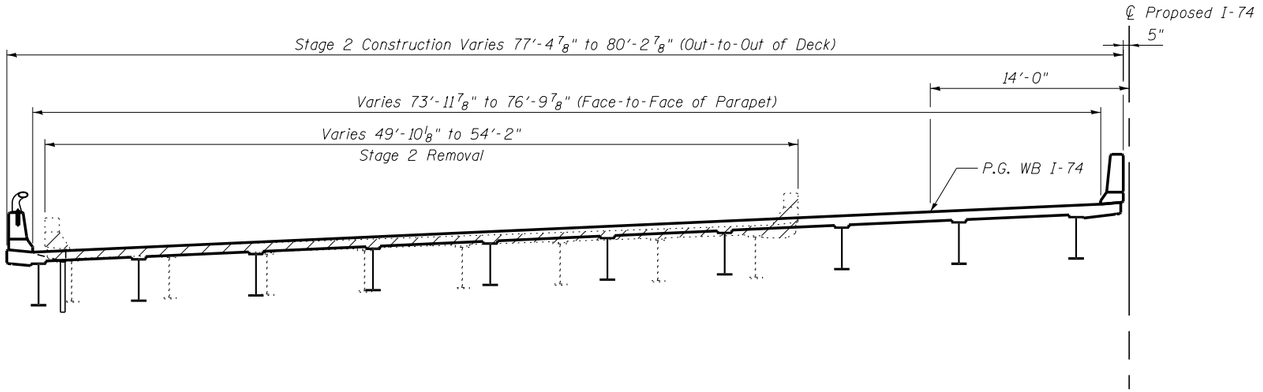
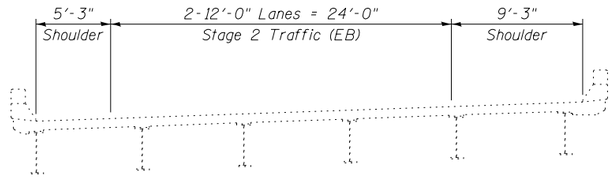
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB FOUNDATION LAYOUT
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S5 OF S91 SHEETS

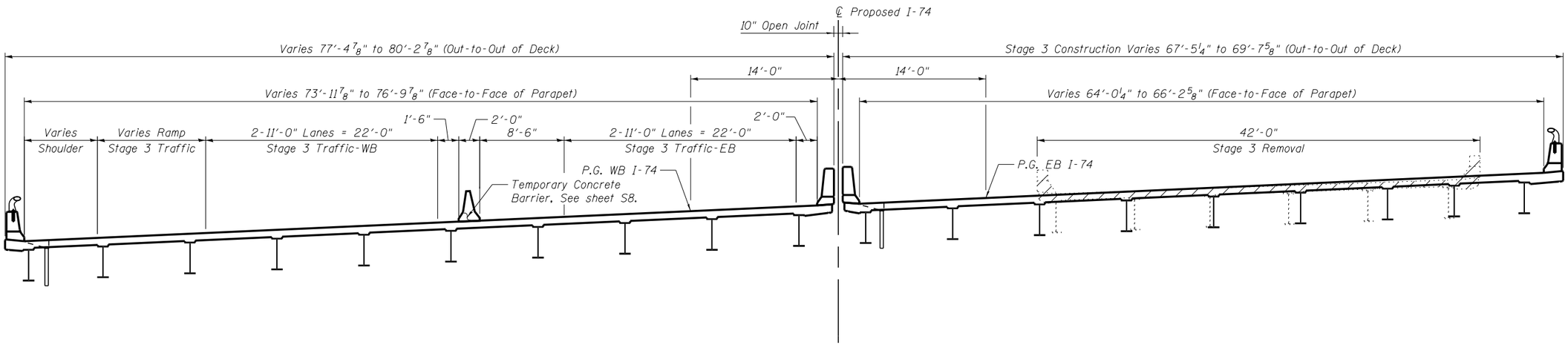
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1153
		CONTRACT NO. 64E26		
		ILLINOIS	FED. AID PROJECT	





STAGE 2 CROSS SECTION

(Looking South)
(I-74 WB Traffic is Detoured)
All dimensions are radial from ℄ Proposed I-74



STAGE 3 CROSS SECTION

(Looking South)
All dimensions are radial from ℄ Proposed I-74

NOTES:

1. Hatched area indicates removal of existing Structure No. 4.
2. For details of temporary concrete barrier, see sheet S8.
3. For quantities of temporary concrete barrier, see roadway plans.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S7 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1154
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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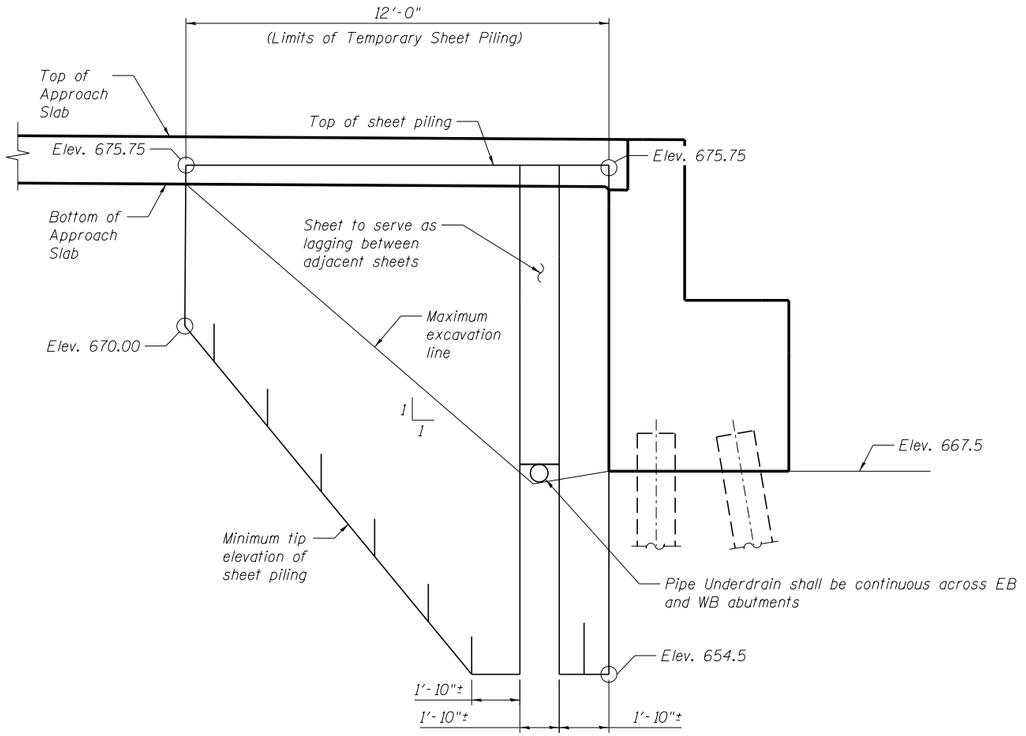
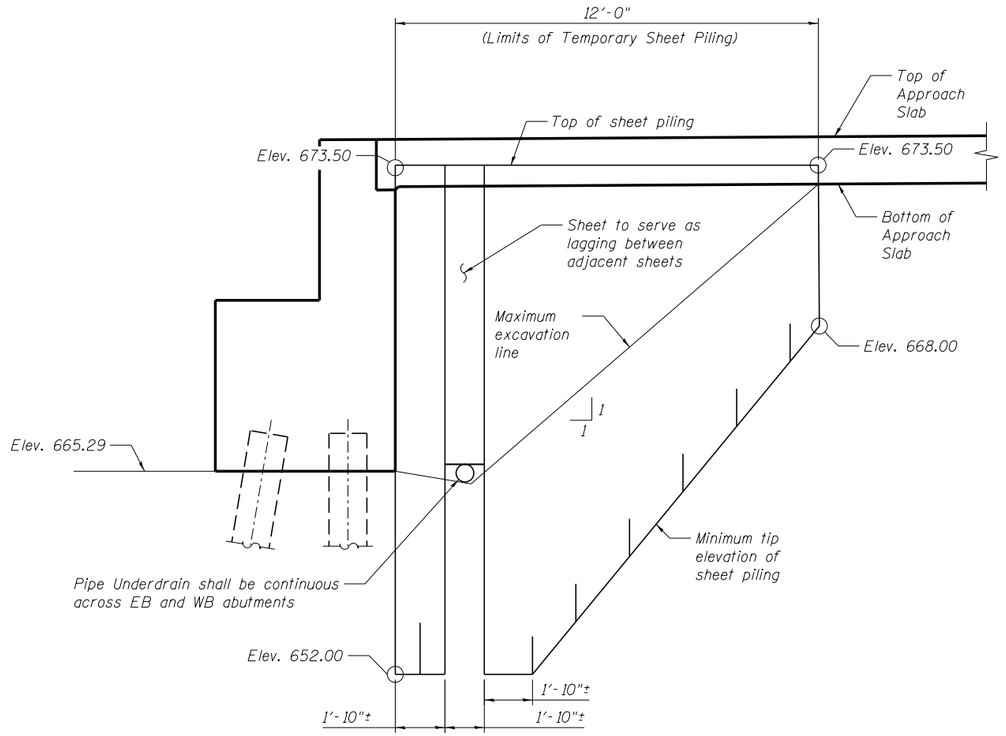


NORTH ABUTMENT TEMPORARY SHEET PILING ELEVATION

(Looking East)
(Min. Required Section Modulus = 11.0 in³/ft)



SOUTH ABUTMENT TEMPORARY SHEET PILING ELEVATION

(Looking East)
(Min. Required Section Modulus = 11.0 in³/ft)

ITEM	UNIT	TOTAL
Temporary Sheet Piling	Sq. Ft.	363

NOTES:

1. If the Contractor chooses to alter the temporary cantilever sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
2. All slope grades shown are measured along the length of the temporary sheet piling.
3. The sheet piling shall be installed prior to backfilling behind the westbound abutment.

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Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-007-Temporary_Sheet_Piling_Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - PRT	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SHEET PILING DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. 56 OF 591 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1155
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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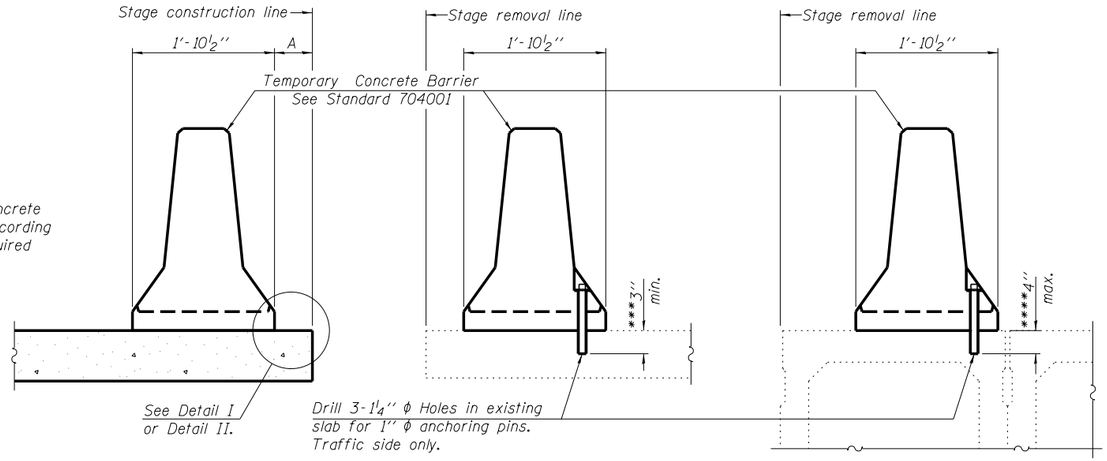
When "A" is 3'-1'' or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-1''.



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1'' x 7'' x ''W'' steel ℄ to the top layer of couplers with 2-$\frac{5}{8}$'' ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

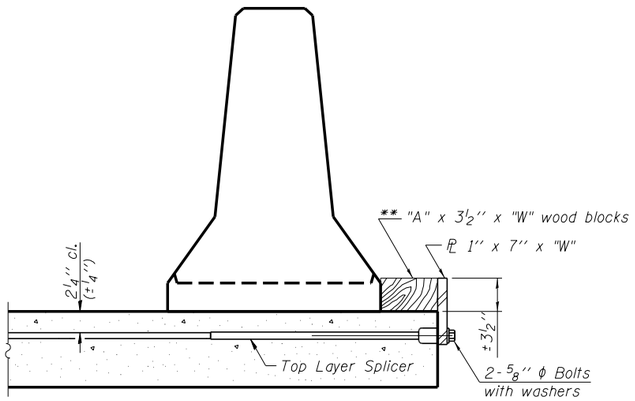
Detail II - With Extended Reinforcement Bars:
Connect one (1) 1'' x 7'' x ''W'' steel ℄ to the concrete slab or concrete wearing surface with 2-$\frac{5}{8}$'' ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

Cost of retainer assembly is included with Temporary Concrete Barrier.

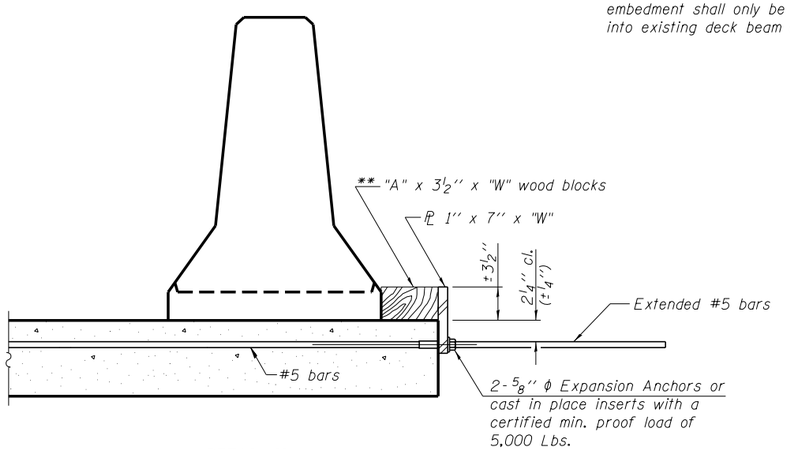
The 1'' x 7'' x ''W'' plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

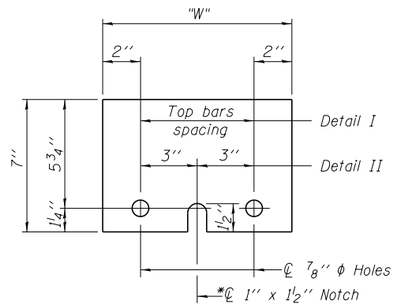
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER ℄ 1'' x 7'' x ''W''

* Required only with Detail II

RETAINER ASSEMBLY

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

R-27

1-12-15

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FILE NAME = 081-0184&0185-C00CD-008-Temporary_Concrete_Barrier_For_Stage_Construction.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S8 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1156
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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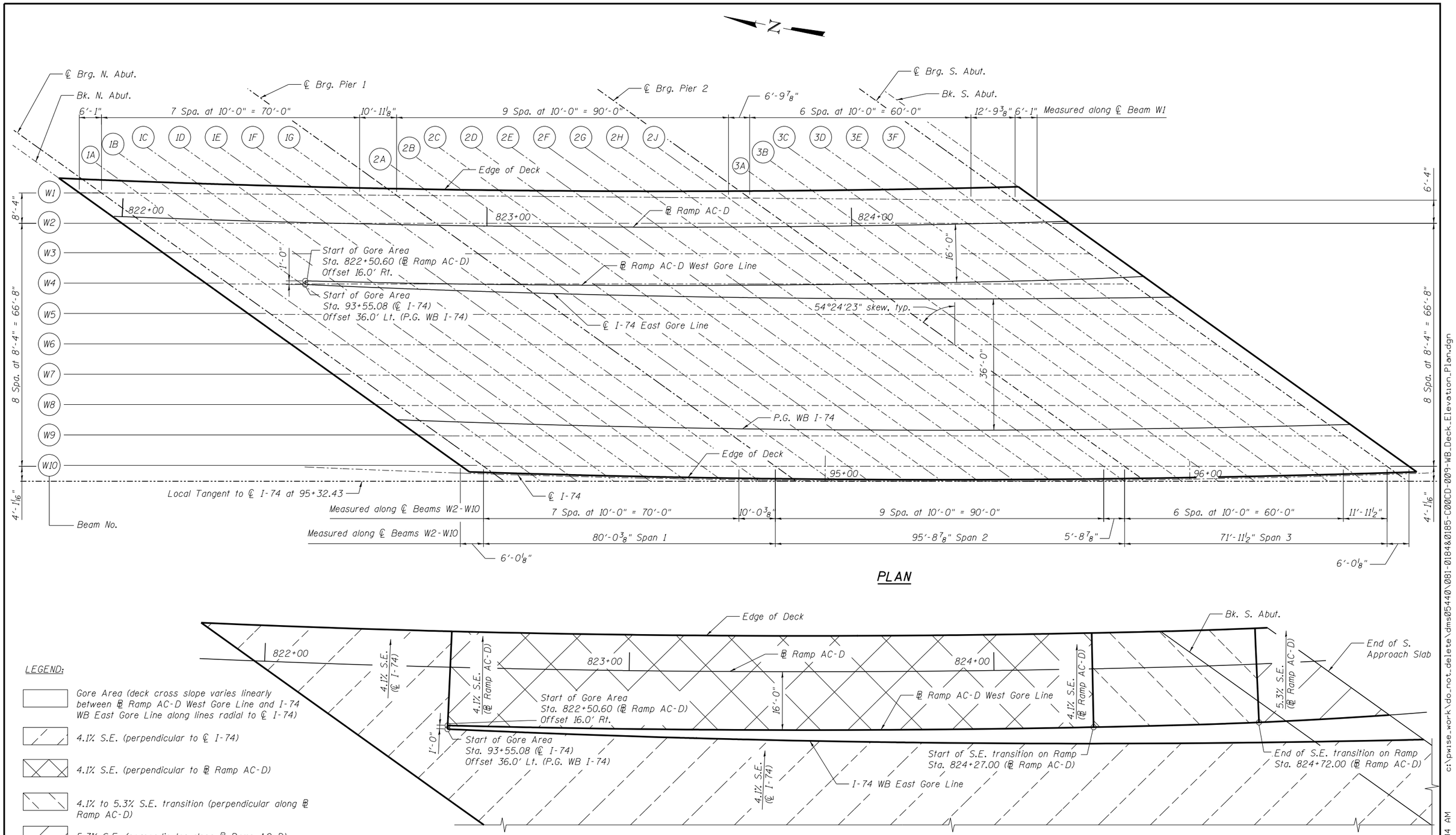

PLAN

DECK CROSS SLOPE DETAILS

LEGEND:

- Gore Area (deck cross slope varies linearly between ℄ Ramp AC-D West Gore Line and I-74 WB East Gore Line along lines radial to ℄ I-74)
- 4.1% S.E. (perpendicular to ℄ I-74)
- 4.1% S.E. (perpendicular to ℄ Ramp AC-D)
- 4.1% to 5.3% S.E. transition (perpendicular along ℄ Ramp AC-D)
- 5.3% S.E. (perpendicular along ℄ Ramp AC-D)

NOTE:

Girder spacing measured perpendicular to Local Tangent.

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FILE NAME = 081-0184&0185-C00CD-009-WB_Deck_Elevation_Plan.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB DECK ELEVATION PLAN
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S 9 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1157
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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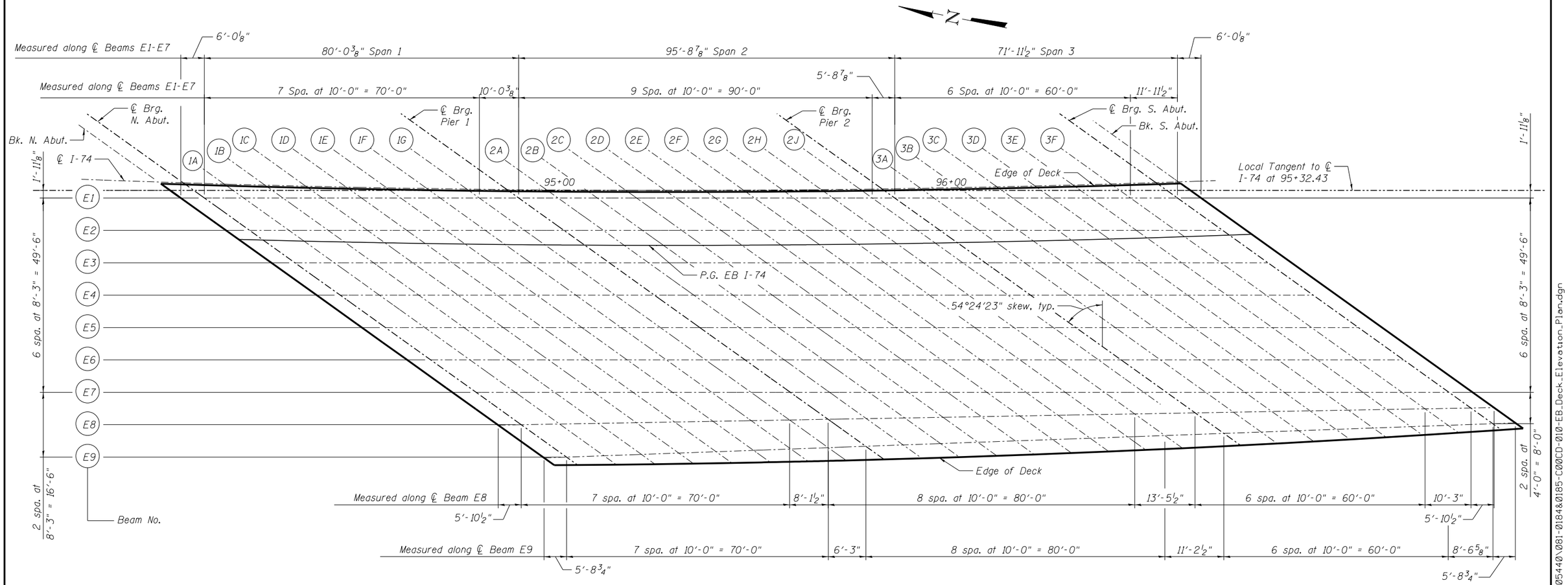

PLAN

NOTE:

Beam spacing measured perpendicular to Local Tangent.

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FILE NAME = 081-0184&0185-C00CD-010-EB_Deck_Elevation_Plan.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - DTS	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB DECK ELEVATION PLAN
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S10 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1158
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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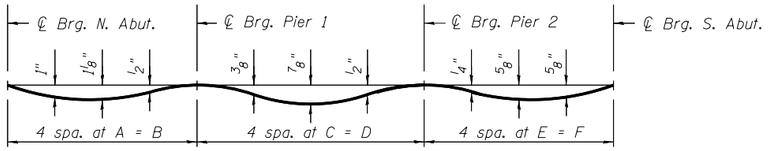
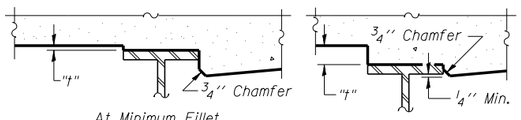


BEAMS W1 THRU W10 & E1 THRU E9 DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S11 thru S18.

BEAMS	A	B	C	D	E	F
W1	20'-2 3/4"(+)	80'-11 1/8"	24'-2 1/2"(-)	96'-9 7/8"	18'-2 3/8"(-)	72'-9 3/8"
W2-W10	20'-0 1/8"(-)	80'-0 3/8"	23'-11 1/4"(-)	95'-8 1/8"	17'-11 7/8"	71'-11 1/2"
E1-E7	20'-0 1/8"(-)	80'-0 3/8"	23'-11 1/4"(-)	95'-8 1/8"	17'-11 7/8"	71'-11 1/2"
E8	19'-6 3/8"	78'-1 1/2"	23'-4 3/8"	93'-5 1/2"	17'-6 3/4"	70'-3"
E9	19'-0 3/4"	76'-3"	22'-9 5/8"	91'-2 1/2"	17'-1 5/8"(+)	68'-6 5/8"



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets S11 thru S18, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

BEAM W1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	92+90.89	-57.82	674.00	674.00
℄ Brg. N. Abut.	92+97.08	-58.14	673.96	673.96
1A	93+07.25	-58.65	673.89	673.94
1B	93+17.43	-59.13	673.82	673.90
1C	93+27.61	-59.59	673.75	673.85
1D	93+37.79	-60.02	673.68	673.78
1E	93+47.98	-60.42	673.61	673.69
1F	93+58.16	-60.80	673.53	673.58
1G	93+68.35	-61.16	673.46	673.48
℄ Brg. Pier 1	93+79.49	-61.51	673.38	673.38
2A	93+89.68	-61.81	673.31	673.32
2B	93+99.88	-62.08	673.24	673.26
2C	94+10.07	-62.33	673.17	673.21
2D	94+20.27	-62.55	673.09	673.16
2E	94+30.47	-62.74	673.02	673.10
2F	94+40.67	-62.91	672.95	673.02
2G	94+50.87	-63.05	672.88	672.93
2H	94+61.07	-63.17	672.81	672.83
2J	94+71.27	-63.26	672.73	672.74
℄ Brg. Pier 2	94+78.23	-63.30	672.68	672.68
3A	94+88.43	-63.35	672.61	672.62
3B	94+98.64	-63.37	672.55	672.58
3C	95+08.84	-63.36	672.48	672.53
3D	95+19.04	-63.33	672.40	672.46
3E	95+29.24	-63.27	672.32	672.38
3F	95+39.44	-63.18	672.22	672.26
℄ BRG. S. Abut.	95+52.47	-63.04	672.09	672.09
Bk. S. Abut.	95+58.68	-62.95	672.02	672.02

BEAM W2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+03.30	-50.16	674.26	674.26
℄ Brg. N. Abut.	93+09.40	-50.50	674.21	674.21
1A	93+19.55	-51.06	674.14	674.19
1B	93+29.71	-51.59	674.07	674.15
1C	93+39.87	-52.10	673.99	674.10
1D	93+50.03	-52.58	673.92	674.02
1E	93+60.19	-53.03	673.84	673.92
1F	93+70.36	-53.46	673.77	673.81
1G	93+80.53	-53.86	673.69	673.71
℄ Brg. Pier 1	93+90.72	-54.23	673.62	673.62
2A	94+00.89	-54.58	673.54	673.55
2B	94+11.07	-54.91	673.47	673.49
2C	94+21.24	-55.20	673.39	673.44
2D	94+31.42	-55.48	673.32	673.38
2E	94+41.60	-55.72	673.24	673.31
2F	94+51.77	-55.94	673.16	673.23
2G	94+61.95	-56.13	673.09	673.14
2H	94+72.14	-56.30	673.01	673.04
2J	94+82.32	-56.44	672.94	672.94
℄ Brg. Pier 2	94+88.17	-56.51	672.90	672.90
3A	94+98.35	-56.61	672.82	672.83
3B	95+08.53	-56.68	672.75	672.78
3C	95+18.72	-56.73	672.68	672.72
3D	95+28.90	-56.75	672.59	672.65
3E	95+39.08	-56.75	672.50	672.56
3F	95+49.27	-56.72	672.41	672.45
℄ BRG. S. Abut.	95+61.45	-56.65	672.29	672.29
Bk. S. Abut.	95+67.57	-56.60	672.23	672.23

NOTE:
Offset measured from P.G. WB I-74.

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E-S 7-1-10

FILE NAME = 081-0184&0185-C00CD-011-Top_of_Slab_Elevations_(1_of_8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - DTS	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (1 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S11 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1159
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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℄ RAMP AC-D

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	821+97.19	0.00	674.20	674.20
℄ Brg. N. Abut.	822+03.55	0.00	674.16	674.16
1A	822+13.55	0.00	674.10	674.15
1B	822+23.55	0.00	674.04	674.13
1C	822+33.55	0.00	673.98	674.08
1D	822+43.55	0.00	673.92	674.02
1E	822+53.55	0.00	673.85	673.94
1F	822+63.55	0.00	673.79	673.84
1G	822+73.55	0.00	673.72	673.75
℄ Brg. Pier 1	822+86.74	0.00	673.63	673.63
2A	822+96.74	0.00	673.56	673.57
2B	823+06.74	0.00	673.49	673.51
2C	823+16.74	0.00	673.42	673.46
2D	823+26.74	0.00	673.35	673.41
2E	823+36.74	0.00	673.28	673.35
2F	823+46.74	0.00	673.20	673.26
2G	823+56.74	0.00	673.13	673.17
2H	823+66.74	0.00	673.05	673.07
2J	823+76.74	0.00	672.97	672.98
℄ Brg. Pier 2	823+82.97	0.00	672.92	672.92
3A	823+92.97	0.00	672.85	672.86
3B	824+02.97	0.00	672.77	672.80
3C	824+12.97	0.00	672.69	672.74
3D	824+22.97	0.00	672.59	672.66
3E	824+32.97	0.00	672.50	672.56
3F	824+42.97	0.00	672.39	672.43
℄ BRG. S. Abut.	824+53.18	0.00	672.28	672.28
Bk. S. Abut.	824+58.94	0.00	672.21	672.21

BEAM W3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+15.59	-42.50	674.51	674.51
℄ Brg. N. Abut.	93+21.68	-42.83	674.47	674.47
1A	93+31.81	-43.35	674.39	674.44
1B	93+41.95	-43.85	674.32	674.41
1C	93+52.09	-44.33	674.25	674.35
1D	93+62.23	-44.78	674.17	674.27
1E	93+72.37	-45.20	674.09	674.17
1F	93+82.52	-45.59	674.02	674.06
1G	93+92.67	-45.96	673.94	673.96
℄ Brg. Pier 1	94+02.84	-46.31	673.87	673.87
2A	94+13.00	-46.63	673.80	673.80
2B	94+23.15	-46.92	673.72	673.74
2C	94+33.30	-47.19	673.65	673.69
2D	94+43.46	-47.43	673.57	673.64
2E	94+53.62	-47.64	673.49	673.57
2F	94+63.78	-47.83	673.42	673.49
2G	94+73.94	-47.99	673.34	673.39
2H	94+84.10	-48.13	673.27	673.29
2J	94+94.26	-48.24	673.19	673.20
℄ Brg. Pier 2	95+00.09	-48.29	673.15	673.15
3A	95+10.25	-48.36	673.08	673.09
3B	95+20.42	-48.40	673.00	673.03
3C	95+30.58	-48.42	672.92	672.97
3D	95+40.74	-48.41	672.84	672.90
3E	95+50.90	-48.38	672.77	672.83
3F	95+61.06	-48.32	672.70	672.73
℄ BRG. S. Abut.	95+73.22	-48.21	672.61	672.61
Bk. S. Abut.	95+79.33	-48.15	672.56	672.56

℄ RAMP AC-D WEST GORE LINE

* Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Start	93+55.08	-37.00	674.53	674.62
1C-Mod	93+65.21	-37.20	674.46	674.57
1D-Mod	93+75.34	-37.40	674.40	674.50
1E-Mod	93+85.46	-37.59	674.33	674.41
1F-Mod	93+95.59	-37.79	674.26	674.31
1G-Mod	94+05.72	-37.99	674.19	674.21
℄ Brg. Pier 1	94+18.46	-38.24	674.11	674.11
2A-Mod	94+28.59	-38.44	674.03	674.04
2B-Mod	94+38.72	-38.63	673.96	673.98
2C-Mod	94+48.85	-38.83	673.89	673.93
2D-Mod	94+58.98	-39.03	673.81	673.87
2E-Mod	94+69.11	-39.23	673.74	673.81
2F-Mod	94+79.24	-39.42	673.66	673.72
2G-Mod	94+89.36	-39.62	673.58	673.63
2H-Mod	94+99.49	-39.82	673.51	673.53
2J-Mod	95+09.62	-40.02	673.43	673.44
℄ Brg. Pier 2	95+17.74	-40.18	673.36	673.36
3A-Mod	95+27.87	-40.37	673.27	673.28
3B-Mod	95+38.00	-40.57	673.19	673.22
3C-Mod	95+48.13	-40.77	673.13	673.19
3D-Mod	95+58.26	-40.96	673.07	673.13
3E-Mod	95+68.38	-41.19	673.00	673.06
3F-Mod	95+78.51	-41.47	672.92	672.96
℄ BRG. S. Abut.	95+90.08	-41.84	672.79	672.79
Bk. S. Abut.-Mod	95+96.04	-42.05	672.71	672.71

I-74 WB EAST GORE LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Start	93+55.08	-36.00	674.57	674.67
1C	93+65.21	-36.00	674.52	674.62
1D	93+75.34	-36.00	674.46	674.56
1E	93+85.46	-36.00	674.40	674.48
1F	93+95.59	-36.00	674.34	674.38
1G	94+05.72	-36.00	674.28	674.29
℄ Brg. Pier 1	94+18.46	-36.00	674.20	674.20
2A	94+28.59	-36.00	674.13	674.13
2B	94+38.72	-36.00	674.06	674.08
2C	94+48.85	-36.00	673.99	674.03
2D	94+58.98	-36.00	673.92	673.98
2E	94+69.11	-36.00	673.85	673.92
2F	94+79.24	-36.00	673.78	673.84
2G	94+89.36	-36.00	673.70	673.75
2H	94+99.49	-36.00	673.63	673.65
2J	95+09.62	-36.00	673.55	673.55
℄ Brg. Pier 2	95+17.74	-36.00	673.48	673.48
3A	95+27.87	-36.00	673.40	673.41
3B	95+38.00	-36.00	673.32	673.35
3C	95+48.13	-36.00	673.23	673.29
3D	95+58.26	-36.00	673.15	673.21
3E	95+68.38	-36.00	673.06	673.12
3F	95+78.51	-36.00	672.97	673.01
℄ BRG. S. Abut.	95+90.08	-36.00	672.87	672.87
Bk. S. Abut.	95+96.04	-36.00	672.82	672.82

* Location of Screed Points for ℄ Ramp AC-D West Gore Line is measured radially with respect to ℄ I-74 from same screed point on ℄ I-74 East Gore Line.

