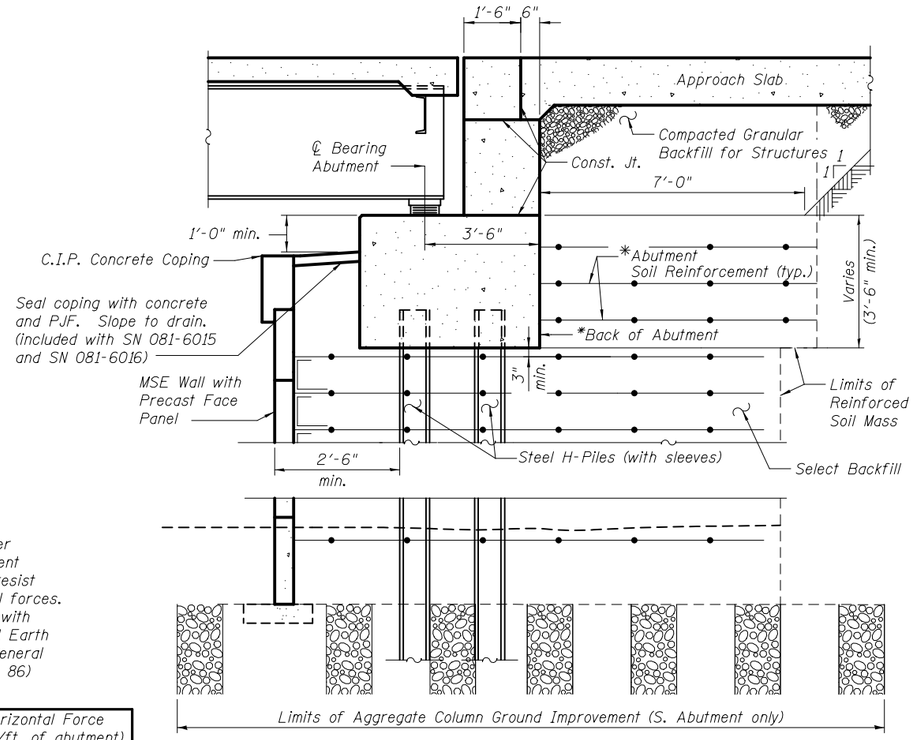
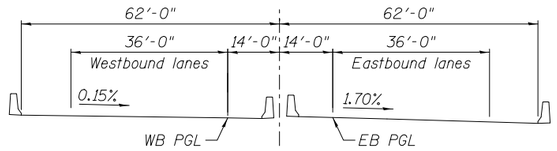


TYPICAL SECTION THRU ABUTMENT

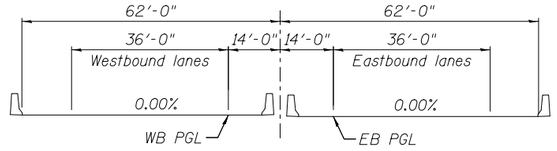
S. Abutment Shown. N. Abutment Similar

* The M.S.E. wall supplier shall design the abutment soil reinforcement to resist the following horizontal forces. Cost shall be included with "Mechanically Stabilized Earth Retaining Wall". (See General Note 12 on sheet 4 of 86)

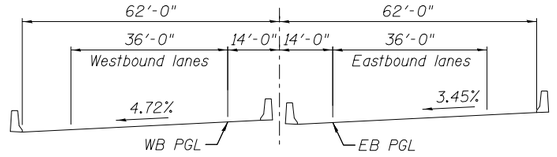
Location	Horizontal Force (kips/ft. of abutment)
Westbound North Abutment	2.54
Westbound South Abutment	3.29
Eastbound North Abutment	3.18
Eastbound South Abutment	2.90



STA. 58+04.84 WB
STA. 56+70.84 EB



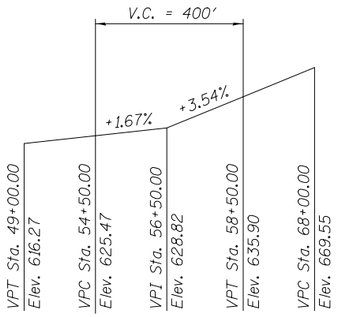
STA. 58+17.65 WB
STA. 58+17.66 EB



STA. 62+25.25 WB
STA. 61+14.84 EB

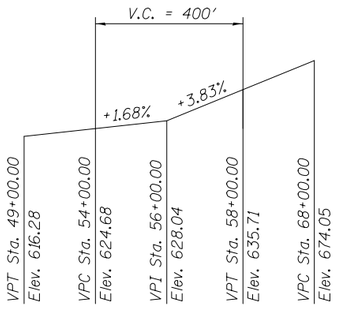
SUPERELEVATION TRANSITION I-74

(Looking South)



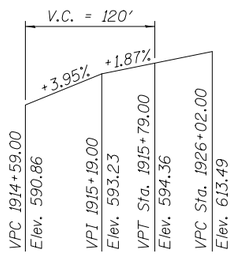
PROFILE GRADE

(Along WB PGL - F.A.I. Route 74)



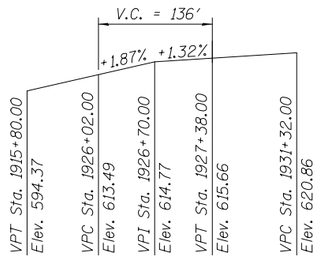
PROFILE GRADE

(Along EB PGL - F.A.I. Route 74)



PROFILE GRADE

(Along SB PGL 19th Street)



PROFILE GRADE

(Along NB PGL 19th Street)

STATION 59+67.00
BUILT 201_ BY
STATE OF ILLINOIS
F.A.I. RTE. 74 SEC. 81-1HBR
LOADING HL-93
STRUCTURE NO. 081-0179

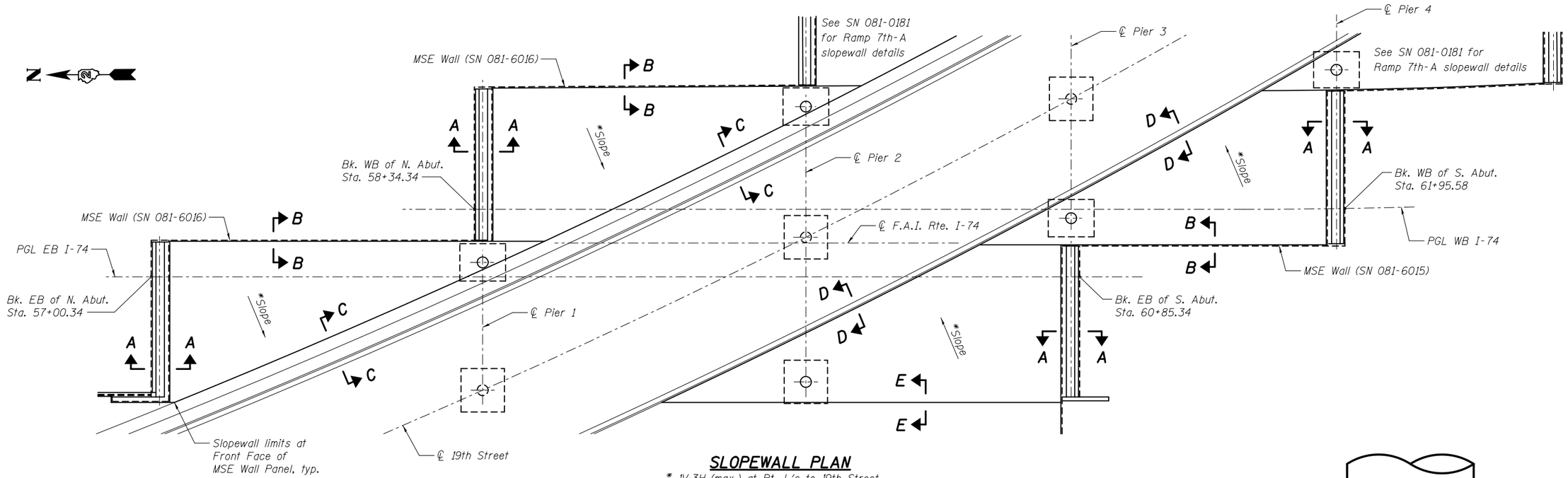
WESTBOUND NAME PLATE

See Std. 515001

STATION 59+67.00
BUILT 201_ BY
STATE OF ILLINOIS
F.A.I. RTE. 74 SEC. 81-1HBR
LOADING HL-93
STRUCTURE NO. 081-0180

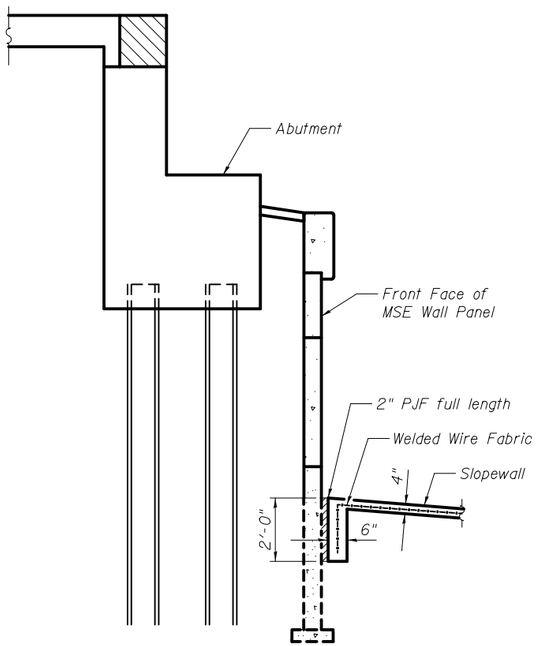
EASTBOUND NAME PLATE

See Std. 515001

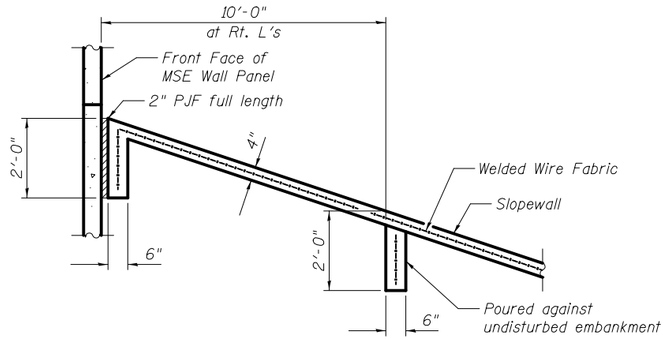


SLOPEWALL PLAN

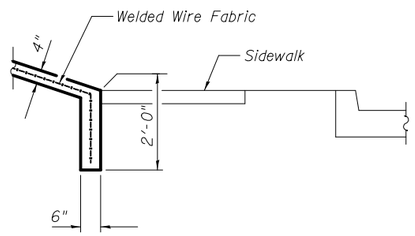
* 1V:3H (max.) at Rt. L's to 19th Street. See Roadway Plans for grading details.



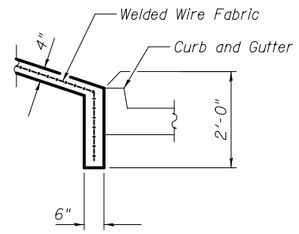
SECTION A-A



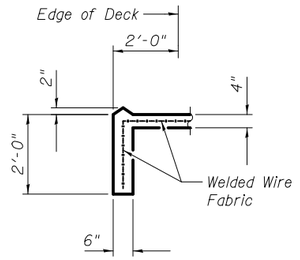
SECTION B-B



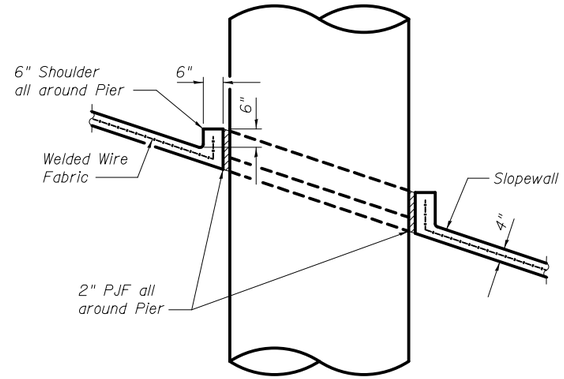
SECTION C-C



SECTION D-D



SECTION E-E



SLOPEWALL AT PIER COLUMN

Notes:
See sheet 1 of 86 for relative plan dimensions.
See SN 081-6015 and SN 081-6016 for MSE wall configuration and details.
Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0, weighing 58 lbs. per 100 sq. ft. Cost of the mesh is included in the cost of slopewall.

BILL OF MATERIAL

Item	Unit	Total
Slope Wall 4 Inch	Sq. Yd.	2,646

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION DETAILS – 2
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 3 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	952
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

INDEX OF SHEETS

GENERAL NOTES

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

2. Calculated weight of Structural Steel =
   M 270 Grade 36: 36,821 lbs
   M 270 Grade 50: 1,560,393 lbs

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

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

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

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

7. Concrete Sealer shall be applied to all exposed surfaces of abutments and piers.

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

9. The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception of the exterior surfaces and the bottom of the bottom flange of fascia beams, masked off connection surfaces, and field installed fasteners, all of which shall be touched up and finish coated in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The exterior and bottom flange of the fascia beams and fascia bearings shall be finish coated with a fluoropolymer paint. The color of the final finish coat for the exterior and bottom flange of the fascia beams and bearings shall be Federal Standard 595C Color 26099 (gray-blue). See Special Provision for "Cleaning and Painting Structural Steel".

10. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments. The proposed embankment configuration includes the Reinforced Soil Mass required for the adjacent MSE walls.

11. See SN 081-6015 and SN 081-6016 plans for MSE details and pay items.

12. The abutment piles are located within the reinforced soil mass of SN 081-6015 and SN 081-6016. Pile sleeves shall be installed within the reinforced soil mass. Cost of pile sleeves is included with Driving Piles. Installation of pile sleeves shall be coordinated with the wall system supplier.

13. Slipforming of the median parapets and the WB exterior parapet aligned next to the Ramp 7th-A structure (SN 081-0181) is not allowed. Slipforming of the Aesthetic Traffic Barrier is allowed.

14. A protective shield system shall be erected and maintained to protect pedestrian and vehicular traffic. The system shall protect the following bridge length and width of the existing structures.

STRUCTURE	LENGTH	WIDTH
081-0099 (SB I-74)	534'-7"	42'-6"
081-0100 (NB I-74)	568'-0"	42'-6"
081-0115 (Ramp 7-S)	661'-3"	34'-0"

15. Light poles and luminaires mounted on the existing structures shall be removed. None are to be salvaged. Cost included with Removal of Existing Structures No. 1.

TOTAL BILL OF MATERIAL

	ITEM	UNIT	SUPER	SUB	TOTAL
**	Removal of Existing Structures No. 1	Each			3
	Protective Shield	Sq. Yd.	7,705		7,705
	Structure Excavation	Cu. Yd.		2,202	2,202
	Concrete Structures	Cu. Yd.		1,208.0	1,208.0
	Concrete Superstructure	Cu. Yd.	1,867.1		1,867.1
	Bridge Deck Grooving	Sq. Yd.	5,716		5,716
	Protective Coat	Sq. Yd.	6,596		6,596
*	Furnishing and Erecting Structural Steel	L. Sum	0.5		0.5
	Stud Shear Connectors	Each	22,392		22,392
	Reinforcement Bars, Epoxy Coated	Pound	492,490	258,300	750,790
	Bar Splicers	Each		268	268
	Mechanical Splicers	Each		498	498
	Slope Wall 4 Inch	Sq. Yd.		2,646	2,646
	Furnishing Steel Piles HP 10x42	Foot		99	99
	Furnishing Steel Piles HP 12X63	Foot		1,974	1,974
	Furnishing Steel Piles HP 12X74	Foot		2,242	2,242
	Furnishing Steel Piles HP 14X102	Foot		4,652	4,652
	Driving Piles	Foot		8,967	8,967
	Test Pile Steel HP 12X63	Each		2	2
	Test Pile Steel HP 12X74	Each		1	1
	Test Pile Steel HP 14X102	Each		1	1
	Name Plates	Each	2		2
	Preformed Joint Strip Seal	Foot	248		248
	Elastomeric Bearing Assembly, Type I	Each	16		16
	Elastomeric Bearing Assembly, Type II	Each	16		16
	Anchor Bolts, 1"	Each		192	192
	Concrete Sealer	Sq. Ft.		10,617	10,617
	High Load Multi-Rotational Bearings, Guided Expansion, 450K	Each	16		16
	High Load Multi-Rotational Bearings, Fixed - 350K	Each	8		8
	High Load Multi-Rotational Bearings, Fixed - 450K	Each	8		8
	Granular Backfill for Structures	Cu. Yd.		423	423
	Steel Railing (Special)	Foot	381		381
	Drainage Scuppers (Special)	Each	10		10
*	Drainage System	L. Sum		0.5	0.5
	Temporary Sheet Piling	Sq. Ft.		2,087	2,087
	Temporary Soil Retention System	Sq. Ft.		1,017	1,017

* See additional structures within this contract for remainder of L. Sum quantity.

** Removal of Existing Structures includes the removal of slopewalls and sidewalks beneath the structures.

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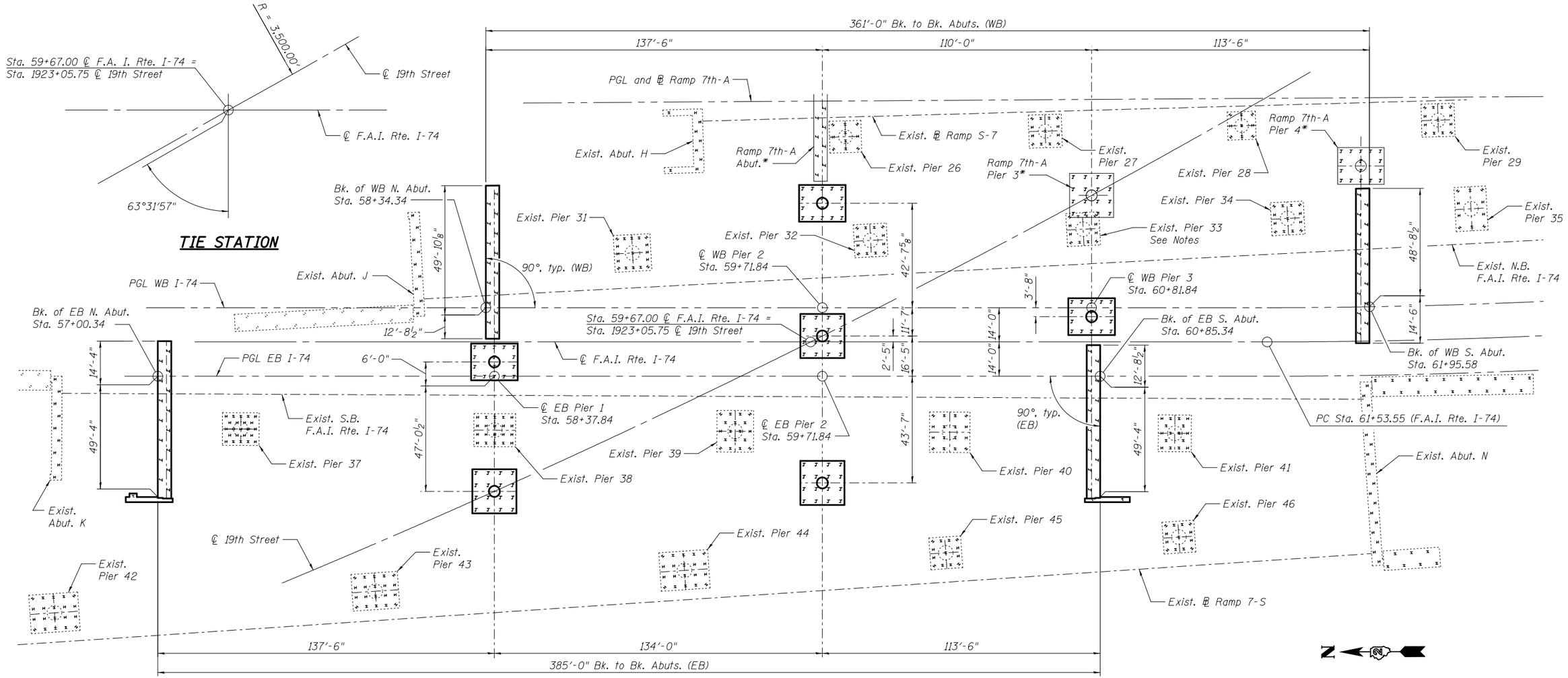
PLOT DATE =	03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL STRUCTURE DATA
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 4 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	953
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



FOUNDATION LAYOUT

* See SN 081-0181 for foundation details

EXISTING FOUNDATION TABLE

LOCATION	DESCRIPTION
Exist. Ramp S-7 - Abut. H	Pile Cap 26'-0"x4'-2"x3'-6" with 9-Piles (10BP42)
Exist. N.B. I-74 - Abut. J	Pile Cap 42'-6"x4'-2"x3'-6" with 28-Piles (10BP42 & Timber)
Exist. S.B. I-74 - Abut. K	Pile Cap 42'-6"x4'-2"x3'-6" with 23-Piles (10BP42 & Timber)
Exist. Ramp 7-S - Abut. L**	Pile Cap 34'-0"x4'-2"x3'-6" with 28-Piles (10BP42)
Exist. Ramp S-7 - Pier 26	Footing 13'-0"x13'-0"x2'-9" with 10-Piles (10BP42)
Exist. Ramp S-7 - Pier 27	Footing 13'-6"x13'-6"x3'-0" with 13-Piles (10BP42)
Exist. Ramp S-7 - Pier 28	Footing 11'-6"x11'-6"x2'-9" with 9-Piles (10BP42)
Exist. Ramp S-7 - Pier 29	Footing 13'-6"x13'-6"x3'-0" with 13-Piles (10BP42)
Exist. Ramp S-7 - Pier 30**	Footing 12'-6"x12'-6"x3'-0" with 9-Piles (10BP42)
Exist. N.B. I-74 - Pier 31	Footing 15'-0"x15'-0"x3'-3" with 19-Piles (10BP42)
Exist. N.B. I-74 - Pier 32	Footing 13'-6"x13'-6"x3'-0" with 16-Piles (10BP42)
Exist. N.B. I-74 - Pier 33	Footing 13'-6"x13'-6"x3'-0" with 16-Piles (10BP42)
Exist. N.B. I-74 - Pier 34	Footing 13'-6"x13'-6"x3'-0" with 13-Piles (10BP42)
Exist. N.B. I-74 - Pier 35	Footing 18'-0"x13'-0"x3'-0" with 12-Piles (10BP42)
Exist. N.B. I-74 - Pier 36**	Footing 14'-0"x13'-0"x3'-0" with 11-Piles (10BP42)

EXISTING FOUNDATION TABLE

LOCATION	DESCRIPTION
Exist. S.B. I-74 - Pier 37	Footing 15'-0"x13'-4"x3'-6" with 23-Piles (10BP42)
Exist. S.B. I-74 - Pier 38	Footing 17'-0"x13'-6"x3'-6" with 20-Piles (10BP42)
Exist. S.B. I-74 - Pier 39	Footing 17'-0"x15'-0"x3'-6" with 18-Piles (10BP42)
Exist. S.B. I-74 - Pier 40	Footing 16'-6"x16'-6"x3'-6" with 16-Piles (10BP42)
Exist. S.B. I-74 - Pier 41	Footing 15'-0"x13'-6"x3'-0" with 18-Piles (10BP42)
Exist. Ramp 7-S - Pier 42	Footing 20'-0"x15'-9"x4'-0" with 20-Piles (10BP42)
Exist. Ramp 7-S - Pier 43	Footing 19'-0"x15'-0"x4'-0" with 20-Piles (10BP42)
Exist. Ramp 7-S - Pier 44	Footing 20'-0"x15'-9"x3'-9" with 20-Piles (10BP42)
Exist. Ramp 7-S - Pier 45	Footing 13'-0"x13'-0"x3'-6" with 13-Piles (10BP42)
Exist. Ramp 7-S - Pier 46	Footing 13'-0"x13'-0"x3'-6" with 13-Piles (10BP42)
Exist. Ramp S-7 - Abut. M and N.B. I-74 - Abut. M**	Pile Cap 67'-4¾"x4'-9"x3'-6" with 25-Piles (10BP42)
Exist. Ramp 7-S - Abut. N and S.B. I-74 - Abut. N	Pile Cap 75'-2½"x4'-3"x3'-6" with 45-Piles (10BP42)

** Not shown

Notes:

Plan dimensions and details relative to existing structures are from existing plans and subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction.

Existing piles at existing pier 33, and any other potential conflicting locations, shall be removed to allow driving of the proposed piles per Section 501 of the Standard Specifications.

For I-74 EB north and south abutment pile cap and pile layout, see sheets 56 and 61 of 86.

For I-74 WB north and south abutment pile cap and pile layout, see sheets 54 and 59 of 86.

For I-74 EB pier 1 and 2 footing and pile layout, see sheets 65 and 68 of 86.

For I-74 WB pier 2 and 3 footing and pile layout, see sheets 68 and 70 of 86.

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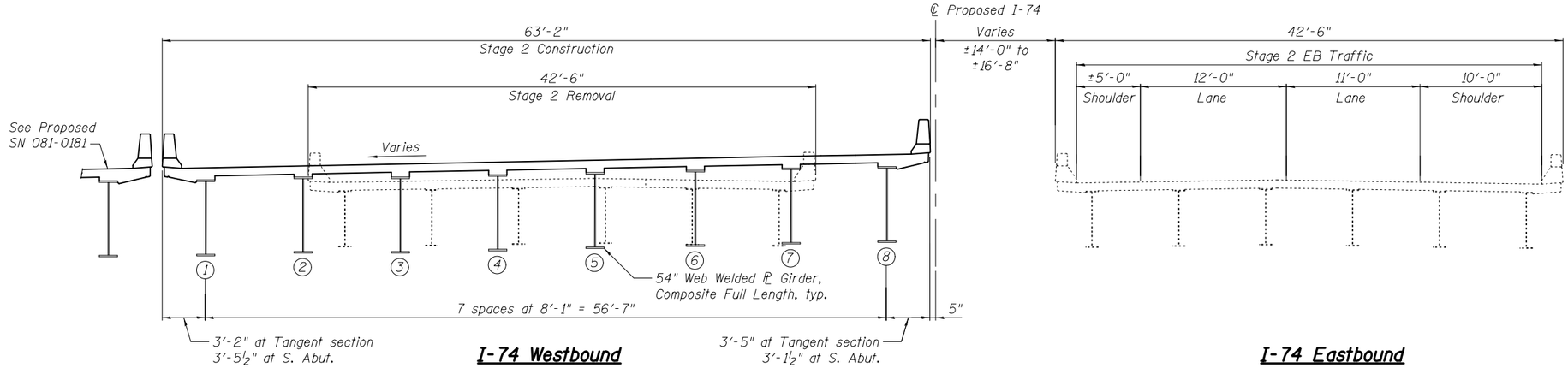
	CHECKED - JTH	REVISED	
PLOT SCALE =	DRAWN - PRC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 5 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	954
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



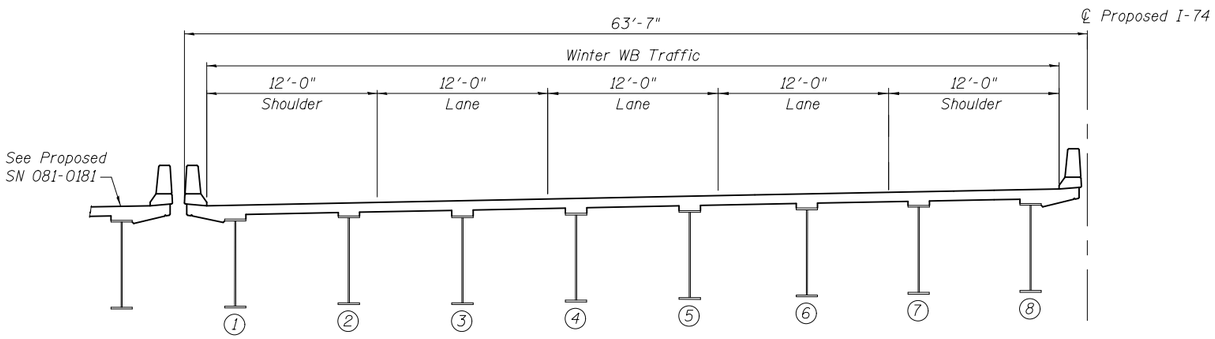
I-74 Westbound

I-74 Eastbound

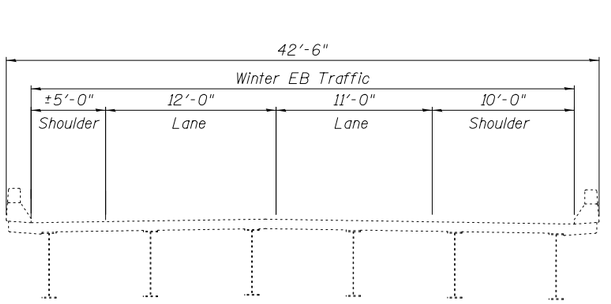
Note: See Traffic Control Plans for Westbound Detour during Stage 2.

CROSS SECTION - STAGE 2

(Looking South)



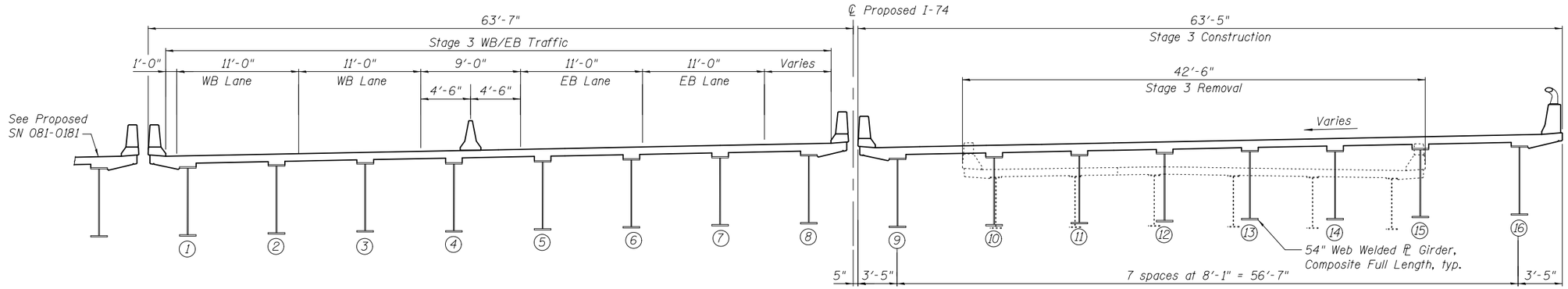
I-74 Westbound



I-74 Eastbound

CROSS SECTION - WINTER

(Looking South)



I-74 Westbound

I-74 Eastbound

CROSS SECTION - STAGE 3

(Looking South)

Notes:
- For details of Temporary Concrete Barrier, see sheet 7 of 86.
- For quantity of Temporary Concrete Barrier, see roadway plans.
- Dotted area indicates Removal of Existing Structures.
- For Stage 1 construction activities, see Roadway Plans.

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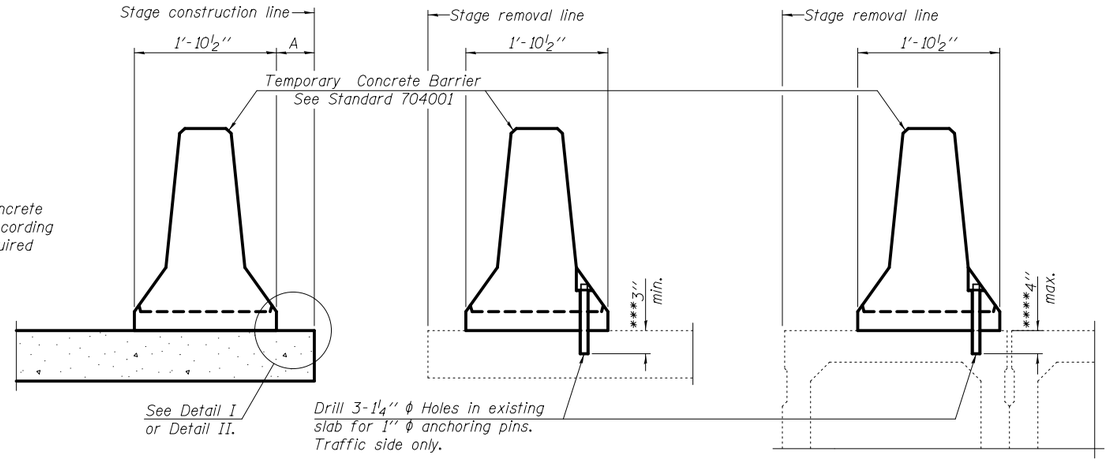
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 6 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	955
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

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



NEW SLAB

EXISTING SLAB

EXISTING DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1'' x 7' 'x ''W'' steel PL to the top layer of couplers with 2-⅝'' ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1'' x 7'' x ''W'' steel PL to the concrete slab or concrete wearing surface with 2-⅝'' ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

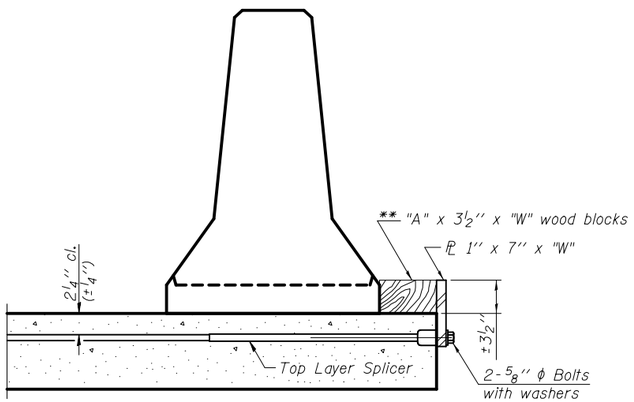
Cost of retainer assembly is included with Temporary Concrete Barrier.

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

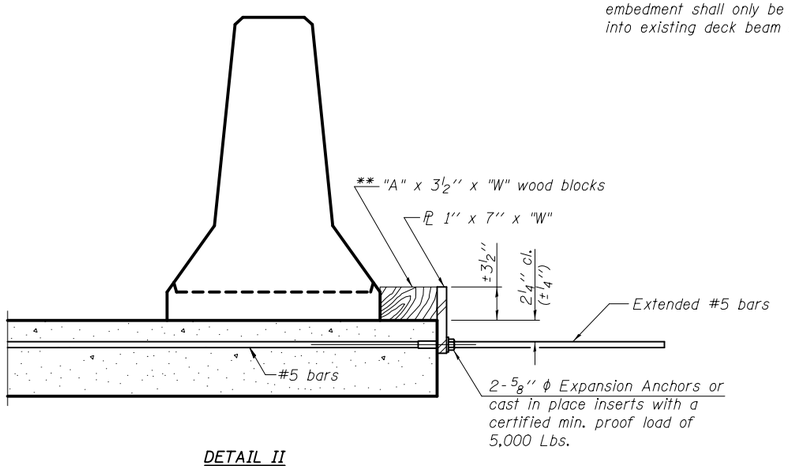
SECTIONS THRU SLAB OR DECK BEAM

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

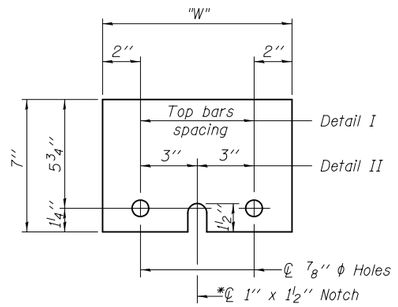
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1'' x 7'' x ''W''

* Required only with Detail II

RETAINER ASSEMBLY

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

R-27

1-12-15

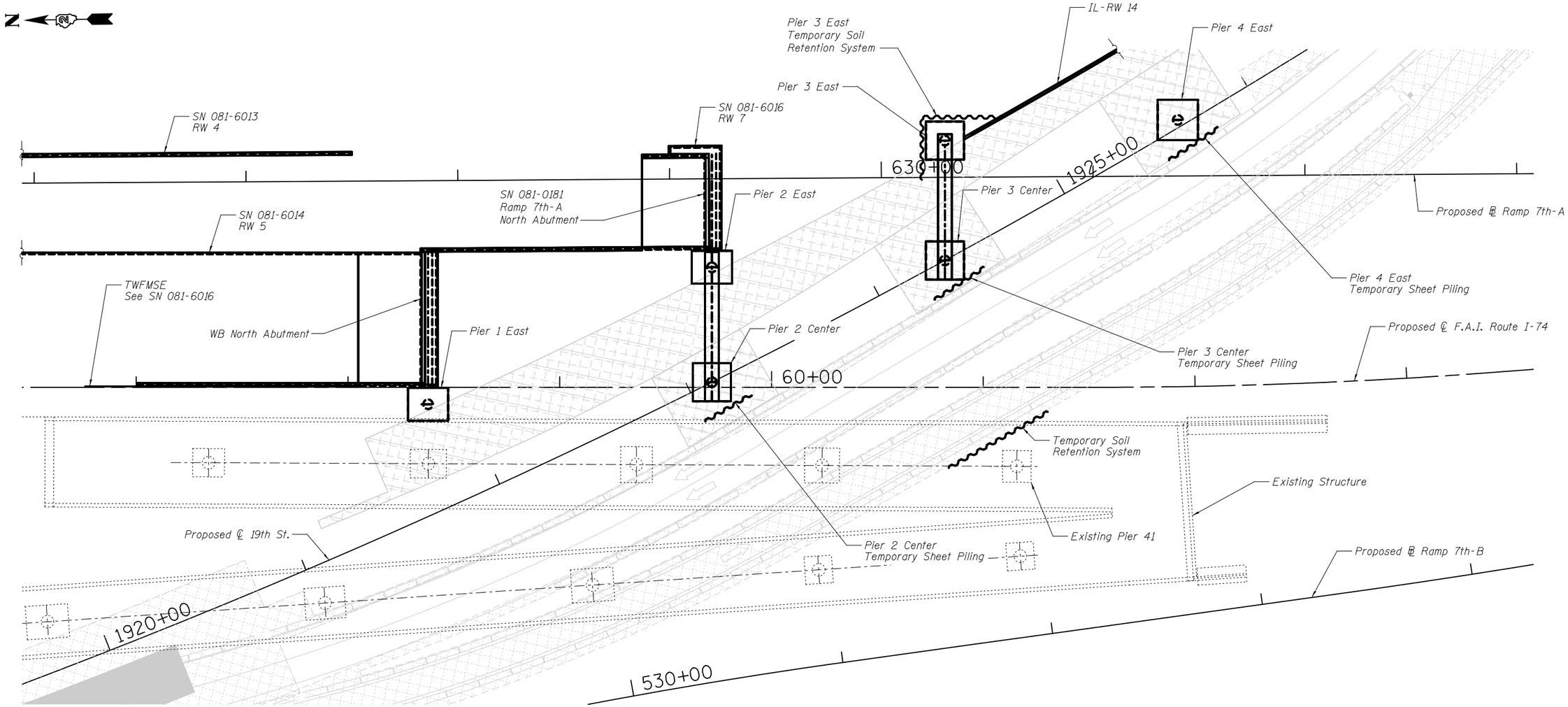
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 7 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	956
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STAGE 2-1 PLAN

STAGE 2-1 CONSTRUCTION

RETAINING WALLS	SN 081-0181	SN 081-0179 AND SN 081-0180	ROADWAY
SN 081-6013, RW 4	Ramp 7th-A North Abutment	WB North Abutment	Temporary Soil Retention System at Existing
SN 081-6014, RW 5	Pier 3 East (Temporary Soil Retention System)	Pier 1 East	Pier 41 to be removed after Stage 2
SN 081-6016, RW 7 (Stage 2 Portion Only)	Pier 3 Center (Temporary Sheet Piling)	Pier 2 East	
IL-RW 14	Pier 3 Cap (Partial)	Pier 2 Center (Temporary Sheet Piling)	
	Pier 4 East (Temporary Sheet Piling)	Pier 2 Cap (Partial)	

Notes:

Suggested sequence of construction shown is required to maintain traffic on 19th Street. See maintenance of traffic plans for additional information.

