63-Bar Splicers (E) for #5 bars at 12" cts. See Section thru Abut. (Place in direction of traffic)

61-#5 v101(E) bars at 12" cts. (Place in direction of traffic)

61-#4 v103(E) bars at 12" cts.

61-#6 v104(E) bars at 12" cts.

63-#6 v102(E) bars at 12" cts.

72-Bar Splicers (E) for #5 bars at 12" cts. See Section thru Abut. (Place in direction of traffic)

75-#5 v101(E) bars at 12" cts. (Place in direction of traffic)

75-#4 v103(E) bars at 12" cts.

75-#6 v104(E) bars at 12" cts.

72-#6 v102(E) bars at 12" cts.

4-#5 u102 (E) bars at 12" cts.

45-#4 s103(E) bars at 9" cts.

Elev. 676.27

4-#5 p105(E) bars (cut to fit)

5x3-#6 h101(E) bars See Sect. Thru Abut.

Elev. 672.01

Elev. 671.76

4-#5 p103(E) bars

Elev. 671.51

4x2-#5 h103(E) bars at 12" cts. (E.F.)

Elev. 671.25

4-#5 u102(E) bars at 12" cts.

Elev. 671.00

10x2-#7 p101(E) bars See Sec. Thru Abut.

1" PJF

10"

12"

Elev. 667.50

℄ Pile, typ.

5-#6 u103(E) bars

4-#6 u104(E) bars

5-#4 u106(E) bars at 9" cts. cut to fit

6-#4 s101(E) at 9" cts.

3-#4 s101(E) at 6" cts.

S.N. 081-0185 North Abutment

21-#4 s103(E) bars at 9" cts.

36-#4 s103(E) bars at 9" cts.

Elev. 673.92 (at start of approach slab)

4-#5 p104(E) bars

4-#5 u102(E) bars at 12" cts.

Elev. 670.75

Elev. 670.49

4-#5 p103(E) bars

Elev. 670.24

Elev. 669.98

4x2-#5 h104(E) bars at 12" cts. (E.F.)

Elev. 669.73

10x2-#7 p102(E) bars See Sec. Thru Abut.

Elev. 666.23

9-#4 s101(E) bars at 9" cts. typ. between piles (17 thus)

7"

7"

Barrier mounted on wingwall

Maskwall

Elev. 673.93

Optional Construction Joint

5-#5 h102(E) bars in pairs at 12" cts.

2-#6 u103(E) bars

3'-6"

1'-10"

4-#4 v108(E) bars at 9" cts. cut to fit

10"

5-#4 s101(E) bars at 9" cts.

ELEVATION

WP 9, see sheet S4

Bridge Parapet above, typ.

1'-1 7/8"

8 1/8"

*7 1/8"

*4 3/4"

8 3/4"

2'-0"

Edge of Bond Breaker

* Limits of Bond Breaker Placement

MINIMUM BAR LAP

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

℄ Girder

6 3/8"

9"

℄ Brg.

9"

6 3/8"

ANCHOR BOLT LAYOUT

S.N. 081-0185 North Abutment

54°24'23"

Local tangent at Sta. 95+32.43

℄ Prop. I-74

WP 10, see sheet S4

v101(E) bar

1'-11½"

Bar Splicer (E), typ.

Sta. 93+81.87

WB PGL

℄ Brg.

1'-6"

6"

2'-9"

3'-6"

1/8" wide x 1/2" deep saw cut in hatched area over 1" PJF in backwall. Seal joint after saw cut with cold poured joint sealer according to section 420.12 of the Standard Specification. Cost included with Concrete Structures.

Back of N. Abut.

Chamfer Edge of Parapet (See sheet S43)

5'-2 1/8"

℄ Ramp AC-D

2'-6"

5"

1'-3¼"

6"

12'-0"

11'-10½"

W10 W9 W8 W7 W6 W5 W4 W3 W2 W1

1" PJF

1" PJF

1" PJF

℄ Girder, typ.

h102(E)

WP 6 (See sheet S4)

Maskwall

26'-10½"

66'-7"

71'-2 5/8"

4'-2 7/8"

9 Bearing Spaces at 14'-3¾"(+) = 128'-10¼"

11'-3"

3 Spaces at 14'-4" = 43'-0"

12'-4"

16'-3"

3 Spaces at 14'-4" = 43'-0"

11'-11 5/8"

Bridge Seat Spacing

137'-10 5/8"

12'-5¾"

** 3-#5 d155(E) bars 7" cts. (See sheet S35 & S36 for approach slab barrier)

TOP VIEW

NOTES:

1. See sheet S57, for section through abutment and additional notes.
2. See sheet S54, for Pile Cap Plan and pile data.
3. See sheets S4 for foundation layout.

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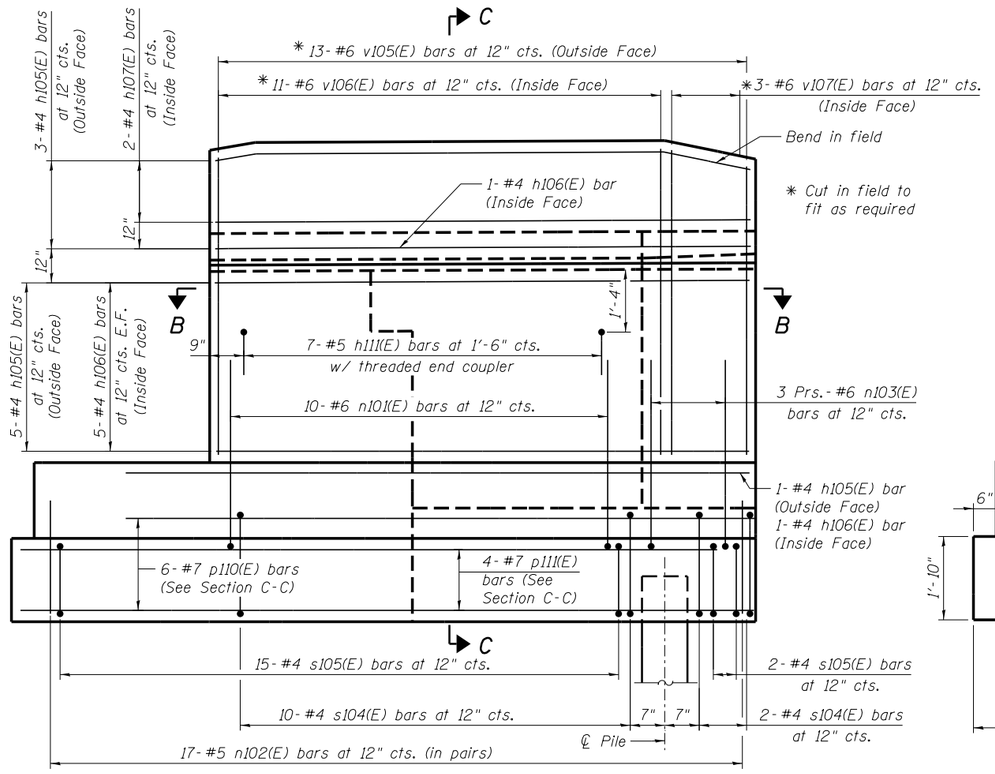
312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-053-WB_North_Abutment_Layout_(1of_2).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - PRT	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

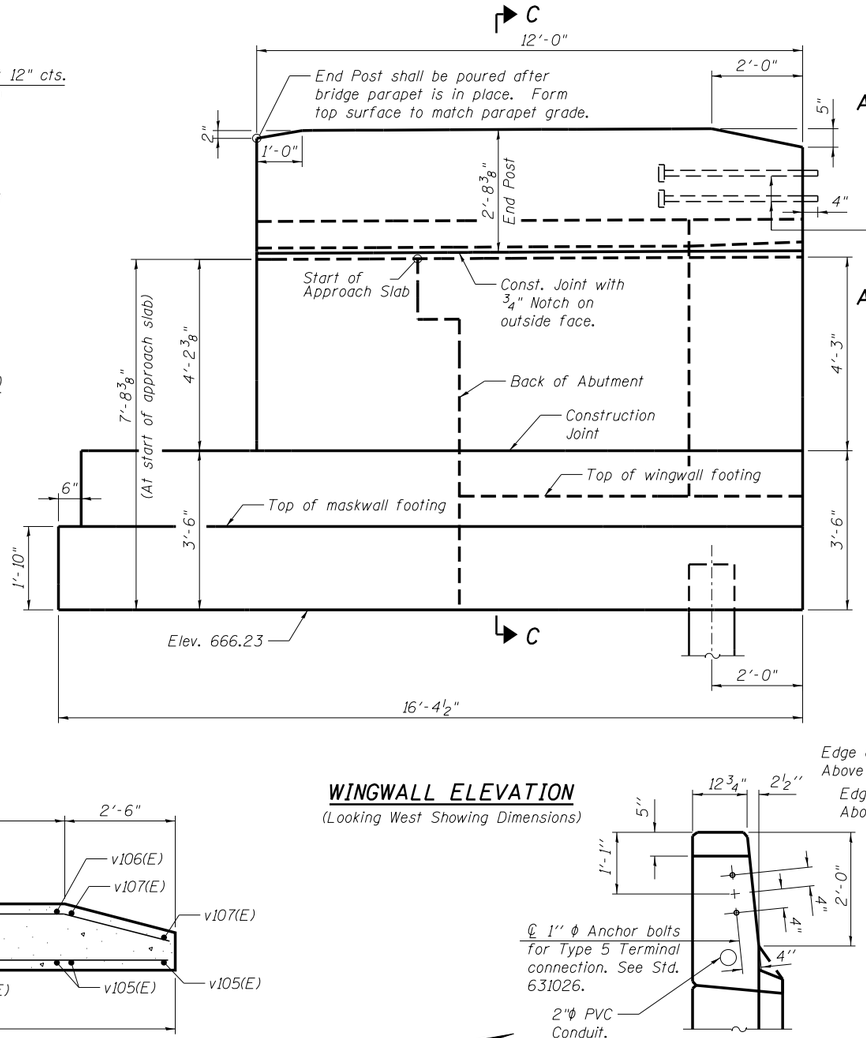
WB NORTH ABUTMENT LAYOUT (1 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S53 OF S91 SHEETS

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	1201
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		



WINGWALL ELEVATION

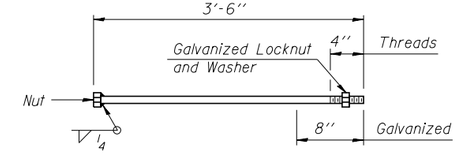
(Looking West Showing Reinforcement)



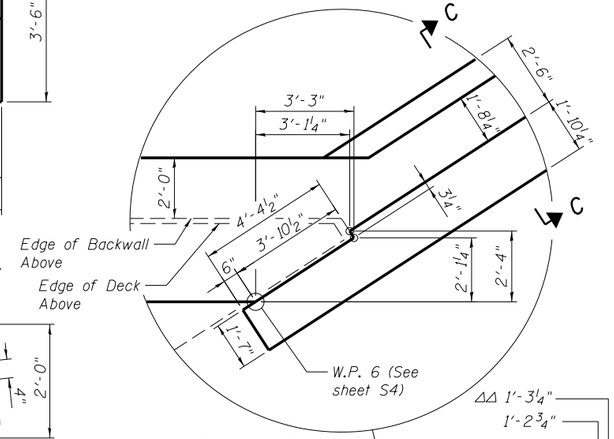
WINGWALL ELEVATION

(Looking West Showing Dimensions)

VIEW A-A



1" ϕ ANCHOR BOLT

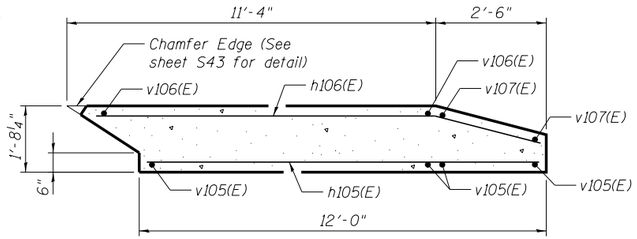


PILE DATA

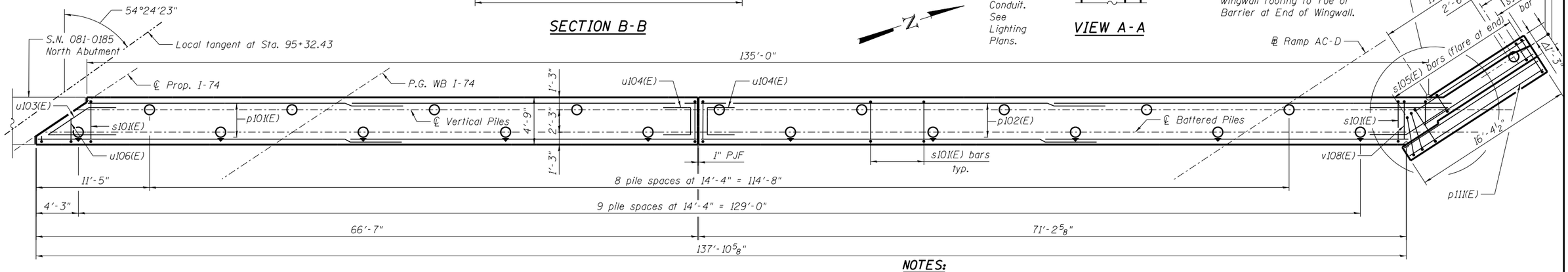
Type: Metal Shell 12"x0.250" with pile shoes
Nominal Required Bearing: 357 kips
Factored Resistance Available: 214 kips
Est. Length: 61 feet
No. Production Piles: 19
Soil Setup Length: 101 feet
No. Test Piles: 1

○ Vertical Pile

○ Battered Pile (see note)



SECTION B-B



PLAN - PILE CAP

NOTES:

1. After demolition of existing abutments, the Contractor shall verify that the existing back row vertical piles will not conflict with driving the proposed battered piles. The Contractor shall inform the Engineer of any potential conflicts before driving piles.
2. See sheet S57 for Section C-C.

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FILE NAME = 081-0184&0185-C00CD-054-WB_North_Abutment_Layout_(2 of 2).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - PRT	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB NORTH ABUTMENT LAYOUT (2 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S54 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	1202
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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64-Bar Splicers (E) for #5 bars at 12" cts. See Section thru Abut. (Place in direction of traffic)

62-#5 v101(E) bars at 12" cts. (Place in direction of traffic)

62-#4 v103(E) bars at 12" cts.

62-#6 v104(E) bars at 12" cts.

64-#6 v102(E) bars at 12" cts.

68-Bar Splicers (E) for #5 bars at 12" cts. See Section thru Abut. (Place in direction of traffic)

70-#5 v101(E) bars at 12" cts. (Place in direction of traffic)

70-#4 v103(E) bars at 12" cts.

70-#6 v104(E) bars at 12" cts.

68-#6 v102(E) bars at 12" cts.

Barrier mounted on wingwall

Maskwall

5-#5 h122(E) bars in pairs at 12" cts.

2-#6 u105(E) bars

3'-6"

1'-10"

Elev. 671.97

Optional Construction Joint

5x3-#6 h121(E) bars See Sect. Thru Abut.

60-#4 s103(E) bars at 9" cts.

4-#5 p104(E) bars

Elev. 671.72

52-#4 s103(E) bars at 9" cts.

Elev. 674.24

4-#5 p107(E) bars (cut to fit)

4x2-#5 h124(E) bars at 12" cts. (E.F.)

Elev. 667.62

Elev. 667.83

3¾"

4-#5 p103(E) bars

Elev. 668.14

3¼"

Elev. 668.41

1⅝"

4-#5 u102(E) bars at 12" cts.

Elev. 668.55

4-#5 u102(E) bars at 12" cts. (Each End)

Elev. 668.79

4x2-#5 h123(E) bars at 12" cts. (E.F.)

Elev. 669.04

Elev. 669.30

3"

4-#5 p103(E) bars

Elev. 669.55

3"

Elev. 669.80

3⅛"

1" PJF

10"

3"

10x2-#7 p121(E) bars See Sec. Thru Abut.

10x2-#7 p122(E) bars See Sec. Thru Abut.

10"

2½"

10"

10"

Elev. 664.12

℄ Pile, typ.

5-#6 u104(E) bars

4-#6 u104(E) bars

Elev. 665.29

S.N. 081-0185 South Abutment

6-#4 u106(E) bars at 9" cts. (cut to fit)

4-#4 s101(E) bars at 9" cts.

9-#4 s101(E) bars at 9" cts. typ. between piles (15 thus)

7"

7"

5-#6 u105(E) bars

8"

10-#4 v108(E) bars at 9" cts. (cut to fit)

10"

10"

20"

6-#4 s101(E) bars at 9" cts. between piles

6-#4 s101(E) bars at 9" cts. between piles

6-#4 s101(E) bars at 9" cts.

3-#4 s101(E) bars at 6" cts.

ELEVATION

MINIMUM BAR LAP

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

6⅜"

℄ Brg.

℄ Girder

9"

9"

6⅜"

ANCHOR BOLT LAYOUT

NOTES:

1. See sheet S57, for section through abutment and additional notes.
2. See sheet S56, for Pile Cap Plan and pile data.
3. See sheet S4, for foundation layout.

⅛" wide x ½" deep saw cut in hatched area over 1" PJF in backwall. Seal joint after saw cut with cold poured joint sealer according to section 420.12 of the Standard Specification. Cost included with Concrete Structures.

Chamfer Edge of Parapet (See sheet S43)

3'-4¾"

2'-10⅜"

2'-0"

8⅜"

WP 28, see sheet S4

Bridge Parapet Above, typ.

** 3-#5 d155(E) bars at 7" cts. (See sheets S37 & S38 for approach slab barrier)

℄ Prop. I-74

1'-1½"

Bar Splicer (E), typ.

v101(E) bar

**

1" PJF

54°24'23"

14'-11⅝"

Maskwall

1'-3¼"

5"

12'-0"

4'-8⅝"

2'-6"

5'-7⅝"

6"

℄ Ramp AC-D

Back of S. Abut.

Sta. 96+44.42

℄ Brg.

P.G. WB I-74

1'-6"

3'-6"

2'-9"

W1

W2

W3

W4

W5

W6

W7

W8

W9

W10

℄ Girder, typ.

WP21, see sheet S4

h122(E)

1" PJF

WP 27, see sheet S4

14'-10⅝"

70'-10¾"

65'-5"

10'-10⅝"

8 Bearing Spaces at 14'-3¾"(+) = 114'-6½"

3'-0"

Bridge Seat Spacing

11'-7¾"

3 Spaces at 14'-4" = 43'-0"

16'-3"

12'-4"

3 Spaces at 14'-4" = 43'-0"

10'-1"

136'-4¾"

TOP VIEW

Local tangent at Sta. 95+32.43

S.N. 081-0185 South Abutment

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

FILE NAME = 081-0184&0185-C00CD-055-WB_South_Abutment_Layout_(1_of_2).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - TPS	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - PRT	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB SOUTH ABUTMENT LAYOUT (1 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)

SHEET NO. S55 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	1203
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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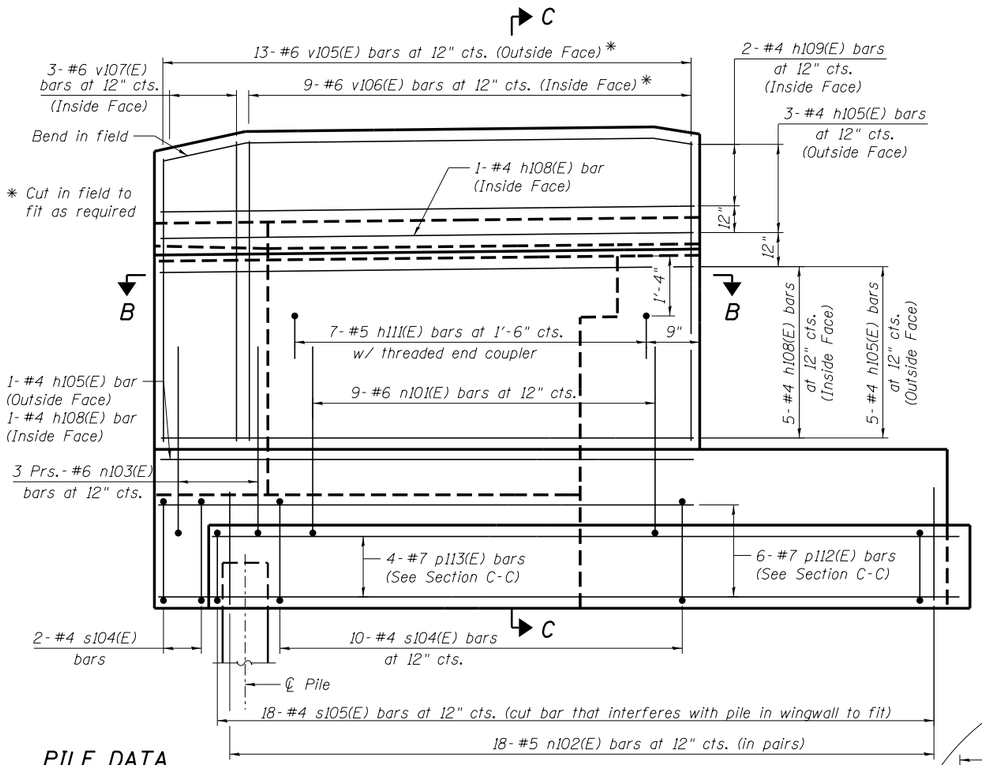


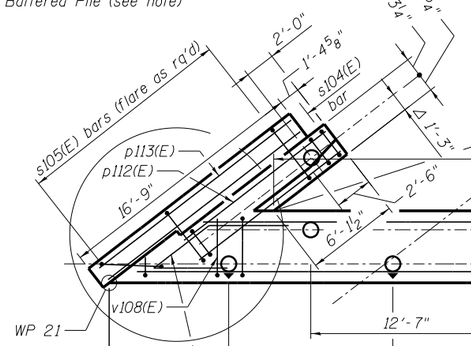
PILE DATA

Type: Metal Shell 12"x0.250" with pile shoes
Nominal Required Bearing: 357 kips
Factored Resistance Available: 214 kips
Est. Length: 61 feet
Soil Setup Length: 101 feet
No. Production Piles: 19
No. Test Piles: 1

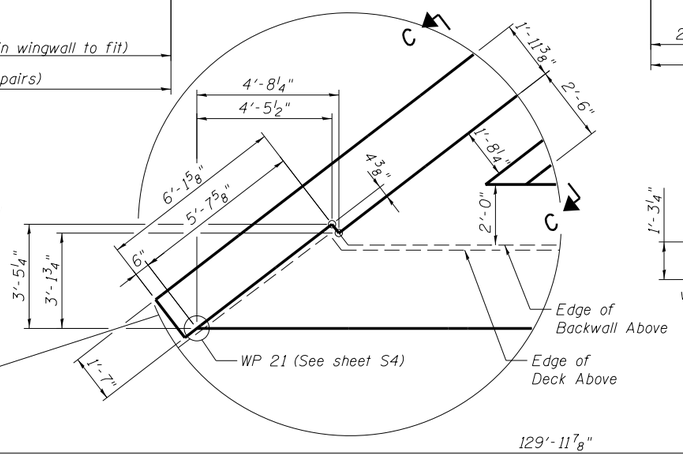
○ Vertical Pile
○ Battered Pile (see note)

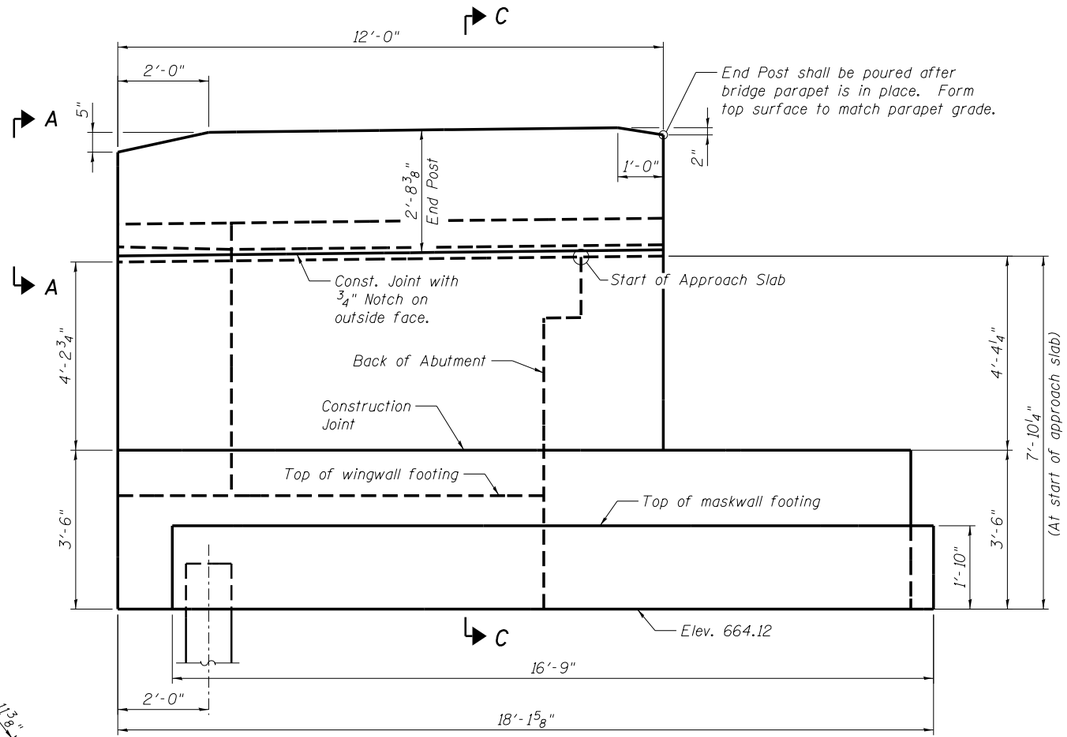
WINGWALL ELEVATION

(Looking West Showing Reinforcement)



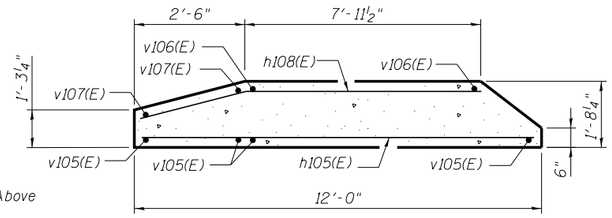
Δ Measured from edge of wingwall footing to ℄ of Pile.
ΔΔ Measured from edge of wingwall footing to Toe of Barrier at End of Wingwall.



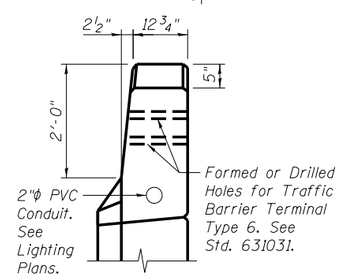


WINGWALL ELEVATION

(Looking West Showing Dimensions)



SECTION B-B



VIEW A-A

PLAN - PILE CAP

NOTES:

1. After demolition of the existing abutments, the Contractor shall verify that the existing back row vertical piles will not conflict with driving the proposed batter piles. The Contractor shall inform the Engineer of any potential conflicts before driving piles.
2. See sheet S57 for Section C-C.

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312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-056-WB_South_Abutment_Layout_(2 of 2).dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - TPS	REVISED -
	PLOT SCALE =	DRAWN - PRT	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB SOUTH ABUTMENT LAYOUT (2 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S56 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	1204
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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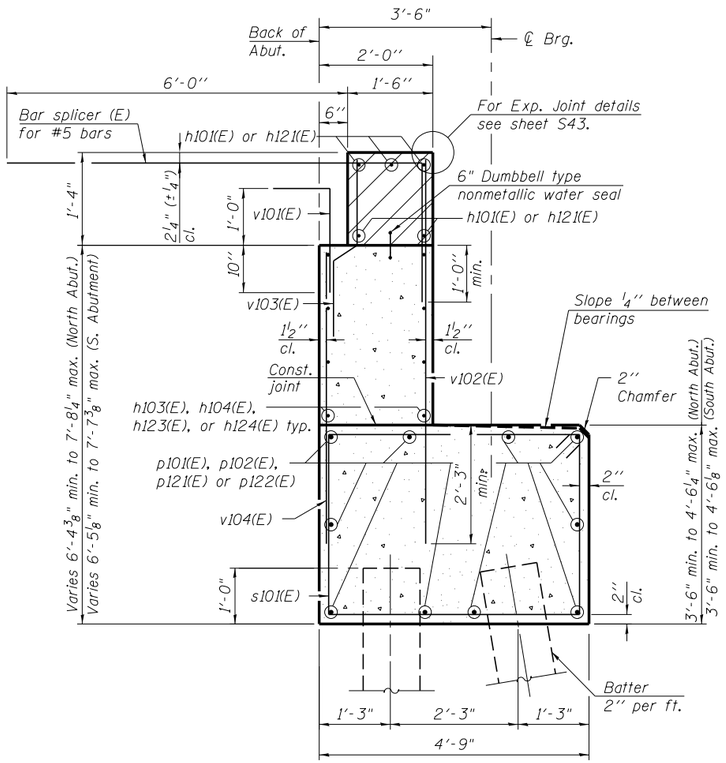
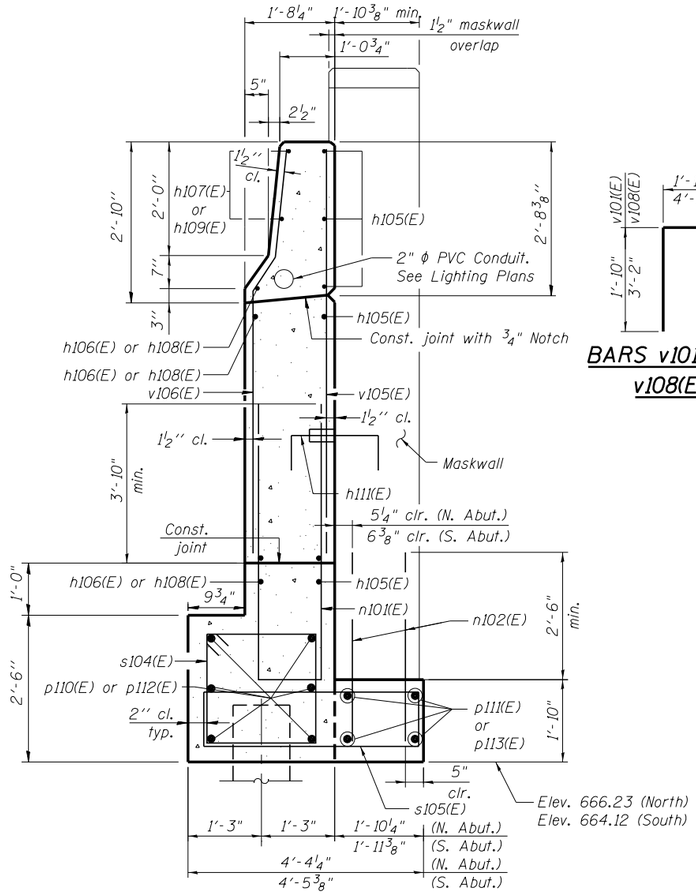
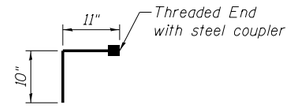


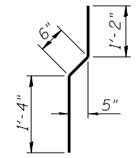
SEC. THRU ABUT.



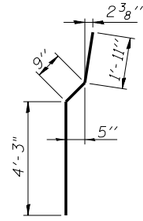
SECTION C-C



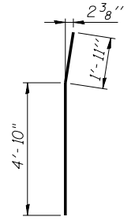
BAR h111(E)



BAR v103(E)

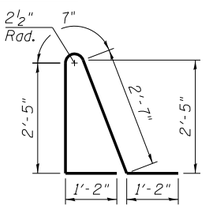


BAR v106(E)



BAR v107(E)

BARS v101(E) & v108(E)



BAR d155(E)

NORTH ABUTMENT BILL OF MATERIAL

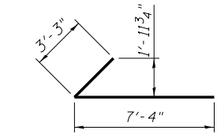
Bar	No.	Size	Length	Shape
d155(E)	3	#5	7'-11"	
h101(E)	15	#6	48'-1"	
h102(E)	10	#5	10'-0"	
h103(E)	16	#5	32'-9"	
h104(E)	16	#5	39'-4"	
h105(E)	9	#4	11'-8"	
h106(E)	7	#4	13'-2"	
h107(E)	2	#4	12'-6"	
h111(E)	7	#5	1'-9"	
n101(E)	10	#6	14'-1"	
n102(E)	34	#5	4'-2"	
n103(E)	6	#6	7'-6"	
p101(E)	20	#7	36'-1"	
p102(E)	20	#7	41'-9"	
p103(E)	8	#5	32'-0"	
p104(E)	4	#5	16'-3"	
p105(E)	4	#5	10'-11"	
p110(E)	6	#7	14'-4"	
p111(E)	4	#7	16'-0"	
s101(E)	167	#4	15'-11"	
s103(E)	102	#4	9'-5"	
s104(E)	12	#4	9'-5"	
s105(E)	17	#4	11'-9"	
u102(E)	12	#5	8'-1"	
u103(E)	7	#6	16'-9"	
u104(E)	9	#6	13'-2"	
u106(E)	5	#4	10'-2"	
v101(E)	136	#5	3'-9"	
v102(E)	135	#6	6'-7"	
v103(E)	136	#4	3'-0"	
v104(E)	136	#6	5'-5"	
v105(E)	13	#6	6'-10"	
v106(E)	11	#6	6'-11"	
v107(E)	3	#6	6'-9"	
v108(E)	4	#4	7'-7"	
Structure Excavation		Cu. Yd.	487	
Pile Shoes		Each	20	
Concrete Structures		Cu. Yd.	135.2	
Reinforcement Bars, Epoxy Coated		Pound	13,540	
Furnishing Metal Shell Piles 12"x0.250"		Foot	1159	
Driving Piles		Foot	1159	
Concrete Sealer		Sq. Ft.	937	
Test Pile Metal Shells		Each	1	

SOUTH ABUTMENT BILL OF MATERIAL

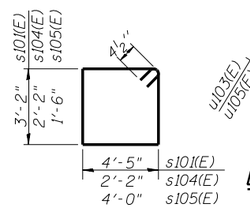
Bar	No.	Size	Length	Shape
d155(E)	3	#5	7'-11"	
h105(E)	9	#4	11'-8"	
h108(E)	7	#4	10'-2"	
h109(E)	2	#4	10'-8"	
h111(E)	7	#5	1'-9"	
h112(E)	15	#6	47'-9"	
h122(E)	10	#5	10'-7"	
h123(E)	16	#5	36'-9"	
h124(E)	16	#5	34'-9"	
n101(E)	9	#6	14'-1"	
n102(E)	36	#5	4'-2"	
n103(E)	6	#6	7'-6"	
p103(E)	8	#5	32'-0"	
p104(E)	4	#5	16'-3"	
p107(E)	4	#5	14'-2"	
p112(E)	6	#7	12'-0"	
p113(E)	4	#7	16'-5"	
p121(E)	20	#7	37'-9"	
p122(E)	20	#7	38'-3"	
s101(E)	160	#4	15'-11"	
s103(E)	112	#4	9'-5"	
s104(E)	12	#4	9'-5"	
s105(E)	18	#4	11'-9"	
u102(E)	12	#5	8'-1"	
u104(E)	9	#6	13'-2"	
u105(E)	7	#6	15'-11"	
u106(E)	6	#4	10'-2"	
v101(E)	132	#5	3'-9"	
v102(E)	132	#6	6'-7"	
v103(E)	132	#4	3'-0"	
v104(E)	132	#6	5'-5"	
v105(E)	13	#6	6'-10"	
v106(E)	9	#6	6'-11"	
v107(E)	3	#6	6'-9"	
v108(E)	10	#4	7'-7"	
Structure Excavation		Cu. Yd.	667	
Pile Shoes		Each	20	
Concrete Structures		Cu. Yd.	134.4	
Reinforcement Bars, Epoxy Coated		Pound	13,330	
Furnishing Metal Shell Piles 12"x0.250"		Foot	1159	
Driving Piles		Foot	1159	
Concrete Sealer		Sq. Ft.	957	
Test Pile Metal Shells		Each	1	

NOTES:

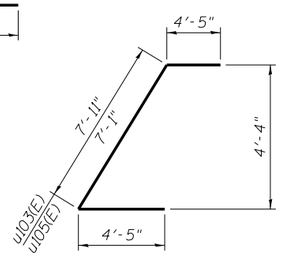
1. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure on sheets S36 & S38.
2. Space reinforcement in cap to miss anchor bolts.
3. Pour steps monolithically with cap.
4. Quantity of concrete in end post included with Concrete Superstructure on sheets S36 & S38.
5. See sheets S63 thru S71, for maskwall details.
6. See sheet S79, for Metal Shell Pile Details.
7. See sheet S80, for Bar Splicer Details.
8. Concrete Sealer shall be applied to all exposed surfaces of backwalls, bridge seats, front faces of pile caps, and back faces of maskwalls.



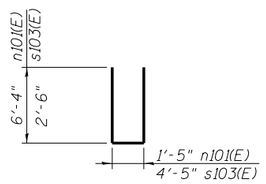
BAR h122(E)



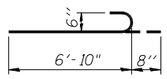
BARS s101(E), s104(E) & s105(E)



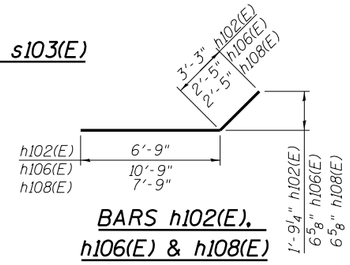
BARS u103(E) & u105(E)



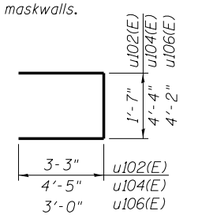
BARS n101(E) & s103(E)



BAR n103 (E)



BARS h102(E), h106(E) & h108(E)



BARS u102(E), u104(E) & u106(E)

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312-565-0450 Job No. 10064.02

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WB ABUTMENT DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S57 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	1205
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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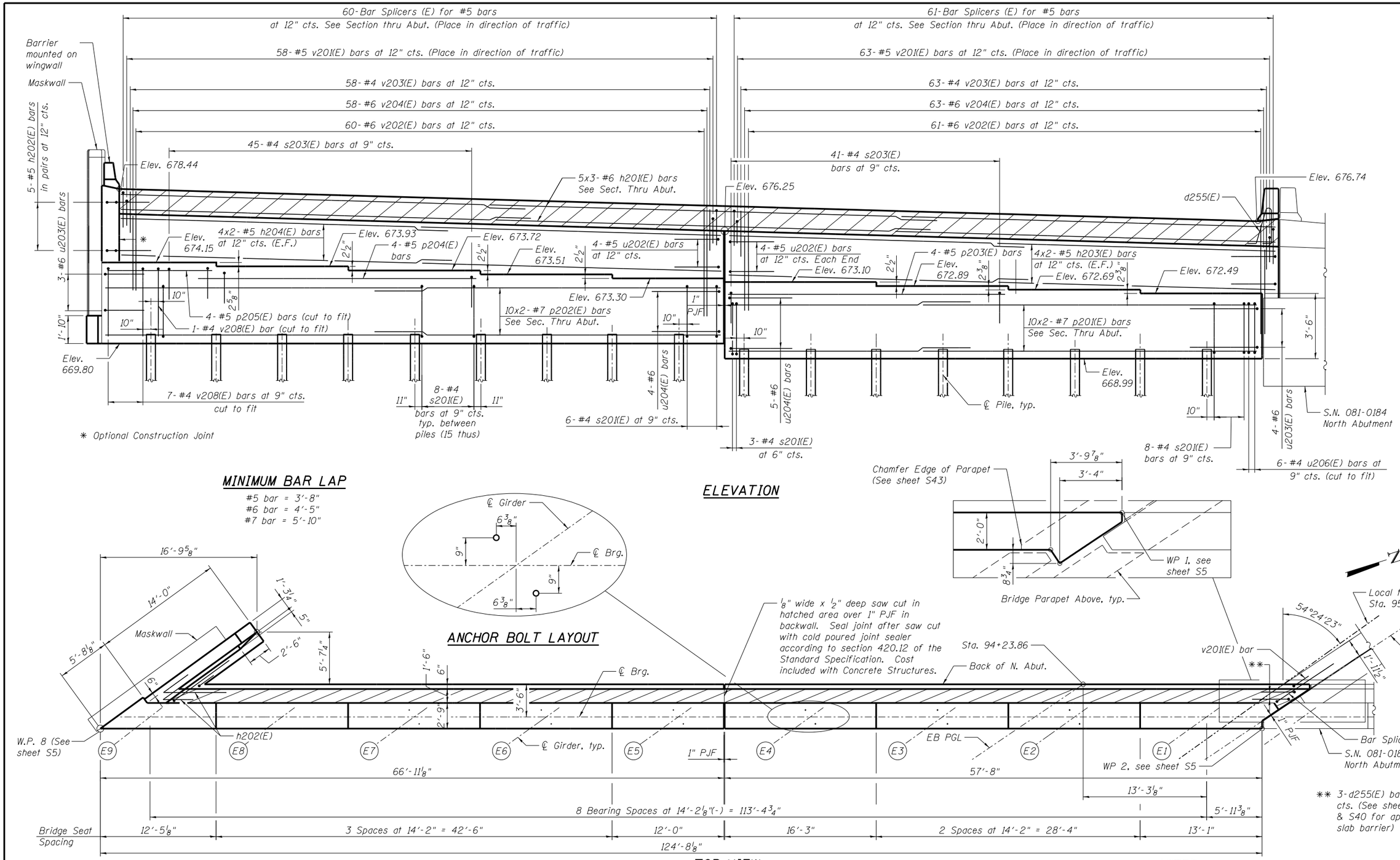

NOTES:

1. See sheet S62, for section through abutment and additional notes.
2. See sheet S59, for Pile Cap Plan and pile data.
3. See sheet S5, for foundation layout.

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DEPARTMENT OF TRANSPORTATION

EB NORTH ABUTMENT LAYOUT (1 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S58 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	1206
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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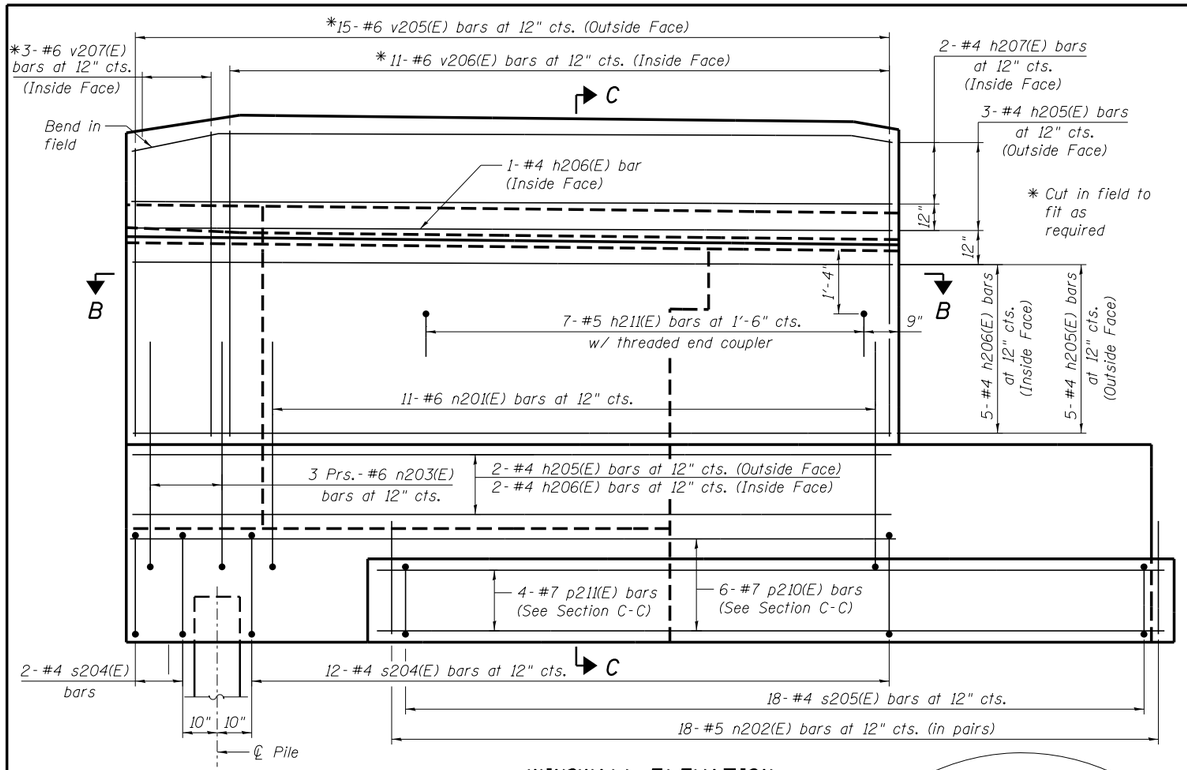
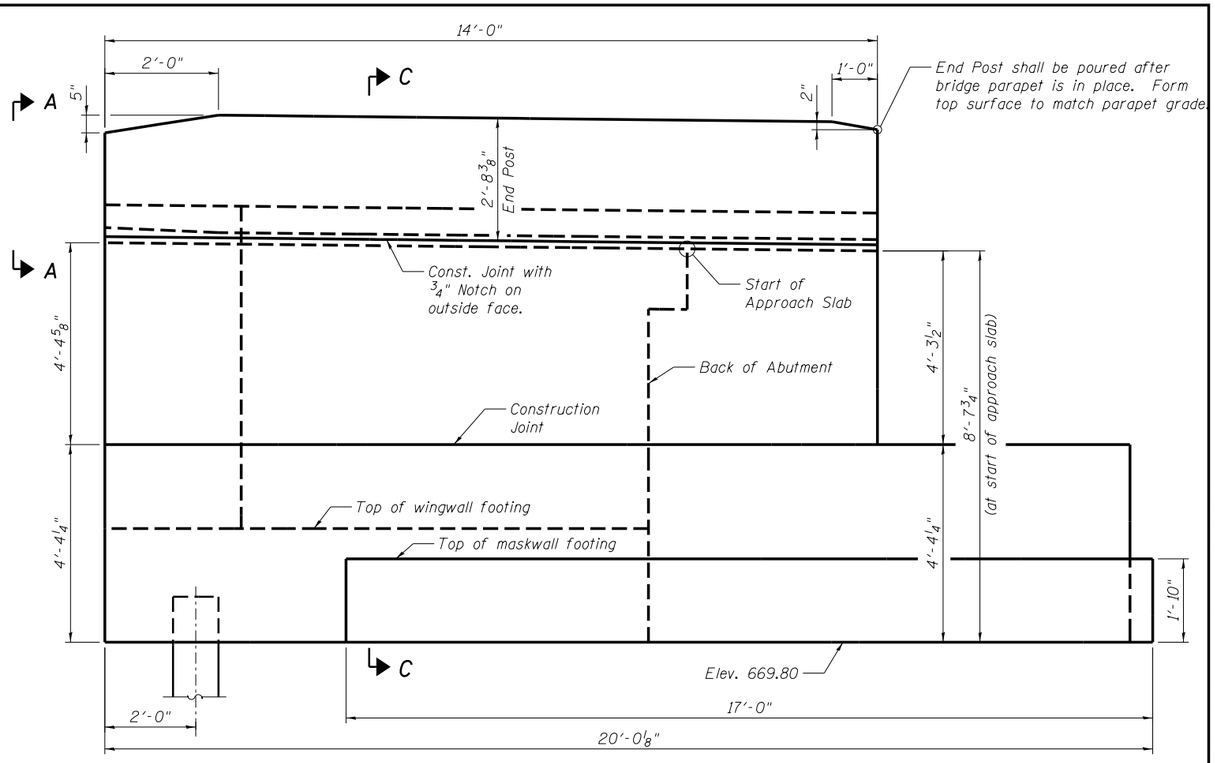
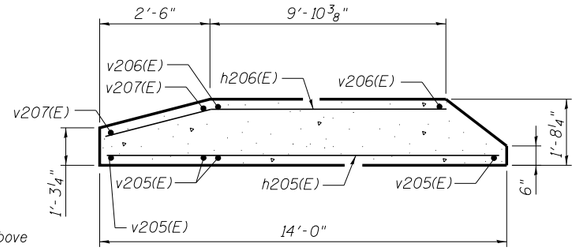


WINGWALL ELEVATION
(Looking East Showing Reinforcement)



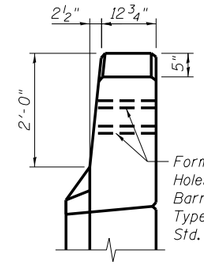
WINGWALL ELEVATION
(Looking East Showing Dimensions)



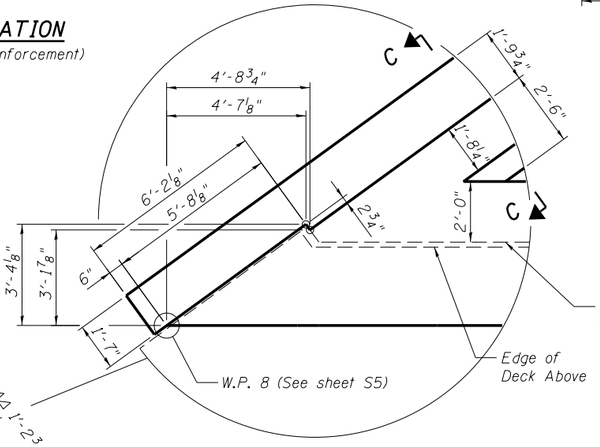
PILE DATA

Type: Metal Shell 12"x0.250" with pile shoes
Nominal Required Bearing: 357 kips
Factored Resistance Available: 214 kips
Est. Length: 61 feet
Soil Setup Length: 101 feet
No. Production Piles: 18
No. Test Piles: 0

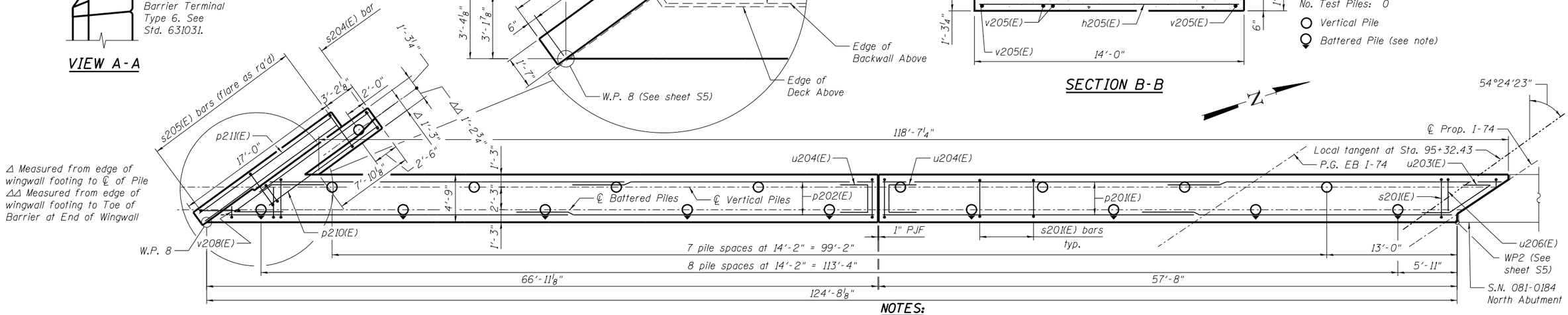
○ Vertical Pile
◉ Battered Pile (see note)



VIEW A-A



SECTION B-B



Δ Measured from edge of wingwall footing to ℄ of Pile
ΔΔ Measured from edge of wingwall footing to Toe of Barrier at End of Wingwall

PLAN - PILE CAP

NOTES:

1. After demolition of the existing abutments, the Contractor shall verify that the existing back row vertical piles will not conflict with driving the proposed battered piles. The Contractor shall inform the Engineer of any potential pile conflicts before driving piles.
2. See sheet S62 for Section C-C.

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MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB NORTH ABUTMENT LAYOUT (2 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S59 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	1207
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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55-Bar Splicers (E) for #5 bars at 12" cts. See Section thru Abut. (Place in direction of traffic)

54-#5 v201(E) bars at 12" cts. (Place in direction of traffic)

54-#4 v203(E) bars at 12" cts.

54-#6 v204(E) bars at 12" cts.

55-#6 v202(E) bars at 12" cts.

49-Bar Splicers (E) for #5 bars at 12" cts. See Section thru Abut. (Place in direction of traffic)

51-#5 v201(E) bars at 12" cts. (Place in direction of traffic)

51-#4 v203(E) bars at 12" cts.

51-#6 v204(E) bars at 12" cts.

49-#6 v202(E) bars at 12" cts.

Δ 4-#5 u202(E) bars at 12" cts.

29-#4 s203(E) bars at 9" cts.

41-#4 s203(E) bars at 9" cts.

Maskwall

Barrier mounted on wingwall

Optional Construction Joint

Elev. 675.73

Elev. 674.00

d255(E)

Elev. 673.52

Elev. 670.59

5x3-#6 h221(E) bars See Sect. Thru Abut.

5-#5 h222(E) bars in pairs at 12" cts.

4-#5 p206(E) bars (cut to fit)

4-#5 u202(E) bars at 12" cts. Each End

Elev. 669.64

2 7/8"

Elev. 669.88

2 3/4"

4x2-#5 h223(E) bars at 12" cts. (E.F.)

Elev. 670.11

2 7/8"

Elev. 670.35

2 7/8"

1" PJF

Δ

4x2-#5 h224(E) bars at 12" cts. (E.F.)

3"

Elev. 670.84

2 7/8"

Elev. 671.08

1 1/2"

Elev. 671.20

1 1/2"

Elev. 671.32

3-#6 u205(E) bars

4'-2 3/4"

3'-6"

10"

10x2-#7 p221(E) bars See Sec. Thru Abut.

4-#5 p203(E) bars

10"

10x2-#7 p222(E) bars See Sec. Thru Abut.

10"

10"

10"

1'-10"

Elev. 667.09

4-#6 u205(E) bars

Elev. 666.14

℄ Pile, typ.

5-#6 u204(E) bars

4-#6 u204(E) bars

S.N. 081-0184 South Abutment

8-#4 s201(E) bars at 9" cts. typ. between piles (13 thus)

11"

11"

6-#4 v208(E) bars at 9" cts. cut to fit

3-#4 s201(E) bars at 6" cts.

6-#4 s201(E) bars at 9" cts.

7-#4 u206(E) bars at 9" cts. (cut to fit)

3-#4 s201(E) bars at 9" cts.

ELEVATION

MINIMUM BAR LAP

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

NOTES:

1. See sheet S62, for section through abutment and additional notes.
2. See sheet S61, for Pile Cap Plan and pile data.
3. See sheet S5, for foundation layout.

1'-0 5/8"

6 1/4"

*6 1/4"

WP 20, see sheet S5

*4 3/4"

8 3/8"

2'-0"

Bridge Parapet above, typ.

Edge of WB approach slab, EB backwall cast underneath approach slab. Place bond breaker underneath approach slab. Cost Included with Concrete Structures.

* Limits of EB Backwall cast under WB approach slab

6 3/8"

℄ Brg.

9"

℄ Girder

9"

6 3/8"

ANCHOR BOLT LAYOUT

Chamfer Edge of Parapet (See sheet S43)

2'-6"

5"

1'-3 1/4"

7'-5 7/8"

h222(E)

Maskwall

16"

14'-0"

3'-5 1/4"

WP 23 (See sheet S5)

1'-11 1/2"

54°24'23"

℄ Prop. I-74

v201(E) bar, typ.

Local tangent at Sta. 95+32.43

Bar Splicer (E), typ.

Sta. 96+80.91

P.G. EB I-74

1'-6"

6"

2'-9"

3'-6"

ΔΔ

Back of S. Abut.

℄ Brg.

S.N. 081-0184 South Abutment

WP 19, see sheet S5

1" PJF

1" PJF

1" PJF

E1

E2

E3

E4

E5

E6

E7

E8

E9

℄ Girder, typ.

20'-9 3/8"

58'-11"

48'-3 3/4"

** 3-#5 d255(E) bars 7" cts. (See sheet S41 & S42 for approach slab barrier)

7'-2 3/8"

6 Bearing Spaces at 14'-2 1/8""(-) = 85'-0 1/2"

2 Brg. Spa. at 6'-10 1/2" = 13'-9"

14'-5"

2 Spaces at 14'-2" = 28'-4"

16'-2"

12'-0"

14'-2"

10'-6"

6'-9"

4'-10 3/4"

Bridge Seat Spacing

12'-6 1/8"

107'-3 3/4"

ΔΔ 1/8" wide x 1/2" deep saw cut in hatched area over 1" PJF in backwall. Seal joint after saw cut with cold poured joint sealer according to section 420.12 of the Standard Specification. Cost included with Concrete Structures.

TOP VIEW

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MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB SOUTH ABUTMENT LAYOUT (1 OF 2)
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S60 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	1208
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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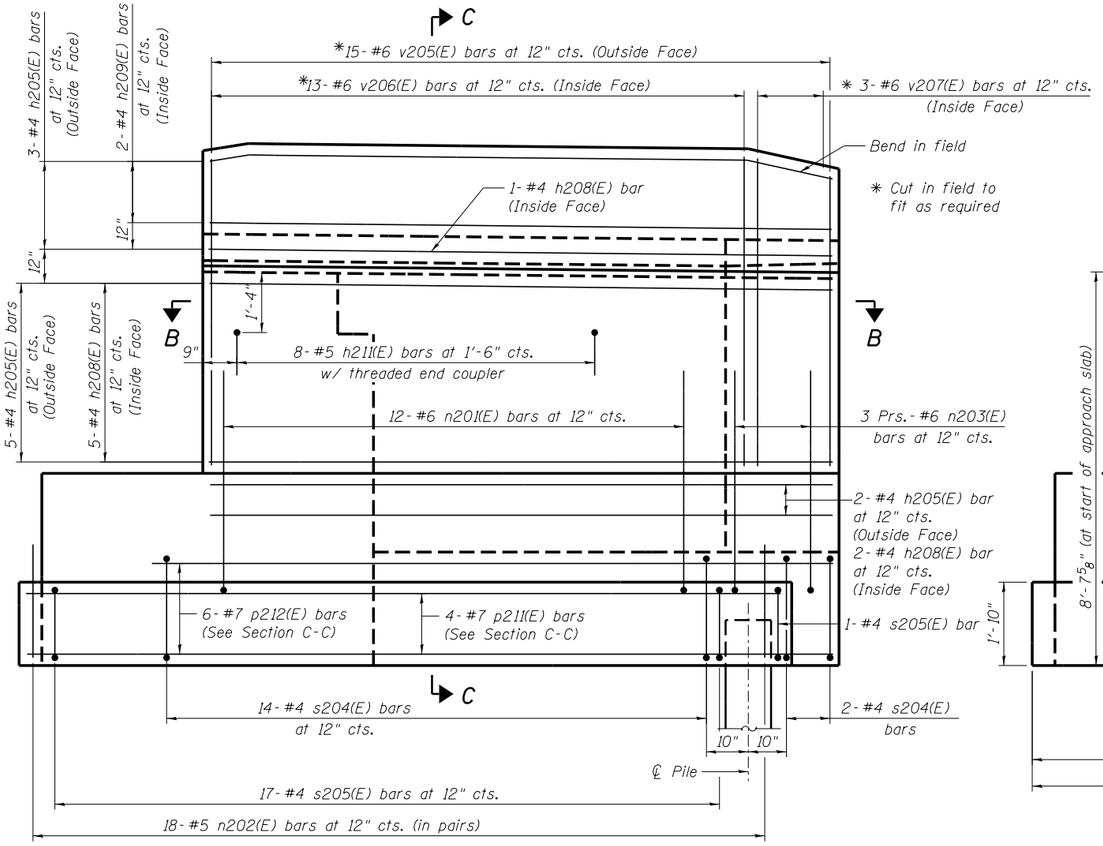
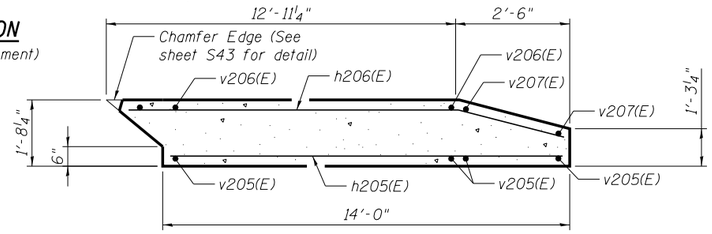


WINGWALL ELEVATION

(Looking East Showing Reinforcement)

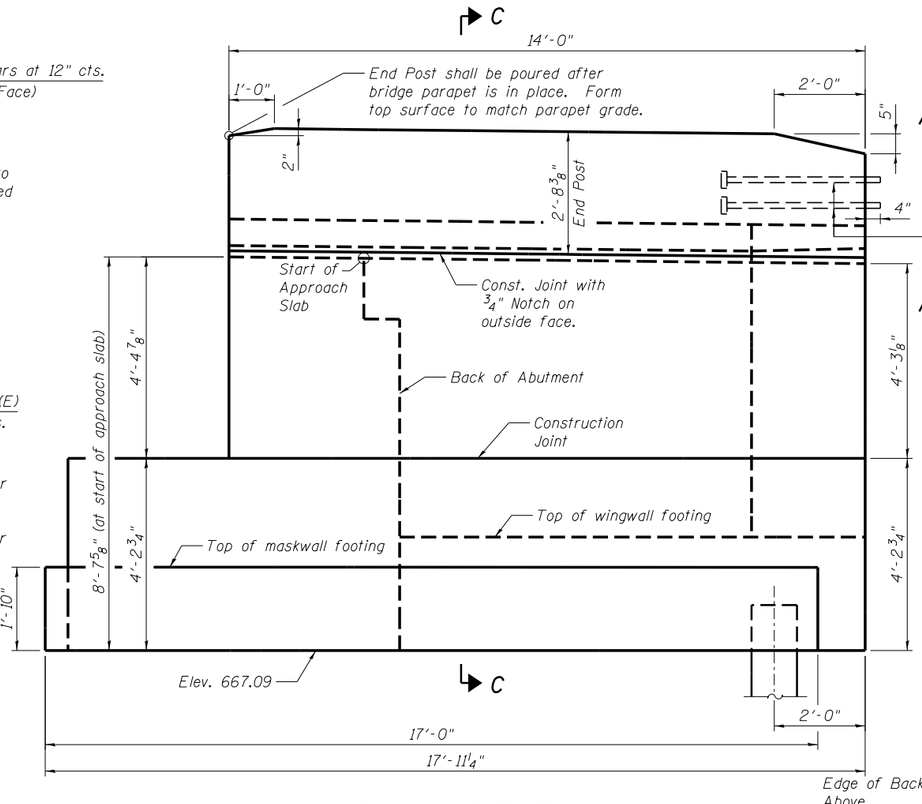


PILE DATA

Type: Metal Shell 12"x0.250" with pile shoes
Nominal Required Bearing: 357 kips
Factored Resistance Available: 214 kips
Est. Length: 61 feet
Soil Setup Length: 101 feet
No. Production Piles: 16
No. Test Piles: 0

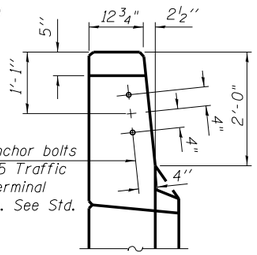
○ Vertical Pile

♀ Battered Pile (see note)

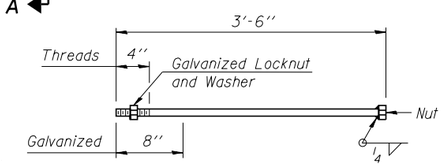


WINGWALL ELEVATION

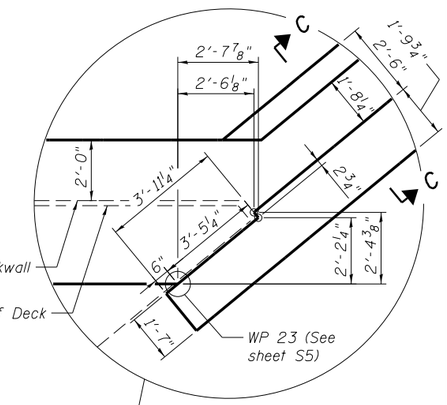
(Looking East Showing Dimensions)



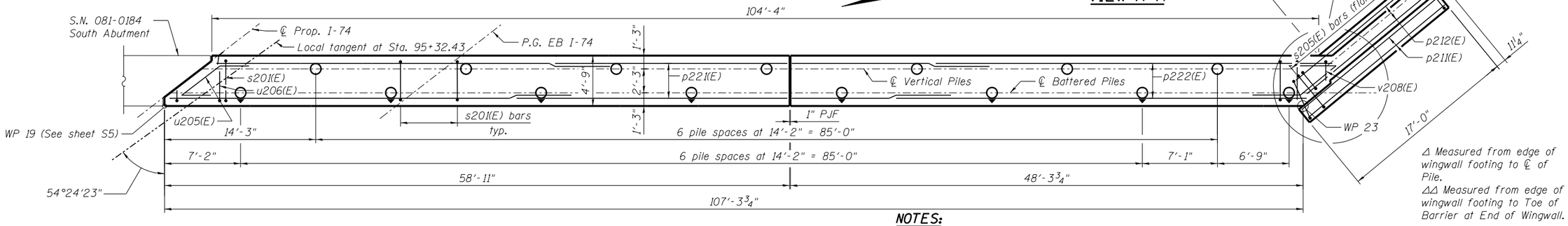
VIEW A-A



1" ϕ ANCHOR BOLT



SECTION B-B



Δ Measured from edge of wingwall footing to ℄ of Pile.
ΔΔ Measured from edge of wingwall footing to Toe of Barrier at End of Wingwall.

PLAN - PILE CAP

NOTES:

1. After demolition of the existing abutments, the Contractor shall verify that the existing back row vertical piles will not conflict with driving the proposed battered piles. The Contractor shall inform the Engineer of any potential conflicts before driving piles.
2. See sheet S62 for Section C-C.

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

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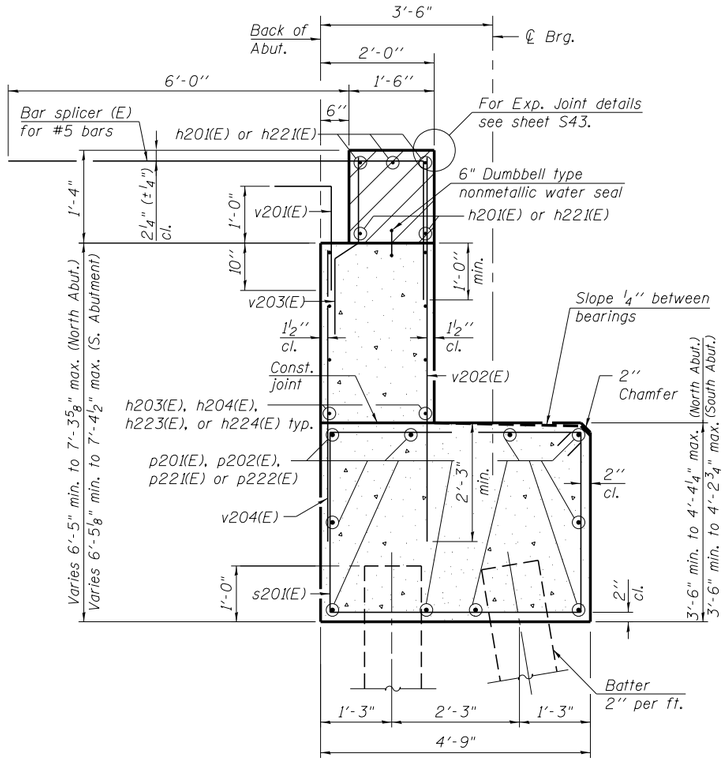
	PLOT DATE = 3/23/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB SOUTH ABUTMENT LAYOUT (2 OF 2)
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S61 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	1209
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



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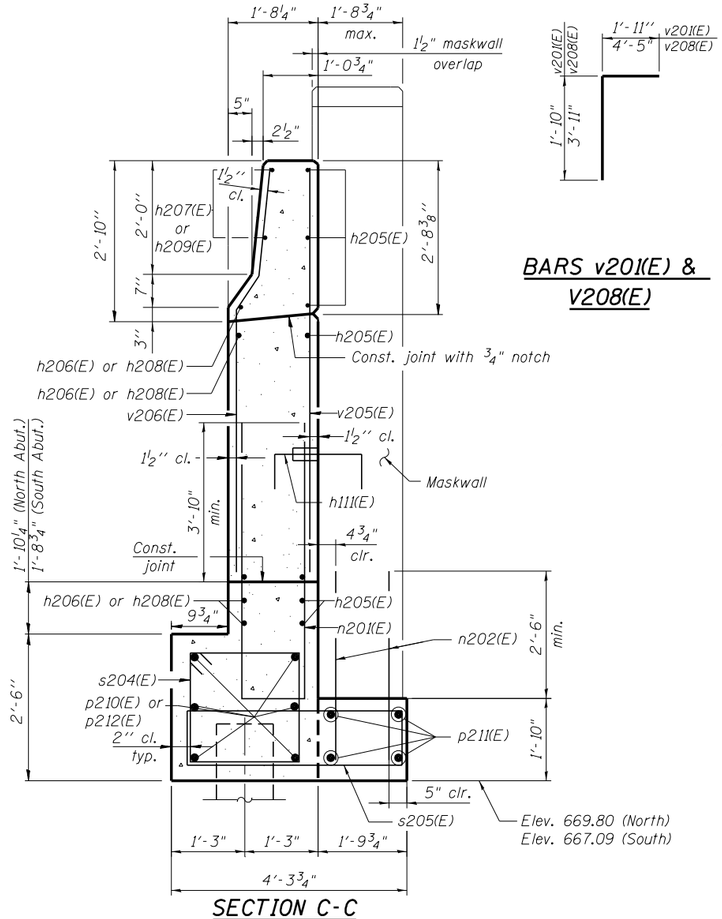
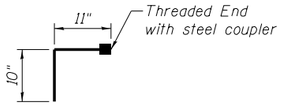
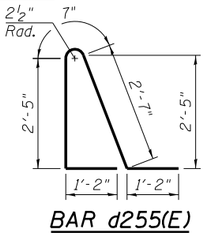


SECTION C-C

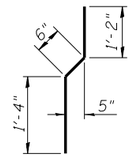
BARS v201(E) & v208(E)



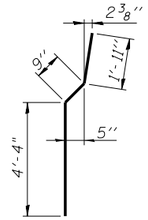
BAR h211(E)



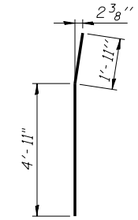
BAR d255(E)



BAR v203(E)



BAR v206(E)



BAR v207(E)

NORTH ABUTMENT BILL OF MATERIAL

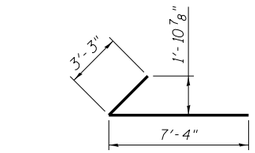
Bar	No.	Size	Length	Shape
d255(E)	3	#5	7'-11"	
h201(E)	15	#6	43'-1"	
h202(E)	10	#5	10'-7"	
h203(E)	16	#5	33'-1"	
h204(E)	16	#5	31'-7"	
h205(E)	10	#4	13'-8"	
h206(E)	8	#4	11'-11"	
h207(E)	2	#4	12'-6"	
h211(E)	7	#5	1'-9"	
n201(E)	11	#6	15'-1"	
n202(E)	36	#5	4'-2"	
n203(E)	6	#6	7'-6"	
p201(E)	20	#7	34'-2"	
p202(E)	20	#7	36'-3"	
p203(E)	4	#5	30'-1"	
p204(E)	4	#5	31'-6"	
p205(E)	4	#5	12'-1"	
p210(E)	6	#7	13'-8"	
p211(E)	4	#7	16'-8"	
s201(E)	137	#4	15'-11"	
s203(E)	86	#4	9'-5"	
s204(E)	14	#4	9'-5"	
s205(E)	18	#4	11'-9"	
u202(E)	12	#5	8'-1"	
u203(E)	7	#6	16'-2"	
u204(E)	9	#6	12'-0"	
u206(E)	6	#4	12'-0"	
v201(E)	121	#5	3'-9"	
v202(E)	121	#6	6'-9"	
v203(E)	121	#4	3'-0"	
v204(E)	121	#6	5'-5"	
v205(E)	15	#6	6'-10"	
v206(E)	11	#6	7'-0"	
v207(E)	3	#6	6'-10"	
v208(E)	8	#4	8'-4"	
Structure Excavation		Cu. Yd.	328	
Pile Shoes		Each	18	
Concrete Structures		Cu. Yd.	118.1	
Reinforcement Bars, Epoxy Coated		Pound	12,320	
Furnishing Metal Shell Piles 12"x0.250"		Foot	1098	
Driving Piles		Foot	1098	
Concrete Sealer		Sq. Ft.	870	

SOUTH ABUTMENT BILL OF MATERIAL

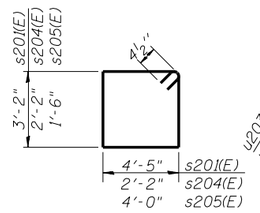
Bar	No.	Size	Length	Shape
d255(E)	3	#5	7'-11"	
h205(E)	10	#4	13'-8"	
h208(E)	8	#4	14'-9"	
h209(E)	2	#4	13'-8"	
h211(E)	8	#5	1'-9"	
h221(E)	15	#6	37'-10"	
h222(E)	10	#5	10'-0"	
h223(E)	16	#5	29'-3"	
h224(E)	16	#5	27'-4"	
n201(E)	12	#6	15'-1"	
n202(E)	36	#5	4'-2"	
n203(E)	6	#6	7'-6"	
p203(E)	4	#5	30'-1"	
p206(E)	4	#5	24'-9"	
p211(E)	4	#7	16'-8"	
p212(E)	6	#7	16'-3"	
p221(E)	20	#7	32'-3"	
p222(E)	20	#7	29'-8"	
s201(E)	116	#4	15'-11"	
s203(E)	70	#4	9'-5"	
s204(E)	16	#4	9'-5"	
s205(E)	18	#4	11'-9"	
u202(E)	12	#5	8'-1"	
u204(E)	9	#6	12'-0"	
u205(E)	7	#6	15'-8"	
u206(E)	7	#4	12'-0"	
v201(E)	105	#5	3'-9"	
v202(E)	104	#6	6'-9"	
v203(E)	105	#4	3'-0"	
v204(E)	105	#6	5'-5"	
v205(E)	15	#6	6'-10"	
v206(E)	13	#6	7'-0"	
v207(E)	3	#6	6'-10"	
v208(E)	6	#4	8'-4"	
Structure Excavation		Cu. Yd.	421	
Pile Shoes		Each	16	
Concrete Structures		Cu. Yd.	107.8	
Reinforcement Bars, Epoxy Coated		Pound	11,010	
Furnishing Metal Shell Piles 12"x0.250"		Foot	976	
Driving Piles		Foot	976	
Concrete Sealer		Sq. Ft.	757	

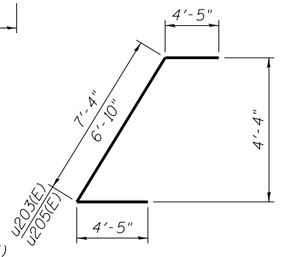
NOTES:

1. Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure on sheets S40 & S42.
2. Space reinforcement in cap to miss anchor bolts.
3. Pour steps monolithically with cap.
4. Quantity of concrete in end post included with Concrete Superstructure on sheets S40 & S42.
5. See sheet S63 thru S71, for maskwall details.
6. See sheet S79, for Metal Shell Pile Details.
7. See sheet S80, for Bar Splicer Details.
8. Concrete sealer shall be applied to all exposed surfaces of backwalls, bridge seats, front faces of pile caps, and back faces of maskwalls.



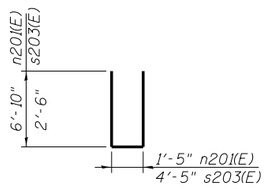
BAR h202(E)



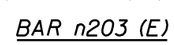


BARS u203(E) & u205(E)

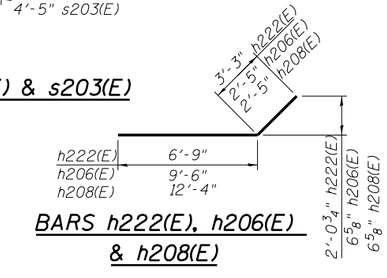
BARS s201(E), s204(E), & s205(E)



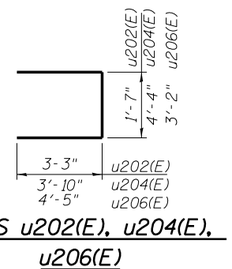
BARS n201(E) & s203(E)



BAR n203 (E)



BARS h222(E), h206(E) & h208(E)



BARS u202(E), u204(E), u206(E)

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-062-EB.Abutment_Details.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EB ABUTMENT DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S62 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	1210
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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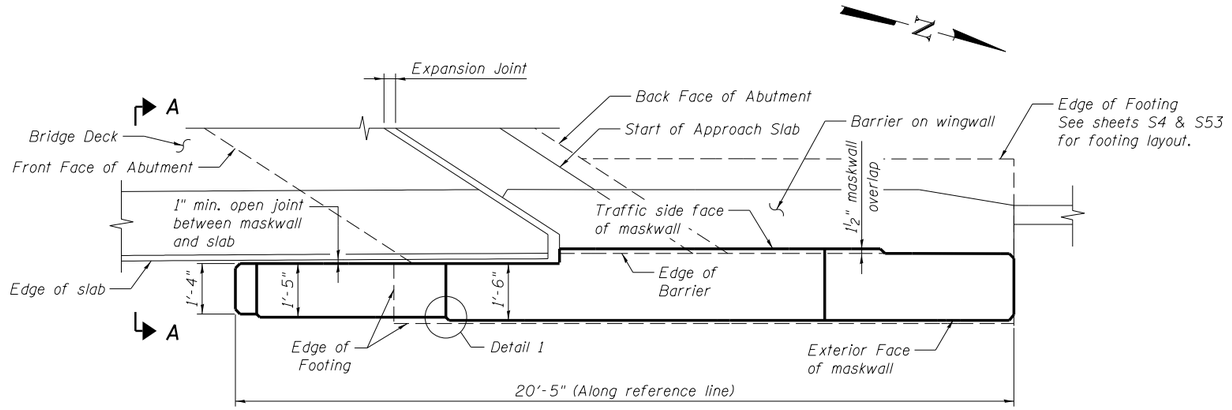
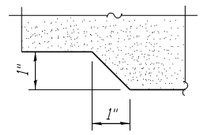
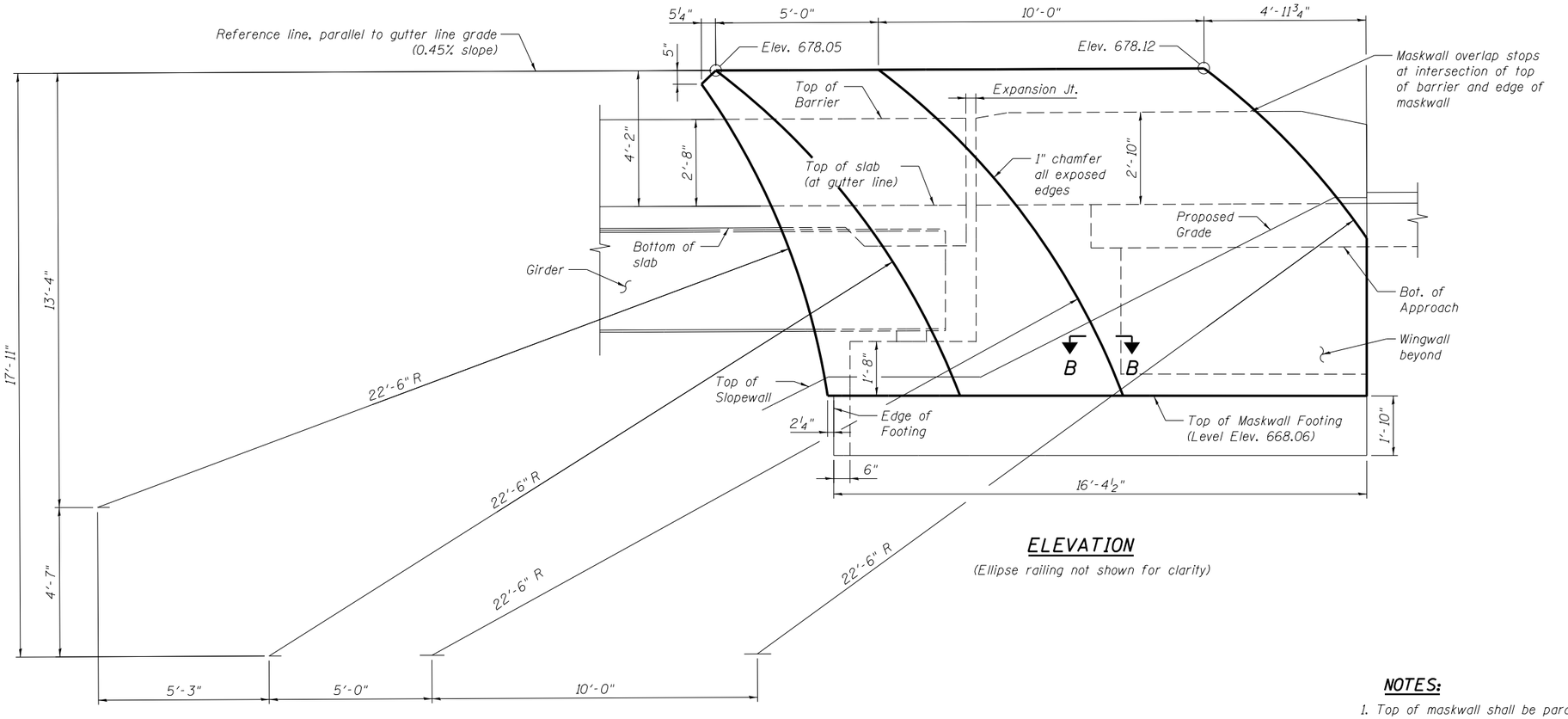


MASKWALL PLAN

(Ellipse Railing not shown for clarity)

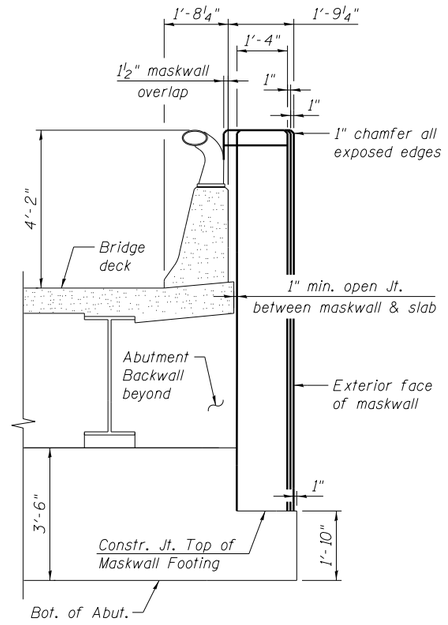


SECTION B-B - DETAIL 1



ELEVATION

(Ellipse railing not shown for clarity)



VIEW A-A

NOTES:

1. Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.
2. Front curve of maskwall only needs to be poured to top of maskwall footing.