NOTE:
Offset measured from P.G. WB I-74, except at ℄ Ramp AC-D.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

E-S 7-1-10

FILE NAME = 081-0184&0185-C00CD-012-Top_of_Slab_Elevations_(2_of_8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (2 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S12 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1160
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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BEAM W4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+27.82	-34.81	674.77	674.77
℄ Brg. N. Abut.	93+33.91	-35.12	674.72	674.72
1A	93+44.02	-35.61	674.65	674.70
1B	93+54.14	-36.08	674.57	674.66
1C	93+64.26	-36.52	674.50	674.60
1D	93+74.38	-36.94	674.42	674.52
1E	93+84.51	-37.33	674.35	674.42
1F	93+94.63	-37.69	674.27	674.32
1G	94+04.76	-38.03	674.20	674.22
℄ Brg. Pier 1	94+14.92	-38.35	674.12	674.12
2A	94+25.05	-38.63	674.05	674.05
2B	94+35.18	-38.90	673.97	674.00
2C	94+45.32	-39.13	673.90	673.95
2D	94+55.45	-39.34	673.82	673.89
2E	94+65.59	-39.53	673.75	673.82
2F	94+75.73	-39.68	673.67	673.74
2G	94+85.87	-39.82	673.60	673.65
2H	94+96.00	-39.92	673.52	673.55
2J	95+06.14	-40.00	673.45	673.46
℄ Brg. Pier 2	95+11.97	-40.04	673.41	673.41
3A	95+22.11	-40.07	673.33	673.34
3B	95+32.25	-40.09	673.25	673.28
3C	95+42.39	-40.08	673.18	673.23
3D	95+52.53	-40.04	673.12	673.18
3E	95+62.67	-39.97	673.05	673.11
3F	95+72.81	-39.88	672.98	673.02
℄ BRG. S. Abut.	95+84.93	-39.74	672.87	672.87
Bk. S. Abut.	95+91.03	-39.66	672.81	672.81

BEAM W5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+40.02	-27.07	675.02	675.02
℄ Brg. N. Abut.	93+46.09	-27.36	674.98	674.98
1A	93+56.18	-27.83	674.90	674.95
1B	93+66.28	-28.27	674.83	674.91
1C	93+76.38	-28.68	674.75	674.86
1D	93+86.49	-29.06	674.68	674.78
1E	93+96.59	-29.42	674.60	674.68
1F	94+06.70	-29.76	674.53	674.57
1G	94+16.81	-30.07	674.45	674.47
℄ Brg. Pier 1	94+26.94	-30.35	674.37	674.37
2A	94+37.05	-30.61	674.29	674.30
2B	94+47.17	-30.84	674.22	674.24
2C	94+57.28	-31.04	674.14	674.19
2D	94+67.40	-31.22	674.06	674.13
2E	94+77.51	-31.37	673.98	674.05
2F	94+87.63	-31.50	673.90	673.97
2G	94+97.74	-31.60	673.82	673.87
2H	95+07.86	-31.68	673.74	673.76
2J	95+17.98	-31.73	673.66	673.66
℄ Brg. Pier 2	95+23.79	-31.75	673.61	673.61
3A	95+33.91	-31.75	673.53	673.54
3B	95+44.03	-31.74	673.44	673.47
3C	95+54.15	-31.70	673.36	673.41
3D	95+64.26	-31.63	673.28	673.34
3E	95+74.38	-31.53	673.19	673.25
3F	95+84.50	-31.41	673.11	673.15
℄ BRG. S. Abut.	95+96.60	-31.23	673.01	673.01
Bk. S. Abut.	96+02.68	-31.13	672.96	672.96

BEAM W6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+52.16	-19.30	675.27	675.27
℄ Brg. N. Abut.	93+58.22	-19.58	675.23	675.23
1A	93+68.29	-20.01	675.16	675.20
1B	93+78.37	-20.42	675.08	675.17
1C	93+88.46	-20.80	675.01	675.11
1D	93+98.54	-21.15	674.93	675.03
1E	94+08.62	-21.48	674.85	674.93
1F	94+18.71	-21.78	674.78	674.82
1G	94+28.80	-22.06	674.70	674.72
℄ Brg. Pier 1	94+38.92	-22.31	674.62	674.62
2A	94+49.01	-22.54	674.54	674.55
2B	94+59.10	-22.74	674.47	674.49
2C	94+69.19	-22.92	674.39	674.43
2D	94+79.29	-23.06	674.31	674.37
2E	94+89.38	-23.19	674.23	674.30
2F	94+99.48	-23.28	674.15	674.21
2G	95+09.57	-23.36	674.07	674.11
2H	95+19.67	-23.40	673.98	674.01
2J	95+29.77	-23.42	673.90	673.91
℄ Brg. Pier 2	95+35.56	-23.42	673.86	673.86
3A	95+45.66	-23.40	673.77	673.78
3B	95+55.76	-23.35	673.69	673.72
3C	95+65.85	-23.28	673.61	673.65
3D	95+75.95	-23.18	673.52	673.58
3E	95+86.04	-23.06	673.44	673.49
3F	95+96.14	-22.91	673.35	673.39
℄ BRG. S. Abut.	96+08.21	-22.69	673.26	673.26
Bk. S. Abut.	96+14.28	-22.57	673.21	673.21

NOTE:
Offset measured from P.G. WB I-74.

benesch
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312-565-0450 Job No. 10064.02

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FILE NAME = 081-0184&0185-C00CD-013-Top.of.Slab.Elevations.(3.of.8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - DTS	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (3 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S13 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1161
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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BEAM W7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+64.25	-11.50	675.53	675.53
℄ Brg. N. Abut.	93+70.30	-11.75	675.48	675.48
1A	93+80.36	-12.15	675.41	675.46
1B	93+90.42	-12.53	675.33	675.42
1C	94+00.48	-12.88	675.26	675.36
1D	94+10.54	-13.20	675.18	675.28
1E	94+20.61	-13.50	675.10	675.18
1F	94+30.68	-13.78	675.03	675.07
1G	94+40.75	-14.02	674.95	674.97
℄ Brg. Pier 1	94+50.84	-14.24	674.87	674.87
2A	94+60.91	-14.44	674.79	674.80
2B	94+70.98	-14.61	674.71	674.73
2C	94+81.06	-14.75	674.64	674.68
2D	94+91.13	-14.87	674.56	674.62
2E	95+01.20	-14.97	674.47	674.54
2F	95+11.28	-15.03	674.39	674.45
2G	95+21.35	-15.07	674.31	674.35
2H	95+31.43	-15.09	674.23	674.25
2J	95+41.50	-15.08	674.15	674.15
℄ Brg. Pier 2	95+47.29	-15.06	674.10	674.10
3A	95+57.36	-15.01	674.02	674.03
3B	95+67.44	-14.93	673.93	673.96
3C	95+77.51	-14.83	673.85	673.90
3D	95+87.58	-14.70	673.77	673.83
3E	95+97.66	-14.55	673.68	673.75
3F	96+07.73	-14.37	673.60	673.64
℄ BRG. S. Abut.	96+19.77	-14.12	673.51	673.51
Bk. S. Abut.	96+25.83	-13.98	673.46	673.46

BEAM W8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+76.29	-3.65	675.78	675.78
℄ Brg. N. Abut.	93+82.33	-3.89	675.73	675.73
1A	93+92.37	-4.26	675.66	675.71
1B	94+02.41	-4.61	675.58	675.67
1C	94+12.45	-4.93	675.51	675.61
1D	94+22.50	-5.22	675.43	675.53
1E	94+32.55	-5.49	675.35	675.43
1F	94+42.59	-5.73	675.28	675.32
1G	94+52.64	-5.95	675.20	675.22
℄ Brg. Pier 1	94+62.72	-6.14	675.12	675.12
2A	94+72.77	-6.30	675.04	675.04
2B	94+82.82	-6.44	674.96	674.98
2C	94+92.87	-6.56	674.88	674.92
2D	95+02.92	-6.65	674.80	674.86
2E	95+12.97	-6.71	674.72	674.79
2F	95+23.03	-6.75	674.64	674.70
2G	95+33.08	-6.76	674.56	674.60
2H	95+43.13	-6.74	674.48	674.49
2J	95+53.19	-6.70	674.39	674.40
℄ Brg. Pier 2	95+58.96	-6.67	674.35	674.35
3A	95+69.01	-6.59	674.26	674.27
3B	95+79.07	-6.48	674.18	674.21
3C	95+89.12	-6.35	674.10	674.15
3D	95+99.17	-6.19	674.01	674.08
3E	96+09.22	-6.01	673.93	673.99
3F	96+19.27	-5.80	673.85	673.89
℄ BRG. S. Abut.	96+31.29	-5.51	673.76	673.76
Bk. S. Abut.	96+37.33	-5.36	673.71	673.71

P.G. WB I-74

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+81.87	0.00	675.90	675.90
℄ Brg. N. Abut.	93+88.24	0.00	675.86	675.86
1A	93+98.28	0.00	675.80	675.85
1B	94+08.32	0.00	675.74	675.82
1C	94+18.35	0.00	675.67	675.78
1D	94+28.39	0.00	675.61	675.71
1E	94+38.42	0.00	675.54	675.62
1F	94+48.46	0.00	675.47	675.52
1G	94+58.49	0.00	675.40	675.43
℄ Brg. Pier 1	94+71.64	0.00	675.31	675.31
2A	94+81.67	0.00	675.24	675.24
2B	94+91.71	0.00	675.16	675.18
2C	95+01.74	0.00	675.08	675.13
2D	95+11.78	0.00	675.01	675.07
2E	95+21.81	0.00	674.93	675.00
2F	95+31.85	0.00	674.85	674.91
2G	95+41.88	0.00	674.76	674.80
2H	95+51.92	0.00	674.68	674.70
2J	95+61.95	0.00	674.59	674.60
℄ Brg. Pier 2	95+68.16	0.00	674.54	674.54
3A	95+78.19	0.00	674.45	674.46
3B	95+88.23	0.00	674.36	674.39
3C	95+98.26	0.00	674.28	674.33
3D	96+08.30	0.00	674.19	674.25
3E	96+18.33	0.00	674.10	674.16
3F	96+28.37	0.00	674.01	674.05
℄ BRG. S. Abut.	96+38.61	0.00	673.92	673.92
Bk. S. Abut.	96+44.42	0.00	673.87	673.87

NOTE:
Offset measured from P.G. WB I-74.

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312-565-0450 Job No. 10064.02

E-S 7-1-10

FILE NAME = 081-0184&0185-C00CD-014-Top_of_Slab_Elevations_(4_of_8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (4 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S14 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1162
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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BEAM W9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	93+88.29	4.23	676.03	676.03
℄ Brg. N. Abut.	93+94.31	4.01	675.99	675.99
1A	94+04.33	3.67	675.91	675.96
1B	94+14.36	3.36	675.84	675.92
1C	94+24.38	3.07	675.76	675.86
1D	94+34.41	2.80	675.68	675.78
1E	94+44.43	2.57	675.61	675.68
1F	94+54.46	2.35	675.53	675.57
1G	94+64.49	2.17	675.45	675.47
℄ Brg. Pier 1	94+74.54	2.01	675.37	675.37
2A	94+84.57	1.87	675.29	675.29
2B	94+94.60	1.76	675.21	675.23
2C	95+04.63	1.68	675.13	675.17
2D	95+14.66	1.62	675.05	675.11
2E	95+24.70	1.59	674.97	675.04
2F	95+34.73	1.58	674.89	674.95
2G	95+44.76	1.60	674.80	674.85
2H	95+54.79	1.64	674.72	674.74
2J	95+64.82	1.71	674.64	674.64
℄ Brg. Pier 2	95+70.58	1.76	674.59	674.59
3A	95+80.61	1.87	674.51	674.52
3B	95+90.64	2.01	674.42	674.46
3C	96+00.67	2.17	674.34	674.40
3D	96+10.70	2.36	674.26	674.33
3E	96+20.73	2.57	674.18	674.24
3F	96+30.75	2.81	674.10	674.14
℄ BRG. S. Abut.	96+42.75	3.13	674.01	674.01
Bk. S. Abut.	96+48.77	3.30	673.97	673.97

BEAM W10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+00.24	12.14	676.28	676.28
℄ Brg. N. Abut.	94+06.25	11.95	676.24	676.24
1A	94+16.25	11.64	676.16	676.21
1B	94+26.25	11.35	676.09	676.18
1C	94+36.26	11.09	676.01	676.12
1D	94+46.26	10.86	675.93	676.03
1E	94+56.27	10.65	675.85	675.93
1F	94+66.28	10.47	675.78	675.82
1G	94+76.28	10.31	675.70	675.71
℄ Brg. Pier 1	94+86.32	10.18	675.62	675.62
2A	94+96.33	10.08	675.54	675.54
2B	95+06.34	10.00	675.46	675.48
2C	95+16.35	9.94	675.38	675.42
2D	95+26.36	9.92	675.30	675.36
2E	95+36.37	9.91	675.21	675.28
2F	95+46.38	9.94	675.13	675.19
2G	95+56.39	9.98	675.05	675.09
2H	95+66.40	10.06	674.97	674.99
2J	95+76.41	10.16	674.88	674.89
℄ Brg. Pier 2	95+82.15	10.23	674.84	674.84
3A	95+92.16	10.37	674.75	674.76
3B	96+02.17	10.53	674.67	674.70
3C	96+12.18	10.72	674.59	674.64
3D	96+22.18	10.94	674.51	674.58
3E	96+32.19	11.18	674.44	674.50
3F	96+42.19	11.45	674.36	674.40
℄ BRG. S. Abut.	96+54.16	11.80	674.27	674.27
Bk. S. Abut.	96+60.17	12.00	674.22	674.22

BEAM E1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+08.83	-10.12	676.79	676.79
℄ Brg. N. Abut.	94+14.84	-10.30	676.72	676.72
1A	94+24.82	-10.59	676.60	676.65
1B	94+34.81	-10.85	676.49	676.57
1C	94+44.80	-11.09	676.37	676.47
1D	94+54.79	-11.30	676.26	676.35
1E	94+64.78	-11.49	676.14	676.22
1F	94+74.78	-11.65	676.03	676.07
1G	94+84.77	-11.78	675.92	675.93
℄ Brg. Pier 1	94+94.79	-11.89	675.81	675.81
2A	95+04.78	-11.97	675.70	675.70
2B	95+14.78	-12.03	675.59	675.61
2C	95+24.77	-12.06	675.48	675.53
2D	95+34.77	-12.07	675.37	675.44
2E	95+44.76	-12.05	675.27	675.34
2F	95+54.76	-12.01	675.16	675.23
2G	95+64.75	-11.94	675.06	675.11
2H	95+74.75	-11.84	674.96	674.98
2J	95+84.74	-11.72	674.86	674.86
℄ Brg. Pier 2	95+90.48	-11.64	674.80	674.80
3A	96+00.47	-11.48	674.70	674.71
3B	96+10.46	-11.29	674.60	674.63
3C	96+20.45	-11.08	674.50	674.55
3D	96+30.44	-10.84	674.41	674.47
3E	96+40.43	-10.58	674.31	674.37
3F	96+50.42	-10.29	674.22	674.25
℄ BRG. S. Abut.	96+62.36	-9.91	674.11	674.11
Bk. S. Abut.	96+68.36	-9.71	674.05	674.05

NOTE:
Offset measured from P.G. WB I-74, except Beam E1 where offset is measured from P.G. EB I-74.

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

E-S 7-1-10

FILE NAME = 081-0184&0185-C00CD-015-Top_of_Slab_Elevations_(5_of_8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (5 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S15 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1163
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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BEAM E2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+20.58	-2.22	676.99	676.99
℄ Brg. N. Abut.	94+26.57	-2.39	676.92	676.92
1A	94+36.54	-2.64	676.80	676.85
1B	94+46.51	-2.88	676.69	676.77
1C	94+56.48	-3.08	676.57	676.68
1D	94+66.45	-3.26	676.46	676.56
1E	94+76.42	-3.42	676.35	676.43
1F	94+86.39	-3.55	676.24	676.28
1G	94+96.36	-3.66	676.13	676.14
℄ Brg. Pier 1	95+06.36	-3.74	676.02	676.02
2A	95+16.34	-3.79	675.91	675.91
2B	95+26.31	-3.82	675.80	675.83
2C	95+36.28	-3.82	675.70	675.74
2D	95+46.26	-3.80	675.59	675.66
2E	95+56.23	-3.75	675.49	675.56
2F	95+66.21	-3.68	675.38	675.45
2G	95+76.18	-3.58	675.28	675.33
2H	95+86.15	-3.45	675.18	675.20
2J	95+96.12	-3.30	675.08	675.09
℄ Brg. Pier 2	96+01.85	-3.20	675.02	675.02
3A	96+11.82	-3.01	674.93	674.93
3B	96+21.79	-2.80	674.83	674.86
3C	96+31.76	-2.56	674.73	674.78
3D	96+41.72	-2.29	674.64	674.70
3E	96+51.69	-2.00	674.54	674.60
3F	96+61.65	-1.68	674.45	674.49
℄ BRG. S. Abut.	96+73.57	-1.27	674.34	674.34
Bk. S. Abut.	96+79.56	-1.05	674.29	674.29

P.G. EB I-74

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+23.86	0.00	677.05	677.05
℄ Brg. N. Abut.	94+30.09	0.00	676.98	676.98
1A	94+40.05	0.00	676.88	676.93
1B	94+50.01	0.00	676.77	676.86
1C	94+59.98	0.00	676.66	676.77
1D	94+69.94	0.00	676.56	676.66
1E	94+79.90	0.00	676.45	676.53
1F	94+89.87	0.00	676.35	676.40
1G	94+99.83	0.00	676.24	676.26
℄ Brg. Pier 1	95+11.63	0.00	676.11	676.11
2A	95+21.59	0.00	676.01	676.01
2B	95+31.56	0.00	675.90	675.92
2C	95+41.52	0.00	675.80	675.84
2D	95+51.48	0.00	675.69	675.75
2E	95+61.45	0.00	675.59	675.65
2F	95+71.41	0.00	675.48	675.54
2G	95+81.37	0.00	675.37	675.41
2H	95+91.34	0.00	675.27	675.28
℄ Brg. Pier 2	96+06.14	0.00	675.11	675.11
3A	96+16.11	0.00	675.00	675.01
3B	96+26.07	0.00	674.90	674.93
3C	96+36.03	0.00	674.79	674.85
3D	96+45.99	0.00	674.69	674.75
3E	96+55.96	0.00	674.58	674.64
3F	96+65.92	0.00	674.47	674.51
℄ BRG. S. Abut.	96+75.21	0.00	674.38	674.38
Bk. S. Abut.	96+80.91	0.00	674.32	674.32

BEAM E3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+32.28	5.72	677.19	677.19
℄ Brg. N. Abut.	94+38.26	5.57	677.12	677.12
1A	94+48.21	5.34	677.01	677.06
1B	94+58.15	5.14	676.89	676.98
1C	94+68.10	4.96	676.78	676.88
1D	94+78.06	4.81	676.67	676.77
1E	94+88.01	4.68	676.56	676.63
1F	94+97.96	4.58	676.45	676.49
1G	95+07.91	4.50	676.34	676.36
℄ Brg. Pier 1	95+17.89	4.45	676.23	676.23
2A	95+27.84	4.43	676.12	676.13
2B	95+37.79	4.43	676.02	676.04
2C	95+47.75	4.46	675.91	675.96
2D	95+57.70	4.51	675.81	675.88
2E	95+67.65	4.59	675.71	675.78
2F	95+77.61	4.69	675.61	675.67
2G	95+87.56	4.82	675.51	675.55
2H	95+97.51	4.97	675.41	675.43
2J	96+07.46	5.15	675.31	675.31
℄ Brg. Pier 2	96+13.17	5.26	675.25	675.25
3A	96+23.12	5.48	675.15	675.16
3B	96+33.07	5.73	675.06	675.09
3C	96+43.01	6.00	674.96	675.01
3D	96+52.96	6.29	674.87	674.93
3E	96+62.90	6.61	674.78	674.83
3F	96+72.84	6.96	674.69	674.72
℄ BRG. S. Abut.	96+84.73	7.41	674.58	674.58
Bk. S. Abut.	96+90.71	7.65	674.52	674.52

NOTE:
Offset measured from P.G. EB I-74.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10064.02

E-S 7-1-10

FILE NAME = 081-0184&0185-C00CD-016-Top_of_Slab_Elevations_(6_of_8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - DTS	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (6 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S16 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1164
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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BEAM E4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+43.93	13.69	677.40	677.40
℄ Brg. N. Abut.	94+49.90	13.55	677.33	677.33
1A	94+59.83	13.36	677.21	677.26
1B	94+69.75	13.18	677.10	677.19
1C	94+79.69	13.04	676.99	677.09
1D	94+89.62	12.91	676.88	676.98
1E	94+99.55	12.82	676.77	676.85
1F	95+09.48	12.75	676.66	676.71
1G	95+19.41	12.70	676.55	676.57
℄ Brg. Pier 1	95+29.37	12.68	676.45	676.45
2A	95+39.30	12.68	676.34	676.35
2B	95+49.23	12.71	676.24	676.26
2C	95+59.16	12.77	676.13	676.18
2D	95+69.10	12.85	676.03	676.10
2E	95+79.03	12.96	675.93	676.00
2F	95+88.96	13.09	675.83	675.90
2G	95+98.89	13.25	675.73	675.78
2H	96+08.82	13.43	675.63	675.66
2J	96+18.74	13.64	675.54	675.54
℄ Brg. Pier 2	96+24.44	13.77	675.48	675.48
3A	96+34.37	14.02	675.38	675.39
3B	96+44.30	14.29	675.29	675.32
3C	96+54.22	14.59	675.20	675.25
3D	96+64.14	14.91	675.10	675.17
3E	96+74.06	15.26	675.01	675.07
3F	96+83.98	15.63	674.92	674.96
℄ BRG. S. Abut.	96+95.84	16.11	674.82	674.82
Bk. S. Abut.	97+01.80	16.37	674.76	674.76

BEAM E5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+55.53	21.69	677.60	677.60
℄ Brg. N. Abut.	94+61.49	21.58	677.53	677.53
1A	94+71.40	21.41	677.42	677.47
1B	94+81.31	21.26	677.31	677.39
1C	94+91.22	21.15	677.20	677.30
1D	95+01.13	21.05	677.09	677.19
1E	95+11.04	20.99	676.98	677.06
1F	95+20.95	20.94	676.87	676.92
1G	95+30.86	20.93	676.77	676.79
℄ Brg. Pier 1	95+40.80	20.94	676.66	676.66
2A	95+50.71	20.97	676.56	676.56
2B	95+60.62	21.03	676.46	676.48
2C	95+70.53	21.11	676.35	676.40
2D	95+80.44	21.22	676.25	676.32
2E	95+90.35	21.36	676.15	676.23
2F	96+00.26	21.52	676.05	676.12
2G	96+10.17	21.71	675.96	676.00
2H	96+20.08	21.92	675.86	675.88
2J	96+29.98	22.15	675.76	675.77
℄ Brg. Pier 2	96+35.67	22.30	675.71	675.71
3A	96+45.57	22.58	675.62	675.63
3B	96+55.48	22.88	675.52	675.55
3C	96+65.38	23.21	675.43	675.48
3D	96+75.28	23.56	675.34	675.40
3E	96+85.17	23.94	675.25	675.31
3F	96+95.07	24.34	675.16	675.20
℄ BRG. S. Abut.	97+06.90	24.85	675.06	675.06
Bk. S. Abut.	97+12.85	25.13	675.01	675.01

BEAM E6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+67.09	29.73	677.81	677.81
℄ Brg. N. Abut.	94+73.03	29.63	677.74	677.74
1A	94+82.92	29.49	677.63	677.68
1B	94+92.81	29.38	677.52	677.61
1C	95+02.70	29.29	677.41	677.51
1D	95+12.59	29.23	677.30	677.40
1E	95+22.48	29.19	677.20	677.27
1F	95+32.38	29.18	677.09	677.14
1G	95+42.27	29.19	676.99	677.00
℄ Brg. Pier 1	95+52.18	29.23	676.88	676.88
2A	95+62.07	29.29	676.78	676.78
2B	95+71.96	29.38	676.68	676.70
2C	95+81.85	29.49	676.58	676.63
2D	95+91.74	29.63	676.48	676.54
2E	96+01.63	29.80	676.38	676.45
2F	96+11.52	29.98	676.28	676.35
2G	96+21.40	30.20	676.19	676.23
2H	96+31.29	30.44	676.09	676.11
2J	96+41.17	30.70	676.00	676.00
℄ Brg. Pier 2	96+46.85	30.87	675.94	675.94
3A	96+56.73	31.17	675.85	675.86
3B	96+66.61	31.50	675.76	675.79
3C	96+76.49	31.86	675.67	675.72
3D	96+86.36	32.24	675.58	675.64
3E	96+96.24	32.65	675.49	675.55
3F	97+06.11	33.08	675.40	675.44
℄ BRG. S. Abut.	97+17.92	33.63	675.30	675.30
Bk. S. Abut.	97+23.85	33.92	675.25	675.25

NOTE:
Offset measured from P.G. EB I-74.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10064.02

E-S 7-1-10

FILE NAME = 081-0184&0185-C00CD-017-Top_of_Slab_Elevations_(7_of_8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (7 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S17 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1165
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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BEAM E7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+78.60	37.80	678.02	678.02
℄ Brg. N. Abut.	94+84.53	37.72	677.95	677.95
1A	94+94.40	37.61	677.84	677.89
1B	95+04.27	37.53	677.73	677.82
1C	95+14.14	37.47	677.62	677.73
1D	95+24.01	37.44	677.52	677.62
1E	95+33.88	37.43	677.41	677.49
1F	95+43.75	37.44	677.31	677.35
1G	95+53.62	37.48	677.21	677.22
℄ Brg. Pier 1	95+63.52	37.55	677.10	677.10
2A	95+73.39	37.64	677.00	677.01
2B	95+83.25	37.76	676.90	676.93
2C	95+93.12	37.90	676.80	676.85
2D	96+02.99	38.07	676.70	676.77
2E	96+12.86	38.26	676.61	676.68
2F	96+22.72	38.48	676.51	676.58
2G	96+32.59	38.73	676.42	676.46
2H	96+42.45	38.99	676.32	676.35
2J	96+52.31	39.29	676.23	676.24
℄ Brg. Pier 2	96+57.97	39.47	676.18	676.18
3A	96+67.83	39.80	676.09	676.09
3B	96+77.69	40.16	676.00	676.02
3C	96+87.55	40.54	675.91	675.96
3D	96+97.40	40.95	675.82	675.88
3E	97+07.25	41.39	675.73	675.79
3F	97+17.10	41.85	675.65	675.68
℄ BRG. S. Abut.	97+28.88	42.43	675.54	675.54
Bk. S. Abut.	97+34.80	42.73	675.49	675.49

BEAM E8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	94+90.20	46.01	678.23	678.23
℄ Brg. N. Abut.	94+95.98	45.85	678.16	678.16
1A	95+05.83	45.59	678.05	678.10
1B	95+15.68	45.36	677.93	678.02
1C	95+25.53	45.16	677.82	677.92
1D	95+35.38	44.97	677.71	677.80
1E	95+45.23	44.82	677.60	677.67
1F	95+55.08	44.69	677.49	677.53
1G	95+64.93	44.58	677.38	677.39
℄ Brg. Pier 1	95+72.93	44.52	677.29	677.29
2A	95+82.78	44.46	677.18	677.19
2B	95+92.63	44.42	677.07	677.10
2C	96+02.49	44.41	676.97	677.02
2D	96+12.34	44.43	676.87	676.93
2E	96+22.19	44.47	676.76	676.84
2F	96+32.04	44.54	676.66	676.72
2G	96+41.90	44.63	676.56	676.60
2H	96+51.75	44.74	676.46	676.48
℄ Brg. Pier 2	96+65.01	44.94	676.33	676.33
3A	96+74.86	45.12	676.23	676.24
3B	96+84.71	45.32	676.13	676.16
3C	96+94.56	45.54	676.04	676.09
3D	97+04.40	45.79	675.94	676.00
3E	97+14.25	46.07	675.85	675.90
3F	97+24.09	46.37	675.76	675.79
℄ BRG. S. Abut.	97+34.18	46.71	675.66	675.66
Bk. S. Abut.	97+39.96	46.91	675.61	675.61

BEAM E9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	95+01.76	54.25	678.44	678.44
℄ Brg. N. Abut.	95+07.39	54.01	678.37	678.37
1A	95+17.21	53.60	678.25	678.30
1B	95+27.03	53.21	678.13	678.22
1C	95+36.86	52.85	678.01	678.12
1D	95+46.68	52.51	677.90	677.99
1E	95+56.51	52.20	677.78	677.85
1F	95+70.28	51.81	677.62	677.64
1G	95+76.17	51.65	677.55	677.56
℄ Brg. Pier 1	95+82.31	51.50	677.47	677.47
2A	95+92.14	51.28	677.36	677.37
2B	96+01.97	51.09	677.25	677.28
2C	96+11.81	50.92	677.14	677.19
2D	96+21.65	50.77	677.03	677.10
2E	96+31.48	50.65	676.92	676.99
2F	96+41.32	50.56	676.81	676.87
2G	96+51.16	50.49	676.70	676.74
2H	96+60.99	50.45	676.60	676.61
℄ Brg. Pier 2	96+72.03	50.43	676.48	676.48
3A	96+81.86	50.44	676.37	676.38
3B	96+91.70	50.47	676.27	676.30
3C	97+01.54	50.53	676.17	676.22
3D	97+11.38	50.61	676.07	676.13
3E	97+21.21	50.72	675.97	676.02
3F	97+31.05	50.86	675.87	675.90
℄ BRG. S. Abut.	97+39.47	50.99	675.78	675.78
Bk. S. Abut.	97+45.10	51.09	675.73	675.73

NOTE:
Offset measured from P.G. EB I-74.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

E-S 7-1-10

FILE NAME = 081-0184&0185-C00CD-018-Top_of_Slab_Elevations_(8_of_8).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - RJT	REVISED -
	PLOT SCALE =	DRAWN - DTS	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - RJT	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS (8 OF 8)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S 18 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1166
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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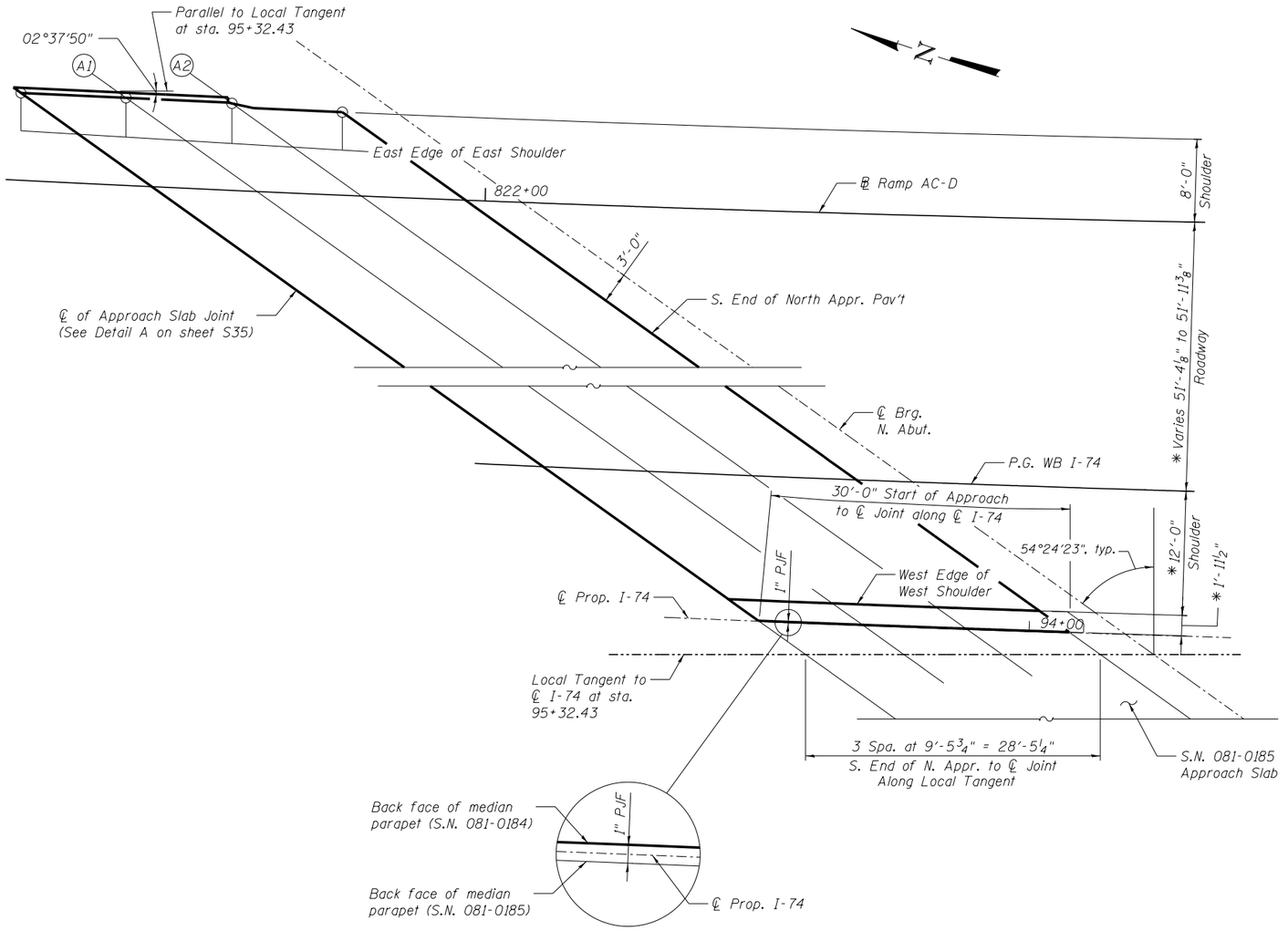

PLAN

* Denotes radial dimension from ℄ Proposed I-74

EAST EDGE OF EAST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. WB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	92+57.10	-59.50	674.07
A1	92+67.43	-59.73	674.02
A2	92+77.87	-59.88	673.97
S. End of North Appr. Pav't	92+88.76	-59.72	673.93

℄ RAMP AC-D

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. WB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	92+70.55	-51.35	674.35
A1	92+80.86	-51.55	674.30
A2	92+91.13	-51.75	674.25
S. End of North Appr. Pav't	93+01.36	-51.95	674.19

P.G. WB I-74

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. WB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	93+52.42	0.00	676.06
A1	93+62.58	0.00	676.01
A2	93+72.70	0.00	675.95
S. End of North Appr. Pav't	93+82.78	0.00	675.89

WEST EDGE OF WEST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. WB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	93+70.88	12.00	676.45
A1	93+80.93	12.00	676.39
A2	93+90.94	12.00	676.34
S. End of North Appr. Pav't	94+00.92	12.00	676.27

