GENERAL NOTES

Fasteners shall be ASTM F3125 Grade A325, mechanically galvanized bolts. Bolts $\frac{7}{8}$ in. ϕ, holes $\frac{15}{16}$ in. ϕ, unless otherwise noted.

Calculated weight of Structural Steel = 1,718,000 lbs. (Grade 50)

All structural steel shall be AASHTO M270 Grade 50.

Steel dead load fit shall be used to detail the cross frame connections.

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

Reinforcement bars designated (E) shall be epoxy coated.

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

Concrete Sealer shall be applied to the designated areas of the abutments.

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

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 surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4.

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

Slipforming of the median parapet (adjacent to the centerline of I-80) is not allowed.

Existing protective shielding was installed under Contract 60M64. If the Contractor elects to use the existing protective shielding, the Contractor shall inspect its condition prior to bidding and make necessary adjustments or modifications as necessary for re-use. In addition, the Contractor shall submit, to the Engineer, calculations and working drawings prepared and sealed by an Illinois Licensed Structural Engineer incorporating the existing protective shielding into this work. This work, along with modifications and adjustments shall be included in the cost of "Protective Shield."

The removal and disposal of the existing protective shielding will be included in the lump sum cost of Removal of Existing Structures.

This project requires a US Army Corps of Engineers (USACE) 404 permit. See General Note 22 on roadway plan sheet no. 3. Instream work plan will be required depicting any work within the Waters of the US (WOUS) noted on the plans. The Contractor shall develop and submit the instream work plan as described in General Note 4 on sheet no. 4. Instream work plan may be required for the removal of existing Pier 2, 3, or 4, and for the construction of proposed Pier 2.

Bridge deck grooving shall be applied to the future WB lane.

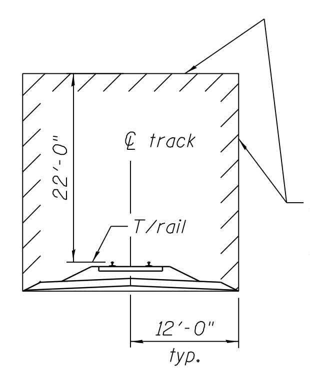
The existing bridge railing (Standard 2399) on SN 099-0067 (WB I-80 over Rowell Avenue) shall be salvaged, delivered and unloaded at the IDOT maintenance yard. The Engineer shall contact John Bilski at 847-956-1444 at least 48 hours in advance to coordinate access and unloading of salvaged material at the yard. The cost of this work will be included in the lump sum cost of Removal of Existing Structures. The yard is located at:

District Bridge Office
1101 Biesterfield Road
Elk Grove Village, IL 60007

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

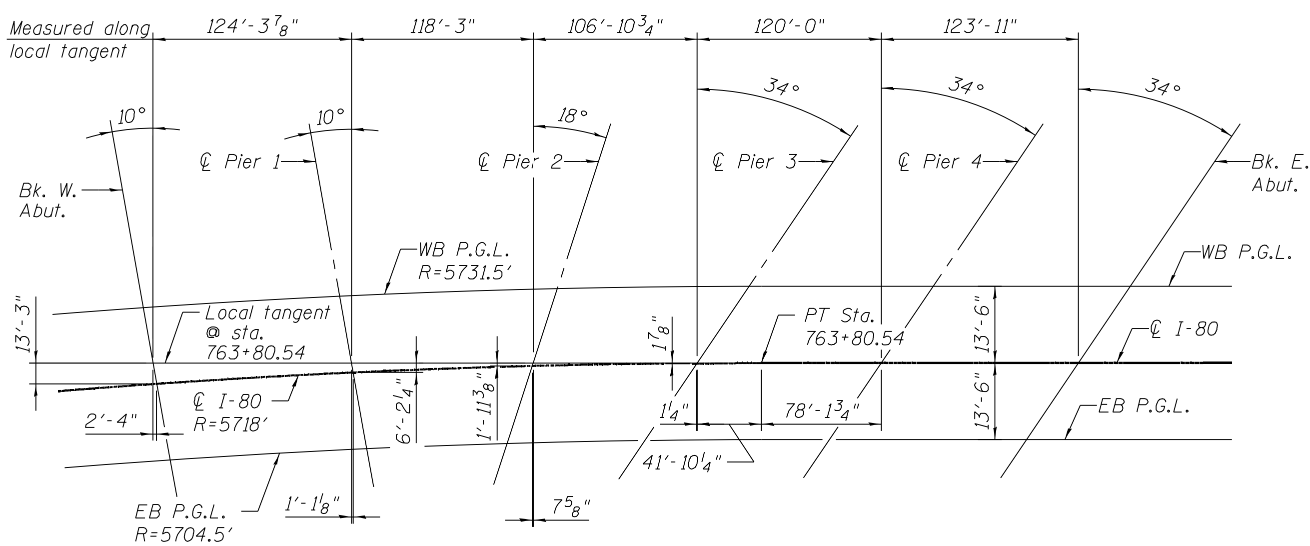
ITEM	UNIT	SUPER	SUB	TOTAL
Removal Of Existing Structures	Each	-	-	1
Protective Shield	Sq Yd	1119	-	1119
Structure Excavation	Cu Yd	-	1364.3	1364.3
Cofferdam Excavation	Cu Yd	-	164	164
Concrete Structures	Cu Yd	-	915.2	915.2
Concrete Superstructure	Cu Yd	1258	-	1258
Protective Coat	Sq Yd	5184	-	5184
Concrete Superstructure (Approach Slab)	Cu Yd	178	-	178
Furnishing And Erecting Structural Steel	L Sum	0.65	-	0.65
Stud Shear Connectors	Each	23376	-	23376
Reinforcement Bars	Pound	-	53530	53530
Reinforcement Bars, Epoxy Coated	Pound	380350	256110	636460
Bar Splicers	Each	2147	456	2603
Slope Wall 4 Inch	Sq Yd	-	2319	2319
Furnishing Steel Piles Hp12X53	Foot	-	2059	2059
Driving Piles	Foot	-	2059	2059
Test Pile Steel Hp12X53	Each	-	2	2
Pile Shoes	Each	-	44	44
Name Plates	Each	1	-	1
Permanent Casing	Foot	-	68	68
Drilled Shaft In Soil	Cu Yd	-	54	54
Drilled Shaft In Rock	Cu Yd	-	92.7	92.7
Preformed Joint Strip Seal	Foot	76	-	76
Elastomeric Bearing Assembly, Type Ii	Each	10	-	10
Elastomeric Bearing Assembly, Type Iii	Each	10	-	10
Anchor Bolts, 1"	Each	120	-	120
Anchor Bolts, 1 1/2"	Each	40	-	40
Temporary Soil Retention System	Sq Ft	-	2339	2339
Mechanically Stabilized Earth Retaining Wall	Sq Ft	-	1216	1216
Temporary Mechanically Stabilized Earth Retaining Wall	Sq Ft	-	671	671
Drainage System For Structures	L Sum	1	-	1
Granular Backfill For Structures	Cu Yd	-	265	265
Concrete Sealer	Sq Ft	-	1718	1718
Geocomposite Wall Drain	Sq Yd	-	88	88
Pipe Underdrains For Structures 4"	Foot	-	144	144
Crosshole Sonic Logging Access Ducts	Foot	-	465	465
Crosshole Sonic Logging Testing	Each	-	8	8
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	-	3	3
Bridge Deck Grooving (Longitudinal)	Sq Yd	2708	-	2708
High Load Multi-Rotational Bearings, Guided Expansion, 400K	Each	20	-	20
Drainage Scuppers, DS-33	Each	10	-	10
Diamond Grinding (Bridge Section)	Sq Yd	4208	-	4208
Modular Expansion Joint 6"	Foot	61	-	61



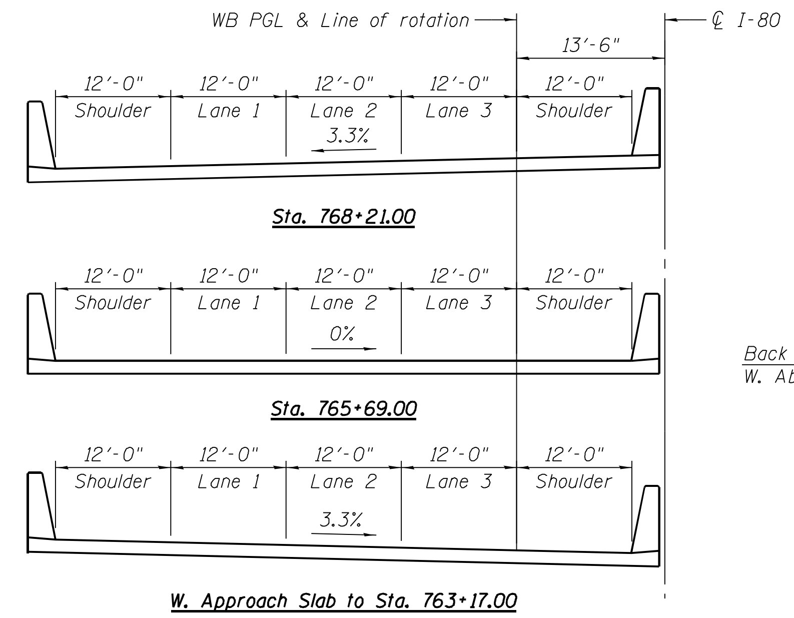
MINIMUM CONSTRUCTION CLEARANCE ENVELOPE
(Dimensions @ Rt. L to ℄ Track)

STATION 760+85.0
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RTE. 80 SEC. 2013-009B
LOADING HL-93
STRUCTURE NO. 099-0905

NAME PLATE
See Std. 515001

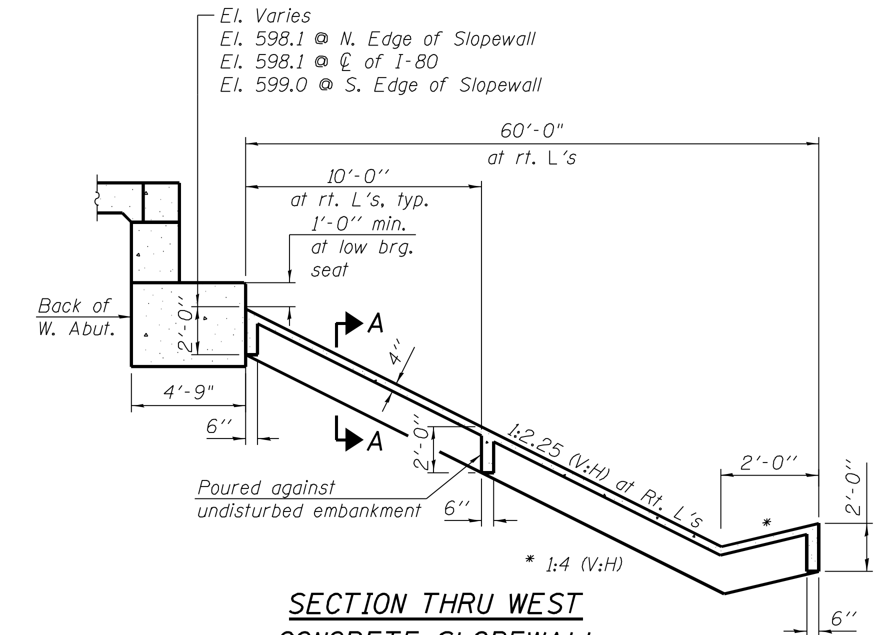


OFFSET SKETCH



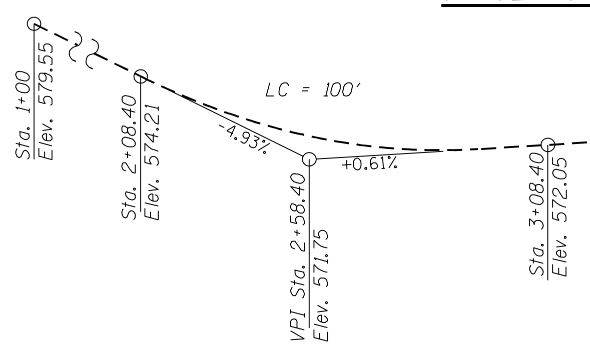
WB DECK CROSS SLOPE DETAIL

Superelevation transition detail.
See roadway plans for additional info.



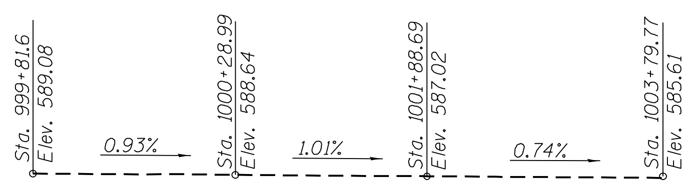
SECTION THRU WEST CONCRETE SLOPEWALL

(Looking North)



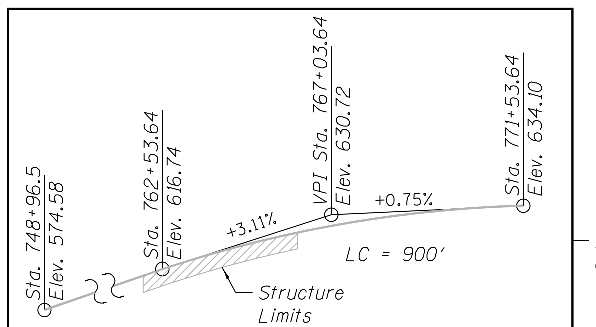
PROFILE GRADE EXIST. ROWELL AVE.

(Along ℄ Rdwy)



PROFILE GRADE EXIST. WCL RR

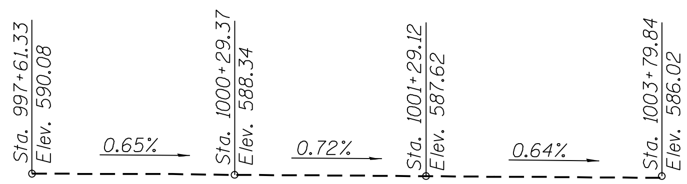
(Top of rail @ Track 2)



PROFILE GRADE I-80

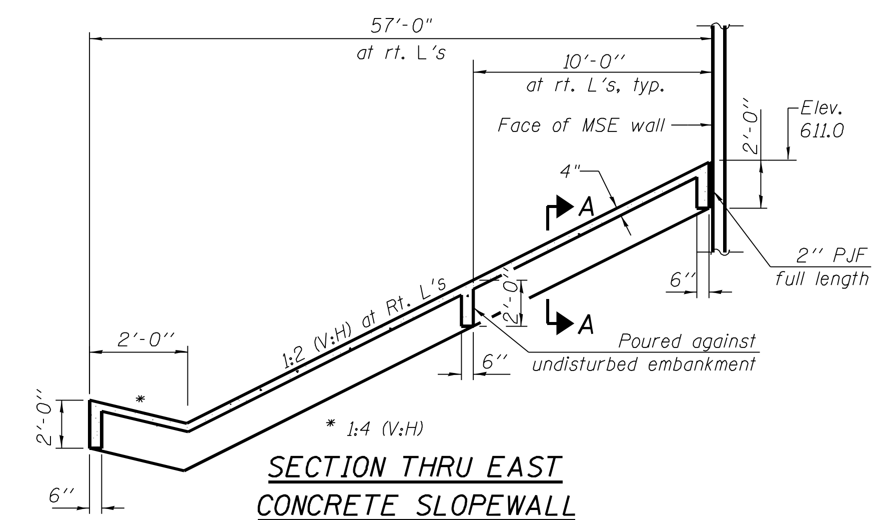
(Along EB P.G.L.)

For Information Only
(Not in contract)



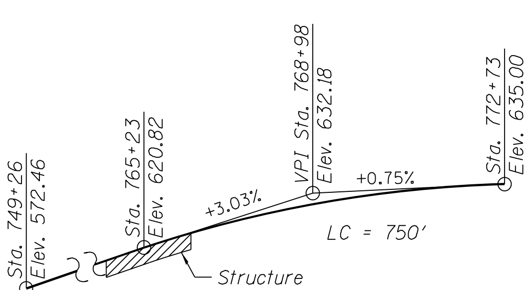
PROFILE GRADE EXIST. WCL RR

(Top of rail @ Track 1)



SECTION THRU EAST CONCRETE SLOPEWALL

(Looking North)



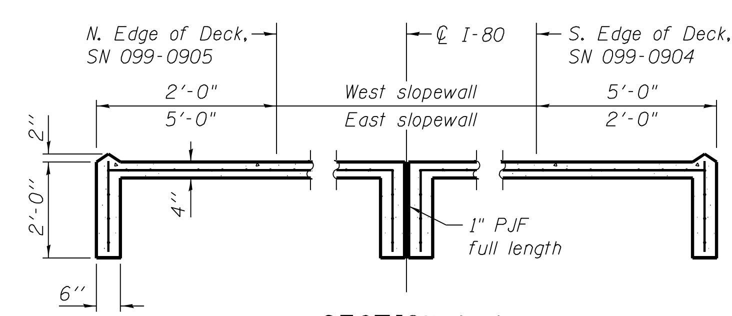
PROFILE GRADE PROP. I-80

(Along WB P.G.L.)

(The profile grade shows the final elevations after grinding)

CURVE DATA (℄ I-80)

PI STA. = 758+81.58
Δ = 10° 01' 30" (RT)
D = 1° 00' 07"
R = 5,718.00'
T = 501.52'
L = 1,000.48'
E = 21.95'
e = 3.3%
T.R. = 40'
S.E. RUN = 128'
P.C. STA = 753+80.06
P.T. STA = 763+80.54



SECTION A-A

NOTES

1. Slopewall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft. Cost of welded wire fabric included with Slope Wall.

2. For additional slopewall details, see Sheet SR-04.

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	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - HBJ	REVISED -
PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA II
STRUCTURE NO. 099-0905

SHEET SR-03 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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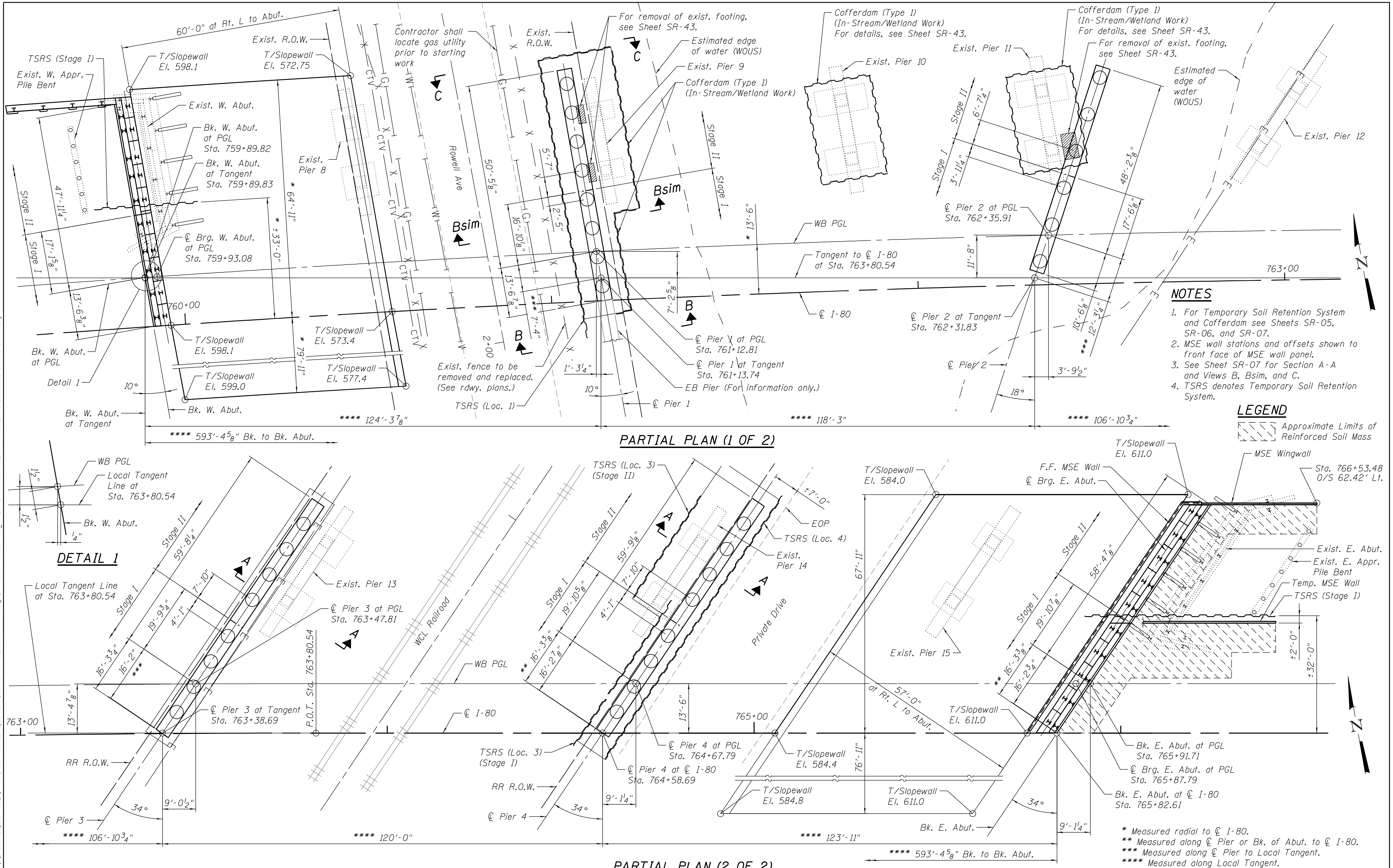
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		



NOTES

1. For Temporary Soil Retention System and Cofferdam see Sheets SR-05, SR-06, and SR-07.
2. MSE wall stations and offsets shown to front face of MSE wall panel.
3. See Sheet SR-07 for Section A-A and Views B, Bsim, and C.
4. TSRS denotes Temporary Soil Retention System.

LEGEND

Approximate Limits of Reinforced Soil Mass

* Measured radial to ℄ I-80.
** Measured along ℄ Pier or Bk. of Abut. to ℄ I-80.
*** Measured along ℄ Pier to Local Tangent.
**** Measured along Local Tangent.

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PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOOTING LAYOUT
STRUCTURE NO. 099-0905
SHEET SR-04 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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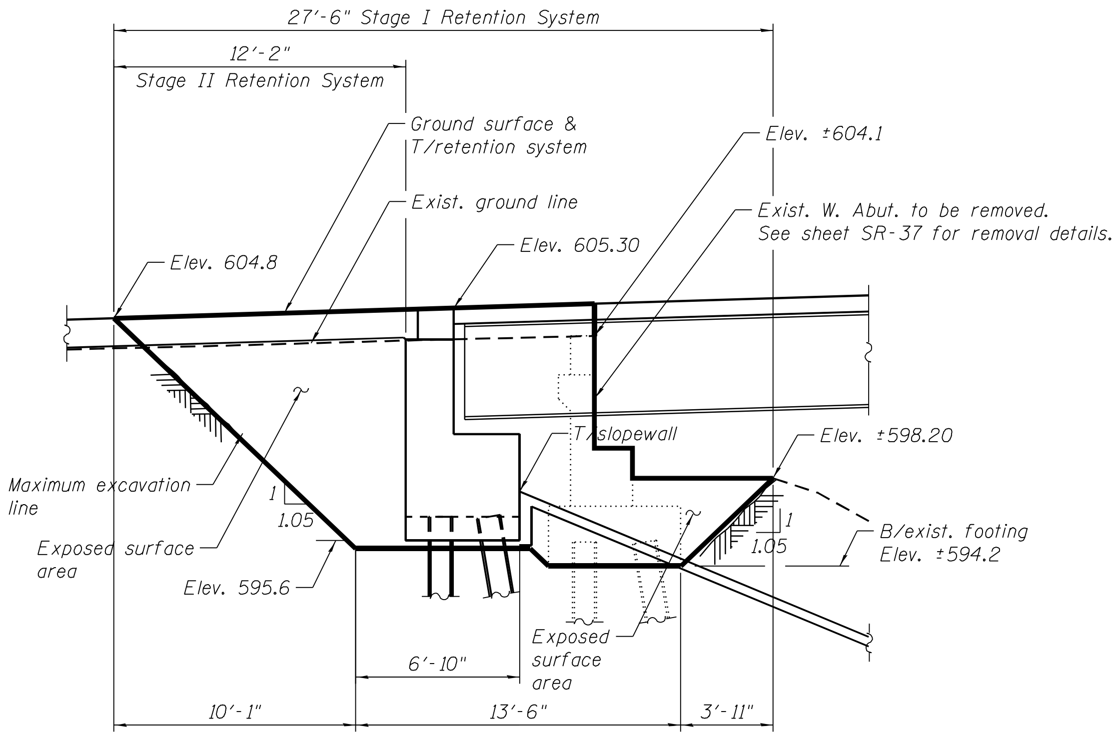
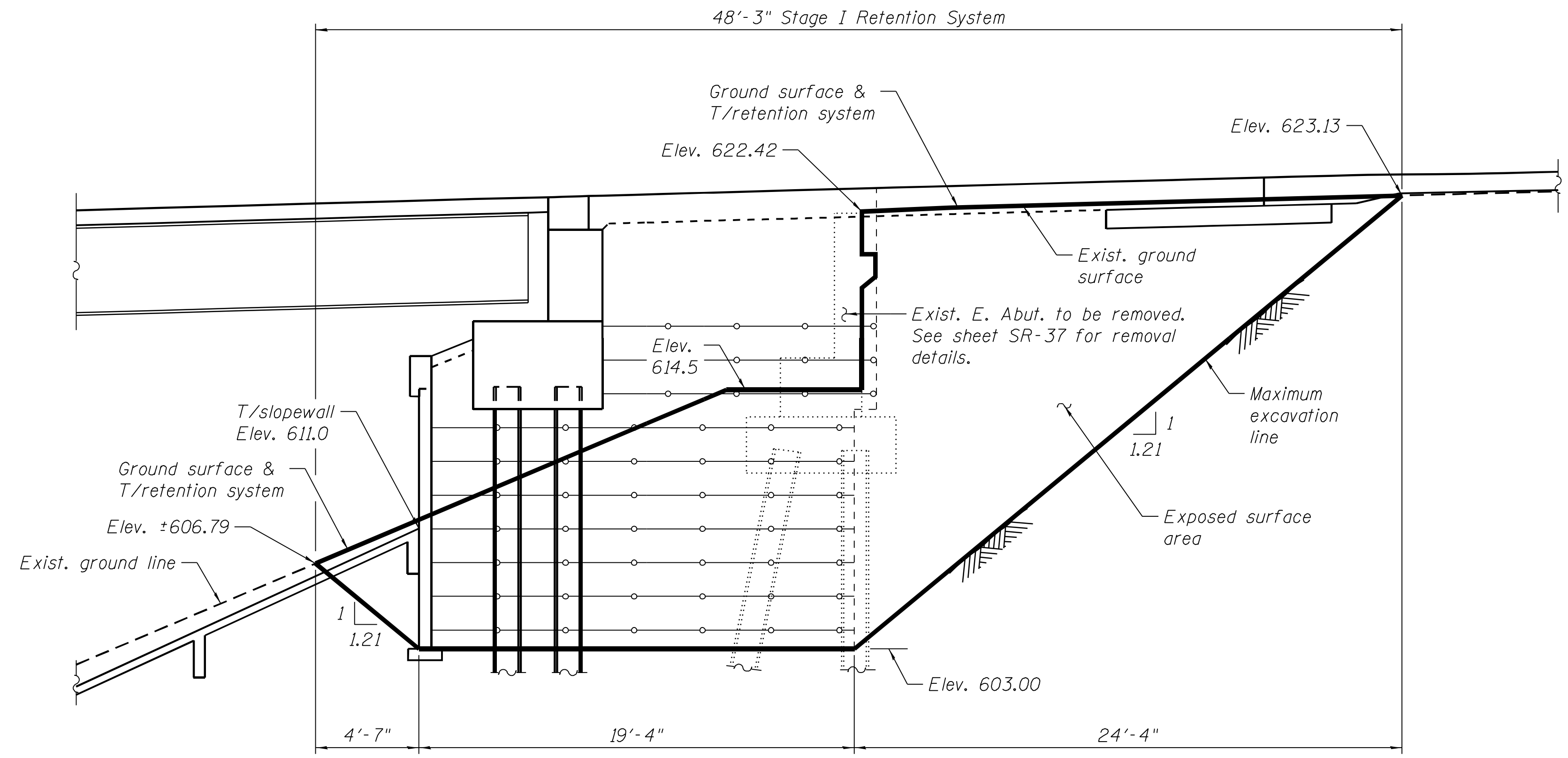


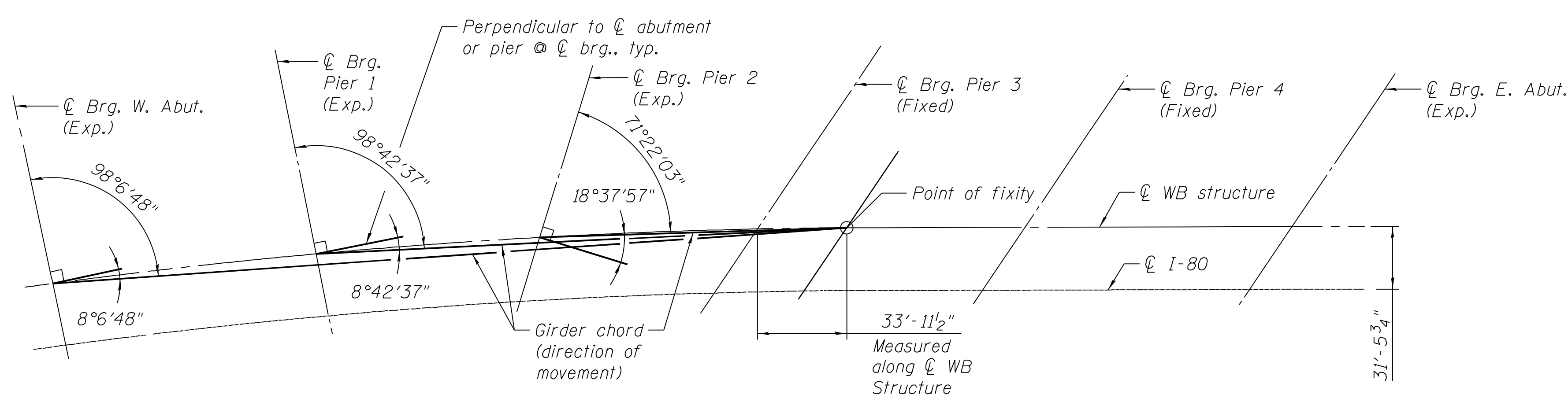
WEST ABUTMENT TEMP. SOIL RETENTION SYSTEM

(Along Stage Line)



EAST ABUTMENT TEMP. SOIL RETENTION SYSTEM

(Along Stage Line)



BEARING LAYOUT

Note: See Sheets SR-35 & SR-36 for angle between centerline bearing and tangent to beam centerline.

N

NOTES

1. See Sheet SR-07 for Bill of Material.

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PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS I
STRUCTURE NO. 099-0905

SHEET SR-05 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		ILLINOIS FED. AID PROJECT		

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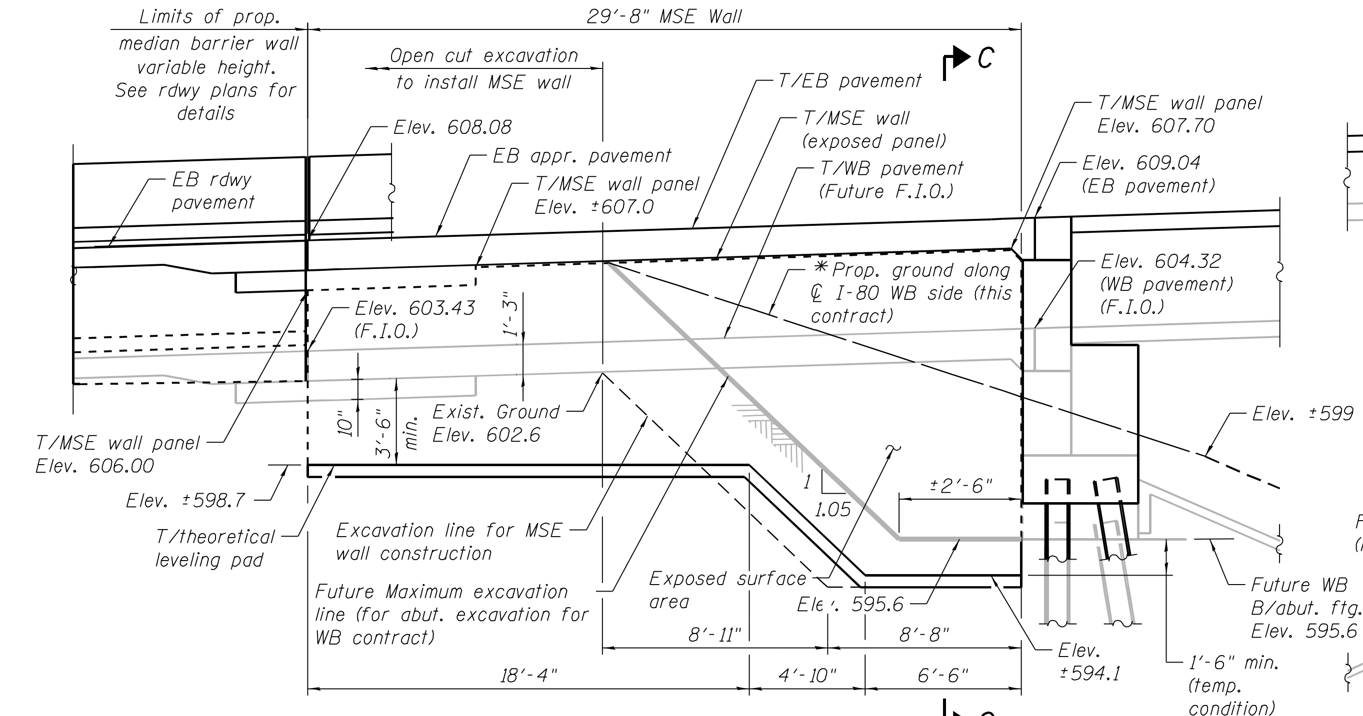
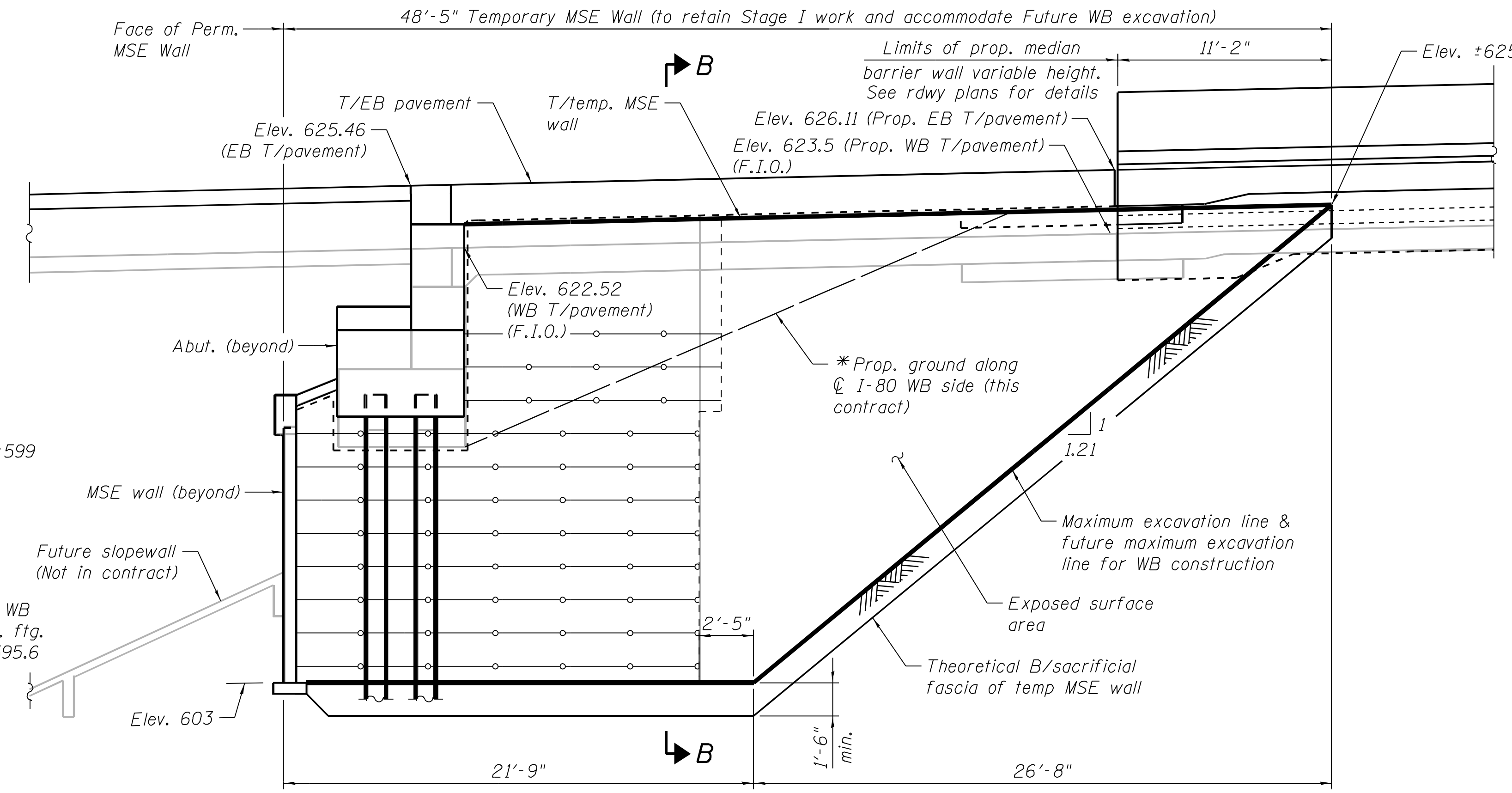


WEST ABUTMENT MSE WALL

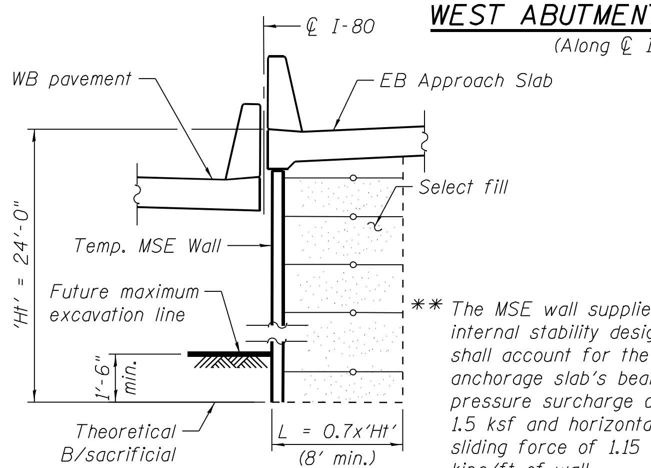
(Along ℄ I-80)



EAST ABUTMENT TEMP. MSE WALL

(Along ℄ I-80)

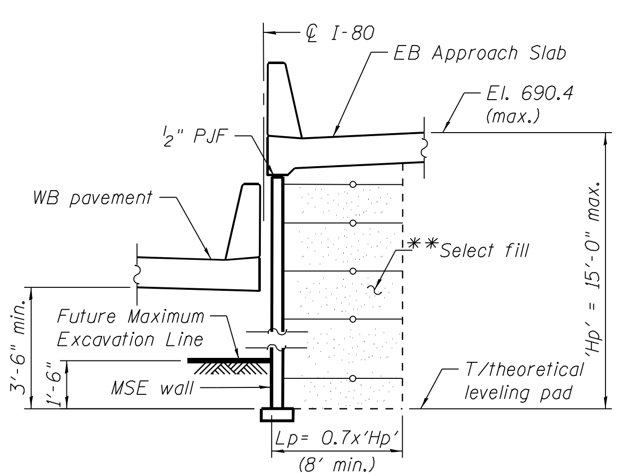
For information only



SECTION B-B

(At E. Abut.)

** The MSE wall supplier's internal stability design shall account for the anchorage slab's bearing pressure surcharge of 1.5 ksf and horizontal sliding force of 1.15 kips/ft of wall.

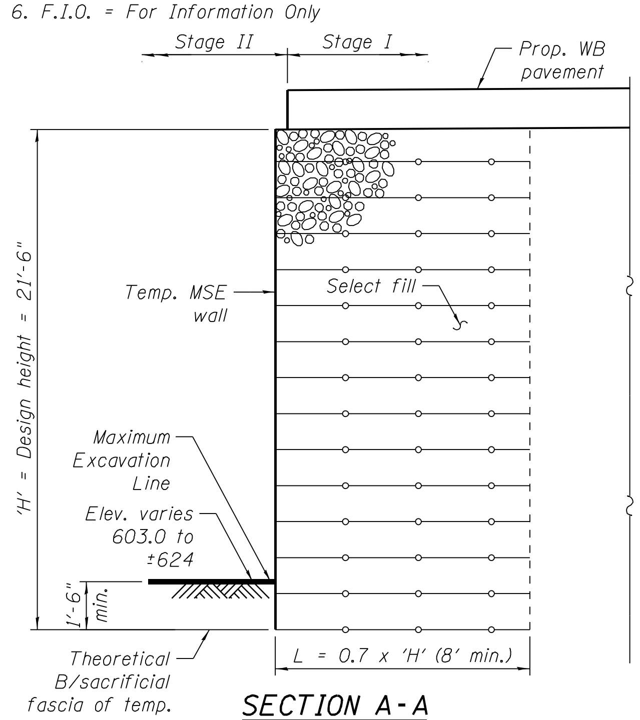


SECTION C-C

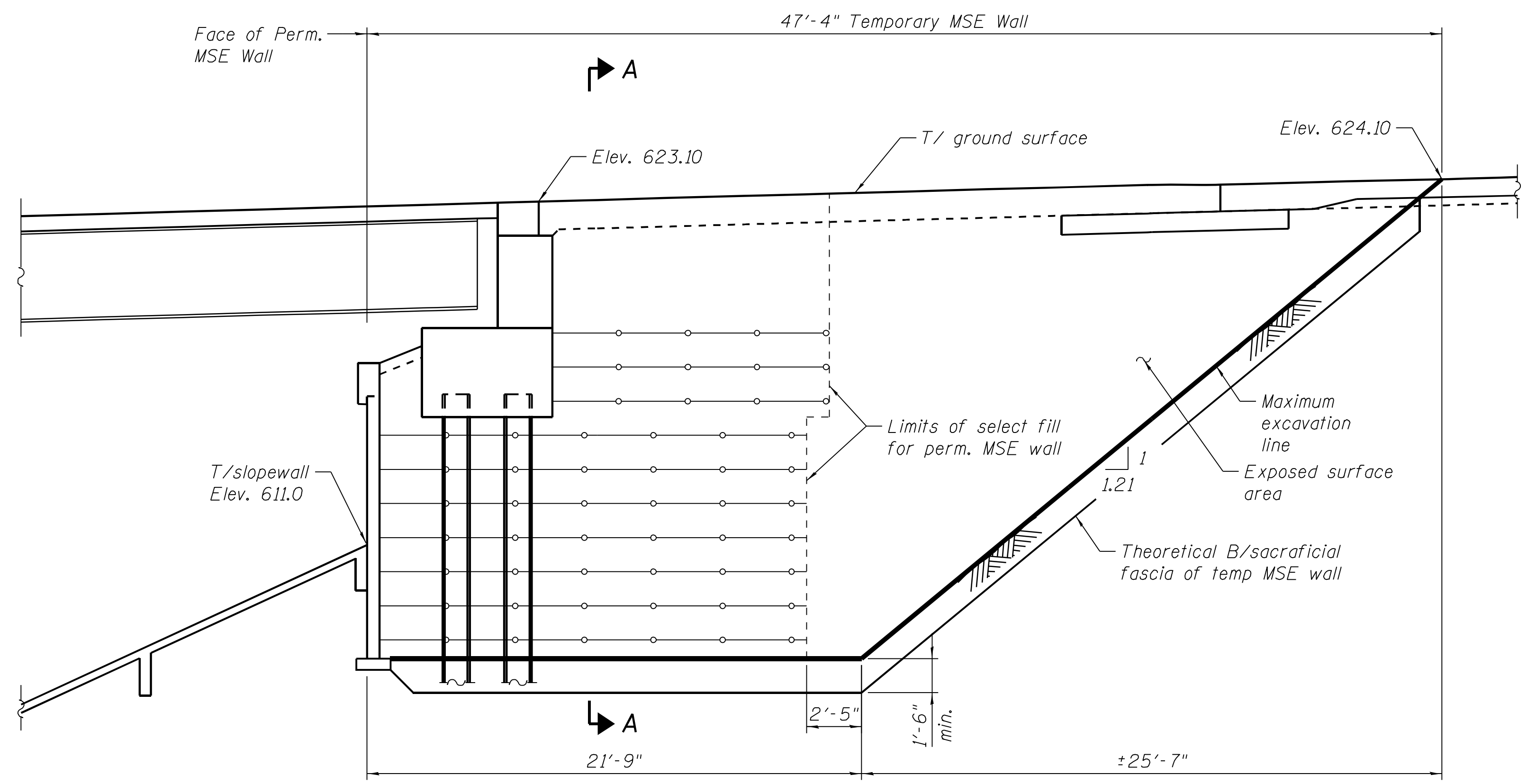
(At W. Abut.)

NOTES

1. See Notes 1 and 2 on Sheet SR-42.
2. See Sheet SR-04 for additional information.
3. For Approach Slab Details, see sheets SR-22 thru SR-24.
4. Contractor shall coordinate installation of Median Barrier Base and MSE wall at W. Abutment.
5. See sheet SR-07 for Bill of Material.
6. F.I.O. = For Information Only



SECTION A-A



EAST ABUTMENT TEMP. MSE WALL

(Along Stage Line)

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		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - HBJ	REVISED -	
	PLOT DATE =	CHECKED - CCE	REVISED -	

MISCELLANEOUS DETAILS II
STRUCTURE NO. 099-0905

SHEET SR-06 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		ILLINOIS FED. AID PROJECT		

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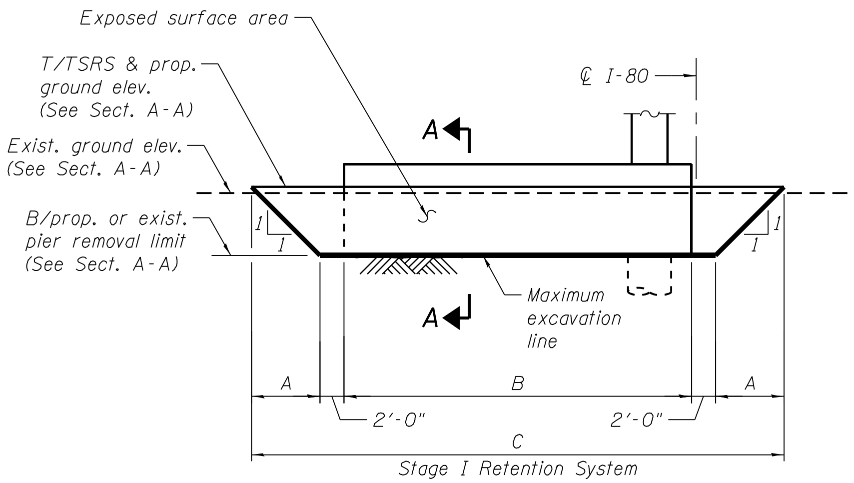


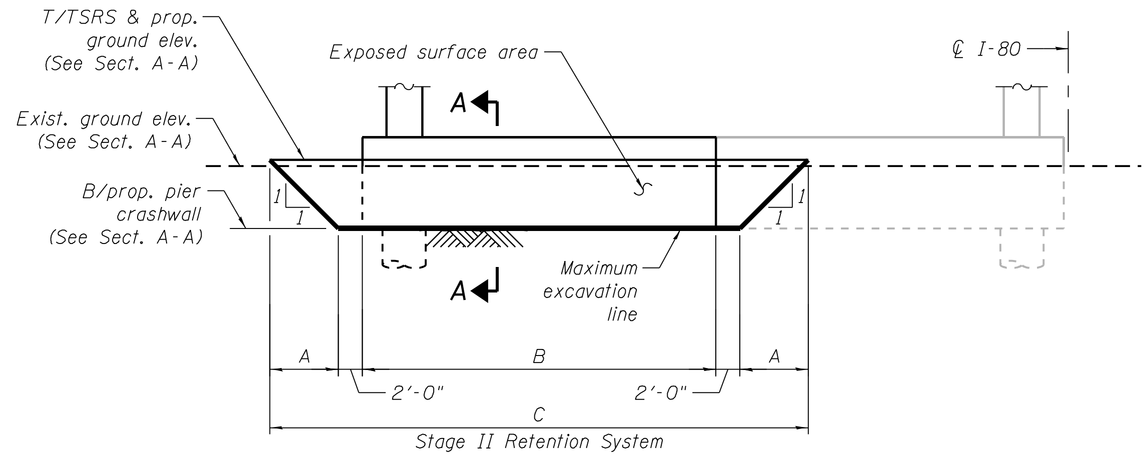
TYPICAL PIER SOIL RETENTION SYSTEM - STAGE I

(Looking East)
(Loc. 4 reflected)

TABLE OF DIMENSIONS

Loc.	A	B	C
1	7'-6"	30'-5"	49'-5"
3	6'-0"	36'-1½"	52'-1½"
4**	5'-0"	76'-0"	90'-0"

** Loc. 4 soil retention system to remain in place for Stage I & Stage II construction.

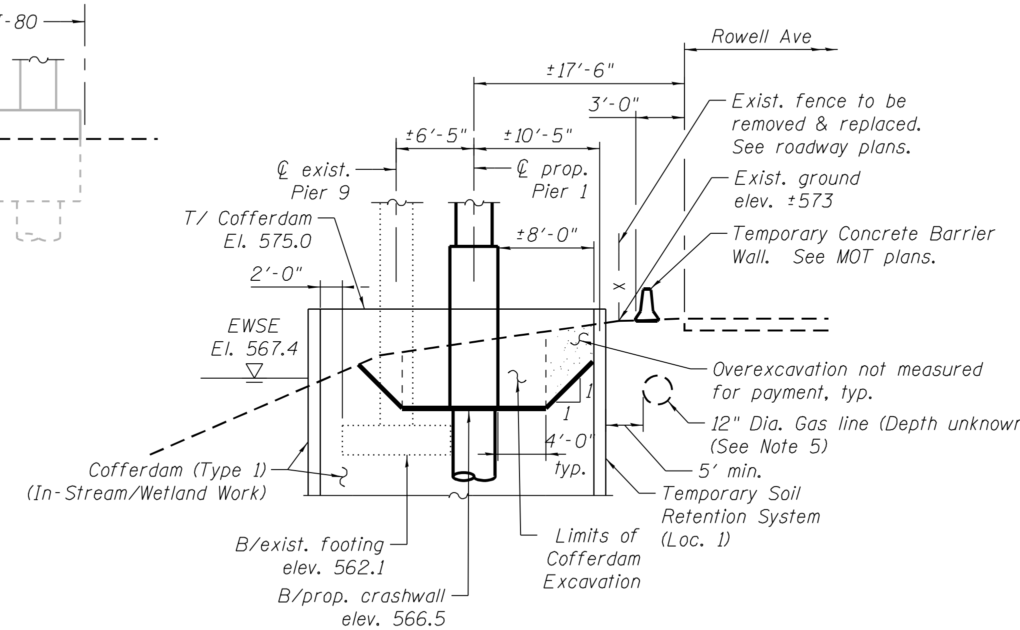


TYPICAL PIER SOIL RETENTION SYSTEM - STAGE II

(Looking East)
(Loc. 4 reflected)

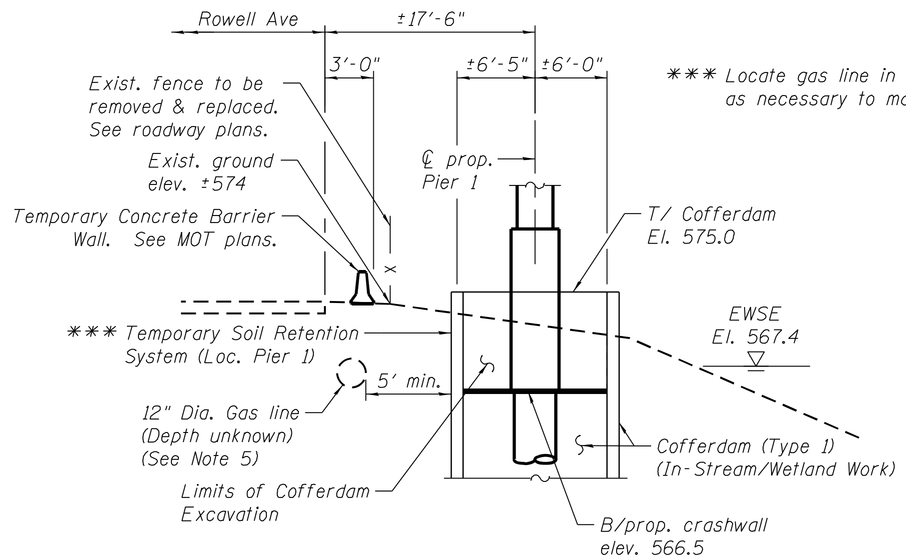
TABLE OF DIMENSIONS

Loc.	A	B	C
1	7'-6"	33'-7"	52'-7"
3	6'-0"	39'-10½"	55'-10½"



VIEW C

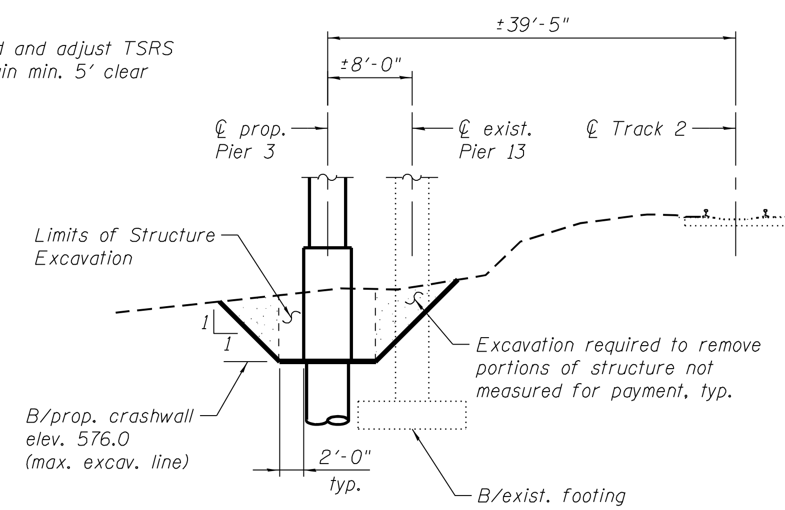
(Looking S. at North End of Pier 1)



*** Locate gas line in field and adjust TSRS as necessary to maintain min. 5' clear

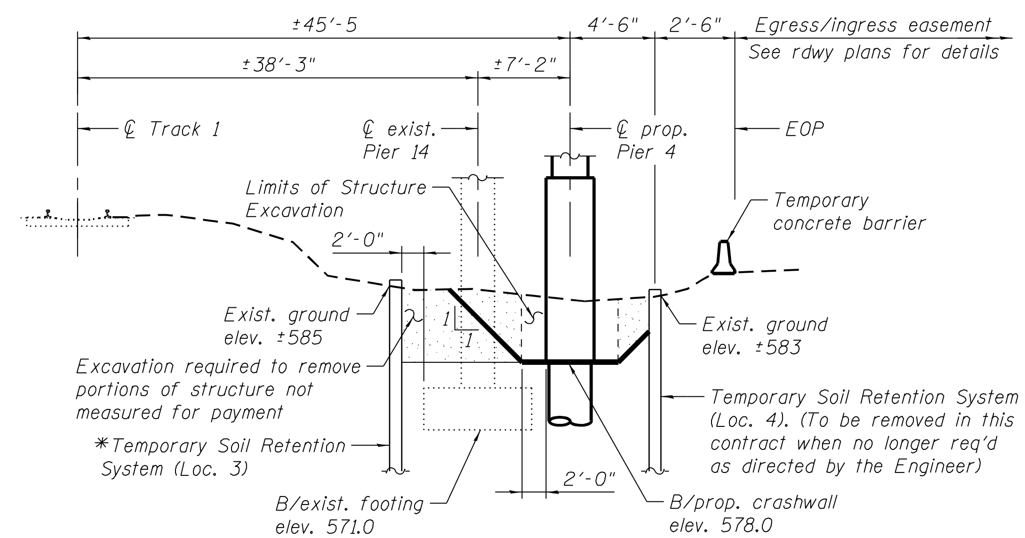
VIEW B & Bsim

(Looking N. at South End of Pier 1)



SECTION A-A

(At Pier 3)
(No TSRS Required)



SECTION A-A

(At Pier 4)

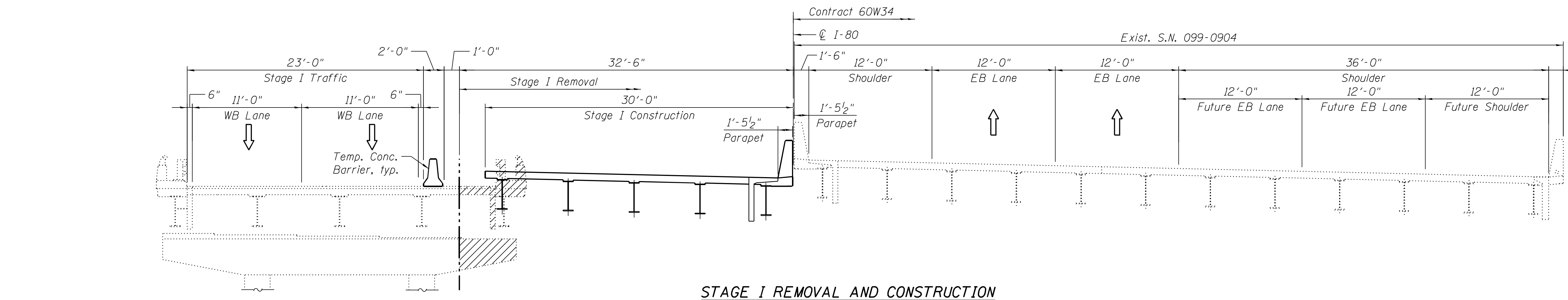
NOTES

1. See Sheet SR-04 for plan view and section references shown on this sheet.
2. See Sheets SR-05 & SR-06 for temporary soil retention system details & MSE wall details at abutments.
3. 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.
4. Existing pier numbering per existing drawings.
5. The Contractor shall coordinate type of Temporary Soil Retention System and installation methods with Nicor Gas prior to starting the work. The TSRS shall maintain a minimum 5-ft clearance of all Nicor facilities during installation operations, and location of TSRS adjusted as directed by the Engineer to provide minimum clearance. During continuous vibratory operations, the observed peak particle velocity shall not exceed 25 mm/s and the maximum hammer energy produced by the vibratory hammer shall not exceed 2950 Nm/s per blow during pile driving or other operations required to install the TSRS. During transient vibratory operations, the observed peak particle velocity shall not exceed 40 mm/s and the maximum hammer energy produced by the vibratory hammer shall not exceed 14850 Nm/s per blow during pile driving or other operations required to install the TSRS. Coordination and ground monitoring work will not be measured for payment but shall be included in the cost of Temporary Soil Retention System.

BILL OF MATERIAL

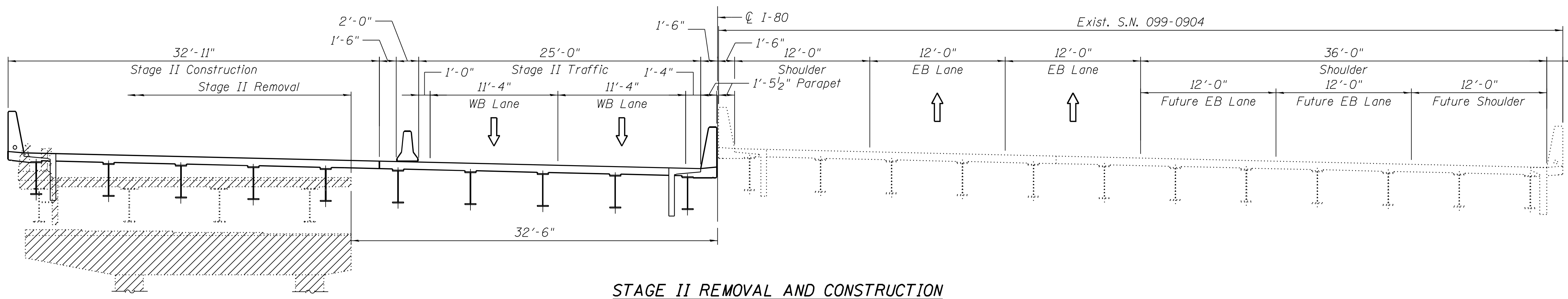
ITEM	UNIT	QUANTITY
Temporary Soil Retention System	Sq. Ft.	2339
Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	671
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	3
Cofferdam Excavation	Cu. Yd.	164

* Temporary soil retention system design computations and working drawings shall be submitted to the WCL Railroad for review and approval. See Special Provisions.



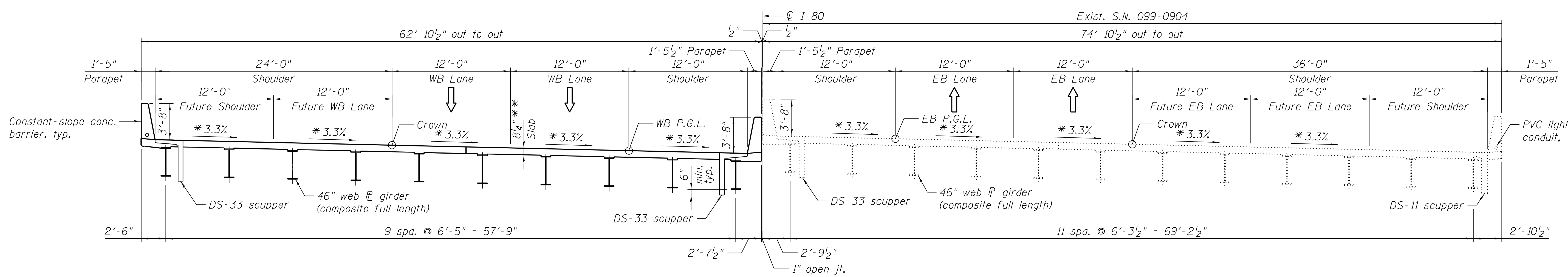
STAGE I REMOVAL AND CONSTRUCTION

(Looking East)



STAGE II REMOVAL AND CONSTRUCTION

(Looking East)



END OF CONTRACT

(Looking East)

* See Sheet SR-03 and roadway plans for superelevation transition details.

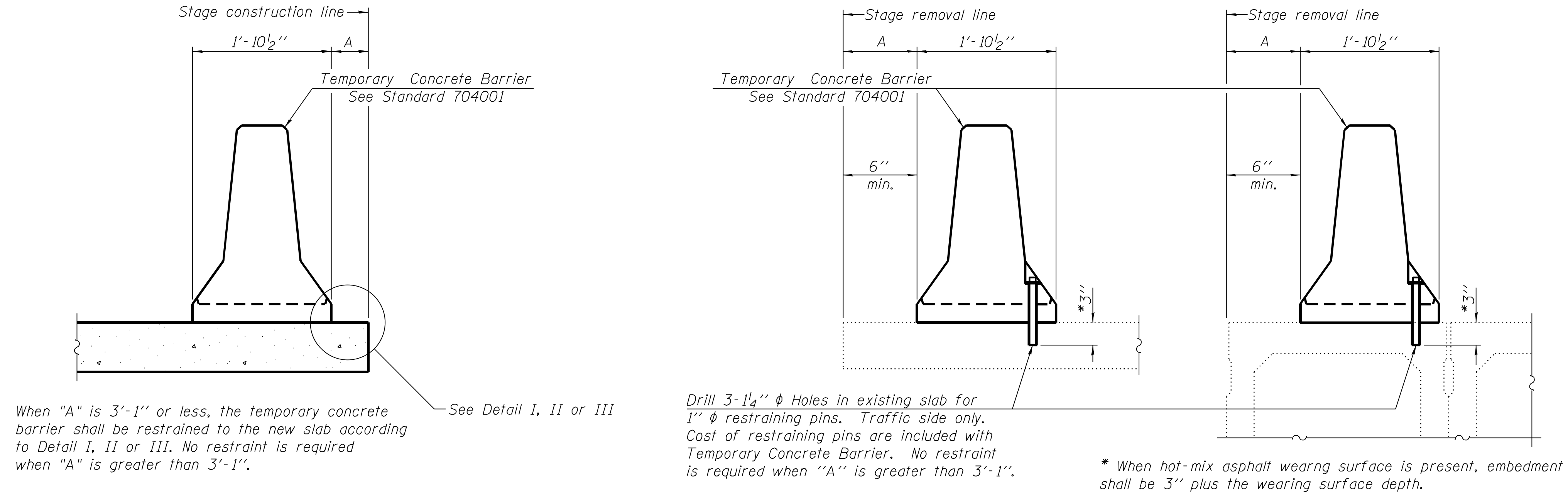
** Prior to grinding

NOTES:

1. Hatched areas indicated Removal of Existing Structures.
2. Dimensions shown are at right ∟'s to ℄ I-80, unless noted otherwise.
3. See MOT plans for additional required traffic stages not shown on this sheet.
4. For details of Temporary Concrete Barrier, see Sheet SR-09.
5. For quantity of Temporary Concrete Barrier, see roadway plans.
6. Locations of the stage construction joints are different for the superstructure and substructure.

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGE CONSTRUCTION DETAILS STRUCTURE NO. 099-0905	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465 / 307
	PLOT SCALE =	DRAWN - HBJ	REVISED -					CONTRACT NO. 60W35	
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-08 OF SR-64 SHEETS		ILLINOIS	FED. AID PROJECT	

3/9/2022 10:44:21 AM

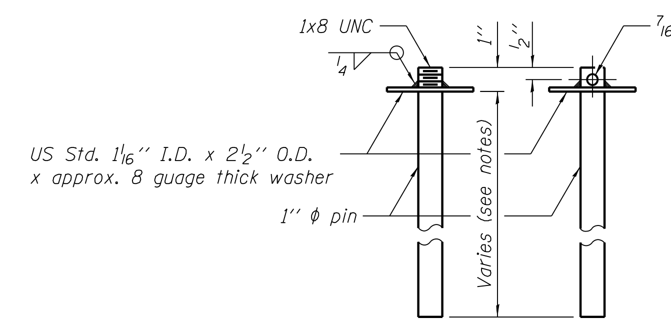


NEW SLAB OR NEW DECK BEAM

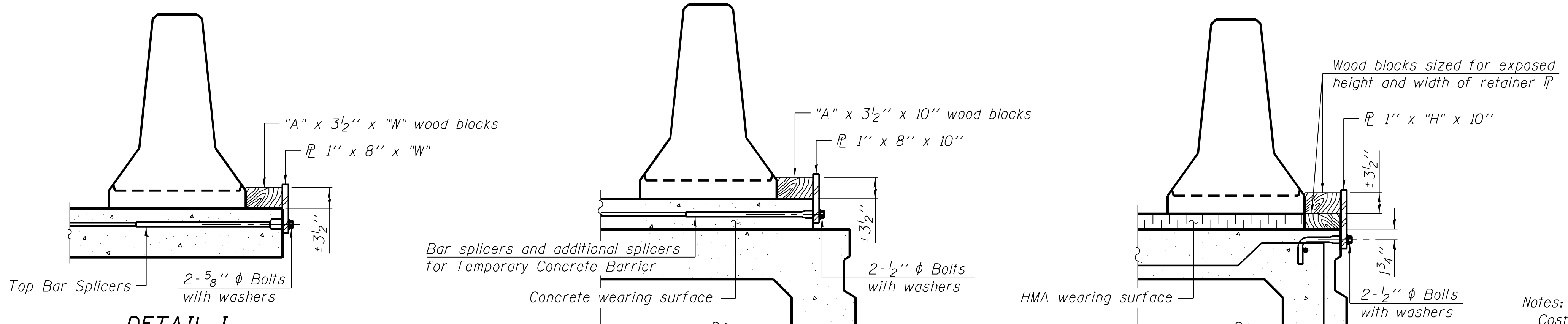
EXISTING SLAB

EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM



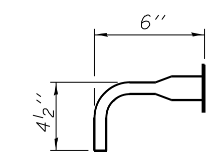
RESTRAINING PIN



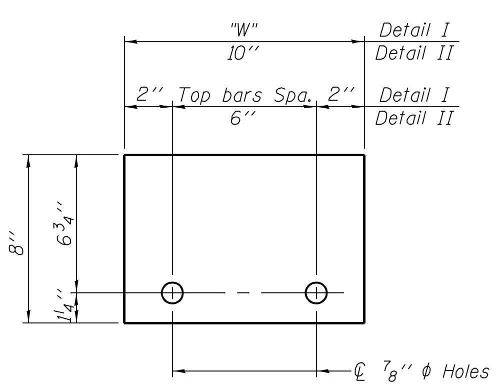
DETAIL I

DETAIL II

DETAIL III

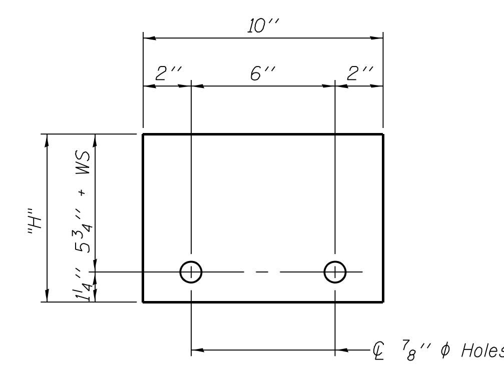


BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER PL 1'' x 8'' x "W"

(Detail I and II)



STEEL RETAINER PL 1'' x "H" x 10''

(Detail III)

Notes:
Cost of retainer assembly is included with Temporary Concrete Barrier.
A retainer assembly shall be located at the approximate CL of each temporary concrete barrier.
The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
When the 'A' dimension is less than 1½'', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.
For deck beam applications the minimum required 'A' distance is 6'' to accommodate the shear key clamping device.

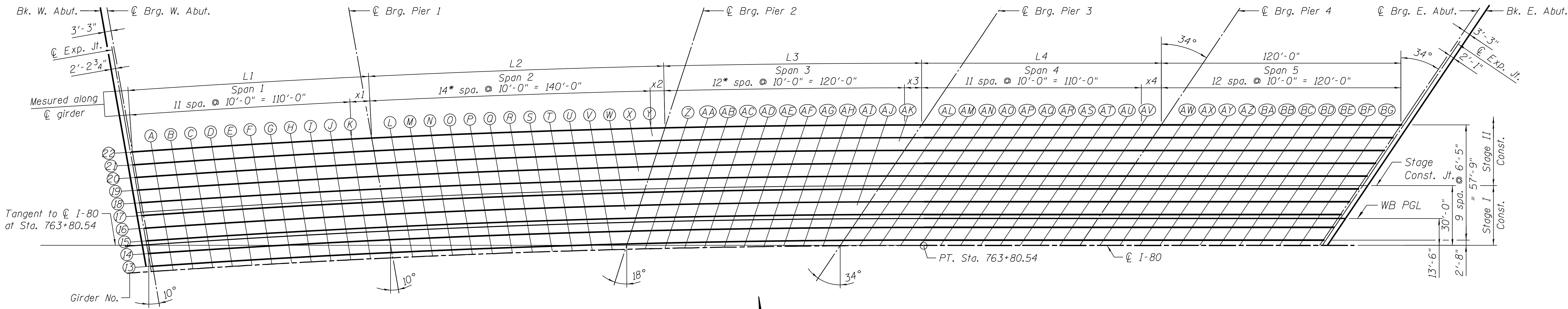
Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0'' centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

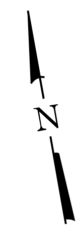
Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6'' apart, shall be placed at 6'-0'' centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27

2-17-2017



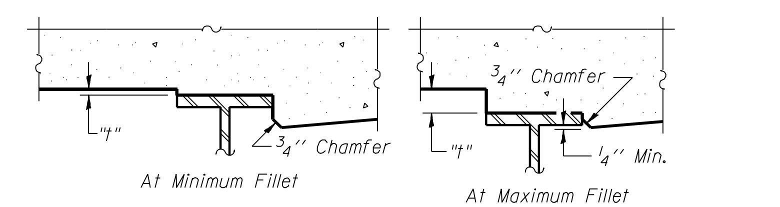
PLAN



* Number of 10'-0" intervals per girder varies as shown.

PLAN DIMENSIONS

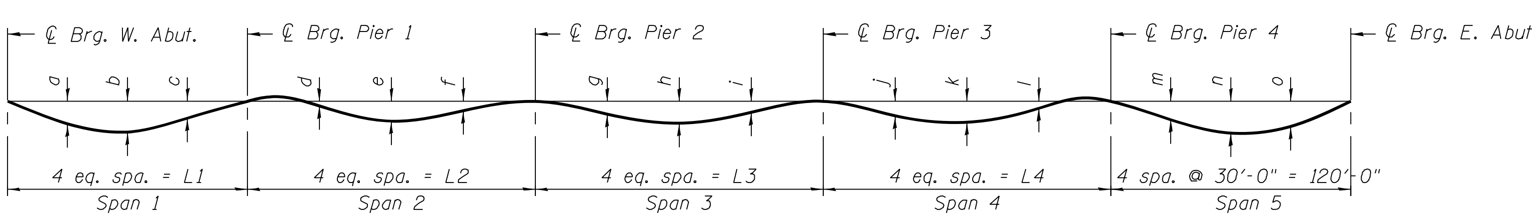
Girder No.	x1	x2	x3	x4
13	10'-0 3/16"	7'-11 5/16"	8'-4 7/16"	10'-1 1/8"
14	10'-0 3/16"	11'-2 1/16"	10'-7 3/8"	10'-0 7/8"
15	10'-0 3/16"	14'-4 13/16"	12'-10 5/16"	10'-0 11/16"
16	10'-0 1/8"	7'-7 1/2"	5'-1 3/16"	10'-0 1/2"
17	10'-0 1/8"	10'-10 1/4"	7'-4"	10'-0 3/8"
18	10'-0 1/16"	14'-1"	9'-6 7/8"	10'-0 1/4"
19	10'-0 1/16"	7'-3 11/16"	11'-9 11/16"	10'-0 1/8"
20	10'-0 1/16"	10'-6 7/16"	14'-0 7/16"	10'-0 1/16"
21	10'-0"	13'-9 1/8"	6'-3 3/16"	10'-0"
22	10'-0"	6'-11 13/16"	8'-5 15/16"	10'-0"



To determine "t": After all structural steel has been erected, elevations of the top flanges of the girders shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets SR-11 thru SR-14, minus 8 1/4" deck thickness equals the fillet heights "t" above top flange of beams.

The slab is to be ground after curing to achieve smoothness, but the slab is not to be ground to elevations below the "Theoretical Grade Elevations" shown on sheets SR-11 thru SR-14. For grinding the deck, see Special Provisions.

FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections and grinding as shown on sheets SR-11 thru SR-14.

DEAD LOAD DEFLECTION TABLE

Girder No.	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
13	1 7/8"	2 1/4"	1 1/4"	0	3/8"	1/4"	3/8"	5/8"	3/8"	3/8"	5/8"	1/8"	1 1/8"	2 1/4"	1 7/8"
14	1 3/4"	2 1/8"	1 1/8"	1/8"	1/2"	1/4"	3/8"	5/8"	3/8"	3/8"	5/8"	1/8"	1 1/4"	2 3/8"	1 7/8"
15	1 3/4"	2"	1"	1/8"	5/8"	3/8"	3/8"	3/4"	3/8"	3/8"	5/8"	1/8"	1 1/8"	2 1/4"	1 7/8"
16	1 5/8"	1 7/8"	1"	1/4"	5/8"	3/8"	3/8"	3/4"	3/8"	3/8"	1/2"	1/8"	1 1/8"	2 1/8"	1 3/4"
17	1 1/2"	1 3/4"	7/8"	1/4"	3/4"	1/2"	3/8"	3/4"	1/2"	1/4"	3/8"	1/8"	1"	1 7/8"	1 1/2"
18	1 1/2"	1 3/4"	7/8"	3/8"	7/8"	1/2"	3/8"	3/4"	1/2"	1/4"	1/2"	1/8"	1"	2"	1 5/8"
19	1 1/2"	1 3/4"	3/4"	1/2"	1 1/8"	3/4"	3/8"	7/8"	1/2"	1/4"	1/2"	1/8"	1 1/8"	2 1/8"	1 3/4"
20	1 1/2"	1 3/4"	3/4"	5/8"	1 1/2"	7/8"	1/2"	1"	5/8"	1/4"	1/2"	1/8"	1 1/4"	2 1/4"	1 7/8"
21	1 5/8"	1 7/8"	7/8"	7/8"	1 3/4"	1"	1/2"	1 1/8"	3/4"	1/4"	1/2"	1/8"	1 1/4"	2 3/8"	2"
22	1 5/8"	1 7/8"	3/4"	1"	2"	1 1/4"	1/2"	1 1/4"	7/8"	1/4"	1/2"	1/8"	1 1/4"	2 3/8"	2"

Note:
For dimensions L1, L2, L3 and L4, see sheet SR-32.

GIRDER 13

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+90.97	10.83	604.35	604.37
℄ Exp. Jt. @ 50°F	759+93.21	10.83	604.42	604.44
℄ Brg. W. Abut.	759+94.24	10.83	604.45	604.47
A	760+04.23	10.83	604.75	604.84
B	760+14.23	10.83	605.06	605.20
C	760+24.22	10.83	605.36	605.54
D	760+34.22	10.83	605.66	605.87
E	760+44.21	10.83	605.97	606.18
F	760+54.21	10.83	606.27	606.48
G	760+64.21	10.83	606.57	606.76
H	760+74.20	10.83	606.87	607.03
I	760+84.20	10.83	607.18	607.30
J	760+94.19	10.83	607.48	607.56
K	761+04.19	10.83	607.78	607.83
℄ Brg. Pier 1	761+14.20	10.83	608.09	608.11
L	761+24.19	10.83	608.39	608.40
M	761+34.19	10.83	608.69	608.71
N	761+44.19	10.83	608.99	609.02
O	761+54.18	10.83	609.30	609.33
P	761+64.18	10.83	609.60	609.65
Q	761+74.17	10.83	609.90	609.96
R	761+84.17	10.83	610.20	610.26
S	761+94.16	10.83	610.51	610.56
T	762+04.16	10.83	610.81	610.85
U	762+14.15	10.83	611.11	611.14
V	762+24.15	10.83	611.42	611.44
W				
X				
Y				
℄ Brg. Pier 2	762+32.09	10.83	611.66	611.68
Z	762+42.08	10.83	611.96	611.99
AA	762+52.08	10.83	612.26	612.30
AB	762+62.07	10.83	612.56	612.62
AC	762+72.07	10.83	612.87	612.93
AD	762+82.06	10.83	613.17	613.24
AE	762+92.06	10.83	613.47	613.55
AF	763+02.05	10.83	613.77	613.84
AG	763+12.05	10.83	614.08	614.13
AH	763+22.05	10.83	614.39	614.43
AI	763+32.04	10.83	614.70	614.73
AJ				
AK				
℄ Brg. Pier 3	763+40.41	10.83	614.97	614.99
AL	763+50.40	10.83	615.29	615.31
AM	763+60.40	10.83	615.60	615.65
AN	763+70.39	10.83	615.92	615.98
AO	763+80.39	10.83	616.24	616.31
AP	763+90.39	10.83	616.55	616.63
AQ	764+00.39	10.83	616.87	616.95
AR	764+10.39	10.83	617.19	617.26
AS	764+20.39	10.83	617.51	617.56
AT	764+30.39	10.83	617.82	617.86
AU	764+40.39	10.83	618.14	618.16
AV	764+50.39	10.83	618.46	618.47
℄ Brg. Pier 4	764+60.48	10.83	618.78	618.80
AW	764+70.48	10.83	619.09	619.14
AX	764+80.48	10.83	619.41	619.49
AY	764+90.48	10.83	619.73	619.85
AZ	765+00.48	10.83	620.05	620.21
BA	765+10.48	10.83	620.36	620.56
BB	765+20.48	10.83	620.68	620.90
BC	765+30.48	10.83	621.00	621.22
BD	765+40.48	10.83	621.31	621.53
BE	765+50.48	10.83	621.62	621.81
BF	765+60.48	10.83	621.93	622.07
BG	765+70.48	10.83	622.23	622.32
℄ Brg. E. Abut.	765+80.48	10.83	622.53	622.55
℄ Exp. Jt. @ 50°F	765+81.89	10.83	622.57	622.59
Bk. E. Abut.	765+84.40	10.83	622.65	622.67

GIRDER 14

Location	Station Along O℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+90.29	4.42	604.54	604.56
℄ Exp. Jt. @ 50°F	759+92.53	4.42	604.61	604.63
℄ Brg. W. Abut.	759+93.55	4.42	604.64	604.66
A	760+03.53	4.42	604.95	605.03
B	760+13.52	4.42	605.25	605.38
C	760+23.50	4.42	605.55	605.73
D	760+33.49	4.42	605.85	606.06
E	760+43.47	4.42	606.15	606.37
F	760+53.46	4.42	606.46	606.67
G	760+63.44	4.42	606.76	606.95
H	760+73.42	4.42	607.06	607.22
I	760+83.41	4.42	607.36	607.48
J	760+93.39	4.42	607.67	607.74
K	761+03.38	4.42	607.97	608.01
℄ Brg. Pier 1	761+13.38	4.42	608.27	608.29
L	761+23.36	4.42	608.57	608.59
M	761+33.34	4.42	608.88	608.89
N	761+43.33	4.42	609.18	609.21
O	761+53.31	4.42	609.48	609.52
P	761+63.30	4.42	609.78	609.84
Q	761+73.28	4.42	610.09	610.15
R	761+83.26	4.42	610.39	610.45
S	761+93.25	4.42	610.69	610.75
T	762+03.23	4.42	610.99	611.04
U	762+13.22	4.42	611.30	611.33
V	762+23.20	4.42	611.60	611.62
W				
X				
Y				
℄ Brg. Pier 2	762+34.35	4.42	611.94	611.96
Z	762+44.34	4.42	612.24	612.27
AA	762+54.32	4.42	612.54	612.58
AB	762+64.31	4.42	612.84	612.90
AC	762+74.29	4.42	613.15	613.22
AD	762+84.27	4.42	613.45	613.53
AE	762+94.26	4.42	613.75	613.83
AF	763+04.24	4.42	614.05	614.12
AG	763+14.23	4.42	614.36	614.41
AH	763+24.21	4.42	614.66	614.70
AI	763+34.20	4.42	614.97	615.00
AJ				
AK				
℄ Brg. Pier 3	763+44.79	4.42	615.30	615.32
AL	763+54.78	4.42	615.61	615.63
AM	763+64.76	4.42	615.91	615.95
AN	763+74.75	4.42	616.22	616.28
AO	763+84.74	4.42	616.53	616.60
AP	763+94.74	4.42	616.84	616.91
AQ	764+04.74	4.42	617.15	617.22
AR	764+14.74	4.42	617.46	617.52
AS	764+24.74	4.42	617.76	617.82
AT	764+34.74	4.42	618.07	618.11
AU	764+44.74	4.42	618.38	618.40
AV	764+54.74	4.42	618.69	618.71
℄ Brg. Pier 4	764+64.81	4.42	619.00	619.02
AW	764+74.81	4.42	619.31	619.36
AX	764+84.81	4.42	619.62	619.70
AY	764+94.81	4.42	619.93	620.05
AZ	765+04.81	4.42	620.24	620.40
BA	765+14.81	4.42	620.54	620.74
BB	765+24.81	4.42	620.85	621.07
BC	765+34.81	4.42	621.16	621.39
BD	765+44.81	4.42	621.46	621.68
BE	765+54.81	4.42	621.76	621.95
BF	765+64.81	4.42	622.06	622.20
BG	765+74.81	4.42	622.36	622.44
℄ Brg. E. Abut.	765+84.81	4.42	622.65	622.67
℄ Exp. Jt. @ 50°F	765+86.22	4.42	622.69	622.71
Bk. E. Abut.	765+88.73	4.42	622.76	622.78

WB P.G.L.