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-063-Maskwall_Plan_Elevation_and_Sections_-_NE_Quadrant.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MASKWALL PLAN, ELEVATION AND SECTIONS – NE QUADRANT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S63 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	1211
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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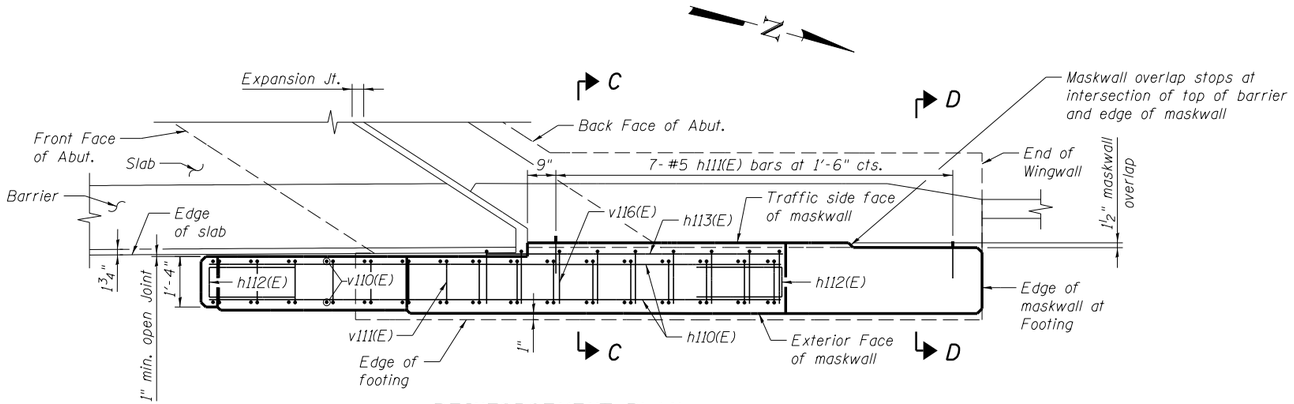
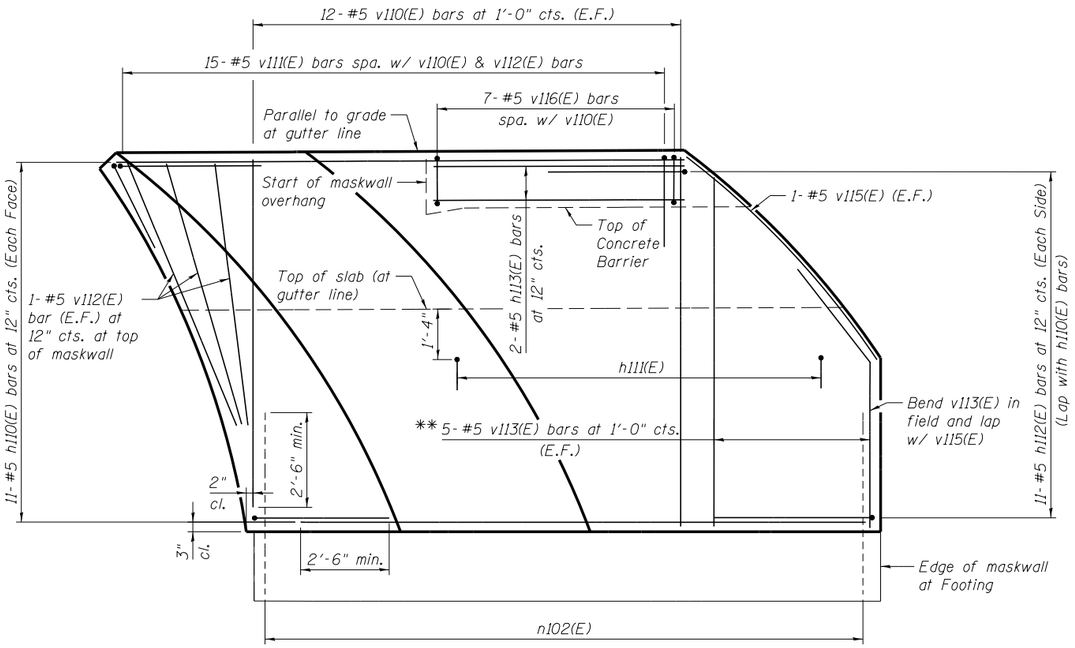


REINFORCEMENT PLAN

(Ellipse railing not shown for clarity)



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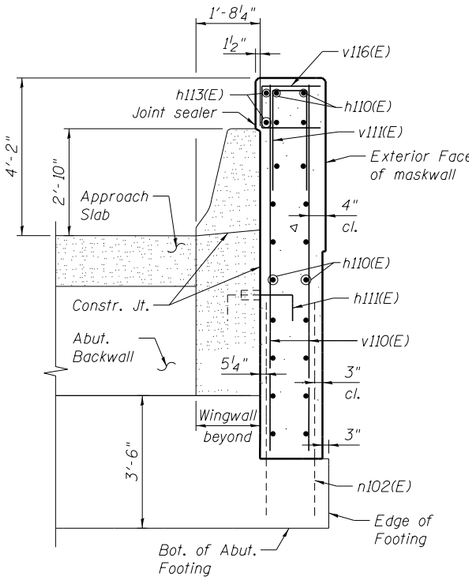
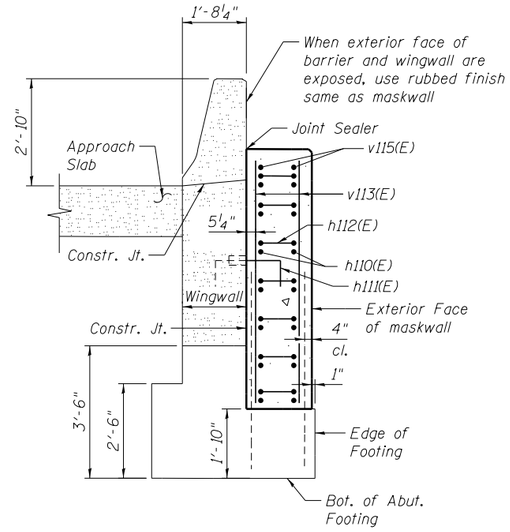
REINFORCEMENT ELEVATION

(Ellipse railing not shown for clarity)



SECTION C-C



SECTION D-D

NOTES:

1. Two inch clear concrete cover unless noted otherwise.
2. 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.
3. See sheets S54 & S57 for maskwall footing bar detailing.

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

MASKWALL DETAILS – NE QUADRANT
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S64 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	1212
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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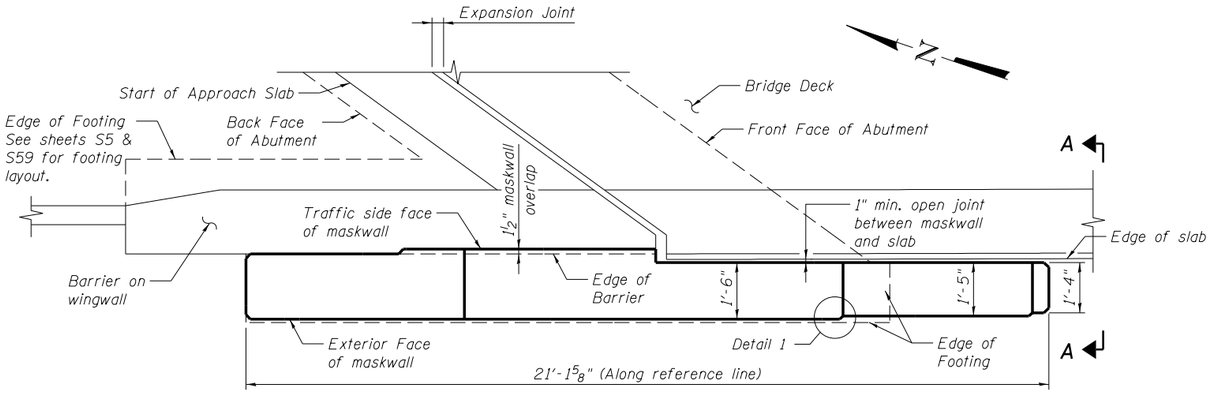
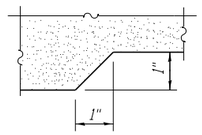
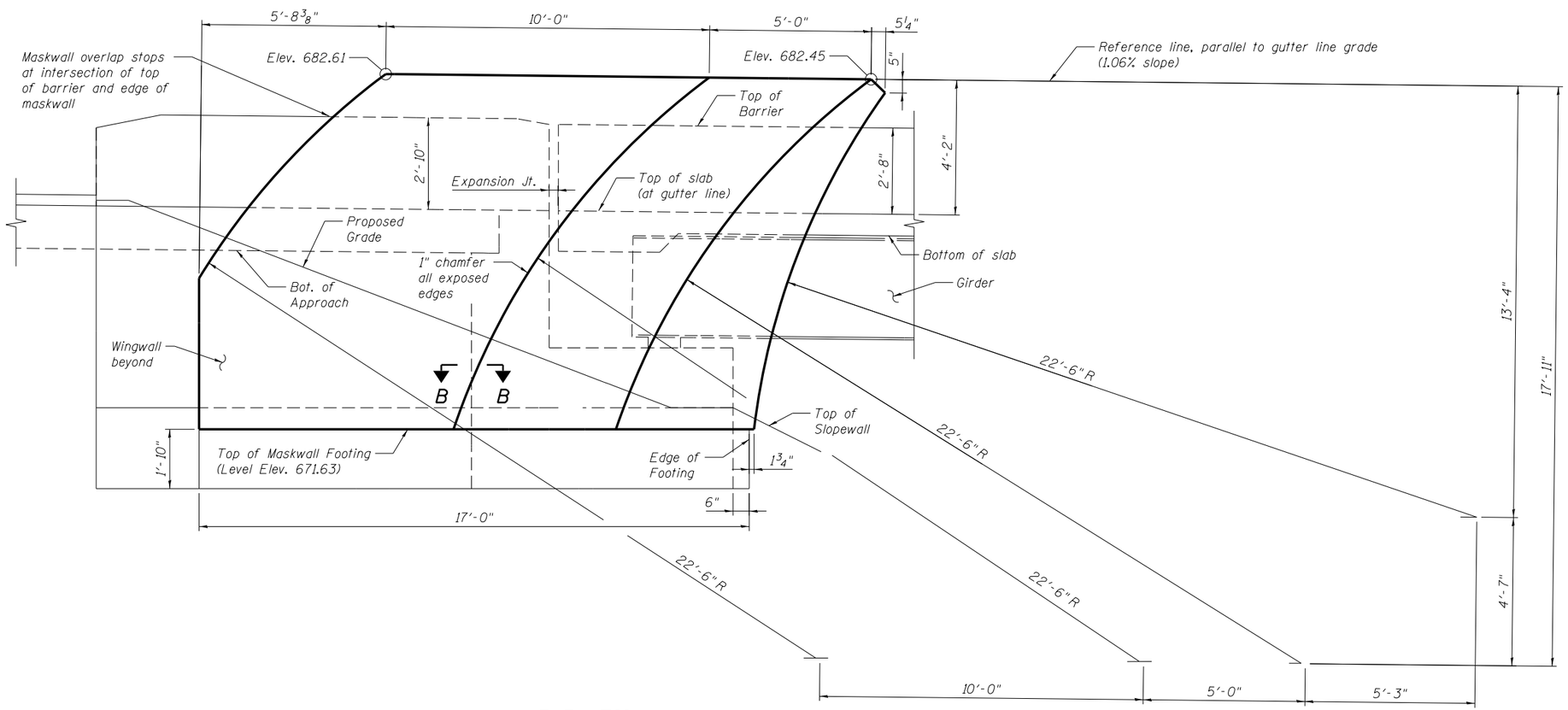


MASKWALL PLAN

(Ellipse railing not shown for clarity)



SECTION B-B - DETAIL 1



ELEVATION

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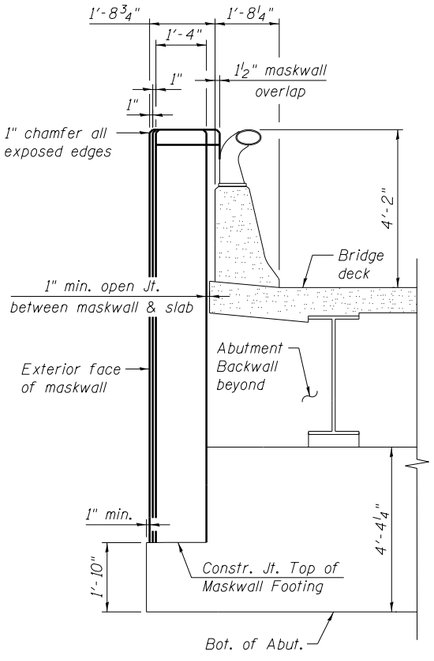

VIEW A-A

NOTES:

1. Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.
2. Front curve of maskwall only needs to be poured to top of maskwall footing.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
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

MASKWALL PLAN, ELEVATION AND SECTIONS – NW QUADRANT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S65 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	1213
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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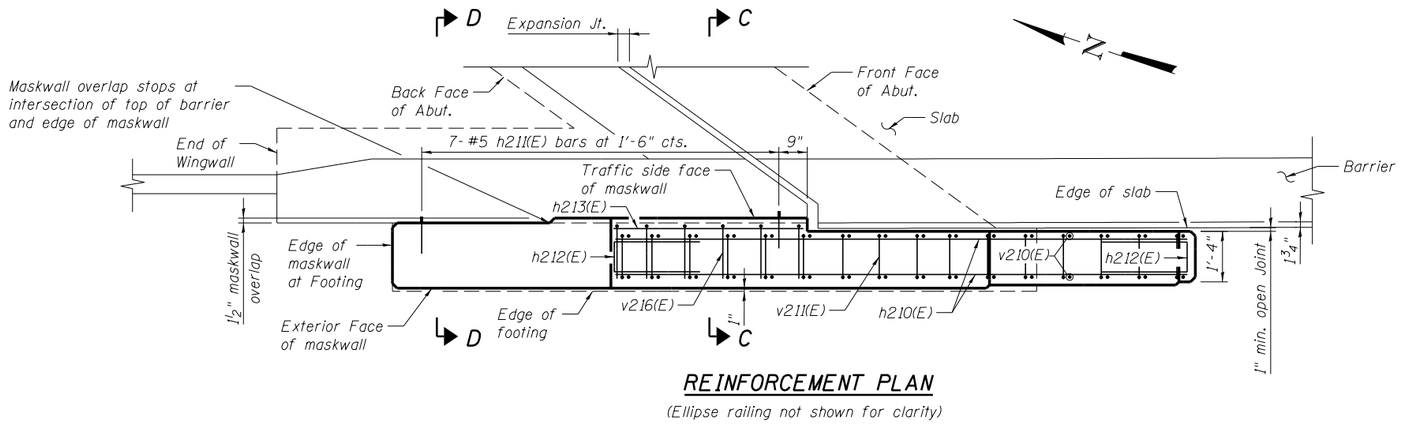

REINFORCEMENT PLAN

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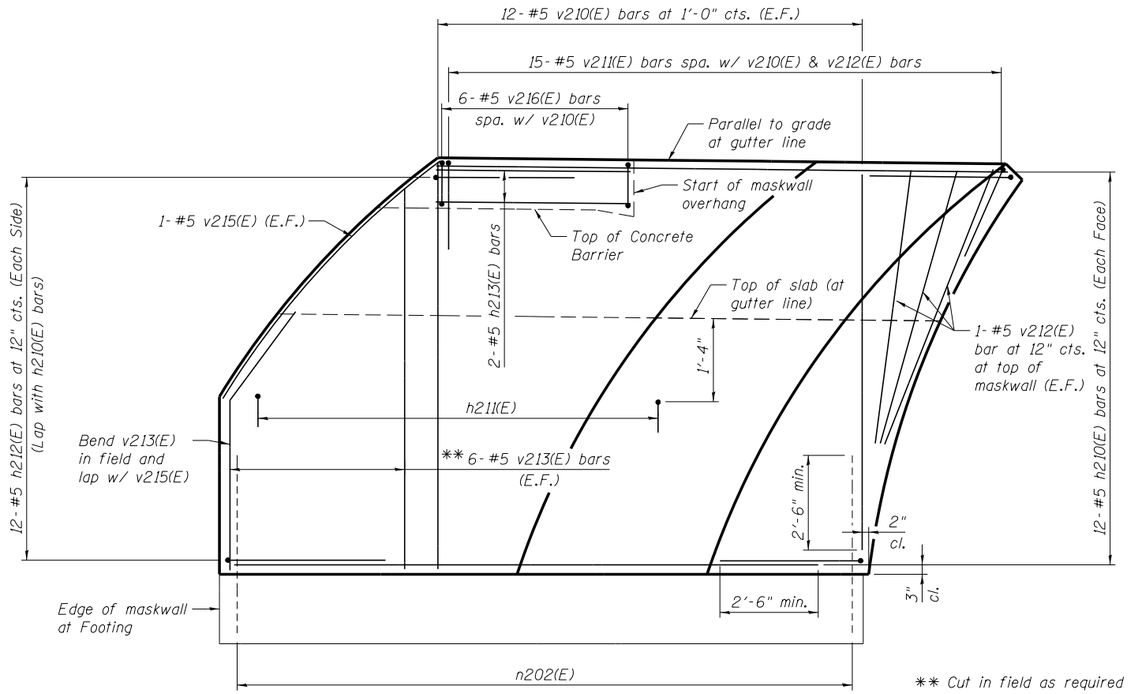

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REINFORCEMENT ELEVATION

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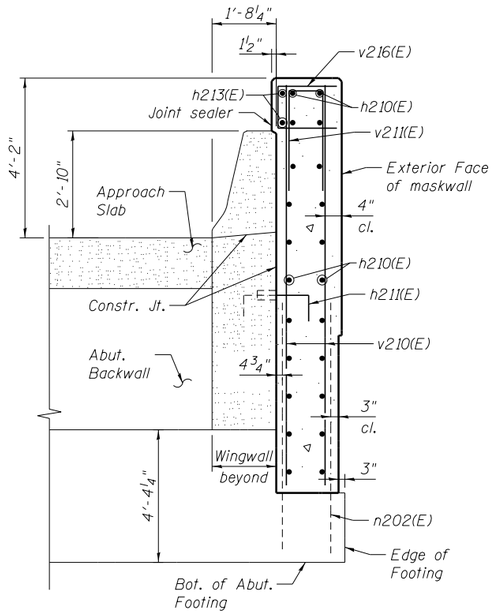
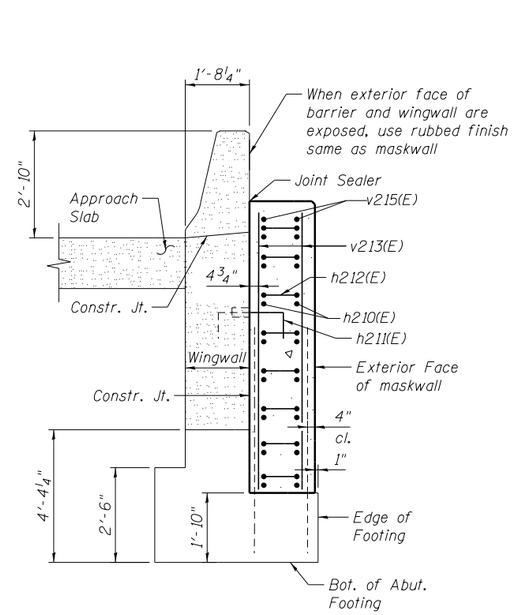


SECTION C-C



SECTION D-D

NOTES:

1. Two inch clear concrete cover unless noted otherwise.
2. 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.
3. See sheets S59 & S62 for maskwall footing bar detailing.

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-066-Maskwall_Details_-_NW_Quadrant.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - PRT	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MASKWALL DETAILS – NW QUADRANT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S66 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	1214
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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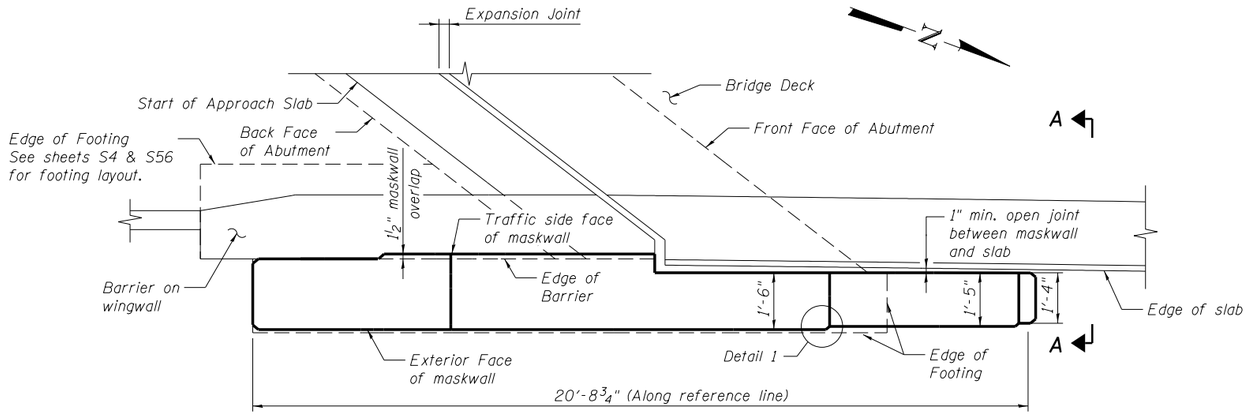
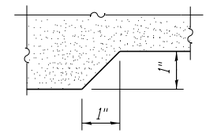
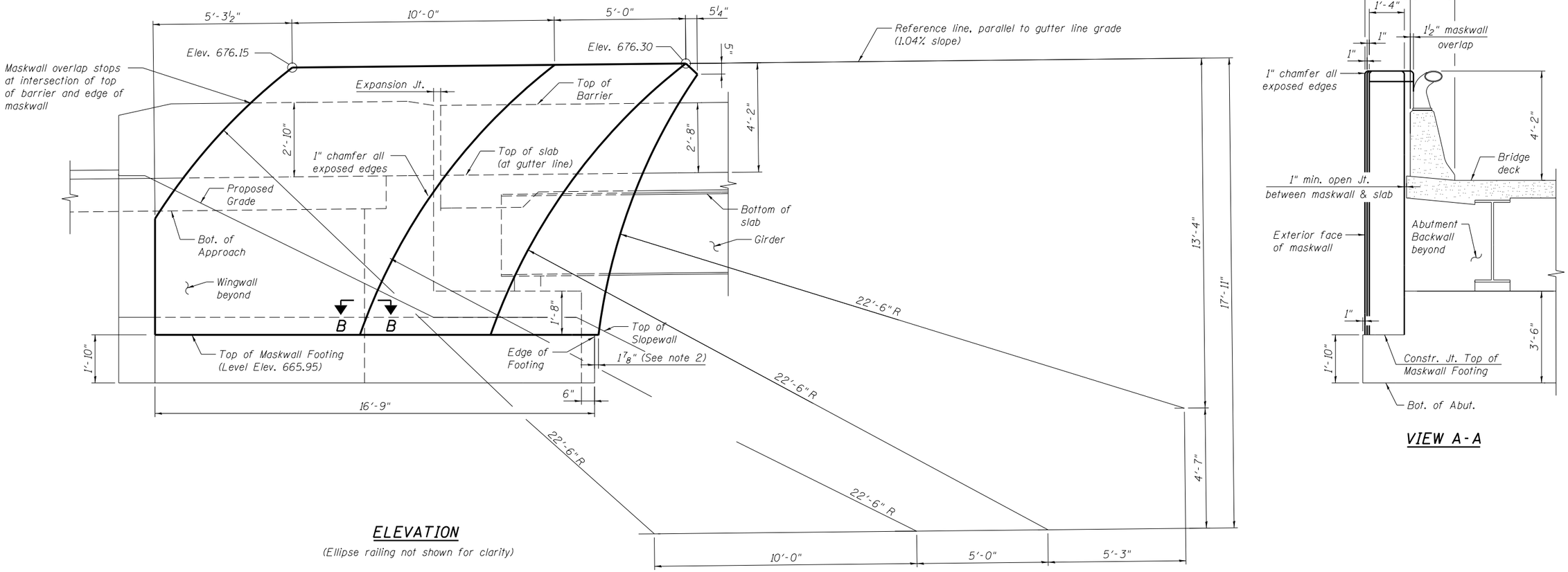


MASKWALL PLAN

(Ellipse railing not shown for clarity)



SECTION B-B - DETAIL 1



ELEVATION

(Ellipse railing not shown for clarity)

VIEW A-A

NOTES:

1. Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.
2. Front curve of maskwall only needs to be poured to top of maskwall footing.

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-067-Maskwall_Plan_Elevations_and_Sections_-_SE_Quad-ant.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
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MODEL: Default	PLOT SCALE =	DRAWN - PRT	REVISED -
	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MASKWALL PLAN, ELEVATION AND SECTIONS – SE QUADRANT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 67 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	1215
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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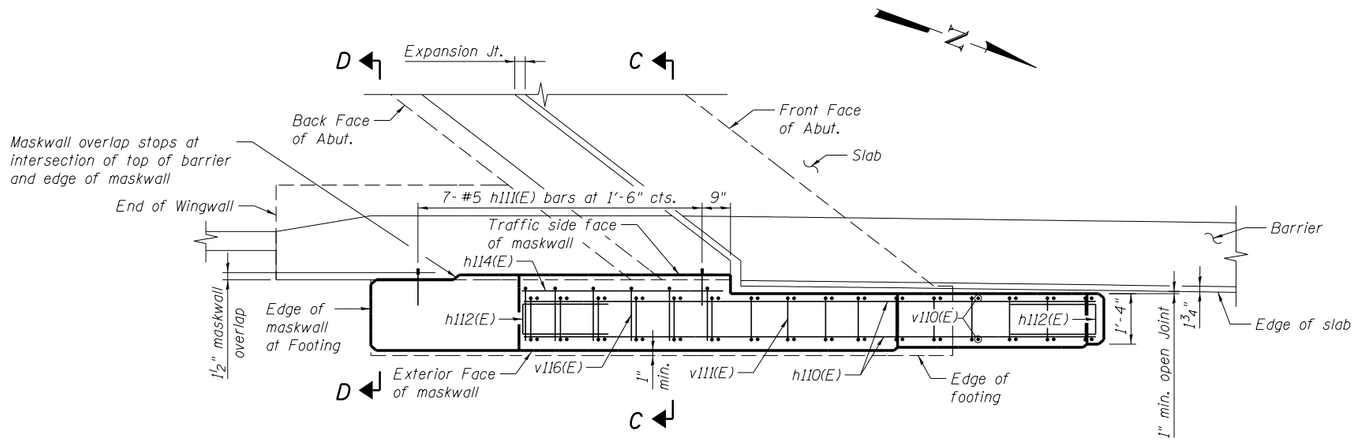
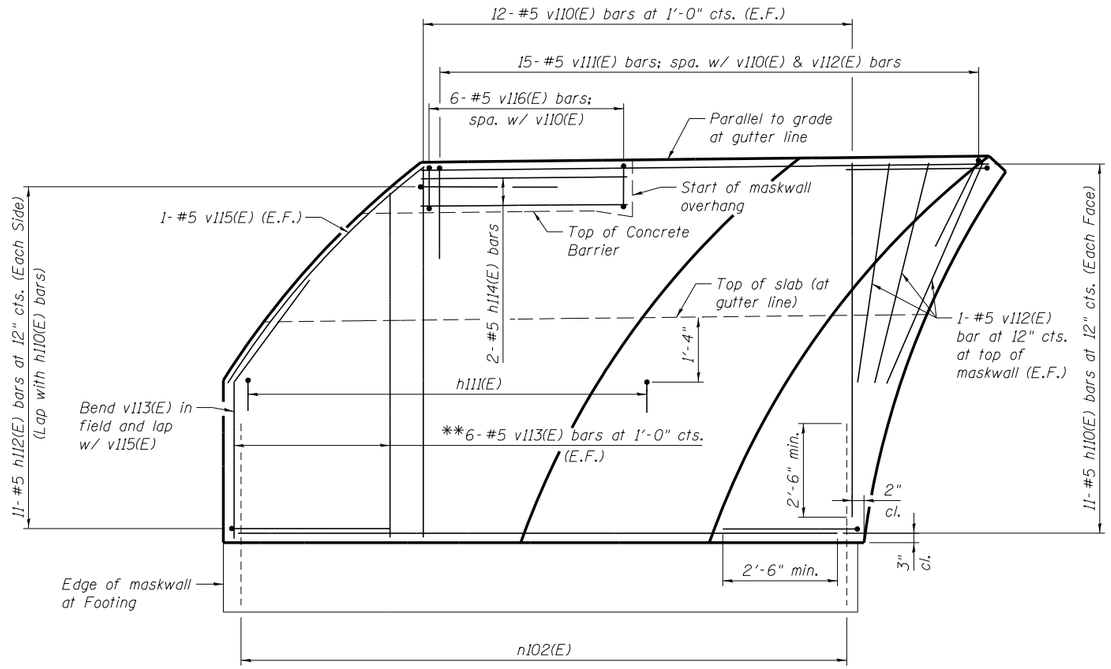


REINFORCEMENT PLAN

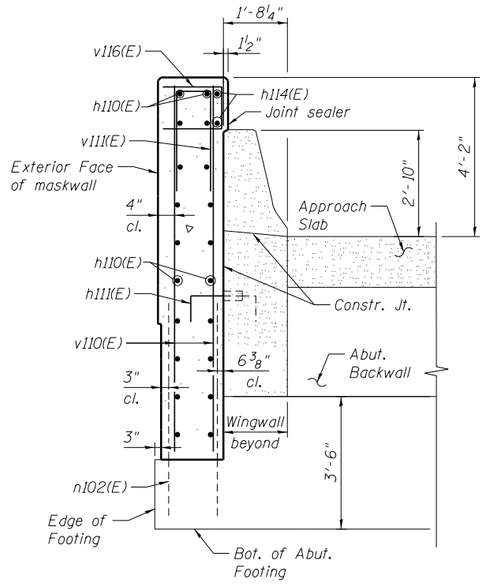
(Ellipse railing not shown for clarity)



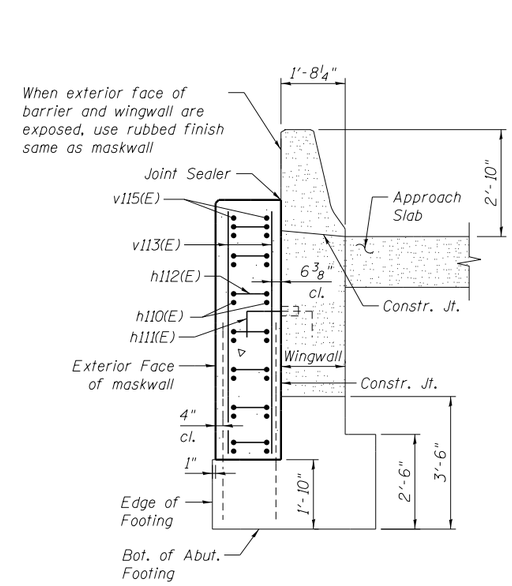
REINFORCEMENT ELEVATION

(Ellipse railing not shown for clarity)

** Cut in field as required



SECTION C-C



SECTION D-D

NOTES:

1. Two inch clear concrete cover unless noted otherwise.
2. 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.
3. See sheets S56 & S57 for maskwall footing bar detailing.

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-068-Maskwall_Details_-_SE_Quadrant.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - PRT	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MASKWALL DETAILS – SE QUADRANT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S68 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	1216
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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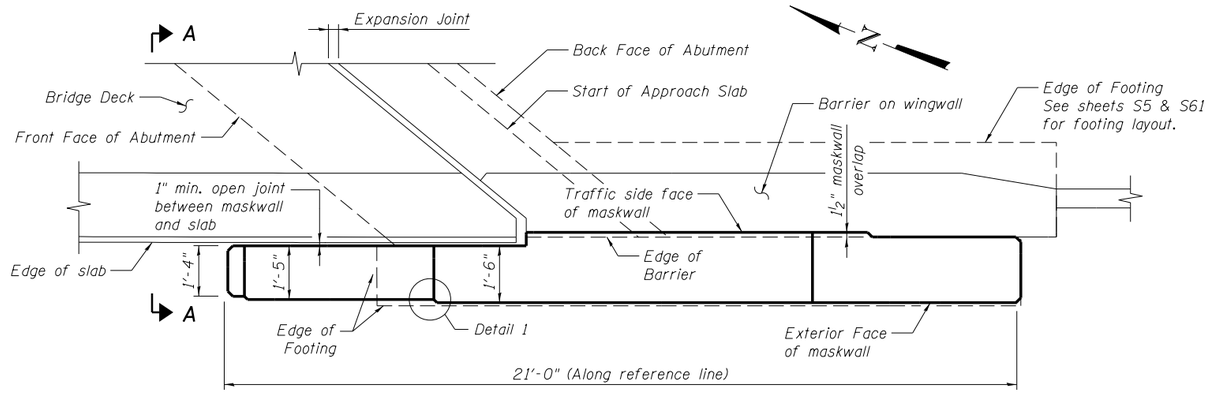
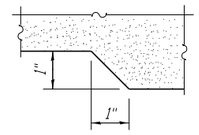
3/23/2017

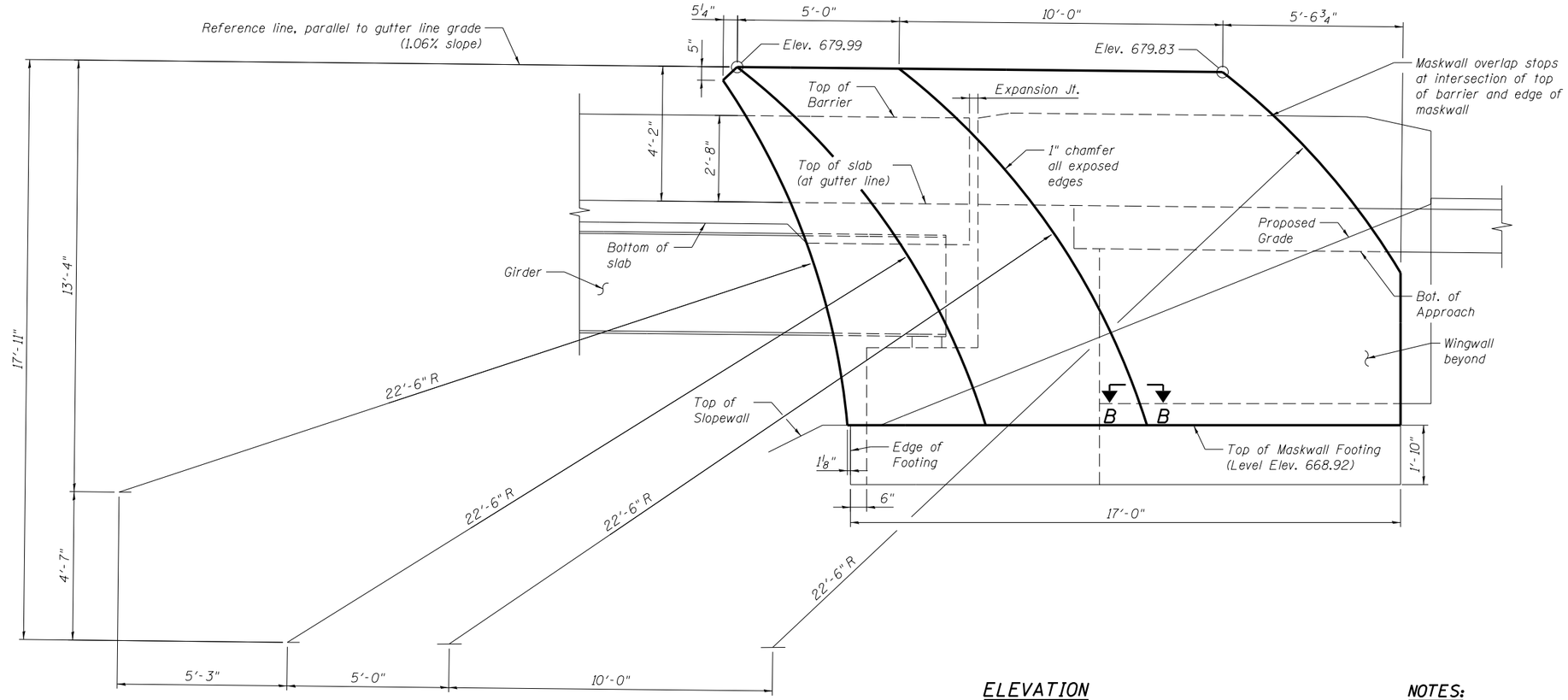


MASKWALL PLAN

(Ellipse railing not shown for clarity)

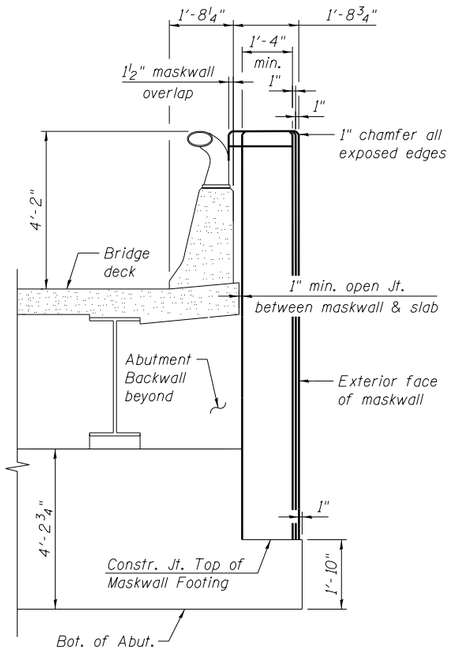


SECTION B-B - DETAIL 1



ELEVATION

(Ellipse railing not shown for clarity)



VIEW A-A

NOTES:

1. Top of maskwall shall be parallel to the longitudinal grade of the roadway and any adjacent barrier.
2. Front curve of maskwall only needs to poured to top of maskwall footing.

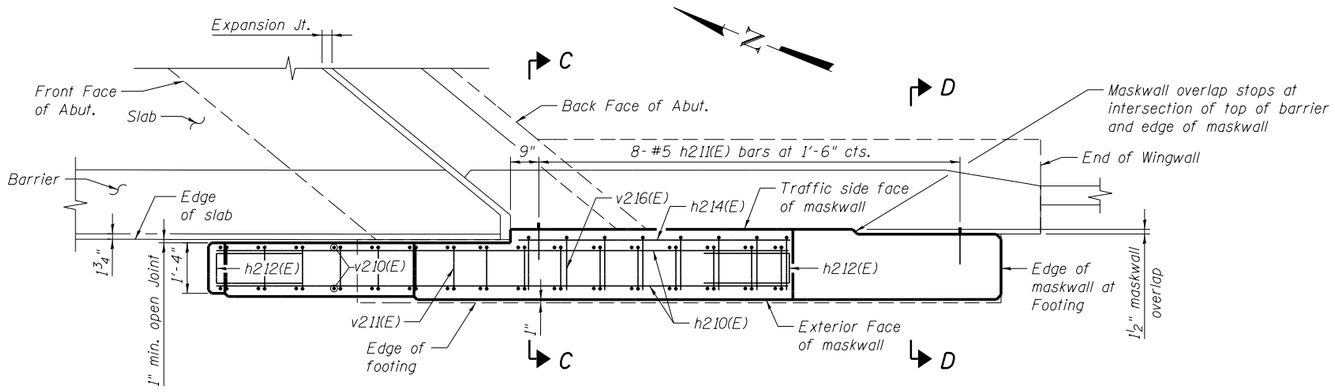
benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064.02

FILE NAME = 081-0184&0185-C00CD-069-Maskwall_Plan_Elevation_and_Sections_-_SW_Quadrant.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

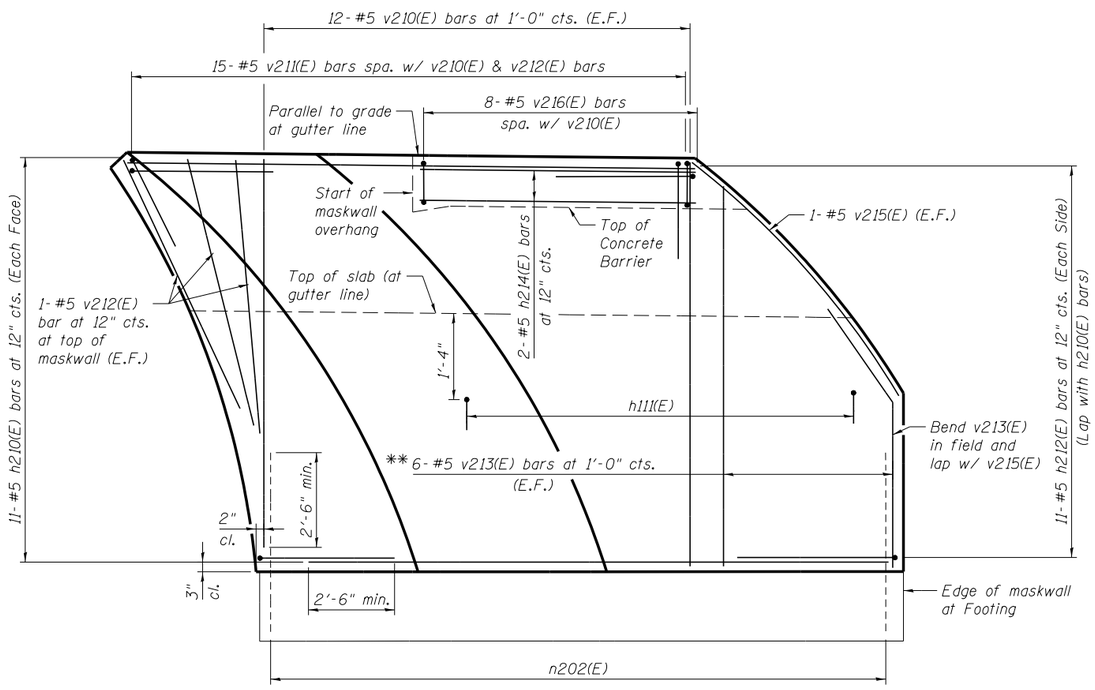
MASKWALL PLAN, ELEVATION AND SECTIONS – SW QUADRANT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 69 OF S91 SHEETS

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	1217
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		



REINFORCEMENT PLAN

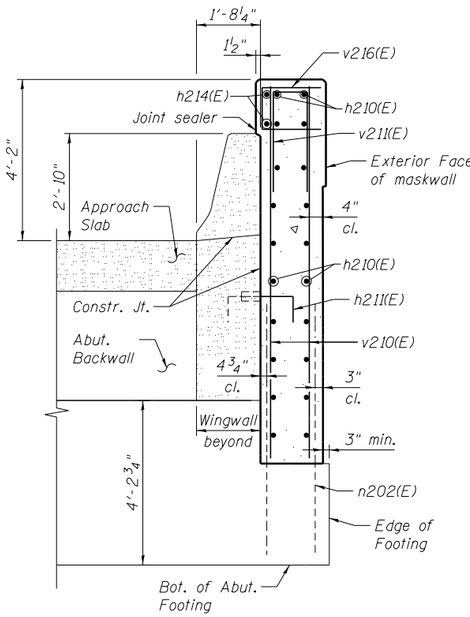
(Ellipse railing not shown for clarity)



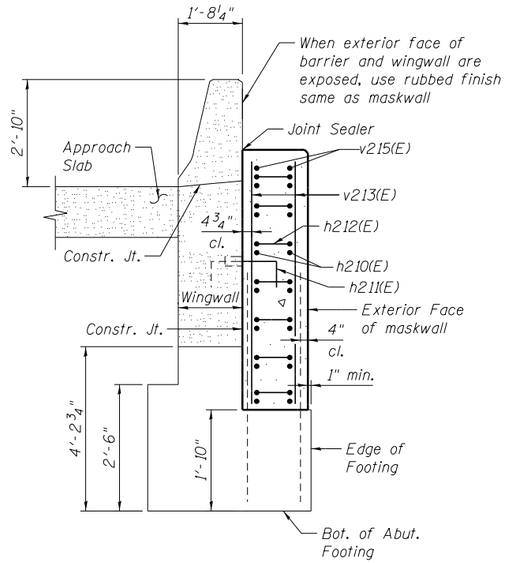
REINFORCEMENT ELEVATION

(Ellipse railing not shown for clarity)

** Cut in field as required



SECTION C-C



SECTION D-D

NOTES:

1. Two inch clear concrete cover unless noted otherwise.
2. 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.
3. See sheets S61 & S62 for maskwall footing bar detailing.

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

FILE NAME = 081-0184&0185-C00CD-070-Maskwall_Details_-_SW_Quadrant.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

MASKWALL DETAILS – SW QUADRANT
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S70 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	1218
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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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 rustications.

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.*

WESTBOUND BILL OF MATERIAL NORTH ABUTMENT MASKWALL (NE QUADRANT)

Bar	No.	Size	Length	Shape
h110(E)	22	#5	14'-8"	——
h111(E)	7	#5	1'-9"	⌐
h112(E)	22	#5	8'-11"	⊏
h113(E)	2	#5	6'-6"	——
v110(E)	24	#5	9'-10"	——
v111(E)	15	#5	4'-10"	⊓
v112(E)	6	#5	7'-3"	——
v113(E)	10	#5	9'-3"	——
v115(E)	2	#5	7'-5"	⌒
v116(E)	7	#5	4'-0"	⊏
Concrete Structures			Cu. Yd.	10.3
Reinforcement Bars, Epoxy Coated			Pound	1,080

WESTBOUND BILL OF MATERIAL SOUTH ABUTMENT MASKWALL (SE QUADRANT)

Bar	No.	Size	Length	Shape
h110(E)	22	#5	14'-8"	——
h111(E)	7	#5	1'-9"	⌐
h112(E)	22	#5	8'-11"	⊏
h114(E)	2	#5	5'-3"	——
v110(E)	24	#5	9'-10"	——
v111(E)	15	#5	4'-10"	⊓
v112(E)	6	#5	7'-3"	——
v113(E)	12	#5	9'-3"	——
v115(E)	2	#5	7'-5"	⌒
v116(E)	6	#5	4'-0"	⊏
Concrete Structures			Cu. Yd.	10.8
Reinforcement Bars, Epoxy Coated			Pound	1,090

EASTBOUND BILL OF MATERIAL NORTH ABUTMENT MASKWALL (NW QUADRANT)

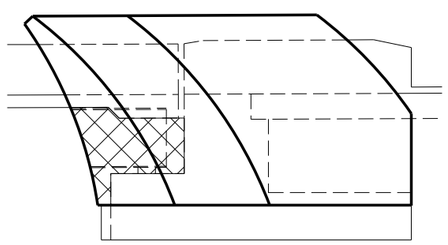
Bar	No.	Size	Length	Shape
h210(E)	24	#5	14'-8"	——
h211(E)	7	#5	1'-9"	⌐
h212(E)	24	#5	9'-11"	⊏
h213(E)	2	#5	4'-10"	——
v210(E)	24	#5	10'-8"	——
v211(E)	15	#5	4'-10"	⊓
v212(E)	24	#5	7'-3"	——
v213(E)	12	#5	10'-0"	——
v215(E)	2	#5	8'-2"	⌒
v216(E)	6	#5	4'-0"	⊏
Concrete Structures			Cu. Yd.	11.1
Reinforcement Bars, Epoxy Coated			Pound	1,200

EASTBOUND BILL OF MATERIAL SOUTH ABUTMENT MASKWALL (SW QUADRANT)

Bar	No.	Size	Length	Shape
h210(E)	22	#5	14'-8"	——
h211(E)	8	#5	1'-9"	⌐
h212(E)	22	#5	9'-11"	⊏
h214(E)	2	#5	7'-1"	——
v210(E)	24	#5	10'-8"	——
v211(E)	15	#5	4'-10"	⊓
v212(E)	6	#5	7'-3"	——
v213(E)	12	#5	10'-0"	——
v215(E)	2	#5	8'-2"	⌒
v216(E)	8	#5	4'-0"	⊏
Concrete Structures			Cu. Yd.	11.3
Reinforcement Bars, Epoxy Coated			Pound	1,160

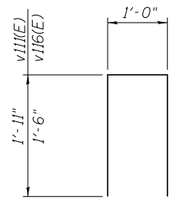
NOTE:

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.

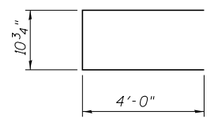


LIMIT OF CONCRETE SEALER APPLICATION

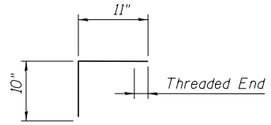
Limit of Concrete Sealer Application (Abutment Side of Maskwall only). Quantity of concrete sealer applied to maskwall include with Concrete Sealer on sheet S57 & S62.



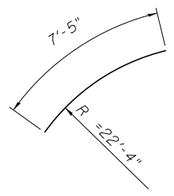
Bars v111(E) & v116(E)



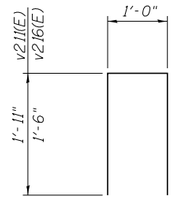
Bar h112(E)



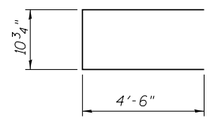
Bar h111(E)



Bar v115(E)



Bars v211(E) & v216(E)



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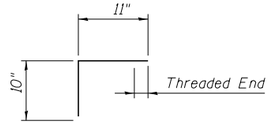

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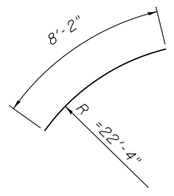

Bar v215(E)

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-071_Maskwall_Notes_and_Bill_of_Material.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

MASKWALL NOTES AND BILL OF MATERIAL
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S71 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	1219
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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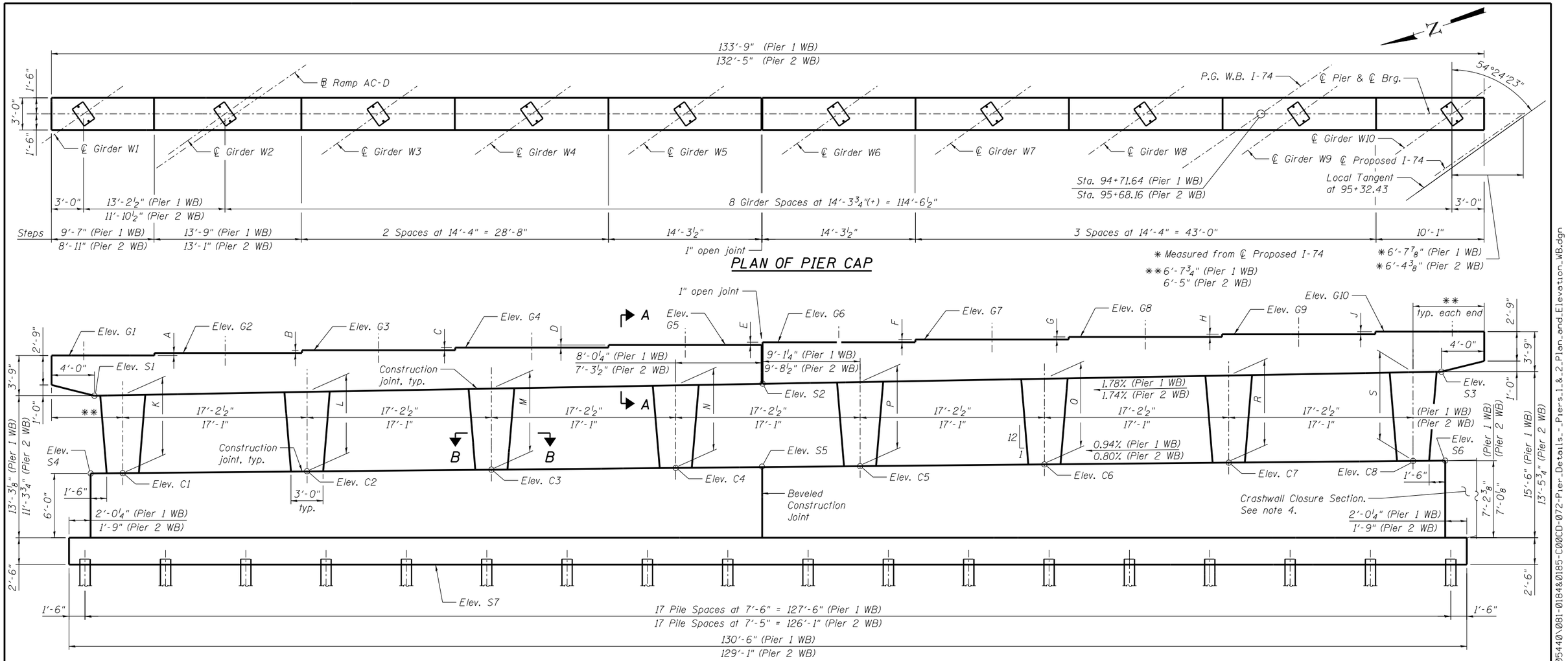
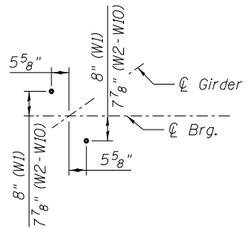


PLAN OF PIER CAP

PIER ELEVATION

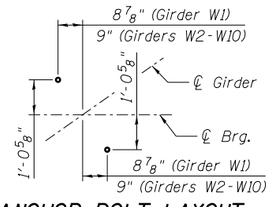
(Looking East)

PIER	C1	C2	C3	C4	C5	C6	C7	C8	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	S1	S2	S3	S4	S5	S6	S7
Pier 1 WB	658.08	658.24	658.41	658.57	658.73	658.89	659.06	659.22	669.06	669.30	669.55	669.81	670.05	670.30	670.55	670.80	671.05	671.30	665.31	666.42	667.55	658.05	658.65	659.25	649.55
Pier 2 WB	659.15	659.28	659.42	659.56	659.69	659.83	659.97	660.10	668.18	668.39	668.65	668.91	669.11	669.36	669.61	669.85	670.10	670.35	664.43	665.49	666.60	659.12	659.61	660.13	650.62



ANCHOR BOLT LAYOUT

Pier 1 WB



ANCHOR BOLT LAYOUT

Pier 2 WB

PIER	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
Pier 1 WB	2⅞"	3"	3⅛"	2⅞"	3"	3"	3"	3"	3"	7'-3¼"	7'-5"	7'-6¾"	7'-8½"	7'-10¼"	8'-0"	8'-1⅝"	8'-3⅜"
Pier 2 WB	2½"	3⅛"	3⅛"	2⅜"	3"	3"	2⅞"	3"	3"	5'-3⅞"	5'-5⅞"	5'-7¾"	5'-9¾"	5'-11⅝"	6'-1⅝"	6'-3½"	6'-5½"

PILE DATA - PIER 1 WB

Type: Metal Shell Piles 12"x0.250" with pile shoes
Nominal Required Bearing: 292 kips
Factored Resistance Available: 175 kips
Est. Length: 44 feet
Soil Setup Length: 70 feet
No. Production Piles: 35
No. Test Piles: 1

PILE DATA - PIER 2 WB

Type: Metal Shell Piles 12"x0.250" with pile shoes
Nominal Required Bearing: 292 kips
Factored Resistance Available: 175 kips
Est. Length: 44 feet
Soil Setup Length: 70 feet
No. Production Piles: 35
No. Test Piles: 1

NOTES:

1. See sheet S73 for reinforcing details.
2. See sheet S78 for pier notes, bar list and bill of material.
3. See sheet S74 For sections A-A, & B-B.
4. Crashwall Closure Section to be constructed with Eastbound pier. See sheets S75-S77 for additional details.

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

FILE NAME = 081-0184&0185-C00CD-072-Pier_Details_-_Piers_1_&_2_Plan_and_Elevation_WB.dgn
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DESIGNED - AWH | DRAWN - PRT | CHECKED - AJK/MFH
REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS 1 & 2 PLAN AND ELEVATION WB
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S72 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	1220
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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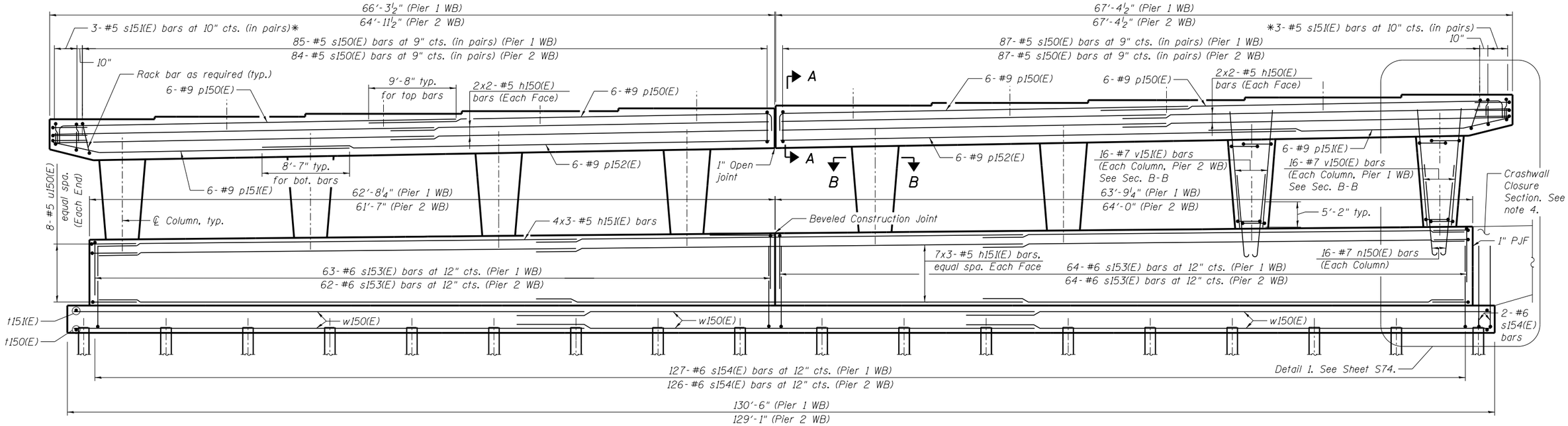

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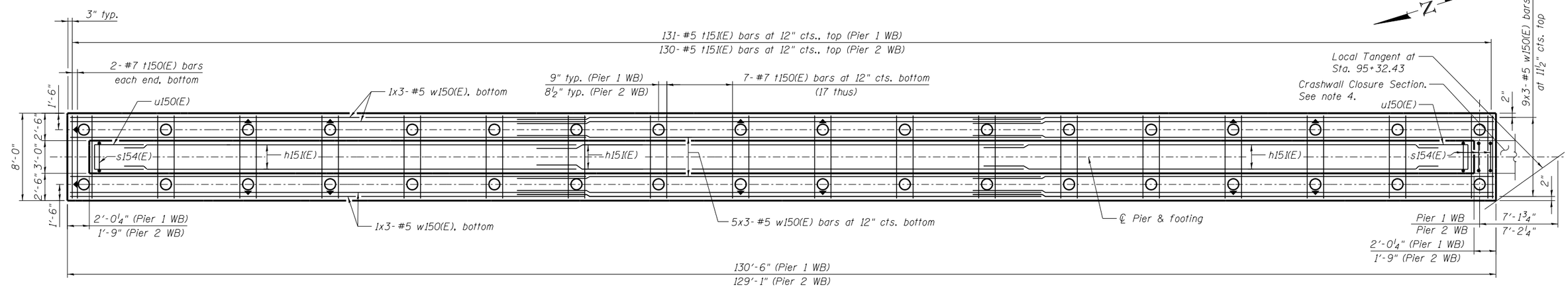
PIER ELEVATION



FOOTING PLAN

MINIMUM BAR LAP

#5 bar = 3'-8"
#6 bar = 3'-10"
#7 bar = 5'-2"

NOTES:

1. For sections A-A, & B-B, see sheet S74.
2. See sheet S78 for pier notes, reinforcement details, and bill of material.
3. See sheet S4 for footing and pile layout.
4. Crashwall Closure Section to be constructed with eastbound pier. See sheet S77.
5. Bars indicated thus 9x3-#5 etc. indicates 9 lines of bars with 3 lengths per line.

Battered Pile
Vertical Pile

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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

PIERS 1 & 2 REINFORCEMENT DETAILS WB
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S73 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	1221
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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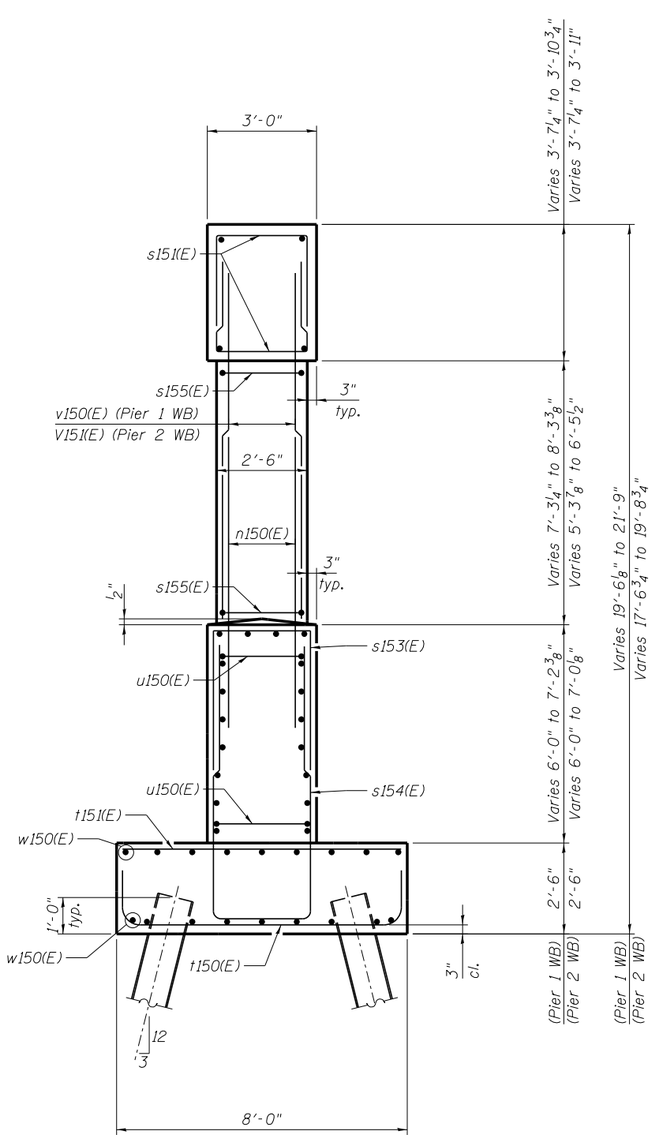
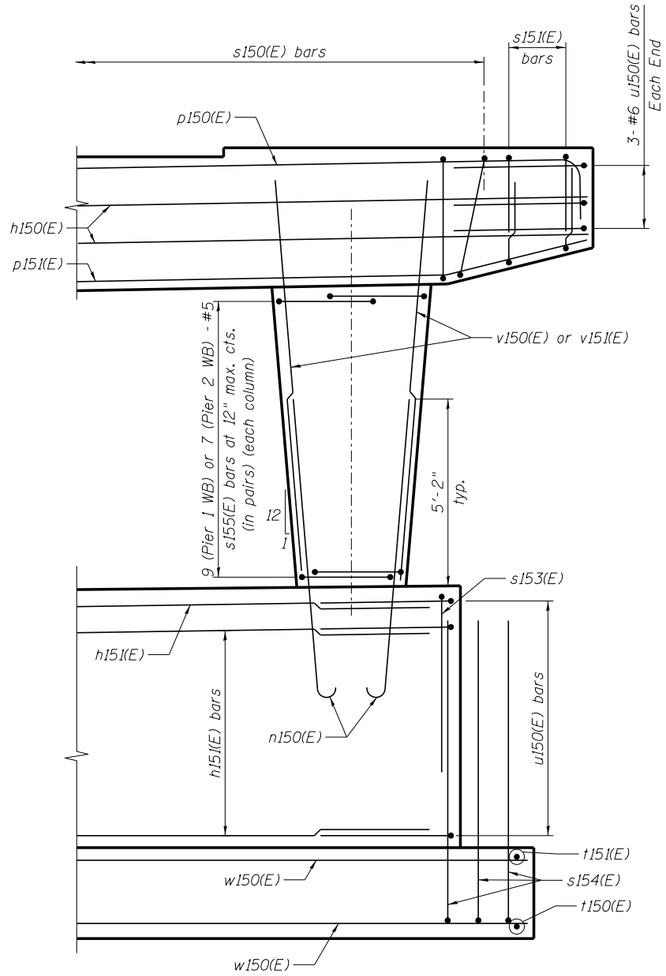


END VIEW

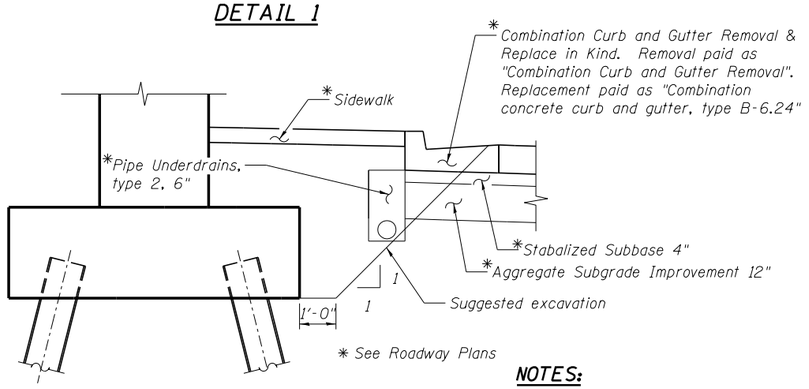
** LIMITS OF SUGGEST EXCAVATION CONFLICT

Pier	Start Station	End Station
Pier 1	2057+98	2059+33

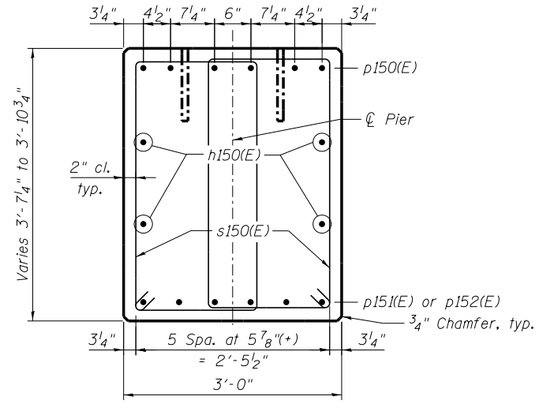
** The table above represents the limits where the suggested excavation conflicts with the proposed combination curb and gutter and subsequent subbase. Stations are measured along ℄ SB 19th St.



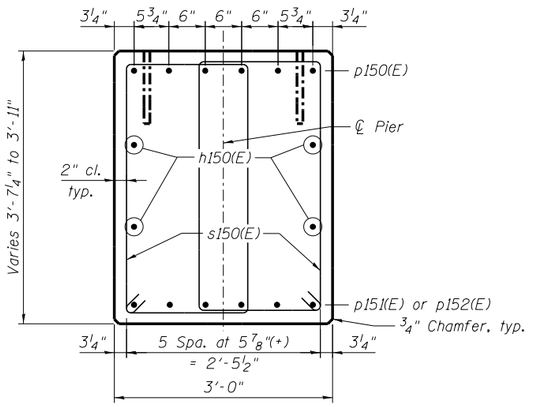
DETAIL 1



SUGGESTED EXCAVATION LIMIT AT PIER



SECTION A-A
(Pier 1 WB)



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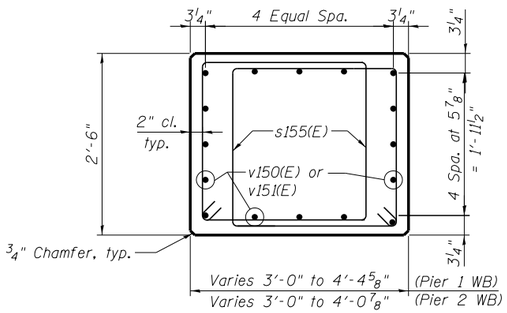
(Pier 2 WB)



SECTION B-B

NOTES:

1. Cost of removal Pipe Underdrains, type 2 6", Stabalized Subbase, and Aggregate Subgrade Improvement, shall be included in cost of structure excavation.
2. Pipe Underdrains, type 2 6", Stabalized Subbase 4", and Aggregate Subgrade Improvements 12" shall be replaced in kind. Replacement shall be paid at the contract unit price for each item.

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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

PIERS 1 & 2 DETAILS WB
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S74 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	1222
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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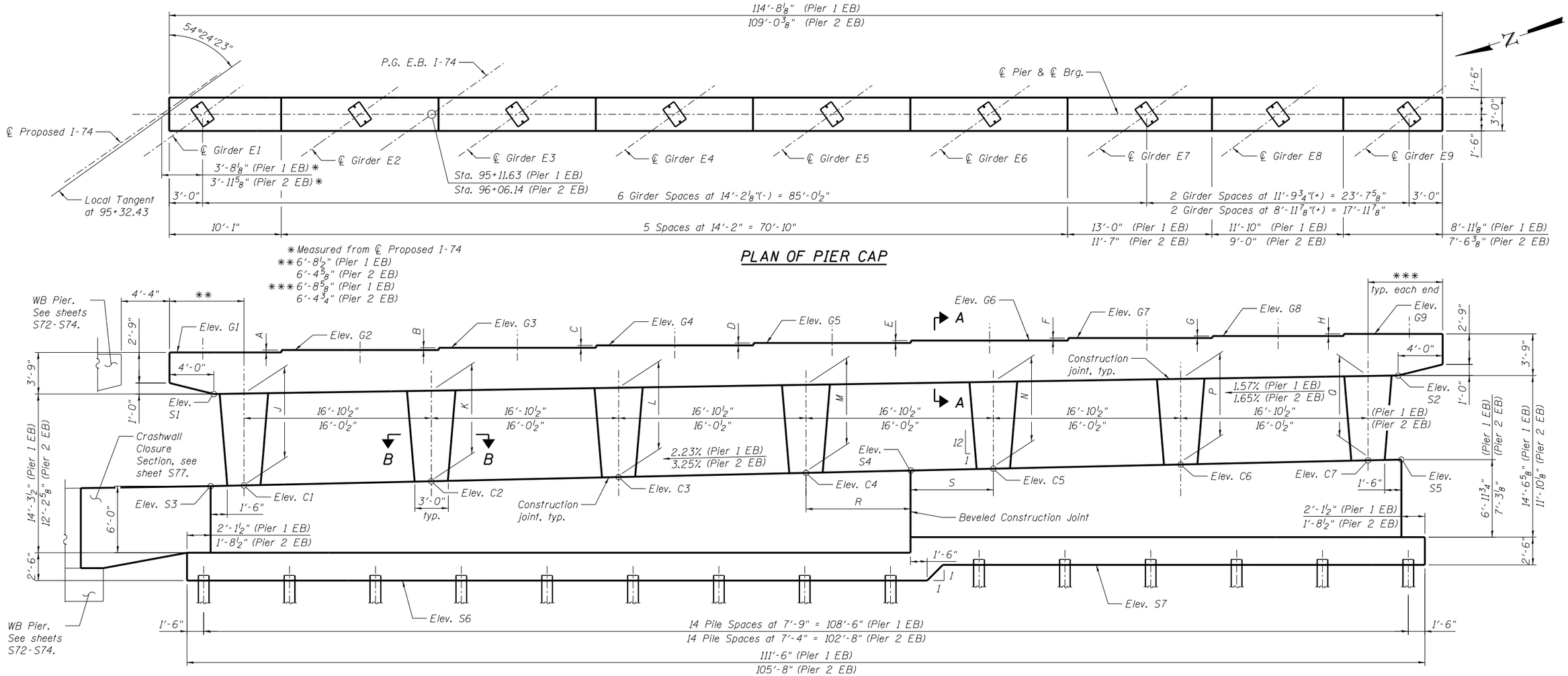


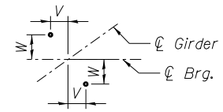
PLAN OF PIER CAP

PIER ELEVATION

(Looking East)

PIER	C1	C2	C3	C4	C5	C6	C7	G1	G2	G3	G4	G5	G6	G7	G8	G9	S1	S2	S3	S4	S5	S6	S7
Pier 1 EB	659.50	659.87	660.25	660.63	661.00	661.38	661.76	671.47	671.68	671.89	672.11	672.32	672.54	672.76	672.95	673.14	667.72	669.39	659.43	660.84	661.82	650.93	652.34
Pier 2 EB	660.41	660.94	661.46	661.98	662.50	663.02	663.54	670.29	670.51	670.74	670.97	671.20	671.43	671.66	671.82	671.97	666.54	668.22	660.32	662.26	663.64	651.82	653.88

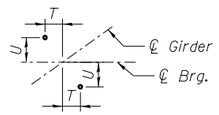
PIER	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
Pier 1 EB	2 1/2"	2 1/2"	2 5/8"	2 1/2"	2 5/8"	2 5/8"	2 1/4"	2 1/4"	8'-3 1/8"	8'-1 7/8"	8'-0 1/2"	7'-11 1/8"	7'-9 3/4"	7'-8 1/2"	7'-7 1/8"	9'-5"	7'-5 1/2"
Pier 2 EB	2 5/8"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	2 3/4"	1 7/8"	1 3/4"	6'-2"	5'-10 7/8"	5'-7 7/8"	5'-4 3/4"	5'-1 3/4"	4'-10 5/8"	4'-7 5/8"	8'-6 1/2"	7'-6"



GIRDER	V	W
E1-E7	5 5/8"	7 7/8"
E8	5 7/8"	7 7/8"
E9	6"	7 3/4"

ANCHOR BOLT LAYOUT

Pier 1 EB



GIRDER	T	U
E1-E7	9"	1'-0 5/8"
E8	9 1/4"	1'-0 1/2"
E9	9 1/2"	1'-0 1/4"

ANCHOR BOLT LAYOUT

Pier 2 EB

PILE DATA - PIER 1 EB

Type: Metal Shell Piles 12"x0.250" with pile shoes
Nominal Required Bearing: 292 kips
Factored Resistance Available: 175 kips
Est. Length: 46 feet
Soil Setup Length: 70 feet
No. Production Piles: 30
No. Test Piles: 0

PILE DATA - PIER 2 EB

Type: Metal Shell Piles 12"x0.250" with pile shoes
Nominal Required Bearing: 292 kips
Factored Resistance Available: 175 kips
Est. Length: 46 feet
Soil Setup Length: 70 ft
No. Production Piles: 30
No. Test Piles: 0

NOTES:

1. See sheet S76 for reinforcing details.
2. See sheet S78 for pier notes, bar list and bill of material.
3. See sheet S77 For sections A-A, & B-B.

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312-565-0450 Job No. 10064.02

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS 1 & 2 PLAN AND ELEVATION EB
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S75 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	1223
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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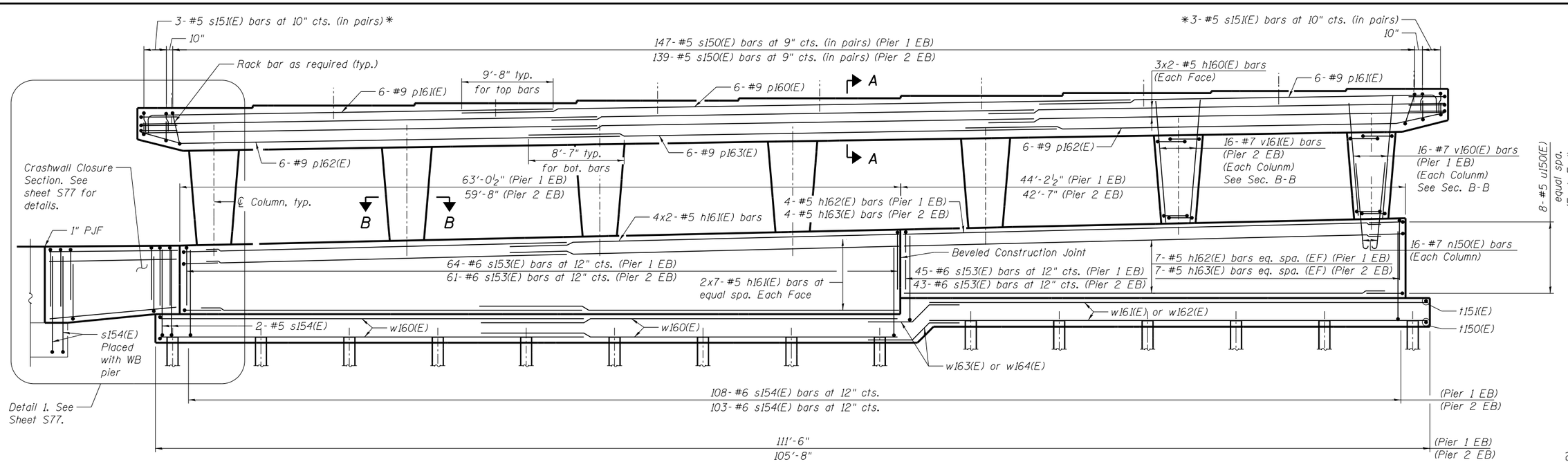

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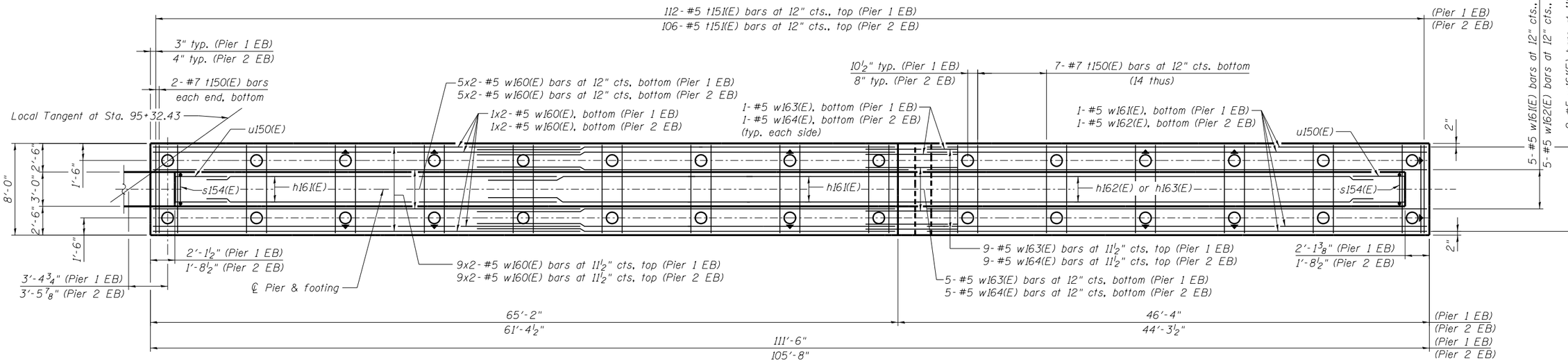
PIER ELEVATION



FOOTING PLAN

○ Vertical Pile

◐ Battered Pile

NOTES:

1. For sections A-A, & B-B, see sheet S77.
2. See sheet S78 for pier notes, reinforcement details, and bill of material.
3. See sheet S5 for footing and pile layout.
4. Bars indicated thus 9x3-#5 etc. indicates 9 lines of bar with 3 lengths per line.