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS – WESTBOUND
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S19 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1167
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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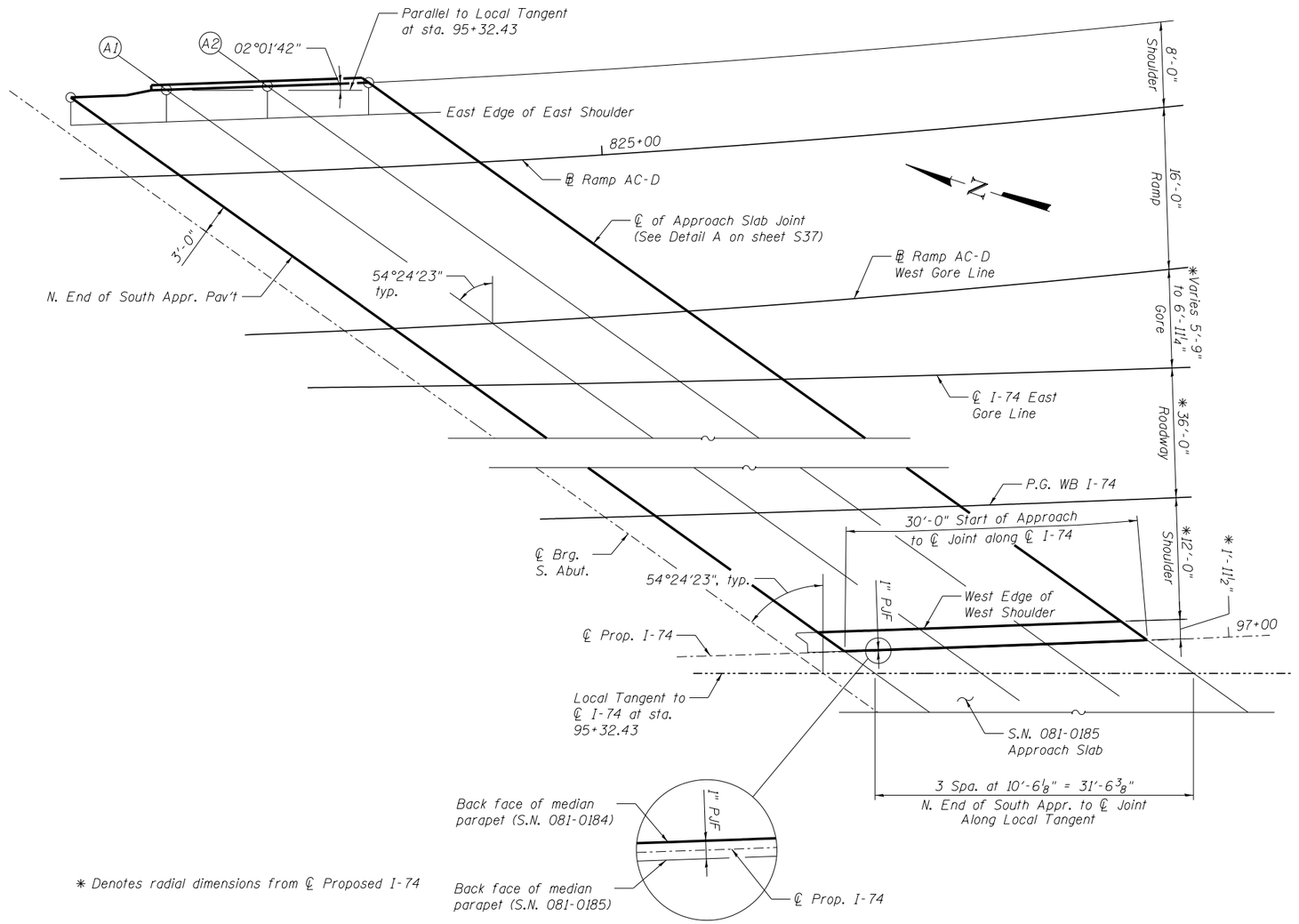

* Denotes radial dimensions from ℄ Proposed I-74

PLAN

EAST EDGE OF EAST SHOULDER

Location	Station (Along ℄ Ramp AC-D)	Offset (from ℄ Ramp AC-D)	Theoretical Grade Elevations
N. End of South Appr. Pav't	824+47.54	-8.02	671.97
A1	824+57.07	-8.51	671.82
A2	824+67.16	-8.50	671.68
℄ of Approach Slab Joint	824+77.24	-8.42	671.54

℄ RAMP AC-D

Location	Station (Along ℄ Ramp AC-D)	Offset (from ℄ Ramp AC-D)	Theoretical Grade Elevations
N. End of South Appr. Pav't	824+58.12	0.00	672.22
A1	824+68.13	0.00	672.10
A2	824+78.04	0.00	671.98
℄ of Approach Slab Joint	824+87.86	0.00	671.85

℄ RAMP AC-D WEST GORE LINE

Location	Station (Along ℄ Ramp AC-D)	Offset (from ℄ Ramp AC-D)	Theoretical Grade Elevations
N. End of South Appr. Pav't	824+78.55	16.00	672.82
A1	824+88.25	16.00	672.69
A2	824+97.86	16.00	672.56
℄ of Approach Slab Joint	825+07.39	16.00	672.42

℄ I-74 EAST GORE LINE

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. WB I-74)	Theoretical Grade Elevations
N. End of South Appr. Pav't	95+95.19	-36.00	672.83
A1	96+05.58	-36.00	672.73
A2	96+15.94	-36.00	672.64
℄ of Approach Slab Joint	96+26.26	-36.00	672.55

WEST EDGE OF WEST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. WB I-74)	Theoretical Grade Elevations
N. End of South Appr. Pav't	96+59.35	12.00	674.23
A1	96+69.40	12.00	674.14
A2	96+79.42	12.00	674.05
℄ of Approach Slab Joint	96+89.39	12.00	673.97

P.G. WB I-74

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. WB I-74)	Theoretical Grade Elevations
N. End of South Appr. Pav't	96+43.59	0.00	673.88
A1	96+53.72	0.00	673.79
A2	96+63.82	0.00	673.70
℄ of Approach Slab Joint	96+73.88	0.00	673.61

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS – WESTBOUND
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S20 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1168
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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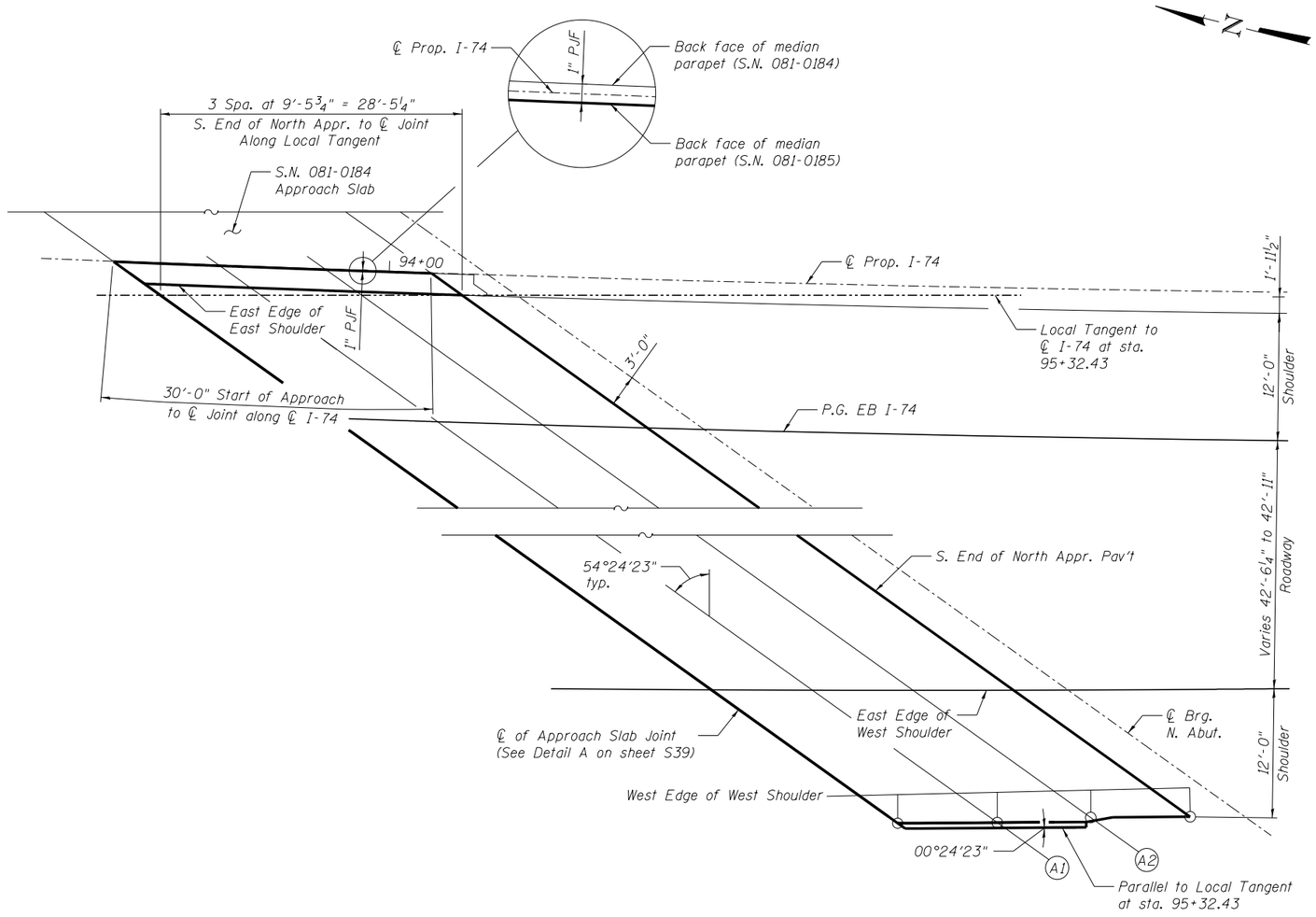

PLAN

EAST EDGE OF EAST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	93+76.97	-12.00	677.05
A1	93+86.99	-12.00	676.95
A2	93+96.97	-12.00	676.84
S. End of North Appr. Pav't	94+06.92	-12.00	676.74

P.G. EB I-74

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	93+95.10	0.00	677.35
A1	94+05.02	0.00	677.25
A2	94+14.90	0.00	677.14
S. End of North Appr. Pav't	94+24.75	0.00	677.04

EAST EDGE OF WEST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	94+58.05	42.92	678.44
A1	94+67.44	42.78	678.34
A2	94+76.81	42.65	678.23
S. End of North Appr. Pav't	94+86.14	42.52	678.13

WEST EDGE OF WEST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
℄ of Approach Slab Joint	94+75.55	55.20	678.76
A1	94+84.78	55.01	678.66
A2	94+93.81	54.71	678.55
S. End of North Appr. Pav't	95+02.65	54.28	678.44

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS – EASTBOUND
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S21 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1169
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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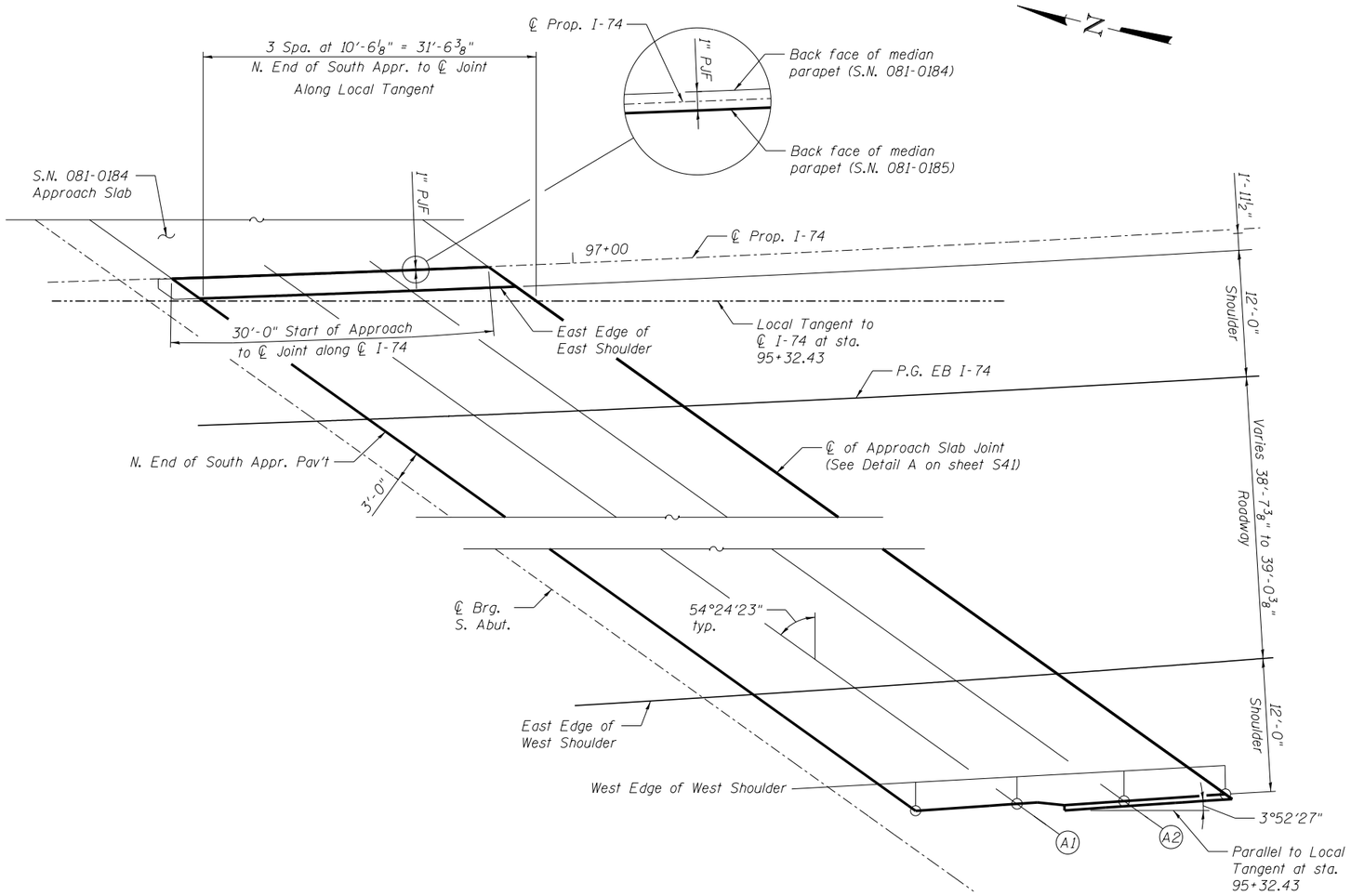

PLAN

EAST EDGE OF EAST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
N. End of South Appr. Pav't	96+64.57	-12.00	674.00
A1	96+74.59	-12.00	673.89
A2	96+84.57	-12.00	673.78
℄ of Approach Slab Joint	96+94.53	-12.00	673.68

P.G. EB I-74

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
N. End of South Appr. Pav't	96+80.09	0.00	674.32
A1	96+90.03	0.00	674.22
A2	96+99.94	0.00	674.11
℄ of Approach Slab Joint	97+09.81	0.00	674.01

EAST EDGE OF WEST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
N. End of South Appr. Pav't	97+29.42	39.03	675.40
A1	97+38.93	38.89	675.29
A2	97+48.42	38.76	675.19
℄ of Approach Slab Joint	97+57.88	38.62	675.08

WEST EDGE OF WEST SHOULDER

Location	Station (Along ℄ Prop. I-74)	Offset (from P.G. EB I-74)	Theoretical Grade Elevations
N. End of South Appr. Pav't	97+43.98	50.82	675.73
A1	97+53.44	50.70	675.62
A2	97+63.41	51.02	675.53
℄ of Approach Slab Joint	97+72.87	50.95	675.43

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS – EASTBOUND
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 22 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1170
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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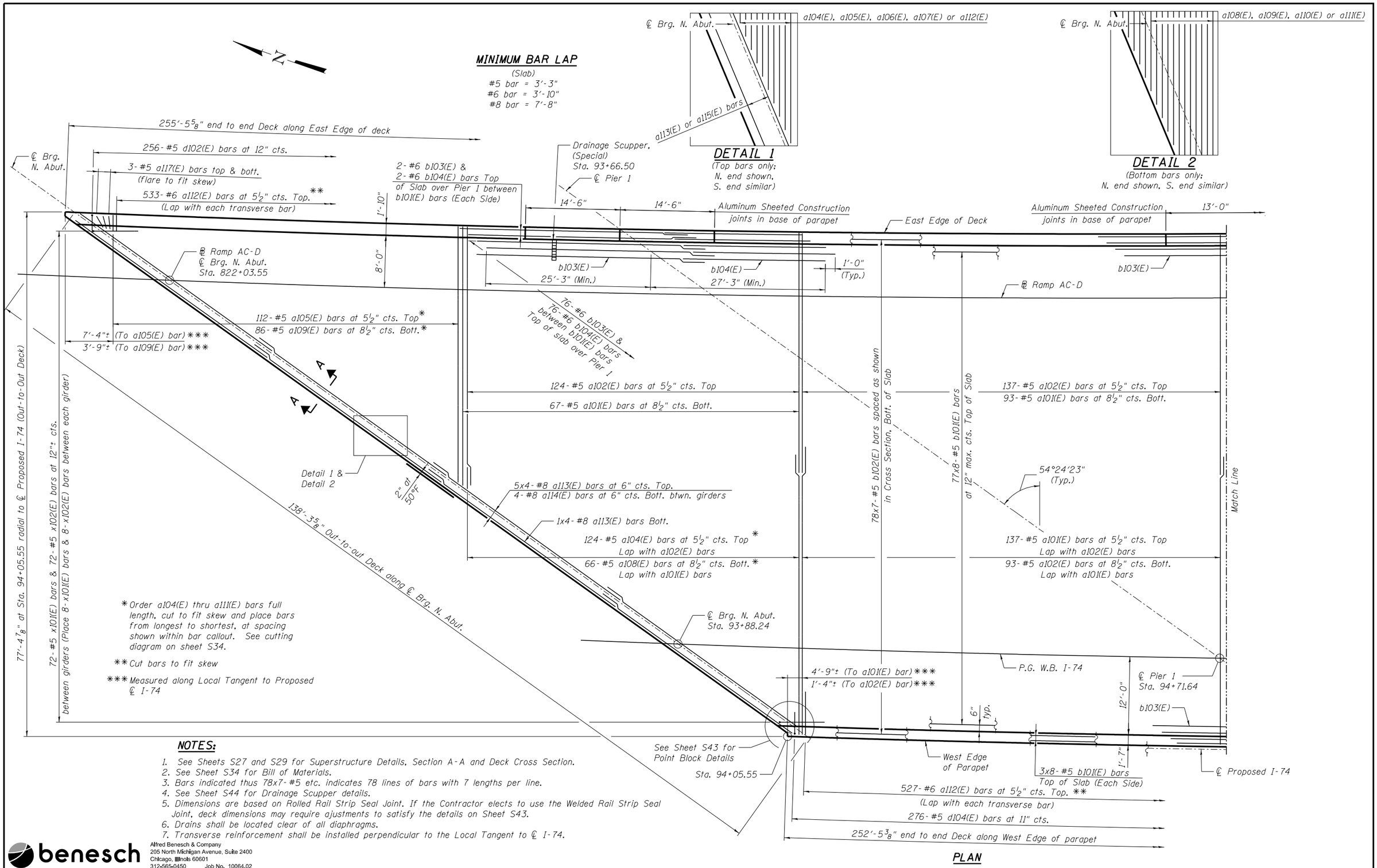

PLAN

* Order a104(E) thru a111(E) bars full length, cut to fit skew and place bars from longest to shortest, at spacing shown within bar callout. See cutting diagram on sheet S34.

** Cut bars to fit skew

*** Measured along Local Tangent to Proposed ℄ I-74

NOTES:

1. See Sheets S27 and S29 for Superstructure Details, Section A-A and Deck Cross Section.
2. See Sheet S34 for Bill of Materials.
3. Bars indicated thus 78x7-#5 etc. indicates 78 lines of bars with 7 lengths per line.
4. See Sheet S44 for Drainage Scupper details.
5. Dimensions are based on Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require ajustments to satisfy the details on Sheet S43.
6. Drains shall be located clear of all diaphragms.
7. Transverse reinforcement shall be installed perpendicular to the Local Tangent to ℄ I-74.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLAN – WESTBOUND (1 OF 2)
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S23 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1171
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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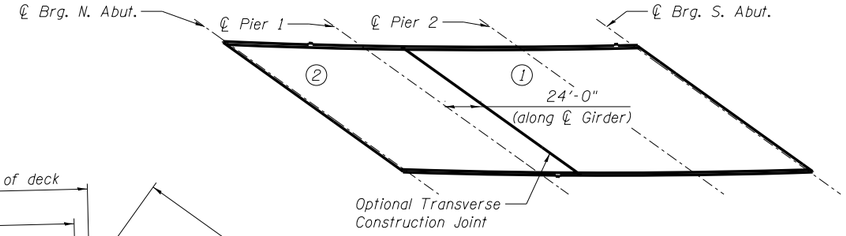
MINIMUM BAR LAP

(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"
#8 bar = 7'-8"



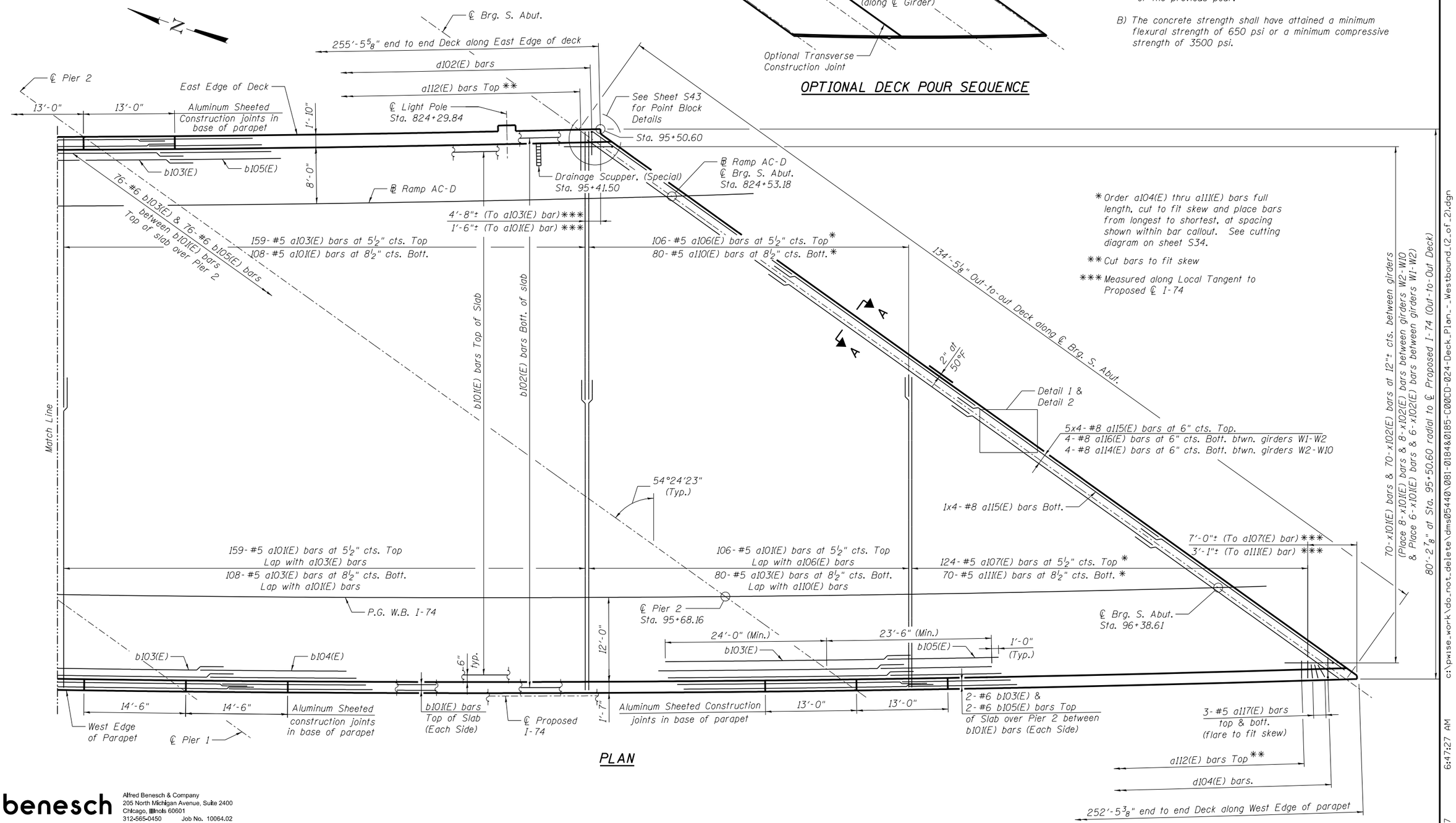
OPTIONAL DECK POUR SEQUENCE

NOTES:

1. When the deck pour is stopped for the day at the optional transverse bonded construction joint in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

   A) At least 72 hours shall have elapsed from the end of the previous pour.

   B) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.



* Order a104(E) thru a111(E) bars full length, cut to fit skew and place bars from longest to shortest, at spacing shown within bar callout. See cutting diagram on sheet S34.

** Cut bars to fit skew

*** Measured along Local Tangent to Proposed ℄ I-74

PLAN

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLAN – WESTBOUND (2 OF 2)
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S24 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1172
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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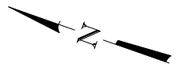
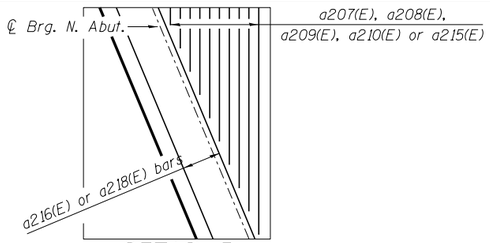
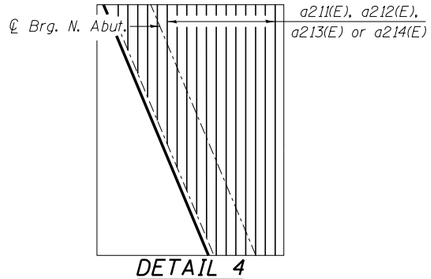
MINIMUM BAR LAP

(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"
#8 bar = 7'-8"

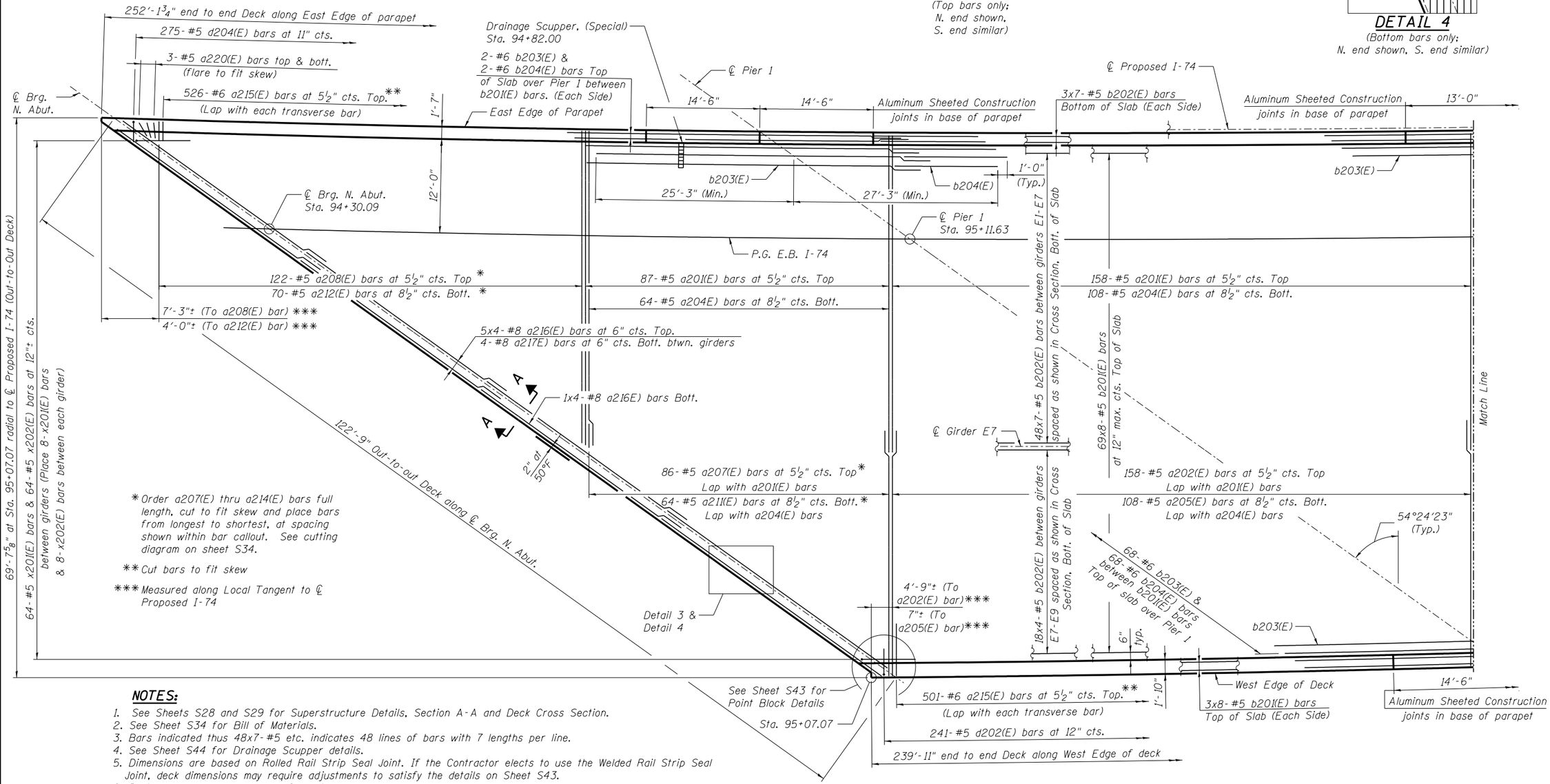




DETAIL 3
(Top bars only; N. end shown, S. end similar)



DETAIL 4
(Bottom bars only; N. end shown, S. end similar)



* Order a207(E) thru a214(E) bars full length, cut to fit skew and place bars from longest to shortest, at spacing shown within bar callout. See cutting diagram on sheet S34.

** Cut bars to fit skew

*** Measured along Local Tangent to ℄ Proposed I-74

NOTES:

1. See Sheets S28 and S29 for Superstructure Details, Section A-A and Deck Cross Section.
2. See Sheet S34 for Bill of Materials.
3. Bars indicated thus 48x7-#5 etc. indicates 48 lines of bars with 7 lengths per line.
4. See Sheet S44 for Drainage Scupper details.
5. Dimensions are based on Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Sheet S43.
6. Drains shall be located clear of all diaphragms.
7. Transverse reinforcement shall be installed perpendicular to the Local Tangent to ℄ I-74.

PLAN

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DECK PLAN – EASTBOUND (1 OF 2)
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S25 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1173
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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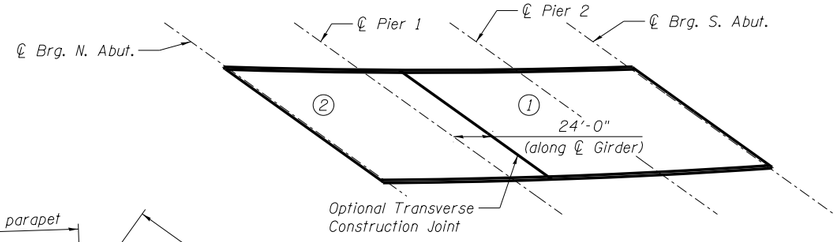
MINIMUM BAR LAP

(Slab)
#5 bar = 3'-3"
#6 bar = 3'-10"
#8 bar = 7'-8"



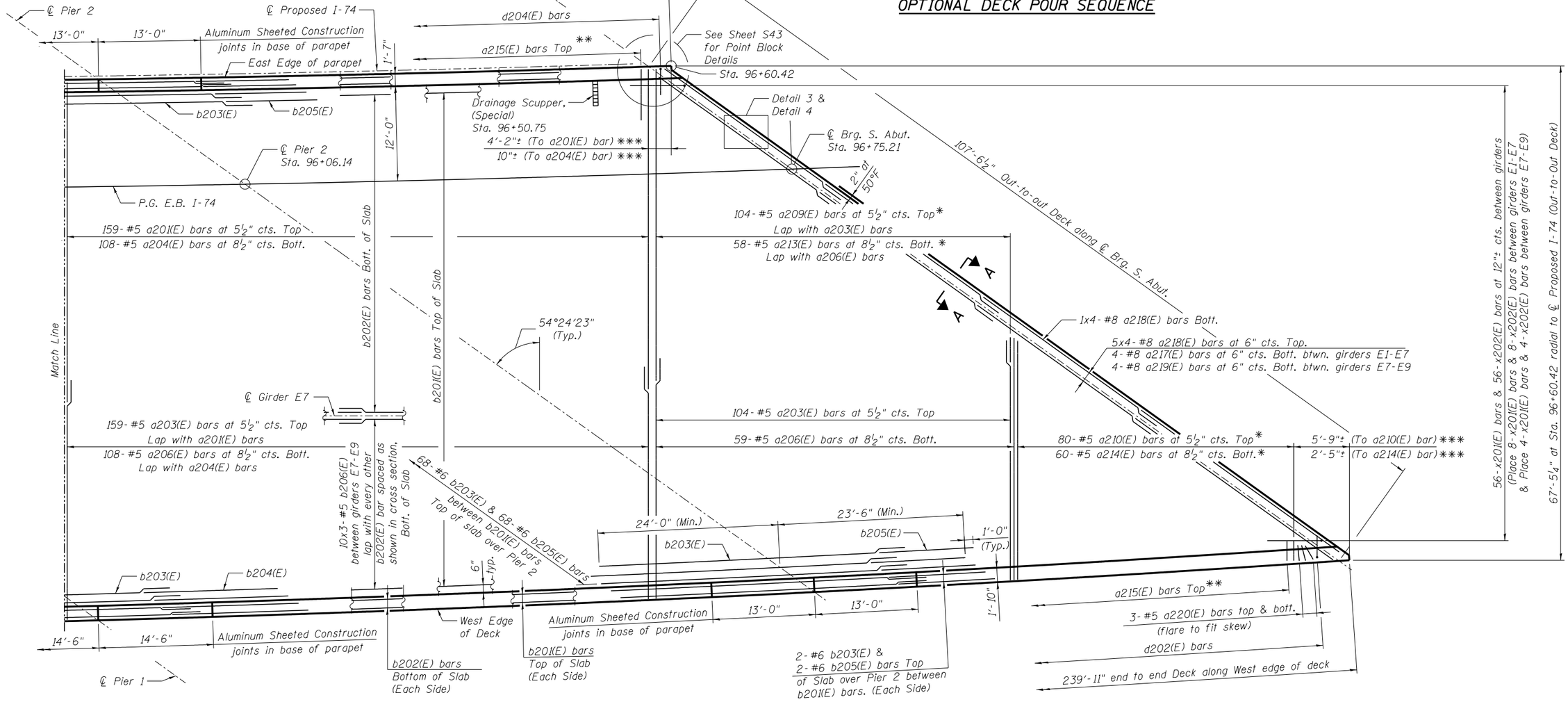
OPTIONAL DECK POUR SEQUENCE

NOTES:

1. When the deck pour is stopped for the day at the optional transverse bonded construction joint in the deck pouring sequence as shown, the next pour shall not be made until both of the following are met:

   A) At least 72 hours shall have elapsed from the end of the previous pour.