For additional structures shown, see complete plan set.

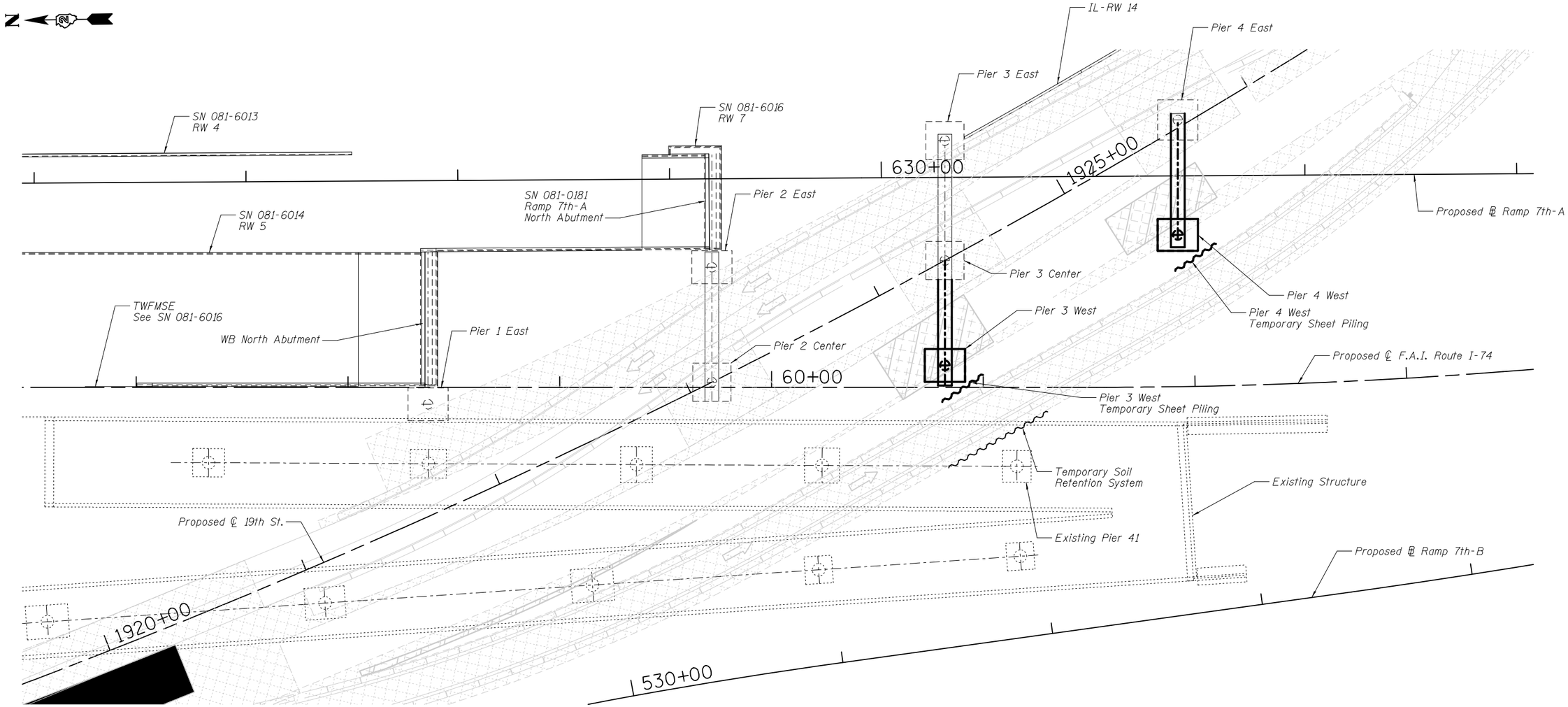
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2-1 PLAN
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 8 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	957
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STAGE 2-2 PLAN

STAGE 2-2 CONSTRUCTION

SN 081-0181	SN 081-0179 AND SN 081-0180	ROADWAY
Pier 4 West (Temporary Sheet Piling)	Pier 3 West (Temporary Sheet Piling)	Temporary Soil Retention System at Existing Pier 41 constructed in Stage 2-1, to be removed after Stage 2
Pier 4 Cap	Pier 3 Cap (Remaining)	

Notes:

Suggested sequence of construction shown is required to maintain traffic on 19th Street. See maintenance of traffic plans for additional information.

For additional structures shown, see complete plan set.

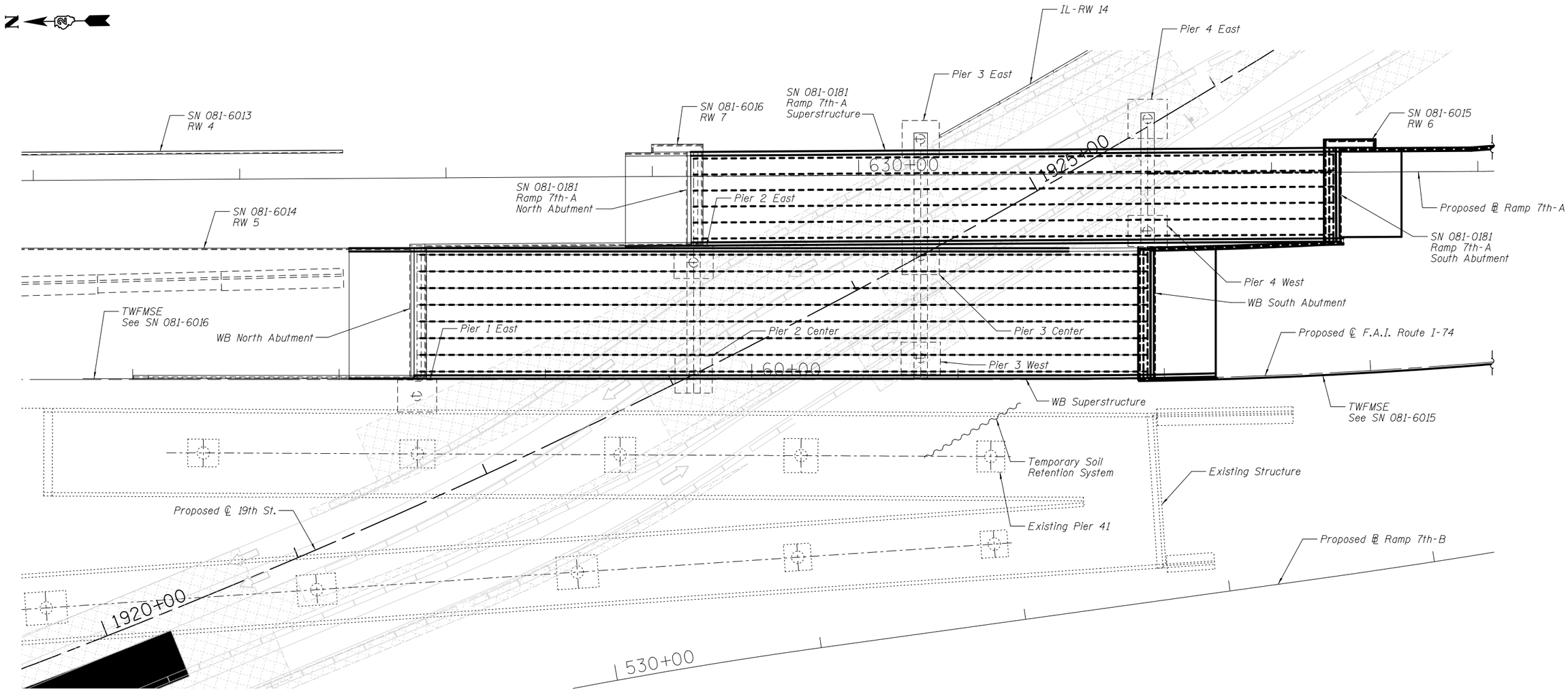
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2-2 PLAN
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 9 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	958
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STAGE 2-3 PLAN

STAGE 2-3 CONSTRUCTION

RETAINING WALLS	SN 081-0181	SN 081-0179 AND SN 081-0180	ROADWAY
SN 081-6015, RW 6 (Stage 2 Portion Only)	Ramp 7th-A South Abutment	WB South Abutment	Temporary Soil Retention System at Existing Pier 41 constructed in Stage 2-1, to be removed after Stage 2
	Ramp 7th-A Superstructure	WB Superstructure	

Notes:

Suggested sequence of construction shown is required to maintain traffic on 19th Street. See maintenance of traffic plans for additional information.

For additional structures shown, see complete plan set.

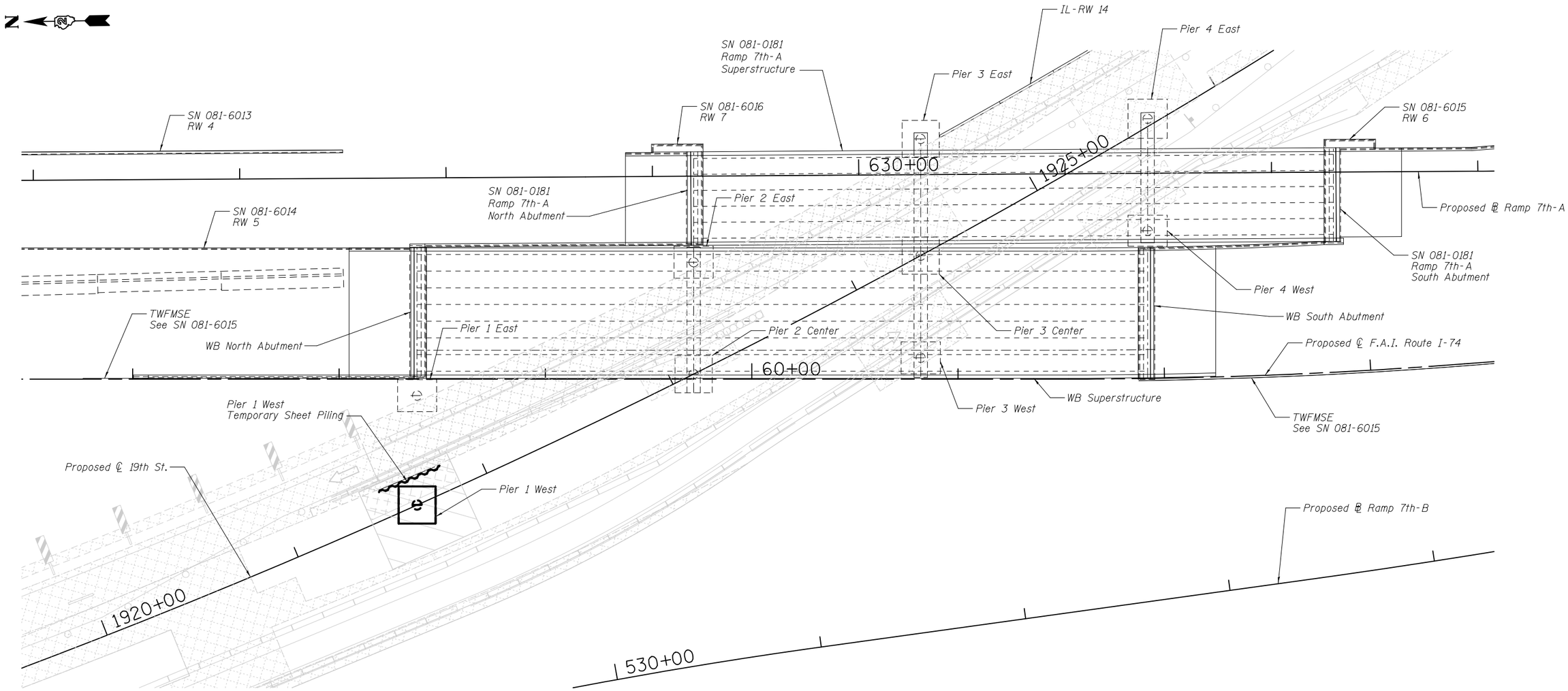
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2-3 PLAN
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 10 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	959
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STAGE 3-1 PLAN

STAGE 3-1 CONSTRUCTION

SN 081-0179 AND SN 081-0180
Pier 1 West (Temporary Sheet Piling)

Notes:

Suggested sequence of construction shown is required to maintain traffic on 19th Street. See maintenance of traffic plans for additional information.

For additional structures shown, see complete plan set.

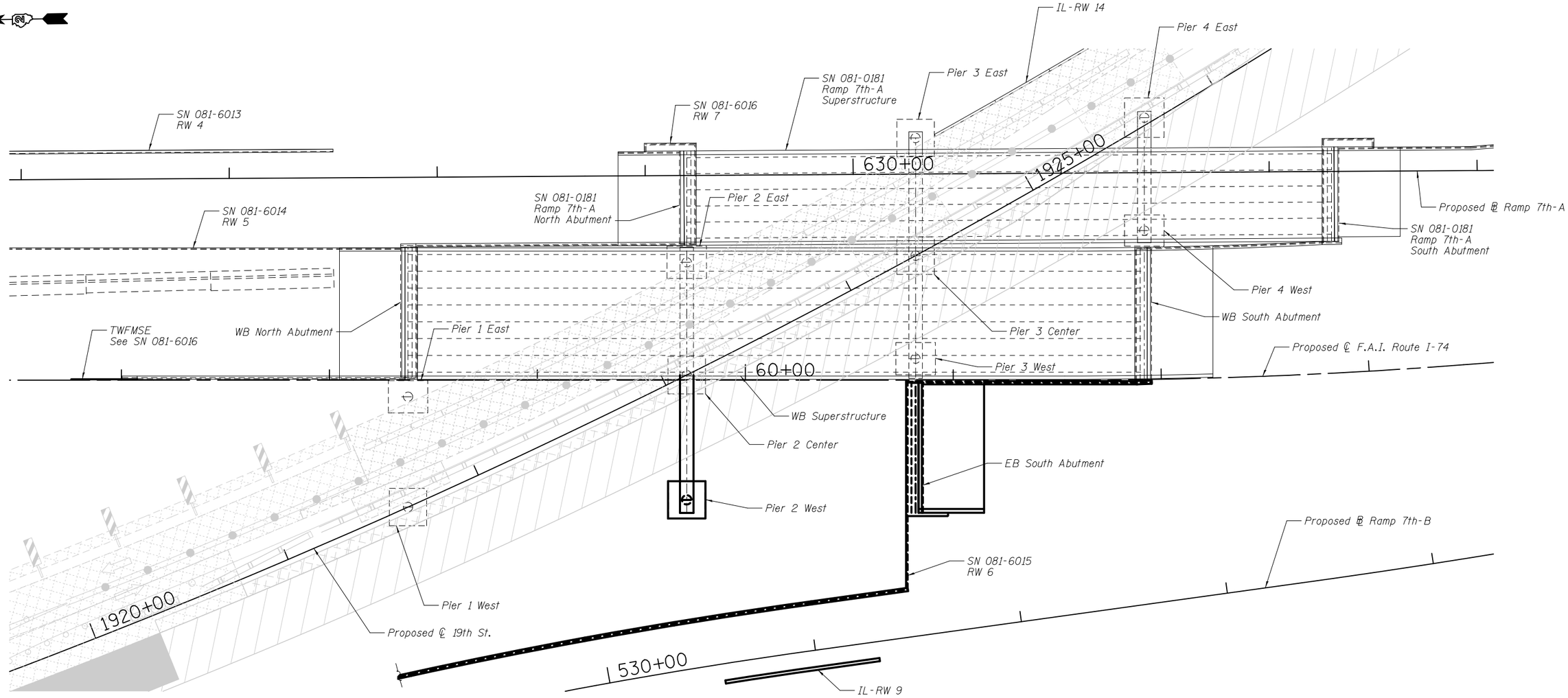
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 3-1 PLAN
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 11 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	960
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STAGE 3-2 PLAN

STAGE 3-2 CONSTRUCTION

RETAINING WALLS	SN 081-0179 AND SN 081-0180
SN 081-6015, RW 6 (Stage 3 Portion Only)	Pier 2 West
IL-RW 9	Pier 2 Cap (Remaining)
	EB South Abutment

Notes:

Suggested sequence of construction shown is required to maintain traffic on 19th Street. See maintenance of traffic plans for additional information.

For additional structures shown, see complete plan set.

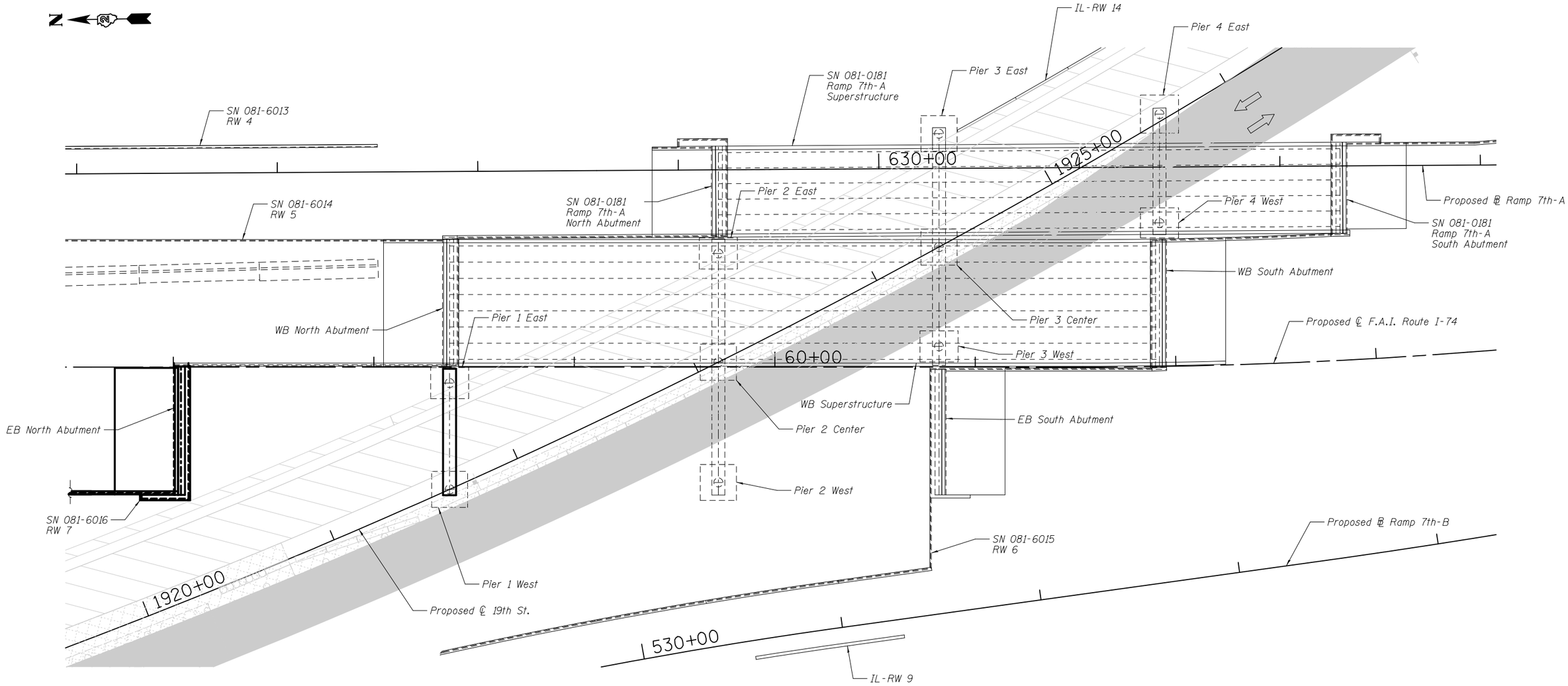
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 3-2 PLAN
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 12 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	961
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STAGE 3-3 PLAN

STAGE 3-3 CONSTRUCTION

RETAINING WALLS	SN 081-0179 AND SN 081-0180
SN 081-6016, RW 7 (Stage 3 Portion Only)	Pier 1 Cap
	EB North Abutment

Notes:

Suggested sequence of construction shown is required to maintain traffic on 19th Street. See maintenance of traffic plans for additional information.

For additional structures shown, see complete plan set.

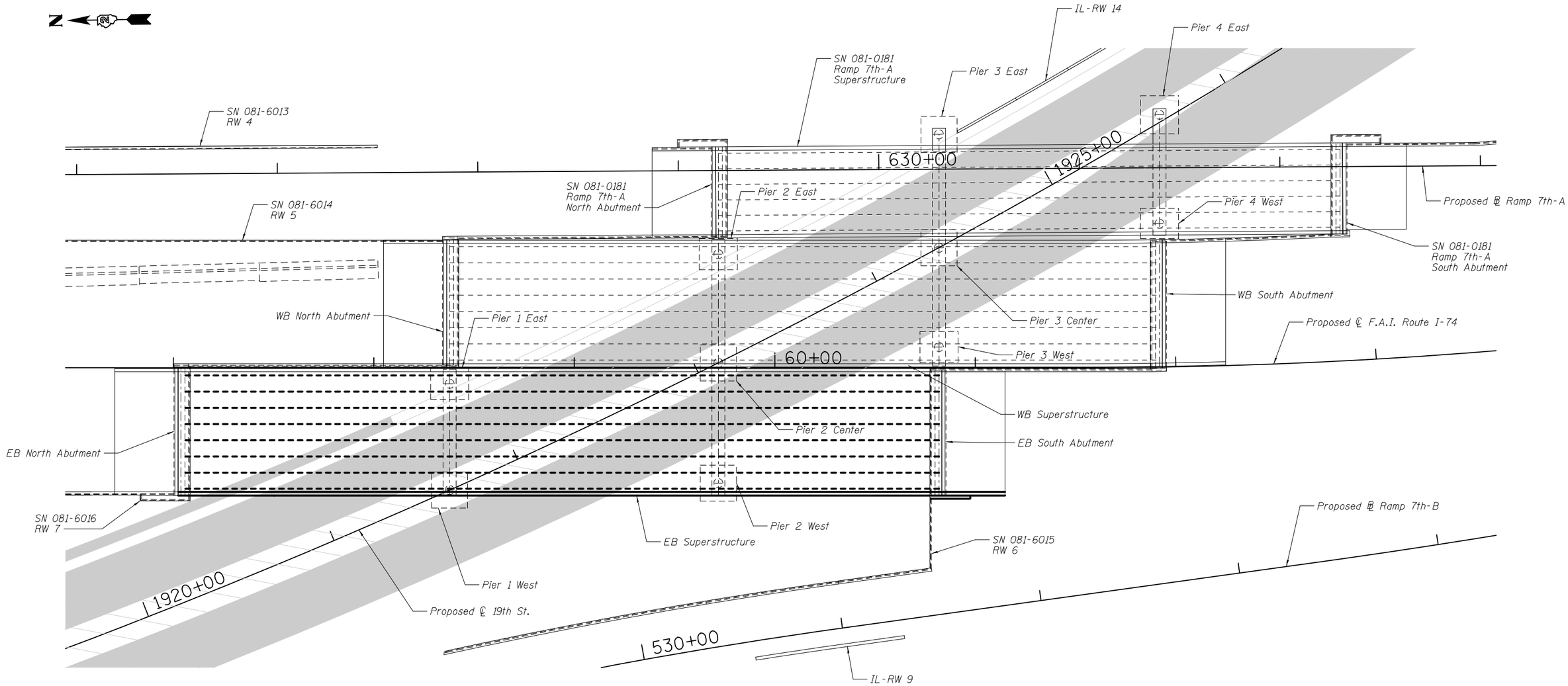
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 3-3 PLAN
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 13 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	962
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



STAGE 3-4 PLAN

STAGE 3-4 CONSTRUCTION

SN 081-0179 AND SN 081-0180
EB Superstructure

Notes:

Suggested sequence of construction shown is required to maintain traffic on 19th Street. See maintenance of traffic plans for additional information.

For additional structures shown, see complete plan set.

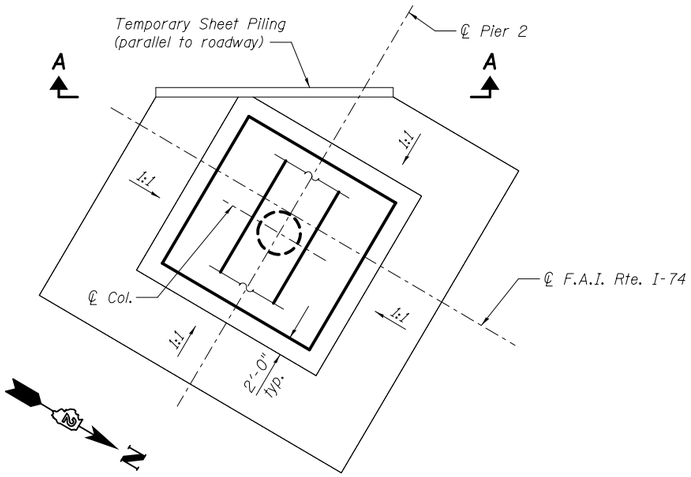
MODJESKI and MASTERS
Experience great bridges.

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

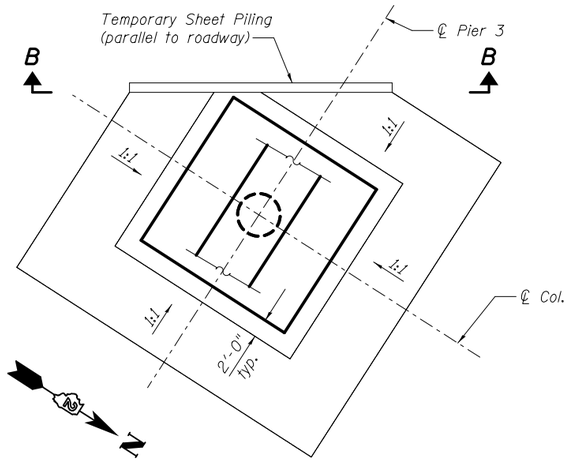
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 3-4 PLAN
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 14 OF 86 SHEETS

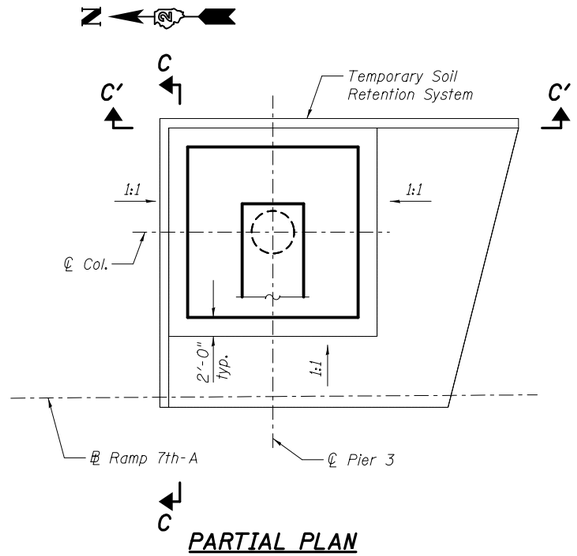
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	963
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PARTIAL PLAN
PIER 2 - CENTER COLUMN FOOTING

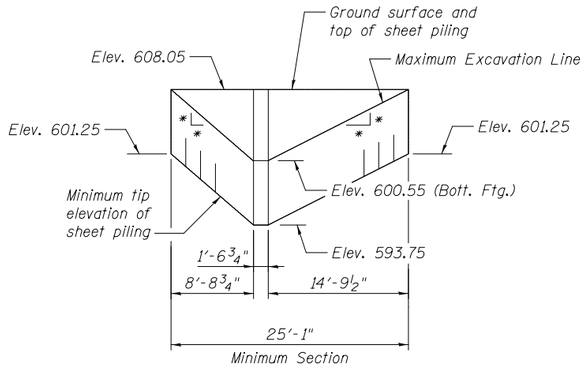


PARTIAL PLAN
PIER 3 - CENTER COLUMN FOOTING



PARTIAL PLAN
PIER 3 - EAST COLUMN FOOTING

Note:
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.



SECTION A-A
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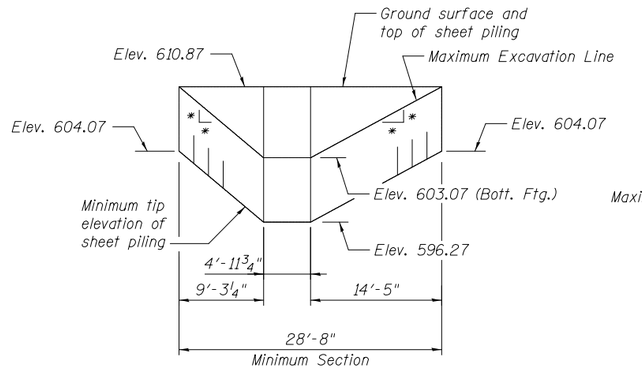

SECTION B-B
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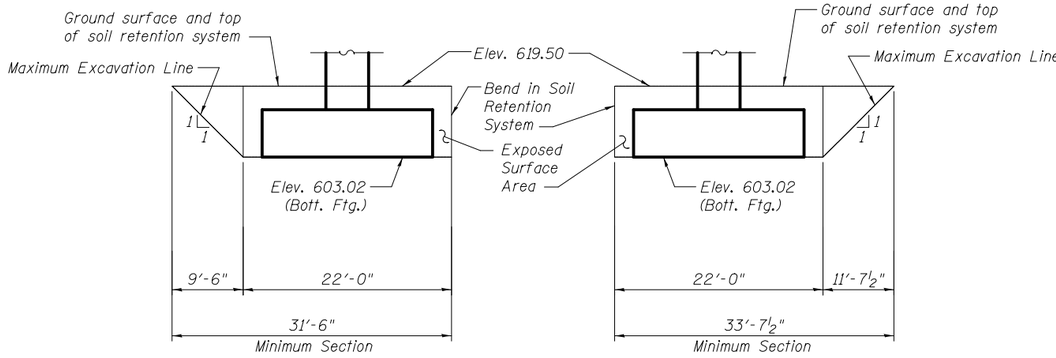
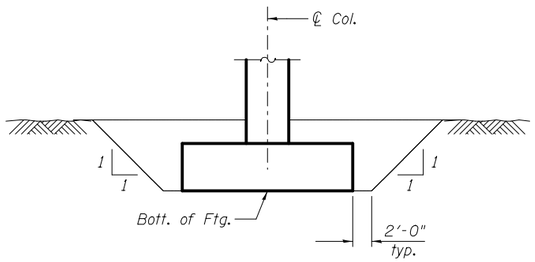


SECTION C-C

SECTION C'-C'



TYPICAL FOOTING ELEVATION

Notes:
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.
See sheet 17 of 86 for minimum required section modulus.

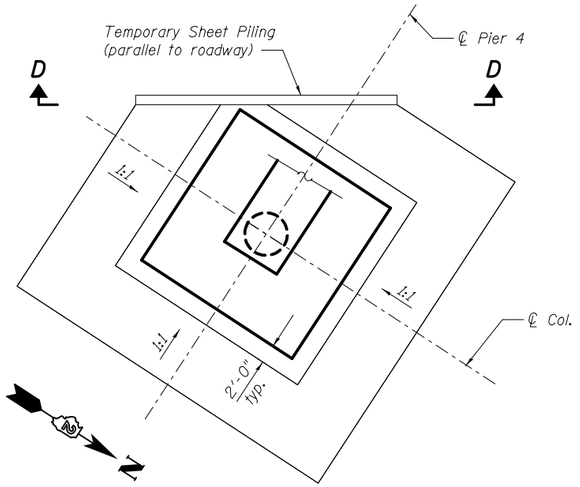
MODJESKI and MASTERS
Experience great bridges.

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

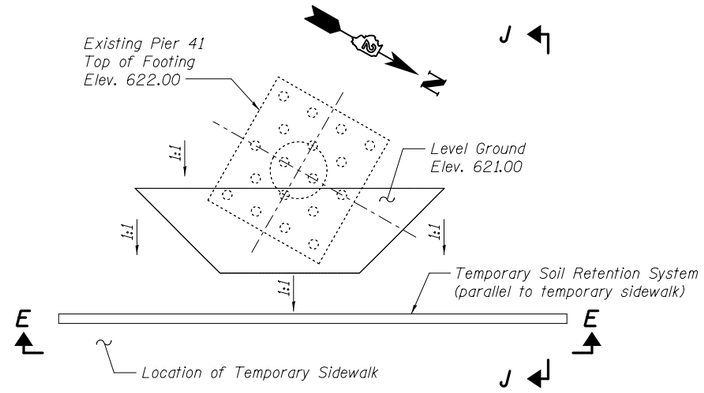
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL RETENTION DETAILS – 1
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 15 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	964
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PARTIAL PLAN
PIER 4 - EAST COLUMN FOOTING

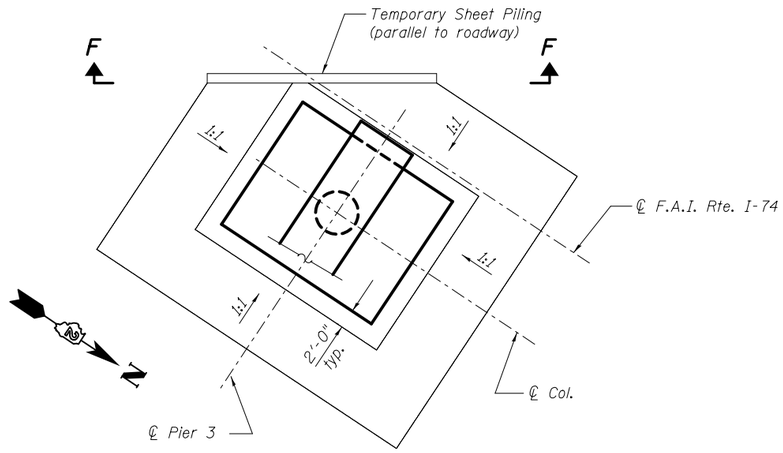


PARTIAL PLAN
EXISTING PIER 41 - COLUMN FOOTING

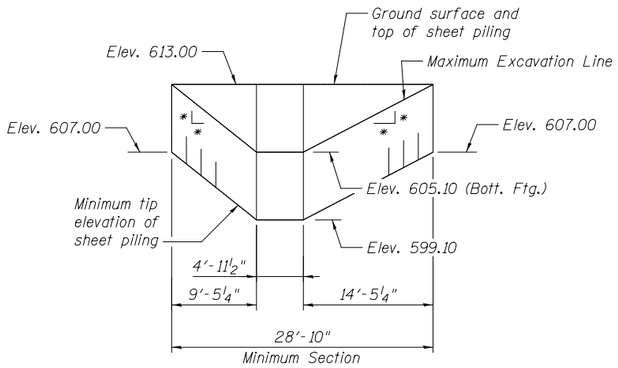
(at Existing S.B. F.A.I. Rte. I-74)

Notes:
A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.

Contractor shall not expose more than 1'-0" of existing footing and shall maintain the stability of existing Pier 41 during stage construction. Adjustments may be required if actual field conditions vary from configuration shown.



PART PLAN
PIER 3 - WEST COLUMN FOOTING



SECTION D-D

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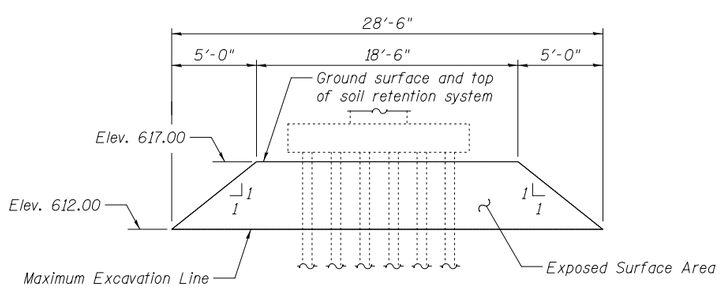
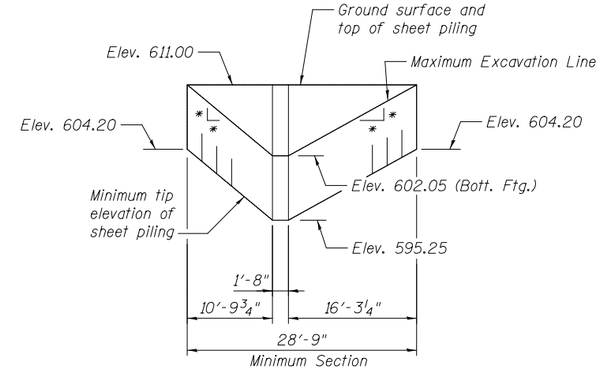


SECTION E-E



SECTION F-F

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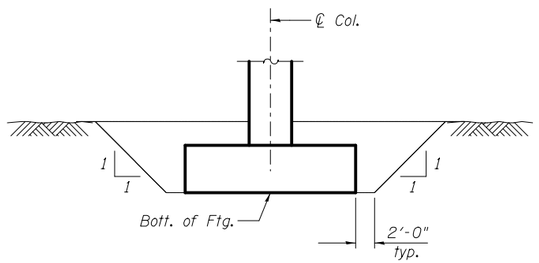
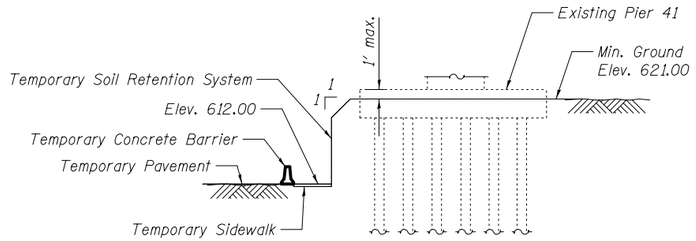


TYPICAL FOOTING ELEVATION



SECTION J-J

Notes:
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

See sheet 17 of 86 for minimum required section modulus.

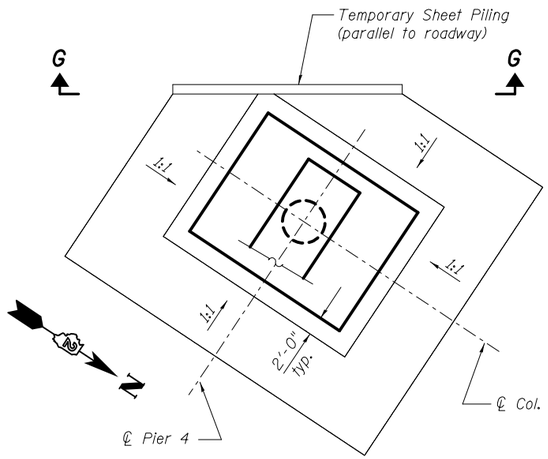
MODJESKI and MASTERS
Experience great bridges.