MINIMUM BAR LAP

#5 bar = 3'-8"
#6 bar = 3'-10"
#7 bar = 5'-2"

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS 1 & 2 REINFORCEMENT DETAILS EB
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S76 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	1224
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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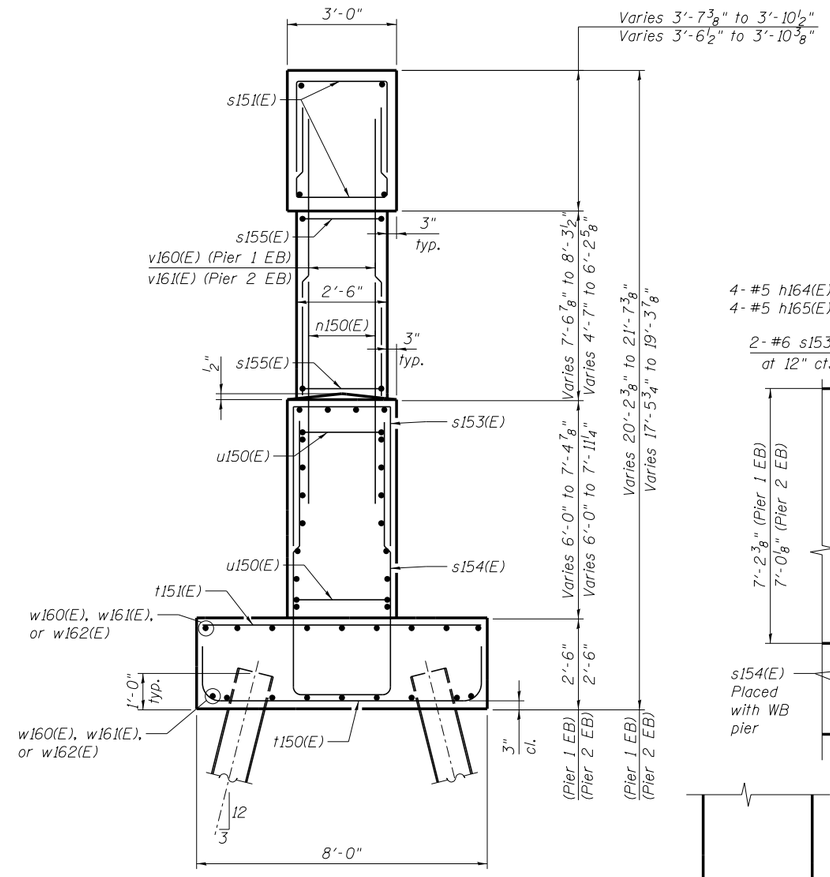

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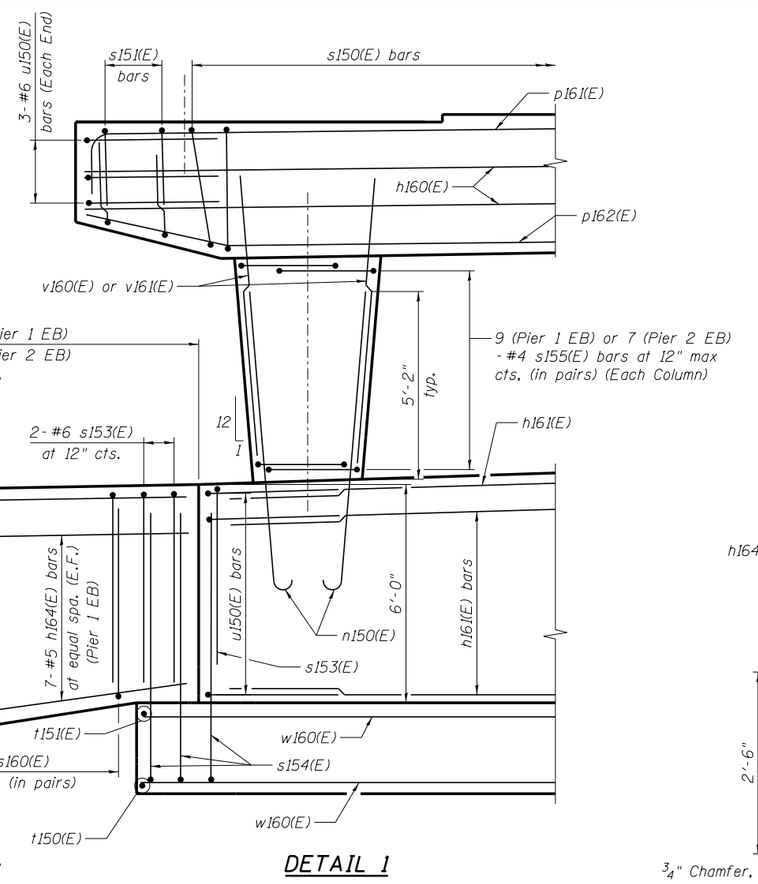
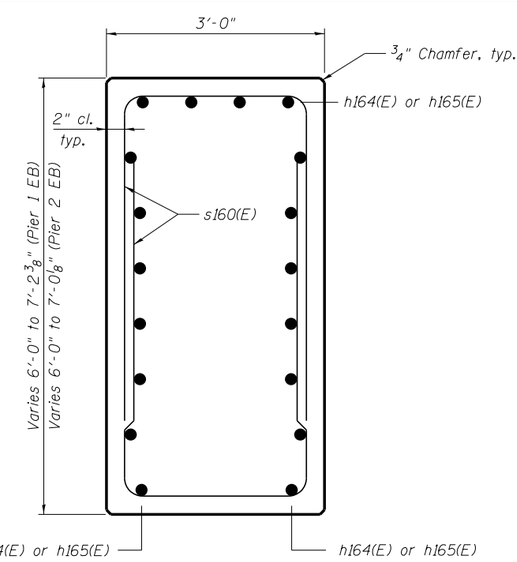
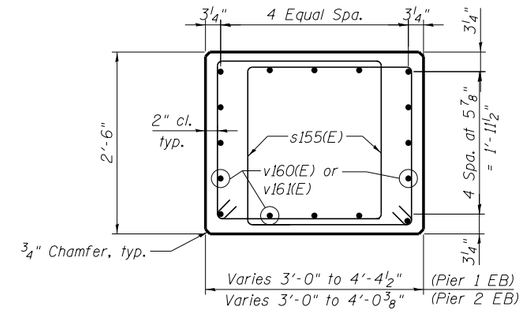


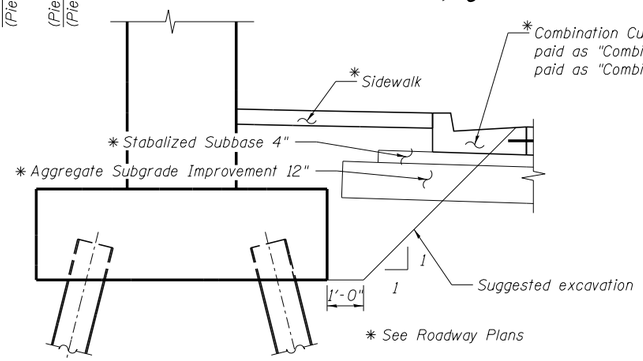
DETAIL 1



SECTION C-C



SECTION B-B

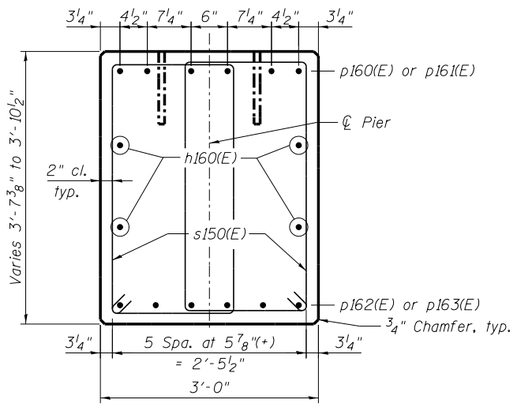


SUGGESTED EXCAVATION LIMIT AT PIER

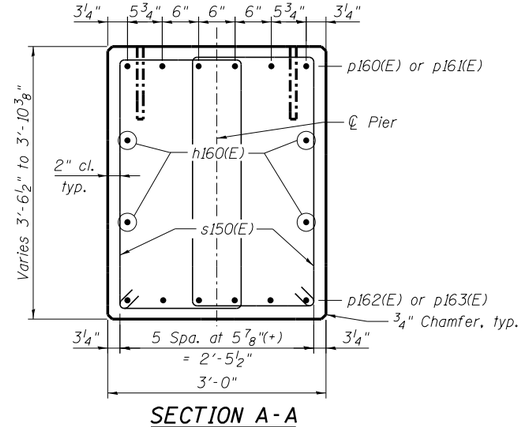
** LIMITS OF EXCAVATION CONFLICT

Pier	Start Station	End Station
Pier 1	2059+33	2060+48
Pier 2	2061+00	2061+27

** The table above represents the limits where the suggested excavation conflicts with the proposed combination curb and gutter and subsequent subbase. Stations are measured along ℄ SB 19th St.



SECTION A-A
(Pier 1 EB)



SECTION A-A
(Pier 2 EB)

NOTES:

1. Pipe underdrain, type 2 6" not shown in section. See sheet S74 for pipe underdrain detail. See Schedule of Quantities - Drainage Schedules for limits of pipe underdrain.
2. Cost of removal Pipe Underdrains, type 2 6", Stabalized Subbase, and Aggregate Subgrade Improvement, shall be included in cost of structure excavation.
3. Pipe Underdrains, type 2 6", Stabalized Subbase 4", and Aggregate Subgrade Improvements 12" shall be replaced in kind. Replacement shall be paid at the contract unit price for each item.

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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

PIERS 1 & 2 DETAILS EB
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S77 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	1225
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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ROADWAY WB
BILL OF MATERIAL

Item	Unit	Total
Aggregate Subgrade Improvement 12"	Sq. Yd.	39
Stabalized Subbase 4"	Sq. Yd.	39
Combination Curb and Gutter Removal	Foot	135
Pipe Underdrains, Type 2, 6"	Foot	135
Combination Concrete Curb and Gutter, Type B-6.24	Foot	135

ROADWAY EB
BILL OF MATERIAL

Item	Unit	Total
Aggregate Subgrade Improvement 12"	Sq. Yd.	55
Stabalized Subbase 4"	Sq. Yd.	49
Combination Curb and Gutter Removal	Foot	142
Pipe Underdrains, Type 2, 6"	Foot	94
Combination Concrete Curb and Gutter, Type B-6.24	Foot	142

PIER 1 WB
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h150(E)	16	#5	35'-4"	
h151(E)	54	#5	44'-6"	
n150(E)	128	#7	8'-10"	
p150(E)	24	#9	39'-11"	
p151(E)	12	#9	27'-8"	
p152(E)	12	#9	48'-0"	
s150(E)	344	#5	10'-9"	
s151(E)	12	#5	8'-4"	
s153(E)	127	#6	12'-10"	
s154(E)	129	#6	18'-6"	
s155(E)	144	#4	9'-9"	
t150(E)	123	#7	10'-8"	
t151(E)	131	#5	7'-8"	
u150(E)	22	#5	9'-11"	
v150(E)	128	#7	10'-8"	
w150(E)	54	#5	46'-0"	

Concrete Structures	Cu. Yd.	265.8
Reinforcement Bars, Epoxy Coated	Pound	32,030
Structure Excavation	Cu. Yd.	326
Test Pile Metal Shells	Each	1
Furnishing Metal Shell Piles 12"x0.250"	Foot	1540
Driving Piles	Foot	1540
Pile Shoes	Each	36
Concrete Sealer	Sq. Ft.	4,278

PIER 2 WB
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h150(E)	16	#5	35'-4"	
h151(E)	54	#5	44'-6"	
n150(E)	128	#7	8'-10"	
p150(E)	24	#9	39'-11"	
p151(E)	12	#9	27'-8"	
p152(E)	12	#9	48'-0"	
s150(E)	342	#5	10'-9"	
s151(E)	12	#5	8'-4"	
s153(E)	126	#6	12'-10"	
s154(E)	128	#6	18'-6"	
s155(E)	112	#4	9'-9"	
t150(E)	123	#7	10'-8"	
t151(E)	130	#5	7'-8"	
u150(E)	22	#5	9'-11"	
v151(E)	128	#7	8'-8"	
w150(E)	54	#5	46'-0"	

Concrete Structures	Cu. Yd.	256.4
Reinforcement Bars, Epoxy Coated	Pound	31,220
Structure Excavation	Cu. Yd.	378
Test Pile Metal Shells	Each	1
Furnishing Metal Shell Piles 12"x0.250"	Foot	1540
Driving Piles	Foot	1540
Pile Shoes	Each	36
Concrete Sealer	Sq. Ft.	4,016

PIER 1 EB
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h160(E)	12	#5	40'-7"	
h161(E)	36	#5	33'-6"	
h162(E)	18	#5	43'-10"	
h164(E)	18	#5	11'-5"	
n150(E)	112	#7	8'-10"	
p160(E)	6	#9	54'-0"	
p161(E)	12	#9	41'-5"	
p162(E)	12	#9	44'-5"	
p163(E)	6	#9	43'-0"	
s150(E)	294	#5	10'-9"	
s151(E)	12	#5	8'-4"	
s153(E)	113	#6	12'-10"	
s154(E)	110	#6	18'-6"	
s155(E)	126	#4	9'-9"	
s160(E)	16	#6	13'-4"	
t150(E)	102	#7	10'-8"	
t151(E)	112	#5	7'-8"	
u150(E)	22	#5	9'-11"	
v160(E)	112	#7	11'-0"	
w160(E)	36	#5	34'-4"	
w161(E)	18	#5	43'-3"	
w163(E)	18	#5	12'-0"	

Concrete Structures	Cu. Yd.	237.0
Reinforcement Bars, Epoxy Coated	Pound	28,280
Structure Excavation	Cu. Yd.	287
Furnishing Metal Shell Piles 12"x0.250"	Foot	1380
Driving Piles	Foot	1380
Pile Shoes	Each	30
Concrete Sealer	Sq. Ft.	3,855

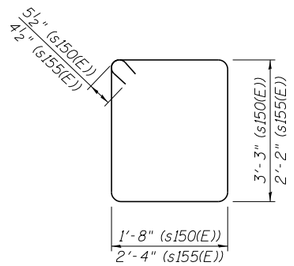
PIER 2 EB
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h160(E)	12	#5	40'-7"	
h161(E)	36	#5	33'-6"	
h163(E)	18	#5	42'-3"	
h165(E)	18	#5	10'-10"	
n150(E)	112	#7	8'-10"	
p160(E)	6	#9	54'-0"	
p161(E)	12	#9	41'-5"	
p162(E)	12	#9	44'-5"	
p163(E)	6	#9	43'-0"	
s150(E)	278	#5	10'-9"	
s151(E)	12	#5	8'-4"	
s153(E)	108	#6	12'-10"	
s154(E)	105	#6	18'-6"	
s155(E)	98	#4	9'-9"	
s160(E)	16	#6	13'-4"	
t150(E)	102	#7	10'-8"	
t151(E)	106	#5	7'-8"	
u150(E)	22	#5	9'-11"	
v161(E)	112	#7	8'-0"	
w160(E)	36	#5	34'-4"	
w162(E)	18	#5	40'-6"	
w164(E)	18	#5	13'-0"	

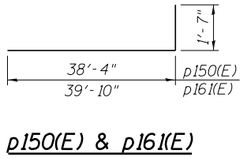
Concrete Structures	Cu. Yd.	222.7
Reinforcement Bars, Epoxy Coated	Pound	26,870
Structure Excavation	Cu. Yd.	363
Furnishing Metal Shell Piles 12"x0.250"	Foot	1380
Driving Piles	Foot	1380
Pile Shoes	Each	30
Concrete Sealer	Sq. Ft.	3,522

NOTES:

1. The minimum clear distance from the face of concrete to near reinforcing bar is 2" unless noted otherwise.
2. All exposed corners, 90 degrees or sharper shall have a $\frac{3}{4}$" chamfer.
3. Space reinforcement in cap to miss anchor bolts.
4. Pour steps monolithically with cap.



s150(E) & s155(E)



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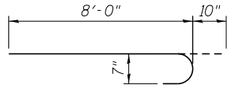
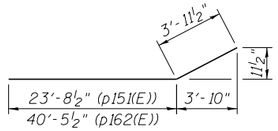
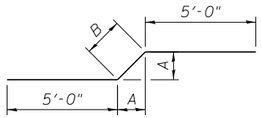


n150(E)

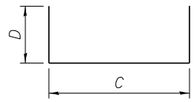


p151(E) & p162(E)



BAR	A	B
w163(E)	1'-5"	2'-0"
w164(E)	2'-1"	3'-0"

w163(E) & w164(E)



BAR	C	D
s151(E)	2'-8"	2'-10"
s153(E)	2'-8"	5'-1"
s154(E)	2'-8"	7'-11"
s160(E)	2'-8"	5'-4"
u150(E)	2'-7"	3'-8"
t150(E)	7'-8"	1'-6"

s151(E), s153(E), s154(E), s160(E), u150(E) & t150(E)

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312-565-0450 Job No. 10064.02

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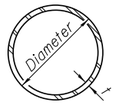
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

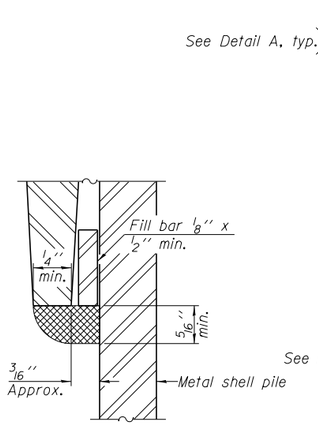
PIER BILL OF MATERIAL
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S78 OF S91 SHEETS

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	1226
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

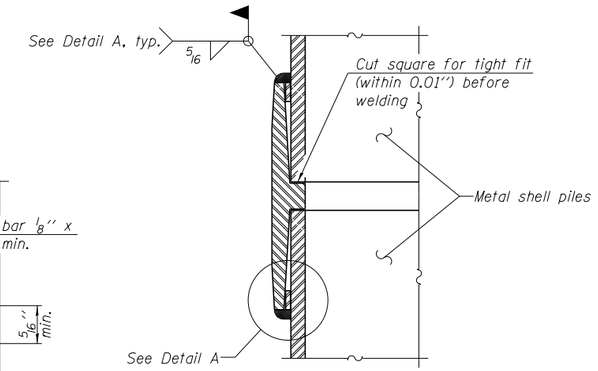


METAL SHELL PILE TABLE

Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd.³ /ft.)
PP12	0.179″	22.60	0.0274
PP12	0.250″	31.37	0.0267
PP14	0.250″	36.71	0.0368
PP14	0.312″	45.61	0.0361

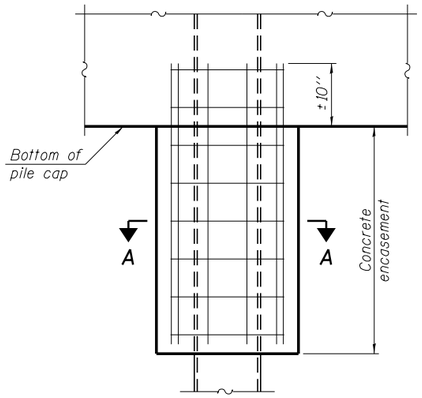


DETAIL A

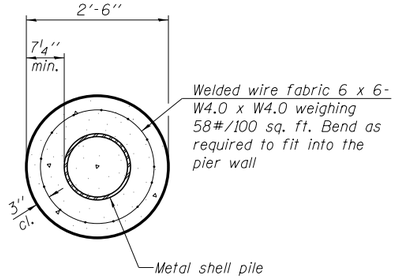


Notes:
The 1/8″ x 1/2″ min. fill bar may be constructed of 2 bars with a 1/8″ max. gap between them.
Pile segments shall be driven to solid contact with splicer before welding.

WELDED COMMERCIAL SPLICE



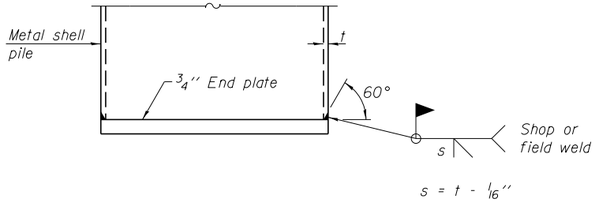
ELEVATION



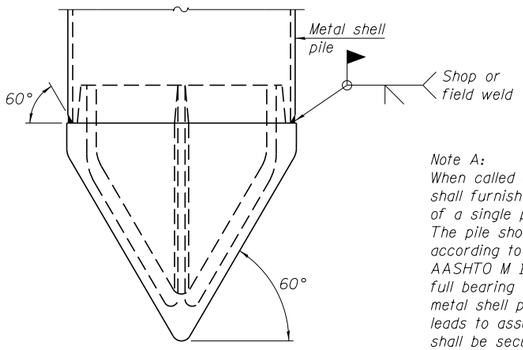
SECTION A-A

Note:
Forms for encasement may be omitted when soil conditions permit.

CONCRETE ENCASEMENT AT PIERS



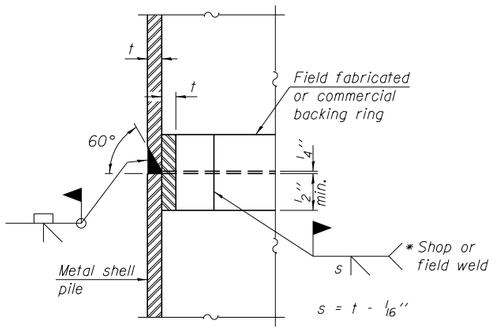
END PLATE ATTACHMENT



Note A:
When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.

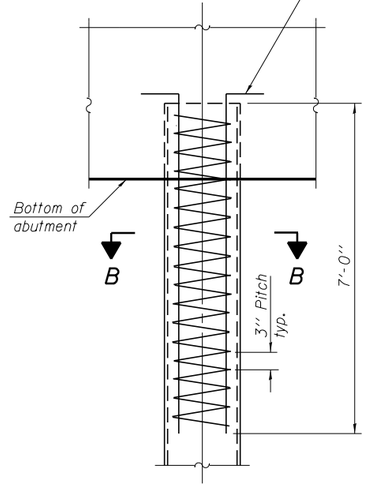
METAL SHELL PILE SHOE ATTACHMENT

(See Note A)



COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



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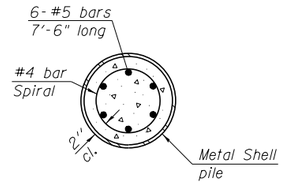

SECTION B-B

METAL SHELL REINFORCEMENT AT ABUTMENTS

Note:
The metal shell piles shall be according to ASTM A 252 Grade 3.

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

F-MS 1-27-12

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		CHECKED - AJK	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

METAL SHELL PILE DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S79 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	1227
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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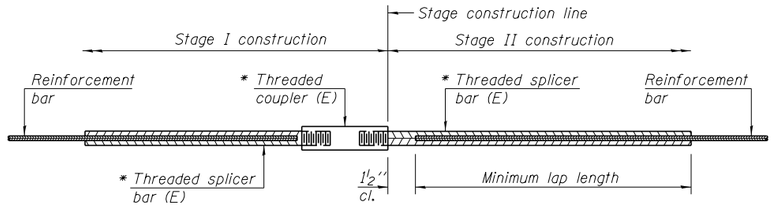


STANDARD BAR SPLICER ASSEMBLY

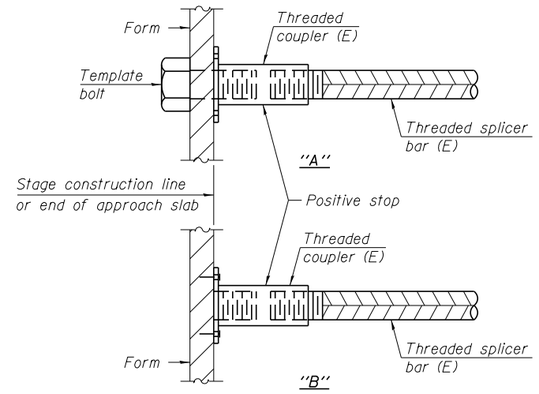
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

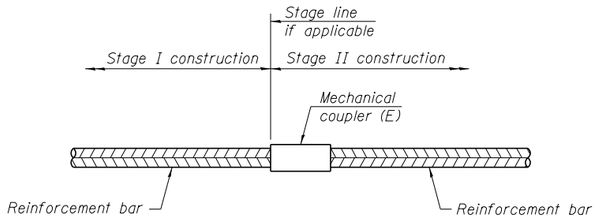
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

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



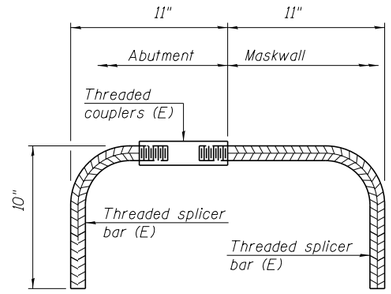
INSTALLATION AND SETTING METHODS

"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.



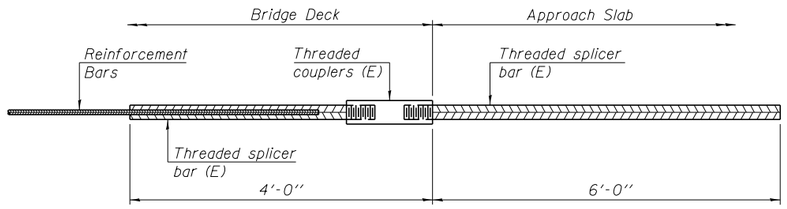
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



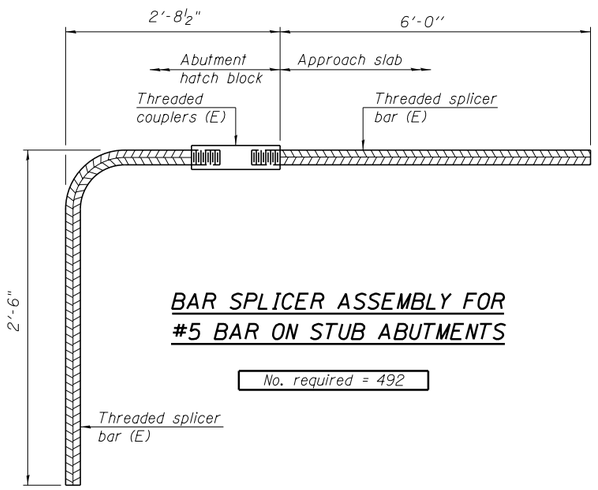
BAR SPLICER ASSEMBLY FOR #5 BAR ON MASKWALL

No. required = 29



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

No. required = 0



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 492

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.

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

BAR SPLICER ASSEMBLY DETAILS
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. 580 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	1228
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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3/23/2017

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 1/10/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. ~~081-103, 104~~
Station

BORING NO. B-1
Station ~~923+52~~
Offset ~~87.00ft LT CL~~
Ground Surface Elev. 655.6 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

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

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown SILTY CLAY LOAM			0.8 P	21
	653.60			
STIFF tan SILTY CLAY LOAM		1 3 4	1.3 P	23
	652.10			
SOFT tan SILTY LOAM	-5	1 3 3	0.4 P	26
	649.60			
STIFF tan SILTY LOAM		2 4 6	1.7 S	20
	647.10			
SOFT tan SILTY LOAM	-10	2 2 2	0.4 P	24
	644.60			
STIFF gray LOAM with GRAVEL		3 2 3	1.2 B	20
	642.10			
MEDIUM dark gray SANDY LOAM	-15	1 1 3	0.5 B	20
	639.10			
VERY STIFF brown SILTY CLAY TILL		1 3 5	3.3 B	15
	637.10			
	-20	4		
VERY STIFF gray CLAY LOAM TILL *(continued)*		6 8	2.9 B	14
	634.60			
VERY STIFF gray CLAY LOAM TILL		4 6 11	3.3 B	14
	632.10			
VERY STIFF gray CLAY LOAM TILL	-25	5 7 11	2.7 B	14
	629.60			
VERY STIFF gray CLAY LOAM TILL		6 9 11	2.7 B	15
	627.10			
VERY STIFF gray CLAY LOAM TILL	-30	5 8 12	3.1 B	13
	624.60			
VERY STIFF gray CLAY LOAM TILL		4 7 10	3.7 B	14
	622.10			
VERY STIFF gray CLAY LOAM TILL	-35	5 8 11	3.7 B	14
	619.60			
VERY STIFF gray CLAY LOAM TILL		4 7 10	2.9 B	13
	617.10			
	-40	5		

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 1/10/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

COUNTY Rock Island DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME-45 Automatic

STRUCT. NO. ~~081-103, 104~~
Station

BORING NO. B-1
Station ~~923+52~~
Offset ~~87.00ft LT CL~~
Ground Surface Elev. 655.6 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

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

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray CLAY LOAM TILL *(continued)*		9 12	3.1 B	15
	614.60			
VERY STIFF gray CLAY LOAM TILL		5 9 15	2.9 B	14
	612.10			
VERY STIFF gray CLAY LOAM TILL	-45	6 8 10	3.3 B	15
	609.60			
VERY STIFF gray CLAY LOAM TILL		7 9 14	3.9 B	15
	607.10			
VERY STIFF gray CLAY LOAM TILL	-50	6 8 14	3.5 B	15
	604.60			
VERY STIFF gray CLAY LOAM TILL		7 9 14	3.5 B	14
	602.10			
VERY STIFF gray CLAY LOAM TILL	-55	6 8 13	3.7 B	15
	599.60			
HARD gray CLAY LOAM TILL		5 7 11	4.1 B	16
	597.10			
	-60	6		
VERY STIFF olive green CLAY LOAM TILL *(continued)*		8 12	3.9 B	16
	594.60			
HARD olive green CLAY LOAM TILL		11 11 13	4.1 B	18
	592.10			
VERY STIFF olive-green CLAY LOAM TILL	-65	8 13 22	3.7 B	15
	589.60			
HARD gray CLAY LOAM TILL		7 9 14	4.5 S	14
	587.10			
End of Boring	-70			
	-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)

BORING NO. B-1
STATION: 94+57.85
OFFSET: 87.00' Lt.

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-081-Soil_Boring_Log_-_Boring_B-1.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING B-1
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 81 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	1229
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

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3/23/2017 6:54:00 AM

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 1/11/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY J. Strating

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station

BORING NO. B-2
Station ~~325+55~~
Offset ~~62.00ft Rt CL~~
Ground Surface Elev. 655.6 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

Groundwater Elev.:
First Encounter 648.1 ft ▼
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
MEDIUM brown SILTY CLAY LOAM			0.5 P	19
	653.10			
LOOSE brown clean medium SAND (fill)		3 2 2		
	651.60			
	-5			
VERY LOOSE brown clean medium SAND (fill)		2 0 1		
	648.60			
VERY STIFF brown/gray CLAY LOAM		4 5 7	2.4 B	14
	646.60			
	-10			
VERY STIFF brown CLAY LOAM TILL		5 8 11	3.3 B	15
	644.10			
VERY STIFF brown/gray CLAY LOAM TILL		7 9 13	3.5 B	15
	641.60			
	-15			
VERY STIFF gray CLAY LOAM TILL		3 5 7	2.6 B	14
	639.10			
VERY STIFF gray CLAY LOAM TILL		3 5 7	2.4 B	14
	636.60			
	-20			
VERY STIFF gray CLAY LOAM TILL		3 5 7	2.0 B	14
	634.10			
VERY STIFF gray CLAY LOAM TILL		3 6 10	3.0 B	14
	631.60			
	-25			
VERY STIFF gray CLAY LOAM TILL		2 6 9	3.0 B	14
	629.10			
VERY STIFF gray CLAY LOAM TILL		3 5 9	2.8 B	13
	626.60			
	-30			
VERY STIFF gray CLAY LOAM TILL		2 6 9	2.8 B	14
	624.10			
VERY STIFF gray CLAY LOAM TILL		3 6 11	2.8 B	14
	621.60			
	-35			
HARD dark gray CLAY LOAM TILL with ORGANICS		3 7 13	4.1 B	15
	619.10			
HARD dark gray CLAY LOAM TILL with SAND lens		3 11 15	5.1 B	15
	616.60			
	-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 1/11/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY J. Strating

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station

BORING NO. B-2
Station ~~325+55~~
Offset ~~62.00ft Rt CL~~
Ground Surface Elev. 655.6 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

Groundwater Elev.:
First Encounter 648.1 ft ▼
Upon Completion ft
After Hrs. ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VERY STIFF gray/green CLAY LOAM TILL		4 6 9	2.8 B	15
	614.10			
VERY STIFF gray/green CLAY LOAM TILL		3 8 12	3.0 B	14
	611.60			
	-45			
VERY STIFF gray/green CLAY LOAM TILL		2 8 12	2.8 B	15
	609.10			
VERY STIFF gray/green CLAY LOAM TILL		2 6 9	2.8 B	15
	606.60			
	-50			
VERY STIFF gray/green CLAY LOAM TILL		3 7 9	2.8 B	14
	604.10			
VERY STIFF gray/green CLAY LOAM TILL		3 7 10	2.8 B	16
	601.60			
	-55			
VERY STIFF gray/green CLAY LOAM TILL		2 6 11	2.8 B	16
	599.10			
VERY STIFF gray/green CLAY LOAM TILL		3 7 10	3.5 B	15
	596.60			
	-60			
VERY STIFF gray/green SILTY CLAY LOAM		2 6 10	2.8 B	15
	594.10			
VERY STIFF gray/green CLAY LOAM TILL		1 6 9	2.8 B	16
	591.60			
	-65			
VERY STIFF gray/green CLAY LOAM TILL		1 6 10	2.6 B	19
	589.10			
VERY STIFF gray/green CLAY LOAM TILL		3 5 11	2.6 B	17
	586.60			
End of Boring				
	-70			
	-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)

BORING NO. B-2
STATION: 96+60.20
OFFSET: 62.00' Rt.

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-082-Soil_Boring_Log_-_Boring_B-2.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING B-2
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S 82 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	1230
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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3/23/2017

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 1/14/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~324+00~~
BORING NO. B-3
Station ~~322+93~~
Offset ~~3.0ft LT~~ Rt
Ground Surface Elev. 674.6 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft
Groundwater Elev.:
First Encounter 654.6 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
				MEDIUM light brown SILTY LOAM
		0.5 P	20	
672.10				
	4			STIFF dark brown LOAM
	6	1.5	18	
670.60	15	B		
-5				
	9			STIFF tan SILTY LOAM
	10	1.8	19	
668.10	9	P		
	3			STIFF tan SILTY LOAM
	5	1.2	23	
665.60	6	B		
-10				
	2			MEDIUM tan SILTY LOAM
	3	0.5	25	
663.10	4	S		
	1			MEDIUM rust SILTY LOAM
	1	0.8	30	
660.60	3	P		
-15				
	1			MEDIUM light brown SILTY LOAM
	3	0.6	37	
658.10	4	S		
	3			STIFF gray CLAY LOAM
	3	1.7	25	
655.60	5	B		
▼-20				
	1			STIFF gray CLAY LOAM
	3	1.6	24	
653.10	4	B		
				VERY STIFF gray SILTY CLAY
	4			
	5	2.0	23	
650.60	7			
-25				
	1			STIFF gray SILTY CLAY LOAM with SAND lens
	4	1.8	14	
647.60	6	P		
	5			STIFF gray SILTY CLAY TILL
	6	1.5	28	
645.60	7	P		
-30				
	5			STIFF gray CLAY LOAM TILL
	8	1.3	16	
643.10	11	P		
	1			VERY STIFF gray CLAY LOAM TILL
	4	2.3	16	
640.60	7	B		
-35				
	3			VERY STIFF gray CLAY LOAM TILL
	5	2.3	15	
638.10	9	B		
	4			VERY STIFF gray CLAY LOAM TILL
	6	2.3	15	
635.60	9	B		
-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 1/14/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~324+00~~
BORING NO. B-3
Station ~~322+93~~
Offset ~~3.0ft LT~~ Rt
Ground Surface Elev. 674.6 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft
Groundwater Elev.:
First Encounter 654.6 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
	4			VERY STIFF gray CLAY LOAM TILL
	5	2.7	15	
633.10	8	B		
	3			VERY STIFF gray CLAY LOAM TILL
	8	2.0	16	
630.60	10	B		
-45				
	3			VERY STIFF gray CLAY LOAM TILL
	6	2.7	16	
628.10	9	B		
	2			VERY STIFF gray CLAY LOAM TILL
	6	2.9	15	
625.60	10	B		
-50				
	3			VERY STIFF gray CLAY LOAM TILL
	7	3.3	15	
623.10	11	B		
	4			VERY STIFF gray CLAY LOAM TILL
	8	3.5	15	
620.60	11	B		
-55				
	4			VERY STIFF gray CLAY LOAM TILL
	5	2.3	14	
618.10	9	B		
	6			VERY STIFF gray CLAY LOAM TILL
	7	3.3	16	
615.60	12	B		
-60				
	5			VERY STIFF gray CLAY LOAM TILL
	9	3.3	15	
613.10	12	B		
	6			VERY STIFF gray CLAY LOAM TILL
	9	2.5	13	
610.60	12	B		
-65				
	6			HARD gray CLAY LOAM TILL
	9	4.3	15	
608.10	13	B		
	5			VERY STIFF gray CLAY LOAM TILL
	9	3.3	16	
605.60	11	B		
-70				
	8			STIFF gray CLAY LOAM TILL with SAND lens
	10	1.7	16	
603.10	15	B		
	7			HARD gray CLAY LOAM TILL
	10	4.3	14	
600.60	12	B		
-75				
	3			VERY STIFF gray CLAY LOAM TILL
	7	3.9	14	
598.10	12	B		
	6			HARD gray CLAY LOAM TILL
	12	5.0	16	
595.60	16	B		
-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 1/14/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~324+00~~
BORING NO. B-3
Station ~~322+93~~
Offset ~~3.0ft LT~~ Rt
Ground Surface Elev. 674.6 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft
Groundwater Elev.:
First Encounter 654.6 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
	4			VERY STIFF gray CLAY LOAM TILL
	9	3.9	18	
593.10	13	B		
	9			HARD gray CLAY LOAM TILL
	12	4.5	17	
590.60	16	B		
-85				
	12			little recovery
	16			CLAY LOAM TILL
588.10	18			
	5			VERY STIFF gray CLAY LOAM TILL
	8	3.1	17	
585.60	11	B		
				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)

BORING NO. B-3
STATION: 93+64.0
OFFSET: 3.0' Rt.

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-003-Soil_Boring_Log-_Boring_B-3.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING B-3
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S 83 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	1231
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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3/23/2017

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 1/15/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO. ____
Station ~~324+00~~

BORING NO. B-4
Station ~~324+00~~
Offset ~~79.00ft Rt CL~~
Ground Surface Elev. 653.1 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

Groundwater Elev.:
First Encounter 638.1 ft ▼
Upon Completion 631.1 ft ▽
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
		0.5 P	16	MEDIUM dark brown LOAM
650.60				
	2 3 7	1.5 P	26	STIFF brown SILTY CLAY LOAM with SAND lens
648.60				
-5				
	4 3 3			LOOSE tan clean medium SAND
646.60				
	5 2 3			LOOSE dark brown dirty SAND
644.10				
-10				
	1 2 2			LOOSE dark brown dirty moist SAND
641.60				
	1 1 2			VERY LOOSE gray moist dirty SAND
638.60				
▼ -15				
	1 1 4	0.3 P	33	SOFT gray SILTY LOAM
636.60				
	4 8 10			No Recovery Assume as above
633.60				
-20				
	5 7 9	3.1 B	14	VERY STIFF tan CLAY LOAM TILL
631.60				
▽				
	3 5 9	2.7 B	15	VERY STIFF gray CLAY LOAM TILL
629.10				
-25				
	3 6 10	2.9 B	15	VERY STIFF gray CLAY LOAM TILL
626.60				
	5 7 10	2.7 B	16	VERY STIFF gray CLAY LOAM TILL
624.10				
-30				
	5 7 11	3.3 B	15	VERY STIFF gray CLAY LOAM TILL
621.60				
	5 8 13	3.5 B	15	VERY STIFF gray CLAY LOAM TILL
619.10				
-35				
	4 9 14	2.9 B	14	VERY STIFF gray CLAY LOAM TILL
616.60				
	5 9 13	2.3 B	15	VERY STIFF gray CLAY LOAM TILL
614.10				
-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
Illinois Department of Transportation

SOIL BORING LOG

Date 1/15/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO. ____
Station ~~324+00~~

BORING NO. B-4
Station ~~324+00~~
Offset ~~79.00ft Rt CL~~
Ground Surface Elev. 653.1 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

Groundwater Elev.:
First Encounter 638.1 ft ▼
Upon Completion 631.1 ft ▽
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	8 11 15	3.3 B	14	VERY STIFF gray CLAY LOAM TILL
611.60				
	8 12 17	3.5 B	16	VERY STIFF gray CLAY LOAM TILL
609.10				
-45				
	6 11 15	4.1 B	14	HARD gray CLAY LOAM TILL
606.60				
	4 8 13	3.3 B	17	VERY STIFF gray CLAY LOAM TILL
604.10				
-50				
	5 11 14	3.3 B	17	VERY STIFF gray CLAY LOAM TILL
601.60				
	8 16 19	4.1 B	15	HARD gray CLAY LOAM TILL
599.10				
-55				
	7 9 15	2.5 B	17	VERY STIFF gray CLAY LOAM TILL
596.60				
	5 10 29	3.1 B	14	VERY STIFF gray CLAY LOAM TILL with weathered LIMESTONE lens
594.10				
-60				
	7 10 15	3.1 B	20	VERY STIFF gray CLAY LOAM TILL
591.60				
	8 12 16	3.3 B	15	VERY STIFF gray CLAY LOAM TILL
589.10				
-65				
	6 8 10	2.1 B	17	VERY STIFF gray CLAY LOAM TILL
586.60				
	7 10 13	2.9 B	16	VERY STIFF gray CLAY LOAM TILL
584.10				
-70				
	8 11 15	3.5 B	19	VERY STIFF gray CLAY LOAM TILL
581.60				
	7 9 12	3.5 B	18	VERY STIFF gray CLAY LOAM TILL
579.10				
-75				
	7 8 12	2.9 B	19	VERY STIFF gray CLAY LOAM TILL
576.60				End of Boring
-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)

BORING NO. B-4
STATION: 95+73.06
OFFSET 79.00' Rt.

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-084-Soil_Boring_Log-_Boring_B-4.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING B-4
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 84 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	1232
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 3/10/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~824.00~~
BORING NO. B-5
Station ~~825.00~~
Offset ~~8.00R LCL~~
Ground Surface Elev. 673.1 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft
Groundwater Elev.:
First Encounter 653.1 ft ▼
Upon Completion Wash ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
670.60		0.5 P	17	MEDIUM light brown SILTY LOAM
669.10	5 7 7	2.8 P	21	VERY STIFF tan SILTY LOAM
-5				
666.60	4 5 8	1.4 B	23	STIFF gray SILTY CLAY LOAM
664.10	5 5 7	2.1 S	19	VERY STIFF gray SILTY LOAM
-10				
661.60	12 6 7	2.5 P	19	VERY STIFF gray SILTY LOAM with GRAVEL
659.10	3 4 6			No Recovery
-15				
656.60	1 1 2	0.3 B	30	SOFT gray SILTY LOAM
654.10	0 1 3	0.3 P	27	SOFT gray SILTY LOAM
▼-20				
651.10	0 2 3	0.7 B	37	MEDIUM gray/brown LOAM with 11% ORGANICS
649.10	2 8 10	3.1 B	15	VERY STIFF light brown CLAY LOAM TILL
-25				
646.60	8 10 15	2.9 B	14	VERY STIFF light brown CLAY LOAM TILL
644.10	8 10 13	3.7 S	13	VERY STIFF gray CLAY LOAM TILL
-30				
641.60	3 5 8	2.7 B	14	VERY STIFF gray CLAY LOAM TILL
639.10	8 10 14	2.9 B	14	VERY STIFF gray CLAY LOAM TILL
-35				
636.60	7 9 12	2.9 B	14	VERY STIFF gray CLAY LOAM TILL
634.10	6 8 12	3.1 B	14	VERY STIFF gray CLAY LOAM TILL
-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 3/10/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~824.00~~
BORING NO. B-5
Station ~~825.00~~
Offset ~~8.00R LCL~~
Ground Surface Elev. 673.1 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft
Groundwater Elev.:
First Encounter 653.1 ft ▼
Upon Completion Wash ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
631.60	6 8 11	3.3 B	14	VERY STIFF gray CLAY LOAM TILL
629.10	3 7 10	3.3 B	15	Wash VERY STIFF gray CLAY LOAM TILL
-45				
626.60	6 9 11	2.9 B	15	VERY STIFF gray CLAY LOAM TILL
624.10	7 12 17	3.5 B	15	VERY STIFF gray CLAY LOAM TILL
-50				
621.60	9 11 17	3.3 B	15	VERY STIFF gray CLAY LOAM TILL
619.10	5 6 10	2.7 B	14	Wash VERY STIFF gray CLAY LOAM TILL
-55				
616.60	10 11 15	3.3 B	15	VERY STIFF gray CLAY LOAM TILL
614.10	5 8 12	2.7 B	17	VERY STIFF gray CLAY LOAM TILL
-60				
611.60	9 10 11	2.9 B	14	VERY STIFF gray CLAY LOAM TILL
609.10	7 11 15	4.1 B	16	HARD olive-green CLAY LOAM TILL
-65				
606.60	6 9 12	3.7 B	16	VERY STIFF gray CLAY LOAM TILL
604.10	5 8 11	3.3 B	17	VERY STIFF gray CLAY LOAM TILL
-70				
601.60	6 11 15	2.7 B	15	VERY STIFF gray CLAY LOAM TILL
599.10	6 8 11	3.1 B	20	VERY STIFF gray CLAY LOAM TILL
-75				
596.60	7 10 15	3.5 B	16	VERY STIFF gray CLAY LOAM TILL
594.10	6 8 10	3.7 B	30	VERY STIFF gray CLAY LOAM TILL
-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 3/10/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~824.00~~
BORING NO. B-5
Station ~~825.00~~
Offset ~~8.00R LCL~~
Ground Surface Elev. 673.1 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft
Groundwater Elev.:
First Encounter 653.1 ft ▼
Upon Completion Wash ft
After ____ Hrs. ____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
591.60	6 10 12	2.7 B	21	VERY STIFF gray CLAY LOAM TILL
589.10	4 9 12	2.9 B	18	VERY STIFF gray CLAY LOAM TILL
-85				
586.60	6 8 11	2.7 B	18	VERY STIFF gray CLAY LOAM TILL
584.10	5 6 10	2.9 B	18	VERY STIFF gray CLAY LOAM TILL
-90				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)

BORING NO. B-5
STATION: 96+60.47
OFFSET: 5.00' Lt.

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-005-Soil_Boring_Log-_Boring_B-5.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING B–5
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 85 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	1233
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 3/11/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~324+00~~

BORING NO. B-6
Station ~~322+87~~
Offset ~~93.00ft Lt CL~~
Ground Surface Elev. 655.9 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

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

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				DRY brown fine SAND
653.40				
	2 1 3			LOOSE brown fine SAND
651.90				
-5				
	2 3 4			LOOSE brown fine SAND
649.40				
	2 1 4			LOOSE brown fine SAND
646.40				
-10				
	2 2 2	0.4 P	18	SOFT gray LOAM with SAND
643.90				
	0 1 3	1.9 B	15	STIFF gray CLAY LOAM TILL
641.90				
-15				
	3 6 9	2.5 B	14	VERY STIFF gray CLAY LOAM TILL
639.40				
	4 7 9	1.9 B	14	STIFF gray CLAY LOAM TILL
636.90				
-20				
	4 8 8	2.3 B	15	VERY STIFF gray CLAY LOAM TILL
634.40				
	4 6 9	2.7 B	15	VERY STIFF gray CLAY LOAM TILL
631.90				
-25				
	5 6 11	2.9 B	16	VERY STIFF gray CLAY LOAM TILL
629.40				
	3 5 9	2.1 B	16	VERY STIFF gray CLAY LOAM TILL
626.90				
-30				
	3 7 10	3.1 B	14	VERY STIFF gray CLAY LOAM TILL
624.40				
	3 6 9	2.9 B	14	VERY STIFF gray CLAY LOAM TILL
621.90				
-35				
	4 7 10	2.7 B	14	VERY STIFF gray CLAY LOAM TILL with COAL
619.40				
	3 5 8	2.1 B	16	VERY STIFF gray CLAY LOAM TILL
616.90				
-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 3/11/08

ROUTE FAI 74 DESCRIPTION P92-032-01 Bridge carrying I-74 over SB 19th Street in Moline LOGGED BY W. Garza

SECTION 81(1-2,1,2-2)RS-1&M LOCATION Moline Twp. - 4 NW, SEC. , TWP. 17N, RNG. 1W

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

STRUCT. NO.
Station ~~324+00~~

BORING NO. B-6
Station ~~322+87~~
Offset ~~93.00ft LT CL~~
Ground Surface Elev. 655.9 ft

Surface Water Elev. 655.1 ft
Stream Bed Elev. 81.5 ft

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

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4 8 9	2.7 B	15	VERY STIFF gray CLAY LOAM TILL
614.40				
	2 7 11	2.9 B	14	VERY STIFF gray CLAY LOAM TILL
611.90				
-45				
	2 8 10	3.3 B	19	VERY STIFF gray CLAY LOAM TILL
609.40				
	2 7 10	2.9 B	18	VERY STIFF gray CLAY LOAM TILL
606.90				
-50				
	2 6 10	2.1 B	15	VERY STIFF gray CLAY LOAM TILL
604.40				
	3 8 11	2.9 B	18	VERY STIFF gray CLAY LOAM TILL
601.90				
-55				
	3 6 10	3.0 B	17	VERY STIFF gray CLAY LOAM TILL
599.40				
	2 6 10	3.1 B	15	VERY STIFF gray CLAY LOAM TILL
596.90				
-60				
	4 8 10	3.3 B	16	VERY STIFF gray CLAY LOAM TILL
594.40				
591.90				
-65				
	2 6 9	2.5 B	14	VERY STIFF gray CLAY LOAM TILL
589.40				
586.90				
-70				
	4 9 14	3.7 B	13	VERY STIFF gray CLAY LOAM TILL
584.40				
581.90				
-75				
	2 6 8	2.5 B	16	VERY STIFF gray CLAY LOAM TILL
579.40				End of Boring
-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)

BORING NO. B-6
STATION: 93+72.88
OFFSET: 93.00' Lt.

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-086-Soil_Boring_Log_-_Boring_B-6.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING B-6
S.N.'s 081-0184 (W.B.) & 081-0185 (E.B.)
SHEET NO. S 86 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	1234
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 12/12/05

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=558179.679, E=2460420.083), 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. IL030P
Station 97+55.72
Offset 58.20ft
Ground Surface Elev. 674.48 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 648.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
673.98				**Topsoil**
	5			4" thick dark brown sandy lean clay with root matter topsoil underlain by 2" thick limestone gravel□ Hole offset to south abutment gps #47
	7	2.3		
	5	P		
	5			
	2			
	3			**Silty Clay(CL)**
	4			Light brown, stiff, moist/dry, fill '
	5			Brown, moist, stiff, low-medium plasticity, fine-coarse, subangular-angular, limestone gravel, very wet zone in top 3", fill
-5	3			
	5	2.3		
	5	P		
	6			Brown with gray seams, trace of gravel, fill
	3			Light grayish brown, soft, moist, fill
	3	2.5		
	5	P		
	5			
	5			Trace gravel, fine to coarse, subangular-angular, very stiff to hard, fill
	7	1.5		
-10	8	P		
	9			
	6			Light brown to gray, moist/dry, stiff, <5% fine to coarse, subangular-angular limestone gravel, fill
	7	4.5		
	8	P		
	10			
	5			Greenish gray, stiff, moist/dry, 2" coarse limestone gravel seam at 6" from the top of the sample, fill
	7	1.3		
	8	P		
	6			
-15	2			Greenish gray, stiff, moist/dry, trace root matter, sample appears to be softer and wetter towards the bottom, fill
	3	2.0,		
	4	1.5-0.5		
	5	P		
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	2			**Silty Clay(CL)**
	3	0-0.5	27.0	Light brown, stiff, moist/dry, fill
	3	P		*(continued)*
	4			Faint organic odor, fill
-25				
	2			
648.48 ▼	2	0-0.5	27.0	**Silty Clay(CL)**
	3	P		Dark gray/black with coal particles, slight odor, wet at the interface with the greenish gray soil above, possibly native soil□ Possible water at 26' while drilling
	2			
644.48				
-30				**Sandy Lean Clay, Trace Gravel (CL)**
		1.0	22.0	Light brown/gray, wet, stiff, fine to medium rounded-subrounded gravel possibly till
		P		Brown with gray seams, stiff, moist, wet, low plasticity, fine to coarse, subangular-subrounded gravel embedded throughout, weathered glacial till
	6			
	7	1.5		
	10	P		
	10			
-35				
	3			
	4	3.25-2.0		
	2	P		
	9			
-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 12/12/05

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=558179.679, E=2460420.083), 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. IL030P
Station 97+55.72
Offset 58.20ft
Ground Surface Elev. 674.48 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 648.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4			**Sandy Lean Clay, Trace Gravel (CL)**
	6	2.0		Light brown/gray, wet, stiff, fine to medium rounded-subrounded gravel possibly till *(continued)*
	10	P		Gray, unweathered glacial till
	11			
-45				
	4			
	7	2.0		
	10	P		
	11			
-50				
	6			
	7	2.5		
	11	P		
	12			
-55				
	4			
	7	2.0		
	11	P		
	11			
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4			**Sandy Lean Clay, Trace Gravel (CL)**
	7	2.0		Light brown/gray, wet, stiff, fine to medium rounded-subrounded gravel possibly till *(continued)*
	10	P		
	11			
-65				
	4			
	6	2.0		
	8	P		
	11			
-70				
	4			
	6	2.0		
	8	P		
	11			
-75				
	4			
	6	2.0		
	8	P		
	11			
-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 12/12/05

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=558179.679, E=2460420.083), 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. IL030P
Station 97+55.72
Offset 58.20ft
Ground Surface Elev. 674.48 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 648.5 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
	4			**Sandy Lean Clay, Trace Gravel (CL)**
	8	2.0		Light brown/gray, wet, stiff, fine to medium rounded-subrounded gravel possibly till *(continued)*
	10	P		
	11			
572.48				End of Boring
-85				
	6			
	8	2.0		
	12	P		
	12			
-90				
-95				
-100				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
	5		
	6	2.5	
	9	P	
	11		
-105			
-110			
-115			
-120			

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)

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-087-Soil_Boring_Log-_Boring_IL030P.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING IL030P
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 87 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	1235
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 3/26/08

ROUTE I-74 DESCRIPTION North Abutment at I-74 NB over 19th SB LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558653.8025, E=2460400.4911), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR1901
Station 92+74.15
Offset 71.87ft
Ground Surface Elev. 673.62 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
				9" thick asphalt concrete in shoulder followed by subbase 672.82
	6			Silty Clay, red brown to light grayish brown, moist, friable, possible loess
	4	1.0		
	6	P		
	6			
	2			Gray brown, low plasticity
-5	3	<0.5		
	5	P		
	6			
	2			Brown with very fine sand throughout, wet, low plasticity, loess
	3		23.0	
	3			
	5			Grayish brown, moist
		2.5		
-10		P		
	2			Dark brown, trace gravel, moist, low plasticity, possible paleosol or old topsoil
	3	3.3	25.0	
-15	4	P		
655.12				
	2			
	3	1.5	18.0	
-20	5	P		
				Sandy Lean Clay Trace Gravel, dark gray, very sandy, very fine gravel embedded throughout, moist, possible gumbotil, clayey part is medium plasticity *(continued)*
		4.0		
		P		
				Glacial till, unweathered
				Gray, unweathered till, dry
	8			
	11	4.5		
	13	P		
-25				
-30				
-35				
635.12				
	18			No Recovery, possibly pounded on piece of cobble
	20			
-40	23			

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 3/26/08

ROUTE I-74 DESCRIPTION North Abutment at I-74 NB over 19th SB LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558653.8025, E=2460400.4911), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR1901
Station 92+74.15
Offset 71.87ft
Ground Surface Elev. 673.62 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
				No Recovery, possibly pounded on piece of cobble *(continued)*
				No Recovery
	12			
-45	14			
	20			
625.12				
	10			Sandy Lean Clay Trace Gravel, unweathered till
	10	3.3	13.0	
-50	18	P		
-55				
	4			
	7	3.3		
-60	12	P		
				Sandy Lean Clay Trace Gravel, unweathered till *(continued)*
-65				
	9			
	10	3.5		
-70	12	P		
-75				
-80		3.0		
		P		

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 3/26/08

ROUTE I-74 DESCRIPTION North Abutment at I-74 NB over 19th SB LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558653.8025, E=2460400.4911), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR1901
Station 92+74.15
Offset 71.87ft
Ground Surface Elev. 673.62 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, unweathered till *(continued)*
-85				
	6			
	8	3.3		
-90	12	P		
-95				
575.12				
		2.8		
-100		P		
				End of Boring
-105				
-110				
-115				
-120				

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)

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-088-Soil_Boring_Log-_Boring_ILR1901.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING ILR1901
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 88 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	1236
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 3/27/08

ROUTE I-74 DESCRIPTION I-74 over 19th Street SB, Pier 2 LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558336.9838, E=2460355.1544), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR2001
Station 95+88.28
Offset 64.63ft
Ground Surface Elev. 656.99 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 (%)
Silty Clay with Sand, dark brown, moist, with some burnt and brick pieces, fill	4			Sandy Lean Clay Trace Gravel, gray, unweathered glacial clay *(continued)*			
	12 4 5		16.0				
	3						
	3 3 4 4 3						
-5	3 3 5			-25	4 5 8		15.0
Miscellaneous fill	3						
	3 2 3 3						
More sand, fill	1 3 2			-30	4 6 9		
641.99 -15				-35			
Sandy Lean Clay Trace Gravel, gray, unweathered glacial clay	1 1 2						
-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
CH2M HILL

SOIL BORING LOG

Date 3/27/08

ROUTE I-74 DESCRIPTION I-74 over 19th Street SB, Pier 2 LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558336.9838, E=2460355.1544), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR2001
Station 95+88.28
Offset 64.63ft
Ground Surface Elev. 656.99 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 (%)
Sandy Lean Clay Trace Gravel, gray, unweathered glacial clay *(continued)* Brown and gray	4			Sandy Lean Clay Trace Gravel, gray, unweathered glacial clay *(continued)*	7		
	7 7		16.0		7 9		
-45				-65			
	4				3		
-50	7 9			-70	6 7		19.0
-55				-75			
-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
CH2M HILL

SOIL BORING LOG

Date 3/27/08

ROUTE I-74 DESCRIPTION I-74 over 19th Street SB, Pier 2 LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558336.9838, E=2460355.1544), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR2001
Station 95+88.28
Offset 64.63ft
Ground Surface Elev. 656.99 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 (%)
Sandy Lean Clay Trace Gravel, gray, unweathered glacial clay *(continued)*	6			Sandy Lean Clay Trace Gravel, gray, unweathered glacial clay *(continued)*	6		
	8 11			555.49	7 11		
-85				End of Boring			
	7						
-90	9 9			-105			
-95				-110			
-100				-115			
				-120			

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)

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-089-Soil_Boring_Log-_Boring_ILR2001.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING ILR2001
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 89 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	1237
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 3/25/08

ROUTE I-74 DESCRIPTION I-74 Over 19th Street NB Pier 1 LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558518.3241, E=2460449.8461), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR2101
Station 94+44.72
Offset 81.45ft
Ground Surface Elev. 654.13 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 (%)	
653.43				Topsoil, dark brown, sandy clay with green roots, followed by sandy clay
	2 2 4 4	1.5 to 2.0 P		
652.13				Sandy Clay, brown, moist, soft with trace gravel, possible fill
	4			
	4 5 5 2	3.0 P		Silty Clay, dark grayish with reddish and black streaks, possible remolded loess used as fill, stiff
650.13				light brown, very soft, moist, sandy clay with trace gravel and wood matter rolled in, fill, medium plasticity
-5	2 2 3	<0.5 P	25.0	
	1			light yellowish brown, moist, very soft, medium to high plasticity, with root matter, fill
	1 2 2	<0.5 P	23.0	
		1.0 P		Dark brown, moist, soft, medium plasticity, fill
-10				
640.63				
	4			Silty Clay with Gravel, dark gray brown, moist, medium plasticity, trace fine, subangular to angular gravel embedded, possible gumbotil
	5 6	1.5 to 2.0 P	23.0	
-15				
635.63				
	4			
	8 9	4.0 P		
-20				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				Silty Clay with Gravel, dark gray brown, moist, medium plasticity, trace fine, subangular gravel embedded throughout, weathered glacial till *(continued)*
	5			Possibly pounded on coarse gravel/cobbles, gray till possible
-25	9 10			
625.63				
	5			Sandy Lean Clay Trace Gravel, gray, moist, very stiff, low plasticity, unweathered, till
	8 9	4.0 P		
-30				
	5			
	8 10		15.0	
-35				
	6			
	8 11	4.0 P		
-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 3/25/08

ROUTE I-74 DESCRIPTION I-74 Over 19th Street NB Pier 1 LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558518.3241, E=2460449.8461), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR2101
Station 94+44.72
Offset 81.45ft
Ground Surface Elev. 654.13 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 (%)	
				Sandy Lean Clay Trace Gravel, gray, moist, very stiff, low plasticity, unweathered, till *(continued)*
-45				
	6			Dry/moist
	10 12	3.5 P		
-50				
-55				
	5			Dry
	8 10	3.5 P		
-60				

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
				Sandy Lean Clay Trace Gravel, gray, moist, very stiff, low plasticity, unweathered, till *(continued)*
-65				
	5			
	8 10			
-70				
-75				
	8			Brown, gray, more sand
	10 13	3.5 P	16.0	
-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 3/25/08

ROUTE I-74 DESCRIPTION I-74 Over 19th Street NB Pier 1 LOGGED BY B. Karnik
SECTION I-74 Bridge over Mississippi River LOCATION (N=558518.3241, E=2460449.8461), SEC. 32, TWP. 18N, RNG. 1W
COUNTY Rock Island DRILLING METHOD HSA, CME 55 HAMMER TYPE CME AUTOMATIC

STRUCT. NO.
Station
BORING NO. ILR2101
Station 94+44.72
Offset 81.45ft
Ground Surface Elev. 654.13 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 (%)	
				Sandy Lean Clay Trace Gravel, gray, moist, very stiff, low plasticity, unweathered, till *(continued)*
-85				
	5			Brown, gray, sandy
	8 10			
-90				
-95				
	7			Gray, unweathered till
554.13 -100	9 14	3.5 P		
				End of Boring

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
-105				
-110				
-115				
-120				

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)

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-090-Soil_Boring_Log_-_Boring_ILR2101.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
MODEL: Default	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING ILR2101
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 90 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	1238
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

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Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 9/29/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY F. Abreu

SECTION I-74 Bridge over Mississippi River LOCATION (N=558586.894, E=2460345.056), 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. ILR1226
Station _____
Offset _____
Ground Surface Elev. 674.93 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 (%)
Grass And Brown Topsoil 673.93				
Clayey Silt(CL-ML) Gray with orange brown, dry, non plastic, stiff, trace fine sands, occasional root matter, oxidized, possible compacted fill		4		
		5 7 8	4.0 P	
Light brown with orange brown stains, dry, very stif, non plastic, trace silt sands and medium to fine sub angular to sub rounded gravel, possible compacted fill, brittle, strong cementation slightly oxidized 668.93	-5	3		
		10 18 21	4.5 P	
Silt (ML) Light rown with yellowish orange, moist, dry, non plastic, stiff, trace coarse sands, possible fill compacted, fill slightly oxidized 666.93		5		
		4 6 6	2.0 P	
Silty Clay(CL-ML) Yellowish orange with gray, moist, medium stiff, low to medium plasticity, oxidized, possible native soil, loess		3		
	-10	4 2 2	2.0 P	
Light gray with orange brown stains, moist, low to medium plasticity, possible native soil			1.5 P	
Oxidized, moist, soft, non plastic at top 4" of sample, remainder low to medium plasticity, possible loess		1		
	-15	1 1 2	<0.25 P	
Dark brown, dry to moist, non plastic, possible loess 656.93			2.0 P	
Silt (ML) Dark brown, dry to moist, non plastic, medium stiff, brittle, some clay, occasional root matter with		0		
		2 3 4	1.3 P	
gray streaks, possible native soil, loess	-20			
Lean Clay With Sand(CL) Uniform gray, dry to moist, little coarse to fine sands scattered throughout, possible transition to glacial till 651.93			1.8 P	
Sandy Lean Clay(CL) Uniform gray to greenish gray, dry to moist, low to non plastic, medium stiff to stiff, little to few coarse to fine sands, possible unweathered clacial till 649.93		2		
	-25	3 4 5	1.2	
Sandy Lean Clay Trace Gravel (CL) Gray with light gray, dry to moist, non plastic, stiff, strong cementation, medium to fine sub angular to sub rounded gravels, few coarse to fine sands, possible glacial till		2		
	-30	5 7 10	3.5 P	
Uniform gray, stiff, unweathered, glacial till		1		
	-35	5 6 10	3.0 P	
Uniform gray, unweathered glacial till with occasional sand seams, medium to fine sand seam 1" from top of sample		3		
	-40	5 6 8	1.4	

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 9/29/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY F. Abreu

SECTION I-74 Bridge over Mississippi River LOCATION (N=558586.894, E=2460345.056), 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. ILR1226
Station _____
Offset _____
Ground Surface Elev. 674.93 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 (%)
Sandy Lean Clay Trace Gravel (CL) Gray with light gray, dry to moist, non plastic, stiff, strong cementation, medium to fine sub angular to sub rounded gravels, few coarse to fine sands, possible glacial till *(continued)*				
Uniform gray, stif, dry to moist, unweathered glacial till with scattered sand seams		4		
	-45	6 9 10	4.0 P	
Uniform olive gray, very stiff, dry to moist, unweathered glacial till		2		
	-50	6 8 10	4.0 P	
BOB 50' bgs at 10:00 A.M. 624.93				
End of Boring	-55			
	-60			

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)

BORING NO. ILR1226
STATION: 93+48.60
OFFSET: 0.00'

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-091-Soil.Boring.Log.-.Boring.ILR1226.dgn	USER NAME = ksnider	DESIGNED -	REVISED -
		CHECKED -	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE = 3/23/2017	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG – BORING ILR1226
S.N.'s 081–0184 (W.B.) & 081–0185 (E.B.)
SHEET NO. S 91 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	1239
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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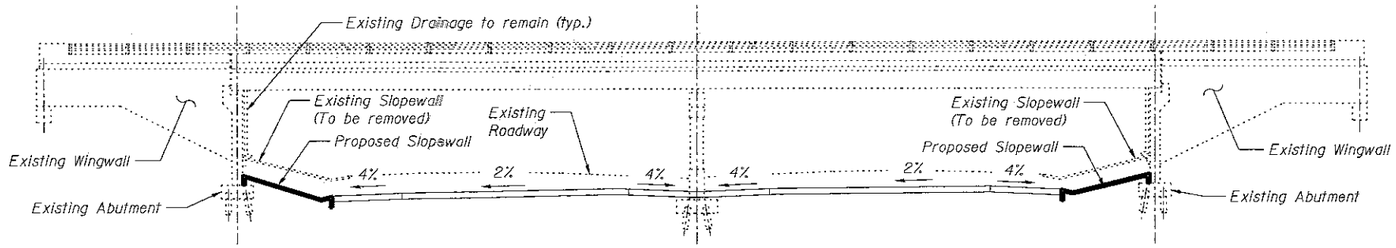
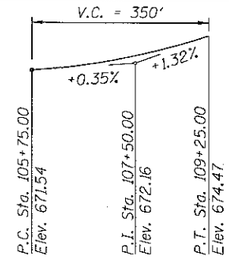


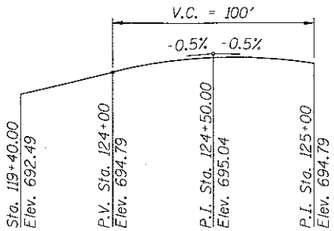
ELEVATION

Looking Upstation



PROFILE GRADE F.A.I. 74

(Along ℄ F.A.I 74)



PROFILE GRADE 23RD AVE.

(Along ℄ 23RD Ave.)

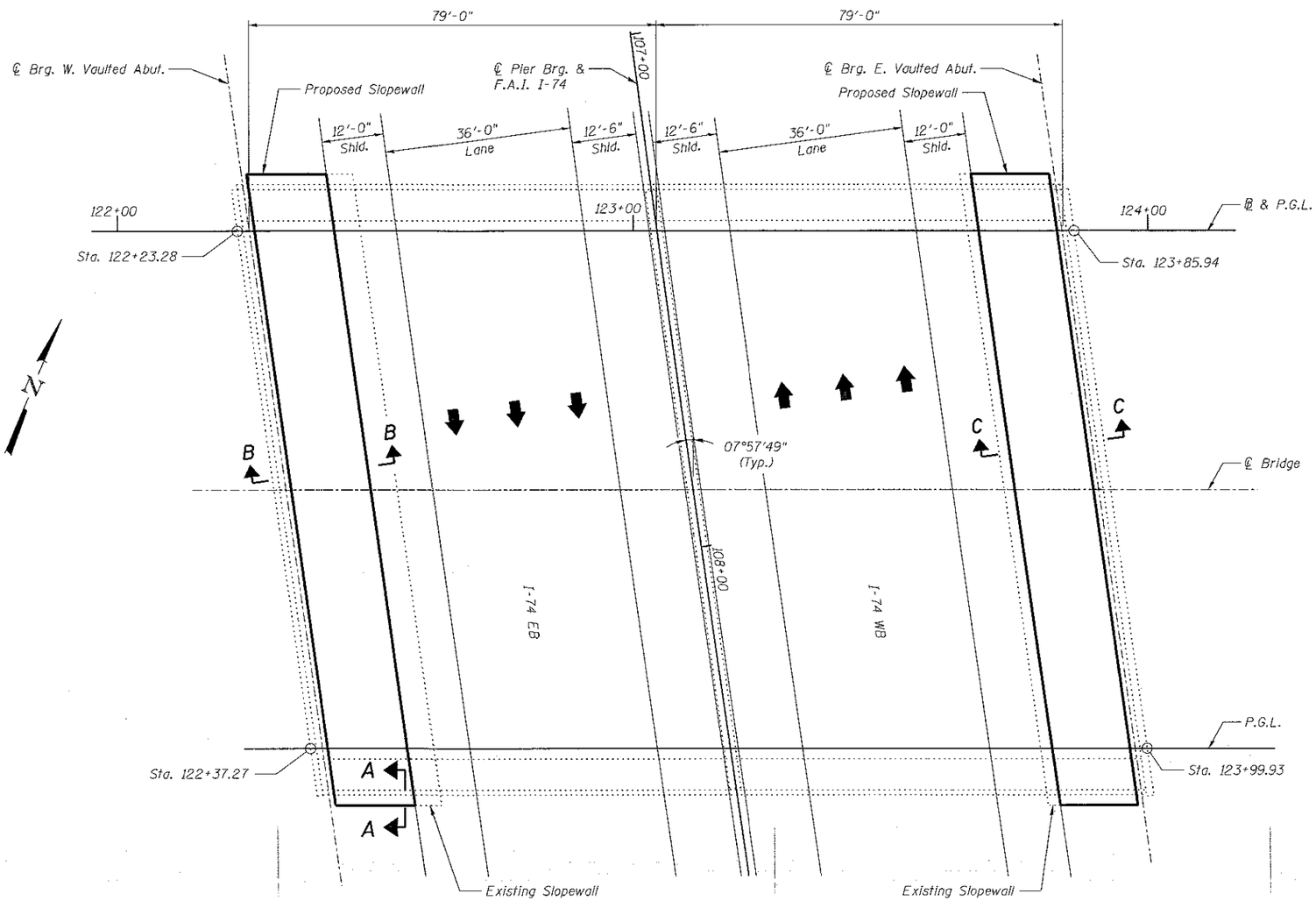
DESIGN SPECIFICATIONS

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

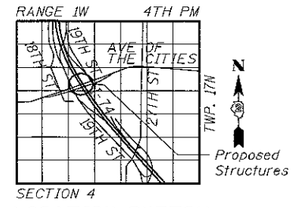
DESIGN STRESSES

FIELD UNITS

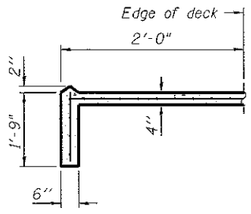
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)



PLAN



LOCATION SKETCH



SECTION A-A

ANDREW J. KEASCHALL
081-006764
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

EXPIRATION DATE 11-30-2018
DATE: 3/27/17

GENERAL PLAN AND ELEVATION
I-74 UNDER 23RD AVENUE
F.A.I. ROUTE 74 SECTION 81-1HB-2
ROCK ISLAND COUNTY
STATION 107+36.35
STRUCTURE NO. 081-0105

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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		CHECKED - AJK	REVISED -
MODEL: #MODEL	PLOT SCALE =	DRAWN - KMS	REVISED -
	PLOT DATE = 4/13/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

S.N. 081-0105
SHEET NO. 5A1 OF 5A5 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	1240
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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4/13/2017

GENERAL NOTES

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

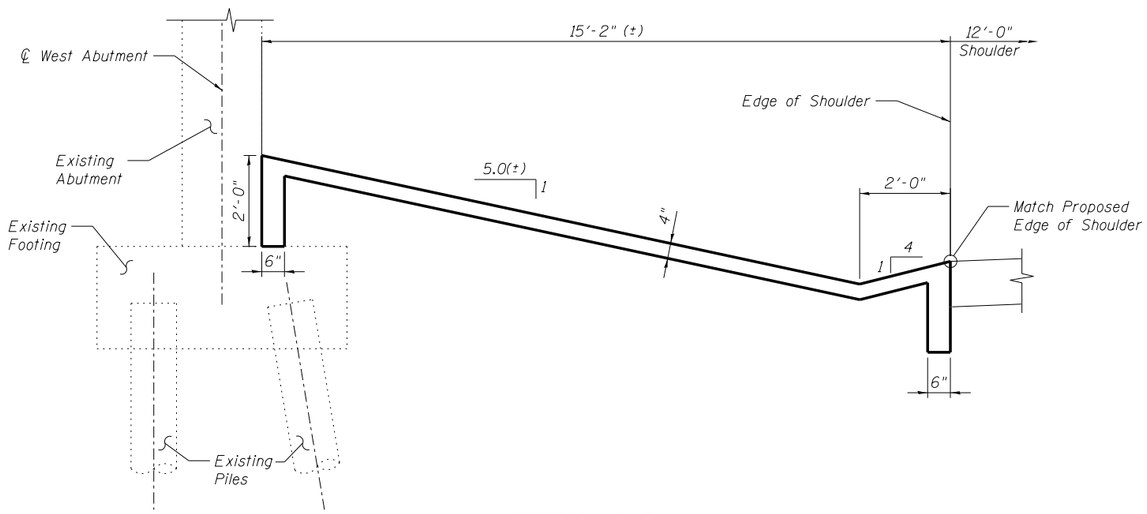
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not because for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

3. Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 X W4.0, weighing 58 lbs. per 100 sq. ft.

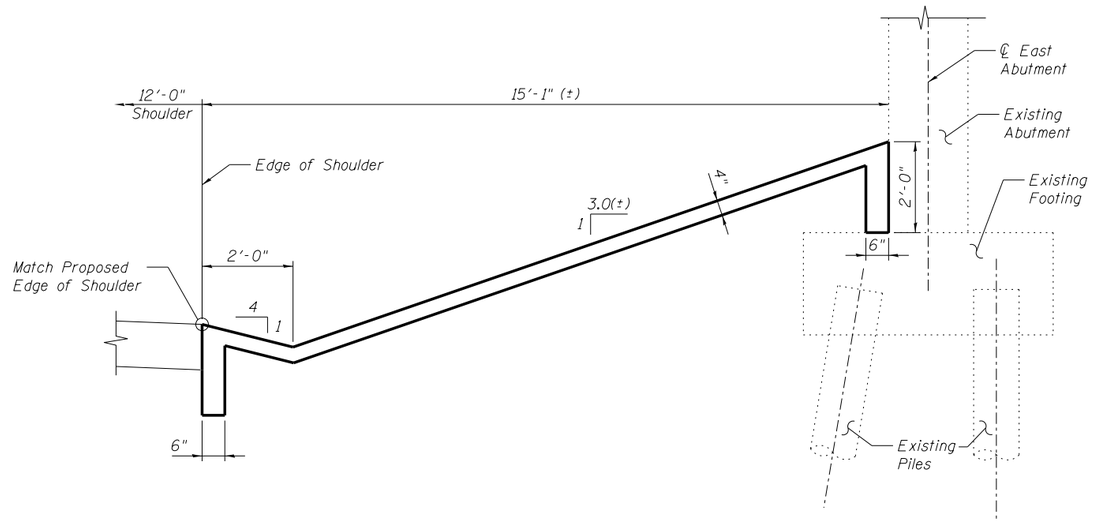
INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Slope Wall Removal	Sq Yd	530
Structure Excavation	Cu Yd	277
Slope Wall 4 Inch	Sq Yd	430



SECTION B-B



SECTION C-C

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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	PLOT DATE = 3/22/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, BILL OF MATERIAL, SECTIONS
S.N. 081-0105
SHEET NO. SA2 OF SA5 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	1241
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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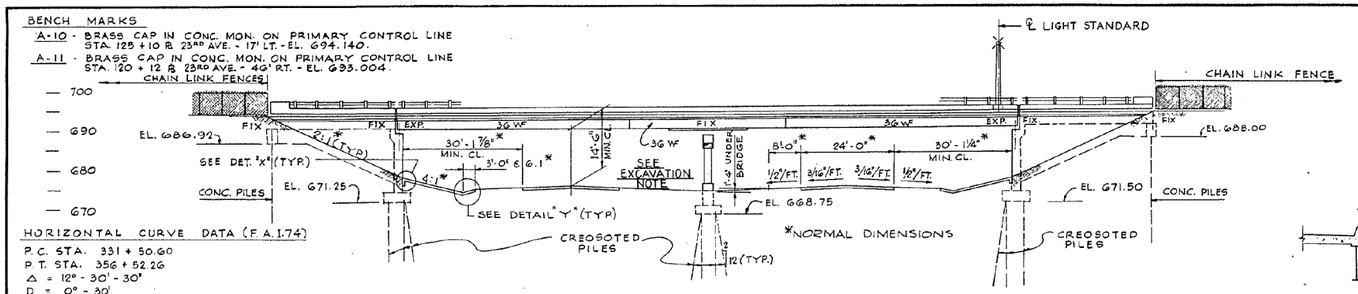
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-3	ROCK ISLAND	438	131
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 (5&10		

DWG. S-1

BENCH MARKS

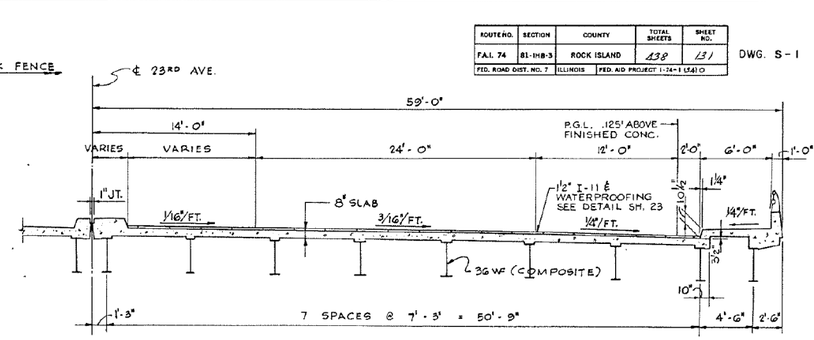
A-10 - BRASS CAP IN CONC. MON. ON PRIMARY CONTROL LINE STA. 125 + 10 B 23RD AVE. - 17' LT. - EL. 694.140.

A-11 - BRASS CAP IN CONC. MON. ON PRIMARY CONTROL LINE STA. 120 + 12 B 23RD AVE. - 40' RT. - EL. 693.004.

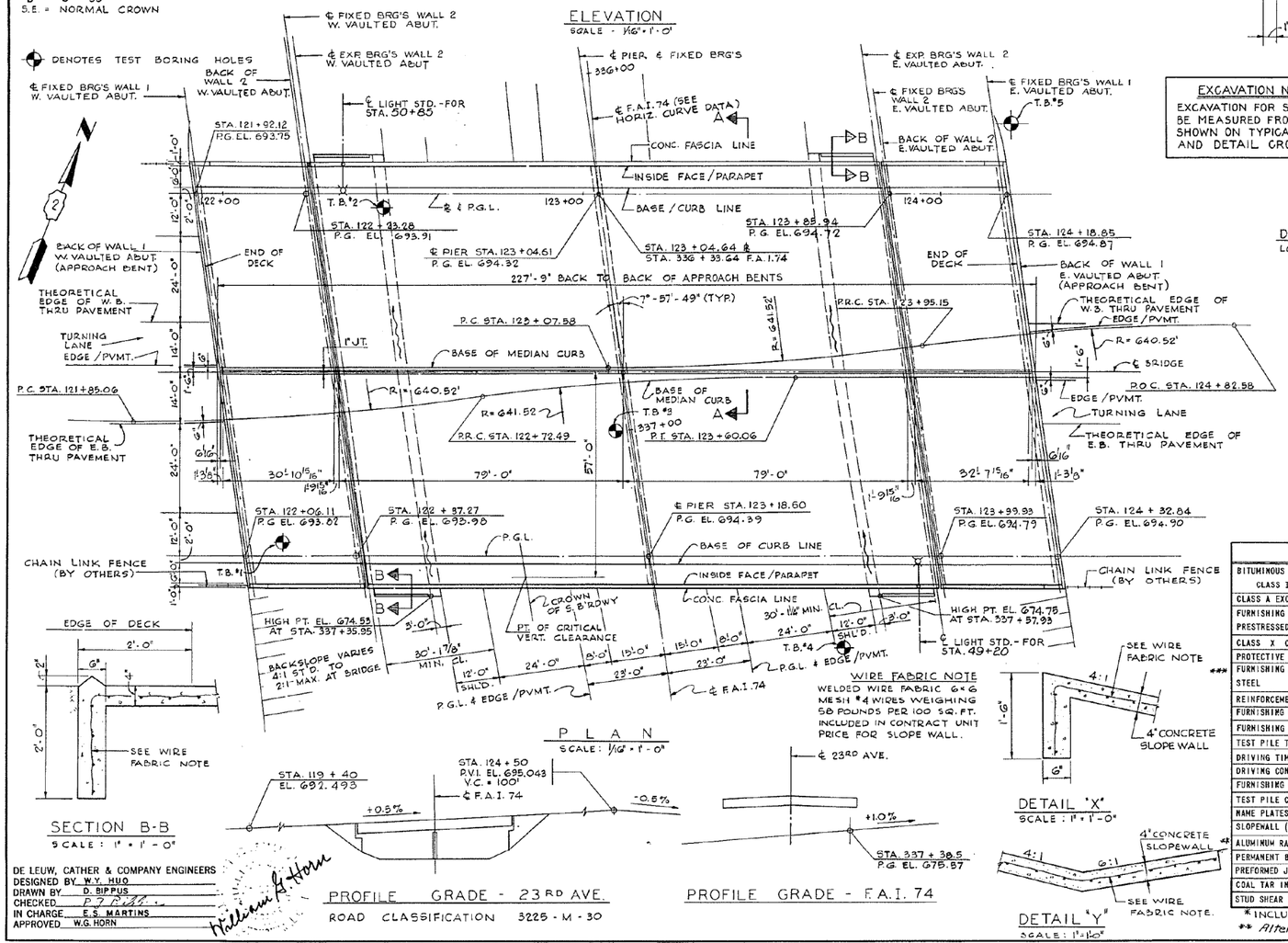


HORIZONTAL CURVE DATA (F.A.I.74)

P.C. STA. 331 + 50.60
P.T. STA. 356 + 52.26
Δ = 12° - 30' - 30"
D = 0° - 30'
S.E. = NORMAL CROWN



ELEVATION
SCALE - 1/16" = 1'-0"



DENOTES TEST BORING HOLES

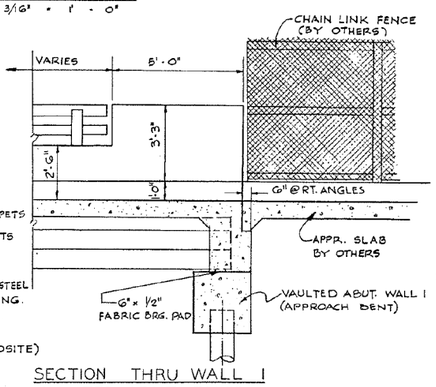
DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY W.Y. HUO
DRAWN BY D. BIPPUS
CHECKED P.T.C.
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

William G. Horn

EXCAVATION NOTE

EXCAVATION FOR STRUCTURES SHALL BE MEASURED FROM GRADING LINE SHOWN ON TYPICAL SECTION AND DETAIL CROSS SECTIONS.