Location	Station Along O℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+89.82	0.00	604.68	604.70
℄ Exp. Jt. @ 50°F	759+92.05	0.00	604.74	604.76
℄ Brg. W. Abut.	759+93.08	0.00	604.77	604.80
A	760+03.05	0.00	605.08	605.16
B	760+13.03	0.00	605.38	605.51
C	760+23.01	0.00	605.68	605.85
D	760+32.98	0.00	605.98	606.18
E	760+42.96	0.00	606.28	606.49
F	760+52.94	0.00	606.59	606.79
G	760+62.91	0.00	606.89	607.07
H	760+72.89	0.00	607.19	607.34
I	760+82.87	0.00	607.49	607.60
J	760+92.84	0.00	607.80	607.87
K	761+02.82	0.00	608.10	608.14
℄ Brg. Pier 1	761+12.81	0.00	608.40	608.42
L	761+22.79	0.00	608.70	608.72
M	761+32.76	0.00	609.00	609.02
N	761+42.74	0.00	609.31	609.34
O	761+52.71	0.00	609.61	609.65
P	761+62.69	0.00	609.91	609.97
Q	761+72.67	0.00	610.21	610.28
R	761+82.64	0.00	610.52	610.58
S	761+92.62	0.00	610.82	610.88
T	762+02.60	0.00	611.12	611.17
U	762+12.57	0.00	611.42	611.46
V	762+22.55	0.00	611.72	611.75
W				
X				
Y				
℄ Brg. Pier 2	762+35.91	0.00	612.13	612.15
Z	762+45.89	0.00	612.43	612.46
AA	762+55.86	0.00	612.73	612.77
AB	762+65.84	0.00	613.04	613.09
AC	762+75.82	0.00	613.34	613.41
AD	762+85.79	0.00	613.64	613.72
AE	762+95.77	0.00	613.94	614.02
AF	763+05.75	0.00	614.24	614.32
AG	763+15.72	0.00	614.55	614.61
AH	763+25.70	0.00	614.85	614.89
AI	763+35.68	0.00	615.15	615.18
AJ				
AK				
℄ Brg. Pier 3	763+47.81	0.00	615.52	615.54
AL	763+57.78	0.00	615.82	615.85
AM	763+67.76	0.00	616.12	616.16
AN	763+77.74	0.00	616.42	616.48
AO	763+87.73	0.00	616.73	616.79
AP	763+97.73	0.00	617.03	617.10
AQ	764+07.73	0.00	617.33	617.40
AR	764+17.73	0.00	617.64	617.70
AS	764+27.73	0.00	617.94	617.99
AT	764+37.73	0.00	618.24	618.27
AU	764+47.73	0.00	618.54	618.56
AV	764+57.73	0.00	618.85	618.86
℄ Brg. Pier 4	764+67.79	0.00	619.15	619.17
AW	764+77.79	0.00	619.45	619.50
AX	764+87.79	0.00	619.76	619.84
AY	764+97.79	0.00	620.06	620.18
AZ	765+07.79	0.00	620.36	620.52
BA	765+17.79	0.00	620.67	620.86
BB	765+27.79	0.00	620.97	621.18
BC	765+37.79	0.00	621.27	621.49
BD	765+47.79	0.00	621.57	621.77
BE	765+57.79	0.00	621.86	622.04
BF	765+67.79	0.00	622.15	622.29
BG	765+77.79	0.00	622.44	622.52
℄ Brg. E. Abut.	765+87.79	0.00	622.72	622.74
℄ Exp. Jt. @ 50°F	765+89.20	0.00	622.76	622.78
Bk. E. Abut.	765+91.71	0.00	622.83	622.85

exp.

USER NAME =	DESIGNED - CCE	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - HBJ	REVISED -
PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS I
STRUCTURE NO. 099-0905

SHEET SR-11 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	310
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

GIRDER 15

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+89.60	-2.00	604.73	604.76
℄ Exp. Jt. @ 50°F	759+91.84	-2.00	604.80	604.82
℄ Brg. W. Abut.	759+92.86	-2.00	604.83	604.85
A	760+02.84	-2.00	605.14	605.22
B	760+12.81	-2.00	605.44	605.57
C	760+22.78	-2.00	605.74	605.91
D	760+32.76	-2.00	606.04	606.24
E	760+42.73	-2.00	606.34	606.55
F	760+52.70	-2.00	606.65	606.85
G	760+62.67	-2.00	606.95	607.12
H	760+72.65	-2.00	607.25	607.40
I	760+82.62	-2.00	607.55	607.66
J	760+92.59	-2.00	607.85	607.93
K	761+02.57	-2.00	608.16	608.20
℄ Brg. Pier 1	761+12.55	-2.00	608.46	608.48
L	761+22.53	-2.00	608.76	608.78
M	761+32.50	-2.00	609.06	609.08
N	761+42.47	-2.00	609.36	609.40
O	761+52.44	-2.00	609.67	609.71
P	761+62.42	-2.00	609.97	610.03
Q	761+72.39	-2.00	610.27	610.34
R	761+82.36	-2.00	610.57	610.64
S	761+92.34	-2.00	610.88	610.94
T	762+02.31	-2.00	611.18	611.23
U	762+12.28	-2.00	611.48	611.52
V	762+22.26	-2.00	611.78	611.81
W				
X				
Y				
℄ Brg. Pier 2	762+36.62	-2.00	612.22	612.24
Z	762+46.59	-2.00	612.52	612.55
AA	762+56.56	-2.00	612.82	612.86
AB	762+66.53	-2.00	613.12	613.18
AC	762+76.51	-2.00	613.42	613.49
AD	762+86.48	-2.00	613.73	613.81
AE	762+96.45	-2.00	614.03	614.11
AF	763+06.43	-2.00	614.33	614.41
AG	763+16.40	-2.00	614.63	614.70
AH	763+26.37	-2.00	614.93	614.98
AI	763+36.35	-2.00	615.23	615.26
AJ				
AK				
℄ Brg. Pier 3	763+49.17	-2.00	615.62	615.64
AL	763+59.14	-2.00	615.92	615.94
AM	763+69.11	-2.00	616.22	616.25
AN	763+79.09	-2.00	616.52	616.57
AO	763+89.08	-2.00	616.82	616.88
AP	763+99.08	-2.00	617.12	617.19
AQ	764+09.08	-2.00	617.42	617.49
AR	764+19.08	-2.00	617.72	617.78
AS	764+29.08	-2.00	618.02	618.06
AT	764+39.08	-2.00	618.32	618.35
AU	764+49.08	-2.00	618.62	618.64
AV	764+59.08	-2.00	618.92	618.93
℄ Brg. Pier 4	764+69.14	-2.00	619.22	619.24
AW	764+79.14	-2.00	619.52	619.56
AX	764+89.14	-2.00	619.82	619.90
AY	764+99.14	-2.00	620.12	620.24
AZ	765+09.14	-2.00	620.42	620.58
BA	765+19.14	-2.00	620.72	620.91
BB	765+29.14	-2.00	621.02	621.23
BC	765+39.14	-2.00	621.32	621.53
BD	765+49.14	-2.00	621.61	621.82
BE	765+59.14	-2.00	621.90	622.08
BF	765+69.14	-2.00	622.19	622.32
BG	765+79.14	-2.00	622.47	622.56
℄ Brg. E. Abut.	765+89.14	-2.00	622.76	622.78
℄ Exp. Jt. @ 50°F	765+90.55	-2.00	622.80	622.82
Bk. E. Abut.	765+93.06	-2.00	622.87	622.89

GIRDER 16

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+88.92	-8.42	604.93	604.95
℄ Exp. Jt. @ 50 °F	759+91.16	-8.42	604.99	605.01
℄ Brg. W. Abut.	759+92.18	-8.42	605.02	605.05
A	760+02.14	-8.42	605.33	605.40
B	760+12.10	-8.42	605.63	605.75
C	760+22.06	-8.42	605.93	606.09
D	760+32.03	-8.42	606.23	606.41
E	760+41.99	-8.42	606.53	606.72
F	760+51.95	-8.42	606.84	607.02
G	760+61.91	-8.42	607.14	607.30
H	760+71.87	-8.42	607.44	607.57
I	760+81.84	-8.42	607.74	607.84
J	760+91.80	-8.42	608.04	608.11
K	761+01.76	-8.42	608.34	608.38
℄ Brg. Pier 1	761+11.73	-8.42	608.65	608.67
L	761+21.69	-8.42	608.95	608.96
M	761+31.66	-8.42	609.25	609.27
N	761+41.62	-8.42	609.55	609.58
O	761+51.58	-8.42	609.85	609.90
P	761+61.54	-8.42	610.15	610.22
Q	761+71.50	-8.42	610.46	610.53
R	761+81.46	-8.42	610.76	610.83
S	761+91.43	-8.42	611.06	611.13
T	762+01.39	-8.42	611.36	611.42
U	762+11.35	-8.42	611.66	611.71
V	762+21.31	-8.42	611.96	612.00
W	762+31.27	-8.42	612.27	612.29
X				
Y				
℄ Brg. Pier 2	762+38.87	-8.42	612.50	612.52
Z	762+48.83	-8.42	612.80	612.82
AA	762+58.80	-8.42	613.10	613.14
AB	762+68.76	-8.42	613.40	613.46
AC	762+78.72	-8.42	613.70	613.77
AD	762+88.68	-8.42	614.01	614.08
AE	762+98.64	-8.42	614.31	614.39
AF	763+08.60	-8.42	614.61	614.68
AG	763+18.57	-8.42	614.91	614.97
AH	763+28.53	-8.42	615.20	615.25
AI	763+38.49	-8.42	615.49	615.53
AJ	763+48.45	-8.42	615.78	615.80
AK				
℄ Brg. Pier 3	763+53.53	-8.42	615.93	615.95
AL	763+63.49	-8.42	616.22	616.24
AM	763+73.45	-8.42	616.51	616.55
AN	763+83.43	-8.42	616.80	616.85
AO	763+93.43	-8.42	617.09	617.15
AP	764+03.43	-8.42	617.39	617.45
AQ	764+13.43	-8.42	617.68	617.74
AR	764+23.43	-8.42	617.97	618.02
AS	764+33.43	-8.42	618.26	618.30
AT	764+43.43	-8.42	618.55	618.58
AU	764+53.43	-8.42	618.84	618.86
AV	764+63.43	-8.42	619.14	619.15
℄ Brg. Pier 4	764+73.47	-8.42	619.43	619.45
AW	764+83.47	-8.42	619.72	619.76
AX	764+93.47	-8.42	620.01	620.09
AY	765+03.47	-8.42	620.30	620.42
AZ	765+13.47	-8.42	620.60	620.74
BA	765+23.47	-8.42	620.89	621.07
BB	765+33.47	-8.42	621.18	621.37
BC	765+43.47	-8.42	621.47	621.67
BD	765+53.47	-8.42	621.75	621.94
BE	765+63.47	-8.42	622.03	622.20
BF	765+73.47	-8.42	622.31	622.43
BG	765+83.47	-8.42	622.58	622.66
℄ Brg. E. Abut.	765+93.47	-8.42	622.86	622.88
℄ Exp. Jt. @ 50 °F	765+94.88	-8.42	622.89	622.92
Bk. E. Abut.	765+97.39	-8.42	622.96	622.98

GIRDER 17

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+88.24	-14.83	605.12	605.14
℄ Exp. Jt. @ 50 °F	759+90.47	-14.83	605.18	605.21
℄ Brg. W. Abut.	759+91.50	-14.83	605.22	605.24
A	760+01.45	-14.83	605.52	605.59
B	760+11.40	-14.83	605.82	605.93
C	760+21.35	-14.83	606.12	606.27
D	760+31.30	-14.83	606.42	606.59
E	760+41.25	-14.83	606.72	606.90
F	760+51.20	-14.83	607.02	607.19
G	760+61.15	-14.83	607.33	607.47
H	760+71.10	-14.83	607.63	607.75
I	760+81.05	-14.83	607.93	608.02
J	760+91.00	-14.83	608.23	608.29
K	761+00.95	-14.83	608.53	608.57
℄ Brg. Pier 1	761+10.91	-14.83	608.83	608.85
L	761+20.86	-14.83	609.13	609.15
M	761+30.81	-14.83	609.44	609.46
N	761+40.77	-14.83	609.74	609.77
O	761+50.72	-14.83	610.04	610.09
P	761+60.67	-14.83	610.34	610.41
Q	761+70.62	-14.83	610.64	610.72
R	761+80.57	-14.83	610.94	611.02
S	761+90.52	-14.83	611.24	611.32
T	762+00.47	-14.83	611.55	611.61
U	762+10.42	-14.83	611.85	611.90
V	762+20.37	-14.83	612.15	612.19
W	762+30.32	-14.83	612.45	612.48
X				
Y				
℄ Brg. Pier 2	762+41.12	-14.83	612.78	612.80
Z	762+51.07	-14.83	613.08	613.10
AA	762+61.02	-14.83	613.38	613.41
AB	762+70.97	-14.83	613.68	613.73
AC	762+80.93	-14.83	613.98	614.04
AD	762+90.88	-14.83	614.28	614.35
AE	763+00.83	-14.83	614.58	614.66
AF	763+10.78	-14.83	614.89	614.96
AG	763+20.73	-14.83	615.18	615.24
AH	763+30.68	-14.83	615.46	615.51
AI	763+40.63	-14.83	615.74	615.78
AJ	763+50.58	-14.83	616.03	616.05
AK				
℄ Brg. Pier 3	763+57.88	-14.83	616.23	616.25
AL	763+67.83	-14.83	616.52	616.54
AM	763+77.78	-14.83	616.80	616.83
AN	763+87.77	-14.83	617.08	617.12
AO	763+97.77	-14.83	617.36	617.41
AP	764+07.77	-14.83	617.65	617.70
AQ	764+17.77	-14.83	617.93	617.98
AR	764+27.77	-14.83	618.21	618.26
AS	764+37.77	-14.83	618.50	618.53
AT	764+47.77	-14.83	618.78	618.80
AU	764+57.77	-14.83	619.06	619.08
AV	764+67.77	-14.83	619.35	619.36
℄ Brg. Pier 4	764+77.80	-14.83	619.63	619.65
AW	764+87.80	-14.83	619.92	619.96
AX	764+97.80	-14.83	620.20	620.27
AY	765+07.80	-14.83	620.48	620.58
AZ	765+17.80	-14.83	620.77	620.90
BA	765+27.80	-14.83	621.05	621.21
BB	765+37.80	-14.83	621.33	621.51
BC	765+47.80	-14.83	621.61	621.79
BD	765+57.80	-14.83	621.88	622.05
BE	765+67.80	-14.83	622.15	622.30
BF	765+77.80	-14.83	622.42	622.53
BG	765+87.80	-14.83	622.69	622.76
℄ Brg. E. Abut.	765+97.80	-14.83	622.95	622.97
℄ Exp. Jt. @ 50 °F	765+99.20	-14.83	622.99	623.01
Bk. E. Abut.	766+01.72	-14.83	623.05	623.07

STAGE CONST. JT.

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+88.07	-16.50	605.17	605.19
℄ Exp. Jt. @ 50 °F	759+90.30	-16.50	605.23	605.26
℄ Brg. W. Abut.	759+91.32	-16.50	605.27	605.29
A	760+01.27	-16.50	605.57	605.59
B	760+11.21	-16.50	605.87	605.89
C	760+21.16	-16.50	606.17	606.19
D	760+31.11	-16.50	606.47	606.49
E	760+41.06	-16.50	606.77	606.79
F	760+51.01	-16.50	607.07	607.09
G	760+60.95	-16.50	607.37	607.40
H	760+70.90	-16.50	607.68	607.70
I	760+80.85	-16.50	607.98	608.00
J	760+90.80	-16.50	608.28	608.30
K	761+00.74	-16.50	608.58	608.60
℄ Brg. Pier 1	761+10.70	-16.50	608.88	608.90
L	761+20.65	-16.50	609.18	609.20
M	761+30.60	-16.50	609.48	609.50
N	761+40.54	-16.50	609.79	609.81
O	761+50.49	-16.50	610.09	610.11
P	761+60.44	-16.50	610.39	610.41
Q	761+70.39	-16.50	610.69	610.71
R	761+80.34	-16.50	610.99	611.01
S	761+90.28	-16.50	611.29	611.31
T	762+00.23	-16.50	611.59	611.61
U	762+10.18	-16.50	611.89	611.91
V	762+20.13	-16.50	612.20	612.22
W	762+30.07	-16.50	612.50	612.52
X				
Y				
℄ Brg. Pier 2	762+41.71	-16.50	612.85	612.87
Z	762+51.65	-16.50	613.15	613.17
AA	762+61.60	-16.50	613.45	613.47
AB	762+71.55	-16.50	613.75	613.77
AC	762+81.50	-16.50	614.05	614.08
AD	762+91.45	-16.50	614.36	614.38
AE	763+01.39	-16.50	614.66	614.68
AF	763+11.34	-16.50	614.96	614.98
AG	763+21.29	-16.50	615.25	615.27
AH	763+31.24	-16.50	615.53	615.55
AI	763+41.18	-16.50	615.81	615.83
AJ	763+51.13	-16.50	616.09	616.11
AK				
℄ Brg. Pier 3	763+59.01	-16.50	616.31	616.33
AL	763+68.96	-16.50	616.59	616.61
AM	763+78.90	-16.50	616.87	616.89
AN	763+88.89	-16.50	617.15	617.17
AO	763+98.89	-16.50	617.43	617.45
AP	764+08.89	-16.50	617.71	617.74
AQ	764+18.89	-16.50	618.00	618.02
AR	764+28.89	-16.50	618.28	618.30
AS	764+38.89	-16.50	618.56	618.58
AT	764+48.89	-16.50	618.84	618.86
AU	764+58.89	-16.50	619.12	619.14
AV	764+68.89	-16.50	619.40	619.42
℄ Brg. Pier 4	764+78.92	-16.50	619.68	619.70
AW	764+88.92	-16.50	619.97	619.99
AX	764+98.92	-16.50	620.25	620.27
AY	765+08.92	-16.50	620.53	620.55
AZ	765+18.92	-16.50	620.81	620.83
BA	765+28.92	-16.50	621.09	621.11
BB	765+38.92	-16.50	621.37	621.39
BC	765+48.92	-16.50	621.64	621.66
BD	765+58.92	-16.50	621.91	621.94
BE	765+68.92	-16.50	622.18	622.20
BF	765+78.92	-16.50	622.45	622.47
BG	765+88.92	-16.50	622.71	622.73
℄ Brg. E. Abut.	765+98.92	-16.50	622.97	622.99
℄ Exp. Jt. @ 50 °F	766+00.33	-16.50	623.01	623.03
Bk. E. Abut.	766+02.84	-16.50	623.07	623.09

GIRDER 18

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+87.57	-21.25	605.31	605.33
℄ Exp. Jt. @ 50 °F	759+89.79	-21.25	605.38	605.40
℄ Brg. W. Abut.	759+90.81	-21.25	605.41	605.43
A	760+00.75	-21.25	605.71	605.78
B	760+10.69	-21.25	606.01	606.13
C	760+20.63	-21.25	606.31	606.47
D	760+30.57	-21.25	606.61	606.79
E	760+40.51	-21.25	606.91	607.10
F	760+50.45	-21.25	607.21	607.39
G	760+60.39	-21.25	607.51	607.67
H	760+70.33	-21.25	607.82	607.94
I	760+80.27	-21.25	608.12	608.21
J	760+90.21	-21.25	608.42	608.48
K	761+00.15	-21.25	608.72	608.76
℄ Brg. Pier 1	761+10.10	-21.25	609.02	609.04
L	761+20.04	-21.25	609.32	609.34
M	761+29.98	-21.25	609.62	609.65
N	761+39.92	-21.25	609.92	609.97
O	761+49.86	-21.25	610.22	610.30
P	761+59.79	-21.25	610.52	610.62
Q	761+69.73	-21.25	610.83	610.93
R	761+79.67	-21.25	611.13	611.24
S	761+89.61	-21.25	611.43	611.53
T	761+99.55	-21.25	611.73	611.82
U	762+09.49	-21.25	612.03	612.10
V	762+19.43	-21.25	612.33	612.38
W	762+29.37	-21.25	612.63	612.67
X				
Y				
℄ Brg. Pier 2	762+43.37	-21.25	613.06	613.08
Z	762+53.31	-21.25	613.36	613.38
AA	762+63.25	-21.25	613.66	613.70
AB	762+73.19	-21.25	613.96	614.02
AC	762+83.13	-21.25	614.26	614.34
AD	762+93.07	-21.25	614.56	614.65
AE	763+03.01	-21.25	614.86	614.96
AF	763+12.95	-21.25	615.16	615.26
AG	763+22.88	-21.25	615.45	615.53
AH	763+32.82	-21.25	615.72	615.79
AI	763+42.76	-21.25	615.99	616.04
AJ	763+52.70	-21.25	616.27	616.30
AK				
℄ Brg. Pier 3	763+62.22	-21.25	616.53	616.55
AL	763+72.16	-21.25	616.80	616.83
AM	763+82.11	-21.25	617.08	617.11
AN	763+92.11	-21.25	617.35	617.40
AO	764+02.11	-21.25	617.63	617.69
AP	764+12.11	-21.25	617.90	617.97
AQ	764+22.11	-21.25	618.18	618.25
AR	764+32.11	-21.25	618.45	618.51
AS	764+42.11	-21.25	618.73	618.78
AT	764+52.11	-21.25	619.00	619.04
AU	764+62.11	-21.25	619.28	619.30
AV	764+72.11	-21.25	619.55	619.57
℄ Brg. Pier 4	764+82.12	-21.25	619.83	619.85
AW	764+92.12	-21.25	620.10	620.15
AX	765+02.12	-21.25	620.38	620.46
AY	765+12.12	-21.25	620.65	620.78
AZ	765+22.12	-21.25	620.93	621.09
BA	765+32.12	-21.25	621.20	621.40
BB	765+42.12	-21.25	621.47	621.69
BC	765+52.12	-21.25	621.74	621.97
BD	765+62.12	-21.25	622.01	622.22
BE	765+72.12	-21.25	622.27	622.45
BF	765+82.12	-21.25	622.53	622.67
BG	765+92.12	-21.25	622.78	622.87
℄ Brg. E. Abut.	766+02.12	-21.25	623.03	623.05
℄ Exp. Jt. @ 50 °F	766+03.53	-21.25	623.07	623.09
Bk. E. Abut.	766+06.04	-21.25	623.13	623.15

GIRDER 19

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+86.89	-27.67	605.50	605.52
℄ Exp. Jt. @ 50 °F	759+89.11	-27.67	605.57	605.59
℄ Brg. W. Abut.	759+90.13	-27.67	605.60	605.62
A	760+00.06	-27.67	605.90	605.97
B	760+09.99	-27.67	606.20	606.32
C	760+19.92	-27.67	606.50	606.65
D	760+29.85	-27.67	606.80	606.97
E	760+39.78	-27.67	607.10	607.28
F	760+49.70	-27.67	607.40	607.58
G	760+59.63	-27.67	607.70	607.86
H	760+69.56	-27.67	608.00	608.13
I	760+79.49	-27.67	608.30	608.39
J	760+89.42	-27.67	608.61	608.66
K	760+99.35	-27.67	608.91	608.94
℄ Brg. Pier 1	761+09.28	-27.67	609.21	609.23
L	761+19.21	-27.67	609.51	609.53
M	761+29.14	-27.67	609.81	609.85
N	761+39.07	-27.67	610.11	610.17
O	761+49.00	-27.67	610.41	610.49
P	761+58.92	-27.67	610.71	610.81
Q	761+68.85	-27.67	611.01	611.13
R	761+78.78	-27.67	611.31	611.44
S	761+88.71	-27.67	611.61	611.74
T	761+98.64	-27.67	611.91	612.02
U	762+08.57	-27.67	612.21	612.30
V	762+18.50	-27.67	612.51	612.58
W	762+28.42	-27.67	612.82	612.86
X	762+38.35	-27.67	613.12	613.14
Y				
℄ Brg. Pier 2	762+45.61	-27.67	613.34	613.36
Z	762+55.54	-27.67	613.64	613.66
AA	762+65.47	-27.67	613.94	613.98
AB	762+75.39	-27.67	614.24	614.29
AC	762+85.32	-27.67	614.54	614.61
AD	762+95.25	-27.67	614.84	614.93
AE	763+05.18	-27.67	615.14	615.24
AF	763+15.11	-27.67	615.44	615.53
AG	763+25.04	-27.67	615.71	615.80
AH	763+34.96	-27.67	615.98	616.05
AI	763+44.89	-27.67	616.24	616.29
AJ	763+54.82	-27.67	616.51	616.54
AK				
℄ Brg. Pier 3	763+66.54	-27.67	616.82	616.84
AL	763+76.47	-27.67	617.08	617.11
AM	763+86.44	-27.67	617.35	617.38
AN	763+96.44	-27.67	617.62	617.66
AO	764+06.44	-27.67	617.88	617.94
AP	764+16.44	-27.67	618.15	618.21
AQ	764+26.44	-27.67	618.42	618.48
AR	764+36.44	-27.67	618.68	618.73
AS	764+46.44	-27.67	618.95	618.99
AT	764+56.44	-27.67	619.22	619.24
AU	764+66.44	-27.67	619.48	619.50
AV	764+76.44	-27.67	619.75	619.76
℄ Brg. Pier 4	764+86.45	-27.67	620.02	620.04
AW	764+96.45	-27.67	620.28	620.33
AX	765+06.45	-27.67	620.55	620.63
AY	765+16.45	-27.67	620.82	620.94
AZ	765+26.45	-27.67	621.08	621.24
BA	765+36.45	-27.67	621.35	621.54
BB	765+46.45	-27.67	621.61	621.82
BC	765+56.45	-27.67	621.87	622.08
BD	765+66.45	-27.67	622.12	622.32
BE	765+76.45	-27.67	622.37	622.55
BF	765+86.45	-27.67	622.62	622.76
BG	765+96.45	-27.67	622.87	622.95
℄ Brg. E. Abut.	766+06.45	-27.67	623.11	623.13
℄ Exp. Jt. @ 50 °F	766+07.86	-27.67	623.14	623.17
Bk. E. Abut.	766+10.37	-27.67	623.20	623.23

GIRDER 20

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+86.21	-34.08	605.69	605.71
℄ Exp. Jt. @ 50 °F	759+88.44	-34.08	605.76	605.78
℄ Brg. W. Abut.	759+89.45	-34.08	605.79	605.81
A	759+99.37	-34.08	606.09	606.16
B	760+09.29	-34.08	606.39	606.51
C	760+19.21	-34.08	606.69	606.84
D	760+29.12	-34.08	606.99	607.16
E	760+39.04	-34.08	607.29	607.47
F	760+48.96	-34.08	607.59	607.76
G	760+58.88	-34.08	607.89	608.04
H	760+68.79	-34.08	608.19	608.31
I	760+78.71	-34.08	608.49	608.58
J	760+88.63	-34.08	608.79	608.85
K	760+98.55	-34.08	609.09	609.13
℄ Brg. Pier 1	761+08.47	-34.08	609.39	609.41
L	761+18.39	-34.08	609.69	609.72
M	761+28.30	-34.08	609.99	610.04
N	761+38.22	-34.08	610.29	610.36
O	761+48.14	-34.08	610.60	610.69
P	761+58.06	-34.08	610.90	611.01
Q	761+67.97	-34.08	611.20	611.33
R	761+77.89	-34.08	611.50	611.64
S	761+87.81	-34.08	611.80	611.94
T	761+97.73	-34.08	612.10	612.23
U	762+07.64	-34.08	612.40	612.51
V	762+17.56	-34.08	612.70	612.78
W	762+27.48	-34.08	613.00	613.05
X	762+37.40	-34.08	613.30	613.33
Y				
℄ Brg. Pier 2	762+47.84	-34.08	613.62	613.64
Z	762+57.76	-34.08	613.92	613.94
AA	762+67.68	-34.08	614.22	614.25
AB	762+77.60	-34.08	614.52	614.57
AC	762+87.51	-34.08	614.82	614.89
AD	762+97.43	-34.08	615.12	615.21
AE	763+07.35	-34.08	615.42	615.52
AF	763+17.27	-34.08	615.72	615.82
AG	763+27.18	-34.08	615.97	616.07
AH	763+37.10	-34.08	616.23	616.31
AI	763+47.02	-34.08	616.48	616.55
AJ	763+56.94	-34.08	616.74	616.78
AK				
℄ Brg. Pier 3	763+70.86	-34.08	617.10	617.12
AL	763+80.78	-34.08	617.36	617.38
AM	763+90.78	-34.08	617.61	617.65
AN	764+00.78	-34.08	617.87	617.92
AO	764+10.78	-34.08	618.13	618.19
AP	764+20.78	-34.08	618.39	618.45
AQ	764+30.78	-34.08	618.65	618.71
AR	764+40.78	-34.08	618.91	618.96
AS	764+50.78	-34.08	619.16	619.21
AT	764+60.78	-34.08	619.42	619.45
AU	764+70.78	-34.08	619.68	619.70
AV	764+80.78	-34.08	619.94	619.95
℄ Brg. Pier 4	764+90.78	-34.08	620.20	620.22
AW	765+00.78	-34.08	620.46	620.50
AX	765+10.78	-34.08	620.71	620.80
AY	765+20.78	-34.08	620.97	621.09
AZ	765+30.78	-34.08	621.23	621.39
BA	765+40.78	-34.08	621.48	621.68
BB	765+50.78	-34.08	621.74	621.95
BC	765+60.78	-34.08	621.98	622.20
BD	765+70.78	-34.08	622.23	622.44
BE	765+80.78	-34.08	622.47	622.65
BF	765+90.78	-34.08	622.71	622.85
BG	766+00.78	-34.08	622.95	623.03
℄ Brg. E. Abut.	766+10.78	-34.08	623.18	623.20
℄ Exp. Jt. @ 50 °F	766+12.19	-34.08	623.21	623.23
Bk. E. Abut.	766+14.70	-34.08	623.27	623.29

GIRDER 21

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+85.54	-40.50	605.88	605.90
℄ Exp. Jt. @ 50 °F	759+87.76	-40.50	605.95	605.97
℄ Brg. W. Abut.	759+88.78	-40.50	605.98	606.00
A	759+98.68	-40.50	606.28	606.36
B	760+08.59	-40.50	606.58	606.70
C	760+18.50	-40.50	606.88	607.04
D	760+28.40	-40.50	607.18	607.36
E	760+38.31	-40.50	607.48	607.67
F	760+48.22	-40.50	607.78	607.96
G	760+58.12	-40.50	608.08	608.23
H	760+68.03	-40.50	608.38	608.50
I	760+77.94	-40.50	608.68	608.77
J	760+87.84	-40.50	608.98	609.04
K	760+97.75	-40.50	609.28	609.31
℄ Brg. Pier 1	761+07.66	-40.50	609.58	609.60
L	761+17.56	-40.50	609.88	609.91
M	761+27.47	-40.50	610.18	610.23
N	761+37.38	-40.50	610.48	610.56
O	761+47.28	-40.50	610.78	610.89
P	761+57.19	-40.50	611.08	611.21
Q	761+67.10	-40.50	611.38	611.54
R	761+77.00	-40.50	611.68	611.85
S	761+86.91	-40.50	611.98	612.15
T	761+96.82	-40.50	612.28	612.43
U	762+06.72	-40.50	612.58	612.71
V	762+16.63	-40.50	612.88	612.98
W	762+26.53	-40.50	613.18	613.25
X	762+36.44	-40.50	613.48	613.52
Y				
℄ Brg. Pier 2	762+50.07	-40.50	613.89	613.92
Z	762+59.98	-40.50	614.19	614.22
AA	762+69.89	-40.50	614.49	614.53
AB	762+79.79	-40.50	614.79	614.86
AC	762+89.70	-40.50	615.09	615.18
AD	762+99.60	-40.50	615.39	615.50
AE	763+09.51	-40.50	615.69	615.81
AF	763+19.42	-40.50	615.98	616.10
AG	763+29.32	-40.50	616.23	616.34
AH	763+39.23	-40.50	616.48	616.57
AI	763+49.14	-40.50	616.72	616.80
AJ	763+59.04	-40.50	616.97	617.02
AK	763+68.95	-40.50	617.22	617.25
℄ Brg. Pier 3	763+75.16	-40.50	617.37	617.40
AL	763+85.11	-40.50	617.62	617.65
AM	763+95.11	-40.50	617.87	617.90
AN	764+05.11	-40.50	618.12	618.17
AO	764+15.11	-40.50	618.37	618.43
AP	764+25.11	-40.50	618.62	618.68
AQ	764+35.11	-40.50	618.87	618.93
AR	764+45.11	-40.50	619.12	619.18
AS	764+55.11	-40.50	619.37	619.41
AT	764+65.11	-40.50	619.62	619.65
AU	764+75.11	-40.50	619.87	619.89
AV	764+85.11	-40.50	620.12	620.13
℄ Brg. Pier 4	764+95.11	-40.50	620.37	620.39
AW	765+05.11	-40.50	620.62	620.67
AX	765+15.11	-40.50	620.87	620.96
AY	765+25.11	-40.50	621.12	621.25
AZ	765+35.11	-40.50	621.37	621.54
BA	765+45.11	-40.50	621.61	621.82
BB	765+55.11	-40.50	621.85	622.08
BC	765+65.11	-40.50	622.09	622.32
BD	765+75.11	-40.50	622.33	622.55
BE	765+85.11	-40.50	622.56	622.75
BF	765+95.11	-40.50	622.79	622.93
BG	766+05.11	-40.50	623.02	623.10
℄ Brg. E. Abut.	766+15.11	-40.50	623.24	623.26
℄ Exp. Jt. @ 50 °F	766+16.52	-40.50	623.27	623.29
Bk. E. Abut.	766+19.03	-40.50	623.33	623.35

GIRDER 22

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding
Bk. W. Abut.	759+84.87	-46.92	606.07	606.09
℄ Exp. Jt. @ 50 °F	759+87.09	-46.92	606.14	606.16
℄ Brg. W. Abut.	759+88.10	-46.92	606.17	606.19
A	759+98.00	-46.92	606.47	606.55
B	760+07.89	-46.92	606.77	606.90
C	760+17.79	-46.92	607.07	607.23
D	760+27.68	-46.92	607.37	607.55
E	760+37.58	-46.92	607.67	607.86
F	760+47.47	-46.92	607.97	608.15
G	760+57.37	-46.92	608.27	608.42
H	760+67.27	-46.92	608.57	608.70
I	760+77.16	-46.92	608.87	608.96
J	760+87.06	-46.92	609.17	609.23
K	760+96.95	-46.92	609.47	609.50
℄ Brg. Pier 1	761+06.85	-46.92	609.77	609.79
L	761+16.74	-46.92	610.07	610.10
M	761+26.64	-46.92	610.37	610.42
N	761+36.53	-46.92	610.67	610.75
O	761+46.43	-46.92	610.97	611.09
P	761+56.32	-46.92	611.27	611.42
Q	761+66.22	-46.92	611.57	611.75
R	761+76.12	-46.92	611.87	612.06
S	761+86.01	-46.92	612.17	612.36
T	761+95.91	-46.92	612.47	612.65
U	762+05.80	-46.92	612.77	612.92
V	762+15.70	-46.92	613.07	613.19
W	762+25.59	-46.92	613.36	613.46
X	762+35.49	-46.92	613.66	613.72
Y	762+45.38	-46.92	613.96	614.00
℄ Brg. Pier 2	762+52.30	-46.92	614.17	614.19
Z	762+62.19	-46.92	614.47	614.50
AA	762+72.09	-46.92	614.77	614.81
AB	762+81.98	-46.92	615.07	615.14
AC	762+91.88	-46.92	615.37	615.46
AD	763+01.77	-46.92	615.67	615.78
AE	763+11.67	-46.92	615.97	616.10
AF	763+21.57	-46.92	616.24	616.37
AG	763+31.46	-46.92	616.48	616.60
AH	763+41.36	-46.92	616.72	616.83
AI	763+51.25	-46.92	616.96	617.04
AJ	763+61.15	-46.92	617.20	617.26
AK	763+71.04	-46.92	617.44	617.47
℄ Brg. Pier 3	763+79.45	-46.92	617.64	617.66
AL	763+89.44	-46.92	617.88	617.90
AM	763+99.44	-46.92	618.12	618.15
AN	764+09.44	-46.92	618.37	618.41
AO	764+19.44	-46.92	618.61	618.66
AP	764+29.44	-46.92	618.85	618.91
AQ	764+39.44	-46.92	619.09	619.15
AR	764+49.44	-46.92	619.33	619.39
AS	764+59.44	-46.92	619.57	619.62
AT	764+69.44	-46.92	619.81	619.84
AU	764+79.44	-46.92	620.06	620.07
AV	764+89.44	-46.92	620.30	620.31
℄ Brg. Pier 4	764+99.44	-46.92	620.54	620.56
AW	765+09.44	-46.92	620.78	620.83
AX	765+19.44	-46.92	621.02	621.11
AY	765+29.44	-46.92	621.26	621.39
AZ	765+39.44	-46.92	621.50	621.67
BA	765+49.44	-46.92	621.73	621.94
BB	765+59.44	-46.92	621.97	622.20
BC	765+69.44	-46.92	622.20	622.43
BD	765+79.44	-46.92	622.42	622.65
BE	765+89.44	-46.92	622.64	622.84
BF	765+99.44	-46.92	622.86	623.01
BG	766+09.44	-46.92	623.08	623.17
℄ Brg. E. Abut.	766+19.44	-46.92	623.29	623.31
℄ Exp. Jt. @ 50 °F	766+20.84	-46.92	623.32	623.34
Bk. E. Abut.	766+23.36	-46.92	623.38	623.40

N. EDGE OF N. SHOULDER

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of W. Appr. Slab	759+55.57	-48.00	605.22	605.24
A1	759+65.47	-48.00	605.52	605.54
A2	759+75.36	-48.00	605.82	605.84
E. End of W. Appr. Slab	759+85.25	-48.00	606.12	606.14

N. EDGE OF LANE 3

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of W. Appr. Slab	759+56.77	-36.00	604.86	604.88
A1	759+66.68	-36.00	605.16	605.18
A2	759+76.60	-36.00	605.46	605.48
E. End of W. Appr. Slab	759+86.51	-36.00	605.76	605.78

N. EDGE OF LANE 2

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of W. Appr. Slab	759+57.97	-24.00	604.50	604.52
A1	759+67.91	-24.00	604.80	604.82
A2	759+77.84	-24.00	605.10	605.13
E. End of W. Appr. Slab	759+87.77	-24.00	605.41	605.43

STAGE CONST. JT.

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of W. Appr. Slab	759+58.73	-16.50	604.28	604.30
A1	759+68.67	-16.50	604.58	604.60
A2	759+78.62	-16.50	604.88	604.90
E. End of W. Appr. Slab	759+88.57	-16.50	605.18	605.20

N. EDGE OF LANE 1

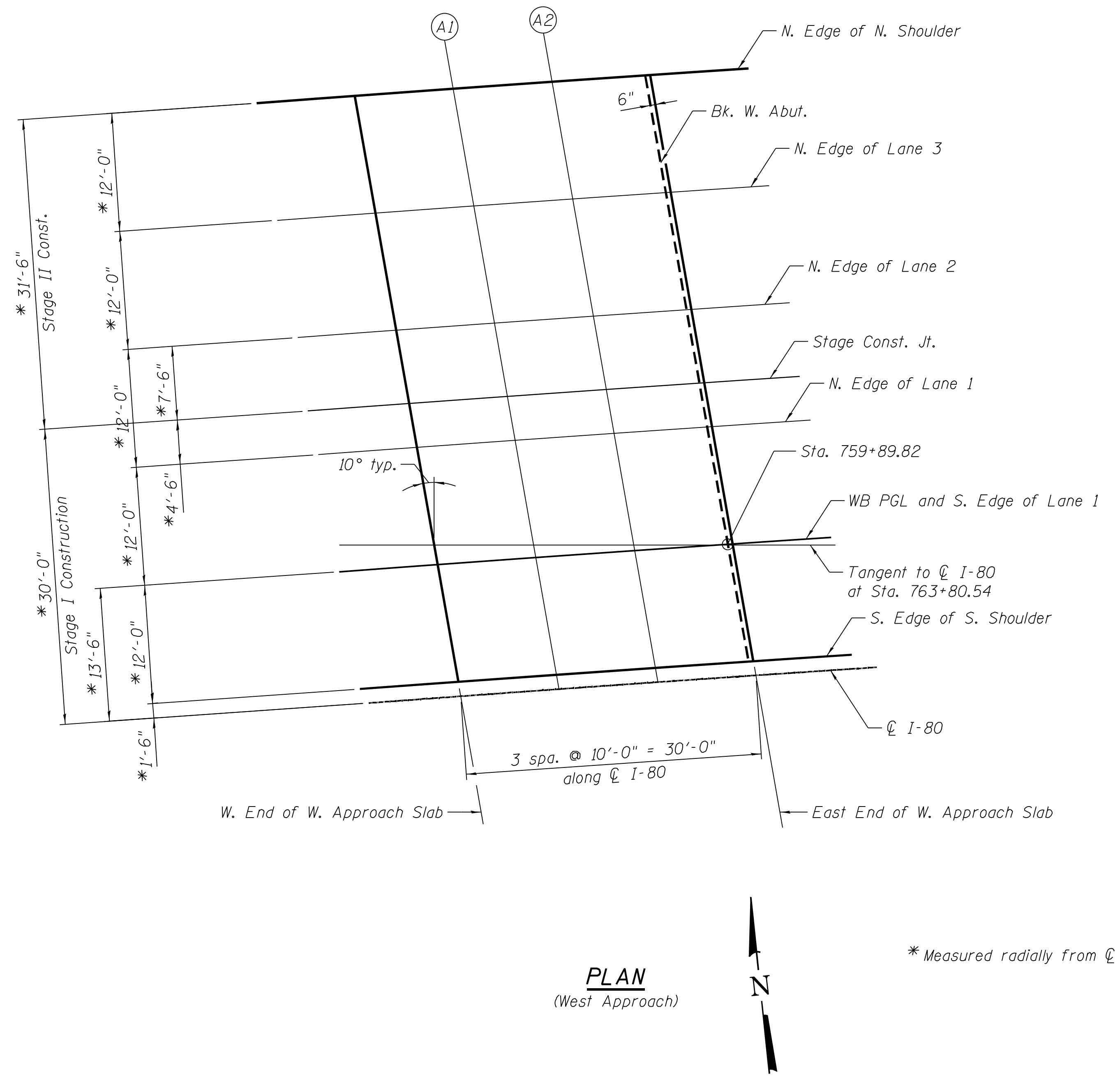
Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of W. Appr. Slab	759+59.18	-12.00	604.14	604.16
A1	759+69.13	-12.00	604.44	604.47
A2	759+79.09	-12.00	604.75	604.77
E. End of W. Appr. Slab	759+89.04	-12.00	605.05	605.07

WB PGL AND S. EDGE OF LANE 1

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of W. Appr. Slab	759+60.39	0.00	603.78	603.80
A1	759+70.37	0.00	604.09	604.11
A2	759+80.34	0.00	604.39	604.41
E. End of W. Appr. Slab	759+90.32	0.00	604.69	604.71

S. EDGE OF S. SHOULDER

Location	Station Along ℄ I-80	Offset from WB PGL	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of W. Appr. Slab	759+61.61	12.00	603.43	603.45
A1	759+71.60	12.00	603.73	603.75
A2	759+81.60	12.00	604.03	604.05
E. End of W. Appr. Slab	759+91.60	12.00	604.33	604.35



PLAN
(West Approach)

✱ Measured radially from ℄ I-80

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - HBJ	REVISED -	
	PLOT DATE =	CHECKED - CCE	REVISED -	

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 099-0905
SHEET SR-15 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	314

CONTRACT NO. 60W35
ILLINOIS | FED. AID PROJECT

MODEL: Default
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3/9/2022 10:48:48 AM

N. EDGE OF N. SHOULDER

Location	Station along ℄ I-80	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of E. Appr. Slab	766+23.48	-48.00	623.37	623.39
A3	766+33.48	-48.00	623.58	623.60
A4	766+43.48	-48.00	623.78	623.81
E. End of E. Appr. Slab	766+53.48	-48.00	623.99	624.01

N. EDGE OF LANE 3

Location	Station along ℄ I-80	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of E. Appr. Slab	766+15.39	-36.00	623.27	623.30
A3	766+25.39	-36.00	623.50	623.52
A4	766+35.39	-36.00	623.72	623.74
E. End of E. Appr. Slab	766+45.39	-36.00	623.94	623.96

N. EDGE OF LANE 2

Location	Station along ℄ I-80	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of E. Appr. Slab	766+07.30	-24.00	623.15	623.17
A3	766+17.30	-24.00	623.39	623.41
A4	766+27.30	-24.00	623.63	623.66
E. End of E. Appr. Slab	766+37.30	-24.00	623.87	623.89

STAGE CONST. JT.

Location	Station along ℄ I-80	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of E. Appr. Slab	766+02.24	-16.50	623.06	623.08
A3	766+12.24	-16.50	623.31	623.33
A4	766+22.24	-16.50	623.57	623.59
E. End of E. Appr. Slab	766+32.24	-16.50	623.81	623.84

N. EDGE OF LANE 1

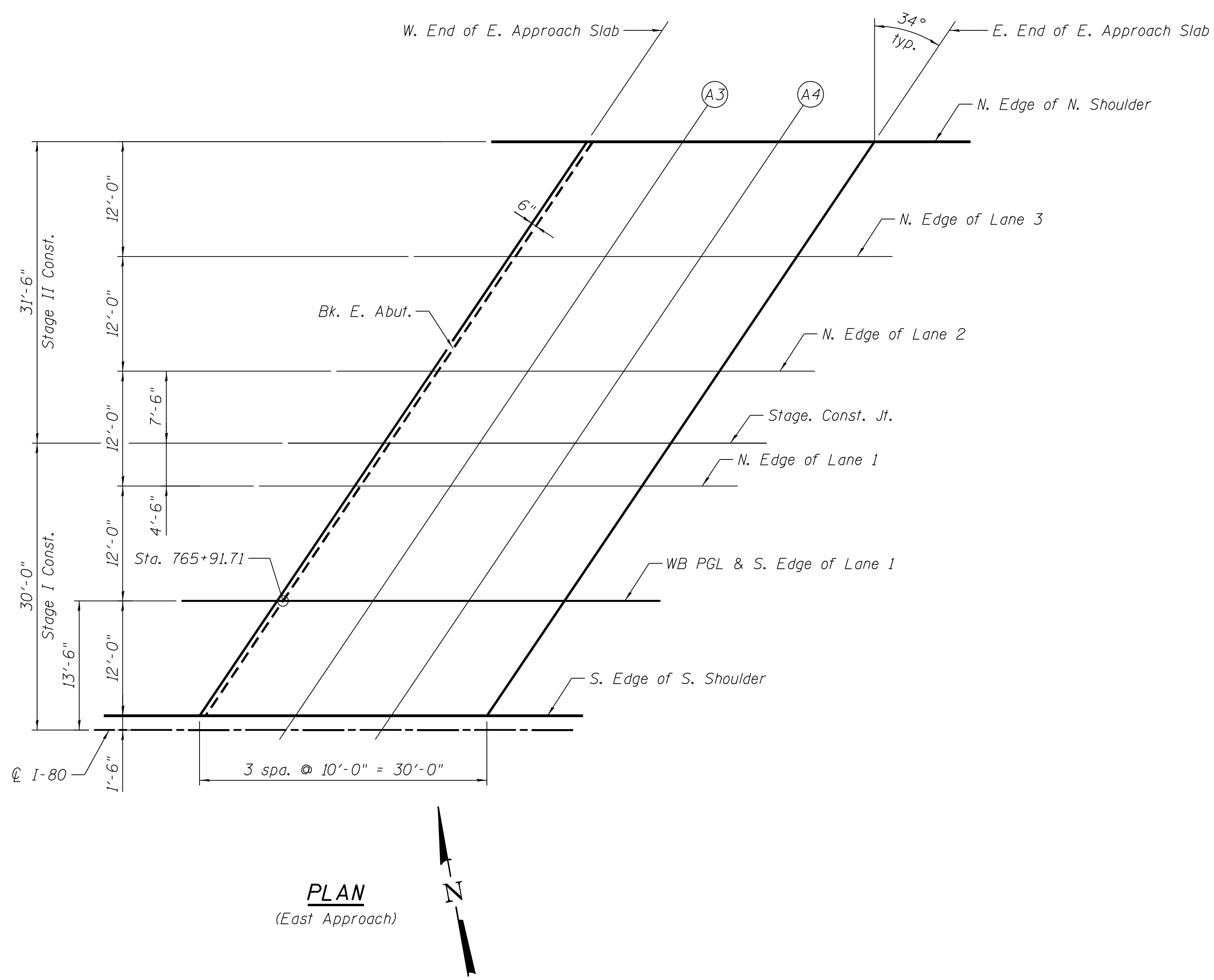
Location	Station along ℄ I-80	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of E. Appr. Slab	765+99.20	-12.00	623.00	623.02
A3	766+09.20	-12.00	623.26	623.28
A4	766+19.20	-12.00	623.52	623.54
E. End of E. Appr. Slab	766+29.20	-12.00	623.77	623.80

WB PGL & S. EDGE OF LANE 1

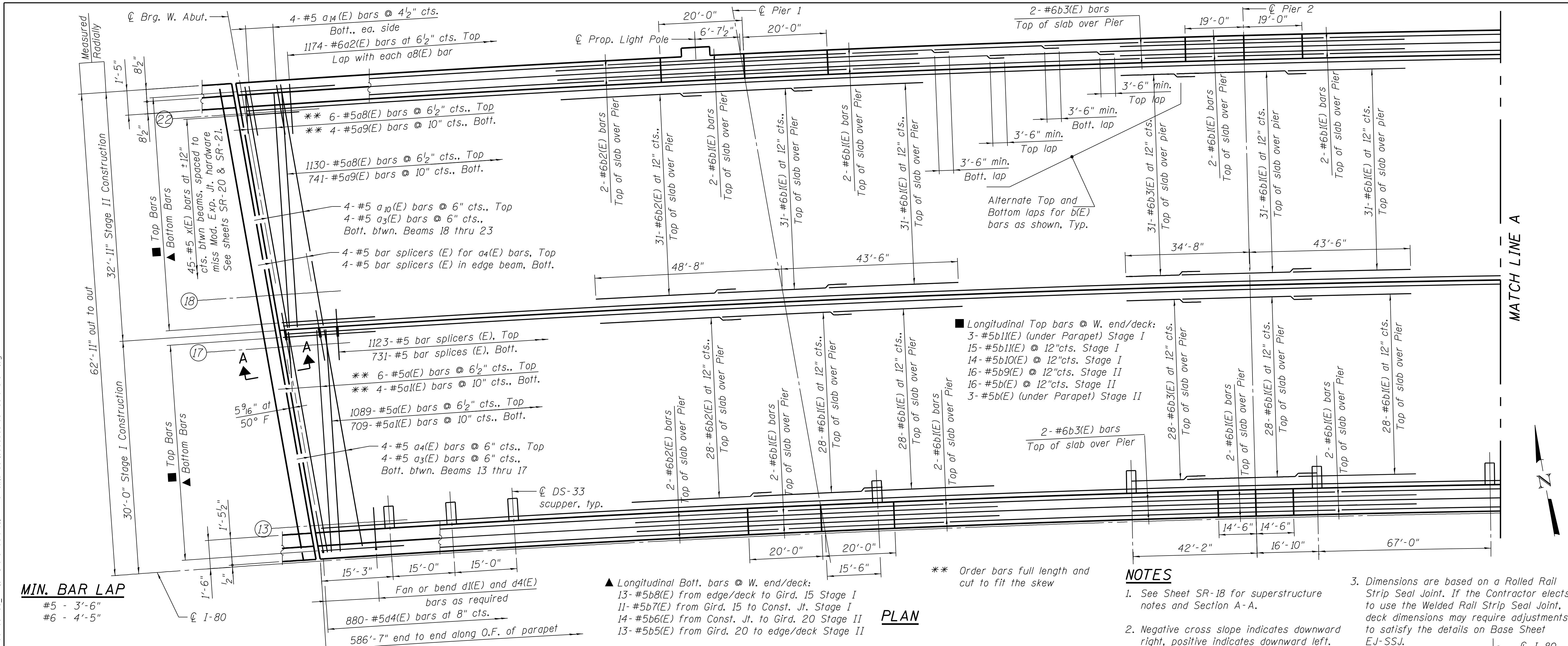
Location	Station along ℄ I-80	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of E. Appr. Slab	765+91.11	0.00	622.82	622.84
A3	766+01.11	0.00	623.10	623.12
A4	766+11.11	0.00	623.37	623.40
E. End of E. Appr. Slab	766+21.11	0.00	623.65	623.67

S. EDGE OF S. SHOULDER

Location	Station along ℄ I-80	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of E. Appr. Slab	765+83.01	12.00	622.61	622.63
A3	765+93.01	12.00	622.91	622.93
A4	766+03.01	12.00	623.20	623.22
E. End of E. Appr. Slab	766+13.01	12.00	623.50	623.52

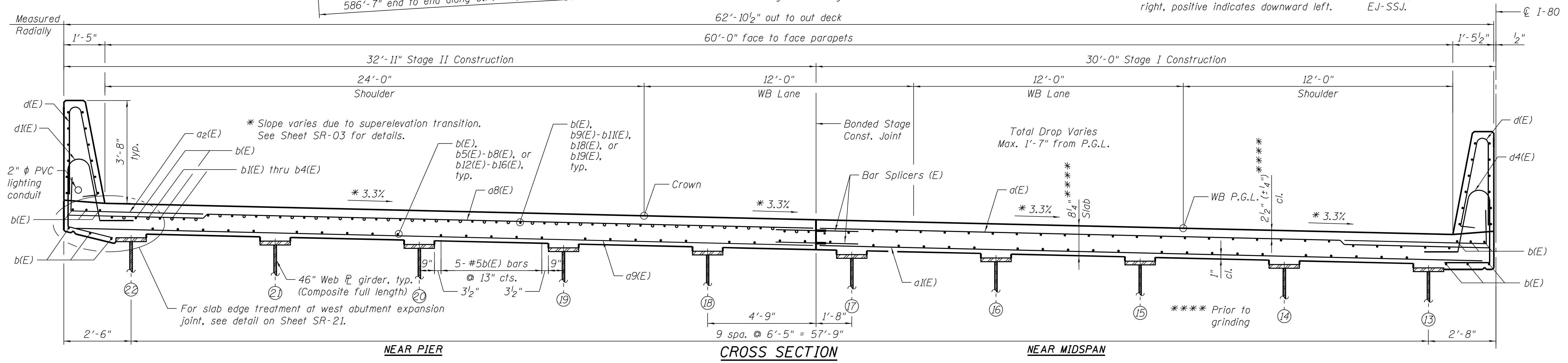


PLAN
(East Approach)



NOTES

1. See Sheet SR-18 for superstructure notes and Section A-A.
2. Negative cross slope indicates downward right, positive indicates downward left.
3. 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 adjustments to satisfy the details on Base Sheet EJ-SSJ.



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		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-17 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	316
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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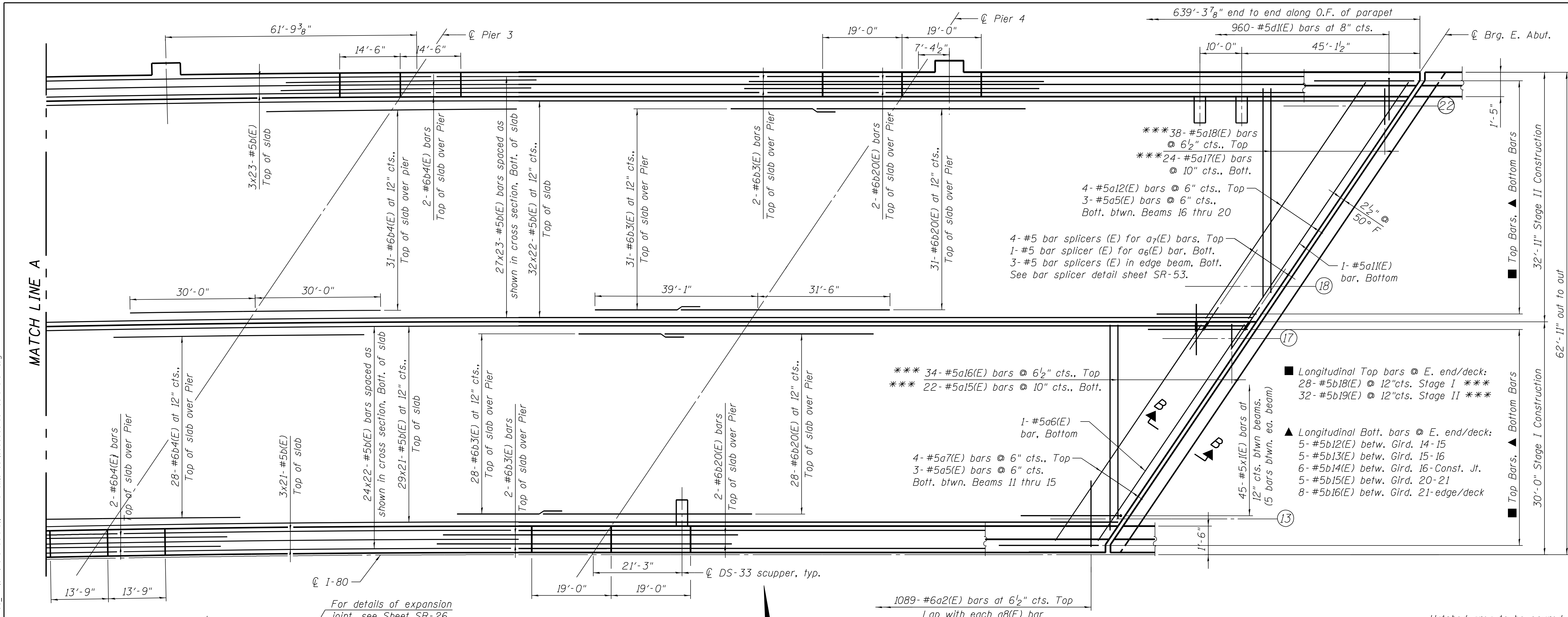
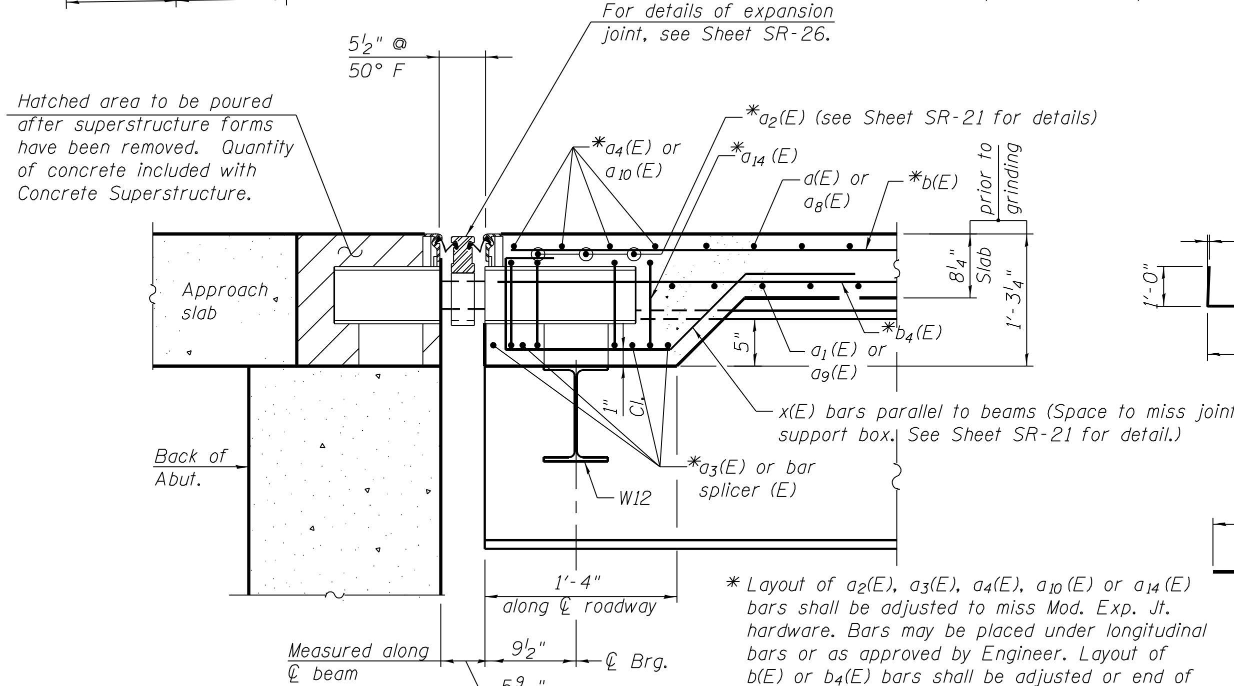
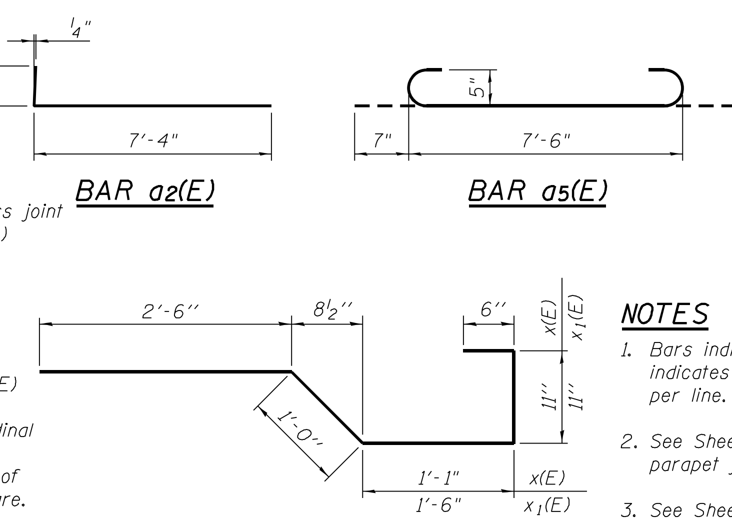


***Order half bars full length. Cut as per cutting diagram and use remainder of bars in the same level in the same corner.



SECTION A-A

* Layout of a2(E), a3(E), a4(E), a10(E) or a14(E) bars shall be adjusted to miss Mod. Exp. Jt. hardware. Bars may be placed under longitudinal bars or as approved by Engineer. Layout of b(E) or b4(E) bars shall be adjusted or end of bars cut to fit to miss Mod. Exp. Jt. hardware. Cost included in the cost of Reinforcement Bars, Epoxy Coated.



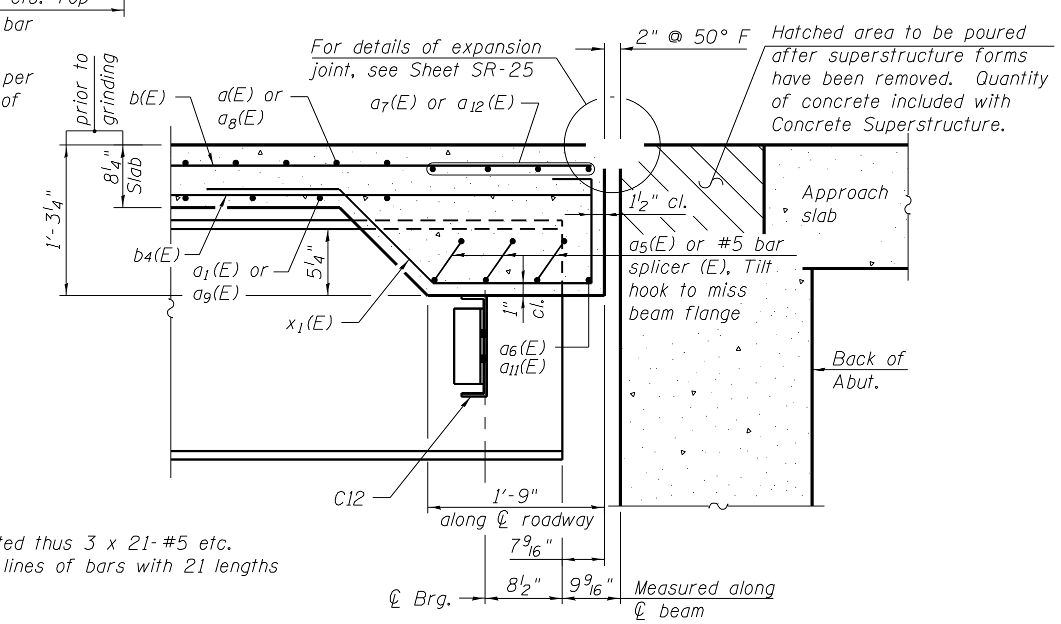
BAR a2(E)

BAR a5(E)

BAR x(E) & x1(E)

NOTES

1. Bars indicated thus 3 x 21-#5 etc. indicates 3 lines of bars with 21 lengths per line.
2. See Sheets SR-19 and SR-20 for parapet joint spacing and reinforcement.
3. See Sheet SR-21 for Superstructure details and Bill of Material.



SECTION B-B

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exp.

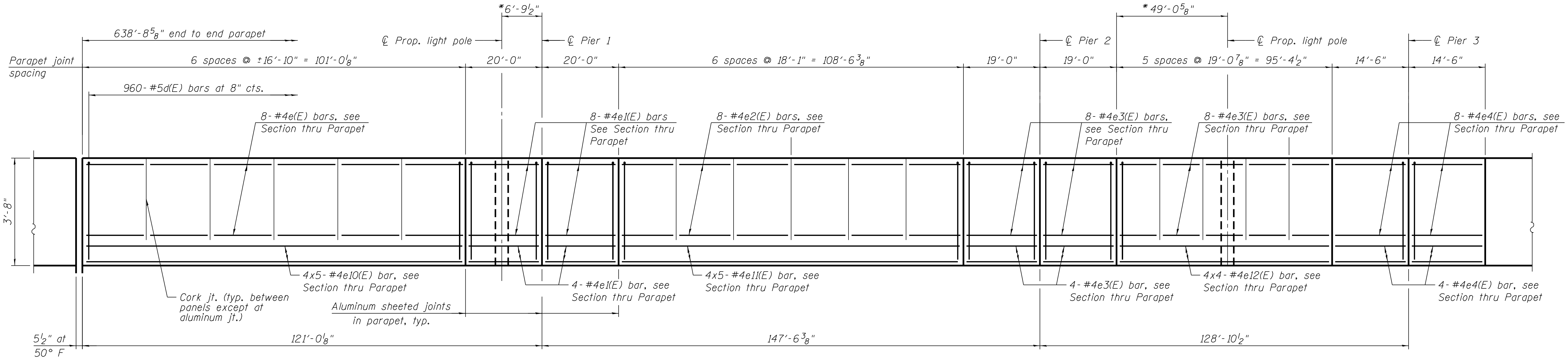
USER NAME =	DESIGNED - CCE	REVISED -	
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

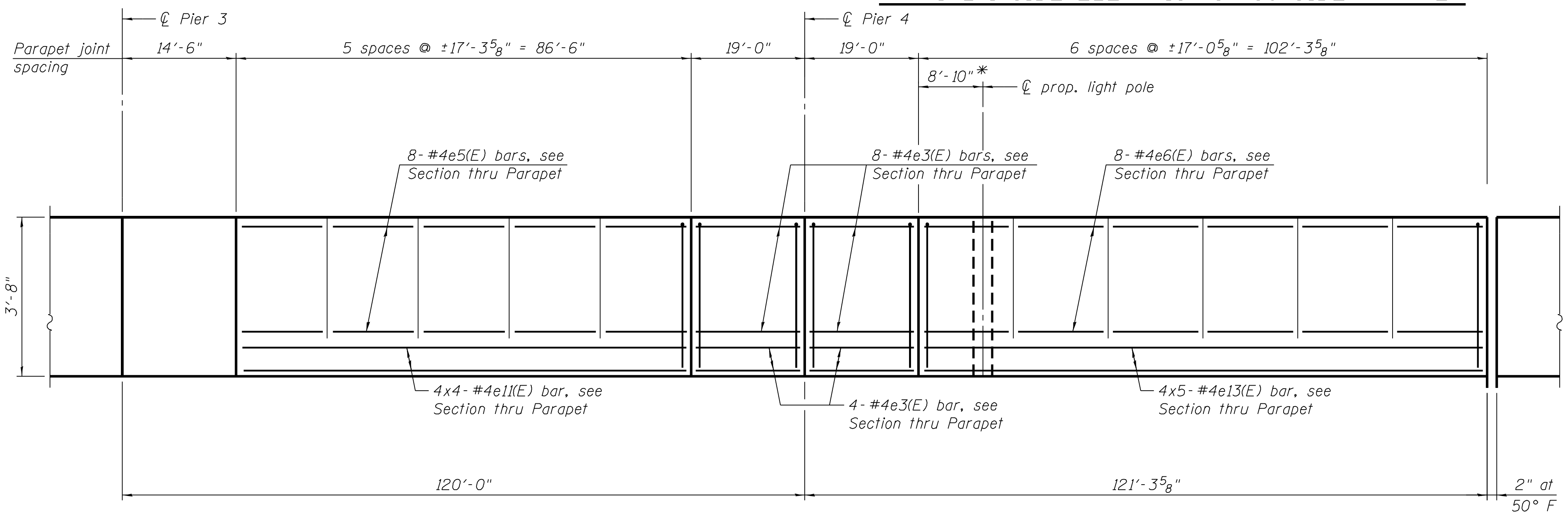
SUPERSTRUCTURE PLAN & DETAILS
STRUCTURE NO. 099-0905

SHEET SR-18 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	317
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		



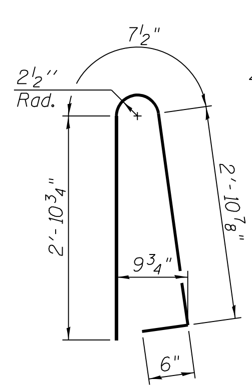
PARTIAL INSIDE ELEVATION OF OUTSIDE PARAPET



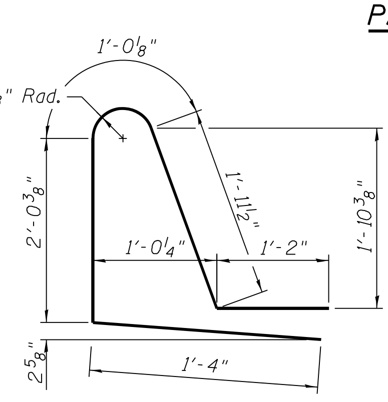
PARTIAL INSIDE ELEVATION OF OUTSIDE PARAPET

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

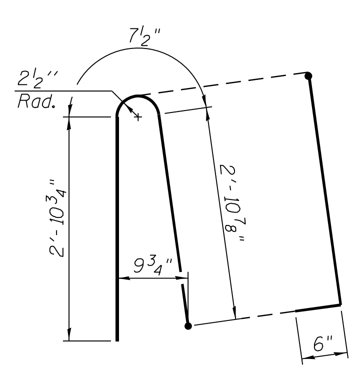
* Measured along inside face of parapet.



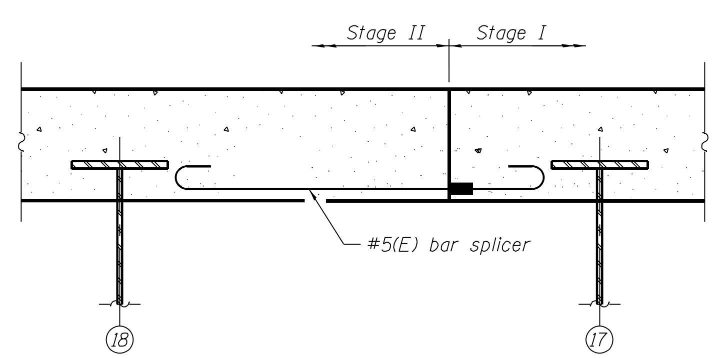
BAR d(E)



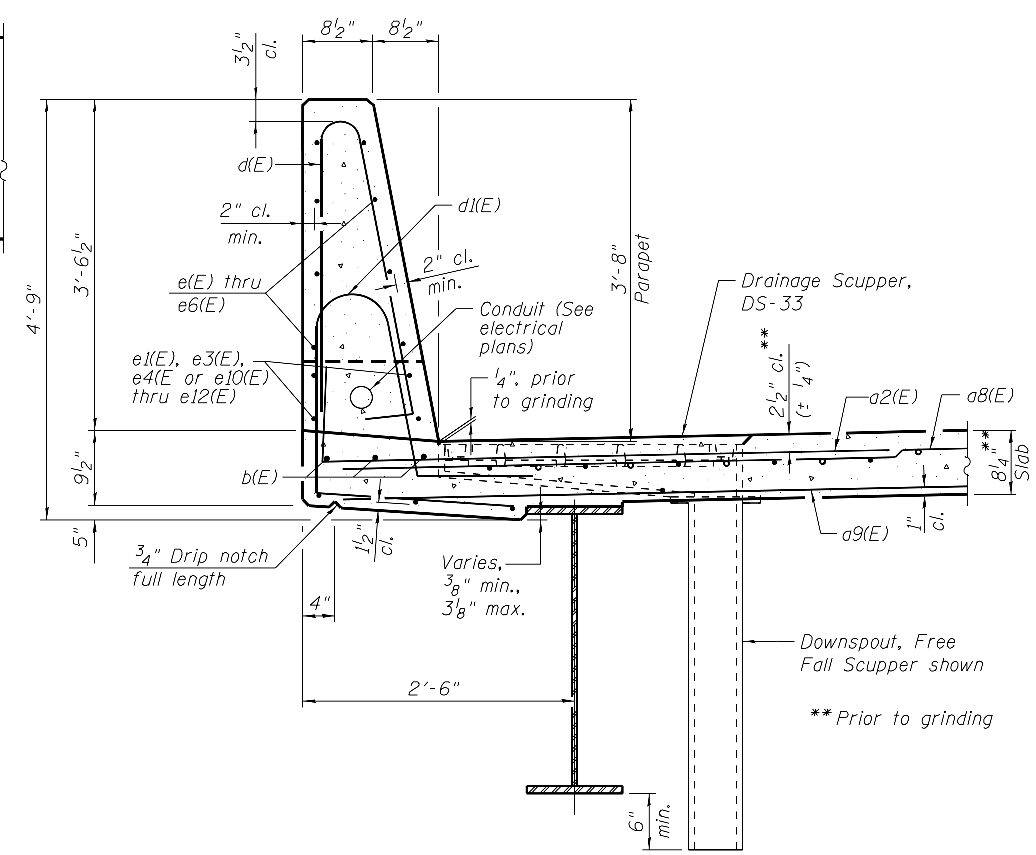
BAR d1(E)



ALTERNATE BAR d(E)
(For 44" constant slope parapet when conduit is present)



E. ABUT. DIAPHRAGM AT STAGE LINE



** Prior to grinding

SECTION THRU OUTSIDE PARAPET

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exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE DETAILS I STRUCTURE NO. 099-0905	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	318
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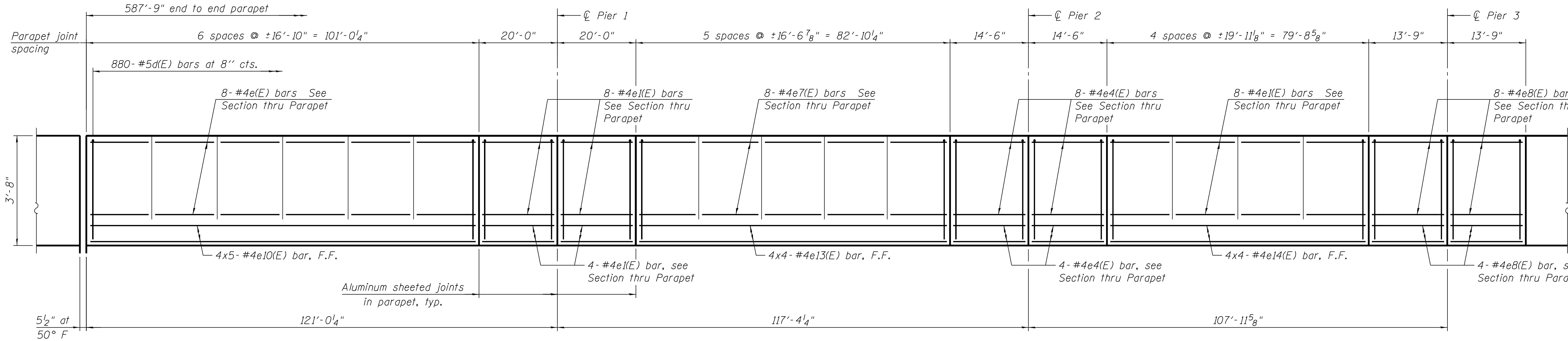
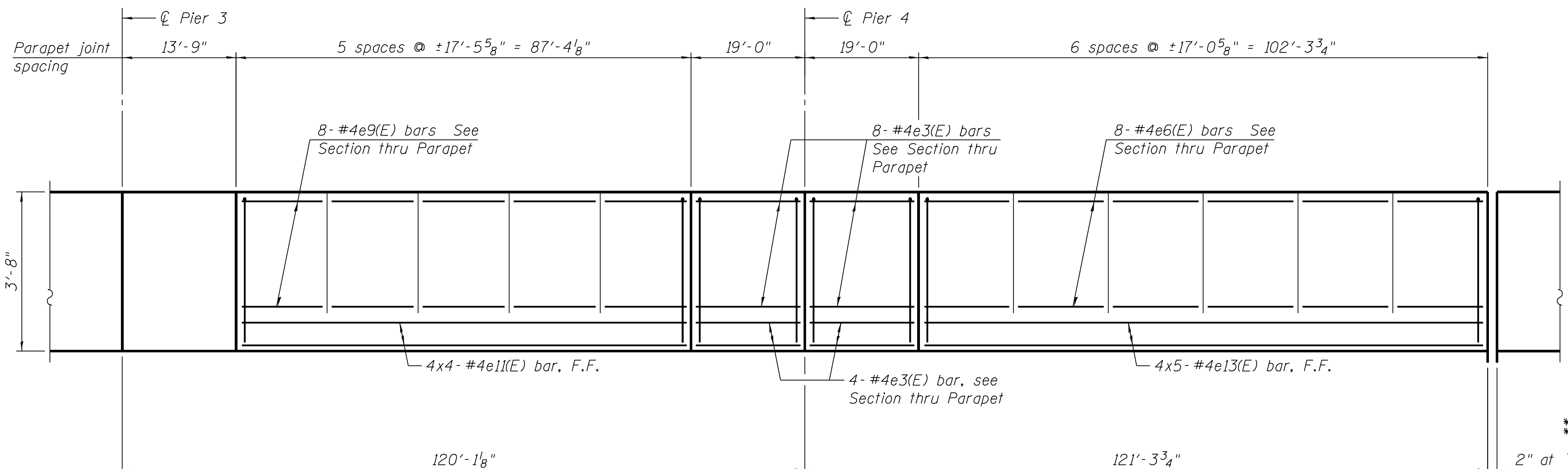


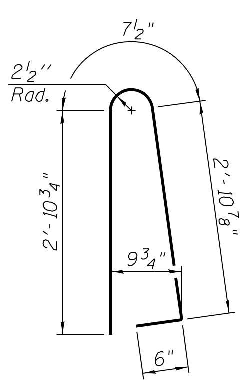
REFLECTED PARTIAL INSIDE ELEVATION OF MEDIAN PARAPET

(Slipforming not allowed)

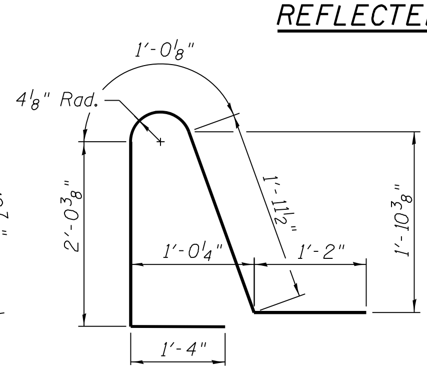


REFLECTED PARTIAL INSIDE ELEVATION OF MEDIAN PARAPET

(Slipforming not allowed)



BAR d(E)

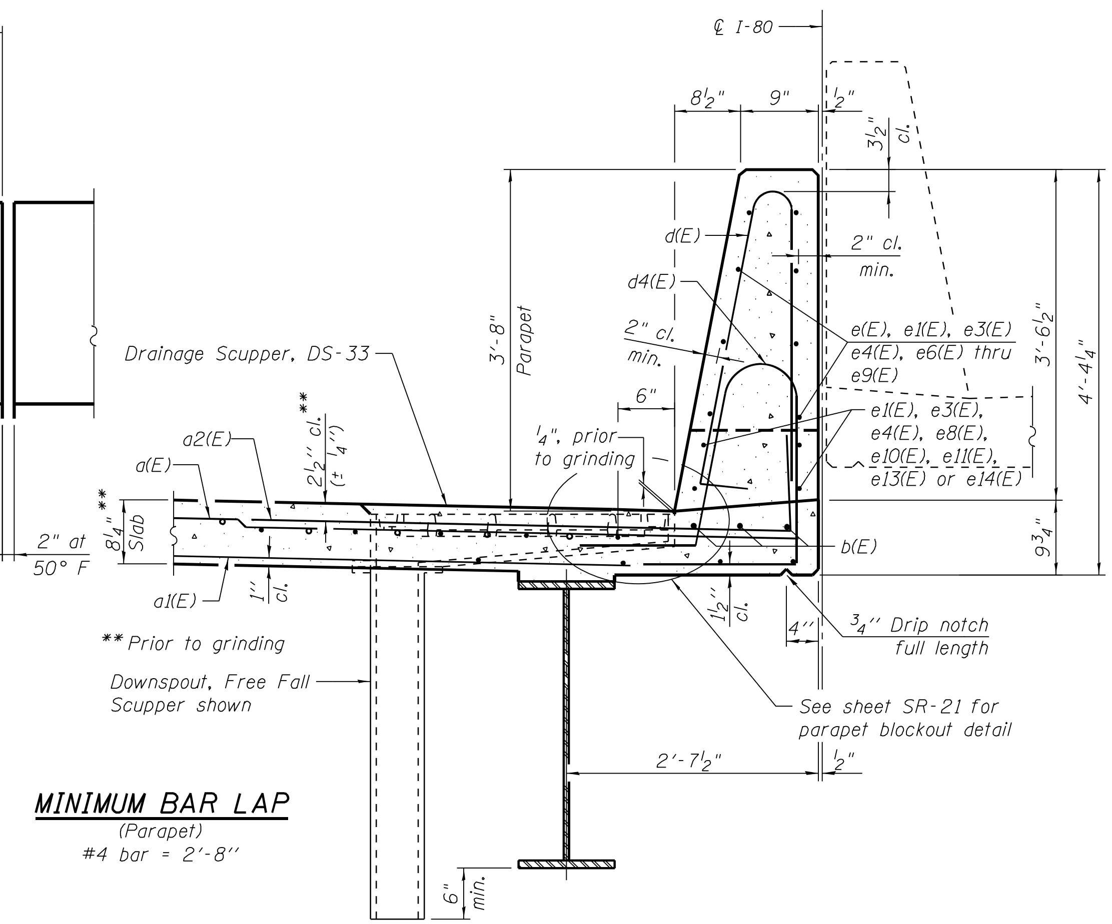


BAR d4(E)

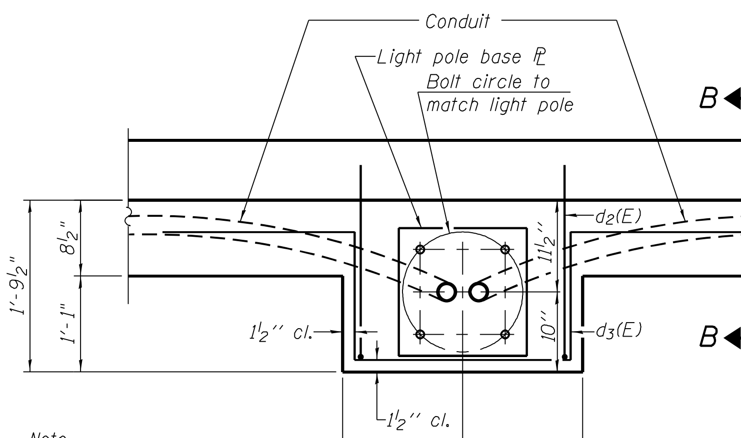
MINIMUM BAR LAP

(Parapet)

#4 bar = 2'-8"

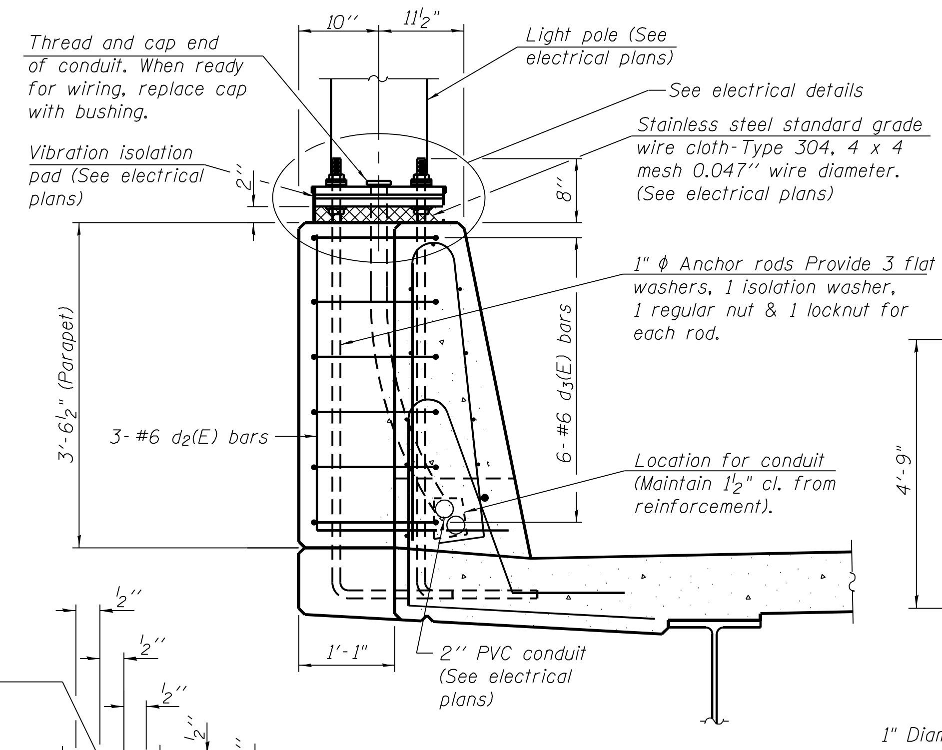


SECTION THRU MEDIAN PARAPET

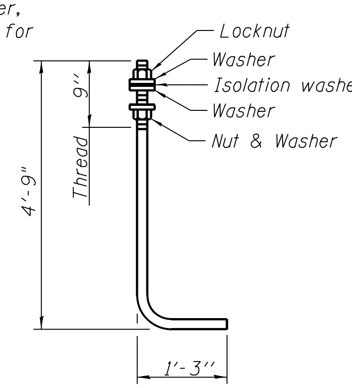


Note:
Cost of anchor rods is included with Concrete Superstructure.