   B) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.



PLAN

*Order a207(E) thru a214(E) bars full length, cut to fit skew and place bars from longest to shortest, at spacing shown within bar callout. See cutting diagram on sheet S34.

**Cut bars to fit skew

***Measured along Local Tangent to ℄ Proposed I-74

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DEPARTMENT OF TRANSPORTATION

DECK PLAN – EASTBOUND (2 OF 2)
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S26 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1174
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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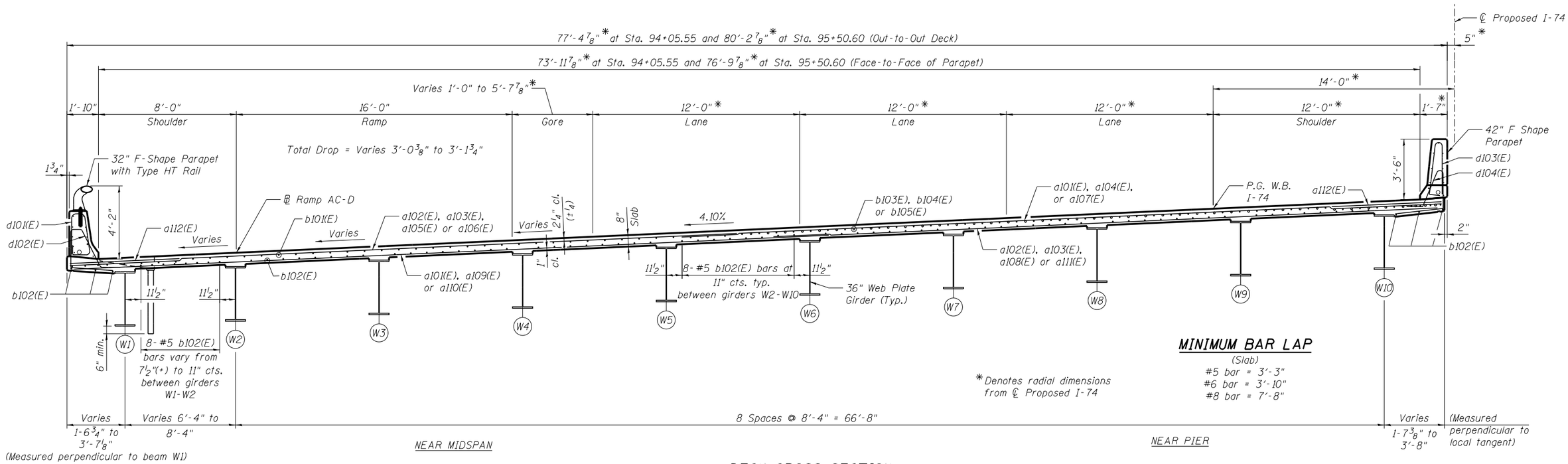
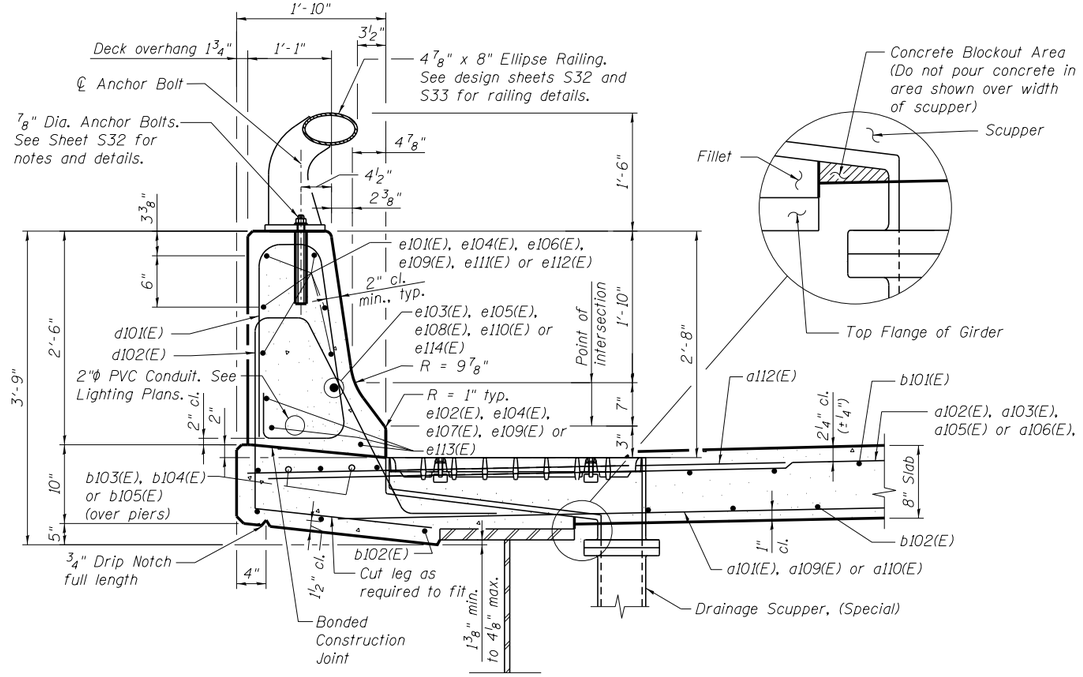
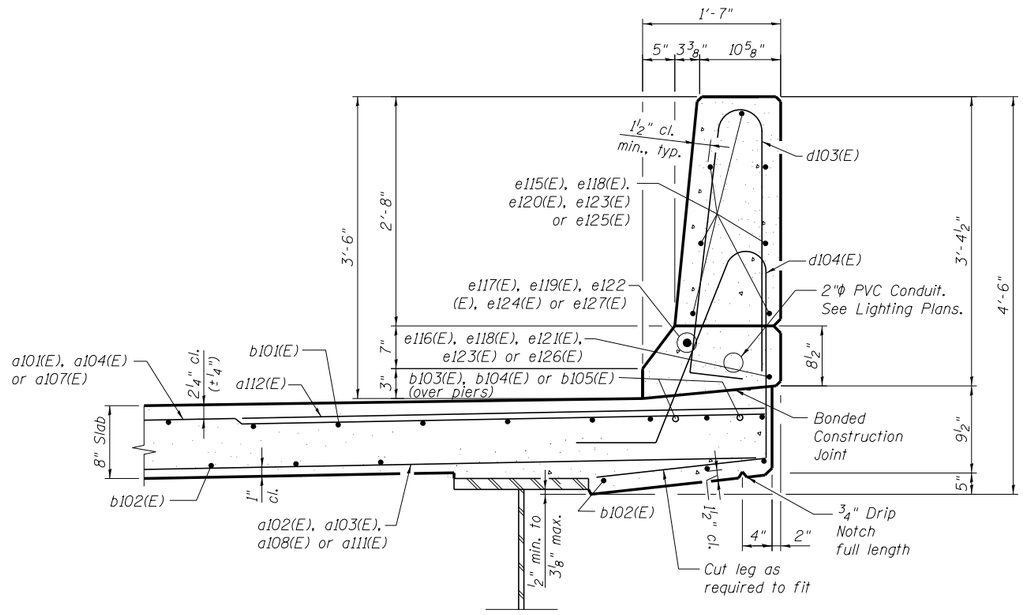


DECK CROSS SECTION

(Looking South)



SECTION THRU EAST PARAPET



SECTION THRU MEDIAN PARAPET

NOTE:
See Sheet S9 for Deck Cross Slope Details.

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FILE NAME = 081-0184&0185-C00CD-027-Westbound_Deck_Cross_Section.dgn	USER NAME = ksnider	DESIGNED - DMS	REVISED -
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MODEL: Default	PLOT SCALE =	DRAWN - KMS	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - DTS/TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND DECK CROSS SECTION
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S27 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1175
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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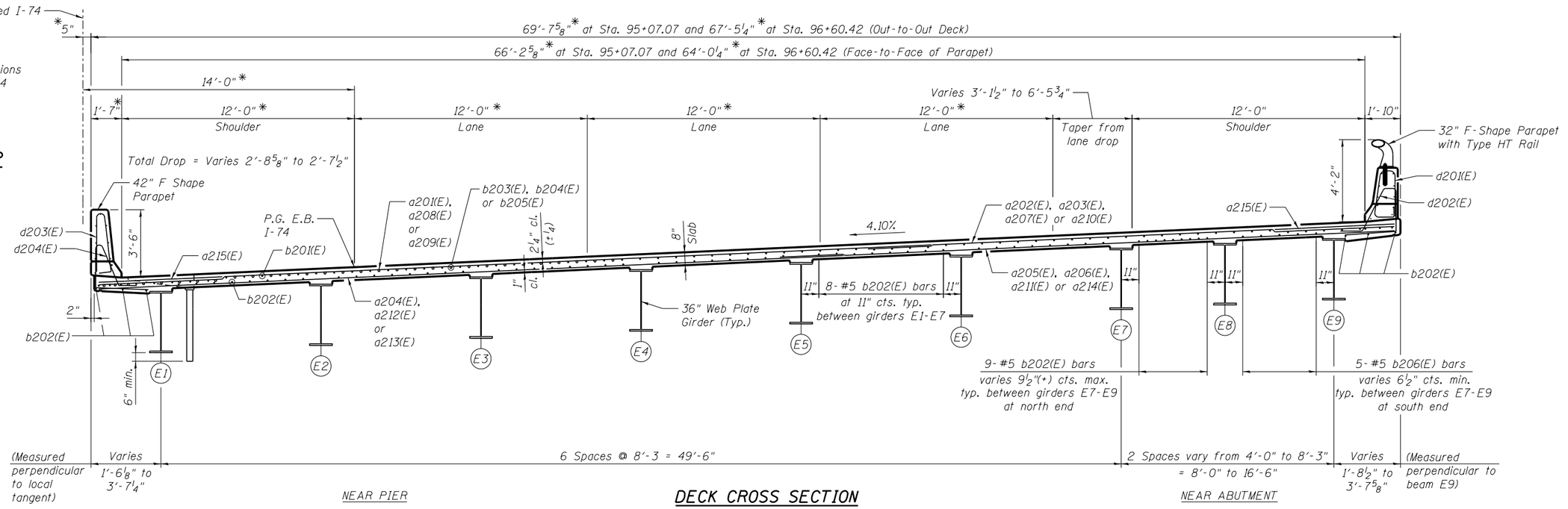
3/23/2017

MINIMUM BAR LAP

(Slab)

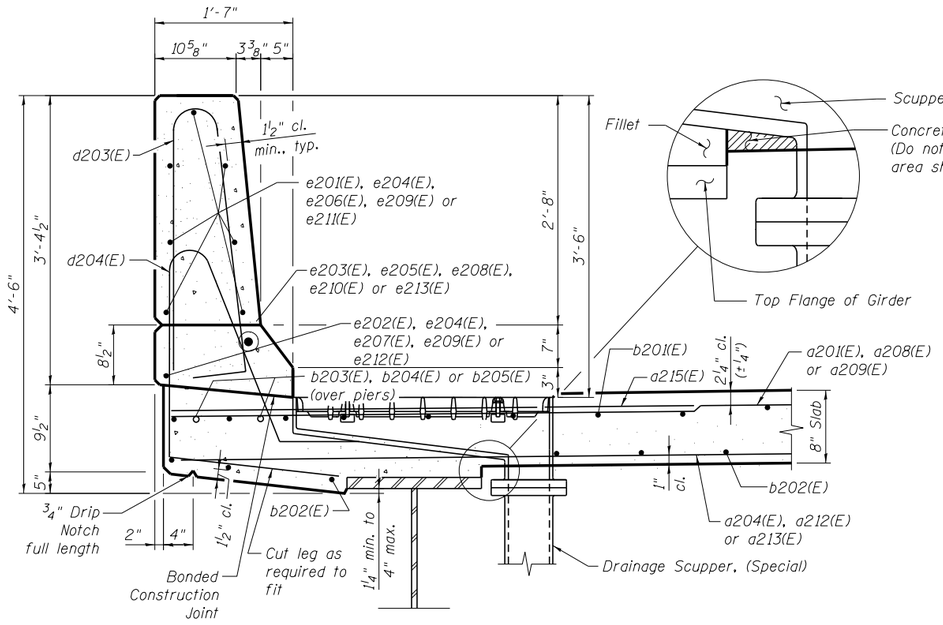
#5 bar = 3'-3"
#6 bar = 3'-10"
#8 bar = 7'-8"

* Denotes radial dimensions from ℄ Proposed I-74

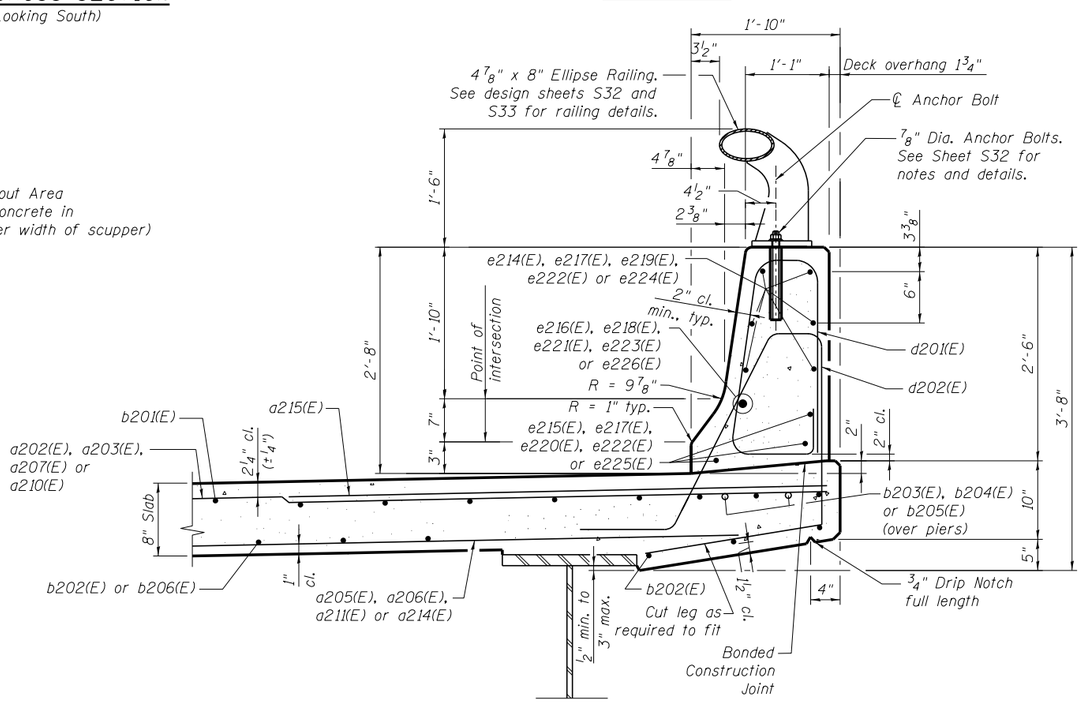


DECK CROSS SECTION

(Looking South)



SECTION THRU MEDIAN PARAPET



SECTION THRU WEST PARAPET

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND DECK CROSS SECTION
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S28 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1176
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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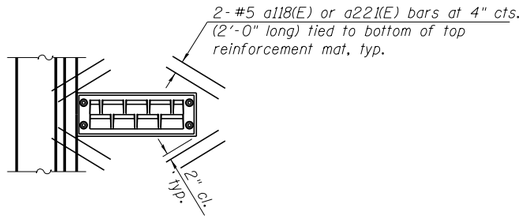
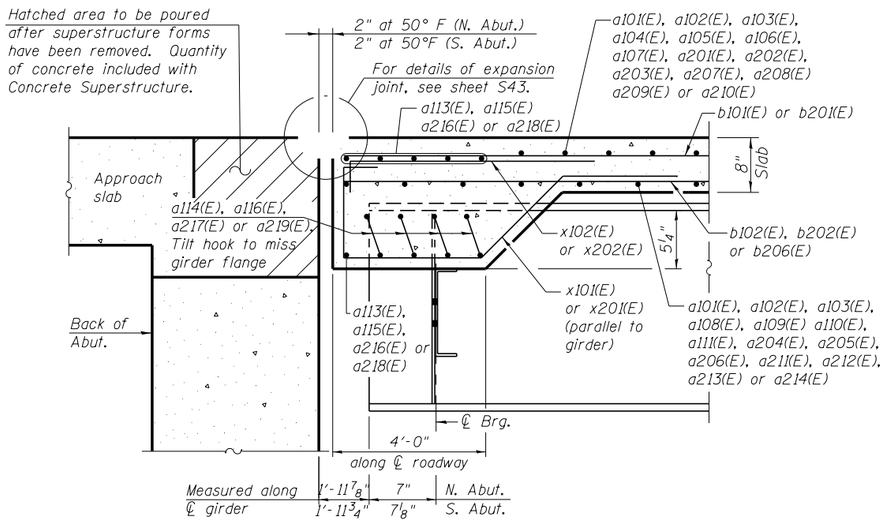
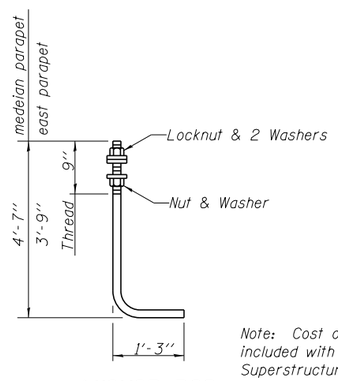


PLAN AT DRAINAGE SCUPPER (SPECIAL)

Note: Cut longitudinal reinforcement to clear drainage scuppers.



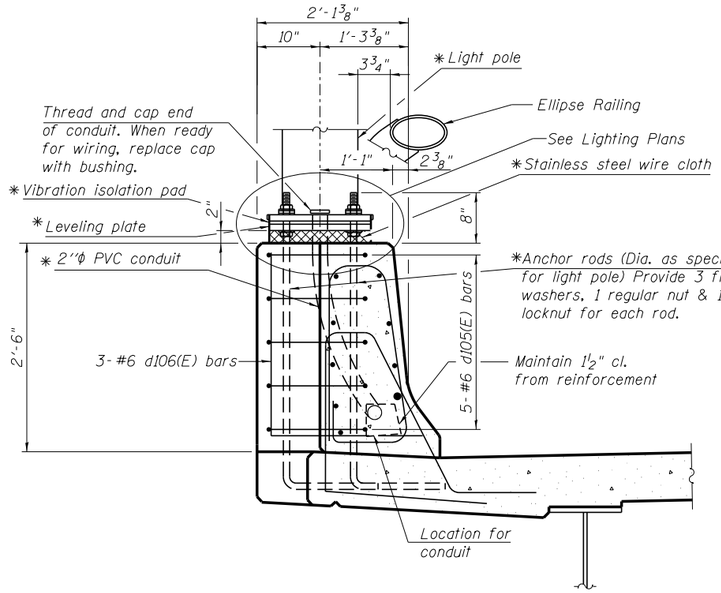
SECTION A-A



Note: Cost of Anchor rods included with Concrete Superstructure

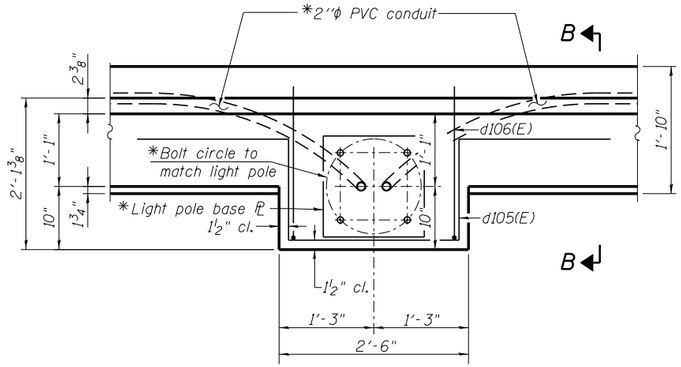
ANCHOR ROD

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



SECTION B-B

(1 location)



PLAN - POLE BASE

(WB Deck, East Parapet)

* See Lighting Plans for Light Pole details and pay items.

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FILE NAME = 081-0184&0185-C00CD-029-Superstructure_Details.dgn	USER NAME = ksnider	DESIGNED - DMS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S29 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1177
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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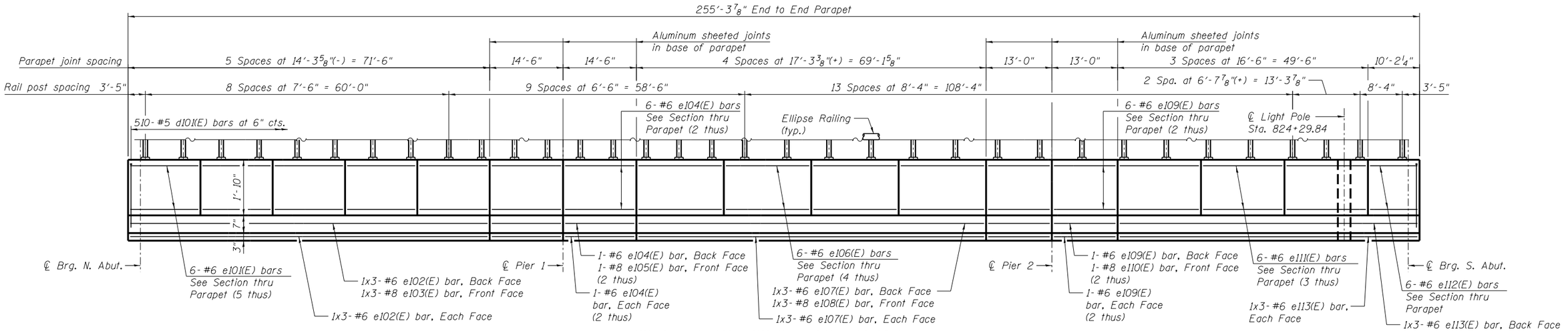
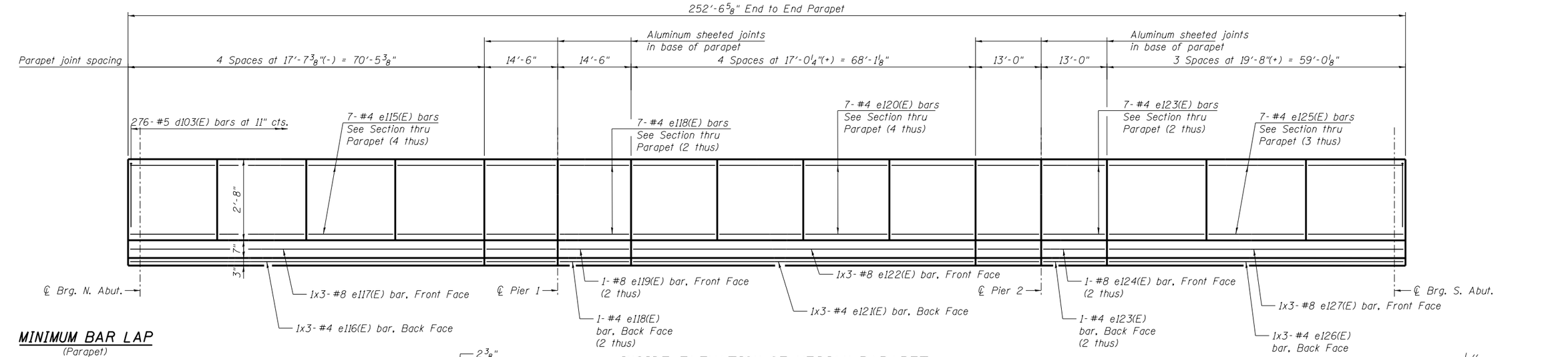


INSIDE ELEVATION OF EAST PARAPET



INSIDE ELEVATION OF MEDIAN PARAPET

(Reflected view shown)

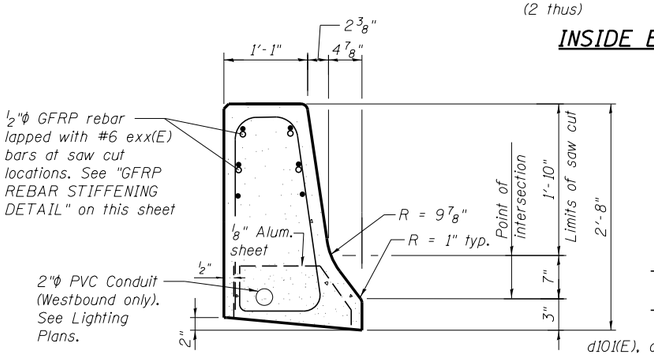
MINIMUM BAR LAP

(Parapet)

#4 bar = 2'-0"
#6 bar = 3'-0"
#8 bar = 5'-2"

NOTES:

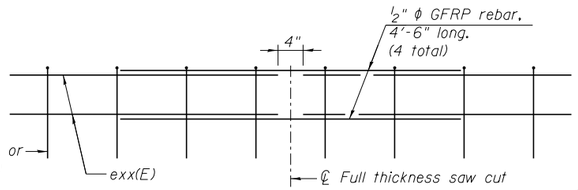
1. All dimensions shown are along the toe of the parapet (gutterline).
2. Bars indicated thus 1x3-#8 etc. indicates 1 line of bars with 3 lengths per line.
3. Light poles stationed along ℄ Proposed I-74.



OPTIONAL SLIPFORMED PARAPET JOINT DETAILS

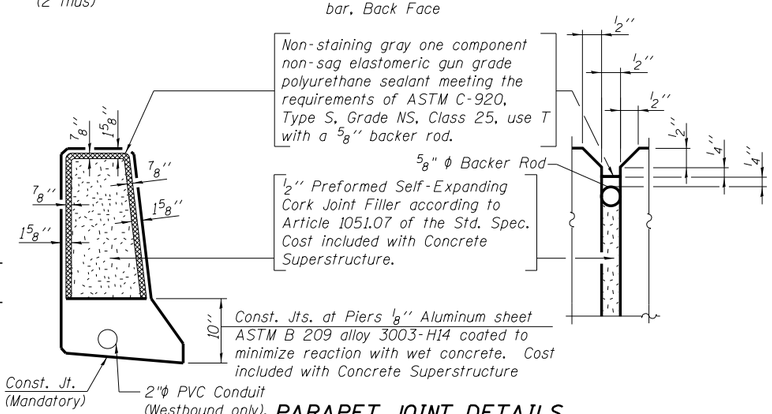
(Ellipse railing not shown for clarity)

1. All dimensions shall remain the same as shown on superstructure details.
2. Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.



GFRP REBAR STIFFENING DETAIL

(Place as shown in parapet section at each parapet joint location.)
(Cost of GFRP shall be included with Concrete Superstructure.)



PARAPET JOINT DETAILS

(For conventional concrete placement)

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		CHECKED - DTS/TPS	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - KMS	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - DTS/TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND BARRIER DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S30 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1178
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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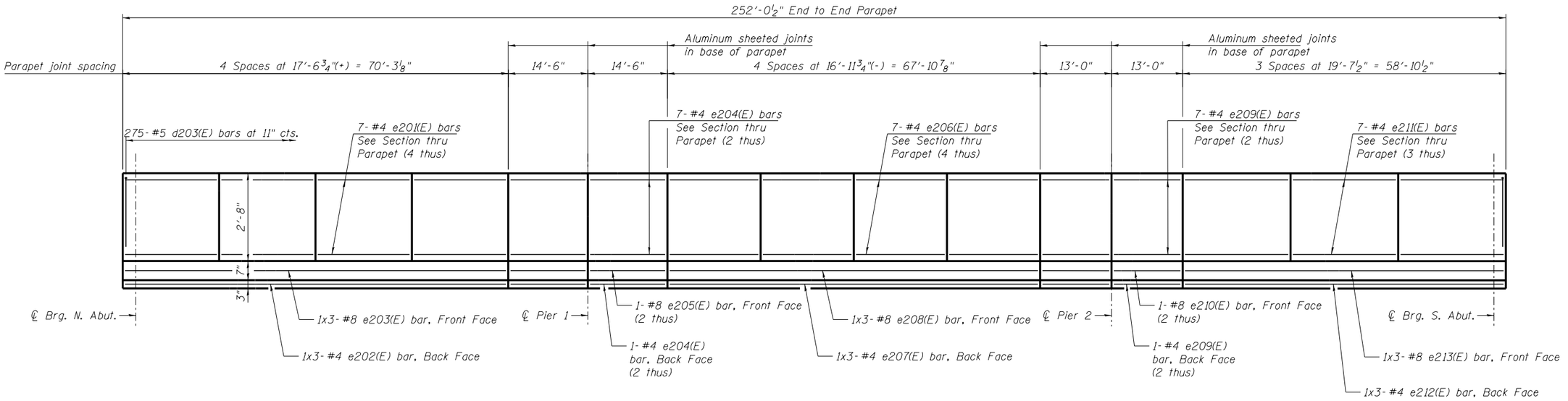
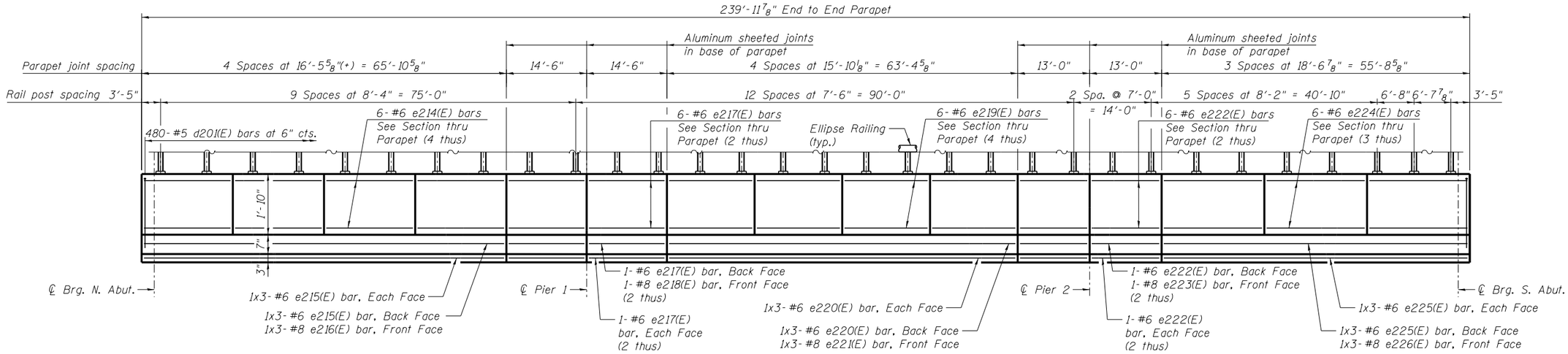


INSIDE ELEVATION OF MEDIAN PARAPET



INSIDE ELEVATION OF WEST PARAPET

(Reflected view shown)

NOTE:

See sheet S30 for additional notes, parapet joint details & optional slipformed parapet joint details.

MINIMUM BAR LAP

(Parapet)

#4 bar = 2'-0"
#6 bar = 3'-0''
#8 bar = 5'-2''

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND BARRIER DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S31 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1179
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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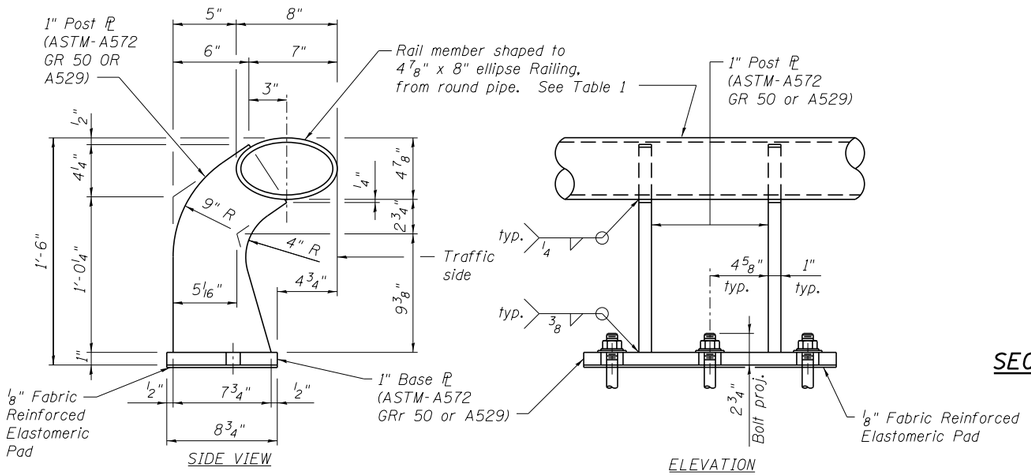
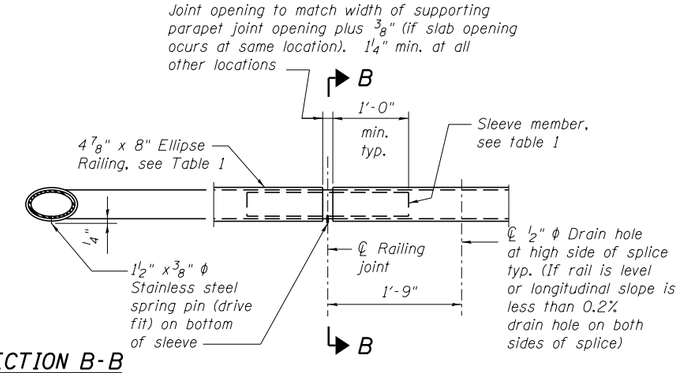




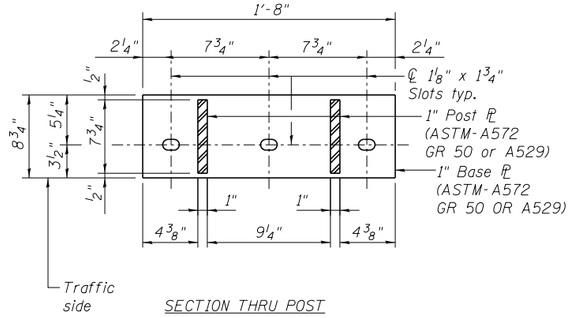
SECTION B-B

ELLIPSE RAILING SLEEVE DETAIL

Note:
The major and minor diameters of the rail member may vary +/- 3/16" from plan dimensions. However, the difference between the outside diameters of the sleeve and the inside diameters of the rail shall not exceed 1/8" along the major or minor axis. The maximum gap along the 45° axis of the sleeve may be 1/4" max.