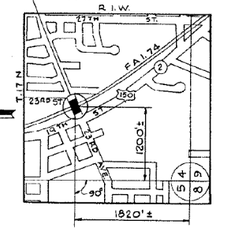
HALF SECTION A-A
SCALE : 3/16" = 1' - 0"



DESIGN NOTES:

LOADING - HS 20 - 44 & ALT.
f'c = 1200 P.S.I. DECK SLAB
f'c = 1400 P.S.I. SUBSTRUCTURE, CURBS & PARAPETS
f'c = 5000 P.S.I. } PRECAST PRESTRESSED UNITS
f'ci = 4000 P.S.I. }
f's = 248,000 P.S.I. } (STRANDS 7/16"ϕ)
fsi = 173,600 P.S.I. }
fs = 20,000 P.S.I. REINF BARS & STRUCT STEEL
v = 75 P.S.I. ALLOWABLE SHEAR IN FOOTING.
n = 10 FOR CAST IN PLACE CONCRETE.
ALLOWABLE L.L. DEFLECTION.
L/1200 (NON - COMPOSITE), L/1440 (COMPOSITE)

SECTION THRU WALL 1 VAULTED ABUTMENTS
SCALE: 3/8" = 1'-0"



LOCATION PLAN

TOTAL BILL OF MATERIAL
(BRIDGE ONLY)

ITEM	UNIT	SUPER STRUCT.	SUB-STRUCT.	TOTAL
BITUMINOUS CONCRETE SURFACE COURSE CLASS I (1½" INCH THICK)	TON	196	-	196
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	-	1,310 *	1,310 *
FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I BEAMS, 36"	LIN. FT.	1,044	-	1,044
CLASS X CONCRETE	CU. YD.	912.1	712.2	1,624.3
PROTECTIVE COAT	SQ. YD.	794	-	794
FURNISHING AND ERECTING STRUCTURAL STEEL	L.SUM	0.4	-	0.4
REINFORCEMENT BARS	POUND	197,265	67,860	265,125
FURNISHING CREOSOTED PILES UP TO 20'	LIN. FT.	-	975	975
FURNISHING CREOSOTED PILES, 20,I TO 38'	LIN. FT.	-	2,773	2,773
TEST PILE TIMBER (CREOSOTED)	EACH	-	3	3
DRIVING TIMBER PILES	LIN. FT.	-	3748	3748
DRIVING CONCRETE PILES	LIN. FT.	-	1,320	1,320
FURNISHING CONCRETE PILES	LIN. FT.	-	1,320	1,320
TEST PILE CONCRETE	EACH	-	2	2
NAME PLATES	EACH	-	2	2
SLOPEWALL (4 INCH)	SQ. YD.	-	554	554
ALUMINUM RAILING-TYPE L	LIN. FT.	434	-	434
PERMANENT BENCH MARKS - TYPE I	EACH	1	-	1
PREFORMED JOINT SEALER	LIN. FT.	240	-	240
COAL TAR INTERLAYER PROTECTIVE COAT	SQ. YD.	2,300	-	2,300
STUD SHEAR CONNECTORS	EACH	10,224	-	10,224

*INCLUDES 62 CU.YDS. EXCAVATION FOR SLOPEWALL
** Alternate type M, Steel Railing. *** CALCULATED QUANT; - 669,174 lbs.

WIRE FABRIC NOTE

WELDED WIRE FABRIC 6" x 6" MESH #4 WIRES WEIGHING 58 POUNDS PER 100 SQ. FT. INCLUDED IN CONTRACT UNIT PRICE FOR SLOPE WALL.

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Carl E. Thurmann
Engineer of Bridge & Traffic Structures

GENERAL PLAN AND ELEVATION
F.A.I. 74 - SECTION 81-1HB-3
F.A.I. 74 UNDER 23RD AVE.
ROCK ISLAND COUNTY
STATION 336 + 33.64
SCALE: AS NOTED DATE:

Rev. Reinf. Bars from 67,620 to 67,860 lbs., Total from 264,885 to 265,125 lbs., Furnishing Creosoted Piles up to 20 Ft. Sub & Total from 1067 to 975 Lin. Ft., Driving Timber Piles Sub & Total from 3800 to 3748 Lin. Ft. S.F.M.

Rev. 11-20-67 W.L.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0105-C00CD-003-005-Existing_Plans.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
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MODEL: SMODEL	PLOT DATE = 3/22/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - GPE
S.N. 081-0105
SHEET NO. SA3 OF SA5 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)IR-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1242
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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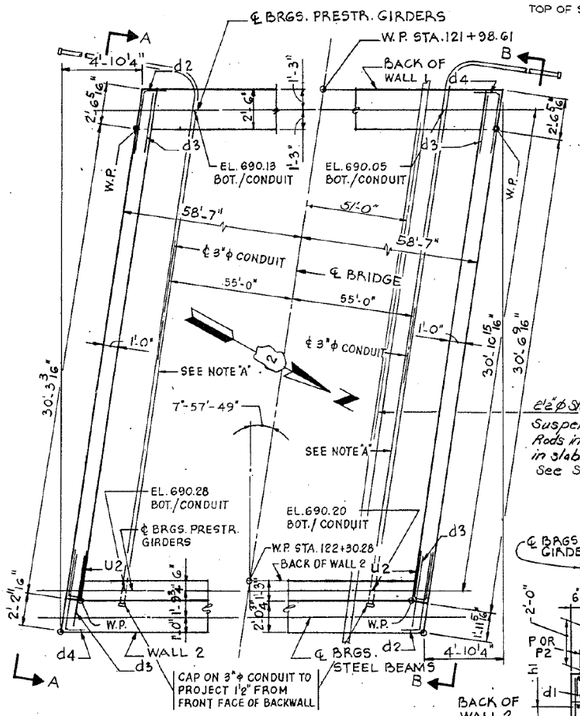
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-3	ROCK ISLAND	438	134
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

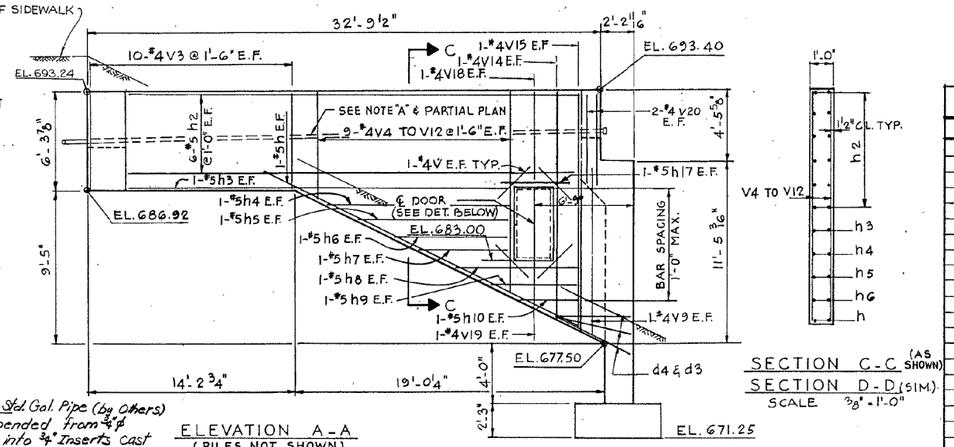
DWG. S-4



PARTIAL PLAN
SCALE: 1/4"=1'-0"

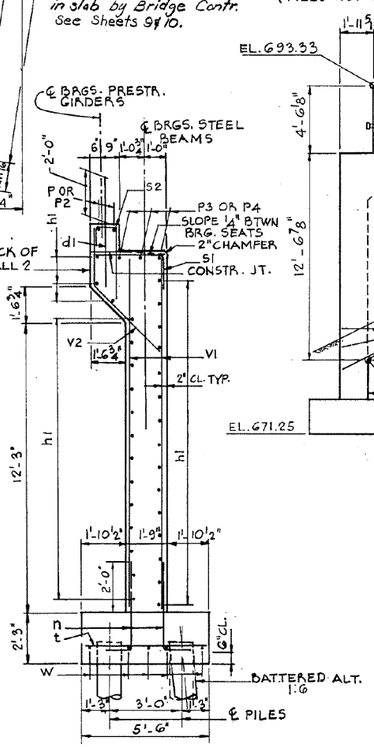
NOTE "A"

3"ϕ CONDUIT, EXTEND TO CLEAR WALL 1 AND TERMINATE AT A POINT OUTSIDE OF SHOULDER. THREAD & CAP EACH END. COST IS TO BE INCIDENTAL TO BRIDGE STRUCTURE.

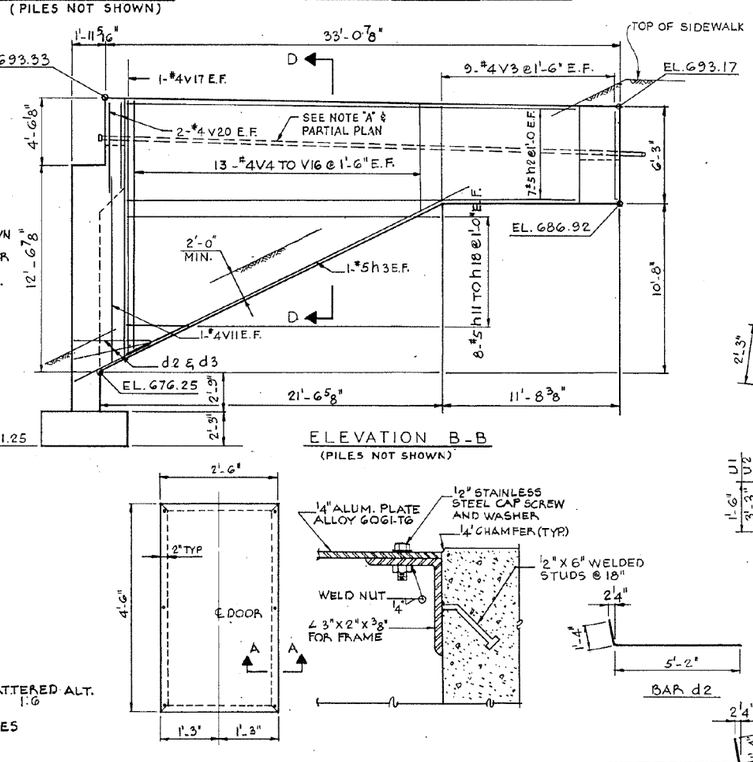


ELEVATION A-A
(PILES NOT SHOWN)

6"ϕ Std. Gal. Pipe (by Others) Suspended from ¾"ϕ Rods into ¾" Inserts cast in slab by Bridge Contr. See Sheets 9 & 10.



SECTION THRU WALL 2
SCALE: 3/8"=1'-0"



ELEVATION B-B
(PILES NOT SHOWN)

DOOR ELEVATION
SCALE 3/4"=1'-0"

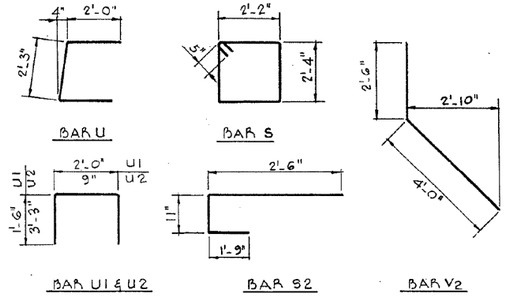
SECTION A-A
NO SCALE

NOTE: COST OF DOOR AND FRAME INCIDENTAL TO THE COST OF CONCRETE.

SECTION C-C (AS SHOWN)
SECTION D-D (SIM.)
SCALE 3/8"-1'-0"

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
					S	110	4	9'-10"	
d1	168	6	4'-0"		S1	115	4	5'-0"	
d2	16	5	6'-6"		S2	115	4	5'-2"	
d3	43	5	4'-6"						
d4	15	5	6'-6"		t	118	5	5'-0"	
h	2	5	22'-0"		U	10	6	6'-2"	
h1	124	5	30'-0"		U1	86	4	5'-0"	
h2	26	5	28'-9"		U2	8	5	7'-3"	
h3	4	5	24'-3"						
h4	2	5	10'-9"		V	8	5	3'-0"	
h5	2	5	8'-9"		V1	238	5	15'-0"	
h6	2	5	6'-9"		V2	115	5	6'-6"	
h7	2	5	5'-3"		V3	38	4	6'-0"	
h8	2	5	7'-6"		V4	4	4	6'-6"	
h9	2	5	5'-6"		V5	4	4	7'-3"	
h10	2	5	3'-6"		V6	4	4	8'-0"	
h11	2	5	18'-3"		V7	4	4	8'-9"	
h12	2	5	12'-3"		V8	4	4	9'-6"	
h13	2	5	14'-3"		V9	6	4	10'-3"	
h14	2	5	12'-3"		V10	4	4	11'-0"	
h15	2	5	10'-3"		V11	6	4	11'-9"	
h16	2	5	8'-0"		V12	4	4	12'-6"	
h17	4	5	6'-0"		V13	2	4	13'-3"	
h18	2	5	4'-0"		V14	4	4	14'-0"	
					V15	4	4	14'-9"	
n	238	5	4'-9"		V16	2	4	15'-6"	
					V17	2	4	15'-9"	
					V18	2	4	5'-6"	
					V19	2	4	2'-9"	
P	4	7	11'-0"		V20	8	4	5'-9"	
P1	28	7	30'-3"		W	20	5	31'-6"	
P2	24	7	18'-0"						
P3	12	7	9'-6"						
P4	12	7	17'-0"						



BENT BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU.YD.	261.7
REINFORCEMENT BARS	POUNDS	15,390
FURNISHING CONCRETE PILES	LIN. FT.	735
FURNISHING CREOSOTED PILES 20.1' TO 38'	LIN. FT.	1,357
TEST PILE CONCRETE	EACH	1
DRIVING CONCRETE PILE	LIN. FT.	735
DRIVING TIMBER PILE	LIN. FT.	1,357
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	488
TEST PILE TIMBER	EACH	1
NAME PLATE	EACH	1

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. PIETERS
DRAWN BY M.H. SANTOS
CHECKED S.W. Strandberg
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

11-6-69 Added Details for locating fire alarm system S.M.

WEST VAULTED ABUTMENT SECTIONS AND DETAILS
F.A.I. 74 - SECTION 81-1HB-3
F.A.I. 74 UNDER 23RD AVE.
ROCK ISLAND COUNTY
STATION 336+33.64
SCALE: AS NOTED DATE:

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – WEST VAULTED ABUTMENT SECTIONS AND DETAILS
S.N. 081-0105
SHEET NO. SA4 OF SA5 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	1243
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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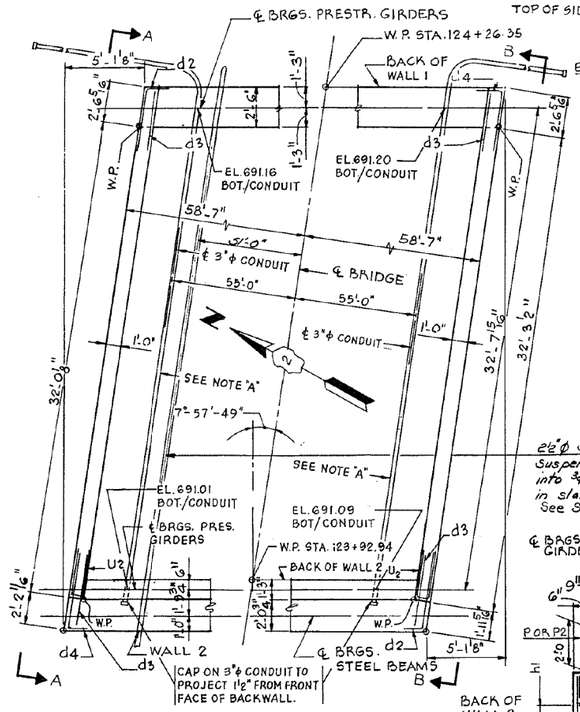
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-3	ROCK ISLAND	438	137
FED. ROAD DIST. NO. 7	ILLINOIS	FED. A/D PROJECT		

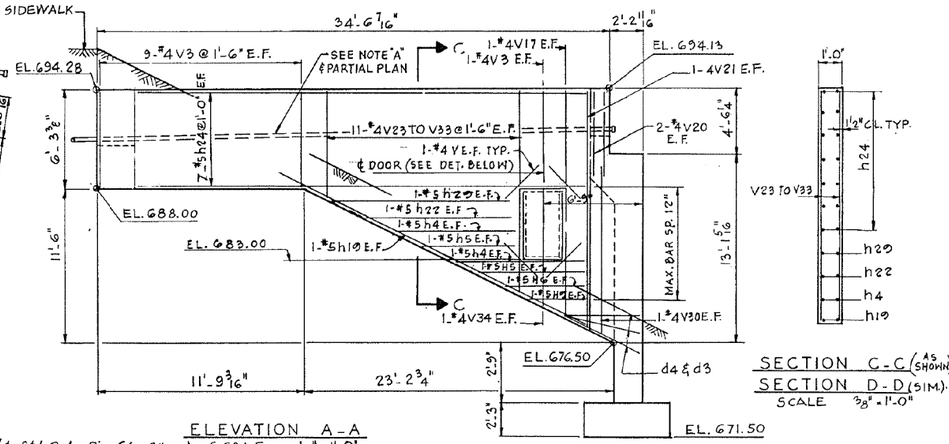
DWG. S-7



PARTIAL PLAN
SCALE 1/4"=1'-0"

NOTE "A"

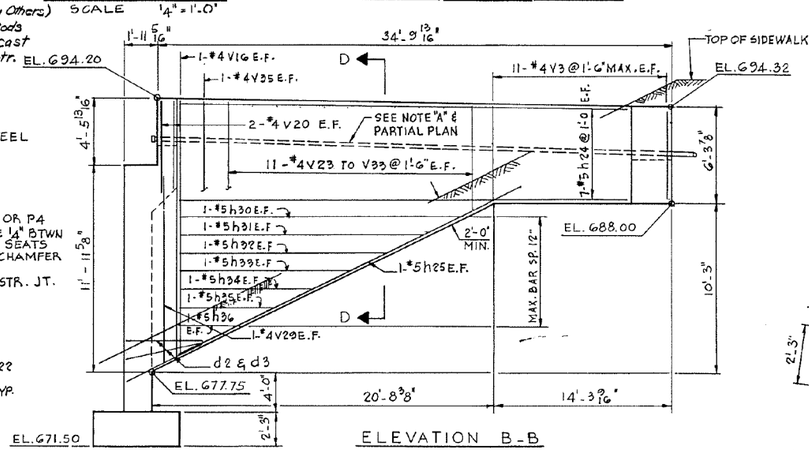
3"ϕ CONDUIT, EXTEND TO CLEAR WALL 1 AND TERMINATE AT A POINT OUTSIDE OF SHOULDER. THREAD & CAP EACH END. COST IS TO BE INCIDENTAL TO BRIDGE STRUCTURE.



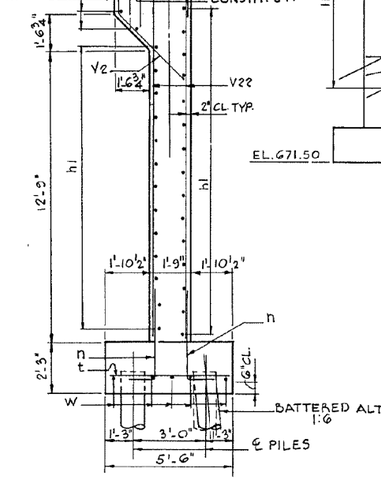
ELEVATION A-A
SCALE 1/4"=1'-0"

SECTION C-C (AS SHOWN)
SECTION D-D (SIM.)
SCALE 3/8"=1'-0"

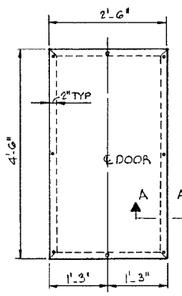
2½" ϕ Std. Galv. Pipe (by Others) Suspended from ¾" ϕ Rods into ¾" conc. Inserts cast in slab by Bridge Contr. See Sheets 9 & 10.



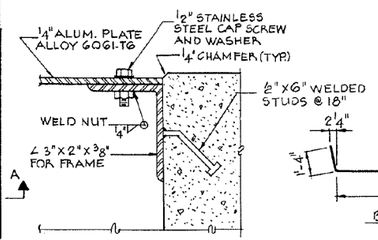
ELEVATION B-B



SECTION THRU WALL 2
SCALE: 3/8"=1'-0"

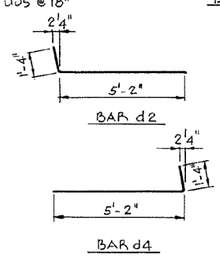


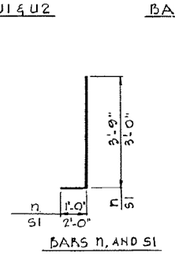
DOOR ELEVATION
SCALE: 3/4"=1'-0"

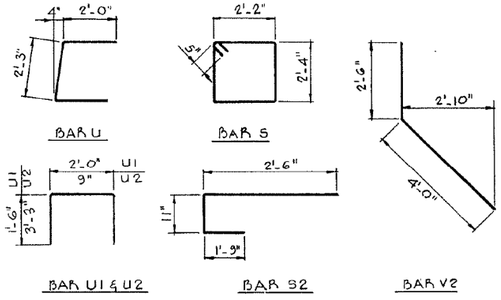


SECTION A-A
NO SCALE

NOTE: COST OF DOOR AND FRAME INCIDENTAL TO THE COST OF CONCRETE.







BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
					S	110	4	3'-10"	
d1	168	6	4'-0"		S1	115	4	5'-0"	
d2	15	5	6'-6"		S2	115	4	5'-2"	
d3	43	5	4'-6"						
d4	16	5	6'-6"		t	118	5	5'-0"	
					U	10	6	6'-3"	
h1	124	5	30'-0"		U1	86	4	5'-0"	
h4	4	5	10'-9"		U2	8	5	7'-3"	
h5	4	5	8'-8"						
h6	2	5	6'-8"		V	8	5	34'-0"	
h9	2	5	5'-6"		V2	115	5	6'-6"	
h10	2	5	26'-0"		V3	42	4	6'-0"	
h22	2	5	12'-9"		V16	2	4	15'-6"	
h24	28	5	30'-6"		V17	2	4	15'-9"	
h25	2	5	23'-0"		V21	2	4	16'-3"	
h29	2	5	14'-8"		V22	238	5	15'-6"	
h30	2	5	16'-6"		V23	4	4	6'-9"	
h31	2	5	14'-6"		V24	4	4	7'-6"	
h32	2	5	12'-6"		V25	4	4	8'-3"	
h33	2	5	10'-6"		V26	4	4	9'-0"	
h34	2	5	8'-6"		V27	4	4	9'-9"	
h35	2	5	6'-6"		V28	4	4	10'-6"	
h36	2	5	4'-6"		V29	6	4	11'-3"	
					V30	6	4	12'-0"	
					V31	4	4	12'-9"	
					V32	4	4	13'-6"	
n	238	5	4'-9"	L	V33	4	4	14'-3"	
					V34	2	4	31'-9"	
					V35	2	4	15'-0"	
P	4	7	11'-0"		V20	8	4	5'-9"	
P1	28	7	30'-3"						
P2	24	7	18'-0"						
P3	12	7	9'-6"		W	20	5	31'-6"	
P4	12	7	17'-0"						

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	266.0
REINFORCEMENT BARS	POUNDS	19,630
FURNISHING CONCRETE PILES	LIN. FT.	585
FURNISHING CREOSOTED PILES 20.1 FT. TO 38 FT. LONG	LIN. FT.	1416
TEST PILE TIMBER	EACH	1
DRIVING CONCRETE PILE	LIN. FT.	585
DRIVING TIMBER PILE	LIN. FT.	1416
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	488
NAMEPLATE	EACH	1
TEST PILE CONCRETE	EACH	1

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY R. PIETERS
DRAWN BY M.H. SANTOS
CHECKED S.N. Shroff, Asst.
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

11-6-69- Added Detail for locating Fire Alarm System S.M.

EAST VAULTED ABUTMENT SECTIONS AND DETAILS
F.A.I. 74 - SECTION 81-1HB-3
F.A.I. 74 UNDER 23RD AVE.
ROCK ISLAND COUNTY
STATION 336+33.64
SCALE: AS NOTED DATE:

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – EAST VAULTED ABUTMENT SECTIONS AND DETAILS
S.N. 081-0105
SHEET NO. SA5 OF SA5 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	1244
		CONTRACT NO. 64E26		
		ILLINOIS	FED. AID PROJECT	

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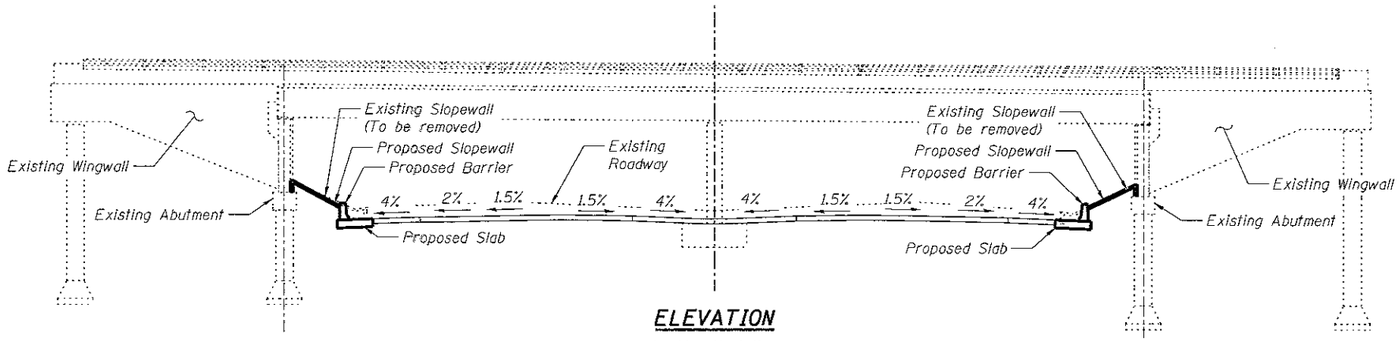
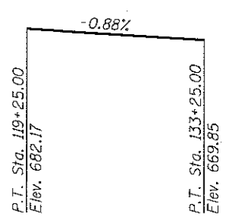


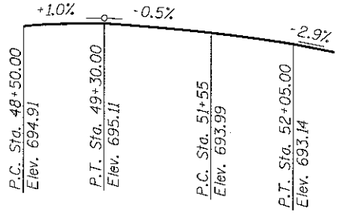
ELEVATION

Looking Upstation



PROFILE GRADE F.A.I. 74

(Along ℄ F.A.I. 74)



PROFILE GRADE 26TH STREET

(Along ℄ 26th St.)

DESIGN SPECIFICATIONS

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

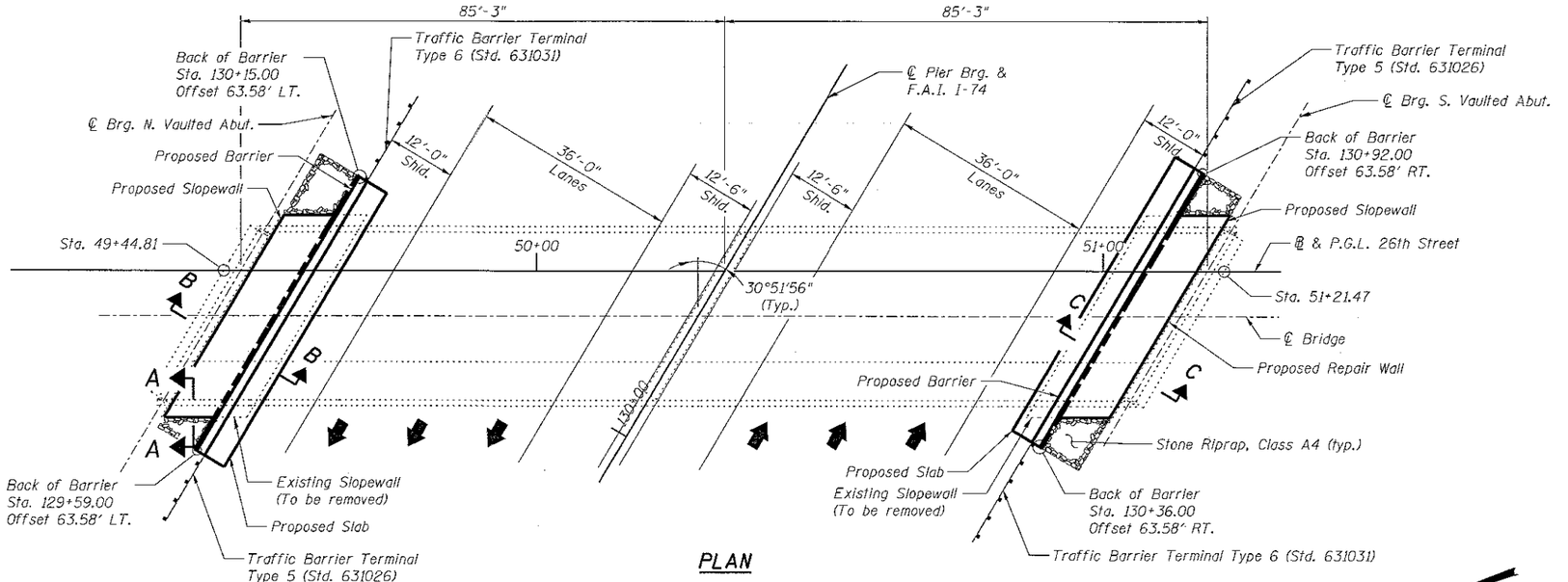
DESIGN STRESSES

FIELD UNITS

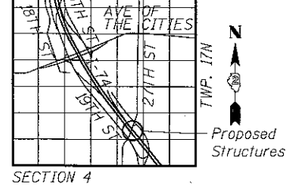
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

ANDREW J. KEASCHALL
081-006764
LICENSED
STRUCTURAL
ENGINEER
OF ILLINOIS

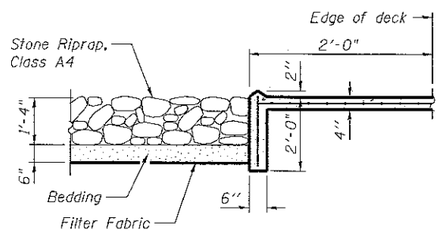
EXPIRATION DATE 11-30-2018
DATE: 3/27/17



PLAN



LOCATION SKETCH



SECTION A-A

NOTE:

This bridge is also known as 27th Street SB.

GENERAL PLAN AND ELEVATION
I-74 UNDER 26TH STREET
F.A.I. ROUTE 74 SECTION 81-1HB-2
ROCK ISLAND COUNTY
STATION 130+33.91
STRUCTURE NO. 081-0107

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

S.N. 081-0107

SHEET NO. SB1 OF SB9 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)IR-1 & 81-1(HBR, HBR-1, HBR-2)	ROCK ISLAND	2042	1245
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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4/13/2017

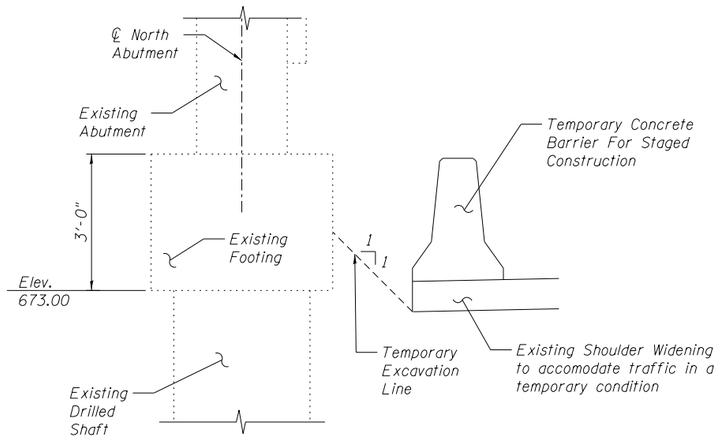
GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not because for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 X W4.0, weighing 58 lbs. per 100 sq. ft.

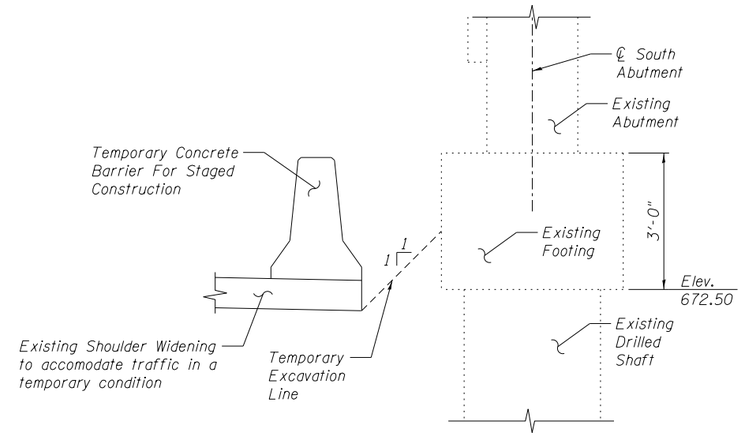
INDEX OF SHEETS

TOTAL BILL OF MATERIAL

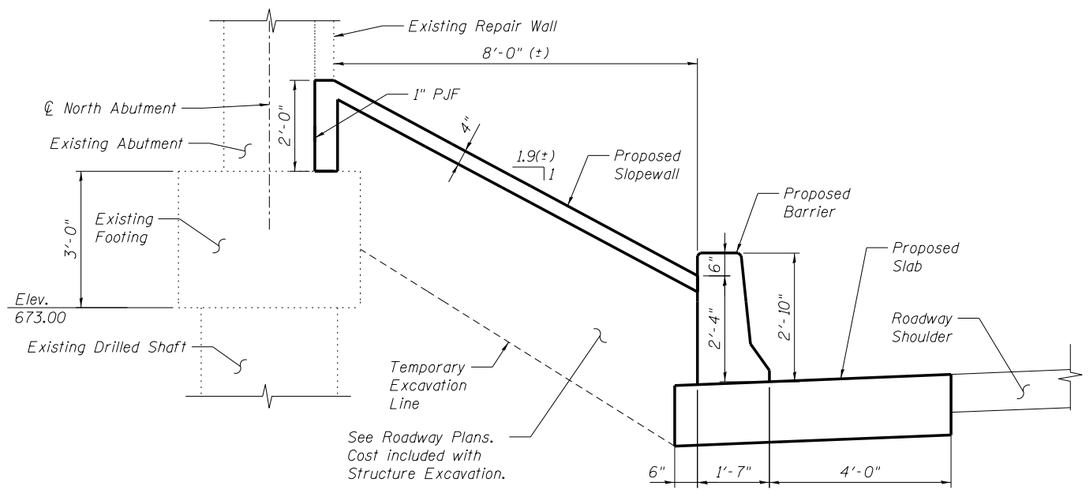
ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq Yd	27
Filter Fabric	Sq Yd	27
Slope Wall Removal	Sq Yd	134
Structure Excavation	Cu Yd	74
Concrete Superstructure	Cu Yd	45.6
Reinforcement Bars, Epoxy Coated	Pound	6,600
Slope Wall 4 Inch	Sq Yd	83



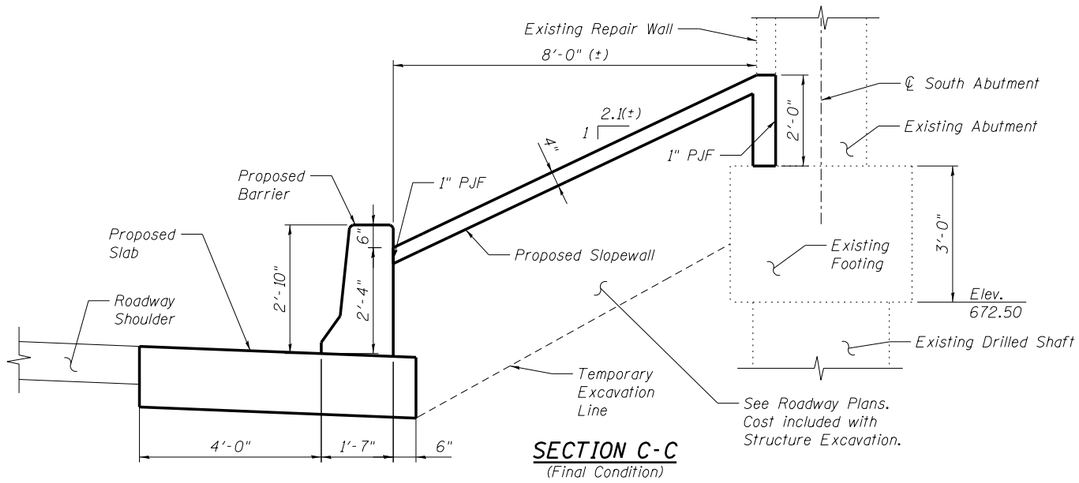
SECTION B-B
(Pre-Stage)



SECTION C-C
(Pre-Stage)



SECTION B-B



SECTION C-C
(Final Condition)

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, BILL OF MATERIAL, SECTIONS
S.N. 081-0107
SHEET NO. SB2 OF SB9 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	1246
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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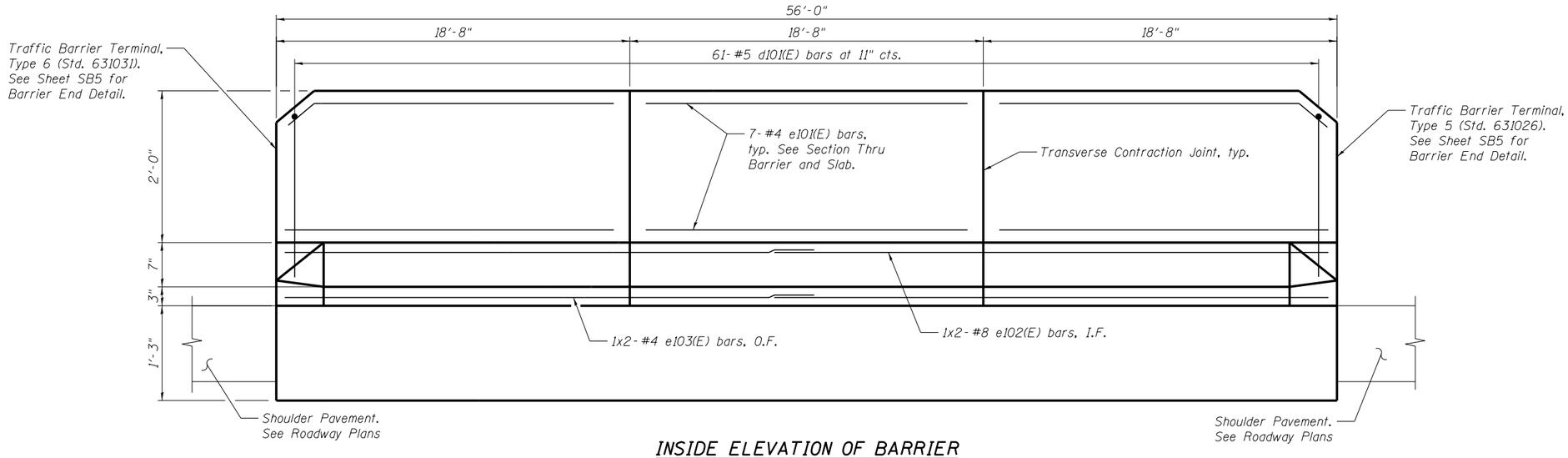
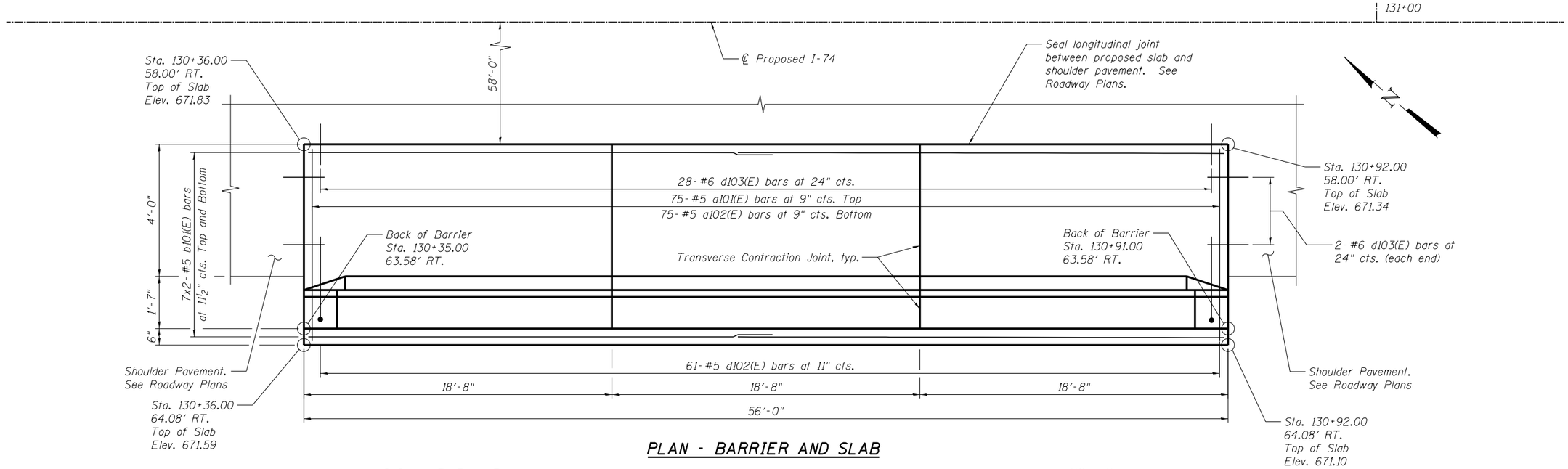


INSIDE ELEVATION OF BARRIER

(Reflected View Shown)



PLAN - BARRIER AND SLAB

MINIMUM BAR LAP

#4 bar = 2'-8"
#5 bar = 3'-3"
#8 bar = 6'-9"

NOTES:

1. For Section thru Barrier and Slab, Bill of Material, and Transverse Contraction Joint Detail, see Sheet SB5.
2. Bars indicated thus 7x2-#5 etc. indicates 7 lines of bars with 2 lengths per line.

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205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND BARRIER AND SLAB PLAN AND ELEVATION
S.N. 081-0107
SHEET NO. SB3 OF SB9 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	1247
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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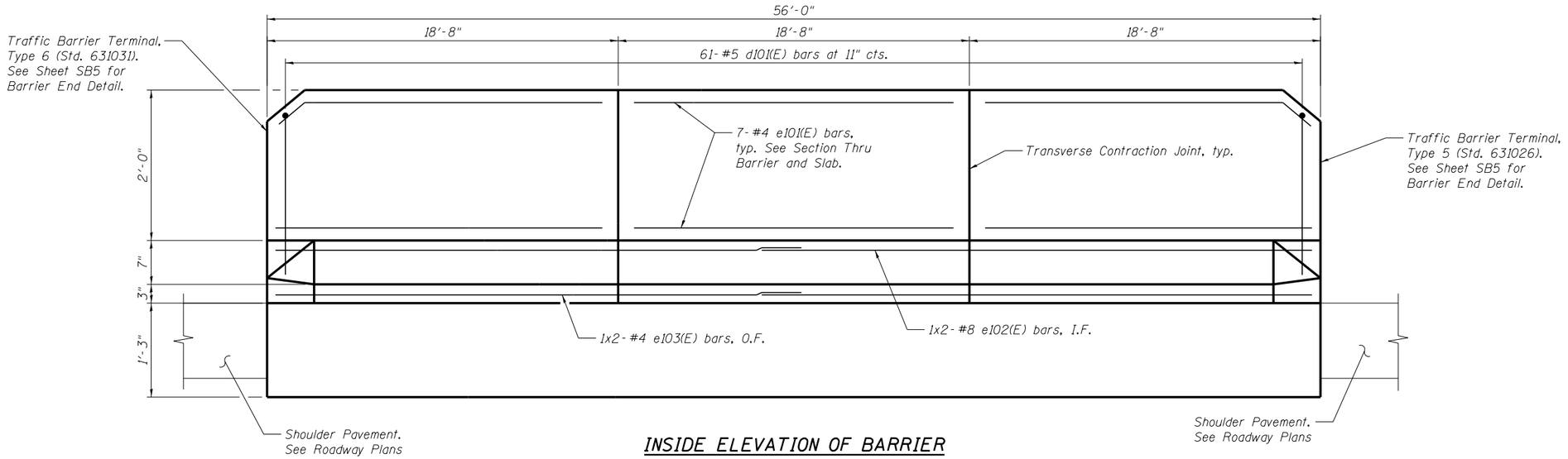
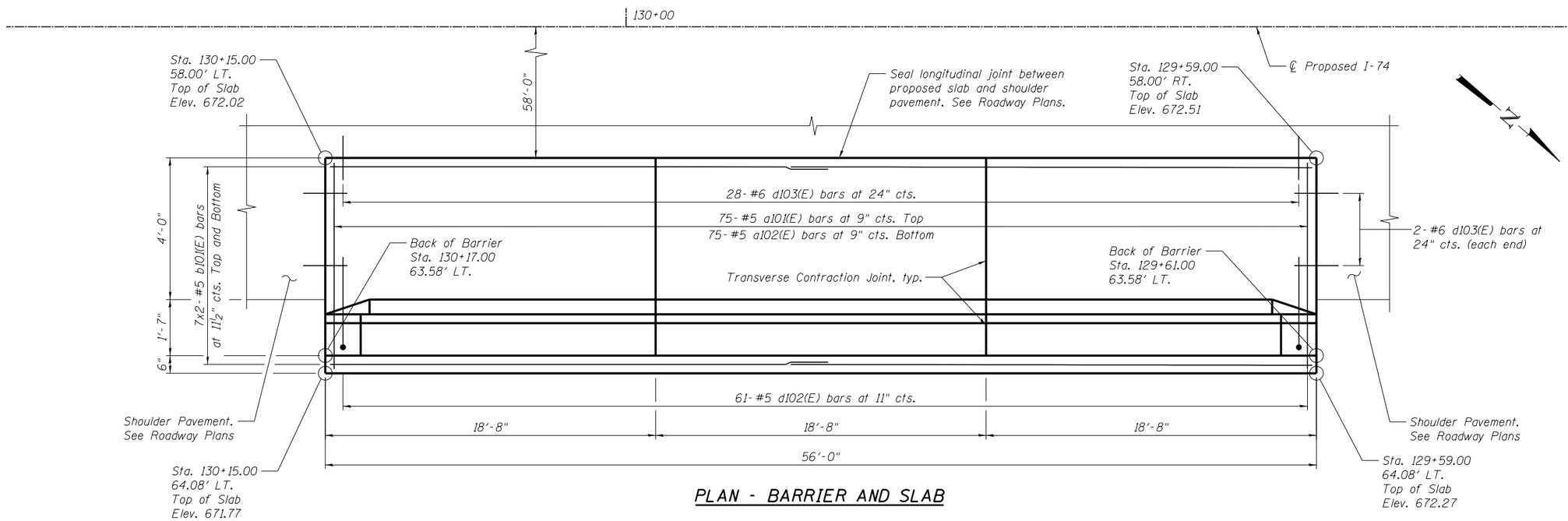


INSIDE ELEVATION OF BARRIER

(Reflected View Shown)



PLAN - BARRIER AND SLAB

MINIMUM BAR LAP

#4 bar = 2'-8"
#5 bar = 3'-3"
#8 bar = 6'-9"

NOTES:

1. For Section thru Barrier and Slab, Bill of Material, and Transverse Contraction Joint Detail, see Sheet SB5.
2. Bars indicated thus 7x2-#5 etc. indicates 7 lines of bars with 2 lengths per line.

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205 North Michigan Avenue, Suite 2400
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312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND BARRIER AND SLAB PLAN AND ELEVATION
S.N. 081-0107
SHEET NO. SB4 OF SB9 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	1248
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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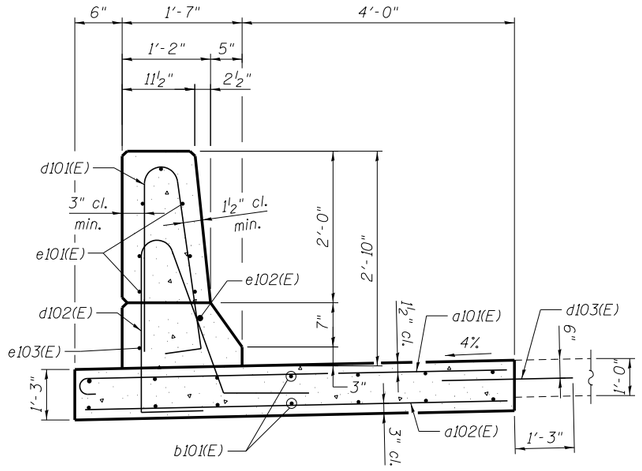
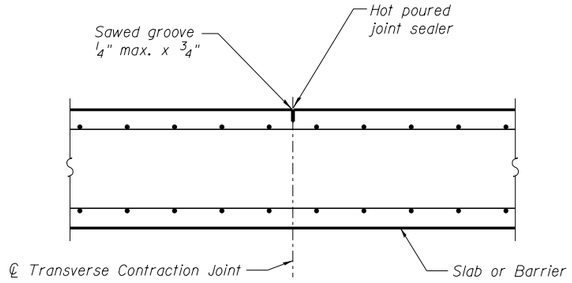
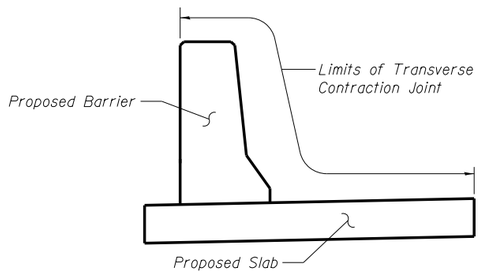


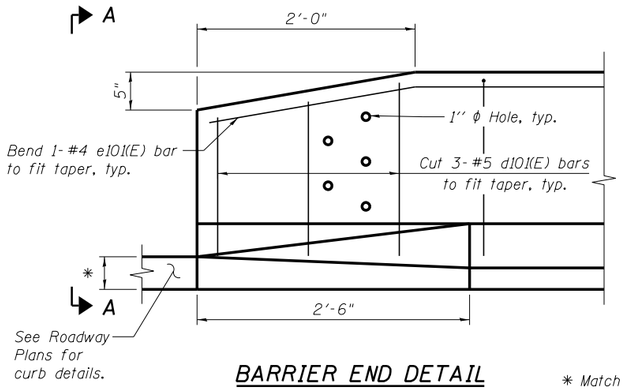
SECTION THRU BARRIER AND SLAB



TRANSVERSE CONTRACTION JOINT DETAIL



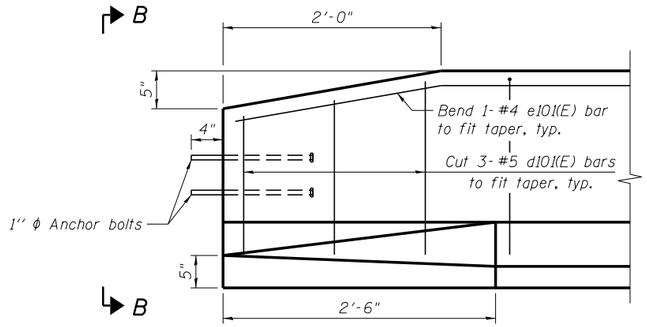
TRANSVERSE CONTRACTION JOINT LIMITS



BARRIER END DETAIL

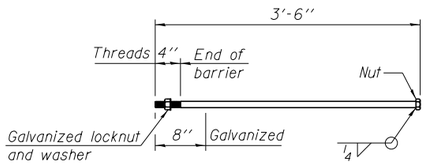
at Traffic Barrier Terminal, Type 6

* Match curb height. See Roadway Plans.



BARRIER END DETAIL

at Traffic Barrier Terminal, Type 5

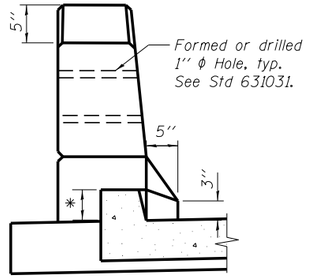


1"ϕ ANCHOR BOLT

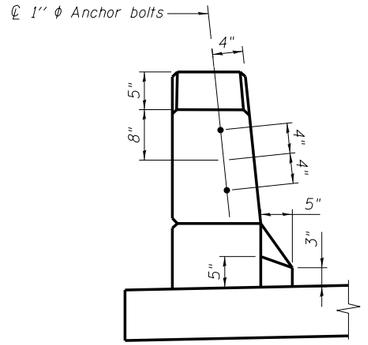
(Cost included with Concrete Superstructure)

NOTES:

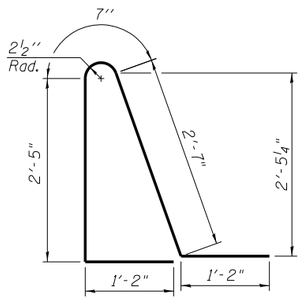
1. Transverse Contraction Joints shall be sawed per Article 420.05(c) of the Standard Specification. Cost included with Concrete Superstructure.
2. Transverse Contraction Joints shall be sealed per Articles 420.12 and 1050.02 of the Standard Specification. Cost included with Concrete Superstructure.



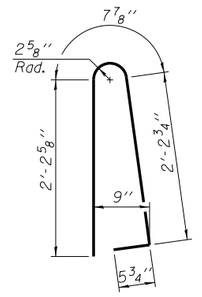
VIEW A-A



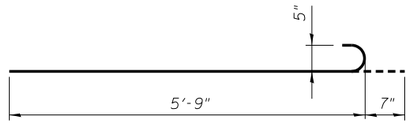
VIEW B-B



BAR d102(E)



BAR d101(E)



BAR a101(E)

BILL OF MATERIAL EASTBOUND

Bar	No.	Size	Length	Shape
a101(E)	75	#5	6'-4"	
a102(E)	75	#5	5'-9"	
b101(E)	28	#5	31'-3"	
d101(E)	61	#5	5'-7"	
d102(E)	61	#5	7'-11"	
d103(E)	32	#6	2'-6"	
e101(E)	21	#4	18'-4"	
e102(E)	2	#8	31'-3"	
e103(E)	2	#4	29'-2"	
Concrete Supertructure			Cu. Yd.	22.8
Reinforcement Bars, Epoxy Coated			Pound	3,300

BILL OF MATERIAL WESTBOUND

Bar	No.	Size	Length	Shape
a101(E)	75	#5	6'-4"	
a102(E)	75	#5	5'-9"	
b101(E)	28	#5	31'-3"	
d101(E)	61	#5	5'-7"	
d102(E)	61	#5	7'-11"	
d103(E)	32	#6	2'-6"	
e101(E)	21	#4	18'-4"	
e102(E)	2	#8	31'-3"	
e103(E)	2	#4	29'-2"	
Concrete Superstructure			Cu. Yd.	22.8
Reinforcement Bars, Epoxy Coated			Pound	3,300

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0107-C00CD-005-Barrier_Slab_Details.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - TPS	REVISED -
	PLOT SCALE =	DRAWN - PRT	REVISED -
MODEL: $MODEL	PLOT DATE = 3/22/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRIER AND SLAB DETAILS
S.N. 081-0107

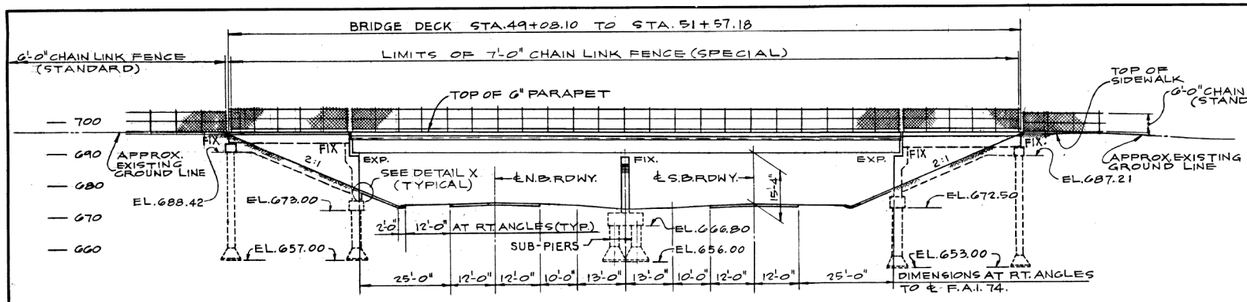
SHEET NO. SB5 OF SB9 SHEETS

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	1249
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

3/22/2017 7:35:46 PM c:\pwise_work\do_not_delete\dms05509\081-0107-C00CD-005-Barrier_Slab_Details.dgn

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-IHB-4	ROCK ISLAND	438	147
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1 (340)		

DWG. NO. S-16



WEST ELEVATION

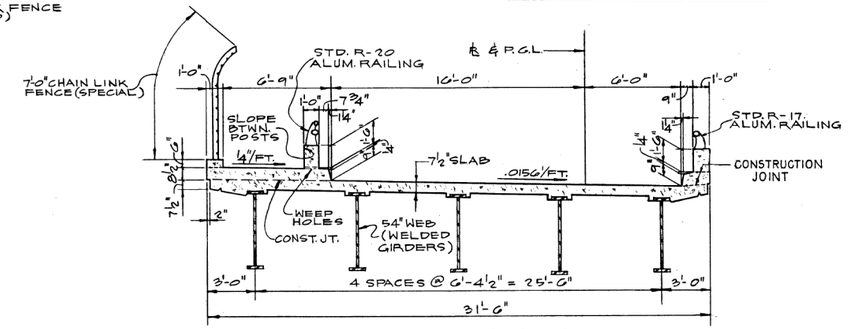
SCALE: 1"=20'-0"

B.M. - EAST CURB SPAN ELEV. 695.85'

BENCH MARKS

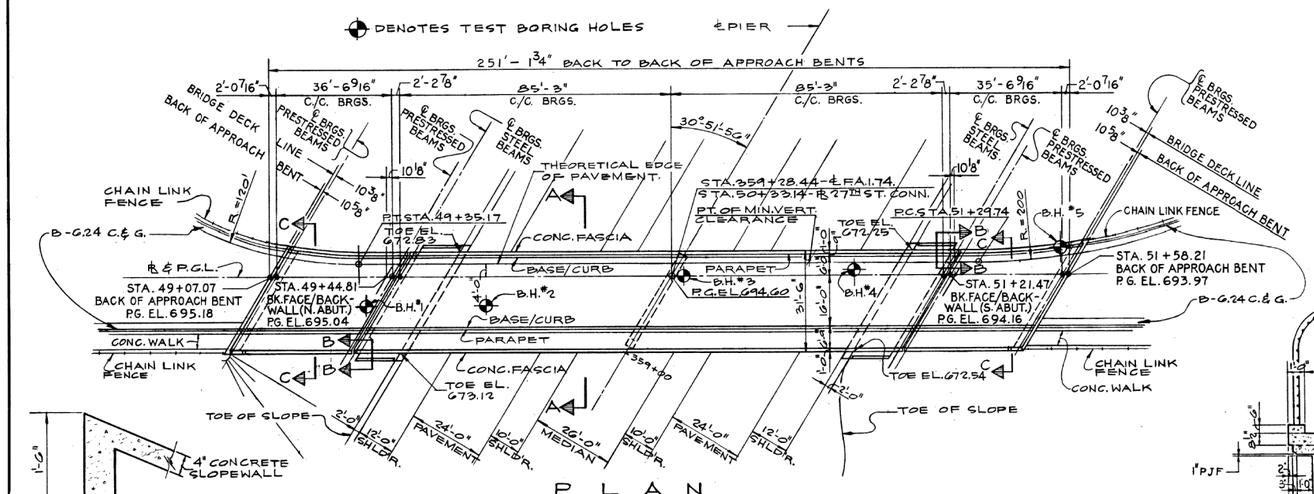
A-13 : BRASS CAP IN CONC. MON. STA. 360+40 ℄ F.A.I. 74 - 200' RT. ELEV. 693.10.

A-14 : BRASS CAP IN CONC. MON. STA. 370+50 ℄ F.A.I. 74 + 310' LT. ELEV. 695.08.



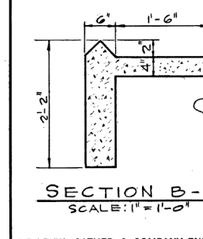
SECTION A-A

SCALE: ¼"=1'-0"



PLAN

SCALE: 1"=20'-0"



DETAIL X

SCALE: 1"=1'-0"

SECTION THRU ABUTS.

(SHOWING EAST SIDE END DETAILS)

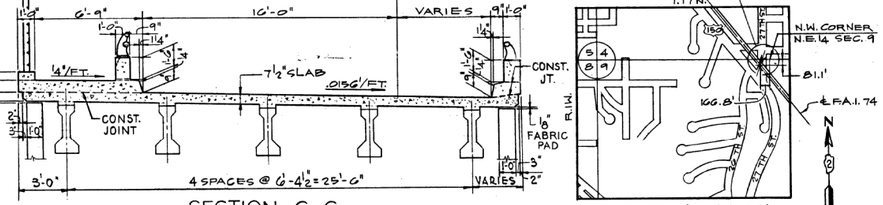
SCALE: ¼"=1'-0"

APPROVED

FOR STRUCTURAL ADEQUACY ONLY

Carl E. Thurman

Engineer of Bridge & Traffic Structures



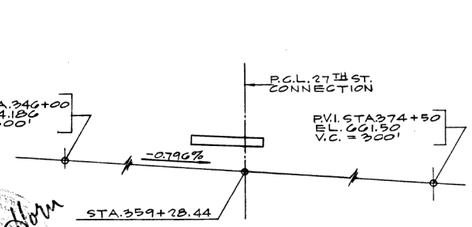
SECTION C-C

SCALE: ¼"=1'-0"

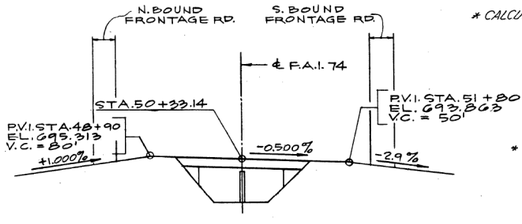
LOCATION PLAN

SECTION B-B

SCALE: 1"=1'-0"



PROFILE GRADE - F.A.I. 74



PROFILE GRADE - 27TH ST. CONNECTION

* CALCULATED QUANT. - 173,005 lbs.

TOTAL BILL OF MATERIAL (BRIDGE ONLY)

ITEM	UNIT	SUPER STRUCTURE	SUB-STRUCTURE	TOTAL
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.		325	325
FURNISHING AND ERECTING PRECAST, PRE-STRESSED CONCRETE I BEAMS, 36"	LIN. FT.	369		369
CLASS X CONCRETE	CU. YD.	311.9	261.1	573.0
PROTECTIVE COAT	SQ. YD.	941		941
FURNISHING AND ERECTING STRUCTURAL STEEL	L. SUM	0.1		0.1
REINFORCEMENT BARS	POUND	72,370	49,560	121,930
SUB-PIER SHAFTS	CU. FT.		2,615.0	2,615.0
NAME PLATES	EACH		2	2
SLOPE WALL (4-INCH)	SQ. YD.		159	159
ALUMINUM RAILING	LIN. FT.	240		240
CHAIN LINK FENCE (SPECIAL)	LIN. FT.	249		249
PERMANENT BENCH MARKS, TYPE I	EACH	1		1
BRIDGE SEAT SEALANT	LUMP SUM		0.3	0.3
ALUMINUM RAILING, TYPE L	LIN. FT.	249		249

DESIGN NOTES:

LOADING-HS 20-44 & ALT. + 25 #/FT² FUTURE W.S.

f'c = 1400 P.S.I. CAST IN PLACE CONCRETE, EXCEPT SLAB.
f'c = 1200 P.S.I. CAST IN PLACE CONCRETE, SLAB ONLY.
f'c = 5000 P.S.I. } PRECAST PRESTRESSED UNITS.
f'ci = 4000 P.S.I.
f's = 248,000 P.S.I. } (STRANDS 7/16 ϕ)
fsi = 173,600 P.S.I.
fs = 20,000 P.S.I. REINF. BARS & STRUCT. STEEL.
v = 75 P.S.I. ALLOWABLE SHEAR IN FOOTING.
n = 10 FOR CAST-IN PLACE CONCRETE.
ALLOWABLE L.L. DEFLECTION - L/1000 (NON-COMPOSITE) L/1200 (COMPOSITE)

GENERAL PLAN & ELEVATION

F.A.I. 74 - SECTION 81-IHB-4

F.A.I. 74 UNDER 27TH STREET CONNECTION

ROCK ISLAND COUNTY

STATION 359+28.44

SCALE: AS NOTED DATE:

DE LEUV, CATHER & COMPANY ENGINEERS
DESIGNED BY E.S. MARTINS
DRAWN BY G.P. ALLEMAN
CHECKED W.G. HORN
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

William G. Horn

Rev. 11-20-69 WL

benesch

Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0107-C00CD-009-012-Existing_Plans.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
MODEL: &MODEL	PLOT SCALE =	DRAWN - AWH	REVISED -
	PLOT DATE = 3/22/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - GPE
S.N. 081-0107

SHEET NO. SB6 OF SB9 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	1250
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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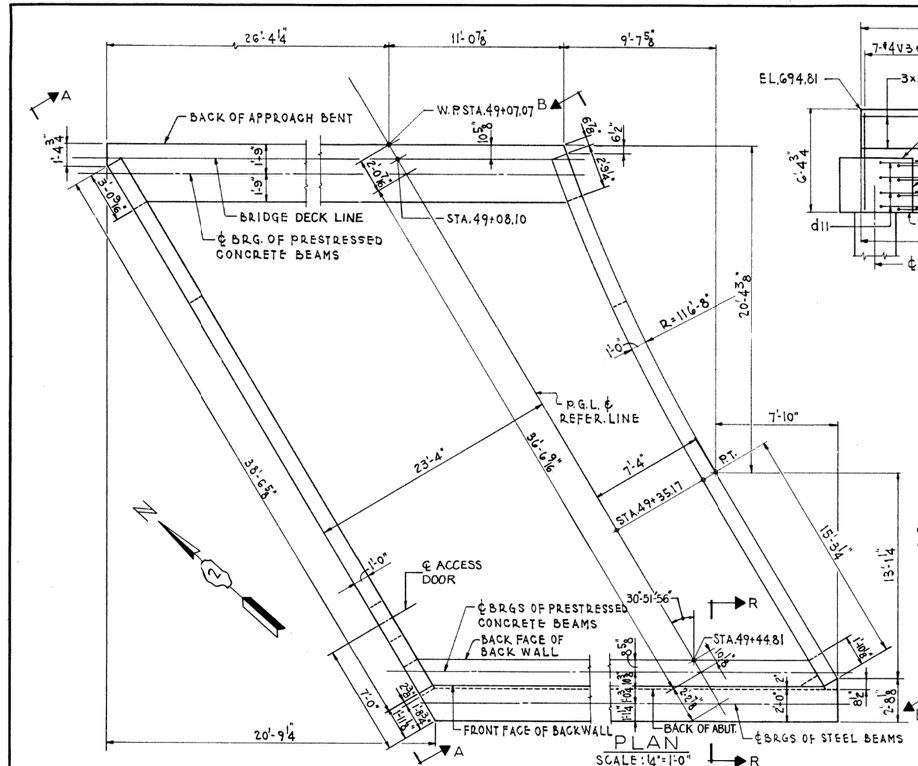
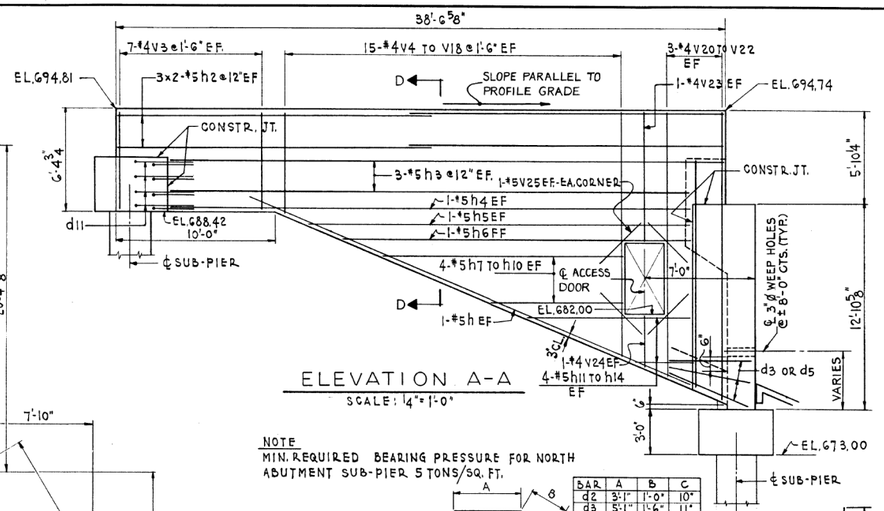
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-4	ROCK ISLAND	438	148
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

DWG. NO. S-17

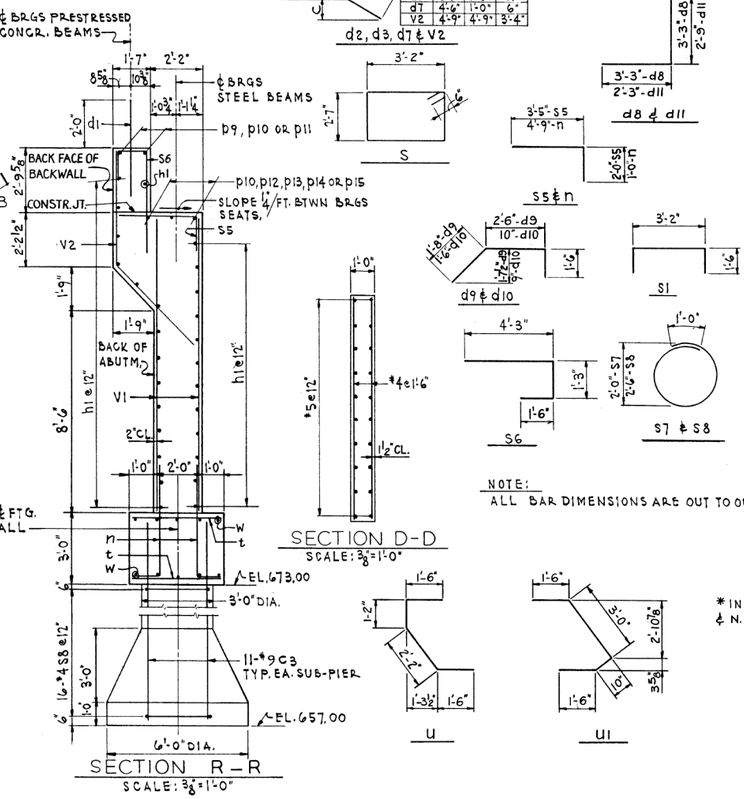




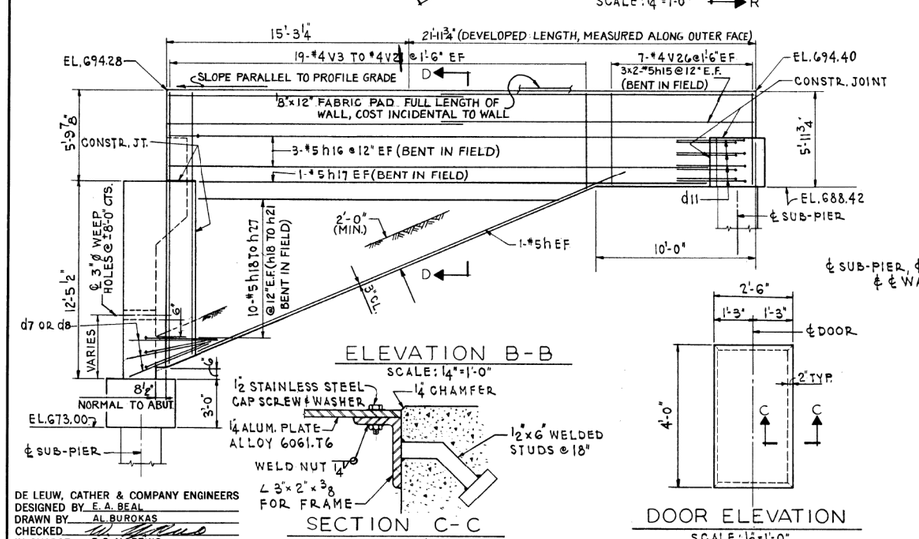
NOTE
MIN. REQUIRED BEARING PRESSURE FOR NORTH ABUTMENT SUB-PIER 5 TONS/SQ. FT.

BAR	A	B	C
d2	3'-1"	1'-0"	10"
d3	5'-1"	1'-6"	11"
d7	4'-6"	1'-0"	6"
V2	4'-0"	4'-9"	3'-4"

d2, d3, d7 & V2



NOTE:
ALL BAR DIMENSIONS ARE OUT TO OUT



BAR LIST*

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
c1	16	#9	34'-0"		P6	1	#6	4'-4"	
c3	44	#9	18'-0"		P7	1	#6	4'-0"	
					P8	1	#6	3'-0"	
d1	48	#6	4'-0"		P12	2	#7	2'-6"	
d2	25	#5	4'-1"		P13	5	#7	16'-7"	
d3	13	#5	6'-7"		P14	2	#7	17'-6"	
d5	13	#5	5'-5"		P15	1	#7	3'-7"	
d7	13	#5	5'-6"		P16	1	#7	4'-2"	
d8	13	#5	6'-6"		P17	1	#7	4'-9"	
d9	13	#5	5'-8"		P18	3	#7	17'-6"	
d10	3	#5	3'-10"						
d11	16	#5	5'-0"		S	35	#5	12'-6"	
					S1	19	#4	6'-2"	
h	4	#5	30'-0"		S5	35	#5	5'-5"	
h1	54	#4	18'-0"		S6	35	#5	7'-0"	
h2	12	#5	20'-4"		S7	64	#4	7'-2"	
h3	6	#5	35'-2"		S8	64	#4	8'-10"	
h4	2	#5	33'-4"		t	74	#5	3'-6"	
h5	2	#5	23'-10"		U	4	#6	6'-4"	
h6	2	#5	21'-6"		U1	4	#6	6'-10"	
h7	2	#5	14'-10"		V1	71	#5	12'-4"	
h8	2	#5	12'-4"		V2	33	#5	9'-6"	
h9	2	#5	9'-11"		V3	16	#4	6'-0"	
h10	2	#5	7'-6"		V4	4	#4	6'-6"	
h11	2	#5	10'-6"		V5	4	#4	7'-2"	
h12	2	#5	8'-2"		V6	4	#4	7'-9"	
h13	2	#5	5'-10"		V7	4	#4	8'-5"	
h14	2	#5	3'-6"		V8	4	#4	9'-1"	
h15	12	#5	19'-9"		V9	4	#4	9'-8"	
h16	6	#5	34'-0"		V10	4	#4	10'-4"	
h17	2	#5	32'-2"		V11	4	#4	11'-0"	
h18	2	#5	23'-0"		V12	4	#4	11'-7"	
h19	2	#5	20'-8"		V13	4	#4	12'-3"	
h20	2	#5	18'-4"		V14	4	#4	12'-11"	
h21	2	#5	16'-0"		V15	4	#4	13'-6"	
h22	2	#5	13'-8"		V16	4	#4	14'-2"	
h23	2	#5	11'-4"		V17	4	#4	14'-10"	
h24	2	#5	9'-0"		V18	4	#4	15'-5"	
h25	2	#5	6'-8"		V19	2	#4	16'-1"	
h26	2	#5	4'-4"		V20	4	#4	16'-9"	
h27	2	#5	2'-0"		V21	4	#4	17'-4"	
					V22	2	#4	18'-0"	
n	71	#5	5'-9"		V23	2	#4	8'-5"	
					V24	2	#4	3'-2"	
P1	10	#10	20'-6"		V25	8	#4	3'-0"	
P2	12	#10	14'-0"		V26	14	#4	5'-6"	
P3	10	#10	26'-6"						
P4	6	#10	9'-3"		W	10	#5	36'-6"	
P5	3	#6	16'-2"						

BILL OF MATERIAL*

ITEM	UNIT	QUANTITY
REINFORCING BARS	POUND	16,250
CLASS X CONCRETE	CU. YD.	106.7
SUB-PIERS SHAFTS	CU. FT.	1047.0
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	134.
NAME PLATE	EACH	1

*INCLUDES MATERIALS FOR DETAILS SHOWN FOR NORTH ABUTMENT & N. APPROACH BENT ON DWGS S-18 & S-19.

NORTH VAULTED ABUTMENT GENERAL PLAN & DETAILS

F.A.I. 74 - SECTION 81-1HB-4

F.A.I. 74 UNDER 27TH STREET CONNECTION

ROCK ISLAND COUNTY

STATION 359+28.44

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. A. BEAL
DRAWN BY AL BUROKAS
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W. G. HORN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = ...\081-0107-C00CD-009-012-Existing_Plans.dgn	USER NAME = $USER$	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
MODEL = $MODEL	PLOT SCALE =	DRAWN - AWH	REVISED -
	PLOT DATE = 3/27/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – NORTH VAULTED ABUT. GENERAL PLANS & DETAILS
S.N. 081-0107
SHEET NO. SB 7 OF SB9 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	1251
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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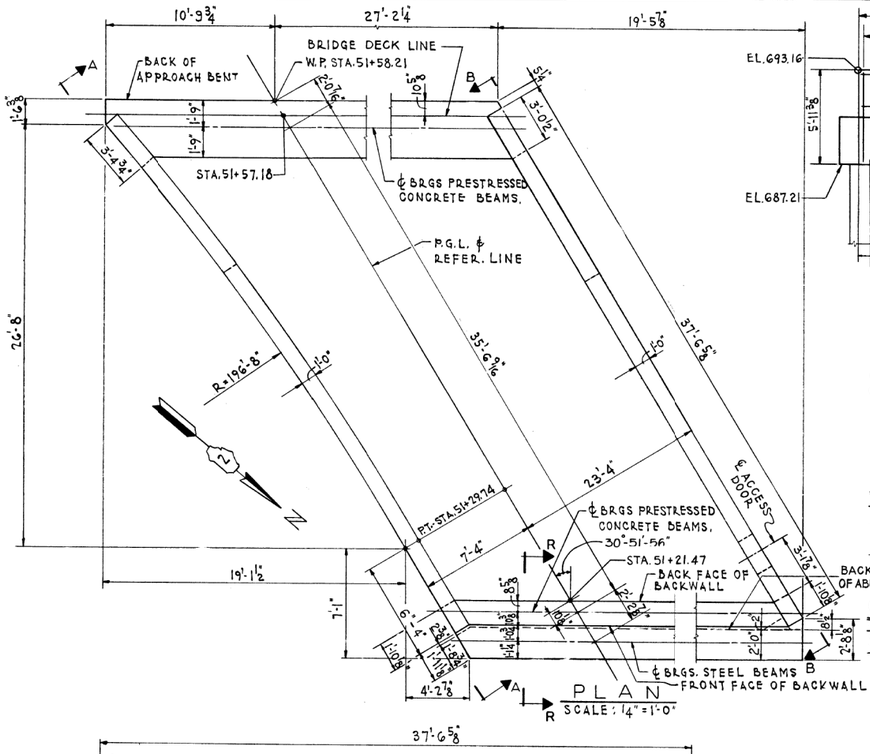
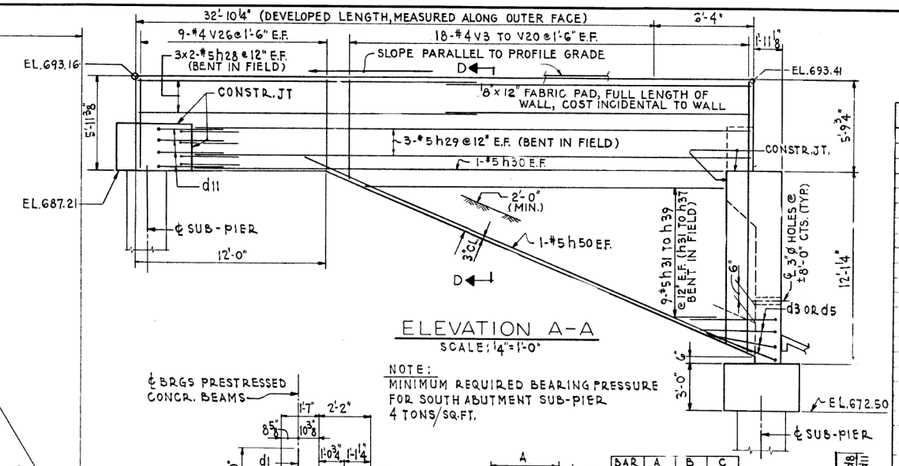
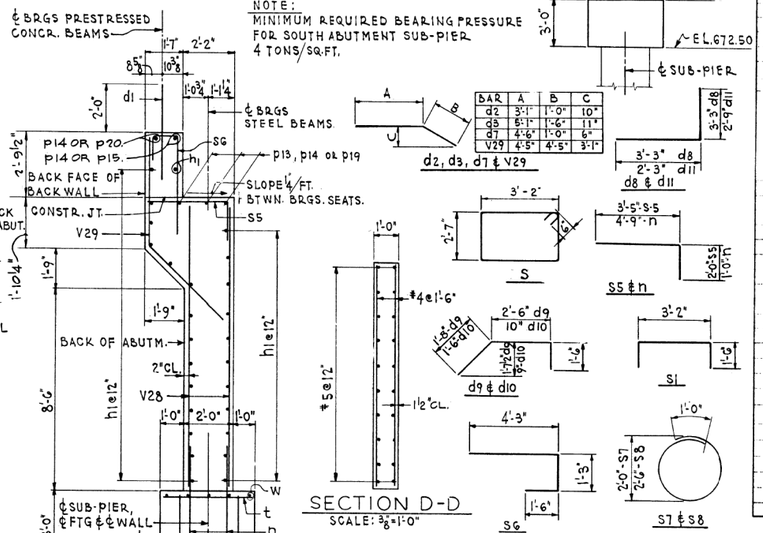
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-IHB-4	ROCK ISLAND	438	149
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT :		

DWG. NO. S-18

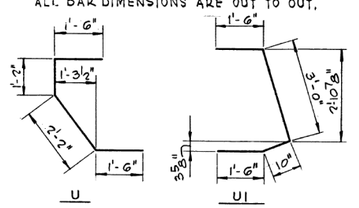




NOTE:
MINIMUM REQUIRED BEARING PRESSURE FOR SOUTH ABUTMENT SUB-PIER 4 TONS/SQ.FT.

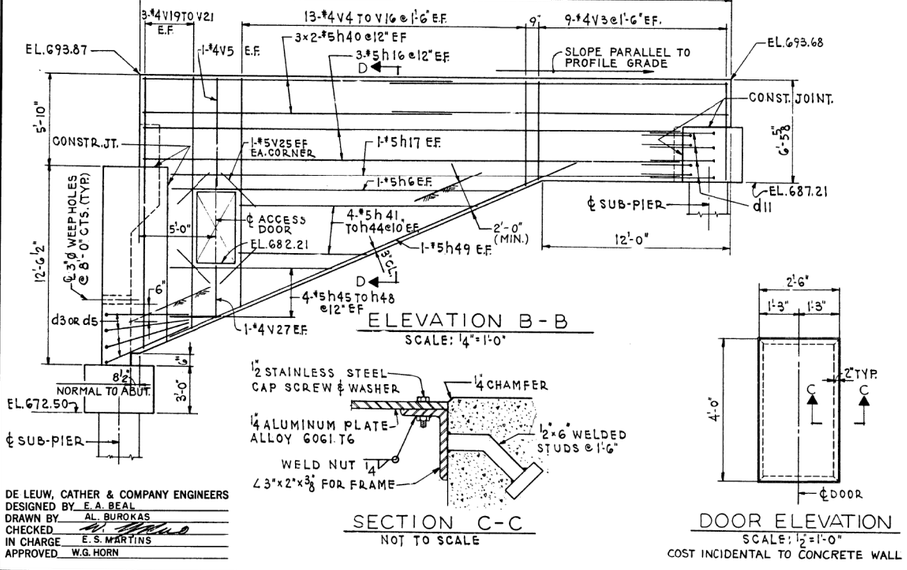


NOTE:
ALL BAR DIMENSIONS ARE OUT TO OUT.



BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
C2	16	#9	36'-9"		P11	6	#10	10'-0"	
C4	44	#9	22'-0"		P13	3	#7	16'-7"	
					P14	7	#7	17'-6"	
d1	48	#6	4'-0"		P15	1	#7	3'-7"	
d2	25	#5	4'-1"		P19	3	#7	3'-3"	
d3	13	#5	6'-7"		P20	1	#7	2'-8"	
d5	13	#5	5'-5"		S	35	#5	12'-6"	
d7	13	#5	5'-6"		S1	19	#4	6'-2"	
d8	13	#5	6'-6"		S5	35	#5	5'-5"	
d9	13	#5	5'-8"		S6	33	#5	7'-0"	
d10	3	#5	3'-10"		S7	68	#4	7'-2"	
d11	16	#5	5'-0"		S8	80	#4	8'-10"	
h1	52	#5	18'-0"		t	74	#5	3'-6"	
h6	2	#5	21'-6"		U	4	#6	6'-4"	
h16	6	#5	34'-0"		U1	4	#6	6'-10"	
h17	2	#5	32'-2"						
h28	12	#5	20'-6"		V3	20	#4	6'-0"	
h29	6	#5	35'-4"		V4	4	#4	6'-6"	
h30	2	#5	33'-6"		V5	6	#4	7'-2"	
h31	2	#5	22'-10"		V6	4	#4	7'-9"	
h32	2	#5	20'-5"		V7	4	#4	8'-5"	
h33	2	#5	17'-11"		V8	4	#4	9'-1"	
h34	2	#5	15'-7"		V9	4	#4	9'-8"	
h35	2	#5	13'-2"		V10	4	#4	10'-4"	
h36	2	#5	10'-9"		V11	4	#4	11'-0"	
h37	2	#5	8'-4"		V12	4	#4	11'-7"	
h38	2	#5	5'-11"		V13	4	#4	12'-3"	
h39	2	#5	3'-6"		V14	4	#4	12'-11"	
h40	12	#5	19'-4"		V15	4	#4	13'-6"	
h41	2	#5	14'-9"		V16	4	#4	14'-2"	
h42	2	#5	12'-10"		V17	2	#4	14'-10"	
h43	2	#5	10'-11"		V18	2	#4	15'-5"	
h44	2	#5	8'-2"		V19	4	#4	16'-1"	
h45	2	#5	10'-9"		V20	4	#4	16'-9"	
h46	2	#5	8'-9"		V21	2	#4	17'-4"	
h47	2	#5	6'-5"		V25	8	#5	8'-0"	
h48	2	#5	4'-1"		V26	18	#4	5'-6"	
h49	2	#5	27'-3"		V27	2	#4	3'-9"	
h50	2	#5	29'-0"		V28	71	#5	11'-11"	
n	71	#5	5'-9"		V29	33	#5	8'-10"	
p3	10	#10	26'-6"						
p5	3	#6	16'-2"		W	10	#5	36'-6"	
p6	1	#6	4'-4"						
p7	1	#6	4'-0"						
p8	1	#6	3'-0"						
p9	10	#10	20'-10"						
p10	12	#10	14'-6"						



BILL OF MATERIAL*

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU. YD.	104.7
REINFORCING BARS	POUND	17,440
SUB-PIER SHAFTS	CU. FT.	1237.0
CLASS A EXCAVATION FOR STRUCTURES	CU. YD.	136.
NAME PLATE	EACH	1

*INCLUDES MATERIALS FOR DETAILS SHOWN FOR SOUTH ABUTMENT & SOUTH APPROACH BENT ON DWGS S-19 & S-20.

SOUTH VAULTED ABUTMENT GENERAL PLAN & DETAILS

F.A.I. 74 - SECTION 81-IHB-4

F.A.I. 74 UNDER 27TH STREET CONNECTION

ROCK ISLAND COUNTY

STATION 359+28.44

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E. A. BEAL
DRAWN BY AL BUROKAS
CHECKED
IN CHARGE E. S. MARTINS
APPROVED W. G. HORN

HE 18 5136 D

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0107-C00CD-009-012-Existing_Plans.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
MODEL: $MODEL	PLOT SCALE =	DRAWN - AWH	REVISED -
	PLOT DATE = 3/22/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – SOUTH VAULTED ABUT. GENERAL PLANS & DETAILS
S.N. 081-0107
SHEET NO. SB 8 OF SB 9 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	1252
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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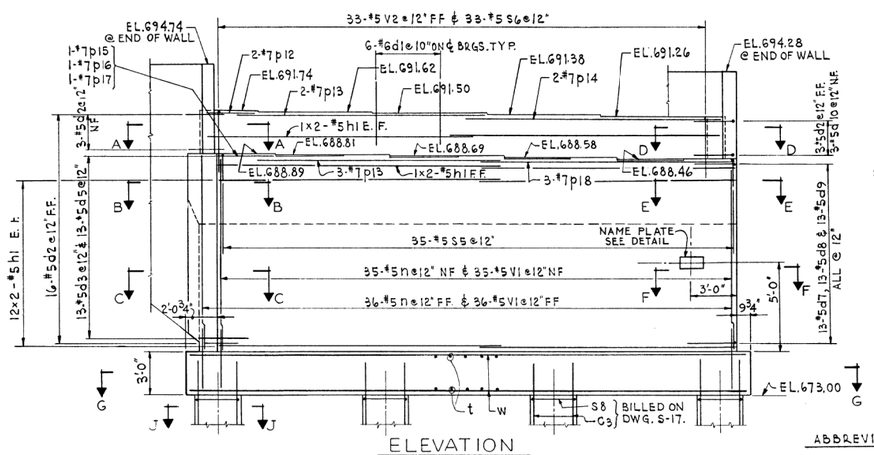
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-4	ROCK ISLAND	438	150
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

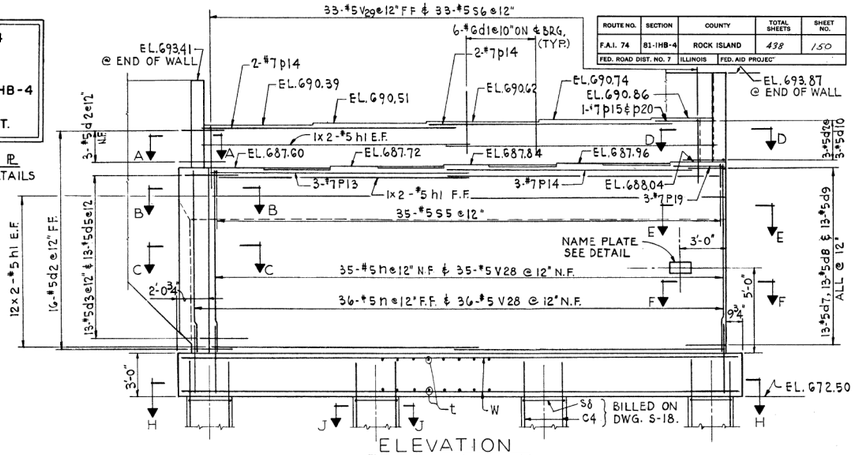
DWG. NO. S-19

STATION 359+28.44
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 81-1HB-4
F.A. PROJ. I-74-1(34)
LOADING HS20 & ALT.

LETTERING FOR NAME PL
SEE STANDARD 2113-1 FOR DETAILS

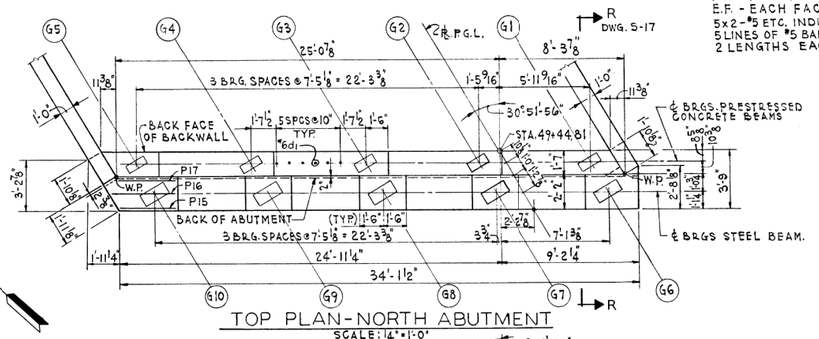


ELEVATION
SCALE: 1/4"=1'-0"

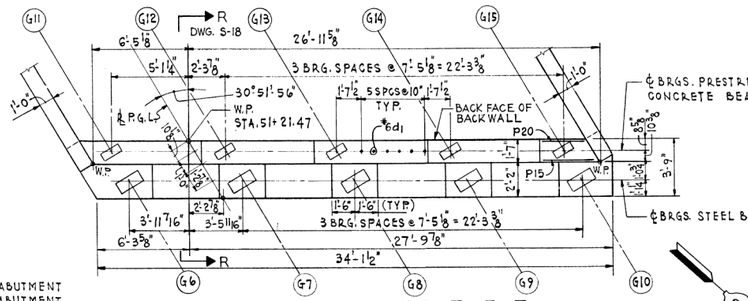


ELEVATION
SCALE: 1/4"=1'-0"

ABBREVIATIONS:
N.F. - NEAR FACE
F.F. - FAR FACE
E.F. - EACH FACE
5x2-#5 ETC. INDICATES 5 LINES OF #5 BARS WITH 2 LENGTHS EACH.

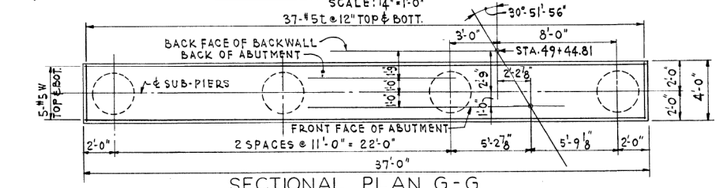


TOP PLAN-NORTH ABUTMENT
SCALE: 1/4"=1'-0"

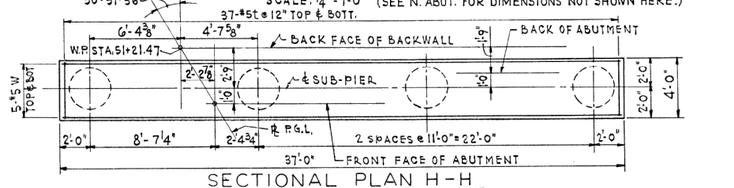


TOP PLAN-SOUTH ABUTMENT
SCALE: 1/4"=1'-0" (SEE N. ABUT. FOR DIMENSIONS NOT SHOWN HERE.)

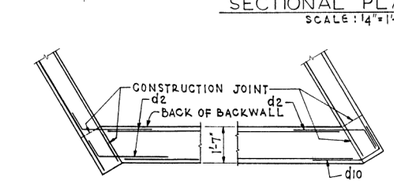
SECTION J-J
SCALE: 3/8"=1'-0"



SECTIONAL PLAN G-G
SCALE: 1/4"=1'-0"

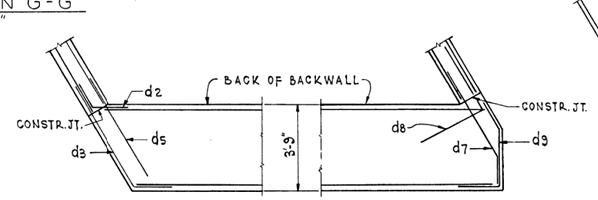


SECTIONAL PLAN H-H
SCALE: 1/4"=1'-0"



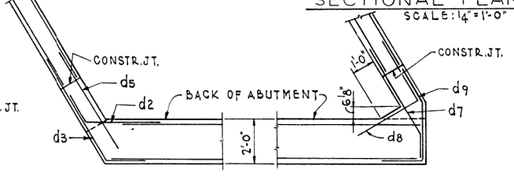
SECTION A-A
SCALE: 3/8"=1'-0"

SECTION D-D
SCALE: 3/8"=1'-0"



SECTION B-B
SCALE: 3/8"=1'-0"

SECTION E-E
SCALE: 3/8"=1'-0"



SECTION C-C
SCALE: 3/8"=1'-0"

SECTION F-F
SCALE: 3/8"=1'-0"

NOTES:
SPACE REINFORCEMENT IN ABUTMENT TO MISS ANCHOR BOLTS.
POUR STEPS MONOLITHICALLY WITH ABUT. WALL.
WORK THIS SHEET WITH DWG. S-16, S-17 & S-18.
FOR BILL OF MATERIAL AND BAR LIST SEE DWG. S-17 & 18.
FOR TYPICAL NORTH ABUT. SECTION SEE DWG. S-17.
FOR TYPICAL SOUTH ABUT. SECTION SEE DWG. S-18.

ABUTMENT DETAILS

F.A.I. 74 - SECTION 81-1HB-4

F.A.I. 74 UNDER 27TH STREET CONNECTION

ROCK ISLAND COUNTY

STATION 359+28.44

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY E.A. BEAL
DRAWN BY AL. BUROKAS
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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CHECKED - AJK | REVISED -
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PLOT DATE = 3/27/2017 | CHECKED - AJK | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – ABUTMENT DETAILS
S.N. 081-0107
SHEET NO. SB 9 OF SB9 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	1253
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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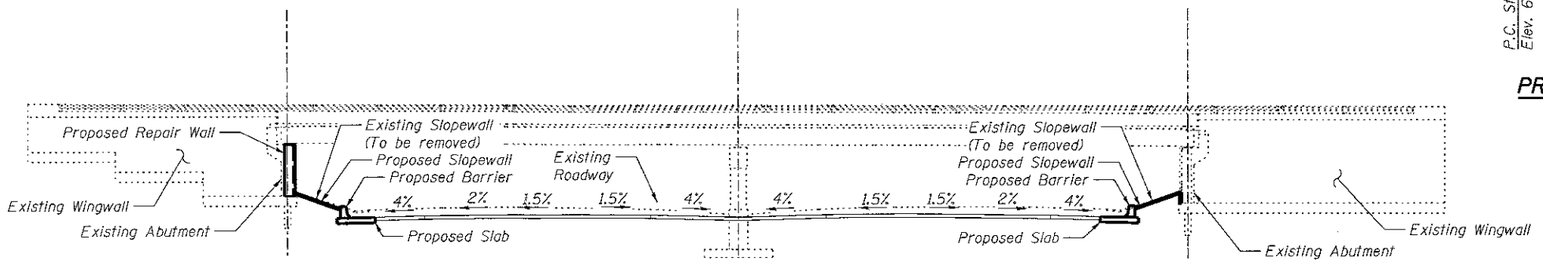
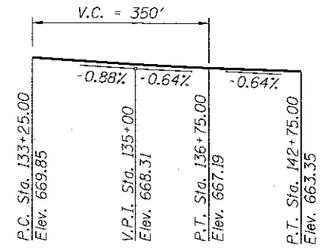


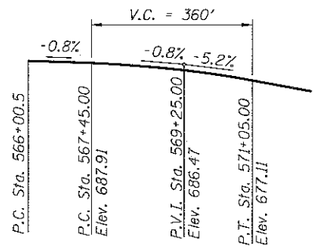
ELEVATION

Looking Upstation



PROFILE GRADE F.A.I 74

(Along ℄ F.A.I. 74)



PROFILE GRADE 27TH STREET NB

(Along ℄ 23RD Ave.)

DESIGN SPECIFICATIONS

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

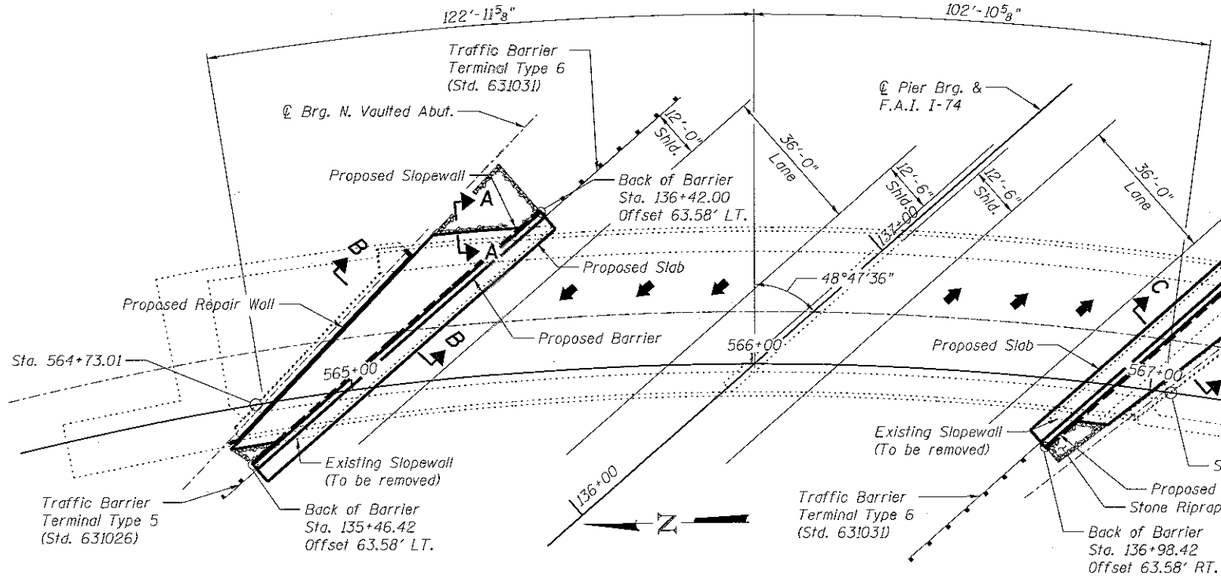
DESIGN STRESSES

FIELD UNITS

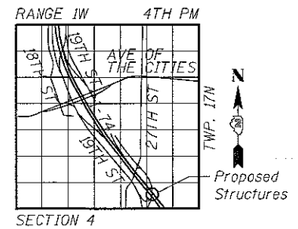
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

ANDREW J. KEASCHALL
081-006764
LICENSED
STRUCTURAL
ENGINEER
OF ILLINOIS

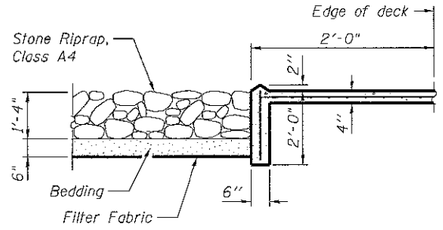
EXPIRATION DATE 11-30-2018
DATE: 3/27/17



PLAN



LOCATION SKETCH



SECTION A-A

GENERAL PLAN AND ELEVATION
I-74 UNDER 27TH STREET NB
F.A.I. ROUTE 74 SECTION 81-1HB-2
ROCK ISLAND COUNTY
STATION 136+57.27
STRUCTURE NO. 081-0108

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

S.N. 081-0108
SHEET NO. SC1 OF SC13 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	1254
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

081-0108-C00CD-001-General_Plan_and_Elevation.dgn
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4/13/2017

GENERAL NOTES

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

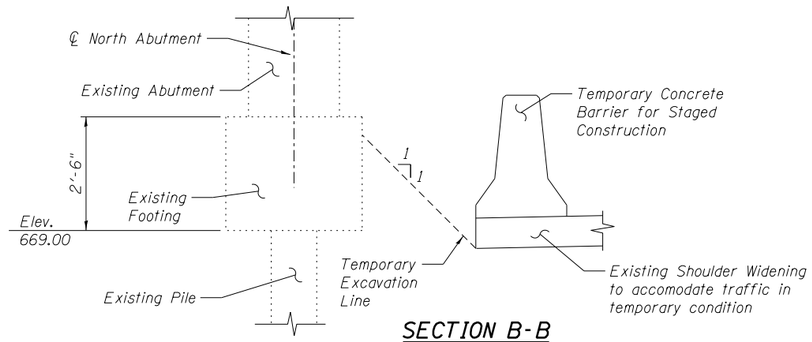
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not because for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

3. Slope wall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 X W4.0, weighing 58 lbs. per 100 sq. ft.

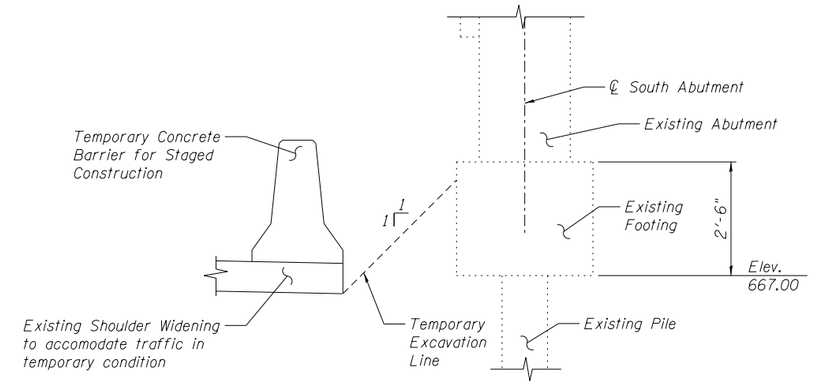
INDEX OF SHEETS

TOTAL BILL OF MATERIAL

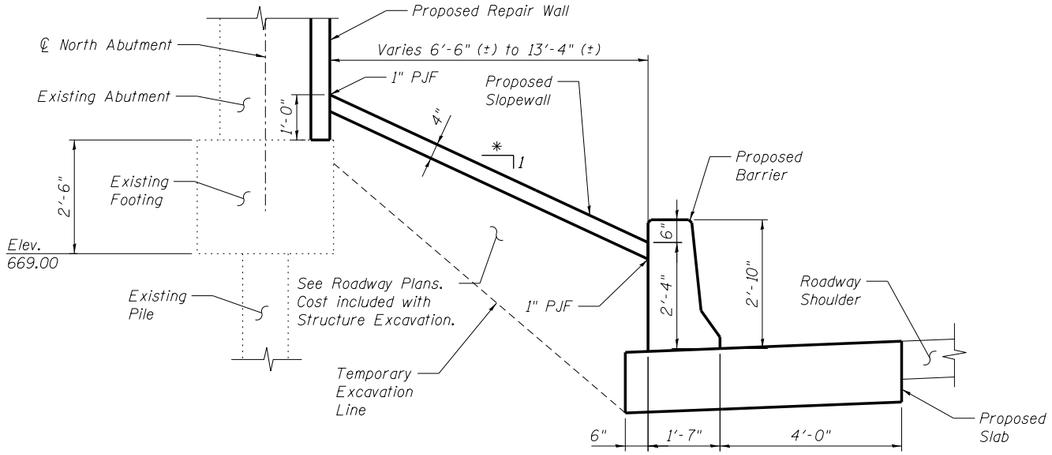
ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq Yd	42
Filter Fabric	Sq Yd	42
Joint or Crack Filling	Pound	10
Slope Wall Removal	Sq Yd	246
Structure Excavation	Cu Yd	143
Concrete Structures	Cu Yd	20.7
Concrete Superstructure	Cu Yd	70.1
Reinforcement Bars, Epoxy Coated	Pound	12,780
Concrete Sealer	Sq Ft	908
Slope Wall 4 Inch	Sq Yd	156
Structural Repair of Concrete (Depth Equal to or less than 5 Inches)	Sq Ft	115
Structural Repair of Concrete (Depth greater than 5 Inches)	Sq Ft	12
Concrete Removal (Special)	Sq Yd	48
Relocating Name Plates	Each	1
Temporary Shoring and Cribbing	Each	6



SECTION B-B
(Pre-Stage)

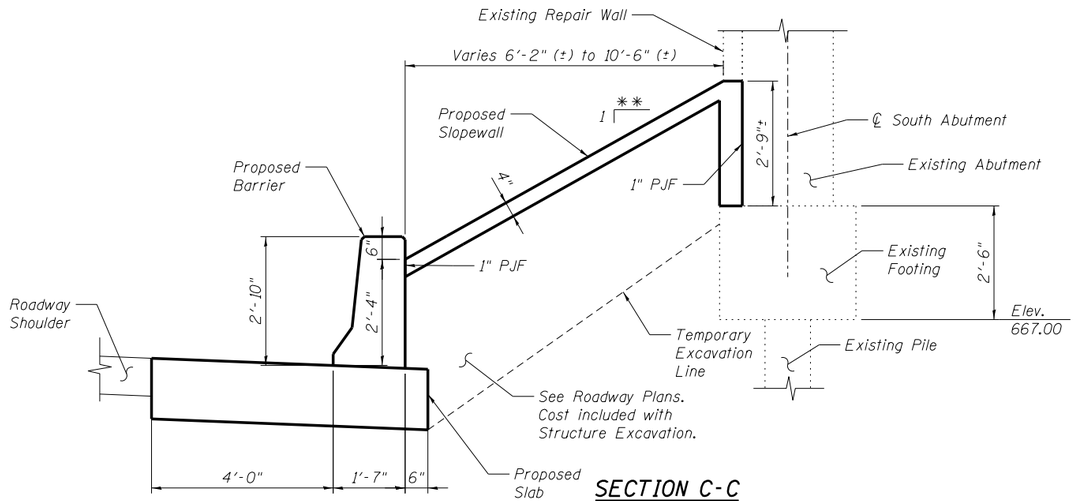


SECTION C-C
(Pre-Stage)



SECTION B-B

* Varies 2.2(±) to 3.7(±)



SECTION C-C

** Varies 1.6(±) to 2.7(±)

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, BILL OF MATERIAL, SECTIONS
S.N. 081-0108
SHEET NO. SC2 OF SC13 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	1255
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

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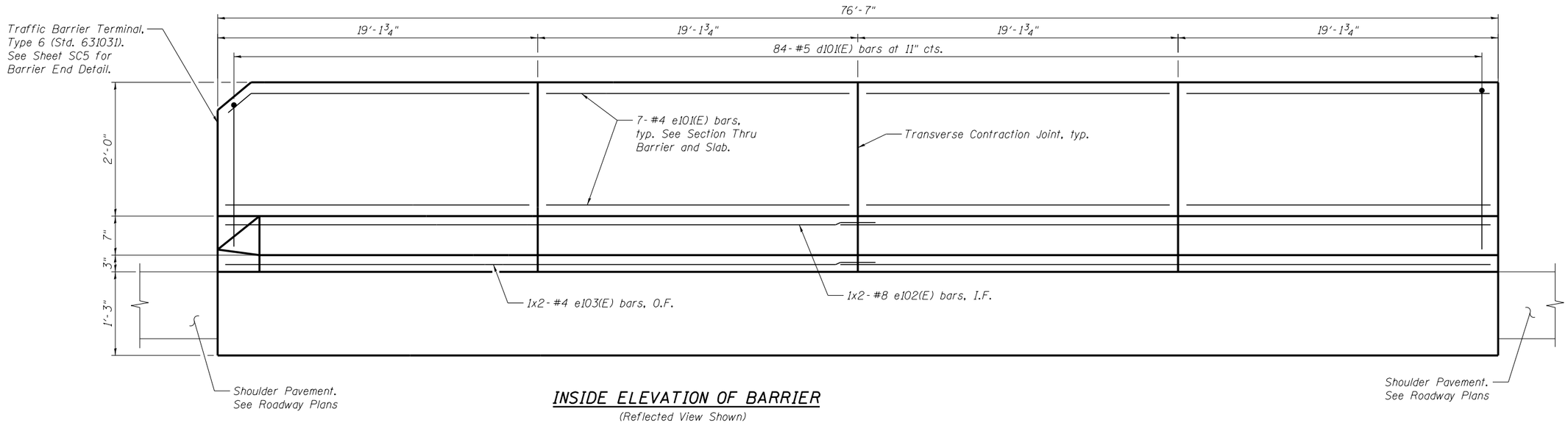
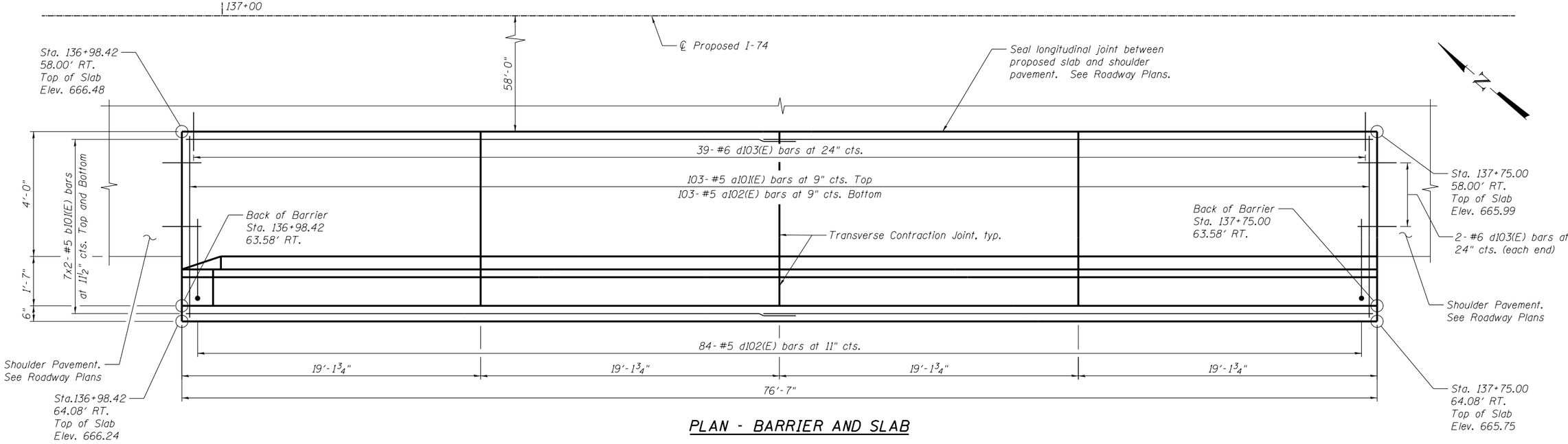


INSIDE ELEVATION OF BARRIER

(Reflected View Shown)



PLAN - BARRIER AND SLAB

MINIMUM BAR LAP

#4 bar = 2'-8"
#5 bar = 3'-3"
#8 bar = 6'-9"

NOTES:

1. For Section thru Barrier and Slab, Bill of Material, and Transverse Contraction Joint Detail, see Sheet SC5.
2. Bars indicated thus 7x2-#5 etc. indicates 7 lines of bars with 2 lengths per line.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EASTBOUND BARRIER AND SLAB PLAN AND ELEVATION
S.N. 081-0108
SHEET NO. SC3 OF SCI3 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	1256
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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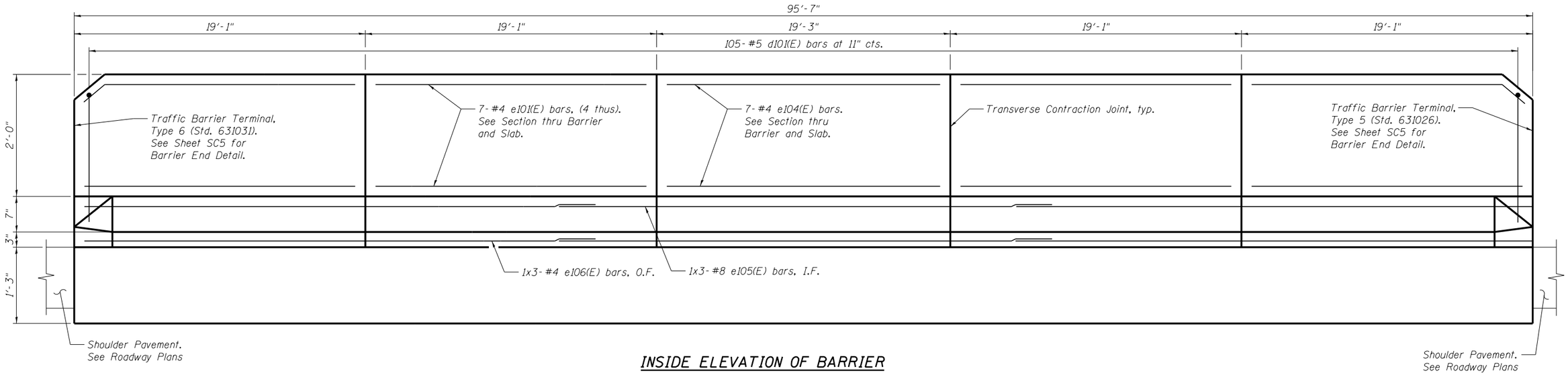
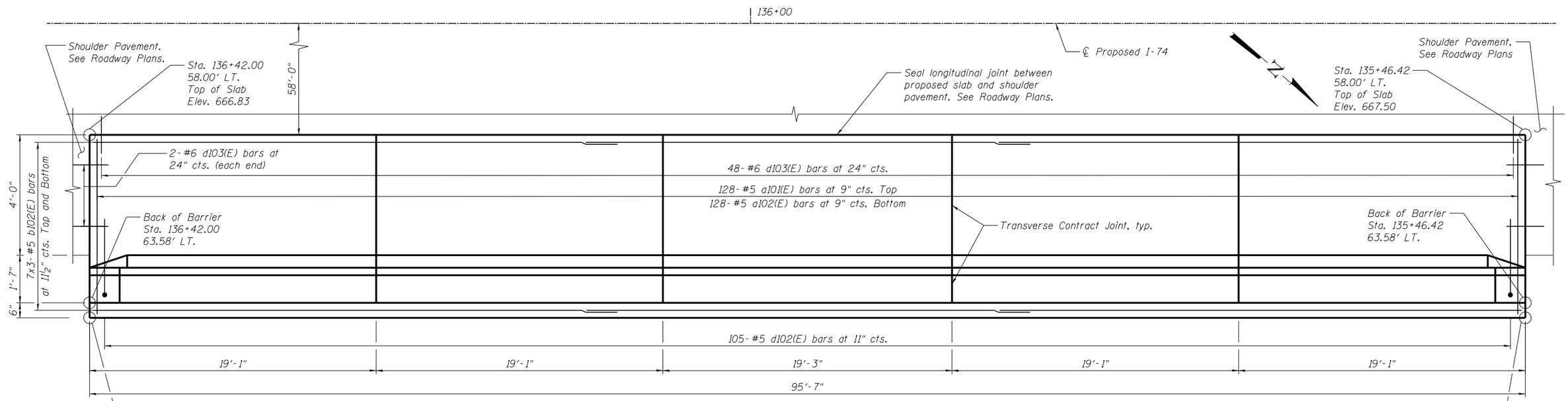


INSIDE ELEVATION OF BARRIER

(Reflected View Shown)



PLAN - BARRIER AND SLAB

MINIMUM BAR LAP

#4 bar = 2'-8"
#5 bar = 3'-3"
#8 bar = 6'-9"

NOTES:

1. For Section thru Barrier and Slab, Bill of Material, and Transverse Contraction Joint Detail, see Sheet SC5.
2. Bars indicated thus 7x3-#5 etc. indicates 7 lines of bars with 3 lengths per line.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WESTBOUND BARRIER AND SLAB PLAN AND ELEVATION
S.N. 081-0108
SHEET NO. SC4 OF SC13 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	1257
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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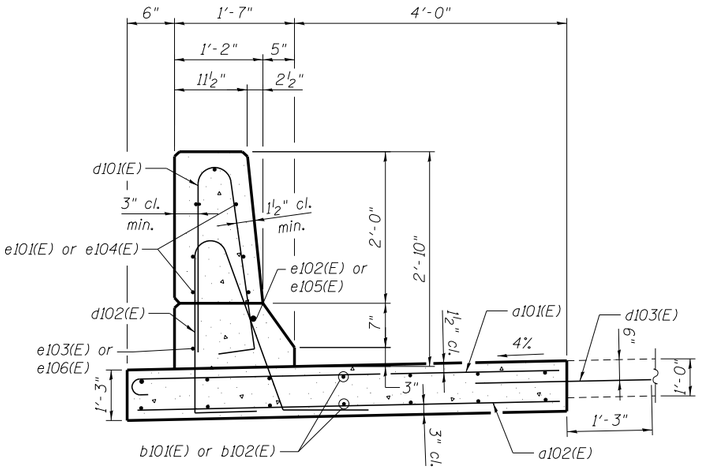
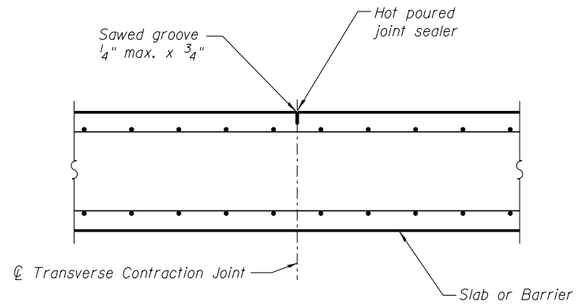
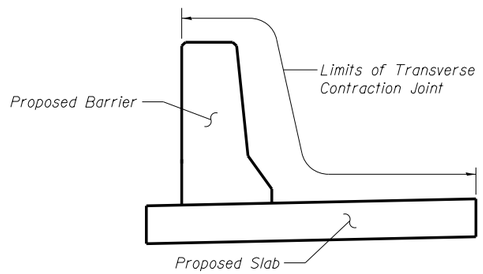


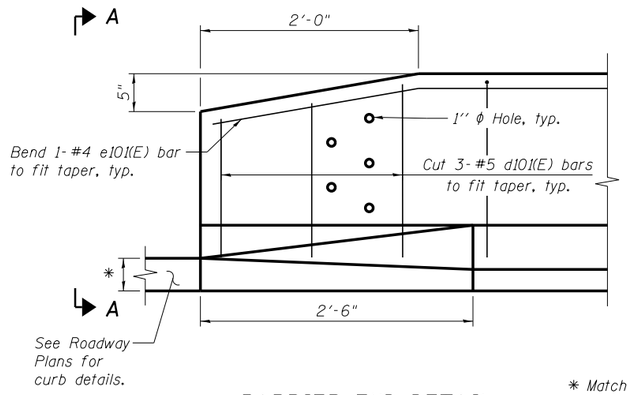
SECTION THRU BARRIER AND SLAB



TRANSVERSE CONTRACTION JOINT DETAIL



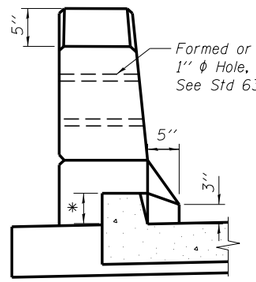
TRANSVERSE CONTRACTION JOINT LIMITS



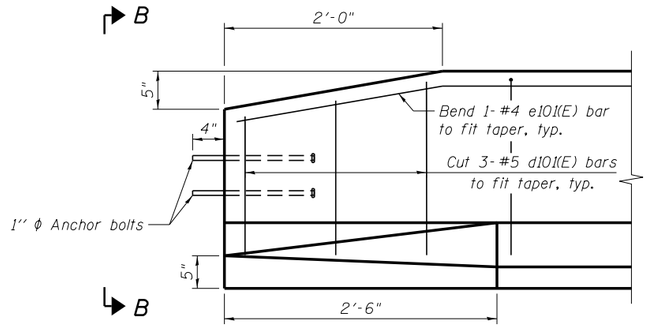
BARRIER END DETAIL

at Traffic Barrier Terminal, Type 6

* Match curb height. See Roadway Plans.

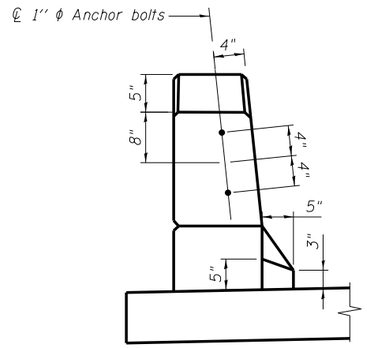


VIEW A-A

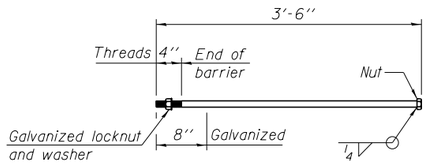


BARRIER END DETAIL

at Traffic Barrier Terminal, Type 5

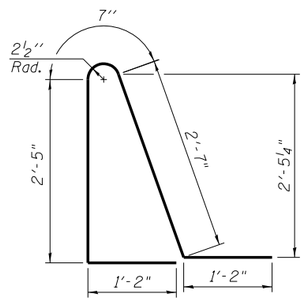


VIEW B-B

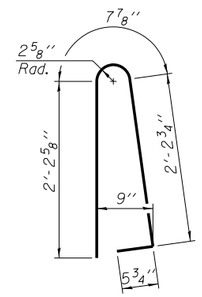


1"ϕ ANCHOR BOLT

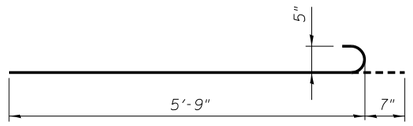
(Cost included with Concrete Superstructure)



BAR d102(E)



BAR d101(E)



BAR a101(E)

NOTES:

1. Transverse Contraction Joints shall be sawed per Article 420.05(c) of the Standard Specification. Cost included with Concrete Superstructure.
2. Transverse Contraction Joints shall be sealed per Articles 420.12 and 1050.02 of the Standard Specification. Cost included with Concrete Superstructure.

BILL OF MATERIAL EASTBOUND

Bar	No.	Size	Length	Shape
a101(E)	103	#5	6'-4"	
a102(E)	103	#5	5'-9"	
b101(E)	28	#5	39'-9"	
d101(E)	84	#5	5'-7"	
d102(E)	84	#5	7'-11"	
d103(E)	43	#6	2'-6"	
e101(E)	28	#4	18'-9"	
e102(E)	2	#8	41'-6"	
e103(E)	2	#4	39'-6"	
Concrete Superstructure			Cu. Yd.	31.2
Reinforcement Bars, Epoxy Coated			Pound	4,430

BILL OF MATERIAL WESTBOUND

Bar	No.	Size	Length	Shape
a101(E)	128	#5	6'-4"	
a102(E)	128	#5	5'-9"	
b102(E)	42	#5	33'-11"	
d101(E)	105	#5	5'-7"	
d102(E)	105	#5	7'-11"	
d103(E)	52	#6	2'-6"	
e101(E)	28	#4	18'-9"	
e104(E)	7	#4	18'-11"	
e105(E)	3	#8	36'-3"	
e106(E)	3	#4	33'-7"	
Concrete Superstructure			Cu. Yd.	38.9
Reinforcement Bars, Epoxy Coated			Pound	5,570

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205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0108-C00CD-005-Barrier_Slab_Details.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - TPS	REVISED -
MODEL: *MODEL	PLOT SCALE =	DRAWN - PRT	REVISED -
	PLOT DATE = 3/22/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BARRIER AND SLAB DETAILS
S.N. 081-0108
SHEET NO. SC5 OF SC13 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	1258
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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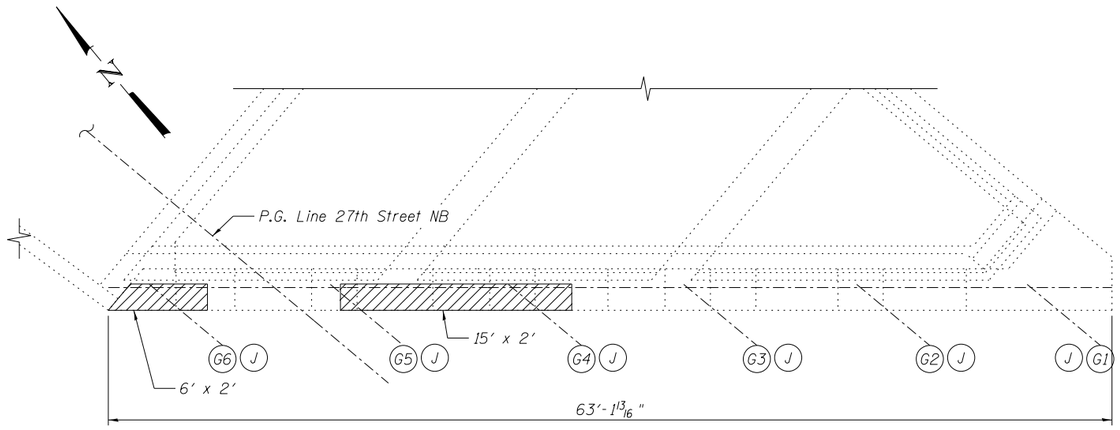
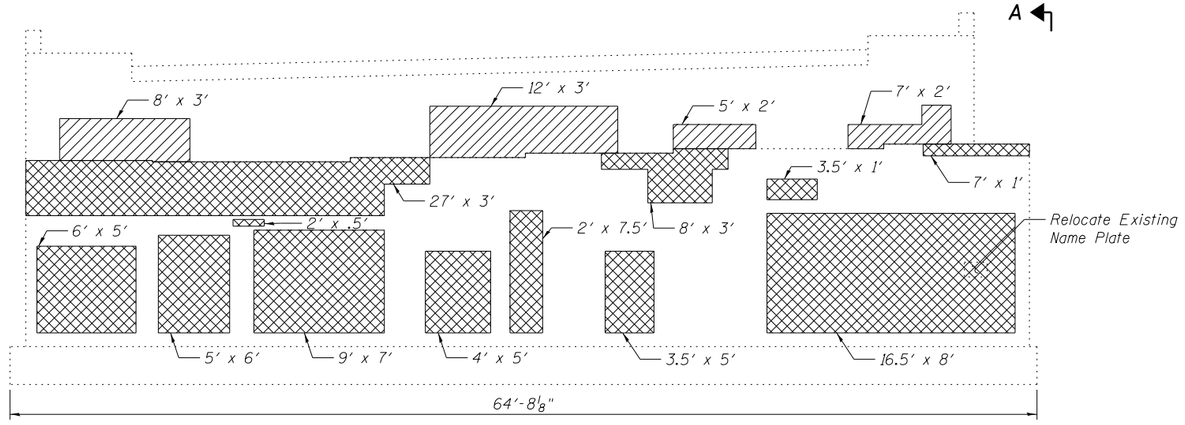


NORTH ABUTMENT - PLAN



NORTH ABUTMENT - ELEVATION

A

BILL OF MATERIAL - NORTH ABUTMENT

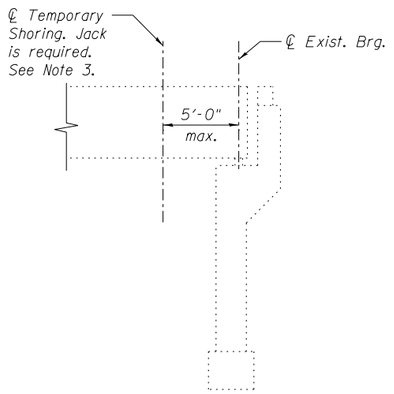
ITEM	UNIT	TOTAL
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	115
Structural Repair of Concrete (Depth Greater Than 5 Inches)	Sq. Ft.	12
Concrete Removal (Special)	Sq. Yd.	48
Relocating Name Plates	Each	1
Temporary Shoring and Cribbing	Each	6

NOTES:

1. Actual repair and removal areas shall be determined in the field by the Engineer.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer anchorage system. Cost included with Concrete Removal (Special).
3. See Special provisions for Temporary Shoring and Cribbing. Temporary Shoring and Cribbing shall be installed before Concrete Removal commences. Contractor shall consider all possible load cases for the design of Temporary Shoring and Cribbing. Temporary Shoring and Cribbing shall be designed to support minimum dead, live, impact, and laterals loads as specified below.

   North Abutment:
   Minimum Dead Load = 64.2 kips (unfactored, per girder)
   Minimum Live Load with Impact = 56.1 kips (unfactored, per girder)
   Minimum Lateral Load = 22.5 kips (unfactored, acting on all 6 existing girders)

   The minimum loads specified above assume the centerline of the shoring is 5 ft or less from the centerline of the existing bearings at the abutment. If the Contractor proposes a distance greater than 5 ft, the Contractor shall recalculate dead, live, impact, and lateral loads and submit to the Engineer for review and approval.
4. Concrete removal and repairs shall be completed after the removal of the existing slopewall but prior to the installation of the new slopewall.



VIEW A-A

LEGEND

- (J) Temporary Shoring
- Structural Repair of Concrete, see Note 1
- Concrete Removal (Special), see note 1

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0108-C00CD-006-Concrete_Repair.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - AJK/TPS	REVISED -
MODEL: $MODEL	PLOT SCALE =	DRAWN - KMS	REVISED -
	PLOT DATE = 3/22/2017	CHECKED - AJK/TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE REMOVAL AND REPAIR DETAILS
S.N. 081-0108
SHEET NO. SC6 OF SCI3 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	1259
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

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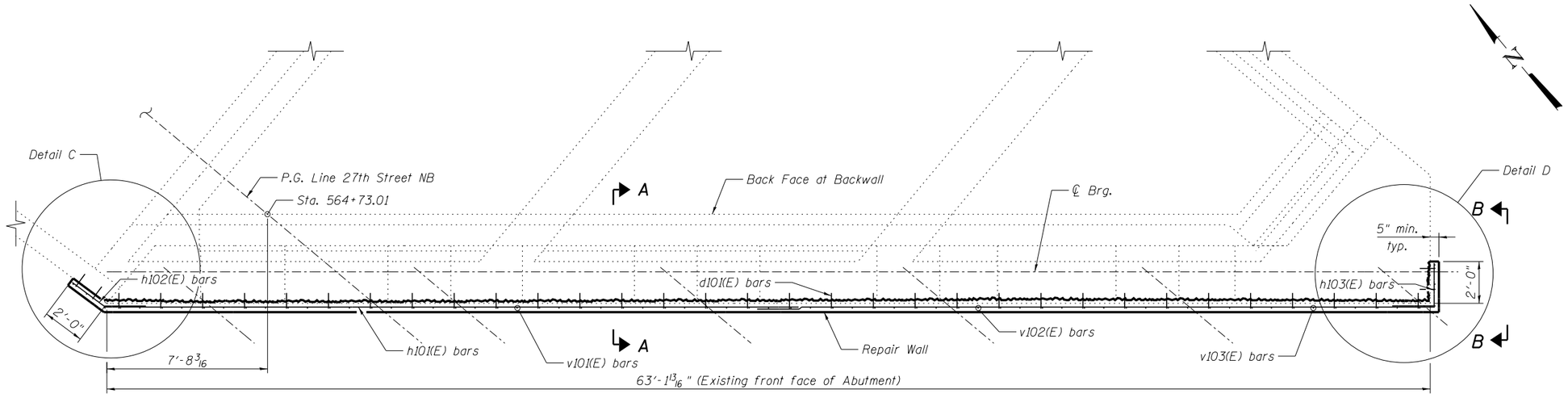


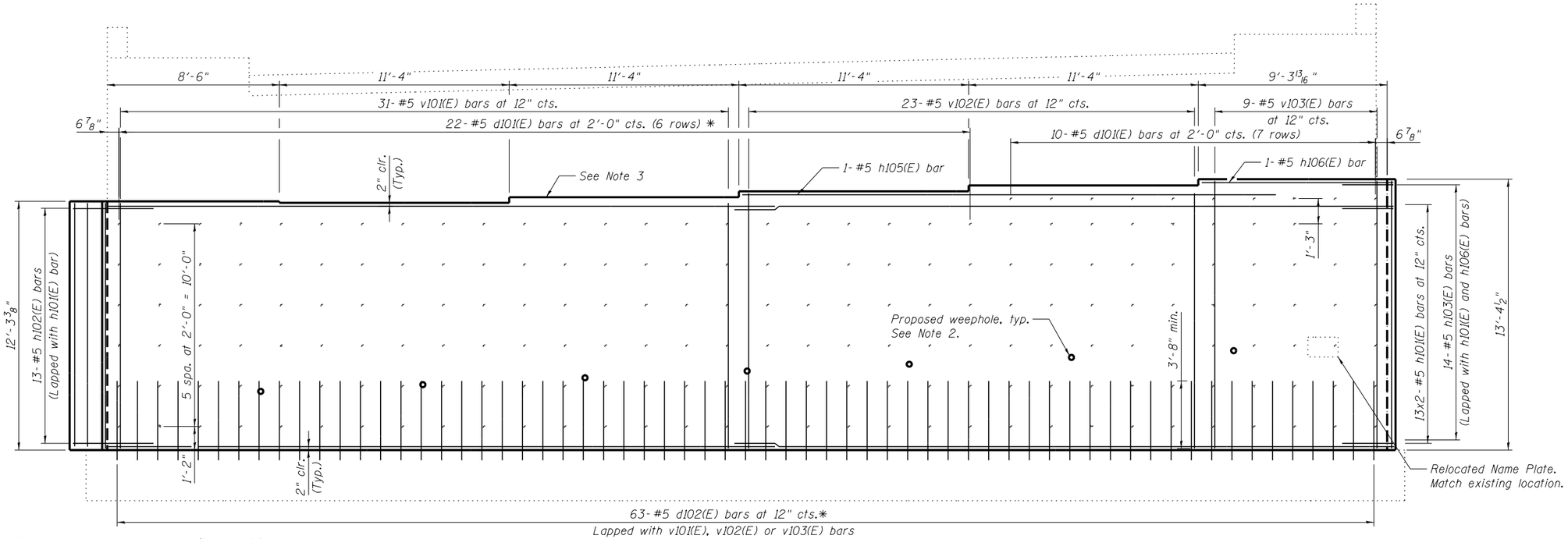
TOP PLAN

NOTES:

1. See Sheet SC9 for Section A-A. View B-B, and Details C and D.
2. Match size and location of existing weepholes. Existing weepholes shall be cleaned if clogged. Cost of weepholes and cleaning included with Concrete Structures.
3. Match existing bridge seat elevations at front face of existing abutment.

MINIMUM BAR LAP

#5 bar = 3'-8"



ELEVATION

(Looking Northeast)

*Drill and grout bars according to Article 584 of the Standard Specifications with a minimum embedment of 6" (d101(E)) or 7½" (d102(E)). Cost included with Reinforcement Bars, Epoxy Coated.

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Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0108-C00CD-007-Repair_Wall_North_Plan_and_Elev.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - TPS	REVISED -
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MODEL: $MODEL	PLOT DATE = 3/22/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR WALL PLAN AND ELEVATION – NORTH ABUTMENT
S.N. 081-0108
SHEET NO. SC7 OF SC13 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	1260
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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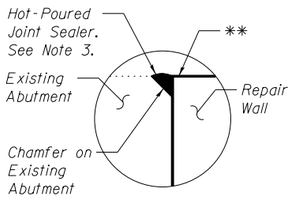
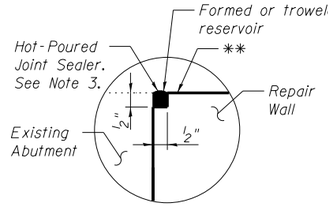


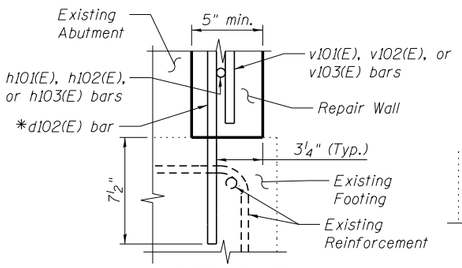
DETAIL E

Top Edge of Existing
Abutment remains intact



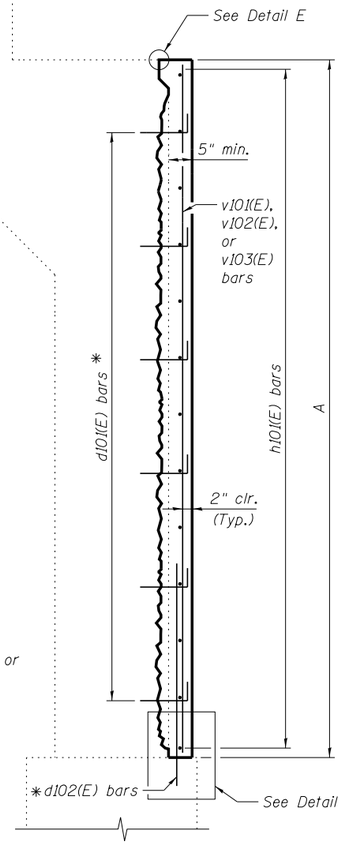
DETAIL E

Top Edge of Existing
Abutment removed

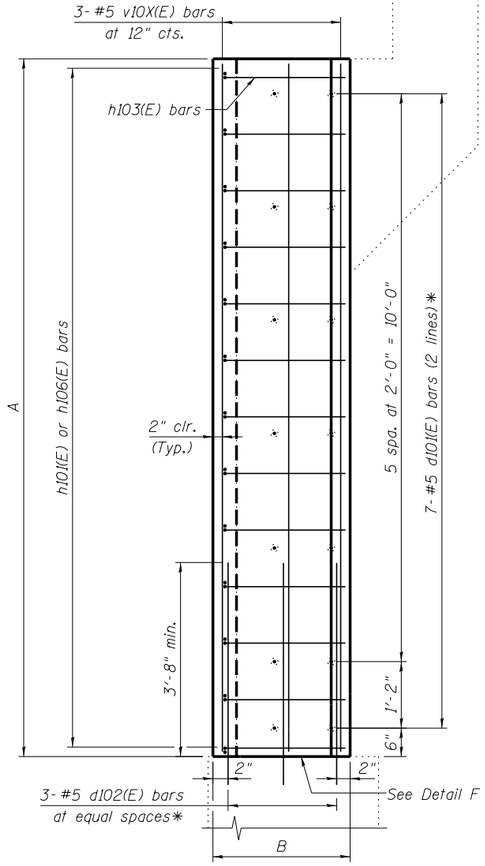


DETAIL F

(Section A-A shown,
View B-B similar)

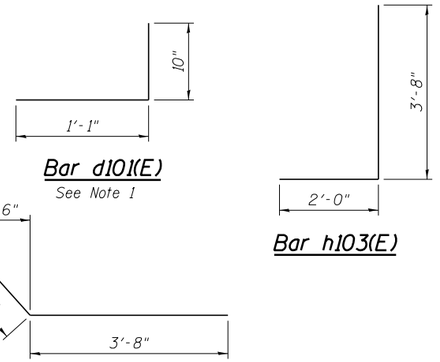


SECTION A-A



VIEW B-B

(East side of North Abutment Shown, West side similar)



ABUTMENT DIMENSIONS

Location	A	B	v10X(E)
North Abutment, West Side	12'-3 3/8"	2'-1 5/8"	v101(E)
North Abutment, East Side	13'-4 1/2"	2'-5"	v103(E)

NOTES:

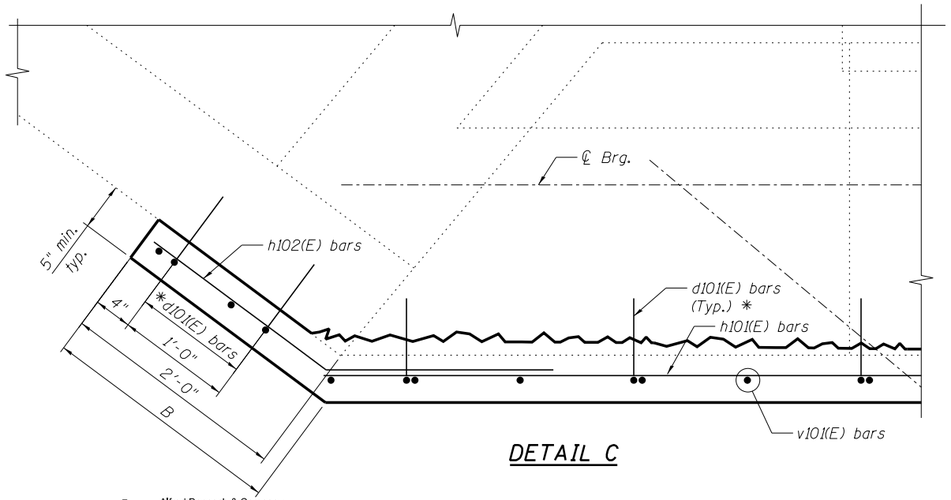
1. The 1'-1" dimension of the d101(E) bar assumes 6" of embedment and 4" of concrete removal. Cut as required to fit variable depth removal areas.
2. Concrete Sealer shall be applied to the front face, top face, and ends of the Repair Wall.
3. Hot-Poured Joint Sealer per Article 452 of the Standard Specifications. Cost included with Joint or Crack Filling.

* Drill and grout bars according to Article 584 of the Standard Specifications with a minimum embedment of 6" (d101(E)) or 7½" (d102(E)). Cost included with Reinforcement Bars, Epoxy Coated.

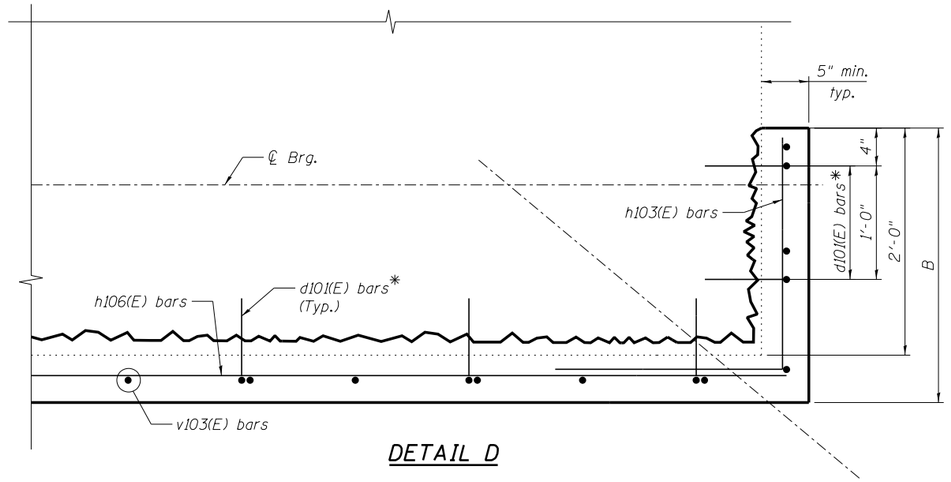
** Match existing bridge seat elevation at front face of existing abutment

NORTH ABUTMENT REPAIR WALL BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d101(E)	230	#5	1'-11"	
d102(E)	69	#5	4'-6"	
h101(E)	26	#5	33'-7"	
h102(E)	13	#5	5'-7"	
h103(E)	14	#5	5'-8"	
h105(E)	1	#5	26'-4"	
h106(E)	1	#5	9'-5"	
v101(E)	34	#5	11'-10"	
v102(E)	23	#5	12'-5"	
v103(E)	12	#5	13'-0"	
Joint or Crack Filling			Pound	10
Concrete Structures			Cu. Yd.	20.7
Reinforcement Bars, Epoxy Coated			Pound	2,780
Concrete Sealer			Sq. Ft.	908



DETAIL C



DETAIL D

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0108-C00CD-009-Repair_Wall_Details.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - TPS	REVISED -
MODEL: $MODEL	PLOT SCALE =	DRAWN - KMS	REVISED -
	PLOT DATE = 3/22/2017	CHECKED - TPS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REPAIR WALL DETAILS
S.N. 081-0108
SHEET NO. SC8 OF SC13 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	1261
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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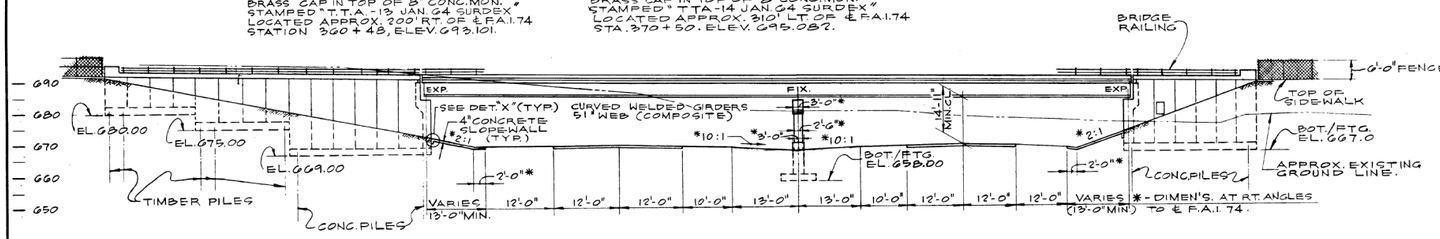
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-IHB-5	ROCK ISLAND	438	161
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74-1(410)		

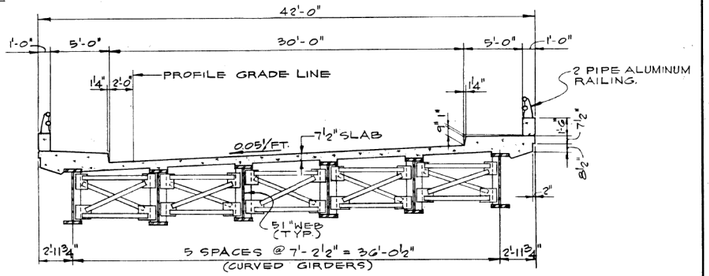
DWG. S-45

BENCH MARK A-13
BRASS CAP IN TOP OF 8" CONC. MON. STAMPED "T.T.A. -13 JAN. 64 SURDEX" LOCATED APPROX. 200' RT. OF ℄ F.A.I. 74 STATION 360+48, ELEV. 693.101.

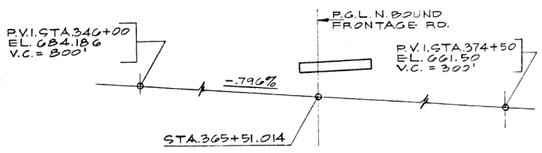
BENCH MARK A-14
BRASS CAP IN TOP OF 8" CONC. MON. STAMPED "T.T.A-14 JAN. 64 SURDEX" LOCATED APPROX. 310' LT. OF ℄ F.A.I. 74 STA. 370+50. ELEV. 695.082.



ELEVATION
SCALE: 1" = 20'-0"



SECTION A-A (RADIAL)
SCALE: 3/16" = 1'-0"



PROFILE GRADE - F.A.I. 74

HORIZONTAL CURVE DATA (N.B. FRONTAGE ROAD)
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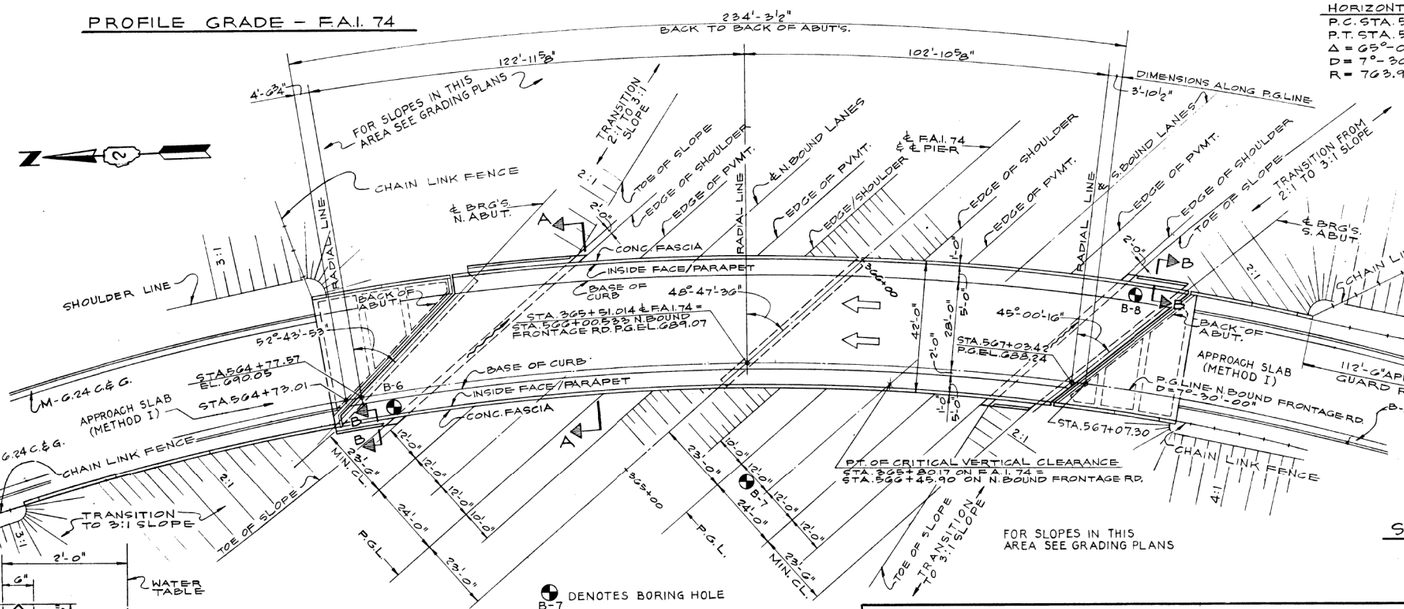
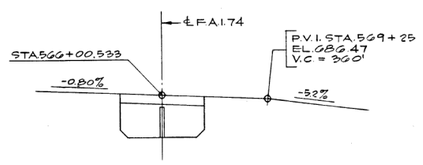
P.T. STA. 568+48.16
Δ = 65°-01'-54"
D = 7°-30'-00"
R = 763.94'



B-7 DENOTES BORING HOLE

PLAN
SCALE: 1" = 20'-0"

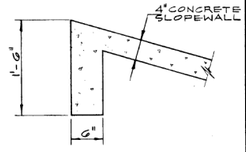
SECTION B-B
SCALE: 1" = 1'-0"



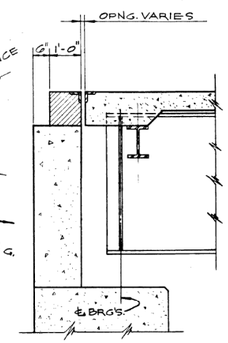
PROFILE GRADE - N.B. FRONTAGE RD.
ROAD CLASSIFICATION 655-M-40 (CLASS 0S-3)

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Carl E. T. Summa
Engineer of Bridge & Traffic Structures
William G. Horn ***

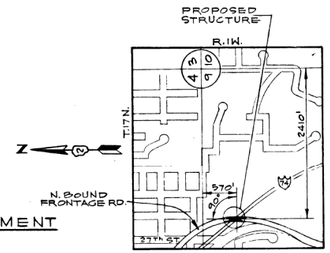
*** CALCULATED QUANT. - 409,494 LBS.



DETAIL X
SCALE: 1" = 1'-0"



SECTION THRU ABUTMENT
SCALE: ½" = 1'-0"



LOCATION PLAN

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL
CLASS "A" EXCAVATION FOR STRUCTURES *	CU.YD.	-	1,794	1,794
PROTECTIVE COAT	SQ.YD.	1,460	-	1,460
CLASS "X" CONCRETE	CU.YD.	345.3	1,024.9	1,370.2
FURNISHING & ERECTING STRUCTURAL STEEL	L. SUM	0.2	-	0.2
ALUMINUM RAILING, TYPE L**	LIN.FT.	462	211	673
REINFORCEMENT BARS	POUND	80,230	116,180	196,410
FURNISHING CREOSOTED PILES, 20.1 FT. TO 38 FT.	LIN.FT.	-	806	806
FURNISHING CONCRETE PILES	LIN.FT.	-	3,730	3,730
DRIVING TIMBER PILES	LIN.FT.	-	806	806

ITEM	UNIT	SUPER STRUCT.	SUB STRUCT.	TOTAL
DRIVING CONCRETE PILES	LIN.FT.	-	3,730	3,730
TEST PILE (TIMBER)	EACH	-	1	1
TEST PILE (CONCRETE)	EACH	-	2	2
NAME PLATES	EACH	-	2	2
SLOPE WALL, 4 INCH	SQ.YD.	-	270	270
PIPE UNDERDRAINS, PERFORATED CORRUGATED STEEL PIPE, 6"	LIN.FT.	-	221	221
BRIDGE SEAT SEALANT	L. SUM	-	-	0.3
PERMANENT BENCH MARKS, TYPE I	EACH	-	1	1
STUD SHEAR CONNECTORS	EACH	2,888	-	2,888
POROUS GRANULAR BACKFILL	CU.YD.	-	298	298

* INCLUDES 37 CU.YD. FOR SLOPE WALL EXCAVATION. ** TYPE M RAILING IS AN ACCEPTABLE ALTERNATE

DESIGN LOADING:
HS 20-44
DESIGN STRESSES:
f_c = 1400 P.S.I. EXCEPT AS FOLLOWS:
f_c = 1700 P.S.I. DECK SLABS ONLY.
f_c = 1000 P.S.I. CLOSED ABUT'S. ONLY.
f_s = 20000 P.S.I. A36 STRUCTURAL STEEL.
f_c = 20000 P.S.I. REINFORCEMENT BARS.
v = 75 P.S.I. ALLOWABLE SHEAR IN FOOTING.
ALLOWABLE L.L. DEFLECTION - $\frac{L}{1200}$ (COMPOSITE)
n = 10
FUTURE WEARING SURFACE = 25 P.S.F.

GENERAL PLAN & ELEVATION
F.A.I. 74 SECTION 81-IHB-5
F.A.I. 74 UNDER NORTHBOUND FRONTAGE RD.
ROCK ISLAND COUNTY
STATION 365+51.014
SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY D.D. PATEL
DRAWN BY G.P. ALLEMAN
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

Rev. 11-20-69 M.L.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0108-C00CD-010-014-Existing_Plans.dgn
MODEL: \$MODEL

USER NAME = dschriks	DESIGNED - AWH	REVISED -
	CHECKED - AJK	REVISED -
PLOT SCALE =	DRAWN - AWH	REVISED -
PLOT DATE = 3/22/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS - GPE
S.N. 081-0108
SHEET NO. SC 9 OF SC13 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	1262
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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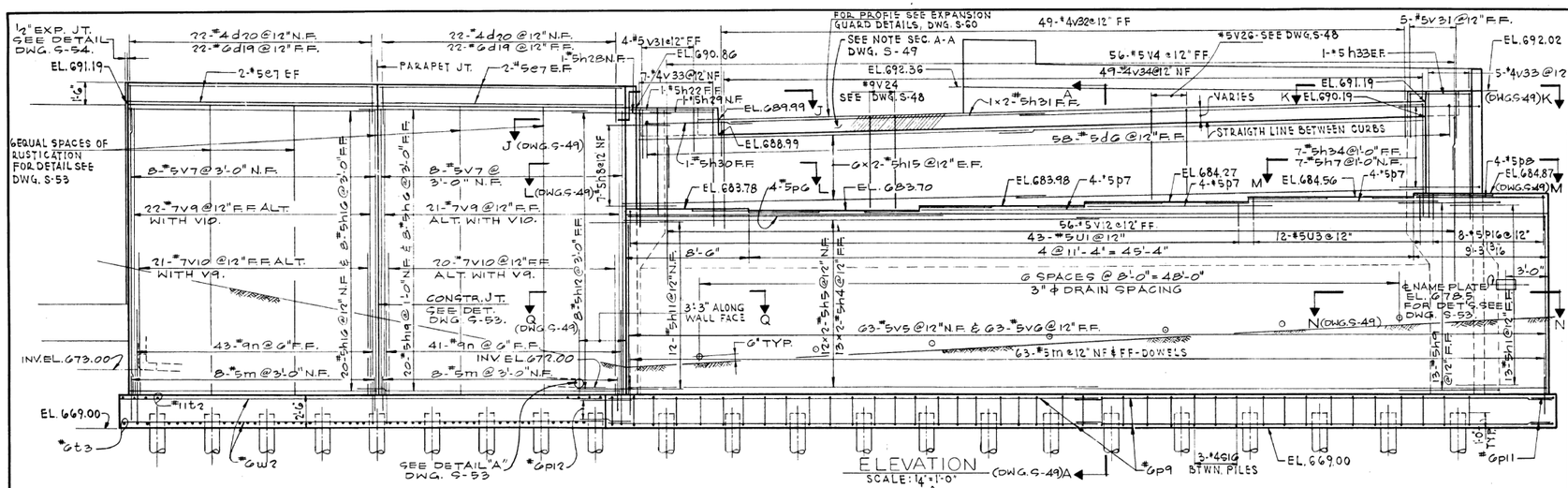
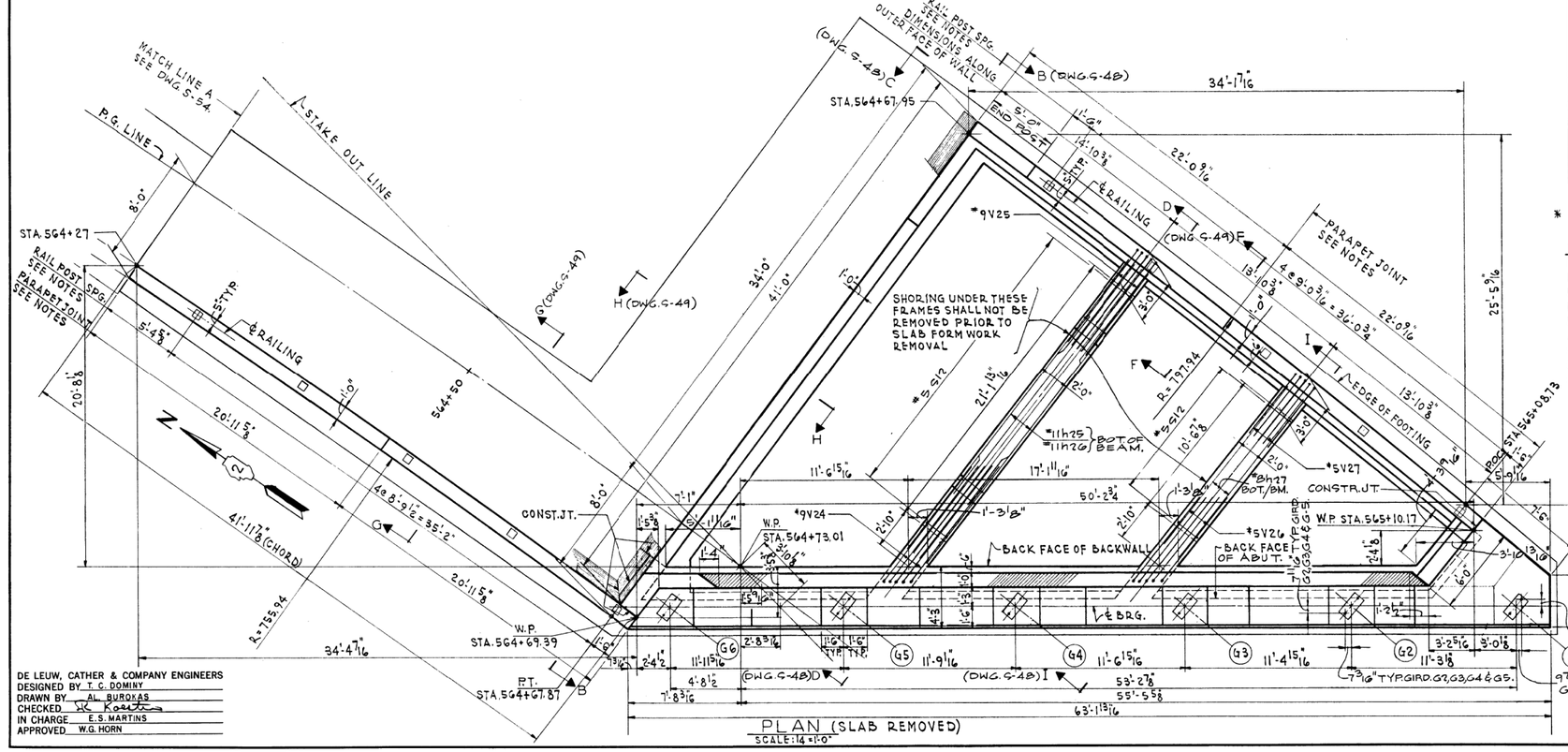
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-5	ROCK ISLAND	438	163
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-74		





BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
a15	7	#7	28'-6"	—	h4	26	#5	29'-3"	—
a16	18		30'-0"	—	h5	24		32'-6"	—
a17	1		8'-9"	—	*h6	8		21'-0"	—
a18	1		11'-0"	—	h7	7		8'-6"	—
a19	1		13'-0"	—	h8	7		6'-0"	—
a20	4		15'-0"	—	h9	13		8'-9"	—
a21	132		8'-0"	—	h10	13		21'-9"	—
a22	10		22'-9"	—	h11	13		31'-0"	—
a23	1		15'-6"	—	h12	13		41'-3"	—
a24	1		17'-6"	—	h13	20		7'-6"	—
a25	1		19'-6"	—	h14	13		11'-9"	—
a26	7	#7	21'-9"	—	h15	24		27'-9"	—
a27	27	#5	4'-0"	—	*h16	28		20'-8"	—
					h17	2		6'-9"	—
b10	3	#5	6'-9"	—	h18	25		35'-9"	—
b11	3		4'-0"	—	*h19	20		22'-3"	—
b12	1		25'-8"	—	*h20	8		10'-6"	—
b13	41		30'-0"	—	*h21	8		30'-6"	—
b14	2	#5	33'-0"	—	*h22	68		22'-6"	—
					h23	4		21'-9"	—
c5	44	#5	8'-4"	—	h24	38	#5	3'-6"	—
c6	1	#5	4'-3"	—	h25	4	#11	23'-0"	—
					h26	4	#11	17'-0"	—
d2	20	#4	2'-3"	—	h27	4	#8	12'-6"	—
d3	6	#4	4'-9"	—	h28	1	#5	5'-6"	—
d4	6	#6	5'-3"	—	h29	1		4'-6"	—
d5	40	#6	3'-6"	—	h30	1		5'-6"	—
d6	139	#5	2'-8"	—	h31	2		25'-0"	—
d7	40	#4	3'-0"	—	h32	1		7'-0"	—
d19	44	#6	3'-3"	—	h33	2		7'-0"	—
d20	44	#4	2'-9"	—	h34	7	#5	7'-9"	—
					h35	8	#6	3'-3"	—
e5	8	#5	21'-9"	—	h36	4	#6	21'-0"	—
e6	4	#5	4'-9"	—	h37	4	#6	4'-3"	—
e7	8	#5	20'-8"	—					

FOR CONTINUATION OF BAR LIST SEE DWG. S-49

* DENOTES BAR TO BE BENT IN FIELD TO FIT ALIGNMENT.

NOTES:
RAIL POST SPACING IS MEASURED ALONG ℄ RAIL POST ANCHORAGE.
FOR RAILING DETAILS SEE DWG. S-61.
FOR PARAPET JOINT DETAILS SEE DWG. S-56.
PARAPET JOINT SPACING MEASURED ALONG OUTER WALL FACE.
FOR ABUTMENT NOTES SEE DWG. S-46.
ALL ANCHOR BOLTS TO PROJECT 3¼" ABOVE FINISHED CONCRETE.
POUR BEARING SEAT STEPS MONOLITHICALLY WITH WALL.
SPACE REINFORCEMENT TO MISS ANCHOR BOLTS.
FOR BAR DETAIL SEE DWG. S-49.