LIGHT POLE FOUNDATION PLAN

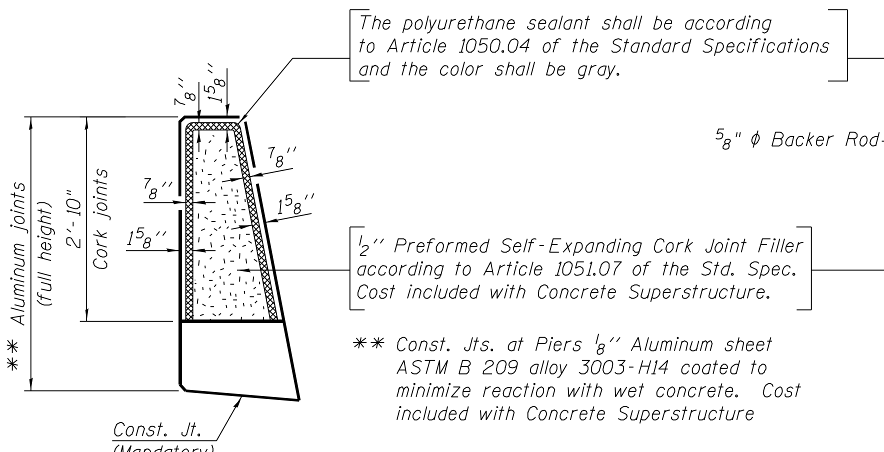


SECTION B-B



ANCHOR ROD

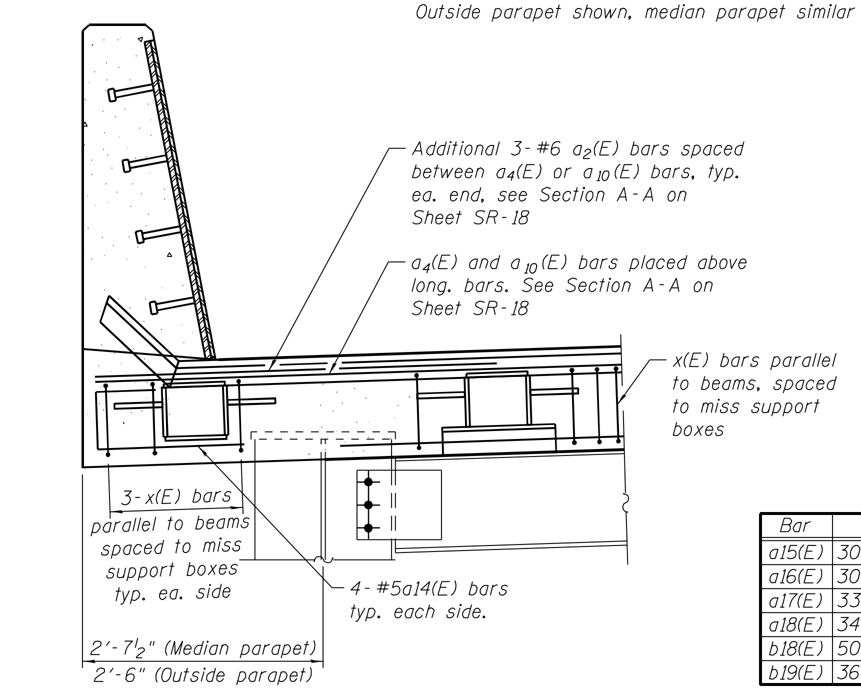
1" Diameter ASTM F 1554 Grade 105
Full length hot dipped galvanized



✱✱ Const. Jts. at Piers ⅛" Aluminum sheet ASTM B 209 alloy 3003-H14 coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure

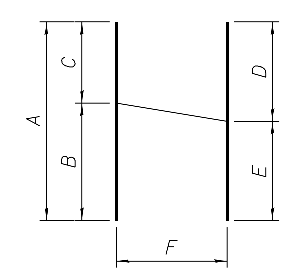
PARAPET JOINT DETAILS

Outside parapet shown, median parapet similar



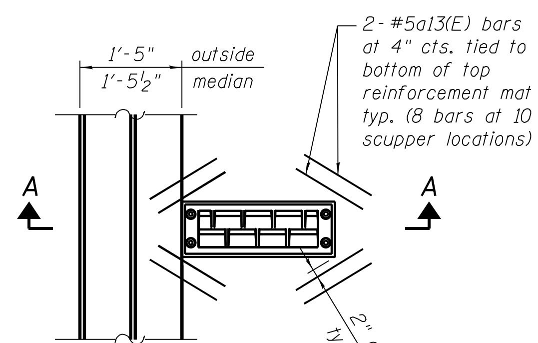
SLAB EDGE TREATMENT AT WEST ABUTMENT EXP. JOINT

✱✱✱
Order b18(E) & b19(E) bars full length. Cut as shown and use remainder of bars in the same level in the same corner.



Bar	A	B	C	D	E	E
a15(E)	30'-0"	28'-0"	2'-0"	14'-5"	15'-7"	11 bars
a16(E)	30'-4"	28'-5"	1'-11"	14'-9"	15'-7"	17 bars
a17(E)	33'-8"	31'-8"	2'-0"	16'-3"	17'-5"	12 bars
a18(E)	34'-6"	32'-1"	2'-5"	16'-10"	17'-8"	19 bars
b18(E)	50'-0"	34'-0"	16'-0"	24'-8"	25'-4"	14 bars
b19(E)	36'-4"	28'-6"	7'-10"	17'-10"	18'-6"	16 bars

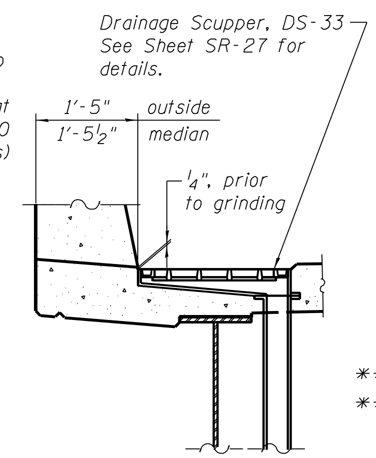
Bars a15(E) thru a18(E), b18(E) & b19(E) CUTTING DIAGRAM



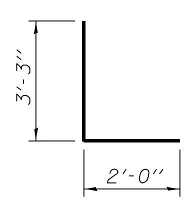
PLAN

Note: Cut longitudinal reinforcement to clear drainage scuppers. Space transverse bars to miss scupper.

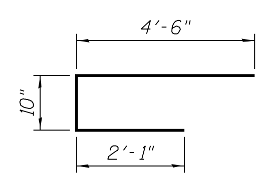
DETAIL AT SCUPPER DS-33



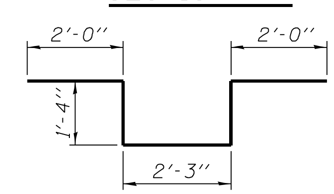
SECTION A-A



BAR d2(E)



BAR a14(E)



BAR d3(E)

SUPERSTRUCTURE BILL OF MATERIAL

	BAR	No.	SIZE	LENGTH	SHAPE
	a(E)	1095	#5	29'-7"	
	a1(E)	713	#5	29'-3"	
	a2(E)	2263	#6	8'-4"	
	a3(E)	32	#5	6'-2"	
	a4(E)	4	#5	29'-9"	
✱	a5(E)	24	#5	8'-8"	
	a6(E)	1	#5	32'-9"	
	a7(E)	4	#5	35'-8"	
	a8(E)	1136	#5	32'-7"	
	a9(E)	745	#5	32'-3"	
	a10(E)	4	#5	32'-9"	
	a11(E)	1	#5	36'-3"	
	a12(E)	4	#5	39'-3"	
	a13(E)	80	#5	1'-6"	
	a14(E)	8	#5	7'-5"	
	a15(E)	11	#5	30'-0"	
	a16(E)	17	#5	30'-4"	
	a17(E)	12	#5	33'-8"	
	a18(E)	19	#5	34'-6"	
	b(E)	2613	#5	30'-0"	
	b1(E)	252	#6	31'-0"	
	b2(E)	63	#6	39'-0"	
	b3(E)	126	#6	25'-0"	
	b4(E)	63	#6	60'-0"	
	b5(E)	13	#5	16'-9"	
	b6(E)	14	#5	15'-0"	
	b7(E)	11	#5	13'-3"	
	b8(E)	13	#5	11'-6"	
	b9(E)	16	#5	28'-0"	
	b10(E)	14	#5	26'-3"	
	b11(E)	18	#5	24'-9"	
	b12(E)	5	#5	10'-6"	
	b13(E)	5	#5	14'-6"	
	b14(E)	6	#5	20'-0"	
	b15(E)	5	#5	10'-0"	
	b16(E)	8	#5	16'-6"	
	b17(E)	4	#5	15'-3"	
✱✱✱	b18(E)	16	#5	50'-0"	
✱✱✱	b19(E)	16	#5	36'-4"	
	b20(E)	63	#6	50'-0"	

BAR	No.	SIZE	LENGTH	SHAPE
d(E)	1840	#5	6'-10"	
d1(E)	960	#5	7'-2"	
d2(E)	9	#6	5'-1"	
d3(E)	18	#6	8'-11"	
d4(E)	880	#5	7'-3"	
e(E)	96	#4	16'-6"	
e1(E)	80	#4	19'-8"	
e2(E)	48	#4	17'-9"	
e3(E)	112	#4	18'-9"	
e4(E)	48	#4	14'-2"	
e5(E)	40	#4	17'-0"	
e6(E)	96	#4	16'-9"	
e7(E)	40	#4	16'-3"	
e8(E)	24	#4	13'-5"	
e9(E)	40	#4	17'-2"	
e10(E)	40	#4	22'-6"	
e11(E)	52	#4	24'-0"	
e12(E)	16	#4	26'-0"	
e13(E)	56	#4	23'-0"	
e14(E)	16	#4	22'-0"	
x1(E)	51	#5	6'-0"	
x2(E)	45	#5	6'-5"	

Item	Unit	Quantity
Concrete Superstructure	Cu Yd	1,239.7
Reinforcement Bars, Epoxy Coated	Pound	304,970

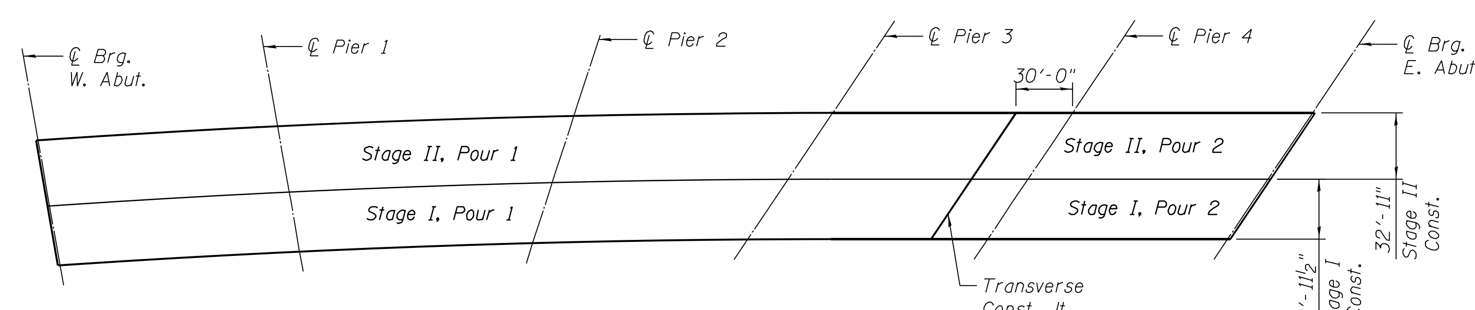
✱ 3- #5(E) bar splicers to be furnished by bar splicer supplier and cost included with Bar Splicers. See sheet SR-54 for details.

DECK POUR NOTES

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

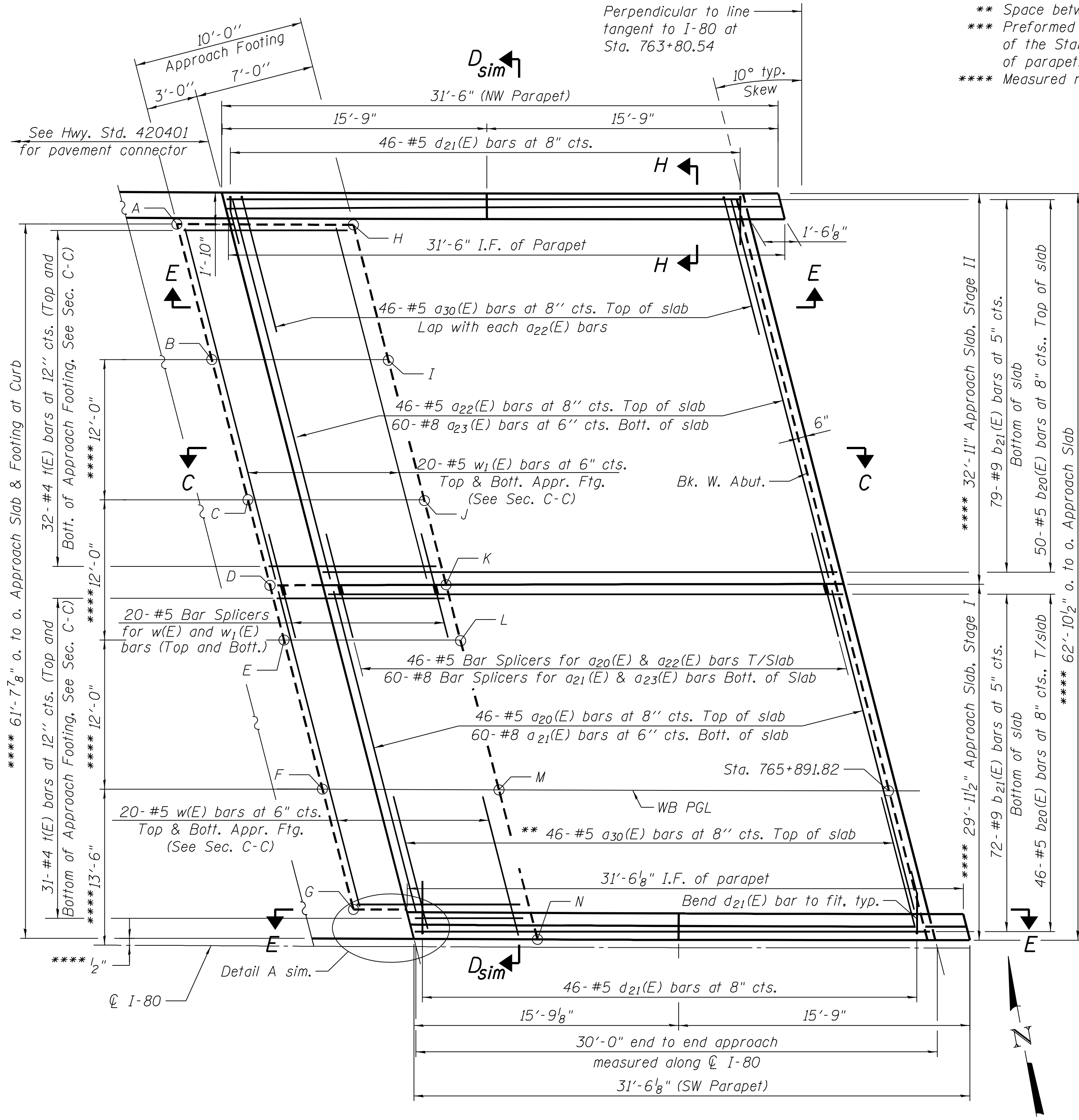
   1) At least 72 hours shall have elapsed from the end of the previous pour.

   2) The concrete strength shall have attained a minimum flexural strength of 675 psi or a minimum compressive strength of 4000 psi.

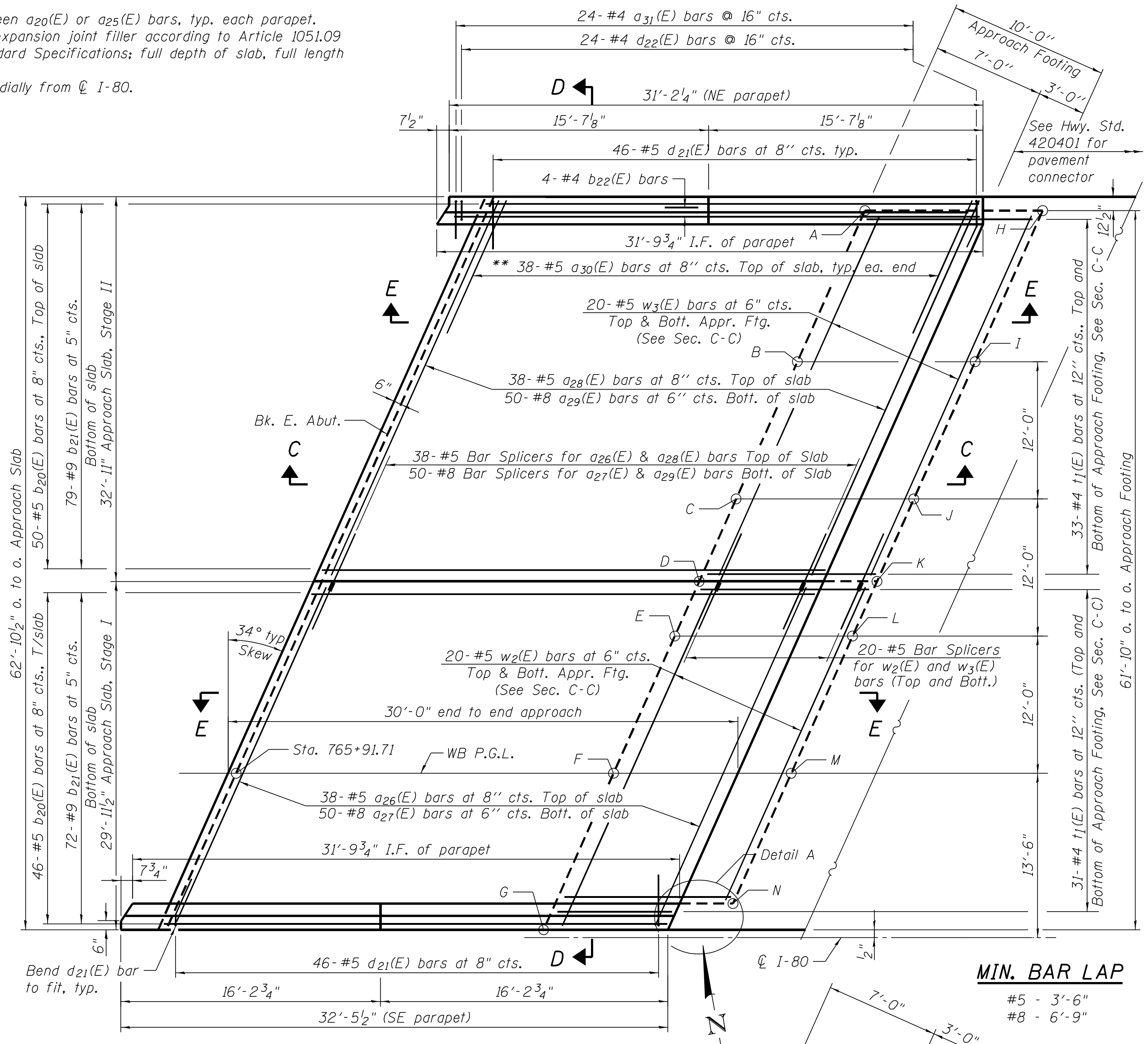


DECK POUR SEQUENCE

** Space between $a_{20}(E)$ or $a_{25}(E)$ bars, typ. each parapet.
*** Preformed expansion joint filler according to Article 1051.09 of the Standard Specifications; full depth of slab, full length of parapet.
**** Measured radially from ℄ I-80.



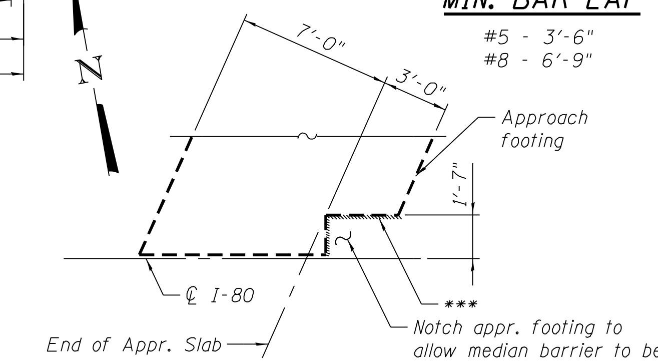
WEST APPROACH PLAN



EAST APPROACH PLAN

MIN. BAR LAP

#5 - 3'-6"
#8 - 6'-9"



DETAIL A

Reinforcement not shown for clarity

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTINGS

Point	West Approach		East Approach	
	Top	Bottom	Top	Bottom
A	603.87	603.04	622.57	621.73
B	603.52	602.69	622.51	621.67
C	603.16	602.33	622.42	621.59
D	602.94	602.10	622.35	621.52
E	602.80	601.97	622.31	621.48
F	602.44	601.61	622.17	621.33
G	602.09	601.25	621.98	621.14

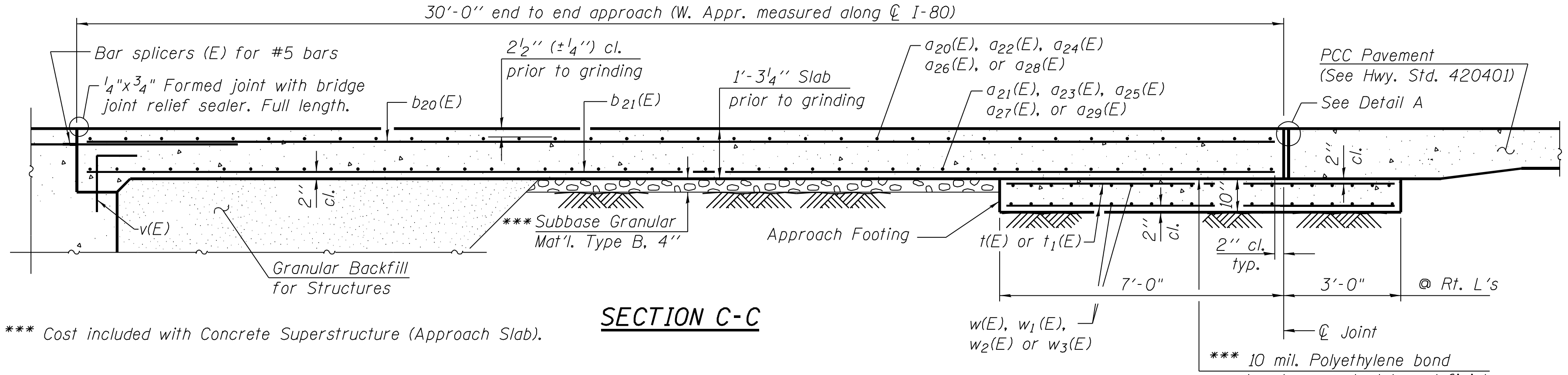
Point	West Approach		East Approach	
	Top	Bottom	Top	Bottom
H	604.17	603.34	622.81	621.98
I	603.82	602.99	622.77	621.94
J	603.46	602.63	622.71	621.88
K	603.24	602.41	622.65	621.82
L	603.11	602.27	622.62	621.78
M	602.75	601.91	622.50	621.66
N	602.34	601.51	622.35	621.52

Notes:

1. See Sheet SR-23 for Sections C-C & D-D, H-H, & I-I, Views B-B & F-F, and additional notes.
2. For Parapet Elevations, see Sheet SR-24.
3. For Bar List, see Sheet SR-24.

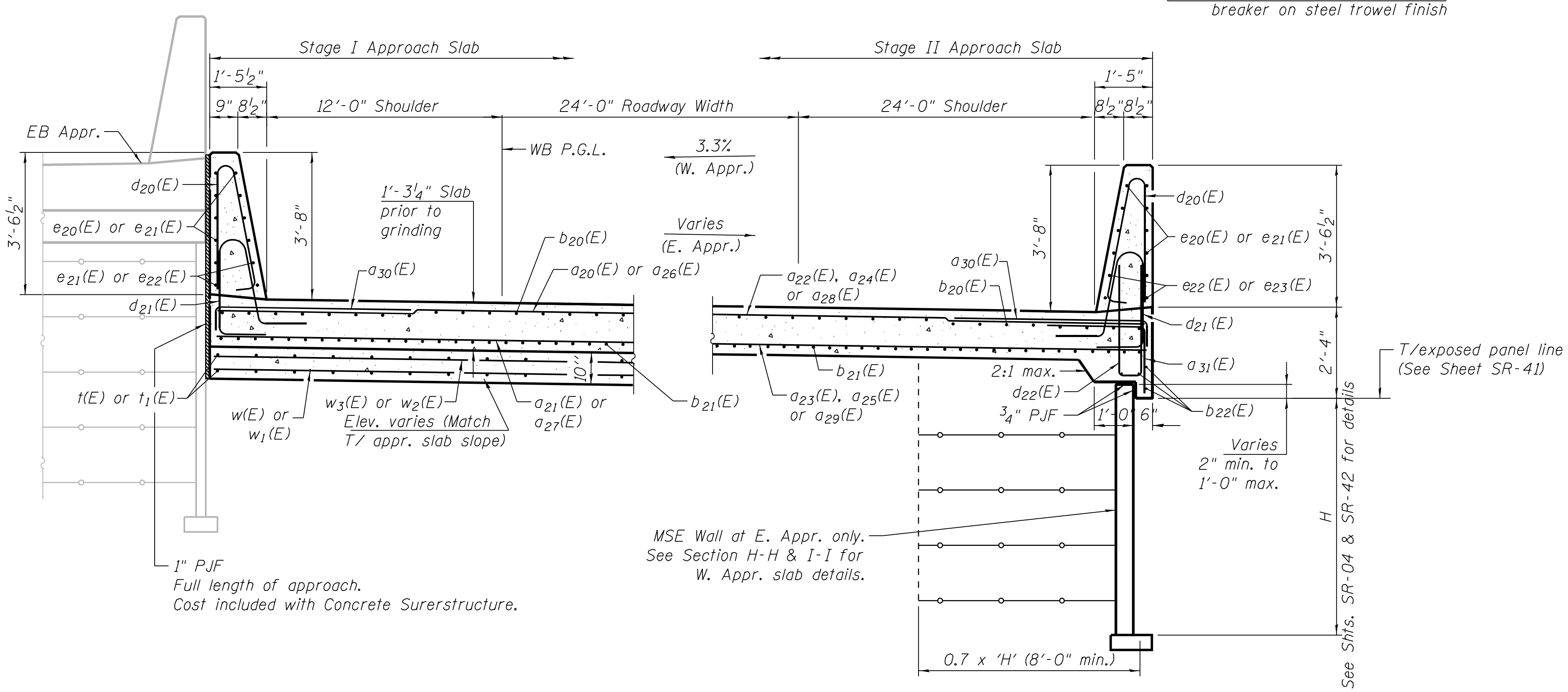
exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB PLAN STRUCTURE NO. 099-0905
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-22 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	321
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	



*** Cost included with Concrete Superstructure (Approach Slab).

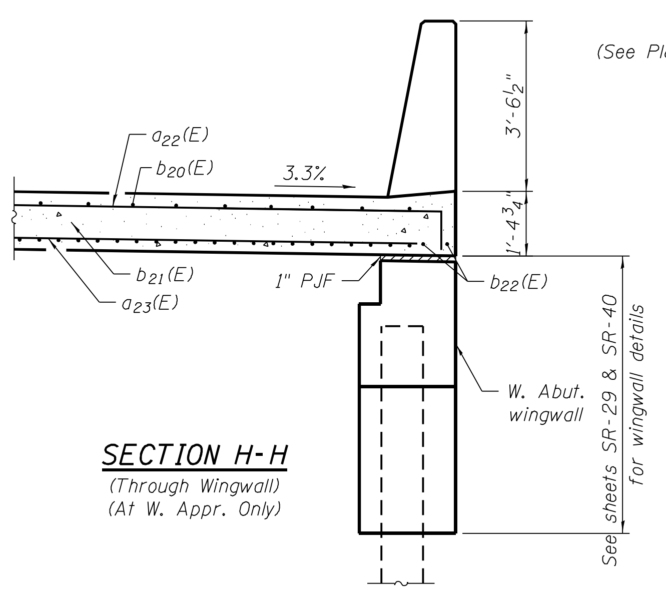
SECTION C-C



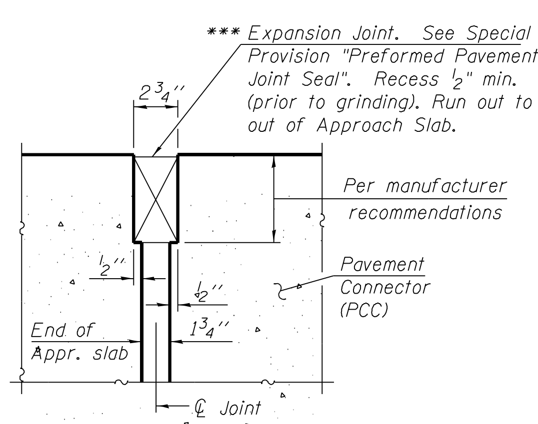
SECTION MEDIAN PARAPET
(At W. or E. Approach Footing)

SECTION THROUGH OUTSIDE PARAPET
(Near E. Abutment)

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



SECTION H-H
(Through Wingwall)
(At W. Appr. Only)



DETAIL A
(@ Rt. L's)

Notes:
1. a(E) thru a_9(E) bar spacings measured along ℄ Rdwy.
2. Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
3. Parapet concrete shall be paid for as Concrete Superstructure.
4. Approach footing concrete shall be paid for as Concrete Structures.
5. Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
6. For v(E) bar details, see Sheets SR-38 & SR-39.
7. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
8. For bar splicer details, see Sheet SR-53.
9. Cost of excavation for approach footing included with Concrete Structures.
10. For Granular Backfill for Structures and drainage treatment details, see Sheet SR-40.
11. For additional parapet details, see Sheets SR-38, SR-39 & SR-40.
12. For parapet joint details, see Sheet SR-21. Cost of joint materials included the cost of Concrete Superstructure.

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exp.

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	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS I
STRUCTURE NO. 099-0905

SHEET SR-23 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60W35		
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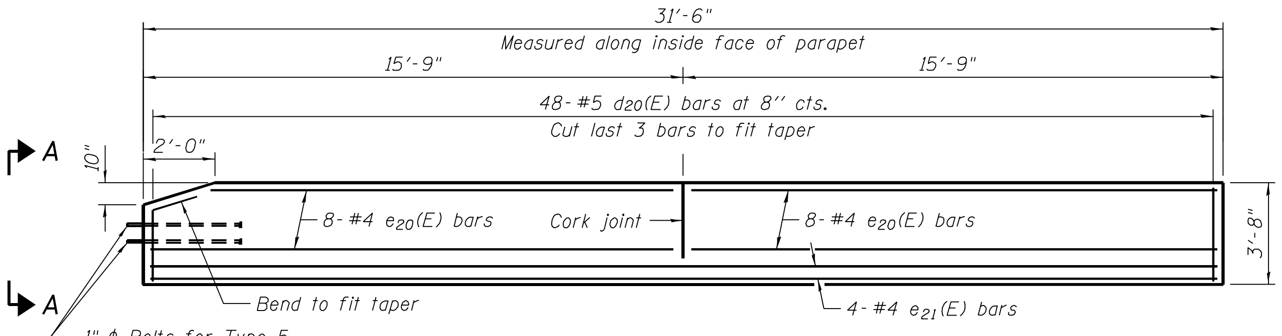
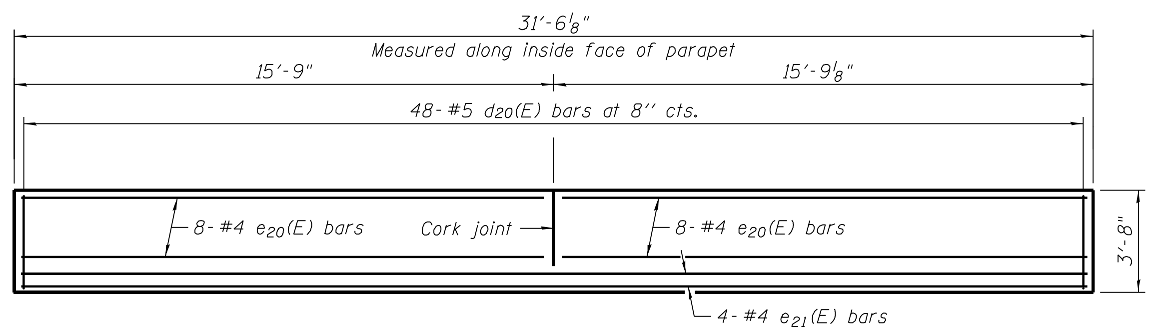
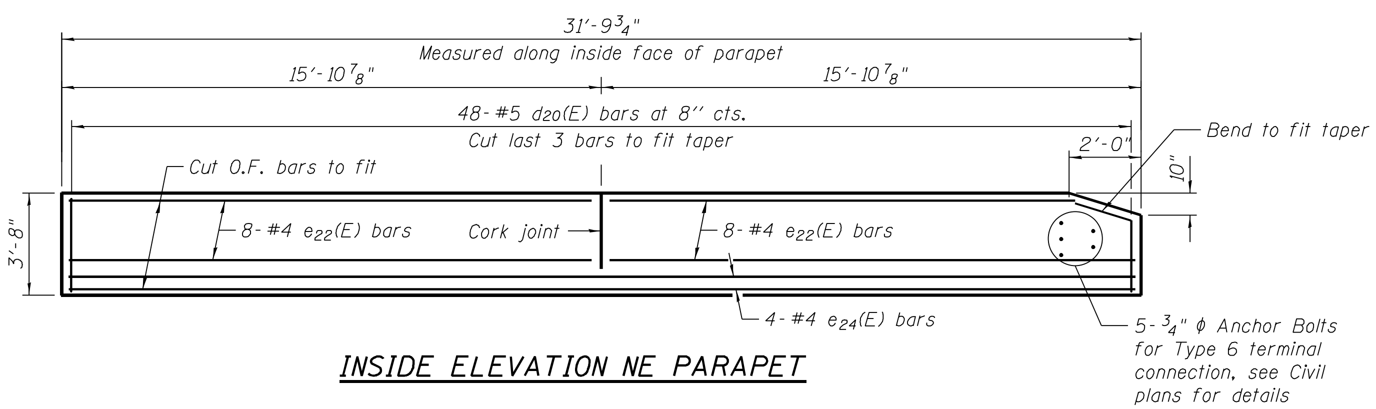


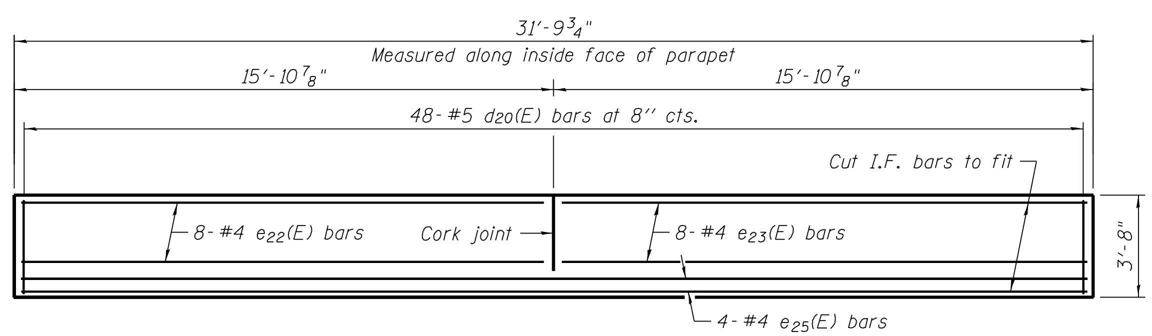
INSIDE ELEVATION NW PARAPET



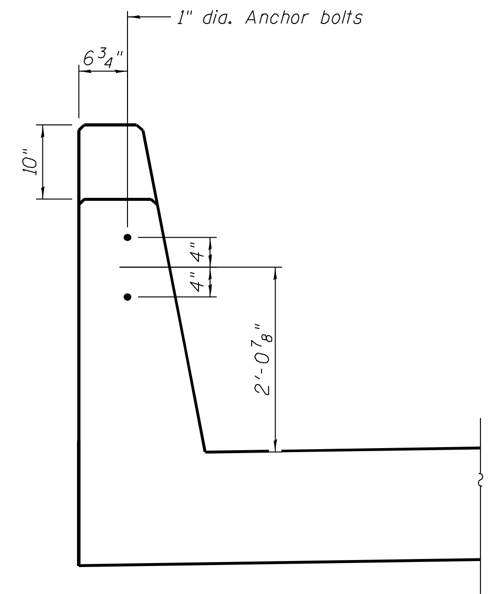
INSIDE ELEVATION SW PARAPET



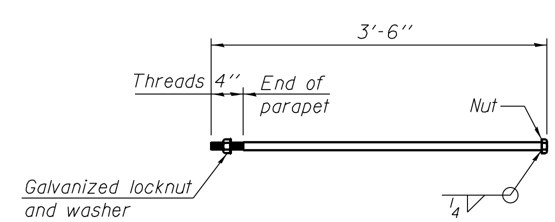
INSIDE ELEVATION NE PARAPET



INSIDE ELEVATION SE PARAPET



VIEW A-A



1''ϕ ANCHOR BOLT

(Anchor Bolt assemblies shall be Galvanized according to Article 1006.09 of the Standard Specifications. Cost included with Concrete Superstructure (Approach Slab))

WEST APPROACH BILL OF MATERIAL

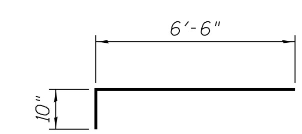
Bar	No.	Size	Length	Shape
a20(E)	46	#5	29'-8"	
a21(E)	60	#8	29'-8"	
a22(E)	46	#5	32'-9"	
a23(E)	60	#8	32'-9"	
a30(E)	92	#5	7'-4"	
b20(E)	96	#5	29'-8"	
b21(E)	151	#9	29'-8"	
d20(E)	96	#5	6'-11"	
d21(E)	92	#5	8'-6"	
e20(E)	32	#4	15'-5"	
e21(E)	8	#4	31'-2"	
t(E)	128	#4	9'-8"	
w(E)	40	#5	29'-9"	
w1(E)	40	#5	30'-11"	

Item	Unit	Quantity
Concrete Structures	Cu Yd	18.7
Concrete Superstructure	Cu Yd	9.0
Concrete Superstructure (Approach Slab)	Cu Yd	89.0
Reinforcement Bars, Epoxy Coated	Pound	37,260

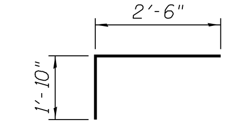
EAST APPROACH BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a26(E)	38	#5	35'-9"	
a27(E)	50	#8	35'-9"	
a28(E)	38	#5	39'-4"	
a28(E)	50	#8	39'-4"	
a30(E)	76	#5	7'-4"	
a31(E)	24	#4	4'-4"	
b20(E)	96	#5	29'-8"	
b21(E)	151	#9	29'-8"	
b22(E)	4	#4	30'-10"	
d20(E)	96	#5	6'-11"	
d21(E)	92	#5	8'-6"	
d22(E)	24	#4	6'-4"	
e22(E)	24	#4	15'-7"	
e23(E)	8	#4	16'-2"	
e24(E)	4	#4	31'-6"	
e25(E)	4	#4	32'-1"	
t1(E)	128	#4	11'-8"	
w2(E)	40	#5	35'-8"	
w3(E)	40	#5	38'-1"	

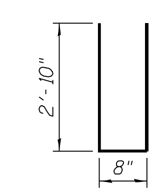
Item	Unit	Quantity
Concrete Structures	Cu Yd	22.8
Concrete Superstructure	Cu Yd	9.3
Concrete Superstructure (Approach Slab)	Cu Yd	89.0
Reinforcement Bars, Epoxy Coated	Pound	38,120



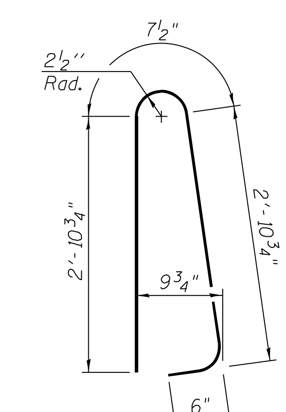
BAR $a_{30}(E)$



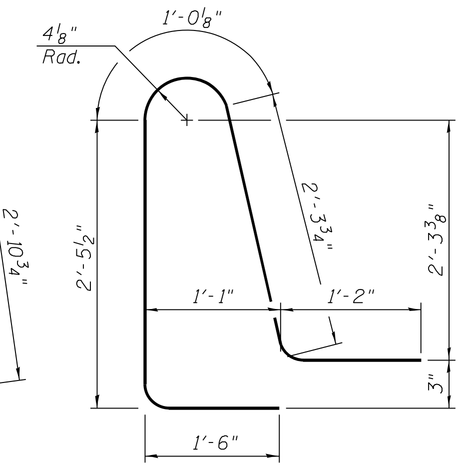
BAR $a_{31}(E)$



BAR $d_{22}(E)$



BAR $d_{20}(E)$



BAR $d_{21}(E)$

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE APPROACH SLAB DETAILS II STRUCTURE NO. 099-0905	F.A.I. RTE. 80	SECTION 2013-009B
		CHECKED - VCP	REVISED -			COUNTY WILL	TOTAL SHEETS 465 / SHEET NO. 323
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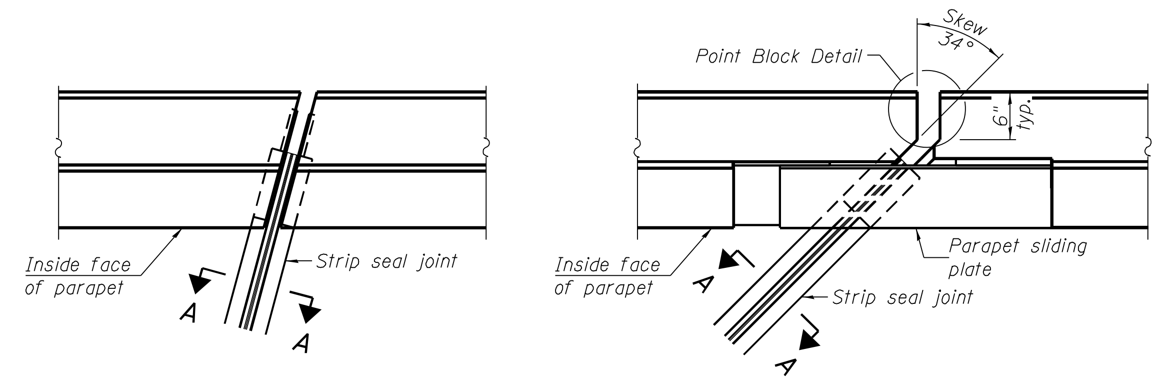
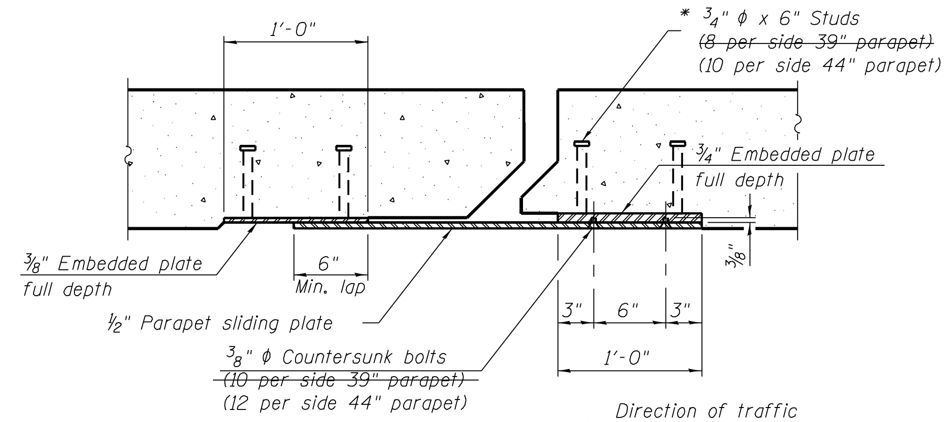


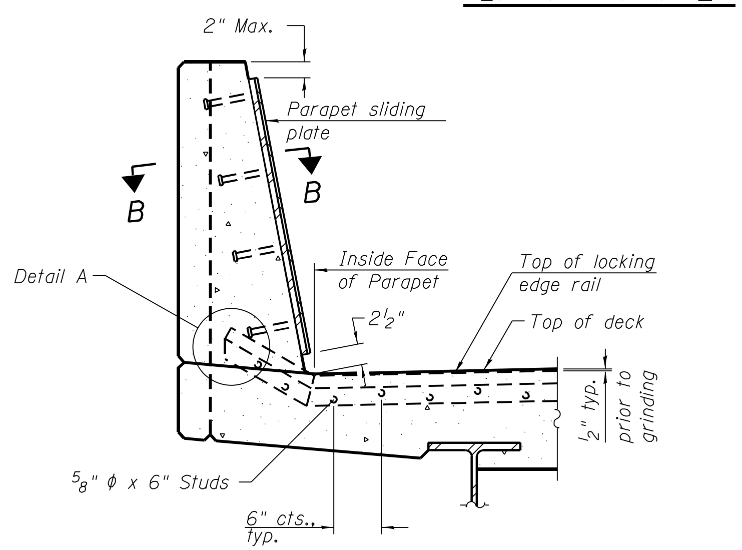
FOR SKEWS <= 30°

FOR SKEWS > 30°

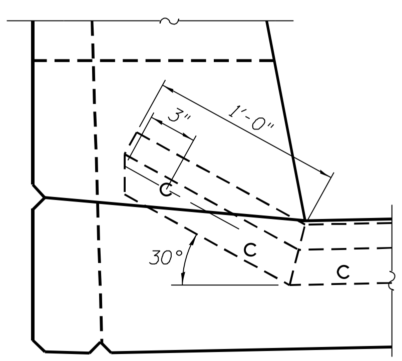
PLAN AT PARAPET



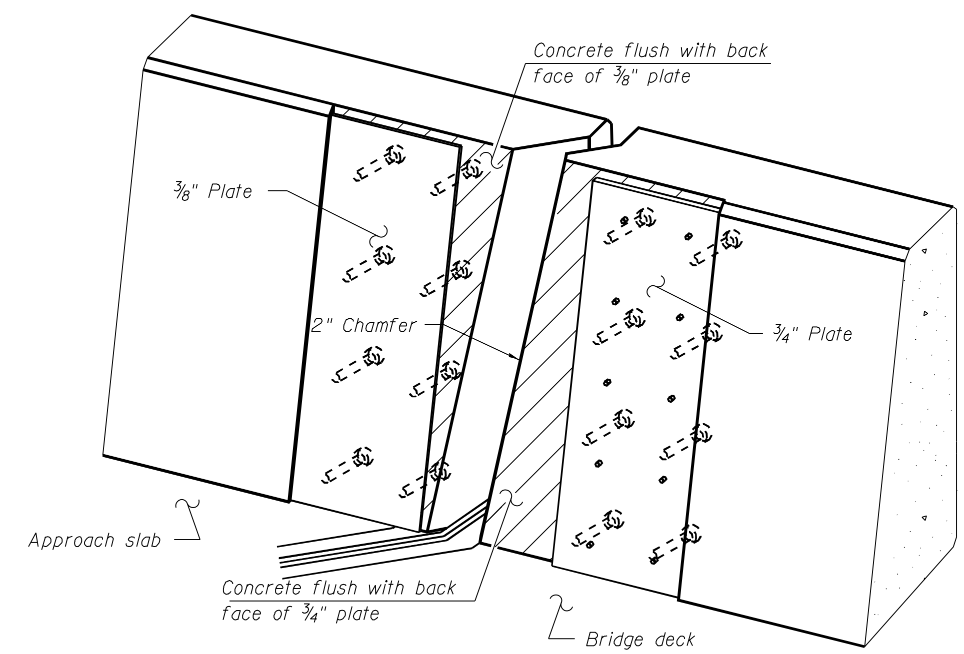
SECTION B-B



SECTION THRU PARAPET

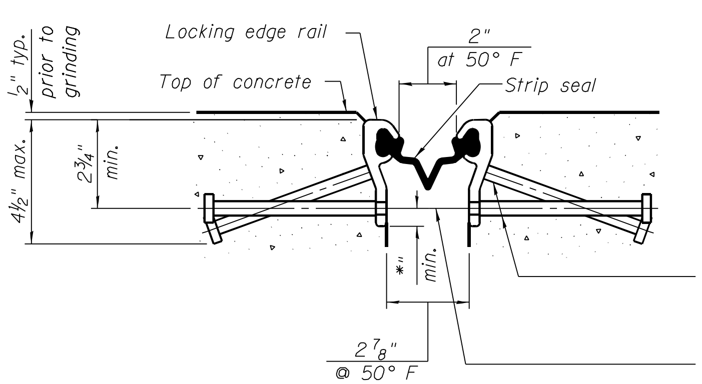


DETAIL A



TRIMETRIC VIEW

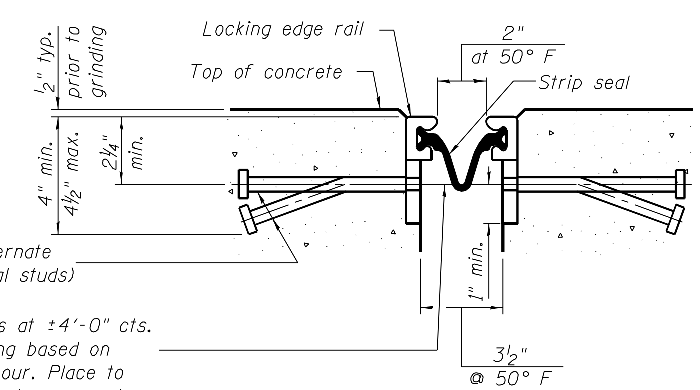
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

* 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

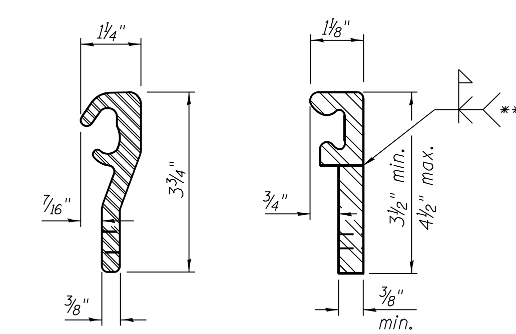
3/8" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.



SHOWING WELDED RAIL JOINT

SECTION A-A

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

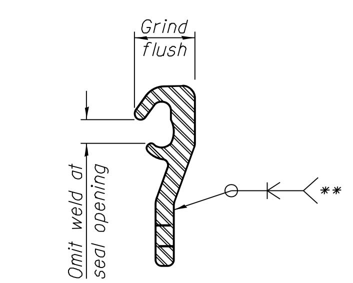


ROLLED
(EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

NOTES

1. 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.

2. The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

3. The manufacturer's recommended installation methods shall be followed.

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

5. The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

6. Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.

7. 39" constant-slope barrier shown, 44" constant-slope similar as noted.

8. The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

9. Details to be verified with pending base sheet for IDOT constant-slope barrier.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	76

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 099-0905

SHEET SR-25 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	324
		CONTRACT NO. 60W35		
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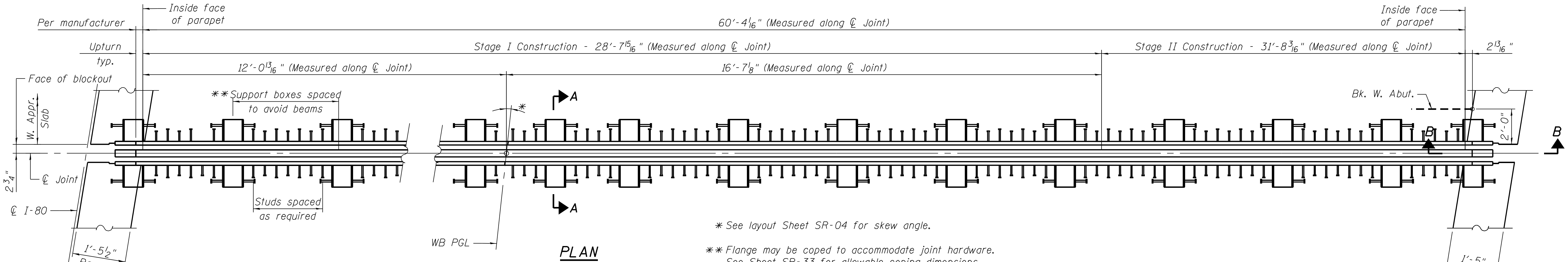
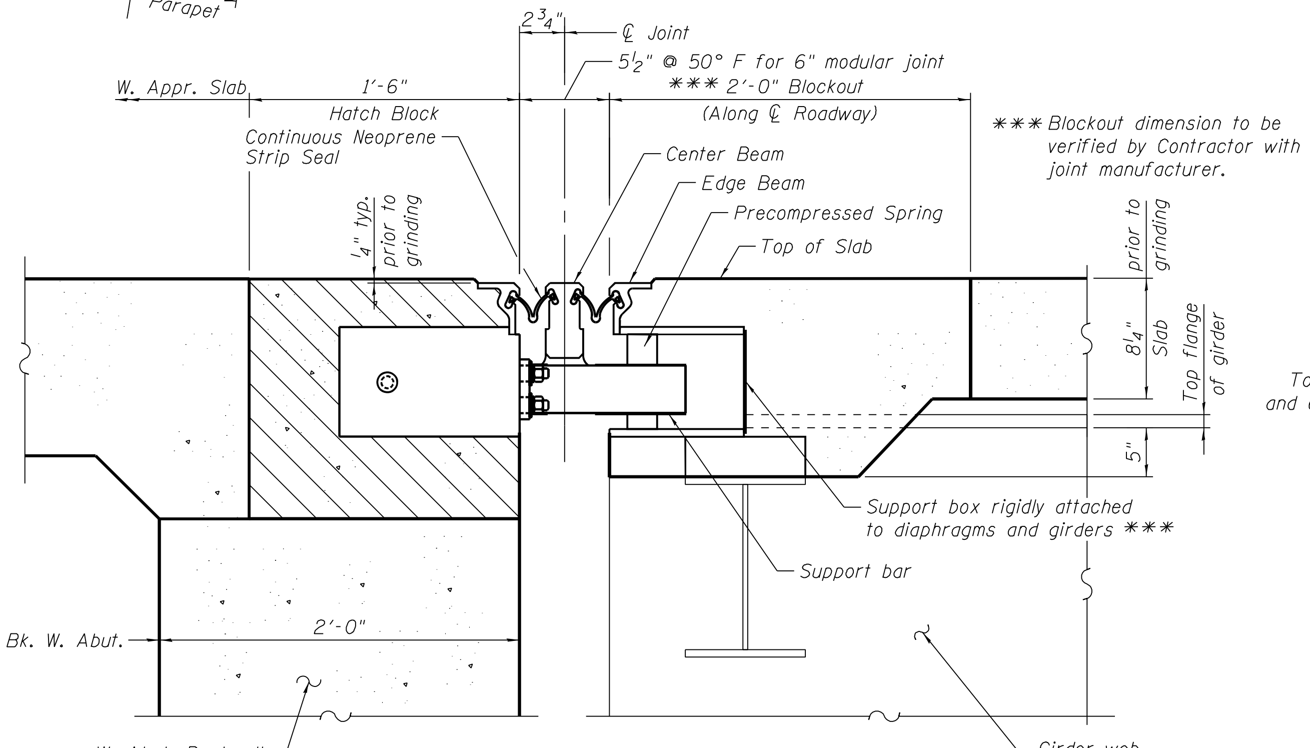


PLAN

* See layout Sheet SR-04 for skew angle.

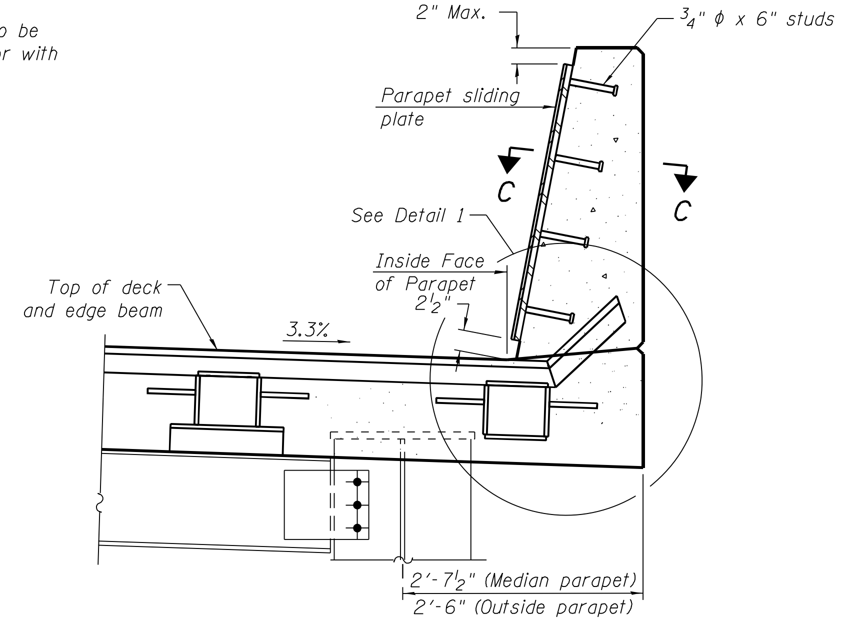
** Flange may be coped to accommodate joint hardware. See Sheet SR-33 for allowable coping dimensions. Only beam flanges interfering with joint hardware shall be coped. Cost included with Furnishing and Erecting Structural Steel.



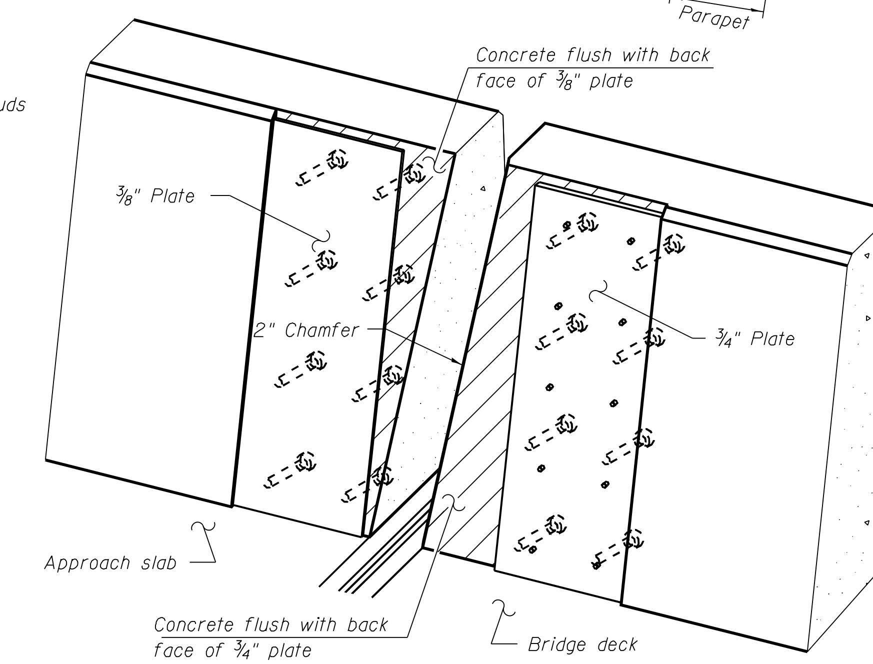
*** Blockout dimension to be verified by Contractor with joint manufacturer.

SECTION A-A

(Dim. ⊥ to ℄ abut. U.N.O.)

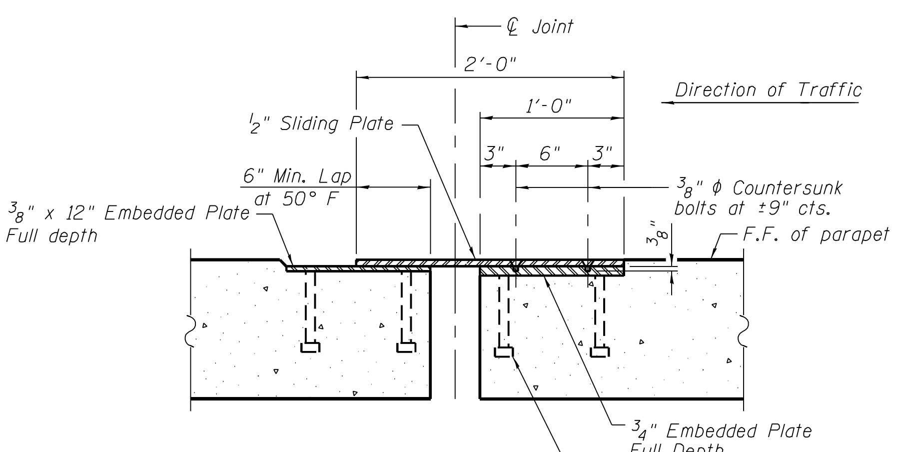


SECTION B-B



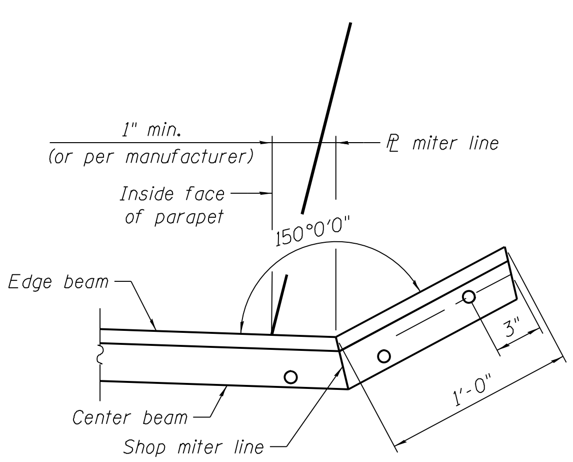
TRIMETRIC VIEW

(Showing embedded plates only)



SECTION C-C

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



DETAIL 1

NOTES

1. Modular Expansion Joint shall be a pre-approved system as listed in the Special Provision.

2. Joint shall be fabricated and installed according to the manufacturer's recommendations and as approved by the Engineer.

3. Joint shall be fabricated to conform to the roadway cross-slope.

4. All structural steel elements including the embedded and sliding plates shall be fabricated with AASHTO M270, Grade 50 steel.

5. See Framing Plans for beam locations.

6. For end of deck details, see Sheet SR-18. Required adjustments to reinforcement bars due to the actual joint used shall be made at no additional cost to the Department.

7. For parapet sliding plates, embedded plates, and anchorage studs details, see Sheet SR-25. Details for 44" Parapet with skew less than 30-deg shall be used, and general notes shall be applicable. Parapet plates, studs and anchorage studs are included in the cost of Modular Expansion Joint 6".

8. The joint configuration depicted is conceptual only. Actual dimensions and details may differ based on the manufacturer.

9. The joint opening and deck dimensions detailed on the superstructure are based on the distance beween the top of the edge beams shown on this sheet. The opening and deck dimensions shall be modified according to the manufacturer's recommendations to accommodate the configuration of the actual joint used. Required modifications shall be made at no additional cost to the Department.

10. Modular expansion joints shall be assembled in their final relative position wih the ends in place for shop inspection and acceptance.

BILL OF MATERIAL

Item	Unit	Total
Modular Expansion Joint 6"	Foot	61

exp.	USER NAME =	DESIGNED - CCE	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - HBJ	REVISED -
	PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MODULAR JOINT
STRUCTURE NO. 099-0905

SHEET SR-26 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	325
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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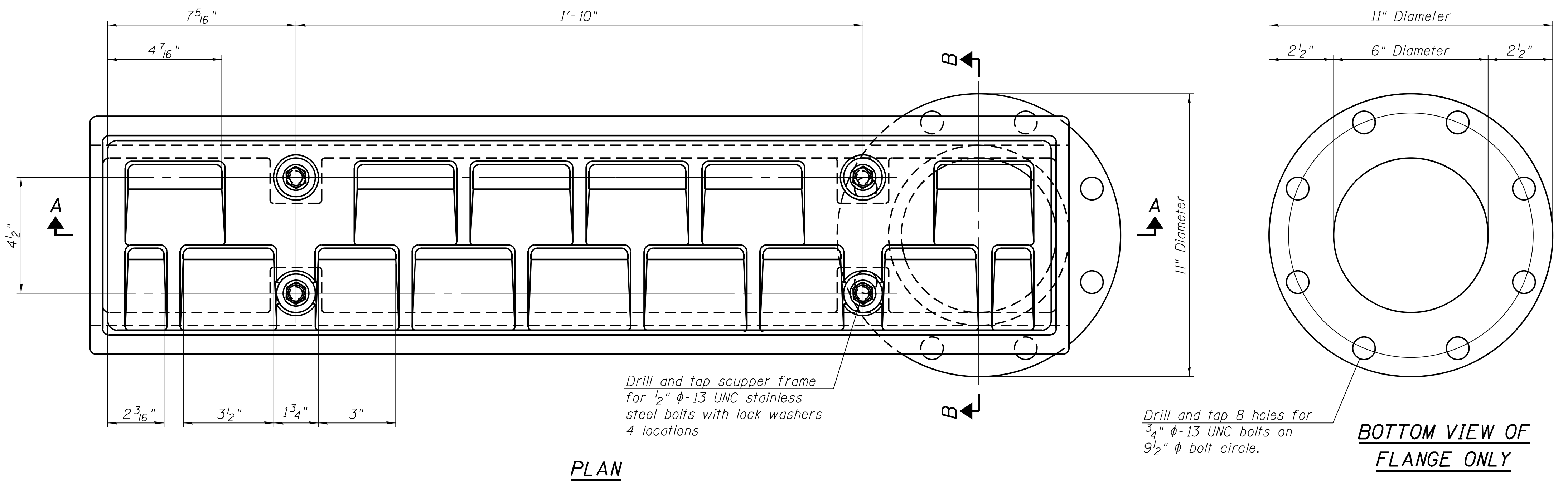
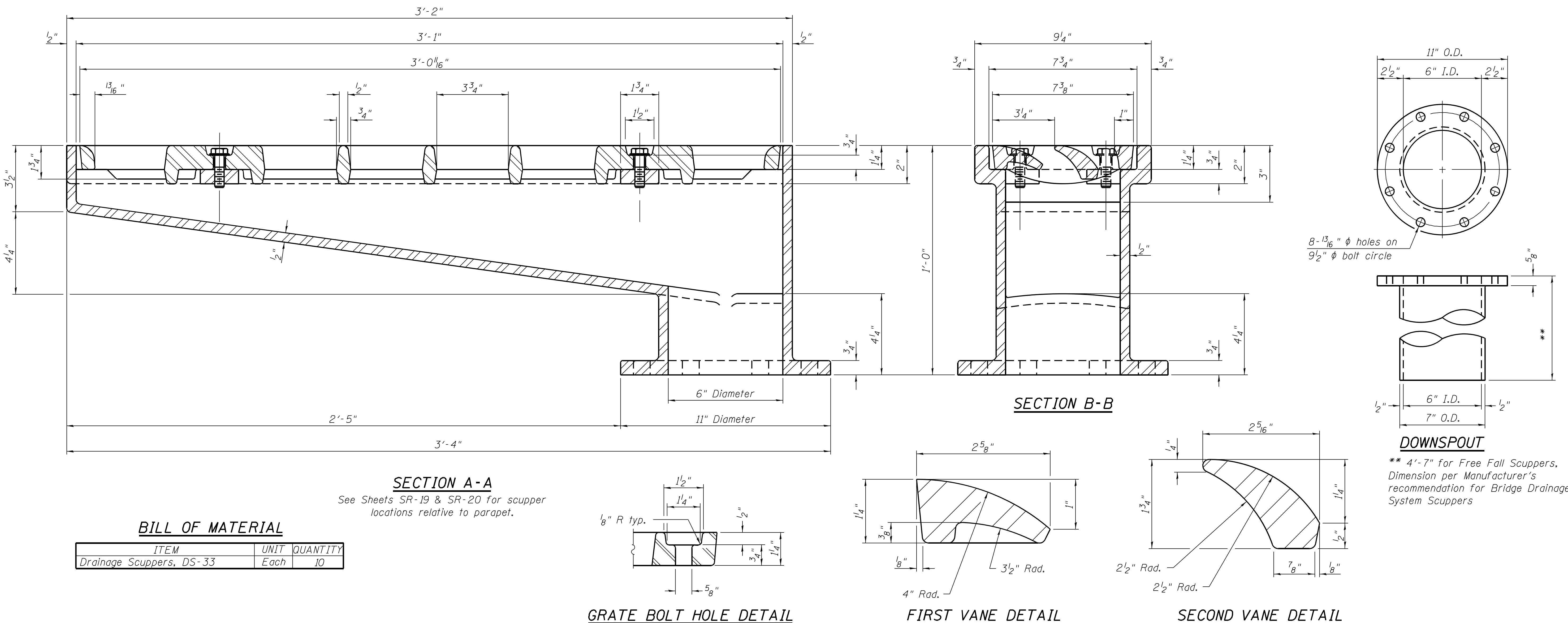


Notes:
All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.
Bolts, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.
Stainless steel hardware shall be 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 frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.
Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.
As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.
Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be pigmented or painted to match the color of the adjacent beam.
The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
Cost of the grate, frame, downspout, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-33.
See Sheet SR-28 for Drainage System Details.



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scuppers, DS-33	Each	10

exp.	USER NAME =	DESIGNED - CCE	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - HBJ	REVISED -
	PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE SCUPPER DS-33
STRUCTURE NO. 099-0905

SHEET SR-27 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	326
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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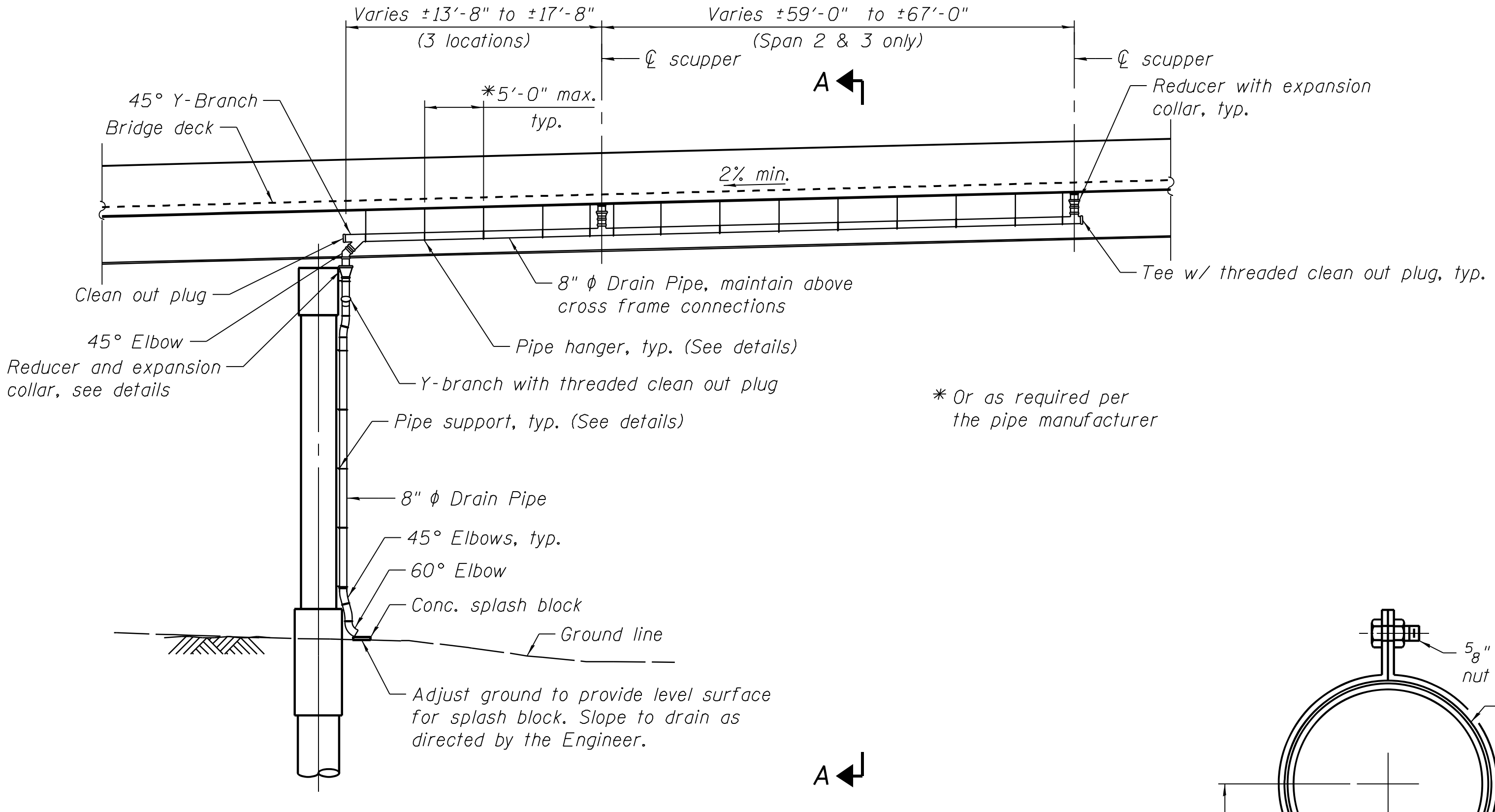
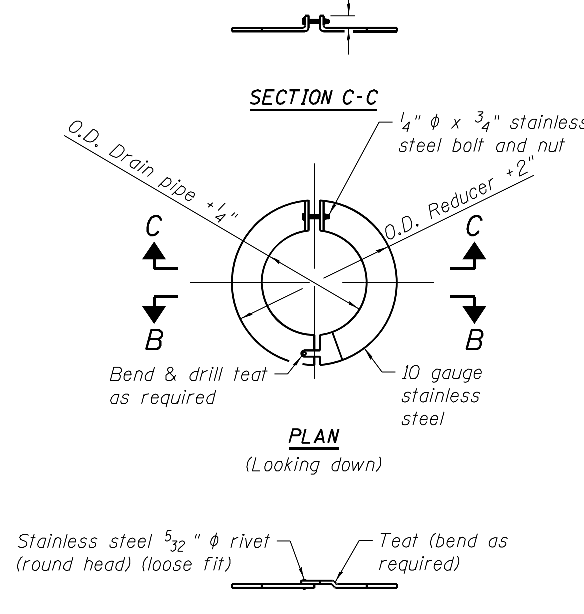
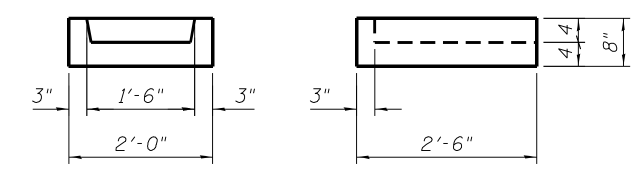


TYPICAL ELEVATION

(Looking North at Piers 1, 2 & 4)

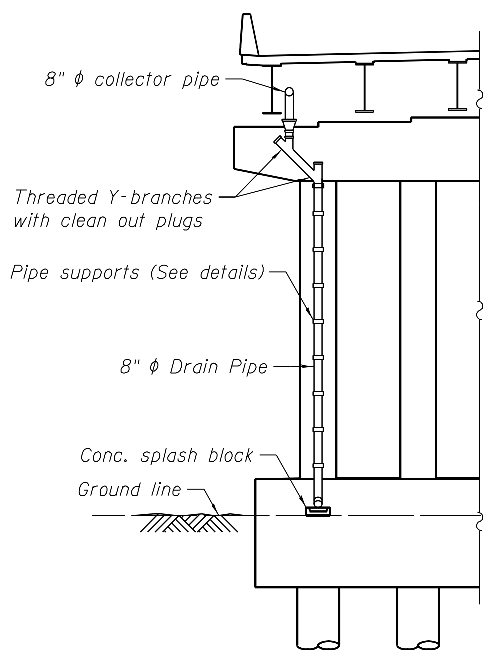


EXPANSION COLLAR DETAILS



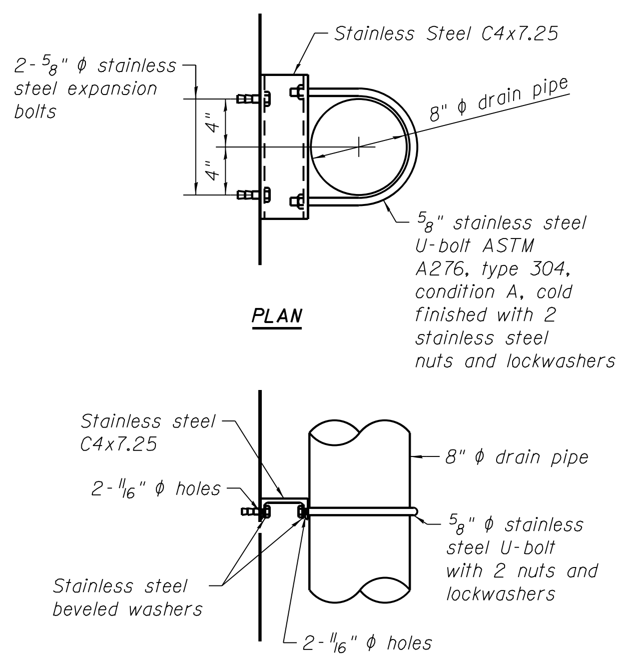
PRECAST CONCRETE SPLASH BLOCK

Cost included with Drainage System for Structures

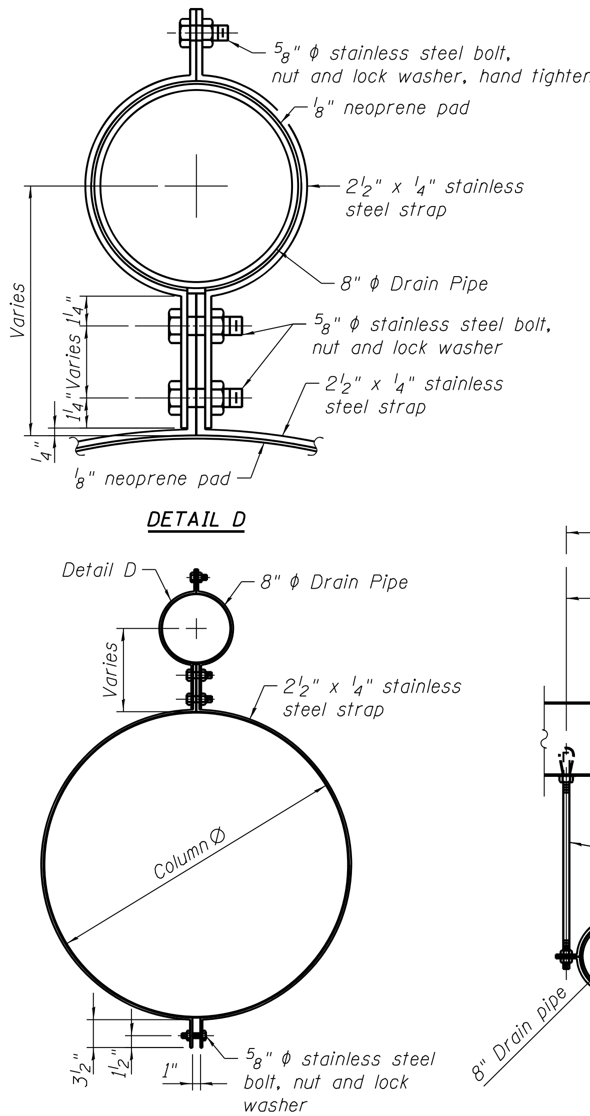


VIEW A-A

(Looking West)

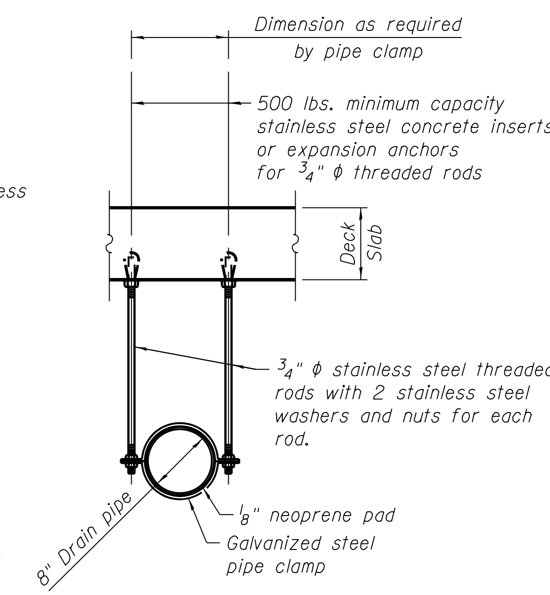


FLAT SURFACES



COLUMNS

VERTICAL DRAIN PIPE SUPPORT DETAILS



COLLECTOR PIPE HANGER DETAILS

Notes:
1. For Drainage scupper locations, see Sheets SR-17 & SR-18.
2. For Drainage scupper details, see Sheet SR-27.
3. Pipe supports shall be provided on all horizontal pipes at each tee, elbow, or change in direction and at intermediate points not more than 5'-0" on centers.
4. Collector pipe hangers shall have a load capacity of not less than 2,000 lbs. and shall be designed so as not to apply excessive compressive stress to the pipe.
5. Pipe supports shall be provided on all vertical drain pipes at not more than 12'-0" on centers, or as approved by the Engineer.
6. Reducers shall be sized to accommodate the following longitudinal movements in each direction:
   Piers: 3"
   Scuppers: 1"
7. Drain pipes and fittings shall be 8" ϕ.
8. The collector pipe shall run above the bottom flange of the fascia beam. The pipe shall run between diaphragm members and connections.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Drainage System for Structures	L. Sum	1

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exp.

USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

DRAINAGE SYSTEM DETAILS
STRUCTURE NO. 099-0905

SHEET SR-28 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	327

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

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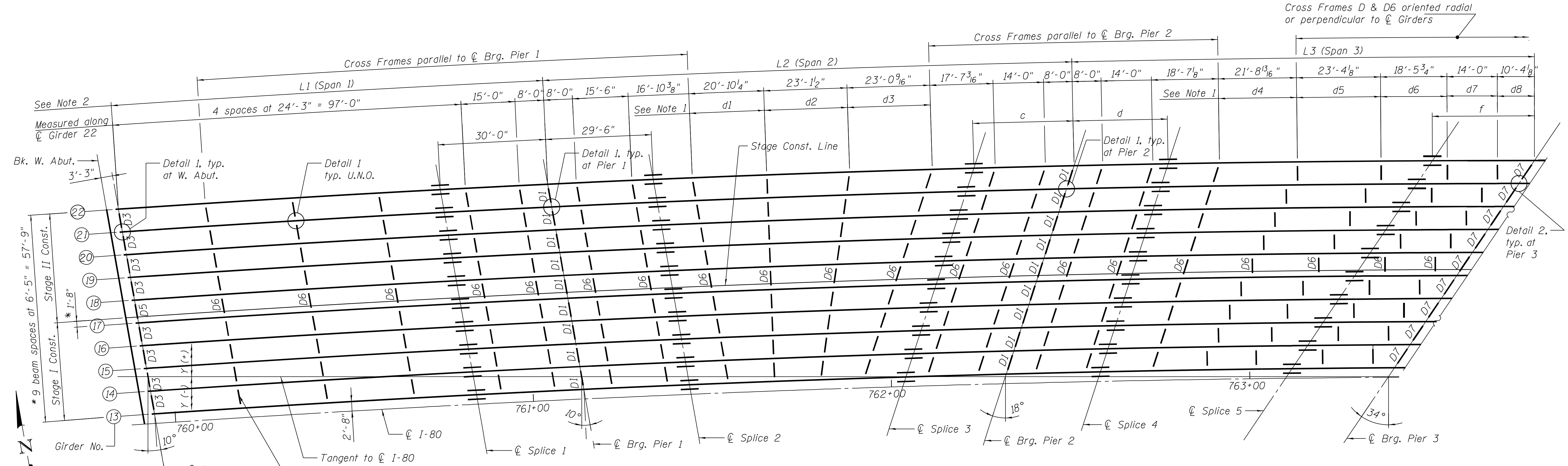
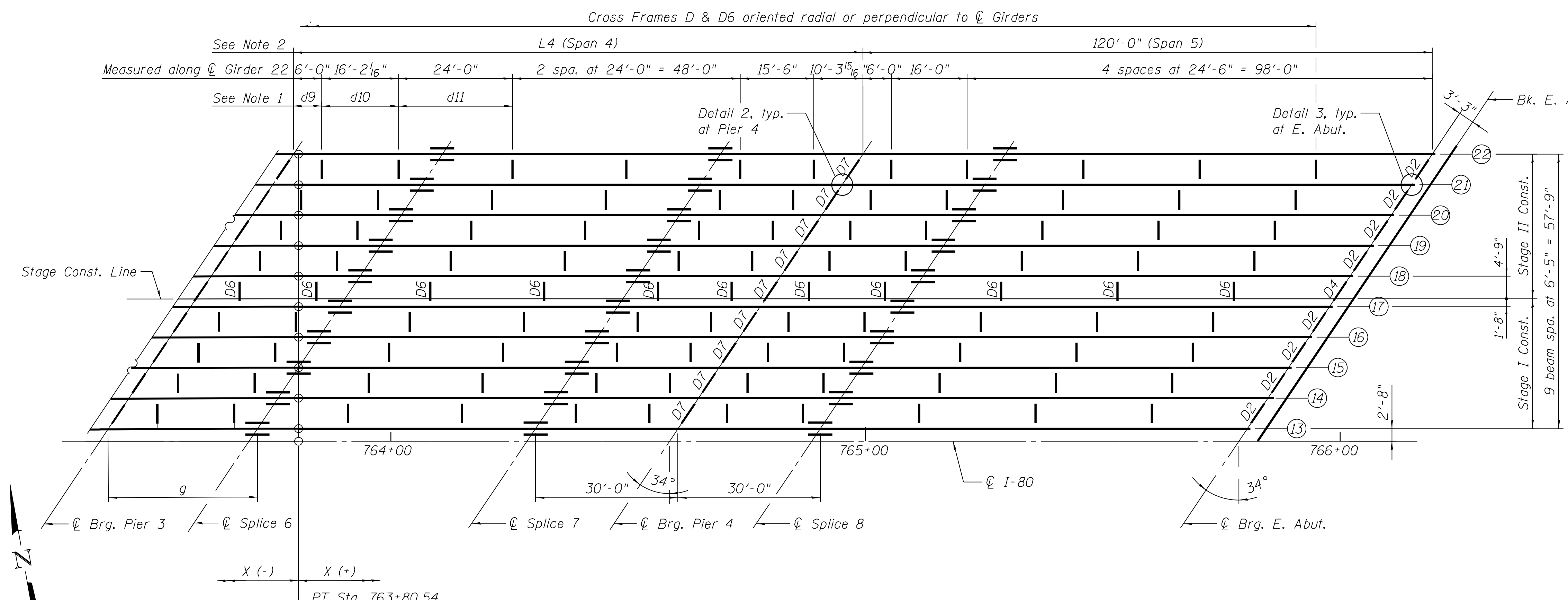


FRAMING PLAN (1 OF 2)



FRAMING PLAN (2 OF 2)

NOTES

1. Cross frame spacing is measured along ℄ girders. See sheet SR-32 for table of dimensions.
2. Span lengths are measured along ℄ girders. See sheet SR-32 for table of dimensions.
3. All cross frames or diaphragms between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross frames or diapragms at supports may be temporarily disconnected to install bearing anchor rods.
4. The Contractor shall either:
   a. Ream diaphragm and/or cross frame connection holes during shop assembly, or
   b. Provide detailing and fabrication controls acceptable to the Engineer which ensures accuracy such that field reaming will not exceed the amount permitted in Article 505.08(I) of the Standard Specifications.
5. For Curved Girder Layout Coordinates X and Y, see Sht. SR-30.
6. All structural steel shall be AASHTO M270 Grade 50.

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FRAMING PLAN STRUCTURE NO. 099-0905
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-29 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	328
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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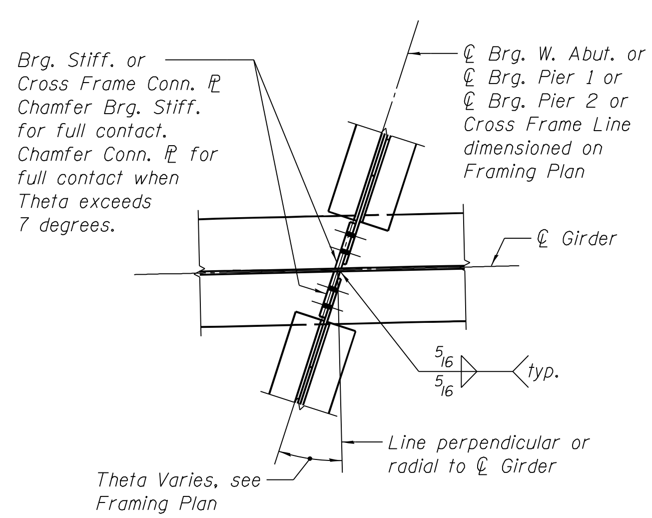
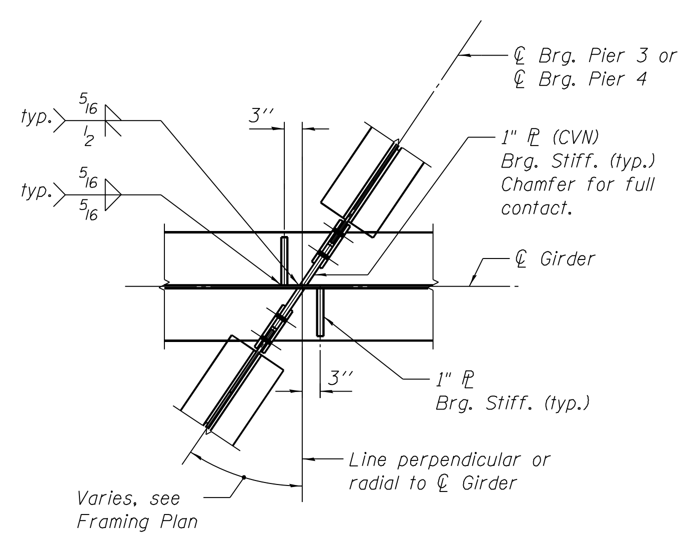
CURVED GIRDER LAYOUT COORDINATES

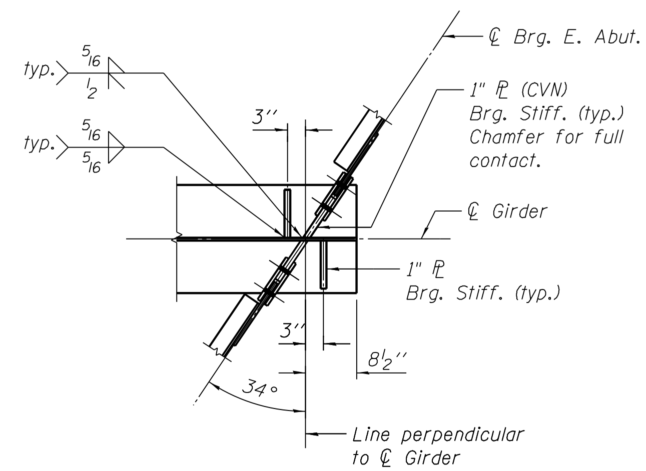
Girder No.	℄ Brg. W. Abut. X	℄ Brg. W. Abut. Y	℄ Splice 1 X	℄ Splice 1 Y	℄ Pier 1 X	℄ Pier 1 Y	℄ Splice 2 X	℄ Splice 2 Y	℄ Splice 3 X	℄ Splice 3 Y	℄ Pier 2 X	℄ Pier 2 Y	℄ Splice 4 X	℄ Splice 4 Y	℄ Splice 5 X	℄ Splice 5 Y	℄ Pier 3 X	℄ Pier 3 Y	℄ Splice 6 X	℄ Splice 6 Y	℄ Splice 7 X	℄ Splice 7 Y	℄ Pier 4 X	℄ Pier 4 Y	℄ Splice 8 X	℄ Splice 8 Y	℄ Brg. E. Abut. X	℄ Brg. E. Abut. Y	PT X	PT Y
13	-386.19	-10.38	-296.33	-5.01	-266.37	-3.54	-236.90	-2.24	-176.49	-0.06	-148.51	0.74	-122.23	1.36	-68.78	2.25	-40.15	2.53	-8.66	2.66	49.94	2.67	79.94	2.67	109.94	2.67	199.94	2.67	0.00	2.67
14	-387.31	-4.03	-297.46	1.35	-267.49	2.83	-238.02	4.14	-174.39	6.43	-146.40	7.21	-120.13	7.82	-64.42	8.72	-35.80	8.97	-4.33	9.08	54.27	9.08	84.27	9.08	114.27	9.08	204.27	9.08	0.00	9.08
15	-388.43	2.33	-298.58	7.72	-268.62	9.20	-239.14	10.51	-172.28	12.91	-144.30	13.68	-118.03	14.29	-60.06	15.19	-31.46	15.41	0.00	15.50	58.60	15.50	88.60	15.50	118.60	15.50	208.60	15.50	0.00	15.50
16	-389.55	8.68	-299.70	14.09	-269.74	15.58	-240.27	16.89	-170.17	19.39	-142.20	20.16	-115.93	20.75	-55.70	21.65	-27.11	21.85	4.33	21.92	62.93	21.92	92.93	21.92	122.93	21.92	212.93	21.92	0.00	21.92
17	-390.67	15.04	-300.83	20.45	-270.86	21.95	-241.39	23.26	-168.07	25.88	-140.09	26.63	-113.83	27.21	-51.35	28.10	-22.77	28.29	8.66	28.33	67.26	28.33	97.26	28.33	127.26	28.33	217.26	28.33	0.00	28.33
18	-391.79	21.39	-301.95	26.82	-271.99	28.32	-242.52	29.64	-165.96	32.36	-137.99	33.09	-111.73	33.66	-46.99	34.56	-18.43	34.72	12.98	34.75	71.58	34.75	101.58	34.75	131.58	34.75	221.58	34.75	0.00	34.75
19	-392.91	27.75	-303.07	33.19	-273.11	34.69	-243.64	36.01	-163.86	38.84	-135.89	39.56	-109.64	40.12	-42.64	41.01	-14.10	41.15	17.31	41.17	75.91	41.17	105.91	41.17	135.91	41.17	225.91	41.17	0.00	41.17
20	-394.03	34.10	-304.19	39.55	-274.23	41.06	-244.76	42.39	-161.75	45.31	-133.79	46.03	-107.54	46.58	-38.29	47.46	-9.76	47.58	21.64	47.58	80.24	47.58	110.24	47.58	140.24	47.58	230.24	47.58	0.00	47.58
21	-395.15	40.46	-305.32	45.92	-275.36	47.43	-245.89	48.76	-159.65	51.79	-131.69	52.50	-105.44	53.04	-33.95	53.90	-5.43	54.00	25.97	54.00	84.57	54.00	114.57	54.00	144.57	54.00	234.57	54.00	0.00	54.00
22	-396.27	46.81	-306.44	52.29	-276.48	53.80	-247.01	55.13	-157.54	58.27	-129.59	58.96	-103.34	59.49	-29.60	60.34	-1.10	60.42	30.30	60.42	88.90	60.42	118.90	60.42	148.90	60.42	238.90	60.42	0.00	60.42



DETAIL 1



DETAIL 2

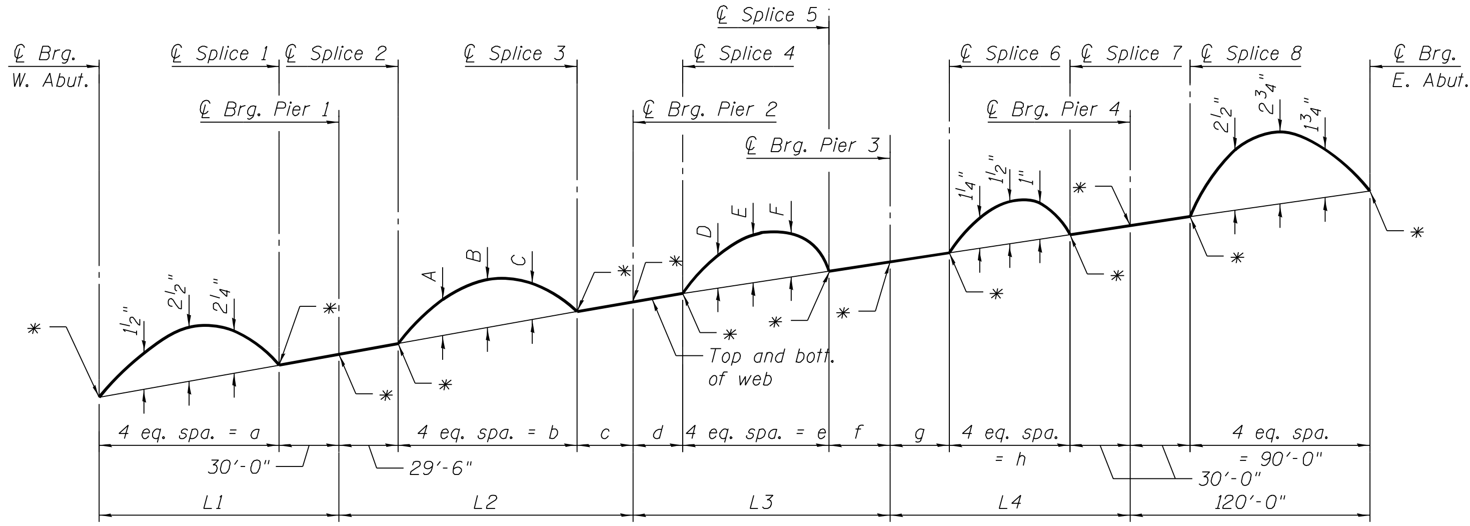


DETAIL 3

NOTES

1. "CVN" denotes Charpy-V-Notch impact energy requirements. Zone 2.

2. All structural steel shall be AASHTO M270 Grade 50.



CAMBER DIAGRAM

Note: For span lengths and girder segment lenghts not shown, see Sheet SR-32.

CAMBER DIMENSIONS

Girder No.	A	B	C	D	E	F
13	1 1/2"	1 3/4"	1 1/4"	1"	1 1/4"	1"
14	1 1/2"	1 3/4"	1 1/4"	1"	1 1/4"	1"
15	1 1/2"	1 3/4"	1 1/4"	1"	1 1/4"	1"
16	1 3/4"	2"	1 1/4"	1"	1 1/4"	1"
17	1 3/4"	2"	1 1/4"	1 1/4"	1 1/2"	1"
18	1 3/4"	2"	1 1/4"	1 1/4"	1 1/2"	1"
19	2"	2 1/4"	1 1/2"	1 1/2"	1 3/4"	1 1/4"
20	2"	2 1/4"	1 1/2"	1 1/2"	1 3/4"	1 1/4"
21	2"	2 1/2"	1 3/4"	2"	2 1/4"	1 1/2"
22	2"	2 1/2"	1 3/4"	2"	2 1/4"	1 1/2"

*TOP OF WEB ELEVATIONS

(For Fabrication use only)

Girder No.	℄ Brg. W. Abut.	℄ Splice 1	℄ Pier 1	℄ Splice 2	℄ Splice 3	℄ Pier 2	℄ Splice 4	℄ Pier 3	℄ Splice 5	℄ Splice 6	℄ Splice 7	℄ Pier 4	℄ Splice 8	℄ Brg. E. Abut.
13	603.62	606.31	607.16	608.00	609.88	610.74	611.54	613.20	614.10	615.10	616.88	617.88	618.88	621.72
14	603.81	606.49	607.35	608.19	610.17	611.02	611.82	613.55	614.43	615.40	617.13	618.11	619.09	621.83
15	604.00	606.68	607.54	608.39	610.46	611.30	612.10	613.90	614.75	615.69	617.37	618.33	619.28	621.94
16	604.19	606.86	607.73	608.58	610.74	611.58	612.37	614.24	615.06	615.98	617.61	618.54	619.46	622.04
17	604.38	607.04	607.91	608.77	611.02	611.86	612.65	614.57	615.36	616.24	617.83	618.73	619.63	622.14
18	604.57	607.23	608.10	608.97	611.32	612.15	612.93	614.90	615.67	616.52	618.06	618.94	619.81	622.22
19	604.76	607.41	608.29	609.16	611.61	612.43	613.21	615.21	615.96	616.78	618.27	619.12	619.98	622.30
20	604.96	607.60	608.48	609.35	611.89	612.72	613.49	615.52	616.24	617.03	618.47	619.30	620.14	622.37
21	605.15	607.78	608.67	609.55	612.18	613.00	613.77	615.83	616.52	617.28	618.67	619.48	620.28	622.43
22	605.34	607.96	608.86	609.74	612.46	613.28	614.05	616.12	616.79	617.52	618.86	619.64	620.42	622.48

GIRDER MOMENT TABLE - GIRDER 22

			0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.5 Sp. 4	Pier 4	0.6 Sp. 5
	I_s	(in^4)	23755	42629	23755	37103	26373	26373	23755	35844	23755
	$I_c(n)$	(in^4)	53114	-	53114	-	56890	-	53114	-	53114
	$I_c(3n)$	(in^4)	38955	-	38955	-	41882	-	38955	-	38955
	$I_c(cr)$	(in^4)	-	47590	-	41993	-	31131	-	40518	-
	S_s	(in^3)	1066	1794	1066	1586	1170	1170	1066	1498	1066
	$S_c(n)$	(in^3)	1377	-	1377	-	1487	-	1377	-	1377
	$S_c(3n)$	(in^3)	1267	-	1267	-	1370	-	1267	-	1267
	$S_c(cr)$	(in^3)	-	1864	-	1658	-	1246	-	1566	-
	S_{xc}	(in^3)	1289	1840	1303	1635	1426	1226	1338	1544	1284
	DC1	(k/')	0.930	1.037	0.930	1.006	0.945	0.945	0.930	0.999	0.930
	M_{DC1}	('k)	850.0	2033.0	712.0	1687.0	628.0	1048.0	374.0	1596.0	888.0
	DC2	(k/')	0.229	0.229	0.229	0.229	0.229	0.229	0.228	0.228	0.228
	M_{DC2}	('k)	205.0	456.0	174.0	390.0	151.0	260.0	103.0	388.0	227.0
	DW	(k/')	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
	M_{DW}	('k)	277.0	606.0	239.0	511.0	196.0	331.0	126.0	492.0	297.0
**	LLDF		0.466	0.457	0.450	0.455	0.460	0.463	0.466	0.466	0.466
	$M_{℄ + IM}$	('k)	1520.0	1924.0	1422.0	1818.0	1359.0	1509.0	1209.0	1701.0	1460.0
	f_l (Strength I)	(ksi)	1.58	0.19	0.74	0.18	0.57	0.19	0.00	0.00	0.00
	M_u + 1/3 f_l S_{xc}	('k)	4450.8	7397.0	3981.3	6552.4	3668.6	4778.7	2901.0	6194.8	4394.3
	$\phi_f M_n$	('k)	-	-	-	-	-	-	-	-	-
	f_s DC1	(ksi)	9.57	13.60	8.02	12.76	6.44	10.75	4.21	12.79	10.00
	f_s DC2	(ksi)	1.94	2.94	1.65	2.82	1.32	2.50	0.98	2.97	2.15
	f_s DW	(ksi)	2.62	3.90	2.26	3.70	1.72	3.19	1.19	3.77	2.81
	f_s (℄+IM)	(ksi)	13.24	12.39	12.39	13.16	10.97	14.53	10.53	13.04	12.72
	f_l (Service II)	(ksi)	1.18	0.13	0.56	0.14	0.44	0.15	0.00	0.00	0.00
	f_s + $f_l/2$ (Service II)	(ksi)	31.94	36.60	28.31	36.46	23.96	35.40	20.07	36.48	31.50
	$0.95R_hF_{yf}$	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50	47.50	47.50	47.50
	f_s + $f_l/3$ (Total)(Strength I)	(ksi)	42.03	48.26	37.40	48.12	31.66	46.84	26.71	48.17	41.67
	$\phi_f F_n$	(ksi)	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
	V_r	(k)	46.1	52.2	39.1	52.9	38.0	50.4	35.7	49.7	46.0

** 2D grid analysis performed for superstructure analysis. LLDF not used for design and is provided for information only.

GIRDER REACTION TABLE - GIRDER 22

			W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	E. Abut.
**	LLDF		0.497	0.497	0.497	0.497	0.497	0.497
**	OCF		1.021	-	-	-	-	1.131
	R DC1	k	40.9	148.5	134.7	108.3	133.1	43.2
	R DC2	k	10.1	34.4	32.0	26.7	33.2	10.7
	R DW	k	13.0	44.9	41.4	34.0	41.3	13.7
	R LL	k	52.7	115.0	114.1	106.8	113.5	51.5
	R IM	k	11.0	21.1	20.9	20.0	21.3	11.0
	R Total	k	127.6	363.8	343.0	295.8	342.4	130.0

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

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

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

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

S_{xc}: Section modulus about the major axis of section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.^{3}).

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

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

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

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

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

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

LLDF: Live load distribution factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.

OCF: Obtuse correction factor applied to non-continuous exterior beam ends and computed according to Article 4.6.2.2.3c-1.

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

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

f_l: Factored calculated normal stress at edge of flange for controlling flange plate due to lateral bending, Strength I or Service II as applicable (ksi).

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

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

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

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

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

f_s + $f_l/2$ (Service II): Sum of stresses as computed below (ksi).
$f_{s\,DC1} + f_{s\,DC2} + f_{s\,DW} + 1.3 f_s(℄ + IM) + f_l/2$

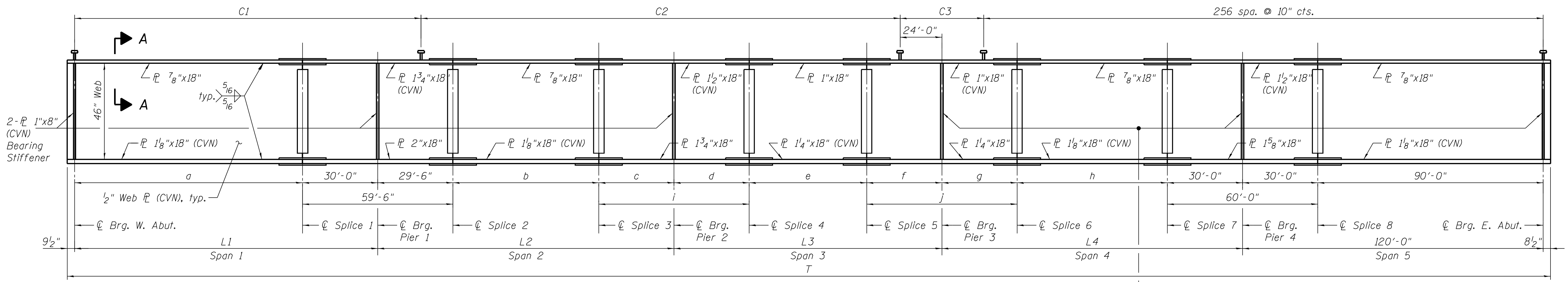
$0.95R_hF_{yf}$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

f_s + $f_l/3$ (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
$1.25 (f_{s\,DC1} + f_{s\,DC2}) + 1.5 f_{s\,DW} + 1.75 f_s(℄ + IM) + f_l/3$

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

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

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



GIRDER ELEVATION

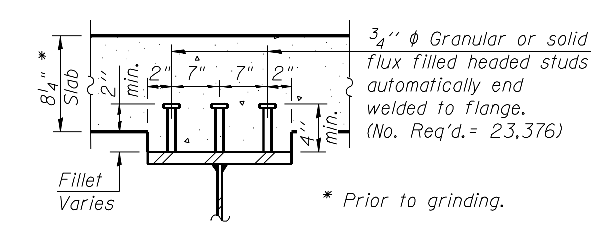
NOTES

1. All structural steel shall be AASHTO M 270 Grade 50 steel.
2. "CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.
3. Cross frame connection plates not shown. For locations and details, see Sheets SR-29, SR-33 and SR-34.

GIRDER DIMENSIONS

Girder No.	**Radius	L1	L2	L3	L4	T	a	b	c	d	e	f	g	h	i	j
13	5720'-8"	120'-0 3/16"	117'-11 5/16"	108'-4 7/16"	120'-1 1/8"	587'-11 1/8"	90'-0 3/16"	60'-5 5/16"	28'-0"	26'-3 3/8"	53'-5 1/2"	28'-7 5/8"	31'-5 7/8"	58'-7 1/4"	54'-3 3/8"	60'-1 1/2"
14	5727'-1"	120'-0 3/16"	121'-2 1/16"	110'-7 3/8"	120'-0 7/8"	593'-4 1/2"	90'-0 3/16"	63'-8 1/8"	27'-11 15/16"	26'-3 5/16"	55'-8 5/8"	28'-7 7/16"	31'-5 11/16"	58'-7 3/16"	54'-3 5/16"	60'-1 1/8"
15	5733'-6"	120'-0 3/16"	124'-4 13/16"	112'-10 5/16"	120'-0 11/16"	598'-9 15/16"	90'-0 3/16"	66'-10 7/8"	27'-11 7/8"	26'-3 5/16"	57'-11 3/4"	28'-7 1/4"	31'-5 1/2"	58'-7 3/16"	54'-3 3/16"	60'-0 3/4"
16	5739'-11"	120'-0 1/8"	127'-7 1/2"	115'-1 3/16"	120'-0 1/2"	604'-3 5/16"	90'-0 1/8"	70'-1 11/16"	27'-11 7/8"	26'-3 1/4"	60'-2 7/8"	28'-7 1/16"	31'-5 5/16"	58'-7 3/16"	54'-3 1/8"	60'-0 3/8"
17	5746'-4"	120'-0 1/8"	130'-10 1/4"	117'-4"	120'-0 3/8"	609'-8 3/4"	90'-0 1/8"	73'-4 7/16"	27'-11 13/16"	26'-3 3/16"	62'-5 15/16"	28'-6 7/8"	31'-5 1/8"	58'-7 3/16"	54'-3"	60'-0 1/16"
18	5752'-9"	120'-0 1/16"	134'-1"	119'-6 7/8"	120'-0 1/4"	615'-2 1/8"	90'-0 1/16"	76'-7 3/16"	27'-11 3/4"	26'-3 3/16"	64'-9"	28'-6 11/16"	31'-5"	58'-7 3/16"	54'-2 15/16"	59'-11 3/4"
19	5759'-2"	120'-0 1/16"	137'-3 11/16"	121'-9 11/16"	120'-0 1/8"	620'-7 9/16"	90'-0 1/16"	79'-10"	27'-11 11/16"	26'-3 1/8"	67'-0"	28'-6 1/2"	31'-4 15/16"	58'-7 3/16"	54'-2 13/16"	59'-11 7/16"
20	5765'-7"	120'-0 1/16"	140'-6 7/16"	124'-0 7/16"	120'-0 1/16"	626'-0 15/16"	90'-0 1/16"	83'-0 3/4"	27'-11 11/16"	26'-3 1/16"	69'-3"	28'-6 3/8"	31'-4 7/8"	58'-7 3/16"	54'-2 3/4"	59'-11 3/16"
21	5772'-0"	120'-0"	143'-9 1/8"	126'-3 3/16"	120'-0"	631'-6 3/8"	90'-0"	86'-3 1/2"	27'-11 5/8"	26'-3 1/16"	71'-6"	28'-6 3/16"	31'-4 13/16"	58'-7 3/16"	54'-2 11/16"	59'-11"
22	5778'-5"	120'-0"	146'-11 13/16"	128'-5 15/16"	120'-0"	636'-11 3/4"	90'-0"	89'-6 1/4"	27'-11 9/16"	26'-3"	73'-8 15/16"	28'-6"	31'-4 13/16"	58'-7 3/16"	54'-2 9/16"	59'-10 13/16"

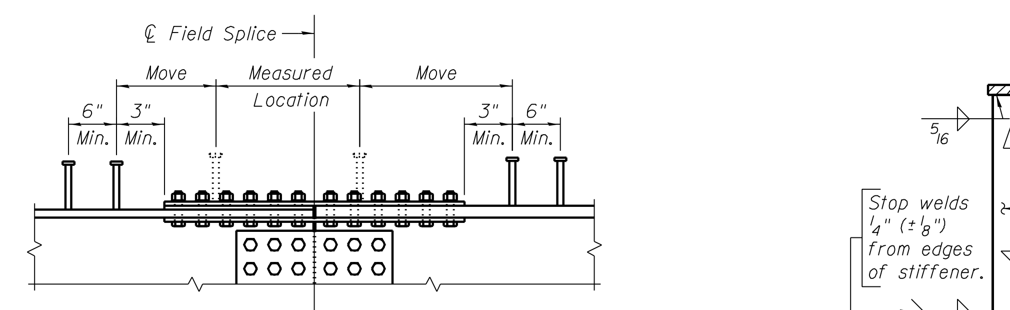
** Radius of girder from west abutment to Sta. 763+80.54.
Girders are straight from Sta. 763+80.54 to east abutment.



SECTION A-A

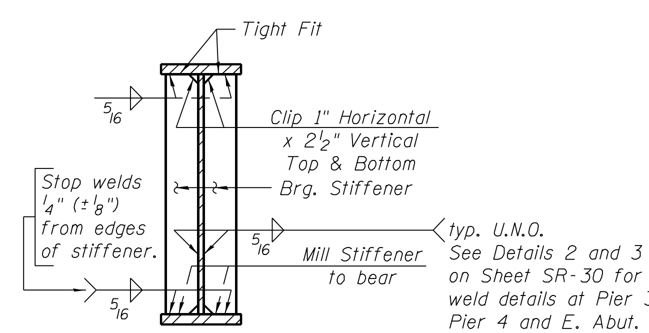
SHEAR STUD SPACING

Girder No.	C1	C2	C3
13	175 Spa. @ 10" cts.	213 Spa. @ 10" cts.	77 Spa. @ 8" cts.
14	218 Spa. @ 8" cts.	220 Spa. @ 10" cts.	77 Spa. @ 8" cts.
15	218 Spa. @ 8" cts.	226 Spa. @ 10" cts.	62 Spa. @ 10" cts.
16	218 Spa. @ 8" cts.	233 Spa. @ 10" cts.	62 Spa. @ 10" cts.
17	218 Spa. @ 8" cts.	240 Spa. @ 10" cts.	62 Spa. @ 10" cts.
18	218 Spa. @ 8" cts.	246 Spa. @ 10" cts.	62 Spa. @ 10" cts.
19	218 Spa. @ 8" cts.	316 Spa. @ 8" cts.	62 Spa. @ 10" cts.
20	218 Spa. @ 8" cts.	259 Spa. @ 10" cts.	62 Spa. @ 10" cts.
21	175 Spa. @ 10" cts.	266 Spa. @ 10" cts.	77 Spa. @ 8" cts.
22	175 Spa. @ 10" cts.	272 Spa. @ 10" cts.	77 Spa. @ 8" cts.



SHEAR STUD DETAIL AT FIELD SPLICES

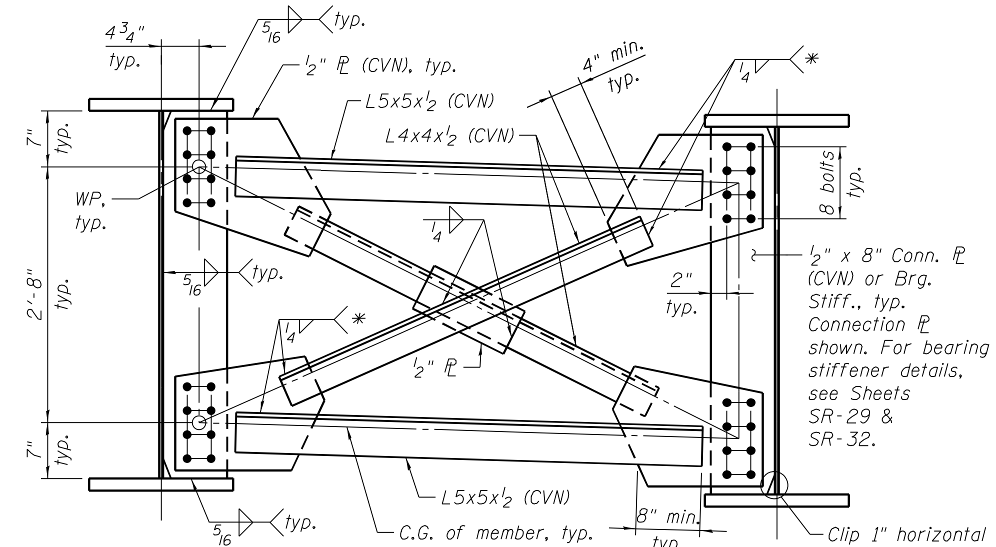
DO NOT place shear studs on splice plates.
Move row of studs to 3" beyond nearest edge of splice plate from measured location.



BEARING STIFFENER DETAIL

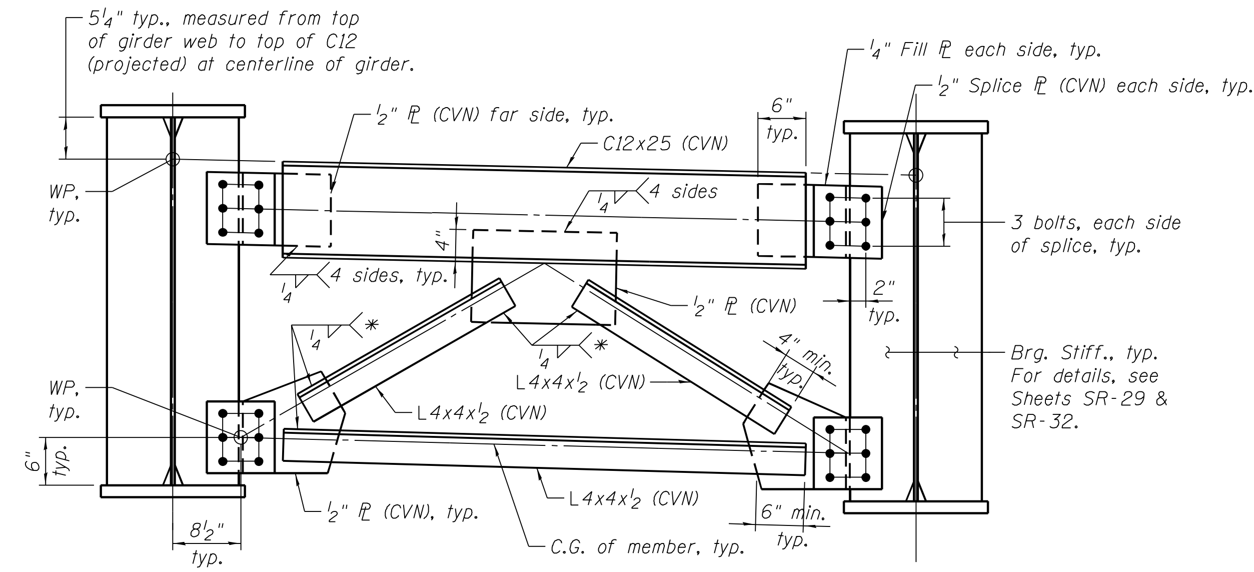
CROSS FRAME SPACING

Girder No.	d1	d2	d3	d4	d5	d6	d7	d8	d9	d10	d11
13	12'-10 9/16"	12'-10 1/2"	12'-2"	-	-	-	-	-	-	-	-
14	13'-9 3/16"	14'-0 3/16"	13'-4 1/2"	13'-3 3/8"	13'-8 1/16"	18'-6 11/16"	14'-0 11/16"	10'-4 7/8"	6'-0 1/16"	16'-2 5/8"	24'-0 1/4"
15	14'-7 13/16"	15'-1 13/16"	14'-7 1/16"	14'-4 1/8"	14'-10 5/8"	18'-6 9/16"	14'-0 5/8"	10'-4 3/4"	6'-0 1/16"	16'-2 9/16"	24'-0 1/8"
16	15'-6 7/16"	16'-3 1/2"	15'-9 9/16"	15'-4 13/16"	16'-1 3/16"	18'-6 7/16"	14'-0 1/2"	10'-4 11/16"	6'-0 1/16"	16'-2 7/16"	24'-0 1/16"
17	16'-5 1/16"	17'-5 3/16"	17'-0 1/16"	16'-5 1/2"	17'-3 11/16"	18'-6 3/8"	14'-0 7/16"	10'-4 9/16"	6'-0 1/16"	16'-2 3/8"	24'-0"
18	17'-3 11/16"	18'-6 13/16"	18'-2 9/16"	17'-6 3/16"	18'-6 1/4"	18'-6 1/4"	14'-0 3/8"	10'-4 1/2"	6'-0 1/16"	16'-2 1/4"	24'-0"
19	18'-2 5/16"	19'-8 1/2"	19'-5 1/16"	18'-6 13/16"	19'-8 3/4"	18'-6 1/8"	14'-0 1/4"	10'-4 3/8"	6'-0 1/16"	16'-2 1/8"	24'-0"
20	19'-1"	20'-10 3/16"	20'-7 9/16"	19'-7 1/2"	20'-11 3/16"	18'-6"	14'-0 3/16"	10'-4 5/16"	6'-0"	16'-2 1/16"	24'-0"
21	19'-11 5/8"	21'-11 13/16"	21'-10 1/16"	20'-8 3/16"	22'-1 11/16"	18'-5 7/8"	14'-0 1/16"	10'-4 3/16"	6'-0"	16'-2 1/16"	24'-0"
22	20'-10 1/4"	23'-1 1/2"	23'-0 9/16"	21'-8 13/16"	23'-4 1/8"	18'-5 3/4"	14'-0"	10'-4 1/8"	6'-0"	16'-2 1/16"	24'-0"



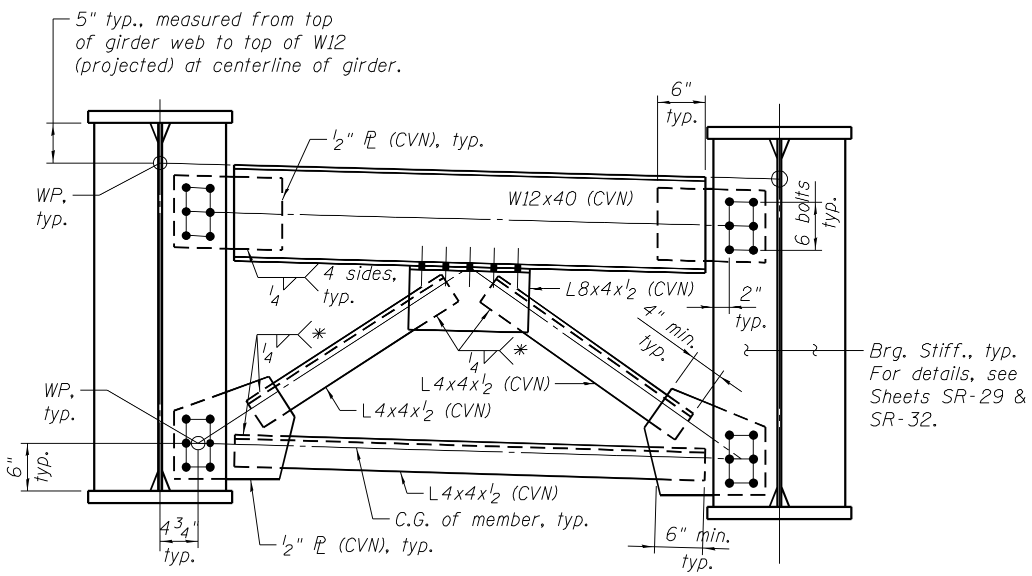
INTERIOR CROSS FRAME D & D1

(248 Required D)
(18 Required D1)



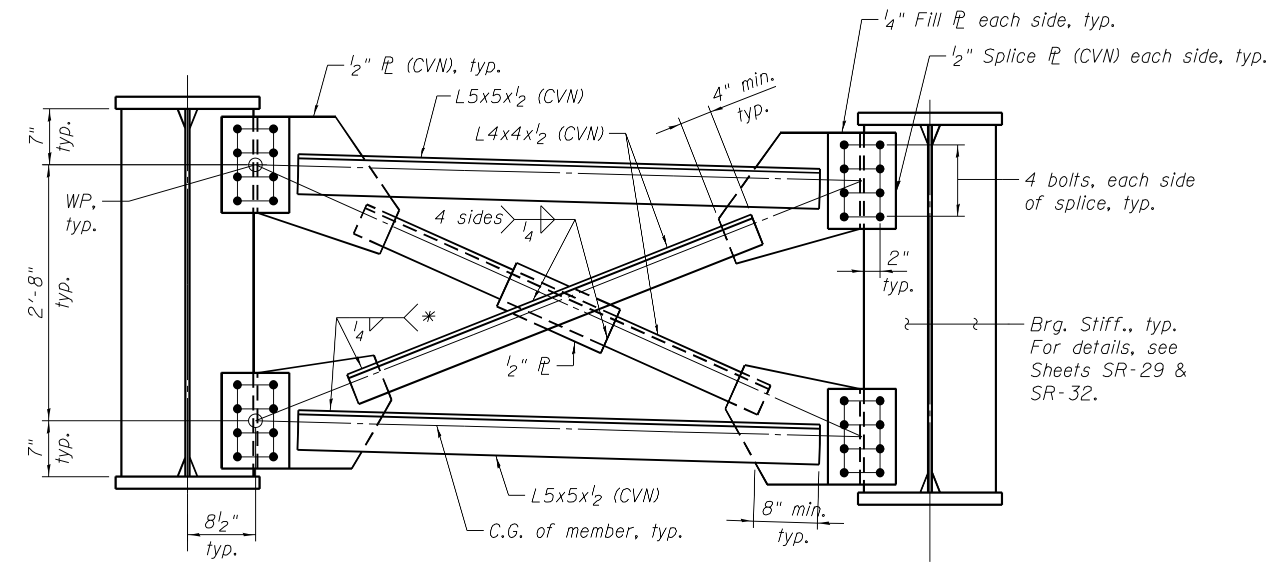
END CROSS FRAME D2

(Looking upstation)
(8 Required)



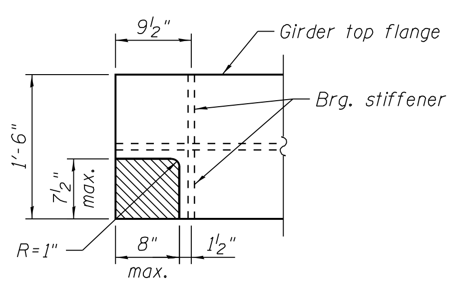
END CROSS FRAME D3

(Looking upstation)
(8 Required)



INTERIOR CROSS FRAME D7

(18 Required)



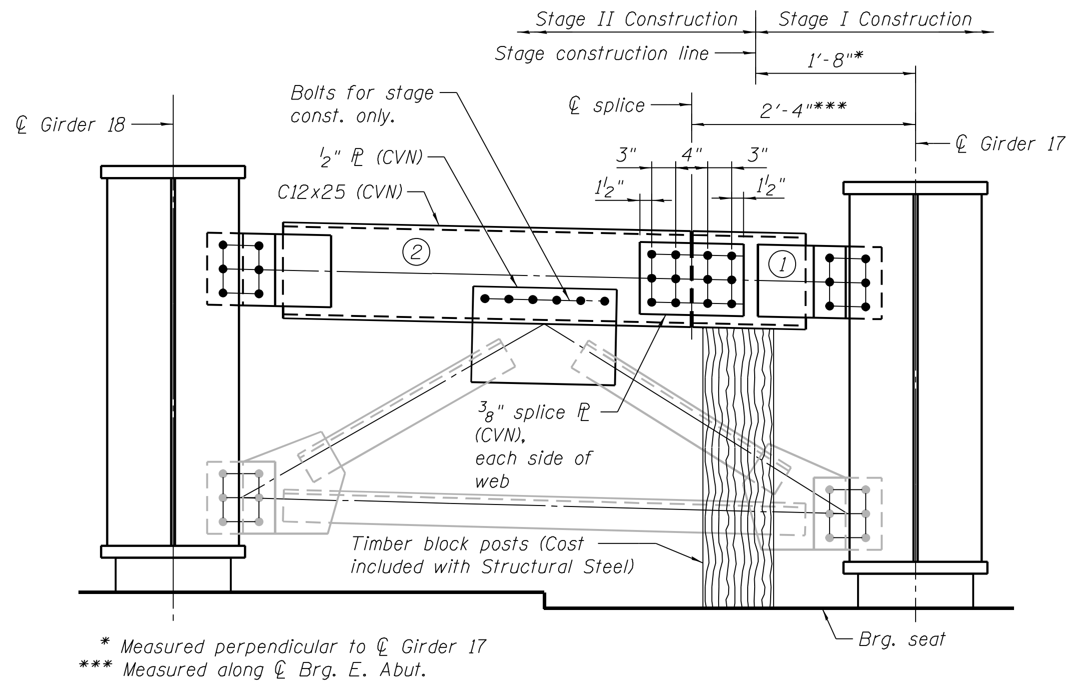
TOP FLANGE COPING DETAIL

(See Note 5)
(Only at locations needed)

NOTES

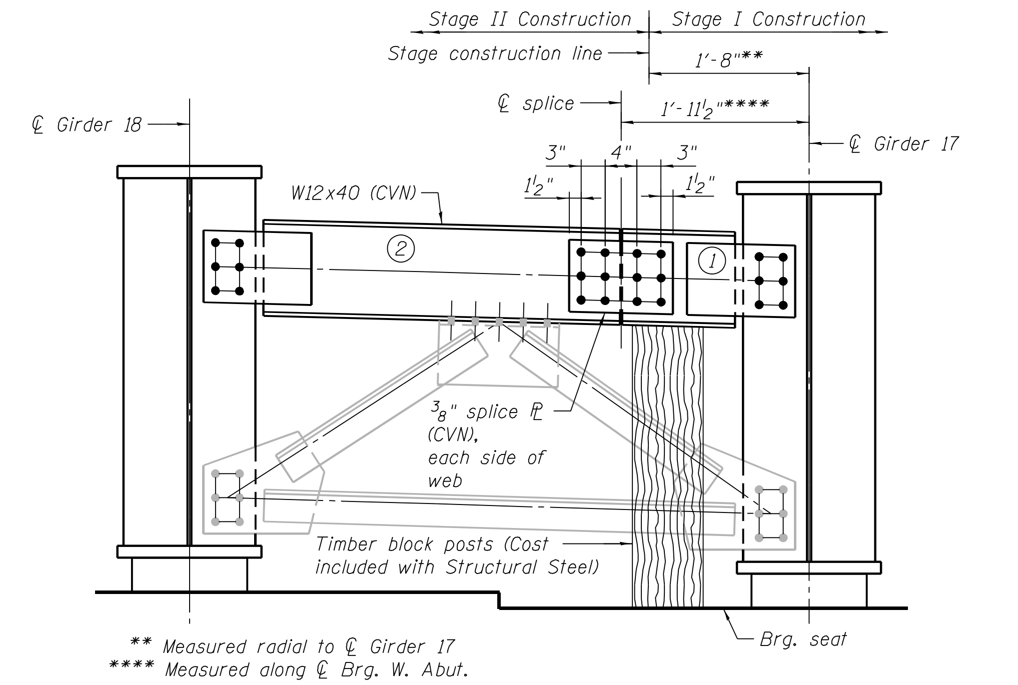
1. For girder spacing and cross frame layout, see framing plan on Sheet SR-29.
2. Bolts for cross frame connections shall be 7/8" dia., holes 15/16" dia.
3. "CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.
4. For additional cross frame notes, see Sheet SR-29.
5. Contractor shall verify with joint manufacturer if top flange of girders at the west abutment require to be coped to accommodate modular joint hardware. Top flange may be coped within max. dimensions shown. If coping requirements differ, Contractor shall submit proposed details to the Engineer for approval. No field cutting or modifications will be permitted. Cost included with Furnishing and Erecting Structural Steel.
6. All structural steel shall be AASHTO M270 Grade 50.

* 3 sides, on one face of gusset PL, typ.



END CROSS FRAME D4

(1 Required)
(See cross frame D2 for details & dimensions not shown)

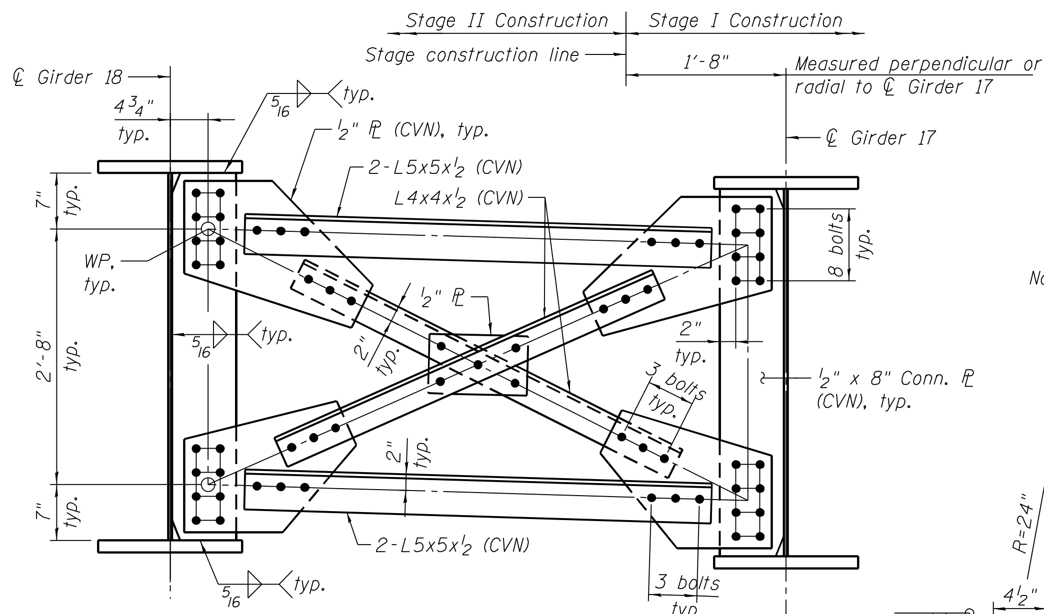


END CROSS FRAME D5

(1 Required)
(See cross frame D3 for details & dimensions not shown)

NOTES

1. For cross frame notes, see Sheet SR-33.
2. All structural steel shall be AASHTO M270 Grade 50 steel.
3. "CVN" denotes Charpy-V-Notch impact energy requirements, Zone 2.
4. Fixed bearing 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.
5. Anchor bolts with fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place. Prior to pouring abutment or pier caps, Contractor shall verify rebar clearances with either anchor bolt installation method.
6. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
7. The structural steel plates and pintles of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
8. Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
9. Shim ℄ and other steel members required for the fixed bearing assembly shall be included in the cost of Furnishing and Erecting Structural Steel.



INTERIOR CROSS FRAME D6

(31 Required)

Erection Sequence for Cross Frame D6:

1. Bolt gusset plates to Girders 17 and 18. Tighten bolts fully.
2. Bolt top and bottom horizontal members with single bolt, finger tight, in hole closest to girder web.
3. After Stage II Deck Pour, add remaining bolts and cross members.
4. Fully tighten all bolts.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1½"	Each	40

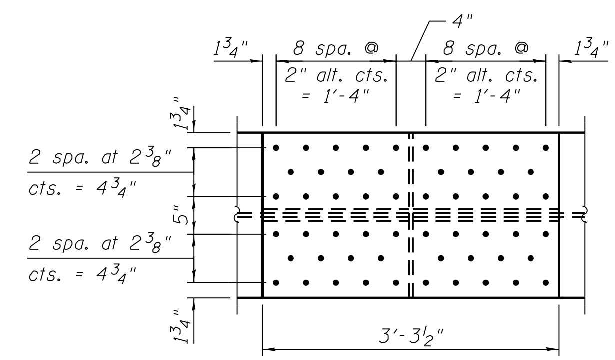
END CROSS FRAME STAGE CONSTRUCTION SEQUENCE

1. Order C12 or W12 in two sections.
2. Attach section (1) of C12 or W12 to Girder 17.
3. Place timber block posts between section (1) of C12 or W12 and abutment bearing section.
4. Attach section (2) of C12 or W12 to both Girder 18 and section (1) of C12 or W12 during Stage II Construction with splice plates.
5. Remove timber block posts.

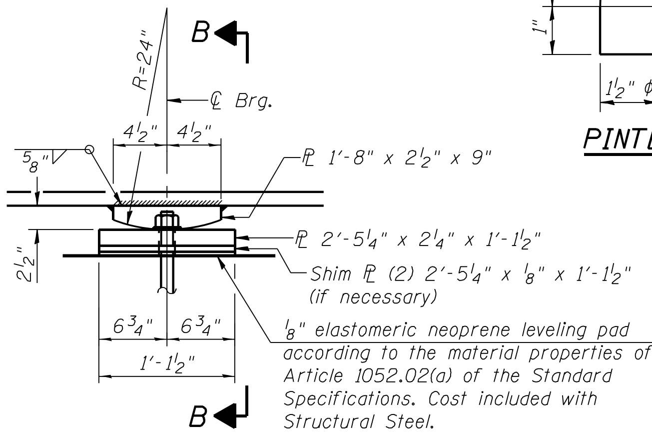
Note: The Contractor may submit an alternate stage construction sequence for end cross frame D4 or D5. Any alternate sequence must be approved by the Engineer prior to ordering any material.

SPLICE FILL PLATE

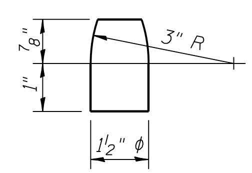
Field Splice No.	A	B
1	⅞"	⅞"
2	⅞"	⅞"
3	⅝"	⅝"
4	½"	½"
5	-	-
6	⅛"	⅛"
7	⅝"	½"
8	⅝"	½"



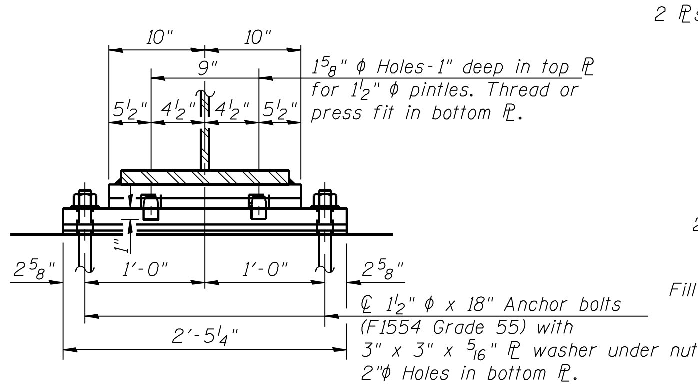
TOP & BOTTOM FLANGE



ELEVATION AT PIER



PINTLE

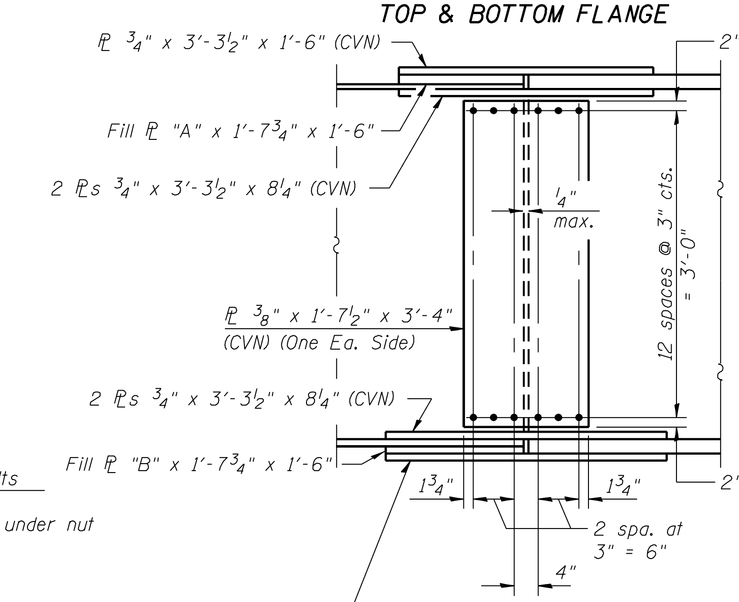


SECTION B-B

FIXED BEARING - PIER 3 & 4

(10 req'd Pier 3)
(10 req'd Pier 4)

Note:
Cost of Anchor Bolts shall be measured for payment as Anchor Bolts, 1½"



ELEVATION

FIELD SPLICE DETAIL

(80 Required)
(Field splice detail 1, 3, 5 & 7 shown, 2, 4, 6 & 8 opposite hand)

USER NAME =	DESIGNED - CCE	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - HBJ	REVISED -
PLOT DATE =	CHECKED - CCE	REVISED -

exp.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS II
STRUCTURE NO. 099-0905
SHEET SR-34 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	333

CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT

MODEL: Default
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.10 Structural\WB Rowell\Sheet\0990905-60W35-030-DD2.dgn
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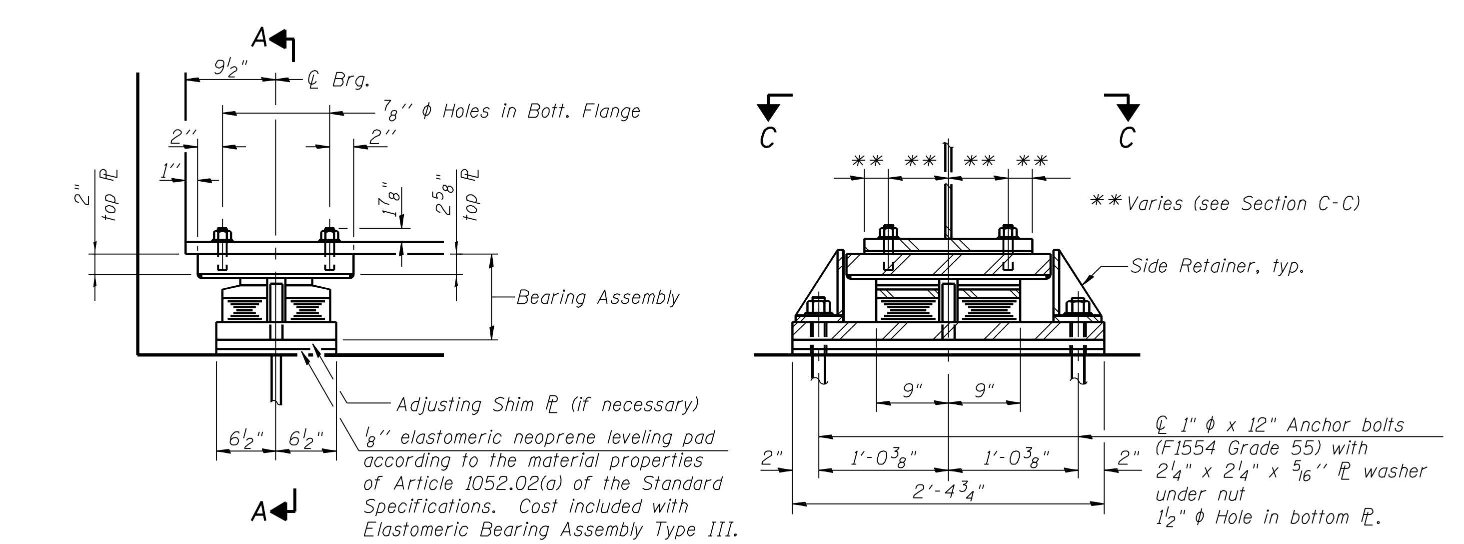
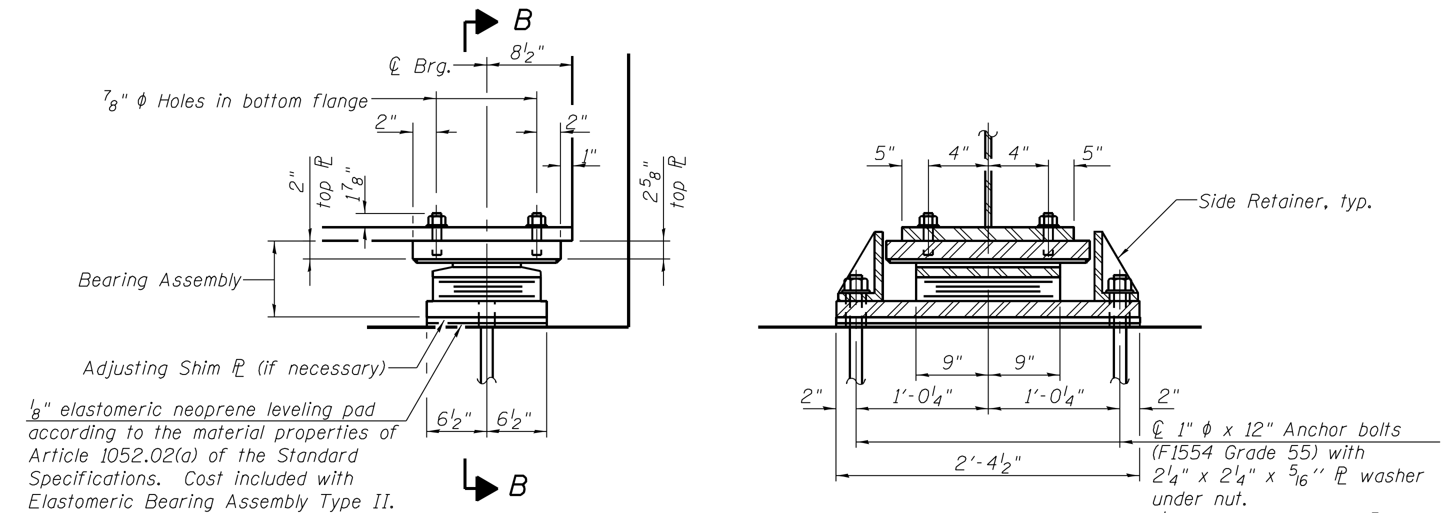


ELEVATION AT W. ABUT.

SECTION A-A

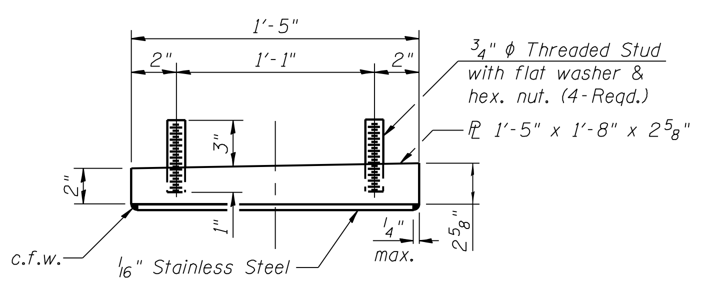
TYPE III ELASTOMERIC EXP. BRG. - W. ABUT.



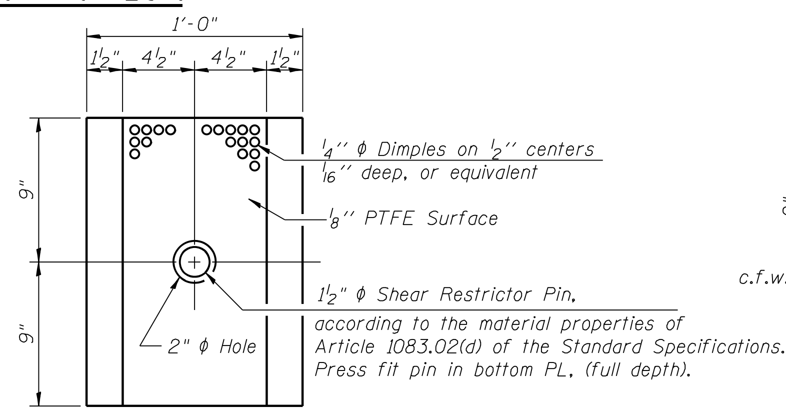
ELEVATION AT E. ABUT.

SECTION B-B

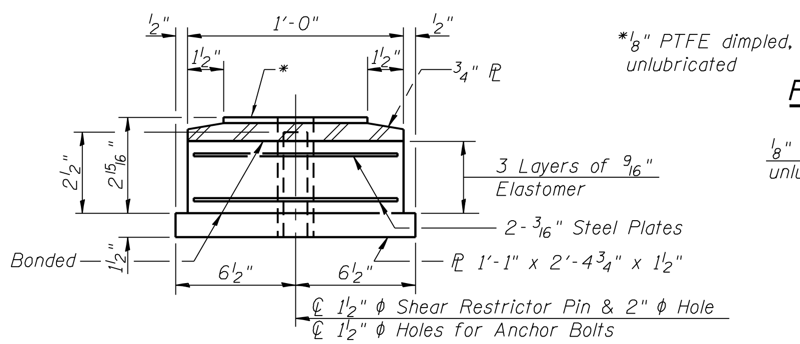
TYPE II ELASTOMERIC EXP. BRG. - E. ABUT.



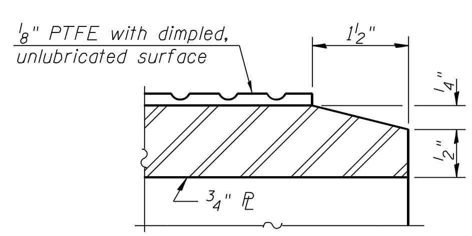
TOP BEARING ASSEMBLY



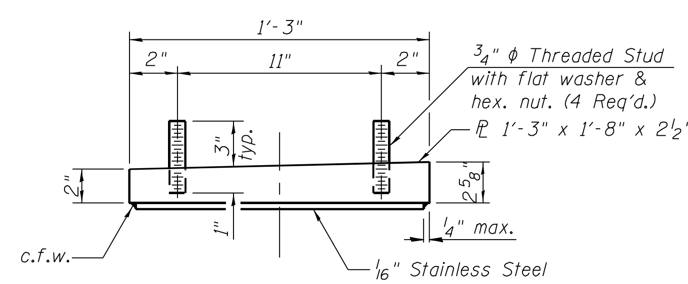
PLAN-PTFE ELASTOMERIC BRG.



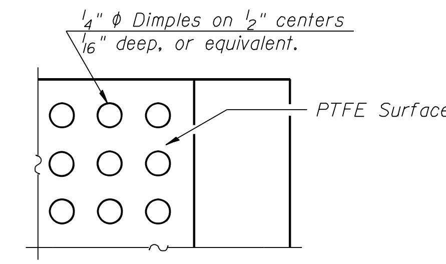
BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE

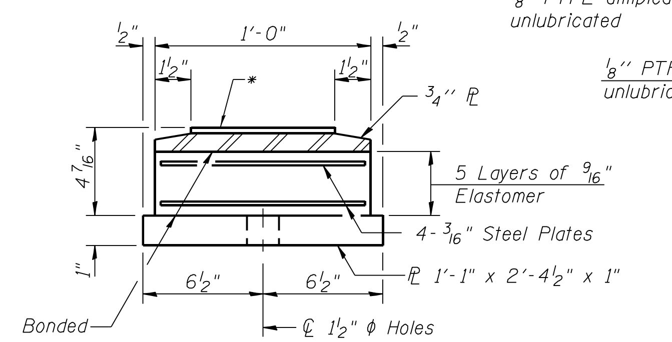


TOP BEARING ASSEMBLY

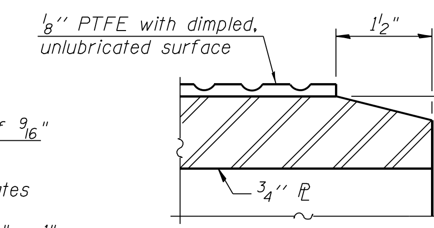


PLAN-PTFE SURFACE

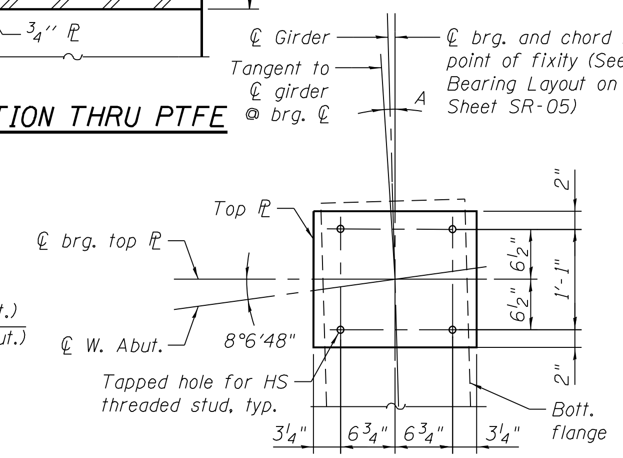
Angle A	
Location	W. Abut.
G-22	02°02'44"
G-21	02°02'20"
G-20	02°01'56"
G-19	02°01'31"
G-18	02°01'06"
G-17	02°00'42"
G-16	02°00'17"
G-15	01°59'53"
G-14	01°59'28"
G-13	01°59'03"



BOTTOM BEARING ASSEMBLY



SECTION THRU PTFE



VIEW C-C

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.

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

The ⅛" 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.

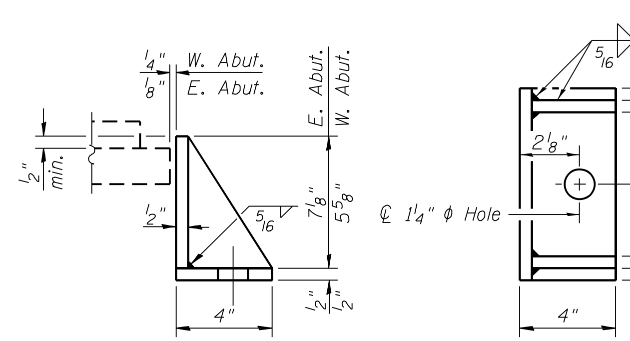
Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details. Cost included in Elastomeric Bearing Assembly of the type specified.

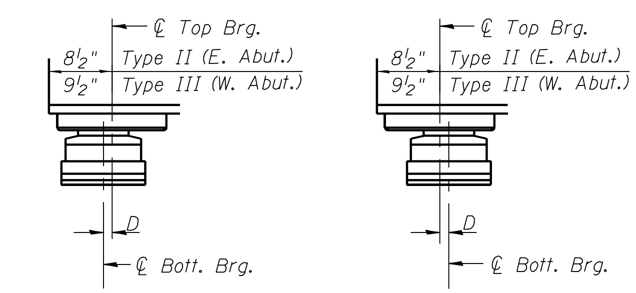
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.



SIDE RETAINER

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



D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	10
Elastomeric Bearing Assembly, Type III	Each	10
Anchor Bolts, 1"	Each	40

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exp.

USER NAME =	DESIGNED - CCE	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - HBJ	REVISED -
PLOT DATE =	CHECKED - CCE	REVISED -

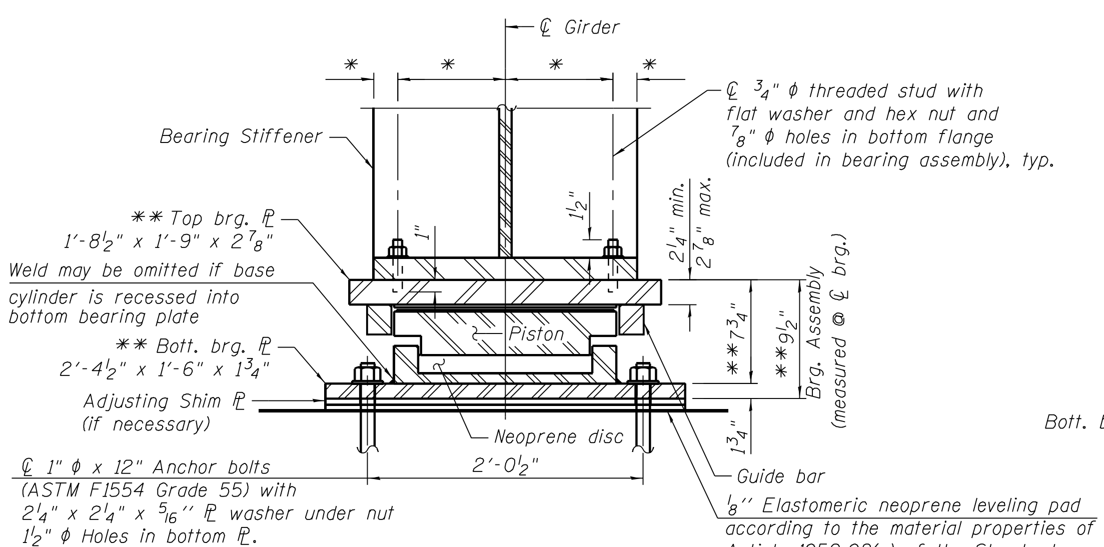
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS I
STRUCTURE NO. 099-0905

SHEET SR-35 OF SR-64 SHEETS

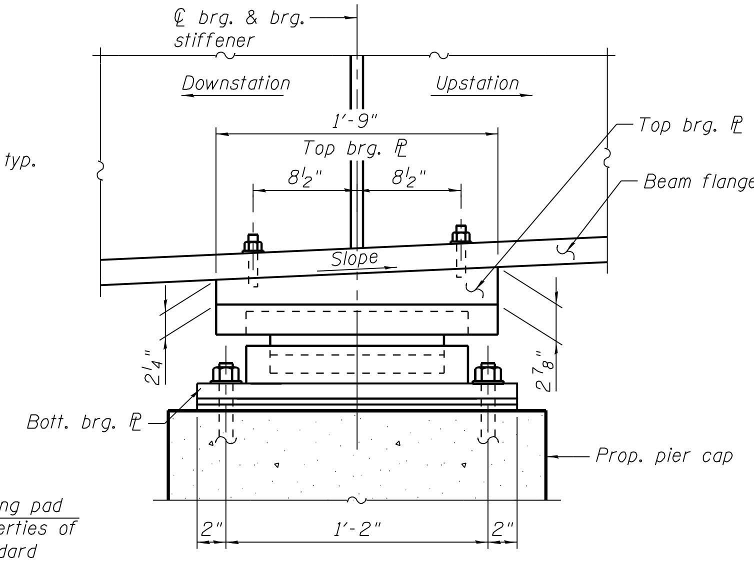
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	334
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

3/9/2022 11:01:10 AM



GUIDED EXPANSION HLMR BEARING

(20 Required)



SIDE VIEW

Looking North

Location	Angle A Pier 1	Angle A Pier 2
G-22	01°27'10"	00°39'09"
G-21	01°26'41"	00°40'30"
G-20	01°26'12"	00°41'50"
G-19	01°25'42"	00°43'11"
G-18	01°25'13"	00°44'31"
G-17	01°24'44"	00°45'52"
G-16	01°24'14"	00°47'14"
G-15	01°23'44"	00°48'35"
G-14	01°23'15"	00°49'57"
G-13	01°22'45"	00°51'18"

HLMR BEARING DESIGN INFORMATION

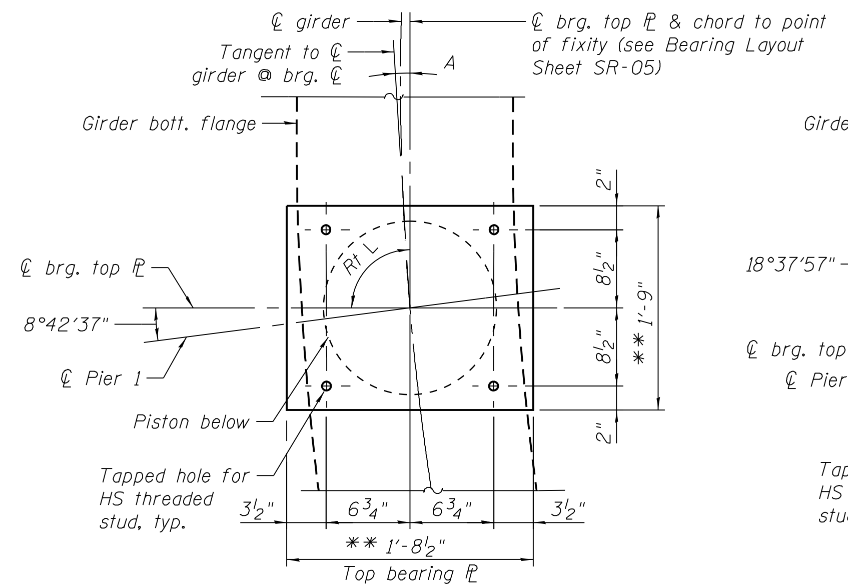
Design Information	Pier 1	Pier 2
Vertical Design Load (kips)	370	350
HLMR Bearing Capacity (kips)	400	400
Type	Guided Expansion	Guided Expansion
Lateral Design Load (kips), Hu	74	70
Total Required Movement (in)	4.5	2.5
Design Rotation (Radians), θu	0.0065	0.0054
Girder Slope	2.9%	2.9%
Expansion Length (ft)	340	190

Notes:

1. Vertical Design Load (Service I) = Total Vertical Dead Load + Live Load (No Impact)
2. Total Required Movement is combined movement in two directions.

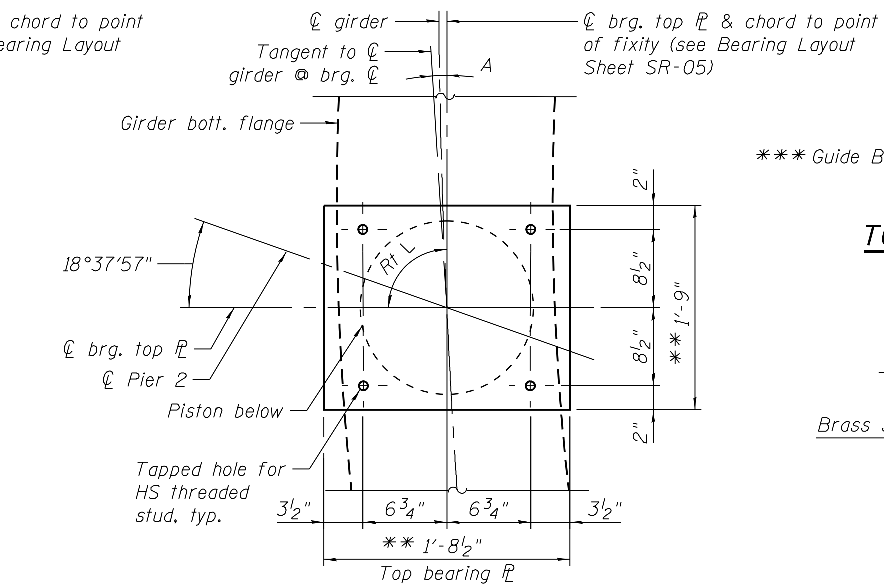
BILL OF MATERIAL

Item	Unit	Total
High Load Multi-Rotational Bearings, Guided Expansion, 400K	Each	20
Anchor Bolts, 1"	Each	80



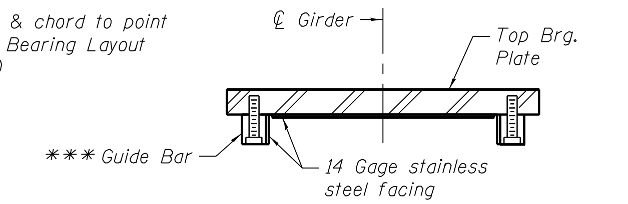
PIER 1 TOP BEARING ℙ AND PISTON PLAN

Guide bars not shown for clarity



PIER 2 TOP BEARING ℙ AND PISTON PLAN

Guide bars not shown for clarity

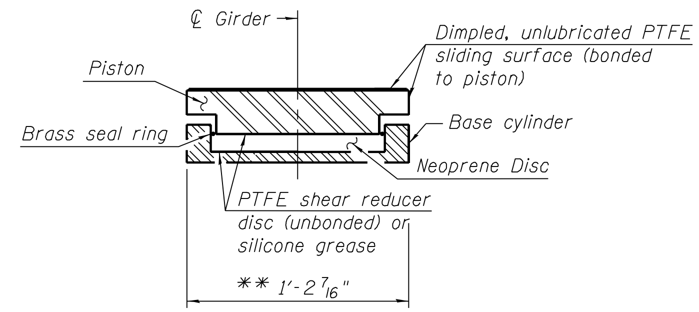


TOP BEARING PLATE ASSEMBLY

* Dimension varies. See Top Bearing ℙ Plan.