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

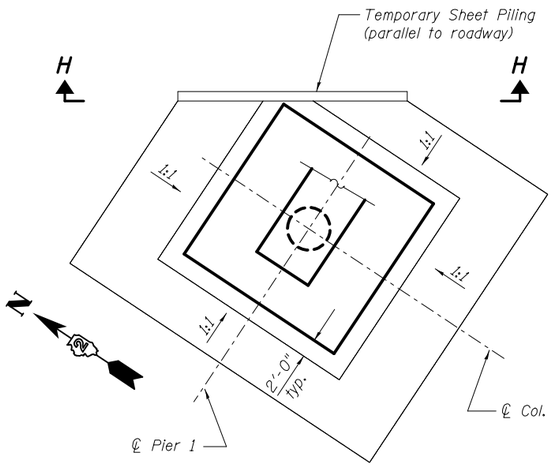
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL RETENTION DETAILS – 2
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 16 OF 86 SHEETS

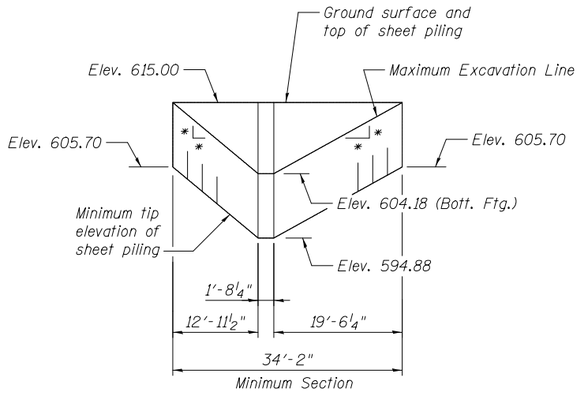
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	965
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



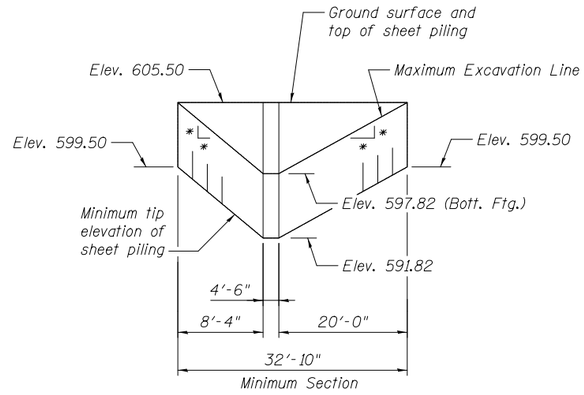
PARTIAL PLAN
PIER 4 - WEST COLUMN FOOTING



PARTIAL PLAN
PIER 1 - WEST COLUMN FOOTING



SECTION G-G
*1:1 Normal



SECTION H-H
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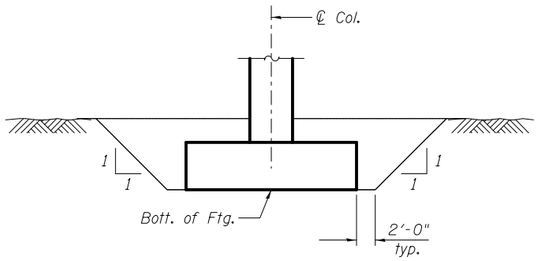


TYPICAL FOOTING ELEVATION

MINIMUM REQUIRED SECTION MODULUS

Temporary Sheet Piling	Section Modulus (in³/ft)
Pier 2 - Center	3.3
Pier 3 - Center	3.7
Pier 4 - East	3.0
Pier 3 - West	4.4
Pier 4 - West	10.1
Pier 1 - West	3.2

BILL OF MATERIAL

Item	Unit	Total
Temporary Sheet Piling	Sq. Ft.	2,087
Temporary Soil Retention System	Sq. Ft.	1,017

Note:
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

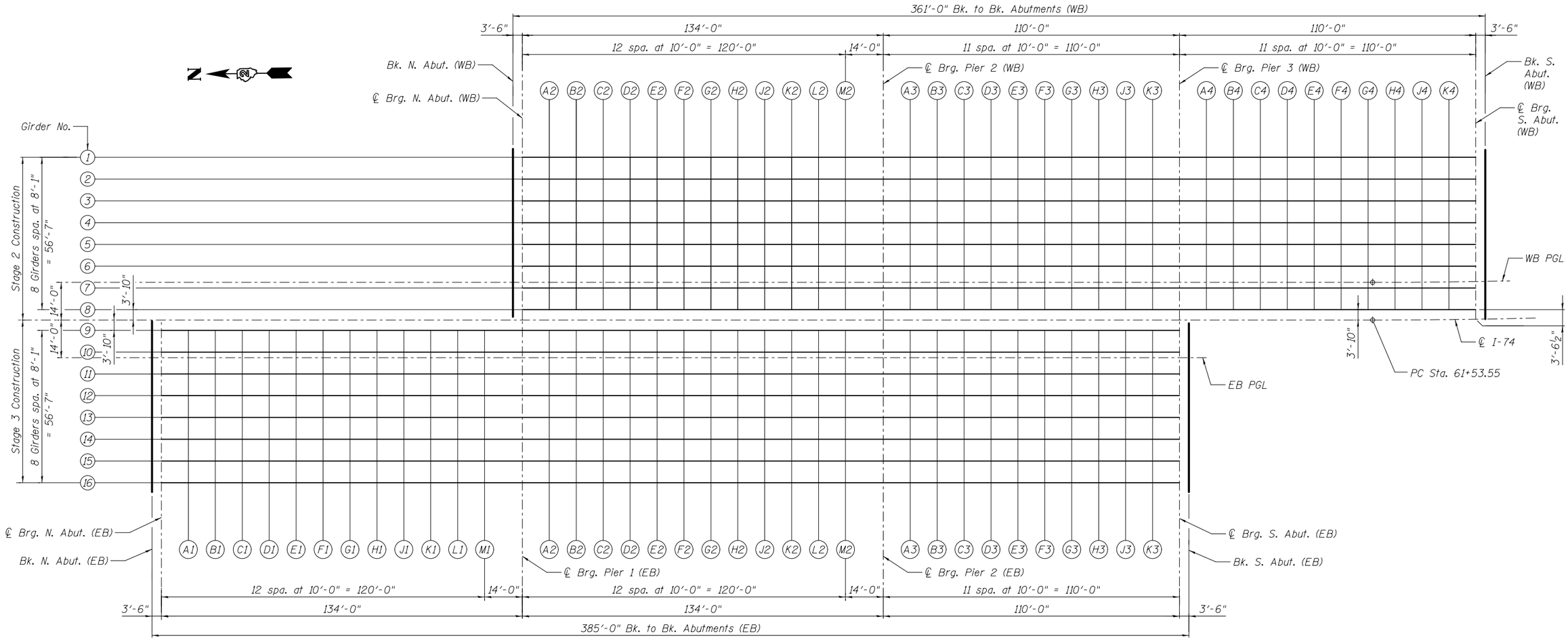
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

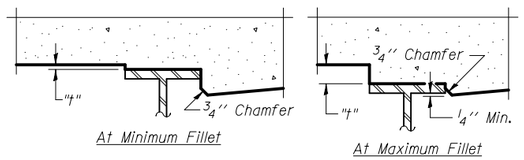
SOIL RETENTION DETAILS – 3
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 17 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	966
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN

WB = Westbound
EB = Eastbound



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 19 thru 24 of 86, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

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

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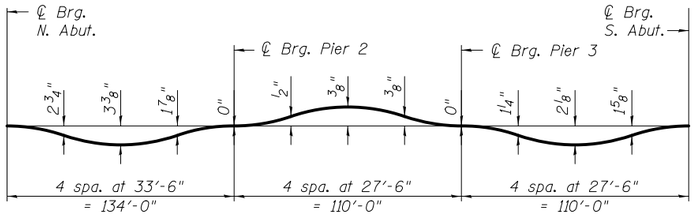
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS – 1
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 18 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	967
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

GIRDER 1

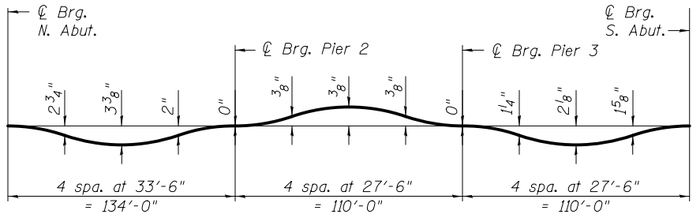
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-60.42	635.25	635.25
℄ Brg. N. Abut. (WB)	58+37.84	-60.42	635.35	635.35
A2	58+47.84	-60.42	635.65	635.73
B2	58+57.84	-60.42	635.96	636.11
C2	58+67.84	-60.42	636.26	636.47
D2	58+77.84	-60.42	636.56	636.81
E2	58+87.84	-60.42	636.86	637.14
F2	58+97.84	-60.42	637.16	637.45
G2	59+07.84	-60.42	637.46	637.74
H2	59+17.84	-60.42	637.76	638.02
J2	59+27.84	-60.42	638.07	638.28
K2	59+37.84	-60.42	638.37	638.53
L2	59+47.84	-60.42	638.67	638.78
M2	59+57.84	-60.42	638.97	639.02
℄ Brg. Pier 2 (WB)	59+71.84	-60.42	639.39	639.39
A3	59+81.84	-60.42	639.69	639.66
B3	59+91.84	-60.42	639.99	639.95
C3	60+01.84	-60.42	640.29	640.25
D3	60+11.84	-60.42	640.59	640.55
E3	60+21.84	-60.42	640.89	640.85
F3	60+31.84	-60.42	641.19	641.16
G3	60+41.84	-60.42	641.49	641.46
H3	60+51.84	-60.42	641.79	641.76
J3	60+61.84	-60.42	642.09	642.07
K3	60+71.84	-60.42	642.39	642.38
℄ Brg. Pier 3 (WB)	60+81.84	-60.42	642.69	642.70
A4	60+91.84	-60.42	642.99	643.03
B4	61+01.84	-60.42	643.29	643.37
C4	61+11.84	-60.42	643.59	643.71
D4	61+21.84	-60.42	643.89	644.04
E4	61+31.84	-60.42	644.20	644.37
F4	61+41.84	-60.42	644.50	644.68
G4	61+51.84	-60.42	644.80	644.97
H4	61+62.05	-60.40	645.10	645.25
J4	61+72.29	-60.35	645.41	645.52
K4	61+82.54	-60.25	645.73	645.78
℄ Brg. S. Abut. (WB)	61+92.97	-60.12	646.04	646.04
Bk. S. Abut. (WB)	61+96.37	-60.06	646.15	646.15



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 1
(Includes weight of concrete only.)

GIRDER 2

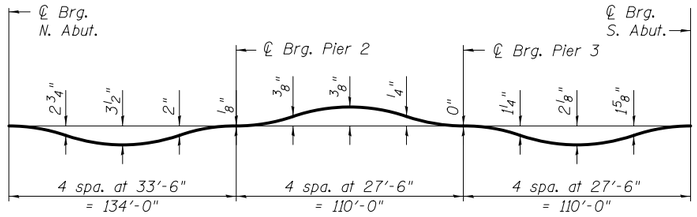
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-52.33	635.27	635.27
℄ Brg. N. Abut. (WB)	58+37.84	-52.33	635.37	635.37
A2	58+47.84	-52.33	635.68	635.76
B2	58+57.84	-52.33	636.00	636.15
C2	58+67.84	-52.33	636.31	636.52
D2	58+77.84	-52.33	636.62	636.87
E2	58+87.84	-52.33	636.93	637.21
F2	58+97.84	-52.33	637.24	637.53
G2	59+07.84	-52.33	637.55	637.83
H2	59+17.84	-52.33	637.86	638.11
J2	59+27.84	-52.33	638.17	638.38
K2	59+37.84	-52.33	638.48	638.65
L2	59+47.84	-52.33	638.79	638.90
M2	59+57.84	-52.33	639.10	639.16
℄ Brg. Pier 2 (WB)	59+71.84	-52.33	639.53	639.54
A3	59+81.84	-52.33	639.84	639.82
B3	59+91.84	-52.33	640.15	640.12
C3	60+01.84	-52.33	640.46	640.43
D3	60+11.84	-52.33	640.77	640.74
E3	60+21.84	-52.33	641.08	641.05
F3	60+31.84	-52.33	641.39	641.36
G3	60+41.84	-52.33	641.70	641.67
H3	60+51.84	-52.33	642.01	641.98
J3	60+61.84	-52.33	642.32	642.30
K3	60+71.84	-52.33	642.63	642.61
℄ Brg. Pier 3 (WB)	60+81.84	-52.33	642.94	642.94
A4	60+91.84	-52.33	643.25	643.28
B4	61+01.84	-52.33	643.56	643.63
C4	61+11.84	-52.33	643.87	643.98
D4	61+21.84	-52.33	644.18	644.33
E4	61+31.84	-52.33	644.49	644.66
F4	61+41.84	-52.33	644.80	644.98
G4	61+51.84	-52.33	645.11	645.28
H4	61+62.02	-52.32	645.42	645.57
J4	61+72.23	-52.27	645.74	645.85
K4	61+82.45	-52.17	646.06	646.12
℄ Brg. S. Abut. (WB)	61+92.66	-52.03	646.39	646.39
Bk. S. Abut. (WB)	61+96.23	-51.98	646.50	646.50



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 2
(Includes weight of concrete only.)

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-44.25	635.28	635.28
℄ Brg. N. Abut. (WB)	58+37.84	-44.25	635.39	635.39
A2	58+47.84	-44.25	635.71	635.79
B2	58+57.84	-44.25	636.04	636.19
C2	58+67.84	-44.25	636.36	636.56
D2	58+77.84	-44.25	636.68	636.93
E2	58+87.84	-44.25	636.99	637.28
F2	58+97.84	-44.25	637.31	637.61
G2	59+07.84	-44.25	637.63	637.92
H2	59+17.84	-44.25	637.95	638.21
J2	59+27.84	-44.25	638.27	638.49
K2	59+37.84	-44.25	638.59	638.76
L2	59+47.84	-44.25	638.91	639.03
M2	59+57.84	-44.25	639.23	639.30
℄ Brg. Pier 2 (WB)	59+71.84	-44.25	639.68	639.69
A3	59+81.84	-44.25	640.00	639.98
B3	59+91.84	-44.25	640.31	640.29
C3	60+01.84	-44.25	640.63	640.61
D3	60+11.84	-44.25	640.95	640.92
E3	60+21.84	-44.25	641.27	641.24
F3	60+31.84	-44.25	641.59	641.57
G3	60+41.84	-44.25	641.91	641.89
H3	60+51.84	-44.25	642.23	642.21
J3	60+61.84	-44.25	642.55	642.53
K3	60+71.84	-44.25	642.87	642.85
℄ Brg. Pier 3 (WB)	60+81.84	-44.25	643.19	643.19
A4	60+91.84	-44.25	643.51	643.54
B4	61+01.84	-44.25	643.83	643.90
C4	61+11.84	-44.25	644.14	644.26
D4	61+21.84	-44.25	644.46	644.61
E4	61+31.84	-44.25	644.78	644.95
F4	61+41.84	-44.25	645.10	645.28
G4	61+51.84	-44.25	645.42	645.59
H4	61+61.99	-44.24	645.75	645.89
J4	61+72.17	-44.18	646.07	646.18
K4	61+82.35	-44.09	646.40	646.46
℄ Brg. S. Abut. (WB)	61+92.53	-43.95	646.73	646.73
Bk. S. Abut. (WB)	61+96.09	-43.89	646.85	646.85



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 3
(Includes weight of concrete only.)

Notes:

Dead load deflection will occur at the piers due to the pier column spacing.

The "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown for the Westbound structure are based on an anticipated construction sequence as described herein. SN 081-0181 Ramp 7th-A steel and concrete superstructure is constructed prior to the Westbound concrete superstructure. Deviation from this sequence will require adjustment to the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown.

The dead load deflections are not to be used in the field if the Engineer is working from "Theoretical Grade Elevations Adjusted For Dead Load Deflection".

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

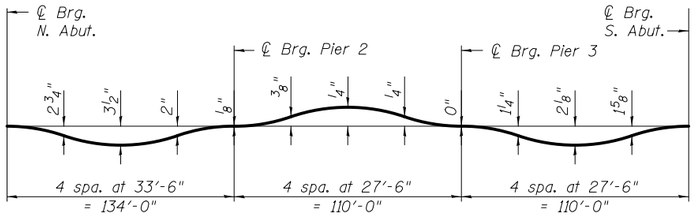
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - 2
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 19 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	968
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

GIRDER 4

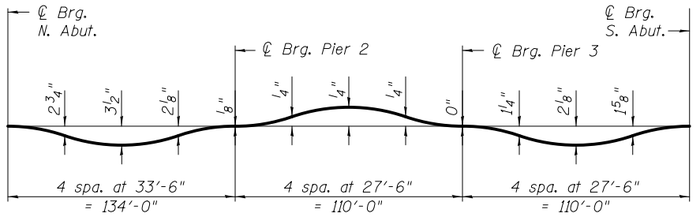
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-36.17	635.30	635.30
℄ Brg. N. Abut. (WB)	58+37.84	-36.17	635.41	635.41
A2	58+47.84	-36.17	635.74	635.81
B2	58+57.84	-36.17	636.07	636.22
C2	58+67.84	-36.17	636.40	636.61
D2	58+77.84	-36.17	636.73	636.99
E2	58+87.84	-36.17	637.06	637.34
F2	58+97.84	-36.17	637.39	637.68
G2	59+07.84	-36.17	637.72	638.00
H2	59+17.84	-36.17	638.05	638.31
J2	59+27.84	-36.17	638.37	638.60
K2	59+37.84	-36.17	638.70	638.88
L2	59+47.84	-36.17	639.03	639.16
M2	59+57.84	-36.17	639.36	639.43
℄ Brg. Pier 2 (WB)	59+71.84	-36.17	639.82	639.84
A3	59+81.84	-36.17	640.15	640.14
B3	59+91.84	-36.17	640.48	640.46
C3	60+01.84	-36.17	640.81	640.78
D3	60+11.84	-36.17	641.13	641.11
E3	60+21.84	-36.17	641.46	641.44
F3	60+31.84	-36.17	641.79	641.77
G3	60+41.84	-36.17	642.12	642.10
H3	60+51.84	-36.17	642.45	642.43
J3	60+61.84	-36.17	642.78	642.76
K3	60+71.84	-36.17	643.11	643.09
℄ Brg. Pier 3 (WB)	60+81.84	-36.17	643.43	643.44
A4	60+91.84	-36.17	643.76	643.80
B4	61+01.84	-36.17	644.09	644.17
C4	61+11.84	-36.17	644.42	644.54
D4	61+21.84	-36.17	644.75	644.90
E4	61+31.84	-36.17	645.08	645.25
F4	61+41.84	-36.17	645.41	645.59
G4	61+51.84	-36.17	645.73	645.91
H4	61+61.96	-36.15	646.07	646.21
J4	61+72.11	-36.10	646.40	646.51
K4	61+82.26	-36.00	646.74	646.80
℄ Brg. S. Abut. (WB)	61+92.4	-35.87	647.08	647.08
Bk. S. Abut. (WB)	61+95.95	-35.81	647.20	647.20



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 4
(Includes weight of concrete only.)

GIRDER 5

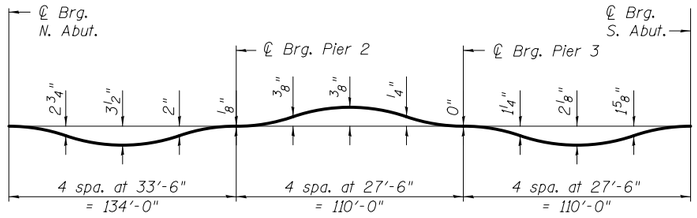
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-28.08	635.31	635.31
℄ Brg. N. Abut. (WB)	58+37.84	-28.08	635.43	635.43
A2	58+47.84	-28.08	635.76	635.84
B2	58+57.84	-28.08	636.11	636.26
C2	58+67.84	-28.08	636.45	636.66
D2	58+77.84	-28.08	636.79	637.04
E2	58+87.84	-28.08	637.13	637.41
F2	58+97.84	-28.08	637.46	637.76
G2	59+07.84	-28.08	637.80	638.09
H2	59+17.84	-28.08	638.14	638.40
J2	59+27.84	-28.08	638.48	638.70
K2	59+37.84	-28.08	638.82	638.99
L2	59+47.84	-28.08	639.15	639.28
M2	59+57.84	-28.08	639.49	639.57
℄ Brg. Pier 2 (WB)	59+71.84	-28.08	639.96	639.98
A3	59+81.84	-28.08	640.30	640.30
B3	59+91.84	-28.08	640.64	640.62
C3	60+01.84	-28.08	640.98	640.95
D3	60+11.84	-28.08	641.32	641.29
E3	60+21.84	-28.08	641.65	641.63
F3	60+31.84	-28.08	641.99	641.97
G3	60+41.84	-28.08	642.33	642.31
H3	60+51.84	-28.08	642.67	642.65
J3	60+61.84	-28.08	643.01	642.99
K3	60+71.84	-28.08	643.34	643.33
℄ Brg. Pier 3 (WB)	60+81.84	-28.08	643.68	643.69
A4	60+91.84	-28.08	644.02	644.06
B4	61+01.84	-28.08	644.36	644.43
C4	61+11.84	-28.08	644.70	644.81
D4	61+21.84	-28.08	645.03	645.18
E4	61+31.84	-28.08	645.37	645.54
F4	61+41.84	-28.08	645.71	645.89
G4	61+51.84	-28.08	646.05	646.22
H4	61+61.94	-28.07	646.39	646.54
J4	61+72.05	-28.02	646.73	646.84
K4	61+82.16	-27.92	647.08	647.14
℄ Brg. S. Abut. (WB)	61+92.27	-27.79	647.43	647.43
Bk. S. Abut. (WB)	61+95.81	-27.73	647.55	647.55



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 5
(Includes weight of concrete only.)

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-20.00	635.33	635.33
℄ Brg. N. Abut. (WB)	58+37.84	-20.00	635.45	635.45
A2	58+47.84	-20.00	635.79	635.87
B2	58+57.84	-20.00	636.15	636.30
C2	58+67.84	-20.00	636.50	636.71
D2	58+77.84	-20.00	636.84	637.10
E2	58+87.84	-20.00	637.19	637.48
F2	58+97.84	-20.00	637.54	637.83
G2	59+07.84	-20.00	637.89	638.17
H2	59+17.84	-20.00	638.23	638.50
J2	59+27.84	-20.00	638.58	638.80
K2	59+37.84	-20.00	638.93	639.10
L2	59+47.84	-20.00	639.28	639.40
M2	59+57.84	-20.00	639.62	639.70
℄ Brg. Pier 2 (WB)	59+71.84	-20.00	640.11	640.13
A3	59+81.84	-20.00	640.46	640.45
B3	59+91.84	-20.00	640.80	640.78
C3	60+01.84	-20.00	641.15	641.12
D3	60+11.84	-20.00	641.50	641.47
E3	60+21.84	-20.00	641.84	641.82
F3	60+31.84	-20.00	642.19	642.17
G3	60+41.84	-20.00	642.54	642.52
H3	60+51.84	-20.00	642.89	642.86
J3	60+61.84	-20.00	643.23	643.21
K3	60+71.84	-20.00	643.58	643.57
℄ Brg. Pier 3 (WB)	60+81.84	-20.00	643.93	643.93
A4	60+91.84	-20.00	644.28	644.31
B4	61+01.84	-20.00	644.62	644.70
C4	61+11.84	-20.00	644.97	645.09
D4	61+21.84	-20.00	645.32	645.47
E4	61+31.84	-20.00	645.66	645.84
F4	61+41.84	-20.00	646.01	646.19
G4	61+51.84	-20.00	646.36	646.53
H4	61+61.91	-19.99	646.71	646.86
J4	61+71.99	-19.93	647.06	647.17
K4	61+82.07	-19.84	647.42	647.47
℄ Brg. S. Abut. (WB)	61+92.15	-19.70	647.77	647.77
Bk. S. Abut. (WB)	61+95.67	-19.65	647.90	647.90



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 6
(Includes weight of concrete only.)

Notes:

Dead load deflection will occur at the piers due to the pier column spacing.

The "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown for the Westbound structure are based on an anticipated construction sequence as described herein. SN 081-0181 Ramp 7th-A steel and concrete superstructure is constructed prior to the Westbound concrete superstructure. Deviation from this sequence will require adjustment to the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown.

The dead load deflections are not to be used in the field if the Engineer is working from "Theoretical Grade Elevations Adjusted For Dead Load Deflection".

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS – 3
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 20 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	969
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

WESTBOUND PROFILE GRADE

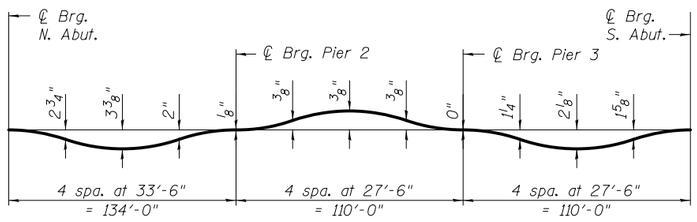
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-14.00	635.34	635.34
℄ Brg. N. Abut. (WB)	58+37.84	-14.00	635.46	635.46
A2	58+47.84	-14.00	635.81	635.89
B2	58+57.84	-14.00	636.18	636.32
C2	58+67.84	-14.00	636.53	636.74
D2	58+77.84	-14.00	636.89	637.14
E2	58+87.84	-14.00	637.24	637.52
F2	58+97.84	-14.00	637.59	637.88
G2	59+07.84	-14.00	637.95	638.23
H2	59+17.84	-14.00	638.30	638.55
J2	59+27.84	-14.00	638.66	638.87
K2	59+37.84	-14.00	639.01	639.17
L2	59+47.84	-14.00	639.37	639.48
M2	59+57.84	-14.00	639.72	639.78
℄ Brg. Pier 2 (WB)	59+71.84	-14.00	640.22	640.22
A3	59+81.84	-14.00	640.57	640.55
B3	59+91.84	-14.00	640.92	640.89
C3	60+01.84	-14.00	641.28	641.24
D3	60+11.84	-14.00	641.63	641.59
E3	60+21.84	-14.00	641.99	641.95
F3	60+31.84	-14.00	642.34	642.31
G3	60+41.84	-14.00	642.70	642.66
H3	60+51.84	-14.00	643.05	643.02
J3	60+61.84	-14.00	643.40	643.38
K3	60+71.84	-14.00	643.76	643.74
℄ Brg. Pier 3 (WB)	60+81.84	-14.00	644.11	644.11
A4	60+91.84	-14.00	644.47	644.50
B4	61+01.84	-14.00	644.82	644.89
C4	61+11.84	-14.00	645.17	645.29
D4	61+21.84	-14.00	645.53	645.68
E4	61+31.84	-14.00	645.88	646.05
F4	61+41.84	-14.00	646.24	646.42
G4	61+51.84	-14.00	646.59	646.76
H4	61+61.89	-14.00	646.95	647.09
J4	61+71.94	-14.00	647.30	647.41
K4	61+82.00	-14.00	647.66	647.72
℄ Brg. S. Abut. (WB)	61+92.06	-14.00	648.02	648.02
Bk. S. Abut. (WB)	61+95.58	-14.00	648.14	648.14

GIRDER 7

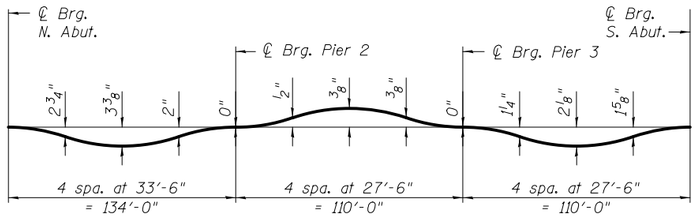
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-11.92	635.35	635.35
℄ Brg. N. Abut. (WB)	58+37.84	-11.92	635.47	635.47
A2	58+47.84	-11.92	635.82	635.90
B2	58+57.84	-11.92	636.19	636.34
C2	58+67.84	-11.92	636.54	636.75
D2	58+77.84	-11.92	636.90	637.15
E2	58+87.84	-11.92	637.26	637.54
F2	58+97.84	-11.92	637.61	637.91
G2	59+07.84	-11.92	637.97	638.25
H2	59+17.84	-11.92	638.33	638.59
J2	59+27.84	-11.92	638.68	638.90
K2	59+37.84	-11.92	639.04	639.21
L2	59+47.84	-11.92	639.40	639.52
M2	59+57.84	-11.92	639.75	639.82
℄ Brg. Pier 2 (WB)	59+71.84	-11.92	640.25	640.26
A3	59+81.84	-11.92	640.61	640.60
B3	59+91.84	-11.92	640.97	640.94
C3	60+01.84	-11.92	641.32	641.29
D3	60+11.84	-11.92	641.68	641.65
E3	60+21.84	-11.92	642.04	642.01
F3	60+31.84	-11.92	642.39	642.36
G3	60+41.84	-11.92	642.75	642.72
H3	60+51.84	-11.92	643.11	643.08
J3	60+61.84	-11.92	643.46	643.44
K3	60+71.84	-11.92	643.82	643.80
℄ Brg. Pier 3 (WB)	60+81.84	-11.92	644.18	644.18
A4	60+91.84	-11.92	644.53	644.57
B4	61+01.84	-11.92	644.89	644.96
C4	61+11.84	-11.92	645.25	645.36
D4	61+21.84	-11.92	645.60	645.75
E4	61+31.84	-11.92	645.96	646.13
F4	61+41.84	-11.92	646.32	646.49
G4	61+51.84	-11.92	646.67	646.84
H4	61+61.88	-11.90	647.03	647.18
J4	61+71.93	-11.85	647.39	647.50
K4	61+81.98	-11.76	647.75	647.81
℄ Brg. S. Abut. (WB)	61+92.02	-11.62	648.12	648.12
Bk. S. Abut. (WB)	61+95.54	-11.57	648.25	648.25

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (WB)	58+34.34	-3.83	635.36	635.36
℄ Brg. N. Abut. (WB)	58+37.84	-3.83	635.49	635.49
A2	58+47.84	-3.83	635.85	635.93
B2	58+57.84	-3.83	636.22	636.37
C2	58+67.84	-3.83	636.59	636.80
D2	58+77.84	-3.83	636.96	637.21
E2	58+87.84	-3.83	637.32	637.60
F2	58+97.84	-3.83	637.69	637.98
G2	59+07.84	-3.83	638.05	638.34
H2	59+17.84	-3.83	638.42	638.68
J2	59+27.84	-3.83	638.79	639.00
K2	59+37.84	-3.83	639.15	639.32
L2	59+47.84	-3.83	639.52	639.63
M2	59+57.84	-3.83	639.88	639.95
℄ Brg. Pier 2 (WB)	59+71.84	-3.83	640.40	640.40
A3	59+81.84	-3.83	640.76	640.74
B3	59+91.84	-3.83	641.13	641.10
C3	60+01.84	-3.83	641.50	641.46
D3	60+11.84	-3.83	641.86	641.82
E3	60+21.84	-3.83	642.23	642.19
F3	60+31.84	-3.83	642.59	642.56
G3	60+41.84	-3.83	642.96	642.93
H3	60+51.84	-3.83	643.32	643.29
J3	60+61.84	-3.83	643.69	643.66
K3	60+71.84	-3.83	644.06	644.04
℄ Brg. Pier 3 (WB)	60+81.84	-3.83	644.42	644.42
A4	60+91.84	-3.83	644.79	644.82
B4	61+01.84	-3.83	645.15	645.23
C4	61+11.84	-3.83	645.52	645.63
D4	61+21.84	-3.83	645.89	646.03
E4	61+31.84	-3.83	646.25	646.42
F4	61+41.84	-3.83	646.62	646.80
G4	61+51.84	-3.83	646.98	647.16
H4	61+61.85	-3.82	647.35	647.50
J4	61+71.87	-3.77	647.72	647.83
K4	61+81.88	-3.67	648.09	648.15
℄ Brg. S. Abut. (WB)	61+91.90	-3.54	648.46	648.46
Bk. S. Abut. (WB)	61+95.40	-3.48	648.59	648.59



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 7
(Includes weight of concrete only.)



DEAD LOAD DEFLECTION DIAGRAM
WESTBOUND - GIRDER 8
(Includes weight of concrete only.)

Notes:

Dead load deflection will occur at the piers due to the pier column spacing.

The "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown for the Westbound structure are based on an anticipated construction sequence as described herein. SN 081-0181 Ramp 7th-A steel and concrete superstructure is constructed prior to the Westbound concrete superstructure. Deviation from this sequence will require adjustment to the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown.

The dead load deflections are not to be used in the field if the Engineer is working from "Theoretical Grade Elevations Adjusted For Dead Load Deflection".

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS – 4
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 21 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	970
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

GIRDER 9

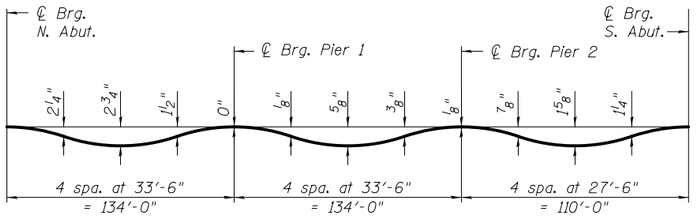
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	3.83	632.29	632.29
℄ Brg. N. Abut. (EB)	57+03.84	3.83	632.40	632.40
A1	57+13.84	3.83	632.72	632.79
B1	57+23.84	3.83	633.05	633.17
C1	57+33.84	3.83	633.38	633.56
D1	57+43.84	3.83	633.72	633.93
E1	57+53.84	3.83	634.06	634.29
F1	57+63.84	3.83	634.41	634.65
G1	57+73.84	3.83	634.77	634.99
H1	57+83.84	3.83	635.13	635.33
J1	57+93.84	3.83	635.49	635.66
K1	58+03.84	3.83	635.87	636.00
L1	58+13.84	3.83	636.25	636.32
M1	58+23.84	3.83	636.62	636.65
℄ Brg. Pier 1 (EB)	58+37.84	3.83	637.14	637.14
A2	58+47.84	3.83	637.51	637.50
B2	58+57.84	3.83	637.88	637.88
C2	58+67.84	3.83	638.25	638.26
D2	58+77.84	3.83	638.62	638.65
E2	58+87.84	3.83	639.00	639.04
F2	58+97.84	3.83	639.37	639.42
G2	59+07.84	3.83	639.74	639.80
H2	59+17.84	3.83	640.11	640.17
J2	59+27.84	3.83	640.48	640.53
K2	59+37.84	3.83	640.85	640.89
L2	59+47.84	3.83	641.22	641.24
M2	59+57.84	3.83	641.60	641.60
℄ Brg. Pier 2 (EB)	59+71.84	3.83	642.12	642.12
A3	59+81.84	3.83	642.49	642.51
B3	59+91.84	3.83	642.86	642.91
C3	60+01.84	3.83	643.23	643.31
D3	60+11.84	3.83	643.60	643.71
E3	60+21.84	3.83	643.97	644.10
F3	60+31.84	3.83	644.35	644.48
G3	60+41.84	3.83	644.72	644.85
H3	60+51.84	3.83	645.09	645.21
J3	60+61.84	3.83	645.46	645.55
K3	60+71.84	3.83	645.83	645.88
℄ Brg. S. Abut. (EB)	60+81.84	3.83	646.20	646.20
Bk. S. Abut. (EB)	60+85.34	3.83	646.33	646.33

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	11.92	632.18	632.18
℄ Brg. N. Abut. (EB)	57+03.84	11.92	632.29	632.29
A1	57+13.84	11.92	632.62	632.69
B1	57+23.84	11.92	632.96	633.09
C1	57+33.84	11.92	633.30	633.48
D1	57+43.84	11.92	633.65	633.86
E1	57+53.84	11.92	634.00	634.24
F1	57+63.84	11.92	634.36	634.60
G1	57+73.84	11.92	634.73	634.95
H1	57+83.84	11.92	635.10	635.30
J1	57+93.84	11.92	635.47	635.64
K1	58+03.84	11.92	635.86	635.99
L1	58+13.84	11.92	636.24	636.33
M1	58+23.84	11.92	636.62	636.67
℄ Brg. Pier 1 (EB)	58+37.84	11.92	637.16	637.16
A2	58+47.84	11.92	637.54	637.53
B2	58+57.84	11.92	637.92	637.92
C2	58+67.84	11.92	638.30	638.31
D2	58+77.84	11.92	638.68	638.71
E2	58+87.84	11.92	639.06	639.11
F2	58+97.84	11.92	639.44	639.50
G2	59+07.84	11.92	639.82	639.89
H2	59+17.84	11.92	640.20	640.27
J2	59+27.84	11.92	640.58	640.64
K2	59+37.84	11.92	640.97	641.01
L2	59+47.84	11.92	641.35	641.37
M2	59+57.84	11.92	641.73	641.74
℄ Brg. Pier 2 (EB)	59+71.84	11.92	642.26	642.27
A3	59+81.84	11.92	642.64	642.67
B3	59+91.84	11.92	643.02	643.08
C3	60+01.84	11.92	643.40	643.49
D3	60+11.84	11.92	643.79	643.90
E3	60+21.84	11.92	644.17	644.30
F3	60+31.84	11.92	644.55	644.69
G3	60+41.84	11.92	644.93	645.06
H3	60+51.84	11.92	645.31	645.43
J3	60+61.84	11.92	645.69	645.78
K3	60+71.84	11.92	646.07	646.12
℄ Brg. S. Abut. (EB)	60+81.84	11.92	646.45	646.45
Bk. S. Abut. (EB)	60+85.34	11.92	646.59	646.59

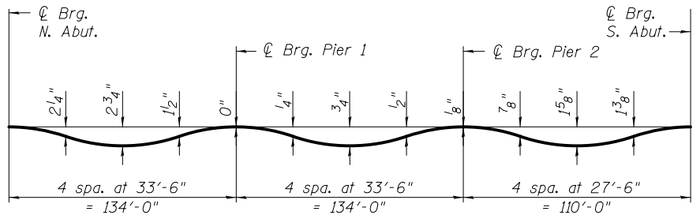
EASTBOUND PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	14.00	632.15	632.15
℄ Brg. N. Abut. (EB)	57+03.84	14.00	632.27	632.27
A1	57+13.84	14.00	632.60	632.66
B1	57+23.84	14.00	632.94	633.06
C1	57+33.84	14.00	633.28	633.46
D1	57+43.84	14.00	633.63	633.84
E1	57+53.84	14.00	633.99	634.22
F1	57+63.84	14.00	634.35	634.59
G1	57+73.84	14.00	634.72	634.94
H1	57+83.84	14.00	635.09	635.29
J1	57+93.84	14.00	635.47	635.64
K1	58+03.84	14.00	635.86	635.99
L1	58+13.84	14.00	636.24	636.33
M1	58+23.84	14.00	636.62	636.67
℄ Brg. Pier 1 (EB)	58+37.84	14.00	637.16	637.17
A2	58+47.84	14.00	637.54	637.54
B2	58+57.84	14.00	637.93	637.93
C2	58+67.84	14.00	638.31	638.33
D2	58+77.84	14.00	638.69	638.73
E2	58+87.84	14.00	639.08	639.13
F2	58+97.84	14.00	639.46	639.52
G2	59+07.84	14.00	639.84	639.91
H2	59+17.84	14.00	640.23	640.29
J2	59+27.84	14.00	640.61	640.67
K2	59+37.84	14.00	640.99	641.04
L2	59+47.84	14.00	641.38	641.41
M2	59+57.84	14.00	641.76	641.78
℄ Brg. Pier 2 (EB)	59+71.84	14.00	642.30	642.31
A3	59+81.84	14.00	642.68	642.71
B3	59+91.84	14.00	643.07	643.12
C3	60+01.84	14.00	643.45	643.53
D3	60+11.84	14.00	643.83	643.94
E3	60+21.84	14.00	644.22	644.35
F3	60+31.84	14.00	644.60	644.74
G3	60+41.84	14.00	644.98	645.12
H3	60+51.84	14.00	645.37	645.48
J3	60+61.84	14.00	645.75	645.84
K3	60+71.84	14.00	646.13	646.18
℄ Brg. S. Abut. (EB)	60+81.84	14.00	646.52	646.52
Bk. S. Abut. (EB)	60+85.34	14.00	646.65	646.65



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 9

(Includes weight of concrete only.)