** INCLUDES ALL ABUTMENT QUANTITIES EXCEPT FOOTING.

BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU YD	293.1
REINFORCEMENT BARS	POUND	30,790
ALUMINUM RAILING	LIN FT	81
BRIDGE SEAT SEALANT	L SUM	L SUM
NAME PLATE	EACH	1
PIPE UNDERDRAINS PEPFORATED CORR. STEEL PIPE 6"	LIN FT	80
POROUS GRANULAR BACKFILL	CU YD	117

NORTH ABUTMENT PLAN AND ELEVATION

F.A.I. 74 - SECTION 81-1HB-5
F.A.I. 74 UNDER NORTHBOUND FRONTAGE RD.

ROCK ISLAND COUNTY
STATION 365+51.014

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY T. C. DOMINY
DRAWN BY AL. BUROKAS
CHECKED W. Kosatka
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = ...\081-0108-C00CD-010-014-Existing_Plans.dgn	USER NAME = $USER$	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
MODEL: $MODEL	PLOT SCALE =	DRAWN - AWH	REVISED -
	PLOT DATE = 3/27/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – NORTH ABUTMENT PLAN AND ELEVATION
S.N. 081-0108

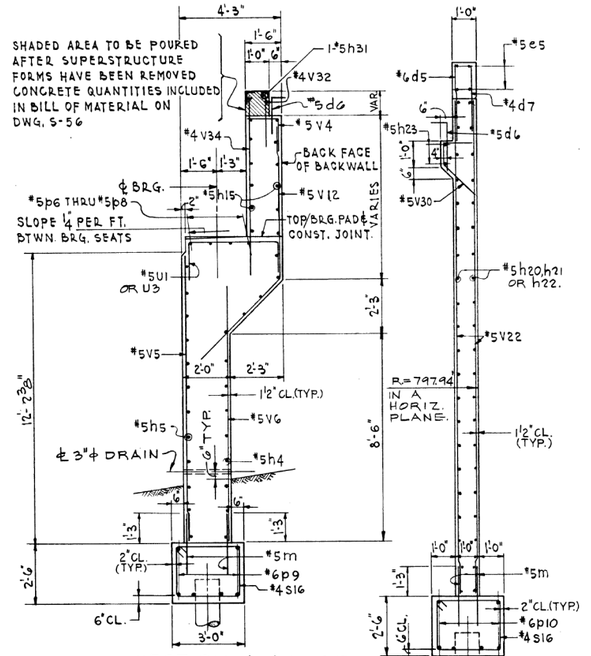
SHEET NO. SC10 OF SC13 SHEETS

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	1263
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-5	ROCK ISLAND	438	165
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT I-74		

DWG. S-49

SHADED AREA TO BE POURED AFTER SUPERSTRUCTURE FORMS HAVE BEEN REMOVED. CONCRETE QUANTITIES INCLUDED IN BILL OF MATERIAL ON DWG. S-56

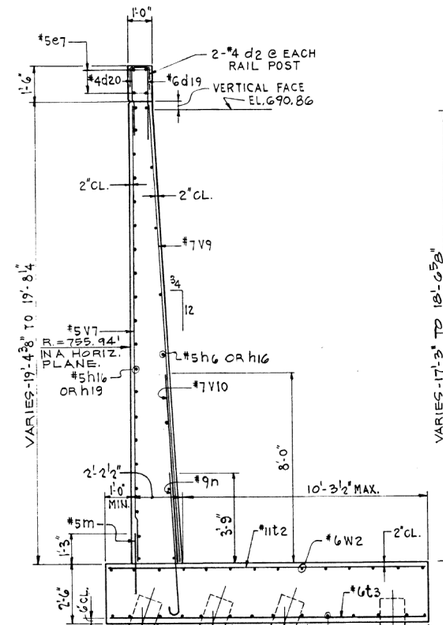


SECTION A-A (DWG.S-47)
SCALE: ⅜"=1'-0"

(MIN. REQ'D. PILE CAPACITY = 45 TONS)

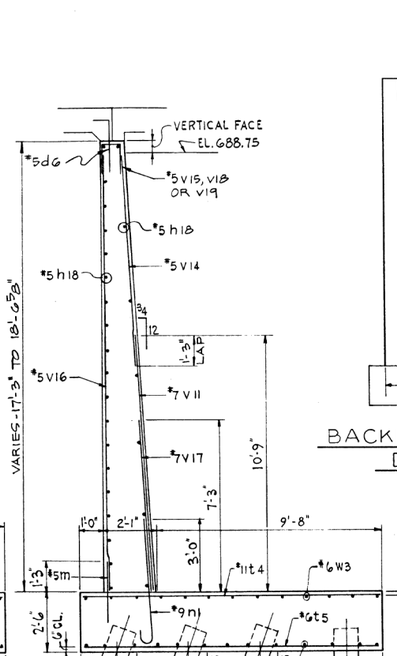
SECTION F-F (DWG.S-47)
SCALE: ⅜"=1'-0"

(MIN. REQ'D. PILE CAPACITY = 45 TONS)



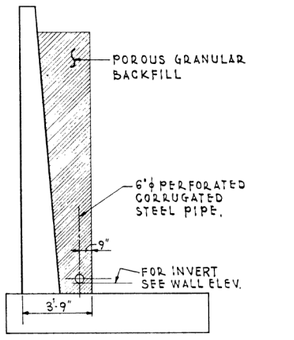
SECTION G-G (DWG.S-47)
SCALE: ⅜"=1'-0"

(MIN. REQ'D. PILE CAPACITY = 30 TONS)

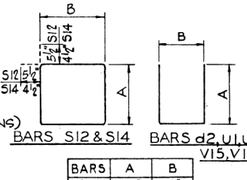


SECTION H-H (DWG.S-47)
SCALE: ⅜"=1'-0"

(MIN. REQ'D. PILE CAPACITY = 45 TONS)

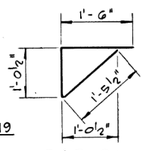


BACKFILL AND DRAINAGE DETAIL

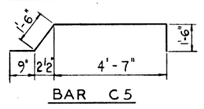


BARS S12 & S14 — BARS d2, U1, U3, V15, V18 & V19

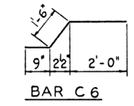
BARS	A	B
d 2	9"	9"
S 12	1'-8"	2'-8"
S 14	8"	8"
U 1	1'-4"	3'-9"
U 3	2'-1"	3'-9"
V 15	3'-6"	8"
V 18	1'-3"	8"
V 19	1'-8"	8"



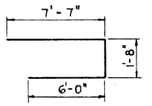
BAR a27



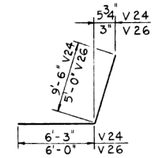
BAR C5



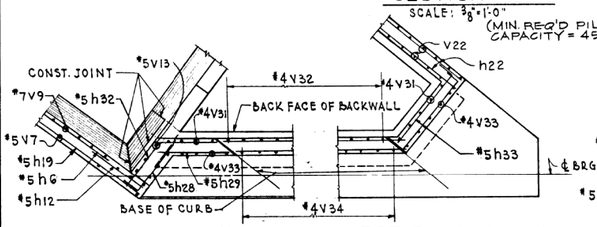
BAR C6



BAR U2

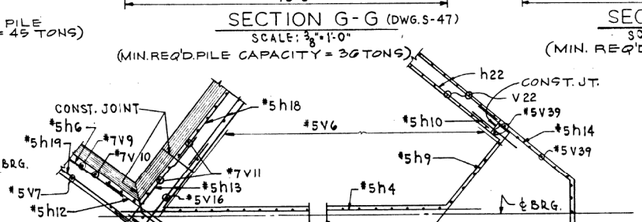


BARS V24 & V26



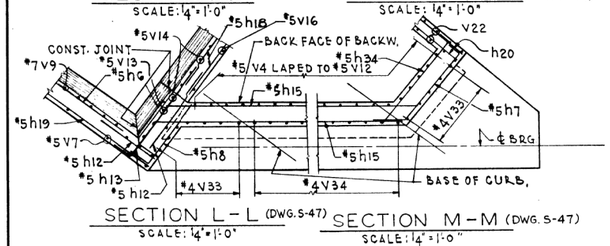
SECTION J-J (DWG.S-47)
SCALE: ¼"=1'-0"

SECTION K-K (DWG.S-47)
SCALE: ¼"=1'-0"



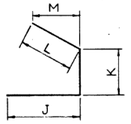
SECTION Q-Q (DWG.S-47)
SCALE: ¼"=1'-0"

SECTION N-N (DWG.S-47)
SCALE: ¼"=1'-0"

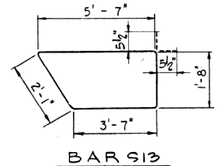


SECTION L-L (DWG.S-47)
SCALE: ¼"=1'-0"

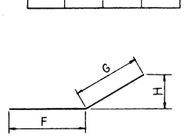
SECTION M-M (DWG.S-47)
SCALE: ¼"=1'-0"



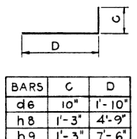
BARS	J	K	L	M
h 7	1'-3"	5'-9"	1'-6"	1'-1½"
h14	1'-3"	3'-3"	7'-3"	5'-6¾"
V30	1'-2"	8"	1'-5"	1'-0"



BAR S13



BARS	F	G	H
h11	1'-6"	1'-6"	10⅜"
h32	3'-6"	3'-6"	2'-9½"
V12	6'-3"	4'-3"	3'-0"



BARS	C	D
d6	10"	1'-10"
h 8	1'-3"	4'-9"
h 9	1'-3"	7'-6"
h13	1'-3"	6'-3"
h24	1'-3"	2'-3"
h28	1'-3"	4'-3"
h33	1'-3"	5'-9"
h34	1'-3"	6'-6"
P16	2'-0"	3'-4"
V 4	1'-3"	2'-6"

BARS	R	S	T
V 25	6'-6"	9'-6"	5¾"
V 27	6'-6"	5'-0"	3"

BAR LIST (CONTINUED FROM DWG. S-47)

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
P6	4	5	21'-3"	—	V16	14	5	17'-0"	—
P7	12	5	12'-9"	—	V17	36	7	7'-3"	—
P8	4	5	9'-0"	—	V18	13	5	3'-9"	⊏
P15	5	5	7'-3"	—	V19	12	5	4'-0"	⊏
P16	15	5	5'-4"	⌐	V20	6	5	12'-3"	—
S12	75	5	9'-7"	▭	V21	6	5	4'-0"	—
S13	24	5	13'-4"	▭	V22	78	5	20'-4"	—
S14	33	5	3'-5"	▭	V24	5	9	15'-9"	⌿
					V25	5	9	15'-0"	⌿
					V26	5	5	11'-0"	⌿
U1	43	5	6'-5"	⊓	V27	5	5	11'-6"	⌿
U2	12	5	15'-3"	⊐	V28	14	5	20'-9"	—
U3	12	5	7'-11"	⊓	V29	4	5	18'-3"	—
					V30	39	5	3'-3"	⌜
V4	56	5	3'-9"	⌐	V31	17	5	3'-0"	—
V5	63	5	12'-2"	—	V32	49	4	2'-0"	—
V6	63	5	10'-0"	—	V33	12	4	8'-0"	—
V7	16	5	19'-3"	—	V34	49	4	6'-6"	—
V9	43	7	19'-3"	—	V35	5	9	17'-3"	—
V10	41	7	8'-0"	—	V36	5	9	16'-0"	—
V11	40	7	10'-9"	—	V37	5	5	16'-9"	—
V12	56	5	10'-9"	⌐	V38	5	5	14'-9"	—
V13	3	5	9'-9"	—	V39	11	5	13'-3"	—
V14	38	5	7'-9"	—	V40	8	5	2'-6"	—
V15	12	5	7'-8"	⊏					

NOTE:
FOR ABUTMENT NOTES, SEE DWG. S-46 & S-47.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY T. C. DOMINY
DRAWN BY AL. BUROKAS
CHECKED JC Kaelin
IN CHARGE E. S. MARTINS
APPROVED W. G. HORN

NORTH ABUTMENT SECTIONS AND DETAILS

F.A.I. 74 - SECTION 81-1HB-5
F.A.I. 74 UNDER NORTHBOUND FRONTAGE RD.

ROCK ISLAND COUNTY

STATION 365 + 51.014

SCALE: AS NOTED DATE:

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = ...\081-0108-C00CD-010-014-Existing_Plans.dgn	USER NAME = $USER$	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
MODEL: $MODEL	PLOT SCALE =	DRAWN - AWH	REVISED -
	PLOT DATE = 3/27/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

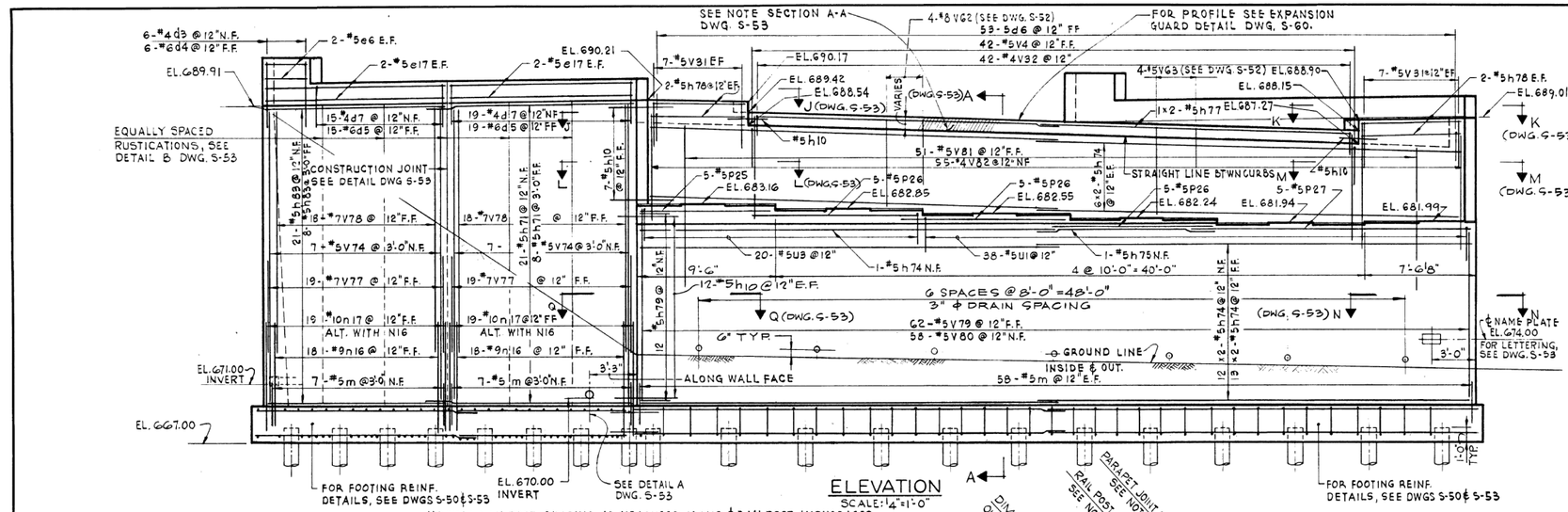
EXISTING PLANS – NORTH ABUTMENT SECTIONS AND DETAILS
S.N. 081-0108
SHEET NO. SC11 OF SC13 SHEETS

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	1264
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

3/27/2017 10:34:50 AM 081-0108-C00CD-010-014-Existing_Plans.dgn

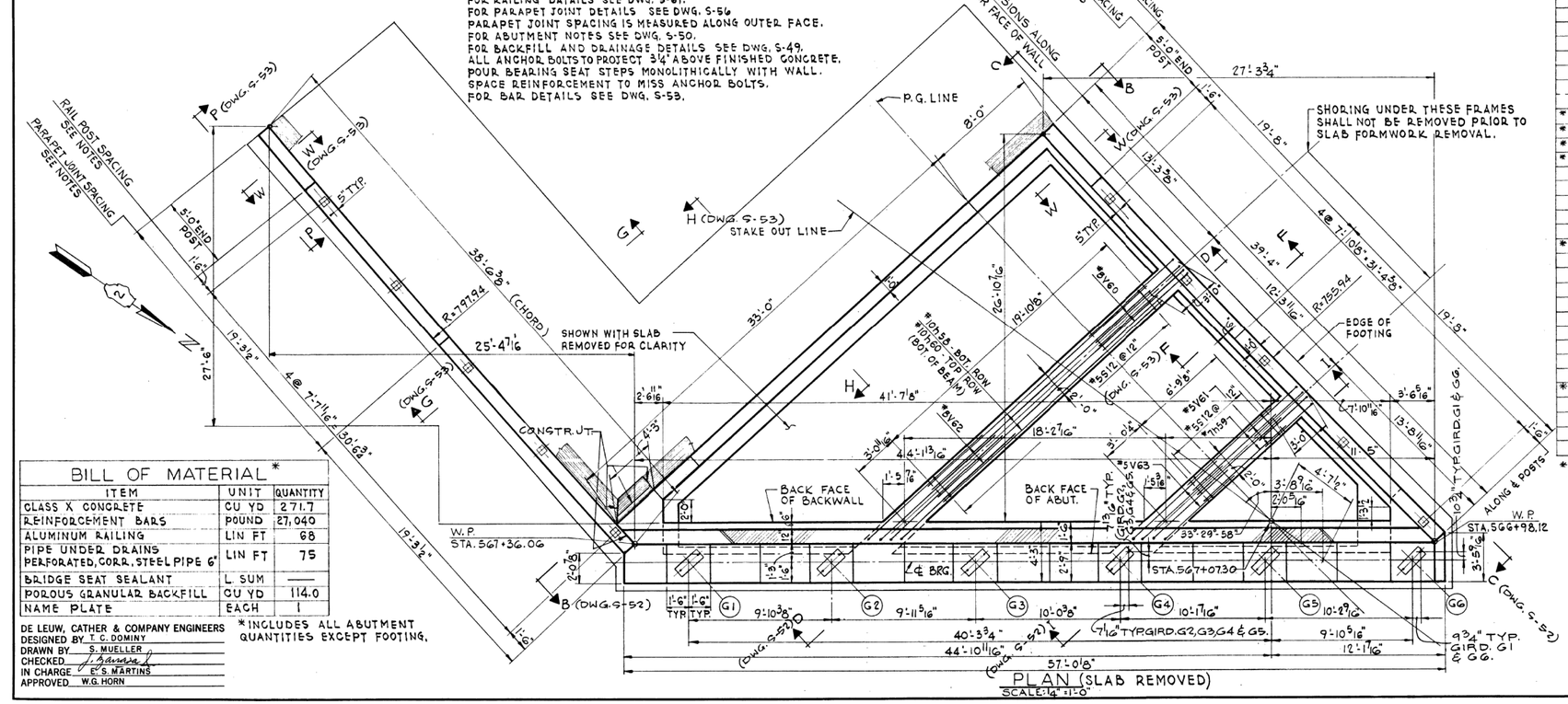
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-5	ROCK ISLAND	438	167
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT 1-74		

DWG. S-51



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

NOTES: RAILPOST SPACING IS MEASURED ALONG ℄ RAILPOST ANCHORAGES.
FOR RAILING DATAILS SEE DWG. S-61.
FOR PARAPET JOINT DETAILS SEE DWG. S-56
PARAPET JOINT SPACING IS MEASURED ALONG OUTER FACE.
FOR ABUTMENT NOTES SEE DWG. S-50.
FOR BACKFILL AND DRAINAGE DETAILS SEE DWG. S-49.
ALL ANCHOR BOLTS TO PROJECT 3/4" ABOVE FINISHED CONCRETE.
POUR BEARING SEAT STEPS MONOLITHICALLY WITH WALL.
SPACE REINFORCEMENT TO MISS ANCHOR BOLTS.
FOR BAR DETAILS SEE DWG. S-53.



PLAN (SLAB REMOVED)
SCALE: 1/4" = 1'-0"

BILL OF MATERIAL *

ITEM	UNIT	QUANTITY
CLASS X CONCRETE	CU YD	271.7
REINFORCEMENT BARS	POUND	27,040
ALUMINUM RAILING	LIN FT	68
PIPE UNDER DRAINS PERFORATED, CORR. STEEL PIPE 6"	LIN FT	75
BRIDGE SEAT SEALANT	L SUM	—
POROUS GRANULAR BACKFILL	CU YD	114.0
NAME PLATE	EACH	1

*INCLUDES ALL ABUTMENT QUANTITIES EXCEPT FOOTING.

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY T.C. DOMINY
DRAWN BY S. MUELLER
CHECKED J. Barrera
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

BAR LIST

BAR	NO.	SIZE	LENGTH	SHAPE	BAR	NO.	SIZE	LENGTH	SHAPE
a11	13	#7	33'-0"		P25	5	#5	9'-3"	
a12	10	#7	5'-3"		P26	15	#5	11'-3"	
a21	80	#7	8'-0"		P27	5	#5	18'-9"	
a27	27	#5	4'-0"						
*a31	23	#7	32'-6"						
b9	3	#5	4'-6"						
b10	4	#5	6'-9"						
b12	1	#5	25'-8"						
b13	6	#5	36'-0"		S12	61	#5	9'-7"	
b15	34	#5	35'-6"		S14	27	#5	3'-5"	
					S21	22	#5	14'-6"	
c7	38	#5	8'-2"						
d2	10	#4	2'-3"						
d3	12	#4	4'-9"						
d4	12	#6	5'-3"						
d5	69	#6	3'-6"						
d6	126	#5	2'-8"						
d7	69	#4	3'-0"		U1	38	#5	6'-5"	
					U3	20	#5	7'-11"	
e6	8	#5	4'-9"		U5	6	#5	17'-0"	
e15	8	#5	19'-4"						
e17	8	#5	19'-0"		V4	42	#5	3'-9"	
					V15	3	#5	7'-8"	
h10	33	#5	2'-9"		V18	11	#5	3'-2"	
h24	36	#5	3'-6"		V21	11	#5	4'-0"	
h38	8	#6	4'-0"		V23	11	#5	4'-10"	
h55	4	#6	19'-9"		V30	30	#5	3'-3"	
h56	4	#6	6'-9"		V31	36	#5	3'-0"	
h57	8	#6	3'-0"		V32	42	#4	8'-0"	
h58	4	#10	21'-6"		V40	8	#5	2'-6"	
h59	4	#7	8'-3"		V60	4	#8	16'-6"	
h60	4	#10	15'-0"		V61	4	#5	13'-7"	
*h61	40	#5	18'-0"		V62	4	#8	13'-11"	
*h62	32	#5	17'-0"		V63	4	#5	11'-0"	
*h63	8	#5	11'-9"		V64	4	#5	16'-10"	
*h65	40	#5	7'-9"		V65	14	#5	19'-6"	
h66	13	#5	12'-3"		V66	4	#8	18'-0"	
h67	13	#5	5'-9"		V67	4	#5	16'-6"	
h68	7	#5	5'-0"		V68	4	#8	15'-1"	
h69	5	#5	3'-3"		V69	4	#5	14'-5"	
h70	25	#5	35'-3"		V70	66	#5	19'-0"	
*h71	29	#5	20'-6"		V71	4	#5	8'-3"	
h72	40	#5	5'-3"		V72	4	#5	6'-9"	
h73	13	#5	5'-1"		V73	13	#5	16'-11"	
h74	75	#5	29'-6"		V74	14	#5	20'-3	
h75	1	#5	11'-6"		V75	37	#7	8'-6"	
h77	2	#5	21'-6"		V76	36	#7	16'-11"	
h78	8	#5	6'-0"		V77	38	#7	6'-9"	
h79	12	#5	4'-6"		V78	36	#7	16'-9"	
h80	2	#5	34'-6"		V79	62	#6	10'-3"	
h81	7	#5	34'-4"		V80	61	#5	12'-4"	
*h83	29	#5	19'-2"		V81	51	#5	11'-6"	
					V82	55	#4	7'-3"	
					V84	2	#5	17'-6"	
					V85	5	#5	19'-9"	

*DENOTES BAR TO BE BENT IN FIELD TO FIT ALIGNMENT.

SOUTH ABUTMENT PLAN AND ELEVATION

F.A.I. 74 - SECTION 81-1HB-5
F.A.I. 74 UNDER NORTHBOUND FRONTAGE RD.

ROCK ISLAND COUNTY

STATION 365 + 51.014

SCALE: AS NOTED DATE:

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0108-C00CD-010-014-Existing_Plans.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - AWH	REVISED -
MODEL: $MODEL	PLOT DATE = 3/22/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – SOUTH ABUTMENT PLAN AND ELEVATION
S.N. 081–0108

SHEET NO. SC12 OF SC13 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	1265
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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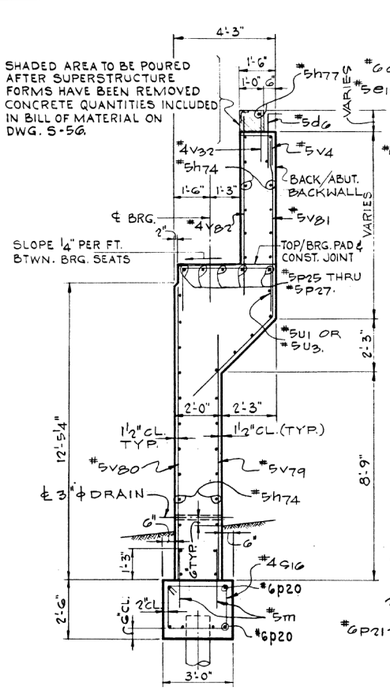
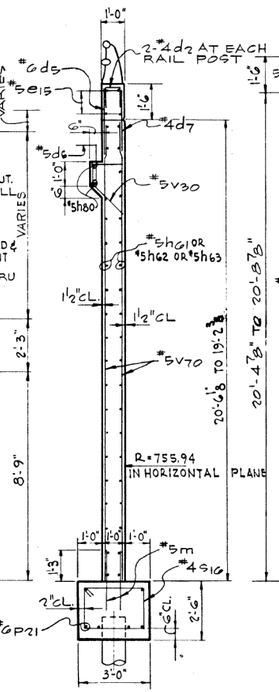
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	81-1HB-5	ROCK ISLAND	438	169
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

DWG. S-53

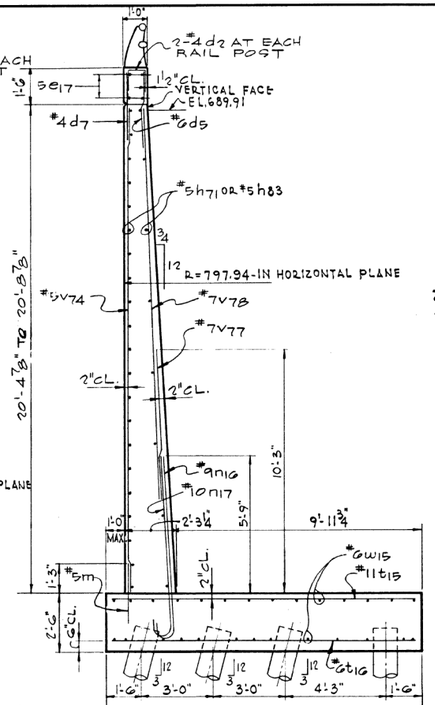
SHADED AREA TO BE POURED AFTER SUPERSTRUCTURE FORMS HAVE BEEN REMOVED CONCRETE QUANTITIES INCLUDED IN BILL OF MATERIAL ON DWG. S-56.



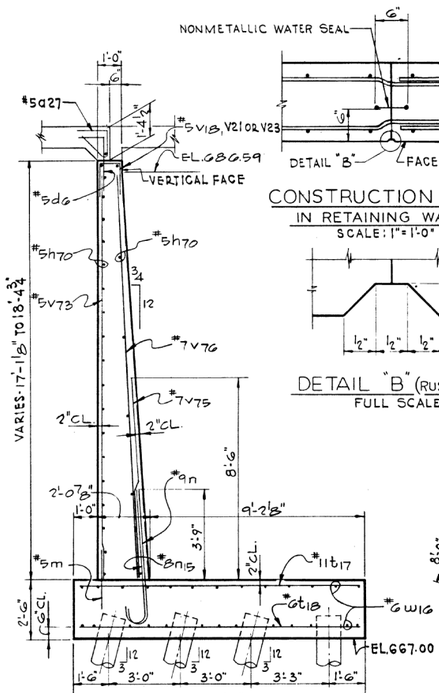
SECTION A-A (DWG. S-51)
SCALE: 3/8"=1'-0"
(MIN. REQ'D. PILE CAPACITY = 45 TONS)



SECTION F-F (DWG. S-51)
SCALE: 3/8"=1'-0"
(MIN. REQ'D. PILE CAPACITY = 36 TONS)



SECTION G-G (DWG. S-51)
SCALE: 3/8"=1'-0"
(MIN. REQ'D. PILE CAPACITY = 42 TONS)

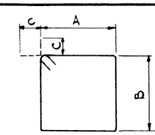


SECTION H-H (DWG. S-51)
SCALE: 3/8"=1'-0"
(MIN. REQ'D. PILE CAPACITY = 45 TONS)

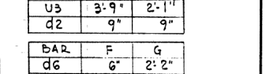
CONSTRUCTION JOINT
IN RETAINING WALLS
SCALE: 1"=1'-0"

DETAIL "B" (RUSTICATIONS)
FULL SCALE

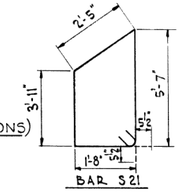
BAR	A	B	C
S12	1'-8"	2'-8"	5½"
S14	8"	8"	4½"
S16	1'-10"	2'-8"	4½"



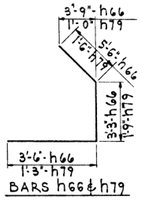
BAR	E	D
V15	8"	3'-6"
V18	8"	1'-3"
V19	8"	1'-8"
V23	8"	2'-1"
U1	3'-9"	1'-4
U3	3'-9"	2'-1"
d2	9"	9"



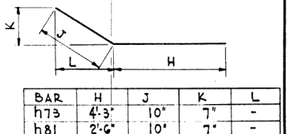
BAR	F	G
d6	6"	2'-2"
h24	1'-3"	2'-3"
V4	1'-3"	2'-6"



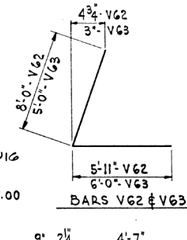
BAR S21



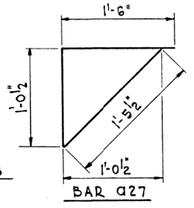
BARS h66 & h79



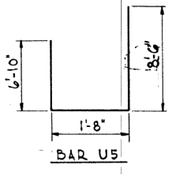
BAR	H	J	K	L
h73	4'-3"	10"	7"	-
h81	2'-6"	10"	7"	-
V60	5'-6"	11'-0"	-	6⅝"
V61	5'-7"	8'-0"	-	4¾"
V81	6'-7"	4'-11"	3'-6"	-



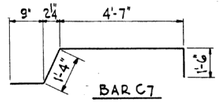
BARS V62 & V63



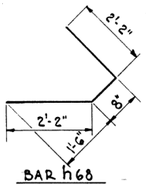
BAR a27



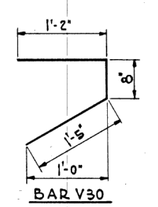
BAR U5



BAR a7

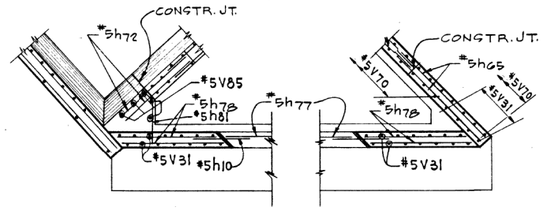


BAR h68



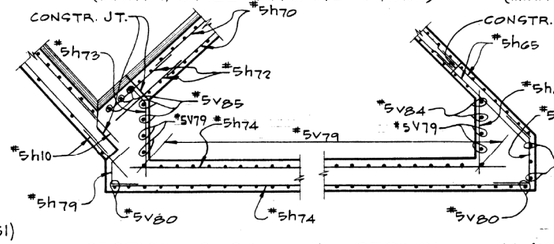
BAR V30

NOTES:
FOR ABUTMENT NOTES SEE DWGS S-50 & S-51.



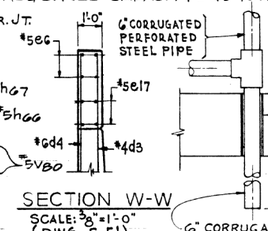
SECTION J-J (DWG. S-51)
SCALE: 1/4"=1'-0"

SECTION K-K (DWG. S-51)
SCALE: 1/4"=1'-0"

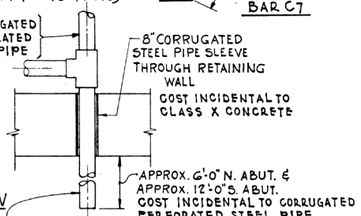


SECTION Q-Q (DWG. S-51)
SCALE: 1/4"=1'-0"

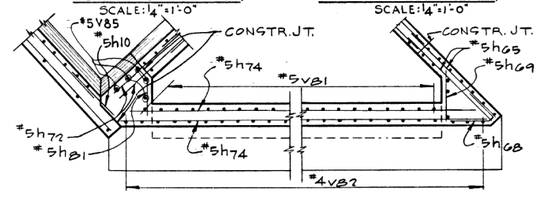
SECTION N-N (DWG. S-51)
SCALE: 1/4"=1'-0"



SECTION W-W
SCALE: 3/8"=1'-0"
(DWG. S-51)

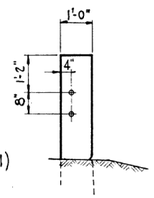


DETAIL "A" (DWG. S-51)
SCALE: 1/2"=1'-0"

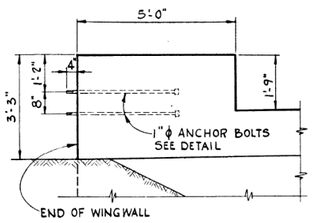


SECTION L-L (DWG. S-51)
SCALE: 1/4"=1'-0"

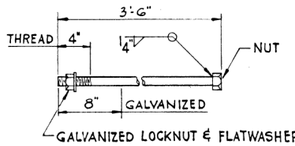
SECTION M-M (DWG. S-51)
SCALE: 1/4"=1'-0"



END VIEW



VIEW P-P (DWG. S-51)
SCALE: 1/2"=1'-0"



ANCHOR BOLT DETAIL

STATION 365+51.014
BUILT 19 BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 81-1HB-5
F.A. PROJ. 1-74-1(34)
LOADING HS 20 & ALT.

LETTERING FOR NAME PLATES

FOR NAME PLATE DETAILS, SEE STANDARD 2113-1

SOUTH ABUTMENT SECTIONS AND DETAILS

F.A.I. 74 - SECTION 81-1HB-5

F.A.I. 74 UNDER NORTHBOUND FRONTAGE RD.

ROCK ISLAND COUNTY

STATION 365+51.014

SCALE: AS NOTED DATE:

DE LEUW, CATHER & COMPANY ENGINEERS
DESIGNED BY T.C. DOMINY
DRAWN BY S. MUELLER
CHECKED
IN CHARGE E.S. MARTINS
APPROVED W.G. HORN

HE 10 8155

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10064

FILE NAME = 081-0108-C00CD-010-014-Existing_Plans.dgn	USER NAME = dschriks	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
	PLOT SCALE =	DRAWN - AWH	REVISED -
MODEL: *MODEL	PLOT DATE = 3/22/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS – SOUTH ABUTMENT SECTIONS AND DETAILS
S.N. 081-0108
SHEET NO. SC13 OF SC13 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	1266
		CONTRACT NO. 64E26		
		ILLINOIS FED. AID PROJECT		

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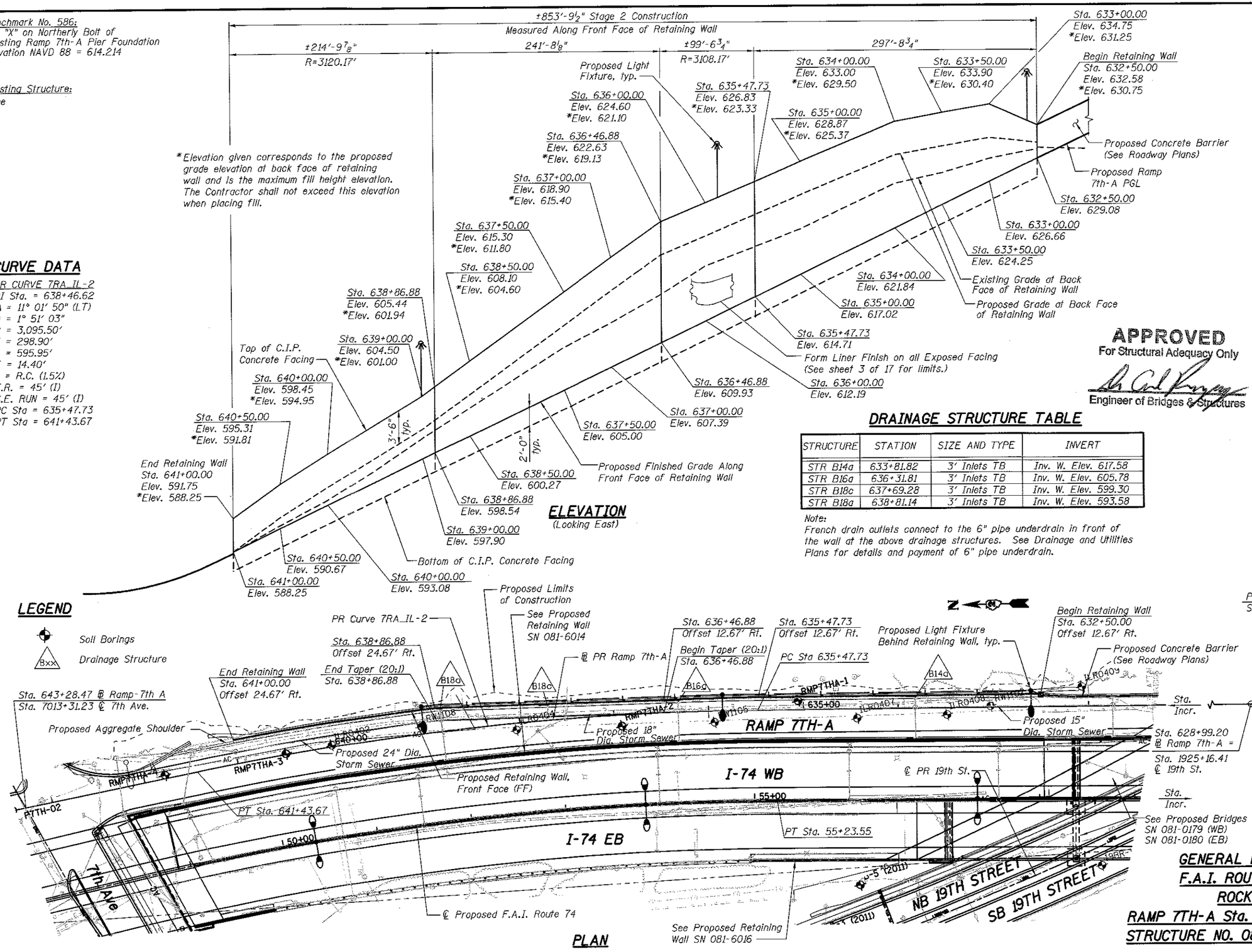
Benchmark No. 586:
Cut "X" on Northerly Bolt of
Existing Ramp 7th-A Pier Foundation
Elevation NAVD 88 = 614.214

Existing Structure:
None

CURVE DATA

PR CURVE TRA IL-2
PI Sta. = 638+46.62
Δ = 11° 01' 50" (LT)
D = 1° 51' 03"
R = 3,095.50'
T = 298.90'
L = 595.95'
E = 14.40'
e = R.C. (1.5%)
T.R. = 45' (I)
S.E. RUN = 45' (I)
PC Sta = 635+47.73
PT Sta = 641+43.67



ELEVATION
(Looking East)

DESIGN SPECIFICATIONS

2012 AASHTO LRFD
Bridge Design Specifications,
6th Edition

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
f_y = 36,000 psi (Structural Steel)

INDEX OF SHEETS

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

JERILYN M. HASSARD
081-006521
LICENSED
STRUCTURAL
ENGINEER
OF
ILLINOIS

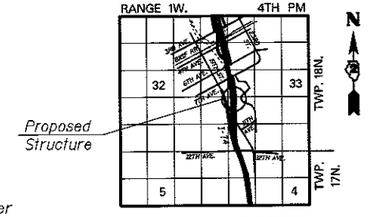
03-23-17

JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL
ENGINEER NO. 081-006521
EXPIRES 11/30/2018

DRAINAGE STRUCTURE TABLE

STRUCTURE	STATION	SIZE AND TYPE	INVERT
STR B14a	633+81.82	3' Inlets TB	Inv. W. Elev. 617.58
STR B16a	636+31.81	3' Inlets TB	Inv. W. Elev. 605.78
STR B18c	637+69.28	3' Inlets TB	Inv. W. Elev. 599.30
STR B18a	638+81.14	3' Inlets TB	Inv. W. Elev. 593.58

Note:
French drain outlets connect to the 6" pipe underdrain in front of the wall at the above drainage structures. See Drainage and Utilities Plans for details and payment of 6" pipe underdrain.



LOCATION SKETCH

LEGEND

Soil Borings
Bxx Drainage Structure

PLAN

Notes:
Utilities shown will be relocated by others to avoid any conflicts during construction. (See Utility Plans)
See Drainage and Utilities Plans for inlet details, french drain outlet, and gutter details.
See Electrical Plans for lighting and conduit details.
See C.I.P. Retaining Wall Aesthetic Plans for required form liner finish.

GENERAL PLAN AND ELEVATION
F.A.I. ROUTE 74 SEC. (81-1)R-1
ROCK ISLAND COUNTY
RAMP 7TH-A Sta. 632+50.00 to Sta. 641+00.00
STRUCTURE NO. 081-6013 (RETAINING WALL 04)

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

MODJESKI and MASTERS
Experience great bridges.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 1 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1267
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

1. Wall stations and offsets are given to the front face (FF) of the wall and are measured from the Ramp 7th-A baseline except as noted. FF of the wall is to be considered edge of form liner.

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

3. The Contractor is responsible for the design and performance of the timber lagging using no less than a 3 in. nominal rough-sawn thickness and timber with a minimum allowable bending stress of 1000 psi.

4. Fill placed within 5 feet of the back of the facing shall be granular material and shall be covered with a 1'-6" layer of cohesive backfill to reduce infiltration of surface runoff. Cost included with Drilling and Setting Soldier Piles (In Soil).

5. Fill shall be placed after the soldier piles and lagging are in place. C.I.P. Concrete Facing shall be constructed after fill material has been placed.

6. All concrete for the C.I.P. facing with a form liner textured surface shall be self-consolidating concrete meeting the requirements of Section 1020 of the Standard Specifications. This work shall be included in the cost of the concrete used and no additional compensation will be allowed.

SUGGESTED SEQUENCE OF CONSTRUCTION

1. Complete Structure Excavation to the top of Soldier Piles.

2. Drill shaft excavations for Soldier Piles to specified bottom elevations maintaining required tolerances and hole stability.

3. Remove loose material and excess water from excavated shafts. Place Soldier Piles in holes and properly locate and brace.

4. Place Class DS Concrete in the holes to the level of the base of the proposed Concrete Facing, then place Controlled Low Strength Material (C.L.S.M.) to the existing ground surface.

5. After all concrete has attained the required design strength, excavate the soil in front of the wall to proposed grade with simultaneous removal of C.L.S.M. at the face of the Soldier Piles and place lagging as specified.

6. Place and compact the proposed fill behind the wall. Hand operated equipment such as a jumping jack or plate compactor shall be used to compact the fill within 5 feet of the back of the wall.

7. Construct wall drainage features at the base of the wall.

8. Place shear studs on Soldier Piles and construct Concrete Facing.

9. Complete final grading at the base and top of the wall.

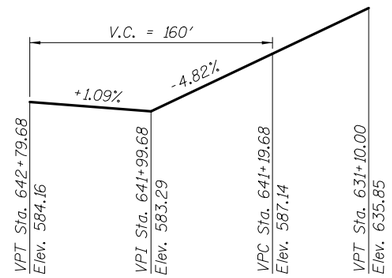
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu. Yd.	497
Concrete Structures	Cu. Yd.	379.2
Form Liner Textured Surface	Sq. Ft.	4755
Stud Shear Connectors	Each	1894
Reinforcement Bars, Epoxy Coated	Pound	37660
Name Plates	Each	1
Geocomposite Wall Drain	Sq. Yd.	354
Furnishing Soldier Piles (HP Section)	Ft.	1219
Furnishing Soldier Piles (W Section)	Ft.	2185
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	10322
Untreated Timber Lagging	Sq. Ft.	4563
Pipe Underdrains for Structures 4"	Ft.	854

STATION 632+50.00
BUILT 201_ BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. (81-1)R-1
LOADING HL-93
STR. NO. 081-6013

NAME PLATE

See Std. 515001



PROFILE GRADE

(Along ℄ Ramp 7th-A)

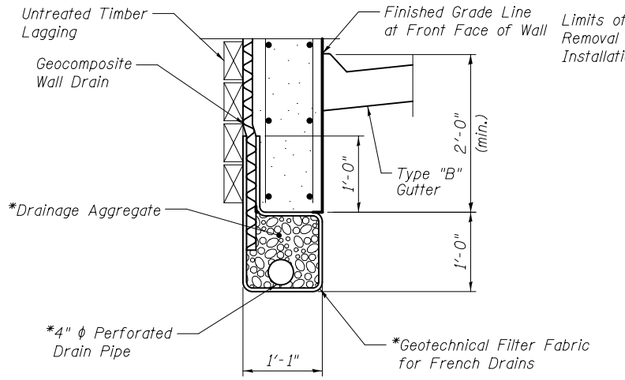
USER NAME =	DESIGNED - TER	REVISED	
	CHECKED - ZJB	REVISED	
PLOT SCALE =	DRAWN - JAB	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

MODJESKI and MASTERS
Experience great bridges.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

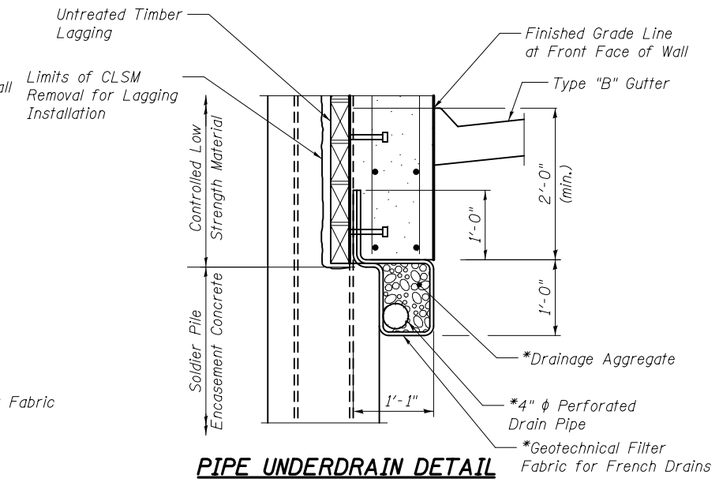
GENERAL NOTES
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 2 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1268
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



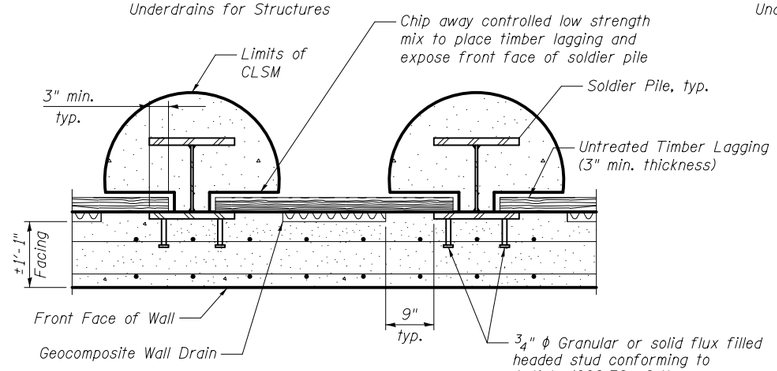
PIPE UNDERDRAIN DETAIL BETWEEN SOLDIER PILES

*Included in the cost of Pipe Underdrains for Structures

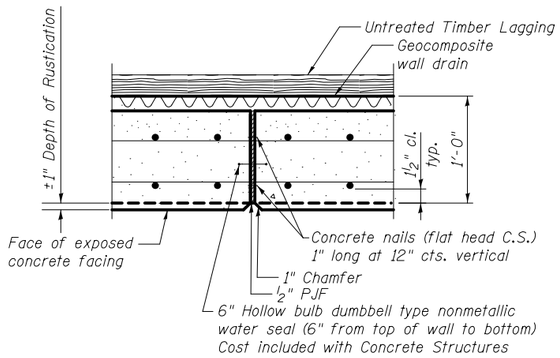


PIPE UNDERDRAIN DETAIL AT SOLDIER PILES

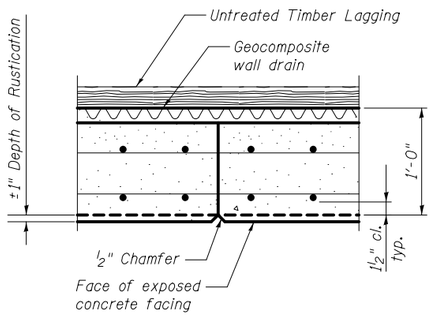
*Included in the cost of Pipe Underdrains for Structures



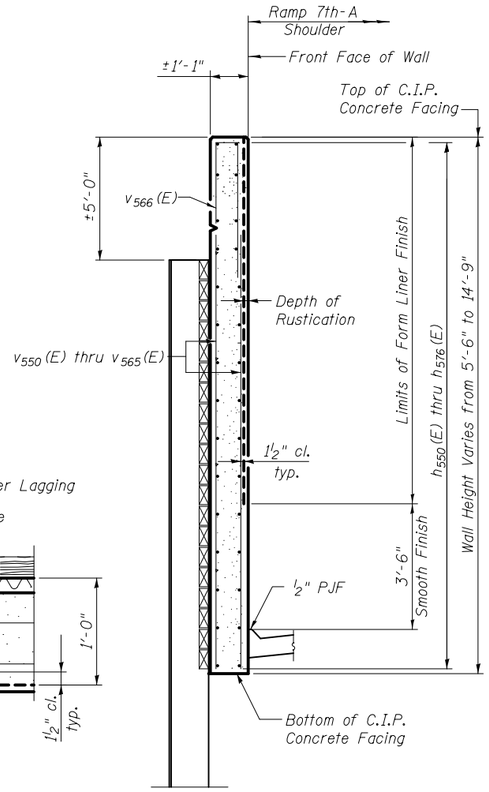
TYPICAL SECTION THRU WALL



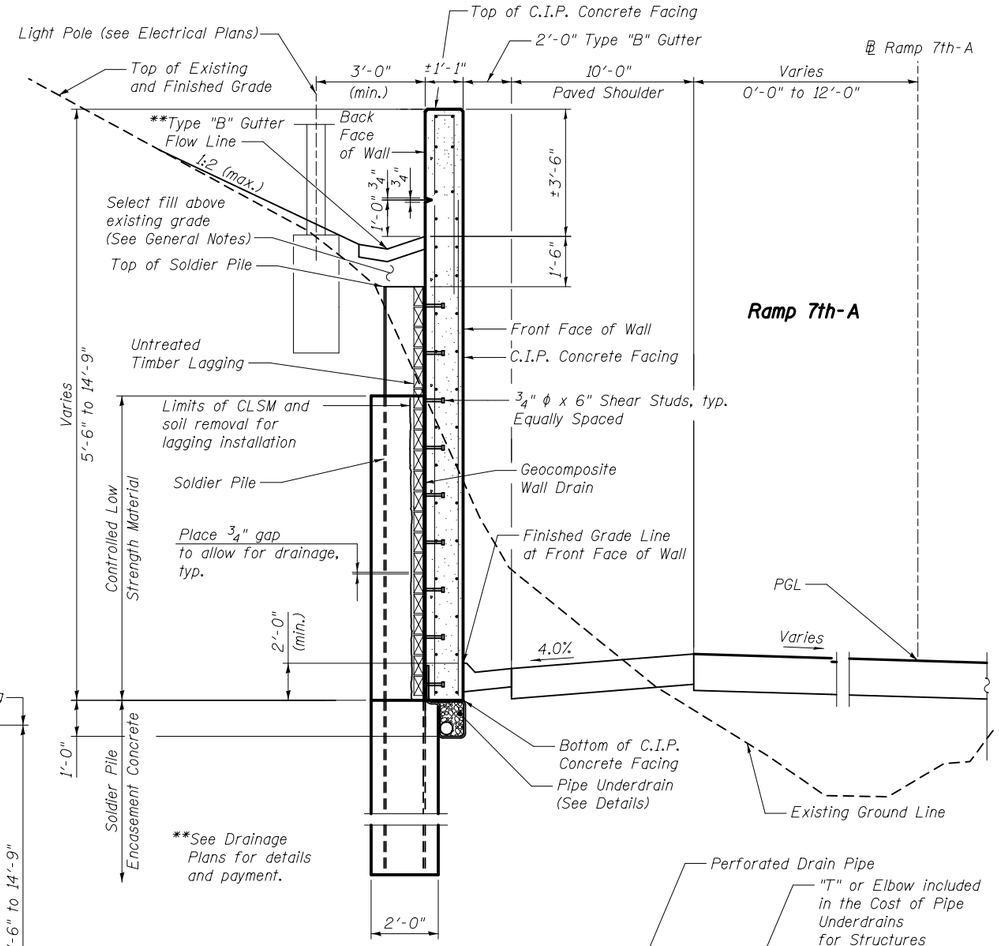
EXPANSION JOINT



CONSTRUCTION JOINT

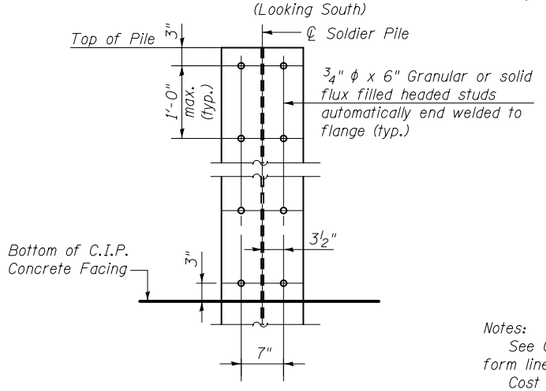


SECTION THRU CONCRETE FACING

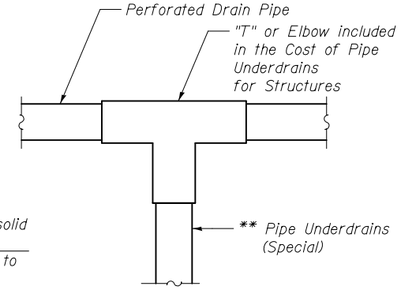


TYPICAL WALL SECTION

(See Section thru Concrete Facing for Details.)
(Looking South)



SHEAR STUD CONNECTORS LAYOUT



FRENCH DRAIN OUTLET

(See Sheet 1 of 17 for locations.)

Notes:

See C.I.P. Retaining Wall Aesthetic Plans for required form liner finish.

Cost of Controlled Low Strength Material included in Drilling and Setting Soldier Piles (In Soil).

See Electrical Plans for light pole locations, foundation details, and payment.

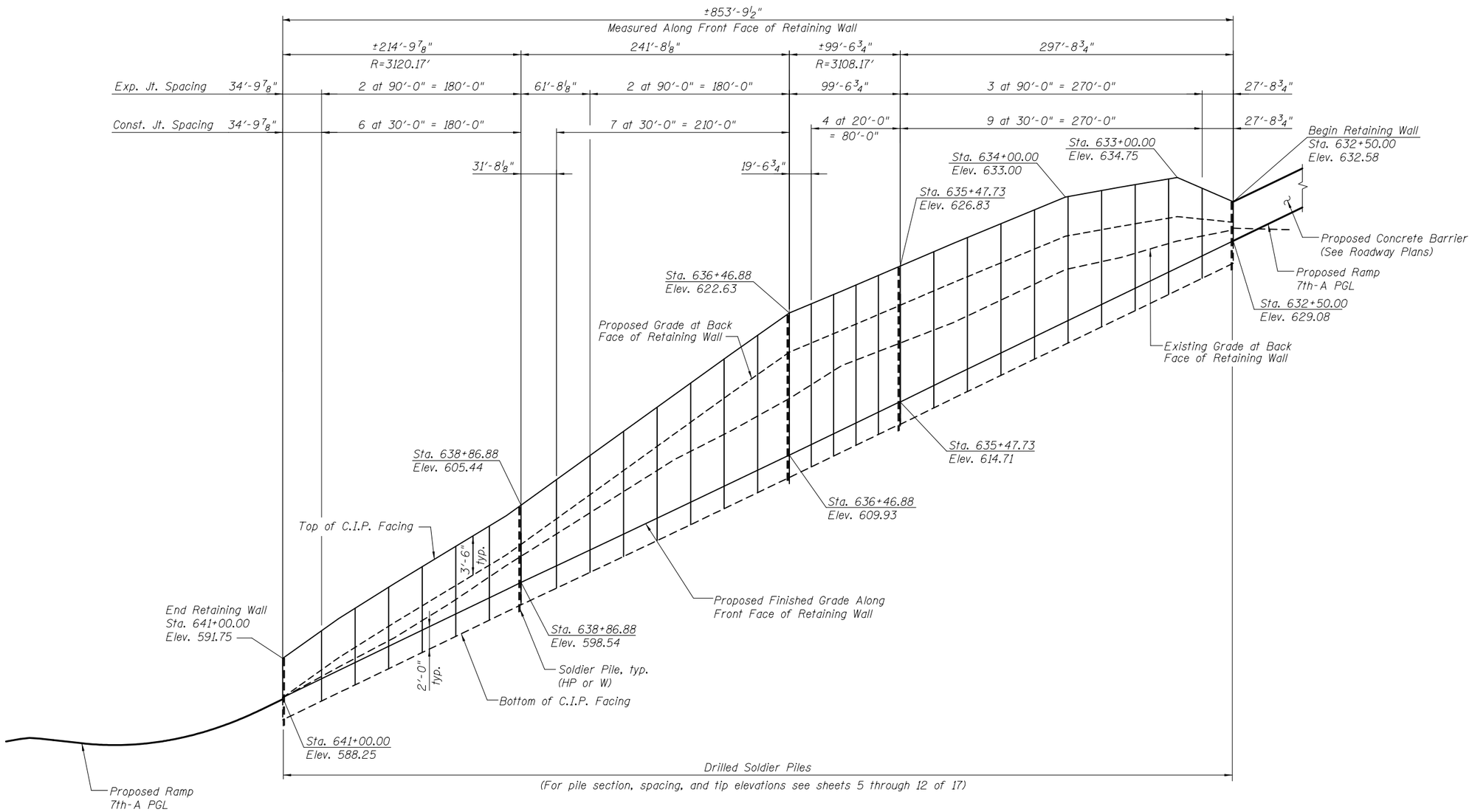
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL SECTIONS AND DETAILS
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 3 OF 17 SHEETS

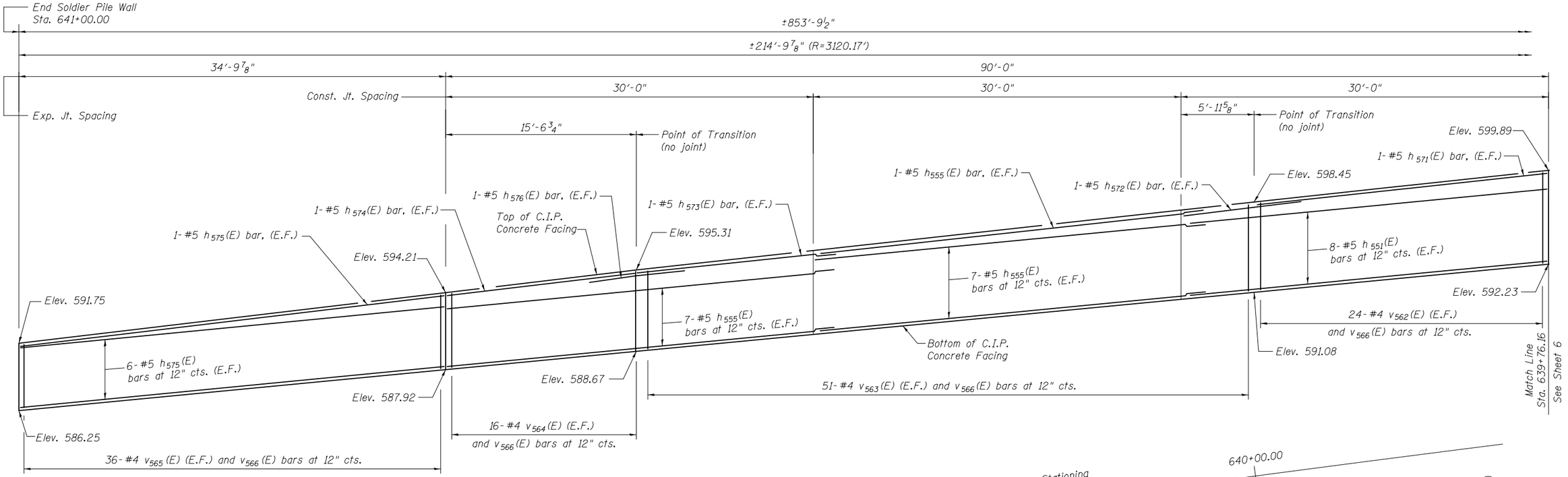
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1269
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



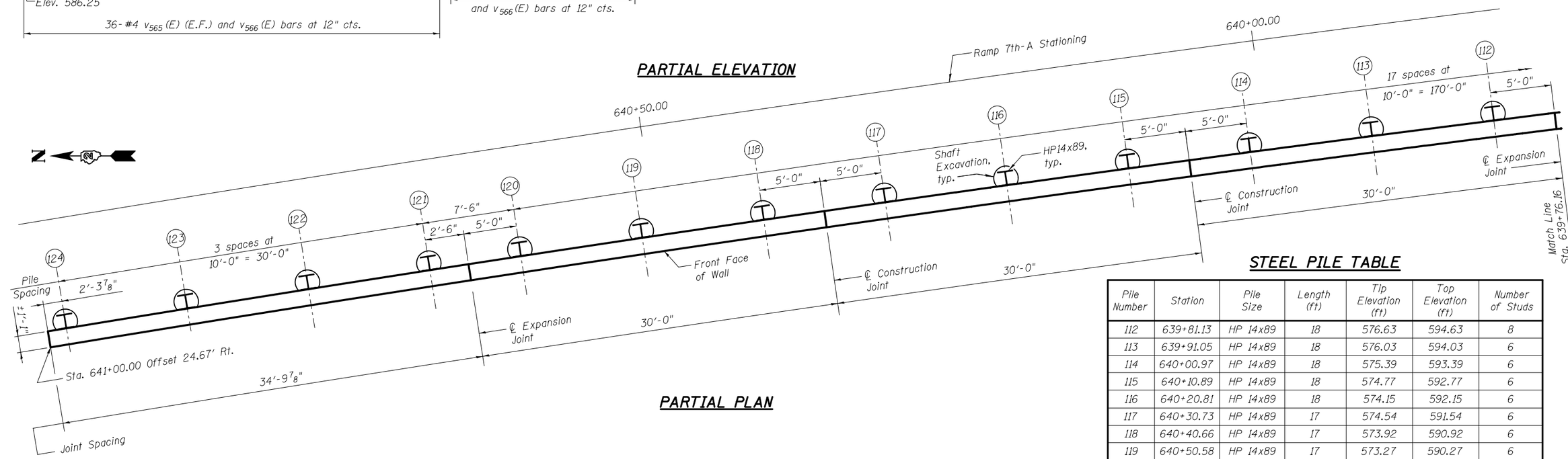
ELEVATION

(Joint Spacing)

MODJESKI and MASTERS Experience great bridges.	USER NAME =	DESIGNED - TER	REVISED	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL ELEVATION RAMP 7TH-A RETAINING WALL 04 STRUCTURE NO. 081-6013	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - ZJB	REVISED			74	(81-1)R-1	ROCK ISLAND	2042	1270
	PLOT SCALE =	DRAWN - JAB	REVISED							CONTRACT NO. 64E26
	PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED		SHEET NO. 4 OF 17 SHEETS			ILLINOIS	FED. AID PROJECT	



PARTIAL ELEVATION



PARTIAL PLAN

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
112	639+81.13	HP 14x89	18	576.63	594.63	8
113	639+91.05	HP 14x89	18	576.03	594.03	6
114	640+00.97	HP 14x89	18	575.39	593.39	6
115	640+10.89	HP 14x89	18	574.77	592.77	6
116	640+20.81	HP 14x89	18	574.15	592.15	6
117	640+30.73	HP 14x89	17	574.54	591.54	6
118	640+40.66	HP 14x89	17	573.92	590.92	6
119	640+50.58	HP 14x89	17	573.27	590.27	6
120	640+60.50	HP 14x89	17	572.57	589.57	4
121	640+67.94	HP 14x89	17	572.04	589.04	4
122	640+77.86	HP 14x89	17	571.34	588.34	4
123	640+87.78	HP 14x89	16	571.64	587.64	4
124	640+97.70	HP 14x89	16	570.94	586.94	4

Notes:

For Bill of Material, See Sheet 12 of 17.

Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.

Dimensions and spacings are measured along the front face of the wall.

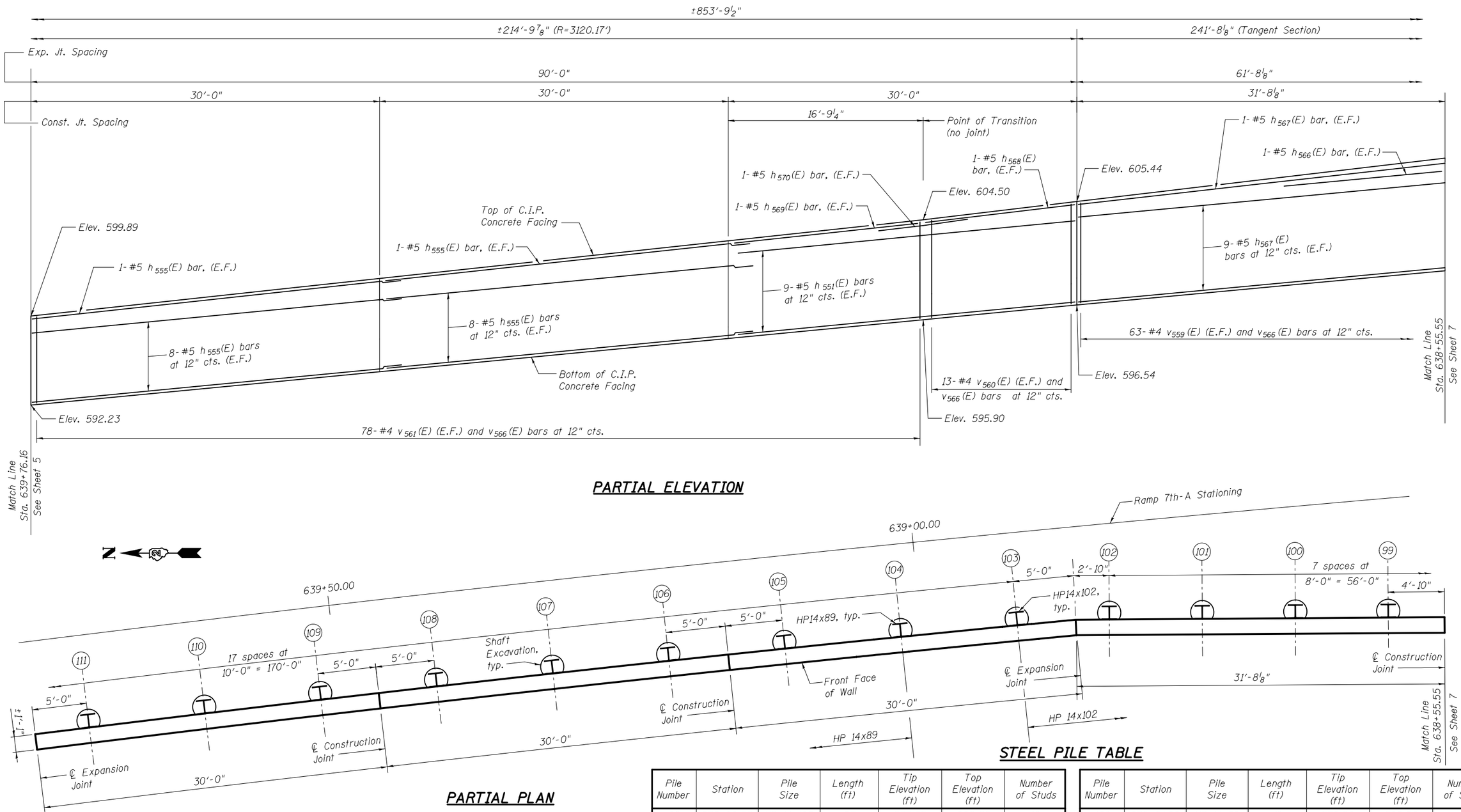
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 1
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 5 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1271
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



PARTIAL ELEVATION

PARTIAL PLAN

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
99	638+60.33	HP 14x102	25	577.35	602.35	12
100	638+68.24	HP 14x102	25	576.78	601.78	10
101	638+76.16	HP 14x102	25	576.21	601.21	10
102	638+84.07	HP 14x102	24	576.64	600.64	10
103	638+91.84	HP 14x102	24	576.08	600.08	10
104	639+01.76	HP 14x89	19	580.39	599.39	10
105	639+11.68	HP 14x89	19	579.80	598.80	8

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
106	639+21.60	HP 14x89	19	579.20	598.20	8
107	639+31.52	HP 14x89	19	578.61	597.61	8
108	639+41.45	HP 14x89	19	578.01	597.01	8
109	639+51.37	HP 14x89	18	578.42	596.42	8
110	639+61.29	HP 14x89	18	577.82	595.82	8
111	639+71.21	HP 14x89	18	577.23	595.23	8

Notes:
For Bill of Material, See Sheet 12 of 17.
Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.
Dimensions and spacings are measured along the front face of the wall.

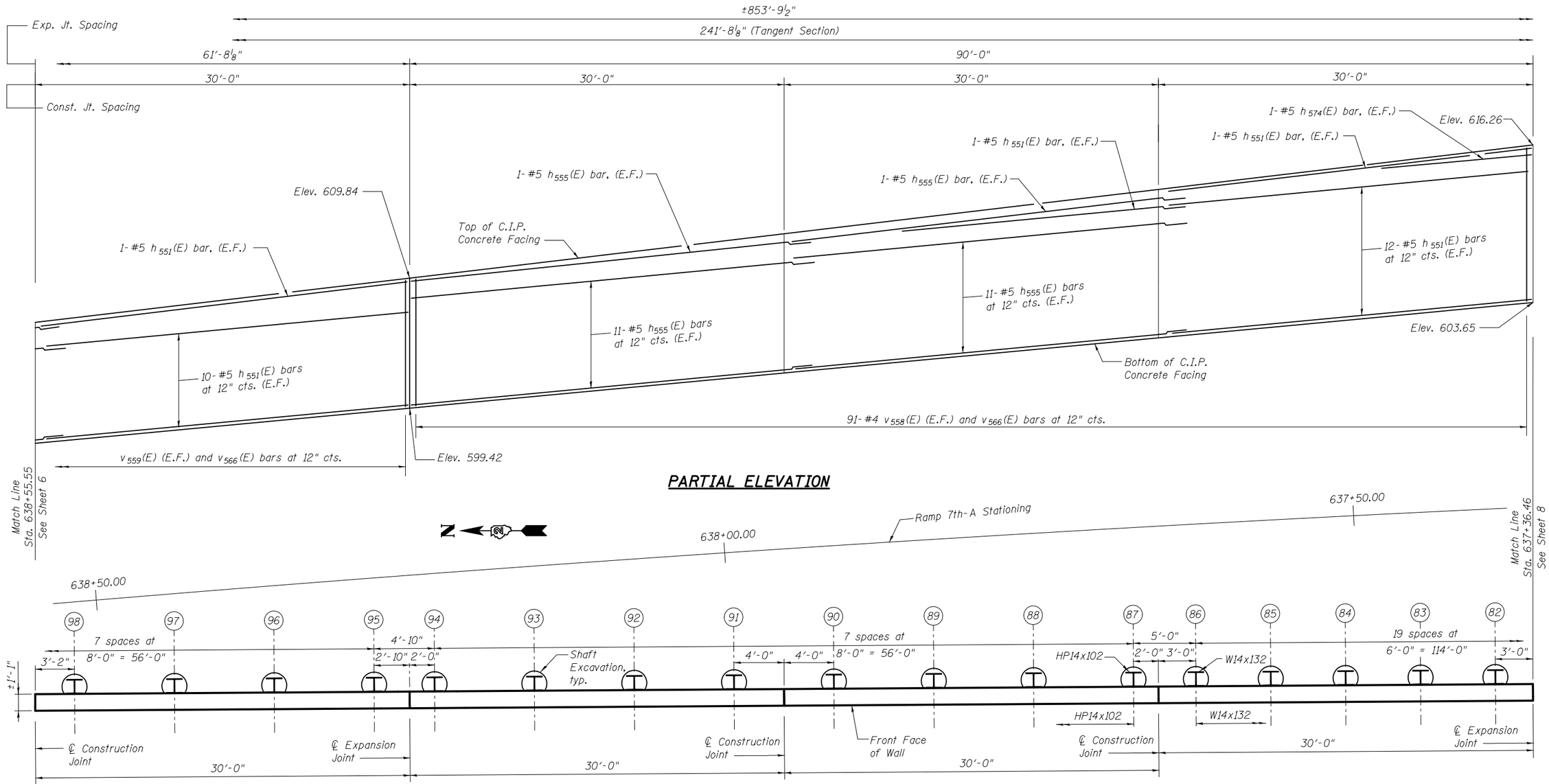
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 2
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 6 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1272
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



PARTIAL ELEVATION

PARTIAL PLAN

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
82	637+39.44	W 14x132	30	581.06	611.06	18
83	637+45.40	W 14x132	30	580.63	610.63	16
84	637+51.37	W 14x132	30	580.20	610.20	16
85	637+57.33	W 14x132	30	579.77	609.77	16
86	637+63.29	W 14x132	29	580.34	609.34	16
87	637+68.26	HP 14x102	27	581.99	608.99	16
88	637+76.21	HP 14x102	27	581.41	608.41	16
89	637+84.15	HP 14x102	27	580.84	607.84	14
90	637+92.10	HP 14x102	27	580.27	607.27	14

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
91	638+00.04	HP 14x102	27	579.70	606.70	14
92	638+07.97	HP 14x102	26	580.13	606.13	14
93	638+15.91	HP 14x102	26	579.55	605.55	14
94	638+23.84	HP 14x102	26	578.98	604.98	12
95	638+28.64	HP 14x102	26	578.64	604.64	12
96	638+36.57	HP 14x102	26	578.07	604.07	12
97	638+44.49	HP 14x102	25	578.50	603.50	12
98	638+52.42	HP 14x102	25	577.93	602.93	12

Notes:
For Bill of Material, See Sheet 12 of 17.
Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.
Dimensions and spacings are measured along the front face of the wall.

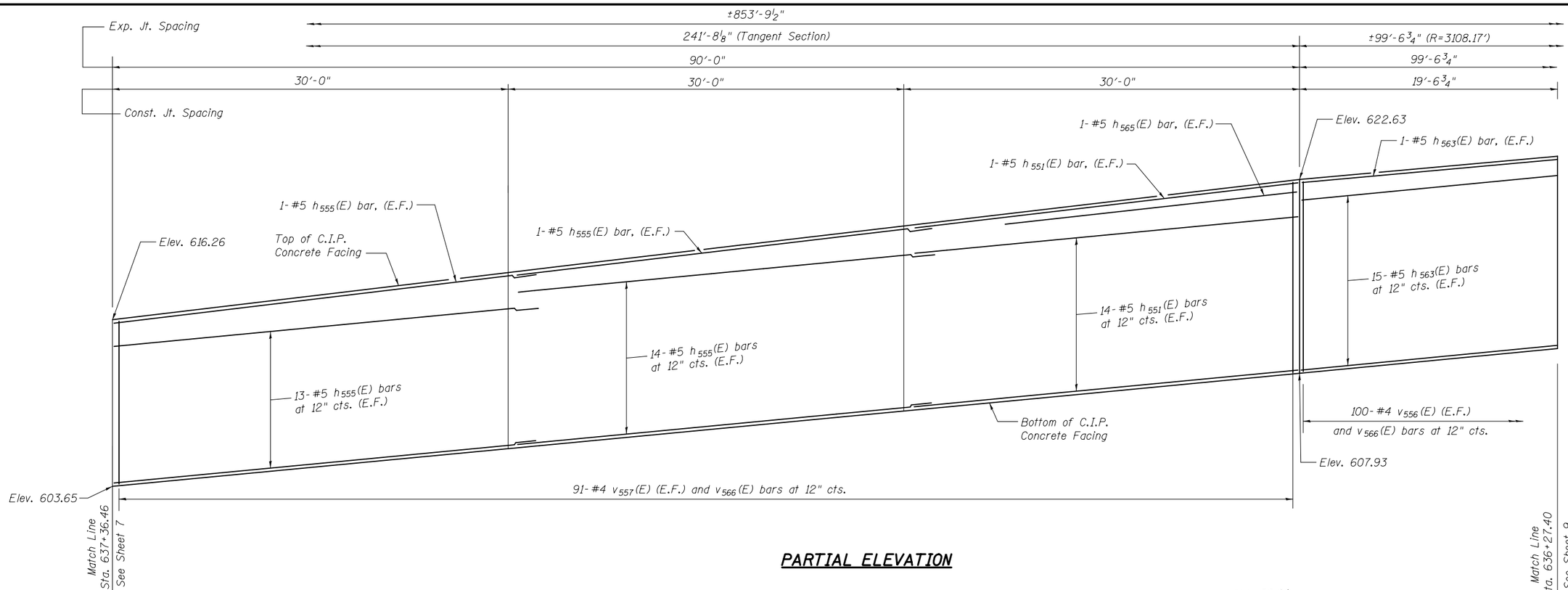
MODJESKI and MASTERS
Experience great bridges.

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

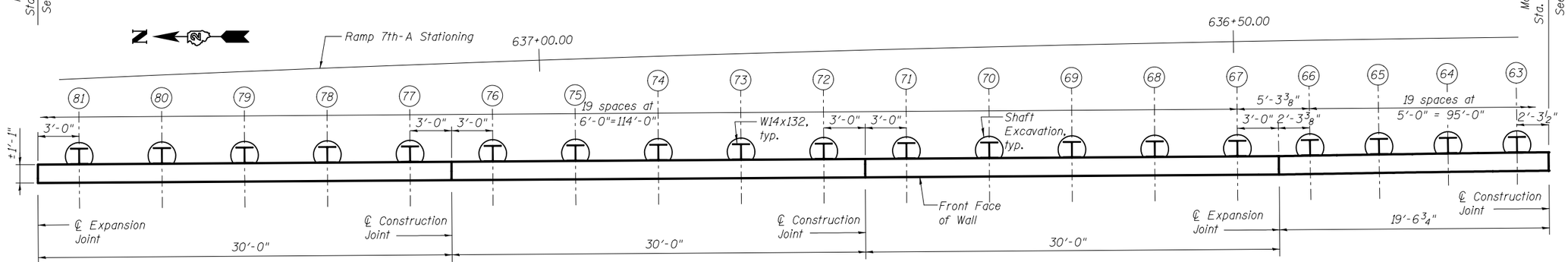
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 3
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 7 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1273
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



PARTIAL ELEVATION



PARTIAL PLAN

Notes:

For Bill of Material, See Sheet 12 of 17.

Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.

Dimensions and spacings are measured along the front face of the wall.

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
63	636+29.67	W 14x132	32	586.36	618.36	22
64	636+34.65	W 14x132	32	586.15	618.15	22
65	636+39.63	W 14x132	32	585.94	617.94	22
66	636+44.61	W 14x132	32	585.73	617.73	22
67	636+49.87	W 14x132	32	585.42	617.42	22
68	636+55.84	W 14x132	32	585.00	617.00	20
69	636+61.82	W 14x132	32	584.58	616.58	20
70	636+67.79	W 14x132	32	584.16	616.16	20
71	636+73.77	W 14x132	32	583.74	615.74	20
72	636+79.74	W 14x132	31	584.32	615.32	20

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
73	636+85.71	W 14x132	31	583.90	614.90	20
74	636+91.68	W 14x132	31	583.48	614.48	20
75	636+97.66	W 14x132	31	583.06	614.06	20
76	637+03.63	W 14x132	31	582.64	613.64	18
77	637+09.60	W 14x132	31	582.21	613.21	18
78	637+15.57	W 14x132	31	581.78	612.78	18
79	637+21.54	W 14x132	30	582.35	612.35	18
80	637+27.50	W 14x132	30	581.92	611.92	18
81	637+33.47	W 14x132	30	581.49	611.49	18

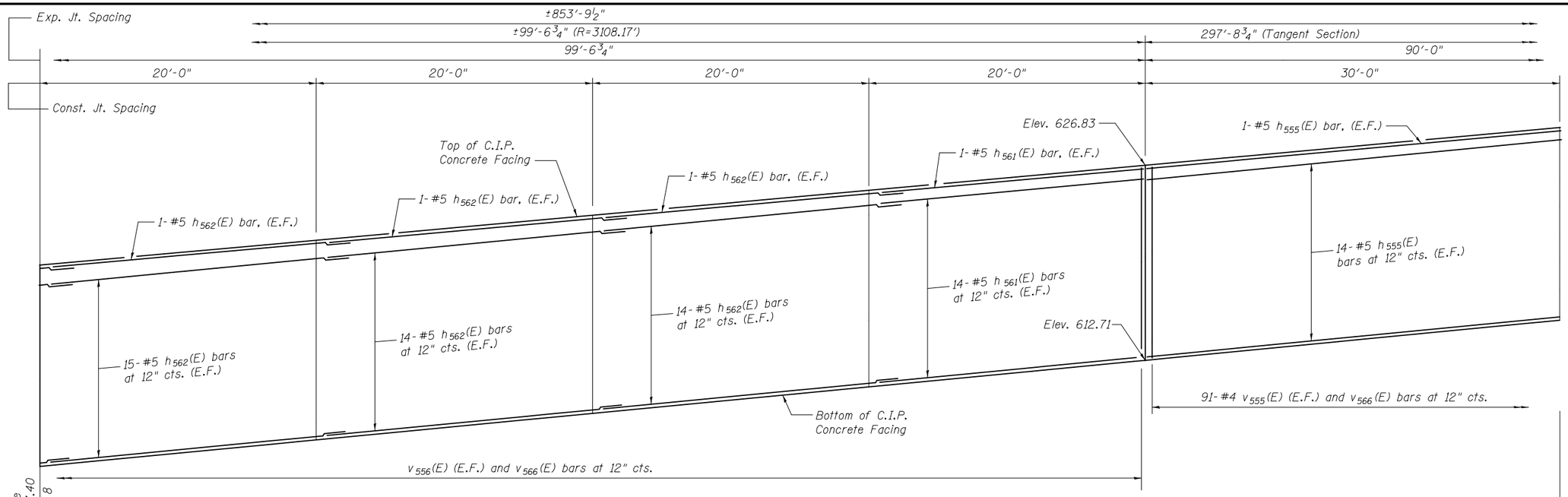
MODJESKI and MASTERS
Experience great bridges.