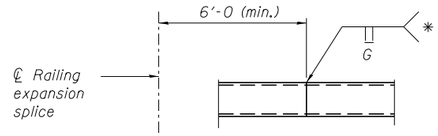
NOTES:

1. See sheets S30 & S31, for post spacing.
2. Steel Railing (Special) shall be fabricated and installed in accordance with Article 509 of the Standard Specifications, unless otherwise noted.
3. All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.
4. The Steel Railing (Special) is to be bid on a per linear foot basis measured from end to end of steel railing.
5. Payment for Steel Railing (Special) shall include full compensation for furnishing all material, and all the equipment and labor required to erect the rail in accordance with these plans and the Standard Specifications.
6. Anchor bolts shall be 7/8" ϕ, ASTM A-193 GR. B7, fully threaded with heavy hex nuts and one hardened washer and one 2 1/4" O.D. washer each. Embed threaded rods 10 1/2" min. into concrete parapet. Material for these items shall be in accordance with the adhesive manufacturer's requirements to be capable of obtaining an ultimate load per threaded rod of 36 kips in tension, considering spacing and edge distance. See Standard Specification 509.06 for further details on setting anchor bolts. Cost of anchor bolts included with Steel Railing (Special).
7. Optional cast-in-place anchor bolts to comply with ASTM F-1554 Grade 105. Hex nuts to comply with AASHTO M291, washers to comply with AASHTO M-293. Galvanizing in accordance with AASHTO M-232.
8. Provide one 1/8" and two 1/16" galvanized steel shims for 25% of rail posts, to be used as required. Shims shall be similar to base plates in size and holes. Cost included with Steel Railing (Special).



SECTION THRU POST

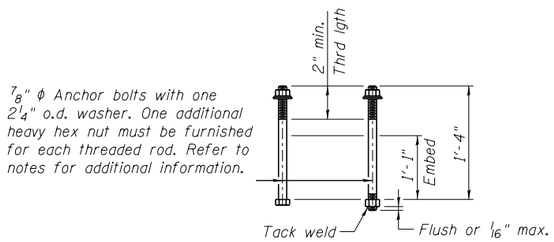
ELLIPTICAL TUBE WITH RAIL POST AND ANCHORAGE DETAILS



RAILING SHOP SPLICE DETAIL

* Shop splice is permitted with minimum 85 percent penetration. The weld may be square groove, double vee groove, or single groove. Grind smooth.

TABLE 1		
APPROVED RAILING MATERIAL		
4 7/8"x 8" Ellipse Railing	Sleeve Member (at railing splice)	
Material	Material	Thickness
6" Dia. Std. Pipe ASTM-A53 E OR S GRADE B	ASTM-A53-B	0.353"
	A36 or A500 GR. B	0.339"
	API-5LX52	0.224"
6" dia. , 0.280" Wall thickness ASTM-A501	ASTM-A53-B	0.353"
	A36 or A500 GR. B	0.339"
	API-5LX52	0.224"
6 5/8" O.D. x 0.188" Tube API-5LX52	ASTM-A53-B	0.339"
	A36 or A500 GR. B	0.325"
	API-5LX52	0.216"



CAST-IN-PLACE ANCHOR BOLT OPTIONS

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Steel Railing (Special)	Foot	496

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		CHECKED - AJK	REVISED -			74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1180
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	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -				ILLINOIS FED. AID PROJECT			

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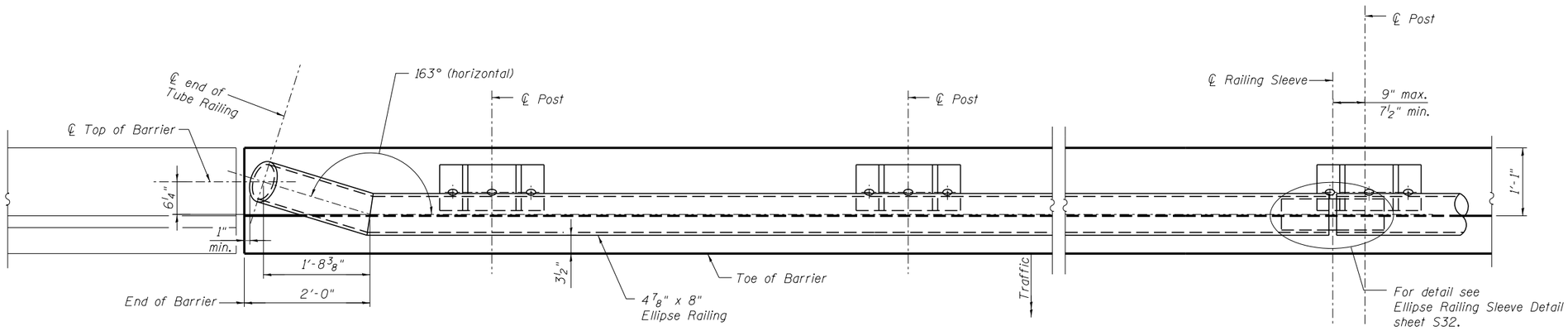
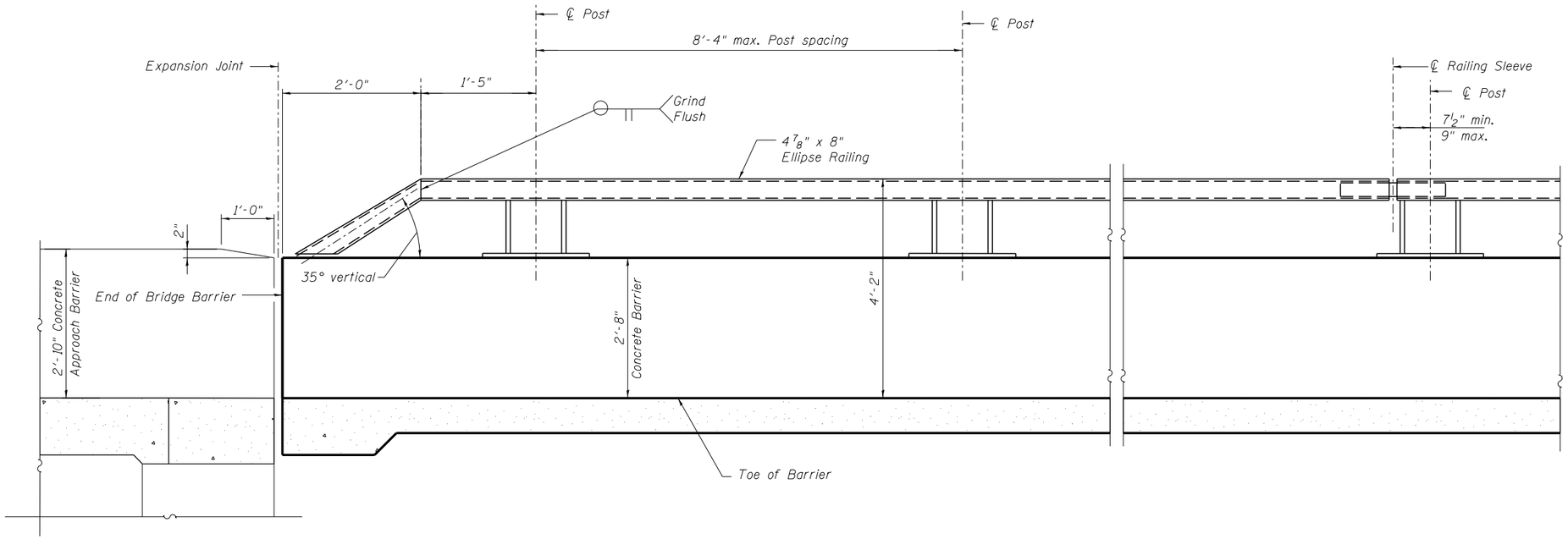


PLAN



ELEVATION

(North Abutment shown, looking East)

NOTES:

1. Edge of base plate shall not be less than 6" from any cold joint or barrier discontinuity including the back of the abutment or opening for finger plate expansion joint.
2. See sheets S30 & S31 for post spacing.

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FILE NAME = 081-0184&0185-C00CD-033-Traffic_Barrier_Details_(2_of_2).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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TRAFFIC BARRIER DETAILS (2 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S33 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1181
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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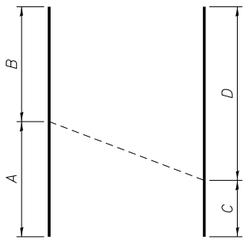
SUPERSTRUCTURE
BILL OF MATERIAL - WESTBOUND

Bar	No.	Size	Length	Shape
a101(E)	670	#5	44'-2"	
a102(E)	354	#5	37'-4"	
a103(E)	347	#5	38'-10"	
a104(E)	62	#5	46'-4"	
a105(E)	56	#5	39'-10"	
a106(E)	53	#5	42'-3"	
a107(E)	62	#5	46'-8"	
a108(E)	33	#5	39'-9"	
a109(E)	43	#5	46'-3"	
a110(E)	40	#5	47'-3"	
a111(E)	35	#5	40'-3"	
a112(E)	1060	#6	6'-6"	
a113(E)	24	#8	40'-3"	
a114(E)	68	#8	15'-10"	
a115(E)	24	#8	39'-3"	
a116(E)	4	#8	12'-5"	
a117(E)	12	#5	2'-1"	
a118(E)	16	#5	2'-0"	
b101(E)	664	#5	34'-5"	
b102(E)	546	#5	39'-3"	
b103(E)	160	#6	41'-3"	
b104(E)	80	#6	17'-6"	
b105(E)	80	#6	12'-6"	
d101(E)	510	#5	7'-9"	
d102(E)	256	#5	8'-2"	
d103(E)	276	#5	6'-10"	
d104(E)	276	#5	7'-9"	
d105(E)	5	#6	8'-11"	
d106(E)	3	#6	4'-3"	
e101(E)	30	#6	13'-11"	
e102(E)	9	#6	25'-9"	
e103(E)	3	#8	27'-2"	
e104(E)	18	#6	14'-2"	
e105(E)	2	#8	14'-2"	
e106(E)	24	#6	16'-11"	
e107(E)	9	#6	25'-0"	
e108(E)	3	#8	26'-5"	
e109(E)	18	#6	12'-8"	
e110(E)	2	#8	12'-8"	
e111(E)	18	#6	16'-2"	
e112(E)	6	#6	9'-10"	
e113(E)	9	#6	21'-10"	
e114(E)	3	#8	23'-3"	
e115(E)	28	#4	17'-3"	
e116(E)	3	#4	24'-9"	
e117(E)	3	#8	26'-10"	
e118(E)	16	#4	14'-2"	
e119(E)	2	#8	14'-2"	
e120(E)	28	#4	16'-8"	
e121(E)	3	#4	24'-0"	
e122(E)	3	#8	26'-1"	
e123(E)	16	#4	12'-8"	
e124(E)	2	#8	12'-8"	
e125(E)	21	#4	19'-4"	
e126(E)	3	#4	20'-11"	
e127(E)	3	#8	23'-1"	
x101(E)	142	#5	8'-8"	
x102(E)	142	#5	4'-1"	
Concrete Superstructure			Cu. Yd.	603.4
Reinforcement Bars, Epoxy Coated			Pound	173,270

SUPERSTRUCTURE
BILL OF MATERIAL - EASTBOUND

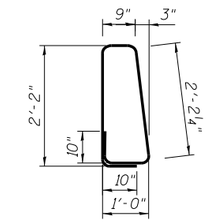
Bar	No.	Size	Length	Shape
a201(E)	404	#5	41'-0"	
a202(E)	158	#5	31'-5"	
a203(E)	263	#5	30'-4"	
a204(E)	280	#5	36'-6"	
a205(E)	108	#5	35'-11"	
a206(E)	167	#5	34'-10"	
a207(E)	43	#5	34'-8"	
a208(E)	61	#5	43'-1"	
a209(E)	52	#5	43'-4"	
a210(E)	40	#5	32'-5"	
a211(E)	32	#5	38'-7"	
a212(E)	35	#5	38'-4"	
a213(E)	29	#5	39'-0"	
a214(E)	30	#5	36'-6"	
a215(E)	1027	#6	6'-6"	
a216(E)	24	#8	36'-4"	
a217(E)	56	#8	15'-9"	
a218(E)	24	#8	32'-7"	
a219(E)	8	#8	8'-5"	
a220(E)	12	#5	2'-1"	
a221(E)	16	#5	2'-0"	
b201(E)	600	#5	34'-4"	
b202(E)	450	#5	38'-10"	
b203(E)	144	#6	41'-3"	
b204(E)	72	#6	17'-6"	
b205(E)	72	#6	12'-6"	
b206(E)	30	#5	38'-9"	
d201(E)	480	#5	7'-9"	
d202(E)	241	#5	8'-2"	
d203(E)	275	#5	6'-10"	
d204(E)	275	#5	7'-9"	
e201(E)	28	#4	17'-3"	
e202(E)	3	#4	24'-8"	
e203(E)	3	#8	26'-9"	
e204(E)	16	#4	14'-2"	
e205(E)	2	#8	14'-2"	
e206(E)	28	#4	16'-8"	
e207(E)	3	#4	23'-11"	
e208(E)	3	#8	26'-0"	
e209(E)	16	#4	12'-8"	
e210(E)	2	#8	12'-8"	
e211(E)	21	#4	19'-3"	
e212(E)	3	#4	20'-11"	
e213(E)	3	#8	23'-0"	
e214(E)	24	#6	16'-2"	
e215(E)	9	#6	23'-11"	
e216(E)	3	#8	25'-4"	
e217(E)	18	#6	14'-2"	
e218(E)	2	#8	14'-2"	
e219(E)	24	#6	15'-6"	
e220(E)	9	#6	23'-1"	
e221(E)	3	#8	24'-6"	
e222(E)	18	#6	12'-8"	
e223(E)	2	#8	12'-8"	
e224(E)	18	#6	18'-3"	
e225(E)	9	#6	20'-6"	
e226(E)	3	#8	21'-11"	
x201(E)	120	#5	8'-8"	
x202(E)	120	#5	4'-1"	
Concrete Superstructure			Cu. Yd.	518.9
Reinforcement Bars, Epoxy Coated			Pound	152,470



Cutting Diagram

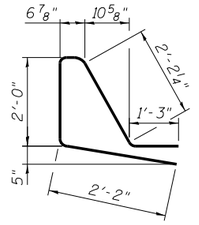
(See table for bar designations)

Bar	A	B	C	D
a104(E)	23'-0"	23'-4"	3'-6"	42'-10"
a105(E)	19'-10"	20'-0"	2'-6"	37'-4"
a106(E)	20'-11"	21'-4"	3'-8"	38'-7"
a107(E)	23'-1"	23'-7"	2'-6"	44'-2"
a108(E)	19'-8"	20'-1"	3'-10"	35'-11"
a109(E)	22'-11"	23'-4"	2'-6"	43'-9"
a110(E)	23'-4"	23'-11"	3'-3"	44'-0"
a111(E)	19'-9"	20'-6"	2'-0"	38'-3"
a207(E)	17'-3"	17'-5"	3'-7"	31'-1"
a208(E)	21'-6"	21'-7"	2'-4"	40'-9"
a209(E)	21'-5"	21'-11"	3'-7"	39'-9"
a210(E)	16'-0"	16'-5"	2'-2"	30'-3"
a211(E)	19'-2"	19'-5"	3'-7"	35'-0"
a212(E)	18'-9"	19'-7"	2'-0"	36'-4"
a213(E)	19'-2"	19'-10"	4'-0"	35'-0"
a214(E)	17'-11"	18'-7"	2'-0"	34'-6"



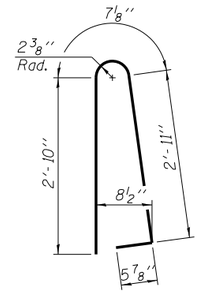
Bar d101(E) & d201(E)

All dimensions are out to out.

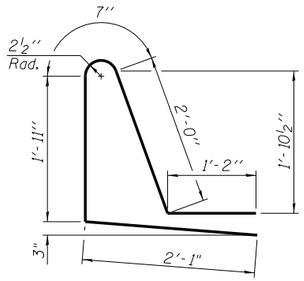


Bar d102(E) & d202(E)

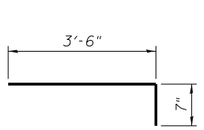
All dimensions are out to out.



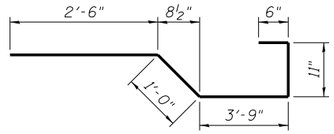
Bar d103(E) & d203(E)



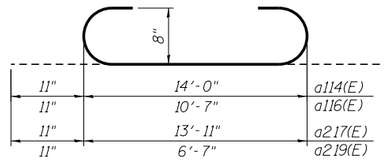
Bar d104(E) & d204(E)



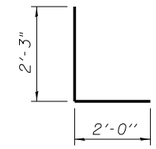
Bar x102(E) & x202(E)



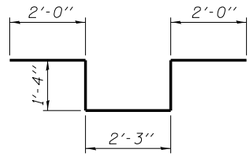
Bar x101(E) & x201(E)



Bar a114(E), a116(E), a217(E) & a219(E)



Bar d106(E)



Bar d105(E)

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205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REINFORCEMENT BAR DETAILS AND BILL OF MATERIAL
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)

SHEET NO. S 34 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1182
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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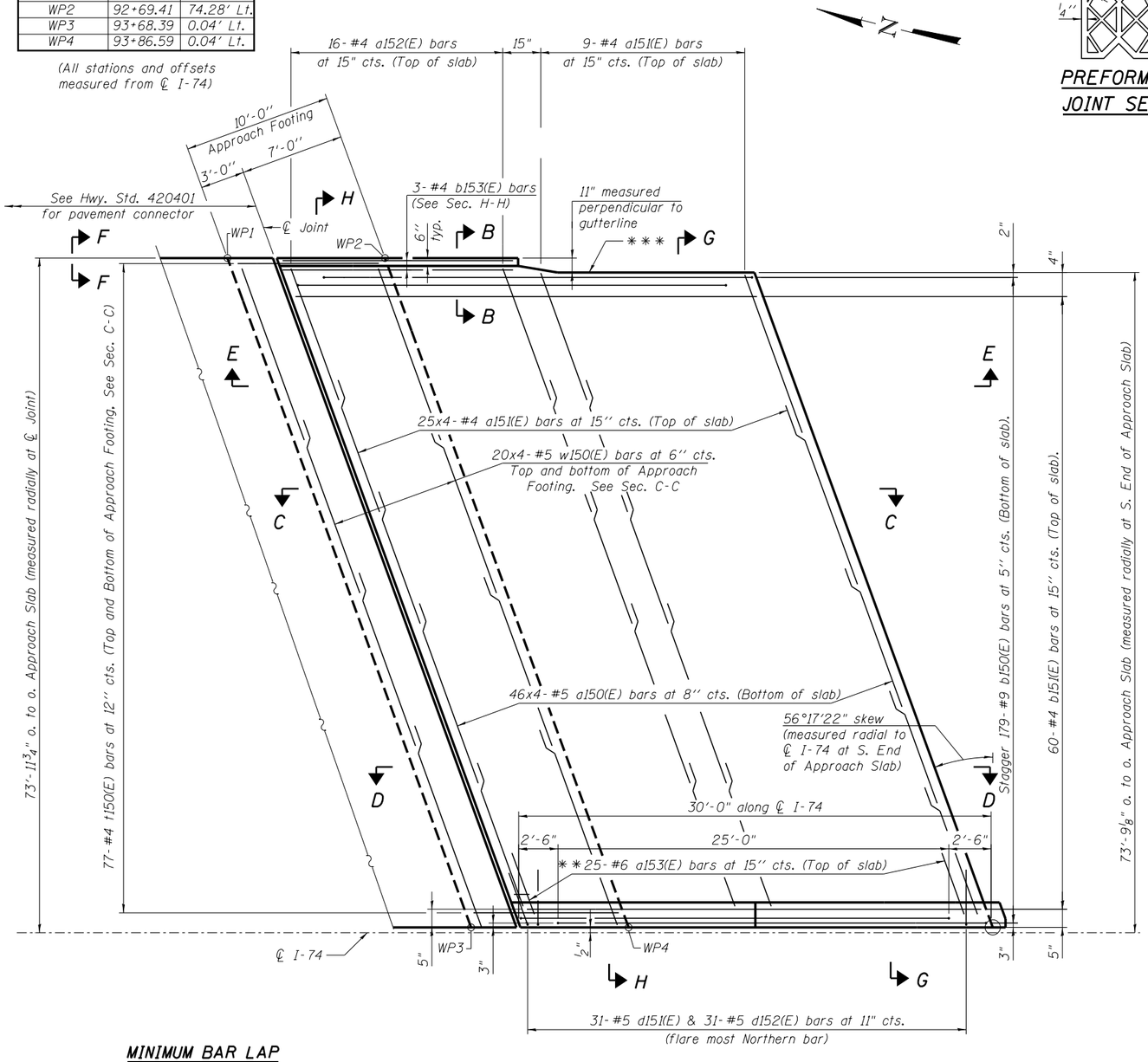
APPROACH FOOTING WORK POINTS

Work Point	Station	Offset
WP1	92+50.68	73.84' Lt.
WP2	92+69.41	74.28' Lt.
WP3	93+68.39	0.04' Lt.
WP4	93+86.59	0.04' Lt.

(All stations and offsets measured from ℄ I-74)

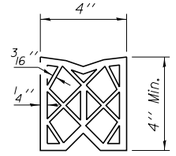


MINIMUM BAR LAP

(Approach)
#4 bar = 2'-7"
#5 bar = 3'-3"

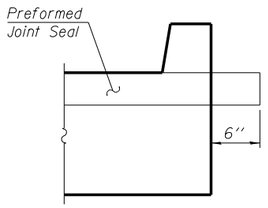
PLAN

* Tilt #9 b150(E) bars as required to maintain clearance.
** Space between a151(E) bars, typ. each parapet.
*** Preformed Flexible Foam Expansion Joint Filler according to Article 1051.09 of Std. Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure.

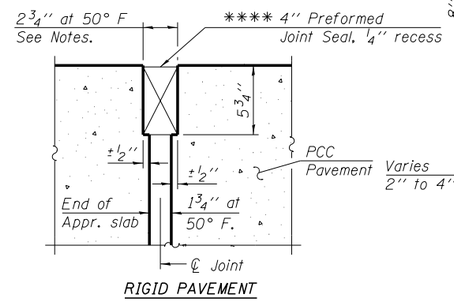


PREFORMED JOINT SEAL

Notes:
1. See sheet S36 for Sections C-C, G-G and H-H.
2. a150(E) and a151 (E) bar spacings measured along ℄ Rdwy.
3. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2" for installation purposes.
4. See sheet S19 for approach slab and parapet layout.

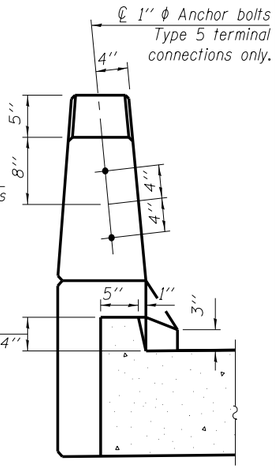


VIEW F-F



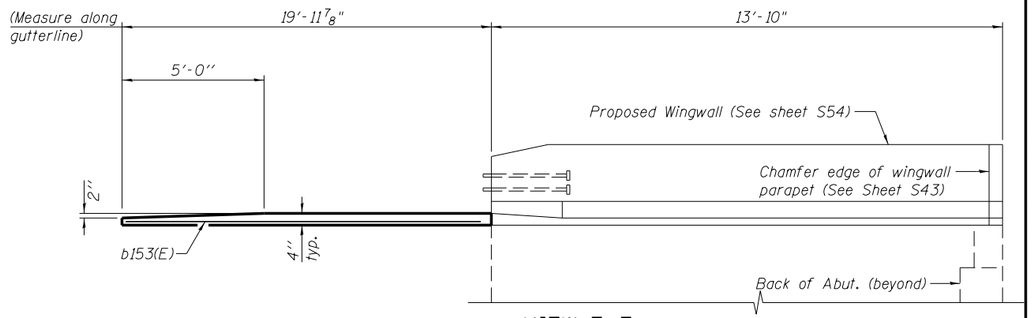
RIGID PAVEMENT

DETAIL A

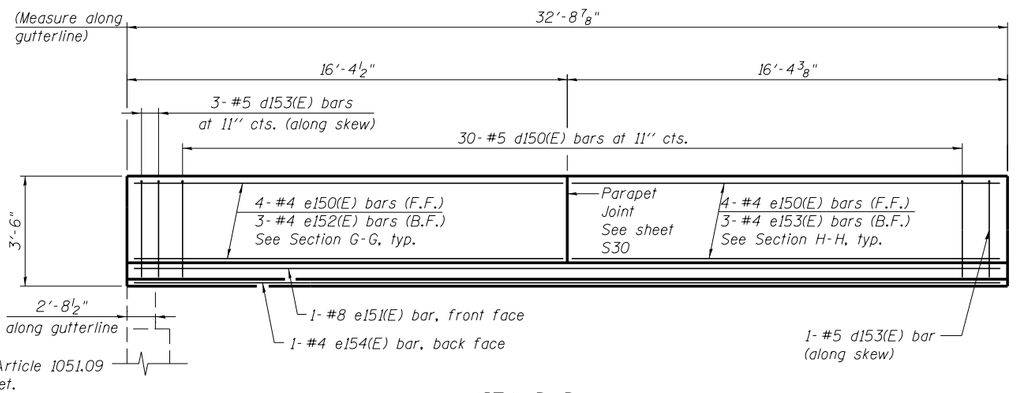


VIEW B-B

**** Cost included with Concrete Superstructure.



VIEW E-E



VIEW D-D

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH SLAB PLAN (WESTBOUND)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S35 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1183
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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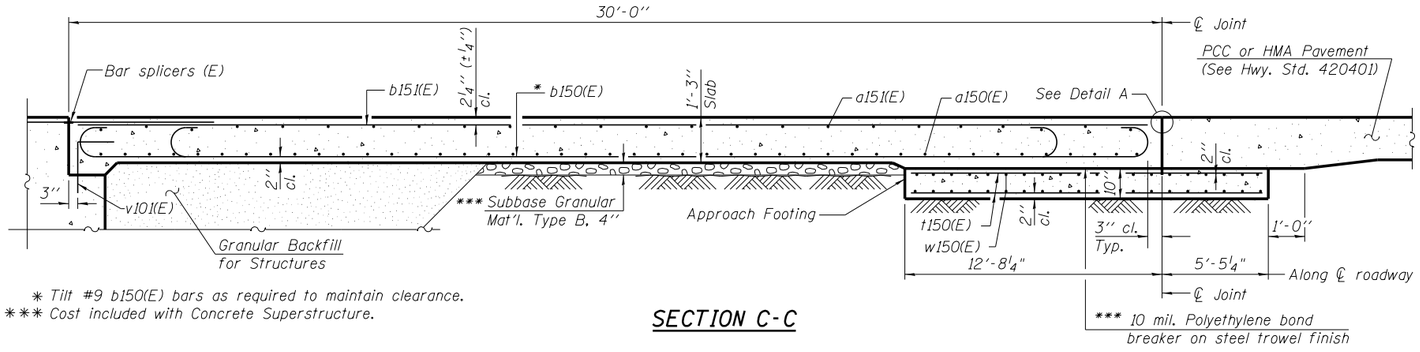
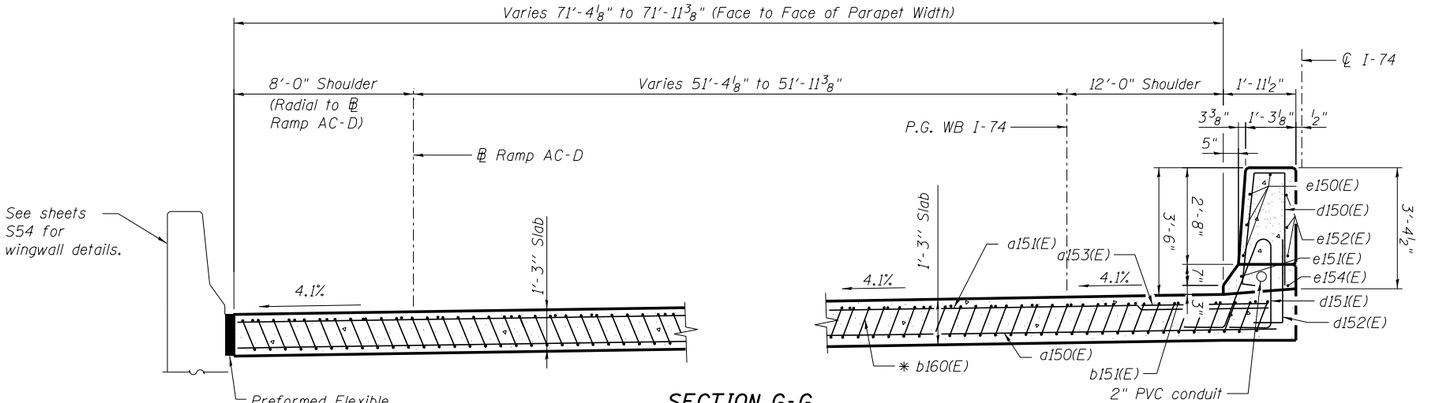


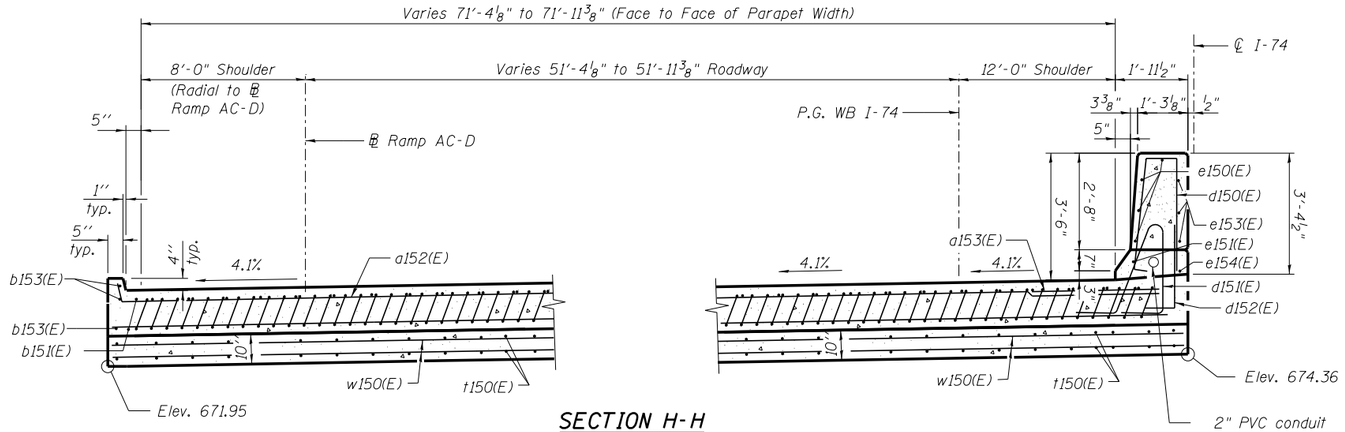
* Tilt #9 b150(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.

SECTION C-C



SECTION G-G

(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Abutment)

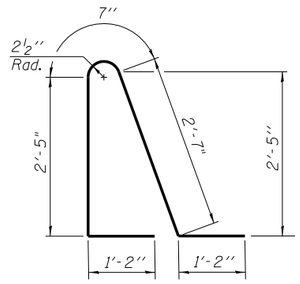


SECTION H-H

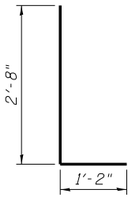
(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Approach Footing)

NOTES:

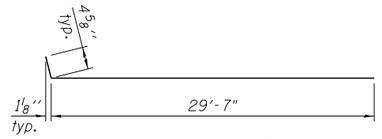
1. See sheet S35 for Detail A.
2. See sheet S9 for Deck Cross Slope Detail.
3. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
4. Approach footing concrete shall be paid for as Concrete Structures.
5. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
6. For v101(E) bar details, see sheets S53, S54 and S57.
7. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
8. For bar splicer details, see sheet S80.
9. Cost of excavation for approach footing included with Concrete Structures.
10. For Granular Backfill for Structures and drainage treatment, see sheet S2.