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 10

(Includes weight of concrete only.)

Notes:
Dead load deflection will occur at the piers due to the pier column spacing.
The dead load deflections are not to be used in the field if the Engineer is working from "Theoretical Grade Elevations Adjusted For Dead Load Deflection".

MODJESKI and MASTERS
Experience great bridges.

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

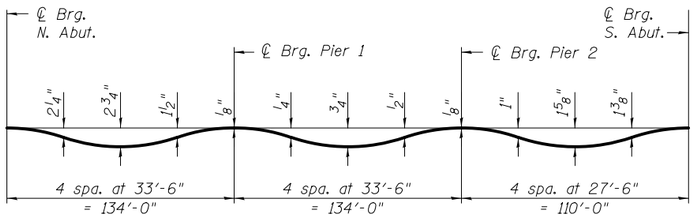
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS – 5
I–74 OVER 19TH ST. – STRUCTURE NO. 081–0179 WB & 081–0180 EB
SHEET NO. 22 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	971
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

GIRDER 11

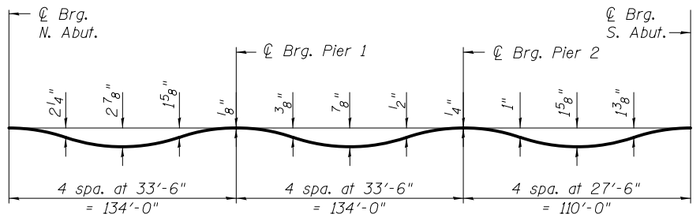
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	20.00	632.07	632.07
℄ Brg. N. Abut. (EB)	57+03.84	20.00	632.19	632.19
A1	57+13.84	20.00	632.53	632.59
B1	57+23.84	20.00	632.87	633.00
C1	57+33.84	20.00	633.23	633.40
D1	57+43.84	20.00	633.58	633.79
E1	57+53.84	20.00	633.95	634.18
F1	57+63.84	20.00	634.31	634.55
G1	57+73.84	20.00	634.69	634.92
H1	57+83.84	20.00	635.06	635.27
J1	57+93.84	20.00	635.45	635.62
K1	58+03.84	20.00	635.85	635.98
L1	58+13.84	20.00	636.24	636.33
M1	58+23.84	20.00	636.63	636.68
℄ Brg. Pier 1 (EB)	58+37.84	20.00	637.17	637.19
A2	58+47.84	20.00	637.57	637.57
B2	58+57.84	20.00	637.96	637.97
C2	58+67.84	20.00	638.35	638.37
D2	58+77.84	20.00	638.74	638.77
E2	58+87.84	20.00	639.13	639.18
F2	58+97.84	20.00	639.52	639.58
G2	59+07.84	20.00	639.91	639.98
H2	59+17.84	20.00	640.30	640.37
J2	59+27.84	20.00	640.69	640.75
K2	59+37.84	20.00	641.08	641.13
L2	59+47.84	20.00	641.47	641.50
M2	59+57.84	20.00	641.86	641.88
℄ Brg. Pier 2 (EB)	59+71.84	20.00	642.41	642.42
A3	59+81.84	20.00	642.80	642.83
B3	59+91.84	20.00	643.19	643.25
C3	60+01.84	20.00	643.58	643.67
D3	60+11.84	20.00	643.97	644.08
E3	60+21.84	20.00	644.36	644.49
F3	60+31.84	20.00	644.75	644.89
G3	60+41.84	20.00	645.14	645.28
H3	60+51.84	20.00	645.53	645.65
J3	60+61.84	20.00	645.92	646.01
K3	60+71.84	20.00	646.31	646.36
℄ Brg. S. Abut. (EB)	60+81.84	20.00	646.70	646.70
Bk. S. Abut. (EB)	60+85.34	20.00	646.84	646.84



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 11
(Includes weight of concrete only.)

GIRDER 12

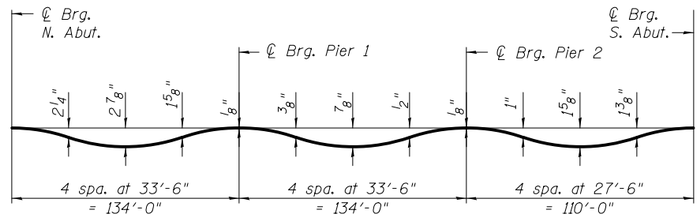
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	28.08	631.96	631.96
℄ Brg. N. Abut. (EB)	57+03.84	28.08	632.08	632.08
A1	57+13.84	28.08	632.43	632.50
B1	57+23.84	28.08	632.79	632.91
C1	57+33.84	28.08	633.15	633.32
D1	57+43.84	28.08	633.51	633.73
E1	57+53.84	28.08	633.89	634.12
F1	57+63.84	28.08	634.26	634.51
G1	57+73.84	28.08	634.65	634.88
H1	57+83.84	28.08	635.03	635.24
J1	57+93.84	28.08	635.43	635.60
K1	58+03.84	28.08	635.83	635.97
L1	58+13.84	28.08	636.23	636.33
M1	58+23.84	28.08	636.63	636.69
℄ Brg. Pier 1 (EB)	58+37.84	28.08	637.19	637.21
A2	58+47.84	28.08	637.59	637.60
B2	58+57.84	28.08	637.99	638.01
C2	58+67.84	28.08	638.39	638.42
D2	58+77.84	28.08	638.79	638.83
E2	58+87.84	28.08	639.19	639.25
F2	58+97.84	28.08	639.59	639.66
G2	59+07.84	28.08	639.99	640.07
H2	59+17.84	28.08	640.39	640.46
J2	59+27.84	28.08	640.79	640.85
K2	59+37.84	28.08	641.19	641.24
L2	59+47.84	28.08	641.59	641.63
M2	59+57.84	28.08	641.99	642.01
℄ Brg. Pier 2 (EB)	59+71.84	28.08	642.55	642.57
A3	59+81.84	28.08	642.95	642.99
B3	59+91.84	28.08	643.35	643.41
C3	60+01.84	28.08	643.75	643.84
D3	60+11.84	28.08	644.15	644.27
E3	60+21.84	28.08	644.55	644.68
F3	60+31.84	28.08	644.95	645.09
G3	60+41.84	28.08	645.35	645.49
H3	60+51.84	28.08	645.75	645.87
J3	60+61.84	28.08	646.15	646.24
K3	60+71.84	28.08	646.55	646.59
℄ Brg. S. Abut. (EB)	60+81.84	28.08	646.95	646.95
Bk. S. Abut. (EB)	60+85.34	28.08	647.09	647.09



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 12
(Includes weight of concrete only.)

GIRDER 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	36.17	631.85	631.85
℄ Brg. N. Abut. (EB)	57+03.84	36.17	631.97	631.97
A1	57+13.84	36.17	632.33	632.40
B1	57+23.84	36.17	632.70	632.82
C1	57+33.84	36.17	633.07	633.25
D1	57+43.84	36.17	633.44	633.66
E1	57+53.84	36.17	633.83	634.06
F1	57+63.84	36.17	634.21	634.46
G1	57+73.84	36.17	634.60	634.84
H1	57+83.84	36.17	635.00	635.21
J1	57+93.84	36.17	635.40	635.58
K1	58+03.84	36.17	635.82	635.96
L1	58+13.84	36.17	636.23	636.33
M1	58+23.84	36.17	636.64	636.70
℄ Brg. Pier 1 (EB)	58+37.84	36.17	637.21	637.23
A2	58+47.84	36.17	637.62	637.63
B2	58+57.84	36.17	638.03	638.05
C2	58+67.84	36.17	638.44	638.47
D2	58+77.84	36.17	638.85	638.89
E2	58+87.84	36.17	639.26	639.32
F2	58+97.84	36.17	639.67	639.74
G2	59+07.84	36.17	640.08	640.15
H2	59+17.84	36.17	640.49	640.56
J2	59+27.84	36.17	640.89	640.96
K2	59+37.84	36.17	641.30	641.35
L2	59+47.84	36.17	641.71	641.75
M2	59+57.84	36.17	642.12	642.14
℄ Brg. Pier 2 (EB)	59+71.84	36.17	642.69	642.71
A3	59+81.84	36.17	643.10	643.14
B3	59+91.84	36.17	643.51	643.57
C3	60+01.84	36.17	643.92	644.01
D3	60+11.84	36.17	644.33	644.45
E3	60+21.84	36.17	644.74	644.88
F3	60+31.84	36.17	645.15	645.29
G3	60+41.84	36.17	645.56	645.70
H3	60+51.84	36.17	645.97	646.09
J3	60+61.84	36.17	646.38	646.46
K3	60+71.84	36.17	646.79	646.83
℄ Brg. S. Abut. (EB)	60+81.84	36.17	647.20	647.20
Bk. S. Abut. (EB)	60+85.34	36.17	647.34	647.34



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 13
(Includes weight of concrete only.)

Notes:
Dead load deflection will occur at the piers due to the pier column spacing.
The dead load deflections are not to be used in the field if the Engineer is working from "Theoretical Grade Elevations Adjusted For Dead Load Deflection".

MODJESKI and MASTERS
Experience great bridges.

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

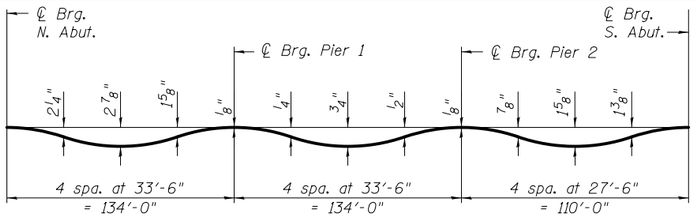
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - 6
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 23 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	972
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

GIRDER 14

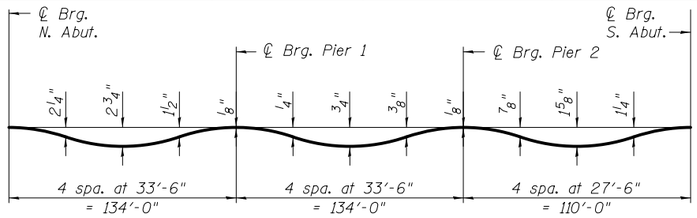
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	44.25	631.74	631.74
℄ Brg. N. Abut. (EB)	57+03.84	44.25	631.87	631.87
A1	57+13.84	44.25	632.24	632.30
B1	57+23.84	44.25	632.61	632.74
C1	57+33.84	44.25	632.99	633.17
D1	57+43.84	44.25	633.38	633.59
E1	57+53.84	44.25	633.77	634.00
F1	57+63.84	44.25	634.16	634.40
G1	57+73.84	44.25	634.56	634.80
H1	57+83.84	44.25	634.97	635.18
J1	57+93.84	44.25	635.38	635.56
K1	58+03.84	44.25	635.81	635.94
L1	58+13.84	44.25	636.23	636.32
M1	58+23.84	44.25	636.65	636.70
℄ Brg. Pier 1 (EB)	58+37.84	44.25	637.23	637.25
A2	58+47.84	44.25	637.65	637.66
B2	58+57.84	44.25	638.07	638.08
C2	58+67.84	44.25	638.49	638.51
D2	58+77.84	44.25	638.91	638.94
E2	58+87.84	44.25	639.32	639.38
F2	58+97.84	44.25	639.74	639.81
G2	59+07.84	44.25	640.16	640.23
H2	59+17.84	44.25	640.58	640.65
J2	59+27.84	44.25	641.00	641.06
K2	59+37.84	44.25	641.42	641.46
L2	59+47.84	44.25	641.83	641.86
M2	59+57.84	44.25	642.25	642.27
℄ Brg. Pier 2 (EB)	59+71.84	44.25	642.84	642.85
A3	59+81.84	44.25	643.26	643.29
B3	59+91.84	44.25	643.68	643.73
C3	60+01.84	44.25	644.09	644.18
D3	60+11.84	44.25	644.51	644.63
E3	60+21.84	44.25	644.93	645.06
F3	60+31.84	44.25	645.35	645.49
G3	60+41.84	44.25	645.77	645.90
H3	60+51.84	44.25	646.19	646.30
J3	60+61.84	44.25	646.61	646.69
K3	60+71.84	44.25	647.02	647.07
℄ Brg. S. Abut. (EB)	60+81.84	44.25	647.44	647.44
Bk. S. Abut. (EB)	60+85.34	44.25	647.59	647.59



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 14
(Includes weight of concrete only.)

GIRDER 15

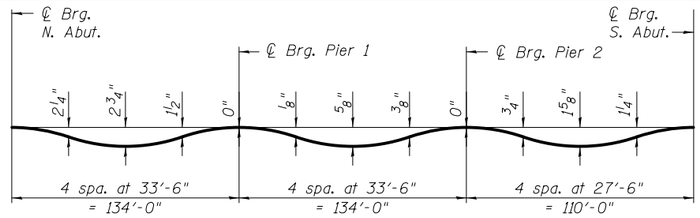
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	52.33	631.63	631.63
℄ Brg. N. Abut. (EB)	57+03.84	52.33	631.76	631.76
A1	57+13.84	52.33	632.14	632.20
B1	57+23.84	52.33	632.52	632.65
C1	57+33.84	52.33	632.91	633.09
D1	57+43.84	52.33	633.31	633.52
E1	57+53.84	52.33	633.71	633.94
F1	57+63.84	52.33	634.11	634.35
G1	57+73.84	52.33	634.52	634.75
H1	57+83.84	52.33	634.94	635.14
J1	57+93.84	52.33	635.36	635.53
K1	58+03.84	52.33	635.80	635.93
L1	58+13.84	52.33	636.22	636.31
M1	58+23.84	52.33	636.65	636.70
℄ Brg. Pier 1 (EB)	58+37.84	52.33	637.25	637.26
A2	58+47.84	52.33	637.68	637.68
B2	58+57.84	52.33	638.11	638.11
C2	58+67.84	52.33	638.53	638.55
D2	58+77.84	52.33	638.96	638.99
E2	58+87.84	52.33	639.39	639.44
F2	58+97.84	52.33	639.82	639.88
G2	59+07.84	52.33	640.25	640.31
H2	59+17.84	52.33	640.67	640.73
J2	59+27.84	52.33	641.10	641.15
K2	59+37.84	52.33	641.53	641.57
L2	59+47.84	52.33	641.96	641.98
M2	59+57.84	52.33	642.38	642.39
℄ Brg. Pier 2 (EB)	59+71.84	52.33	642.98	642.99
A3	59+81.84	52.33	643.41	643.44
B3	59+91.84	52.33	643.84	643.89
C3	60+01.84	52.33	644.27	644.35
D3	60+11.84	52.33	644.70	644.80
E3	60+21.84	52.33	645.12	645.25
F3	60+31.84	52.33	645.55	645.69
G3	60+41.84	52.33	645.98	646.11
H3	60+51.84	52.33	646.41	646.52
J3	60+61.84	52.33	646.83	646.92
K3	60+71.84	52.33	647.26	647.31
℄ Brg. S. Abut. (EB)	60+81.84	52.33	647.69	647.69
Bk. S. Abut. (EB)	60+85.34	52.33	647.84	647.84



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 15
(Includes weight of concrete only.)

GIRDER 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut. (EB)	57+00.34	60.42	631.52	631.52
℄ Brg. N. Abut. (EB)	57+03.84	60.42	631.65	631.65
A1	57+13.84	60.42	632.04	632.11
B1	57+23.84	60.42	632.43	632.56
C1	57+33.84	60.42	632.83	633.01
D1	57+43.84	60.42	633.24	633.45
E1	57+53.84	60.42	633.65	633.88
F1	57+63.84	60.42	634.06	634.30
G1	57+73.84	60.42	634.48	634.71
H1	57+83.84	60.42	634.91	635.11
J1	57+93.84	60.42	635.34	635.51
K1	58+03.84	60.42	635.78	635.91
L1	58+13.84	60.42	636.22	636.30
M1	58+23.84	60.42	636.66	636.70
℄ Brg. Pier 1 (EB)	58+37.84	60.42	637.27	637.27
A2	58+47.84	60.42	637.71	637.70
B2	58+57.84	60.42	638.14	638.14
C2	58+67.84	60.42	638.58	638.59
D2	58+77.84	60.42	639.02	639.04
E2	58+87.84	60.42	639.46	639.50
F2	58+97.84	60.42	639.89	639.94
G2	59+07.84	60.42	640.33	640.39
H2	59+17.84	60.42	640.77	640.82
J2	59+27.84	60.42	641.20	641.25
K2	59+37.84	60.42	641.64	641.67
L2	59+47.84	60.42	642.08	642.09
M2	59+57.84	60.42	642.52	642.52
℄ Brg. Pier 2 (EB)	59+71.84	60.42	643.13	643.13
A3	59+81.84	60.42	643.57	643.58
B3	59+91.84	60.42	644.00	644.05
C3	60+01.84	60.42	644.44	644.52
D3	60+11.84	60.42	644.88	644.98
E3	60+21.84	60.42	645.31	645.44
F3	60+31.84	60.42	645.75	645.89
G3	60+41.84	60.42	646.19	646.32
H3	60+51.84	60.42	646.63	646.74
J3	60+61.84	60.42	647.06	647.15
K3	60+71.84	60.42	647.50	647.55
℄ Brg. S. Abut. (EB)	60+81.84	60.42	647.94	647.94
Bk. S. Abut. (EB)	60+85.34	60.42	648.09	648.09



DEAD LOAD DEFLECTION DIAGRAM
EASTBOUND - GIRDER 15
(Includes weight of concrete only.)

Notes:
Dead load deflection will occur at the piers due to the pier column spacing.
The dead load deflections are not to be used in the field if the Engineer is working from "Theoretical Grade Elevations Adjusted For Dead Load Deflection".

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS - 7
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 24 OF 86 SHEETS

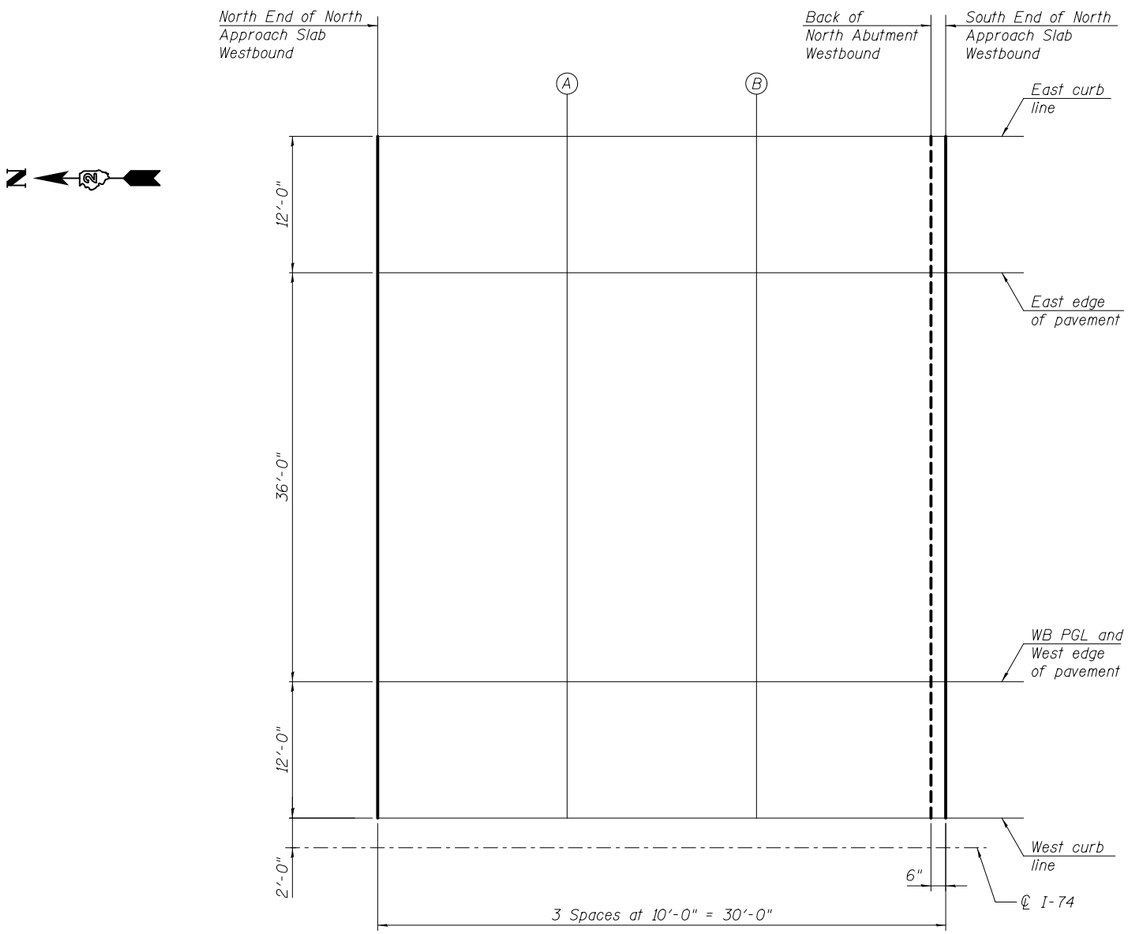
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	973
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	58+04.84	-62.00	634.41
A	58+14.84	-62.00	634.69
B	58+24.84	-62.00	634.97
S. End Appr. Slab at N. Abut.	58+34.84	-62.00	635.26

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	58+04.84	-50.00	634.39
A	58+14.84	-50.00	634.69
B	58+24.84	-50.00	634.98
S. End Appr. Slab at N. Abut.	58+34.84	-50.00	635.29



PLAN

WB PGL AND WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	58+04.84	-14.00	634.34
A	58+14.84	-14.00	634.67
B	58+24.84	-14.00	635.01
S. End Appr. Slab at N. Abut.	58+34.84	-14.00	635.36

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	58+04.84	-2.00	634.32
A	58+14.84	-2.00	634.67
B	58+24.84	-2.00	635.02
S. End Appr. Slab at N. Abut.	58+34.84	-2.00	635.38

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS – WESTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 25 OF 86 SHEETS

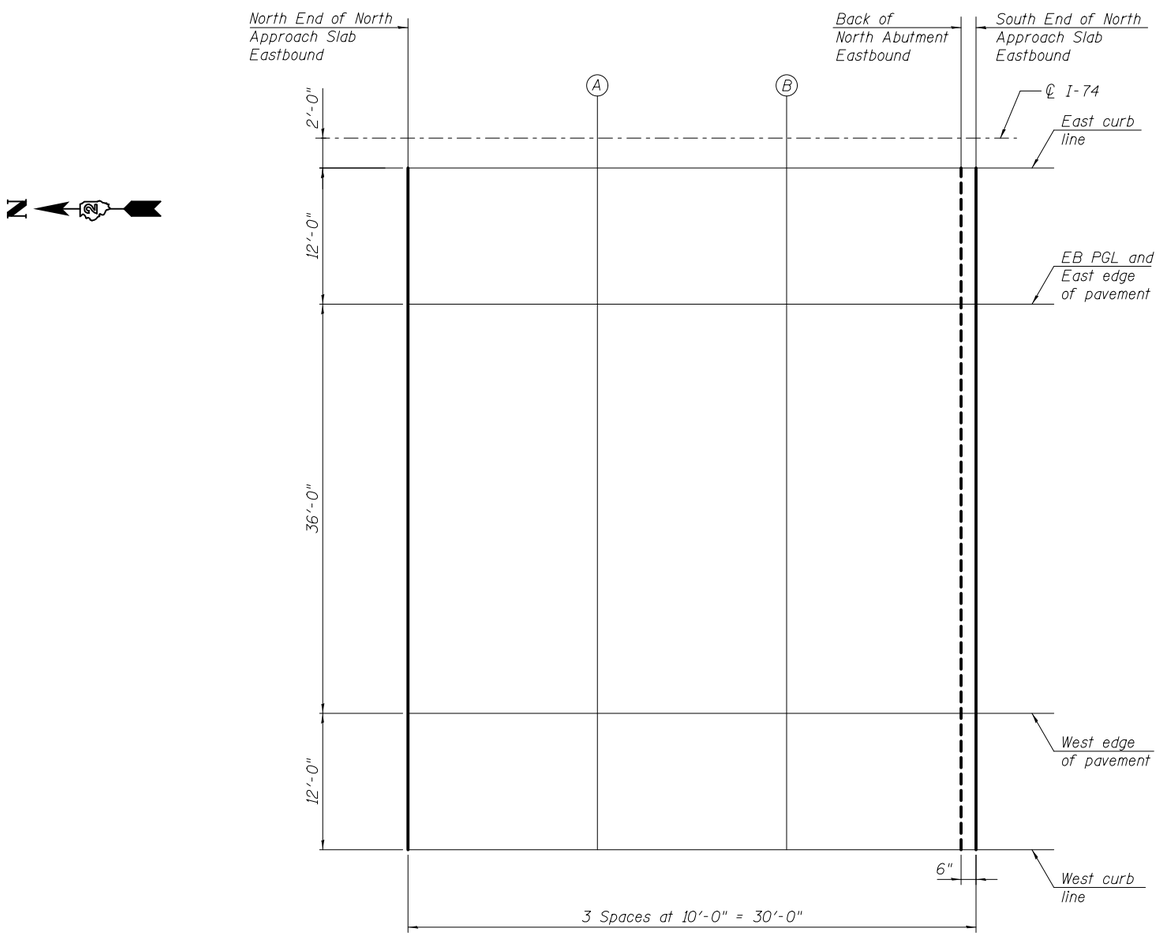
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	974
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	56+70.84	2.00	631.41
A	56+80.84	2.00	631.71
B	56+90.84	2.00	632.02
S. End Appr. Slab at N. Abut.	57+00.84	2.00	632.33

EB PGL AND EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	56+70.84	14.00	631.20
A	56+80.84	14.00	631.52
B	56+90.84	14.00	631.84
S. End Appr. Slab at N. Abut.	57+00.84	14.00	632.17



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	56+70.84	50.00	630.59
A	56+80.84	50.00	630.95
B	56+90.84	50.00	631.31
S. End Appr. Slab at N. Abut.	57+00.84	50.00	631.68

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End North Appr. Slab	56+70.84	62.00	630.39
A	56+80.84	62.00	630.76
B	56+90.84	62.00	631.13
S. End Appr. Slab at N. Abut.	57+00.84	62.00	631.52

MODJESKI and MASTERS
Experience greet bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF NORTH APPROACH SLAB ELEVATIONS – EASTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 26 OF 86 SHEETS

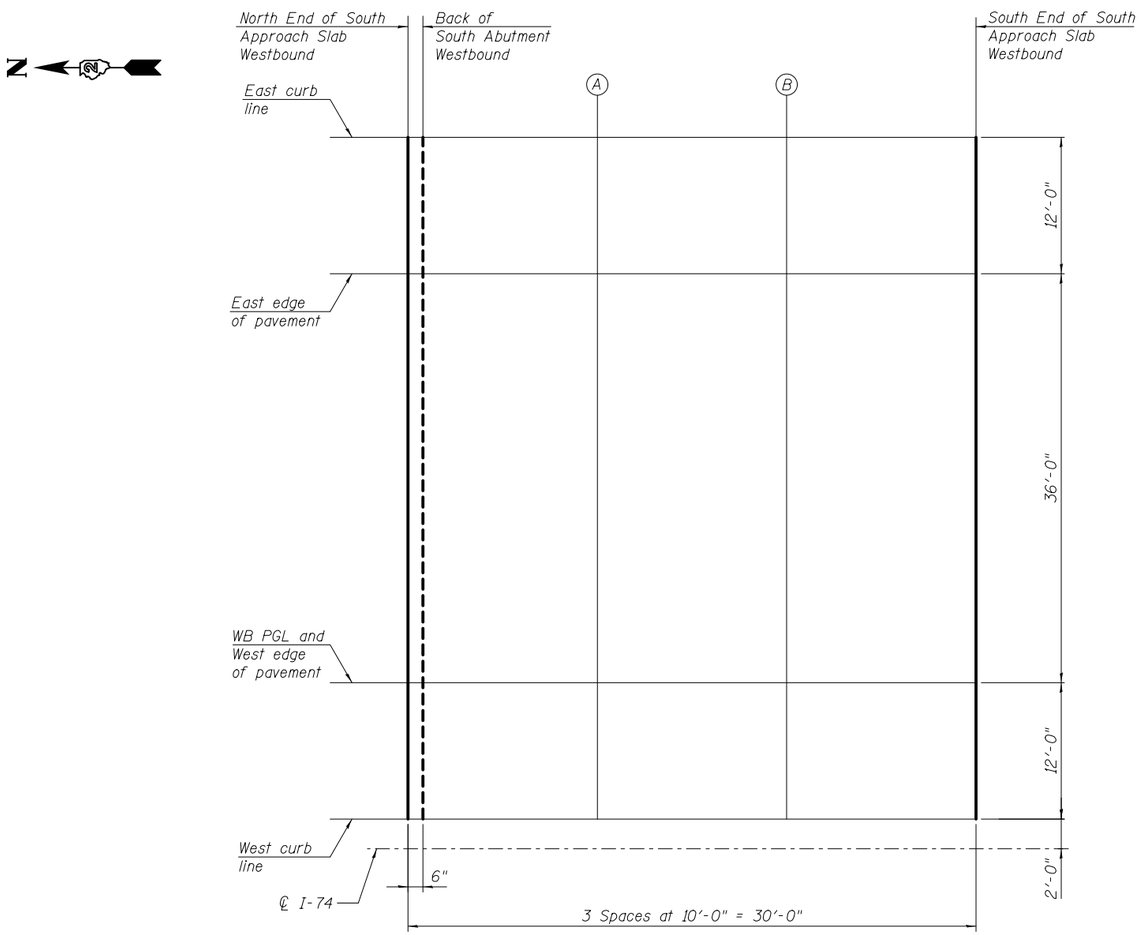
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	975
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	61+95.89	-62.00	646.05
A	62+06.15	-62.00	646.36
B	62+16.40	-62.00	646.66
S. End South Appr. Slab	62+26.66	-62.00	646.97

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	61+95.69	-50.00	646.57
A	62+05.89	-50.00	646.89
B	62+16.09	-50.00	647.21
S. End South Appr. Slab	62+26.31	-50.00	647.53



PLAN

WB PGL AND WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	61+95.08	-14.00	648.12
A	62+05.13	-14.00	648.48
B	62+15.19	-14.00	648.84
S. End South Appr. Slab	62+25.25	-14.00	649.19

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	61+94.88	-2.00	648.64
A	62+04.88	-2.00	649.01
B	62+14.89	-2.00	649.38
S. End South Appr. Slab	62+24.91	-2.00	649.75

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS – WESTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 27 OF 86 SHEETS

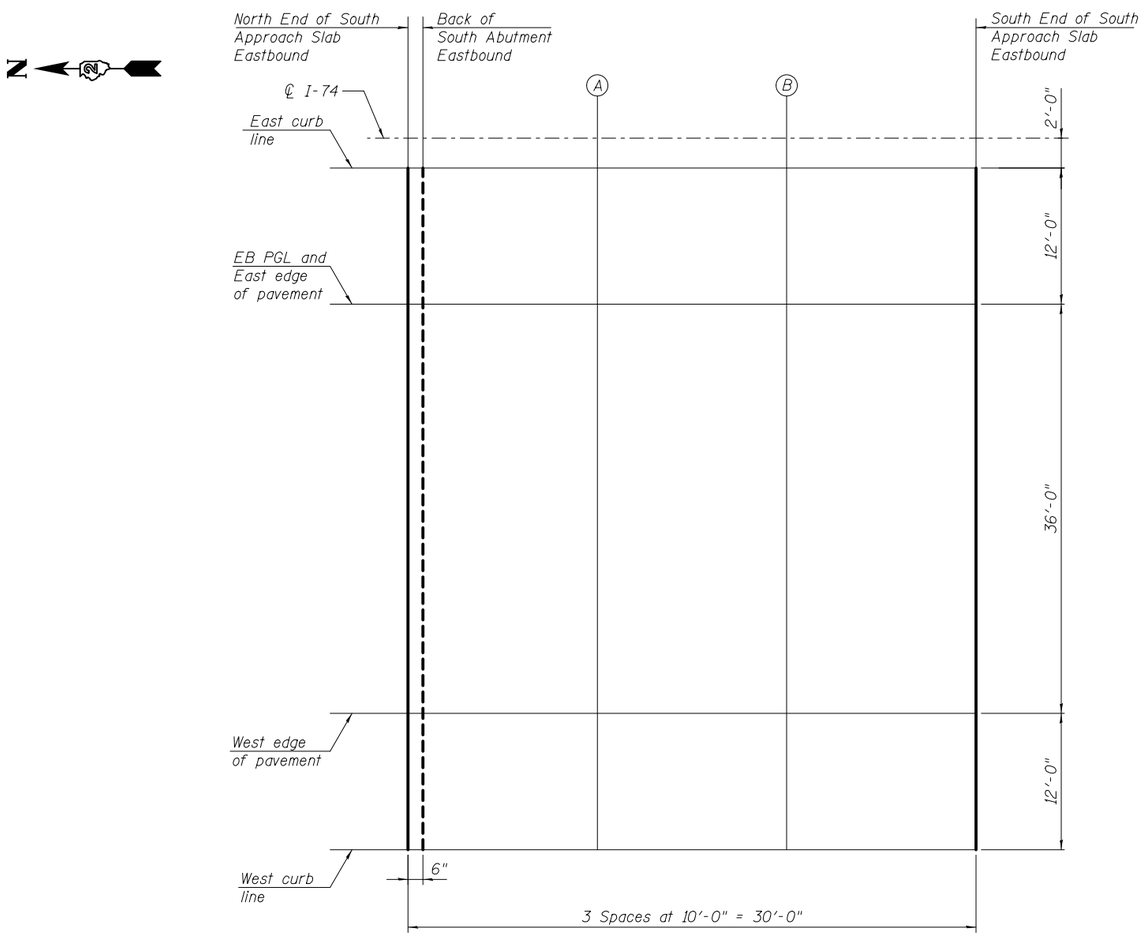
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	976
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	60+84.84	2.00	646.26
A	60+94.84	2.00	646.63
B	61+04.84	2.00	647.00
S. End South Appr. Slab	61+14.84	2.00	647.37

EB PGL AND EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	60+84.84	14.00	646.63
A	60+94.84	14.00	647.01
B	61+04.84	14.00	647.40
S. End South Appr. Slab	61+14.84	14.00	647.78



PLAN

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	60+84.84	50.00	647.75
A	60+94.84	50.00	648.17
B	61+04.84	50.00	648.60
S. End South Appr. Slab	61+14.84	50.00	649.02

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
N. End Appr. Slab at S. Abut.	60+84.84	62.00	648.12
A	60+94.84	62.00	648.56
B	61+04.84	62.00	649.00
S. End South Appr. Slab	61+14.84	62.00	649.44

MODJESKI and MASTERS
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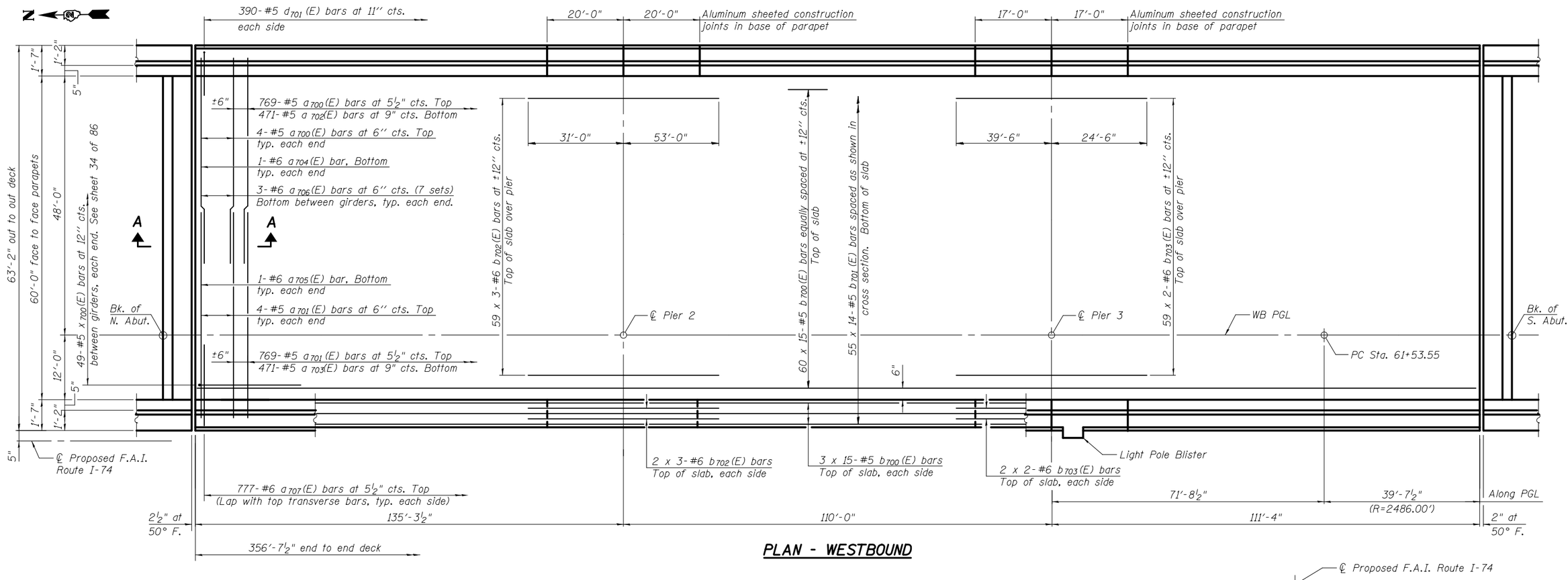
USER NAME =	DESIGNED - JTH	REVISED
	CHECKED - JMH	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JTH	REVISED

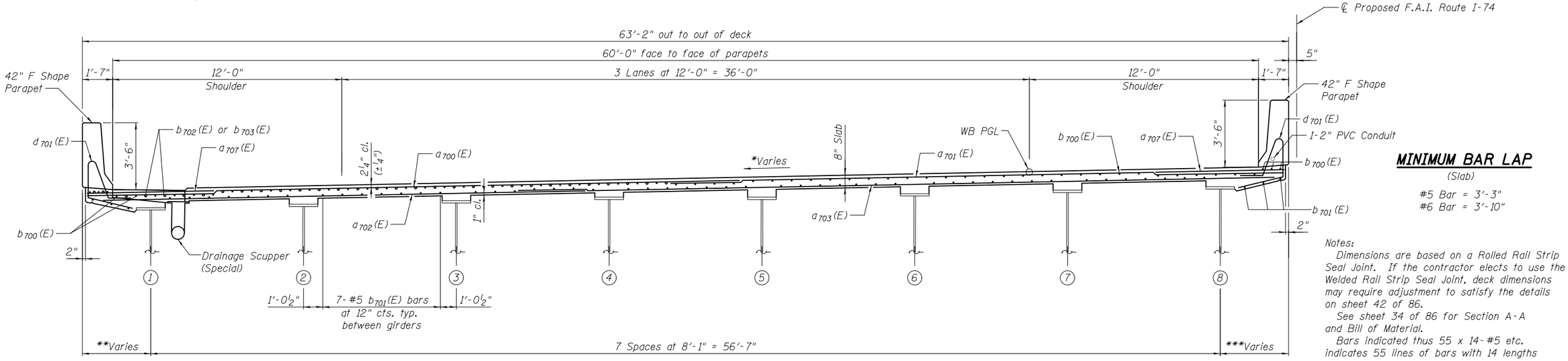
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SOUTH APPROACH SLAB ELEVATIONS – EASTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 28 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	977
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN - WESTBOUND



NEAR PIER

NEAR MIDSPAN

**3'-2" at Sta. 61+53.55 to 3'-5½" at Sta. 61+92.79 to accommodate the horizontal curve

CROSS SECTION

(Looking South)

*See Sheet 2 of 86 for superelevation transitions

***3'-5" at Sta. 61+53.55 to 3'-1½" at Sta. 61+91.90 to accommodate the horizontal curve

MINIMUM BAR LAP

(Slab)

#5 Bar = 3'-3"
#6 Bar = 3'-10"

Notes:

Dimensions are based on a Rolled Rail Strip Seal Joint. If the contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustment to satisfy the details on sheet 42 of 86.