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

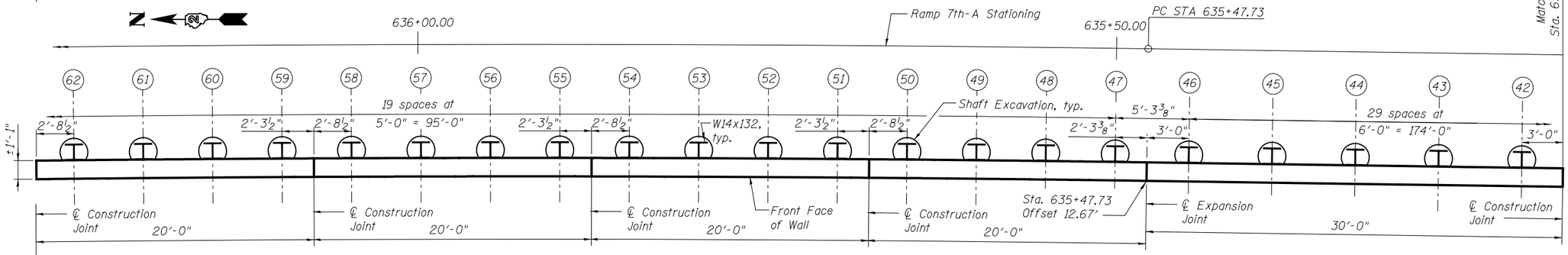
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 4
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 8 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1274
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



PARTIAL ELEVATION



PARTIAL PLAN

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
42	635+20.73	W 14x132	31	591.98	622.98	20
43	635+26.73	W 14x132	32	590.73	622.73	20
44	635+32.73	W 14x132	32	590.47	622.47	20
45	635+38.73	W 14x132	32	590.21	622.21	20
46	635+44.73	W 14x132	32	589.96	621.96	20
47	635+50.00	W 14x132	32	589.73	621.73	20
48	635+54.98	W 14x132	32	589.52	621.52	20
49	635+59.96	W 14x132	32	589.31	621.31	20
50	635+64.94	W 14x132	32	589.10	621.10	20
51	635+69.92	W 14x132	32	588.89	620.89	20
52	635+74.90	W 14x132	32	588.67	620.67	20

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
53	635+79.88	W 14x132	32	588.46	620.46	20
54	635+84.86	W 14x132	32	588.25	620.25	20
55	635+89.84	W 14x132	32	588.04	620.04	20
56	635+94.82	W 14x132	32	587.83	619.83	20
57	635+99.80	W 14x132	32	587.62	619.62	20
58	636+04.78	W 14x132	32	587.40	619.40	20
59	636+09.76	W 14x132	32	587.19	619.19	20
60	636+14.74	W 14x132	32	586.98	618.98	20
61	636+19.72	W 14x132	32	586.77	618.77	22
62	636+24.69	W 14x132	32	586.57	618.57	22

Notes:

For Bill of Material, See Sheet 12 of 17.

Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.

Dimensions and spacings are measured along the front face of the wall.

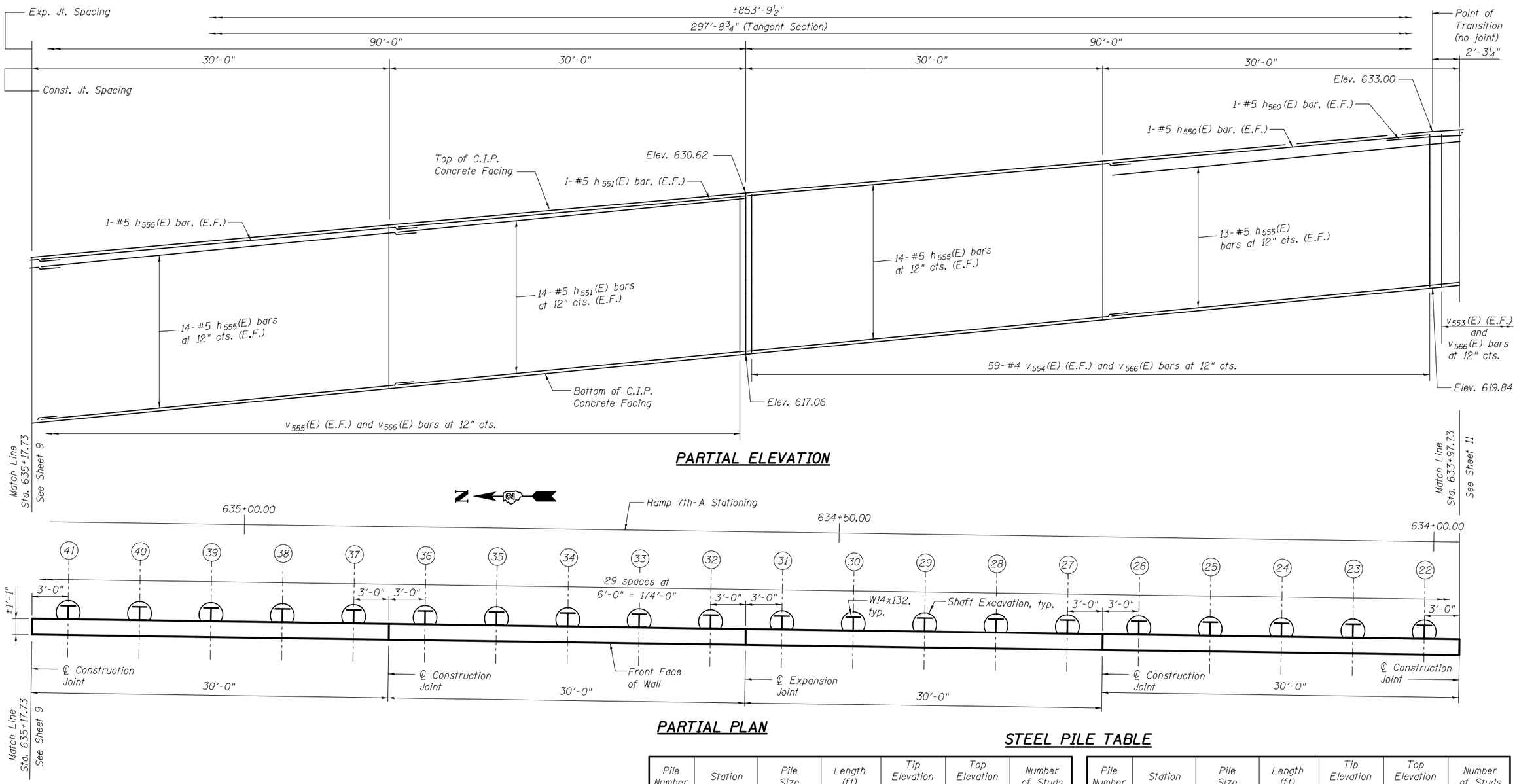
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 5
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 9 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1275
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		



PARTIAL PLAN

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
22	634+00.73	W 14x132	31	596.97	627.97	18
23	634+06.73	W 14x132	31	596.72	627.72	18
24	634+12.73	W 14x132	31	596.47	627.47	18
25	634+18.73	W 14x132	31	596.23	627.23	18
26	634+24.73	W 14x132	31	595.98	626.98	18
27	634+30.73	W 14x132	31	595.73	626.73	18
28	634+36.73	W 14x132	31	595.48	626.48	18
29	634+42.73	W 14x132	31	595.24	626.24	18
30	634+48.73	W 14x132	31	594.99	625.99	18
31	634+54.73	W 14x132	31	594.74	625.74	20

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
32	634+60.73	W 14x132	31	594.49	625.49	20
33	634+66.73	W 14x132	31	594.24	625.24	20
34	634+72.73	W 14x132	31	594.00	625.00	20
35	634+78.73	W 14x132	31	593.75	624.75	20
36	634+84.73	W 14x132	31	593.50	624.50	20
37	634+90.73	W 14x132	31	593.25	624.25	20
38	634+96.73	W 14x132	31	593.01	624.01	20
39	635+02.73	W 14x132	31	592.75	623.75	20
40	635+08.73	W 14x132	31	592.50	623.50	20
41	635+14.73	W 14x132	31	592.24	623.24	20

Notes:

For Bill of Material, See Sheet 12 of 17.

Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.

Dimensions and spacings are measured along the front face of the wall.

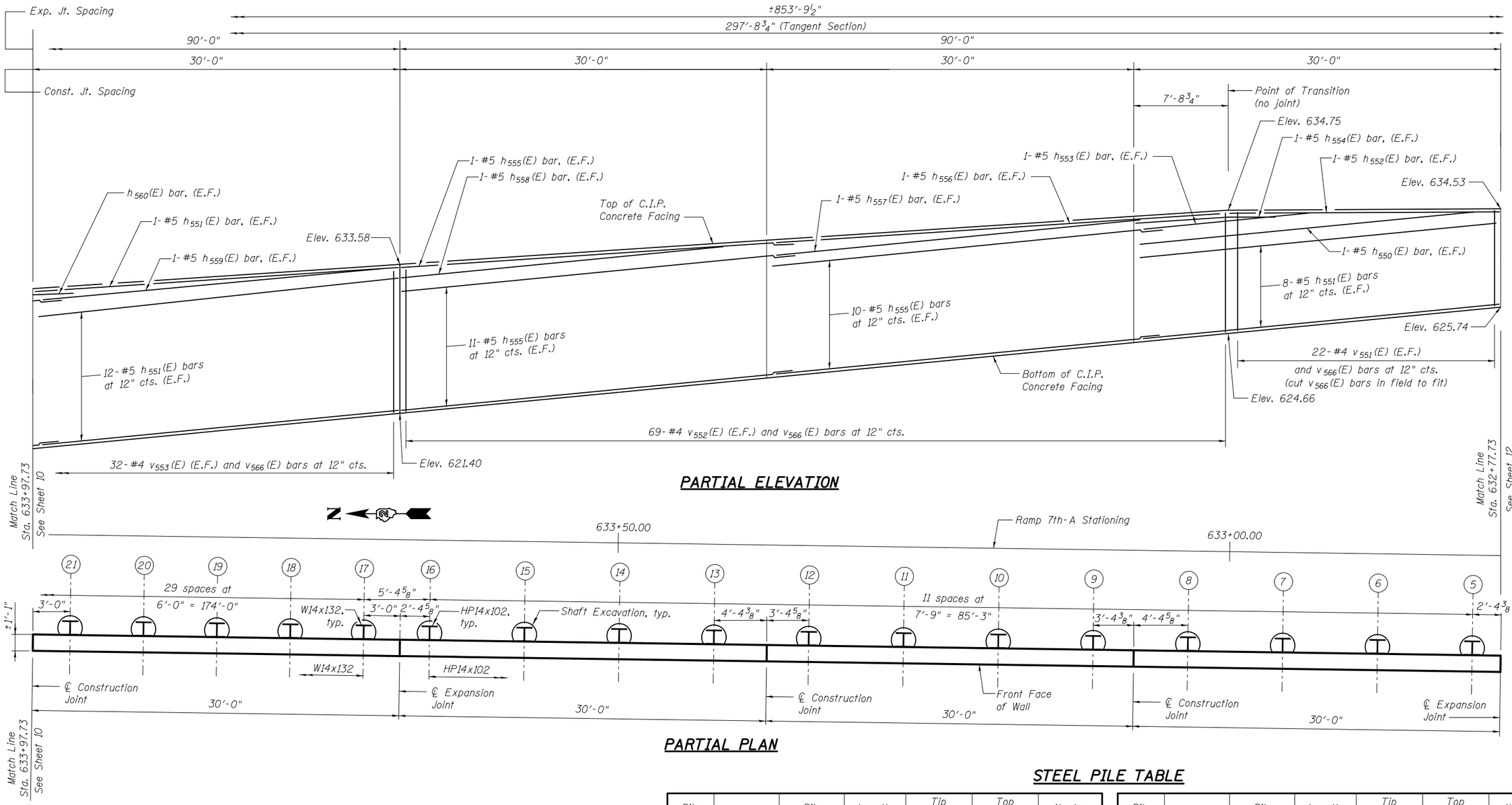
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 6
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 10 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1276
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		



PARTIAL ELEVATION

PARTIAL PLAN

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
5	632+80.09	HP 14x102	24	605.55	629.55	10
6	632+87.84	HP 14x102	25	604.63	629.63	10
7	632+95.59	HP 14x102	25	604.71	629.71	12
8	633+03.34	HP 14x102	26	603.69	629.69	12
9	633+11.09	HP 14x102	26	603.56	629.56	12
10	633+18.84	HP 14x102	26	603.43	629.43	14
11	633+26.59	HP 14x102	26	603.30	629.30	14
12	633+34.34	HP 14x102	27	602.17	629.17	14
13	633+42.09	HP 14x102	27	602.03	629.03	14

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
14	633+49.84	HP 14x102	27	601.90	628.90	16
15	633+57.59	HP 14x102	27	601.76	628.76	16
16	633+65.34	HP 14x102	28	600.62	628.62	16
17	633+70.73	W 14x132	30	598.53	628.53	16
18	633+76.73	W 14x132	30	598.42	628.42	16
19	633+82.73	W 14x132	30	598.31	628.31	18
20	633+88.73	W 14x132	30	598.20	628.20	18
21	633+94.73	W 14x132	30	598.09	628.09	18

Notes:

For Bill of Material, See Sheet 12 of 17.

Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.

Dimensions and spacings are measured along the front face of the wall.

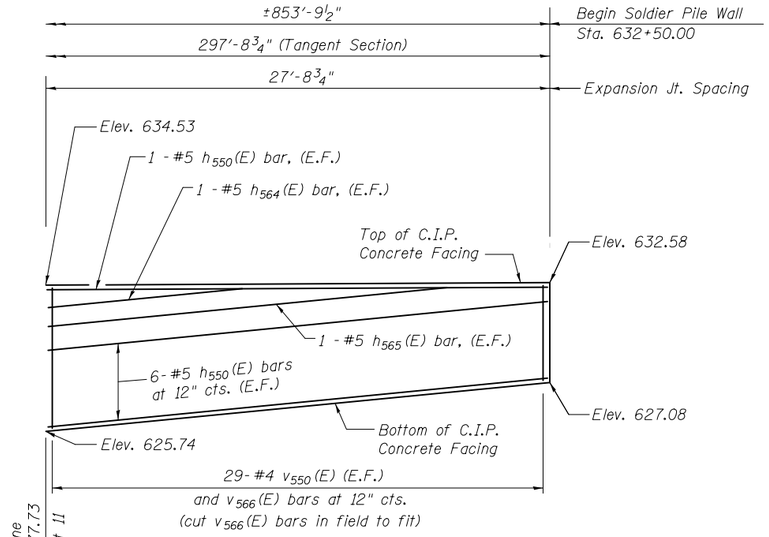
MODJESKI and MASTERS
Experience great bridges.

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

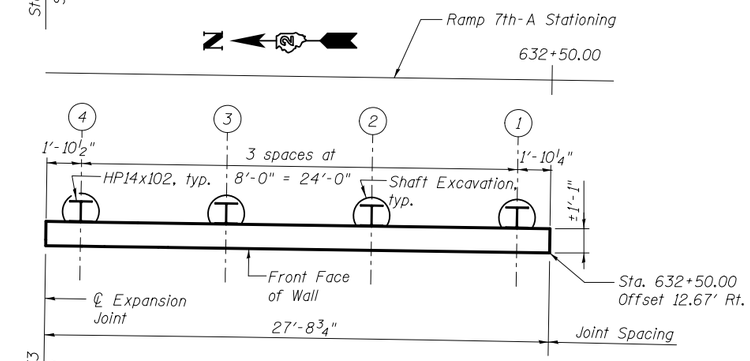
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 7
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 11 OF 17 SHEETS

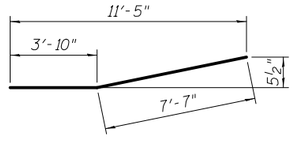
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1277
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		



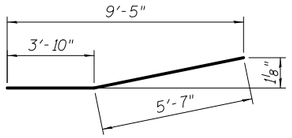
PARTIAL ELEVATION



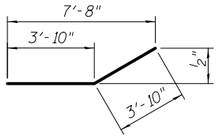
PARTIAL PLAN



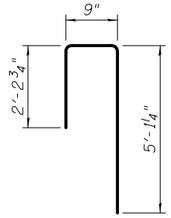
BAR h554 (E)



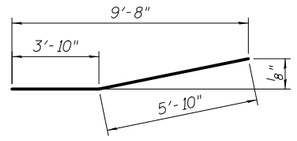
BAR h 560(E)



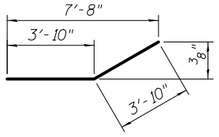
BAR h 570(E)



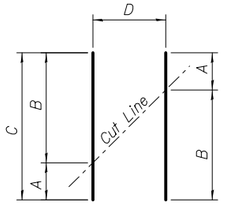
BAR v566 (E)



BAR h572 (E)



BAR h 576(E)



BAR CUTTING DIAGRAM

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

Bar	A	B	C	D
v_{550}(E)	4'-5"	6'-0"	10'-5"	29
v_{551}(E)	6'-0"	7'-3"	13'-3"	22
v_{552}(E)	7'-4"	9'-5"	16'-9"	69
v_{553}(E)	9'-5"	10'-4"	19'-9"	32
v_{554}(E)	10'-5"	10'-9"	21'-2"	59
v_{555}(E)	10'-9"	11'-4"	22'-1"	91
v_{556}(E)	11'-4"	11'-11"	23'-3"	100
v_{557}(E)	11'-11"	9'-10"	21'-9"	91
v_{558}(E)	9'-10"	7'-8"	17'-6"	91
v_{559}(E)	7'-8"	6'-2"	13'-10"	63
v_{560}(E)	6'-2"	5'-10"	12'-0"	13
v_{561}(E)	5'-9"	4'-11"	10'-8"	78
v_{562}(E)	4'-11"	4'-7"	9'-6"	24
v_{563}(E)	4'-7"	3'-10"	8'-5"	51
v_{564}(E)	3'-10"	3'-6"	7'-4"	16
v_{565}(E)	3'-6"	2'-9"	6'-3"	36

STEEL PILE TABLE

Pile Number	Station	Pile Size	Length (ft)	Tip Elevation (ft)	Top Elevation (ft)	Number of Studs
1	632+51.85	HP 14X102	23	606.27	629.27	6
2	632+59.85	HP 14X102	23	606.35	629.35	8
3	632+67.85	HP 14X102	24	605.43	629.43	8
4	632+75.85	HP 14X102	24	605.51	629.51	10

Notes:
Stations and offsets on this sheet are given to the front face of wall and are measured from the Ramp 7th-A baseline.
Dimensions and spacings are measured along the front face of the wall.

MIN. BAR LAP

#4 bars - 2'-7"
#5 bars - 3'-3"

LEGEND

E.F. Each Face

RETAINING WALL 04
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_{550}(E)	18	#5	27'-6"	
h_{551}(E)	186	#5	29'-9"	
h_{552}(E)	2	#5	22'-2"	
h_{553}(E)	2	#5	16'-9"	
h_{554}(E)	2	#5	11'-5"	
h_{555}(E)	330	#5	33'-3"	
h_{556}(E)	2	#5	33'-10"	
h_{557}(E)	2	#5	32'-3"	
h_{558}(E)	2	#5	30'-0"	
h_{559}(E)	2	#5	27'-7"	
h_{560}(E)	2	#5	9'-5"	
h_{561}(E)	30	#5	19'-9"	
h_{562}(E)	92	#5	23'-3"	
h_{563}(E)	32	#5	22'-9"	
h_{564}(E)	2	#5	8'-6"	
h_{565}(E)	4	#5	19'-6"	
h_{566}(E)	2	#5	20'-10"	
h_{567}(E)	20	#5	34'-11"	
h_{568}(E)	2	#5	13'-0"	
h_{569}(E)	2	#5	16'-6"	
h_{570}(E)	2	#5	7'-8"	
h_{571}(E)	2	#5	23'-11"	
h_{572}(E)	2	#5	9'-8"	
h_{573}(E)	2	#5	17'-9"	
h_{574}(E)	4	#5	15'-5"	
h_{575}(E)	14	#5	34'-7"	
h_{576}(E)	2	#5	7'-8"	
v_{550}(E)	29	#4	10'-5"	
v_{551}(E)	22	#4	13'-3"	
v_{552}(E)	69	#4	16'-9"	
v_{553}(E)	32	#4	19'-9"	
v_{554}(E)	59	#4	21'-2"	
v_{555}(E)	91	#4	22'-1"	
v_{556}(E)	100	#4	23'-3"	
v_{557}(E)	91	#4	21'-9"	
v_{558}(E)	91	#4	17'-6"	
v_{559}(E)	63	#4	13'-10"	
v_{560}(E)	13	#4	12'-0"	
v_{561}(E)	78	#4	10'-8"	
v_{562}(E)	24	#4	9'-6"	
v_{563}(E)	51	#4	8'-5"	
v_{564}(E)	16	#4	7'-4"	
v_{565}(E)	36	#4	6'-3"	
v_{566}(E)	865	#4	8'-1"	

Structure Excavation	Cu. Yd.	497
Concrete Structures	Cu. Yd.	379.2
Form Liner Textured Surface	Sq. Ft.	4755
Stud Shear Connectors	Each	1894
Reinforcement Bars, Epoxy Coated	Pound	37660
Furnishing Soldier Piles (HP Section)	Ft.	1219
Furnishing Soldier Piles (W Section)	Ft.	2185
Drilling and Setting Soldier Piles (In Soil)	Cu. Ft.	10322
Untreated Timber Lagging	Sq. Ft.	4563

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE WALL LAYOUT PLAN 8
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 12 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1278
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 9/20/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY KB

SECTION I-74 Bridge over Mississippi River LOCATION (N=562799.18, E=2459788.941), 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. ILR0402
Station 639 + 99
Offset 2' Rt.
Ground Surface Elev. 591.11 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft
Groundwater Elev.:
First Encounter 584.6 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Concrete And Subbase			
589.11			
Silty Sand(SM) dark brown, slightly moist, loose, fine to coarse grained, low plasticity, Dark brown, slightly moist, loose, fine to coarse sand, low plasticity fines	3		
587.11	6		
	5		
	4		
Clay (CH) dark grey, slightly moist, stiff, fine to medium grained, low plasticity, Darky grey, slightly stiff, low plasticity, trace fine to medium sand□Rimac: Pu = 91 lbs	5	1.7	
-5	9		
▼	2		
	7	2.5	
	8	P	
Same as above, thin poorly graded sand (SP) layer at top of sample	3		
Same as above, no sand Rimac: Pu = 105 lbs	5	2.0	
	8		
-10			
dark grey, slightly moist, very stiff, moderate plasticity, Dark grey, slightly moist, moderate plasticity	4		
	8		
	9		
stiff, Same as above, stiff Rimac: Pu = 106 lbs	4		
	5	2.0	
	7		
	3		
-15	5		
	8		
573.11			
Sandy Clay(CL) dark grey, wet, stiff, fine to medium grained, moderate plasticity	4		
	7		
	8		
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Sandy Clay(CL) dark grey, wet, stiff, fine to medium grained, moderate plasticity *(continued)* Dark grey, wet, stiff, moderate plasticity, fine to medium sand			
-25	50/5"		
No recovery from 25ft to end of drilling			
-30	50/4"		
-35	50/4"		
555.11 End of Boring			
-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 10/8/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY Ke, Kaustav/SCO

SECTION I-74 Bridge over Mississippi River LOCATION (N=562604.366, E=2459800.312), 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. ILR0404
Station 638 + 04
Offset 7' Lt.
Ground Surface Elev. 600.85 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft
Groundwater Elev.:
First Encounter 582.9 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Silt With Some Sand(ML) grey, slightly moist, stiff, fine to coarse grained, low plasticity	3		
	5	2.5	
	4	P	
597.85			
Clay With Trace Sand(CL) grey, slightly moist, stiff, fine grained, low plasticity, broken gravel in tip□RIMAC : Pu = 65lb (shear)	3		
	3	3.9	
	9	S	
-5			
trace coarse sand, broken wood chips, no gravel	2		
	4	2.5	
	6	P	
no wood chips	2		
	4	3.0	
	9	P	
-10			
587.35			
Poorly Graded Sand With Trace Fines (SP) dark grey, wet, dense, fine to coarse grained, low plasticity, trace fine angular gravel, less than 1 inch	2		
-15	10		
	15		
582.85 ▼			
Sandy Clay(CL) dark grey, moist, stiff, fine to medium grained, low plasticity			
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Sandy Clay(CL) dark grey, moist, stiff, fine to medium grained, low plasticity *(continued)*	3		
	5	2.5	
	10	P	
-25	1		
	6	6.6	
574.35	5	S	
End of Boring			
-30			
-35			
-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 10/8/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY KB

SECTION I-74 Bridge over Mississippi River LOCATION (N=562244.587, E=2459804.221), 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. ILR0407
Station 634 + 43
Offset 10' Lt.
Ground Surface Elev. 618.66 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 (%)
Silt (ML) dark gray, firm, fine to medium grained, moderate plasticity	2		
	3	1.5	
	2	P	
trace of angular gravel; <½ inch RIMAC: Pu = 35lbs, shear	2		
	2	2.1	
	3	S	
-5			
612.66			
Clay (CL) dark gray, moist, firm, fine to medium grained, trace of angular gravel; <½ inch	2		
	3	1.0	
	4	P	
	2		
	3	2.0	
	3	P	
-10			
-15	2		
no sand or gravel observed RIMAC: Pu = 63lbs, shear	3	3.8	
	5	S	
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Clay (CL) dark gray, moist, firm, fine to medium grained, trace of angular gravel; <½ inch *(continued)* stiff	2		
	4	2.5	
	7	P	
-25	2		
	5	2.5	
	5	P	
-30			
very stiff	1		
	4	2.0	
	4	P	
-35	1		
very stiff RIMAC: Pu = 82lbs, shear	5	4.9	
582.16	6	S	
End of Boring			
-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)

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 1
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 13 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1279
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Page 1 of 1

Date 10/8/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY F. Abreu

SECTION I-74 Bridge over Mississippi River LOCATION (N=562149.5231, E=2459805.768), 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. ILR0408
Station 633+48
Offset 7' Lt.
Ground Surface Elev. 623.59 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 603.6 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Sandy Silt With Clay brown, moist, non plastic 622.59			
Lean Clay Trace Grave(CL) olive gray, dry to moist, low plasticity, medium stiff, mottled with dark brown, few coarse to fine sands, trace medium to fine sibangular to subrounded gravels, possible native soil, gumbotil	2		
	3	2.8	
	3	P	
	4		
olive gray with brown, dry to moist, low to medium plasticity, medium stiff, occasional very angular gravel sized coal strands scattered throughout, possible glacial till	2		
	4	1.2	
-5	5	S	
Rimac: 3.125"-2.375", Pu = 65 lbs, shear	2		
	3	4.0	
	4	P	
uniform olive gray, dry to moist, medium stiff, moderately cemented, unweathered glacial till	5		
	2		
uniform greenish gray to olive gray, medium stiff, moist, medium plasticity, unweathered glacial till	3	1.1	
	4	S	
Rimac: 2.672"-1.937", Pu = 58 lbs, shear -10	5		
uniform olive gray, moist to dry, strongly cemented, 3" gray sandy silt, moist to wet, lense at center of sample, silt with fine sands, possible glacial till with sand lenses/seams	2		
	6	3.5	
	5	P	
-15	6		
605.59			
	2		
	2	1.2	
	6	S	
▼ -20	6		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Lean Clay With Sand(CL) uniform olive gray, moist to dry, medium plasticity, stiff, little to few coarse to fine sands, trace medium to fine gravels, small dark green fine sand pockets in middle of sample, possible glacial till with sand pockets Rimac: 2.625"-2.000", Pu = 65 lbs, shear *(continued)*			
uniform olive gray, moist to dry, very stiff, little to few coarse to fine sands, top half some fine sands with silt, moist to wet, possible glacial till with alternating sand seams/layers	2		
	9	3.0	
-25	9	P	
595.59	10		
Clayey Sand With Silt(SC) 595.09	2		
uniform olive gray, very stiff, moist to wet, loose to medium dense, medium to fine sands with clay and silt, trace coarse sands Rimac: 3.250"-2.875", Pu = 69 lbs, shear failure	10	1.3	
	9	S	
-30	10		
Lean Clay With Sand(CL) same as previous sample, glacial till with alternating sand layers/seams 590.59	2		
Sandy Lean Clay With Gravel (CL) uniform olive gray, dry to moist, stiff, medium plasticity, few coarse to fine sands, trace little medium to fine subangular to subrounded gravels, unweathered, strong cementation, glacial till 588.59	6	4.0	
	7	P	
-35	9		
End of Boring			
-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

Page 1 of 1

Date 10/5/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY F. Abreu

SECTION I-74 Bridge over Mississippi River LOCATION (N=562007.763, E=2459832.104), 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. ILR0409
Station 632+07
Offset 21' Rt.
Ground Surface Elev. 630.14 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 (%)
Grass Matter followed by silty clay with sand and topsoil 629.14			
Sandy Lean Clay(CL) olive gray to brown, dry, stiff, crumbly, few coarse to fine sands, trace fine gravels, subangular to subrounded, slightly oxidized, possible native soil	4		
	4	3.75-4.5	
	5	P	
	7		
olive gray to brown, dry, stiff, crumbly, few coarse to fine sands, trace fine gravels, subangular to subrounded, slightly oxidized, possible native soil	3		
	6	4.5	
	7	P	
-5	9		
light olive gray clayey sand seams of medium to fine sands, followed by mottled dark gray with olive gray sand lean clay, occasional wood matter, possibe transition zone, native soil, slightly oxidized at bottom	5		
	6	3.75-4.5	
	7	P	
	9		
olive gray mottled with light gray and brown, dry, stiff, strong cementation, oxidized, trace medium to fine subangular to subrounded gravels, possible glacial till	3		
	5	2.1	
	6	B	
-10	9		
uniform medium brown, dry, stiff, slightly oxidized at top to unweathered at bottom, strong cementation, little trace of fine subangular to subrounded gravels Rimac: Pu = 110 lbs 617.14	3		
	5	1.7	
	6	B	
-15	10		
Sandy Lean Clay With Gravel (CL) medium brown with gray, dry to moist, stiff, strong cementation, slightly oxidized at top scattered sand lenses Rimac: Pu = 91 lbs 612.14	2		
	6	1.9	
	7	B	
-20	8		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Lean Clay With Sand(CL) uniform olive gray, dry to moist, stiff, little to fine coarse to fine sands, dark orange brown sand seam at center of sample that has oxidized heavily, remainder of sample is unweathered possible glacial till with scattered sand seam and sand pockets Rimac: Pu = 100 lbs *(continued)* 607.14			
Sandy Lean Clay(CL) uniform gray, stiff, dry to moist, few coarse to fine sands, strong cementation, possible unweathered glacial till Rimac: Pu = 110 lbs	2		
	4	2.1	
	6	B	
-25	8		
same as above, uniform olive gray, stiff, unweathered till	3		
	4	3.5	
	7	P	
-30	9		
same as above, uniform olive gray, unweathered glacial till Rimac: Pu = 110 lbs	3		
	5	2.1	
	8	B	
595.14 -35	10		
End of Boring			
-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

Page 1 of 2

Date 11/18/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY L. Hunt

SECTION I-74 Bridge over Mississippi River LOCATION (N=562103.589, E=2459813.573), 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. RW1102
Station 633+02
Offset 1' Rt.
Ground Surface Elev. 624.39 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 (%)
Lean Clay(CL) Clay, trace gravel and sand, brown,moist, medium stiff, homogenous Possibly till used as fill	4		
	4	1.6	
	3	P	
	3		
Clay, trace gravel and sand, gray brown,moist, medium stiff, homogenous	11		
	3	0.8	
	4	P	
	5		
Clay, trace gravel and sand, gray brown, moist, stiff, homogenous	4		
	4	2.2	
-5	6	P	
	6		
	4		
	4	2.4	
	6	P	
	7		
	3		
	3	3.5	
	4	P	
	5		
-10	7		
594.39			
Sandy Lean Clay Trace Gravel (CL) Clay, trace gravel and sand, gray brown, moist, stiff, homogenous, poss. till	3		
	3	2.8	
	4	P	
	6		
	7		
	4		
	6	3.2	
	9	P	
	9		
-15	3		
	5	3.1	
	7	P	
	9		
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Lean Clay(CL) Clay, trace gravel and sand, brown,moist, medium stiff, homogenous Possibly till used as fill *(continued)*	3		
	5	3.5	
	9	P	
	10		
No sample Must have hit large cobble	9		
	7		
	9		
	12		
Large cobble stuck in the end of split spoon	2		
	5	3.3	
	8	P	
	9		
-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)

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 2
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 14 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1280
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Date 11/18/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY L. Hunt

SECTION I-74 Bridge over Mississippi River LOCATION (N=562103.589, E=2459813.573), 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. RW1102
Station 633+02
Offset 1' Rt.
Ground Surface Elev. 624.39 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 (%)
Sandy Lean Clay Trace Gravel (CL) Clay, trace gravel and sand, gray brown, moist, stiff, homogenous, poss. till *(continued)* No cobbles		5		
		8	3.2	
		12	P	
		13		
	579.39 -45			
Silty Clay Trace Grave(CL-ML) Silty Clay, little sand, trace gravel, gray brown, dry to moist, very stiff, homogenous		5		
		8	4.5	
		11	P	
		13		
	576.39			
Sandy Lean Clay Trace Gravel (CL) Clay, trace sand and gravel, gray brown, dry to moist, very stiff, homogenous		5		
		8	4.2	
		11	P	
	574.39 -50	15		
End of Boring				
	-55			
	-60			

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 11/18/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY L. Hunt

SECTION I-74 Bridge over Mississippi River LOCATION (N=562394.911, E=2459803.548), 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. RW1105
Station 635+94
Offset 12' Lt.
Ground Surface Elev. 611.15 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 (%)
Clay (CL) Clay, trace sand and gravel, red brown to gray brown, moist, very stiff, stratified (red-12"; gray-8")		3		
		4	3.5	
		5	P	
		5		
Clay, some silt, trace gravel and sand, gray brown, moist, medium stiff, homogenous Till		3		
		2	1.8	
		4	P	
		5		
	-5		2.1	15.0
			P	
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous		2		
		5	2.1	
		7	P	
		8		
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous		4		
		5	2.0	
		8	P	
	-10	9		
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous		4		
		5	2.3	
		6	P	
		8		
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous		4		
		6	2.5	
		9	P	
		9		
Clay, some silt, trace sand and gravel, gray brown, moist, medium stiff, homogenous		4		
	-15	5	1.8	
		8	P	
		9		
	-20			
Clay (CL)		4		
Clay, trace sand and gravel, red brown to gray brown, moist, very stiff, stratified (red-12"; gray-8") *(continued)*		6	2.0	
		7	P	
		9		
Clay, some silt, trace sand and gravel, gray brown, moist, medium stiff, homogenous				
	-25			
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous		4		
		6	2.5	
		9	P	
		12		
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous	-30	4		
		7	3.3	
		9	P	
		11		
	-35			
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous		4		
		7	2.4	
		9	P	
		12		
	-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 11/18/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY L. Hunt

SECTION I-74 Bridge over Mississippi River LOCATION (N=562394.911, E=2459803.548), 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. RW1105
Station 635+94
Offset 12' Lt.
Ground Surface Elev. 611.15 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 (%)
Clay (CL) Clay, trace sand and gravel, red brown to gray brown, moist, very stiff, stratified (red-12"; gray-8") *(continued)*		7		
		14	4.5	
		24	P	
		23		
Clay, some silt, trace sand and gravel, gray brown, moist, stiff, homogenous				
	566.15 -45			
Sand (SP) Sand, trace clay gray brown, wet, loose to medium dense, homogenous		3		
		11		
		7		
	564.15	12		
Clayey Sand To Shale(SC) Clayey Sand to Shale, gray brown, wet to moist, medium dense, stratified (SC-4"; Shale-4")		23		
		50/3		
	561.15 -50			
End of Boring				
	-55			
	-60			

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 3
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 15 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1281
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Page 1 of 1

Date 11/19/05

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY L. Hunt

SECTION I-74 Bridge over Mississippi River LOCATION (N=562704.911, E=2459806.583), 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. RW1108
Station 639+04
Offset 8' Rt.
Ground Surface Elev. 593.85 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 (%)
Clay (CL) Clay, trace gravel, little sand, dark brown to red brown, mottled gray brown, dry to moist, stiff, stratified (dark brown - top 5")	5		
	6	3.2 P	
	6		
	4		
Clay to Silty Clay, gray brown, dry to moist, stiff, stratified (Silty Clay - 8")	3		
	5	4.5 P	
589.85	7		
	9		
Clayey Silt(MH) Clayey Silt, light gray brown, mottled orange brown, loose to medium stiff, moist, homogenous -5	3		
	7	1.0 P	
	6		
	8		
Clayey Silt to Clayey Fine Sand, gray brown mottled orange brown, moist, loose, homogenous, grades down to sand	3		
	7	4.0 P	18.0
585.85	10		
	10		
Clayey Fine Sand To Sand(SC) Clayey Fine Sand to Sand, till, trace gravel and sand, gray brown, very stiff, moist, stratified (ML-4", SP-5", till-15")	7		
	9		
	10		
-10	13		
Clay (8") to Clayey Fine Sand and Silt (ML-16"), gray brown, moist, stiff to medium stiff to medium dense, stratified	4		
	8	3.0 P	
581.85	10		
	12		
Sand To Clay(SP) Sand (10") to Clay (14"), trace gravel, gray brown, wet to moist, very loose to hard, stratified	4		
	5	3.6 P	
	7		
579.85	9		
Clay (CL) Clay, trace gravel, gray brown, moist, hard, homogenous -15	3		
	6	3.3 P	
	9		
	11		
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Clay (CL) Clay, trace gravel, gray brown, moist, hard, homogenous *(continued)*	5		
	7	3.3 P	
	9		
	10		
Clay, trace gravel, gray brown, moist, hard, homogenous			
-25	4		
Silty Clay, trace gravel and sand, gray brown, moist, very stiff, homogenous	5	2.5 P	
	9		
	11		
563.85 -30	22		
Sand To Gravel(SP) Sand to Gravel, gray brown, wet, loose, homogenous, fine to coarse grained, well rounded, poorly sorted	50/4		
558.85 -35	50/5.5		
Silt (ML) Silt, trace gravel, gray brown, wet, medium dense, homogenous, well rounded, poorly sorted			
555.85			
End of Boring			
-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)

HANSON

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

COUNTY Rock Island DRILLING METHOD Continuous Flight Auger HAMMER TYPE Auto

STRUCT. NO.
Station
BORING NO. RMP 7th A-01
Station 635+06
Offset 9' Rt.
Ground Surface Elev. 619.8 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 (%)
TOPSOIL 619.55			
FILL - Gray, moist, stiff, CLAY with fine-grained sand and trace gravel	4	1.36B	15
2	4		
	5		
4	5	1.77B	14
	6		
614.80	6		
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)

HANSON

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

COUNTY Rock Island DRILLING METHOD Continuous Flight Auger HAMMER TYPE Auto

STRUCT. NO.
Station
BORING NO. RMP 7th A-02
Station 636+92
Offset 12' Lt.
Ground Surface Elev. 607.7 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 (%)
FILL - Gray, moist, stiff, CLAY with very fine-grained sand and trace gravel	3	2.19B	14
2	5		
	6		
4	6	1.77B	14
	6		
602.70	7		
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)

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 4
RAMP 7TH-A RETAINING WALL 04
STRUCTURE NO. 081-6013
SHEET NO. 16 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1282
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		

HANSON

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

COUNTY Rock Island DRILLING METHOD Continuous Flight Auger HAMMER TYPE Auto

STRUCT. NO.
Station
BORING NO. RMP 7th A-03
Station 640+48
Offset 1' Rt.
Ground Surface Elev. 588.6 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 (%)	
FILL - Brownish gray, moist, medium dense, silty medium- to coarse-grained SAND with clay				
587.10	6 7 7	1.98B	13	
Gray, moist, very stiff, silty CLAY with trace very fine-grained sand and gravel				
583.60	7 8 11	3.86B	16	
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)

HANSON

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

COUNTY Rock Island DRILLING METHOD Continuous Flight Auger HAMMER TYPE Auto

STRUCT. NO.
Station
BORING NO. RMP 7th A-04
Station 641+78
Offset 4' Rt.
Ground Surface Elev. 585.1 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 (%)	
TOPSOIL				
584.40				
Brown, moist, soft, sandy, silty CLAY				
	2 2 3	0.42B	23	
	1 2 2	0.44B	26	
580.10				
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)

MODJESKI and MASTERS
Experience great bridges.

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

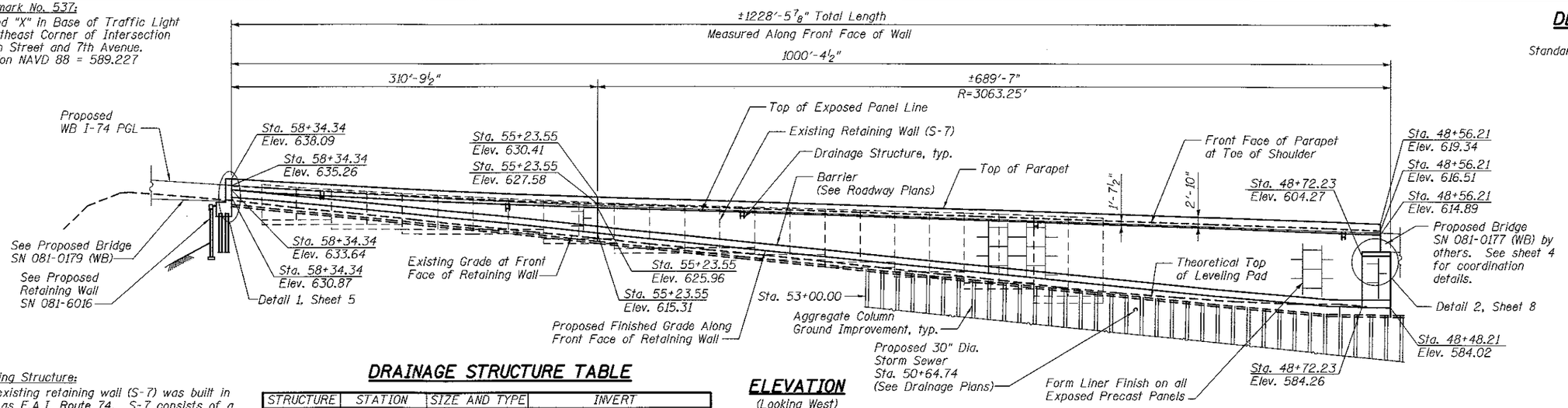
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 5
RAMP 7TH–A RETAINING WALL 04
STRUCTURE NO. 081–6013
SHEET NO. 17 OF 17 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1283
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

Benchmark No. 537:
Chiseled "X" in Base of Traffic Light at Southeast Corner of Intersection of 19th Street and 7th Avenue.
Elevation NAVD 88 = 589.227

ELEVATION
(Looking West)



DESIGN SPECIFICATIONS
2002 AASHTO
Standard Specifications for Highway Bridges

DESIGN STRESSES
FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)
PRECAST UNITS
f'_c = 4,500 psi (Precast Face Panels)

INDEX OF SHEETS

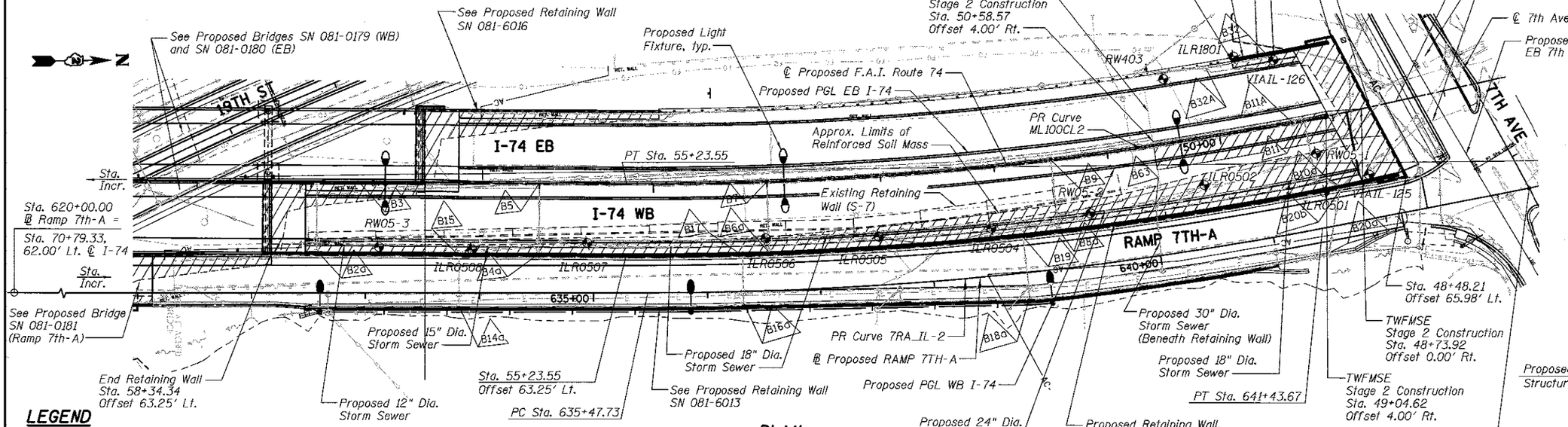
Existing Structure:
The existing retaining wall (S-7) was built in 1973 as F.A.I. Route 74. S-7 consists of a cast-in-place T-type wall supported by both spread footings and pile supported footings. The total length of the retaining wall is +/-716'. The structure will remain in place.

Traffic to be maintained utilizing stage construction.

DRAINAGE STRUCTURE TABLE

STRUCTURE	STATION	SIZE AND TYPE	INVERT
STR B2a	57+94.84	3' Inlet TB	Inv. W. Elev. 628.20
STR B4a	56+00.00	3' Inlet TB	Inv. W. Elev. 624.45
STR B6a	54+00.00	3' Inlet TB	Inv. W. Elev. 621.25
STR B8a	51+50.00	3' Inlet TB	Inv. W. Elev. 617.00
STR B10a	49+08.31	3' Inlet TB	Inv. W. Elev. 613.20
STR B32	49+45.00	2' Inlet TA	Inv. S. Elev. 610.20

PLAN



LEGEND
- Reinforced Soil Mass
- MSE Wall Panels
- Soil Borings
- B14 — Drainage Structure

CURVE DATA

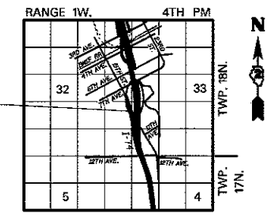
PR CURVE ML100CL2
PI STA = 51+84.67
Δ = 13° 00' 00" (RT)
D = 1° 54' 35"
R = 3,000.00'
T = 341.81'
L = 680.68'
E = 19.41'
e = 4.3%
PC STA = 48+42.87
PT STA = 55+23.55
S.E. RUN= 231' (I), 371.11' (O)

PR CURVE 7RA_IL-2
PI STA = 638+46.62
Δ = 11° 01' 50" (LT)
D = 1° 51' 03"
R = 3,095.50'
T = 298.90'
L = 595.95'
E = 14.40'
e = R.C. (1.5%)
PC STA = 635+47.73
PT STA = 641+43.67

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

Notes:
Existing utilities shown will be relocated by others to avoid any conflicts during construction (see Utility Plans).
See Drainage and Utilities Plans for inlet and manhole details.
See MSE Wall Aesthetic Plans for required form liner finish.
See Sheet 2 for Ground Improvement Performance Requirements.
Temporary Wire Faced MSE Wall (TWFMSE) required for stage construction shall remain in place and shall be paid for as "Temporary Mechanically Stabilized Earth Retaining Wall."

JERILYN M. HASSARD
081-006521
LICENSED STRUCTURAL ENGINEER OF ILLINOIS
03-23-17
JERILYN M. HASSARD
EDWARDSVILLE, ILLINOIS
ILLINOIS LICENSED STRUCTURAL ENGINEER NO. 081-006521
EXPIRES 11/30/2018



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
F.A.I. ROUTE 74 SEC. (81-1)R-1
ROCK ISLAND COUNTY
I-74 Sta. 49+78.00 (EB) to Sta. 58+34.34 (WB)
STRUCTURE NO. 081-6014 (RETAINING WALL 05)

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 1 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1284
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Wall stations and offsets are given to the front face (FF) of the wall and are measured from centerline of Proposed I-74 except as noted. FF of the wall is to be considered edge of panel, form liner or C.I.P. facing.
3. See Special Provision for Mechanically Stabilized Earth Retaining Walls, Aggregate Column Ground Improvement, and Temporary Mechanically Stabilized Earth Retaining Walls for design and construction requirements.
4. For existing soils laboratory data, see Geotechnical Investigation Laboratory Data Special Provision.
5. The piles for SN 081-0177 and SN 081-0178 are located within the reinforced soil mass. See SN 081-0177 and SN 081-0178 plans for additional pile requirements.
6. Wall system supplier shall coordinate proposed wall configuration with Aggregate Column Ground Improvement subcontractor.
7. Wall construction shall not begin until after Aggregate Column Ground Improvement has been completed in the area of the new wall.
8. In areas where ground improvements are not required, the native soils should be inspected when excavation reaches the base of the proposed wall. Any soft or otherwise unsuitable material should be removed and replaced with compacted rock fill. Removals shall be paid for as Removal and Disposal of Unsuitable Material for Structures. Rock fill shall be paid for as Rock Fill.
9. See SN 081-0177 and SN 081-0178 plans for maskwall details.
10. All concrete for the C.I.P. facing with a form liner textured surface shall be self-consolidating concrete meeting the requirements of Section 1020 of the Standard Specifications. This work shall be included in the cost of the concrete used and no additional compensation will be allowed.

MSE WALL SETTLEMENT

1. The Top of Exposed Panel Elevations shown on these plans are final elevations after any settlement.
2. For MSE Wall on top of the aggregate columns, the wall settlement will be determined by the ground improvement design. The wall system supplier shall coordinate with Aggregate Column Ground Improvement subcontractor to accommodate this settlement in the wall design.
3. For MSE wall outside the ground improvement limits, 1.0 inch of settlement is anticipated from I-74 Sta. 58+34.34 to Sta. 53+00.00 (WB). The wall system supplier shall take appropriate measures to accommodate this settlement in the wall design.

STATION 49+78.00
BUILT 201_ BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. (81-1)R-1
LOADING HS-20
STR. NO. 081-6014

NAME PLATE
See Std. 515001

TOTAL BILL OF MATERIAL

	ITEM	UNIT	TOTAL
	Structure Excavation	Cu. Yd.	2,941
	Concrete Superstructure	Cu. Yd.	469.3
	Form Liner Textured Surface	Sq. Ft.	2,527
	Protective Coat	Sq. Yd.	1,060
	Reinforcement Bars, Epoxy Coated	Pound	73,680
	Name Plates	Each	1
	Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	5,542
*	Aggregate Column Ground Improvement	L. Sum	0.25
	Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	25,138
	Rock Fill	Cu. Yd.	765

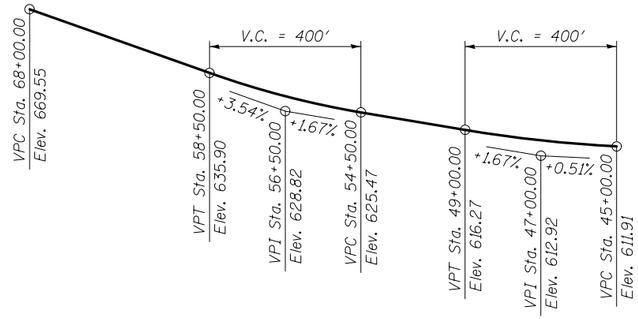
* See additional retaining walls within this contract for remainder of L. Sum quantity.

GROUND IMPROVEMENT PERFORMANCE REQUIREMENTS

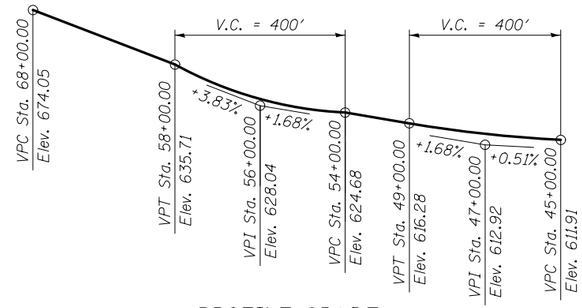
1. Minimum factor of safety for global slope stability shall be 1.5 for both permanent and temporary conditions.
2. Allowable bearing pressure (with F.S.) shall be equal to or greater than the equivalent uniform service bearing pressure as shown on Sheet 3. Intermediate values may be defined by interpolating between the values shown.

   Minimum factor of safety against equivalent uniform service bearing pressure shall be 2.0 if a load test is performed.

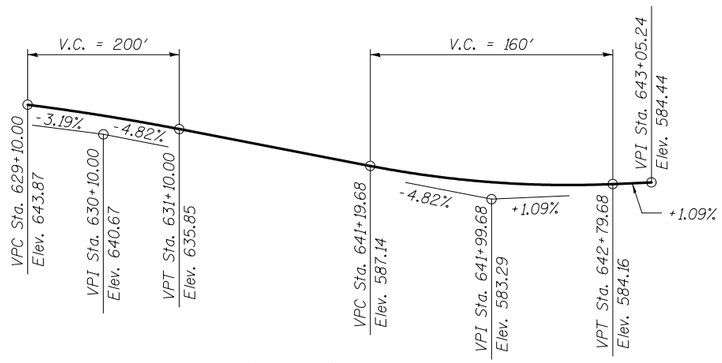
   Minimum factor of safety against equivalent uniform service bearing pressure shall be 2.5 if a load test is not performed.
3. Total settlement measured at the theoretical top of leveling pad shall not exceed 4.0 inches.
4. Total settlement measured on the pavement shall not exceed 1.0 inch.
5. Differential settlement measured along the theoretical top of leveling pad shall not exceed 1/100.
6. The assumed structure life for settlement computations shall be 75 years.
7. Contractor's verification program shall include monitoring points or other instrumentation to demonstrate compliance with the stated performance requirements.
8. The Shop Drawings and construction procedures submittal shall indicate the sequence of construction within the limits of Aggregate Column Ground Improvement. The aggregate column installation shall be coordinated with utility removal, structure removals, proposed utility installation, and bridge pile driving.
9. Aggregate columns shall be installed before the bridge piles are driven; however, the piles shall not be driven through the aggregate of an installed column. The aggregate column layout shall provide clearance for the bridge piles.
10. Primary consolidation of the soil within the depth of the ACGI to be at least 90 percent complete when the bridge piles are to be driven. Any required waiting periods shall be coordinated with the bridge construction schedule.



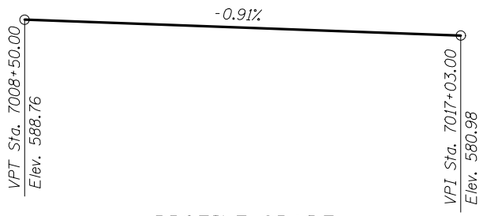
PROFILE GRADE
(Along WB PGL-F.A.I Route 74)



PROFILE GRADE
(Along EB PGL - F.A.I. Route 74)



PROFILE GRADE
(Along ℄ Ramp 7TH-A)



PROFILE GRADE
(Along EB PGL - 7TH Avenue)

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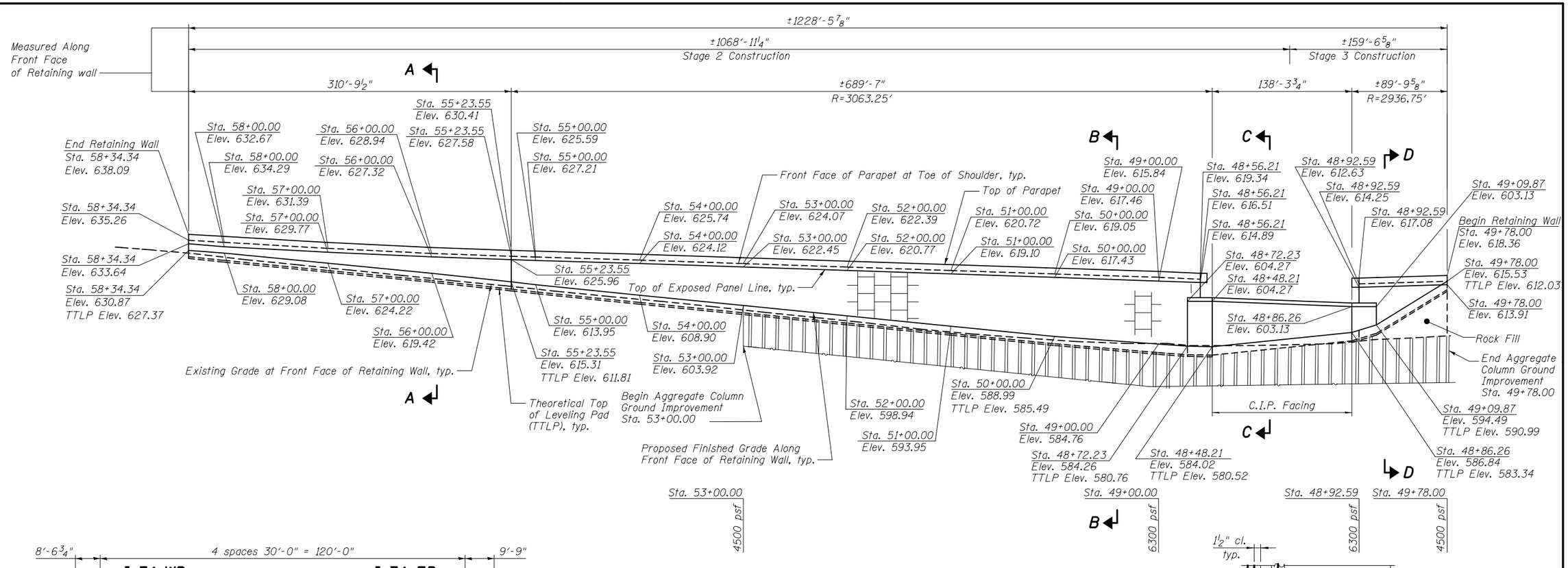
USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - MLA	REVISED
PLOT DATE = 03/23/2017	CHECKED - YSS	REVISED

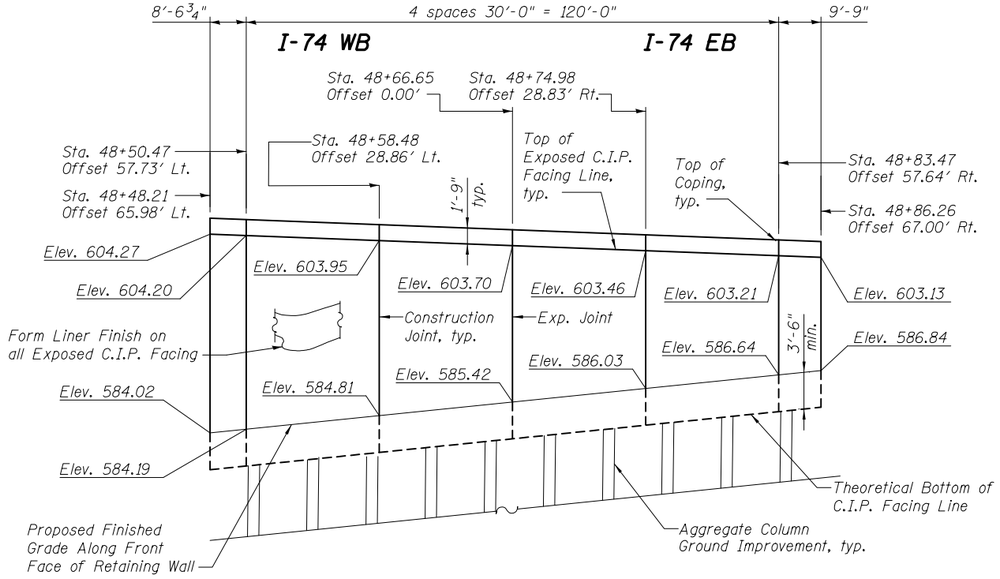
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 2 OF 25 SHEETS

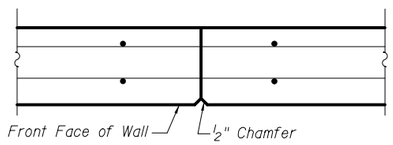
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1285
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



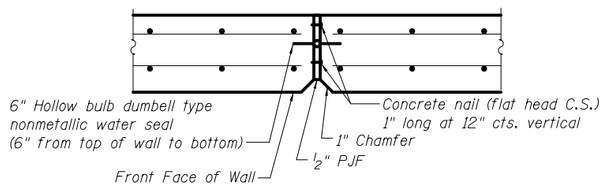
UNFOLDED ELEVATION VIEW



ELEVATION VIEW OF C.I.P. FACING



C.I.P. FACING CONSTRUCTION JOINT



C.I.P. FACING EXPANSION JOINT

Expansion joint materials are included in the cost of Mechanically Stabilized Earth Retaining Wall.

C.I.P. FACING TYPICAL SECTION

Concrete and reinforcing steel for C.I.P. Facing are included in the cost of Mechanically Stabilized Earth Retaining Wall.

LEGEND:

4500 psf — Equivalent Uniform Service Bearing Pressure

Notes:

See Sheet 5 for Section A-A.
See Sheet 6 for Section B-B.
See Sheet 7 for Sections C-C and D-D.
See Sheet 2 for Ground Improvement Performance Requirements
See C.I.P. Retaining Wall Aesthetic Plans for required form liner finish and rustication on C.I.P. Facing.
See MSE Wall Aesthetic Plans for required form liner finish on Precast Panels.
Form liner finish on C.I.P. Facing shall be paid for as Form Liner Textured Surface.
Form liner finish on Precast Panels is included in the Cost of Mechanically Stabilized Earth Retaining Wall.

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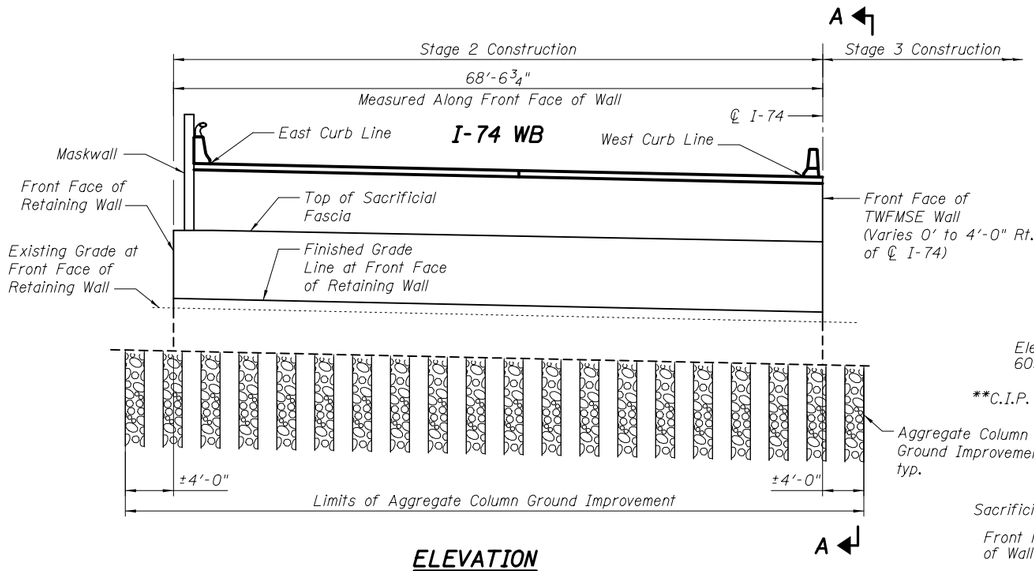
USER NAME =	DESIGNED - ZJB	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

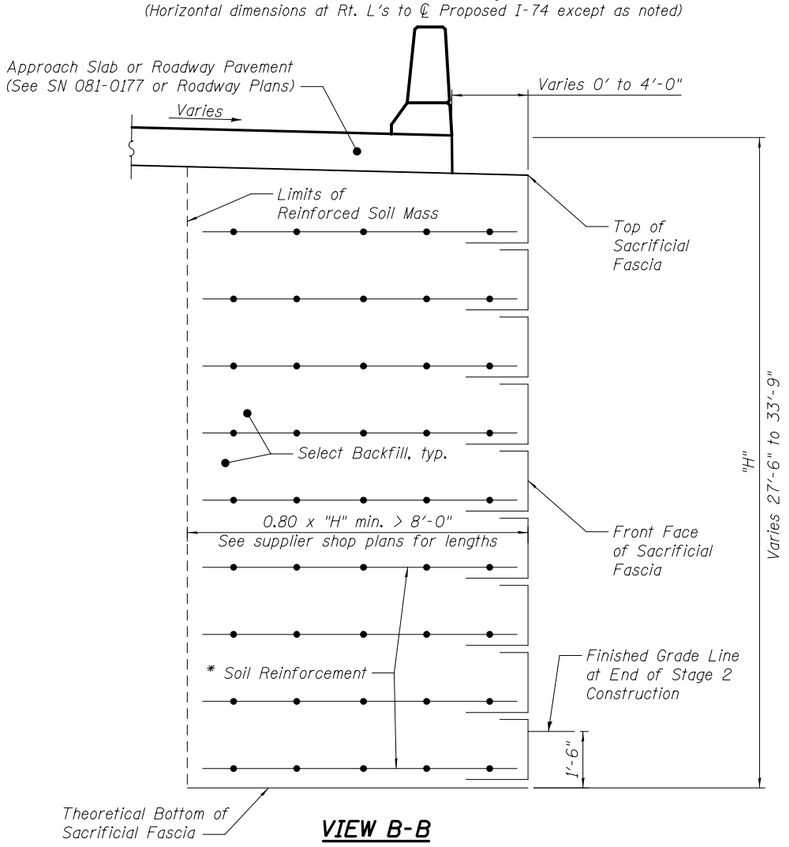
UNFOLDED WALL ELEVATION
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 3 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1286
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

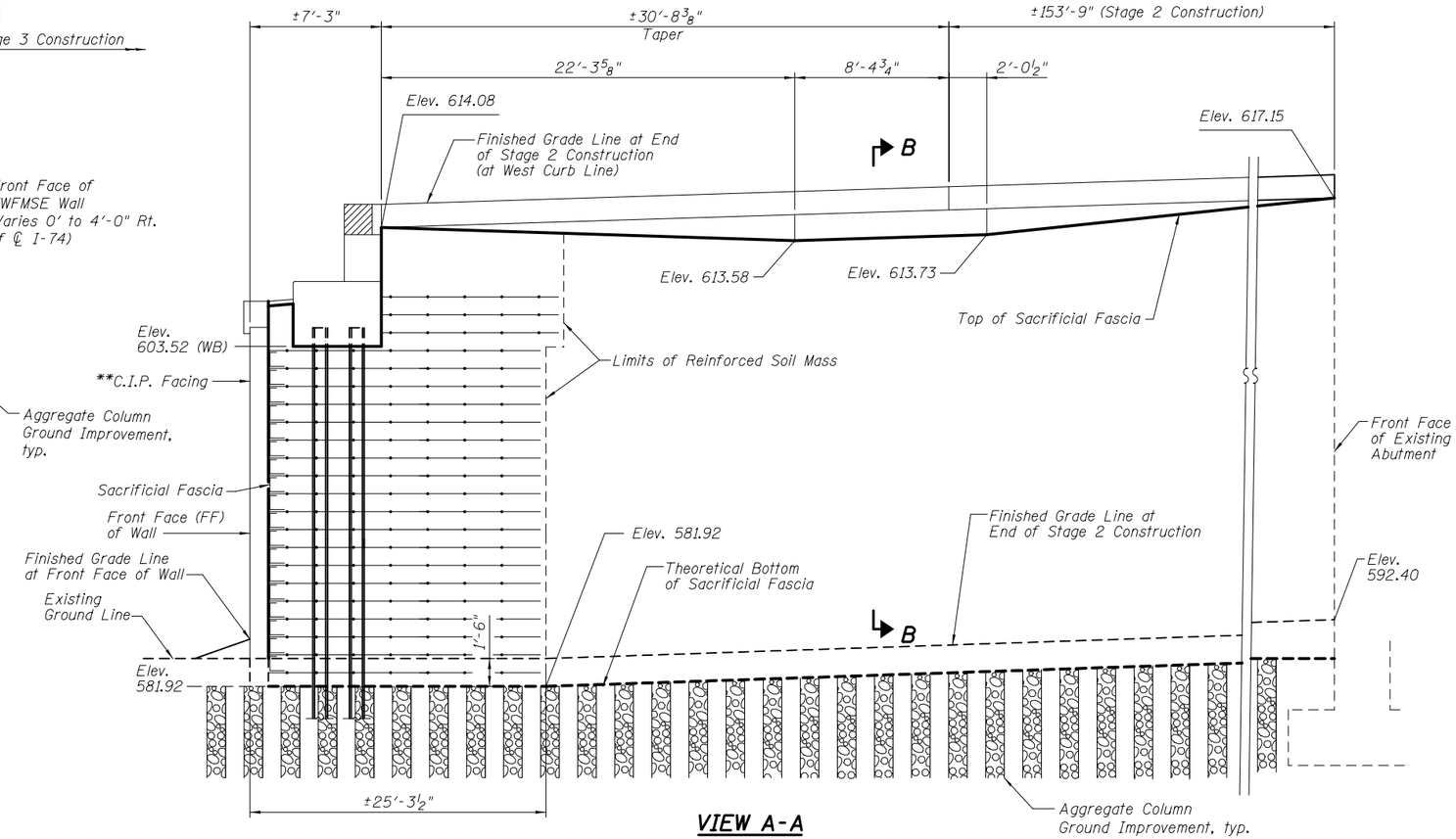


ELEVATION

Front Face of Abutment at End of Stage 2 Construction
(Horizontal dimensions at Rt. L's to ℄ Proposed I-74 except as noted)

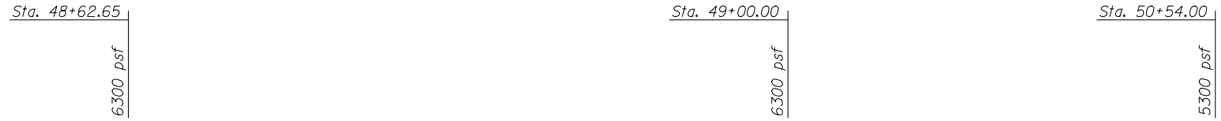


VIEW B-B



VIEW A-A

(Horizontal dimensions parallel to ℄ Proposed I-74)



CONTRACTOR COORDINATION REQUIREMENTS AT SOUTH ABUTMENT

"Wall Contractor" (responsible for construction of SN 081-6014) shall coordinate with "Bridge Contractor" (responsible for construction of SN 081-0177 (WB) and SN 081-0178 (EB) in a separate contract). Construction at the South Abutment shall follow the steps outlined below:

CONSTRUCTION SEQUENCE

1. Wall Contractor shall construct Aggregate Column Ground Improvement beneath South Abutment. Aggregate columns will be located such that they do not interfere with the proposed pile locations (See Sheets 17 and 18).
2. Bridge Contractor shall drive piles.
3. Wall Contractor shall construct MSE wall and place backfill up to the elevation of the bottom of abutment.
4. Bridge Contractor shall construct the abutment. Bridge Contractor is responsible for coordinating the type and location of abutment soil reinforcement straps with the Wall Contractor. Wall Contractor is responsible for placing all components of the abutment soil reinforcement straps.
5. See SN 081-0177 and SN 081-0178 plans for maskwall details and construction sequence notes.
6. Wall Contractor shall resume and complete construction of MSE walls and placement of backfill.
7. Bridge Contractor shall grade sub-base to proper elevation and construct approach slab.

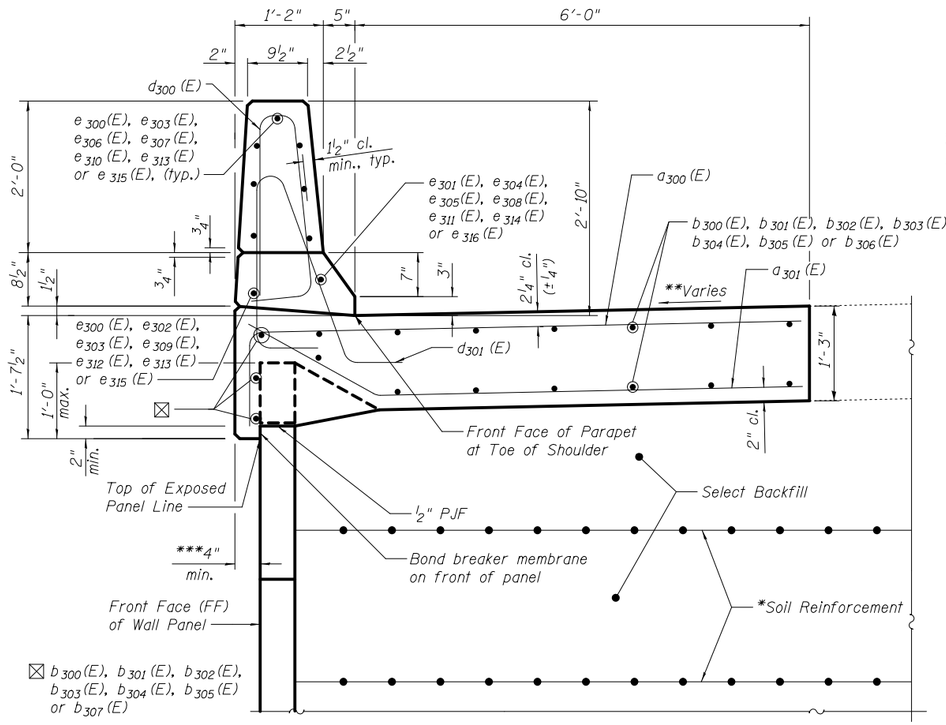
* The M.S.E. wall supplier's internal stability design shall account for the slabs bearing pressure surcharge of 1.0 kips/ft and horizontal sliding force of 0.5 kips/ft of wall.

** C.I.P. Facing shall be placed during Stage 3 Construction after completion of the permanent wall.

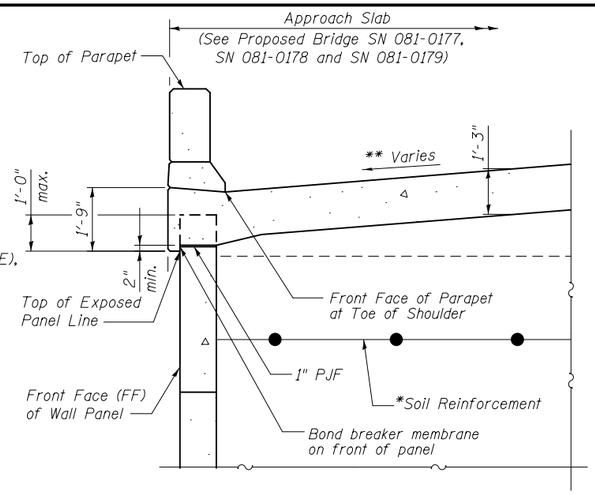
LEGEND:

5300 psf — Equivalent Uniform Service Bearing Pressure

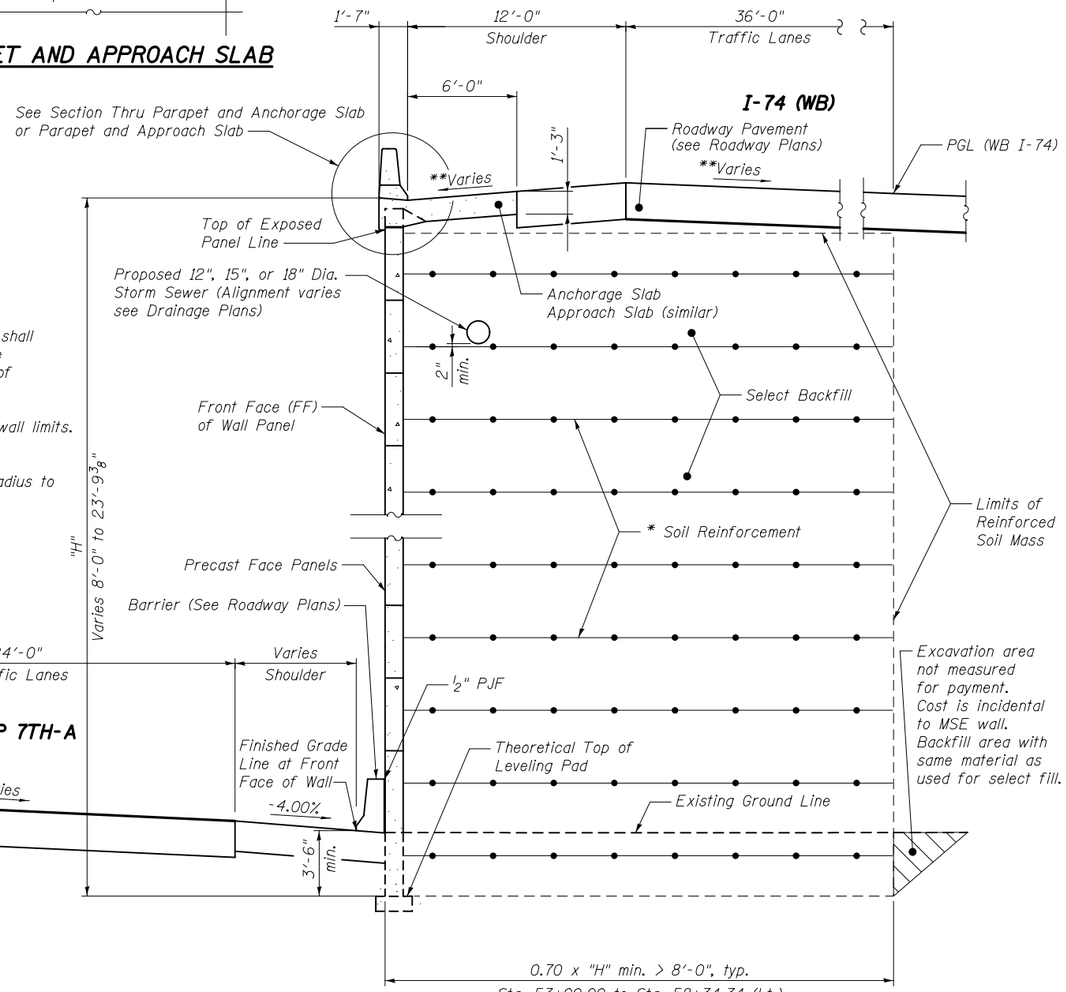
Note:
Limits of TWFMSE Wall shown are based on theoretical limits of permanent wall. Adjustments may be required if actual field conditions vary from the configuration shown.



SECTION THRU PARAPET AND ANCHORAGE SLAB

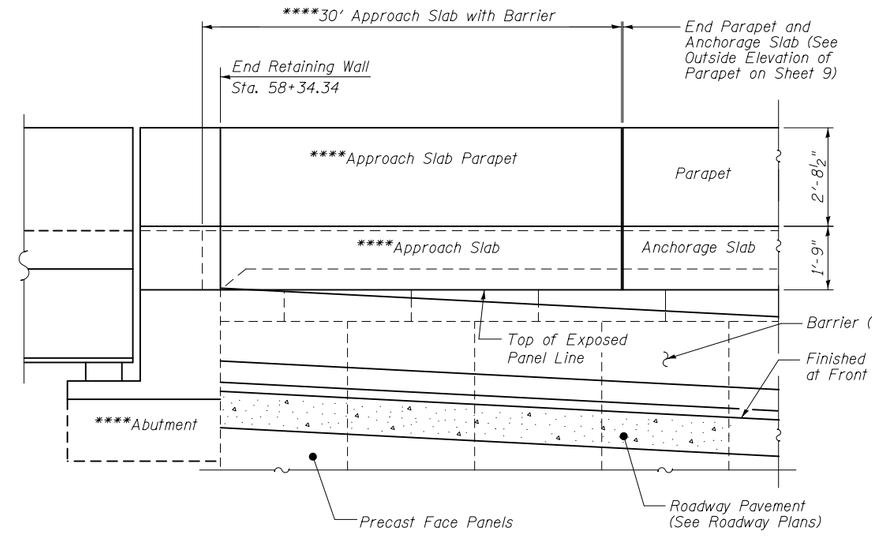


SECTION THRU PARAPET AND APPROACH SLAB

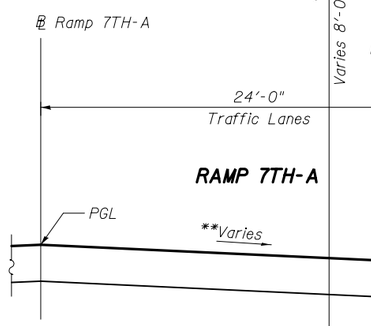


TYPICAL WALL SECTION

(Section A-A)



DETAIL 1



* The M.S.E. wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.5 kips/ft. of wall.

** Cross slope transition varies throughout retaining wall limits. See Roadway Plans for details.

*** Contractor shall detail overhang width along wall radius to provide minimum dimension required.

**** See Proposed Bridge SN 081-0179.

Notes:
For location of Detail 1, see Sheet 1.
For location of Section A-A, see Sheet 3.