** Dimension may vary depending on manufacturer's design.

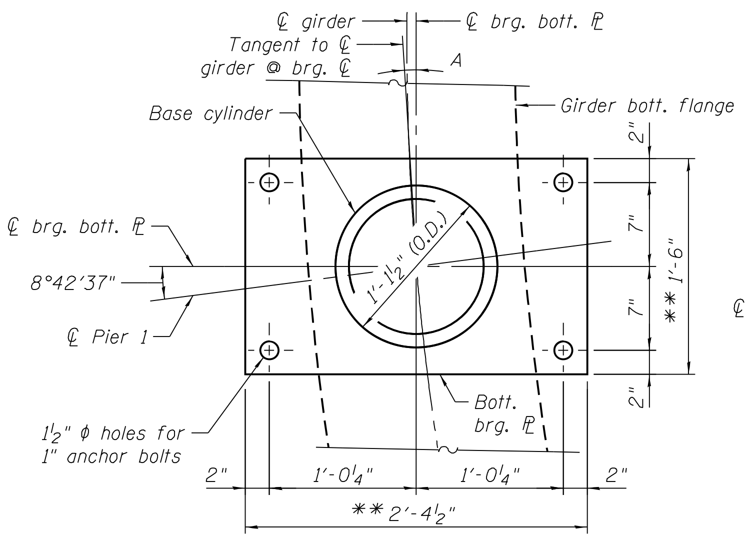
*** As alternates to the bolted connection shown, the guide bars may be connected to the top bearing plate by groove welds or the guide bars and top bearing plate may be fabricated as a single piece.



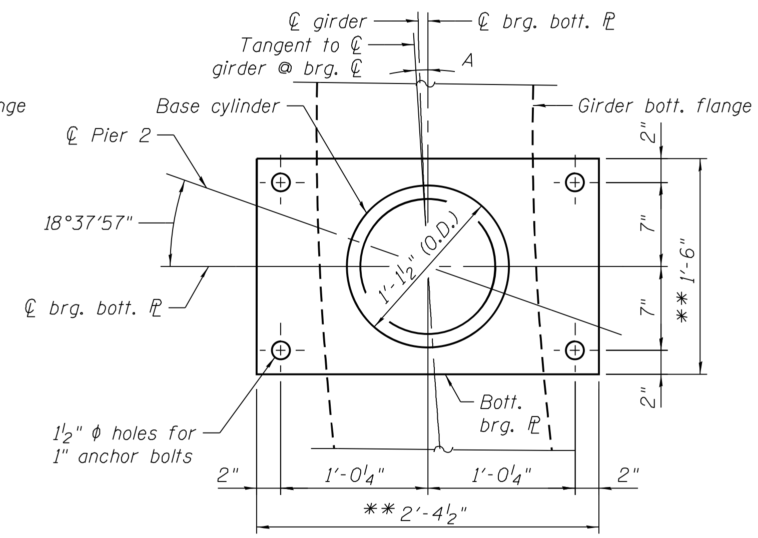
PISTON ASSEMBLY

NOTES

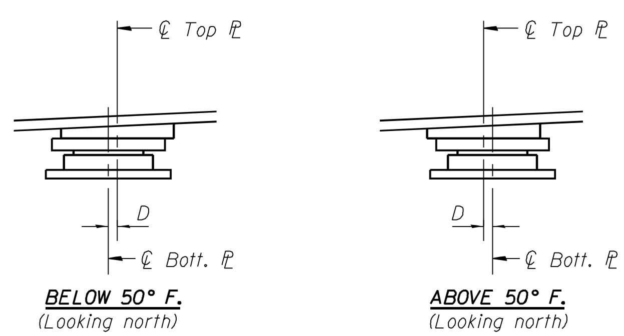
1. The ⅛" PTFE sheets shall be bonded directly to the piston with a two component medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MM-A-134, Type 1. The bond agent shall be applied to the full area of the contact surfaces.
2. The Vertical Design Load in table is the actual controlling vertical service load.
3. HLMR Bearings dimensions and details are based on a specific manufacturer's design tables. Actual dimensions and details may differ. Contractor to verify bearing heights and adjust bearing seat elevations as necessary based on the actual bearings provided and propose plan modifications as necessary for review and approval by the Engineer. Cost included with HLMR Bearings, Guided Expansion, 400K.
4. The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.
5. Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.
6. 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.
7. Anchor bolts for HLMR bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after bearings are in place, and prior to cross frame installation to avoid interference during installation or Contractor shall remove cross frame as needed to avoid interference with drilling operation. This work shall be included in the cost of HLMR Bearings, of the type specified.
8. Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
9. Anchor bolts with fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place. Prior to pouring abutment or pier caps, Contractor shall verify rebar clearances with either anchor bolt installation method.



PIER 1 BOTTOM BEARING ℙ AND BASE CYLINDER PLAN



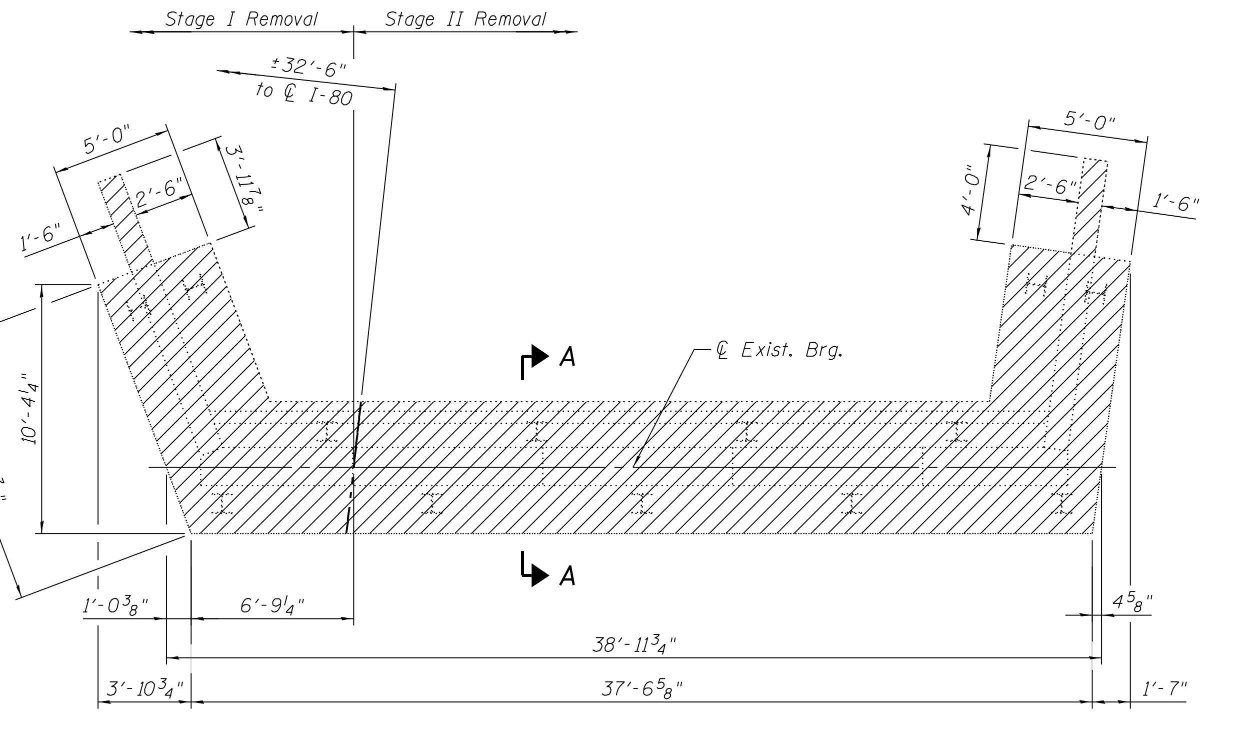
PIER 2 BOTTOM BEARING ℙ AND BASE CYLINDER PLAN



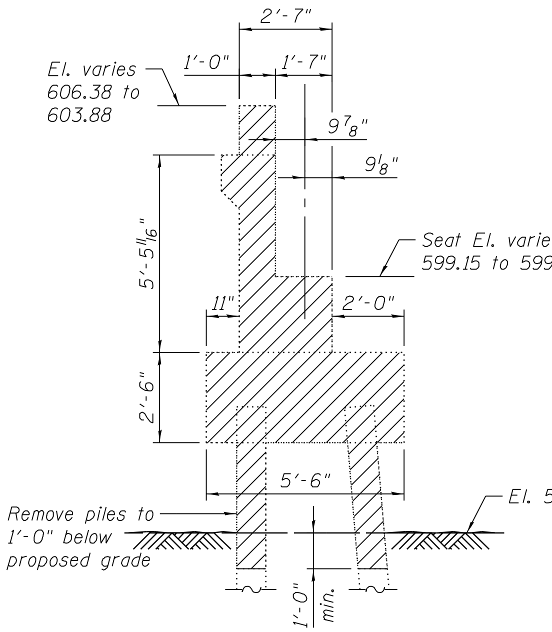
D=⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50° F.

EXPANSION BEARING ORIENTATION

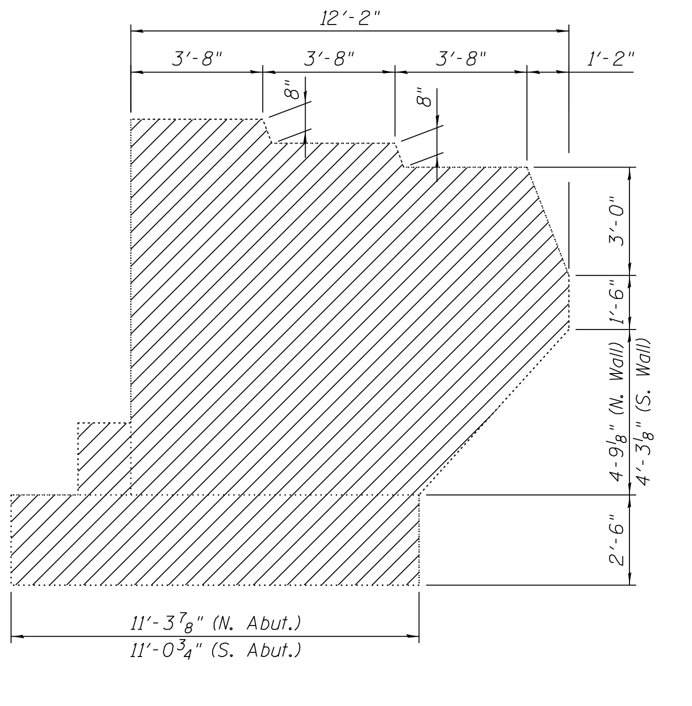
The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.



PLAN - WEST ABUTMENT

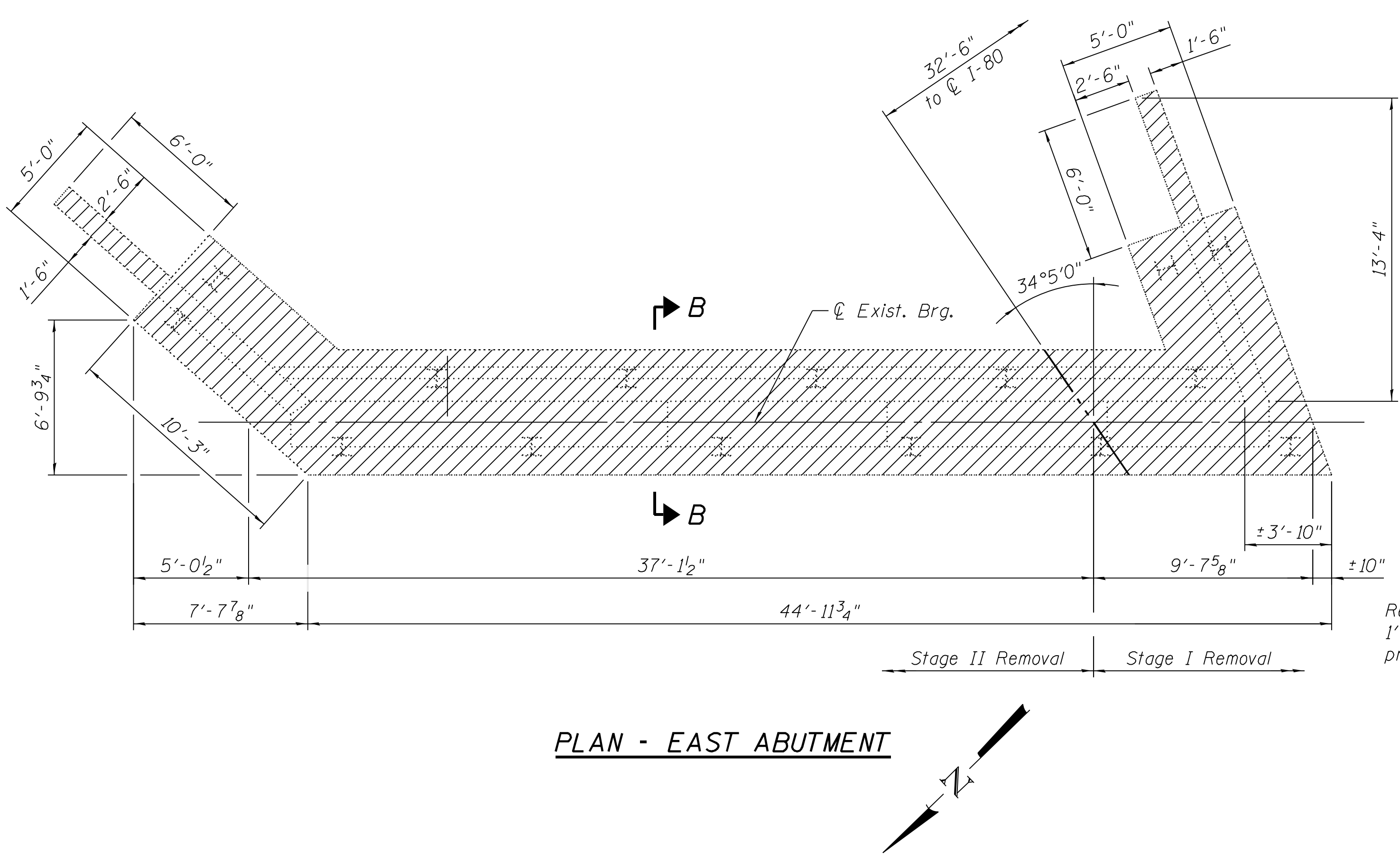


SECTION A-A

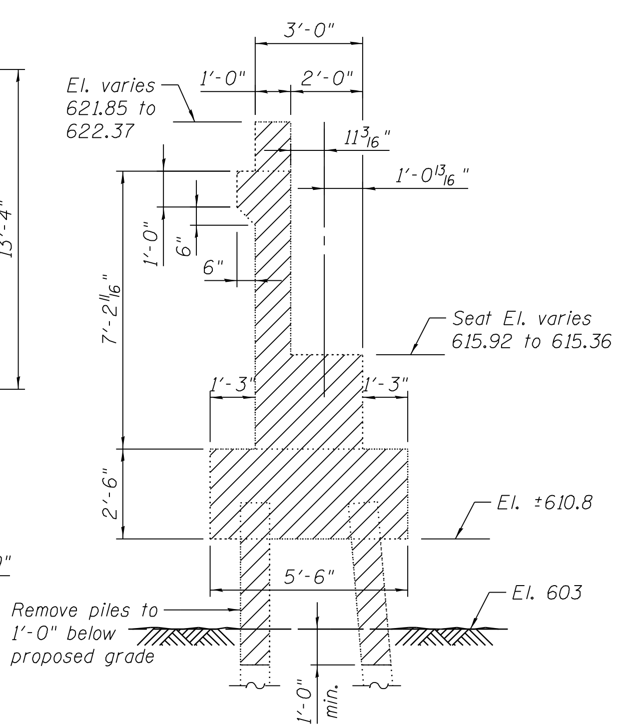


WINGWALL ELEVATION

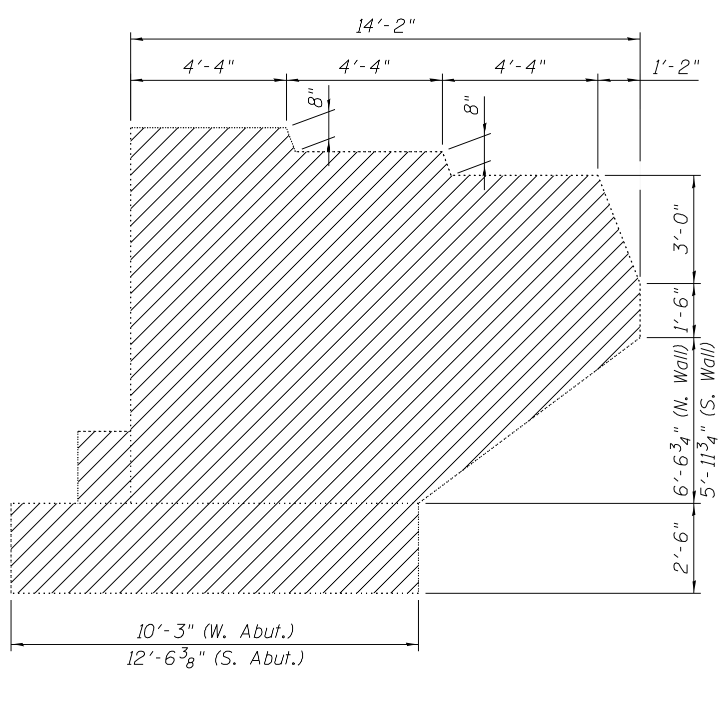
(West Abutment)



PLAN - EAST ABUTMENT



SECTION B-B



WINGWALL ELEVATION

(East Abutment)

LEGEND

Removal of Existing Structures

NOTES

1. Removals shall be paid for as Removal of Existing Structures.
2. See Sheet SR-08 for superstructure removal.

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	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-37 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	336
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		ILLINOIS	FED. AID PROJECT	

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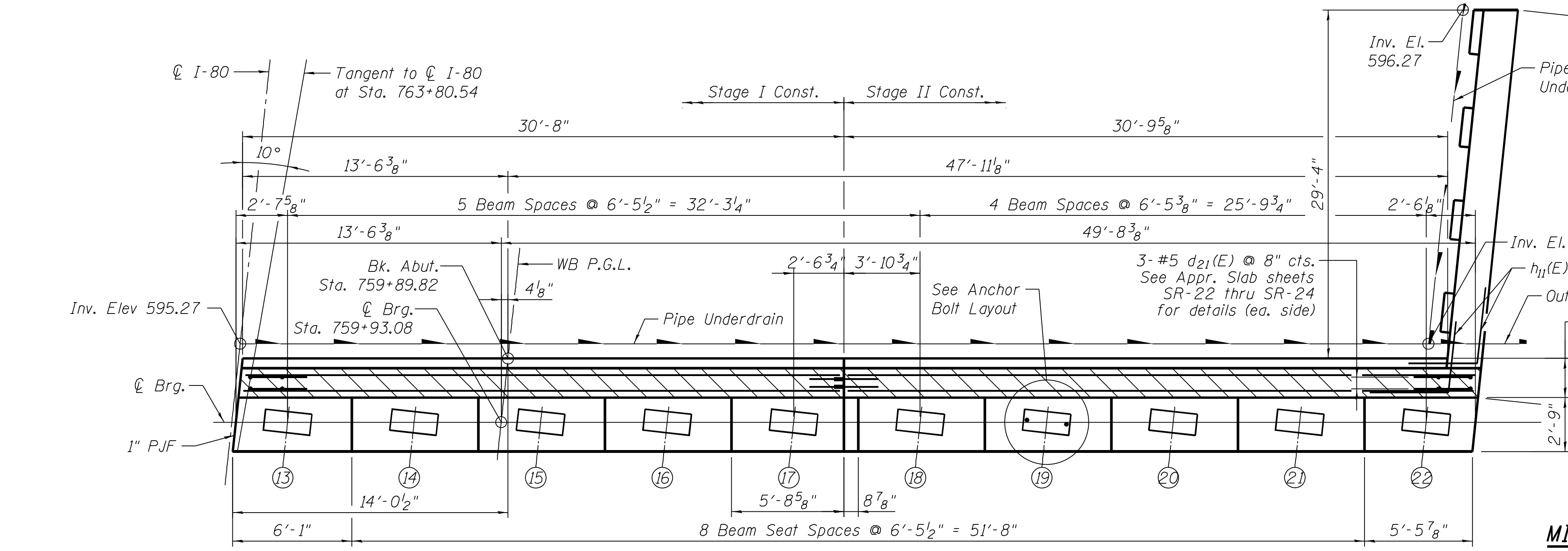
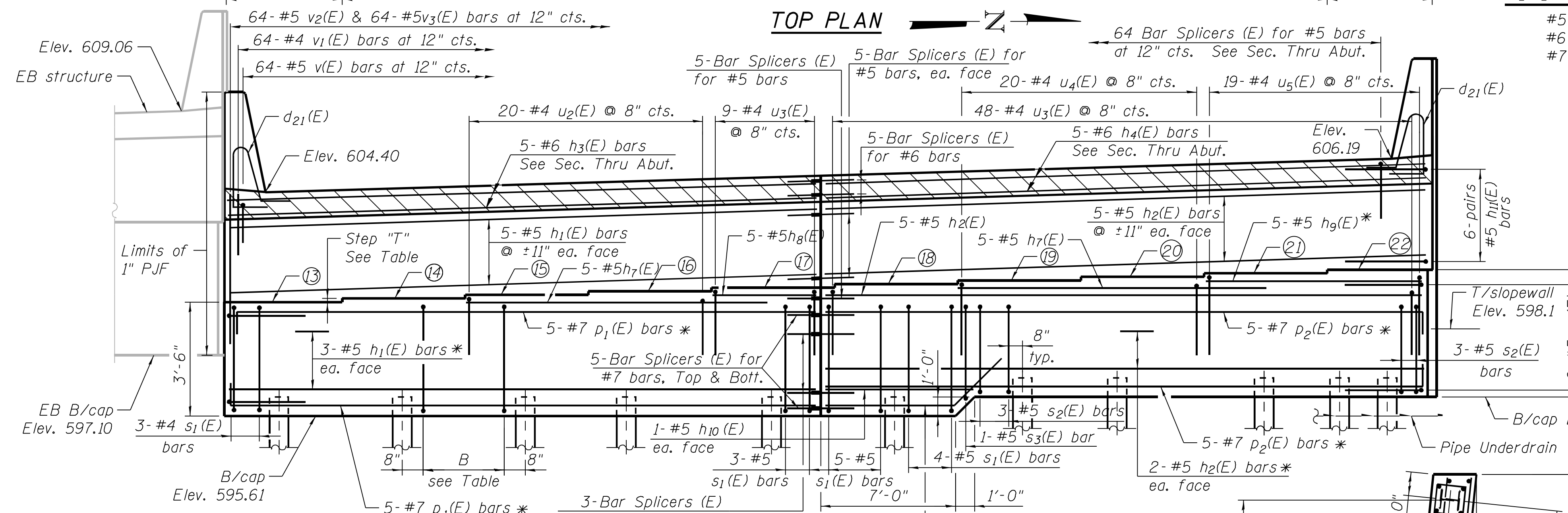
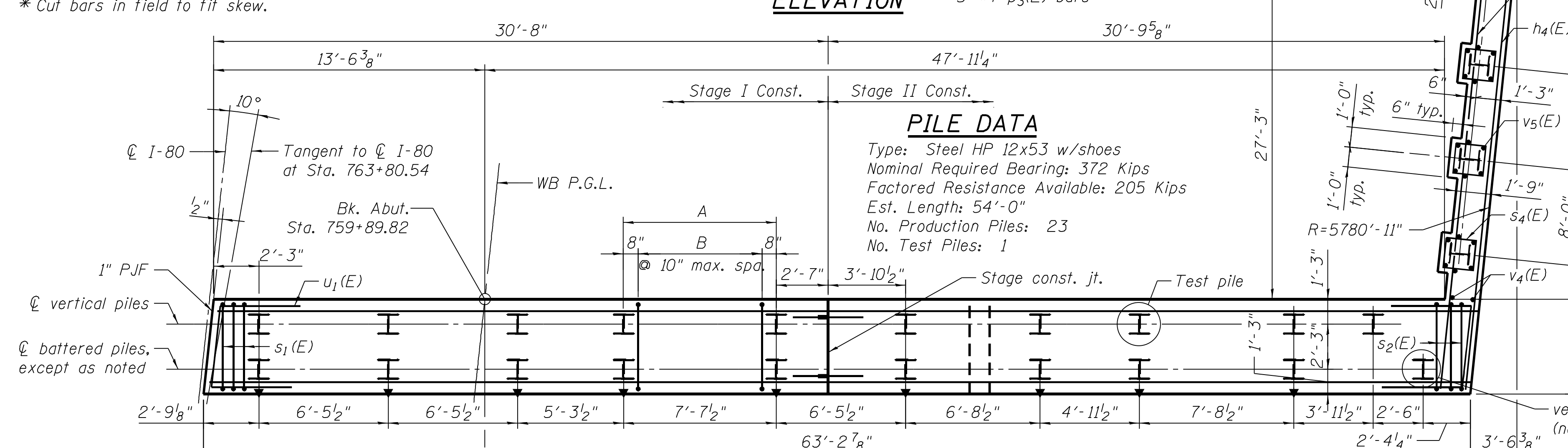


TOP PLAN



ELEVATION

* Cut bars in field to fit skew.

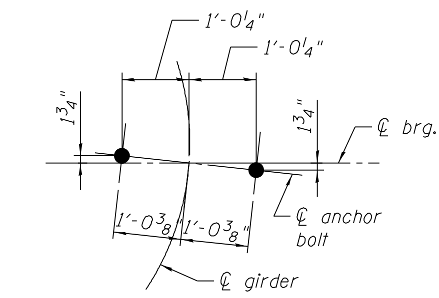


PILE DATA

Type: Steel HP 12x53 w/shoes
Nominal Required Bearing: 372 Kips
Factored Resistance Available: 205 Kips
Est. Length: 54'-0"
No. Production Piles: 23
No. Test Piles: 1

A	B
6'-5½"	8-#5 s1(E)
5'-3½"	6-#5 s1(E)
7'-7½"	9-#5 s1(E)
4'-11½"	6-#5 s2(E)
7'-8½"	9-#5 s2(E)
3'-11½"	5-#5 s2(E)
2'-6"	3-#5 s2(E)

FOOTING PLAN



ANCHOR BOLT LAYOUT

TABLE OF SEAT ELEVATIONS

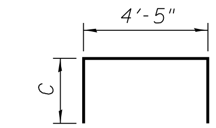
	Elev.	Step "T"
13	599.11	2¼"
14	599.30	2¼"
15	599.50	2¼"
16	599.69	2¼"
17	599.88	2¼"
18	600.07	2¼"
19	600.26	2¼"
20	600.45	2¼"
21	600.64	2¼"
22	600.83	2¼"

MINIMUM BAR LAP

#5 bar = 3'-9"
#6 bar = 5'-4"
#7 bar = 6'-3"

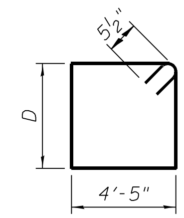
Notes:

See Approach Slab Sheets SR-23 thru SR-24 for additional details. Modular joint housing shall not interfere with reinforcement bars.



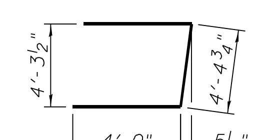
	C
u2(E)	2'-7"
u3(E)	3'-0"
u4(E)	3'-5"
u5(E)	3'-10"

BARS u2(E) thru u5(E)

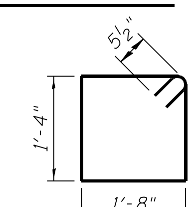


	D
s1(E)	3'-1"
s2(E)	2'-1"
s3(E)	2'-7"

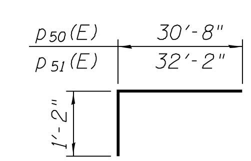
BARS s1(E), s2(E) & s3(E)



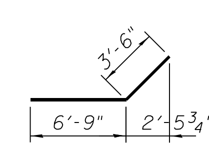
BAR u1(E)



BAR s4(E)



BARS p1(E) & p2(E)



BAR p3(E)

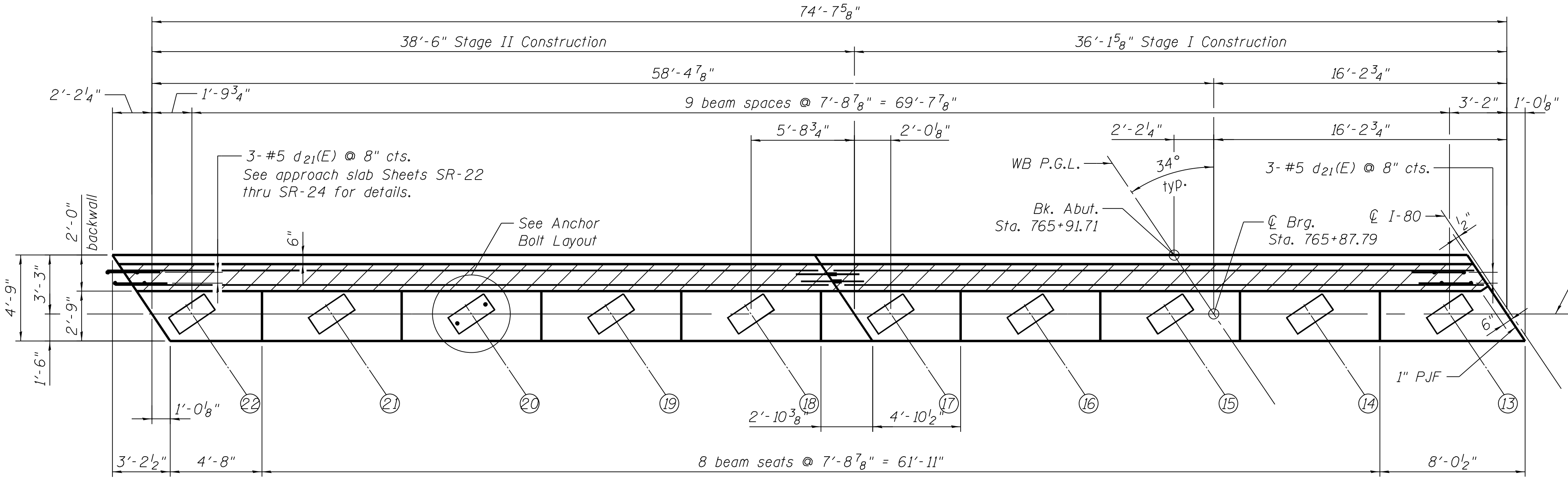
BAR h11(E)

WEST ABUTMENT BILL OF MATERIAL

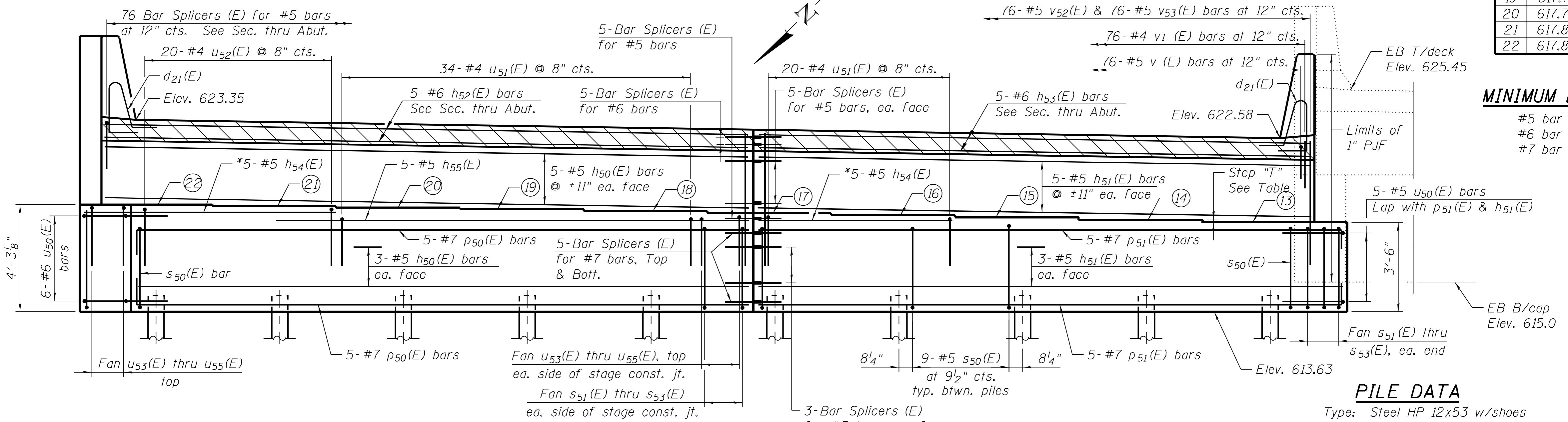
	Bar	No.	Size	Length	Shape
	d21(E)	6	#5	8'-6"	
*	h1(E)	16	#5	30'-9"	
*	h2(E)	19	#5	32'-2"	
	h3(E)	5	#6	30'-6"	
	h4(E)	5	#6	32'-2"	
	h5(E)	10	#5	33'-11"	
	h6(E)	8	#5	31'-2"	
	h7(E)	10	#5	16'-8"	
	h8(E)	5	#5	5'-3"	
*	h9(E)	5	#5	12'-0"	
	h10(E)	2	#5	8'-0"	
	h11(E)	12	#5	7'-6"	
*	p1(E)	10	#7	31'-10"	
*	p2(E)	10	#7	33'-4"	
	p3(E)	5	#7	10'-3"	
	s1(E)	49	#5	15'-11"	
	s2(E)	28	#5	13'-11"	
	s3(E)	1	#5	14'-11"	
	s4(E)	24	#5	6'-11"	
	u1(E)	11	#5	12'-5"	
	u2(E)	20	#4	9'-7"	
	u3(E)	57	#4	10'-5"	
	u4(E)	20	#4	11'-3"	
	u5(E)	19	#4	12'-1"	
	v(E)	64	#5	3'-9"	
	v1(E)	64	#4	3'-0"	
	v2(E)	64	#5	7'-0"	
	v3(E)	64	#4	8'-3"	
*	v4(E)	64	#5	7'-10"	
*	v5(E)	16	#5	6'-6"	

Item	Unit	Quantity
Structure Excavation	Cu Yd	471.3
Concrete Structures	Cu Yd	80.3
Reinforcement Bars, Epoxy Coated	Pound	8,310
Furnishing Steel Piles HP 12x53	Foot	1,242
Driving Piles	Foot	1,242
Test Pile Steel HP12x53	Each	1
Pile Shoes	Each	24
Concrete Sealer	Sq Ft	798

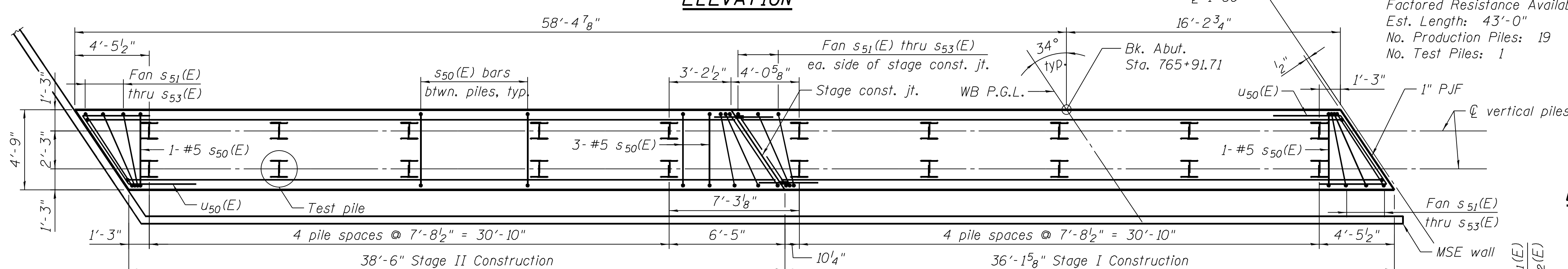
For details of Bar Splicers, see Sheet SR-53.
For details of piles see Sheet SR-52.
For wingwall details see Sheet SR-40.



TOP PLAN



ELEVATION

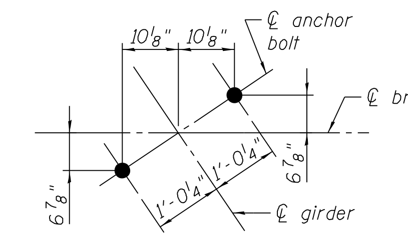


FOOTING PLAN

* Cut bars in field to fit skew as needed

Note:

See Approach Slab Sheets SR-22 thru SR-24 for additional details.



ANCHOR BOLT LAYOUT

TABLE OF SEAT ELEVATIONS

	Elev.	Step "T"
13	617.13	1 3/8"
14	617.25	1 1/4"
15	617.35	1 1/4"
16	617.46	1 1/8"
17	617.55	1"
18	617.63	7/8"
19	617.71	7/8"
20	617.78	3/4"
21	617.84	5/8"
22	617.89	

MINIMUM BAR LAP

#5 bar = 3'-9"
#6 bar = 5'-4"
#7 bar = 6'-3"

PILE DATA

Type: Steel HP 12x53 w/shoes
Nominal Required Bearing: 369 kips
Factored Resistance Available: 203 kips
Est. Length: 43'-0"
No. Production Piles: 19
No. Test Piles: 1

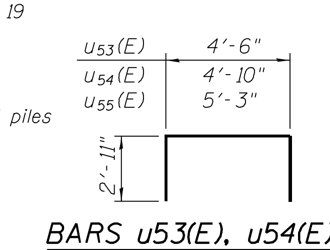
EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d21(E)	6	#5	8'-6"	
h50(E)	16	#5	38'-2"	
h51(E)	16	#5	35'-9"	
h52(E)	5	#6	39'-0"	
h53(E)	5	#6	35'-9"	
* h54(E)	10	#5	15'-5"	
h55(E)	5	#5	29'-9"	
p50(E)	10	#7	39'-3"	
p51(E)	10	#7	36'-10"	
s50(E)	77	#5	15'-11"	
s51(E)	4	#5	16'-1"	
s52(E)	4	#5	16'-9"	
s53(E)	4	#5	17'-7"	
u50(E)	11	#5	13'-2"	
u51(E)	54	#4	9'-7"	
u52(E)	20	#4	10'-3"	
u53(E)	3	#4	10'-4"	
u54(E)	3	#4	10'-8"	
u55(E)	3	#4	11'-1"	
v(E)	76	#5	3'-9"	
v1(E)	76	#4	3'-0"	
v52(E)	76	#5	7'-0"	
v53(E)	76	#5	8'-3"	

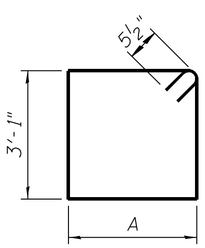
Item	Unit	Quantity
Structure Excavation	Cu Yd	689.8
Concrete Structures	Cu Yd	73.7
Reinforcement Bars, Epoxy Coated	Pound	7,560
Furnishing Steel Piles HP 12x53	Foot	817
Driving Piles	Foot	817
Test Pile Steel HP12x53	Each	1
Pile Shoes	Each	20
Concrete Sealer	Sq Ft	920

For Bar Splicers details, see Sheet SR-53.
For pile details, see Sheet SR-52.

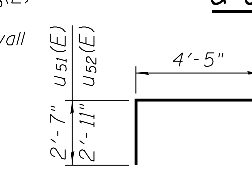
	A
s50(E)	4'-5"
s51(E)	4'-6"
s52(E)	4'-10"
s53(E)	5'-3"



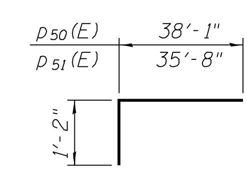
BARS u53(E), u54(E) & u55(E)



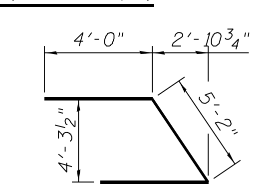
BARS s50(E), s51(E) s52(E) & s53(E)



BARS u51(E) & u52(E)



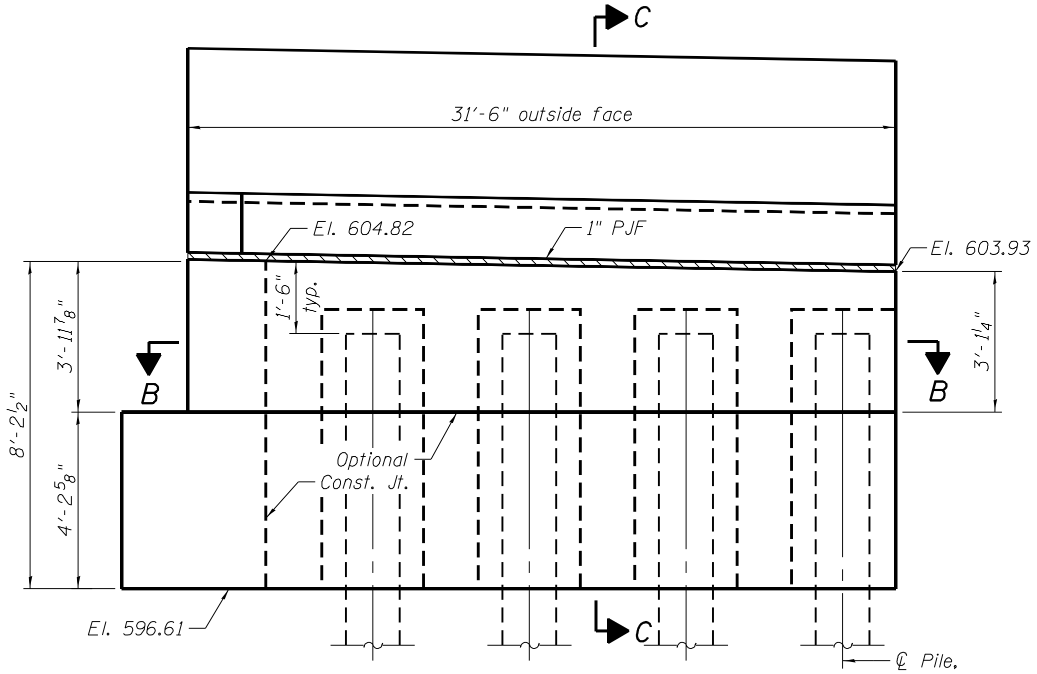
BARS p50(E) & p51(E)



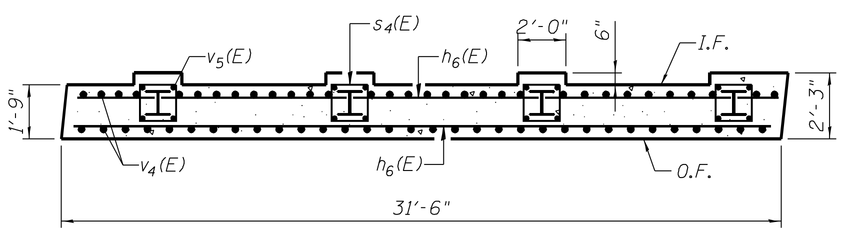
BAR u50(E)

USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT STRUCTURE NO. 099-0905	F.A.I. RTE. 80	SECTION 2013-009B	COUNTY WILL	TOTAL SHEETS 465	SHEET NO. 338
	CHECKED - VCP	REVISED -							
PLOT SCALE =	DRAWN - HBJ	REVISED -		SHEET SR-39 OF SR-64 SHEETS	CONTRACT NO. 60W35				
PLOT DATE =	CHECKED - CCE	REVISED -			ILLINOIS	FED. AID PROJECT			

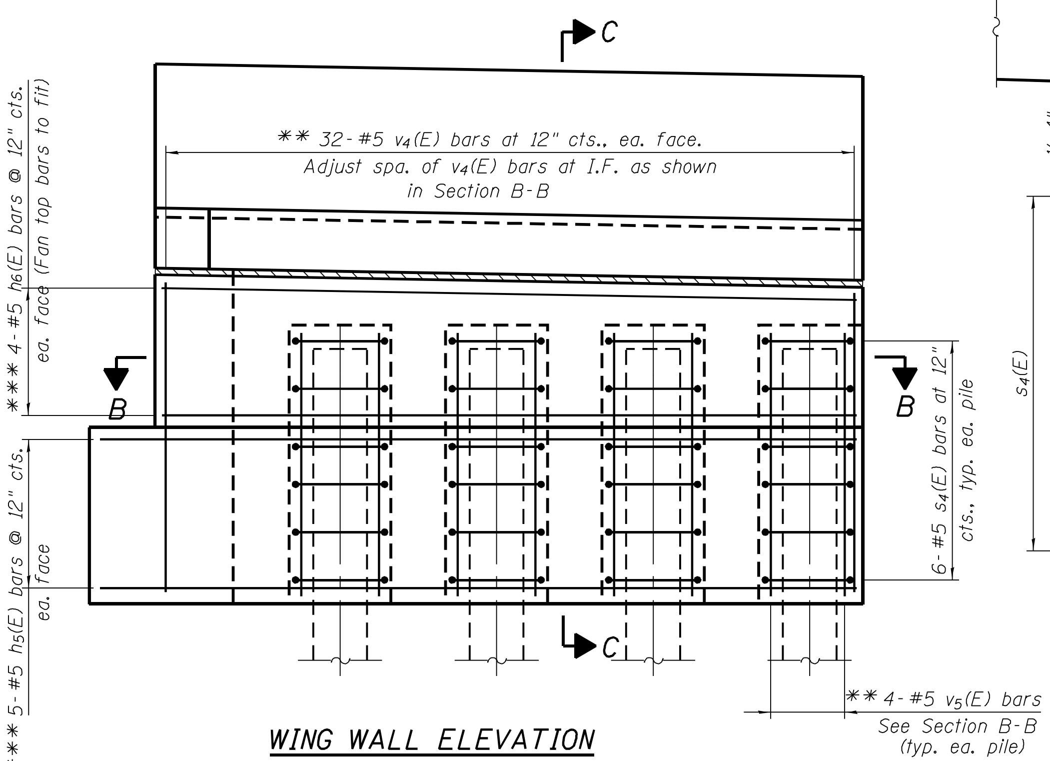
exp.



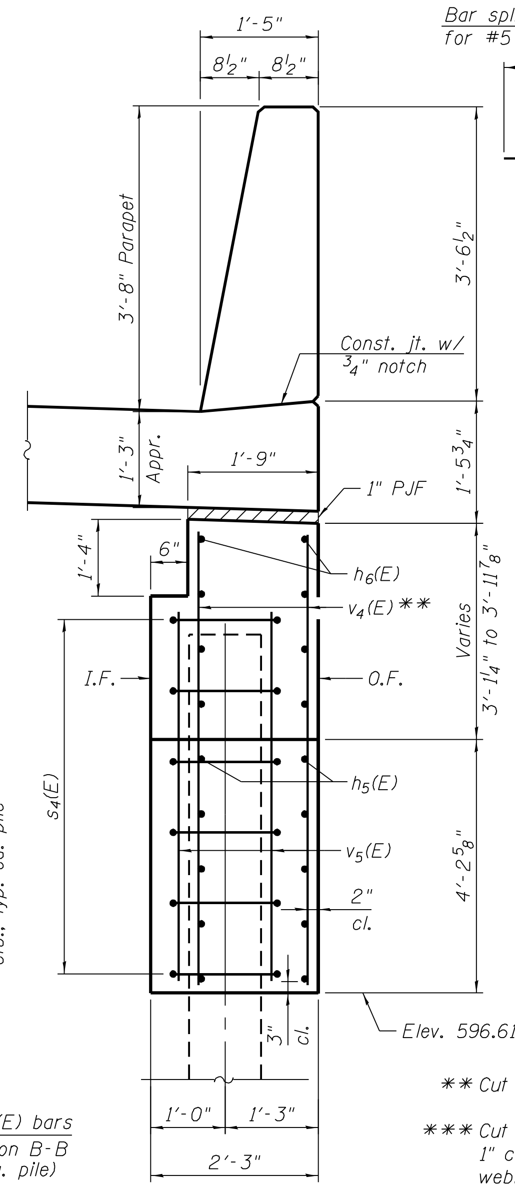
WING WALL ELEVATION
Showing dimensions (W. Abut. only)



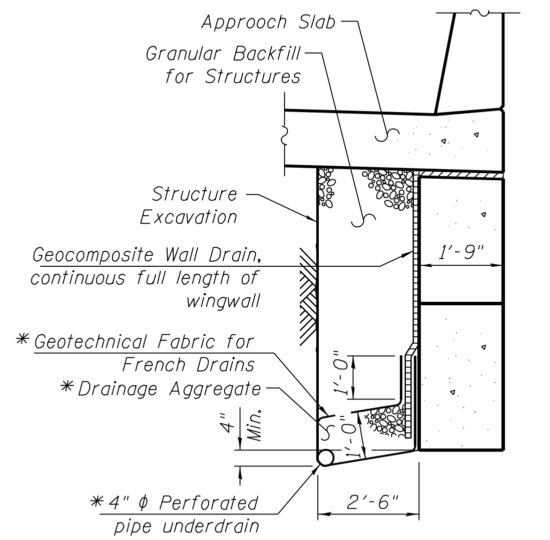
SECTION B-B



WING WALL ELEVATION
Showing reinforcement (W. Abut. only)

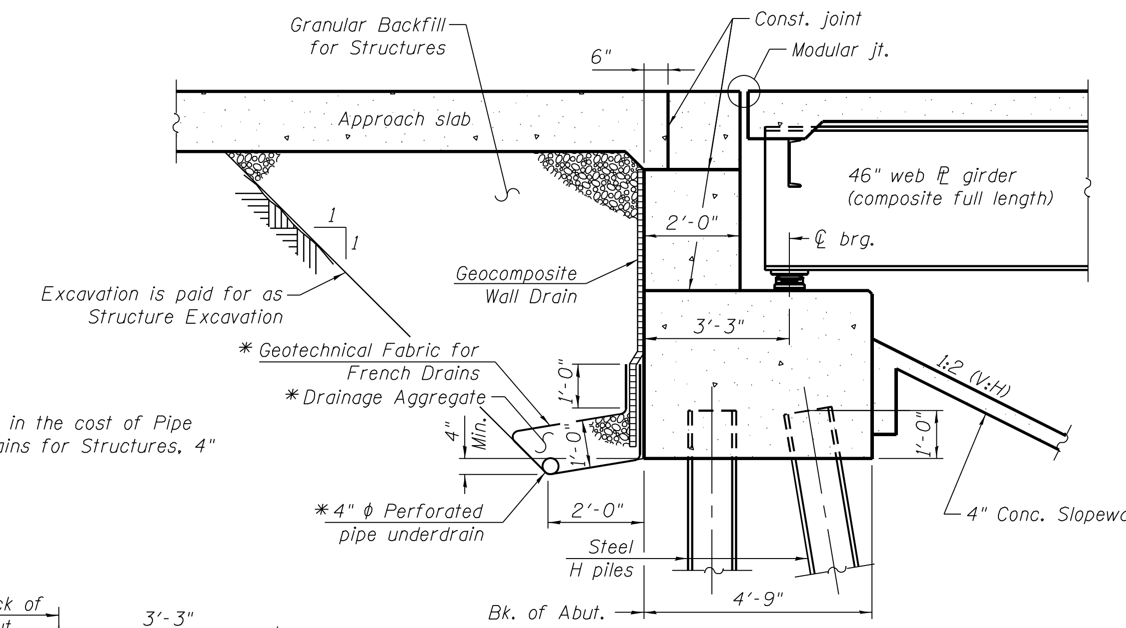


SECTION C-C

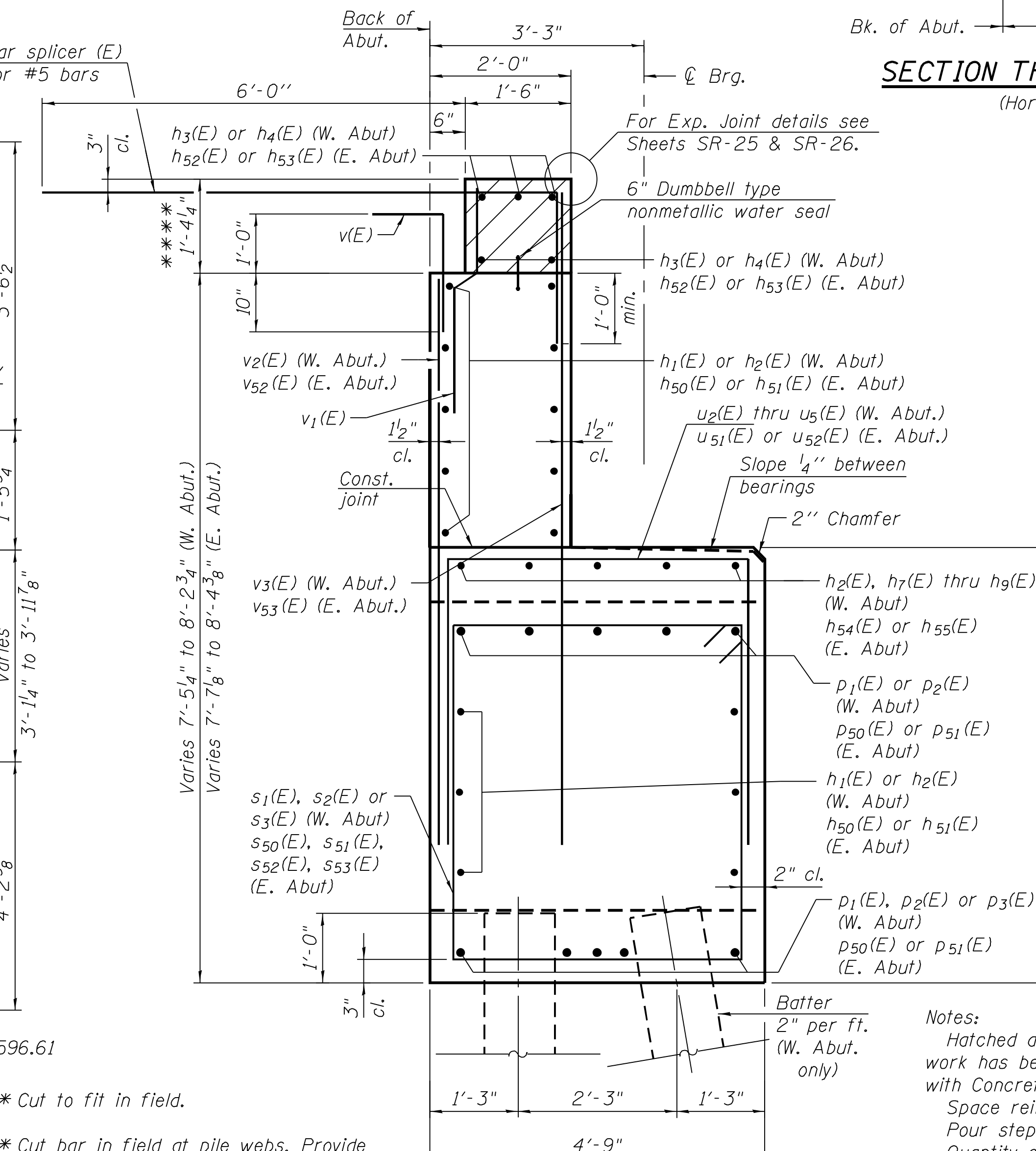


SECTION THRU WING WALL

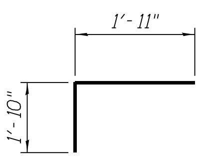
* Included in the cost of Pipe Underdrains for Structures, 4"



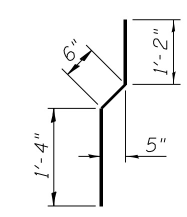
SECTION THRU WEST ABUTMENT
(Horiz. dim. @ Rt. ∟'s)



SECTION THRU ABUT.
Showing W. Abut., E. Abut. similar



BAR v(E)



BAR $v_1(E)$

** Cut to fit in field.

*** Cut bar in field at pile webs. Provide 1" clear between end of bar and pile web.

**** Prior to grinding

Notes:

Hatched area to be poured after superstructure false work has been removed. Quantity of concrete included with Concrete Superstructure.

Space reinforcement in cap to miss anchor bolts.

Pour steps monolithically with cap.

Quantity of concrete in end post included with Concrete Superstructure on Sheet SR-24.

Concrete Sealer shall be applied to all exposed surfaces of the abutment backwall, seats, and front face of the seat.

USER NAME =	DESIGNED - CCE	REVISED -	
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

exp.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS
STRUCTURE NO. 099-0905

SHEET SR-40 OF SR-64 SHEETS

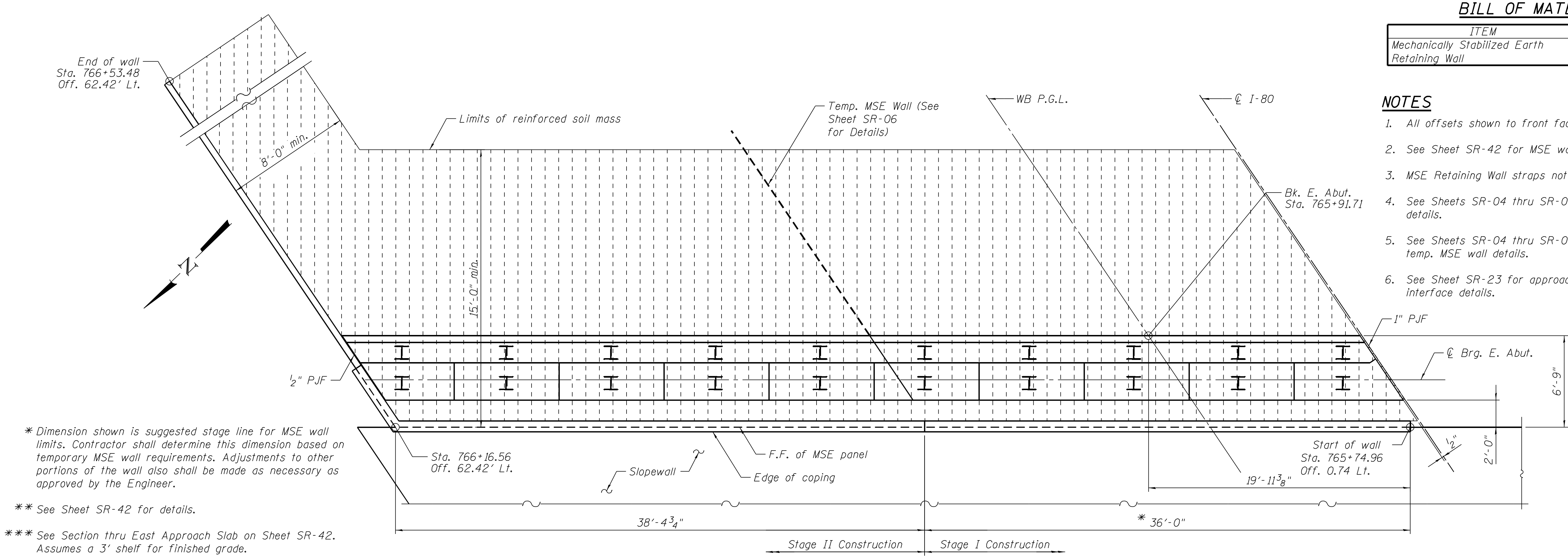
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	339
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Mechanically Stabilized Earth Retaining Wall	Sq Ft	1216

NOTES

1. All offsets shown to front face of MSE wall panel.
2. See Sheet SR-42 for MSE wall details.
3. MSE Retaining Wall straps not shown for clarity.
4. See Sheets SR-04 thru SR-07 for staging details.
5. See Sheets SR-04 thru SR-07 for TSRS & temp. MSE wall details.
6. See Sheet SR-23 for approach slab/MSE wall interface details.

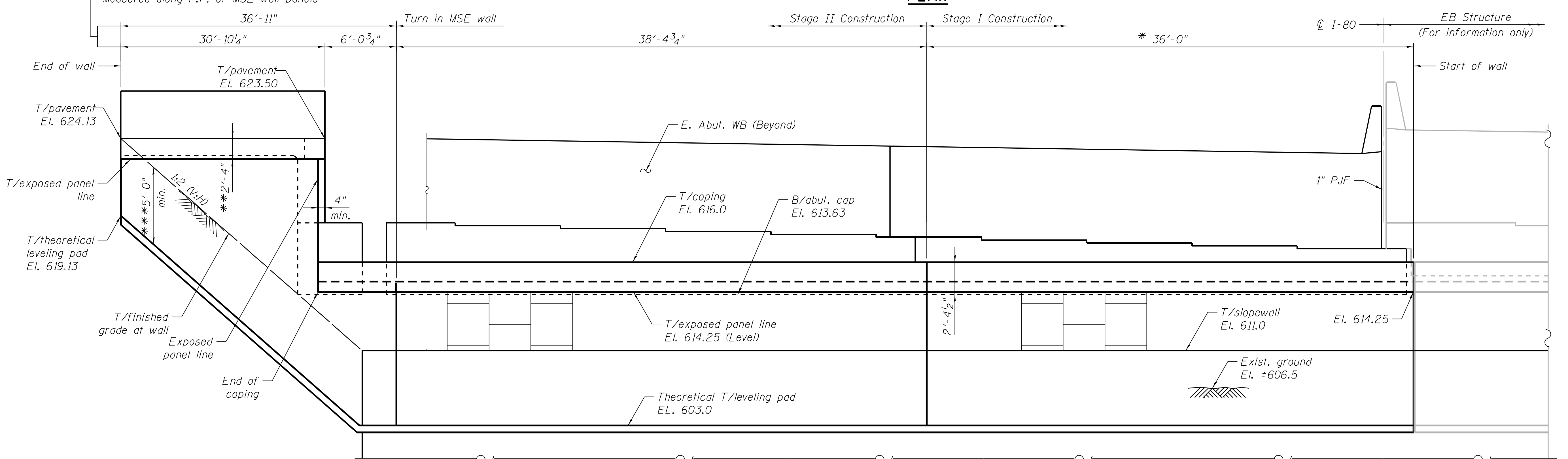


* Dimension shown is suggested stage line for MSE wall limits. Contractor shall determine this dimension based on temporary MSE wall requirements. Adjustments to other portions of the wall also shall be made as necessary as approved by the Engineer.

** See Sheet SR-42 for details.

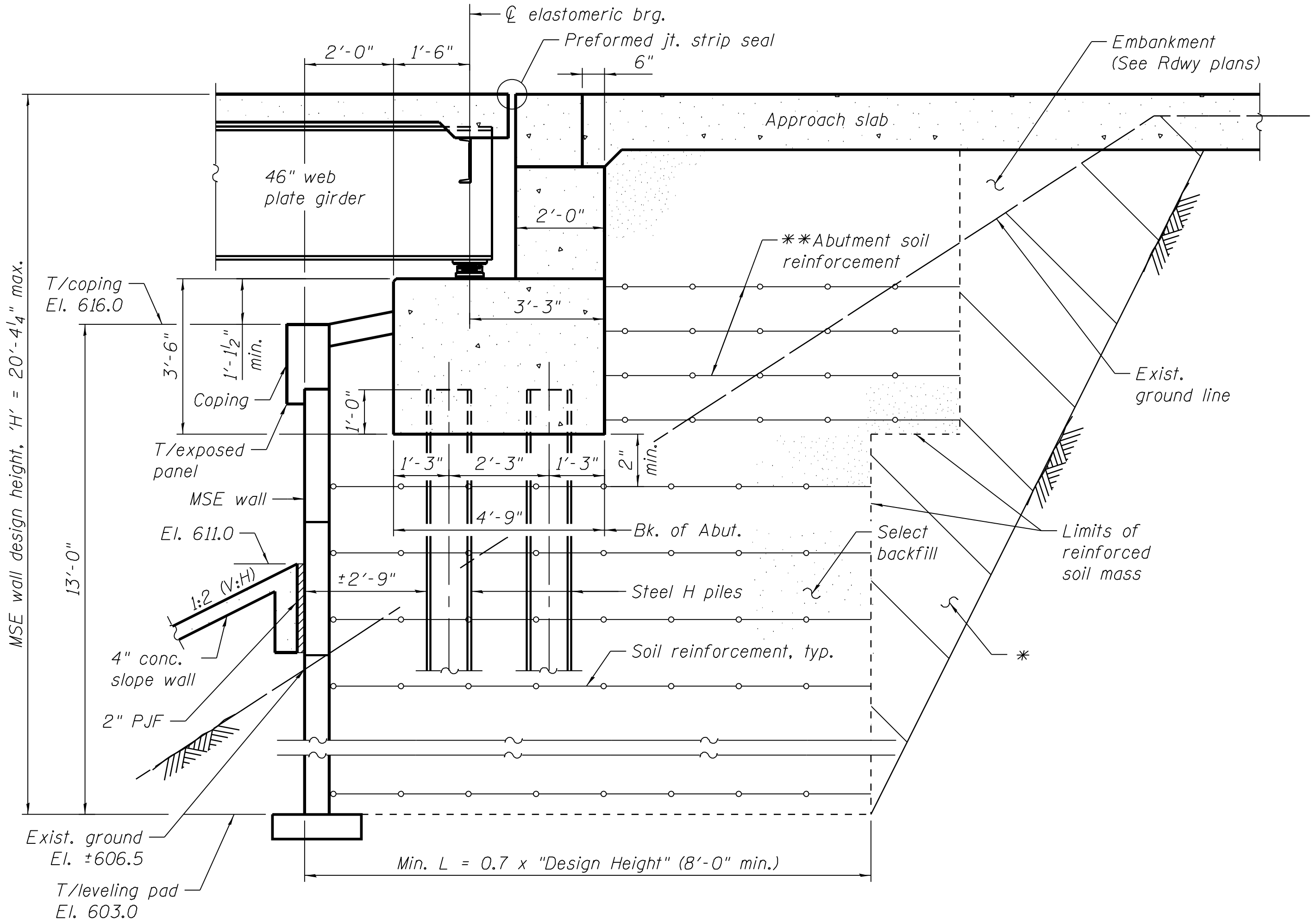
*** See Section thru East Approach Slab on Sheet SR-42. Assumes a 3' shelf for finished grade.

PLAN



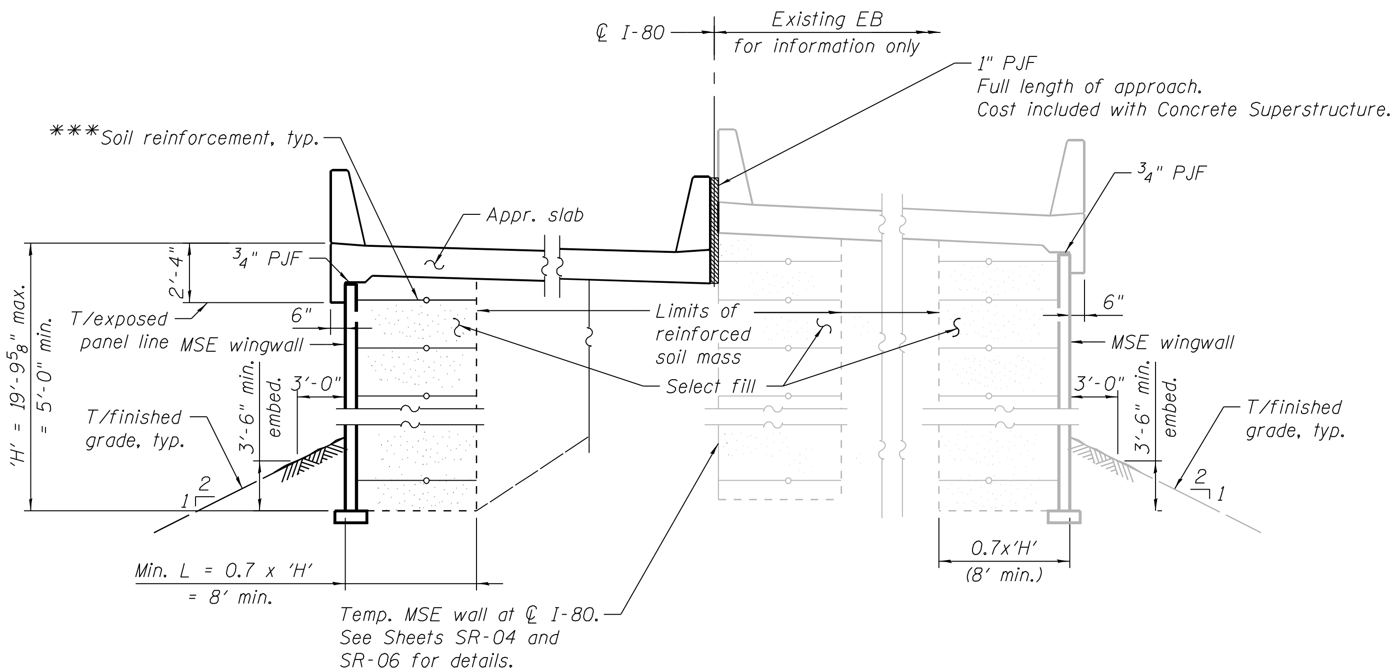
DEVELOPED ELEVATION

(Looking East)



SECTION THRU MSE WALL AND EAST ABUTMENT

(Dim. @ Rt. L's)

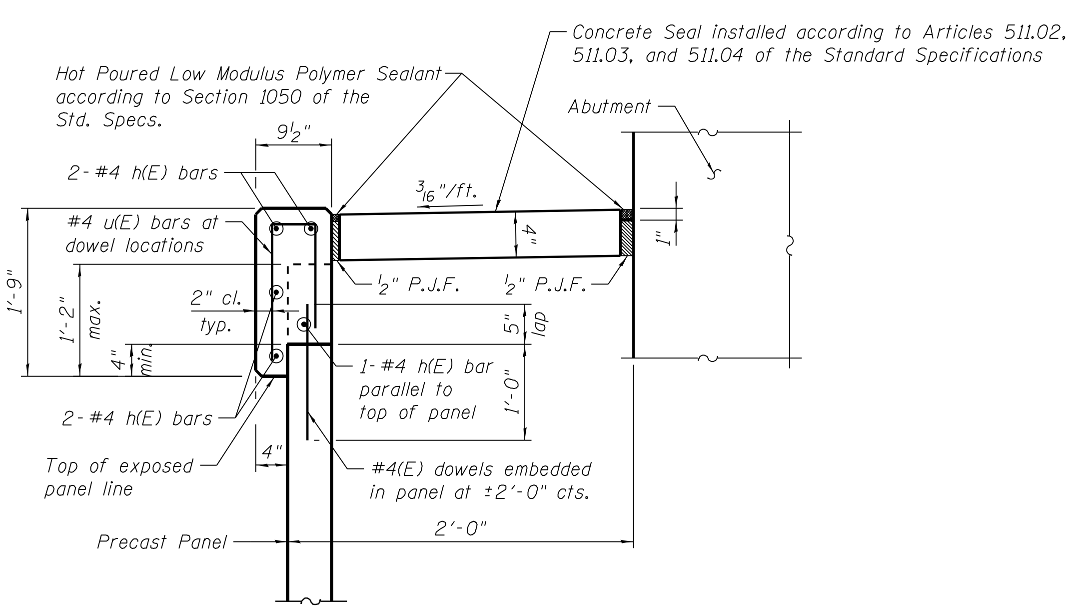


SECTION THRU EAST APPROACH SLAB

✱ Overexcavation beyond Structure Excavation. This area not measured for payment. Backfill overexcavation with same material used for select fill used in MSE wall.

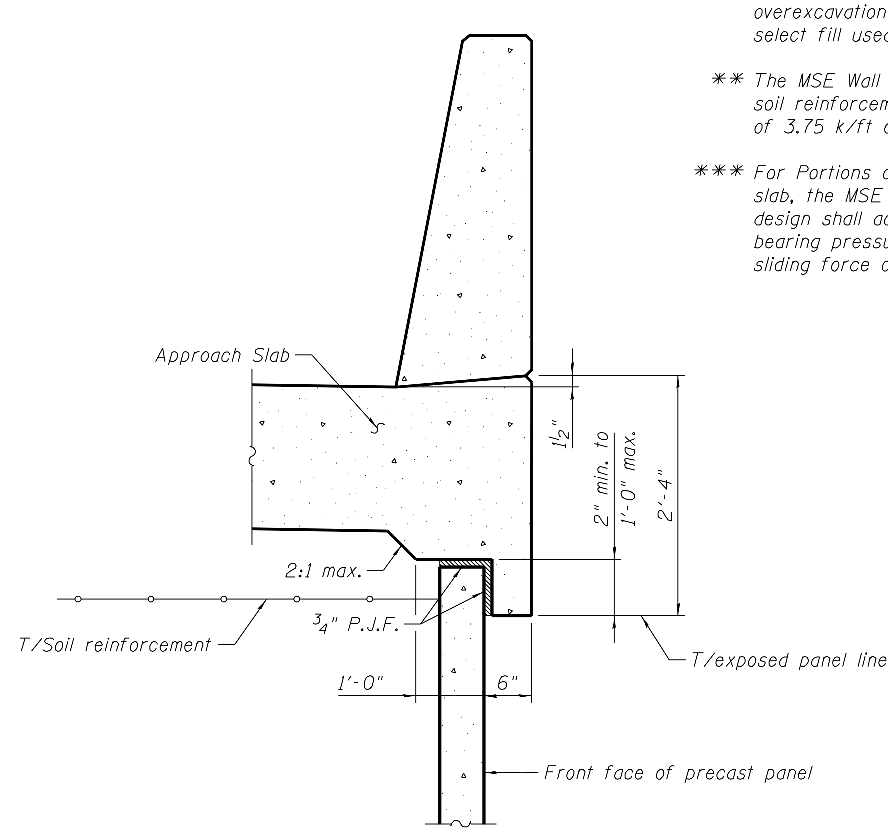
✱✱ The MSE Wall Supplier shall design the abutment soil reinforcement to resist a horizontal force of 3.75 k/ft of abutment.

✱✱✱ For Portions of MSE wall beneath approach slab, the MSE wall supplier's internal stability design shall account for the anchorage slab's bearing pressure of 1.5 ksf and horizontal sliding force of 1.15 kips/ft of wall.



CAST-IN-PLACE COPING DETAIL

(Precast Coping Cannot Be Substituted)
(Horiz. dim. @ Rt. L's)



CAST-IN-PLACE COPING DETAIL AT WINGWALL

NOTES

1. Shop Drawings submittal by MSE Wall Supplier shall include all dimensions, elevations and details necessary to accomodate bridge skew, bridge piles, temporary shoring, and any other structural system shown on the plans. Cost included with Mechanically Stabilized Earth Retaining Wall.
2. No precoring required for piles at abutments. Piles shall be driven prior to placement of the reinforced select backfill.
3. Cost of P.J.F., C.I.P. Coping and reinforcement, Sealant, and Concrete Seal shall be included with the cost of Mechanically Stabilized Earth Retaining Wall.
4. For MSE Wall Plan and Elevation, see Sheet SR-41.
5. For Abutment Details, see Sheet SR-39.
6. For Approach Slab Details, see Sheets SR-22, SR-23, & SR-24.

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EAST ABUTMENT & MSE WALL DETAILS STRUCTURE NO. 099-0905	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465 / 341
	PLOT SCALE =	DRAWN - HBJ	REVISED -					CONTRACT NO. 60W35	
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-42 OF SR-64 SHEETS		ILLINOIS	FED. AID PROJECT	

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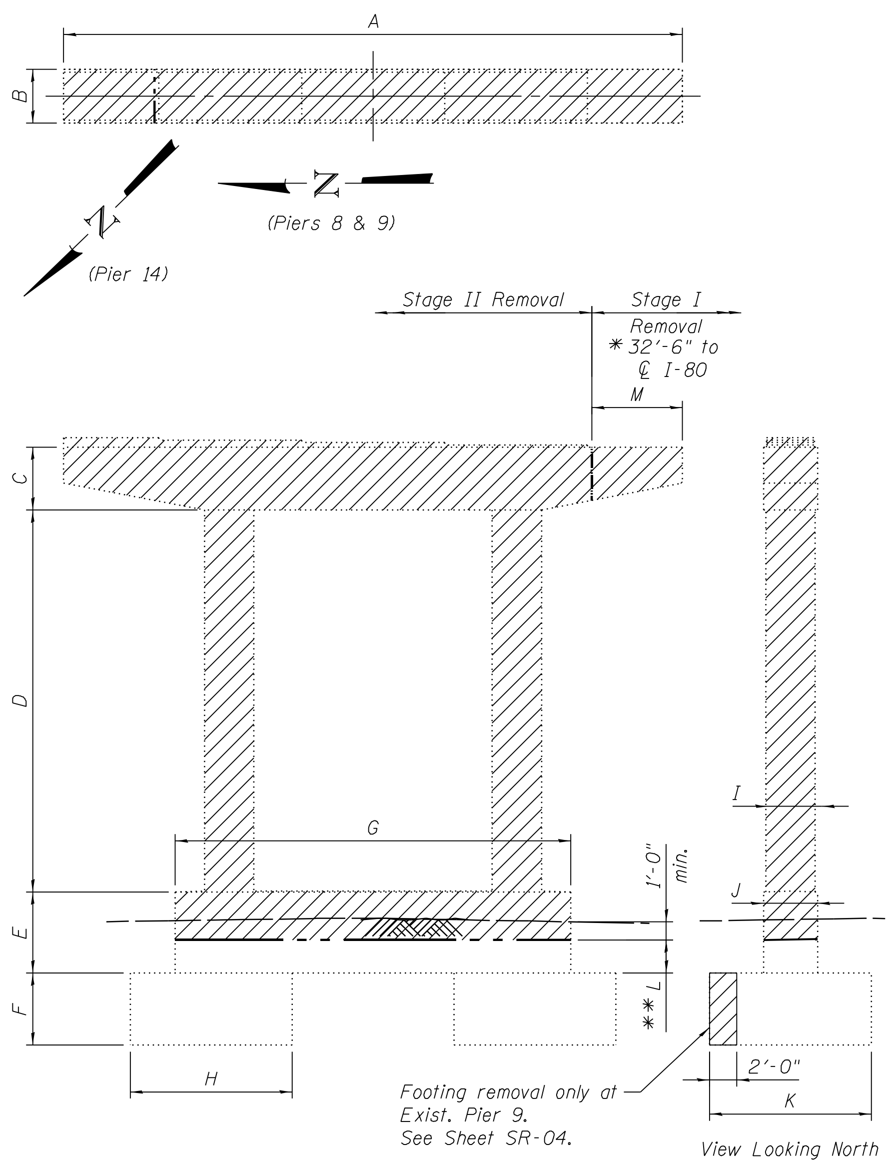
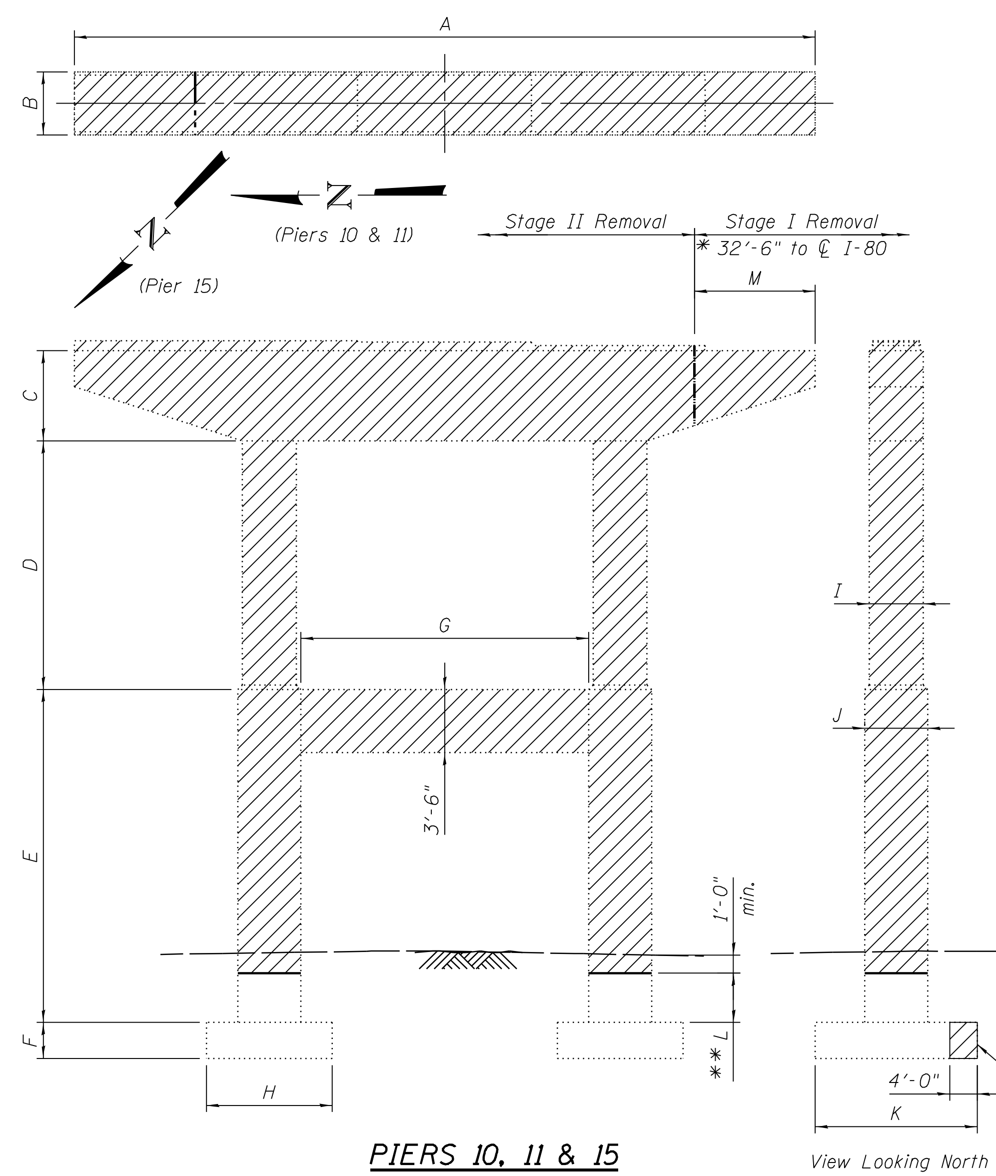
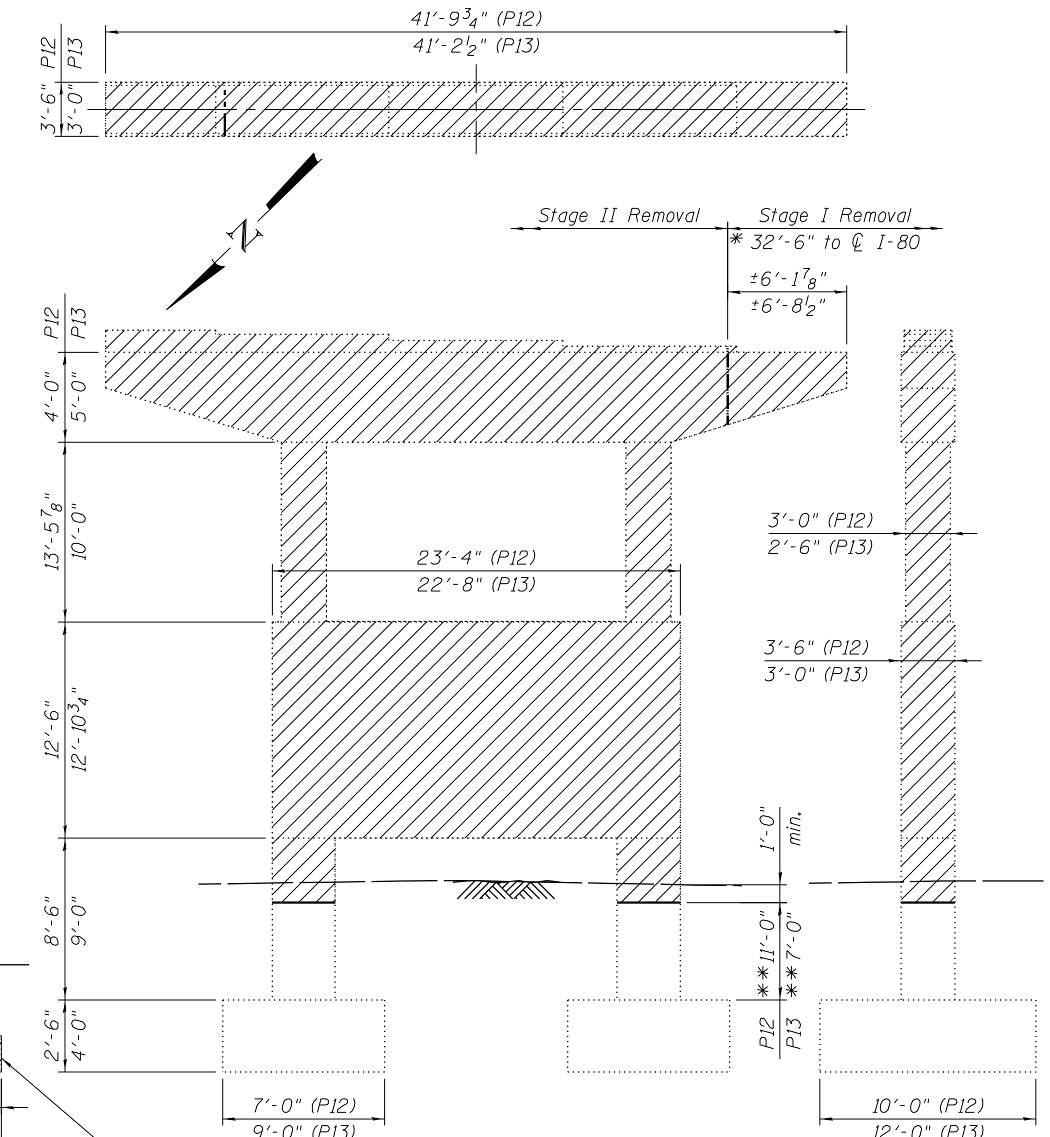
3/9/2022 11:05:09 AM



PIERS 8, 9 & 14



PIERS 10, 11 & 15



PIERS 12 & 13

* Measured perpendicular to ℄ I-80

** Remove existing pier 1' minimum below proposed ground.

TABLE OF DIMENSIONS

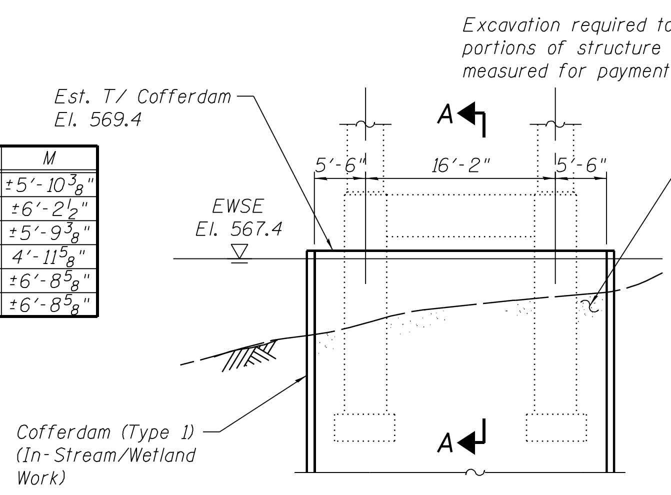
Pier	A	B	C	D	E	F	G	H	I	J	K	L**	M
8	34'-9"	3'-0"	3'-6"	21'-1 11/16"	4'-6"	4'-0"	20'-0"	9'-0"	2'-9"	3'-0"	9'-0"	2'-6"	±5'-10 3/8"
9	34'-9"	3'-0"	3'-6"	23'-10 13/16"	11'-4 15/16"	2'-0"	19'-8"	5'-0"	2'-6"	3'-0"	10'-0"	5'-0"	±6'-2 1/2"
10	34'-9"	3'-6"	3'-6"	20'-0"	27'-3 15/16"	2'-6"	12'-8"	7'-0"	3'-0"	3'-6"	14'-0"	2'-0"	±5'-9 3/8"
11	35'-0"	3'-6"	3'-6"	21'-9 1/4"	29'-0 1/8"	2'-6"	12'-8"	7'-0"	3'-0"	3'-6"	14'-0"	2'-0"	4'-11 5/8"
14	41'-2 1/2"	3'-0"	5'-0"	15'-4 9/16"	18'-6"	2'-0"	22'-8"	7'-0"	2'-6"	3'-0"	9'-0"	9'-0"	±6'-8 5/8"
15	41'-2 1/2"	3'-6"	5'-0"	13'-2 5/8"	20'-2 7/16"	2'-0"	16'-0"	7'-0"	3'-0"	3'-6"	9'-0"	7'-5"	±6'-8 5/8"

LEGEND

Removal of Existing Structures

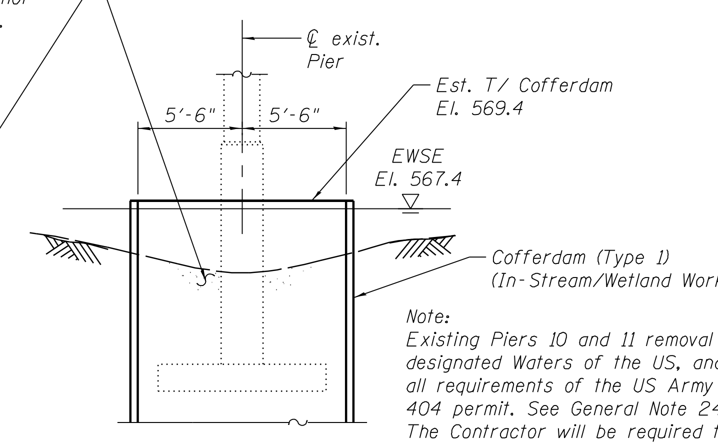
NOTES

1. Removals shall be paid for as Removal of Existing Structures.
2. See Sheet SR-08 for superstructure removal.
3. Pier numbers per existing drawings. Piers 1 thru 7 for EB direction.