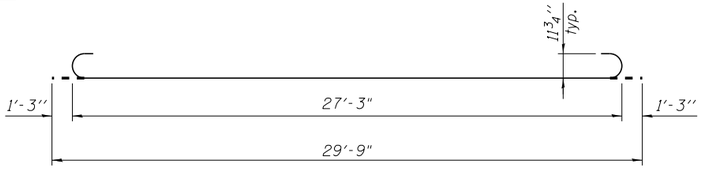
BAR d151(E)



BAR d152(E)



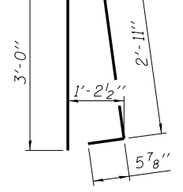
BAR a152(E)



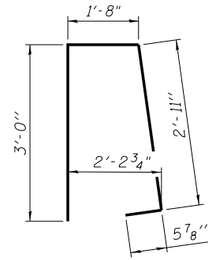
BARS b150(E)

NORTH BRIDGE APPROACH SLAB BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a150(E)	184	#5	36'-10"	
a151(E)	109	#4	29'-8"	
a152(E)	16	#4	30'-0"	
a153(E)	25	#6	6'-6"	
b150(E)	179	#9	29'-9"	
b151(E)	60	#4	29'-8"	
b153(E)	3	#4	19'-8"	
d150(E)	30	#5	7'-4"	
d151(E)	31	#5	7'-11"	
d152(E)	31	#5	3'-10"	
d153(E)	4	#5	8'-1"	
e150(E)	8	#4	15'-11"	
e151(E)	1	#8	32'-2"	
e152(E)	3	#4	17'-8"	
e153(E)	3	#4	13'-1"	
e154(E)	1	#4	31'-1"	
t150(E)	154	#5	17'-9"	
w150(E)	160	#5	37'-0"	
Concrete Superstructure		Cu. Yd.	132.7	
Concrete Structures		Cu. Yd.	42.6	
Reinforcement Bars, Epoxy Coated		Pound	39,060	



BAR d150(E)



BAR d153(E)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH SLAB DETAILS (WESTBOUND)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S36 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1184
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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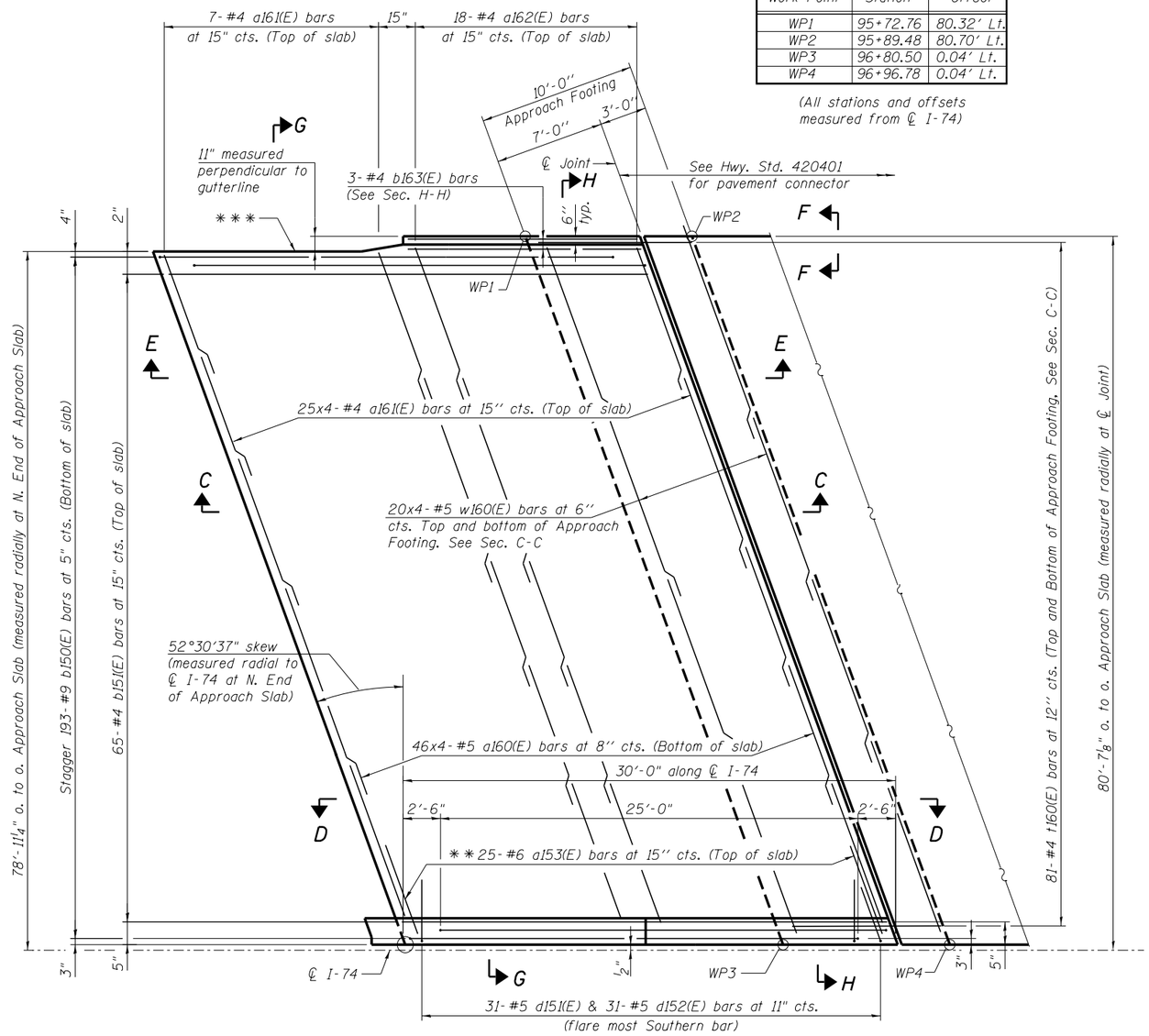
APPROACH FOOTING WORK POINTS

Work Point	Station	Offset
WP1	95+72.76	80.32' Lt.
WP2	95+89.48	80.70' Lt.
WP3	96+80.50	0.04' Lt.
WP4	96+96.78	0.04' Lt.

(All stations and offsets measured from ℄ I-74)



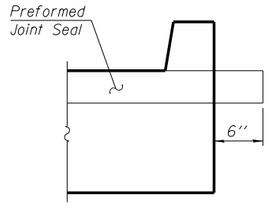
MINIMUM BAR LAP

(Approach)
#4 bar = 2'-7"
#5 bar = 3'-3"

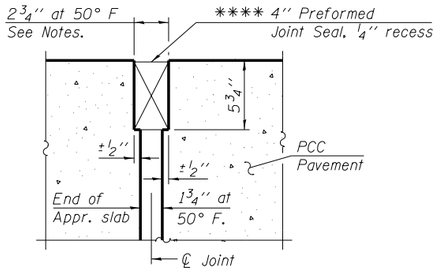
PLAN

* Tilt #9 b150(E) bars as required to maintain clearance.
** Space between a161(E) bars, typ. each parapet.
*** Preformed Flexible Foam Expansion Joint Filler according to Article 1051.09 of Std. Specifications; full depth of slab, full length of parapet. Cost included with Concrete Superstructure.

Notes:
1. See sheet S38 for Sections C-C, G-G and H-H.
2. a160(E) and a161(E) bar spacings measured along ℄ Rdwy.
3. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1½" for installation purposes.
4. See sheet S20 for approach slab and parapet layout.



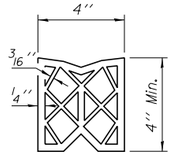
VIEW F-F



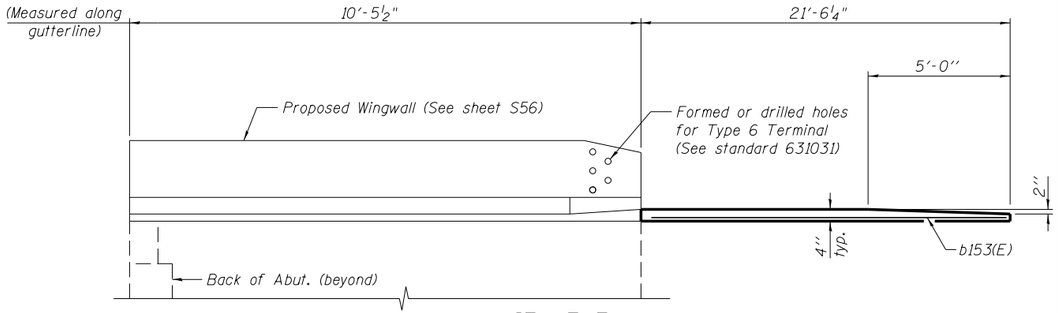
RIGID PAVEMENT

DETAIL A

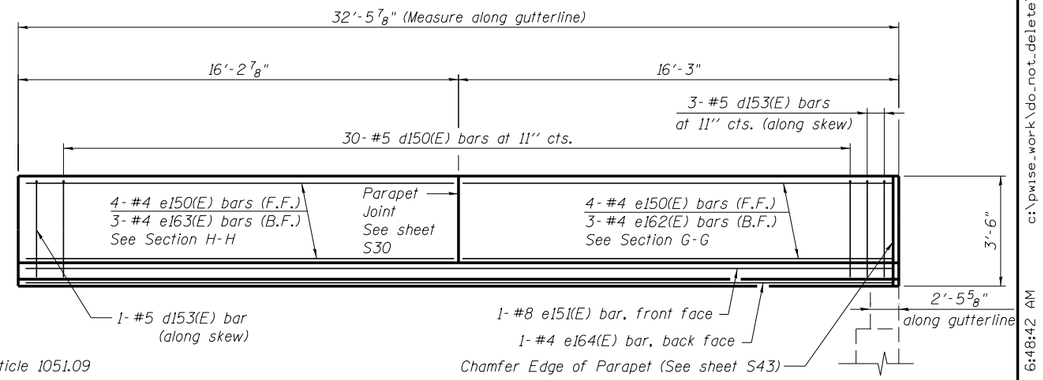
**** Cost included with Concrete Superstructure.



PREFORMED JOINT SEAL



VIEW E-E



VIEW D-D

benesch
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Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB PLAN (WESTBOUND)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S37 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1185
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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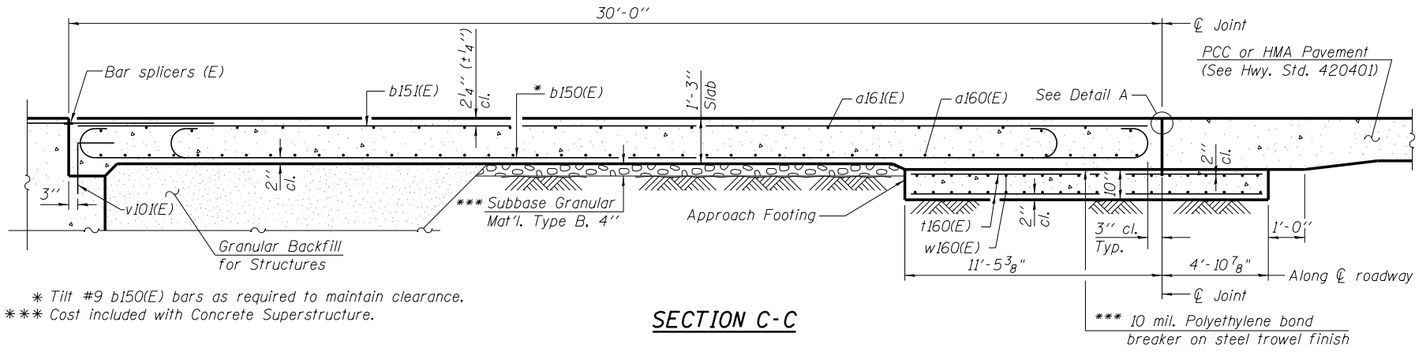
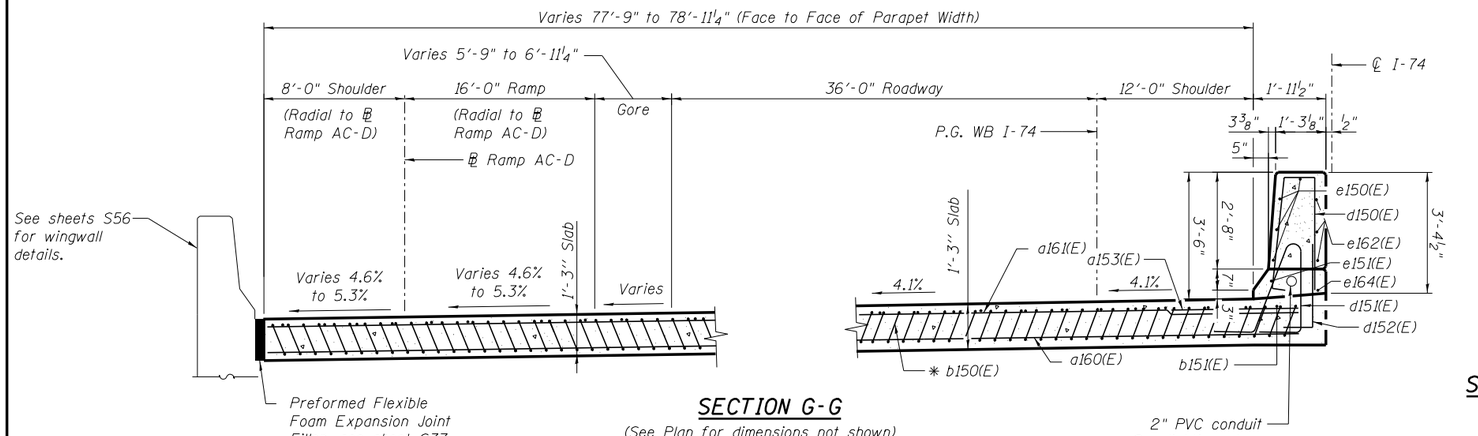


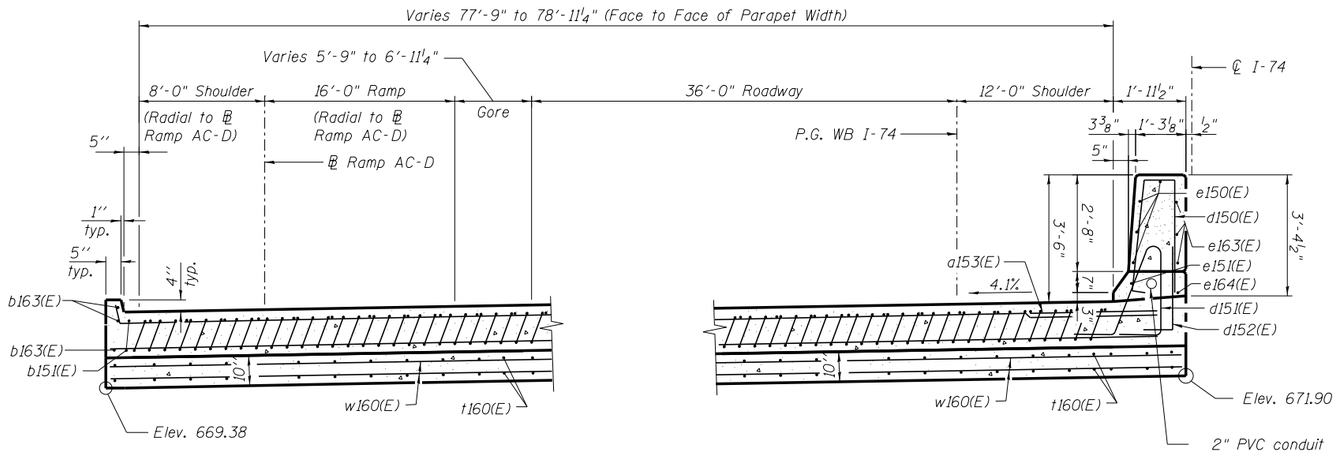
* Tilt #9 b150(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.

SECTION C-C



SECTION G-G

(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Abutment)

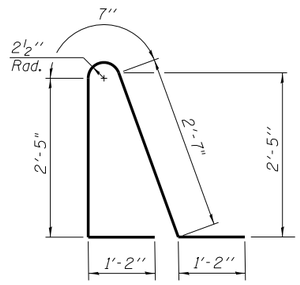


SECTION H-H

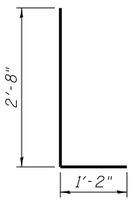
(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Approach Footing)

NOTES:

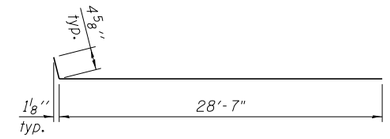
1. See sheet S37 for Detail A.
2. See sheet S9 for Deck Cross Slope Details.
3. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
4. Approach footing concrete shall be paid for as Concrete Structures.
5. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
6. For v101(E) bar details, see sheets S55, S56 and S57.
7. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
8. For bar splicer details, see sheet S80.
9. Cost of excavation for approach footing included with Concrete Structures.
10. For Granular Backfill for Structures and drainage treatment, see sheet S2.



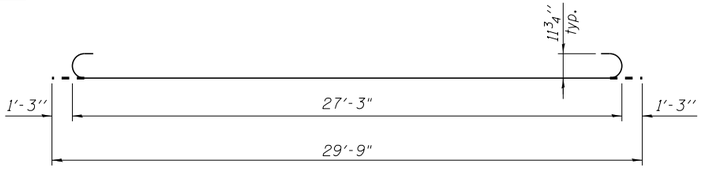
BAR d151(E)



BAR d152(E)



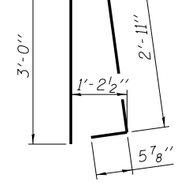
BAR a162(E)



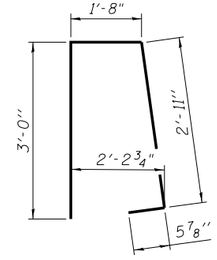
BARS b150(E)

SOUTH BRIDGE APPROACH SLAB BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a153(E)	25	#6	6'-6"	
a160(E)	148	#5	36'-0"	
a161(E)	107	#4	28'-11"	
a162(E)	18	#4	29'-0"	
b150(E)	193	#9	29'-9"	
b151(E)	65	#4	29'-8"	
b163(E)	3	#4	20'-6"	
d150(E)	30	#5	7'-4"	
d151(E)	31	#5	7'-11"	
d152(E)	31	#5	3'-10"	
d153(E)	4	#5	8'-1"	
e150(E)	8	#4	15'-11"	
e151(E)	1	#8	32'-2"	
e162(E)	3	#4	14'-6"	
e163(E)	3	#4	18'-5"	
e164(E)	1	#4	33'-3"	
t160(E)	162	#5	16'-0"	
w160(E)	160	#5	36'-0"	
Concrete Superstructure		Cu. Yd.	139.4	
Concrete Structures		Cu. Yd.	41.2	
Reinforcement Bars, Epoxy Coated		Pound	38,700	



BAR d150(E)



BAR d153(E)

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	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB DETAILS (WESTBOUND)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S38 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1186
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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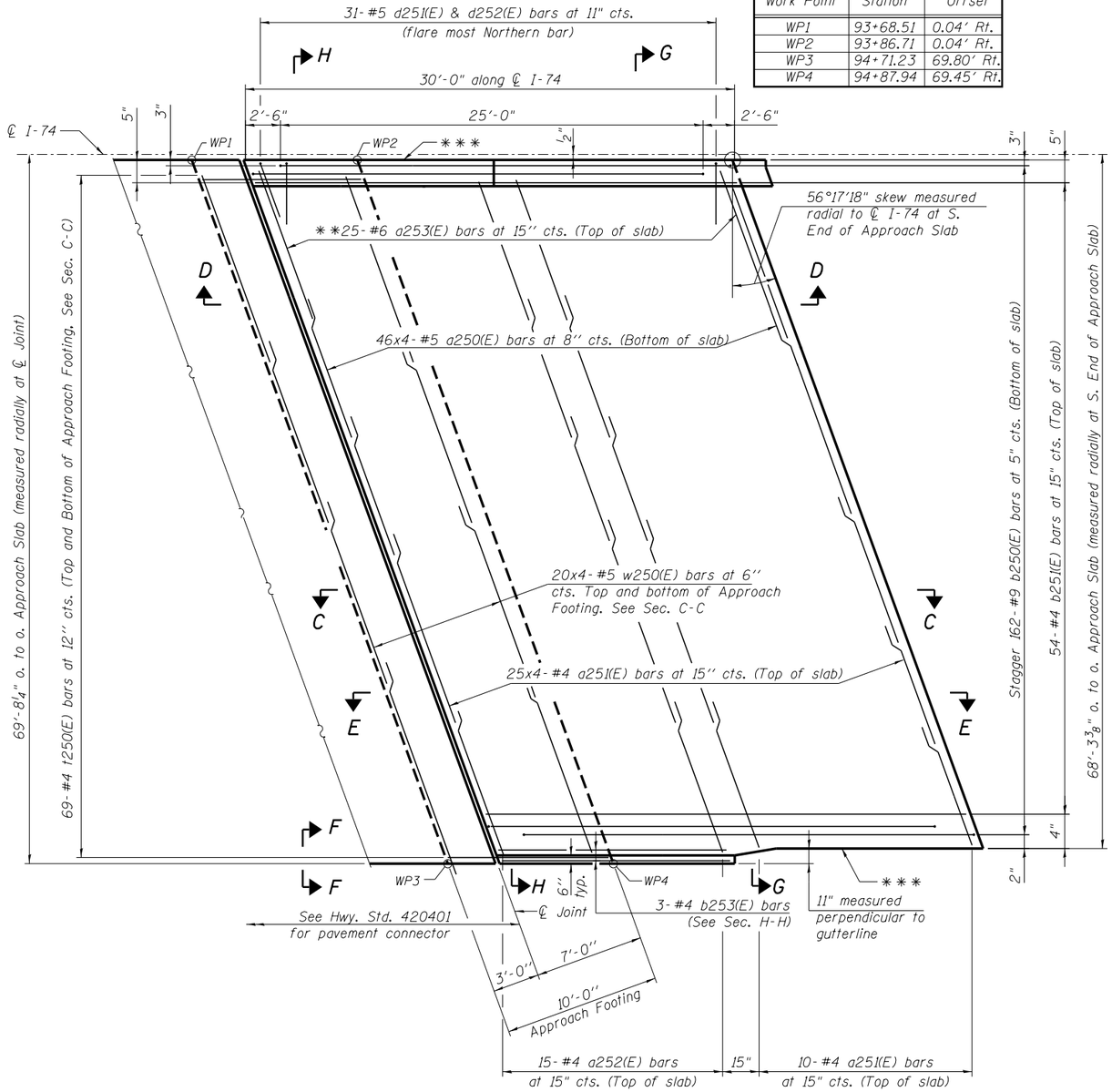
APPROACH FOOTING WORK POINTS

Work Point	Station	Offset
WP1	93+68.51	0.04′ Rt.
WP2	93+86.71	0.04′ Rt.
WP3	94+71.23	69.80′ Rt.
WP4	94+87.94	69.45′ Rt.



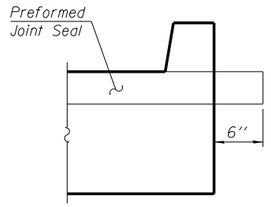
PLAN

* Tilt #9 b250(E) bars as required to maintain clearance.
** Space between a250(E) bars, typ. each parapet.
*** Preformed Flexible Foam Expansion Joint Filler according to Article 1051.09 of Std. Specifications; full depth of slab, full length of parapet, and full length of footing. Cost included with Concrete Superstructure.

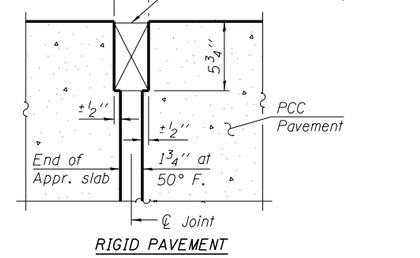
MINIMUM BAR LAP

(Approach)
#4 bar = 2′-7"
#5 bar = 3′-3"

Notes:
1. See sheet S40 for Sections C-C, G-G and H-H.
2. a250(E) and a251(E) bar spacings measured along ℄ Rdwy.
3. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1½" for installation purposes.
4. See sheet S21 for approach slab and parapet layout.

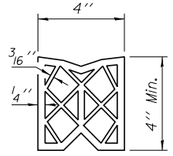


VIEW F-F



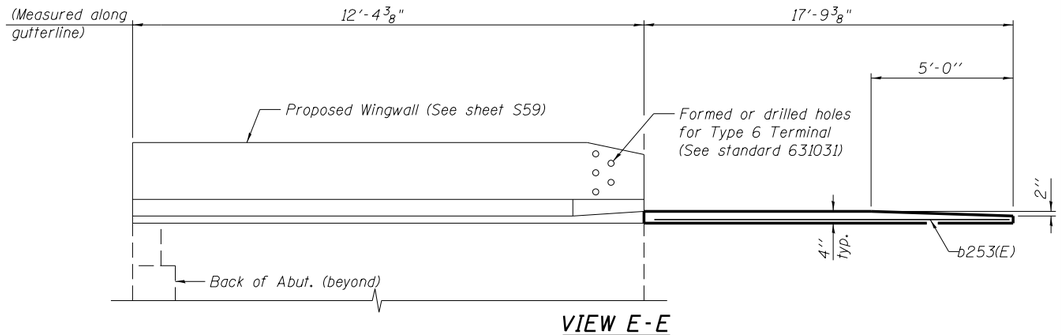
RIGID PAVEMENT

DETAIL A

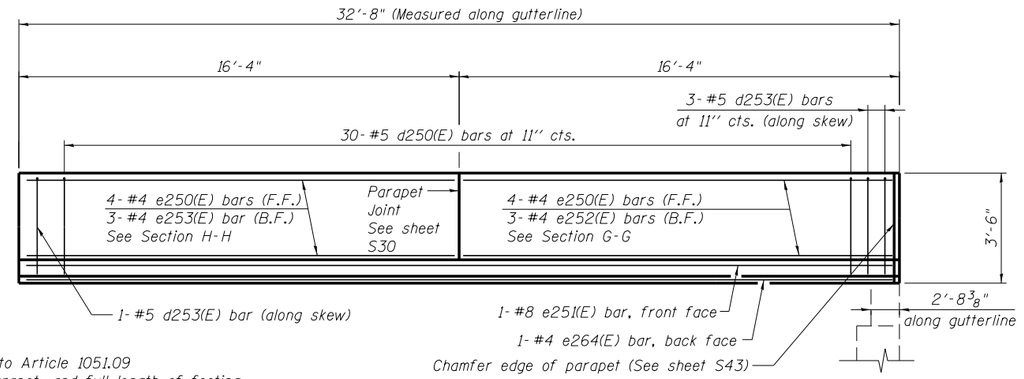


PREFORMED JOINT SEAL

**** Cost included with Concrete Superstructure.



VIEW E-E



VIEW D-D

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Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH SLAB PLAN (EASTBOUND)
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S39 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1187
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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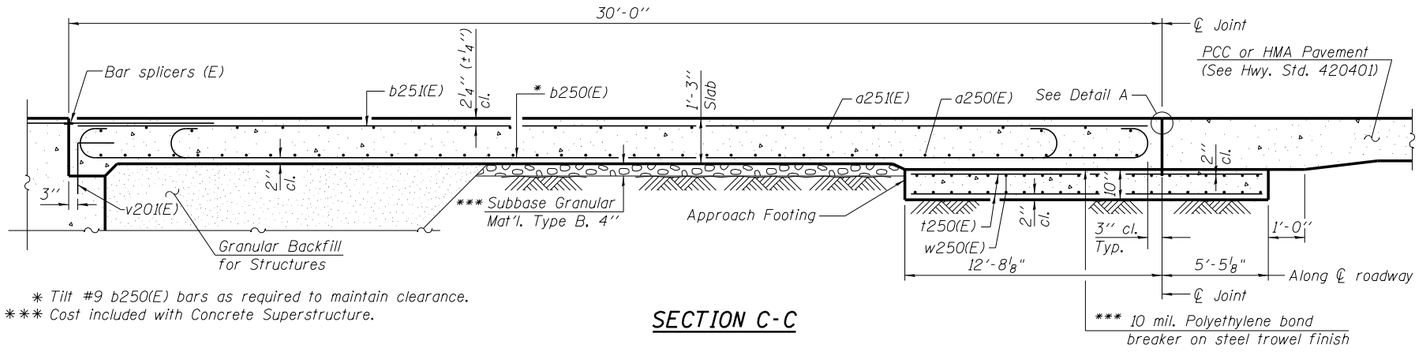
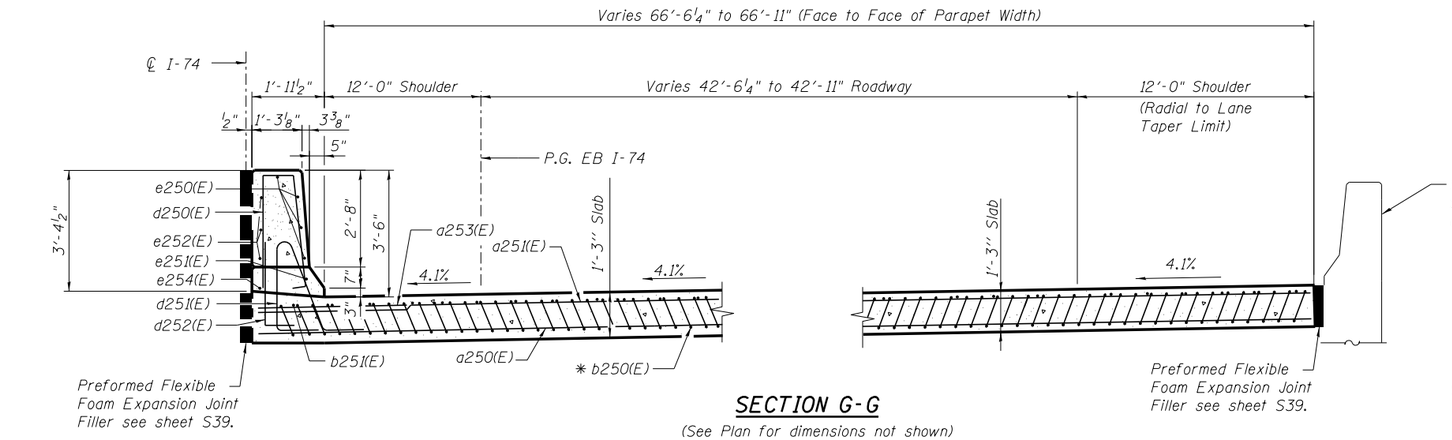


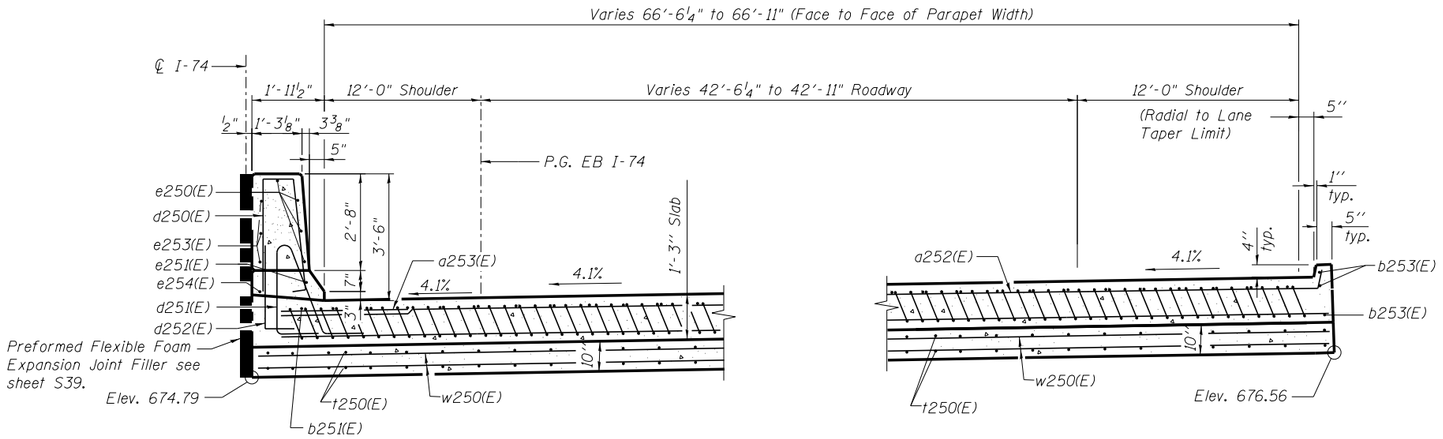
* Tilt #9 b250(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.

SECTION C-C



SECTION G-G

(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Abutment)

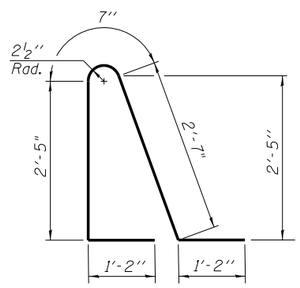


SECTION H-H

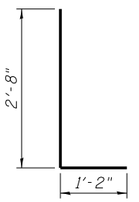
(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Approach Footing)

NOTES:

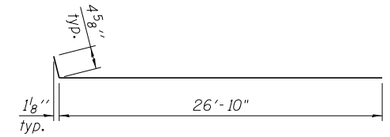
1. See sheet S39 for Detail A.
2. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
3. Approach footing concrete shall be paid for as Concrete Structures.
4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
5. For v201(E) bar details, see sheets S58, S59 and S62.
6. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
7. For bar splicer details, see sheet S80.
8. Cost of excavation for approach footing included with Concrete Structures.
9. For Granular Backfill for Structures and drainage treatment, see sheet S2.