See sheet 34 of 86 for Section A-A and Bill of Material.

Bars indicated thus 55 x 14-#5 etc. indicates 55 lines of bars with 14 lengths per line.

See sheet 31 of 86 for light pole bilster details and parapet reinforcement.

See sheet 1 of 86 for drainage scupper locations.

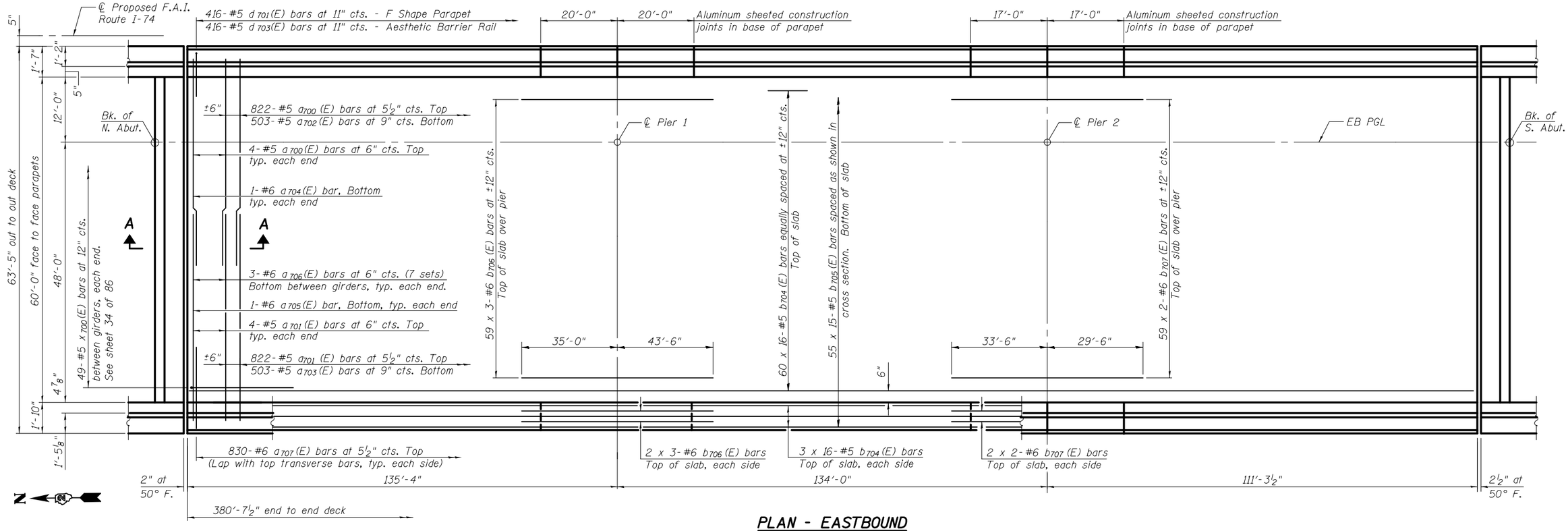
MODJESKI and MASTERS Experience great bridges.

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

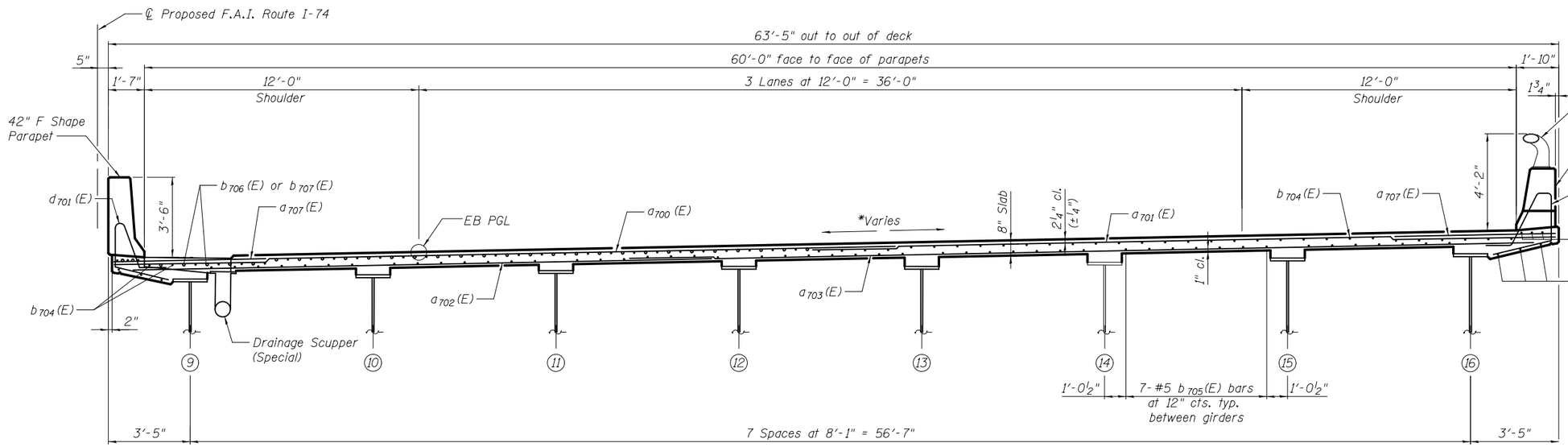
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE – WESTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 29 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	978
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN - EASTBOUND



NEAR PIER

NEAR MIDSPAN

CROSS SECTION

(Looking South)

*See Sheet 2 of 86 for superelevation transitions. Direction of cross slope changes on the structure.

MINIMUM BAR LAP

(Slab)

#5 Bar = 3'-3"
#6 Bar = 3'-10"

Notes:

Dimensions are based on a Rolled Rail Strip Seal Joint. If the contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustment to satisfy the details on sheet 42 of 86.

See sheet 34 of 86 for Section A-A and Bill of Material.

Bars indicated thus 59 x 3-#5 etc. indicates 59 lines of bars with 3 lengths per line.

See sheets 32 and 33 of 86 for parapet reinforcement.

See sheet 1 of 86 for drainage scupper locations.

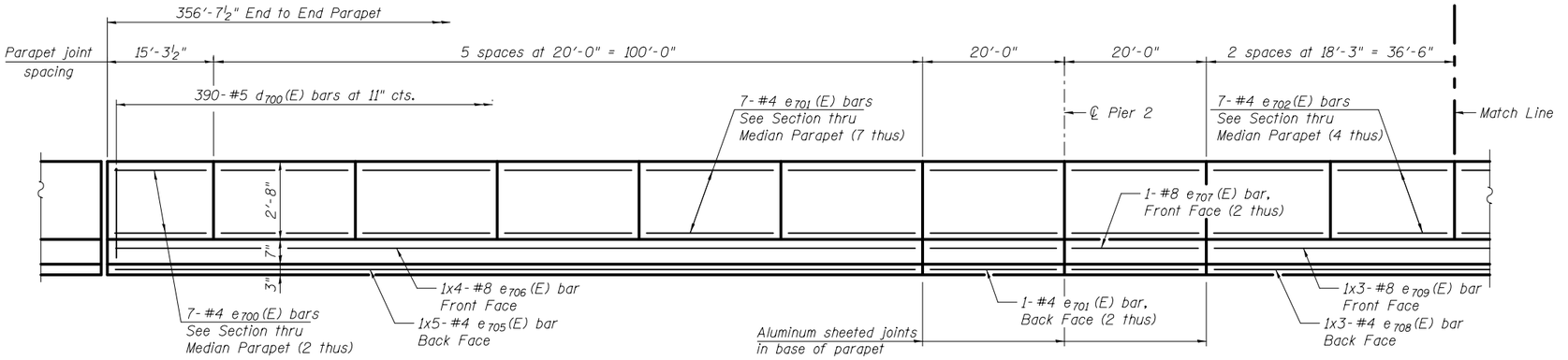
MODJESKI and MASTERS
Experience great bridges.

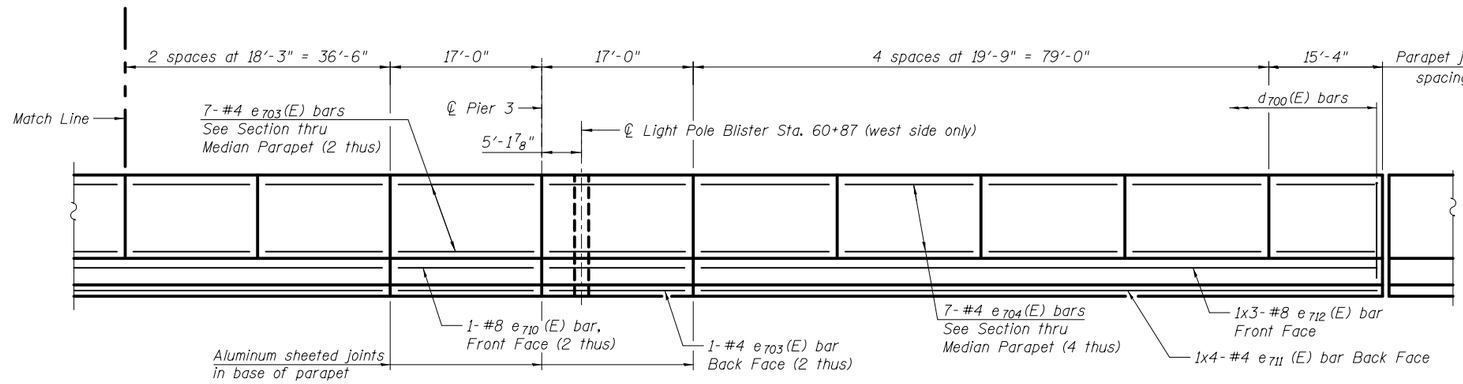
USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE – EASTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 30 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	979
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		





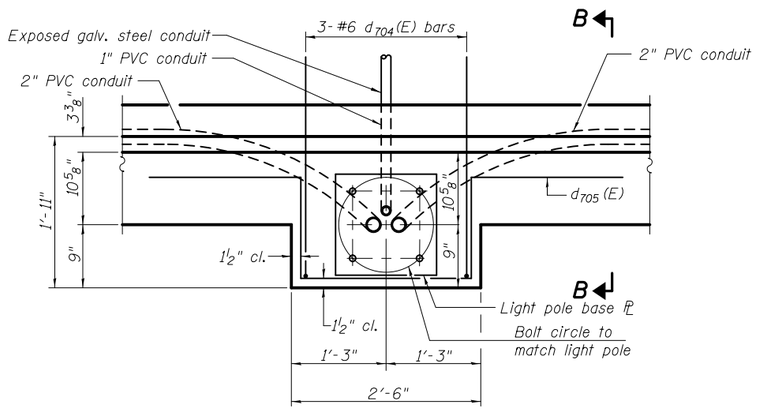
INSIDE ELEVATION OF MEDIAN PARAPET - WESTBOUND

(Looking East, shown)
(Looking West, opposite hand)

MINIMUM BAR LAP

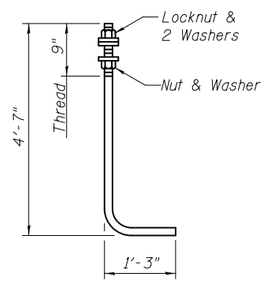
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"

Notes:
All dimensions shown are along toe of parapet.
Bars indicated thus 1x3-#8 etc. indicates 1 line of bars with 3 lengths per line.
For Section thru Median Parapet and Median Parapet Joint Details, see sheet 32 of 86.
Apply Protective Coat according to Article 503.19 and to the top surface of the light pole blister.



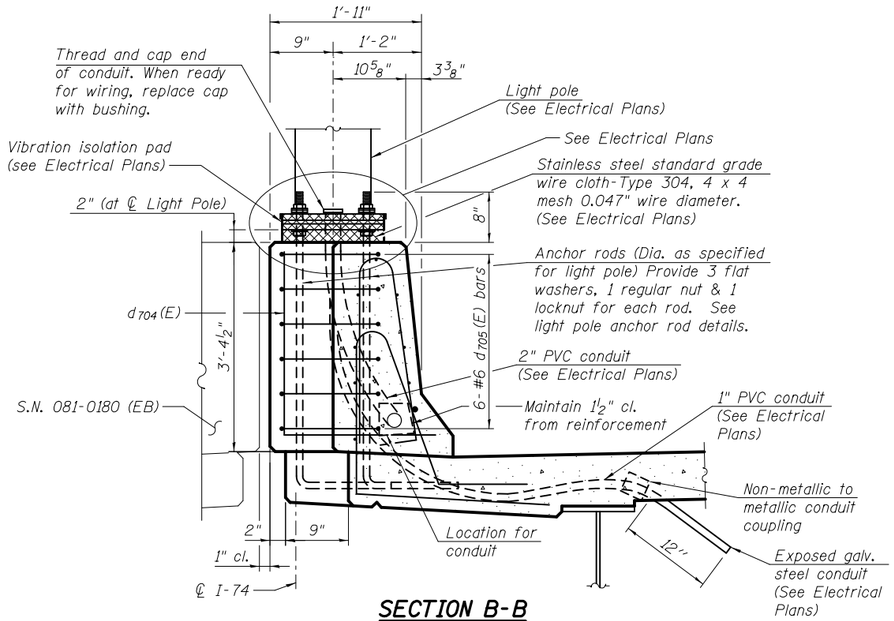
LIGHT POLE BLISTER PLAN

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



LIGHT POLE ANCHOR ROD

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



SECTION B-B

(1 Location)
Slab reinforcement not shown for clarity.

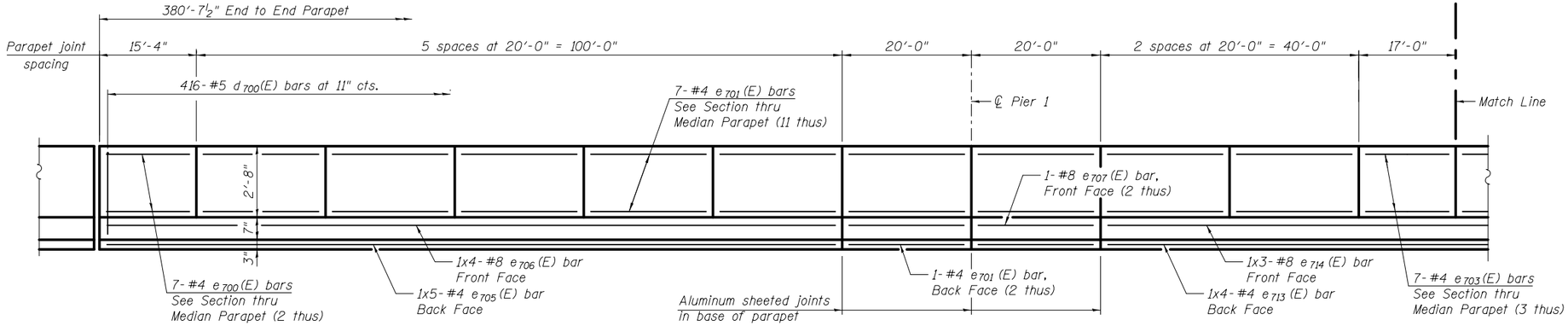
USER NAME =	DESIGNED - KJP	REVISED	
	CHECKED - YSS	REVISED	
PLOT SCALE =	DRAWN - PRC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

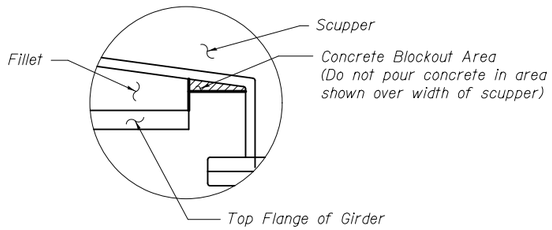
MODJESKI and MASTERS Experience great bridges.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

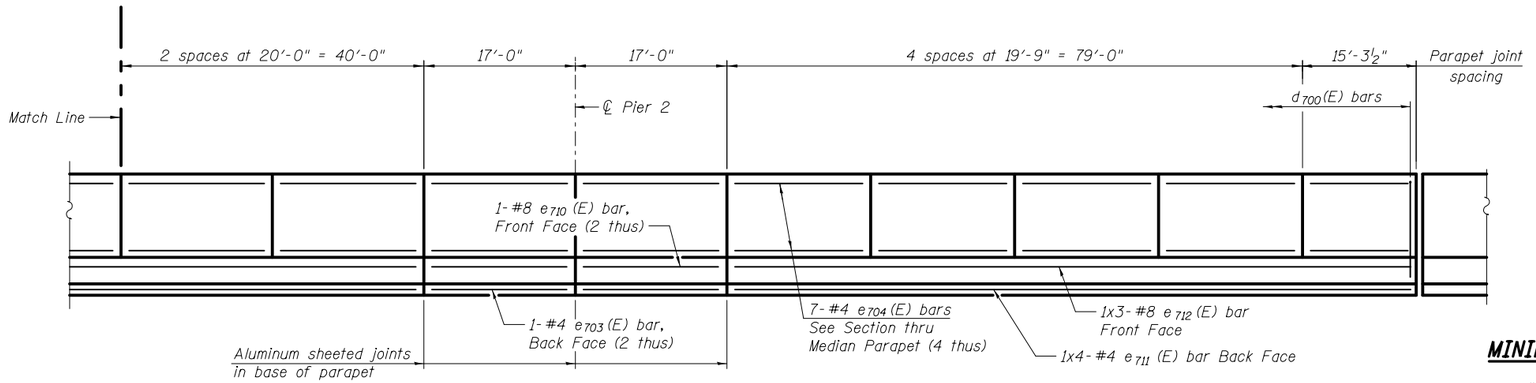
SUPERSTRUCTURE – WESTBOUND DETAILS
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 31 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	980
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		





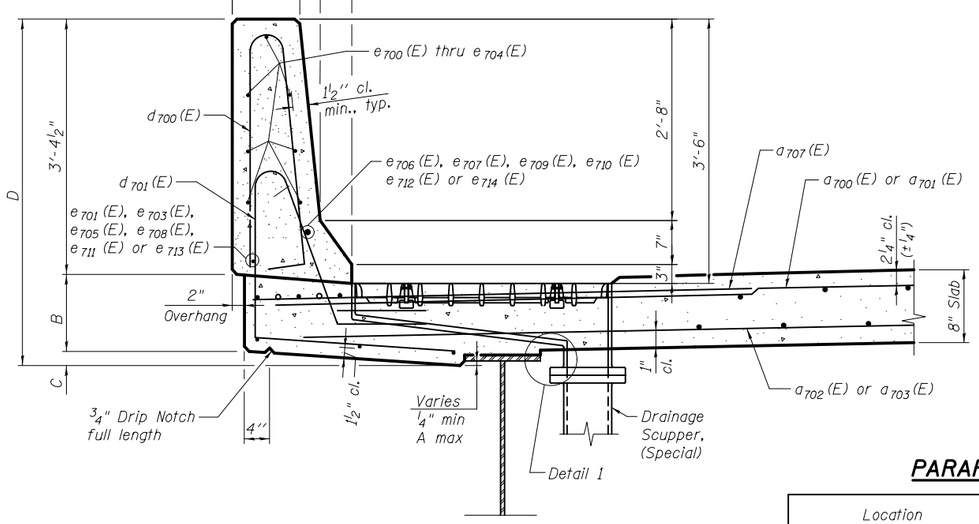
DETAIL 1



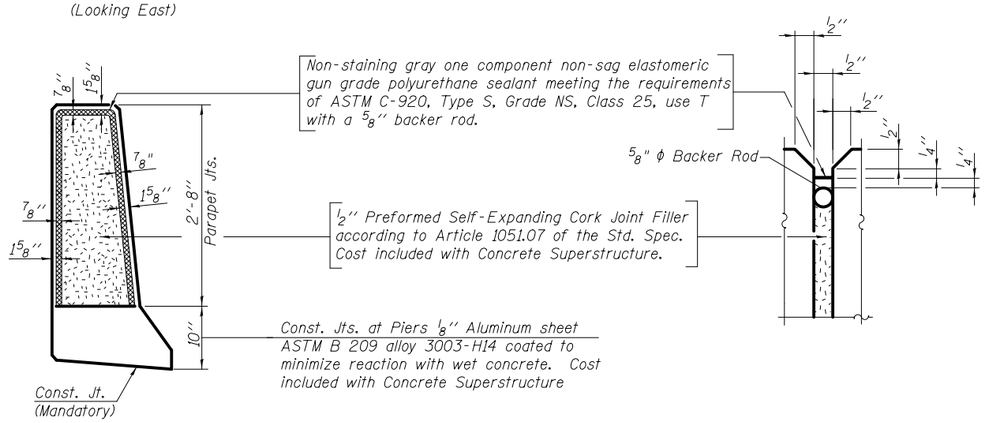
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"

INSIDE ELEVATION OF MEDIAN PARAPET - EASTBOUND

(Looking East)



SECTION THRU MEDIAN PARAPET



MEDIAN PARAPET JOINT DETAILS

PARAPET DIMENSIONS

Location	A	B	C	D
Westbound East Parapet	2⅝"	9½"	3½"	4'-5½"
Westbound West Parapet	1¾"	9½"	4⅛"	4'-6⅛"
Eastbound Median Parapet	1¾"	9½"	3⅝"	4'-5⅝"

Notes:
All dimensions shown are along toe of parapet.
Bars indicated thus 1x3-#8 etc. indicates 1 line of bars with 3 lengths per line.
Apply Protective Coat according to Article 503.19.

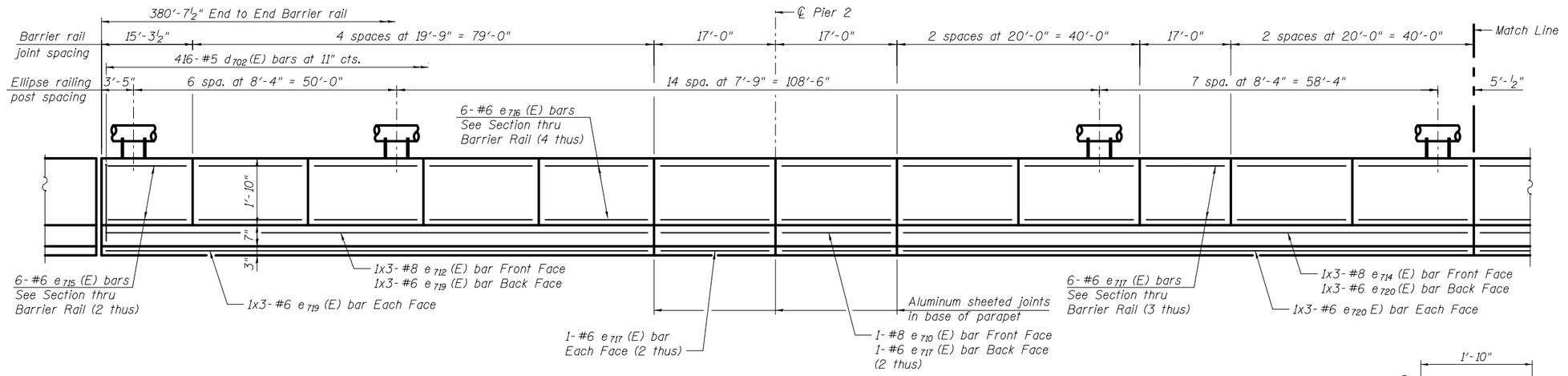
MODJESKI and MASTERS
Experience great bridges.

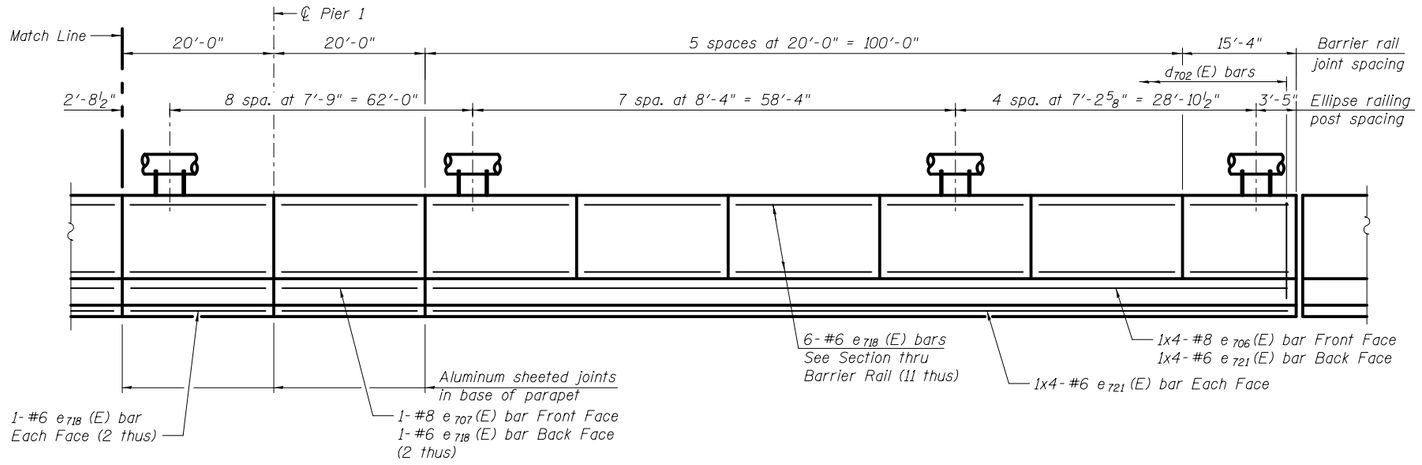
USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE – EASTBOUND DETAILS – 1
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 32 OF 86 SHEETS

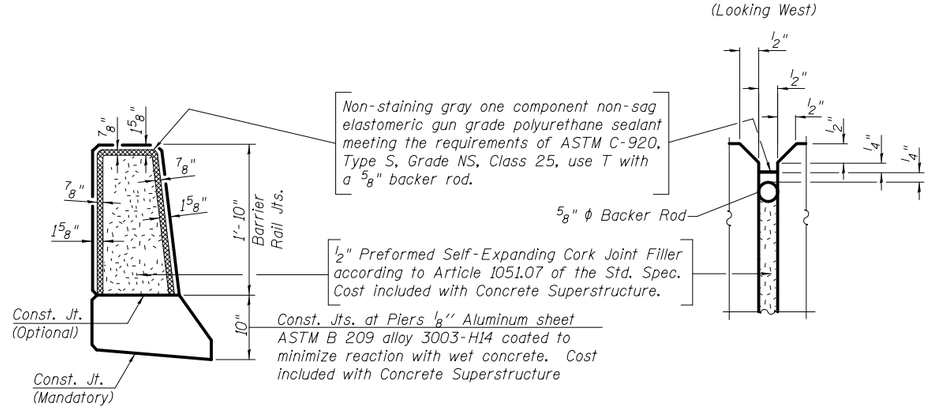
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	981
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		





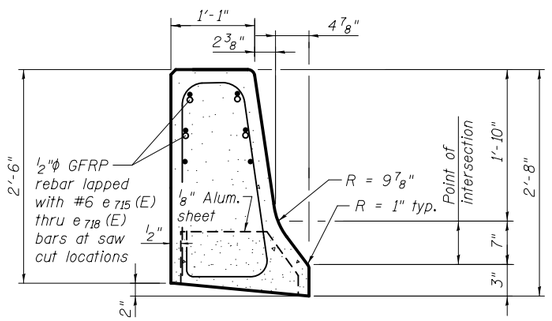
INSIDE ELEVATION OF AESTHETIC TRAFFIC BARRIER RAIL - EASTBOUND

(Looking West)



AESTHETIC TRAFFIC BARRIER RAIL JOINT DETAILS

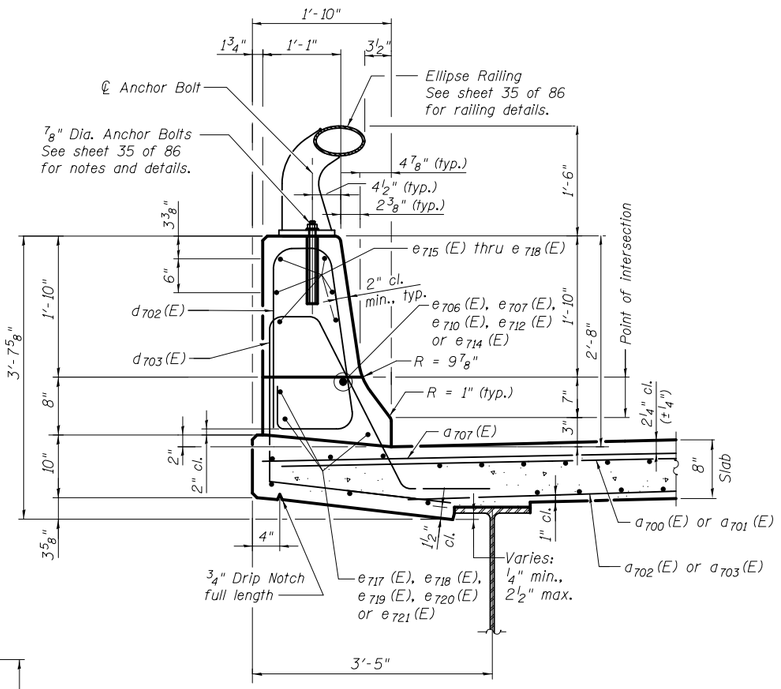
(For conventional concrete placement)



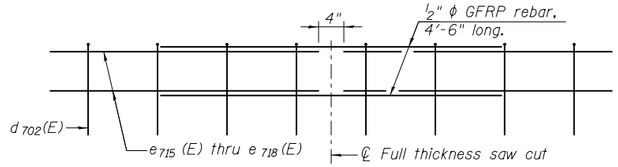
*SLIPFORMED AESTHETIC BARRIER RAIL JOINT DETAILS

(Ellipse railing not shown for clarity)

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



SECTION THRU BARRIER RAIL



*GFRP REBAR STIFFENING DETAIL

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

* To be used only if slipforming option is selected.

MINIMUM BAR LAP

(Barrier Rail)
#6 bar = 3'-0"
#8 bar = 5'-2"

Notes:
All dimensions shown are along toe of Aesthetic Traffic Barrier Rail.
Bars indicated thus 1x3-#8 etc. indicates 1 line of bars with 3 lengths per line.

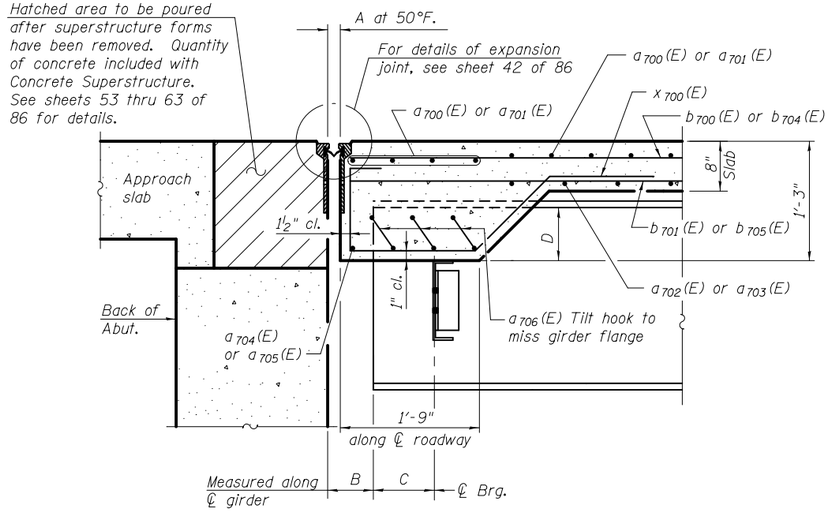
MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE – EASTBOUND DETAILS – 2
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 33 OF 86 SHEETS

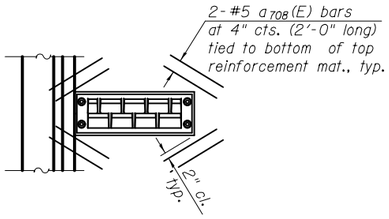
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	982
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



SECTION A-A

JOINT OPENING AND EDGE BEAM DIMENSIONS

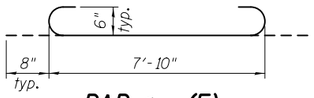
Location	A	B	C	D
Westbound North Abutment	2"	7"	11"	4 5/8"
Westbound South Abutment	1 1/2"	8 1/2"	9 1/2"	5 1/8"
Eastbound North Abutment	1 1/2"	8"	10"	4 3/4"
Eastbound South Abutment	2"	7 1/2"	10 1/2"	5 1/4"



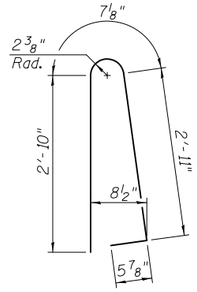
PART PLAN AT SCUPPER

(4 Locations Required on Westbound)
(6 Locations Required on Eastbound)

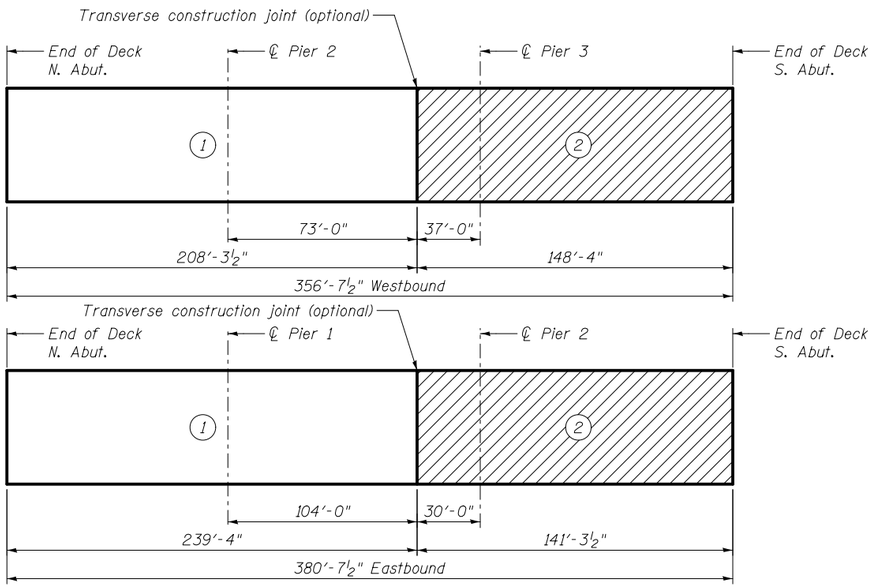
Note: Cut longitudinal reinforcement to clear drainage scuppers.



BAR a 706 (E)



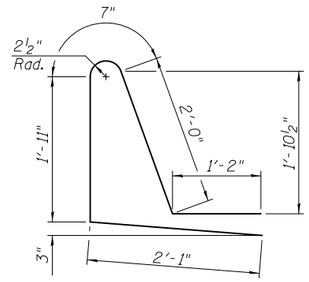
BAR d 700 (E)



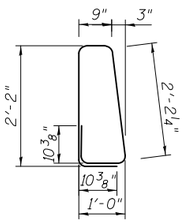
WESTBOUND AND EASTBOUND DECK POURING SEQUENCE

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

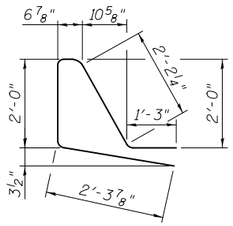
1) At least 72 hours shall have elapsed from the end of the previous pour.
2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.



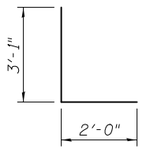
BAR d 701 (E)



BAR d 702 (E)



BAR d 703 (E)



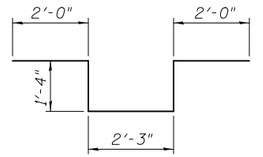
BAR d 704 (E)

SUPERSTRUCTURE BILL OF MATERIAL (WB)

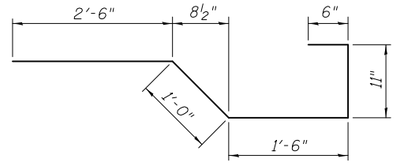
Bar	No.	Size	Length	Shape
a 700 (E)	777	#5	34'-2"	
a 701 (E)	777	#5	32'-1"	
a 702 (E)	471	#5	26'-7"	
a 703 (E)	471	#5	39'-5"	
a 704 (E)	2	#6	23'-5"	
a 705 (E)	2	#6	32'-10"	
a 706 (E)	42	#6	9'-2"	
a 707 (E)	1554	#6	6'-6"	
a 708 (E)	32	#5	2'-0"	
b 700 (E)	990	#5	26'-10"	
b 701 (E)	770	#5	28'-6"	
b 702 (E)	189	#6	30'-7"	
b 703 (E)	126	#6	33'-11"	
d 700 (E)	780	#5	6'-10"	
d 701 (E)	780	#5	7'-9"	
d 704 (E)	3	#6	5'-1"	
d 705 (E)	6	#6	8'-11"	
e 700 (E)	28	#4	15'-0"	
e 701 (E)	102	#4	19'-9"	
e 702 (E)	56	#4	18'-0"	
e 703 (E)	32	#4	16'-9"	
e 704 (E)	56	#4	19'-6"	
e 705 (E)	10	#4	24'-8"	
e 706 (E)	8	#8	32'-8"	
e 707 (E)	4	#8	19'-9"	
e 708 (E)	6	#4	25'-7"	
e 709 (E)	6	#8	27'-8"	
e 710 (E)	4	#8	16'-9"	
e 711 (E)	8	#4	25'-1"	
e 712 (E)	6	#8	34'-10"	
x 700 (E)	98	#5	6'-5"	
Concrete Superstructure			Cu. Yd.	707.3
Bridge Deck Grooving			Sq. Yd.	2,378
Protective Coat			Sq. Yd.	2,738
Reinforcement Bars, Epoxy Coated			Pound	186,300

SUPERSTRUCTURE BILL OF MATERIAL (EB)

Bar	No.	Size	Length	Shape
a 700 (E)	830	#5	34'-2"	
a 701 (E)	830	#5	32'-1"	
a 702 (E)	503	#5	26'-7"	
a 703 (E)	503	#5	39'-5"	
a 704 (E)	2	#6	23'-5"	
a 705 (E)	2	#6	32'-10"	
a 706 (E)	42	#6	9'-2"	
a 707 (E)	1660	#6	6'-6"	
a 708 (E)	48	#5	2'-0"	
b 704 (E)	1056	#5	26'-11"	
b 705 (E)	825	#5	28'-5"	
b 706 (E)	189	#6	28'-9"	
b 707 (E)	126	#6	33'-5"	
d 700 (E)	416	#5	6'-10"	
d 701 (E)	416	#5	7'-9"	
d 702 (E)	416	#5	7'-10"	
d 703 (E)	416	#5	8'-4"	
e 700 (E)	14	#4	15'-0"	
e 701 (E)	79	#4	19'-9"	
e 703 (E)	23	#4	16'-9"	
e 704 (E)	28	#4	19'-6"	
e 705 (E)	5	#4	24'-8"	
e 706 (E)	8	#8	32'-8"	
e 707 (E)	4	#8	19'-9"	
e 710 (E)	4	#8	16'-9"	
e 711 (E)	4	#4	25'-1"	
e 712 (E)	6	#8	34'-10"	
e 713 (E)	4	#4	25'-8"	
e 714 (E)	6	#8	35'-8"	
e 715 (E)	12	#6	15'-0"	
e 716 (E)	24	#6	19'-6"	
e 717 (E)	24	#6	16'-9"	
e 718 (E)	72	#6	19'-9"	
e 719 (E)	9	#6	33'-5"	
e 720 (E)	9	#6	34'-3"	
e 721 (E)	12	#6	31'-1"	
x 700 (E)	98	#5	6'-5"	
Concrete Superstructure			Cu. Yd.	764.3
Bridge Deck Grooving			Sq. Yd.	2,538
Protective Coat			Sq. Yd.	2,894
Reinforcement Bars, Epoxy Coated			Pound	201,050



BAR d 705 (E)



BAR x 700 (E)

Notes:
See sheets 29 and 30 of 86 for location of Section A-A.
See sheet 1 of 86 for drainage locations.