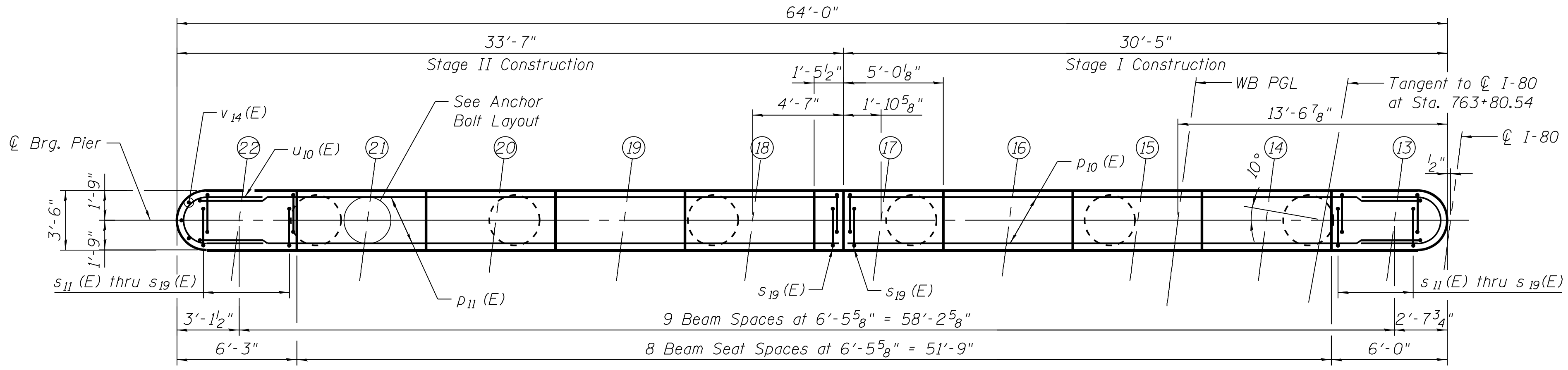
EXISTING PIERS 10 & 11

(Looking East)

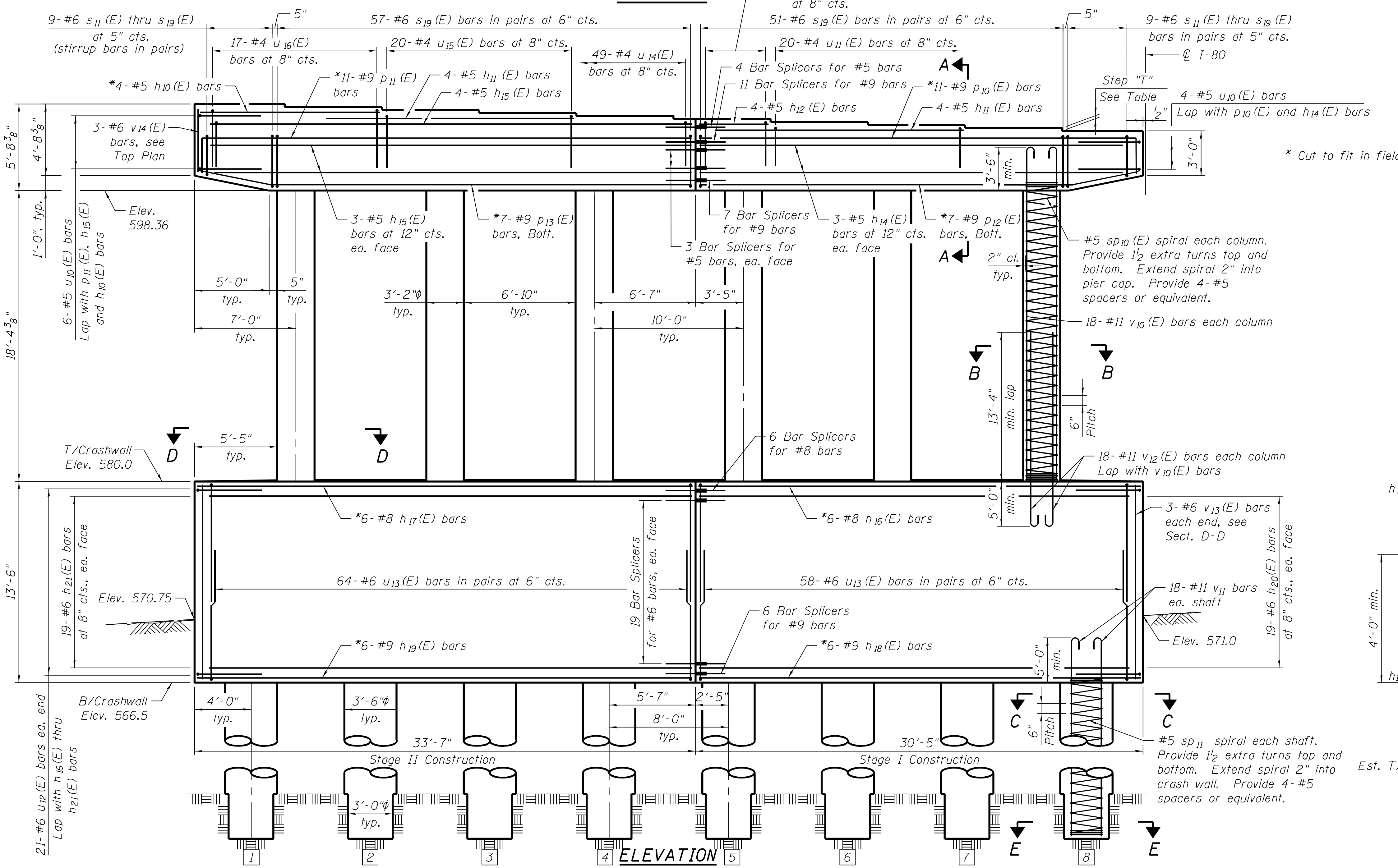


SECTION A-A

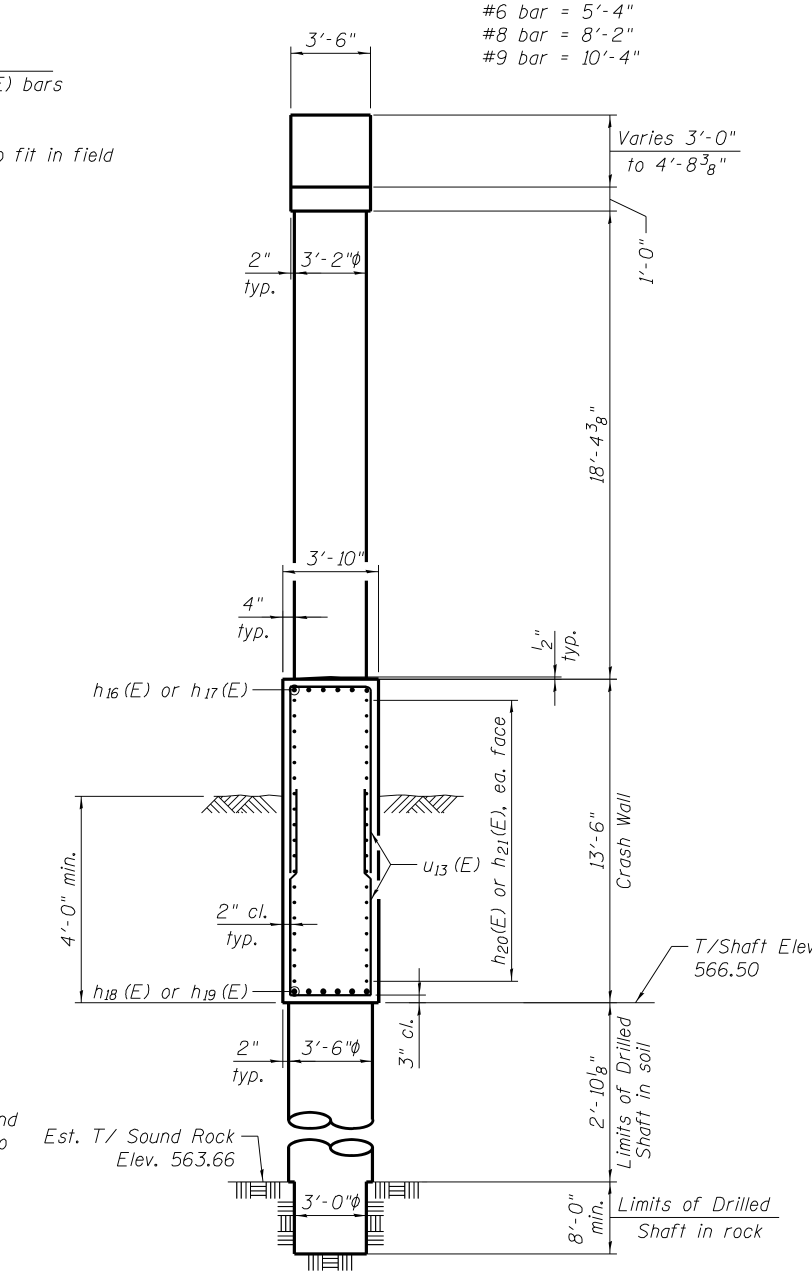
Note:
Existing Piers 10 and 11 removal will be performed within designated Waters of the US, and the Contractor shall comply with all requirements of the US Army Corps of Engineers (USACOE) 404 permit. See General Note 24 on roadway plan sheet no 4. The Contractor will be required to submit an instream work plan to the Department for review and approval. Any material, labor, or equipment necessary to perform existing pier removals shall be included in the cost of Removal of Existing Structures.



TOP PLAN



ELEVATION
(Looking East)



END VIEW

PIER GENERAL NOTES

1. Cast steps monolithically with cap.
2. Space cap reinforcement to miss anchor bolts.
3. Contractor to space drilled shaft and column rebar so as not to interfere with crashwall and cap reinforcement.

NOTES

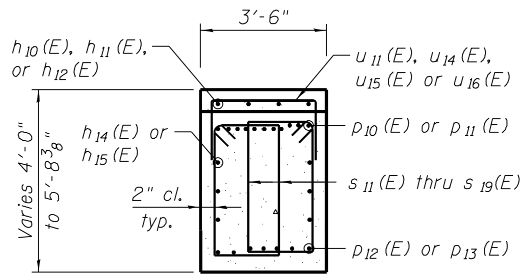
1. For Bill of Material, Bar Diagrams, and Sections A-A, B-B, C-C, D-D, and E-E, see Sheet SR-45.
2. For Anchor Bolt Layout, see Sheet SR-45.
3. For cofferdam details, see Sheet SR-04.
4. Drill and construct the odd-numbered shafts prior to drilling the even-numbered shafts.

BEARING SEAT ELEVATIONS

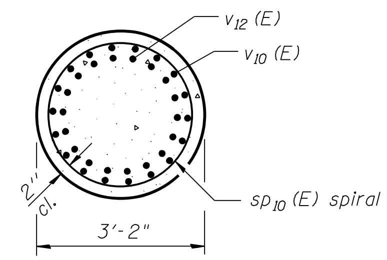
Beam	Elevation	Step "T"
13	602.36	2¼"
14	602.55	2¼"
15	602.74	2¼"
16	602.92	2¼"
17	603.11	2⅜"
18	603.30	2¼"
19	603.49	2¼"
20	603.68	2¼"
21	603.87	2¼"
22	604.06	

MINIMUM BAR LAP

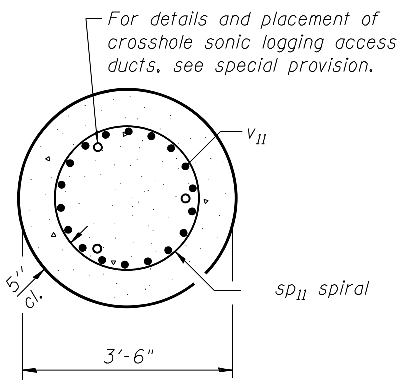
#5 bar = 3'-9"
#6 bar = 5'-4"
#8 bar = 8'-2"
#9 bar = 10'-4"



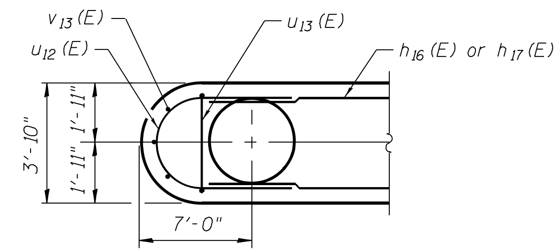
SECTION A-A



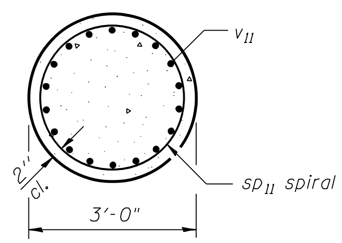
SECTION B-B



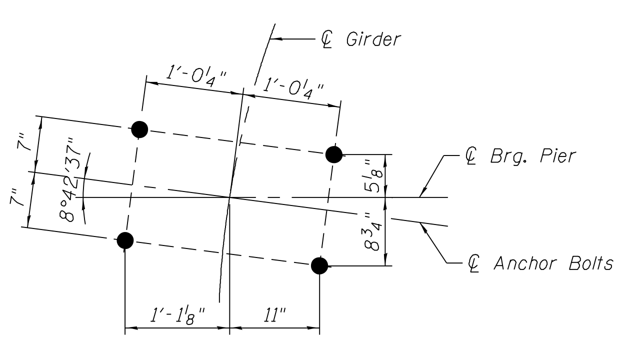
SECTION C-C



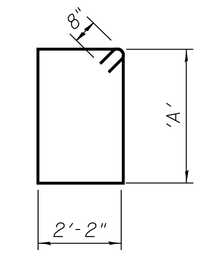
SECTION D-D



SECTION E-E

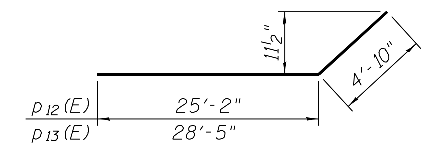


ANCHOR BOLT LAYOUT

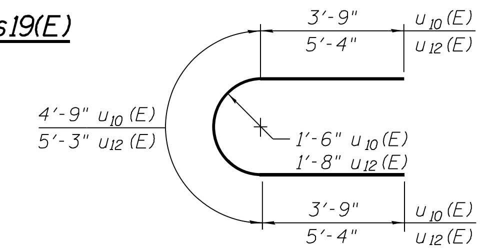


BARS s11(E) thru s19(E)

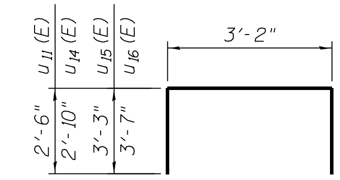
Bar	'A'
s_{11}(E)	3'-0"
s_{12}(E)	3'-1"
s_{13}(E)	3'-2"
s_{14}(E)	3'-3"
s_{15}(E)	3'-4"
s_{16}(E)	3'-5"
s_{17}(E)	3'-6"
s_{18}(E)	3'-7"
s_{19}(E)	3'-8"



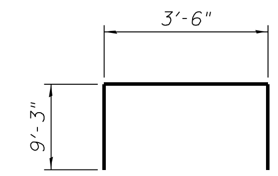
BARS p12(E) & p13(E)



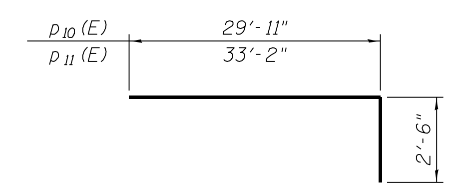
BARS u10(E) & u12(E)



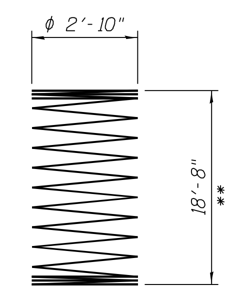
BARS u11(E), u14(E), u15(E) & u16(E)



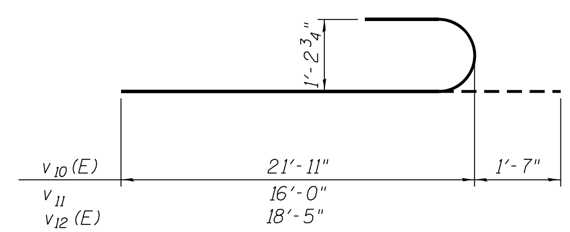
BAR u13(E)



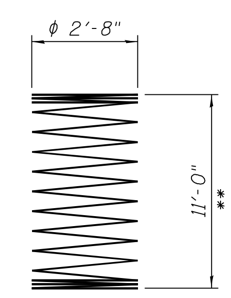
BAR p10(E) & p11(E)



BAR sp10(E)



BARS v10(E), v11 & v12(E)



BAR sp11

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
*	h10(E)	4	#5	12'-4"	
	h11(E)	8	#5	16'-9"	
	h12(E)	4	#5	4'-7"	
	h14(E)	6	#5	28'-5"	
	h15(E)	10	#5	31'-8"	
*	h16(E)	6	#8	30'-0"	
*	h17(E)	6	#8	33'-3"	
*	h18(E)	6	#9	30'-0"	
*	h19(E)	6	#9	33'-3"	
	h20(E)	38	#6	28'-3"	
	h21(E)	38	#6	31'-6"	
*	p10(E)	11	#9	32'-5"	
*	p11(E)	11	#9	35'-8"	
*	p12(E)	7	#9	30'-0"	
*	p13(E)	7	#9	33'-3"	
	s11(E)	4	#6	11'-8"	
	s12(E)	4	#6	11'-10"	
	s13(E)	4	#6	12'-0"	
	s14(E)	4	#6	12'-2"	
	s15(E)	4	#6	12'-4"	
	s16(E)	4	#6	12'-6"	
	s17(E)	4	#6	12'-8"	
	s18(E)	4	#6	12'-10"	
	s19(E)	220	#6	13'-0"	
**	sp10(E)	6	#5	18'-8"	
**	sp11	8	#5	11'-0"	
	u10(E)	10	#5	12'-3"	
	u11(E)	20	#4	8'-2"	
	u12(E)	42	#6	15'-11"	
	u13(E)	244	#6	22'-0"	
	u14(E)	57	#4	8'-10"	
	u15(E)	20	#4	9'-8"	
	u16(E)	17	#4	10'-4"	
	v10(E)	108	#11	23'-6"	
	v11	144	#11	17'-7"	
	v12(E)	108	#11	20'-0"	
	v13(E)	6	#6	13'-1"	
	v14(E)	3	#6	4'-4"	

Item	Unit	Quantity
Cofferdam Excavation	Cu Yd	164.0
Cofferdam (Type 1) (In-Stream/Wetland Work)	Each	1
Concrete Structures	Cu Yd	195.1
Reinforcement Bars	Pound	15,290
Reinforcement Bars, Epoxy Coated	Pound	52,740
Drilled Shaft in Soil	Cu Yd	8.1
Drilled Shaft in Rock	Cu Yd	16.8
Crosshole Sonic Logging Access Ducts	Foot	87
Crosshole Sonic Logging Testing	Each	2

Minimum lap for spirals = 3'-9"
* Cut to fit in field
** Length is height of spiral

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 1 DETAILS II STRUCTURE NO. 099-0905
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-45 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	344
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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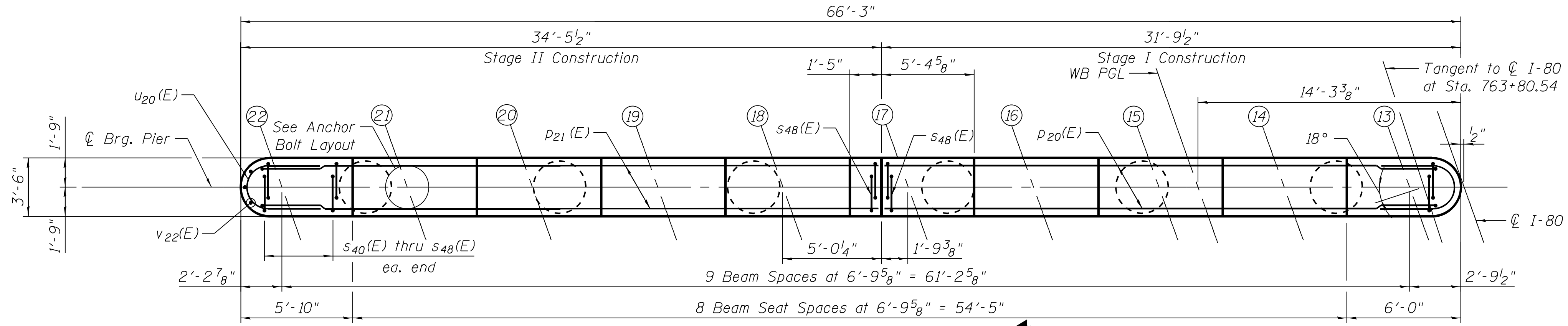
3/9/2022 11:06:55 AM



TOP PLAN

BEARING SEAT ELEVATIONS

Beam	Elevation	Step "T"
13	605.95	
14	606.24	3⅜"
15	606.52	3⅜"
16	606.80	3⅜"
17	607.08	3⅜"
18	607.37	3½"
19	607.65	3⅜"
20	607.94	3⅜"
21	608.22	3⅜"
22	608.50	3⅜"

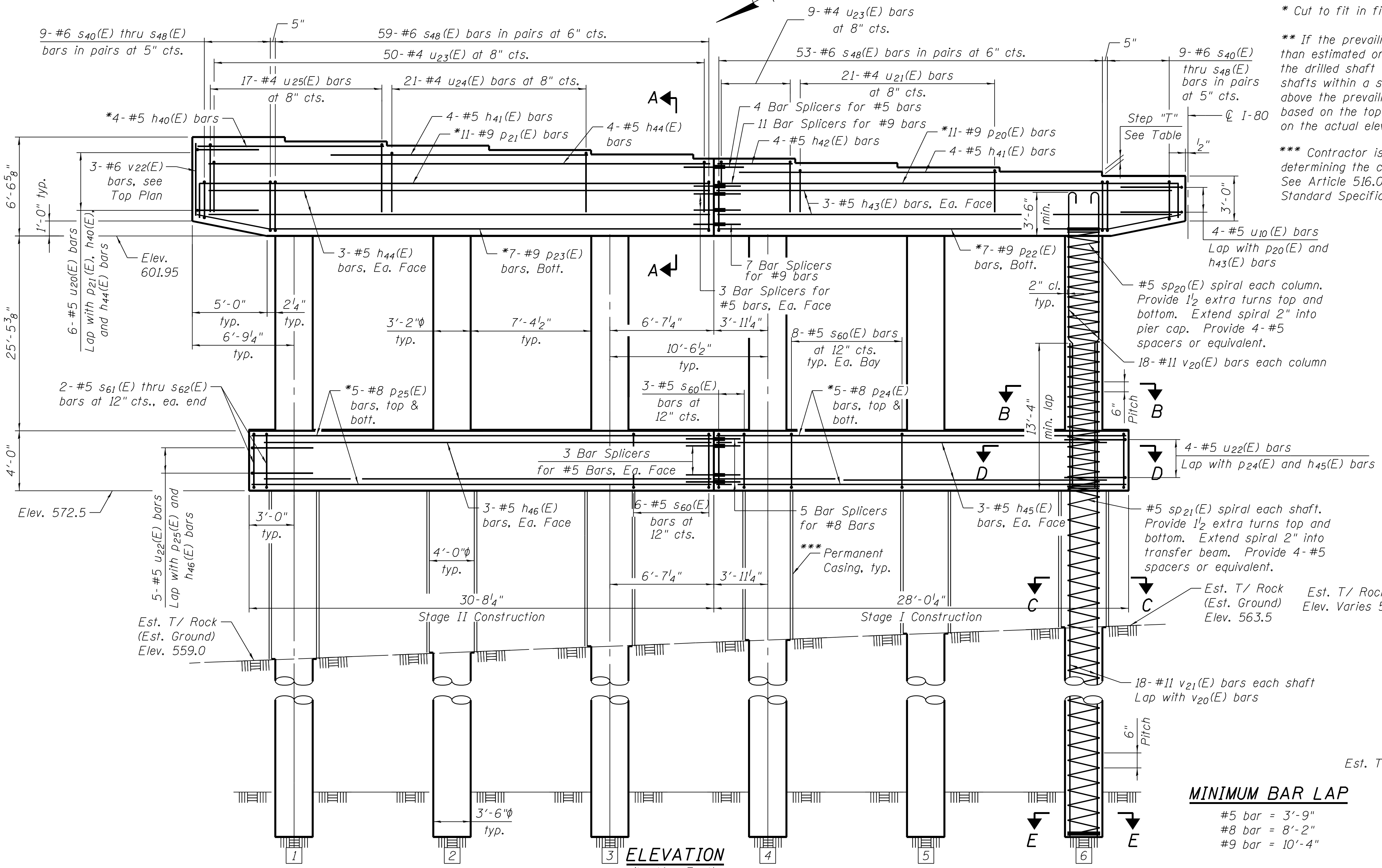
NOTES

1. For Pier General Notes, see Sheet SR-44.
2. For Bill of Material, Bar Diagrams, and Sections A-A, B-B, C-C, D-D, and E-E, see Sheet SR-47.
3. For Anchor Bolt Layout, see Sheet SR-47.
4. If a portion of the drilled shaft web walls or concrete encasement is under water, reinforcement may be placed underwater into forms. Concrete shall be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
5. The construction of this pier may require an in-stream work plan and shall comply with the US Army Corps of Engineers permit 404. This work shall be included in the cost of Concrete Structures.
6. For cofferdam details, see Sheet SR-04.

* Cut to fit in field.

** If the prevailing water surface elevation during construction is consistently different than estimated on the plans, the contractor may propose an adjustment to the top of the drilled shaft elevation as part of their installation procedure. The top of all drilled shafts within a substructure unit shall be constructed to the same elevation and extend above the prevailing water surface. The quantities and reinforcement detailing are based on the top of shaft and the estimated elevations shown and may change based on the actual elevations encountered at each shaft and the final top of shaft elevation.

*** Contractor is responsible for determining the casing thickness. See Article 516.06(d) of the Standard Specifications.

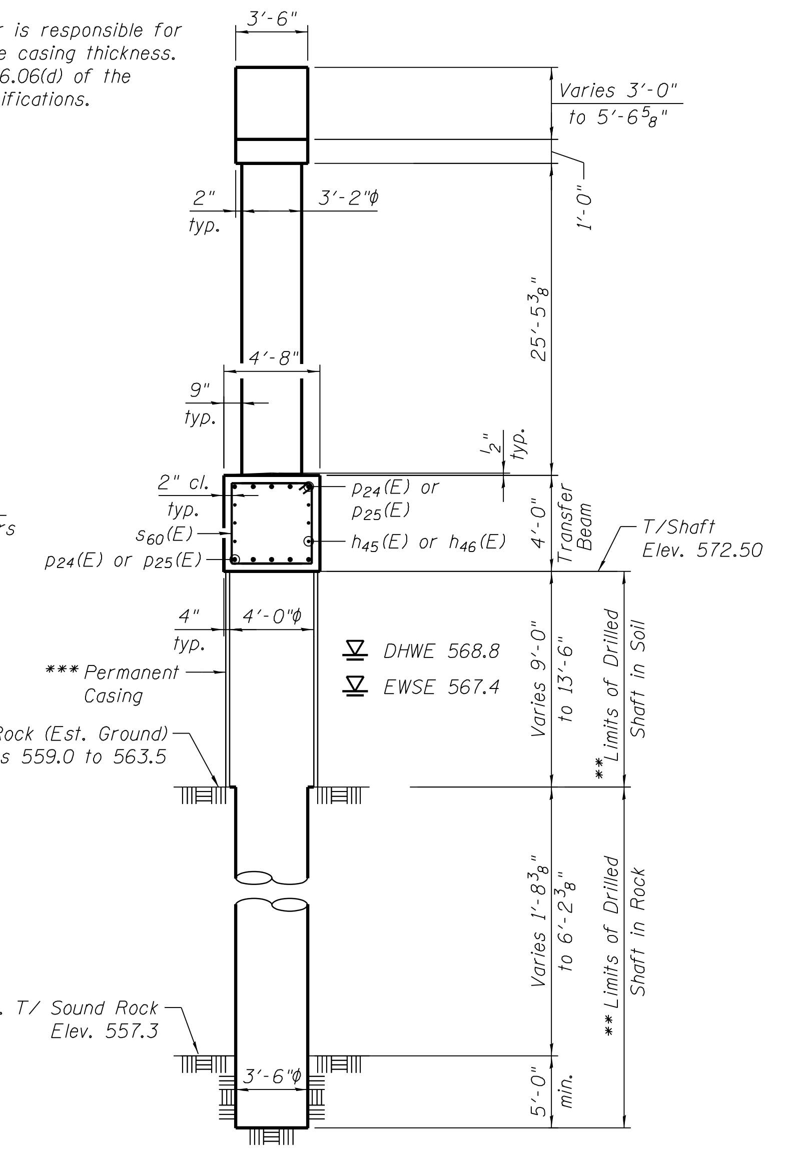


ELEVATION

(Looking East)

MINIMUM BAR LAP

#5 bar = 3'-9"
#8 bar = 8'-2"
#9 bar = 10'-4"



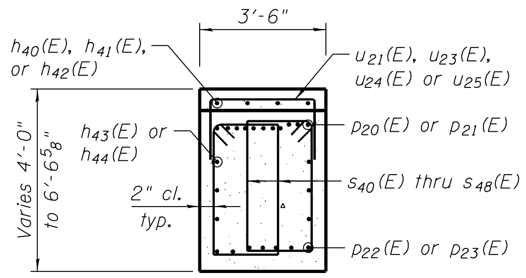
END VIEW

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - HBJ	REVISED -	
	PLOT DATE =	CHECKED - CCE	REVISED -	

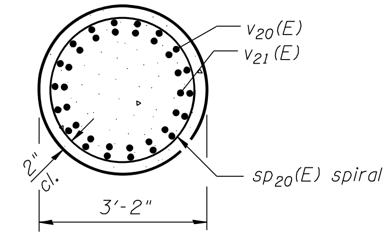
PIER 2 DETAILS I
STRUCTURE NO. 099-0905

SHEET SR-46 OF SR-64 SHEETS

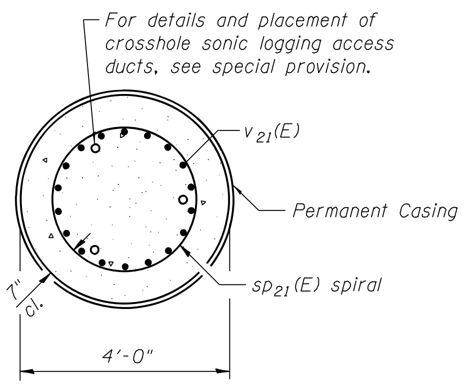
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	345
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		



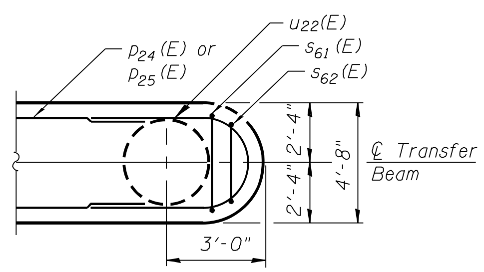
SECTION A-A



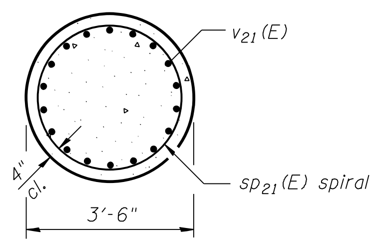
SECTION B-B



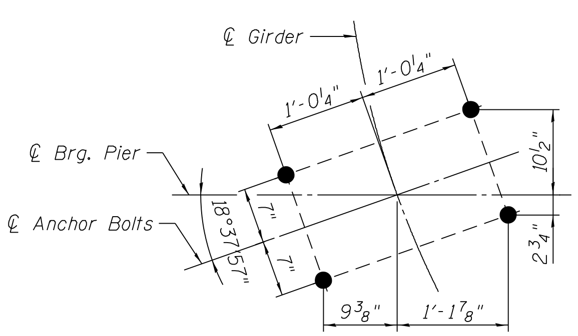
SECTION C-C



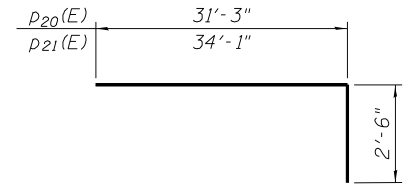
SECTION D-D



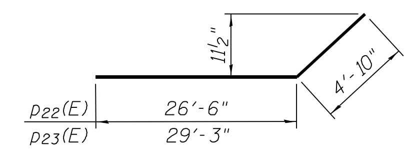
SECTION E-E



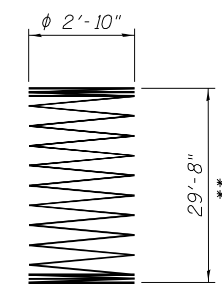
ANCHOR BOLT LAYOUT



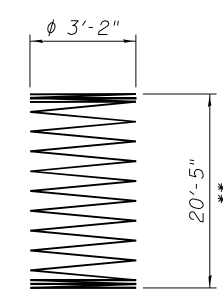
BAR p20E) & p21(E)



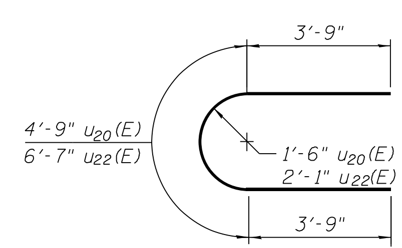
BARS p22(E) & p23(E)



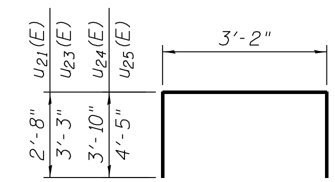
BAR sp20(E)



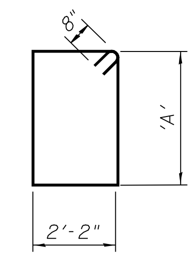
BAR sp21(E)



BARS u20(E) & u22(E)

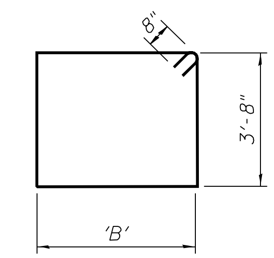


BARS u21(E), u23(E), u245(E) & u25(E)



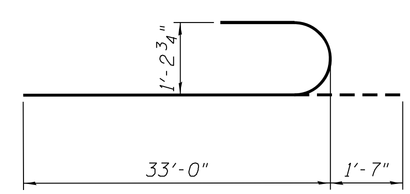
BARS s40(E) thru s48(E)

Bar	'A'
s_{40}(E)	3'-0"
s_{41}(E)	3'-1"
s_{42}(E)	3'-2"
s_{43}(E)	3'-3"
s_{44}(E)	3'-4"
s_{45}(E)	3'-5"
s_{46}(E)	3'-6"
s_{47}(E)	3'-7"
s_{48}(E)	3'-8"



BAR s60(E) thru s62(E)

Bar	'B'
s_{60}(E)	4'-4"
s_{61}(E)	3'-9"
s_{62}(E)	1'-2"



BAR v20(E)

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
*	h40(E)	4	#5	12'-3"	
	h41(E)	8	#5	17'-5"	
	h42(E)	4	#5	5'-0"	
	h43(E)	6	#5	29'-9"	
	h44(E)	10	#5	32'-6"	
	h45(E)	6	#5	25'-5"	
	h46(E)	6	#5	28'-2"	
*	p20(E)	11	#9	33'-9"	
*	p21(E)	11	#9	36'-7"	
*	p22(E)	7	#9	31'-4"	
*	p23(E)	7	#9	34'-2"	
*	p24(E)	10	#8	27'-7"	
*	p25(E)	10	#8	30'-4"	
	s40(E)	4	#6	11'-8"	
	s41(E)	4	#6	11'-10"	
	s42(E)	4	#6	12'-0"	
	s43(E)	4	#6	12'-2"	
	s44(E)	4	#6	12'-4"	
	s45(E)	4	#6	12'-6"	
	s46(E)	4	#6	12'-8"	
	s47(E)	4	#6	12'-10"	
	s48(E)	228	#6	13'-0"	
	s60(E)	41	#6	17'-4"	
	s61(E)	2	#6	16'-2"	
	s62(E)	2	#6	11'-0"	
**	sp20(E)	6	#5	29'-8"	
**	sp21(E)	6	#5	20'-5"	
	u20(E)	10	#5	12'-3"	
	u21(E)	21	#4	8'-6"	
	u22(E)	10	#5	14'-1"	
	u23(E)	59	#4	9'-8"	
	u24(E)	21	#4	10'-10"	
	u25(E)	17	#4	12'-0"	
	v20(E)	108	#11	34'-7"	
	v21(E)	108	#11	33'-7"	
	v22(E)	3	#6	5'-2"	

Item	Unit	Quantity
Concrete Structures	Cu Yd	135.7
Reinforcement Bars, Epoxy Coated	Pound	59,780
Permanent Casing	Foot	68
Drilled Shaft in Soil	Cu Yd	31.5
Drilled Shaft in Rock	Cu Yd	19.2
Crosshole Sonic Logging Access Ducts	Foot	122
Crosshole Sonic Logging Testing	Each	2

Minimum lap for spirals = 3'-9"
*Cut to fit in field.
**Length is height of spiral.

USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

exp.

PIER 2 DETAILS II
STRUCTURE NO. 099-0905
SHEET SR-47 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	346
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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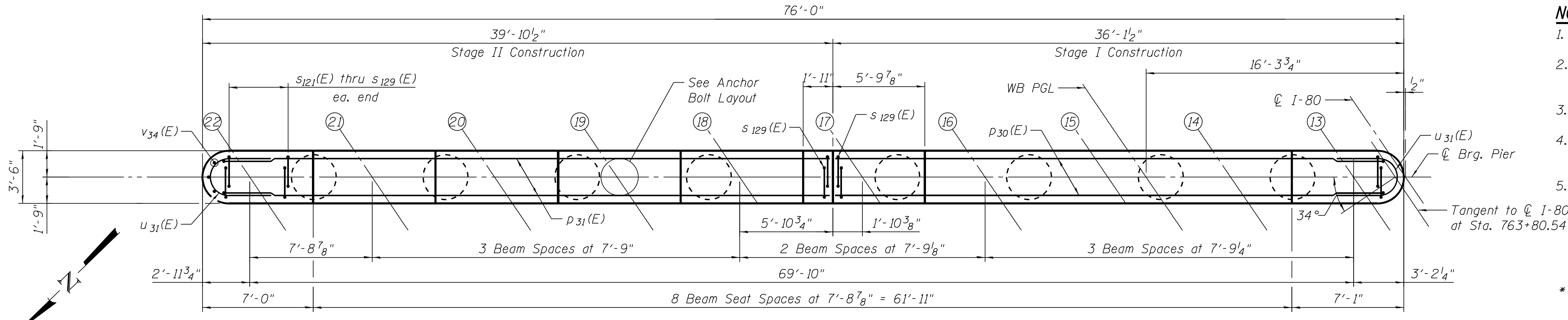
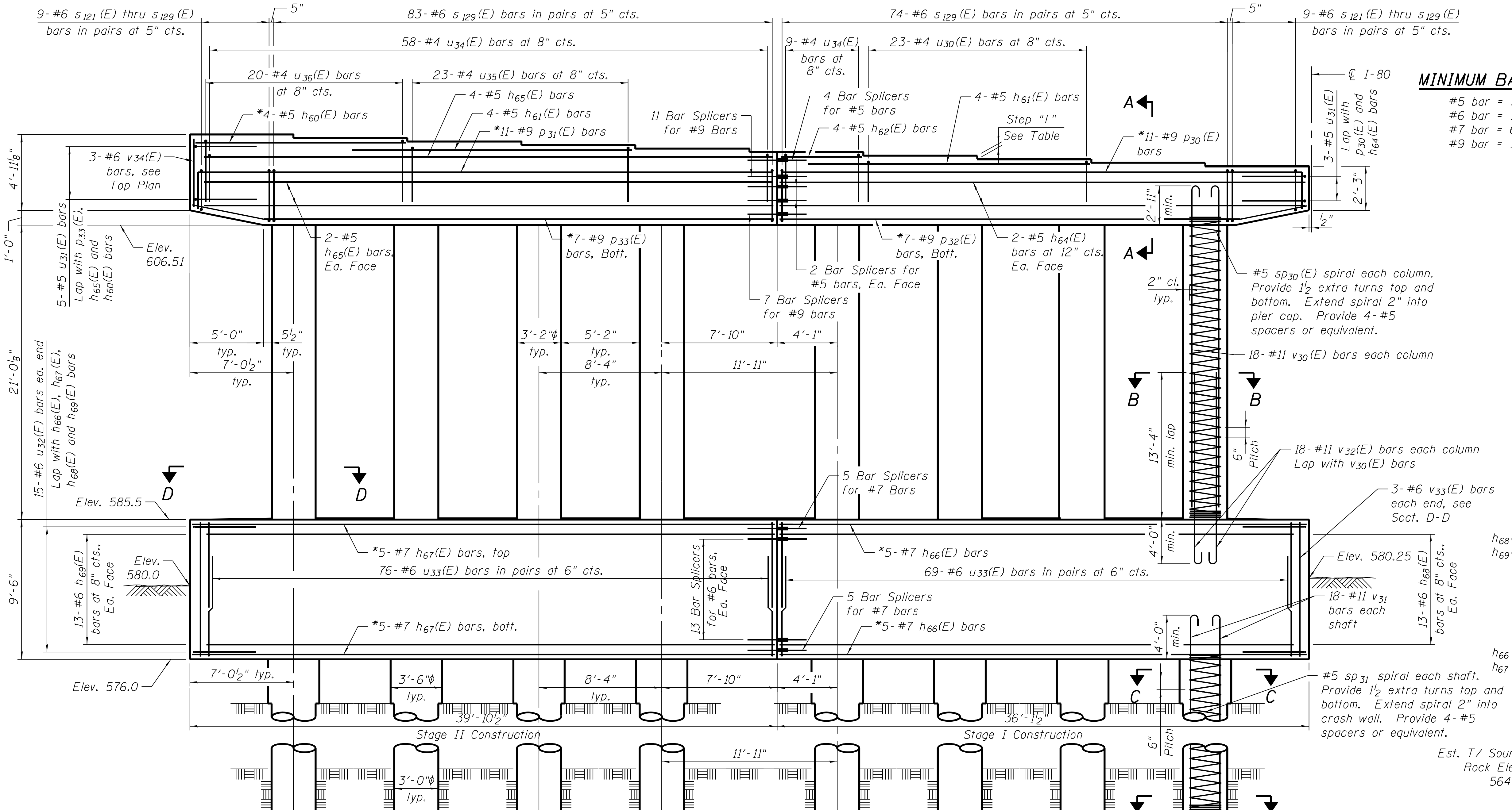
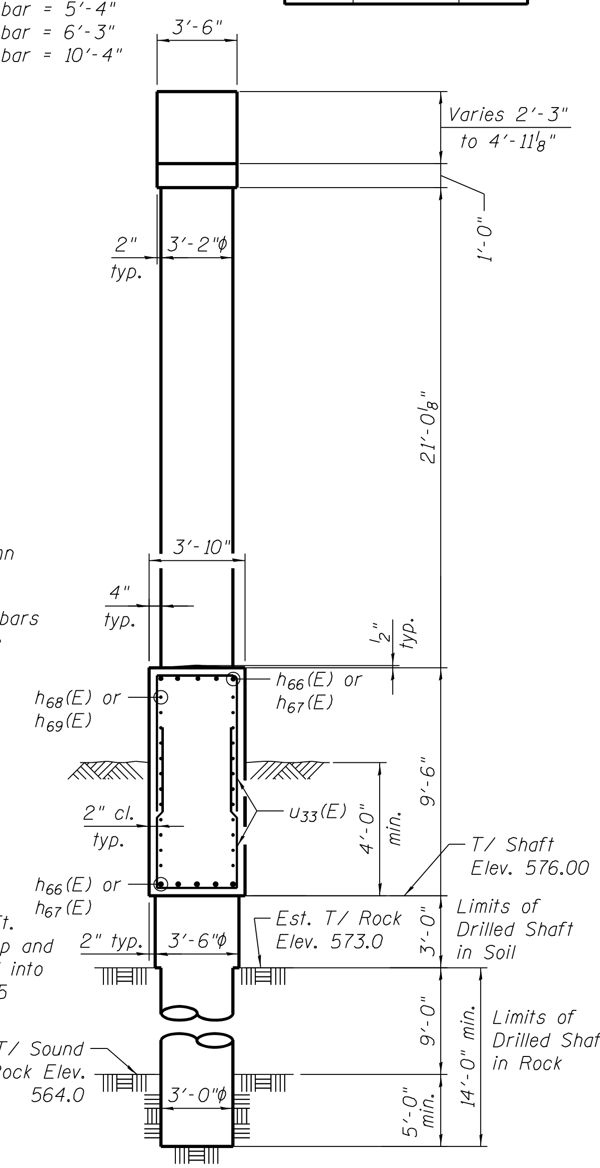


TOP PLAN



ELEVATION

(Looking East)



END VIEW

NOTES

1. For Pier General Notes, see Sheet SR-44.
2. For Bill of Material, Bar Diagrams, and Sections A-A, B-B, C-C, D-D, and E-E, see Sheet SR-49.
3. For Anchor Bolt Layout, see Sheet SR-49.
4. Drill and construct the odd-numbered shafts prior to drilling the even-numbered shafts.
5. For cofferdam details, see Sheet SR-04.

* Cut to fit in field.

BEARING SEAT ELEVATIONS

Beam	Elevation	Step "T"
13	609.76	3⅞"
14	610.09	3⅞"
15	610.41	3¾"
16	610.72	3⅝"
17	611.02	3⅝"
18	611.33	3½"
19	611.62	3⅜"
20	611.90	3¼"
21	612.17	3¼"
22	612.44	

MINIMUM BAR LAP

#5 bar = 3'-9"
#6 bar = 5'-4"
#7 bar = 6'-3"
#9 bar = 10'-4"

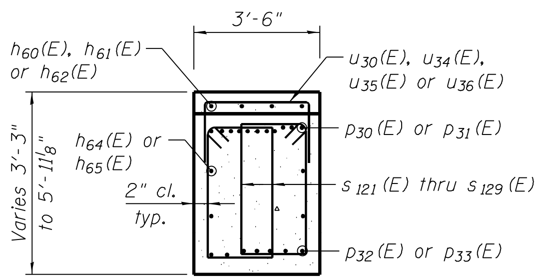
exp.	USER NAME =	DESIGNED - CCE	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - HBJ	REVISED -
	PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

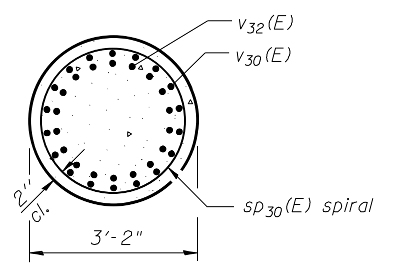
PIER 3 DETAILS I
STRUCTURE NO. 099-0905
SHEET SR-48 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	347

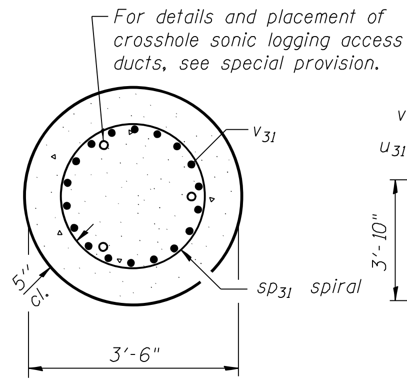
CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT



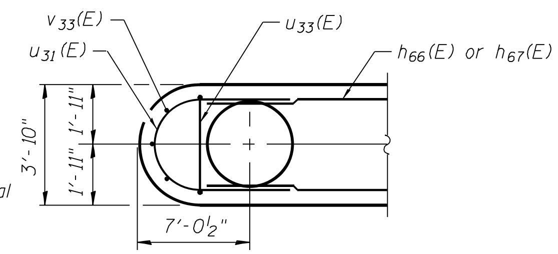
SECTION A-A



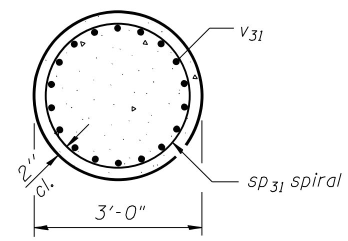
SECTION B-B



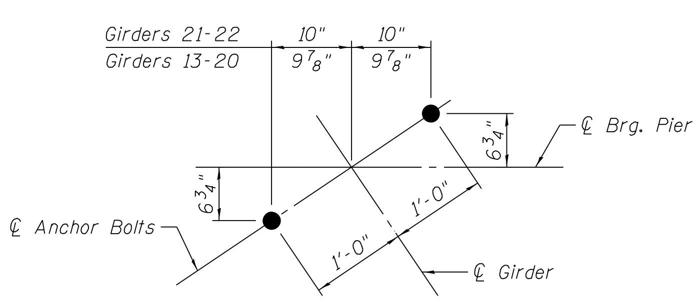
SECTION C-C



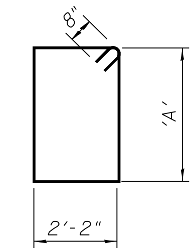
SECTION D-D



SECTION E-E

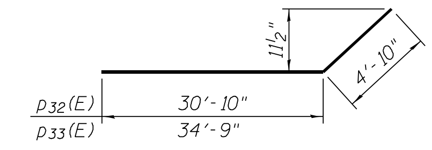


ANCHOR BOLT LAYOUT

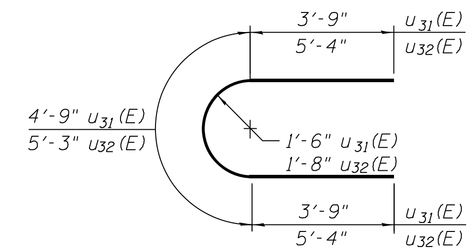


BARS s121(E) thru s129(E)

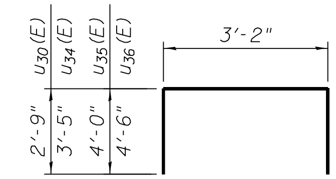
Bar	'A'
$s_{121}(E)$	2'-3"
$s_{122}(E)$	2'-4"
$s_{123}(E)$	2'-5"
$s_{124}(E)$	2'-6"
$s_{125}(E)$	2'-7"
$s_{126}(E)$	2'-8"
$s_{127}(E)$	2'-9"
$s_{128}(E)$	2'-10"
$s_{129}(E)$	2'-11"



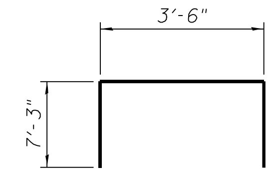
BARS p32(E) & p33(E)



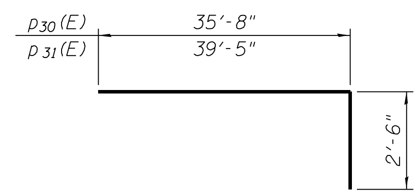
BARS u31(E) & u32(E)



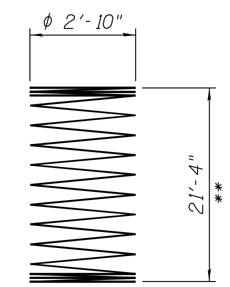
BARS u30(E), u34(E), u35(E) & u36(E)



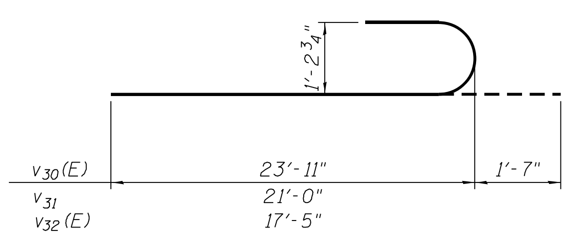
BAR u33(E)



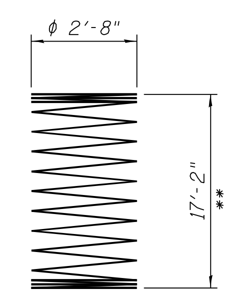
BAR p30(E) & p31(E)



BAR sp30(E)



BARS v30(E), v31 & v32(E)



BAR sp31

BILL OF MATERIAL

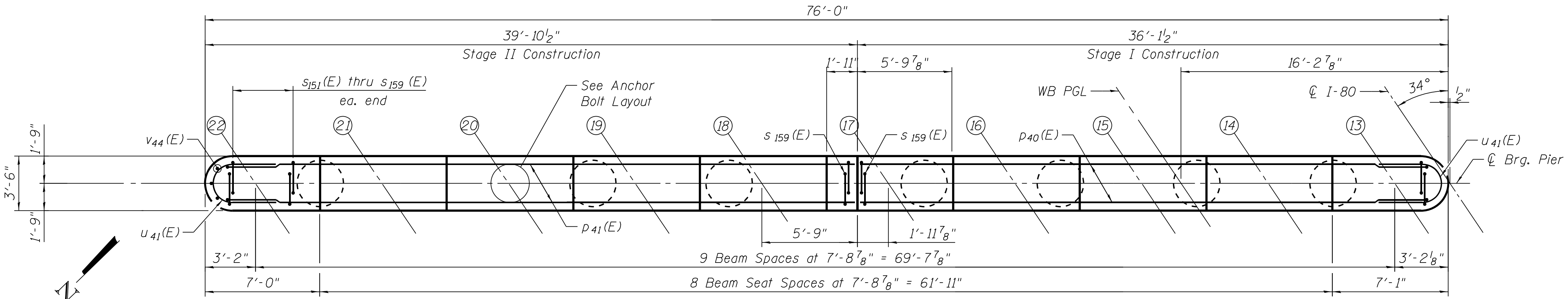
	Bar	No.	Size	Length	Shape
*	h60(E)	4	#5	14'-4"	
	h61(E)	8	#5	19'-3"	
	h62(E)	4	#5	5'-5"	
	h64(E)	4	#5	34'-2"	
	h65(E)	8	#5	38'-0"	
*	h66(E)	10	#7	35'-9"	
*	h67(E)	10	#7	39'-6"	
	h68(E)	26	#6	34'-0"	
	h69(E)	26	#6	37'-10"	
*	p30(E)	11	#9	37'-5"	
*	p31(E)	11	#9	41'-2"	
*	p32(E)	7	#9	35'-8"	
*	p33(E)	7	#9	39'-7"	
	s121(E)	4	#6	10'-2"	
	s122(E)	4	#6	10'-4"	
	s123(E)	4	#6	10'-6"	
	s124(E)	4	#6	10'-8"	
	s125(E)	4	#6	10'-10"	
	s126(E)	4	#6	11'-0"	
	s127(E)	4	#6	11'-2"	
	s128(E)	4	#6	11'-4"	
	s129(E)	318	#6	11'-6"	
**	sp30(E)	8	#5	21'-4"	
**	sp31	8	#5	17'-2"	
	u30(E)	23	#4	8'-8"	
	u31(E)	8	#5	12'-3"	
	u32(E)	30	#6	15'-11"	
	u33(E)	290	#6	18'-0"	
	u34(E)	67	#4	10'-0"	
	u35(E)	23	#4	11'-2"	
	u36(E)	20	#4	12'-2"	
	v30(E)	144	#11	25'-6"	
	v31	144	#11	22'-7"	
	v32(E)	144	#11	19'-0"	
	v33(E)	6	#6	9'-1"	
	v34(E)	3	#6	6'-2"	

Item	Unit	Quantity
Structure Excavation	Cu Yd	98.7
Concrete Structures	Cu Yd	196.8
Reinforcement Bars	Pound	20,040
Reinforcement Bars, Epoxy Coated	Pound	63,130
Drilled Shaft in Soil	Cu Yd	8.6
Drilled Shaft in Rock	Cu Yd	29.4
Crosshole Sonic Logging Access Ducts	Foot	136
Crosshole Sonic Logging Testing	Each	2

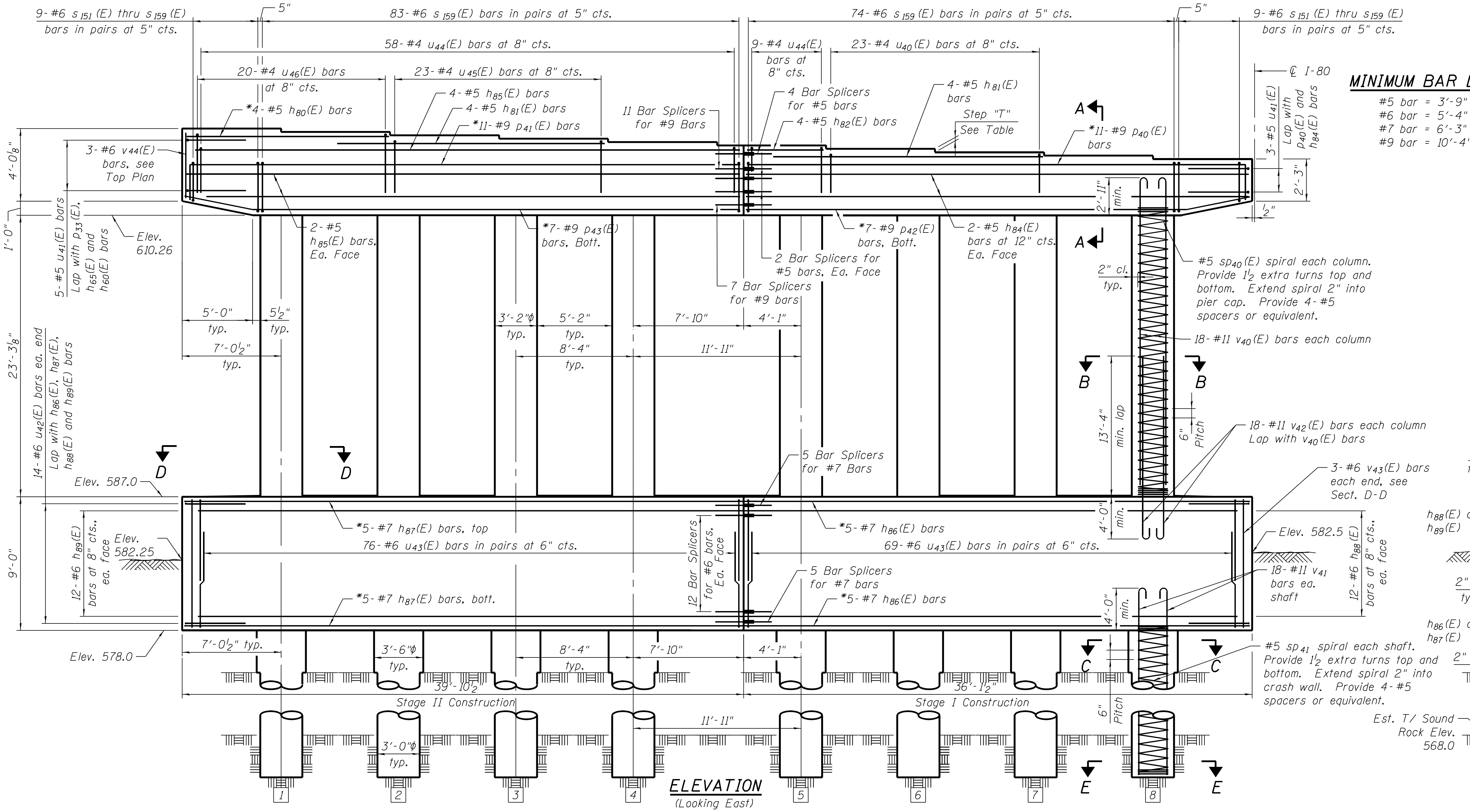
Minimum lap for spirals = 3'-9"
* Cut to fit in field.
** Length is height of spiral.

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 3 DETAILS II STRUCTURE NO. 099-0905
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-49 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	348
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

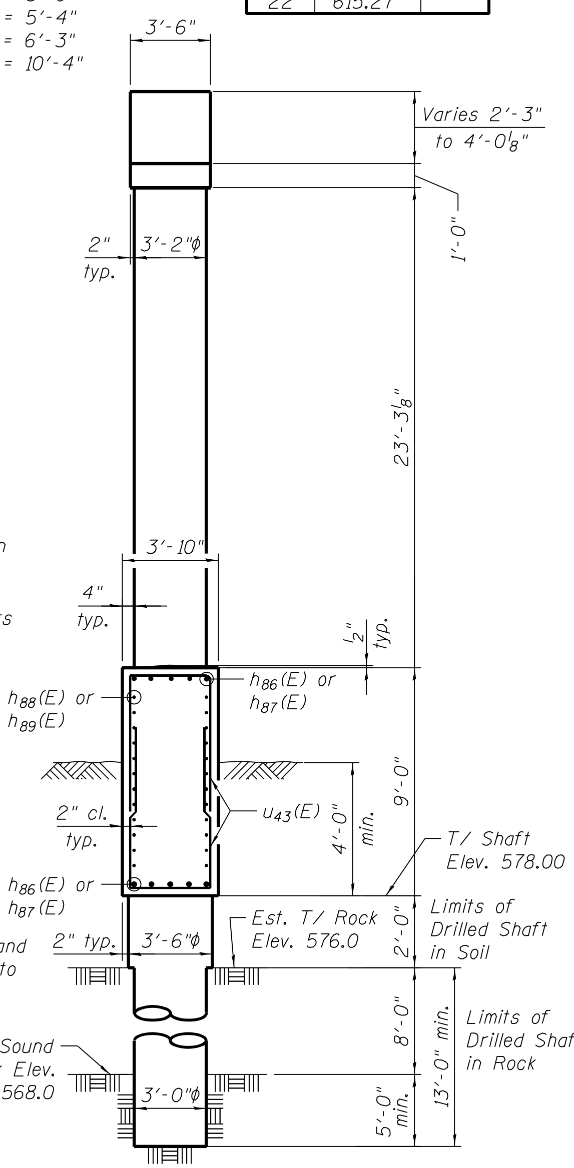


TOP PLAN



ELEVATION

(Looking East)



END VIEW

NOTES

1. For Pier General Notes, see Sheet SR-44.
2. For Bill of Material, Bar Diagrams, and Sections A-A, B-B, C-C, D-D, and E-E, see Sheet SR-51.
3. For Anchor Bolt Layout, see Sheet SR-51.
4. Drill and construct the odd-numbered shafts prior to drilling the even-numbered shafts.
5. For cofferdam details, see Sheet SR-04.

* Cut to fit in field.

BEARING SEAT ELEVATIONS

Beam	Elevation	Step "T"
13	613.51	2¾"
14	613.73	2⅝"
15	613.95	2½"
16	614.16	2¼"
17	614.35	2½"
18	614.56	2¼"
19	614.75	2⅛"
20	614.93	2⅛"
21	615.10	2"
22	615.27	

MINIMUM BAR LAP

#5 bar = 3'-9"
#6 bar = 5'-4"
#7 bar = 6'-3"
#9 bar = 10'-4"

exp.

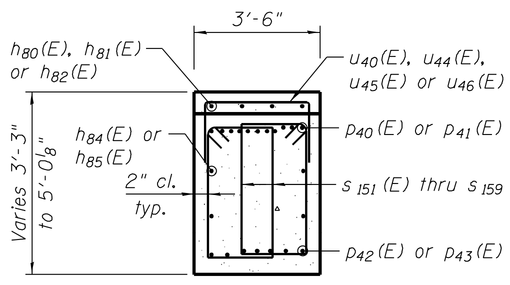
USER NAME =	DESIGNED - CCE	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - HBJ	REVISED -
PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

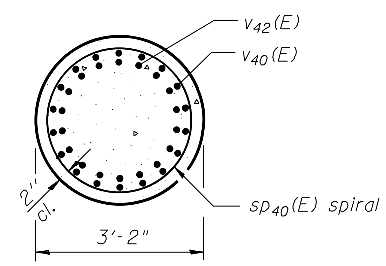
PIER 4 DETAILS I
STRUCTURE NO. 099-0905

SHEET SR-50 OF SR-64 SHEETS

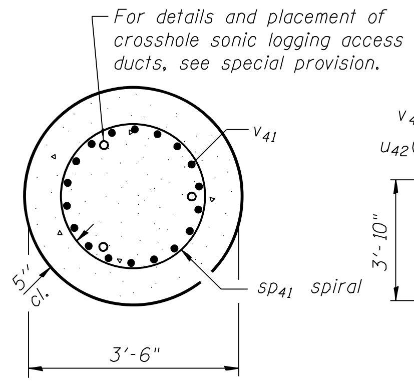
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	349
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		



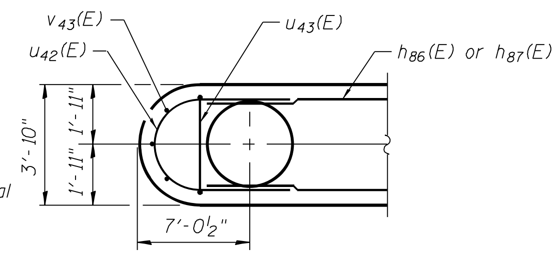
SECTION A-A



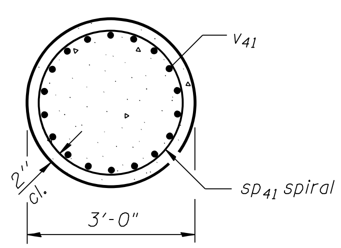
SECTION B-B



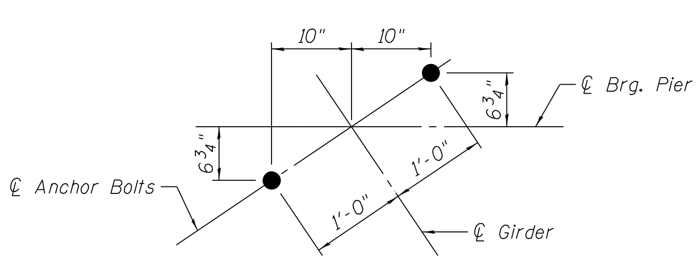
SECTION C-C



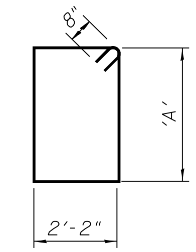
SECTION D-D



SECTION E-E

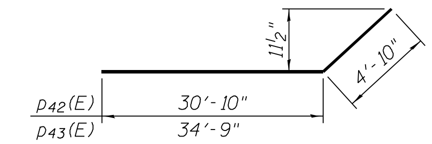


ANCHOR BOLT LAYOUT

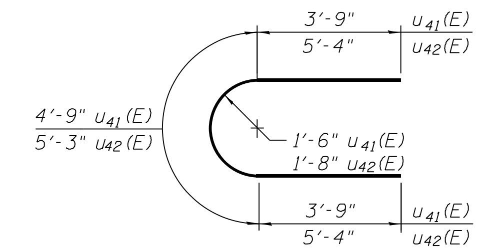


BARS s151(E) thru s159(E)

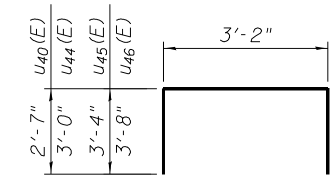
Bar	'A'
s_{151}(E)	2'-3"
s_{152}(E)	2'-4"
s_{153}(E)	2'-5"
s_{154}(E)	2'-6"
s_{155}(E)	2'-7"
s_{156}(E)	2'-8"
s_{157}(E)	2'-9"
s_{158}(E)	2'-10"
s_{159}(E)	2'-11"



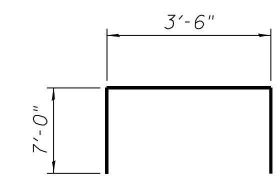
BARS p32(E) & p33(E)



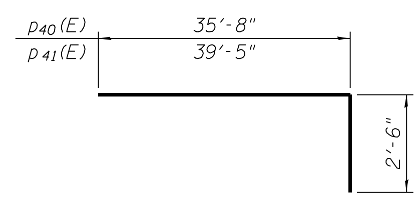
BARS u41(E) & u42(E)



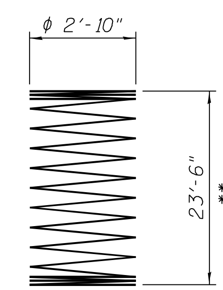
BARS u40(E), u44(E), u45(E) & u46(E)



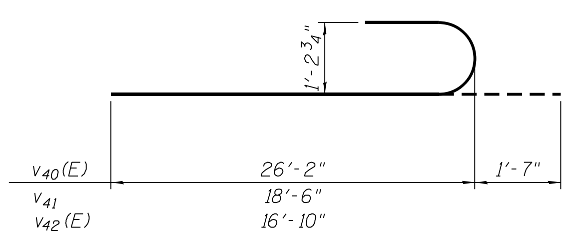
BAR u43(E)



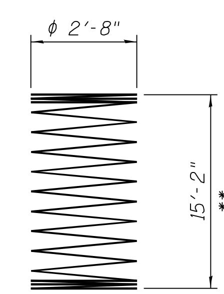
BAR p40(E) & p41(E)



BAR sp40(E)



BARS v40(E), v41 & v42(E)



BAR sp41

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
*	h80(E)	4	#5	14'-4"	straight
	h81(E)	8	#5	19'-3"	straight
	h82(E)	4	#5	5'-5"	straight
	h84(E)	4	#5	34'-2"	straight
	h85(E)	8	#5	38'-0"	straight
*	h86(E)	10	#7	35'-9"	straight
*	h87(E)	10	#7	39'-6"	straight
	h88(E)	24	#6	34'-0"	straight
	h89(E)	24	#6	37'-10"	straight
*	p40(E)	11	#9	37'-5"	
*	p41(E)	11	#9	41'-2"	
*	p42(E)	7	#9	35'-8"	
*	p43(E)	7	#9	39'-7"	
	s151(E)	4	#6	10'-2"	
	s152(E)	4	#6	10'-4"	
	s153(E)	4	#6	10'-6"	
	s154(E)	4	#6	10'-8"	
	s155(E)	4	#6	10'-10"	
	s156(E)	4	#6	11'-0"	
	s157(E)	4	#6	11'-2"	
	s158(E)	4	#6	11'-4"	
	s159(E)	318	#6	11'-6"	
**	sp40(E)	8	#5	23'-6"	
**	sp41	8	#5	15'-2"	
	u40(E)	23	#4	8'-4"	
	u41(E)	8	#5	12'-3"	
	u42(E)	28	#6	15'-11"	
	u43(E)	290	#6	17'-6"	
	u44(E)	67	#4	9'-2"	
	u45(E)	23	#4	9'-10"	
	u46(E)	20	#4	10'-6"	
	v40(E)	144	#11	27'-9"	
	v41	144	#11	20'-7"	
	v42(E)	144	#11	19'-0"	
	v43(E)	6	#6	8'-7"	straight
	v44(E)	3	#6	3'-8"	straight

Item	Unit	Quantity
Structure Excavation	Cu Yd	104.5
Concrete Structures	Cu Yd	192.1
Reinforcement Bars	Pound	18,200
Reinforcement Bars, Epoxy Coated	Pound	64,590
Drilled Shaft in Soil	Cu Yd	5.8
Drilled Shaft in Rock	Cu Yd	27.3
Crosshole Sonic Logging Access Ducts	Foot	120
Crosshole Sonic Logging Testing	Each	2

Minimum lap for spirals = 3'-9"
* Cut to fit in field.
** Length is height of spiral.

exp.

USER NAME =	DESIGNED - CCE	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - HBJ	REVISED -
PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4 DETAILS II
STRUCTURE NO. 099-0905
SHEET SR-51 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	350
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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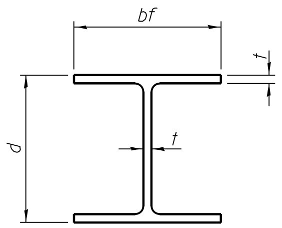
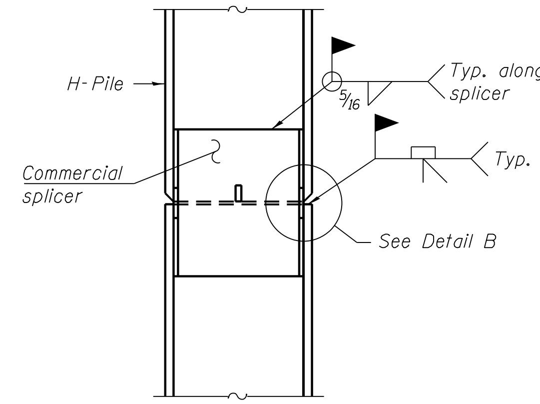
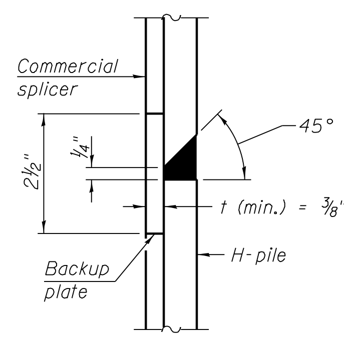


STEEL PILE TABLE

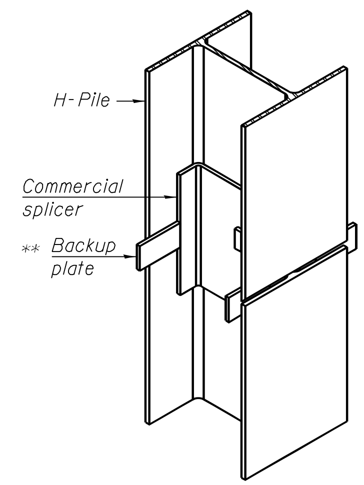
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 14x117	14¼"	14⅞"	13⁄16"	30"
x102	14"	14¾"	11⁄16"	30"
x89	13⅞"	14¾"	⅝"	30"
x73	13⅝"	14⅝"	½"	30"
HP 12x84	12¼"	12¼"	11⁄16"	24"
x74	12⅛"	12¼"	⅝"	24"
x63	12"	12⅛"	½"	24"
x53	11¾"	12"	7⁄16"	24"
HP 10x57	10"	10¼"	9⁄16"	24"
x42	9¾"	10⅛"	7⁄16"	24"
HP 8x36	8"	8⅛"	7⁄16"	18"



ELEVATION

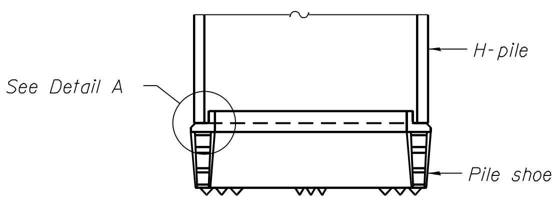


DETAIL "B"

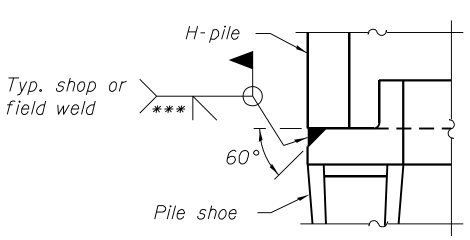


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



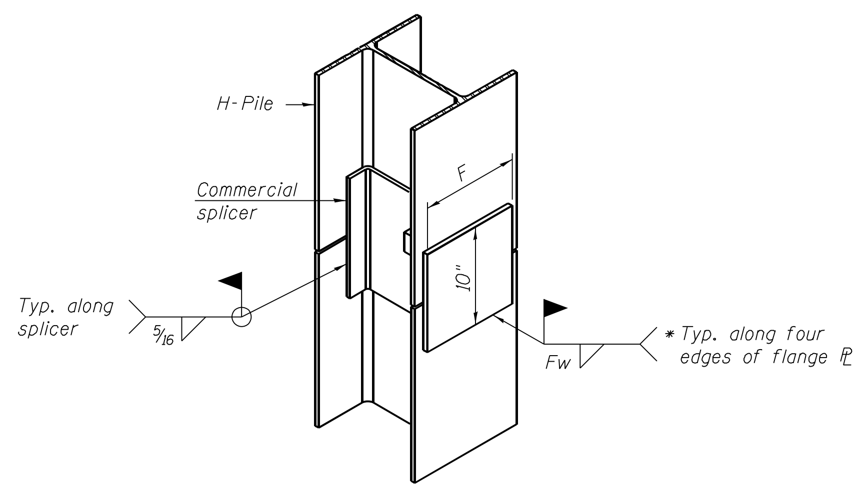
ELEVATION



DETAIL A

SHOE ATTACHMENT

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



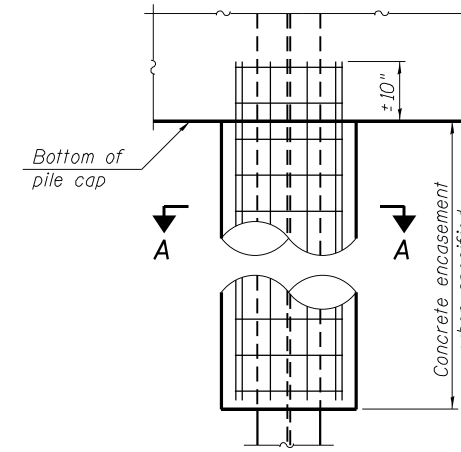
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

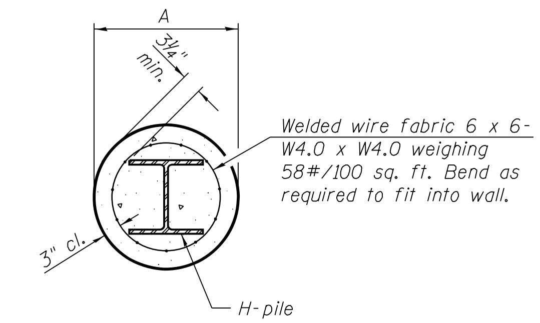
* Interrupt welds ¼" from end of web and/or each flange.

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

*** Weld size per pile shoe manufacturer (5⁄16" min.).



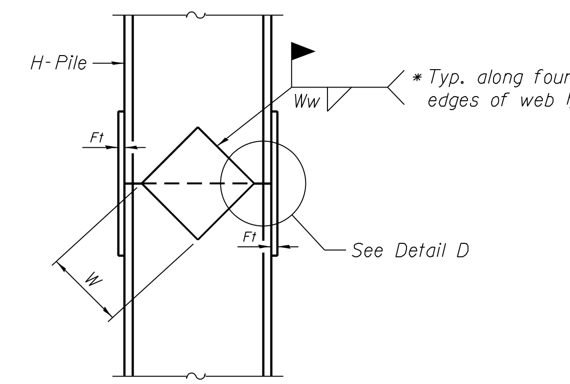
ELEVATION



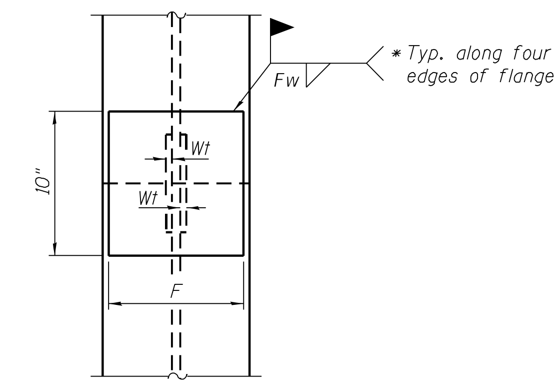
SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT

(Forms for encasement may be omitted when soil conditions permit).