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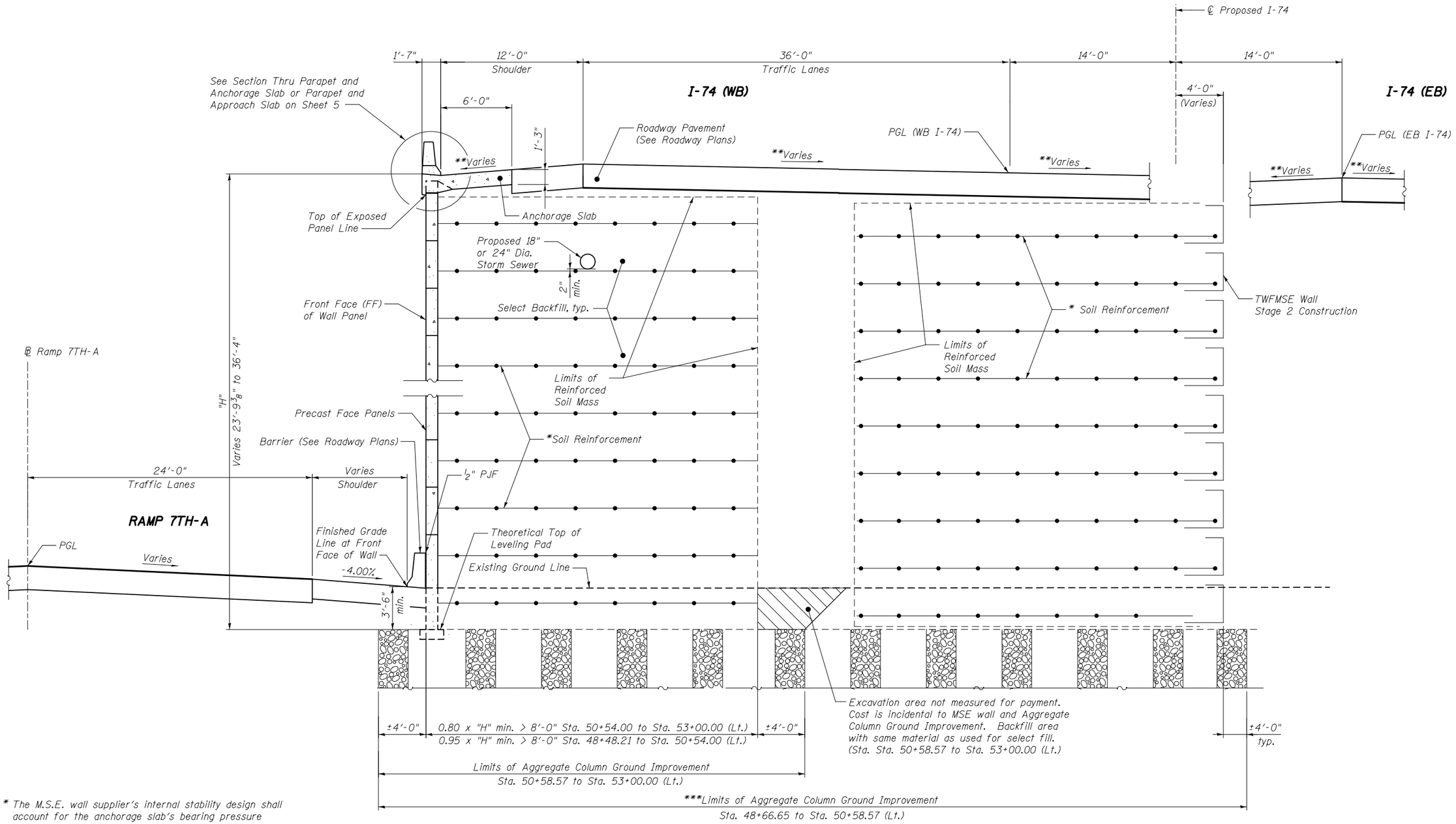
USER NAME =	DESIGNED - ZJB	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MSE DETAILS 1
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 5 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1288
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



* The M.S.E. wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.5 kips/ft. of wall.

** Cross slope transition varies throughout retaining wall limits. See Roadway Plans for details.

*** Limits of Aggregate Column Ground Improvement shall be truncated around the existing retaining wall (S-7) footing which is to remain in place.

TYPICAL WALL SECTION

(Section B-B)

Notes:
For location of Section B-B, see Sheet 3.
For TWFMSE Wall Details, see Sheet 4.

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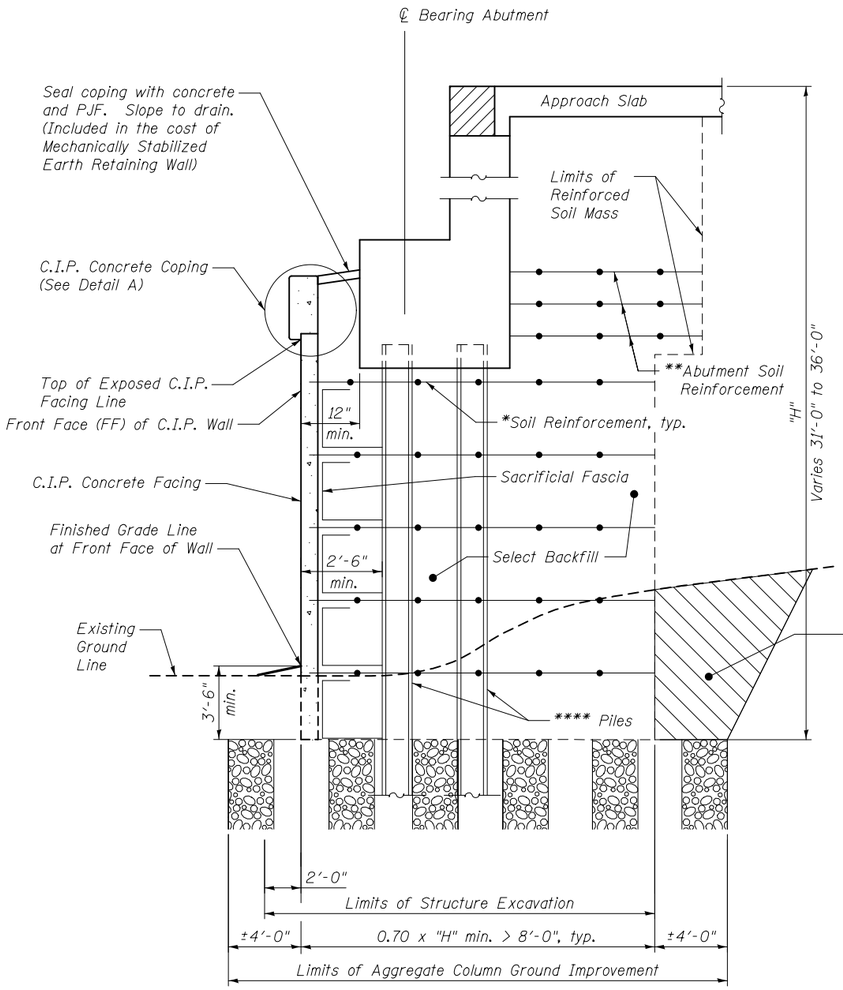
USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

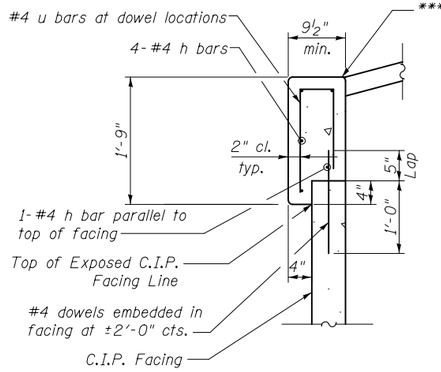
MSE DETAILS 2
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 6 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1289
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

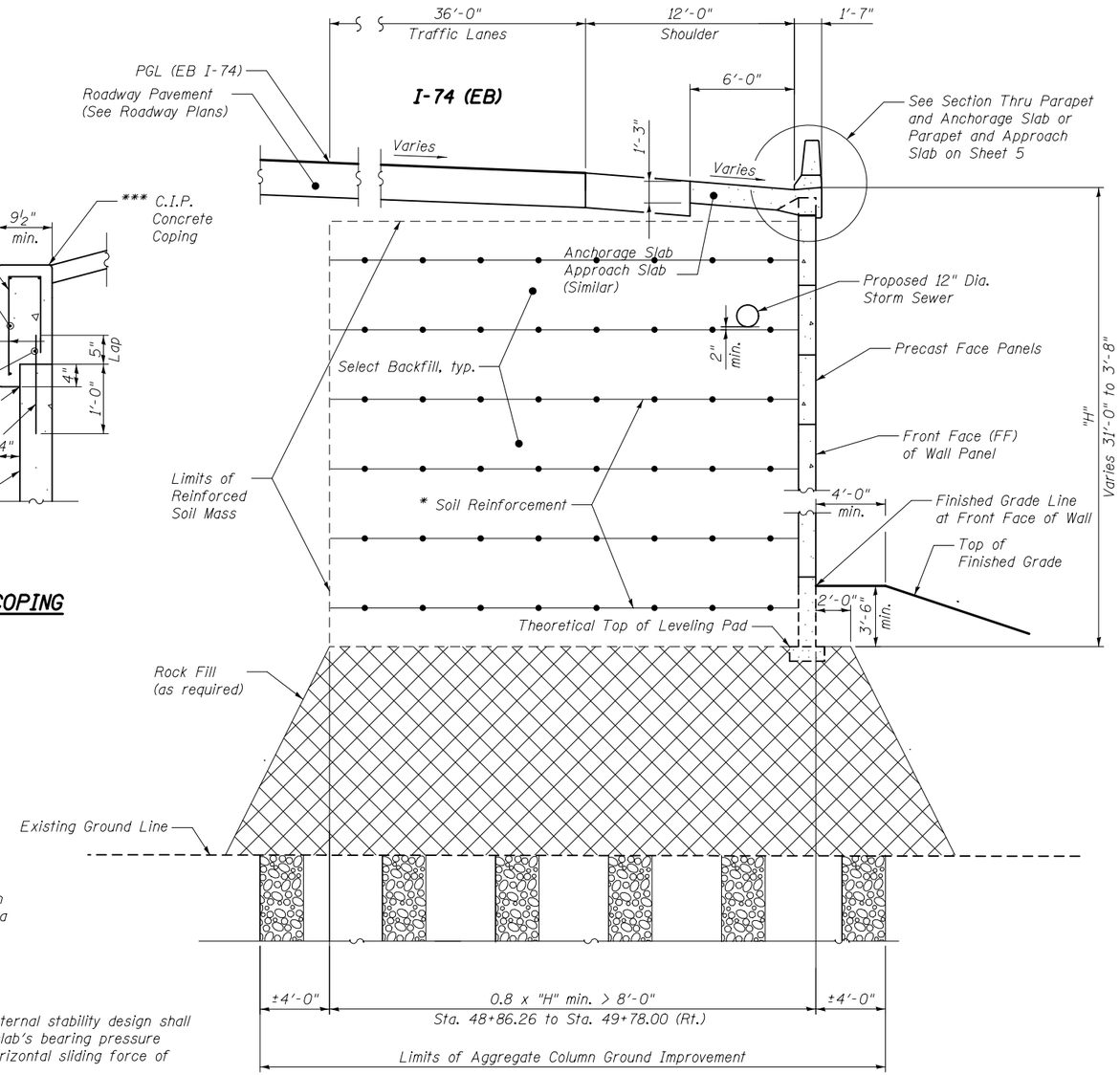


TYPICAL WALL SECTION THRU ABUTMENT

(Section C-C)



DETAIL A
C.I.P. CONCRETE COPING



TYPICAL WALL SECTION

(Section D-D)

Excavation area not measured for payment. Cost is incidental to MSE wall and Aggregate Column Ground Improvement. Backfill area with same material as used for select fill.

* The M.S.E. wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 0.5 kips/ft. of wall.

** The M.S.E wall supplier shall design the abutment soil reinforcement to resist a horizontal force of 3.25 kips/ft. of abutment. Cost shall be included with the cost of "Mechanically Stabilized Earth Retaining Wall"

*** Concrete and reinforcing steel for C.I.P. Concrete Coping are included in the cost of "Mechanically Stabilized Earth Retaining Wall".

**** For location of piles, see Sheets 15 and 16.

Notes:
See SN 081-0177 and SN 081-0178 plans for abutment and approach slab details.
For contractor coordination requirements at south abutment, see Sheet 4.
For location of Section C-C and D-D, see Sheet 3.

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

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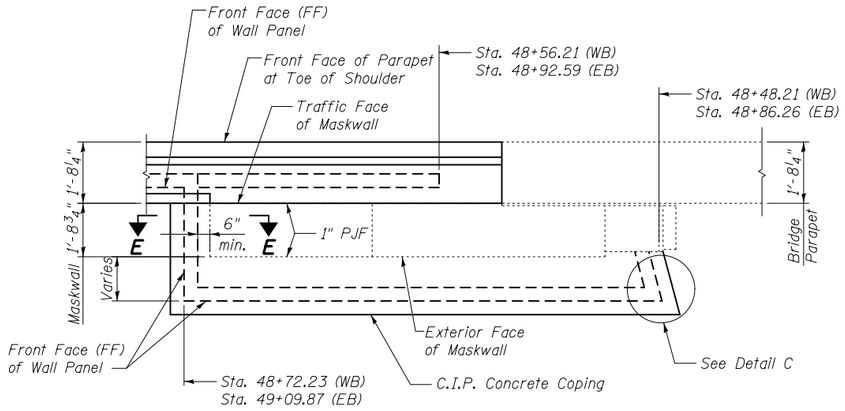
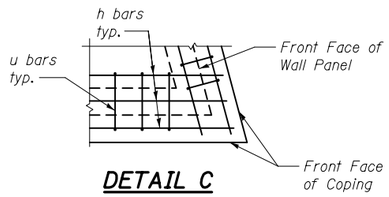
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MSE DETAILS 3
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 7 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1290
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

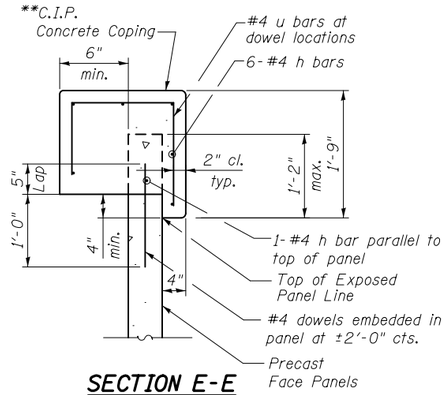


SECTION A-A

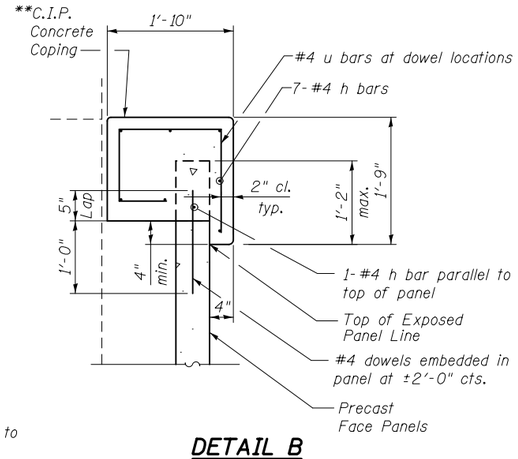


DETAIL C

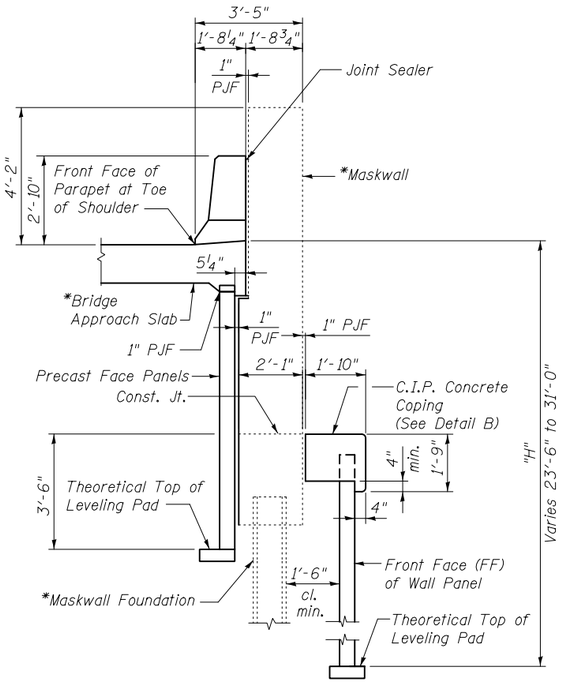
(Bottom reinforcement not shown for clarity.)
(Other corners similar.)



SECTION E-E

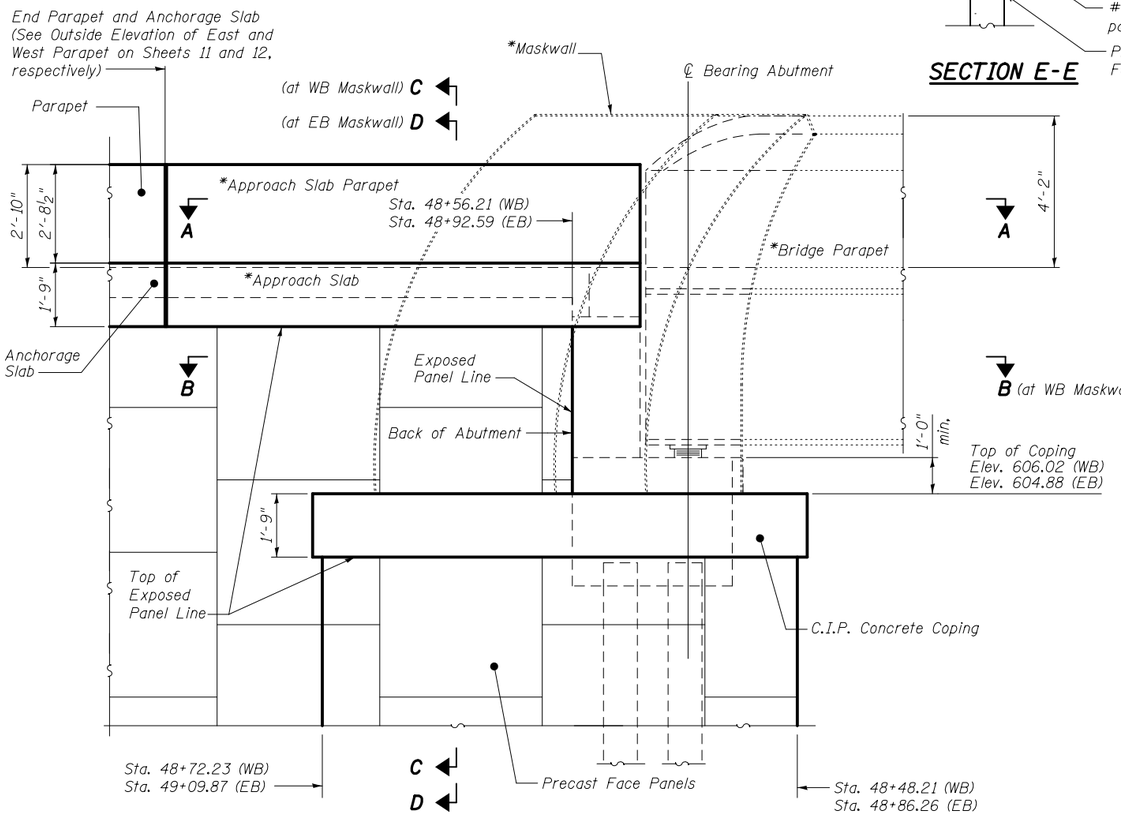


DETAIL B



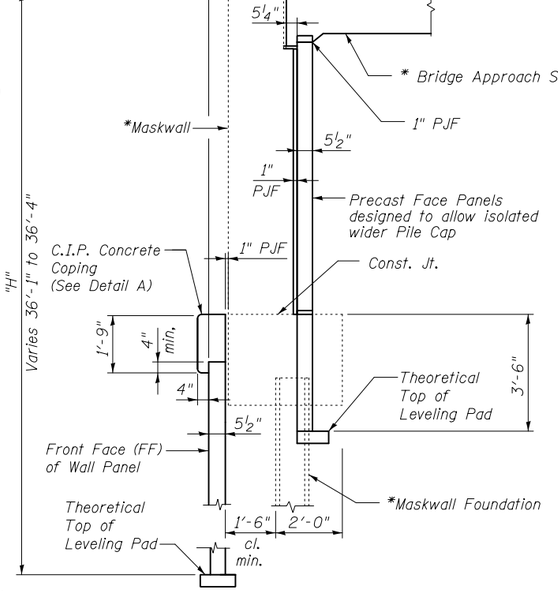
SECTION D-D

(at EB Maskwall)



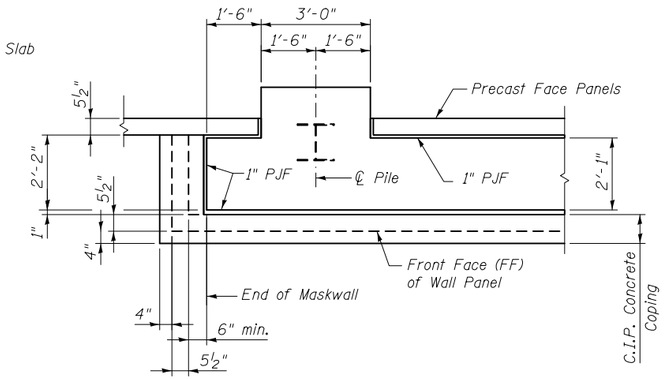
DETAIL 2

(WB shown, EB opposite hand.)
(Maskwall foundation not shown for clarity.)



SECTION C-C

(at WB Maskwall)



SECTION B-B

(at WB Maskwall)

* See Proposed Bridge SN 081-0177 and SN 081-0178

** Concrete and reinforcing steel for C.I.P. Concrete Coping are included in the cost of Mechanically Stabilized Earth Retaining Wall.

Notes:

The soil reinforcement limits for the upper and lower MSE walls shall meet the design requirements provided within the Typical Sections. The width of the lower wall soil reinforcement shall be designed based on "H" as dimensioned in Sections C-C and D-D. The width of the upper wall soil reinforcement shall be designed based on the height from the upper wall Theoretical Top of Leveling Pad to the Toe of Shoulder and shall be equal to or greater than the limit of soil reinforcement required for the lower MSE wall.

For location of Detail 2, see Sheet 1.

For Detail A, see Sheet 7.

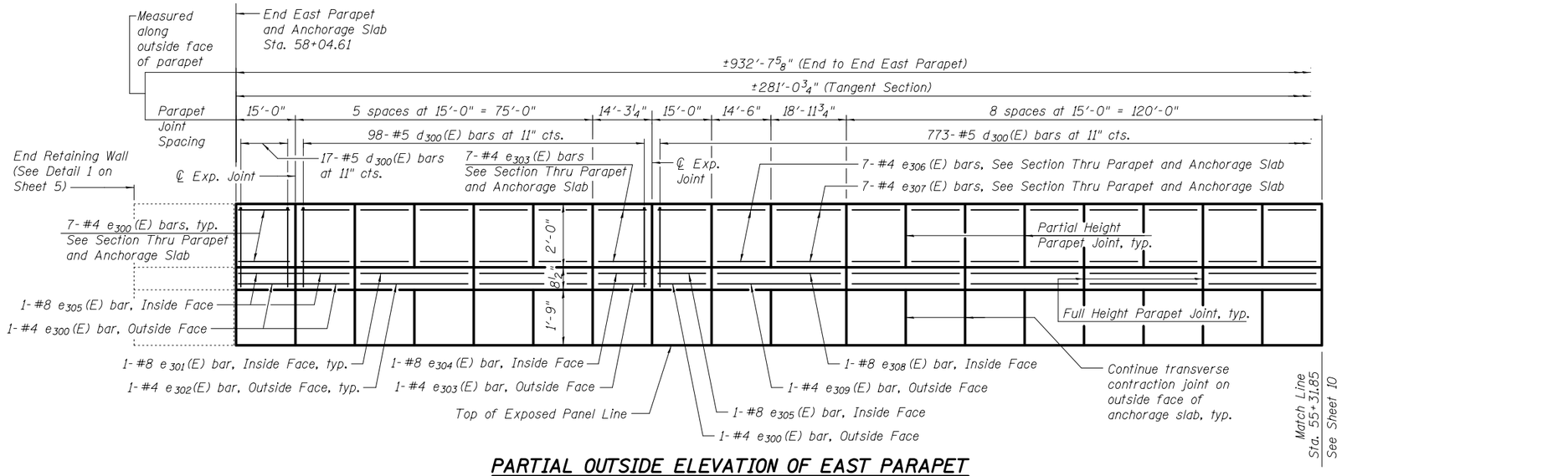
MODJESKI and MASTERS
Experience great bridges.

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

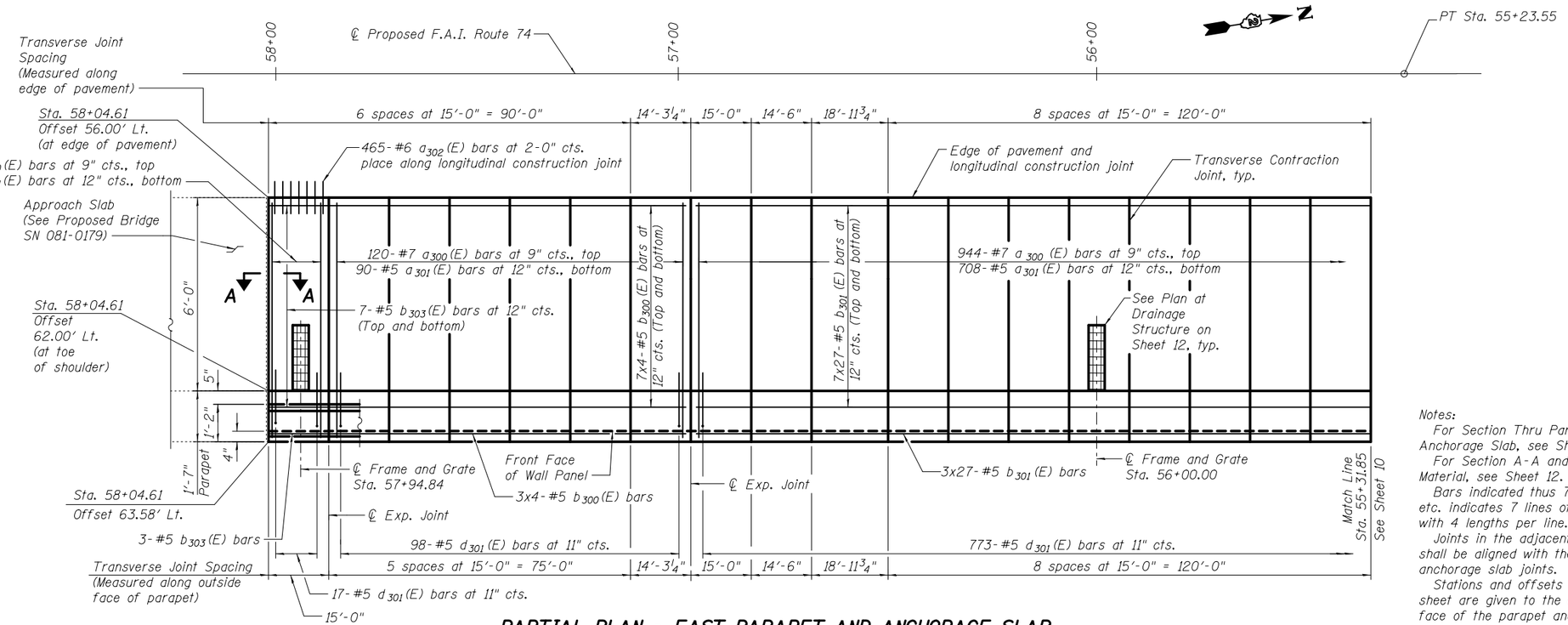
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MSE DETAILS 4
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 8 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1291
		CONTRACT NO. 64E26		
	ILLINOIS	FED. AID PROJECT		



PARTIAL OUTSIDE ELEVATION OF EAST PARAPET



PARTIAL PLAN - EAST PARAPET AND ANCHORAGE SLAB

Notes:

For Section Thru Parapet and Anchorage Slab, see Sheet 5.

For Section A-A and Bill of Material, see Sheet 12.

Bars indicated thus 7x4-#5 etc. indicates 7 lines of bars with 4 lengths per line.

Joints in the adjacent pavement shall be aligned with the anchorage slab joints.

Stations and offsets on this sheet are given to the outside face of the parapet and are measured from centerline Proposed I-74, except as noted.

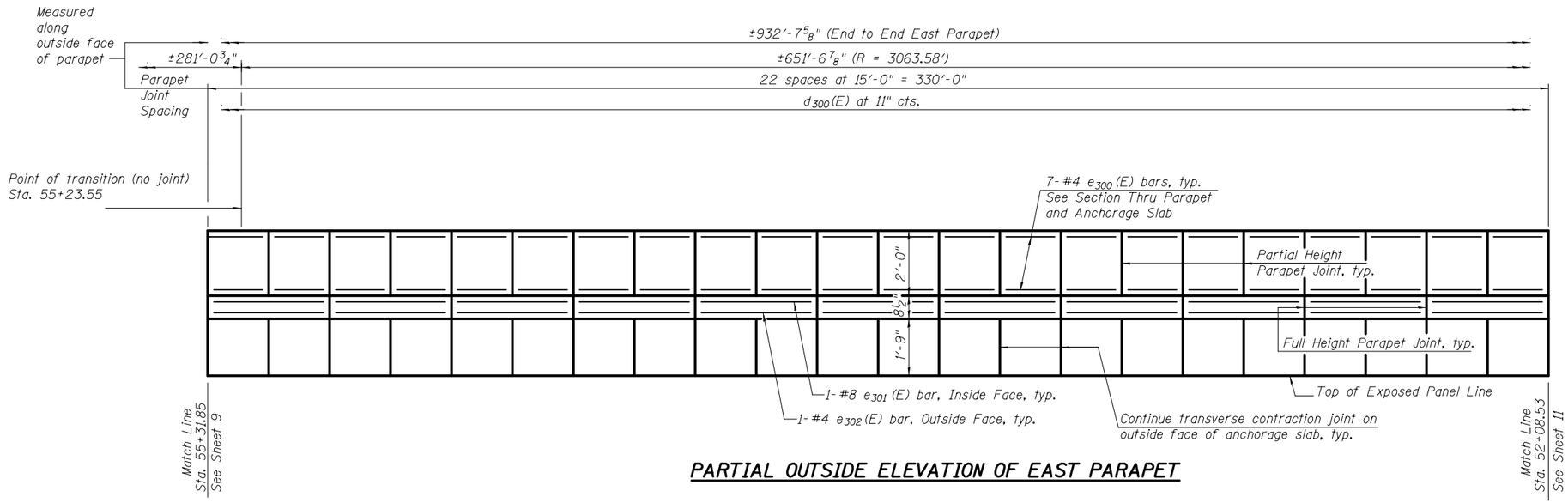
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - MLA	REVISED
PLOT DATE = 03/23/2017	CHECKED - ZJB	REVISED

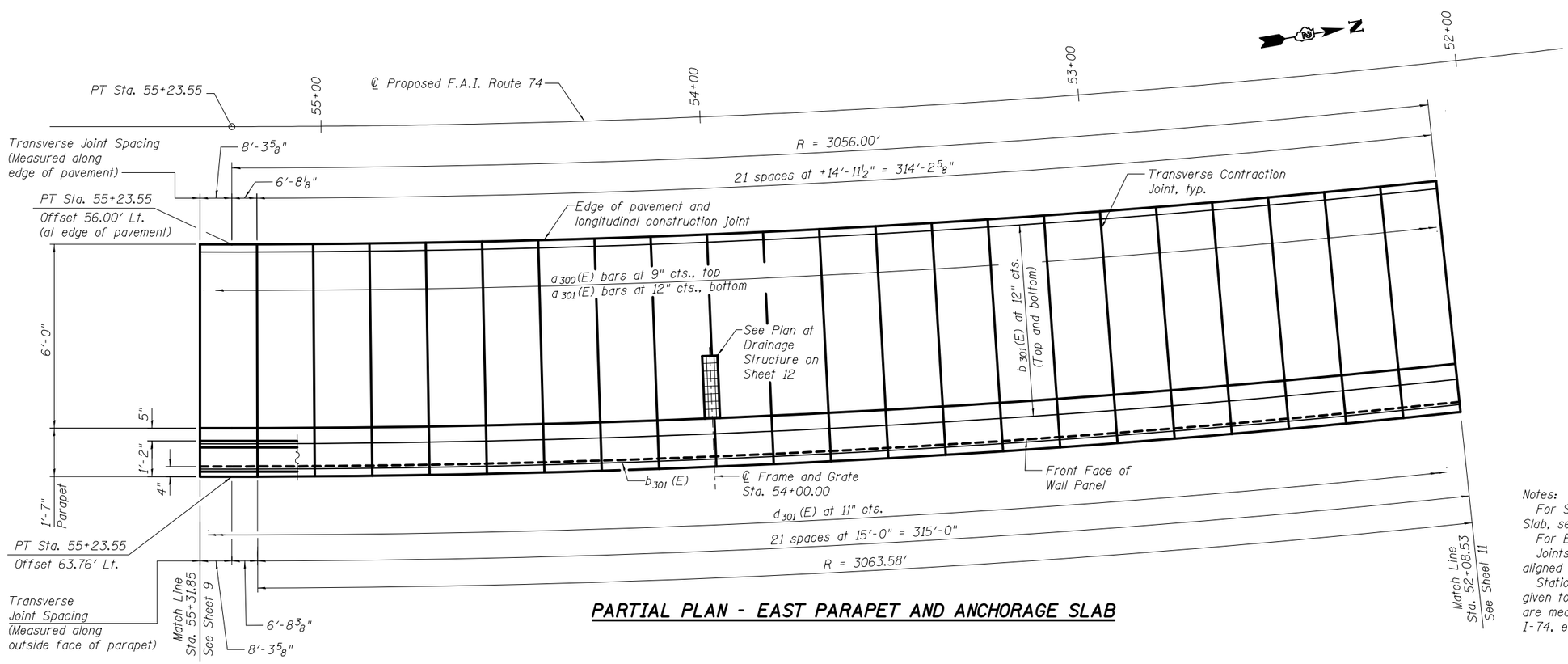
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET AND ANCHORAGE SLAB 1
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 9 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1292
				CONTRACT NO. 64E26
	ILLINOIS	FED. AID PROJECT		



PARTIAL OUTSIDE ELEVATION OF EAST PARAPET



PARTIAL PLAN - EAST PARAPET AND ANCHORAGE SLAB

Notes:

For Section Thru Parapet and Anchorage Slab, see Sheet 5.

For Bill of Material, see Sheet 12.

Joints in the adjacent pavement shall be aligned with the anchorage slab joints.

Stations and offsets on this sheet are given to the outside face of the parapet and are measured from the centerline Proposed I-74, except as noted.

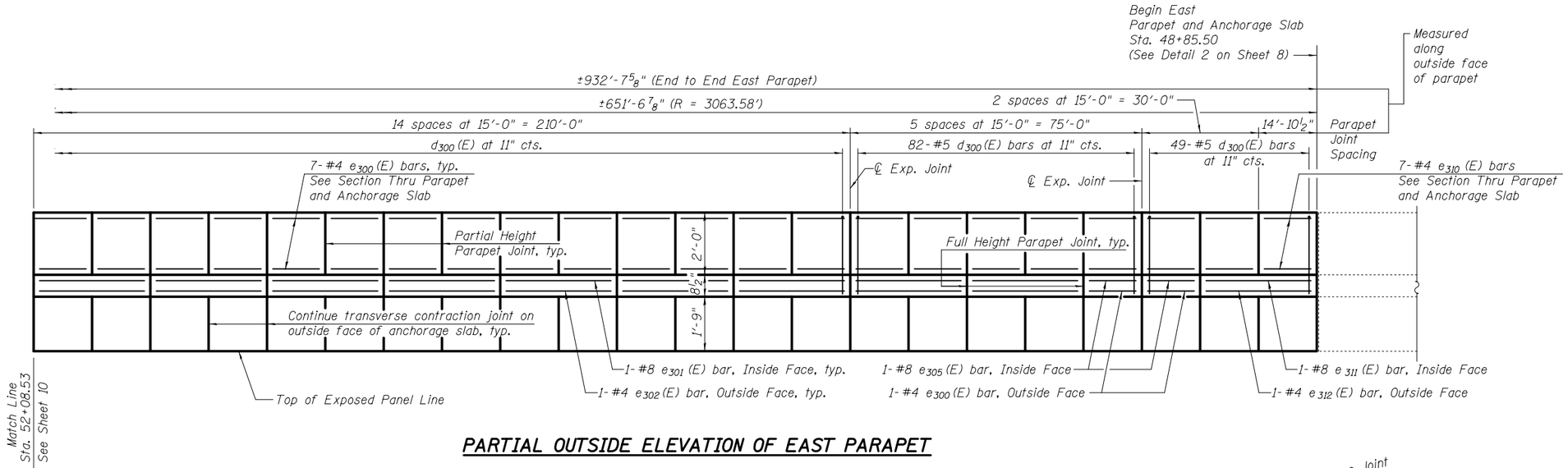
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - MLA	REVISED
PLOT DATE = 03/23/2017	CHECKED - ZJB	REVISED

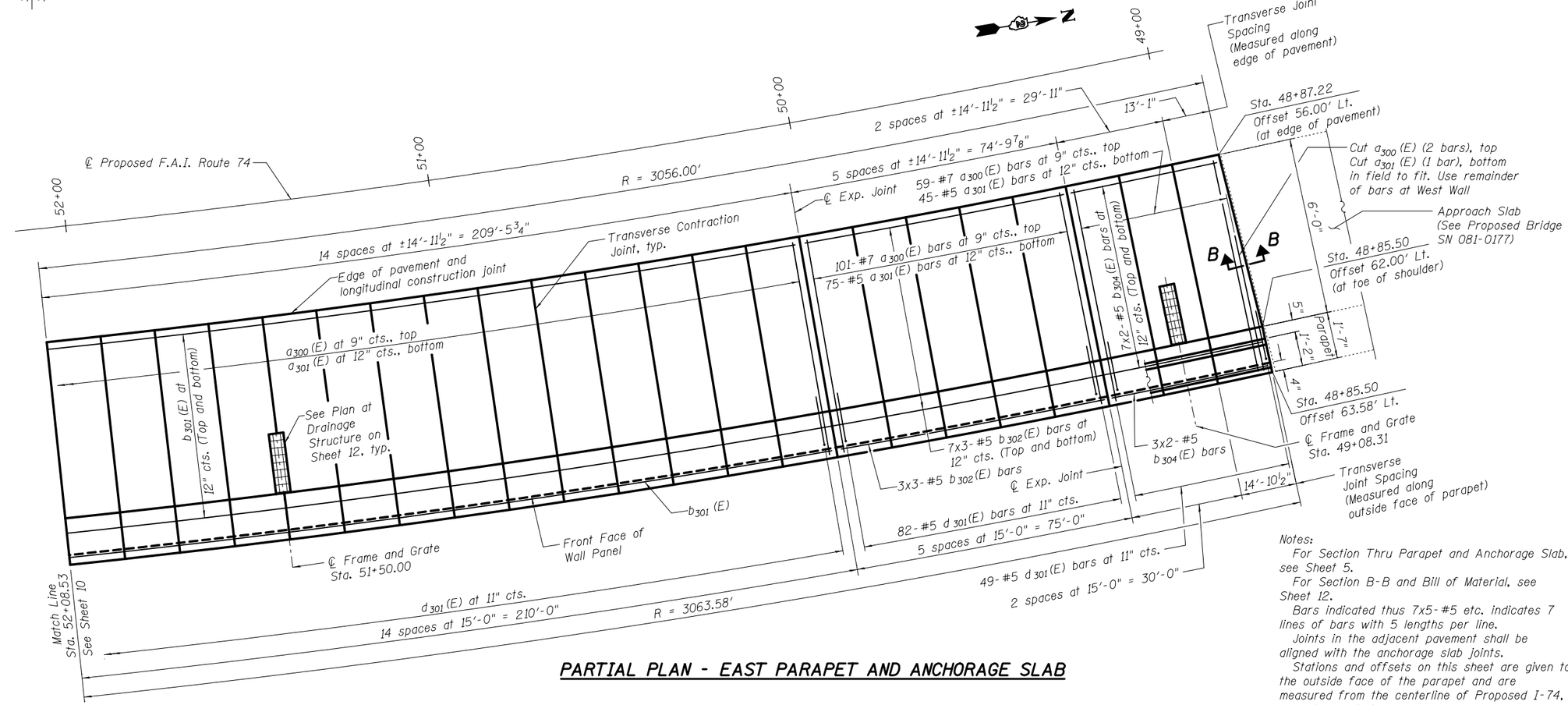
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET AND ANCHORAGE SLAB 2
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 10 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1293
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



PARTIAL OUTSIDE ELEVATION OF EAST PARAPET



PARTIAL PLAN - EAST PARAPET AND ANCHORAGE SLAB

Notes:

For Section Thru Parapet and Anchorage Slab, see Sheet 5.

For Section B-B and Bill of Material, see Sheet 12.

Bars indicated thus 7x5-#5 etc. indicates 7 lines of bars with 5 lengths per line.

Joints in the adjacent pavement shall be aligned with the anchorage slab joints.

Stations and offsets on this sheet are given to the outside face of the parapet and are measured from the centerline of Proposed I-74, except as noted.

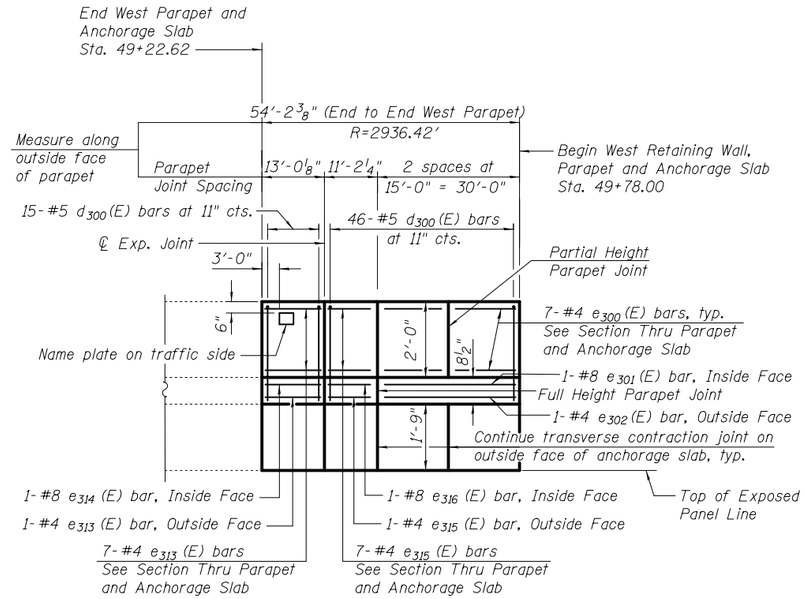
MODJESKI and MASTERS
Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - MLA	REVISED
PLOT DATE = 03/23/2017	CHECKED - ZJB	REVISED

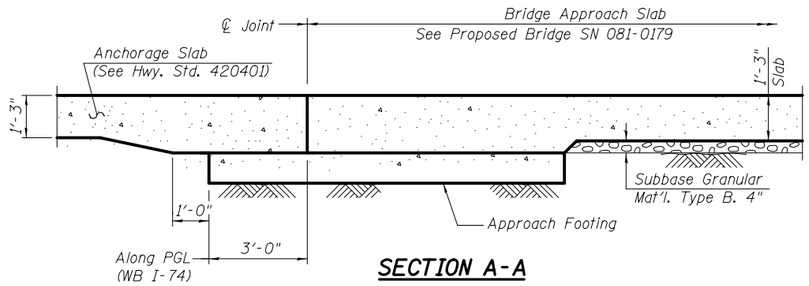
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET AND ANCHORAGE SLAB 3
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 11 OF 25 SHEETS

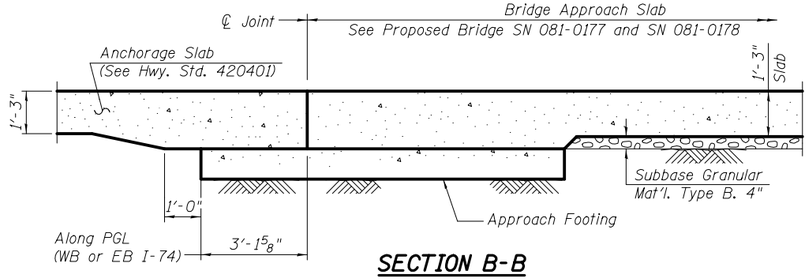
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1294
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



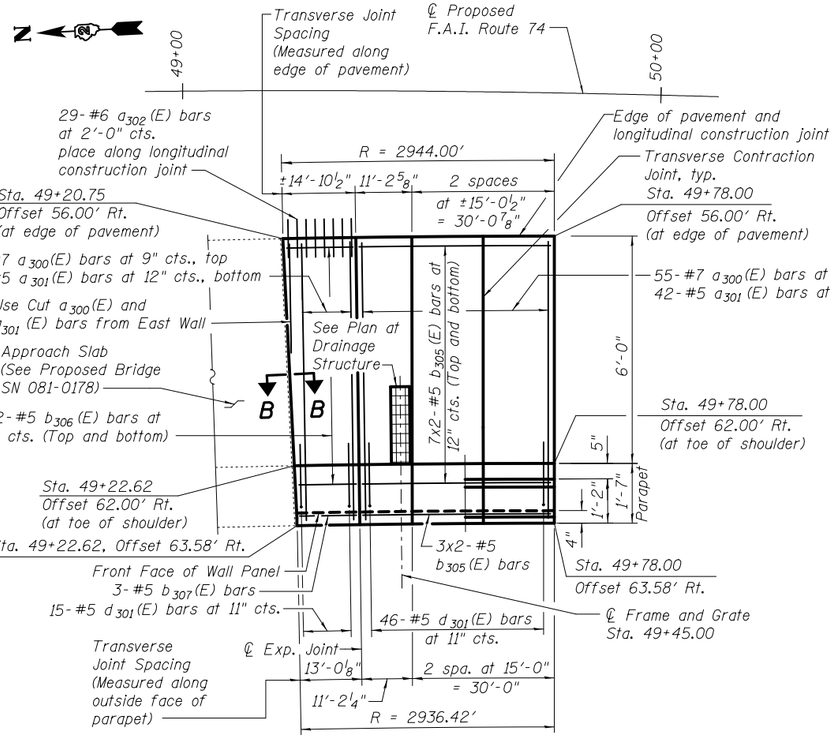
OUTSIDE ELEVATION OF WEST PARAPET



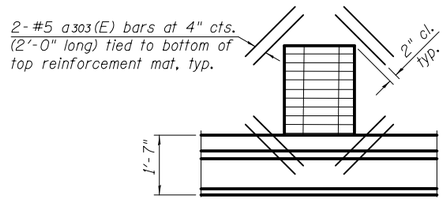
SECTION A-A



SECTION B-B

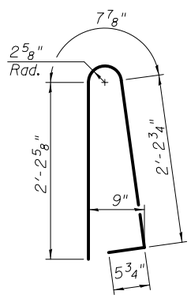


PLAN - WEST PARAPET AND ANCHORAGE SLAB

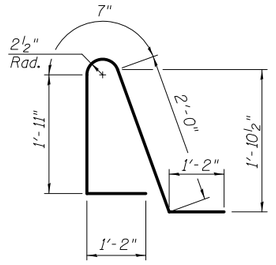


PLAN AT DRAINAGE STRUCTURE

(Cut longitudinal reinforcement to clear drainage structure.)



BAR d300(E)



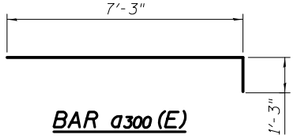
BAR d301(E)

RETAINING WALL 05 BILL OF MATERIAL

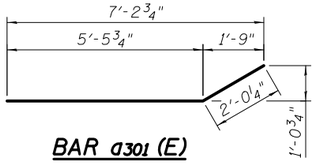
Bar	No.	Size	Length	Shape
a300(E)	1318	#7	8'-6"	
a301(E)	989	#5	7'-6"	
a302(E)	494	#6	2'-0"	
a303(E)	48	#5	2'-0"	
b300(E)	68	#5	25'-0"	
b301(E)	459	#5	27'-3"	
b302(E)	51	#5	26'-8"	
b303(E)	17	#5	14'-9"	
b304(E)	34	#5	24'-0"	
b305(E)	34	#5	22'-3"	
b306(E)	28	#5	9'-0"	
b307(E)	3	#5	12'-9"	
d300(E)	1080	#5	5'-7"	
d301(E)	1080	#5	6'-10"	
e300(E)	425	#4	14'-9"	
e301(E)	27	#8	29'-9"	
e302(E)	27	#4	29'-9"	
e303(E)	8	#4	14'-0"	
e304(E)	1	#8	14'-0"	
e305(E)	5	#8	14'-9"	
e306(E)	7	#4	14'-3"	
e307(E)	7	#4	18'-8"	
e308(E)	1	#8	33'-2"	
e309(E)	1	#4	33'-2"	
e310(E)	7	#4	14'-7"	
e311(E)	1	#8	29'-7"	
e312(E)	1	#4	29'-7"	
e313(E)	8	#4	12'-9"	
e314(E)	1	#8	12'-9"	
e315(E)	8	#4	10'-11"	
e316(E)	1	#8	10'-11"	
Reinforcement Bars, Epoxy Coated		Pound	73,680	
Concrete Superstructure		Cu. Yd.	469.3	

MIN. BAR LAP

#5 bars - 3'-3"



BAR a300(E)



BAR a301(E)

Notes:

For Section Thru Parapet and Anchorage Slab, see Sheet 5.

For location of Section A-A, see Sheet 9.

Bars indicated thus 7x2-#5 etc. indicates 7 lines of bars with 2 lengths per line.

Joints in the adjacent pavement shall be aligned with the anchorage slab joints.

Stations and offsets on this sheet are given to the outside face of the parapet and are measured from the centerline of Proposed I-74, except as noted.

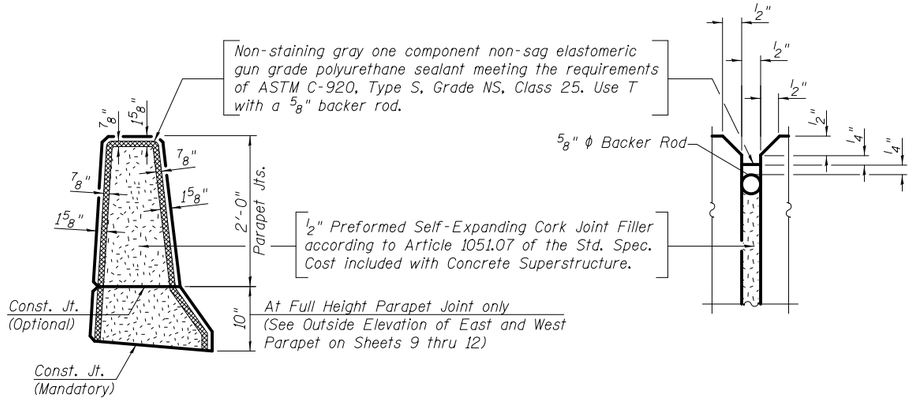
MODJESKI and MASTERS Experience great bridges.

USER NAME =	DESIGNED - YSS	REVISED
	CHECKED - ZJB	REVISED
PLOT SCALE =	DRAWN - MLA	REVISED
PLOT DATE = 03/23/2017	CHECKED - ZJB	REVISED

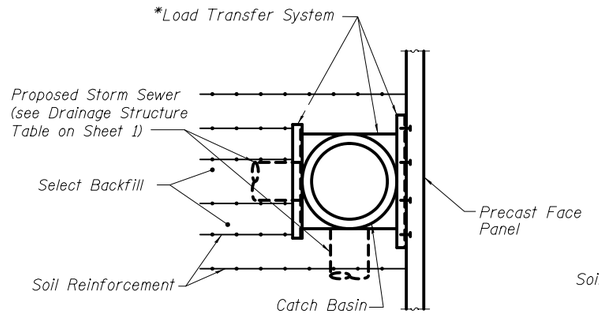
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET AND ANCHORAGE SLAB 4
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 12 OF 25 SHEETS

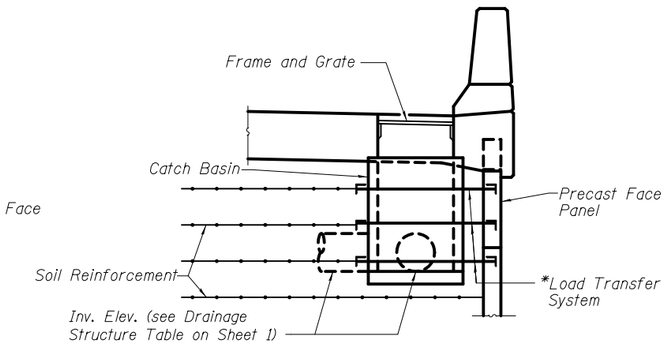
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1295
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



PARAPET JOINT DETAILS

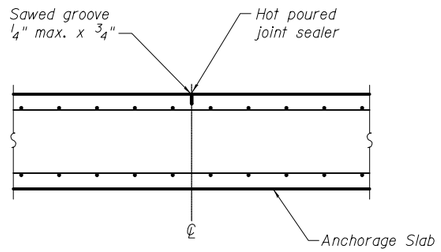


ANCHORAGE SLAB INLET PLAN

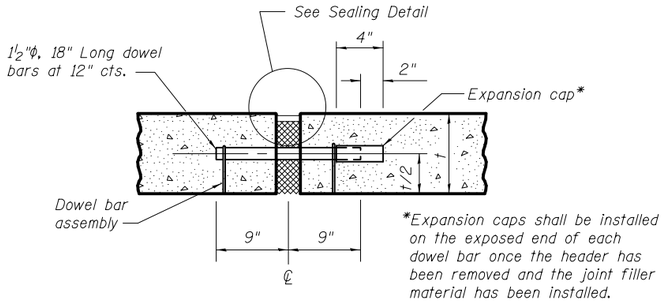


ANCHORAGE SLAB INLET SECTION

*M.S.E. supplier to design load transfer system to accommodate concrete pipe and catch basin.
(See Drainage and Utilities Plans for inlet details.)

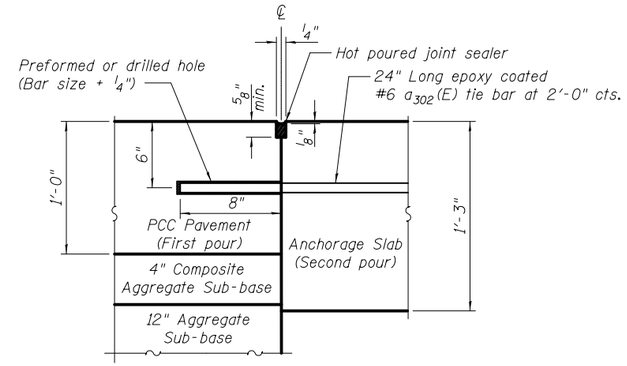


TRANSVERSE CONTRACTION JOINT



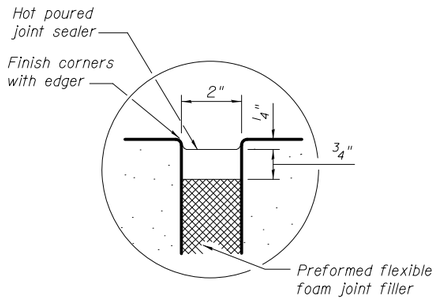
ANCHORAGE SLAB EXPANSION JOINT

Expansion joint and dowel bars included in the cost of Concrete Superstructure.



Notes:
The Contractor may substitute at his option, formed in place tie bars provided the bar length is increased to 30" and the tie bar is centered across the joint.
Preformed or drilled hole shall be in the first pour.

LONGITUDINAL CONSTRUCTION JOINT GROUTED-IN-PLACE TIE BAR



SEALING DETAIL

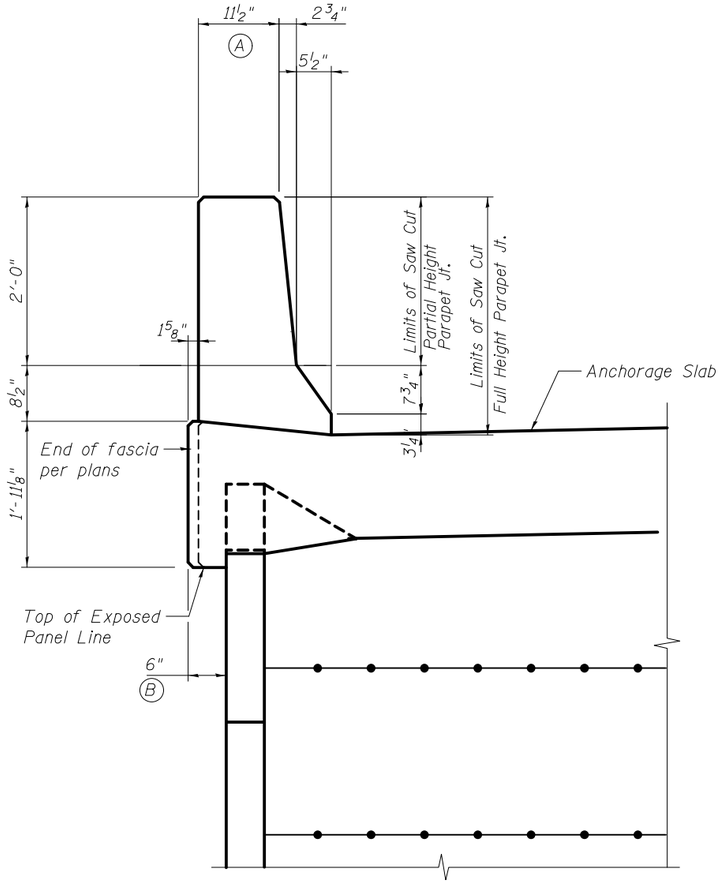
USER NAME =	DESIGNED - YSS	REVISED	
	CHECKED - ZJB	REVISED	
PLOT SCALE =	DRAWN - MLA	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

MODJESKI and MASTERS Experience great bridges.

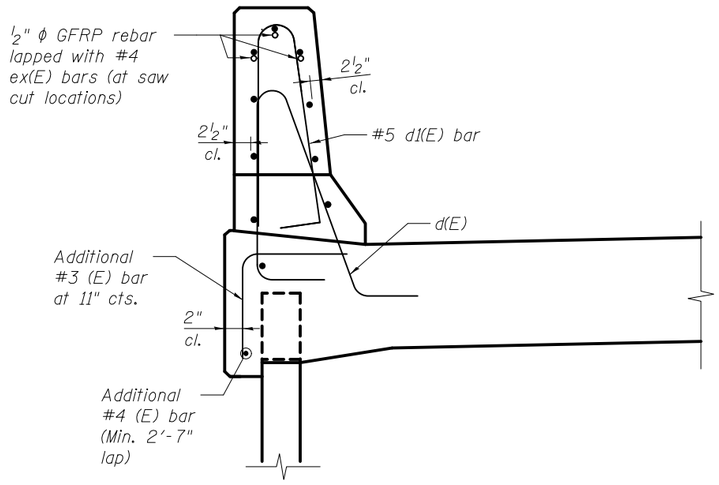
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 13 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1296
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



SECTION THRU PARAPET AND ANCHORAGE SLAB



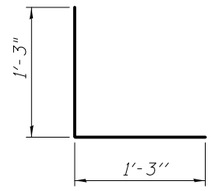
SECTION

(Showing reinforcement clearances for slip forming and additional reinforcement)

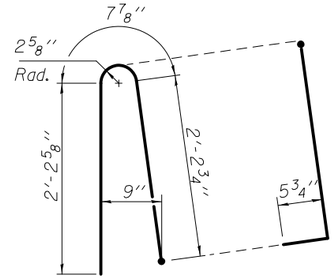
GENERAL NOTES

All dimensions shall remain the same as shown on superstructure details, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A equals 0.016 cu. yds./ft.

Full thickness saw cut at all joint locations in lieu of cork joint filler.

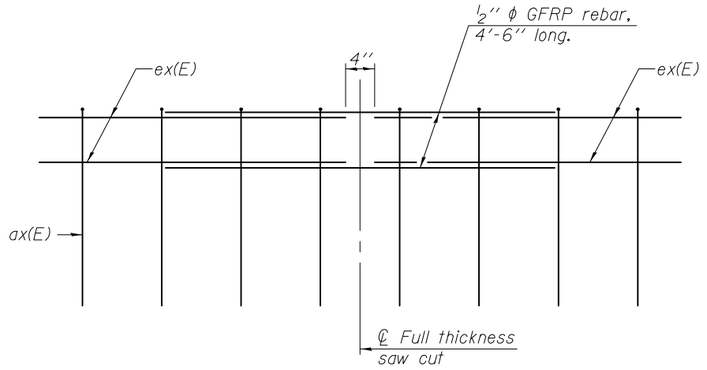


#3 (E) BAR



ALTERNATE BAR #5-d1(E)

(When conduit is present)



GFRP REBAR STIFFENING DETAIL

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

benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450

USER NAME =	DESIGNED - KMP	REVISED
	CHECKED - SLD	REVISED
PLOT SCALE =	DRAWN - KMP	REVISED
PLOT DATE = 03/23/2017	CHECKED - SLD	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

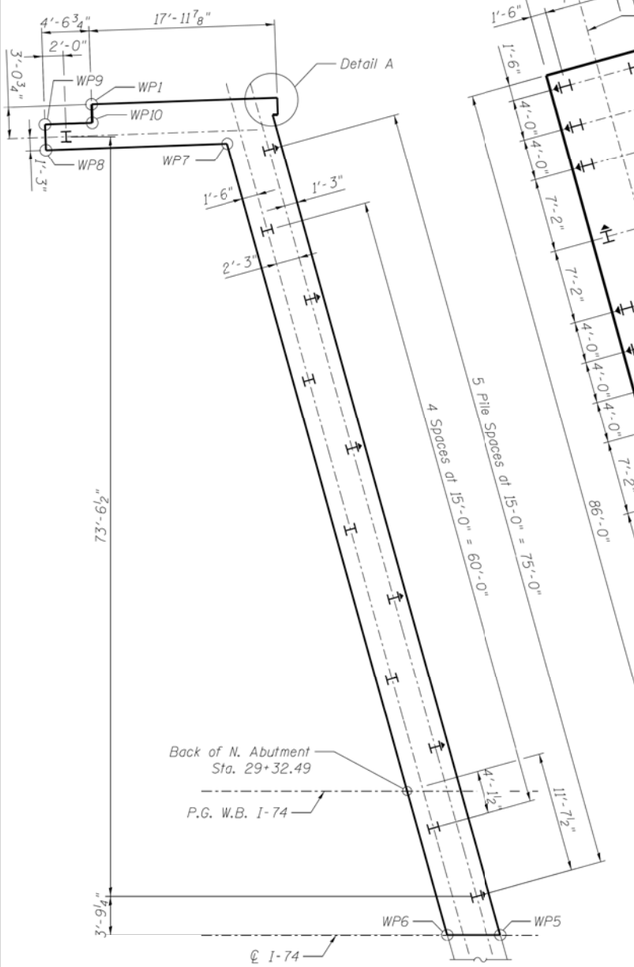
RETAINING WALL PARAPET SLIPFORMING OPTION
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 14 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1297
			CONTRACT NO. 64E26	
	ILLINOIS	FED. AID PROJECT		

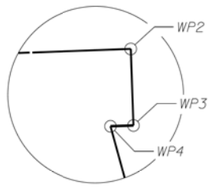
Work Points

W.P.	Station	Offset
1	29+1.99	80.51' Lt.
2	29+19.96	81.15' Lt.
3	29+20.02	79.49' Lt.
4	29+19.52	79.47' Lt.
5	29+41.55	0.04' Lt.
6	29+36.35	0.04' Lt.
7	29+15.11	76.66' Lt.
8	28+97.58	76.04' Lt.
9	28+97.49	78.54' Lt.
10	29+2.05	78.70' Lt.

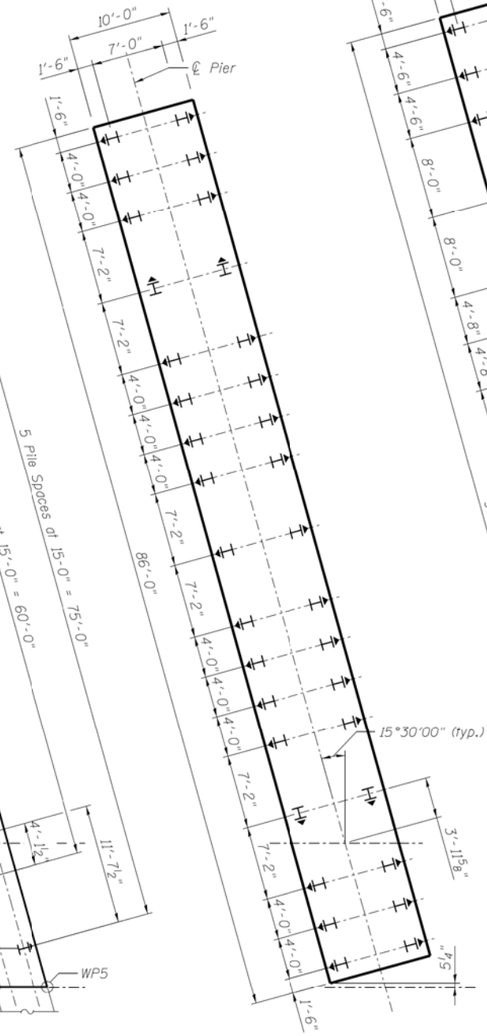
(Offset measured from ℄ I-74)



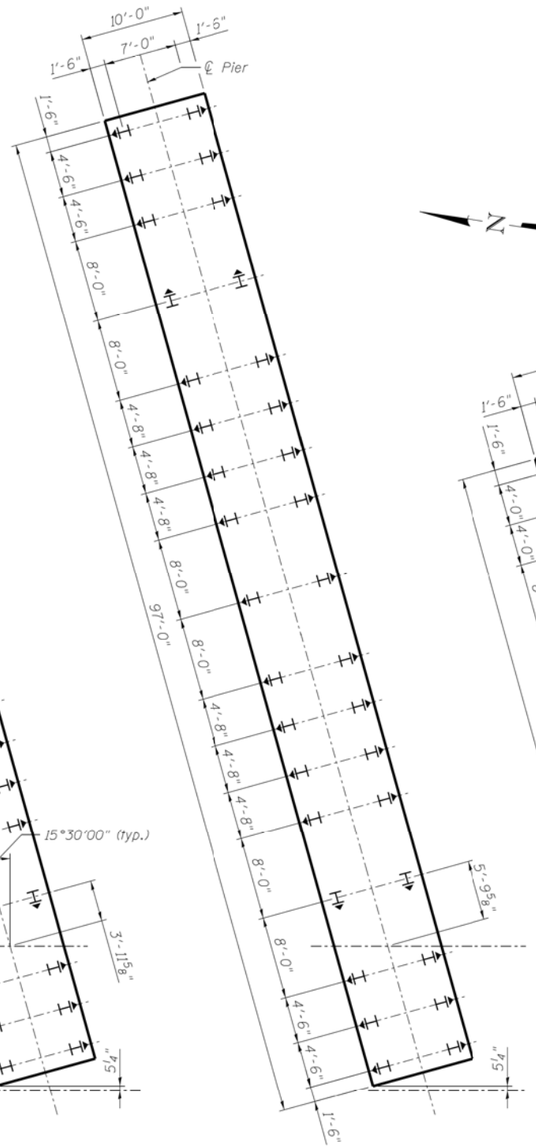
NORTH ABUTMENT



DETAIL A



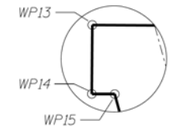
PIER 1



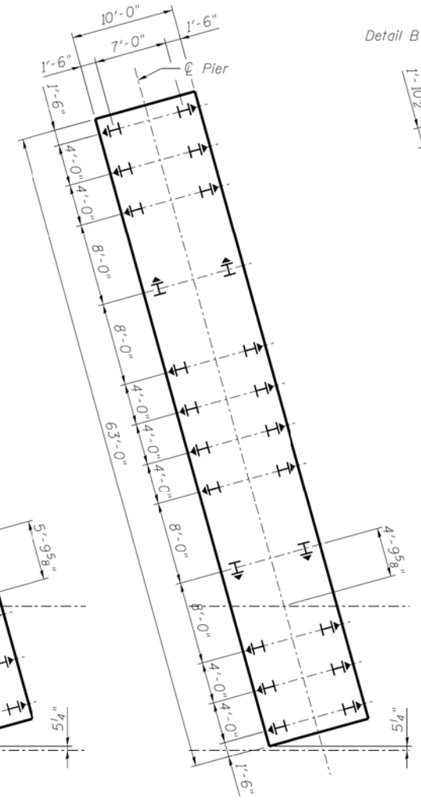
PIER 2

Work Points

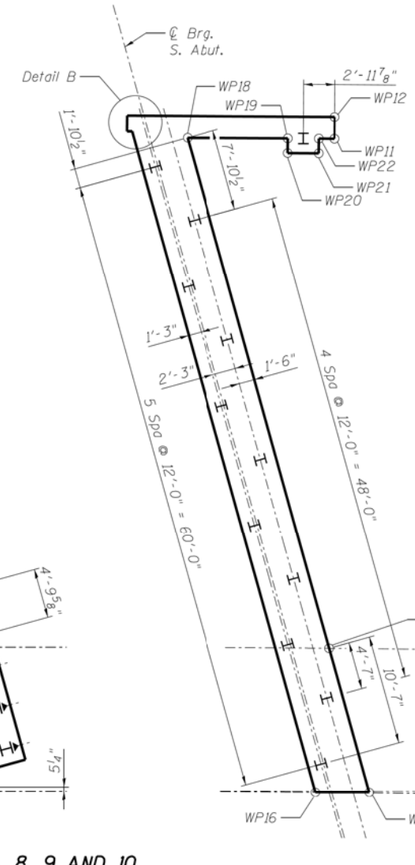
W.P.	Station	Offset
11	48+69.98	63.33 Lt.
12	48+69.97	65.41 Lt.
13	48+50.32	65.43 Lt.
14	48+50.31	63.93 Lt.
15	48+50.80	63.93 Lt.
16	48+68.72	0.02 Lt.
17	48+73.91	0.07 Lt.
18	48+56.05	63.33 Lt.
19	48+65.57	63.32 Lt.
20	48+65.57	61.90 Lt.
21	48+68.51	61.91 Lt.
22	48+68.51	63.32 Lt.



Detail B



PIERS 3, 4, 5, 6, 7, 8, 9 AND 10



SOUTH ABUTMENT

benesch

Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILENAME = 081-0177-C00AB-009-Foundation Layout.dgn	USER NAME = ksnider	DESIGNED - AWH	REVISED -
		CHECKED - AJK	REVISED -
MODEL = Default	PLOT SCALE =	DRAWN - KMS	REVISED -
	PLOT DATE = 1/18/2017	CHECKED - AJK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT
STRUCTURE NO. 081-0177 (WESTBOUND)
SHEET NO. 59 OF S120 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R & 81-1(HVBR)	ROCK ISLAND	1504	778
		CONTRACT NO. 64C08		
	ILLINOIS FED. AID PROJECT			

1/18/2017 11:28:44 AM c:\pwise-work\do_not_delete\dms02470\081-0177-C00AB-009-Foundation Layout.dgn

For Information Only

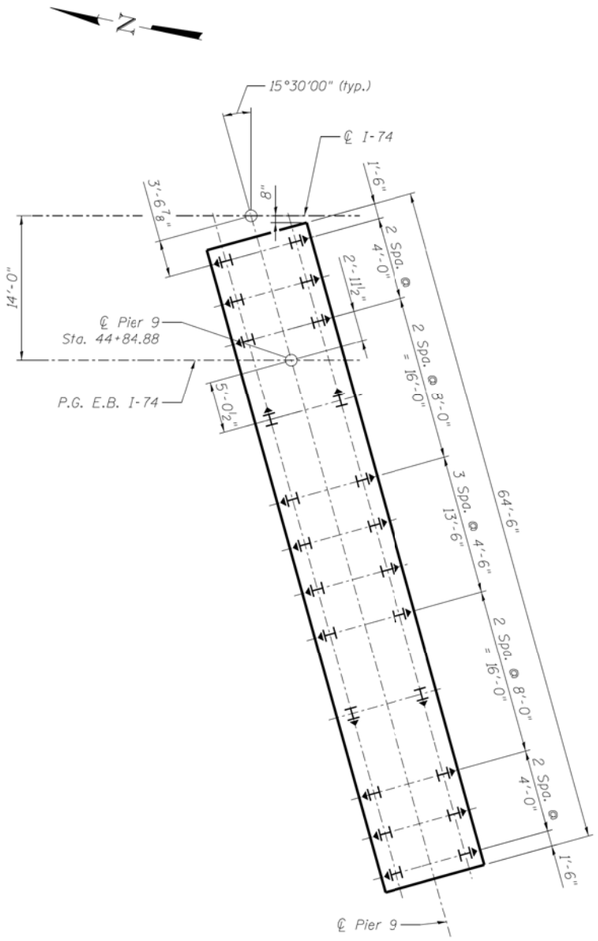
MODJESKI and MASTERS
Experience great bridges.

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

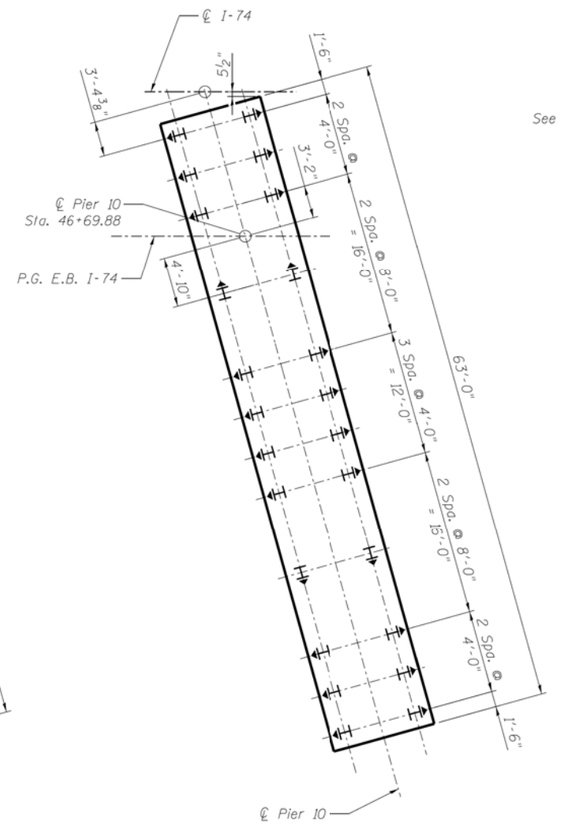
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT 1
STRUCTURE NO. 081-0177 (WESTBOUND)
SHEET NO. 15 OF 25 SHEETS

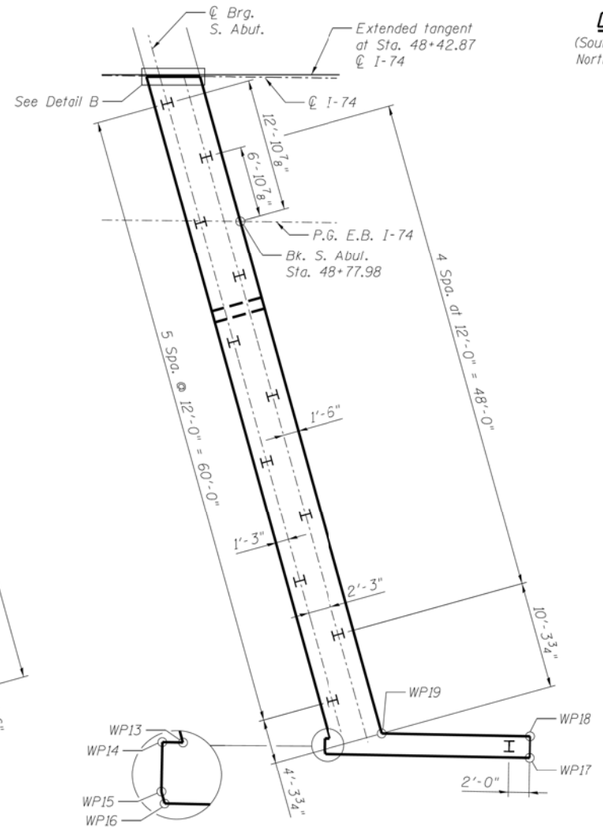
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1298
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			



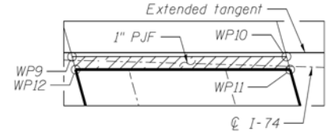
PIER 9



PIER 10



SOUTH ABUTMENT



DETAIL B

(South Abutment shown, North Abutment similar) (Not to scale)

Work Points

W.P.	Station	Offset
9	48+68.72	0.02 Lt.
10	48+73.91	0.07 Lt.
11	48+73.93	0.02 Rt.
12	48+68.75	0.07 Rt.
13	48.87.46	63.91 Rt.
14	48+86.95	63.90 Rt.
15	48+86.95	65.12 Rt.
16	48+87.03	65.40 Rt.
17	49+07.24	65.42 Rt.
18	49+07.23	63.34 Rt.
19	48+92.61	63.34 Rt.

NOTE:
For HP Pile Details, see sheet S124.

benesch
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10061

FILE NAME = 081-0178-C00AB-010-Foundation Layout 12 of 21.dgn	USER NAME = ksnider	DESIGNED - DTS	REVISED -
		CHECKED - AJK	REVISED -
MODEL: Default	PLOT SCALE =	DRAWN - KMS/DMS	REVISED -
	PLOT DATE = 1/18/2017	CHECKED - AWH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT (2 OF 2)
STRUCTURE NO. 081-0178 (EASTBOUND)
SHEET NO. S10 OF S138 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HVBR	ROCK ISLAND	1504	899
		CONTRACT NO. 64C08		
	ILLINOIS FED. AID PROJECT			

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1/18/2017 11:44:33 AM

For Information Only

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT 2
STRUCTURE NO. 081-0178 (EASTBOUND)
SHEET NO. 16 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1299
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Page 1 of 1

Date 9/26/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY F. Abreu

SECTION I-74 Bridge over Mississippi River LOCATION (N=562943.909, E=2459732.885), 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. ILR0501
Station 49+19.50
Offset 65' Left
Ground Surface Elev. 585.55 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 576.6 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Concrete 584.55			
Fill Very Silty Fine to Coarse Sand (SM, ML) Little gravel, olive gray with brown, dry to moist, loose	4		
	5 4 5	2.5 P	
Trace coarse to fine sands, scattered sand seams	3		
	4 5 3	2.3 P	
Sample 2 (3'-5'): grain size analysis and Atterberg limits (LL=25, PI=9) test performed -5 579.55			
Lean Clay (CL) Gray to olive gray, moist, low to medium plasticity, very soft to stiff, loess□Rimac: Pu = 20 lbs Sample 3 (6'-8'): Atterberg limits (LL=36, PI=18) test performed	3		
	2 3 3	0.4	
Sample 8'-10' (ST): consolidation test performed (Cc=0.11, Cr=0.01) ▼		1.5 P	
-10			
Trace medium to fine sand Rimac: Pu = 7 lbs	2		
	1 2 1	0.1	
Sample 4 (11'-13'): Atterberg limits (LL=32, PI=11) test performed 571.05			
Clayey Fine to Medium Sand With Silt (SC) olive gray, wet -15 569.55			
Silty Clay Trace Gravel (CL-ML), moist, poss. gumbotil 567.55			
	5 6 8 27		
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Fine to Medium Sand With Silt (SP-SM) Olive gray to dark greenish gray, wet, medium dense, trace coarse gravel *(continued)* 562.55			
Silty Fine to Medium Sand (poss. Weathered Rock) (SM) Light gray, dry, very dense, trace gravel, possible completely weathered rock	9		
	50/3	4.5 P	
-25 559.72			
Borehole continued with rock coring.			
-30			
-35			
-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

ROCK CORE LOG

Page 2 of 1

Date 9/26/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY F. Abreu

SECTION I-74 Bridge over Mississippi River LOCATION (N=562943.909, E=2459732.885), SEC. 32, TWP. 18N, RNG. 1W, 4th PM

COUNTY Rock Island CORING METHOD Double tube, 10 ft core barrel, NQ wireline, diamond bit

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE _____

Core Diameter _____ in
Top of Rock Elev. 559.72 ft
Begin Core Elev. 559.72 ft

BORING NO. ILR0501
Station 49+19.50
Offset 65' Left
Ground Surface Elev. 585.55 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Limestone Light gray, fine grained, Top top 16", 53" to 77" and bottom 10" of sample remainder slight vuggy, very vuggy appearanced indicating water action, slightly to moderately weathered, medium strong to strong rock, crushed zones at 1" to 5", 20" to 24", 38" to 43" and 60" to 69", 73" to 75', 91" to 93"□25.83' - Horizontal to vertical fractures, slightly to extremely fractured, extremely clost to rough and irregular discontinuous fracture surface, little greenish gray clay infilling that has slightly healed verticaly at 33" to 36" and 52" to 66" from top, surface stain greenish gray and brown, greenish gray clay infilling at vugs most of infilling probably washed away while coring 20" to 23" other surface have slightly altered joint walls with little or no infilling material, sandy clay mineral infilling 9" form top and 9" from bottom, mixed with crushed rock or curshed zones□bit plugged occasionally possibly due to infilling momentary fluid loss Inner barrel jammed, stopped run at 38' continued run	559.72 NQ-R1	84	25		
-30					
-35					
vuggy appearance, fine grained, medium strong to strong rock, crushed zone 12" to 14" from top	NQ-R2	100	53		
-40					
End of Boring 544.72					
-45					

Color pictures of the cores _____
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
CH2M HILL

SOIL BORING LOG

Page 1 of 1

Date 9/20/07

ROUTE I-74 DESCRIPTION New I-74 Bridge Over Mississippi River - Illinois Approach LOGGED BY Vse, Kaustav/SCO

SECTION I-74 Bridge over Mississippi River LOCATION (N=562839.058, E=2459725.968), 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. ILR0502
Station 50+19.98
Offset 40' Left
Ground Surface Elev. 588.73 ft

Surface Water Elev. _____ ft
Stream Bed Elev. _____ ft

Groundwater Elev.:
First Encounter 571.7 ft ▼
Upon Completion _____ ft
After _____ Hrs. _____ ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Silty Fine to Medium Sand (SM) light brown, moist, loose			
	3		
	4 3		
584.73			
Clay (CL) gray, moist, soft to very stiff, trace sand	2		
-5	2 4	0.3 P	
Rimac: Pu = 115 lbs	3		
Sample 3: Atterberg limits (LL=44, PI=25) tests performed	4 6	2.1	
	4		
	7 7	3.0 P	
-10			
Rimac: Pu = 102 lbs	4		
	7 10	1.9	
	2		
	4 7	2.5 P	
574.73			
Sandy Clay (CL) dark gray, moist, stiff Rimac: Pu = 72 lbs	4		
-15	5 7	1.3	
	7		
571.93			
Silty Fine to Medium Sand (SM) yellowish brown, wet, medium dense to dense Sample 9: grain size analysis performed	10 15		
	7		
	15 30		
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Silty Fine to Medium Sand (SM) yellowish brown, wet, medium dense to dense *(continued)*			
	50/5"		
-25			
559.73			
End of Boring			
-30			
-35			
-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)

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 1
I-74 (EB) & (WB) RETAINING WALL 05
STRUCTURE NO. 081-6014
SHEET NO. 17 OF 25 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(81-1)R-1	ROCK ISLAND	2042	1300
		CONTRACT NO. 64E26		
	ILLINOIS FED. AID PROJECT			