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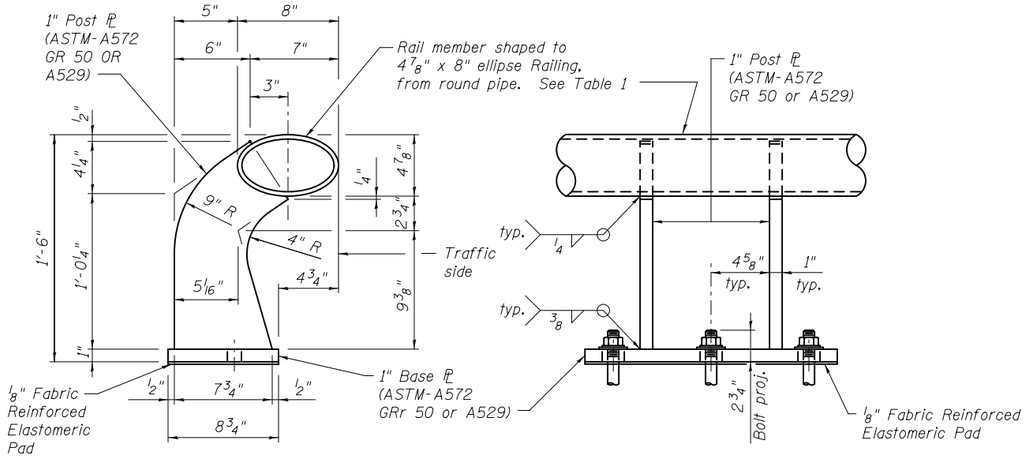
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

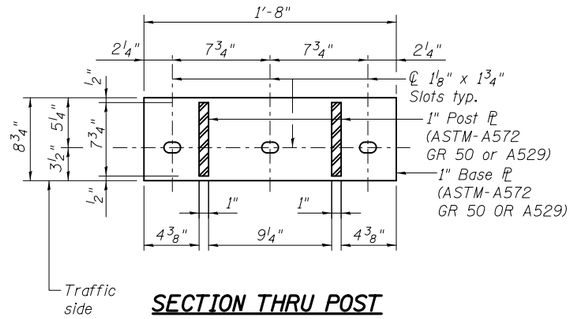
SUPERSTRUCTURE – MISCELLANEOUS DETAILS
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 34 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	983
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



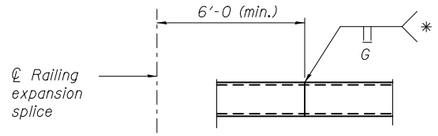
SIDE VIEW

ELEVATION



SECTION THRU POST

ELLIPTICAL TUBE WITH RAIL POST AND ANCHORAGE DETAILS



RAILING SHOP SPLICE DETAIL

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

Notes:

See Sheet 33 of 86 for post spacing.

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

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

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

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

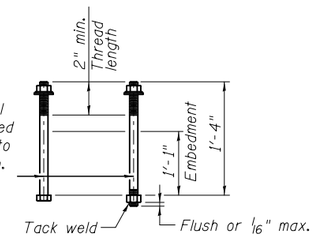
Anchor bolts shall be 7/8" ϕ, ASTM A-193 GR. B7, fully threaded with heavy hex nuts and one hardened washer and one 2 1/4" O.D. washer each. Embed threaded rods 10 1/2" min. into concrete parapet. Material for these items shall be in accordance with the adhesive manufacturer's requirements to be capable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

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

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

TABLE 1

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



CAST-IN-PLACE ANCHOR BOLT OPTIONS

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Steel Railing (Special)	Foot	381

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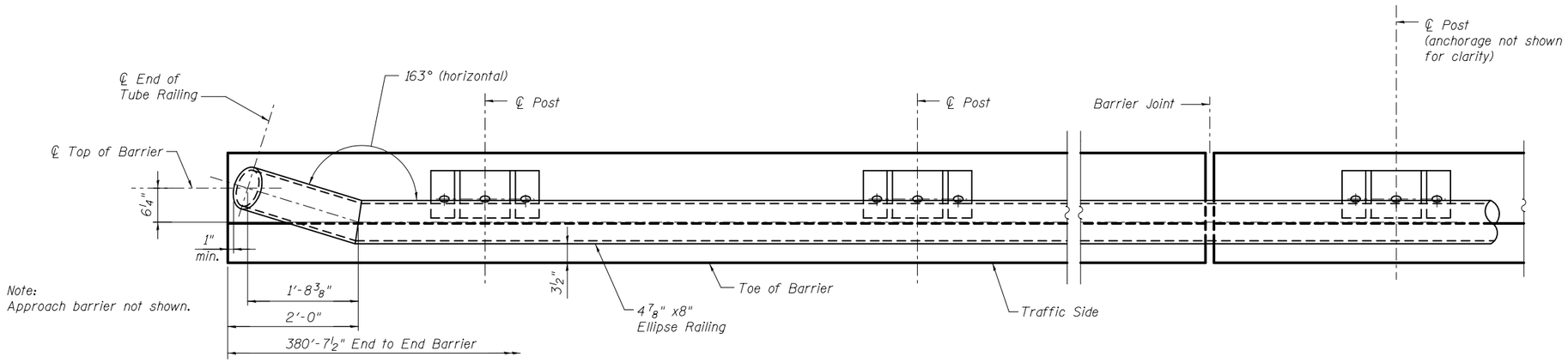
	CHECKED - YSS	REVISED	
PLOT SCALE =	DRAWN - PRC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

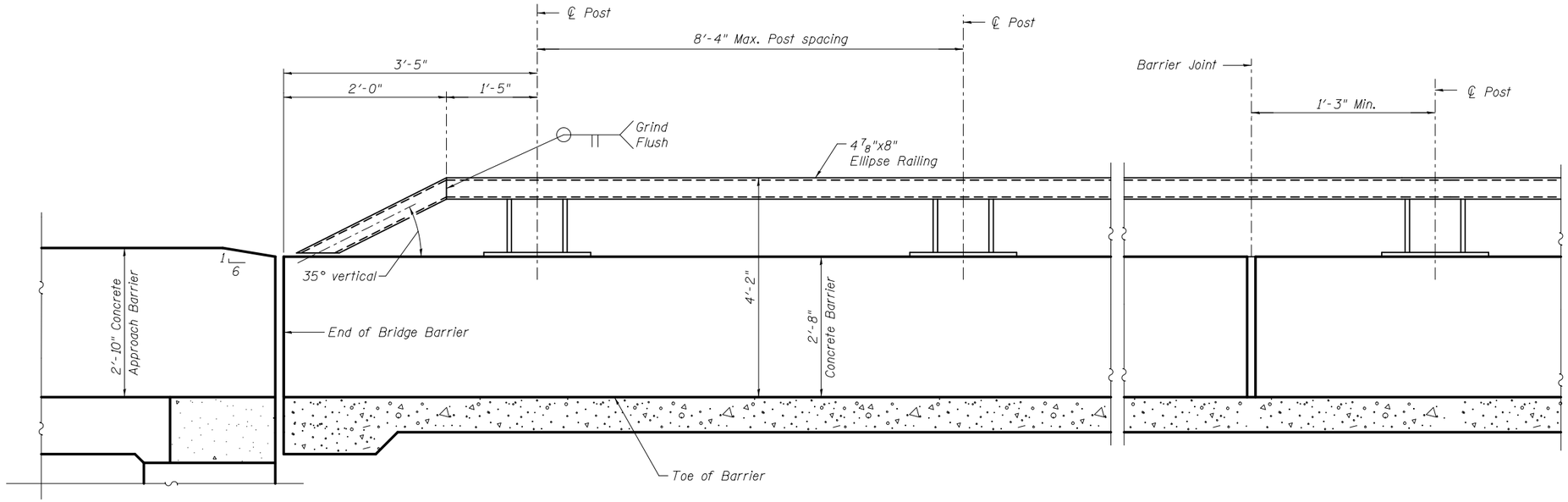
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AESTHETIC TRAFFIC BARRIER RAIL DETAIL – 1
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 35 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	984
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PART PLAN



PART ELEVATION

AESTHETIC TRAFFIC BARRIER RAIL

Eastbound, Inside Face, Looking West

Notes:
Edge of base plate shall be less than 6" from any cold joint or barrier discontinuity including the back of the abutment.
See Sheet 33 of 86 for post spacing and barrier details.

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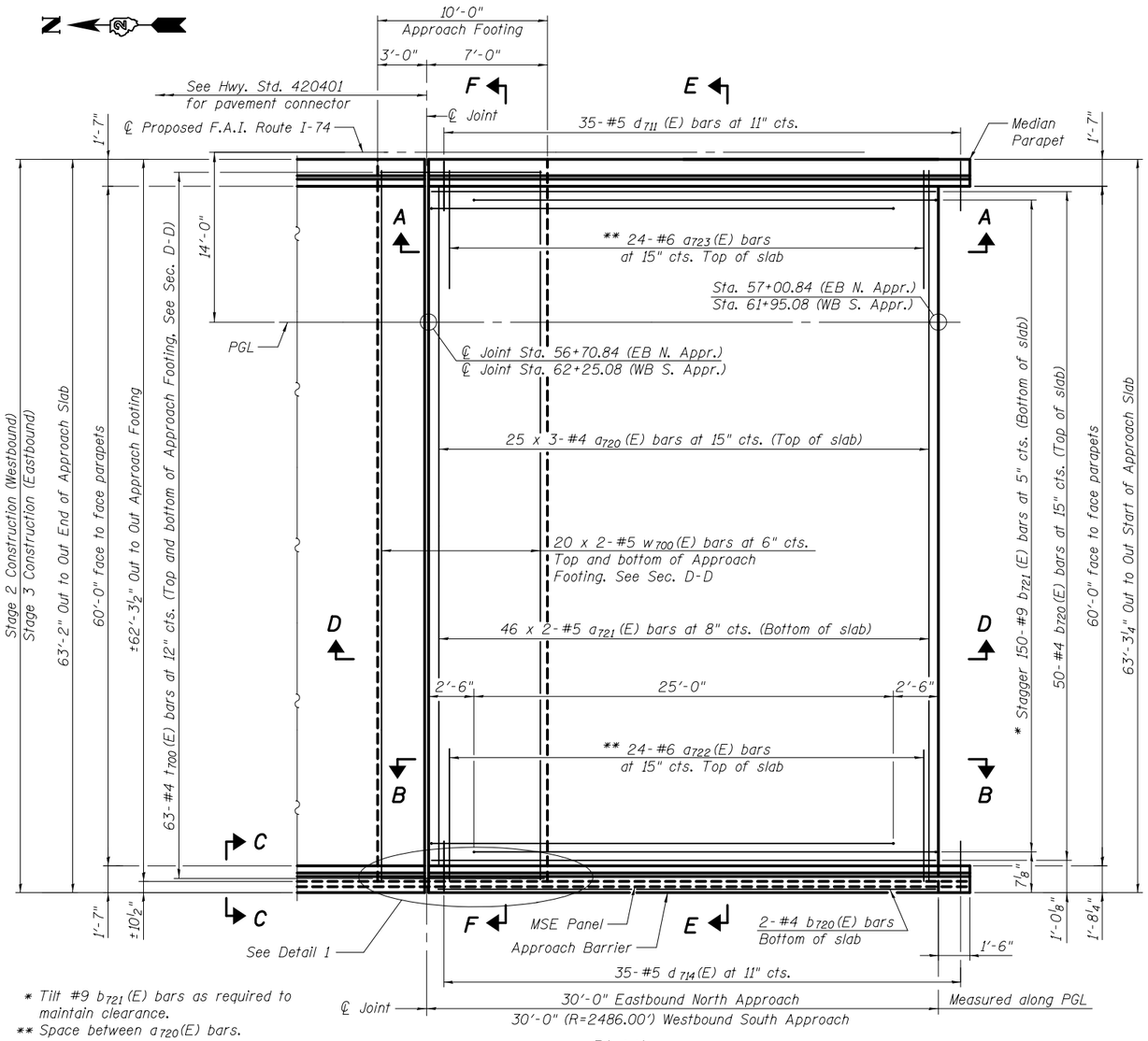
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

AESTHETIC TRAFFIC BARRIER RAIL DETAIL – 2
I–74 OVER 19TH ST. – STRUCTURE NO. 081–0179 WB & 081–0180 EB
SHEET NO. 36 OF 86 SHEETS

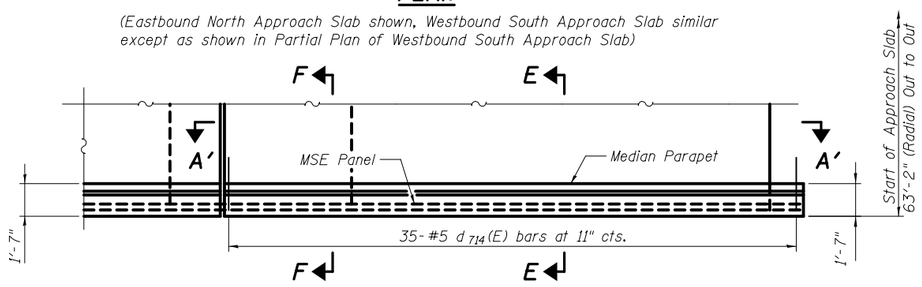
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	985
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



* Tilt #9 b_{721} (E) bars as required to maintain clearance.
** Space between a_{720} (E) bars.

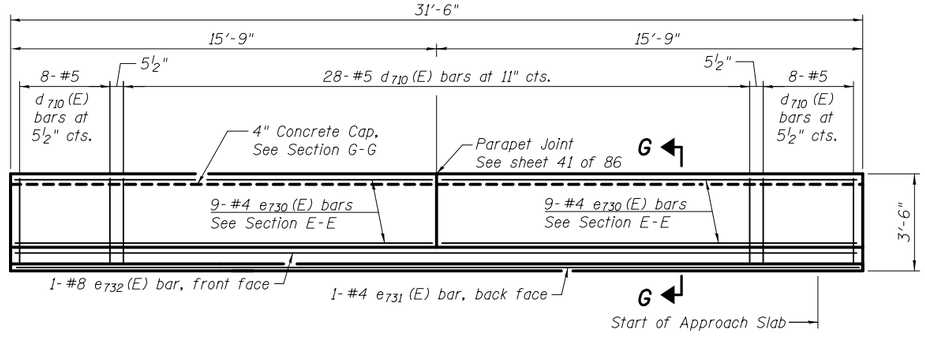
PLAN

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



PARTIAL PLAN OF WESTBOUND SOUTH APPROACH SLAB

(East side)

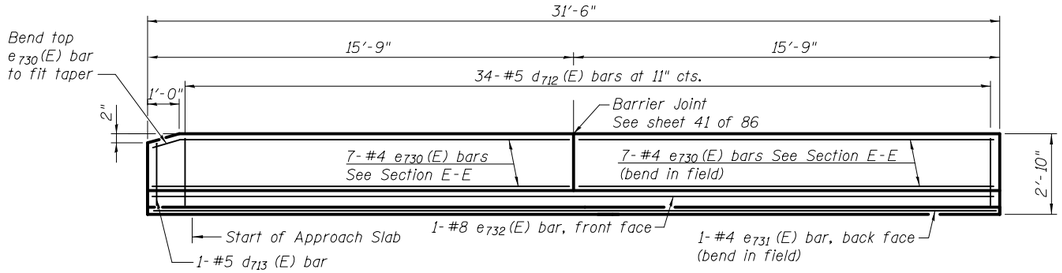


VIEW A-A (INSIDE ELEVATION OF APPROACH MEDIAN PARAPET)

(Eastbound North Approach east side, Westbound South Approach west side)

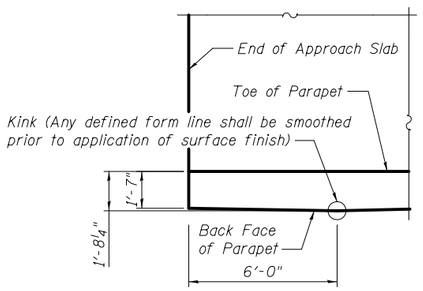
VIEW A'-A' (SIMILAR)

(Westbound South Approach east side)

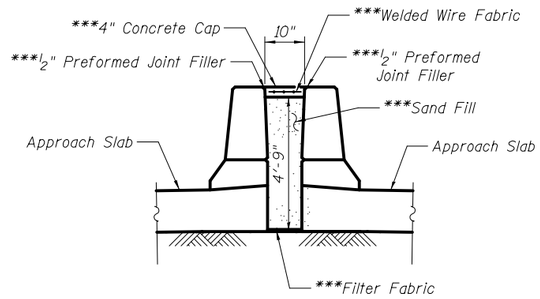


VIEW B-B (INSIDE ELEVATION OF APPROACH BARRIER)

(Eastbound North Approach west side)

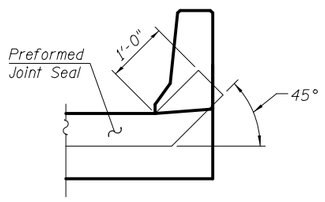


DETAIL 1



SECTION G-G

*** Cost included with Concrete Structures



VIEW C-C

MINIMUM BAR LAP

(Approach Slab)

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

Notes:
See sheet 38 of 86 for Sections D-D, E-E and F-F.
See sheet 41 of 86 for reinforcement details and Bill of Material.
All a(E) bar spacings measured along ℄ Rdwy.
See SN 081-6015 and SN 081-6016 for MSE wall details.
Bars indicated thus 25 x 2-#4 etc. indicates 25 lines of bars with 2 lengths per line.
4" concrete cap shall be reinforced with welded wire fabric, 6" x 6" - W4.0, weighing 58 lbs per 100 sq. ft.

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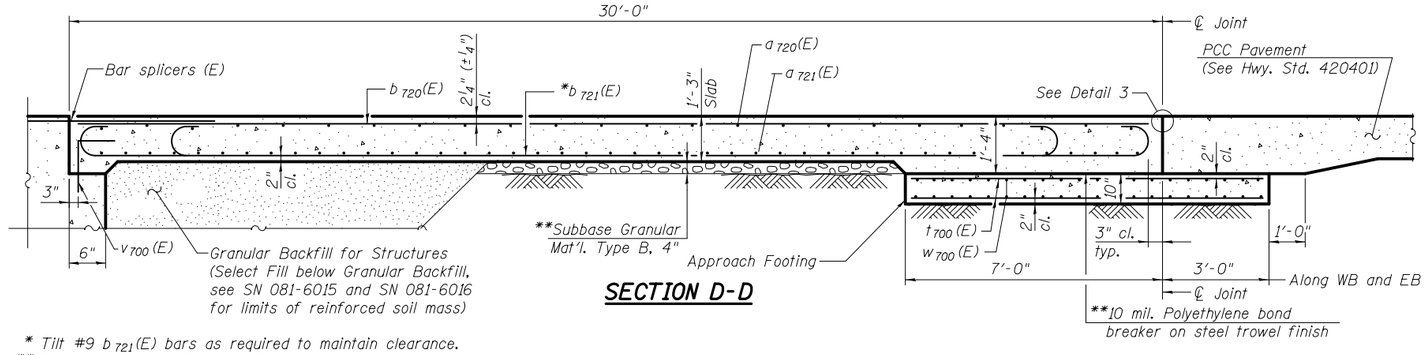
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

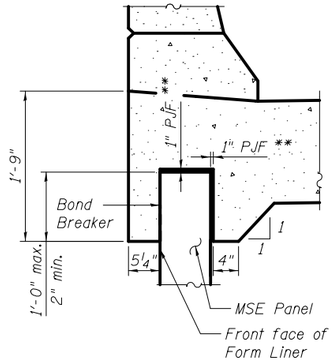
BRIDGE APPROACH SLAB – EB NORTH AND WB SOUTH
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 37 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	986
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

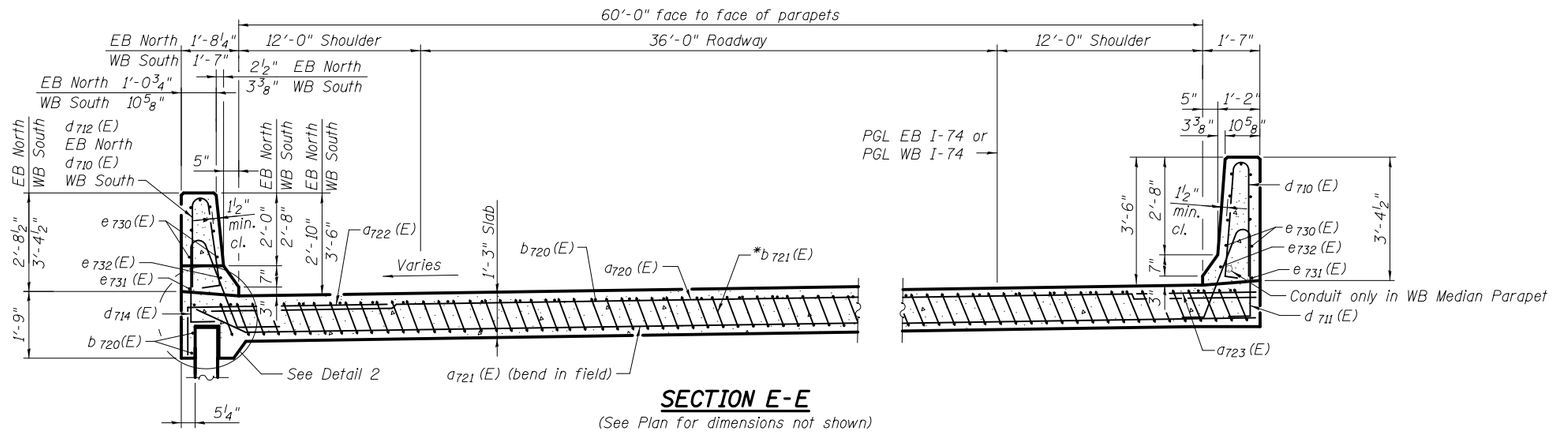


SECTION D-D

* Tilt #9 b_{721}(E) bars as required to maintain clearance.
** Cost included with Concrete Superstructure.

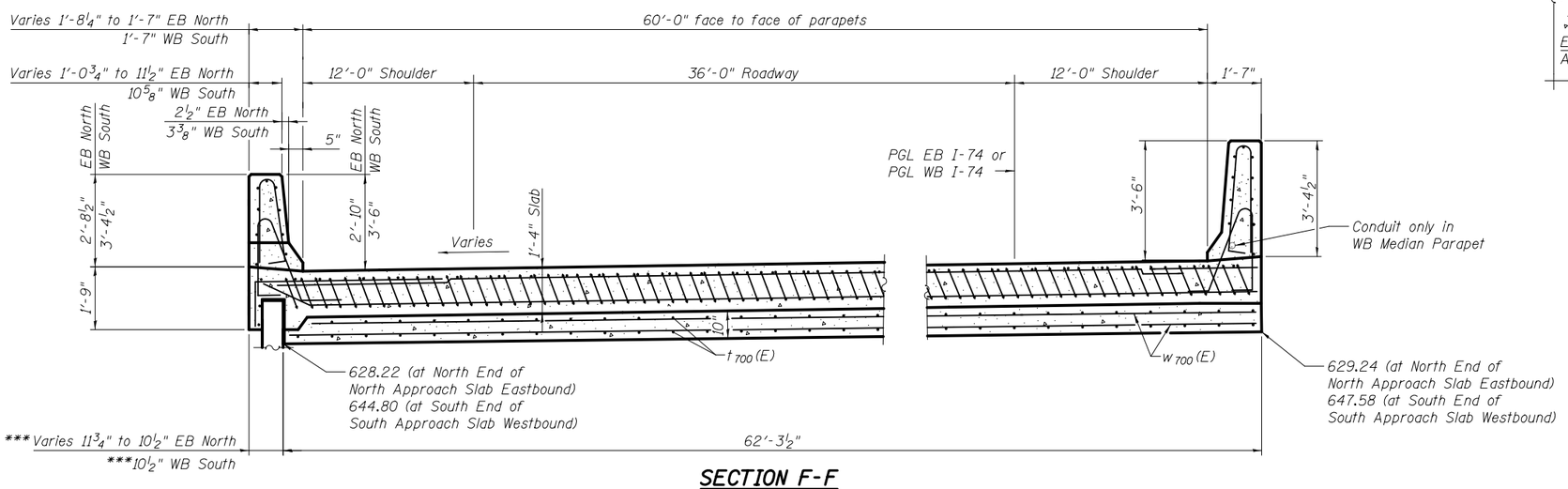


DETAIL 2



SECTION E-E

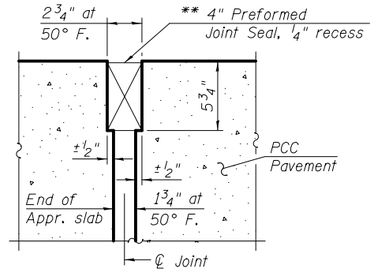
(See Plan for dimensions not shown)



SECTION F-F

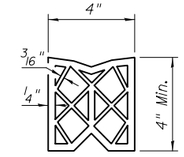
(See Plan for dimensions not shown)

*** Dimensions are based on an assumed thickness of the MSE panel.
See SN 081-6015 and SN 081-6016.



RIGID PAVEMENT

DETAIL 3



PREFORMED JOINT SEAL

Notes:

Approach slab and parapet concrete shall be paid for as Concrete Superstructure.

Approach footing concrete shall be paid for as Concrete Structures.

Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.

For v_{700} (E) bar details, see sheet 53 thru 63 of 86.

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

For bar splicer details, see sheet 77 of 86.

Cost of excavation for approach footing included with Concrete Structures.

For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 86.

Transverse dimensions shown are measured perpendicular to WB and EB PGL.

See SN 081-6015 and SN 081-6016 for MSE wall details.

The joint opening shall be determined per Article 520.04. The minimum dimension shall be 1½" for installation purposes.

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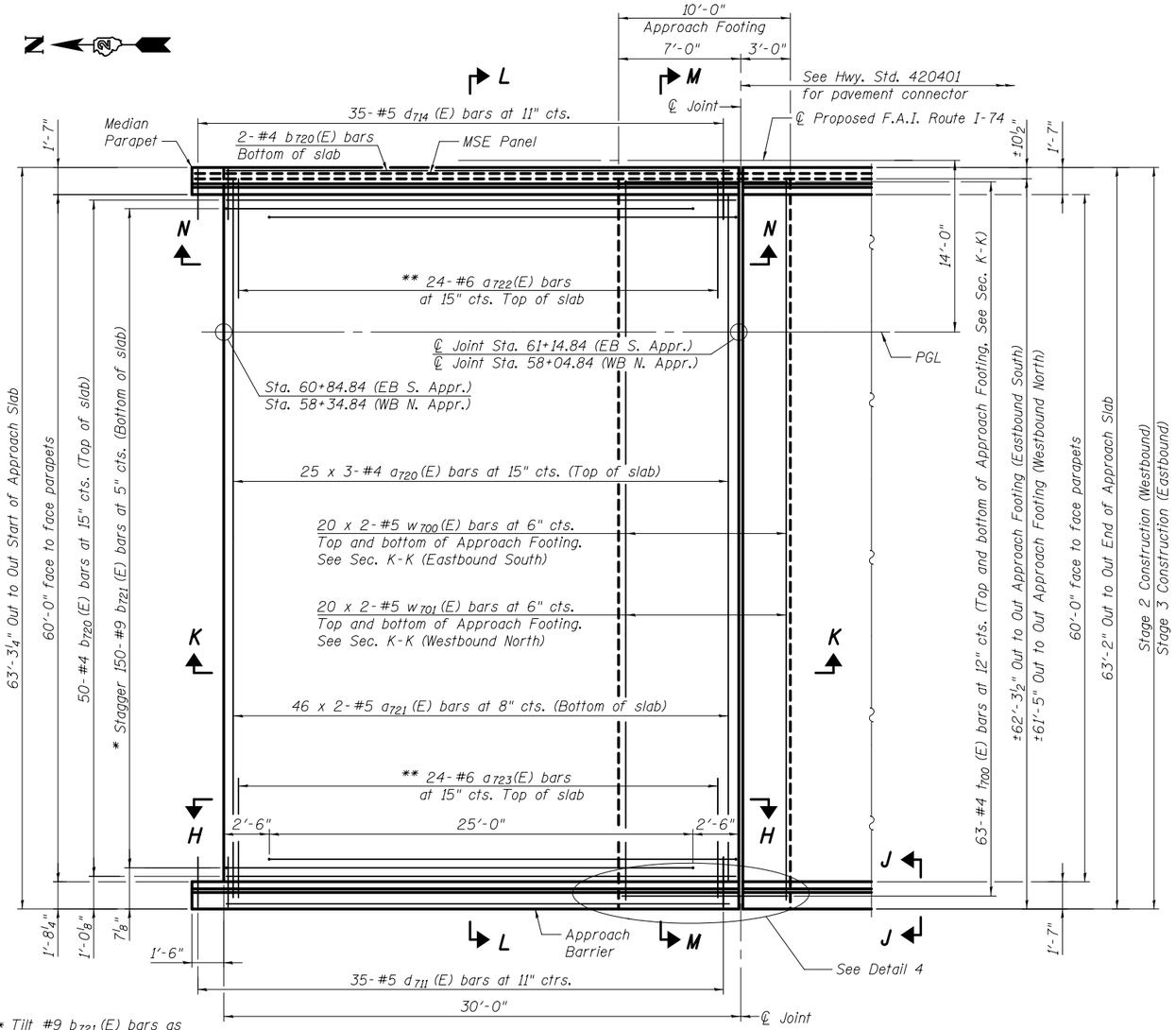
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS – EB NORTH AND WB SOUTH
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB

SHEET NO. 38 OF 86 SHEETS

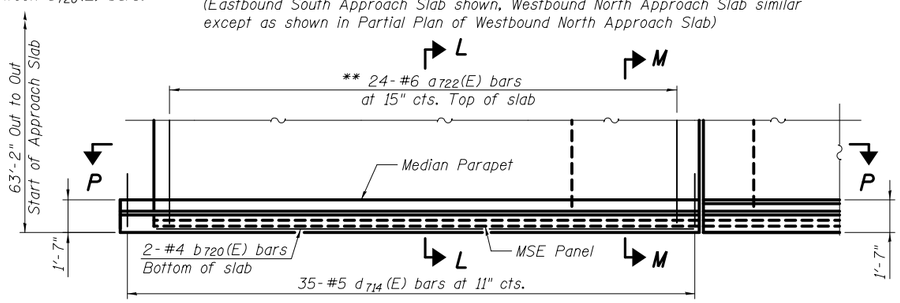
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	987
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



* Tilt #9 b_{721}(E) bars as required to maintain clearance.
** Space between a_{720}(E) bars.

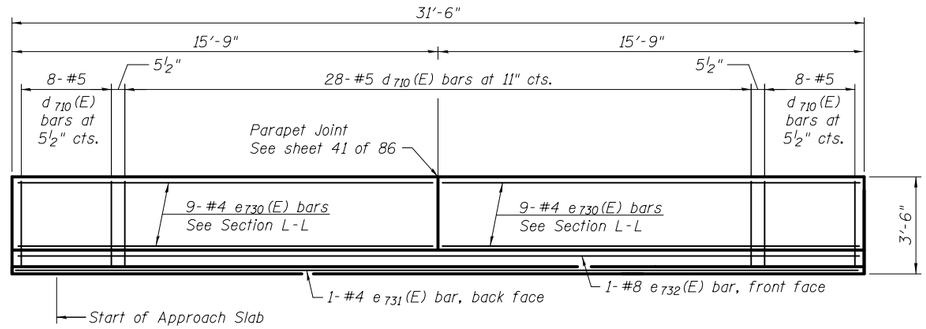
PLAN

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



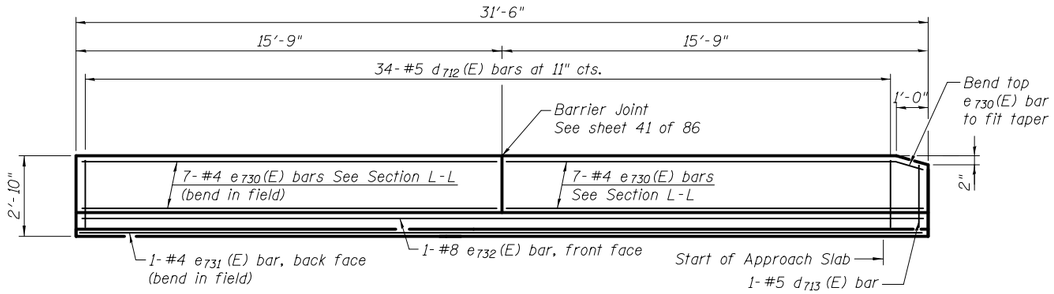
PARTIAL PLAN OF WESTBOUND NORTH APPROACH SLAB

(East side)



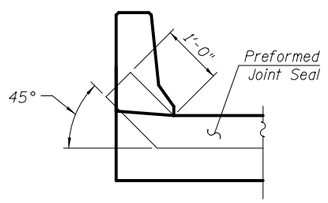
VIEW N-N (INSIDE ELEVATION OF APPROACH MEDIAN PARAPET)

(Eastbound South Approach east side, Westbound North Approach west side)

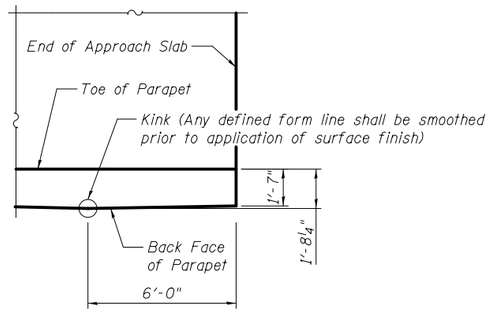


VIEW H-H (INSIDE ELEVATION OF APPROACH BARRIER)

(Eastbound South Approach west side)



VIEW J-J



DETAIL 4

MINIMUM BAR LAP

(Approach Slab)

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

Notes:
See sheet 40 of 86 for Sections K-K, L-L, P-P and M-M.
See sheet 41 of 86 for reinforcement details and Bill of Material.
All d(E) bar spacings measured along ℄ Rdwy.
See SN 081-6015 and SN 081-6016 for MSE wall details.
Bars indicated thus 25 x 2- #4 etc. indicates 25 lines of bars with 2 lengths per line.

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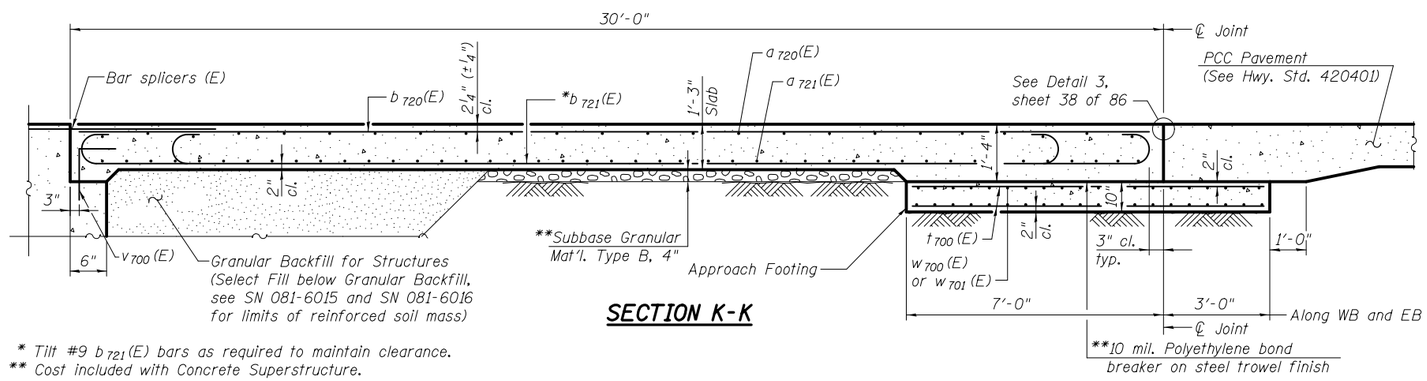
USER NAME =	DESIGNED - JTH	REVISED	
	CHECKED - YSS	REVISED	
PLOT SCALE =	DRAWN - PRC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

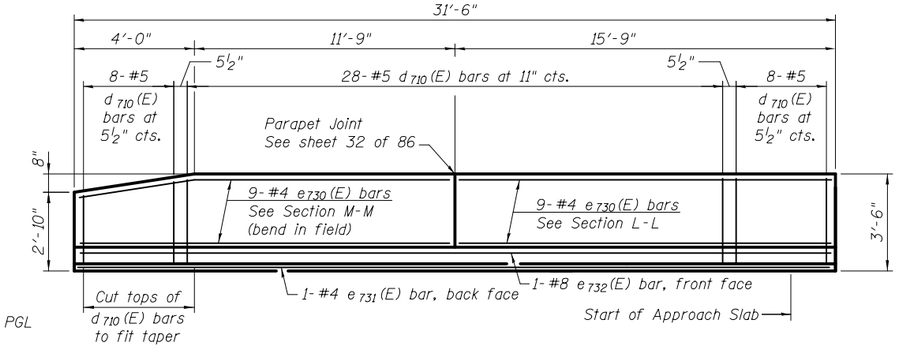
BRIDGE APPROACH SLAB – EB SOUTH AND WB NORTH
I–74 OVER 19TH ST. – STRUCTURE NO. 081–0179 WB & 081–0180 EB
SHEET NO. 39 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	988
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

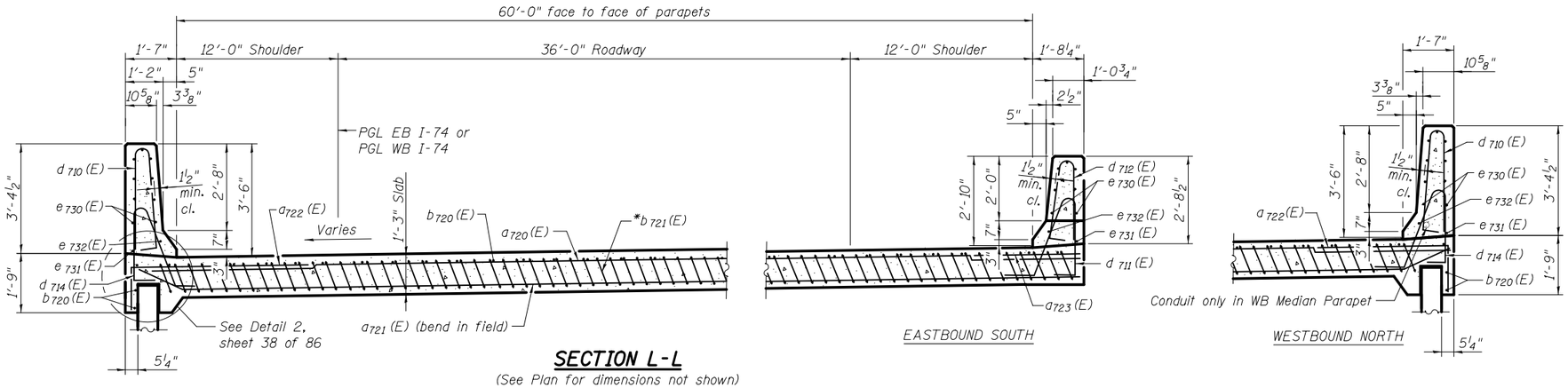


SECTION K-K

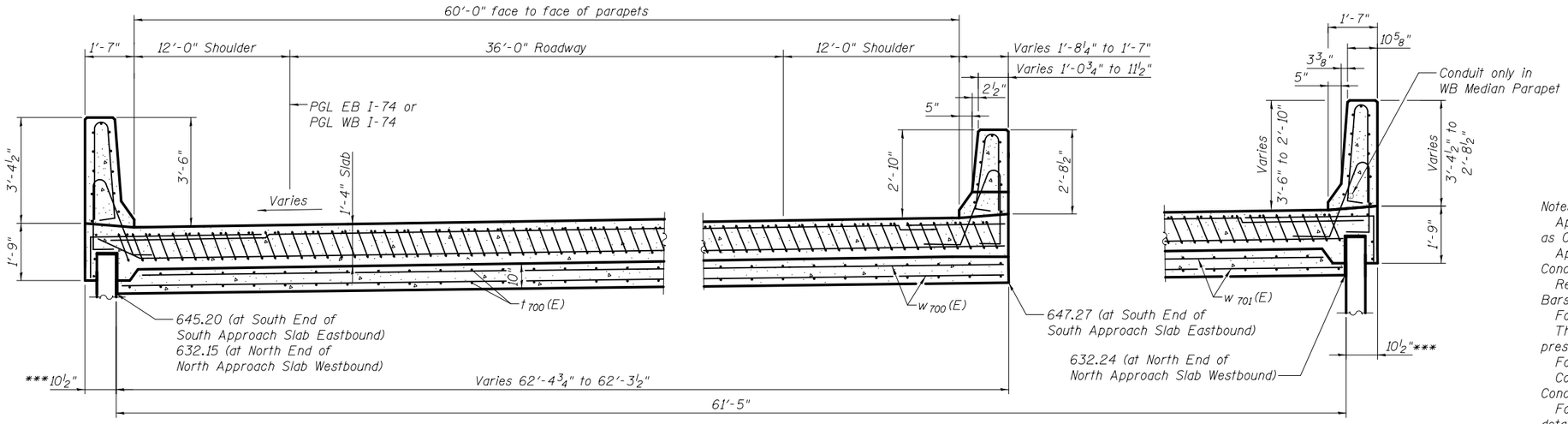
* Tilt #9 b_{721}(E) bars as required to maintain clearance.
** Cost included with Concrete Superstructure.