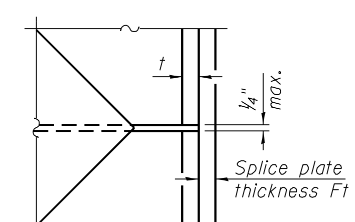


ELEVATION



END VIEW

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12½"	1"	⅞"	7¾"	⅝"	½"
x102	12½"	⅞"	¾"	7¾"	⅝"	½"
x89	12½"	¾"	11⁄16"	7¾"	⅝"	½"
x73	12½"	⅝"	9⁄16"	7¾"	⅝"	½"
HP 12x84	10"	⅞"	11⁄16"	6½"	⅝"	½"
x74	10"	⅞"	11⁄16"	6½"	⅝"	½"
x63	10"	⅝"	½"	6½"	½"	⅜"
x53	10"	⅝"	½"	6½"	½"	⅜"
HP 10x57	8"	¾"	9⁄16"	5¼"	½"	⅜"
x42	8"	⅝"	9⁄16"	5¼"	½"	⅜"
HP 8x36	7"	⅝"	7⁄16"	4¼"	½"	⅜"



DETAIL D

WELDED PLATE FIELD SPLICE

F-HP   8-11-2017

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		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-52 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	351
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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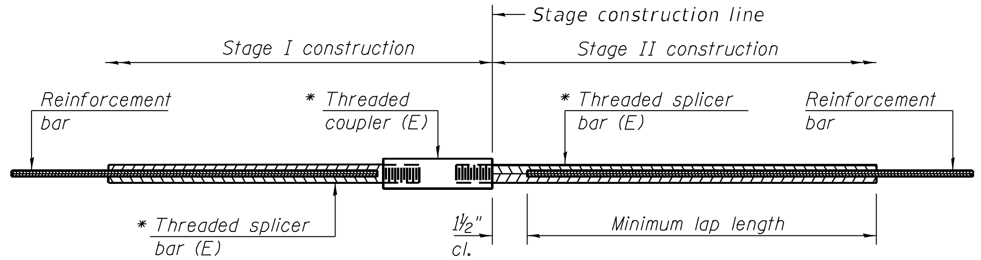
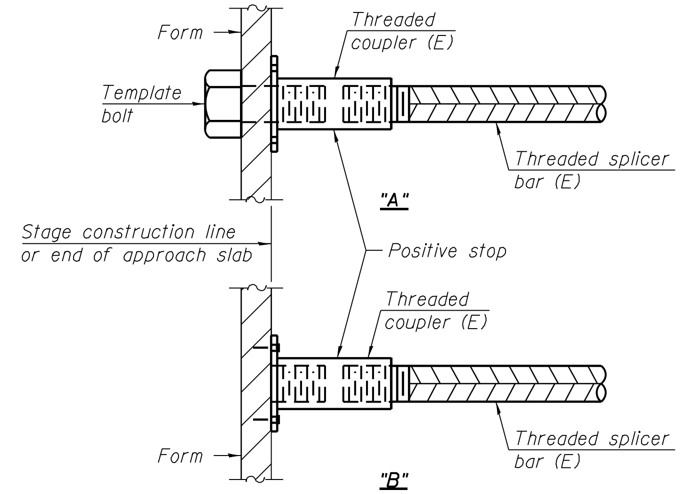


STANDARD BAR SPLICER ASSEMBLY

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

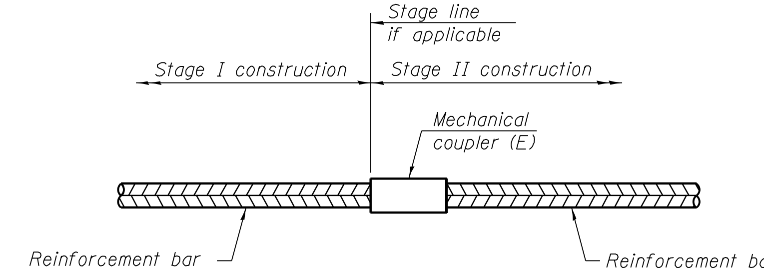
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	1870	3'-6"
East Approach Slab	#8	50	6'-9"
	#5	78	3'-6"
West Approach Slab	#8	60	6'-9"
	#5	86	3'-6"
East Abutment	#5	21	3'-9"
	#6	5	5'-4"
	#7	10	6'-3"
West Abutment	#5	21	3'-9"
	#6	5	5'-4"
	#7	10	6'-3"
Pier 1	#5	10	3'-9"
	#6	38	5'-4"
	#8	6	8'-2"
	#9	24	10'-4"
Pier 2	#5	16	3'-9"
	#8	10	8'-2"
	#9	18	10'-4"
Pier 3	#5	8	3'-9"
	#6	26	5'-4"
	#7	10	6'-3"
	#9	18	10'-4"
Pier 4	#5	8	3'-9"
	#6	24	5'-4"
	#7	10	6'-3"
	#9	18	10'-4"



INSTALLATION AND SETTING METHODS

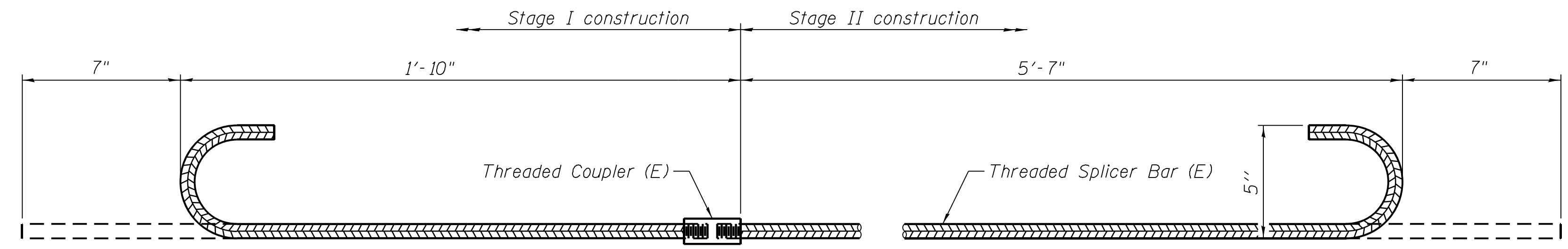
"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

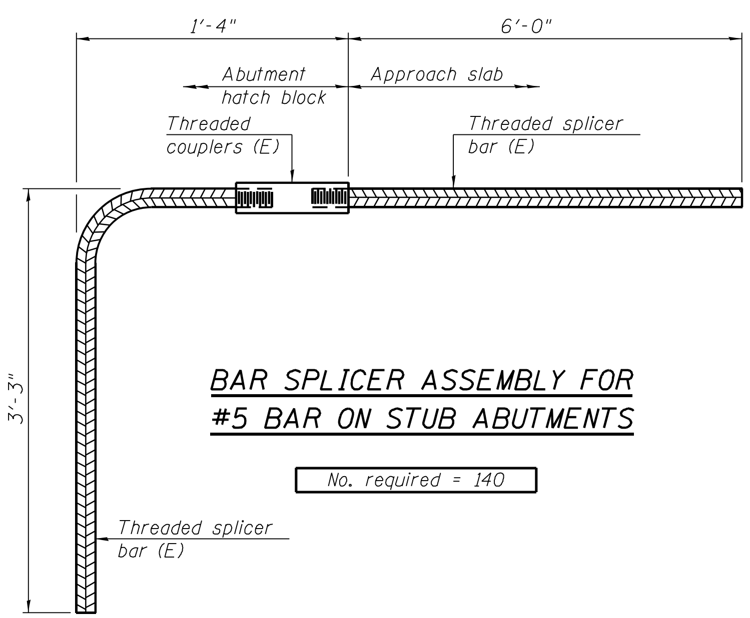
Location	Bar size	No. assemblies required

** The bar splicer assembly shall allow completion of the splice without turning of the hook bars. The stage II splice bar shall be threaded such that the entire coupler can be threaded onto the splice bar.



BAR SPLICER ASSEMBLY FOR #5 a5(E) BAR AT STAGE CONSTRUCTION JOINT

No. required = 3



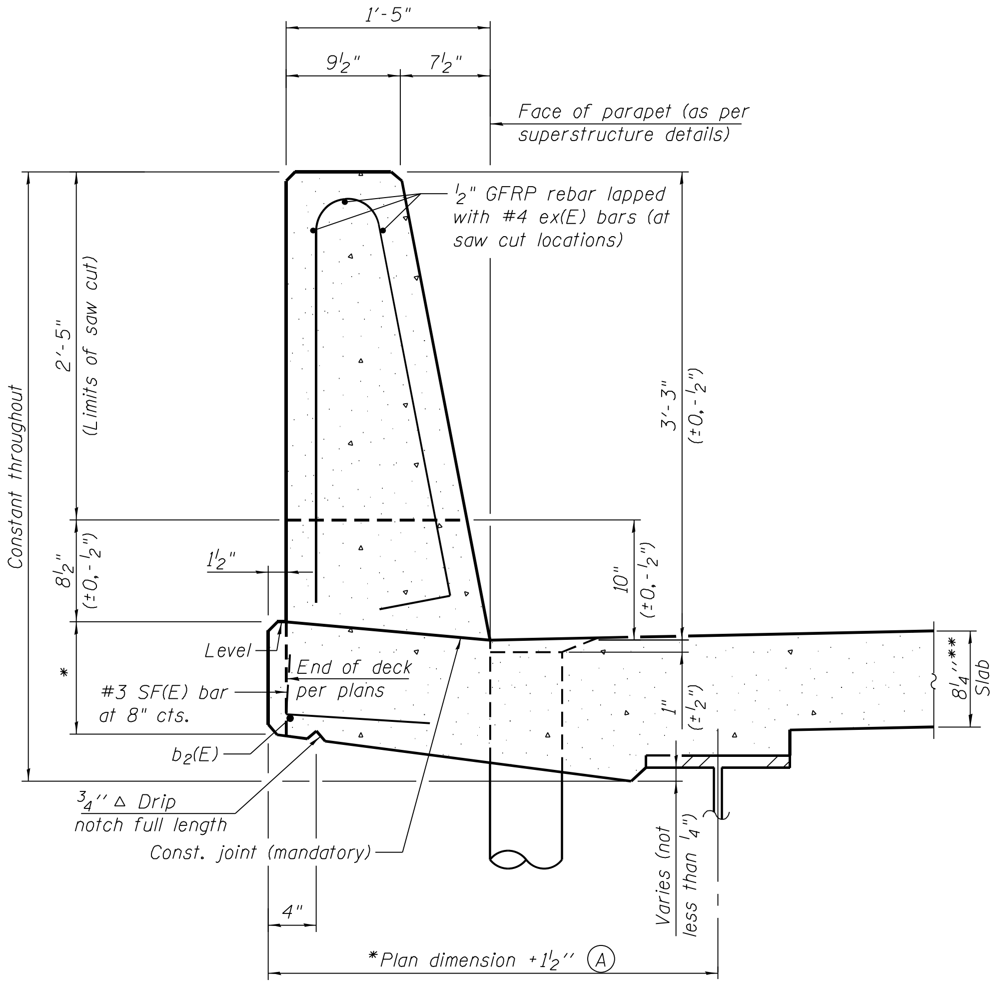
BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 140

NOTES

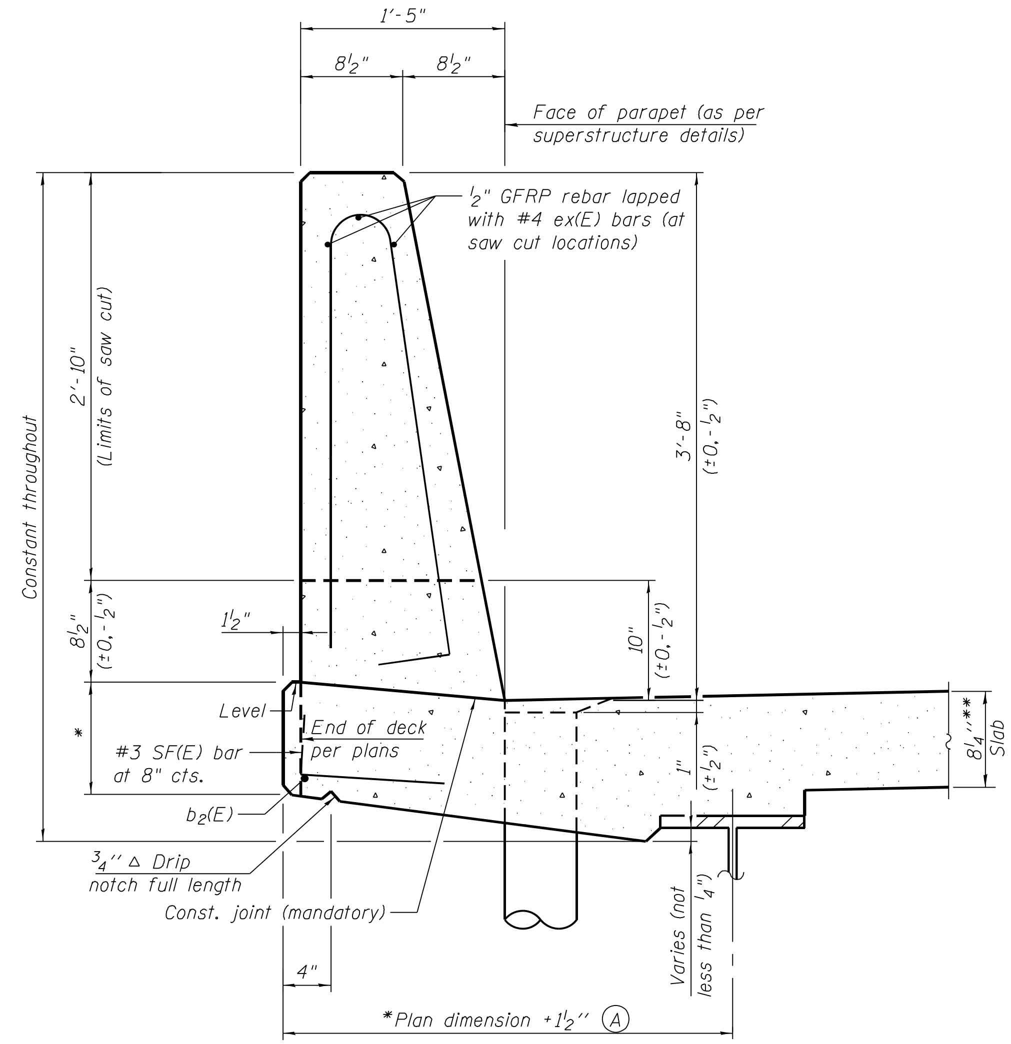
Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.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

BSD-1 2-17-2017



39" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" ϕ GFRP rebar)



44" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" ϕ GFRP rebar)

*See Superstructure Details
**Prior to Grinding

GENERAL NOTES

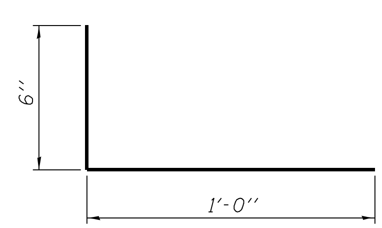
All dimensions shall remain the same as shown on superstructure details, except dimension A which is to be revised as shown. Additional concrete needed to revise dimension A = 0.00348 cu. yds./ft. for 44" parapets.

Place full depth aluminum sheets as shown on superstructure details.

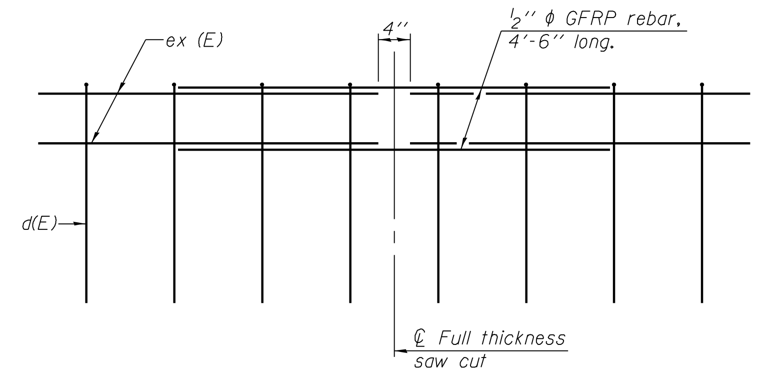
Replace all cork joint filler locations with a full thickness saw cut.

Steel superstructure shown. Other superstructure types similar.

Slipforming of the median parapet (adjacent to the centerline of I-80) is not allowed.



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL

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

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CONCRETE PARAPET SLIPFORMING OPTION STRUCTURE NO. 099-0905	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	353
	PLOT SCALE =	DRAWN - HBJ	REVISED -			CONTRACT NO. 60W35				
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-54 OF SR-64 SHEETS		ILLINOIS	FED. AID PROJECT		

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 3/13/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION LOCATION SE 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-33
Station 759+80
Offset 22.40ft Left
Ground Surface Elev. 604.11 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 10.0' ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
2.0" TOPSOIL-black	603.94				38
CLAY LOAM-brown-stiff to hard (Fill)			4 / 4 / 5	3.5 P	17
		-5	4 / 5 / 7	3.0 B	17
			3 / 6 / 3	3.3 B	15
		-10	3 / 6 / 7	1.5 B	19
			4 / 5 / 8	2.3 B	17
		-15	3 / 7 / 7	2.3 B	18
			4 / 5 / 8	3.0 P	19
		-20	4 / 23 / 8	4.0 P	25
CLAY LOAM-brown-stiff to hard (Fill) *(continued)*			6 / 7 / 11	3.5 P	26
		-25	4 / 5 / 8	1.9 B	21
			4 / 6 / 10	2.4 B	20
		-30	5 / 8 / 13	1.1 B	19
		-35	4 / 7 / 10	4.0 P	22
SANDY CLAY LOAM-brown-very stiff (Fill)	567.11				
		-40	5 / 7 / 9	3.0 P	21

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

BBS, from 137 (Rev. 8-99)

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 7/3/14

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SOIL BORING LOG

GSI Job No. 13125
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Date 3/13/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION LOCATION SE 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-33
Station 759+80
Offset 22.40ft Left
Ground Surface Elev. 604.11 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 10.0' ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY CLAY LOAM-brown-very stiff (Fill) *(continued)*					
COBBLES, GRAVEL, FRACTURED ROCK-medium dense (Fill)	562.11				3
		-45			
		-50			2
		-55	13 / 6 / 13		13
SILTY CLAY LOAM-brown-very loose (A-6)	547.11				
	544.61	-60	2 / 2 / 50/1"		30
Drillers Observation: Apparent Bedrock *(continued)*	543.61				
Borehole continued with rock coring.		-65			
		-70			
		-75			
		-80			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

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DATE 3/13/2014
LOGGED BY MD
GSI JOB No. 13125

ROUTE -- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION -- LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. -- CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station -- Core Diameter 2.0 in
BORING NO. **BSB-33** Top of Rock Elev. *544.6*
Station 759+80 Begin Core Elev. *543.6*
Offset 22.4' Left
Ground Surface Elev. *604.11*

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-60.5' to -70.5') Light gray to gray with horizontal bedding. Varved from -62.0' to -62.5'. Horizontal fractures at -61.3', -62.0', -62.8', -63.5', -65.8', -67.6', -67.8', -68.5', -68.9', -69.5' & -69.8'.		1	100.0	94.5	n/a	1184 @ -61.4'
	-65.5					
	-70.5					

Color pictures of the cores Yes Cores will be stored for examination for --
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS I STRUCTURE NO. 099-0905
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-55 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	354
		CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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SOIL BORING LOG

GSI Job No. 13125
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Date 11/5/13

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY TZ

SECTION ______ LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd PM

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. ______
Station ______

BORING NO. BSB-35
Station 760+71
Offset 76.00ft Left
Ground Surface Elev. 571.92 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter 564.9 ft ▼
Upon Completion n/a ft
After ____ Hrs. ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT	571.25				
CRUSHED STONE & GRAVEL-brown-medium dense			8		
			9		5
	568.92		10		
ORGANIC SILTY LOAM-black-very loose (A-7)			2		
			2	0.5	40
	566.42	-5	2	P	
ORGANIC SANDY LOAM-dark brown-medium stiff (A-8)			2		
		▼	5	0.5	54
	563.92		3	P	
ORGANIC SILTY LOAM-gray-medium dense (A-7)			3		
	562.42		20		45
Drillers Observation: Fractured Rock	560.92	-10	50/3"		
Drillers Observation: Apparent Bedrock	560.42				
Borehole continued with rock coring.		-15			
		-20			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

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DATE 11/5/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE -- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)

SECTION -- LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM

COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO. --
Station --

BORING NO. **BSB-35**
Station 760+71
Offset 76.0' Left
Ground Surface Elev. 571.92

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 560.9
Begin Core Elev. 560.4

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-11.5' to -21.5') Light gray with horizontal bedding. Fine grained with few chert nodules. Some horizontal fractures throughout.		1	100.0	85.0	n/a	957 @ -13.7'
	-16.5					
	-21.5					

Color pictures of the cores Yes Cores will be stored for examination for --
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - HBJ	REVISED -	
	PLOT DATE =	CHECKED - CCE	REVISED -	

SOIL BORING LOGS II
STRUCTURE NO. 099-0905
SHEET SR-56 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	355
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
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SOIL BORING LOG

GSI Job No. 13125
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ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY RP

SECTION LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd PM

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-37
Station 761+21
Offset 56.50ft Left
Ground Surface Elev. 608.16 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
9.25" CONCRETE BRIDGE DECK 607.39				
VOID	-5			
	-10			
	-15			
	-20			
VOID *(continued)*	-25			
	-30			
	-35			
	-40			

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

BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 13125
Page 2 of 2
Date 1/13/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY RP

SECTION LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd PM

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-37
Station 761+21
Offset 56.50ft Left
Ground Surface Elev. 608.16 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After Hrs. ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VOID *(continued)* 566.66				
CLAY-brown-stiff (Fill)		5		
		3	1.0	24
		3	P	
		4		
563.66		5	1.3	27
Drillers Observation: Apparent Bedrock 562.16	-45	50/4"	P	
Borehole continued with rock coring.	-50			
	-55			
	-60			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

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DATE 1/14/2014
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GSI JOB No. 13125

ROUTE -- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)

SECTION -- LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM

COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO. --
Station --

BORING NO. **BSB-37**
Station 761+21
Offset 56.5' Left
Ground Surface Elev. 608.16

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 563.7
Begin Core Elev. 562.2

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-46.0' to -56.0') Light gray to gray with horizontal bedding. Highly fractured with numerous horizontal fractures throughout.		1	99.0	31.0	n/a	888 @ -49.1'
	-51					
	-56					

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

exp.	USER NAME =	DESIGNED - CCE	REVISED -	
		CHECKED - VCP	REVISED -	
	PLOT SCALE =	DRAWN - HBJ	REVISED -	
	PLOT DATE =	CHECKED - CCE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS III
STRUCTURE NO. 099-0905

SHEET SR-57 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	356
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

MODEL: Default
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.10 Structural\WB Rowell\Sheet\0990905-60W35-053-BOR3.dgn

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 1/5/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY RP

SECTION ______ LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO. ______
Station ______

BORING NO. BSB-39
Station 762+85
Offset 56.60ft Left
Ground Surface Elev. 613.18 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.0" CONCRETE BRIDGE DECK	612.35				
VOID		-5			
		-10			
		-15			
		-20			
VOID *(continued)*		-25			
		-30			
		-35			
	574.18				
SANDY CLAY LOAM-dark brown & black-medium dense (Fill)			7		
		-40	8		20

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

BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

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ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY RP

SECTION ______ LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO. ______
Station ______

BORING NO. BSB-39
Station 762+85
Offset 56.60ft Left
Ground Surface Elev. 613.18 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY CLAY LOAM-dark brown & black-medium dense (Fill) *(continued)*	572.18		8		
CLAY LOAM-dark brown-medium dense (Fill)			7		
			13	4.5	25
			15	P	
			13		
	568.68		50/2"		24
Drillers Observation: Apparent Bedrock		-45			
	565.68				
Borehole continued with rock coring.		-50			
		-55			
		-60			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

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DATE 1/15/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE -- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)

SECTION -- LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM

COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO. --
Station --

BORING NO. **BSB-39**
Station 762+85
Offset 56.6' Left
Ground Surface Elev. *613.18*

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. *568.7*
Begin Core Elev. *565.7*

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-47.5' to -57.5') Light gray to gray with horizontal bedding. Weathered with numerous horizontal fractures throughout. 1/4" clay parting @ -56.7'.		1	100.0	49.0	n/a	578 @ -48.2'
	-52.5					
	-57.5					

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

USER NAME =	DESIGNED - CCE	REVISED -	
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - HBJ	REVISED -	
PLOT DATE =	CHECKED - CCE	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS IV
STRUCTURE NO. 099-0905

SHEET SR-58 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	357

CONTRACT NO. 60W35

ILLINOIS FED. AID PROJECT

MODEL: Default
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB\811.10 Structural\WB Rowell\Sheet\0990905-60W35-055-BOR5.dgn

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SOIL BORING LOG

GSI Job No. 13125
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ROUTE F.A.I RTE. 80 | DESCRIPTION I-80 Phase II (Near Term) | LOGGED BY NW

SECTION | LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will | DRILLING METHOD Mud Rotary | HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-40
Station 762+57
Offset 34.00ft Left
Ground Surface Elev. 611.93 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
9.5" CONCRETE BRIDGE DECK 611.14				
VOID	-5			
	-10			
	-15			
	-20			

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
VOID *(continued)*	-25			
	-30			
	-35			
571.93	-40			

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

BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 13125
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Date 3/14/14

ROUTE F.A.I RTE. 80 | DESCRIPTION I-80 Phase II (Near Term) | LOGGED BY NW

SECTION | LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will | DRILLING METHOD Mud Rotary | HAMMER TYPE CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-40
Station 762+57
Offset 34.00ft Left
Ground Surface Elev. 611.93 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY CLAY LOAM with GRAVEL & STONE-dark brown-medium dense to very dense (Fill)		2 8 5		12
569.43		6		
Drillers Observation: Fractured Weathered Rock 567.93		50/3"		20
Drillers Observation: Apparent Bedrock 565.93	-45			
Borehole continued with rock coring.	-50			
	-55			
	-60			

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 7/3/14

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

BBS, from 137 (Rev. 8-99)

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(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 3/14/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE -- | DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION -- | LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will | CORING METHOD Rotary Wash
STRUCT. NO. -- | CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station -- | Core Diameter 2.0 in
BORING NO. **BSB-40** | Top of Rock Elev. 567.9
Station 762+57 | Begin Core Elev. 565.9
Offset 34.0' Left
Ground Surface Elev. 611.93

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-46.0' to -56.0') Light gray with horizontal bedding. Weathered & cherty with rust staining to -50.0'. Numerous horizontal fractures throughout with some intersecting vertical fractures.		1	95.0	36.0	n/a	1092 @ -49.8'
	-51					
	-56					

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

exp.	USER NAME =	DESIGNED - CCE	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - HBJ	REVISED -
	PLOT DATE =	CHECKED - CCE	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS V
STRUCTURE NO. 099-0905
SHEET SR-59 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	358
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

3/9/2022 11:15:08 AM

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 4/17/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION ______ LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO. ______
Station ______

BORING NO. BSB-43
Station 764+04
Offset 56.70ft Left
Ground Surface Elev. 616.44 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.0" CONCRETE BRIDGE DECK	615.65				
VOID		-5			
		-10			
		-15			
		-20			
VOID *(continued)*		-25			
		-30			
	581.44	-35			
CRUSHED STONE-loose (Fill)			3		
			3		8
			3		
	579.44		2		
CINDERS & STONE-black-loose (Fill)			3		
			2		18
			2		
	577.44		3		
CLAY LOAM with Stone-brown & gray-medium dense (Fill)			3		
		-40	2		15

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

BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 13125
Page 2 of 2
Date 4/17/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY JB

SECTION ______ LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO. ______
Station ______

BORING NO. BSB-43
Station 764+04
Offset 56.70ft Left
Ground Surface Elev. 616.44 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM with Stone-brown & gray-medium dense (Fill) *(continued)*			5		
	575.44		9		
CLAY LOAM-brown-dense			7		
			18	3.0 P	14
			18		
	573.44		11		
FRACTURED ROCK			4		
			39		4
	571.94		50/5"		
Drillers Observation: Apparent bedrock		-45			
	570.44				
Borehole continued with rock coring.		-50			
		-55			
		-60			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

PAGE 1 of 1
DATE 4/17/2014
LOGGED BY JK
GSI JOB No. 13125

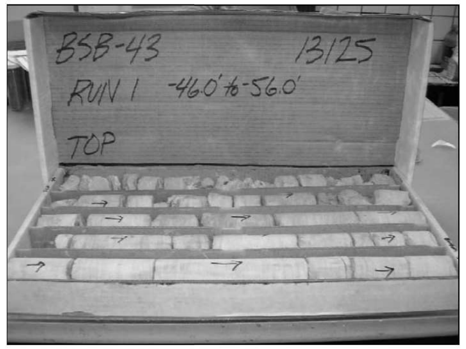
ROUTE -- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)

SECTION -- LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM

COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO. -- CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station -- Core Diameter 2.0 in
Top of Rock Elev. 571.9
BORING NO. **BSB-43** Begin Core Elev. 570.4
Station 764+04
Offset 56.7' Left
Ground Surface Elev. 616.44

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-46.0' to -56.0') Light gray to gray with horizontal to wavy bedding. Highly fractured & weathered with numerous chert nodules to -50.2'. Numerous horizontal fractures throughout.		1	99.0	30.0	n/a	940 @ -52.3'
	-51					
	-56					



Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS VI STRUCTURE NO. 099-0905
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - HBJ	REVISED -		
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-60 OF SR-64 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	359
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
FILE NAME: pw:\\exp-pw.bentley.com:exp-pw-01\Documents\Projects\CHI\00263426-A0\800 CADD Design\811 Contract 60W35_WB 811.10 Structural\WB Rowell\Sheet\0990905-60W35-056-BOR6.dgn

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 3/13/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY NW
SECTION LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-44
Station 763+56
Offset 37.70ft Left
Ground Surface Elev. 614.94 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
9.5" CONCRETE BRIDGE DECK	614.15				
VOID		-5			
		-10			
		-15			
		-20			
VOID *(continued)*		-25			
	580.94	-30			
TOPSOIL-black			7		
		-35	11		25
	578.94		7		
			6		
PEAT-black-loose			3		
			4		87
			4		
	576.94		4		
SAND & GRAVEL-brown-very dense			5		
			8		21
			17		
		-40	28		

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

BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 13125
Page 2 of 2
Date 3/13/14

ROUTE F.A.I RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY NW
SECTION LOCATION SW 1/4, SEC. 14, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Mud Rotary HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-44
Station 763+56
Offset 37.70ft Left
Ground Surface Elev. 614.94 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter n/a ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SAND & GRAVEL-brown-very dense *(continued)*					
			50/5"		
	570.44				12
Drillers Observation: Weathered & fractured rock		-45			
	568.94				
Borehole continued with rock coring.		-50			
		-55			
		-60			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

PAGE 1 of 1
DATE 3/13/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE --
DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION --
LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will
CORING METHOD Rotary Wash
STRUCT. NO. --
Station --
CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. *568.9*
Begin Core Elev. *568.9*
BORING NO. **BSB-44**
Station 763+56
Offset 37.7' Left
Ground Surface Elev. *614.94*

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-46.0' to -56.0') Light gray to gray with horizontal to wavy bedding. Weathered with rust staining & numerous horizontal fractures throughout. Numerous chert nodules to -47.0'.		1	98.0	35.0	n/a	1119 @ -50.0'
	-5					
	-10					

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 11/1/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** I-80 Phase II (Near Term) **LOGGED BY** TZ

SECTION **LOCATION** SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-46
Station 765+12
Offset 66.70ft Left
Ground Surface Elev. 582.31 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 9.5' ft
Upon Completion n/a ft
After ___ **Hrs.** ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
9.0" ASPHALT	581.56				
SILTY SAND, CINDERS & STONE-dark brown & black-medium dense (Fill)			10		
			16		12
	579.31		11		
CLAY LOAM with STONE-brown-stiff (Fill)			3		
			4	1.3	22
	576.81	-5	6	P	
FRACTURED ROCK-brown-dense			8		
			9		6
	574.31		22		
Drillers Observation: Apparent Bedrock	572.31	-10			
Borehole continued with rock coring.					
		-15			
		-20			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

PAGE 1 of 1
DATE November 1, 2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE --
DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION --
LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will
CORING METHOD Rotary Wash
STRUCT. NO. --
Station --
CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 574.3
Begin Core Elev. 572.3
BORING NO. **BSB-46**
Station 765+12
Offset 66.7' Left
Ground Surface Elev. 582.31

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-10.0' to -20.0') Light gray to gray, fine grained with horizontal to wavy bedding. Numerous horizontal fractures throughout with some chert replacement nodules.		1	100.0	38.0	n/a	1172 @ -14.8'
	-15					
	-20					

Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 11/4/13

ROUTE F.A.I RTE. 80 **DESCRIPTION** I-80 Phase II (Near Term) **LOGGED BY** TZ

SECTION **LOCATION** SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO.
Station

BORING NO. BSB-48
Station 765+02
Offset 20.20ft Left
Ground Surface Elev. 583.08 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to 9.5' ft
Upon Completion n/a ft
After ____ **Hrs.** ____ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
7.0" ASPHALT	582.50				
CRUSHED STONE-dense (Fill)			10		
			8		4
			7		
	580.08				
CLAY LOAM-brown & gray-very stiff to hard (Apparent Fill)			6		
			7	4.5	16
		-5	11	P	
			4		
			5	2.8	14
			6	P	
	575.08				
FRACTURED ROCK-very dense			50/1"		
					5
		-10			
	572.08				
Borehole continued with rock coring.					
		-15			
		-20			

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

BBS, from 137 (Rev. 8-99)

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ROCK CORE LOG

PAGE 1 of 1
DATE November 4, 2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE -- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)

SECTION -- LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM

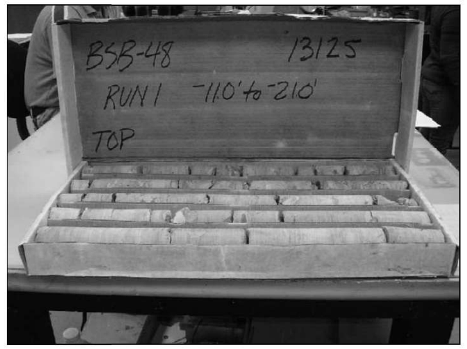
COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO. --
Station --

BORING NO. **BSB-48**
Station 765+02
Offset 20.2' Left
Ground Surface Elev. 583.08

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2.0 in
Top of Rock Elev. 572.1
Begin Core Elev. 572.1

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-11.0' to -21.0') Light gray to gray with horizontal to wavy bedding. Numerous horizontal fractures & chert replacement nodules throughout.		1	100.0	39.0	n/a	1450 @ -16.5'
	-16					
	-21					



Color pictures of the cores Yes Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

MODEL: Default
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SOIL BORING LOG

GSI Job No. 13125
Page 1 of 2
Date 1/13/14

ROUTE F.A.I RTE. 80 | DESCRIPTION I-80 Phase II (Near Term) | LOGGED BY NW

SECTION | LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will | DRILLING METHOD Hollow Stem Auger/Rotary | HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-50
Station 766+69
Offset 55.40ft Left
Ground Surface Elev. 623.94 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 621.4 ft ▼
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" CONCRETE, 18.0" CRUSHED STONE				
		12		
		19		6
621.44 ▼		13		
CLAY to CLAY LOAM-brown, gray & spotted black-medium stiff to hard (Fill)		3		
		10	5.0	16
	-5	8	B	
		3		
		4	3.5	24
		6	P	
		4		
		6	1.9	22
	-10	8	B	
		3		
		4	0.5	34
		8	P	
		4		
		4	0.8	22
	-15	7	B	
		3		
		6	3.0	23
		8	P	
		6		
		8	2.1	20
	-20	10	B	

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY to CLAY LOAM-brown, gray & spotted black-medium stiff to hard (Fill) *(continued)*				
		3		
		5	2.7	20
		6	B	
		6		
		6	2.3	23
	-25	10	P	
		8		
		9	2.3	20
		7	B	
		4		
		4	1.0	27
	-30	10	P	
591.94				
CLAY-brown-very stiff				
		4		
		8	2.1	20
	-35	7	B	
586.94				
SILTY SAND-brown-medium dense				
		3		
		4		19
	-40	7		

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

BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 13125
Page 2 of 2
Date 1/13/14

ROUTE F.A.I RTE. 80 | DESCRIPTION I-80 Phase II (Near Term) | LOGGED BY NW

SECTION | LOCATION SW 1/4, **SEC.** 14, **TWP.** T35N, **RNG.** R10E, 3rd **PM**

COUNTY Will | DRILLING METHOD Hollow Stem Auger/Rotary | HAMMER TYPE CME Automatic

STRUCT. NO.
Station
BORING NO. BSB-50
Station 766+69
Offset 55.40ft Left
Ground Surface Elev. 623.94 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter 621.4 ft ▼
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY SAND-brown-medium dense *(continued)*				
581.94				
CLAY-brown & gray-medium dense		4		
		6		24
	-45	9		
576.94				
FRACTURED ROCK-very dense				
574.94		50/5"		
Drillers Observation: Apparent Bedrock				14
	-50			
572.94				
Borehole continued with rock coring.				
	-55			
	-60			

Z:\PROJECTS\2013\13125 HNTB, I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125_LOG.GPJ 7/3/14

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

BBS, from 137 (Rev. 8-99)

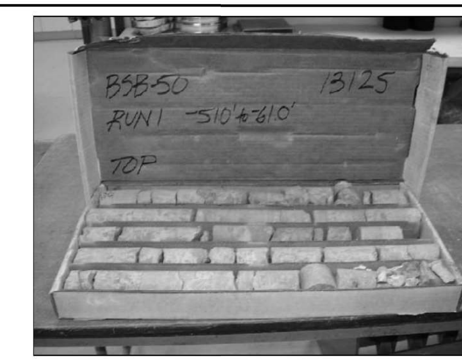
Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

ROCK CORE LOG

PAGE 1 of 1
DATE 1/13/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE -- | DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION -- | LOCATION SEC 14, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will | CORING METHOD Rotary Wash
STRUCT. NO. -- | CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station -- | Core Diameter 2.0 in
BORING NO. **BSB-50** | Top of Rock Elev. 574.9
Station 766+69 | Begin Core Elev. 572.9
Offset 55.4' Left
Ground Surface Elev. 623.94

Description	DEPTH (ft)	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE RUN 1 (-51.0' to -61.0') Light gray to gray & varved with horizontal bedding. Weathered with some chert replacement. Numerous horizontal fractures throughout.		1	99.0	16.0	n/a	906 @ -53.7'
	-56					
	-61					

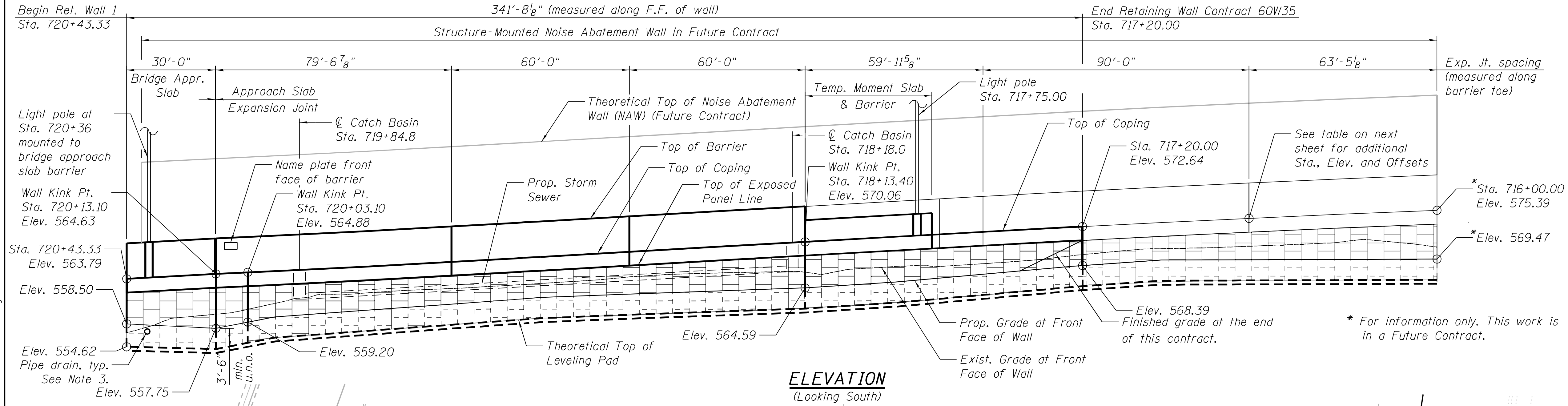


Color pictures of the cores Yes | Cores will be stored for examination for -
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

exp.	USER NAME =	DESIGNED - CCE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS X STRUCTURE NO. 099-0905	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	363
	PLOT SCALE =	DRAWN - HBJ	REVISED -			CONTRACT NO. 60W35				
	PLOT DATE =	CHECKED - CCE	REVISED -		SHEET SR-64 OF SR-64 SHEETS		ILLINOIS	FED. AID PROJECT		

3/9/2022 11:18:11 AM

Benchmark: Iron rod with yellow cap at Sta. 722+92.37, 4.19' Rt. ℄ I-80, Elev. 556.54.
Existing Structure: None
Stage Construction will be utilized to maintain traffic.
Salvage: None



* For information only. This work is in a Future Contract.

ELEVATION
(Looking South)

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

FIELD UNITS

f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)

PRECAST UNITS

f'c = 4,500 psi (Precast Panels)

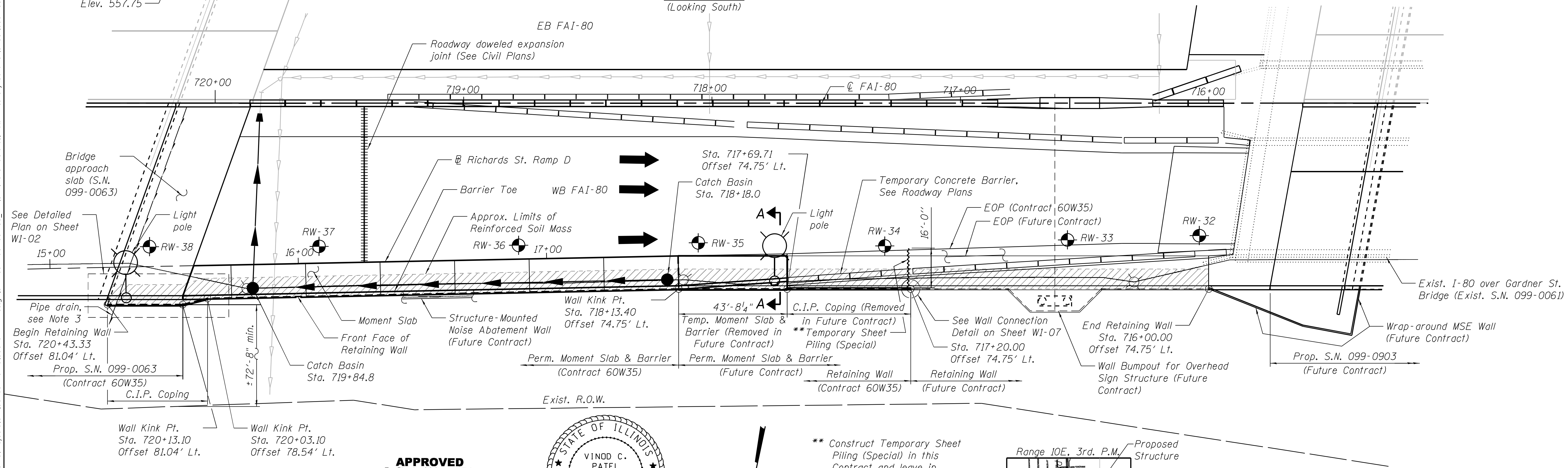
DESIGN LOADS

NOISE ABATEMENT WALL LOADING

Dead Load = 65 psf
Wind Load = 35 psf

RETAINING WALL

The MSE Wall supplier shall consider internal and external stability design accounting for the moment slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 2.4 kips/ft of wall.

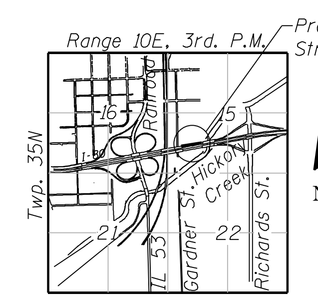


PLAN

** Construct Temporary Sheet Piling (Special) in this Contract and leave in place. Sheeting will be partially removed in Future Contract if required to facilitate future work.

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS
VINOD C. PATEL
081-004528
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER



LOCATION SKETCH

LEGEND

Prop. Storm Sewer
Prop. Catch Basin
Exist. Storm Sewer
Soil Boring

Notes:
1. Stations and offsets are measured relative to ℄ I-80 at the front face of retaining wall.
2. For Section A-A, see Sheet W1-02.
3. See Bridge Plans for details and payment. For details of pipe through wall, see Sheet W1-02.

Signed:
Date: 3/10/2022
Exp: 11/30/2022
Sheets: 1 thru 11

GENERAL PLAN & ELEVATION
RETAINING WALL 1, WB I-80
F.A.I. RTE. 80 - SEC. 2013-009B
WILL COUNTY
STATION 716+00.00 TO STA. 720+43.33
STRUCTURE NO. 099-W035

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	364
	PLOT SCALE =	DRAWN - MTR	REVISED -					CONTRACT NO. 60W35		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W1-01 OF W1-11 SHEETS		ILLINOIS	FED. AID PROJECT		

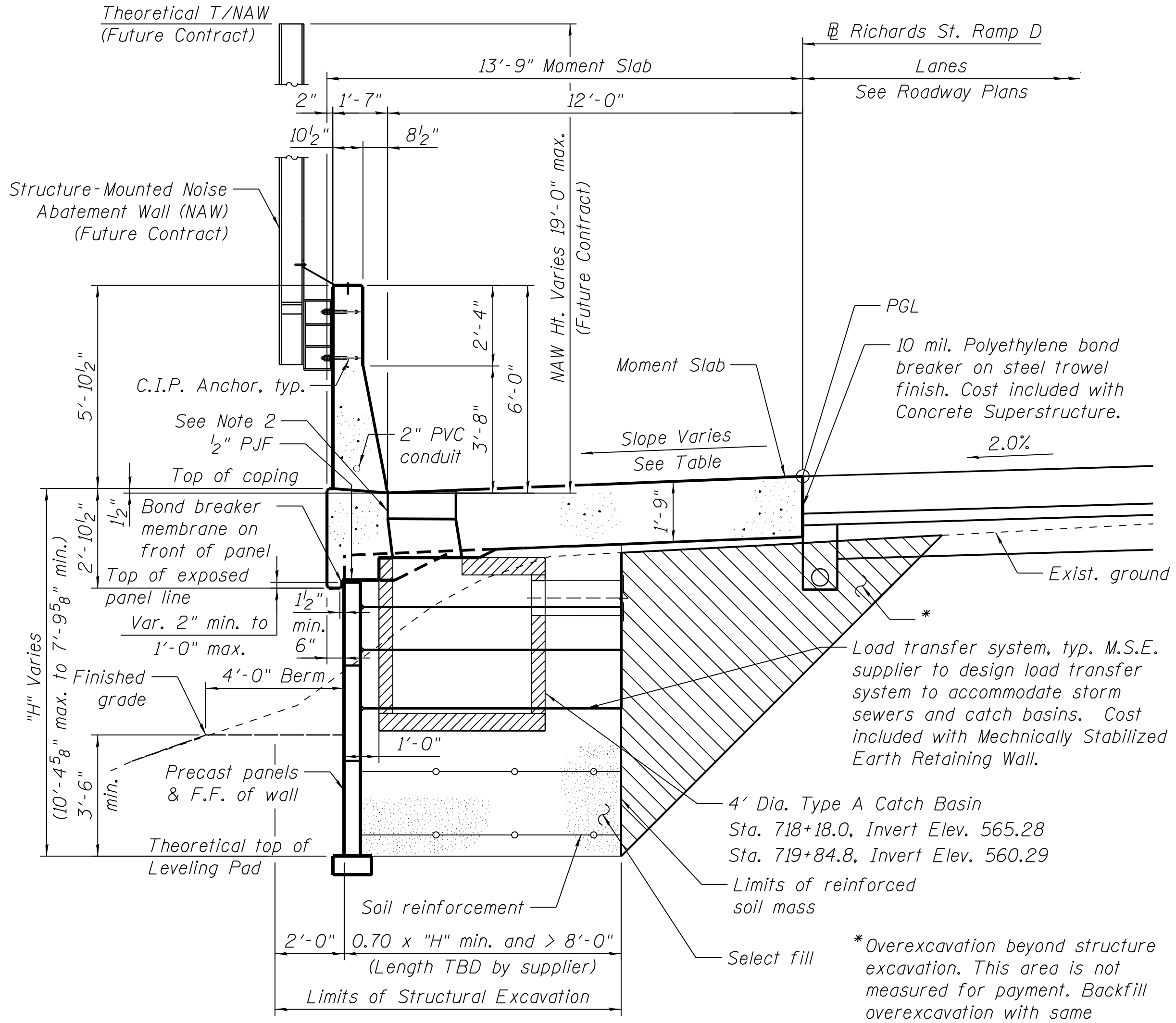
GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Cast frame into moment slab and form opening to structure.
3. The Contractor shall install wire mesh and geotextile fabric closure between the back of abutment and retaining wall. The wire mesh shall be non-coated welded wire reinforcement according to Section 1006.10 and the geotextile fabric shall be according to the BDE special provision for Geotextile Retaining Walls. Cost shall be included with Mechanically Stabilized Earth Retaining Wall.
4. Slipforming of the barrier is not allowed.

FAI-80 Sta.	Width	Slope
716+00.00	12'-0"	-4.00%
719+48.00	12'-0"	-4.00%
720+08.00	12'-0"	-2.00%
720+43.33	11'-4 3/8"	-2.00%

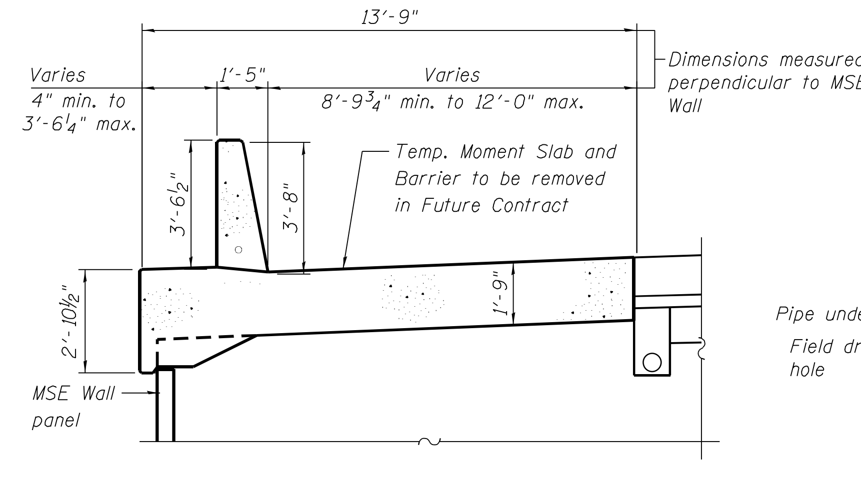
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	887
Concrete Superstructure	Cu Yd	285.6
Protective Coat	Sq Yd	421
Reinforcement Bars, Epoxy Coated	Pound	51,530
Name Plates	Each	1
Mechanically Stabilized Earth Retaining Wall	Sq Ft	2,771
Temporary Sheet Piling (Special)	Sq Ft	220

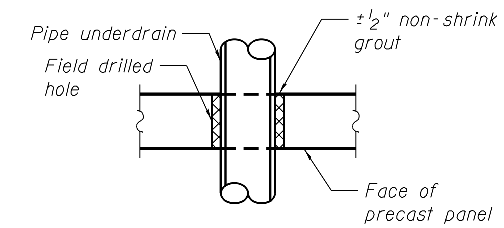


SECTION THRU MSE WALL
Sta. 717+20.00 to 720+43.33 (MSE Wall)
Sta. 718+13.42 to 720+12.96 (Moment Slab)

*Overexcavation beyond structure excavation. This area is not measured for payment. Backfill overexcavation with same material used for select fill used in MSE wall.



SECTION A-A
(See Sheet W1-01 for location)

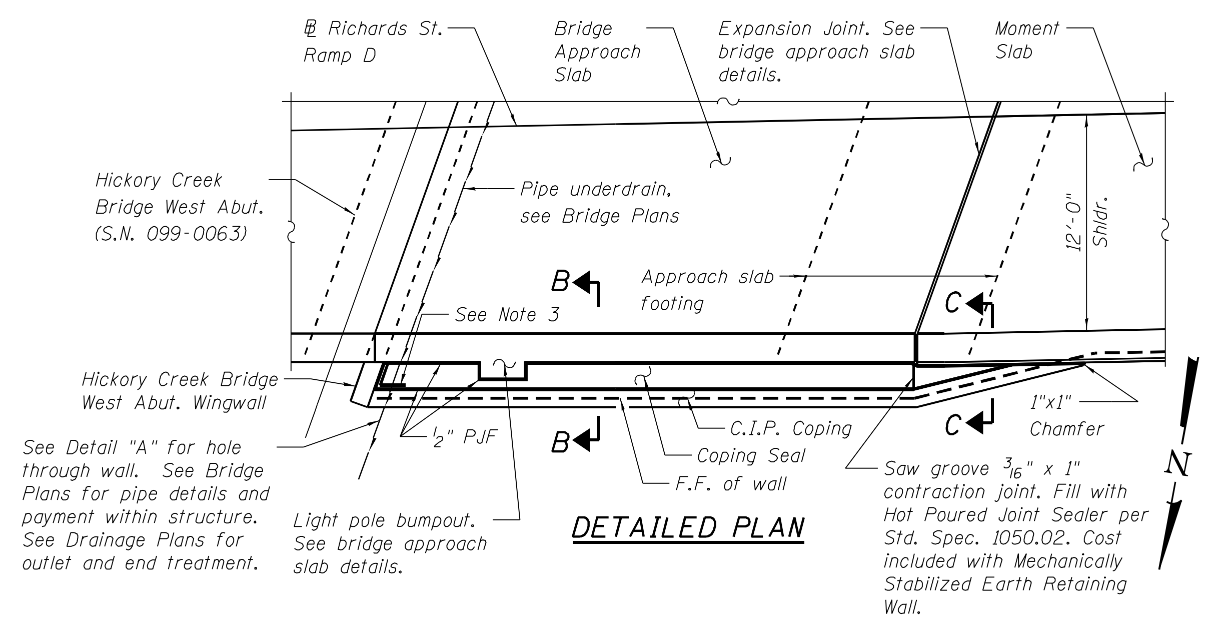


DETAIL "A"

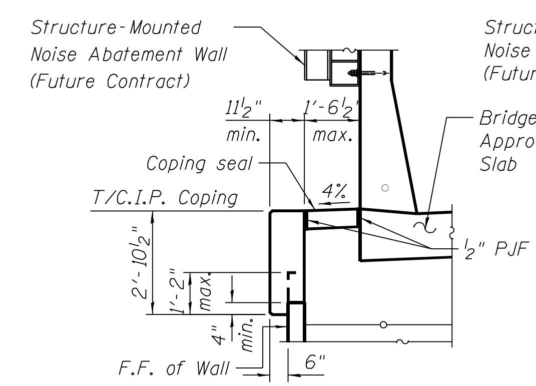
INDEX OF SHEETS

CONTROL POINTS

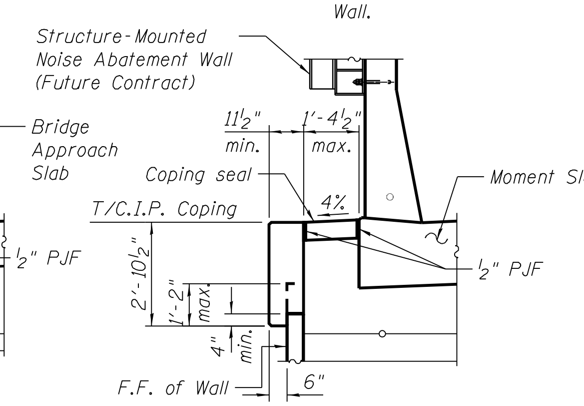
FAI-80 Sta.	T/Coping Elev.	Finished Grade Elev. at F.F. of Wall	Offset
716+00.00	575.39	569.47	74.75' Lt.
716+33.42	574.70	569.41	74.75' Lt.
716+63.42	574.03	569.35	74.75' Lt.
716+93.42	573.31	569.30	74.75' Lt.
717+23.42	572.55	568.24	74.75' Lt.
717+53.42	571.74	566.90	74.75' Lt.
717+83.42	570.90	565.56	74.75' Lt.
718+13.40	570.06	564.59	74.75' Lt.
718+43.39	569.21	564.06	75.35' Lt.
718+73.39	568.36	563.54	75.95' Lt.
719+03.38	567.50	562.95	76.55' Lt.
719+33.37	566.65	561.86	77.15' Lt.
719+63.37	565.86	560.77	77.75' Lt.
719+93.36	565.13	559.68	78.35' Lt.
720+13.10	564.63	557.75	81.04' Lt.
720+43.33	563.79	558.50	81.04' Lt.



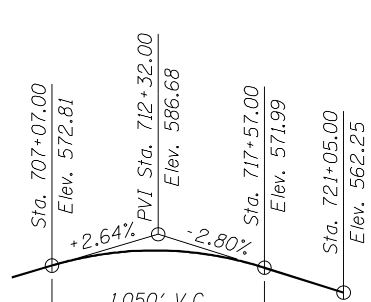
DETAILED PLAN



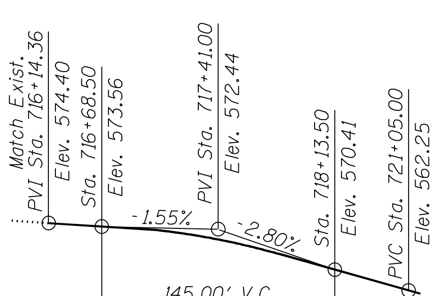
SECTION B-B



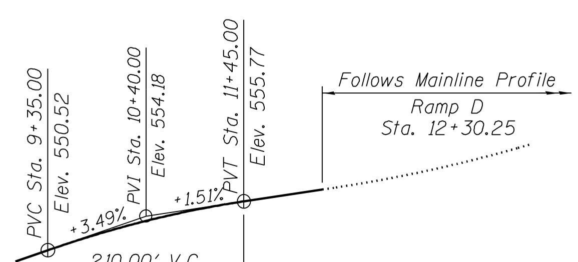
SECTION C-C



PROFILE GRADE
(Final condition along ℄ FAI-80)
(Future Contract)



PROFILE GRADE
(Interim condition along ℄ FAI-80)
(Contract 60W35)



PROFILE GRADE
(Along ℗ Richards St. Ramp D)

STA. 716+00.00 TO 720+43.33
BUILT 202_ BY
STATE OF ILLINOIS
F.A.I. RTE. 80-SEC. 2013-009B
LOADING HL-93
STR. NO. 099-W035

NAME PLATE
See Std. 515001

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL DATA STRUCTURE NO. 099-W035
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W1-02 OF W1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	365
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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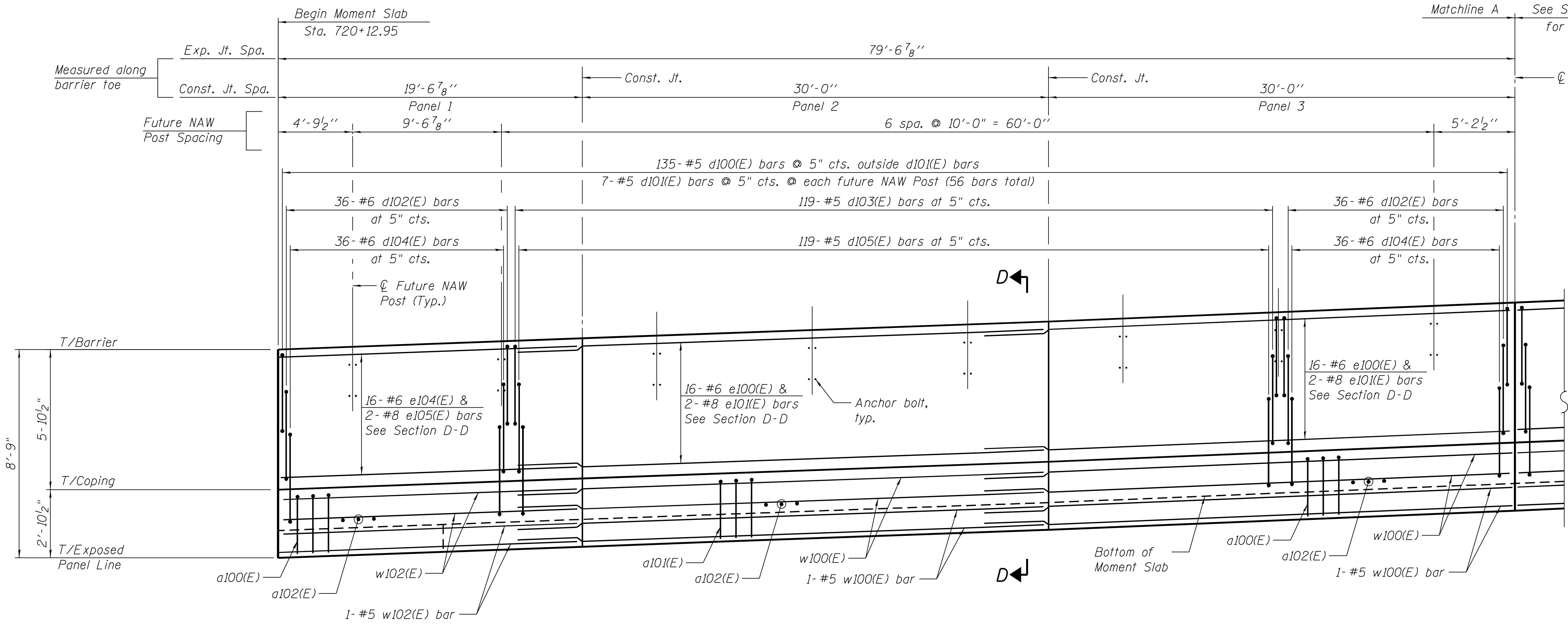
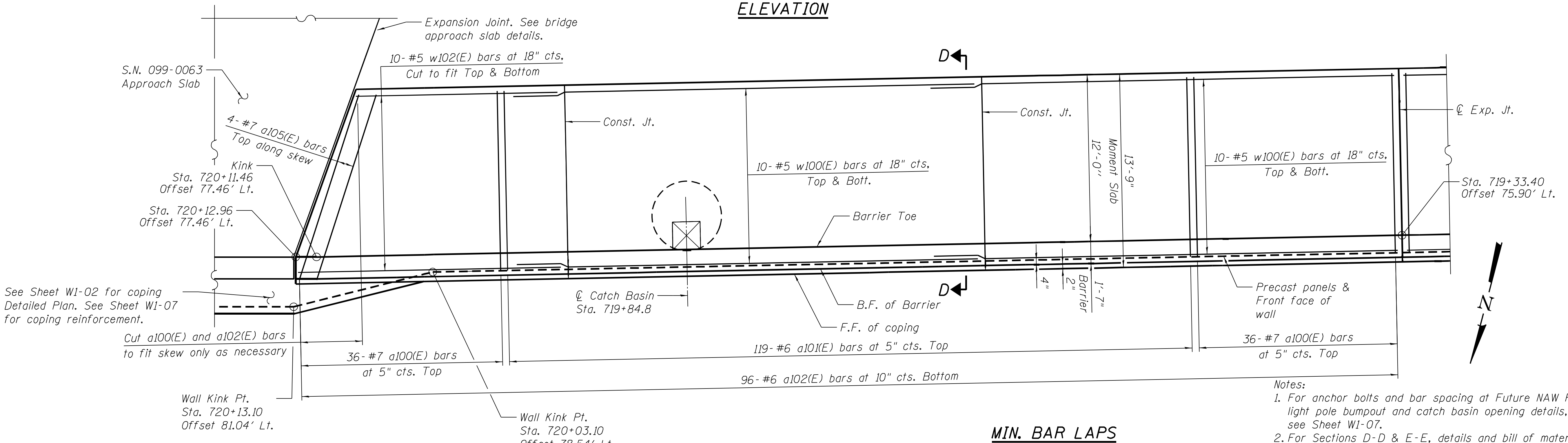


ELEVATION



PLAN

MIN. BAR LAPS

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

Notes:
1. For anchor bolts and bar spacing at Future NAW Post, light pole bumpout and catch basin opening details, see Sheet W1-07.
2. For Sections D-D & E-E, details and bill of material, See Sheet W1-08.
3. Bars indicated thus 10x2 etc. indicates 10 lines of bars with 2 lengths per line.
4. B.F. indicates Back Face
   F.F. indicates Front Face
   NAW indicates Noise Abatement Wall

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILED PLAN AND ELEVATION 1 STRUCTURE NO. 099-W035
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W1-03 OF W1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		ILLINOIS FED. AID PROJECT		

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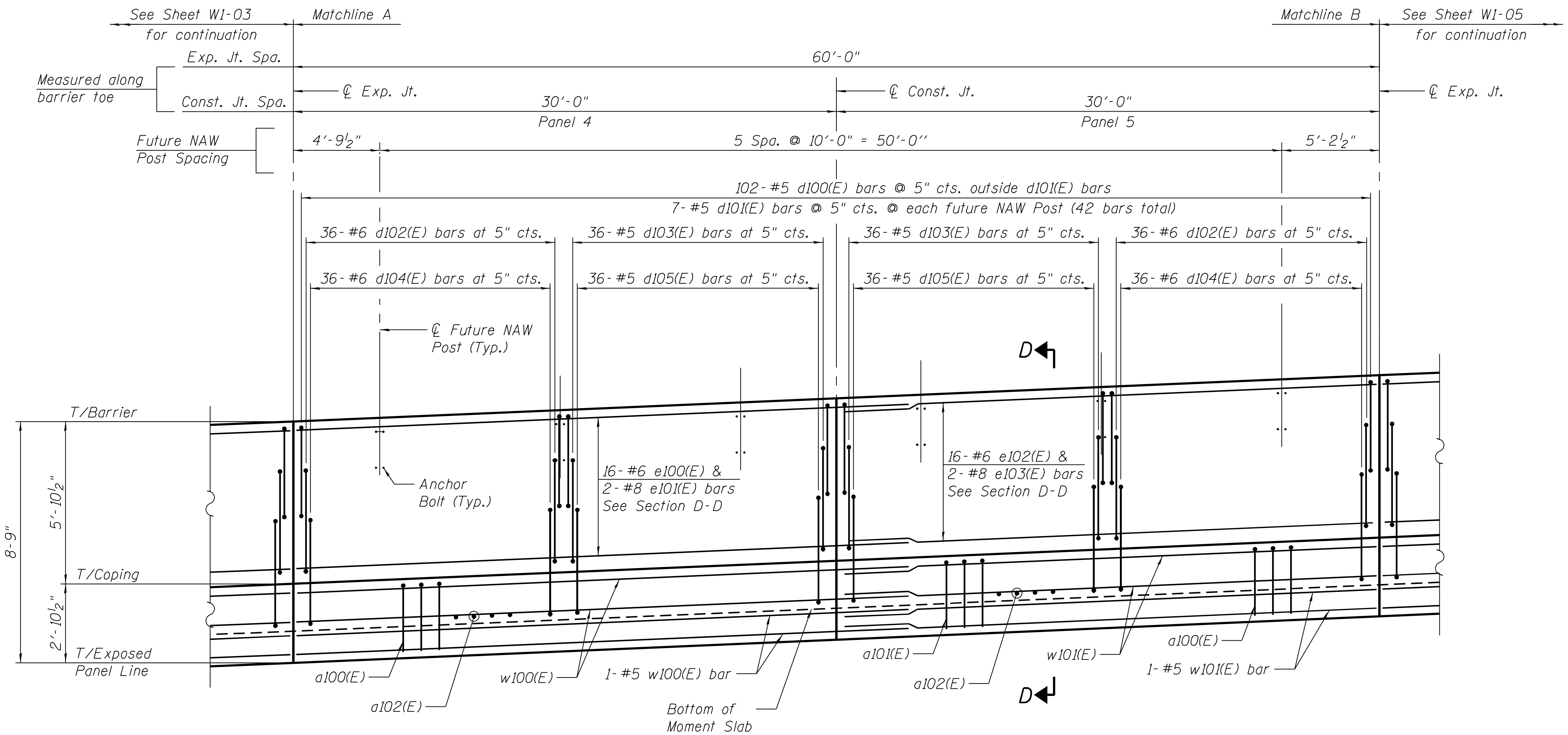
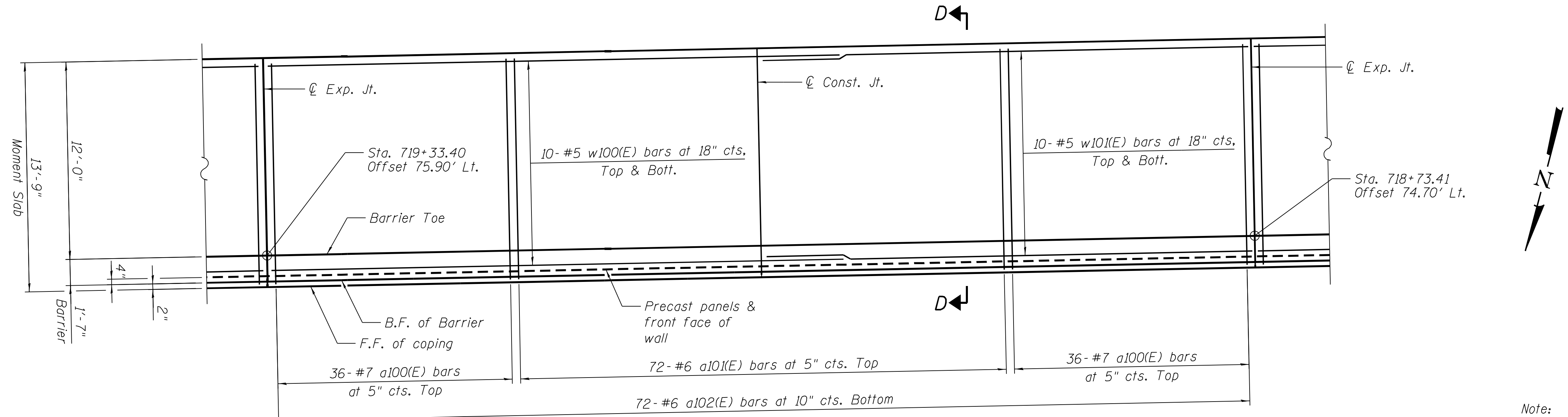


ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W1-03.

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exp.

USER NAME =	DESIGNED - BAR	REVISED -	
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILED PLAN AND ELEVATION 2
STRUCTURE NO. 099-W035

SHEET W1-04 OF W1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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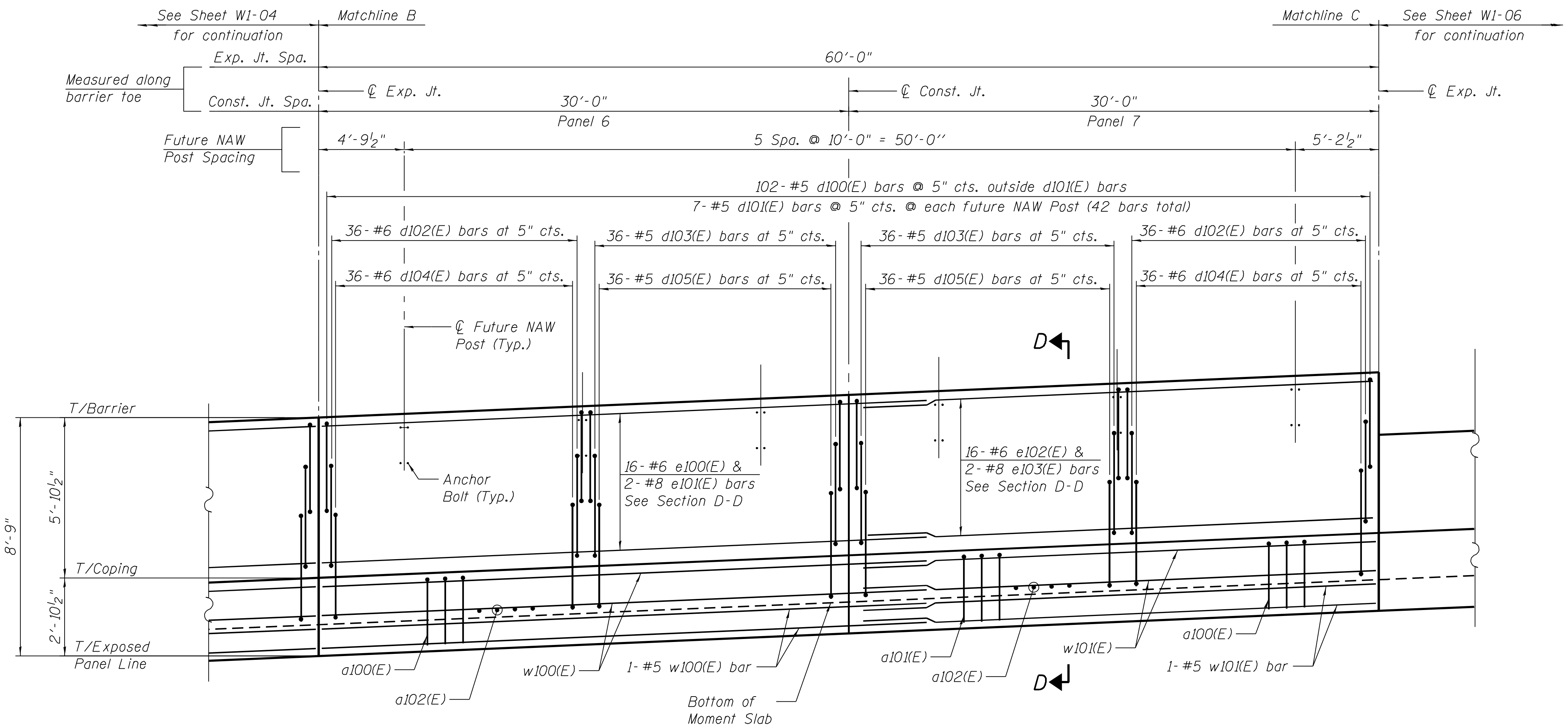
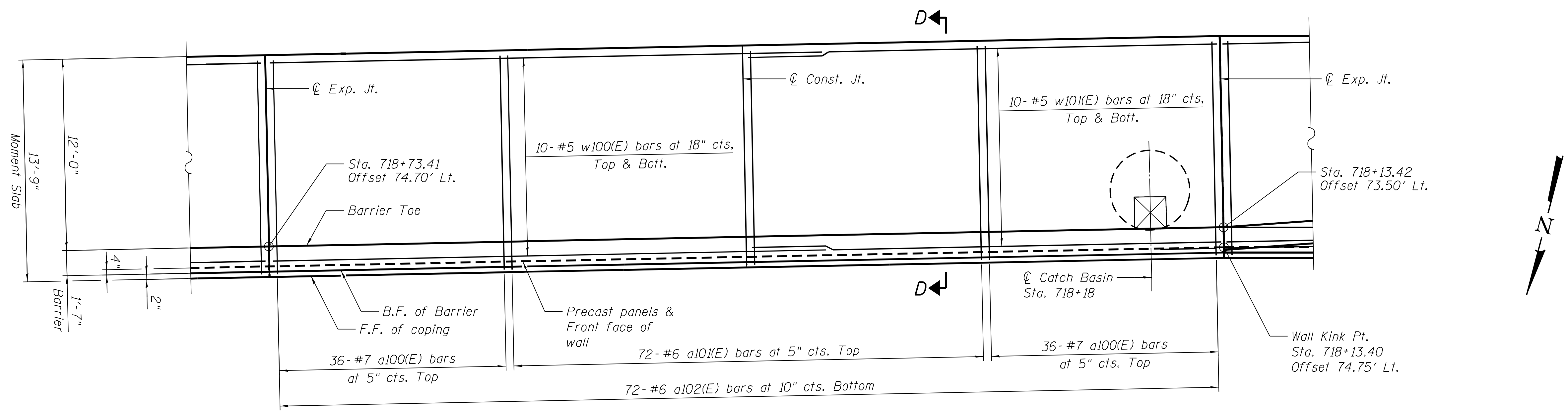


ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W1-03.

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USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILED PLAN AND ELEVATION 3
STRUCTURE NO. 099-W035

SHEET W1-05 OF W1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60W35		
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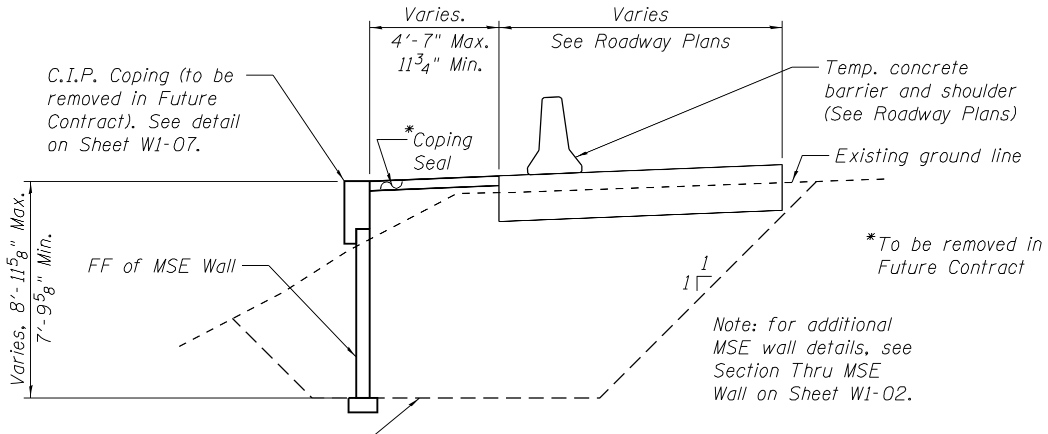
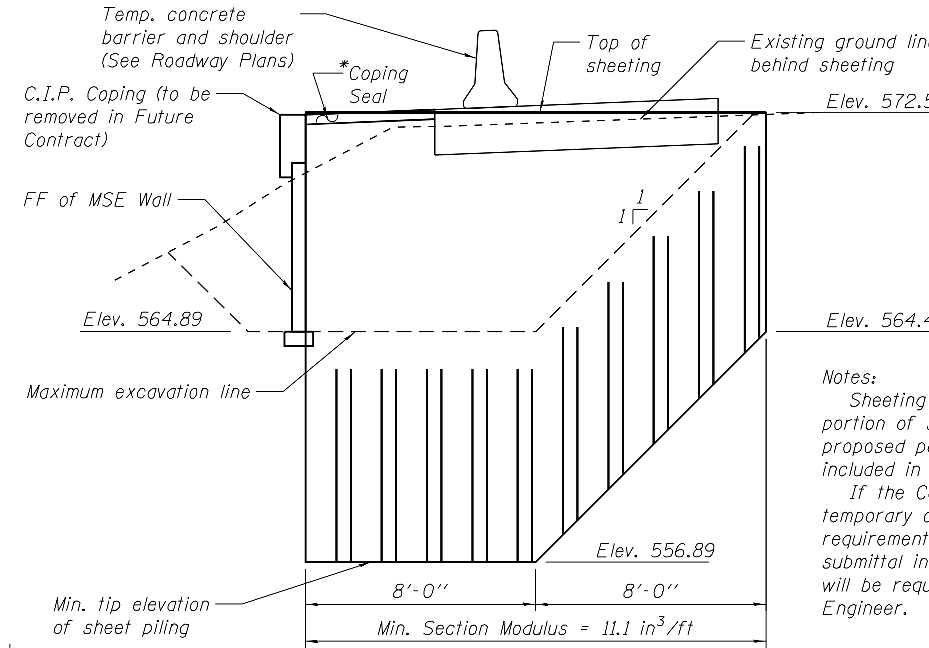
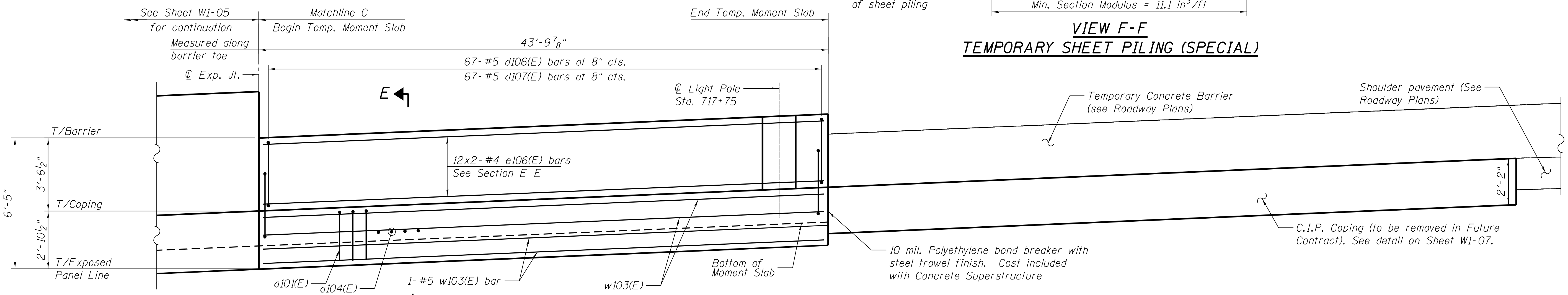


SECTION G-G

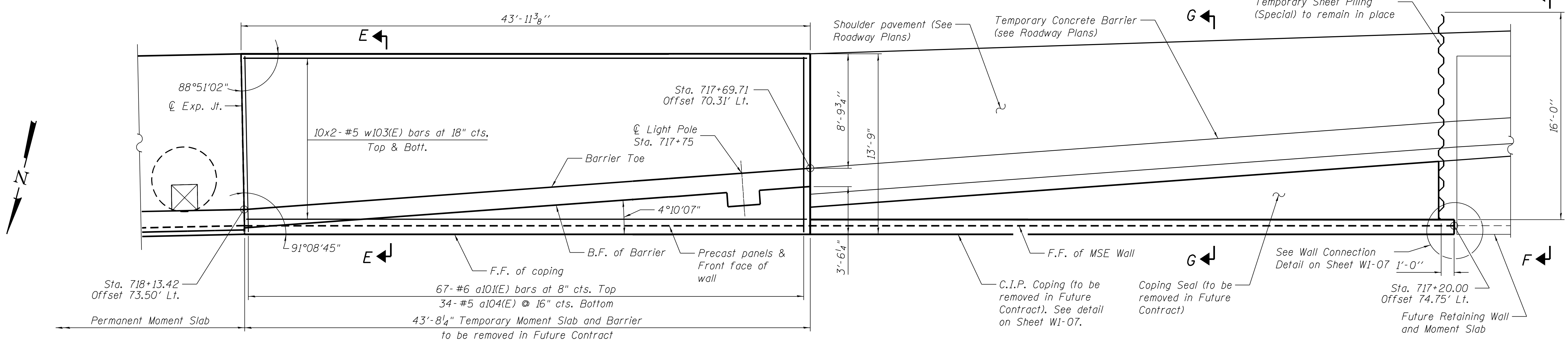


Notes:
Sheeting to remain in place. Remove top portion of sheeting as needed to construct proposed pavement. Cost of partial removal included in Temporary Sheet Piling (Special).
If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.