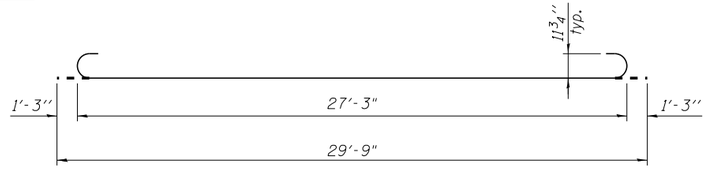
BAR d251(E)



BAR d252(E)



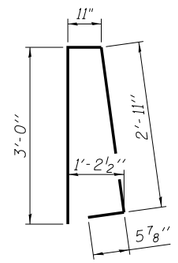
BAR a252(E)



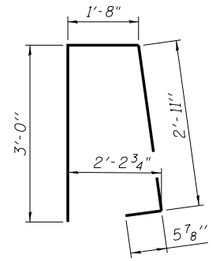
BARS b250(E)

NORTH BRIDGE APPROACH SLAB BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a250(E)	184	#5	33'-6"	
a251(E)	110	#4	26'-11"	
a252(E)	15	#4	27'-3"	
a253(E)	25	#6	6'-6"	
b250(E)	162	#9	29'-9"	
b251(E)	54	#4	29'-8"	
b253(E)	3	#4	16'-9"	
d250(E)	30	#5	7'-4"	
d251(E)	31	#5	7'-11"	
d252(E)	31	#5	3'-8"	
d253(E)	4	#5	8'-1"	
e250(E)	8	#4	16'-0"	
e251(E)	1	#8	32'-4"	
e252(E)	3	#4	14'-4"	
e253(E)	3	#4	18'-9"	
e254(E)	1	#4	33'-6"	
t250(E)	138	#5	17'-9"	
w250(E)	160	#5	33'-8"	
Concrete Superstructure			Cu. Yd.	119.3
Concrete Structures			Cu. Yd.	38.4
Reinforcement Bars, Epoxy Coated			Pound	35,500



BAR d250(E)



BAR d253(E)

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205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH APPROACH SLAB DETAILS (EASTBOUND)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S40 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1188
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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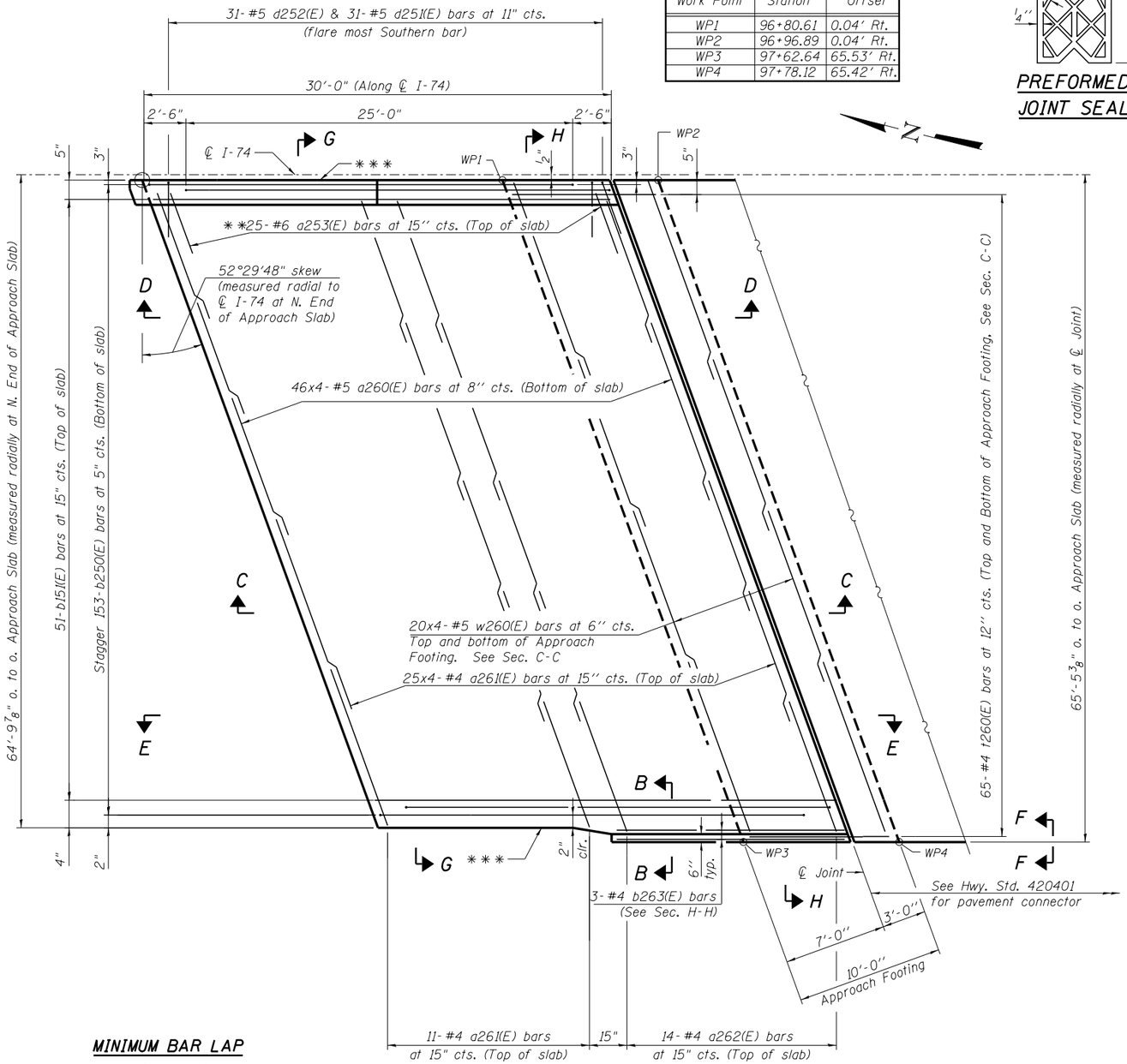
APPROACH FOOTING WORK POINTS

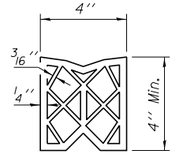
Work Point	Station	Offset
WP1	96+80.61	0.04' Rt.
WP2	96+96.89	0.04' Rt.
WP3	97+62.64	65.53' Rt.
WP4	97+78.12	65.42' Rt.



PLAN

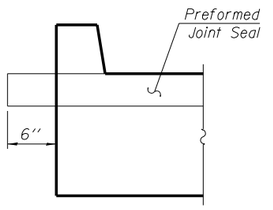
MINIMUM BAR LAP

(Approach)
#4 bar = 2'-7"
#5 bar = 3'-3"

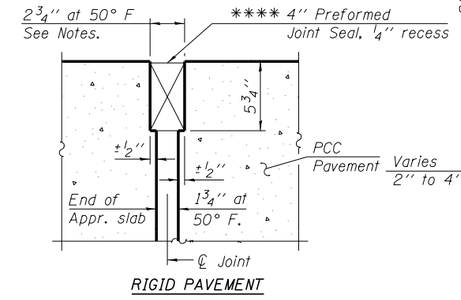


PREFORMED JOINT SEAL

Notes:
1. See sheet S42 for Sections C-C, G-G & H-H.
2. a260(E) and a261 (E) bar spacings measured along ℄ Rdwy.
3. The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2" for installation purposes.
4. See sheet S22 for approach slab and parapet layout.

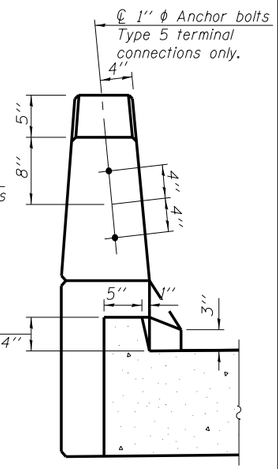


VIEW F-F



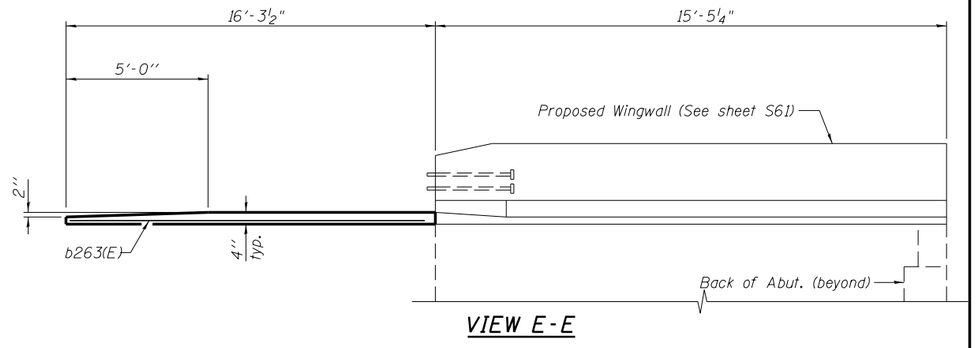
RIGID PAVEMENT

DETAIL A

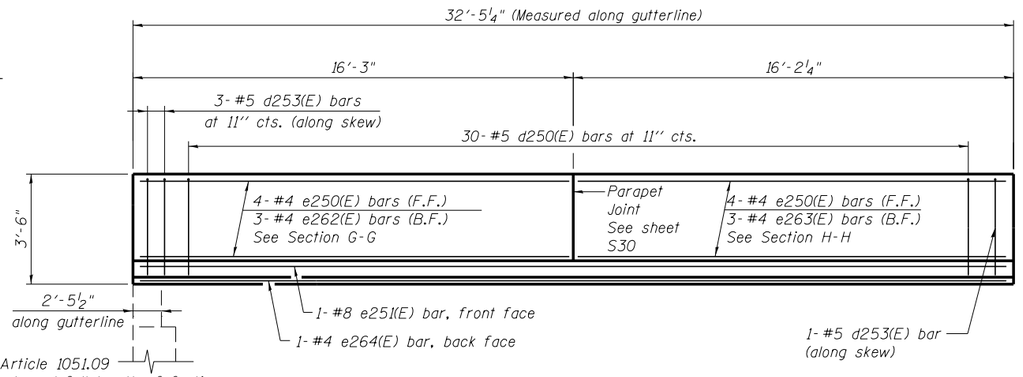


VIEW B-B

**** Cost included with Concrete Superstructure.



VIEW E-E



VIEW D-D

* Tilt #9 b250(E) bars as required to maintain clearance.
** Space between a261(E) bars, typ. each parapet.
*** Preformed Flexible Foam Expansion Joint Filler according to Article 1051.09 of Std. Specifications; full depth of slab, full length of parapet, and full length of footing. Cost included with Concrete Superstructure.

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-041-South_Approach_Slab_Plan_(Eastbound).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB PLAN (EASTBOUND)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S41 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1189
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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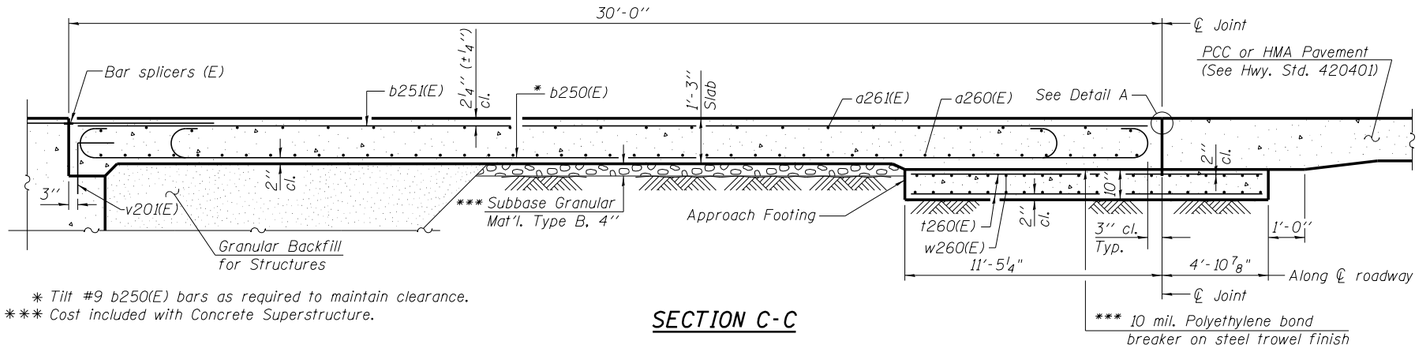
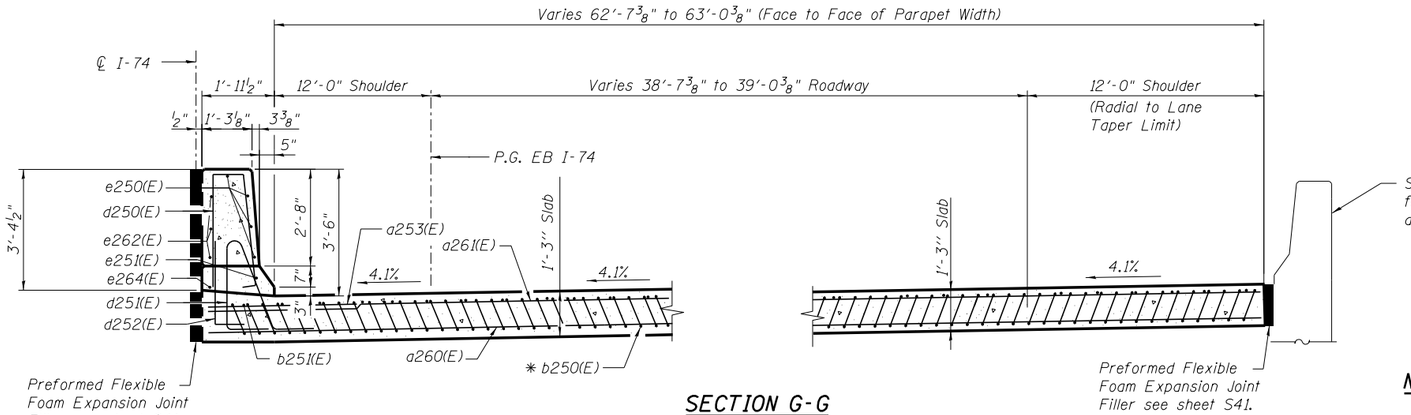


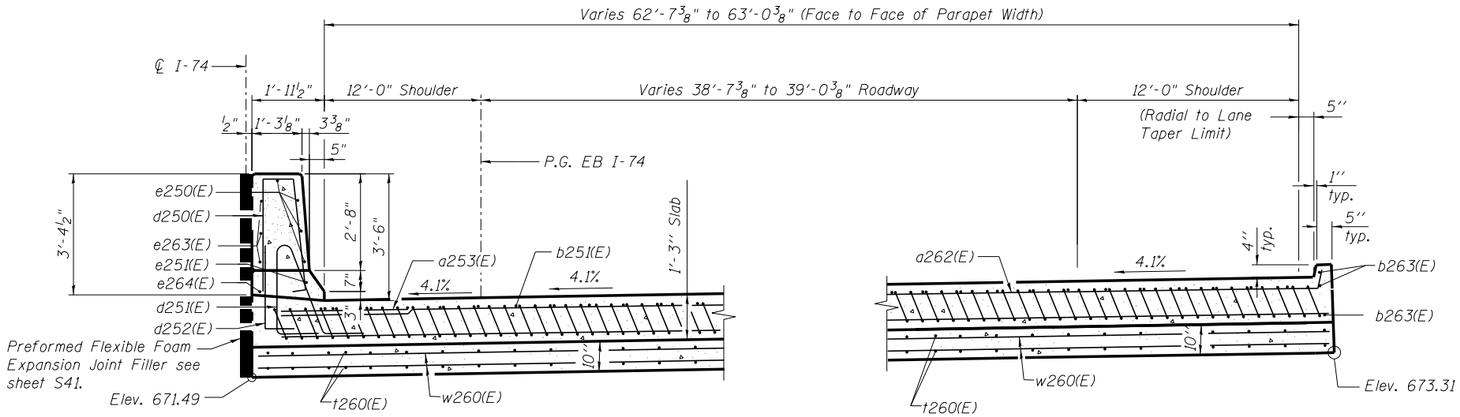
* Tilt #9 b250(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.

SECTION C-C



SECTION G-G

(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Abutment)

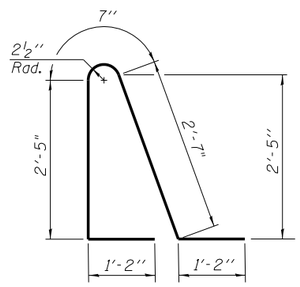


SECTION H-H

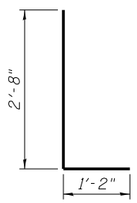
(See Plan for dimensions not shown)
(All horizontal dimensions measured radial to ℄ I-74 unless noted otherwise)
(Near Abutment)

NOTES:

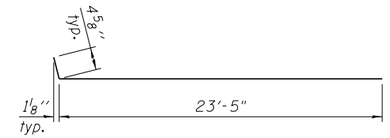
1. See sheet S41 for Detail A.
2. Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
3. Approach footing concrete shall be paid for as Concrete Structures.
4. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
5. For v201(E) bar details, see sheets S60, S61 and S62.
6. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
7. For bar splicer details, see sheet S80.
8. Cost of excavation for approach footing included with Concrete Structures.
9. For Granular Backfill for Structures and drainage treatment, see sheet S2.



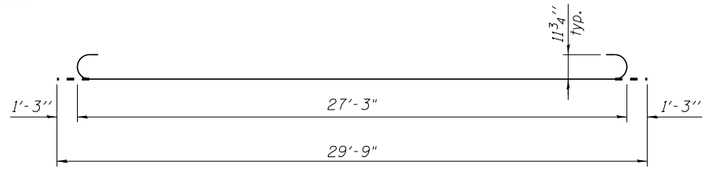
BAR d251(E)



BAR d252(E)



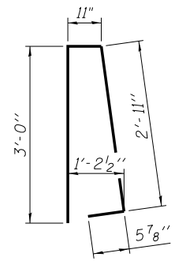
BAR a262(E)



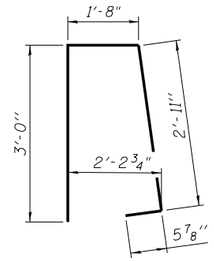
BARS b250(E)

NORTH BRIDGE APPROACH SLAB BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a253(E)	25	#6	6'-6"	
a260(E)	184	#5	29'-3"	
a261(E)	111	#4	23'-6"	
a262(E)	14	#4	23'-10"	
b250(E)	153	#9	29'-9"	
b251(E)	51	#4	29-8"	
b263(E)	3	#4	16'-0"	
d250(E)	30	#5	7'-4"	
d251(E)	31	#5	7'-11"	
d252(E)	31	#5	3'-8"	
d253(E)	4	#5	8'-1"	
e250(E)	8	#4	15'-11"	
e251(E)	1	#8	32'-2"	
e262(E)	3	#4	17'-4"	
e263(E)	3	#4	13'-4"	
e264(E)	1	#4	31'-0"	
t260(E)	130	#5	16'-0"	
w260(E)	160	#5	28'-9"	
Concrete Superstructure			Cu. Yd.	112.5
Concrete Structures			Cu. Yd.	32.5
Reinforcement Bars, Epoxy Coated			Pound	31,290



BAR d250(E)



BAR d253(E)

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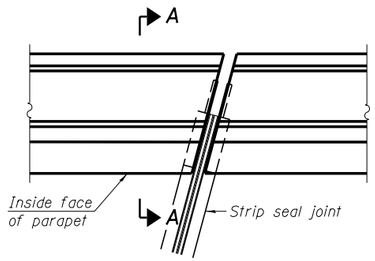
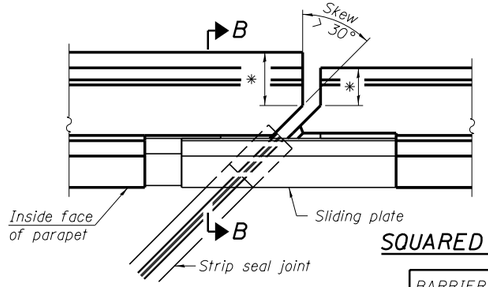
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH SLAB DETAILS (EASTBOUND)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S42 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1190
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		



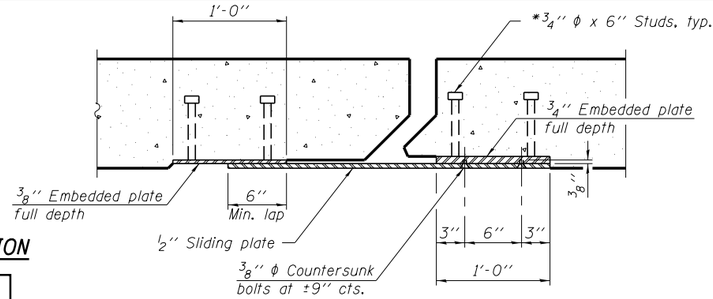
PLAN
(For skews ≤ 30°)



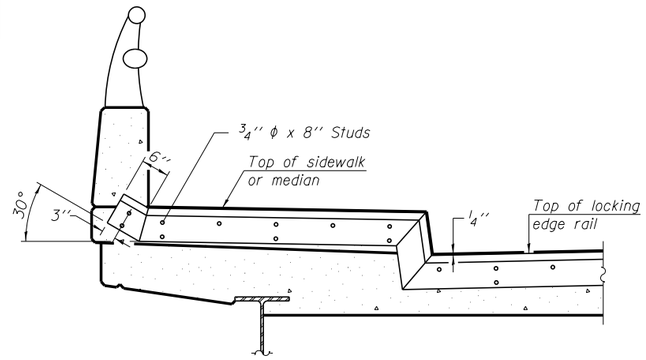
PLAN
(For skews > 30°)
Showing point block

SQUARED OFF WIDTH DIMENSION

BARRIER TYPE	SIDE OF JOINT	* SQUARED OFF WIDTH
Aesthetic	Deck	$7\frac{3}{4}$"
Aesthetic	Approach Slab	6"
Median	Deck	6"
Median	Approach Slab	$10\frac{1}{2}$"

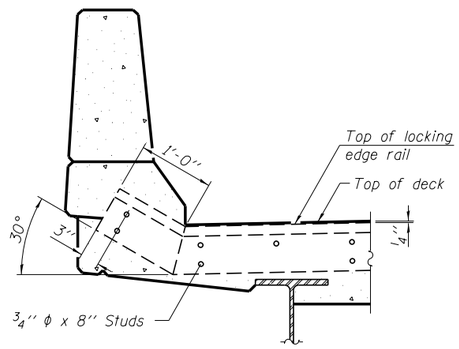


SECTION C-C

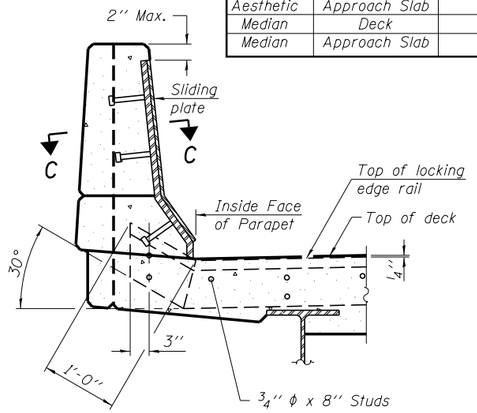


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

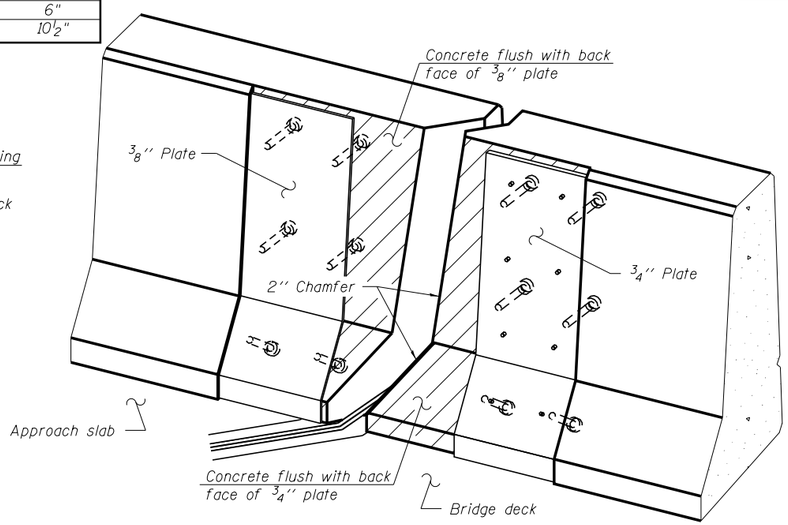
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



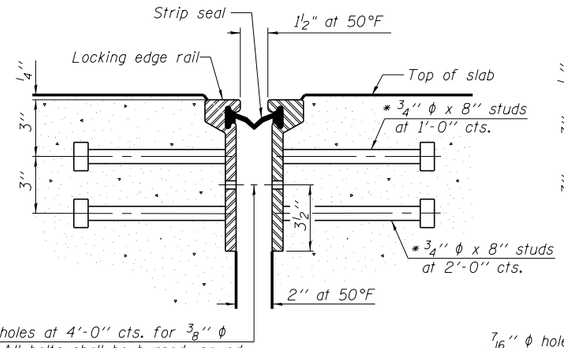
SECTION A-A



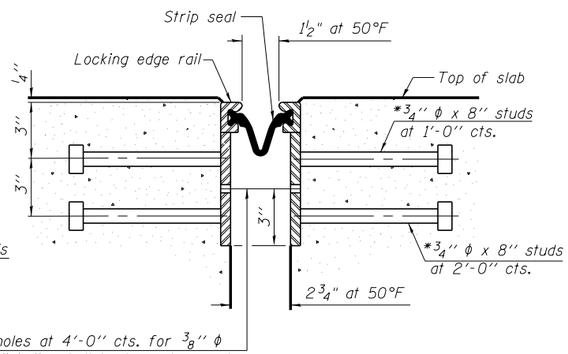
SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)

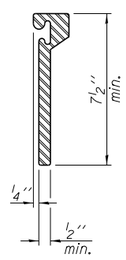


SECTION THRU ROLLED RAIL JOINT

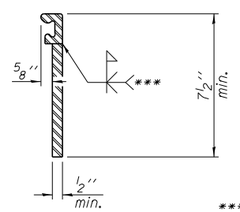


SECTION THRU WELDED RAIL JOINT

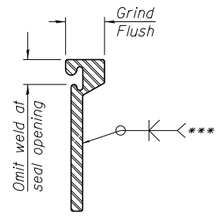
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



ROLLED EXTRUDED RAIL



WELDED RAIL



*** 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.

LOCKING EDGE RAILS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}$". 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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be $\frac{3}{16}$", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	488.0

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

EJ-SSJ 1-27-12

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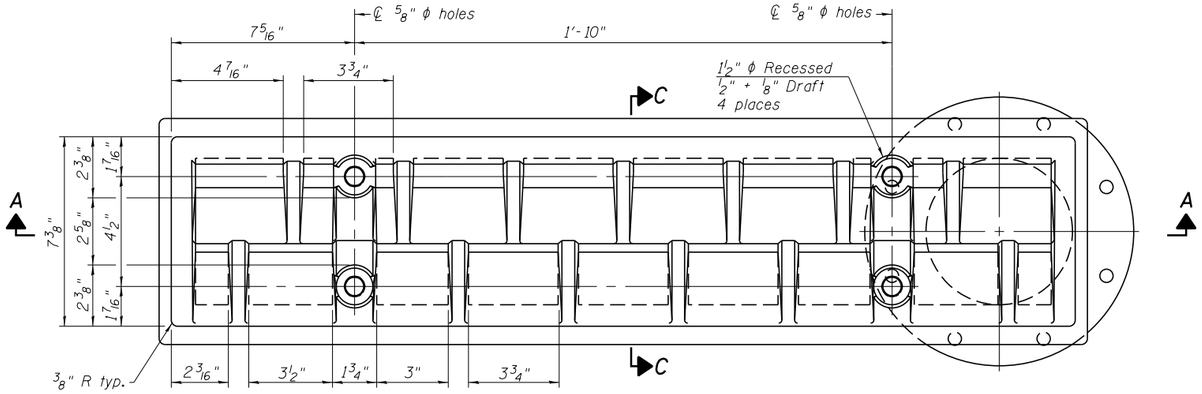
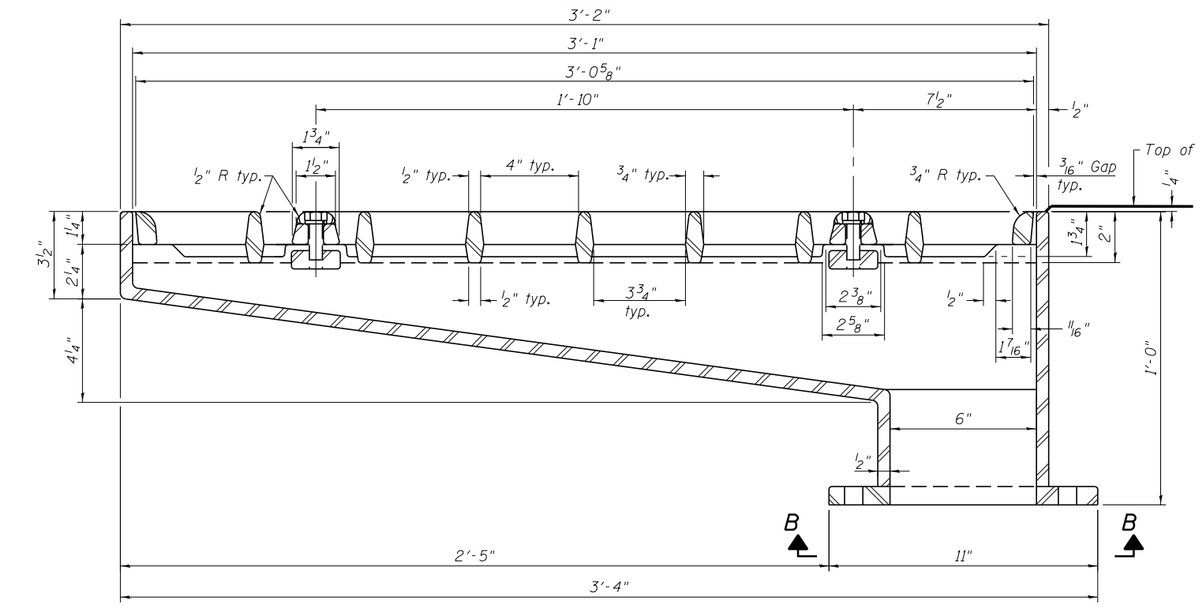
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S43 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1191
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

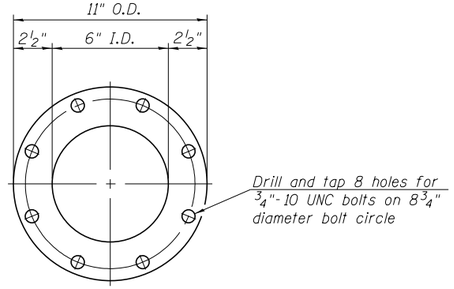


PLAN

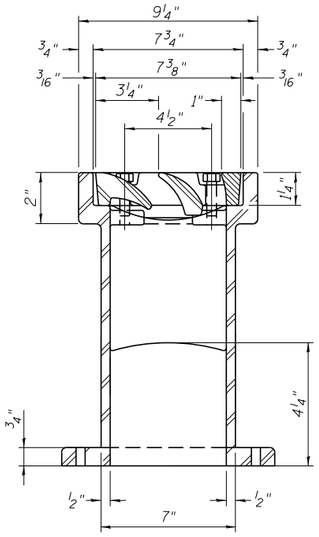


SECTION A-A

See sheets S27 & S28 for scupper location relative to parapet.



VIEW B-B



SECTION C-C

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

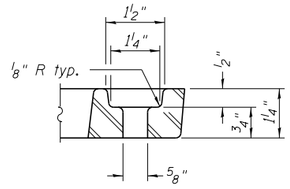
Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

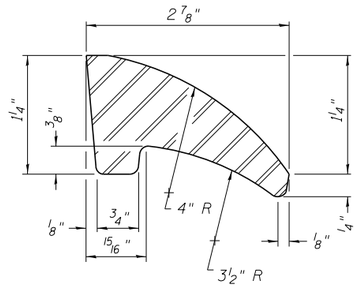
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper (Special).

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

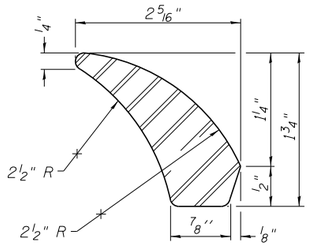
DOWNSPOUT



BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper (Special)	Each	4

benesch
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205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S44 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1192
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

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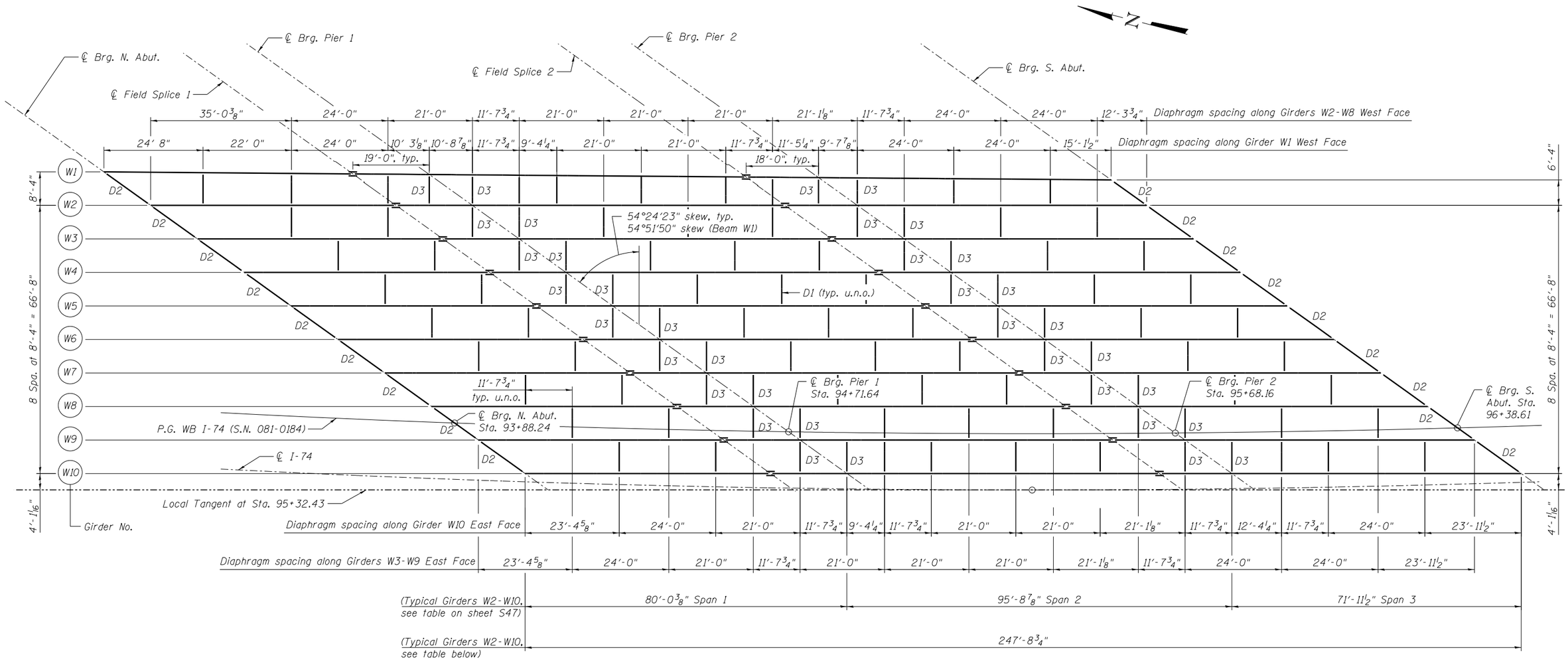

FRAMING PLAN

	W1	W2-W10
Distance along ℄ Beam from ℄ Brg. N. Abut. to ℄ Brg. S. Abut.	250'-6 3/8"	247'-8 3/4"

NOTES:

1. Girder spacing measured perpendicular to Local Tangent at Sta. 95+32.43 at ℄ Brg. N. & S. Abut.
2. Diaphragms placed perpendicular to western girder, except at ℄ Brg. at N. and S. Abut.
3. See sheet S47 for girder elevation.
4. See sheet S48 for diaphragm details.
5. See sheet S49 for splice details.