VIEW P-P (INSIDE ELEVATION OF APPROACH BARRIER)
(Westbound North Approach east side)



SECTION L-L
(See Plan for dimensions not shown)



SECTION M-M
(See Plan for dimensions not shown)

*** Dimensions are based on an assumed thickness of the MSE panel. See SN 081-6015 and SN 081-6016.

Notes:
Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v_{700}(E) bar details, see sheet 53 thru 63 of 86.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet 77 of 86.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 86.
Transverse dimensions shown are measured perpendicular to WB and EB PGL.
See SN 081-6015 and SN 081-6016 for MSE wall details.

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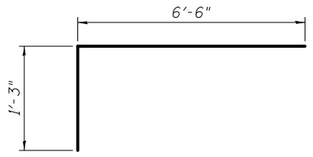
USER NAME =	DESIGNED - JTH	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

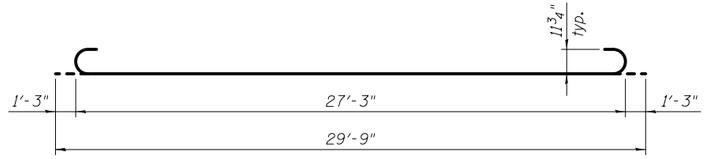
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS – EB SOUTH AND WB NORTH
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 40 OF 86 SHEETS

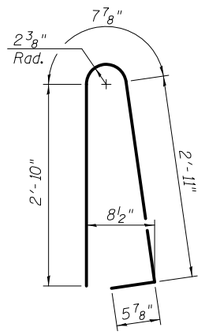
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	989
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



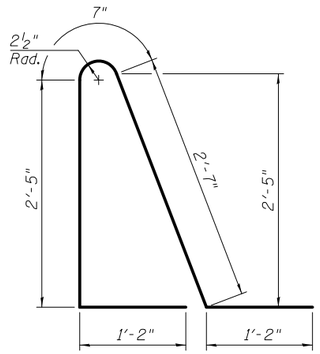
BAR a_{722}(E)



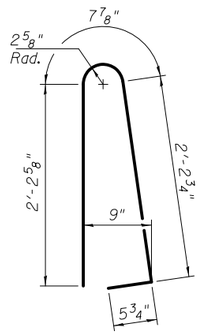
BAR b_{721}(E)



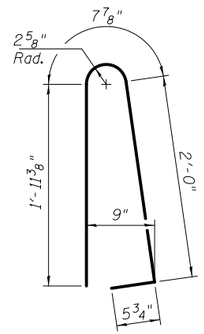
BARS d_{710}(E)



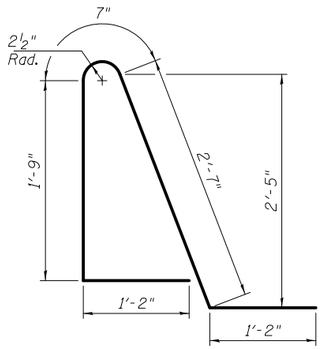
BAR d_{711}(E)



BARS d_{712}(E)



BARS d_{713}(E)



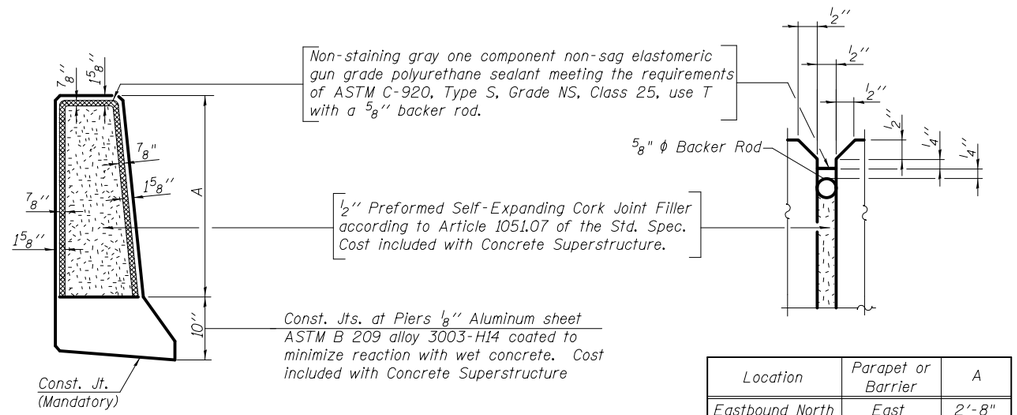
BAR d_{714}(E)

APPROACH SLABS
BILL OF MATERIAL - EB

Bar	No.	Size	Length	Shape
a_{720}(E)	150	#4	22'-11"	
a_{721}(E)	184	#5	33'-2"	
a_{722}(E)	48	#6	7'-9"	
a_{723}(E)	48	#6	6'-6"	
b_{720}(E)	104	#4	29'-8"	
b_{721}(E)	300	#9	29'-9"	
d_{710}(E)	88	#5	6'-11"	
d_{711}(E)	70	#5	7'-11"	
d_{712}(E)	68	#5	5'-7"	
d_{713}(E)	2	#5	5'-1"	
d_{714}(E)	70	#5	7'-3"	
e_{730}(E)	64	#4	15'-5"	
e_{731}(E)	4	#4	31'-2"	
e_{732}(E)	4	#8	31'-2"	
t_{700}(E)	252	#4	9'-8"	
w_{700}(E)	160	#5	32'-8"	
Concrete Structures		Cu. Yd.	38.5	
Concrete Superstructure		Cu. Yd.	196.8	
Bridge Deck Grooving		Sq. Yd.	400	
Protective Coat		Sq. Yd.	480	
Reinforcement Bars, Epoxy Coated		Pound	52,400	

APPROACH SLABS
BILL OF MATERIAL - WB

Bar	No.	Size	Length	Shape
a_{720}(E)	150	#4	22'-11"	
a_{721}(E)	184	#5	33'-2"	
a_{722}(E)	72	#6	7'-9"	
a_{723}(E)	24	#6	6'-6"	
b_{720}(E)	106	#4	29'-8"	
b_{721}(E)	300	#9	29'-9"	
d_{710}(E)	176	#5	6'-11"	
d_{711}(E)	35	#5	7'-11"	
d_{714}(E)	105	#5	7'-3"	
e_{730}(E)	72	#4	15'-5"	
e_{731}(E)	4	#4	31'-2"	
e_{732}(E)	4	#8	31'-2"	
t_{700}(E)	252	#4	9'-8"	
w_{700}(E)	80	#5	32'-8"	
w_{701}(E)	80	#5	32'-3"	
Concrete Structures		Cu. Yd.	38.2	
Concrete Superstructure		Cu. Yd.	198.7	
Bridge Deck Grooving		Sq. Yd.	400	
Protective Coat		Sq. Yd.	484	
Reinforcement Bars, Epoxy Coated		Pound	52,740	



Location	Parapet or Barrier	A
Eastbound North	East	2'-8"
Eastbound North	West	2'-0"
Westbound South	East	2'-8"
Westbound South	West	2'-8"
Eastbound South	East	2'-8"
Eastbound South	West	2'-0"
Westbound North	East	2'-8"
Westbound North	West	2'-8"

MEDIAN PARAPET JOINT DETAILS
BARRIER JOINT DETAILS

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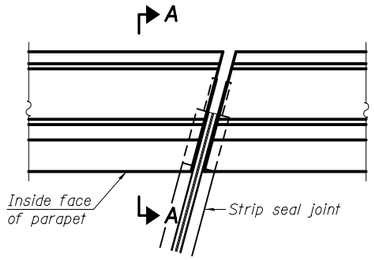
USER NAME =	DESIGNED - JTH	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

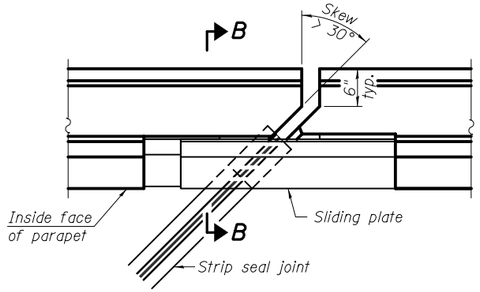
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB – MISCELLANEOUS DETAILS
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 41 OF 86 SHEETS

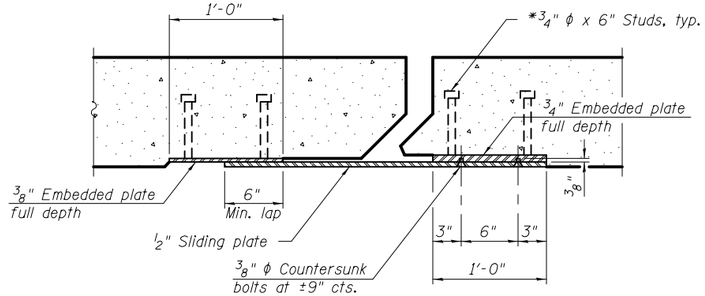
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	990
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



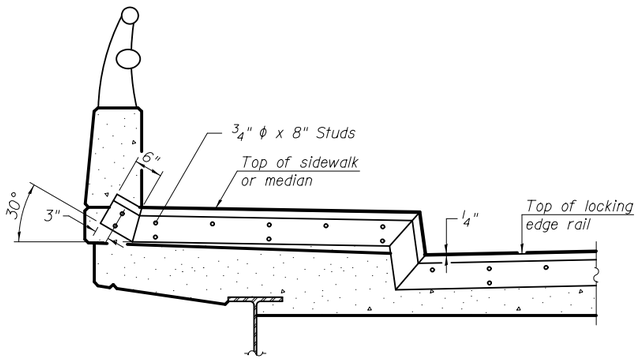
PLAN
(For skews ≤ 30°)



PLAN
(For skews > 30°)
Showing point block

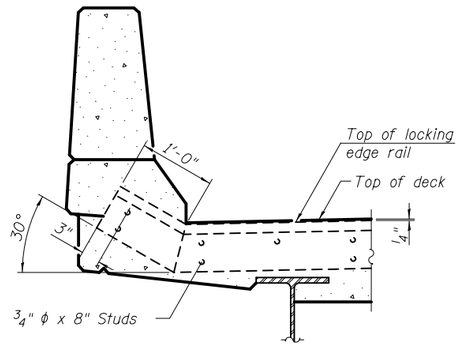


SECTION C-C

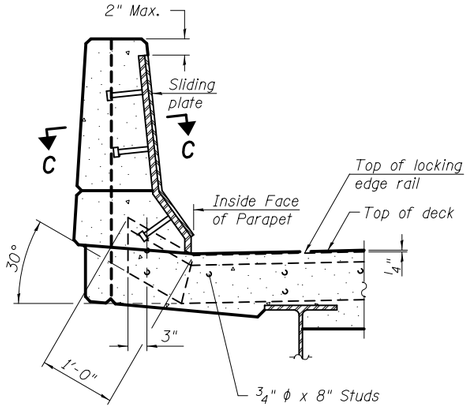


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

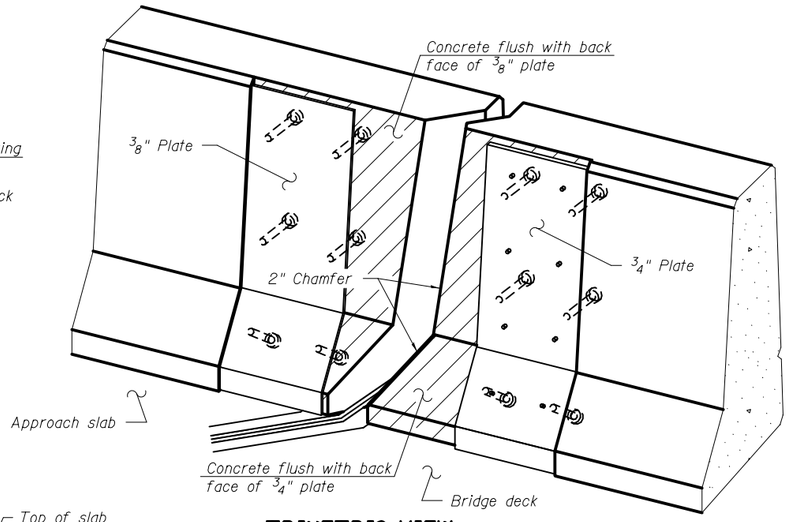
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



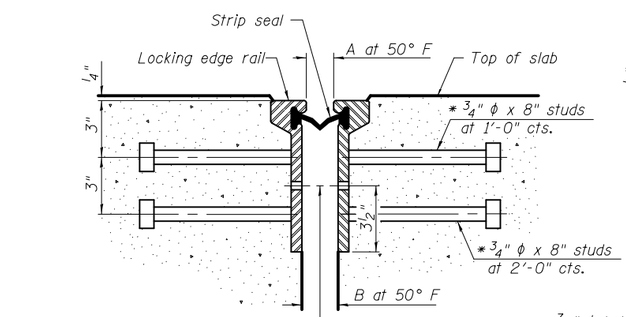
SECTION A-A



SECTION B-B

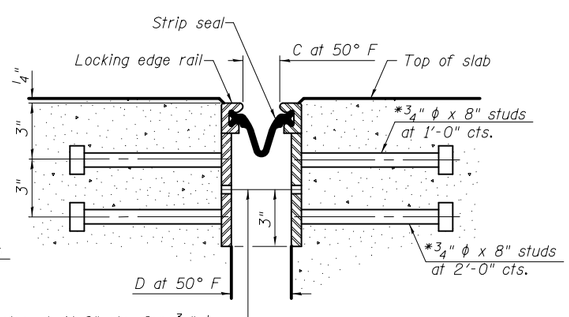


TRIMETRIC VIEW
(Showing back plates only)



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

SECTION THRU ROLLED RAIL JOINT

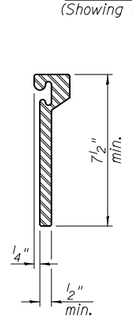


7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

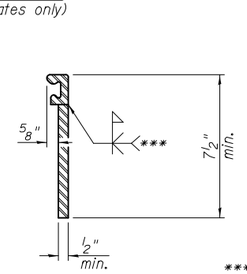
SECTION THRU WELDED RAIL JOINT

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

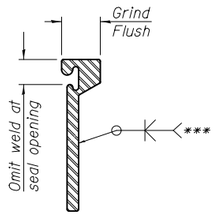
Location	A	B	C	D
Westbound North Abutment	2"	2 1/2"	2"	3 1/4"
Westbound South Abutment	1 1/2"	2"	1 1/2"	2 3/4"
Eastbound North Abutment	1 1/2"	2"	1 1/2"	2 3/4"
Eastbound South Abutment	2"	2 1/2"	2"	3 1/4"



ROLLED EXTRUDED RAIL



WELDED RAIL



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

LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

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

The manufacturer's recommended installation methods shall be followed.

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

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

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

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	248

EJ-SSJ

1-27-12

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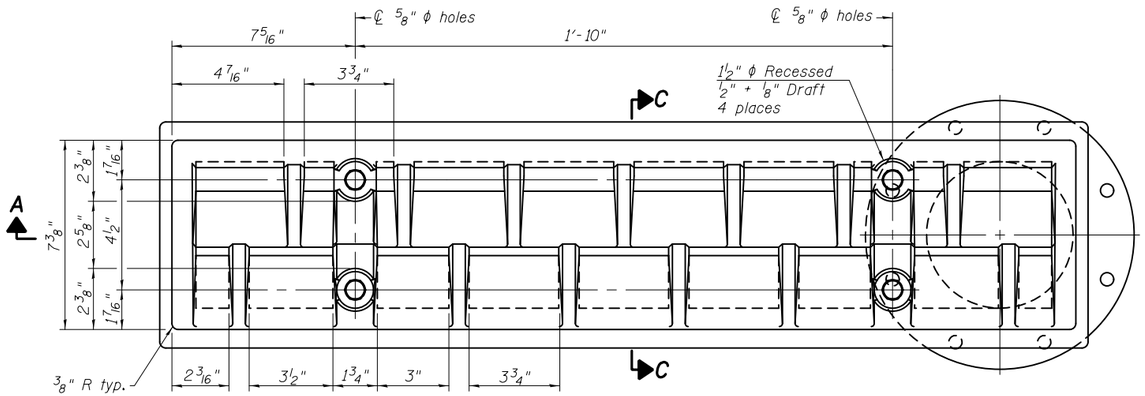
USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - JTH	REVISED
PLOT SCALE =	DRAWN - CMM	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

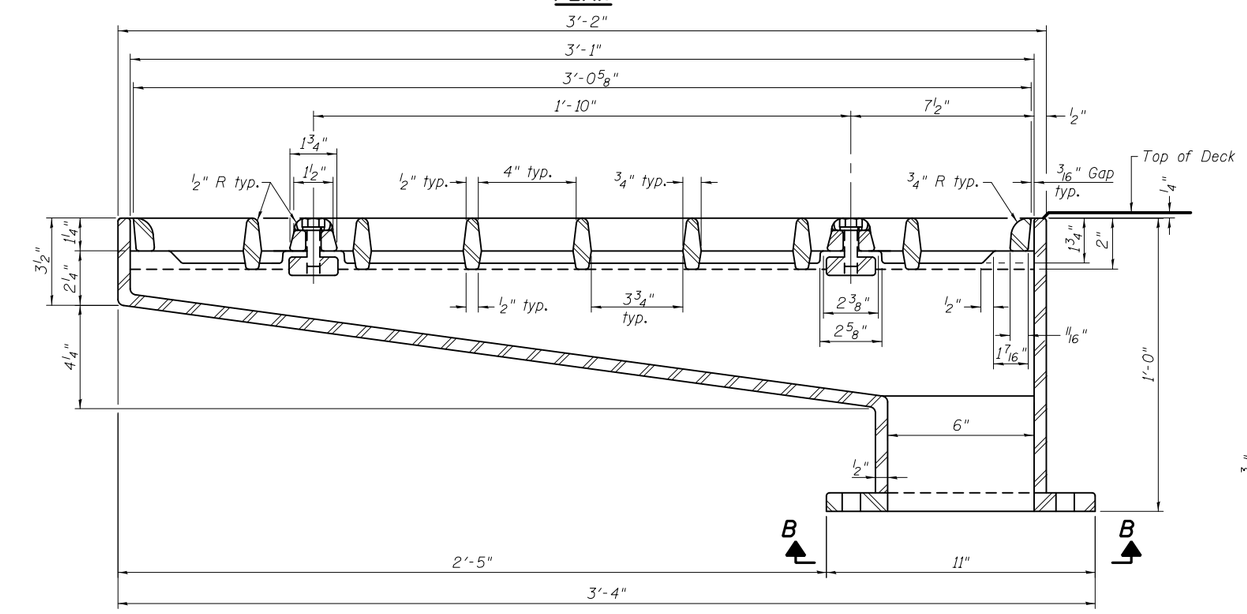
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 42 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	991
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

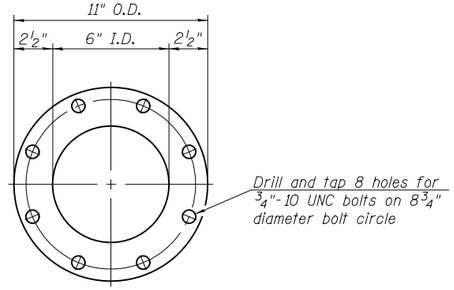


PLAN

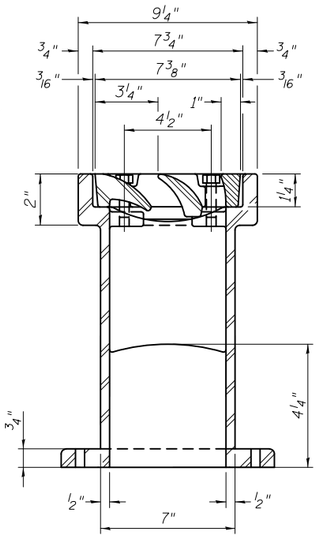


SECTION A-A

See sheets 29 and 30 of 86 for scupper location relative to parapet.



VIEW B-B



SECTION C-C

Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

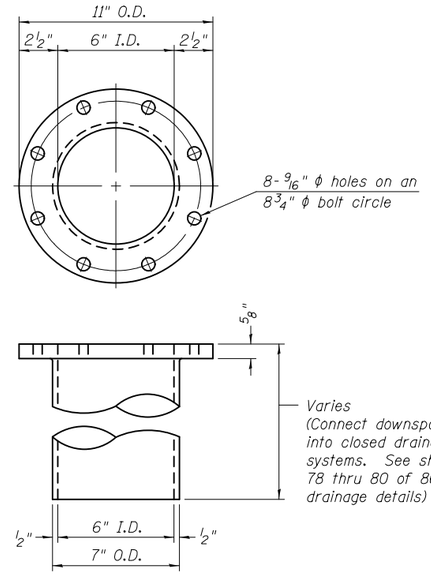
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

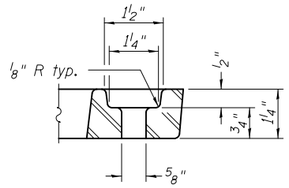
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper (Special).

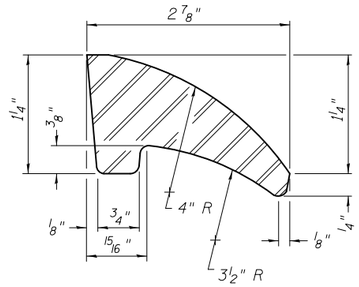
Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.



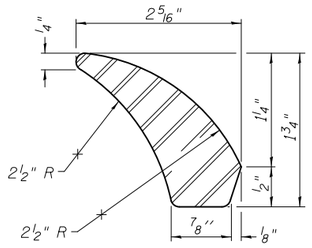
DOWNSPOUT



BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper (Special)	Each	10

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

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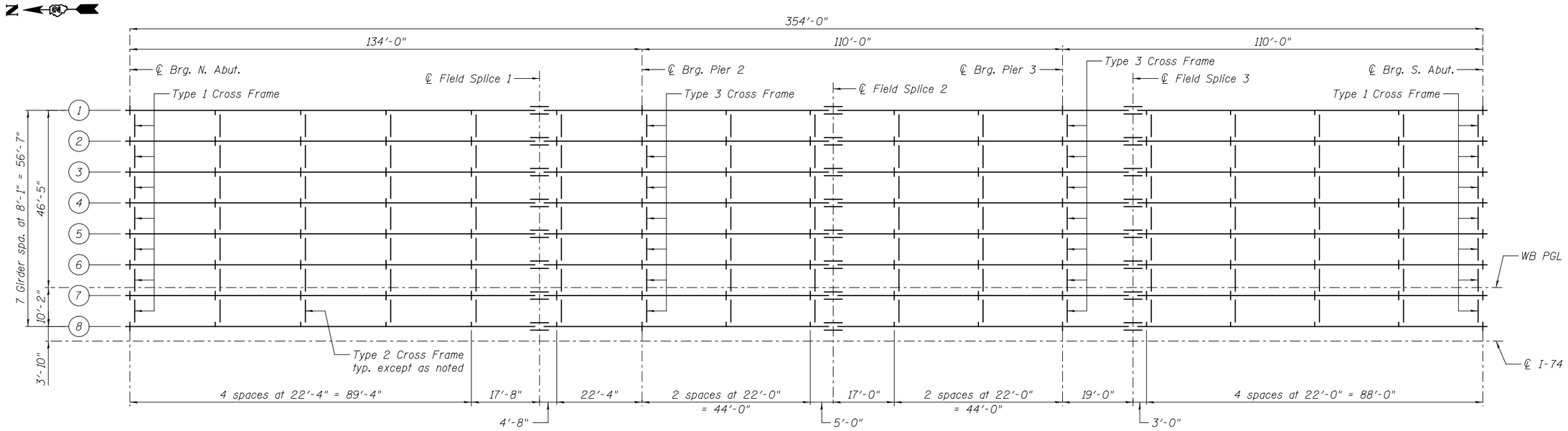
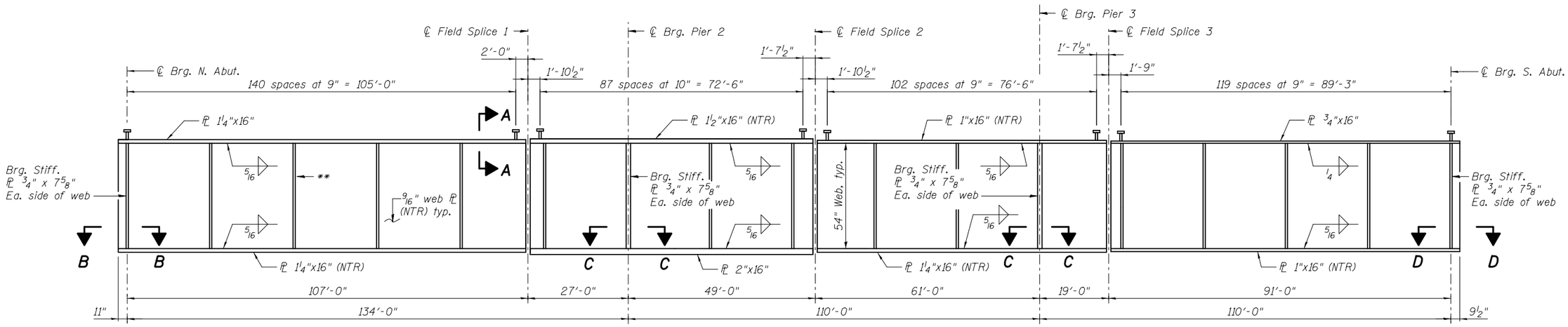
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER – SPECIAL
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 43 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	992
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



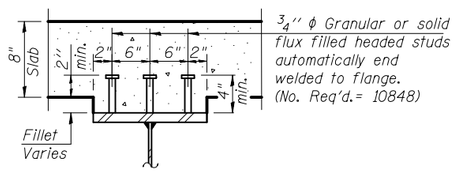
FRAMING PLAN - WESTBOUND



** Cross Frame Conn. ℄ ½" x 6"
Ea. side of web (Omit Conn. ℄
on exterior face of Girders 1
and 8) typ. except as noted

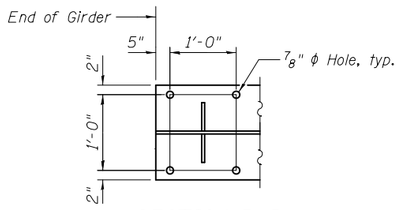
GIRDER ELEVATION - WESTBOUND

Interior girders shown, exterior girders similar.
(Looking East, 8 required)

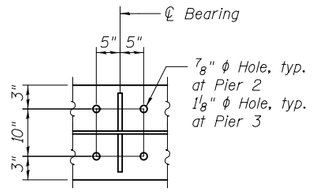


¾" ϕ Granular or solid flux filled headed studs automatically end welded to flange. (No. Req'd.= 10848)

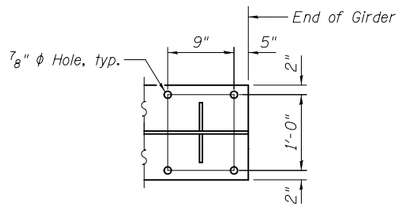
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

Notes:

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

All flange plates, web plates, bearing stiffeners, and cross frame connection plates shall be AASHTO M270 Grade 50.

See sheets 46 and 47 of 86 for steel details.

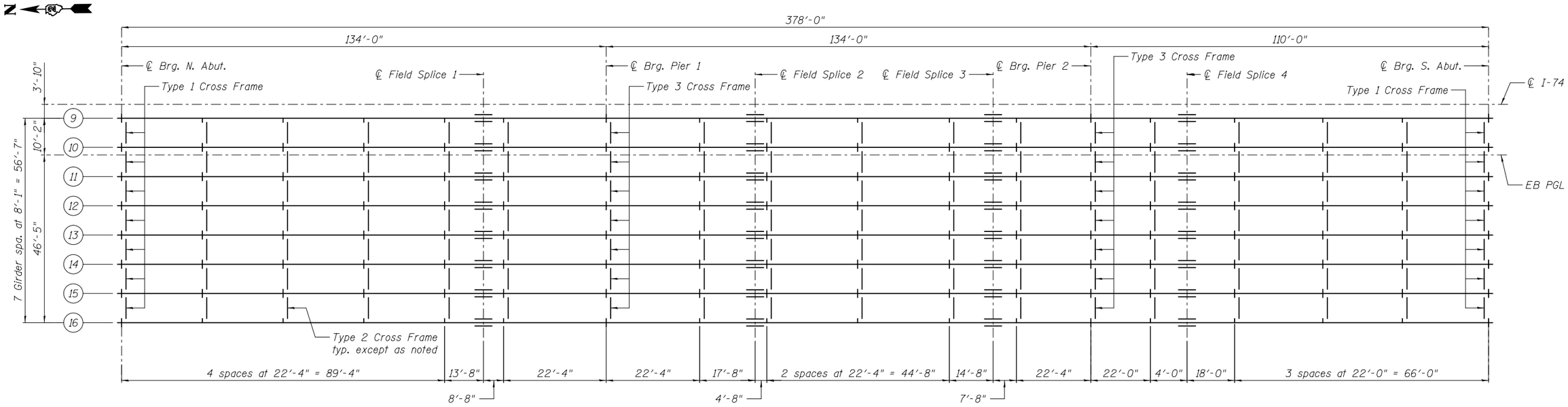
MODJESKI and MASTERS
Experience great bridges.

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

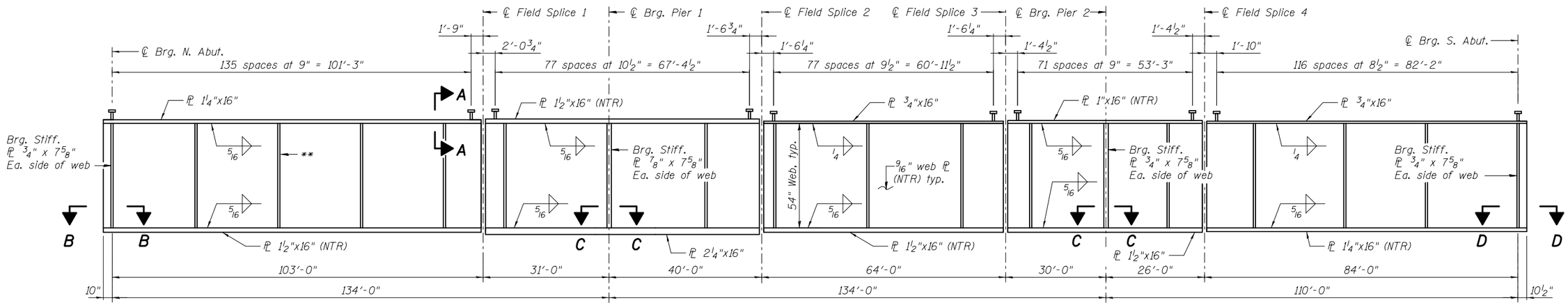
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN – WESTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 44 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	993
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



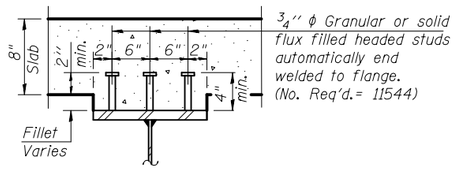
FRAMING PLAN - EASTBOUND



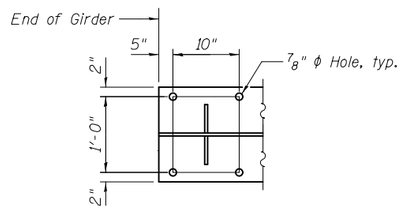
** Cross Frame Conn. PL 1/2" x 6" Ea. side of web (Omit Conn. PL on exterior face of Girders 9 and 16) typ. except as noted

GIRDER ELEVATION - EASTBOUND

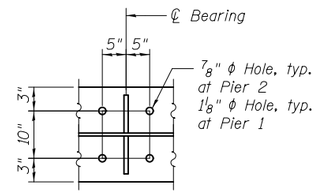
Interior girders shown, exterior girders similar.
(Looking East, 8 required)



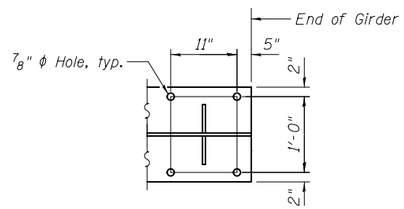
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

Notes:

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

All flange plates, web plates, bearing stiffeners, and cross frame connection plates shall be AASHTO M270 Grade 50.

See sheets 46 and 47 of 86 for steel details.

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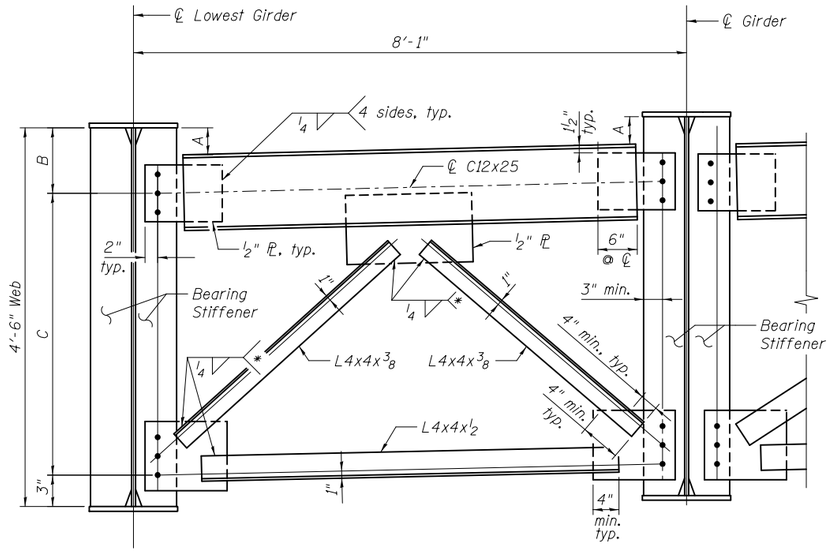
USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - PRC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL FRAMING PLAN – EASTBOUND
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 45 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	994
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

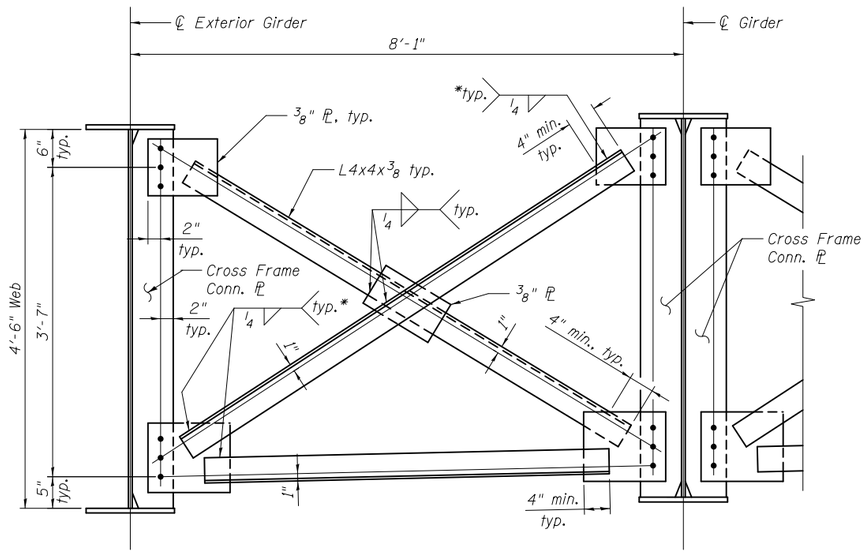


TYPE 1 CROSS FRAME

(28 Required)

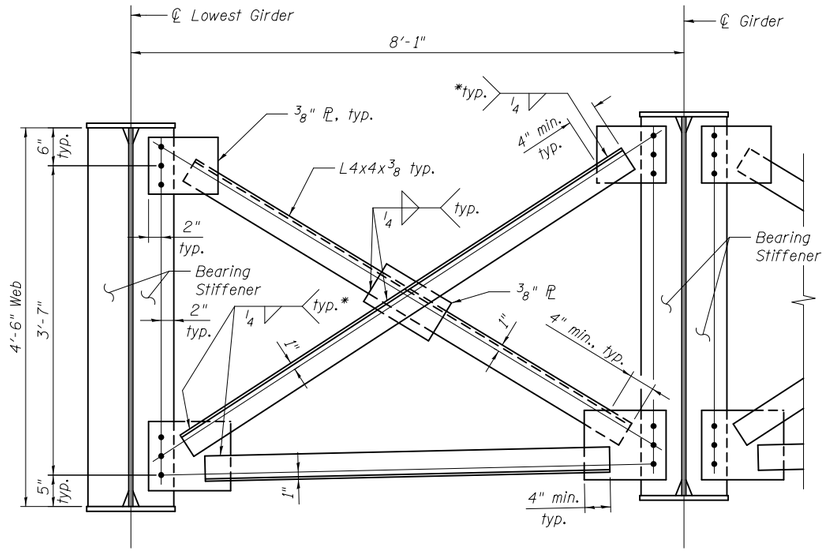
Place cross frame with channel flanges and outstanding angle legs outward from abutment backwall.

Location	A	B	C
Westbound North Abutment	$4\frac{5}{8}$"	$10\frac{5}{8}$"	$3'-4\frac{3}{8}$"
Westbound South Abutment	$5\frac{1}{8}$"	$11\frac{1}{8}$"	$3'-3\frac{7}{8}$"
Eastbound North Abutment	$4\frac{3}{4}$"	$10\frac{3}{4}$"	$3'-4\frac{1}{4}$"
Eastbound South Abutment	$5\frac{1}{4}$"	$11\frac{1}{4}$"	$3'-3\frac{3}{4}$"



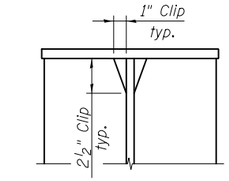
TYPE 2 CROSS FRAME

(189 Required)



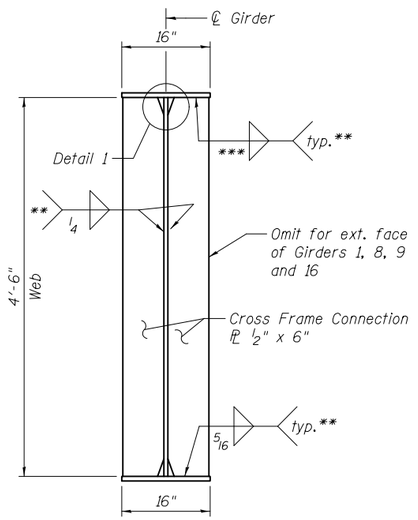
TYPE 3 CROSS FRAME

(28 Required)



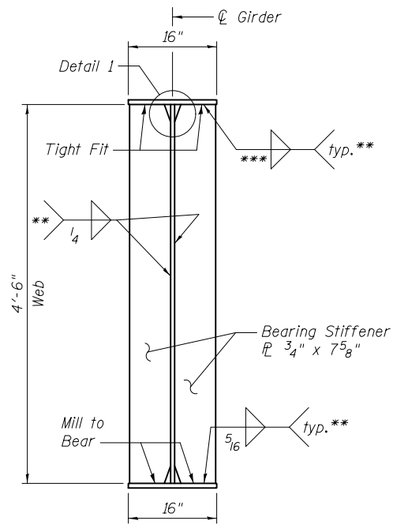
DETAIL 1

(Typical top & bottom flanges)



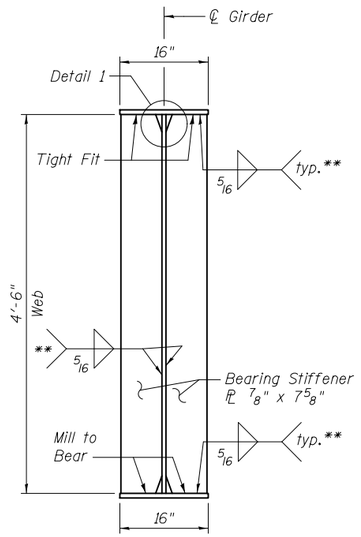
CONNECTION PLATE DETAIL

Use with Type 2 Cross Frame



BEARING STIFFENER AT N. ABUT., PIER 2, PIER 3 AND S. ABUT.

Use with Type 1 and Type 3 cross frame



BEARING STIFFENER AT PIER 1

Use with Type 3 cross frame

* Fillet weld angles along 3 sides on one face of gusset plate.

** Terminate weld $\frac{1}{4}$" from edges of stiffener and connection PL.

*** $\frac{1}{4}$" Weld for flange plate thickness $\frac{3}{4}$"
$\frac{5}{16}$" Weld for flange plate thickness greater than $\frac{3}{4}$"

Notes:

All cross frame members may be AASHTO M270 Grade 36.

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

Bolts for cross frame connections shall be $\frac{3}{4}$" ϕ, holes $\frac{15}{16}$" ϕ. Two hardened washers required for each set of oversized holes.

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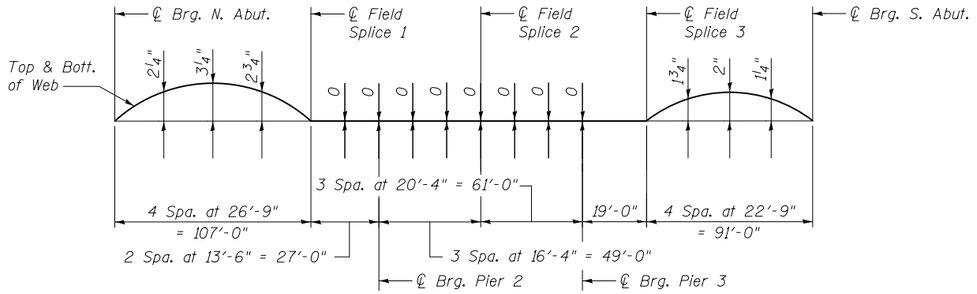
Experience greet bridges.

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

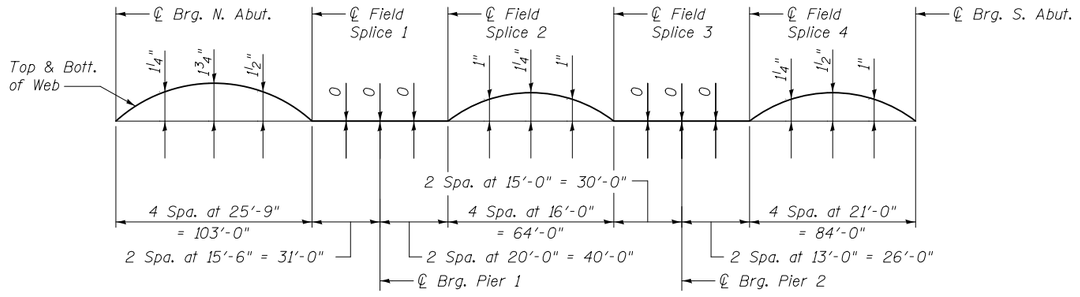
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS – 1
I–74 OVER 19TH ST. – STRUCTURE NO. 081–0179 WB & 081–0180 EB
SHEET NO. 46 OF 86 SHEETS

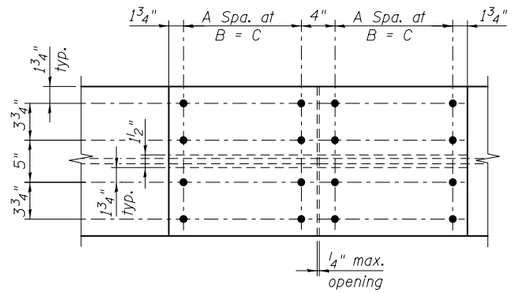
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	995
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



WESTBOUND CAMBER DIAGRAM



EASTBOUND CAMBER DIAGRAM



FLANGE SPLICE

(See Splice Table)

TOP OF WEB ELEVATIONS - WESTBOUND

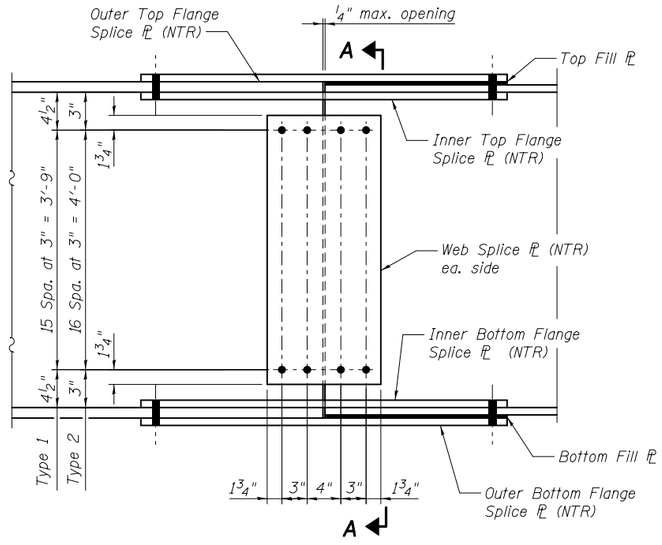
(For fabrication only)

Girder No.	℄ Brg. N. Abut.	℄ Field Splice 1	℄ Brg. Pier 2	℄ Field Splice 2	℄ Brg. Pier 3	℄ Field Splice 3	℄ Brg. S. Abut.
1	634.49	637.64	638.50	639.93	641.85	642.38	645.22
2	634.51	637.76	638.65	640.12	642.10	642.64	645.56
3	634.53	637.88	638.79	640.31	642.34	642.91	645.91
4	634.55	638.00	638.93	640.50	642.59	643.17	646.26
5	634.57	638.11	639.08	640.69	642.84	643.44	646.60
6	634.58	638.23	639.22	640.88	643.08	643.70	646.95
7	634.60	638.35	639.37	641.07	643.33	643.97	647.29
8	634.62	638.47	639.51	641.26	643.58	644.23	647.64

TOP OF WEB ELEVATIONS - EASTBOUND

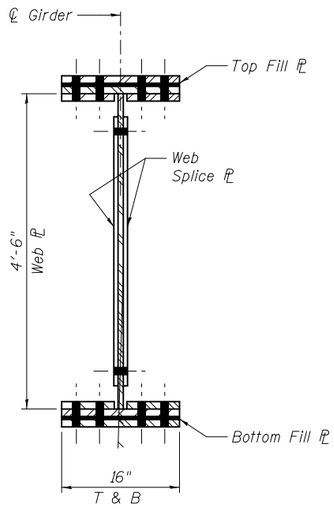
(For fabrication only)

Girder No.	℄ Brg. N. Abut.	℄ Field Splice 1	℄ Brg. Pier 1	℄ Field Splice 2	℄ Field Splice 3	℄ Brg. Pier 2	℄ Field Splice 4	℄ Brg. S. Abut.
9	631.55	635.06	636.26	637.71	640.13	641.28	642.21	645.39
10	631.44	635.05	636.28	637.76	640.24	641.43	642.38	645.64
11	631.33	635.04	636.30	637.82	640.36	641.57	642.55	645.89
12	631.23	635.03	636.32	637.88	640.48	641.72	642.71	646.13
13	631.12	635.02	636.34	637.93	640.59	641.86	642.88	646.38
14	631.01	635.01	636.36	637.99	640.71	642.01	643.05	646.63
15	630.91	635.00	636.38	638.05	640.83	642.15	643.22	646.88
16	630.80	634.99	636.39	638.10	640.94	642.30	643.39	647.13



FIELD SPLICE - ELEVATION

(See Splice Table)



SECTION A-A

SPLICE TABLE

Splice Location	Top Flange							Bottom Flange							Web		
	Outer Flange ℄	Inner Flange ℄	Fill ℄	A	B	C	No. Bolts	Outer Flange ℄	Inner Flange ℄	Fill ℄	A	B	C	No. Bolts	Web Splice ℄	Type	No. Bolts
Westbound Splice 1	⅝" x 16" x 3'-1½"	2-⅝" x 7¼" x 3'-1½"	¼" x 16" x 1'-6⅝"	5	3"	1'-3"	48	⅝" x 16" x 3'-1½"	2-⅝" x 7¼" x 3'-1½"	¾" x 16" x 1'-6⅝"	5	3"	1'-3"	48	⅜" x 13½" x 4'-3½"	2	68
Westbound Splice 2	½" x 16" x 2'-7½"	2-½" x 7¼" x 2'-7½"	½" x 16" x 1'-3⅜"	4	3"	1'-0"	40	⅝" x 16" x 3'-1½"	2-⅝" x 7¼" x 3'-1½"	¾" x 16" x 1'-6⅝"	5	3"	1'-3"	48	⅜" x 13½" x 4'-0½"	1	64
Westbound Splice 3	½" x 16" x 2'-1½"	2-½" x 7¼" x 2'-1½"	¼" x 16" x 1'-0⅝"	3	3"	9"	32	½" x 16" x 2'-7½"	2-½" x 7¼" x 2'-7½"	¼" x 16" x 1'-3⅝"	4	3"	1'-0"	40	⅜" x 13½" x 4'-0½"	1	64
Eastbound Splice 1	⅝" x 16" x 3'-1½"	2-⅝" x 7¼" x 3'-1½"	¼" x 16" x 1'-6⅝"	5	3"	1'-3"	48	⅝" x 16" x 4'-1½"	2-¾" x 7¼" x 4'-1½"	¾" x 16" x 2'-0⅝"	7	3"	1'-9"	64	⅜" x 13½" x 4'-3½"	2	68
Eastbound Splice 2	½" x 16" x 2'-1½"	2-½" x 7¼" x 2'-1½"	¾" x 16" x 1'-0⅝"	3	3"	9"	32	⅝" x 16" x 4'-1½"	2-¾" x 7¼" x 4'-1½"	¾" x 16" x 2'-0⅝"	7	3"	1'-9"	64	⅜" x 13½" x 4'-0½"	1	64
Eastbound Splice 3	½" x 16" x 2'-1½"	2-½" x 7¼" x 2'-1½"	¼" x 16" x 1'-0⅜"	3	3"	9"	32	⅝" x 16" x 3'-1½"	2-¾" x 7¼" x 3'-1½"	Not Applicable	5	3"	1'-3"	48	⅜" x 13½" x 4'-0½"	1	64
Eastbound Splice 4	½" x 16" x 2'-1½"	2-½" x 7¼" x 2'-1½"	¼" x 16" x 1'-0⅝"	3	3"	9"	32	⅝" x 16" x 3'-1½"	2-¾" x 7¼" x 3'-1½"	¼" x 16" x 1'-6⅝"	5	3"	1'-3"	48	⅜" x 13½" x 4'-0½"	1	64

Notes:
All Splice Plates shall be AASHTO M270 Grade 50 steel.
Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

MODJESKI and MASTERS
Experience great bridges.

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DETAILS – 2
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 47 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	996
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

WESTBOUND

EXTERIOR GIRDER MOMENT TABLE

		0.4 Sp. 1	Pier 2	0.5 Sp. 2	Pier 3	0.6 Sp. 3
I_s	(in^4)	37,912	50,353	34,557	34,557	28,263
$I_c(n)$	(in^4)	75,340	-	74,191	-	65,164
$I_c(3n)$	(in^4)	56,841	-	54,905	-	47,841
$I_c(cr)$	(in^4)	-	58,906	-	42,221	-
S_s	(in^3)	1342	1616	1301	1301	1083
$S_c(n)$	(in^3)	1685	-	1677	-	1454
$S_c(3n)$	(in^3)	1553	-	1539	-	1326
$S_c(cr)$	(in^3)	-	2079	-	1407	-
DC1	(k/')	1.124	1.183	1.106	1.106	1.075
M_{DC1}	('k)	1611.5	2063.6	68.9	1252.4	1062.6
DC2	(k/')	0.192	0.192	0.192	0.192	0.192
M_{DC2}	('k)	275.3	346.1	9.5	215.6	192.6
DW	(k/')	0.375	0.375	0.375	0.375	0.375
M_{DW}	('k)	537.6	676.1	18.6	421.1	376.1
M_{L+IM}	('k)	2355.1	2497.3	1573.8	1853.4	1877.8
M_u (Strength I)	('k)	7286.3	8396.6	2880.1	5710.1	5419.3
$\phi_f M_n$	('k)	8330.3	8975.4	8602.7	6421.0	7183.1
f_s DC1	(ksi)	14.41	15.32	0.64	11.55	11.77
f_s DC2	(ksi)	2.13	2.00	0.07	1.84	1.74
f_s DW	(ksi)	4.15	3.90	0.15	3.59	3.40
f_s (L+IM)	(ksi)	16.77	14.41	11.26	15.81	15.50
f_s (Service II)	(ksi)	42.49	39.96	15.49	37.53	37.07
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-
$\phi_f F_n$	(ksi)	-	-	-	-	-
V_f	(k)	66.2	73.4	50.9	77.3	64.9

EASTBOUND

EXTERIOR GIRDER MOMENT TABLE

		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in^4)	40,959	53,030	33,144	37,243	30,835
$I_c(n)$	(in^4)	83,166	-	81,145	-	73,012
$I_c(3n)$	(in^4)	62,019	-	57,801	-	52,841
$I_c(cr)$	(in^4)	-	62,198	-	45,664	-
S_s	(in^3)	1518	1640	1415	1193	1250
$S_c(n)$	(in^3)	1900	-	1891	-	1668
$S_c(3n)$	(in^3)	1753	-	1728	-	1525
$S_c(cr)$	(in^3)	-	2106	-	1643	-
DC1	(k/')	1.138	1.197	1.106	1.119	1.088
M_{DC1}	('k)	1532.2	2362.2	590.9	1563.8	970.3
DC2	(k/')	0.192	0.192	0.192	0.192	0.192
M_{DC2}	('k)	257.3	390.9	101.4	268.2	171.5
DW	(k/')	0.375	0.375	0.375	0.375	0.375
M_{DW}	('k)	502.6	763.6	198.0	523.8	335.0
M_{L+IM}	('k)	2431.1	2584.8	1950.0	2094.5	1926.2
M_u (Strength I)	('k)	7245.2	9110.2	4574.9	6741.1	5300.6
$\phi_f M_n$	('k)	9545.1	9407.2	9238.4	7017.0	8421.4
f_s DC1	(ksi)	12.11	17.28	5.01	15.73	9.31
f_s DC2	(ksi)	1.76	2.23	0.70	1.96	1.35
f_s DW	(ksi)	3.44	4.35	1.38	3.83	2.64
f_s (L+IM)	(ksi)	15.35	14.73	12.37	15.30	13.86
f_s (Service II)	(ksi)	37.27	43.01	23.18	41.40	31.32
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-
$\phi_f F_n$	(ksi)	-	-	-	-	-
V_f	(k)	68.4	73.8	59.7	76.7	67.3

WESTBOUND

INTERIOR GIRDER MOMENT TABLE

		0.4 Sp. 1	Pier 2	0.5 Sp. 2	Pier 3	0.6 Sp. 3
I_s	(in^4)	37,912	50,353	34,557	34,557	28,263
$I_c(n)$	(in^4)	76,815	-	75,704	-	66,478
$I_c(3n)$	(in^4)	57,990	-	56,120	-	48,967
$I_c(cr)$	(in^4)	-	59,560	-	42,792	-
S_s	(in^3)	1342	1616	1301	1301	1083
$S_c(n)$	(in^3)	1694	-	1684	-	1461
$S_c(3n)$	(in^3)	1563	-	1550	-	1336
$S_c(cr)$	(in^3)	-	2118	-	1414	-
DC1	(k/')	1.126	1.185	1.109	1.109	1.078
M_{DC1}	('k)	1615.3	2068.1	71.1	1253.9	1066.0
DC2	(k/')	0.192	0.192	0.192	0.192	0.192
M_{DC2}	('k)	275.2	346.2	9.6	215.5	192.6
DW	(k/')	0.375	0.375	0.375	0.375	0.375
M_{DW}	('k)	537.6	676.2	18.7	420.8	376.2
M_{L+IM}	('k)	1942.2	2177.9	1365.1	1607.5	1608.0
M_u (Strength I)	('k)	6568.4	7843.5	2517.9	5281.1	4951.6
$\phi_f M_n$	('k)	8360.7	9049.1	8674.8	6448.2	7213.3
f_s DC1	(ksi)	14.44	15.36	0.66	11.57	11.81
f_s DC2	(ksi)	2.11	1.96	0.07	1.83	1.73
f_s DW	(ksi)	4.13	3.83	0.14	3.57	3.38
f_s (L+IM)	(ksi)	13.76	12.34	9.73	13.64	13.21
f_s (Service II)	(ksi)	38.57	37.19	13.52	34.70	34.09
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-
$\phi_f F_n$	(ksi)	-	-	-	-	-
V_f	(k)	61.8	68.6	47.5	72.2	60.6

EASTBOUND

INTERIOR GIRDER MOMENT TABLE

		0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.6 Sp. 3
I_s	(in^4)	40,959	53,030	33,144	37,243	30,835
$I_c(n)$	(in^4)	84,876	-	82,306	-	74,568
$I_c(3n)$	(in^4)	63,317	-	58,921	-	54,132
$I_c(cr)$	(in^4)	-	62,902	-	46,296	-
S_s	(in^3)	1518	1640	1415	1193	1250
$S_c(n)$	(in^3)	1910	-	1892	-	1677
$S_c(3n)$	(in^3)	1764	-	1734	-	1536
$S_c(cr)$	(in^3)	-	2146	-	1681	-
DC1	(k/')	1.141	1.200	1.106	1.123	1.092
M_{DC1}	('k)	1539.5	2366.5	591.9	1566.0	975.6
DC2	(k/')	0.192	0.192	0.192	0.192	0.192
M_{DC2}	('k)	257.3	391.0	101.3	268.2	171.5
DW	(k/')	0.375	0.375	0.375	0.375	0.375
M_{DW}	('k)	502.6	763.7	197.9	523.8	335.0
M_{L+IM}	('k)	2025.5	2216.0	1619.1	1789.7	1671.2
M_u (Strength I)	('k)	6544.5	8470.4	3996.8	6210.4	4861.0
$\phi_f M_n$	('k)	9585.7	9468.9	9525.5	7096.0	8457.3
f_s DC1	(ksi)	12.17	17.32	5.02	15.75	9.37
f_s DC2	(ksi)	1.75	2.19	0.70	1.91	1.34
f_s DW	(ksi)	3.42	4.27	1.37	3.74	2.62
f_s (L+IM)	(ksi)	12.73	12.39	10.27	12.78	11.96
f_s (Service II)	(ksi)	33.88	39.88	20.44	38.01	28.87
$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50
f_s (Total)(Strength I)	(ksi)	-	-	-	-	-
$\phi_f F_n$	(ksi)	-	-	-	-	-
V_f	(k)	63.9	68.9	55.7	71.6	62.9

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

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

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

$I_c(cr)$, $S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.^{4} and in.^{3}).

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

M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

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

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

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

$\phi_f M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

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

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

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

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

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

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

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

$\phi_f F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

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

WESTBOUND

EXTERIOR GIRDER REACTION TABLE

		N. Abut.	Pier 2	Pier 3	S. Abut.
R_{DC1}	(k)	60.19	163.29	125.50	47.80
R_{DC2}	(k)	10.28	27.19	21.89	8.60
R_{DW}	(k)	20.08	53.11	42.76	16.80
R_{L+IM}	(k)	90.51	175.06	158.20	85.81
R_{Total}	(k)	181.1	418.7	348.4	159.0

WESTBOUND

INTERIOR GIRDER REACTION TABLE

		N. Abut.	Pier 2	Pier 3	S. Abut.
R_{DC1}	(k)	60.33	163.64	125.73	47.93
R_{DC2}	(k)	10.28	27.20	21.89	8.60
R_{DW}	(k)	20.08	53.12	42.75	16.80
R_{L+IM}	(k)	101.53	196.40	177.46	96.25
R_{Total}	(k)	192.2	440.4	367.8	169.6

EASTBOUND

EXTERIOR GIRDER REACTION TABLE

		N. Abut.	Pier 1	Pier 2	S. Abut.
R_{DC1}	(k)	59.08	178.66	143.88	46.00
R_{DC2}	(k)	9.95	29.56	24.95	8.12
R_{DW}	(k)	19.43	57.74	48.72	15.86
R_{L+IM}	(k)	91.24	179.34	166.27	86.40
R_{Total}	(k)	179.7	445.3	383.8	156.4

EASTBOUND

INTERIOR GIRDER REACTION TABLE

		N. Abut.	Pier 1	Pier 2	S. Abut.
R_{DC1}	(k)	59.31	179.05	144.16	46.20
R_{DC2}	(k)	9.95	29.56	24.95	8.12
R_{DW}	(k)	19.43	57.74	48.72	15.86
R_{L+IM}	(k)	102.36	201.21	186.54	96.92
R_{Total}	(k)	191.1	467.6	404.4	167.1

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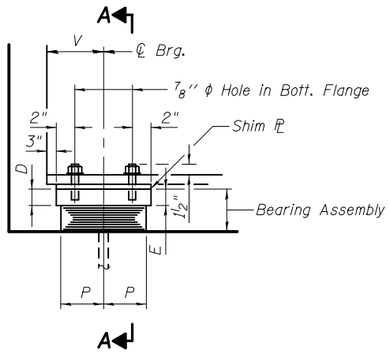
USER NAME =	DESIGNED - KJP	REVISED
	CHECKED - YSS	REVISED
PLOT SCALE =	DRAWN - AEC	REVISED
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

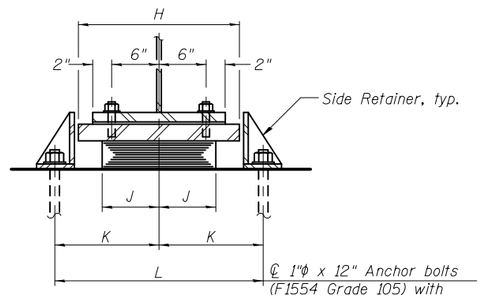
DESIGN DATA TABLE AND NOTES
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 48 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	997
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



ELEVATION AT ABUT.

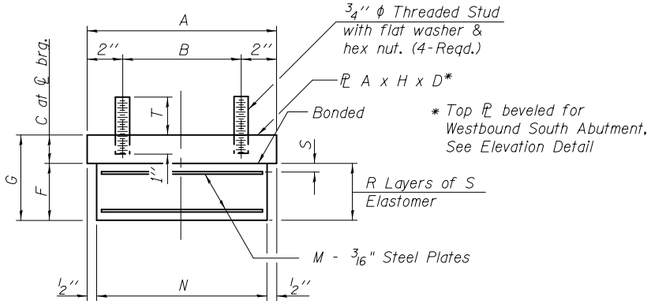
(Looking East at EB North Abutment)
(Looking West at WB South Abutment)



SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

EB North Abutment and WB South Abutment



BEARING ASSEMBLY

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

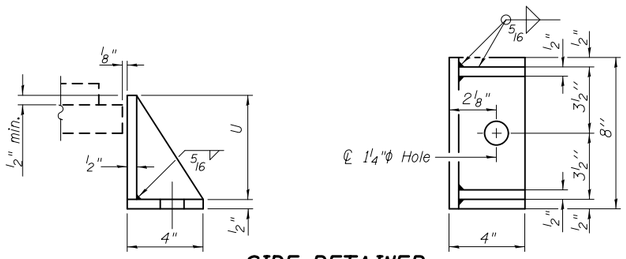
Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

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

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

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

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.



SIDE RETAINER

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

TYPE I ELASTOMERIC BEARING ASSEMBLY TABLE

Location	Bearing Assembly																		
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	V
Eastbound North Abutment	1'-2"	10"	1 7/8"	1 7/8"	1 7/8"	4 11/16"	6 9/16"	1'-10"	10"	1'-1 1/4"	2'-2 1/2"	5	1'-1"	6 1/2"	6	5/8"	3 1/4"	6 9/16"	10"
Westbound South Abutment	1'-1"	9"	2"	2 1/4"	1 3/4"	3 9/16"	5 9/16"	1'-8"	9"	1'-1/4"	2'-1/2"	4	1'-0"	6"	5	9/16"	2 3/4"	5 13/16"	9 1/2"

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	16
Anchor Bolts, 1"	Each	32

I-2E-1

1-27-12

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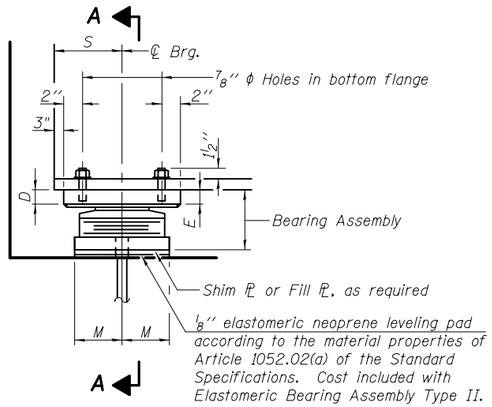
		CHECKED - YSS	REVISED
	PLOT SCALE =	DRAWN - PRC	REVISED
	PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

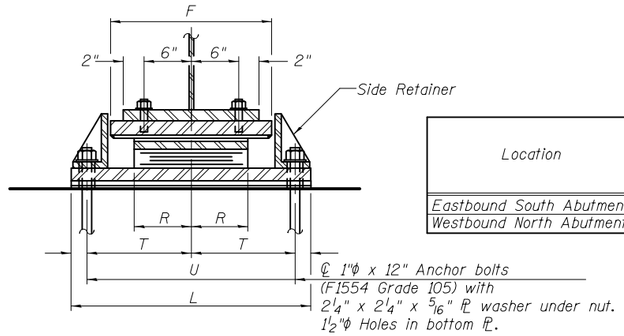
TYPE I BEARING DETAILS
I-74 OVER 19TH ST. - STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 49 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	998
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



ELEVATION AT ABUT.

(Looking West at EB South Abutment)
(Looking East at WB North Abutment)



SECTION A-A

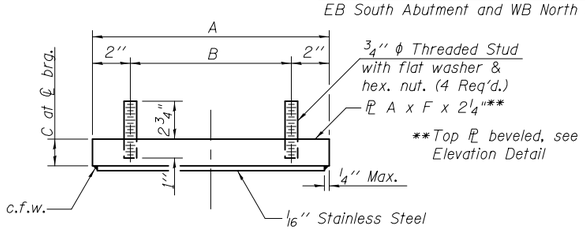
TYPE II ELASTOMERIC BEARING ASSEMBLY TABLE

Location	Top Bearing Assembly						Bottom Bearing Assembly								
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	R
Eastbound South Abutment	1'-3"	11"	1 15/16"	2 1/4"	1 5/8"	1'-8"	5 3/16"	5	6	9/16"	2'-4 1/4"	6 1/2"	1'-1"	1'-0"	9"
Westbound North Abutment	1'-4"	1'-0"	2"	1 3/4"	2 1/4"	1'-10"	4 3/4"	4	5	5/8"	2'-6 1/4"	7"	1'-2"	1'-1"	10"

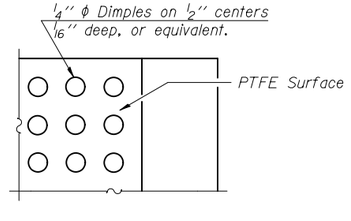
Location	Miscellaneous			
	S	T	U	V
Eastbound South Abutment	10 1/2"	1'-1 1/4"	2'-1/2"	7 1/2"
Westbound North Abutment	11"	1'-1 1/4"	2'-2 1/2"	7 1/8"

TYPE II ELASTOMERIC EXP. BRG.

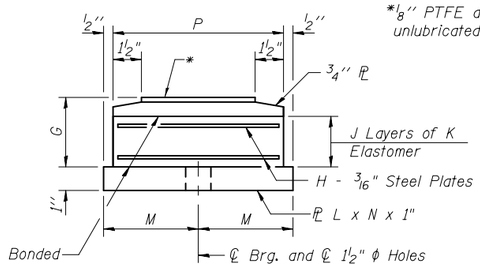
EB South Abutment and WB North Abutment



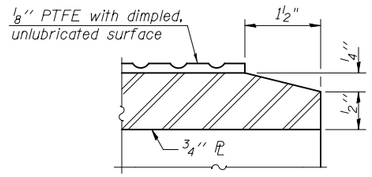
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

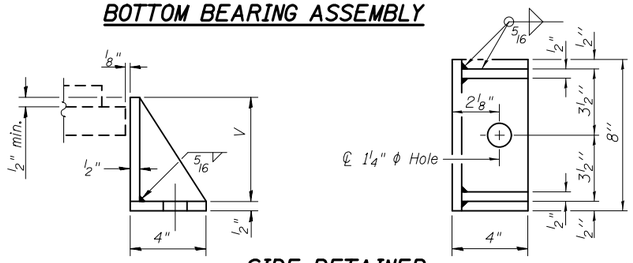


*1/8" PTFE dimpled, unlubricated



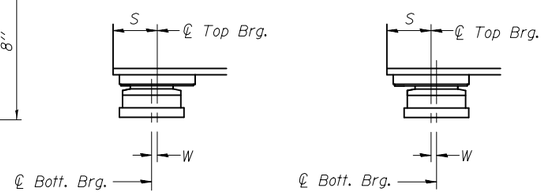
SECTION THRU PTFE

BOTTOM BEARING ASSEMBLY



SIDE RETAINER

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



BELOW 50°F.
(Move bott. brg. away from fixed brg.)

ABOVE 50°F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

W=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

FILL PLATE TABLE

(WB North Abutment only)

Girder No.	Total Thickness
1	0
2	1/4"
3	1/2"
4	3/4"
5	0
6	1/4"
7	1/2"
8	3/4"

Notes:

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

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

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

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

The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	16
Anchor Bolts, 1"	Each	32

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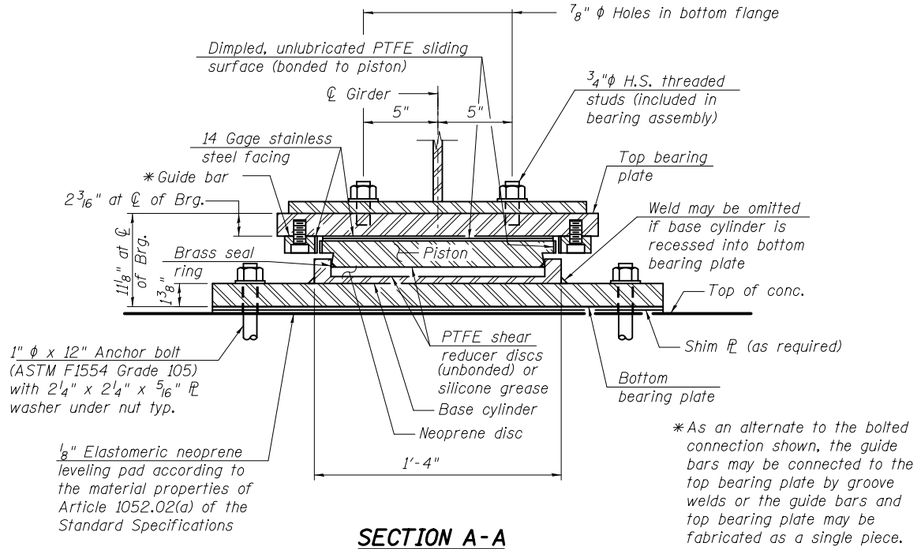
USER NAME =	DESIGNED - KJP	REVISED	
	CHECKED - YSS	REVISED	
PLOT SCALE =	DRAWN - PRC	REVISED	
PLOT DATE = 03/23/2017	CHECKED - JMH	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

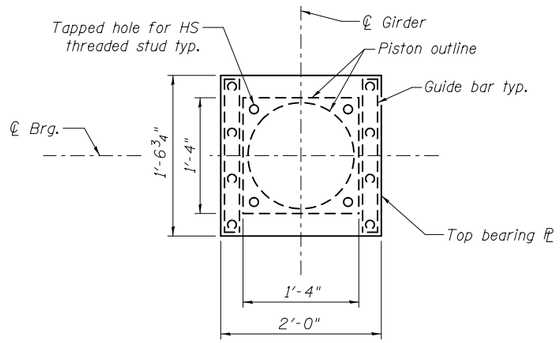
TYPE II BEARING DETAILS
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 50 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	999
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



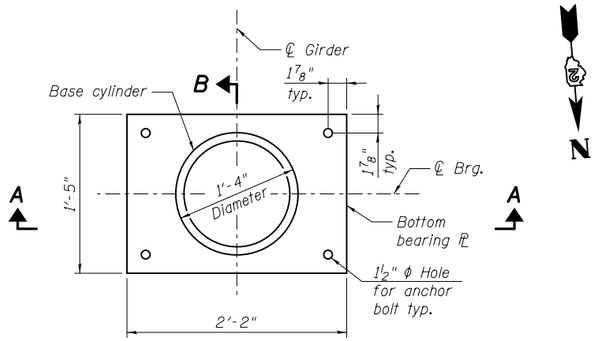
SECTION A-A

*As an alternate to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.



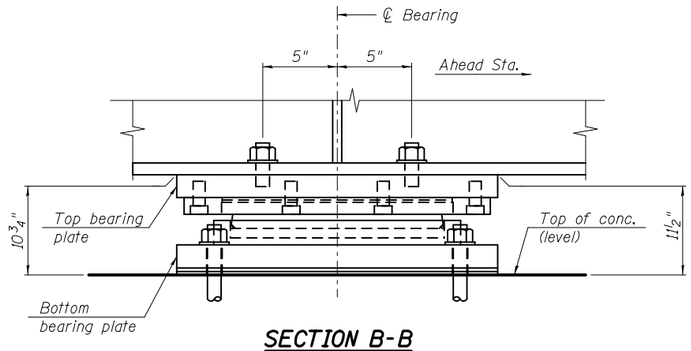
TOP BEARING ℙ AND PISTON PLAN

Pier 2



BOTTOM BEARING ℙ AND BASE CYLINDER PLAN

Pier 2



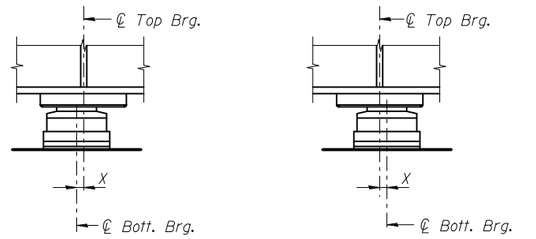
SECTION B-B

(Looking East)

BEARING DESIGN DATA

Location	Vert. Design Load** (kips)	Hu, Horiz. Design Load** (kips)	θu, Required Rotation Range*** (radians)	Max. Theor. Thermal Mvmt**** from 50 °F
Pier 2	410	82	0.01	7/8"

** Design Loads are the governing service loads with no dynamic load allowance.
*** Rotation allowances for fabrication tolerances (0.005 radians), installation uncertainties (0.005 radians) are excluded.
**** Total required movement is based on one way expansion (or contraction) of the superstructure along the centerline of girder when bearings are set at 50°F. Bearing movement tolerances are excluded.



BELOW 50°F
(Move bottom brg. away from fixed brg.)

ABOVE 50°F
(Move bottom brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT HLMR EXP. BRG.

(Looking West for EB bearing)
(Looking East for WB bearing)

X=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

Notes:
All steel for bearings shall conform to the requirements of AASHTO M270 Grade 50, unless otherwise noted.
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554. Anchor bolts may be either cast in place or installed in holes drilled after the supported member is in place. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
Total bearing height is estimated based on manufacturer data. Actual bearing height may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations, if required, prior to placing pier concrete. Total bearing height is taken at the ℄ of bearing for bevelled top plates.
Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates.

BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion, 450k	Each	16
Anchor Bolts, 1"	Each	64

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HLMR GUIDED EXPANSION BEARING DETAILS
I-74 OVER 19TH ST. – STRUCTURE NO. 081-0179 WB & 081-0180 EB
SHEET NO. 51 OF 86 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	81-1HBR	ROCK ISLAND	2042	1000
		CONTRACT NO. 64E26		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		