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DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN – WB
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S45 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1193
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

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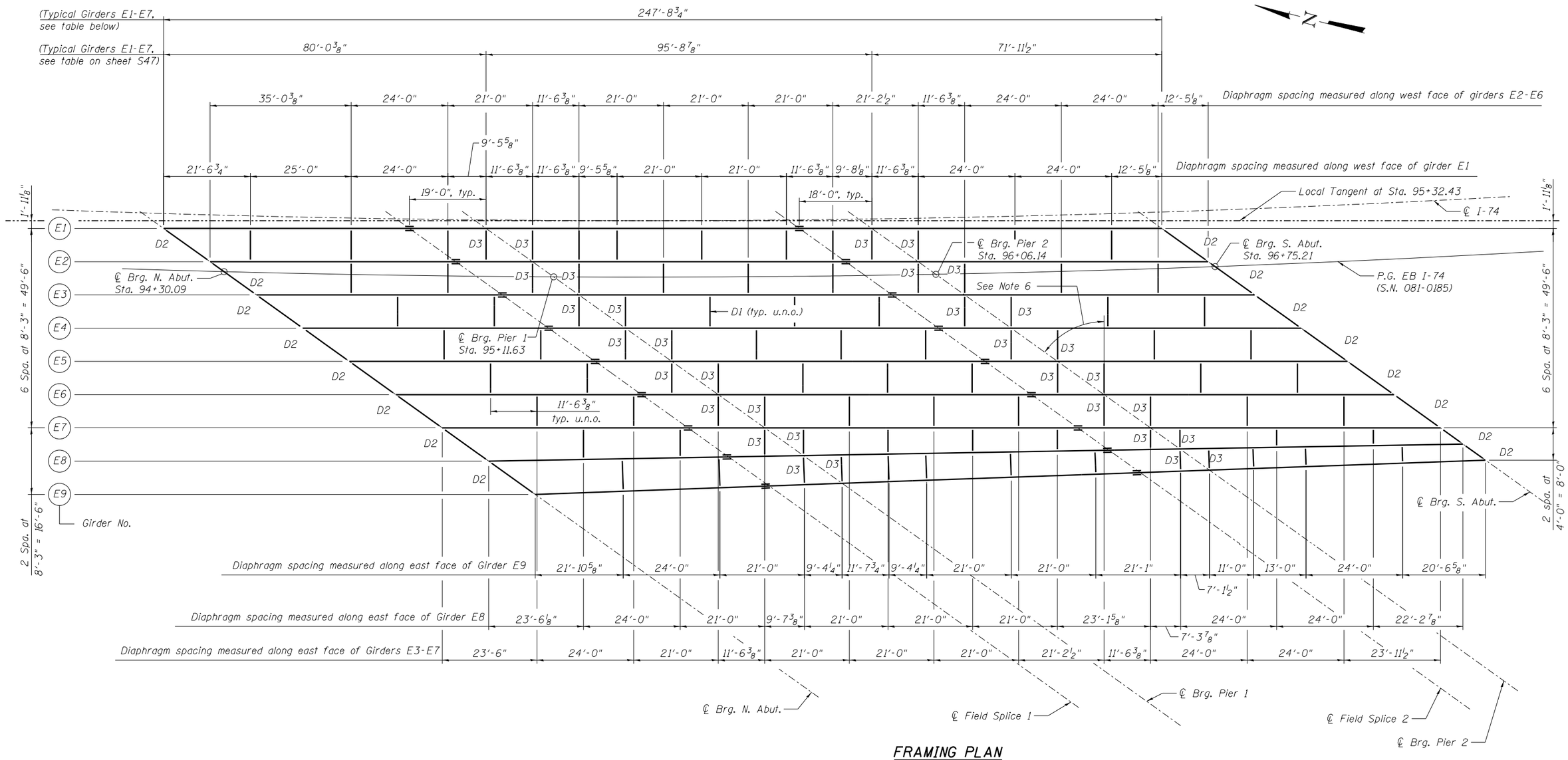

FRAMING PLAN

	E1-E7	E8	E9
Distance along ℄ Beam from ℄ Brg. N. Abut. to ℄ Brg. S. Abut.	247'-8 3/4"	241'-9 7/8"	236'-0"

NOTES:

1. Girder spacing measured perpendicular to Local Tangent at Sta. 95+32.43 at ℄ Brg. N. Abut.
2. Diaphragms placed perpendicular to eastern girder, except at ℄ Brg. at N. and S. Abut and placed perpendicular to girder E9 between girders E8 & E9.
3. See sheet S47 for girder elevation
4. See sheet S48 diaphragm details.
5. See sheet S49 for splice details.
6. Skew = 54°24'23" (Girder E1-E7)
   Skew = 53°23'58" (Girder E8)
   Skew = 52°20'32" (Girder E9)

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DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN – EB
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S46 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1194
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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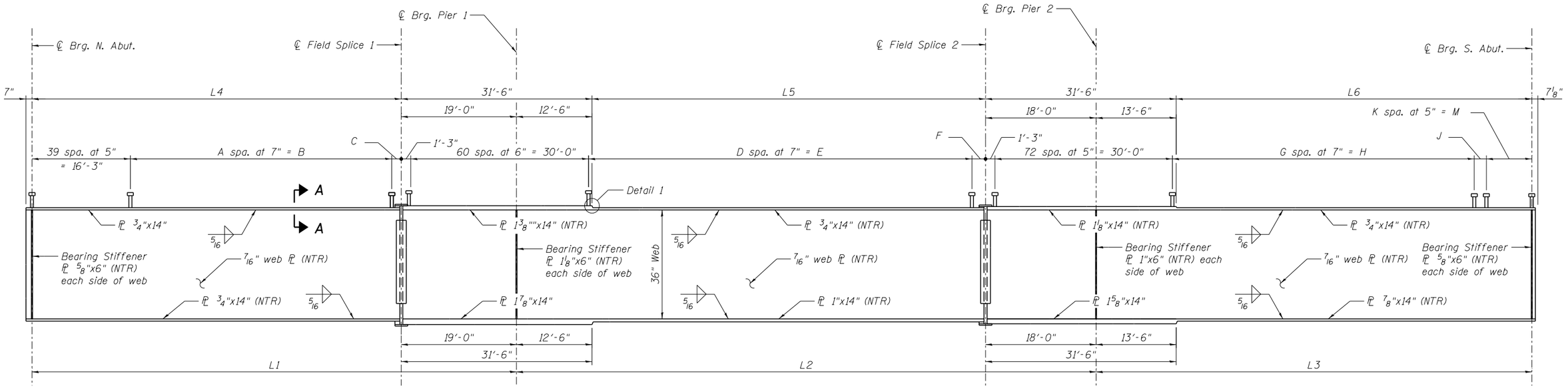
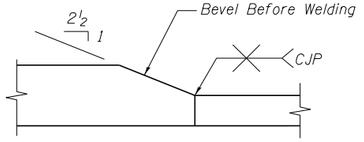


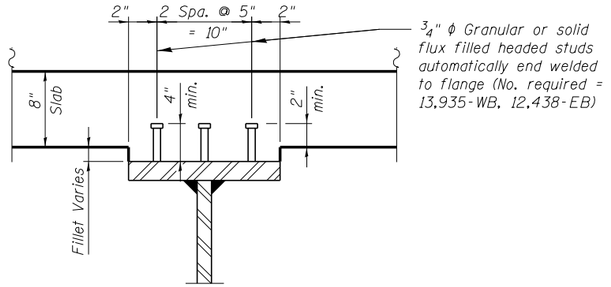
GIRDER ELEVATION

SHEAR STUD SPACING

Girder No.	A	B	C	D	E	F	G	H	J	K	M	No. rows of studs per girder line	No. of studs per girder line
W1	76	44'-4"	1'-4 1/8"	111	64'-9"	1'-9 7/8"	87	50'-9"	5 3/8"	20	8'-4"	469	1407
W2-W10 & E1-E7	74	43'-2"	1'-7 3/8"	110	64'-2"	1'-3 7/8"	87	50'-9"	5 1/2"	18	7'-6"	464	1392
E8	71	41'-5"	1'-5 1/2"	106	61'-10"	1'-4 1/2"	84	49'-0"	6"	18	7'-6"	454	1362
E9	68	39'-8"	1'-4"	102	59'-6"	1'-5 1/2"	81	47'-3"	6 5/8"	18	7'-6"	444	1332



DETAIL 1



SECTION A-A

TOP OF WEB ELEVATIONS

(For fabrication only - See note 4)

	W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	E1	E2	E3	E4	E5	E6	E7	E8	E9
℄ Brg. N. Abut.	673.13	673.39	673.64	673.90	674.15	674.41	674.66	674.91	675.16	675.42	675.90	676.10	676.30	676.50	676.71	676.92	677.13	677.34	677.55
℄ Field Splice 1	672.65	672.89	673.14	673.40	673.65	673.90	674.15	674.40	674.65	674.90	675.12	675.33	675.54	675.75	675.96	676.18	676.40	676.60	676.80
℄ Pier 1	672.51	672.75	673.00	673.26	673.50	673.75	674.00	674.25	674.50	674.75	674.92	675.13	675.34	675.55	675.77	675.99	676.21	676.40	676.59
℄ Field Splice 2	671.95	672.17	672.42	672.68	672.89	673.14	673.39	673.63	673.88	674.12	674.09	674.31	674.53	674.76	674.99	675.22	675.45	675.61	675.78
℄ Pier 2	671.82	672.03	672.30	672.55	672.75	673.00	673.25	673.49	673.74	673.99	673.93	674.15	674.38	674.61	674.84	675.07	675.31	675.46	675.61
℄ Brg. S. Abut.	671.26	671.47	671.78	672.05	672.19	672.43	672.68	672.94	673.19	673.44	673.28	673.52	673.76	673.99	674.23	674.48	674.72	674.84	674.96

GIRDER DIMENSIONS

	W1	W2-W10 & E1-E7	E8	E9
L1	80'-11 1/8"	80'-0 3/8"	78'-1 1/2"	76'-2 7/8"
L2	96'-9 7/8"	95'-8 7/8"	93'-5 1/2"	91'-2 1/2"
L3	72'-9 3/8"	71'-11 1/2"	70'-2 1/8"	68'-6 5/8"
L4	61'-11 1/8"	61'-0 3/8"	59'-1 1/2"	57'-2 7/8"
L5	66'-3 7/8"	65'-2 7/8"	62'-11 1/2"	60'-8 1/2"
L6	59'-3 3/8"	58'-5 1/2"	56'-8 7/8"	55'-0 5/8"

NOTES:

1. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
2. All flange plates and web plates shall be AASHTO M270 Grade 50 Steel.
3. See sheet S49 for splice details.
4. Girders are not cambered.

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DEPARTMENT OF TRANSPORTATION

GIRDER ELEVATION AND DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S47 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1195
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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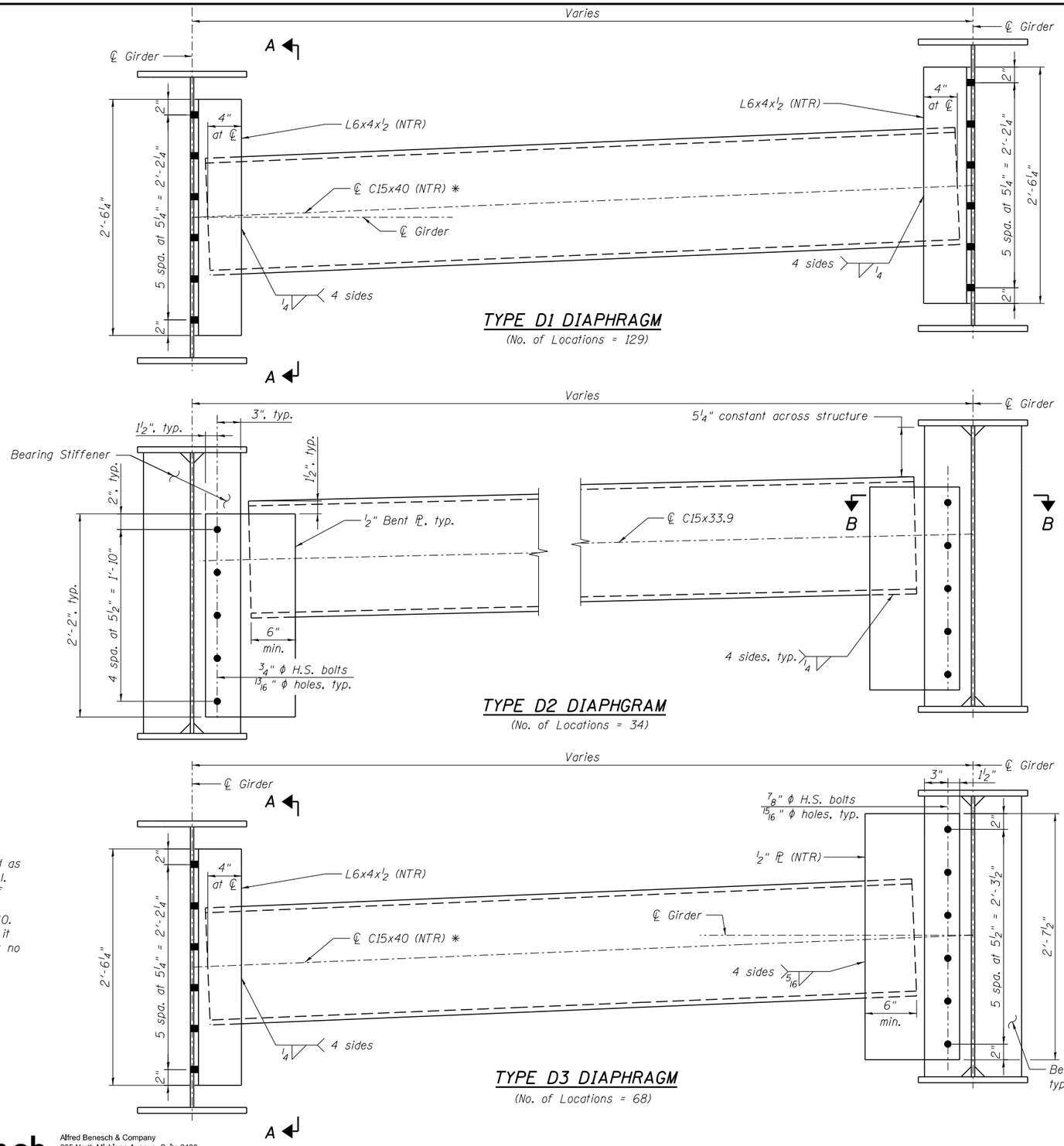

* C15x50 is permitted as an alternate channel. Calculated weight of structural steel is based on the C15x40. If C15x50 is used, it shall be provided at no extra cost to the Department.

NOTES:

1. All diaphragms between girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the engineer. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
2. See sheets S45 & S46 for framing plan.
3. Load carrying components designated "NTR" shall conform to Impact Testing Requirement, Zone 2.
4. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts ¾" ϕ, holes 13/16" ϕ, unless noted otherwise.

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DIAPHRAGM DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S48 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1196
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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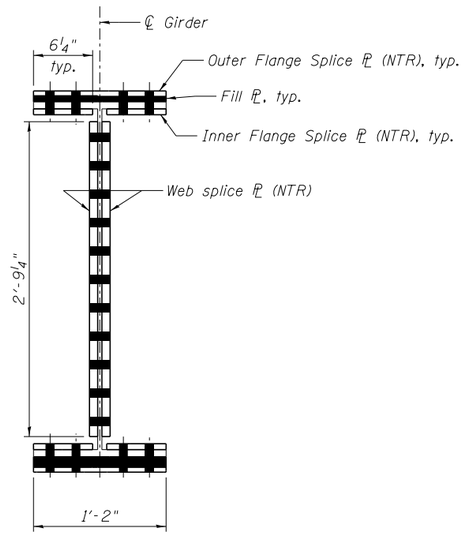
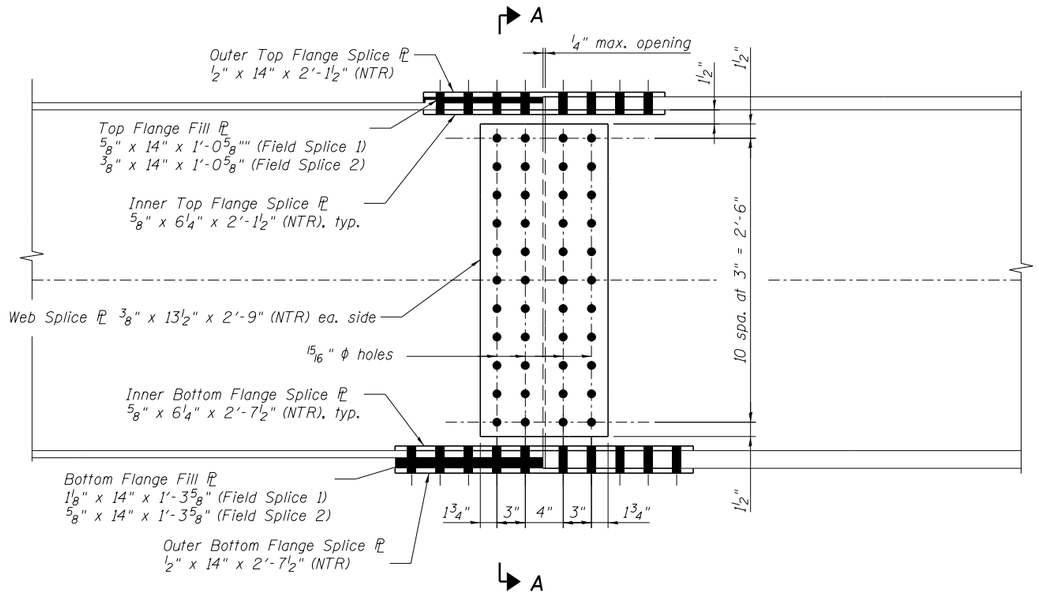
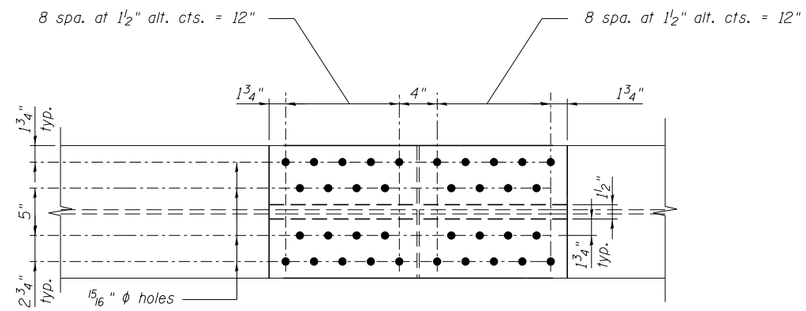


SECTION A-A



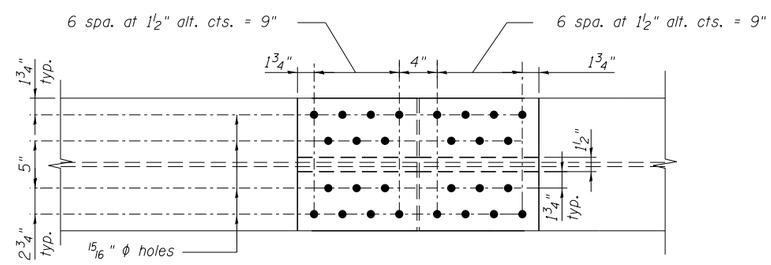
ELEVATION

(44 bolts per pair web splice)



PLAN - BOTTOM FLANGE

(36 bolts per bottom flange splice)



PLAN - TOP FLANGE

(28 bolts per top flange splice)

NOTES:

1. All splice plates shall be AASHTO M270 Grade 50 Steel.
2. All splice bolts shall be ⅞" ϕ ASTM A325 High Strength with 15/16" ϕ holes.
3. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS – FIELD SPLICE DETAILS
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S49 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1197
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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INTERIOR GIRDER MOMENT TABLE						
		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in^4)	8,792	17,540	9,931	14,847	9,384
$I_c(n)$	(in^4)	22,723	41,813	26,888	37,443	24,827
$I_c(3n)$	(in^4)	17,441	-----	20,242	-----	18,871
$I_c(cr)$	(in^4)	-----	22,610	-----	19,838	-----
S_s	(in^3)	469	995	572	867	521
$S_c(n)$	(in^3)	652	-----	787	-----	720
$S_c(3n)$	(in^3)	603	-----	731	-----	667
$S_c(cr)$	(in^3)	-----	1083	-----	958	-----
S_{xc}	(in^3)	598	1059	745	934	677
DC1	(k/')	1.006	1.102	1.020	1.075	1.013
M_{DC1}	('k)	409	930	330	762	326
DC2	(k/')	0.183	0.183	0.183	0.183	0.183
M_{DC2}	('k)	75	164	60	135	60
DW	(k/')	0.380	0.380	0.380	0.380	0.380
M_{DW}	('k)	156	340	125	281	124
M_{L+IM}	('k)	1075	1352	1016	1217	970
f_f (Strength I)	(ksi)	6.47	3.07	6.47	3.07	6.47
$M_u + 1/3 f_f S_{xc}$	('k)	2828	4334	2587	3752	2488
$\phi_f M_n$	('k)	3,238	-----	4,037	-----	3,670
f_s DC1	(ksi)	10.5	11.2	6.9	10.5	7.5
f_s DC2	(ksi)	1.5	1.8	1.0	1.7	1.1
f_s DW	(ksi)	3.1	3.8	2.1	3.5	2.2
f_s (L+IM)	(ksi)	19.8	15.0	15.5	15.3	16.2
f_f (Service II)	(ksi)	4.90	2.35	4.90	2.35	4.90
$f_s + 1/2$ (Service II)	(ksi)	43.2	37.4	32.5	36.8	34.3
$0.95R_hF_{yf}$	(ksi)	47.5	47.5	47.5	47.5	47.5
$f_s + 1/3$ (Total)(Strength I)	(ksi)	-----	49.2	-----	48.3	-----
$\phi_f F_n$	(ksi)	-----	50.0	-----	50.0	-----
V_f	(k)	71.5	-----	63.9	-----	69.8

TYPICAL INTERIOR GIRDER REACTION TABLE					
		N. Abut.	Pier 1	Pier 2	S. Abut.
R_{DC1}	(k)	29.8	105.3	95.5	26.9
R_{DC2}	(k)	5.3	18.4	16.9	4.7
R_{DW}	(k)	11.0	38.3	35.2	9.8
R_{L+IM}	(k)	111.6	156.0	147.8	108.6
R_{Total}	(k)	157.6	318.0	295.4	150.0

Girders W2-W9 Modeled in Moment and Reaction Table (Controlling Design)

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.^{4} and in.^{3}).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short term composite live loads (in.^{4} and in.^{3}).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (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}).

S_{xc}: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.^{3}).

DC1: Un-factored non-composite dead load (kips/ft.).

M_{DC1}: 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.).

M_{DC2}: 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.).

M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M_{L+IM}: Un-factored live load moment plus dynamic load allowance (impact)(kip-ft.).

M_u (Strength I): Factored design moment (kip-ft.).
$1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{L+IM}$

f_f: Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

$\phi_f M_n$: 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.).

f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}

f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
$M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.

f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
$M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.

f_s (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
$M_{L+IM} / S_c(n)$ or $M_{DW} / S_c(cr)$ as applicable.

$f_s + 1/2$ (Service II): Sum of stresses as computed below (ksi).
$f_{s\,DC1} + f_{sDC2} + f_{sDW} + 1.3 f_s(L+IM) + 1/2$

$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

$f_s + 1/3$ (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s(L+IM) + 1/3$

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

V_f: Maximum factored shear range in span computed according to Article 6.10.10.

Note:
M_L and R_L include the effects of centrifugal force and superelevation.

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		CHECKED - KMP	REVISED -			74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1198
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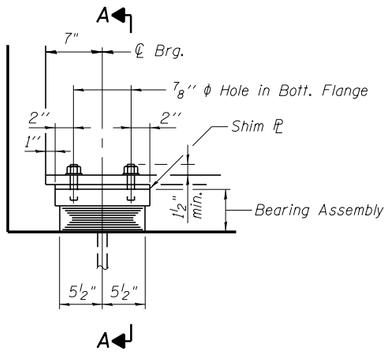
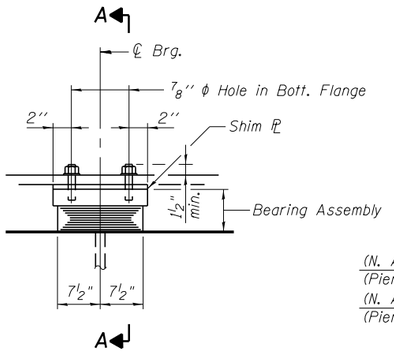
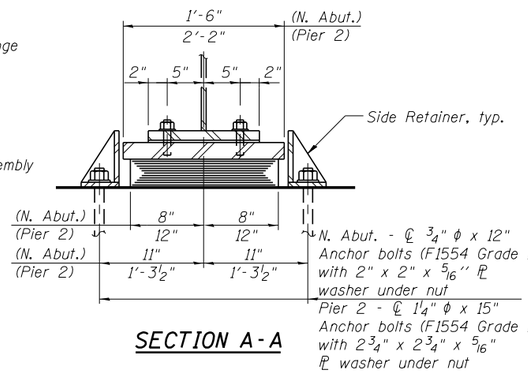


ELEVATION AT N. ABUT.

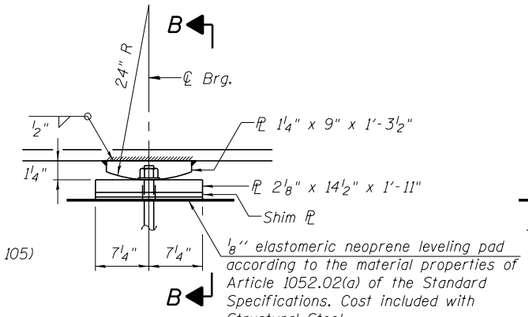


ELEVATION AT PIER 2

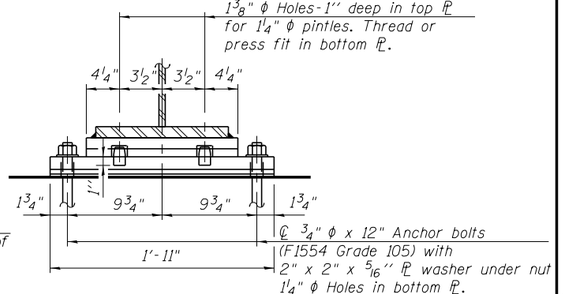


SECTION A-A

(Omit Anchor Bolts and Side Retainers at N. Abut. and Pier 1 from Girders W1, W2, W9, W10, E1, E8 & E9)



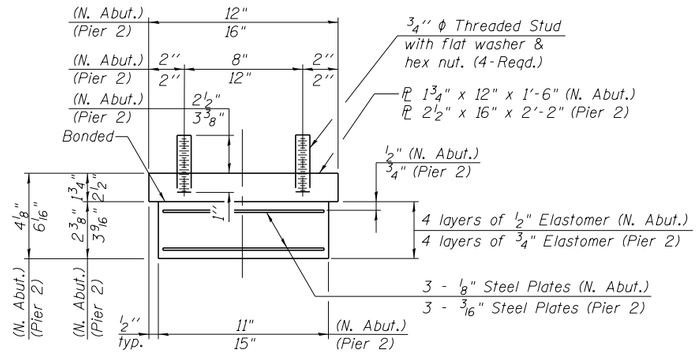
ELEVATION AT PIER 1



SECTION B-B

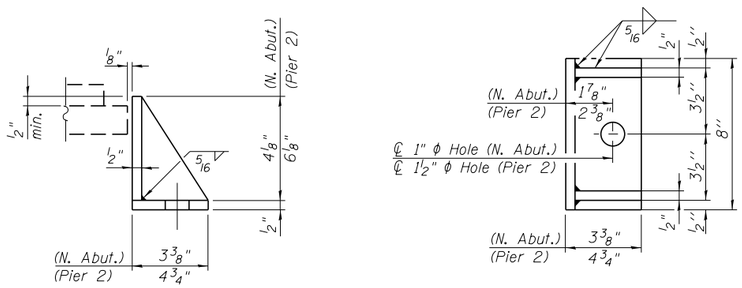
FIXED BEARING

TYPE I ELASTOMERIC EXP. BRG.



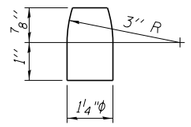
TYPE I BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
(Omit side retainers from Beams W1, W2, W9, W10, E1, E8 & E9)



PINTLE

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Anchor bolts for Type I bearings may be cast in place or installed in holes drilled before or after members are in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the bearing assembly, shall conform to requirements of AASHTO M270 Grade 50.

The structural steel plates and pintles of the fixed bearing, shall conform to requirements of AASHTO M270 Grade 50.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on the bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	38
Anchor Bolts, 3/4"	Each	62
Anchor Bolts, 1 1/4"	Each	24

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-051-Fixed.and.Type.I.Elastomeric.Bearing.Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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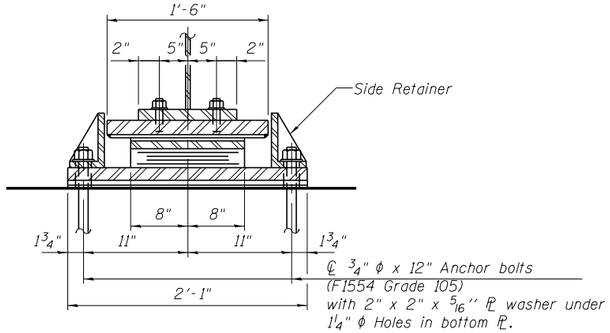
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

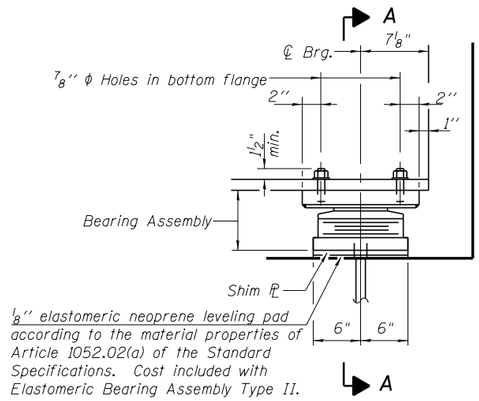
FIXED AND TYPE I ELASTOMERIC BEARING DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S51 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1199
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



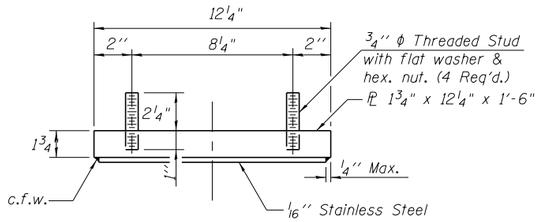
SECTION A-A

(Omit Side Reatiners from Beams W1, W2, W9, W10, E1, E8 & E9. Install anchor bolts with nuts sitting directly on bottom plate)

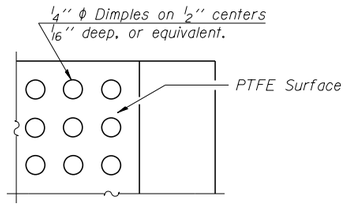


ELEVATION AT S. ABUT.

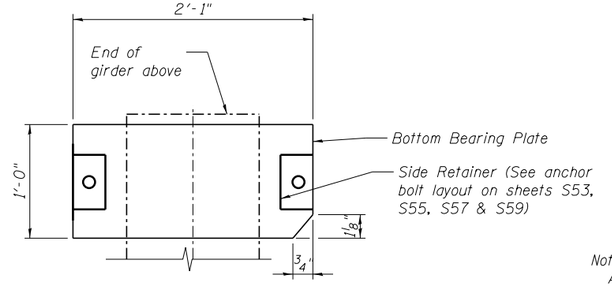
TYPE II ELASTOMERIC EXP. BRG.



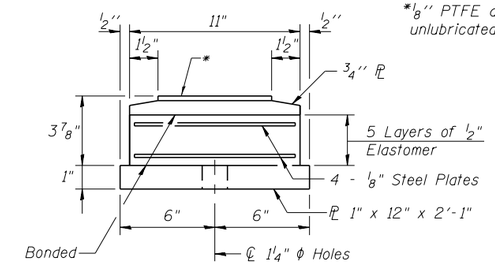
TYPE II TOP BEARING ASSEMBLY



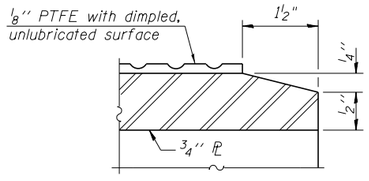
PLAN-PTFE SURFACE



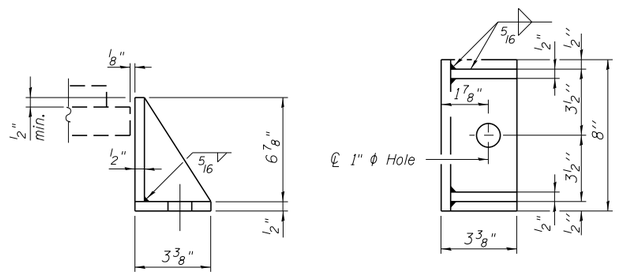
PLAN BOTTOM BEARING PLATE



TYPE II BOTTOM BEARING ASSEMBLY

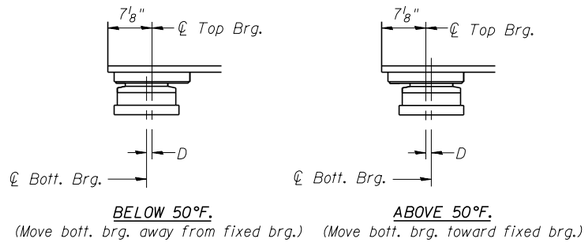


SECTION THRU PTFE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.
(Omit side retainers from Beams W1, W2, W9, W10, E1, E8 & E9)



BELOW 50°F.
(Move bott. brg. away from fixed brg.)

ABOVE 50°F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT TYPE II EXP. BRG.

D=1/8" per each 100° of expansion for every 15° temp. change from the normal temp. of 50°F.

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

The structural steel plates of the bearing assembly, shall conform to requirements of AASHTO M270 Grade 50.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims as shown on the bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	19
Anchor Bolts, 3/4"	Each	38

I-2E-2

1-27-12

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-052-Type_II_Elastomeric_Bearing_Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - KMP	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPE II ELASTOMERIC BEARING DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S52 OF S91 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1200
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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