VIEW F-F
TEMPORARY SHEET PILING (SPECIAL)



ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W1-03.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILED PLAN AND ELEVATION 4 STRUCTURE NO. 099-W035
		CHECKED - VCP	REVISED -		
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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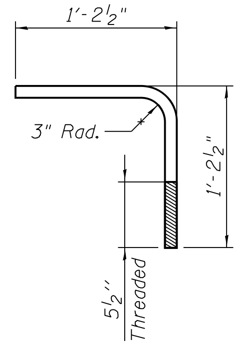
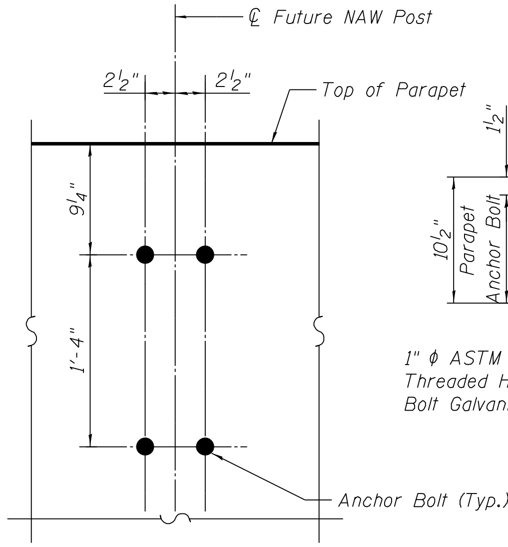


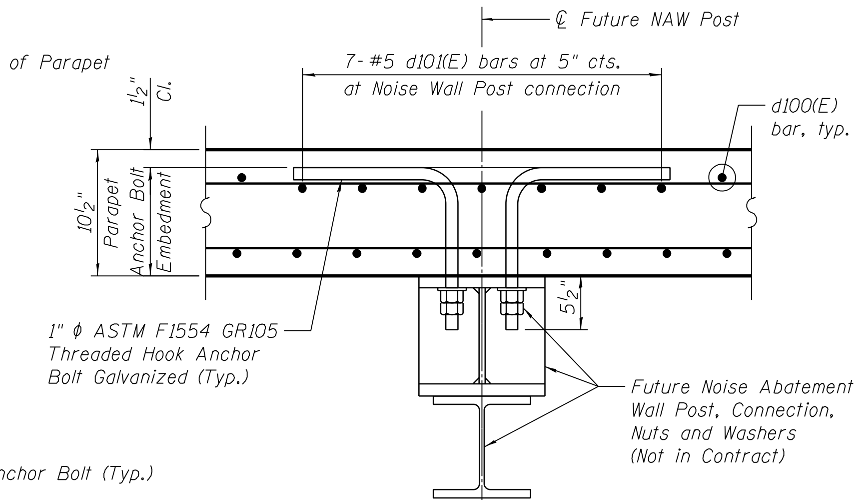
CUSTOM BENT ANCHOR BOLT

ASTM F1554 GR105
4 Thus for Each Post
Cost Included with Concrete Superstructure

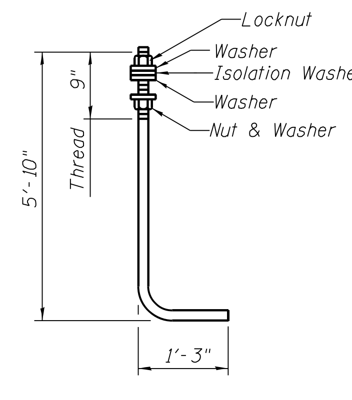


ANCHOR BOLT LAYOUT

(Back of Parapet Elevation)

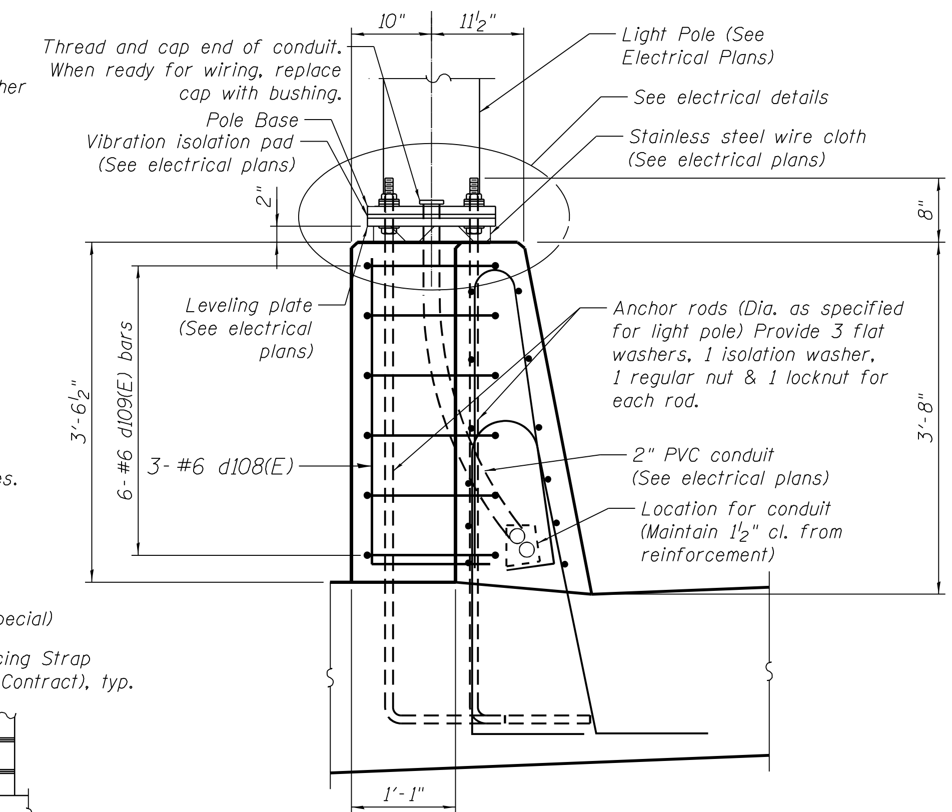


PLAN AT FUTURE NAW POST

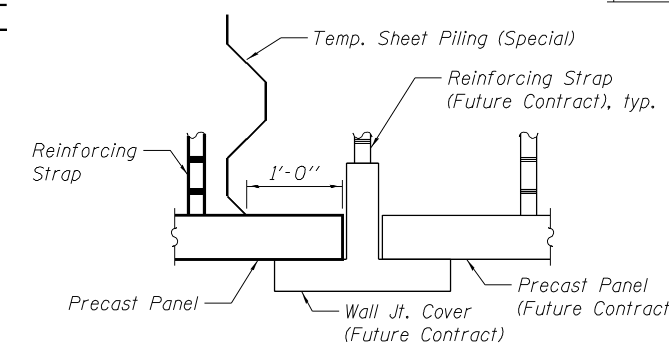


ANCHOR ROD

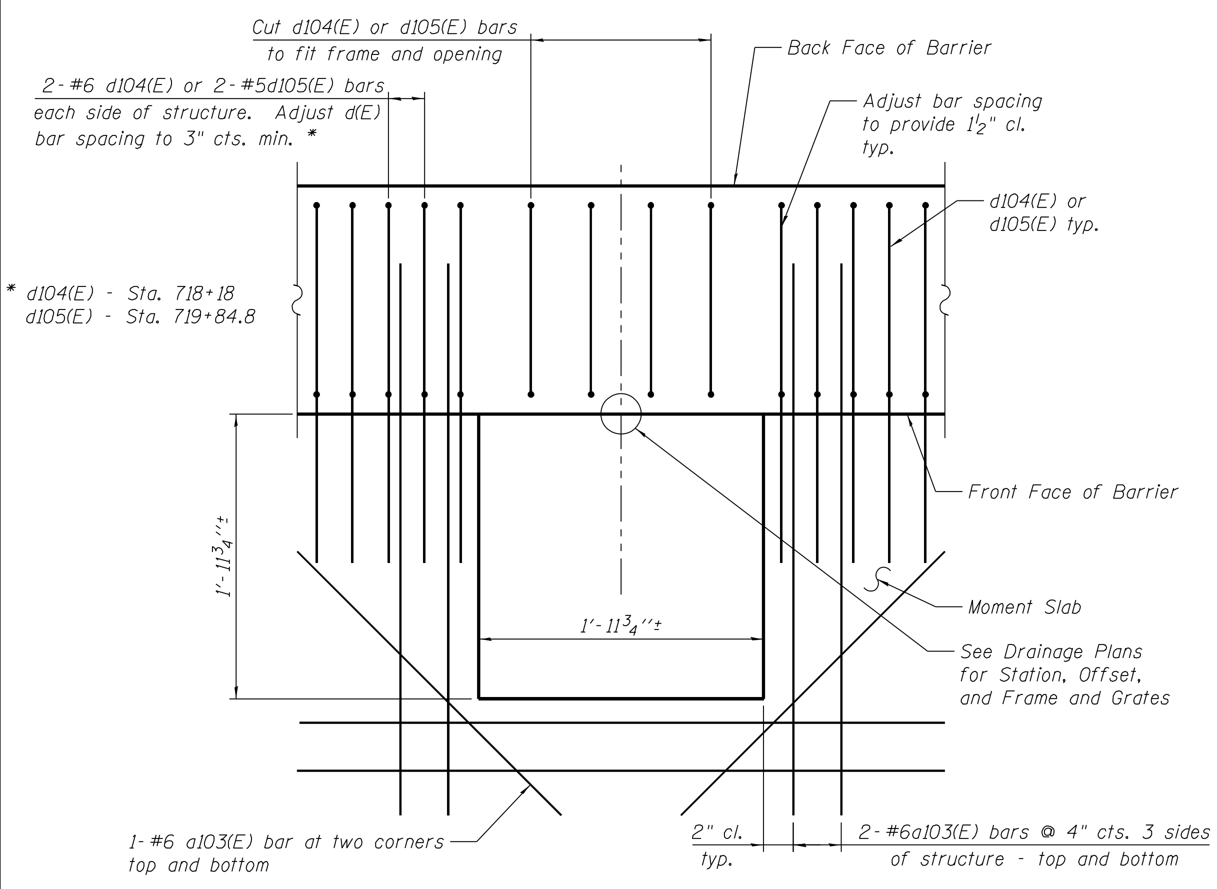
Diameter as specified for light poles.
(ASTM F 1554 Grade 105)
Full length hot dipped galvanized



SECTION A-A

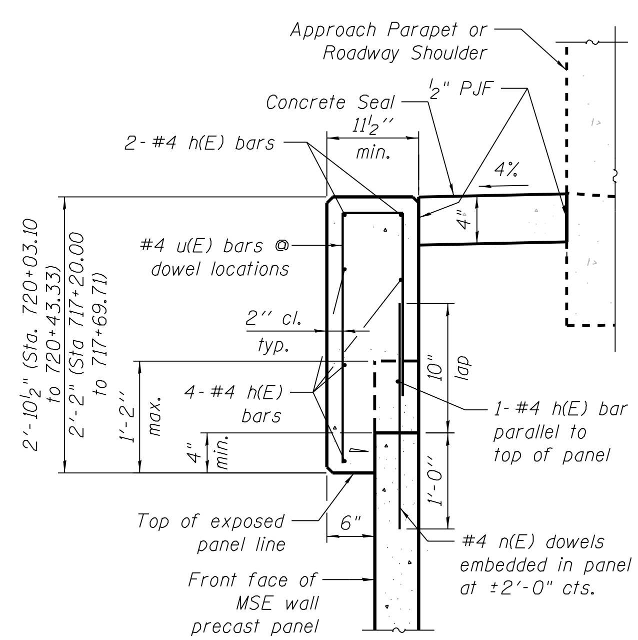


WALL CONNECTION DETAIL



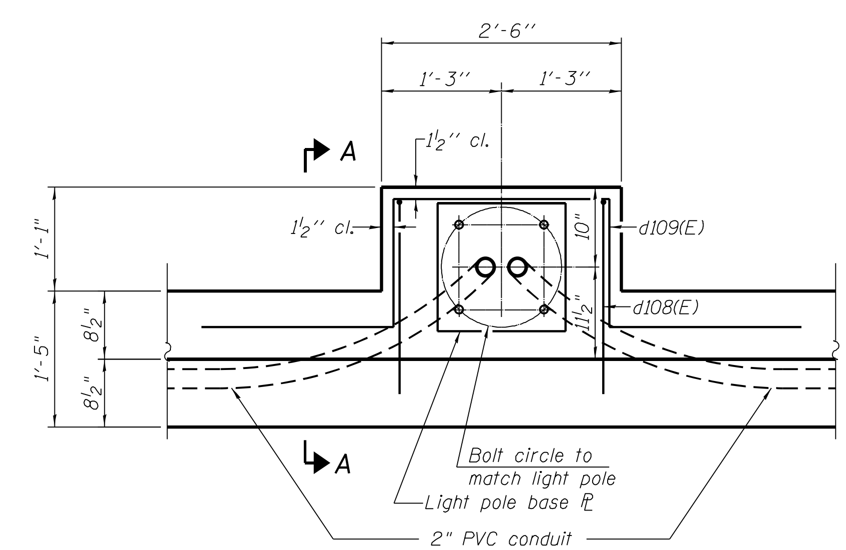
REINFORCEMENT AROUND DRAINAGE OPENING

(For clarity some reinforcement not shown)



COPING DETAIL

All elements of the Coping Detail shall
be in included in the cost of Mechanically
Stabilized Earth Retaining Wall.



LIGHT POLE PLAN

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

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS 1
STRUCTURE NO. 099-W035

SHEET W1-07 OF W1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	370
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

MODEL: Default
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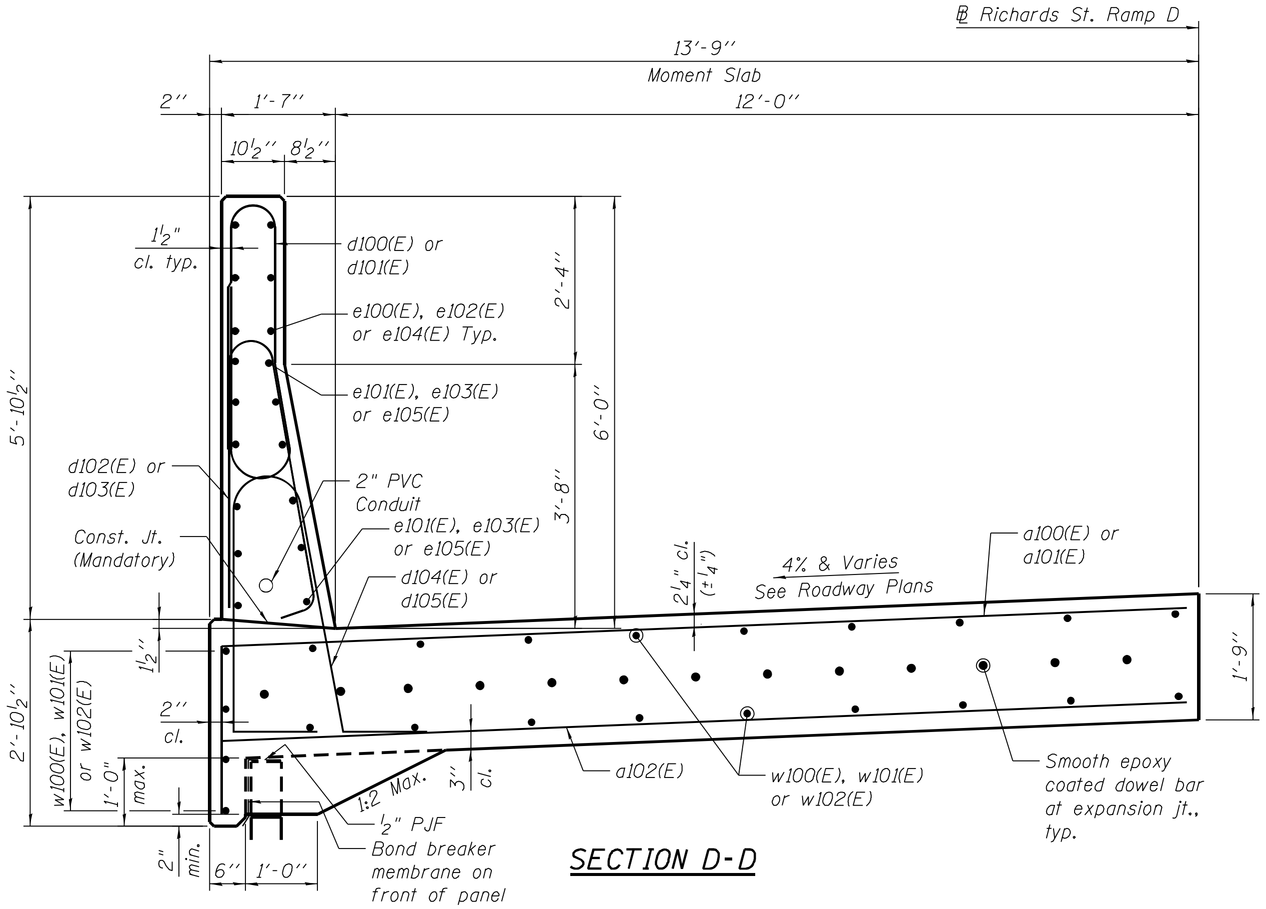
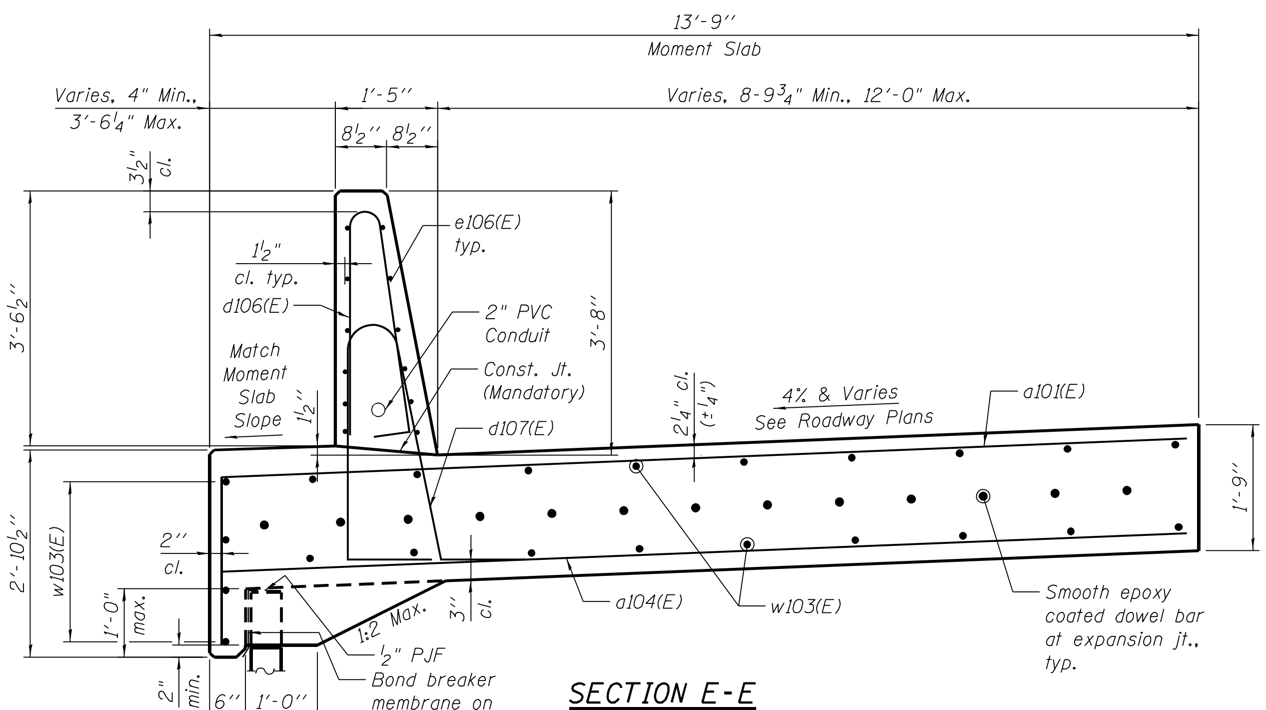
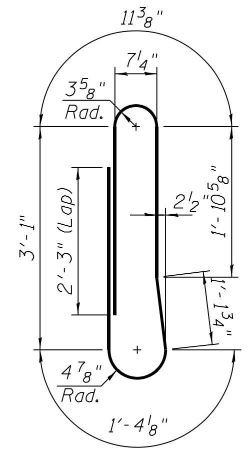


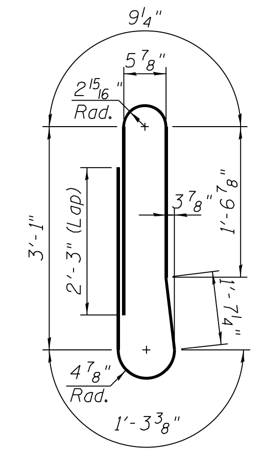
SECTION D-D



SECTION E-E
TEMPORARY MOMENT SLAB & BARRIER



BAR d100(E)



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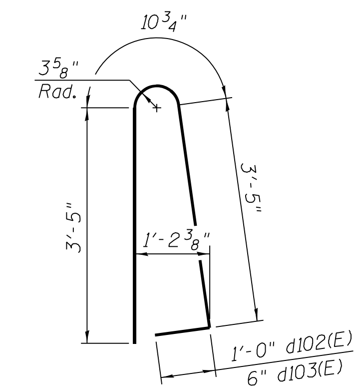

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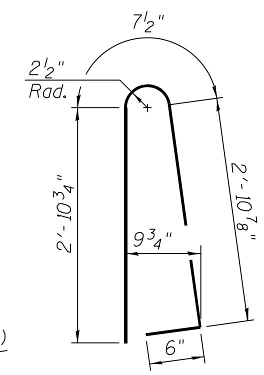

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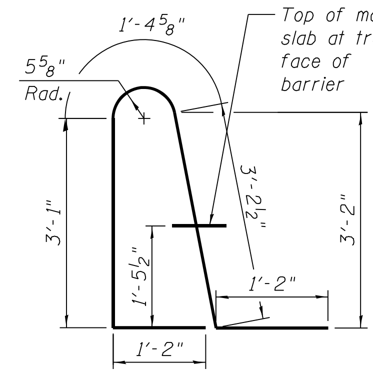
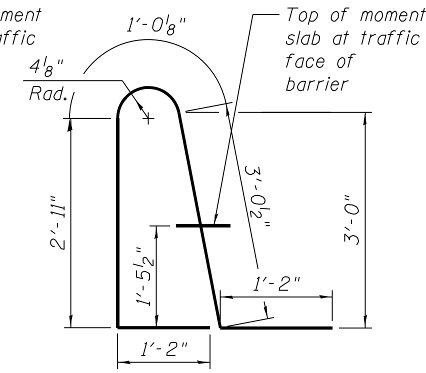
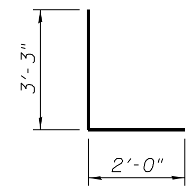


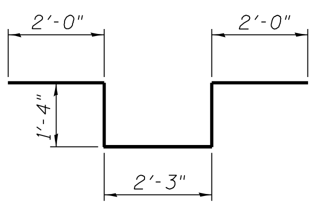
BARS d104(E) & d105(E)



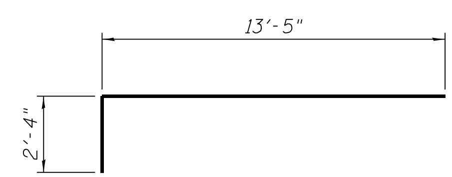
BAR d107(E)



BAR d108(E)



BAR d109(E)



BARS a100(E) & a101(E)

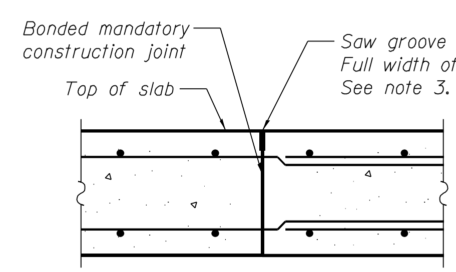
BILL OF MATERIAL

BAR	No.	SIZE	LENGTH	SHAPE
a100(E)	216	#7	15'-9"	
a101(E)	330	#6	15'-9"	
a102(E)	240	#6	13'-5"	
a103(E)	32	#6	6'-0"	
a104(E)	34	#5	13'-5"	
a105(E)	4	#7	14'-0"	
d100(E)	339	#5	10'-8"	
d101(E)	140	#5	10'-7"	
d102(E)	216	#6	8'-9"	
d103(E)	263	#5	8'-3"	
d104(E)	224	#6	10'-0"	
d105(E)	271	#5	10'-0"	
d106(E)	67	#5	6'-11"	
d107(E)	67	#5	9'-4"	
d108(E)	3	#6	5'-3"	
d109(E)	6	#6	8'-11"	
e100(E)	64	#6	34'-0"	
e101(E)	8	#8	36'-8"	
e102(E)	32	#6	29'-8"	
e103(E)	4	#8	29'-8"	
e104(E)	16	#6	19'-3"	
e105(E)	2	#8	19'-3"	
e106(E)	24	#4	23'-1"	
w100(E)	96	#5	33'-4"	
w101(E)	48	#5	29'-8"	
w102(E)	24	#5	19'-2"	
w103(E)	48	#5	23'-6"	

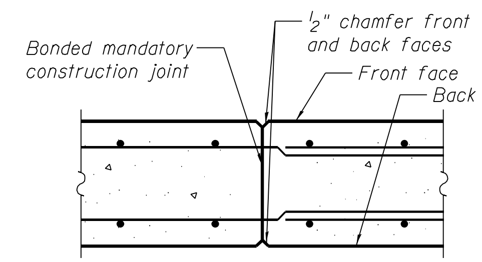
Item	Unit	Quantity
Concrete Superstructure	Cu Yd	285.6
Protective Coat	Sq Yd	421
Reinforcement Bars, Epoxy Coated	Pound	51,530

Notes:

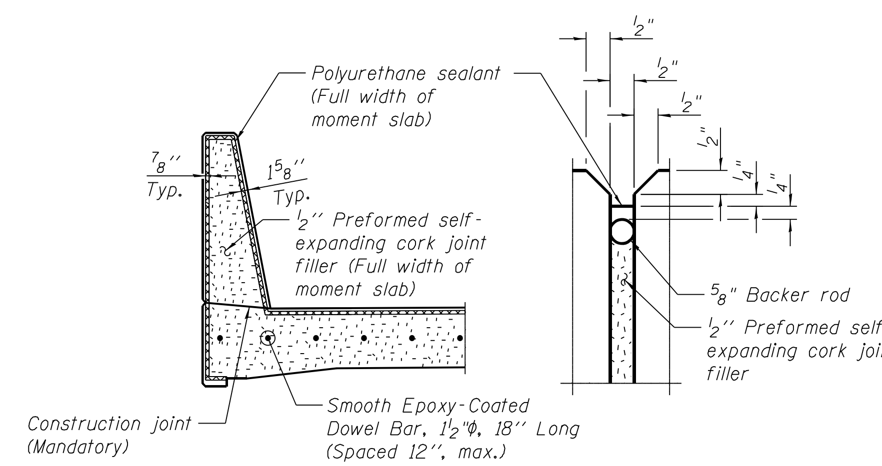
1. The Polyurethane Sealant shall be according to Article 1050.04 of the Standard Specifications and the color shall be gray.
2. Cost of expansion joints shall be included with Concrete Superstructure. Joint for 44" barrier shown. Joint at 72" barrier is similar.
3. The saw groove shall use a hot poured joint sealer per Article 1050.02 of the Standard Specifications.



TRANSVERSE CONSTRUCTION JT. IN SLAB



TRANSVERSE CONSTRUCTION JT. IN BARRIER



EXPANSION JOINT DETAILS

See Note 2

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WALL DETAILS 2
STRUCTURE NO. 099-W035

SHEET W1-08 OF W1-11 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	371
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

FILE NAME:

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SOIL BORING LOG

GSI Job No. 20012 — Page 1 of 1 — Date 5/12/21

ROUTE FAI 80 **DESCRIPTION** I-80 Phase II **LOGGED BY** ZP
SECTION **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**
COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. ____ **Station** ____
BORING NO. RW-32 **Station** 716+04 **Offset** 53.30ft Left **Ground Surface Elev.** 574.62 ft
Surface Water Elev. n/a ft **Stream Bed Elev.** n/a ft
Groundwater Elev.: First Encounter Dry to -10.0' ft; Upon Completion n/a ft; After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.5" ASPHALT, 13.0" CONCRETE	573.16		2		
CRUSHED STONE-loose			2		11
	571.62		1		
CLAY LOAM-brown & gray-stiff (Fill)			4		
			3	1.20	20
	569.12	-5	3	B	
SILTY CLAY LOAM-brown & gray-loose (Fill)			3		
			4		16
	566.62		3		
CLAY LOAM-brown & gray-stiff to hard (Fill)			3		
			3	1.20	18
		-10	4	B	
			2		
			5	1.00	20
			4	P	
			3		
			6	1.30	23
		-15	8	B	
			3		
			3	3.00	21
			11	P	
			3		
			6	1.90	16
		-20	8	B	

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-stiff to hard (Fill) *(continued)*			4		
			6	3.00	15
			8	P	
			5		
			9	3.50	15
		-25	13	B	
			6		
			6	3.10	15
			11	B	
			7		
			10	2.80	12
		-30	8	B	
			6		
			5	4.00	15
		-35	7	P	
			6		
End Of Boring @ -40.0'. Boring backfilled with cuttings.			10	4.20	16
	534.62	-40	14	B	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 20012 — Page 1 of 1 — Date 5/12/21

ROUTE FAI 80 **DESCRIPTION** I-80 Phase II **LOGGED BY** ZP
SECTION **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**
COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. ____ **Station** ____
BORING NO. RW-33 **Station** 716+57 **Offset** 55.00ft Left **Ground Surface Elev.** 573.73 ft
Surface Water Elev. n/a ft **Stream Bed Elev.** n/a ft
Groundwater Elev.: First Encounter Dry to -10.0' ft; Upon Completion n/a ft; After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
4.0" ASPHALT, 9.0" CONCRETE	572.64				
CLAY LOAM-brown & gray-very stiff to hard (Fill)			3		
			5	3.00	15
			5	P	
			3		
			5	2.20	19
		-5	4	B	
			4		
			8	3.50	17
			8	B	
			3		
			7	3.10	18
		-10	7	B	
			5		
			5	3.00	18
			5	P	
			7		
			5	2.00	20
		-15	7	P	
			3		
			4	2.40	19
			4	B	
			5		
			6	2.90	15
		-20	7	B	

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-very stiff to hard (Fill) *(continued)*			7		
			7	2.40	14
			8	B	
			7		
			10	2.10	12
		-25	9	B	
			13		
			15		NR
			19		
			10		
			12	4.50	13
	541.73	-30	14	P	
SILTY CLAY LOAM-gray-hard (Apparent Fill)			5		
			8		11
		-35	11		
			11		
End Of Boring @ -40.0'. Boring backfilled with cuttings.			12	4.50	16
	533.73	-40	16	P	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 20012 — Page 1 of 1 — Date 5/12/21

ROUTE FAI 80 **DESCRIPTION** I-80 Phase II **LOGGED BY** ZP
SECTION **LOCATION** SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**
COUNTY Will **DRILLING METHOD** Hollow Stem Auger/Rotary **HAMMER TYPE** CME Automatic

STRUCT. NO. ____ **Station** ____
BORING NO. RW-34 **Station** 717+30 **Offset** 57.50ft Left **Ground Surface Elev.** 572.32 ft
Surface Water Elev. n/a ft **Stream Bed Elev.** n/a ft
Groundwater Elev.: First Encounter Dry to -10.0' ft; Upon Completion n/a ft; After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
13.0" ASPHALT	571.24				
CLAY LOAM-brown & gray-stiff to hard (Fill)			15		
			5	3.00	15
			3	P	
			2		
			3	3.00	20
		-5	3	P	
			3		
			5	1.80	21
			6	B	
			3		
			8	4.00	15
		-10	9	B	
			3		
			5	1.20	21
			7	B	
			4		
			7	2.70	19
		-15	9	B	
			6		
			8	2.90	16
			8	B	
			3		
			5	1.80	17
		-20	6	B	

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-stiff to hard (Fill) *(continued)*			5		
			4	3.50	17
			6	P	
			10		
			50/8"	3.50	13
		-25		B	
			7		
			12	2.50	11
			11	B	
			7		
			10	2.50	15
		-30	12	B	
			9		
			10	2.00	16
		-35	11	P	
			7		
End Of Boring @ -40.0'. Boring backfilled with cuttings.			8	4.50	15
	532.32	-40	12	P	

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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Note:
1. For soil boring locations, see Sheet W1-01.

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SOIL BORING LOG

GSI Job No. 20012 — Page 1 of 2 — Date 5/14/21

ROUTE FAI 80 — DESCRIPTION I-80 Phase II — LOGGED BY MM

SECTION — LOCATION SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**

COUNTY Will — DRILLING METHOD Hollow Stem Auger/Rotary — HAMMER TYPE CME Automatic

STRUCT. NO.	
Station	
BORING NO.	RW-35
Station	718+06
Offset	56.20ft Left
Ground Surface Elev.	570.70 ft
Surface Water Elev.	n/a ft
Stream Bed Elev.	n/a ft
Groundwater Elev.: First Encounter	Dry to -10.0' ft
Upon Completion	n/a ft
After ___ Hrs.	ft

Description	Elev.	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
5.0" ASPHALT, 6.0" CONCRETE	569.78				
CLAY LOAM-brown & gray-stiff to hard (Fill)			4, 3, 3	3.50 P	17
		-5	2, 1, 3	1.75 P	20
			6, 8, 5	3.50 P	16
		-10	4, 7, 10	4.00 P	17
			6, 8, 9	2.70 B	18
		-15	4, 5, 7	1.20 B	23
			6, 5, 7	2.70 B	18
		-20	6, 6, 7	1.30 B	16
CLAY LOAM-brown & gray-stiff to hard (Fill) *(continued)*			8, 8, 7	1.70 B	15
		-25	4, 5, 6	1.30 B	16
SILTY CLAY LOAM-gray-hard (Fill)	545.20		17, 19, 19		NR
		-30	11, 13, 15	3.50 P	13
CLAY LOAM-brown & gray-very stiff to hard (Fill)	538.70	-35	11, 13, 18	4.50 P	15
		-40	13, 13, 14	2.50 P	19

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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GSI Job No. 20012 — Page 2 of 2 — Date 5/14/21

ROUTE FAI 80 — DESCRIPTION I-80 Phase II — LOGGED BY MM

SECTION — LOCATION SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**

COUNTY Will — DRILLING METHOD Hollow Stem Auger/Rotary — HAMMER TYPE CME Automatic

STRUCT. NO.	
Station	
BORING NO.	RW-35
Station	718+06
Offset	56.20ft Left
Ground Surface Elev.	570.70 ft
Surface Water Elev.	n/a ft
Stream Bed Elev.	n/a ft
Groundwater Elev.: First Encounter	Dry to -10.0' ft
Upon Completion	n/a ft
After ___ Hrs.	ft

Description	Elev.	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
CLAY LOAM-brown & gray-very stiff to hard (Fill) *(continued)*					
Drillers Observation: Possible Bedrock	526.20	-45			
End Of Boring @ -46.5'. Boring backfilled with cuttings.	524.20				
		-50			
		-55			
		-60			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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GSI Job No. 20012 — Page 1 of 2 — Date 5/14/21

ROUTE FAI 80 — DESCRIPTION I-80 Phase II — LOGGED BY MM

SECTION — LOCATION SW 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**

COUNTY Will — DRILLING METHOD Hollow Stem Auger/Rotary — HAMMER TYPE CME Automatic

STRUCT. NO.	
Station	
BORING NO.	RW-36
Station	718+78
Offset	57.20ft Left
Ground Surface Elev.	568.79 ft
Surface Water Elev.	n/a ft
Stream Bed Elev.	n/a ft
Groundwater Elev.: First Encounter	Dry to -10.0' ft
Upon Completion	n/a ft
After ___ Hrs.	ft

Description	Elev.	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
5.0" ASPHALT, 6.0" CONCRETE	567.87				
CLAY LOAM-brown & gray-very stiff to hard (Fill)			5, 3, 5	2.50 P	17
		-5	1, 6, 5	2.75 P	19
			6, 9, 6	4.50 P	14
		-10	4, 6, 10	2.10 B	15
			5, 6, 6	3.75 P	15
		-15	5, 7, 7	2.50 B	18
			5, 5, 7	3.00 P	15
		-20	3, 5, 7	3.50 P	17
CLAY LOAM-brown & gray-very stiff to hard (Fill) *(continued)*			4, 4, 4	3.00 P	17
		-25	5, 7, 8	4.50 P	15
			8, 9, 50/2"	2.00 P	14
		-30	7, 7, 12	2.50 P	18
		-35	5, 7, 9	3.00 P	18
		-40	5, 8, 6	2.50 P	17

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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Note:
1. For soil boring locations, see Sheet W1-01.

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GSI Job No. 20012 — Page 2 of 2 — Date 5/14/21

ROUTE FAI 80 — DESCRIPTION I-80 Phase II — LOGGED BY MM

SECTION — LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM

COUNTY Will — DRILLING METHOD Hollow Stem Auger/Rotary — HAMMER TYPE CME Automatic

STRUCT. NO. — Station

BORING NO. RW-36
Station 718+78
Offset 57.20ft Left
Ground Surface Elev. 568.79 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to -10.0' ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-brown & gray-very stiff to hard (Fill) *(continued)*					
Auger Refusal @ -43.0'. Possible Bedrock. End Of Boring. Boring backfilled with cuttings.	525.79				
		-45			
		-50			
		-55			
		-60			

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The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
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Naperville, Illinois 60565
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SOIL BORING LOG

GSI Job No. 20012 — Page 1 of 1 — Date 4/21/21

ROUTE FAI 80 — DESCRIPTION I-80 Phase II — LOGGED BY MM

SECTION — LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM

COUNTY Will — DRILLING METHOD Hollow Stem Auger/Rotary — HAMMER TYPE CME Automatic

STRUCT. NO. — Station

BORING NO. RW-37
Station 719+58
Offset 57.60ft Left
Ground Surface Elev. 566.63 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to -10.0' ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
5.0" ASPHALT, 7.0" CONCRETE	565.63				
CLAY LOAM-brown & gray-stiff to very stiff (Fill)			4		
			4	3.00	15
			4	P	
			1		
			2	1.30	18
		-5	5	B	
			6		
			10	4.40	16
			11	B	
			5		
			6	2.20	18
		-10	7	B	
			4		
			6	2.00	18
			7	P	
			5		
			7	3.00	15
		-15	7	P	
			5		
			3	3.00	14
			8	P	
			4		
			7	1.20	16
		-20	6	B	
CLAY LOAM-brown & gray-stiff to very stiff (Fill) *(continued)*			4		
			3	2.50	16
			6	P	
			4		
			4	1.50	18
		-25	4	P	
			3		
			3	1.00	19
			3	P	
			5		
			5	2.00	17
		-30	14	P	
			5		
			7	2.20	20
		-35	5	B	
	529.63				
SANDY CLAY LOAM with Gravel-dark brown, gray & black-medium dense (Fill)			12		
End Of Boring @ -40.0'. Boring backfilled with cuttings.			6		16
	526.63	-40	14		

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/1/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 20012 — Page 1 of 1 — Date 5/14/21

ROUTE FAI 80 — DESCRIPTION I-80 Phase II — LOGGED BY MM

SECTION — LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM

COUNTY Will — DRILLING METHOD Hollow Stem Auger/Rotary — HAMMER TYPE CME Automatic

STRUCT. NO. — Station

BORING NO. RW-38
Station 720+26
Offset 57.80ft Left
Ground Surface Elev. 564.56 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry to -10.0' ft
Upon Completion n/a ft
After ___ Hrs. ___ ft

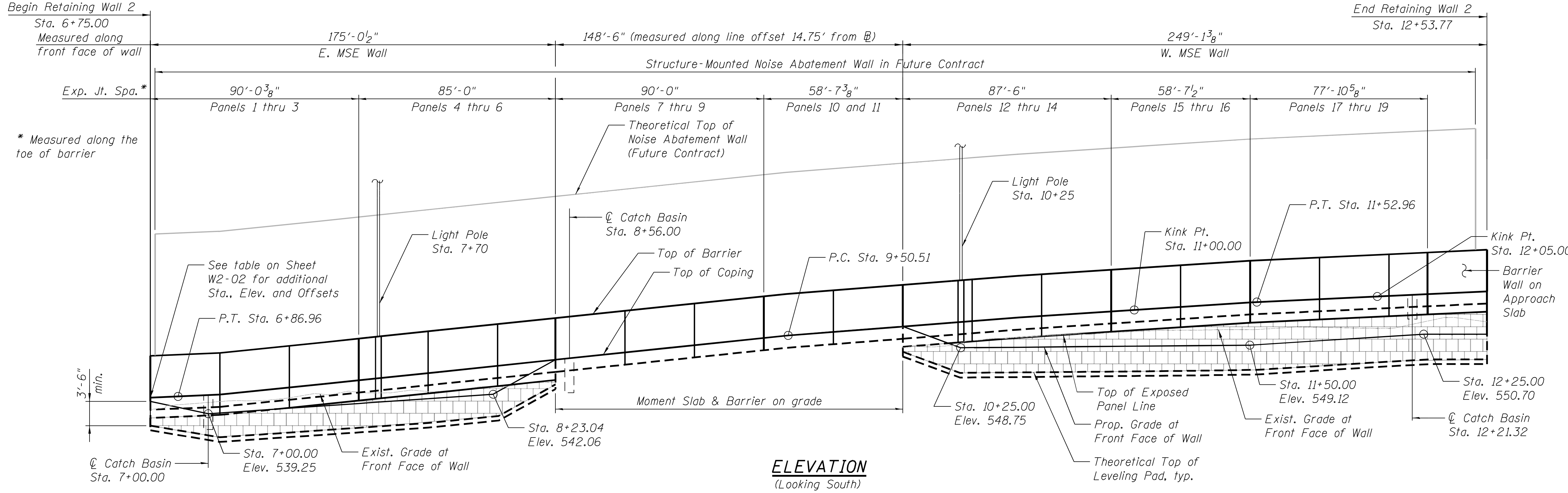
Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT	563.90				
CLAY LOAM & STONE-black-loose (Fill)			1		
			3	1.50	17
			3	P	
	561.56				
SILTY CLAY LOAM-brown & gray-stiff to very stiff (Fill)			2		
			3	2.50	15
		-5	7	P	
	559.06				
SILTY LOAM-gray-medium dense (Fill)			7		
			7	2.50	16
			9	P	
	556.56				
CLAY LOAM-brown & gray-very stiff to hard (Fill)			5		
			4	3.00	15
		-10	5	P	
			7		
			6	2.70	15
			8	B	
			4		
			7	3.00	15
		-15	8	P	
			6		
			6	4.00	16
			5	P	
			5		
			9	4.00	15
		-20	14	P	
CLAY LOAM-brown & gray-very stiff to hard (Fill) *(continued)*			6		
			9	3.25	15
			9	P	
			6		
			7	2.75	13
		-25	14	P	
			7		
			8	2.50	17
			17	P	
	536.56				
SILTY CLAY LOAM-brown & gray-very stiff to hard (Fill)			6		
			9	3.75	11
		-30	12	P	
			8		
			8	4.50	15
		-35	8	P	
	527.06				
Drillers Observation: Possible Bedrock					
End Of Boring @ -39.5'. Boring backfilled with cuttings.	525.06				
		-40			

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/1/21

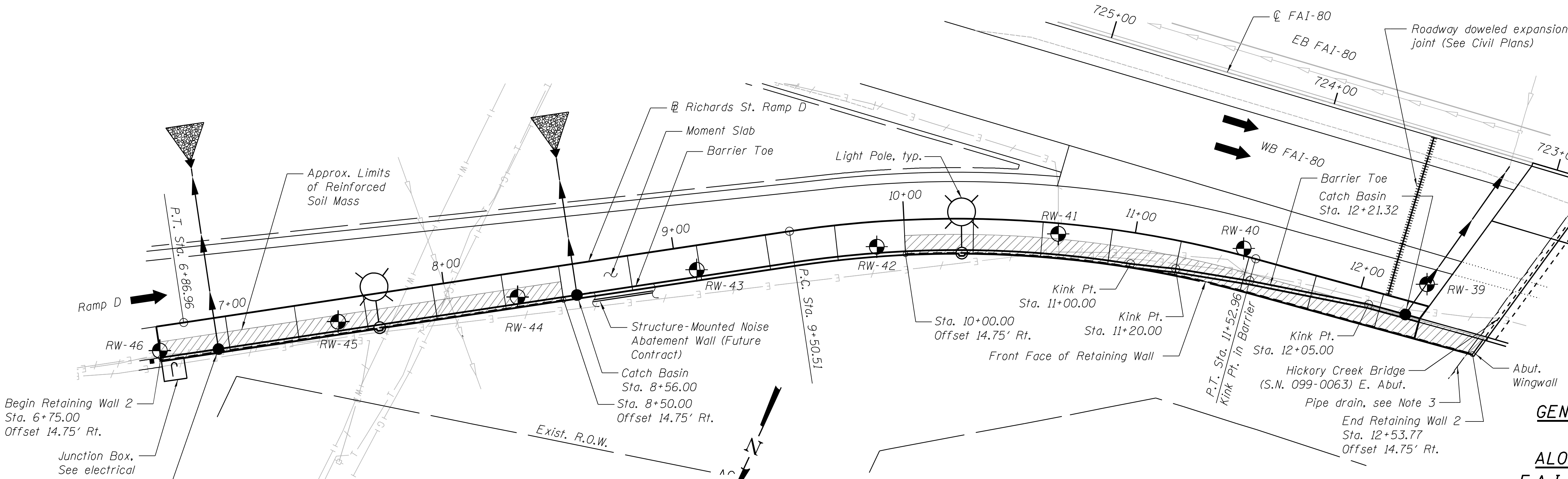
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Note:
1. For soil boring locations, see Sheet W1-01.

Benchmark: Control Point #1029 - Iron rod with yellow cap at Sta. 722+92.37, 4.19' Rt. ℄ I-80, Elev. 556.54
Traffic to be maintained using ramp closure and detour
Existing Structure: None, Salvage: None



ELEVATION
(Looking South)



PLAN

Notes:
1. Stations and offsets are measured relative to ℄ Richards St. Ramp D at the front face of retaining wall.
2. For Section Thru MSE Wall, see Sheet W2-02.
3. See Bridge Plans for details and payment. For details of pipe through wall, see Detail "A" on Sheet W2-02.

DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES
FIELD UNITS
f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)

PRECAST UNITS
f'c = 4,500 psi (Precast Panels)

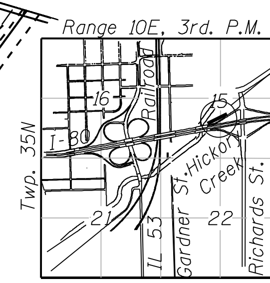
DESIGN LOADS
NOISE ABATEMENT WALL LOADING
Dead Load = 65 psf
Wind Load = 35 psf

RETAINING WALL
The MSE Wall supplier shall consider internal and external stability design accounting for the moment slab's bearing pressure surcharge of 1.0 ksf and horizontal sliding force of 2.4 kips/ft of wall.

LEGEND
- Prop. Storm Sewer
- Prop. Catch Basin
- Exist. Storm Sewer
- Exist. Underground Water
- Exist. Underground Gasline
- Exist. Underground Tele.
- Soil Boring

STATE OF ILLINOIS
VINOD C. PATEL
081-004528
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Signed:
Date: 3/10/2022
Exp: 11/30/2022
Sheets: 1 thru 14



LOCATION SKETCH

GENERAL PLAN & ELEVATION
RETAINING WALL 2
ALONG RICHARDS ST. RAMP D
F.A.I. RTE. 80 - SEC. 2013-009B
WILL COUNTY
STATION 6+75.00 TO STA. 12+53.77
STRUCTURE NO. 099-W036

exp.

USER NAME =	DESIGNED - BAR	REVISED -
	CHECKED - VCP	REVISED -
PLOT SCALE =	DRAWN - MTR	REVISED -
PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET W2-01 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	375

CONTRACT NO. 60W35
ILLINOIS FED. AID PROJECT

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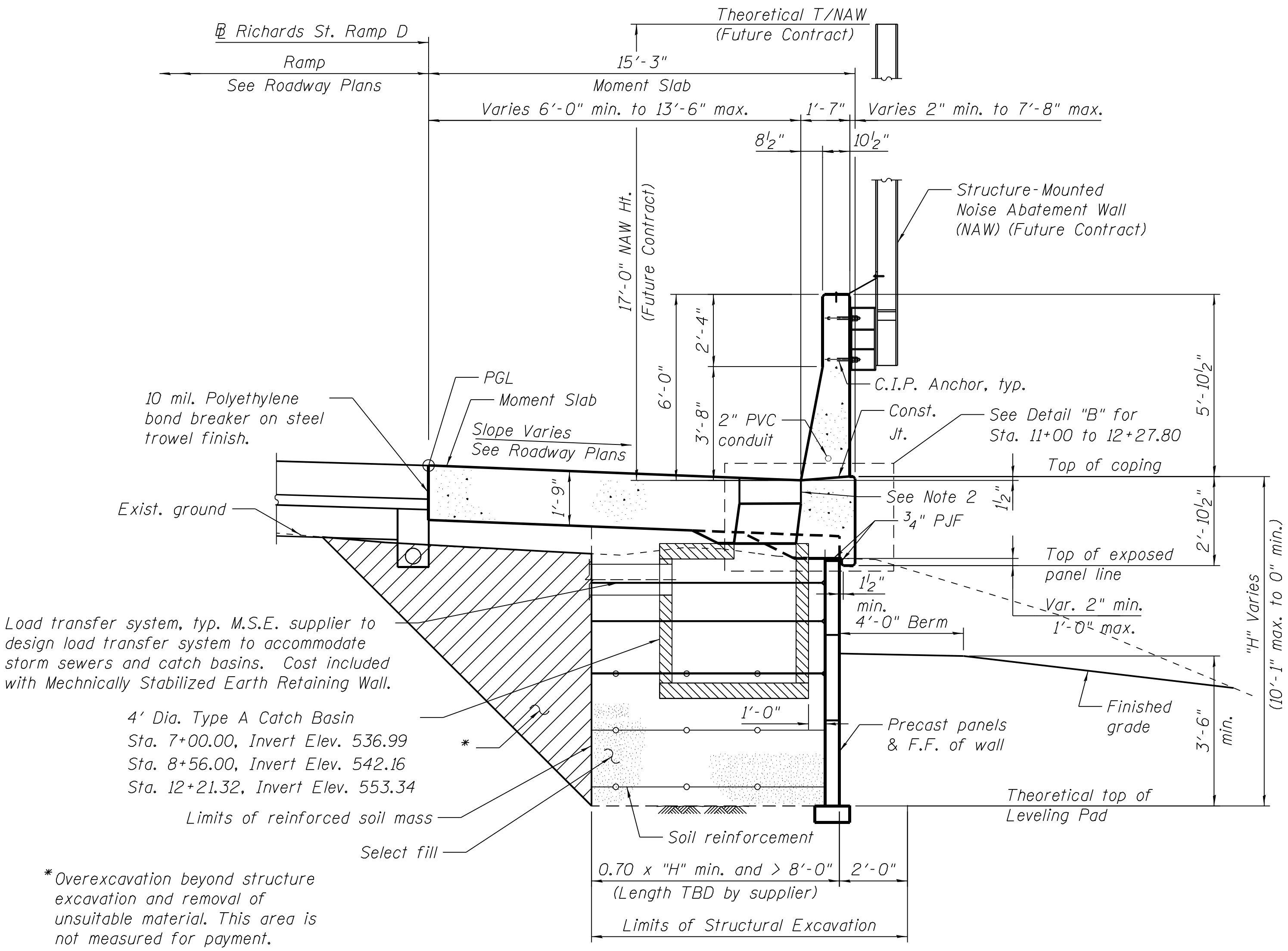
GENERAL NOTES

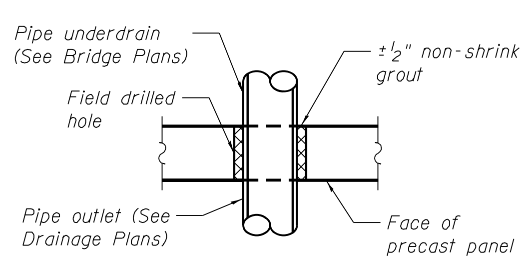
1. Reinforcement bars designated (E) shall be epoxy coated.
2. Cast frame into moment slab and form opening to structure.
3. Slipforming of the barrier is not allowed.



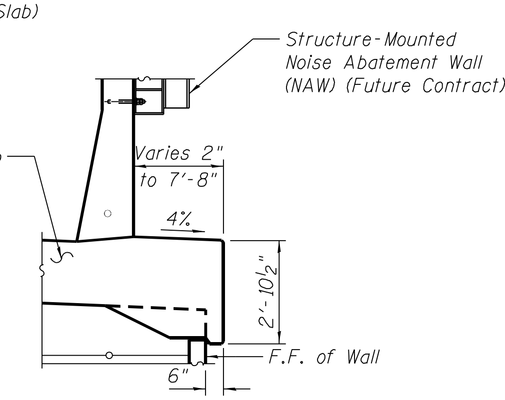
*Overexcavation beyond structure excavation and removal of unsuitable material. This area is not measured for payment. Backfill overexcavation with same material used for select fill used in MSE wall.

SECTION THRU MSE WALL

Sta. 6+75.00 to 8+50.00 and Sta. 10+00 to 12+53.77 (MSE Wall)
Sta. 6+75.00 to 12+27.80 (Moment Slab)



DETAIL "A"



DETAIL "B"

INDEX OF SHEETS

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Structure Excavation	Cu Yd	1,139
Concrete Superstructure	Cu Yd	702.6
Protective Coat	Sq Yd	1,206
Reinforcement Bars, Epoxy Coated	Pound	130,390
Mechanically Stabilized Earth Retaining Wall	Sq Ft	3,279

CONTROL POINTS

FAI-80 Sta.	T/Coping Elev.	Finished Grade Elev. at F.F. of Wall	Offset
6+75.00	541.16	541.04	14.75' Rt.
6+86.96	541.54	540.18	14.75' Rt.
7+05.00	542.12	539.36	14.75' Rt.
7+35.00	543.13	540.05	14.75' Rt.
7+65.00	544.18	540.73	14.75' Rt.
7+95.00	545.23	541.42	14.75' Rt.
8+25.00	546.27	542.42	14.75' Rt.
8+50.00	547.14	547.02	14.75' Rt.
8+80.00	548.19	548.07	14.75' Rt.
9+10.00	549.24	549.11	14.75' Rt.
9+40.00	550.28	550.16	14.75' Rt.
9+50.51	550.63	550.51	14.75' Rt.
9+70.00	551.17	551.05	14.75' Rt.
10+00.00	551.93	551.80	14.75' Rt.
10+30.00	552.72	548.76	14.75' Rt.
10+60.00	553.46	548.85	14.75' Rt.
10+90.00	554.11	548.94	14.75' Rt.
11+20.00	554.89	549.03	14.75' Rt.
11+50.00	555.60	549.12	14.75' Rt.
11+52.96	555.66	549.18	14.75' Rt.
11+80.00	556.03	549.75	14.75' Rt.
12+10.00	556.44	550.38	14.75' Rt.
12+17.81	556.56	550.55	14.75' Rt.
12+53.77	557.10	550.70	14.75' Rt.

CURVE DATA D-1

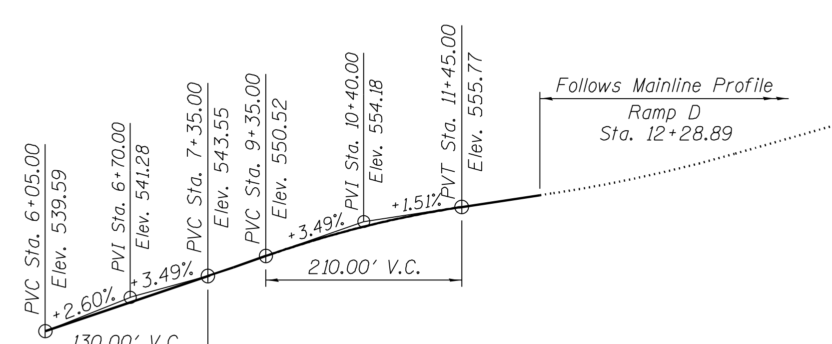
(Along ℞ Richards St. Ramp D)

PI Sta. = 5+99.95
Δ = 2°08'40" Lt.
D = 1°13'56"
R = 4,650.00"
T = 87.03'
L = 174.03'
E = 0.81'
e = 6.0%
P.C. Sta. = 5+12.92
P.T. Sta. = 6+86.96

CURVE DATA D-2

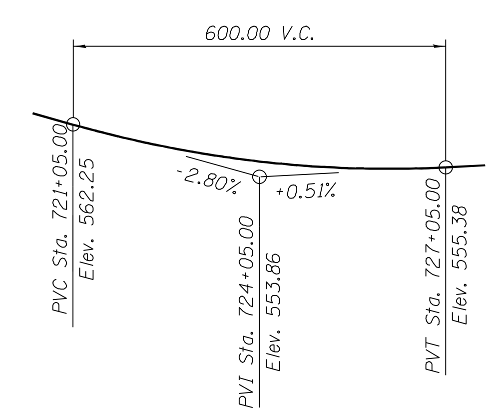
(Along ℞ Richards St. Ramp D)

PI Sta. = 10+53.23
Δ = 23°54'59" Rt.
D = 11°48'49"
R = 485.00'
T = 102.72'
L = 202.45'
E = 10.76'
e = 6.0%
P.C. Sta. = 9+50.51
P.T. Sta. = 11+52.96



PROFILE GRADE

(Along ℞ Richards St. Ramp D)



PROFILE GRADE

(Along ℄ FAI-80)

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	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W2-02 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	376
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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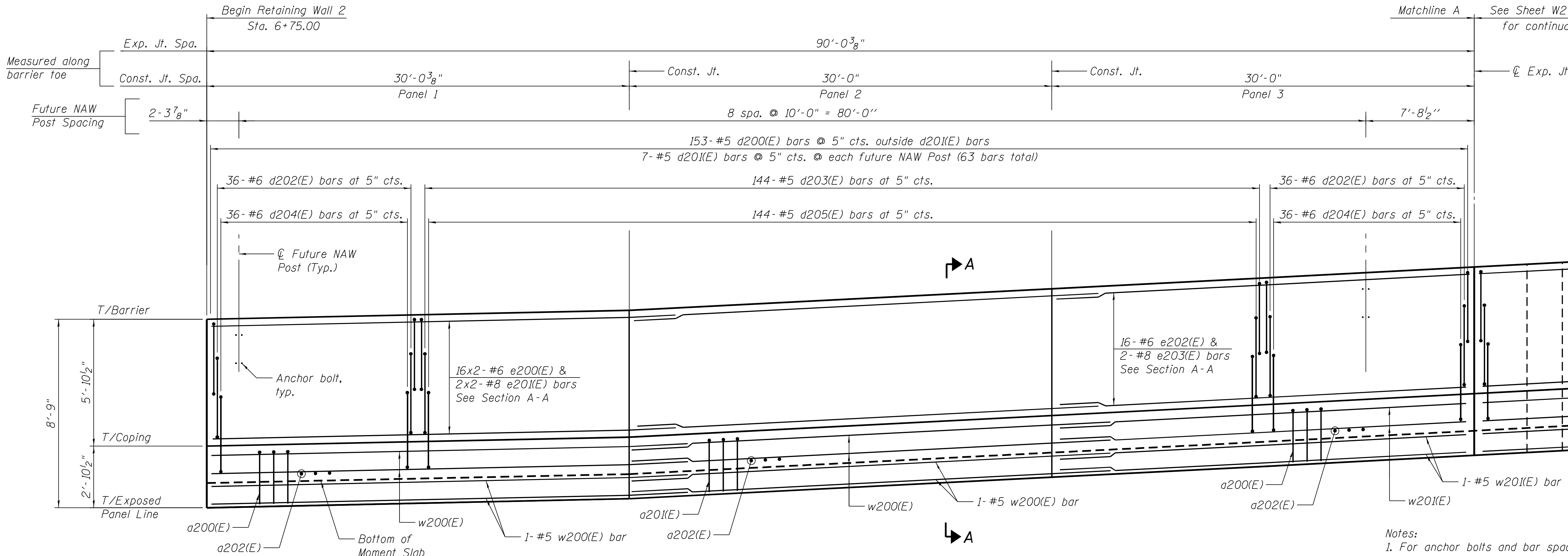
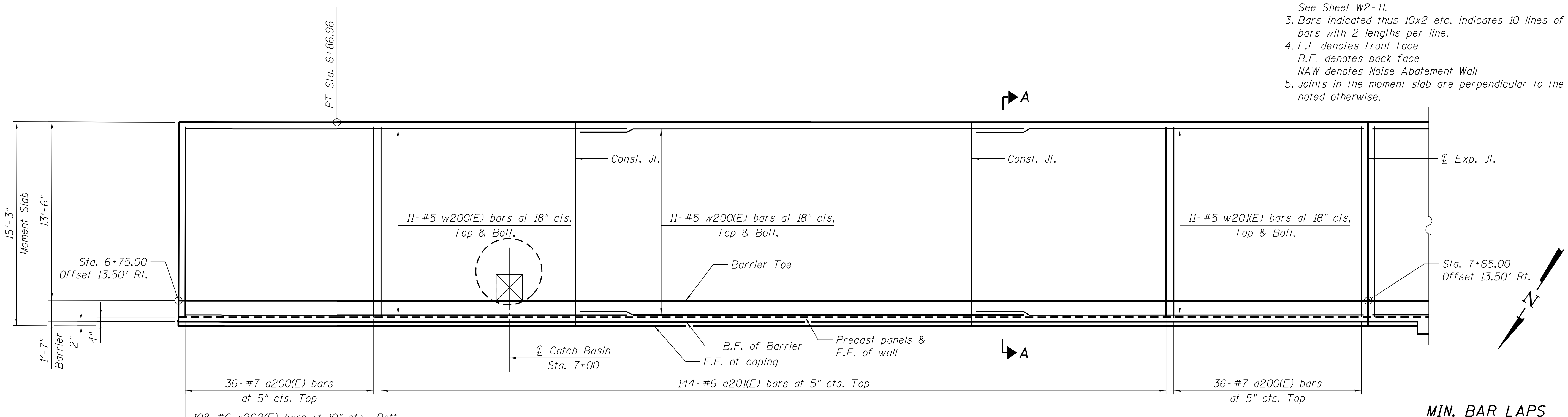


ELEVATION

Notes:

1. For anchor bolts and bar spacing at Future NAW Post, light pole bumpout and catch basin opening details, see Sheet W2-10.
2. For Sections A-A & B-B, details and bill of material, See Sheet W2-11.
3. Bars indicated thus 10x2 etc. indicates 10 lines of bars with 2 lengths per line.
4. F.F denotes front face
   B.F. denotes back face
   NAW denotes Noise Abatement Wall
5. Joints in the moment slab are perpendicular to the ℄ unless noted otherwise.



PLAN

MIN. BAR LAPS

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

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

DETAILED PLAN AND ELEVATION 1
STRUCTURE NO. 099-W036
SHEET W2-03 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	377
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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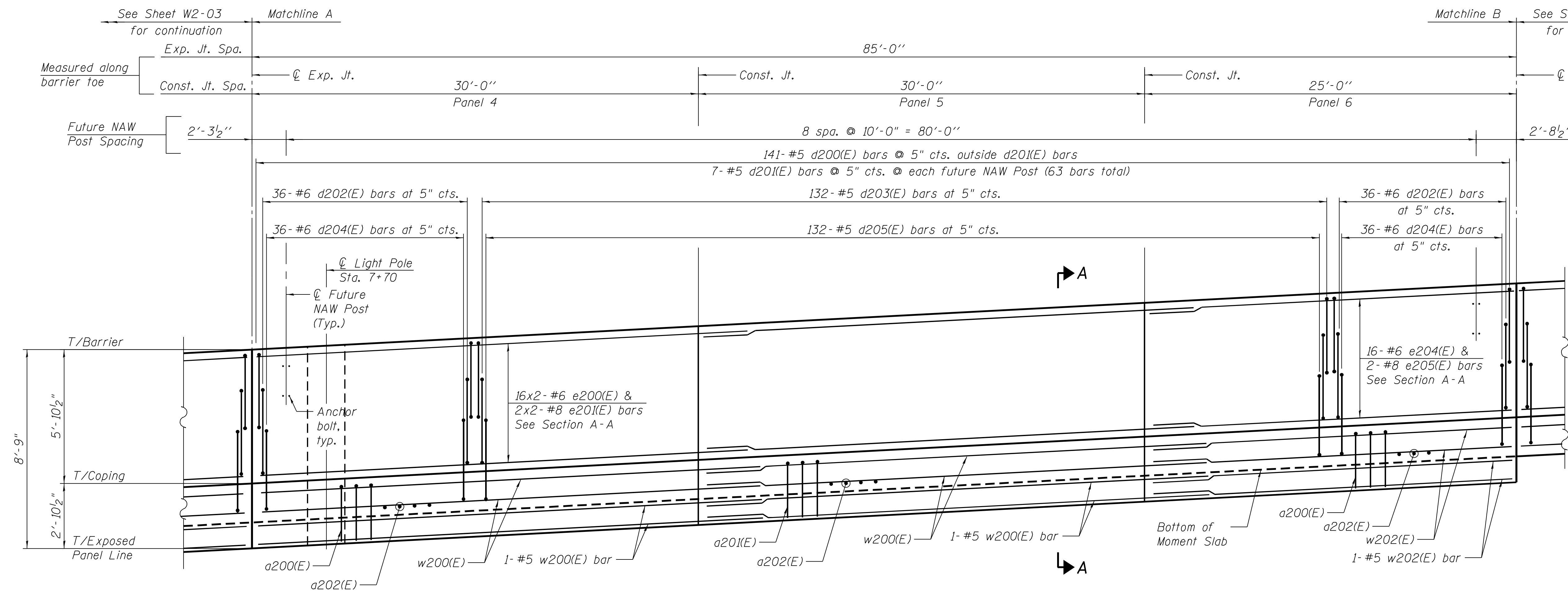
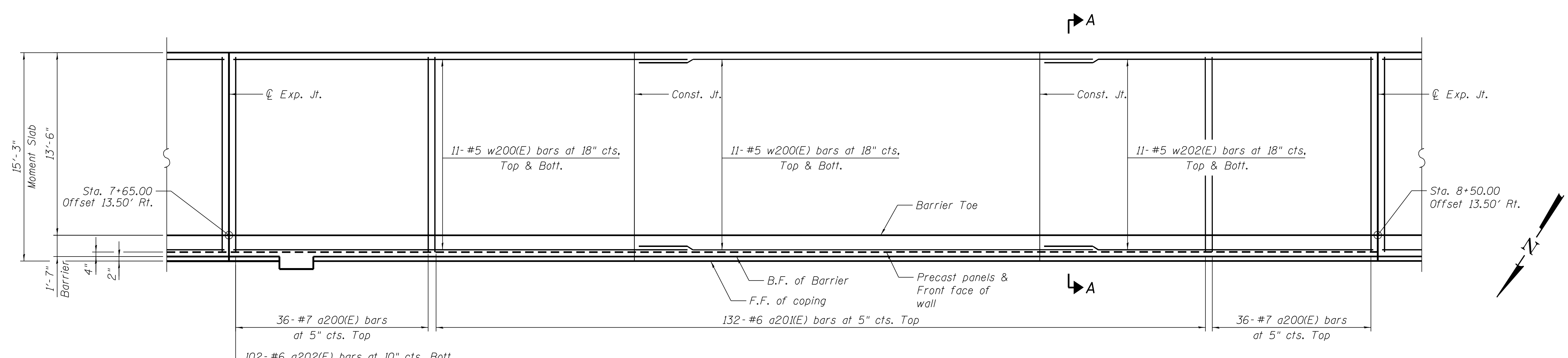


ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W2-03.

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	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W2-04 OF W2-14 SHEETS	ILLINOIS FED. AID PROJECT	

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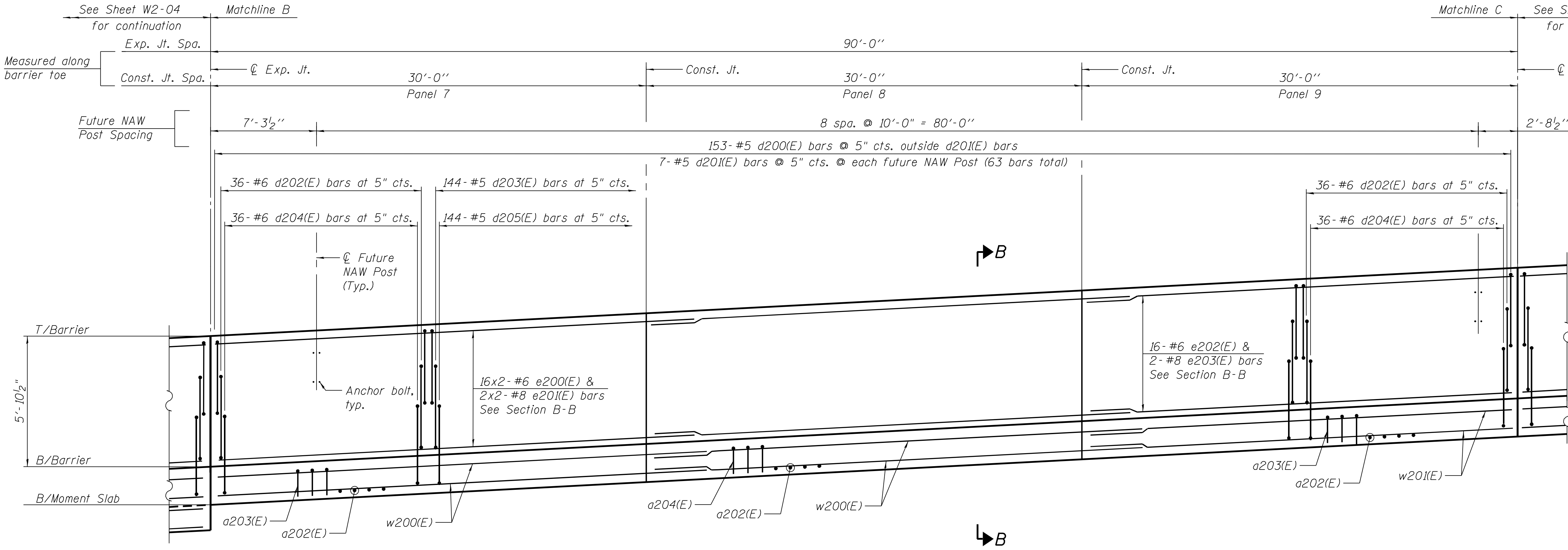
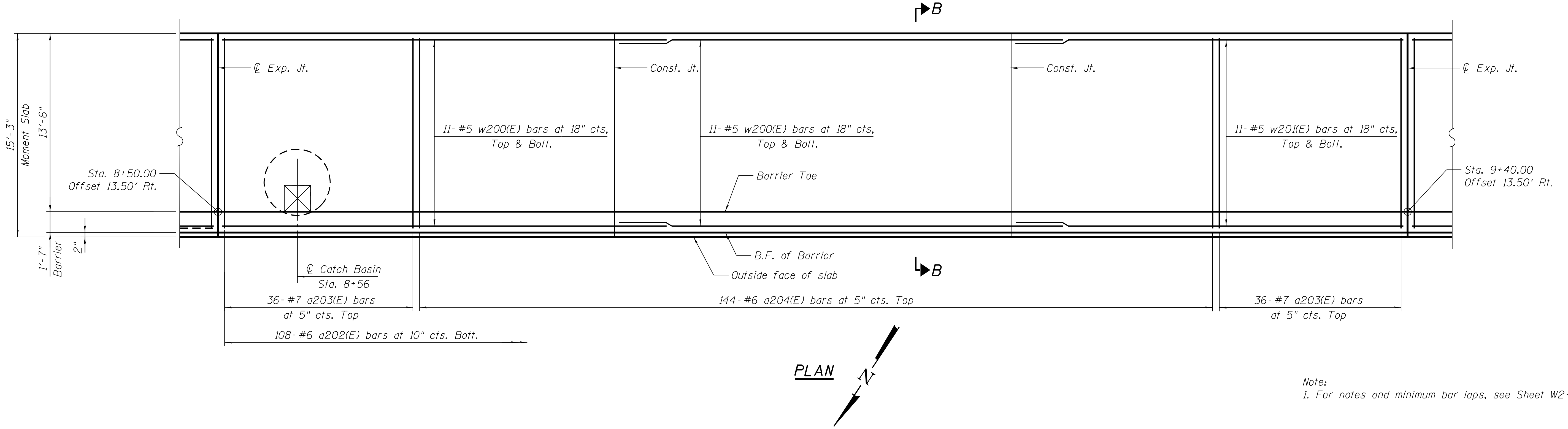


ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W2-03.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILED PLAN AND ELEVATION 3
STRUCTURE NO. 099-W036

SHEET W2-05 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		ILLINOIS FED. AID PROJECT		

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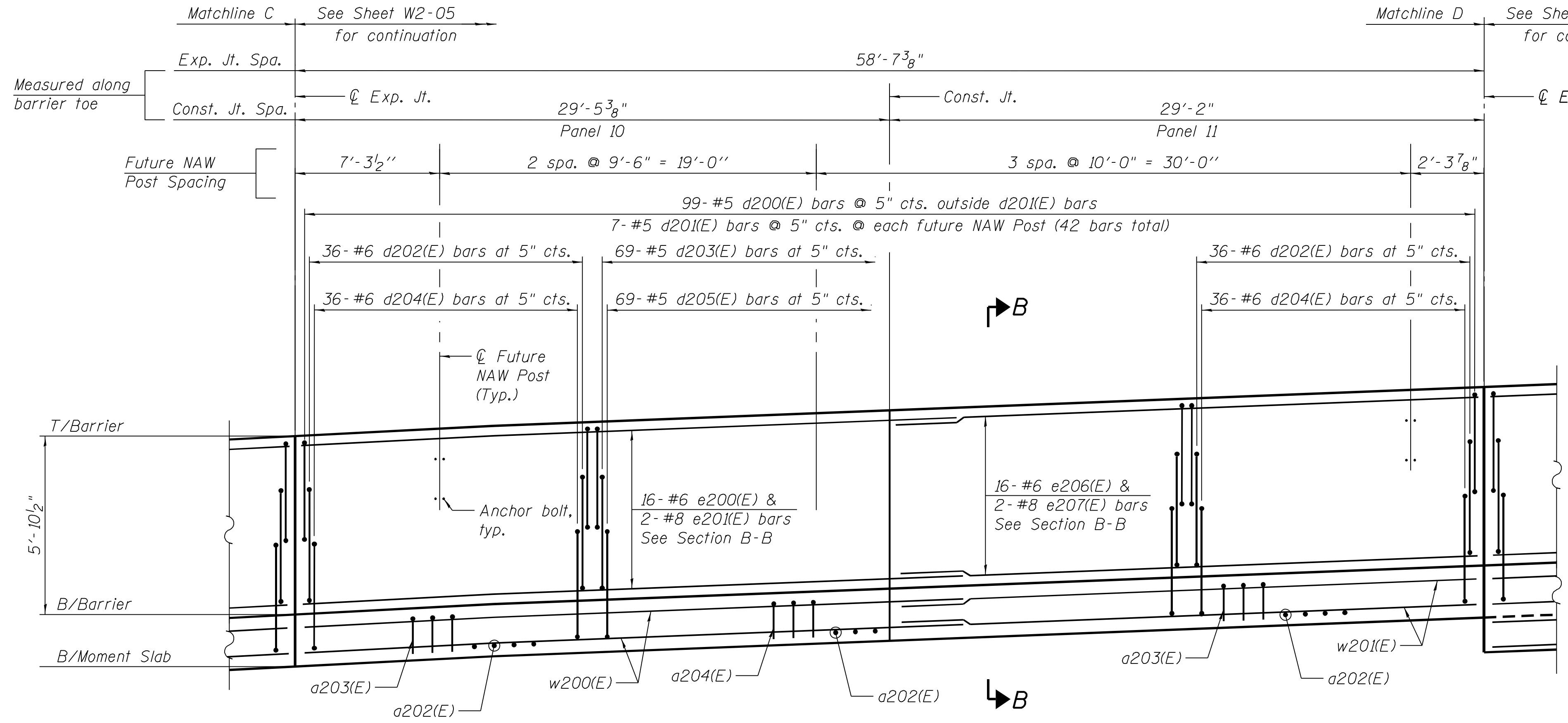
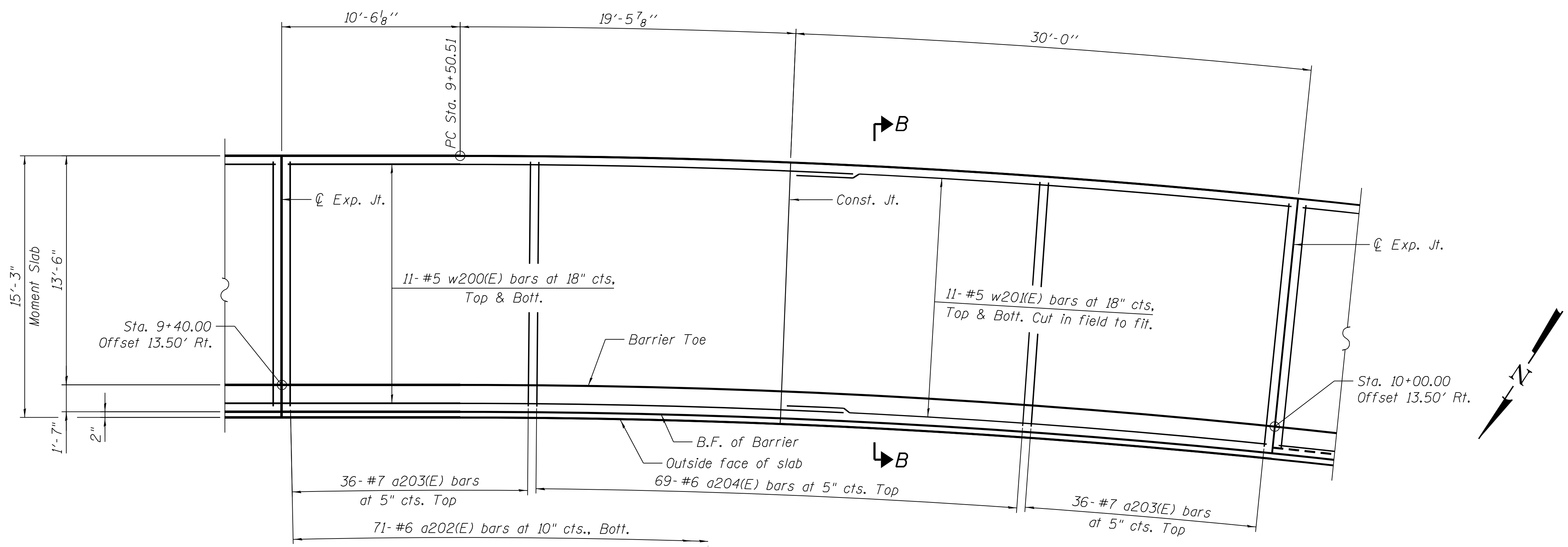


ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W2-03.

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PLOT DATE =	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILED PLAN AND ELEVATION 4
STRUCTURE NO. 099-W036

SHEET W2-06 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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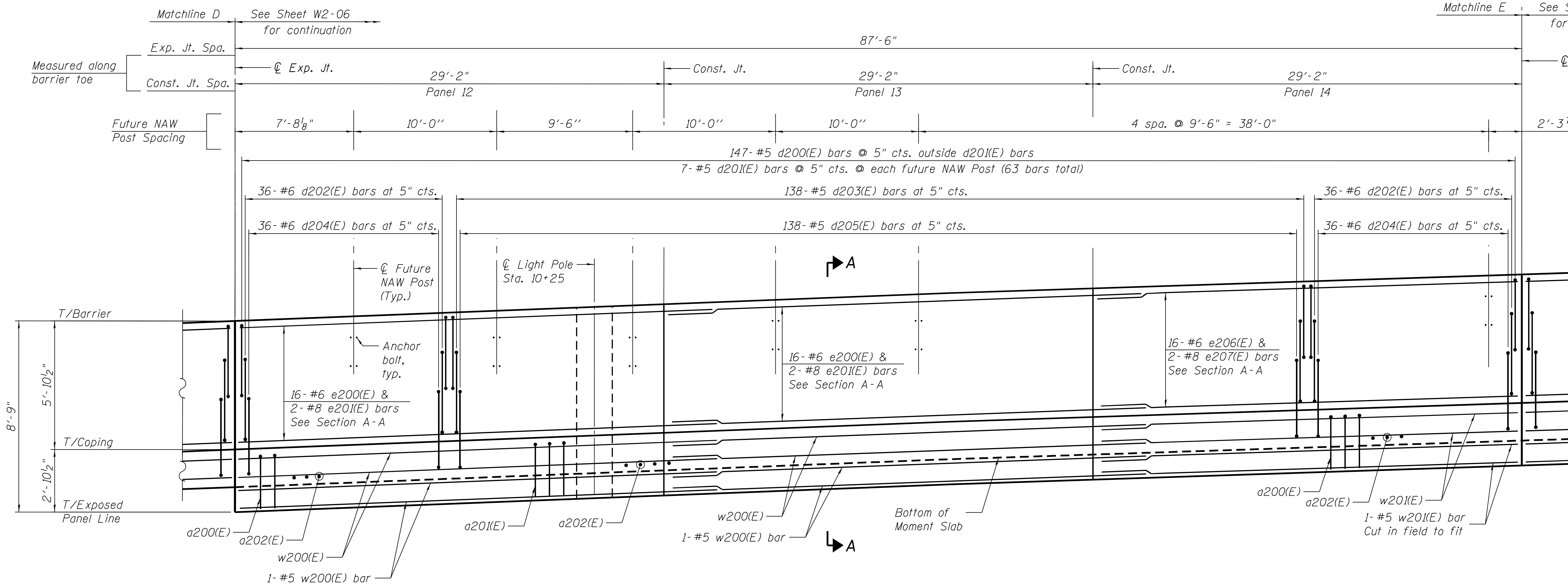
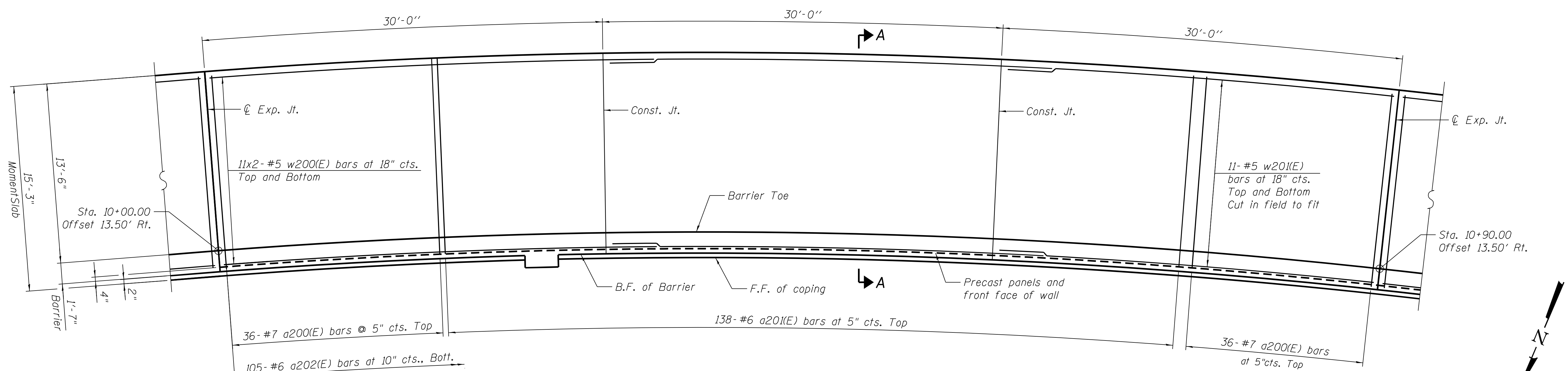


ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W2-03.

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		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W2-07 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	381
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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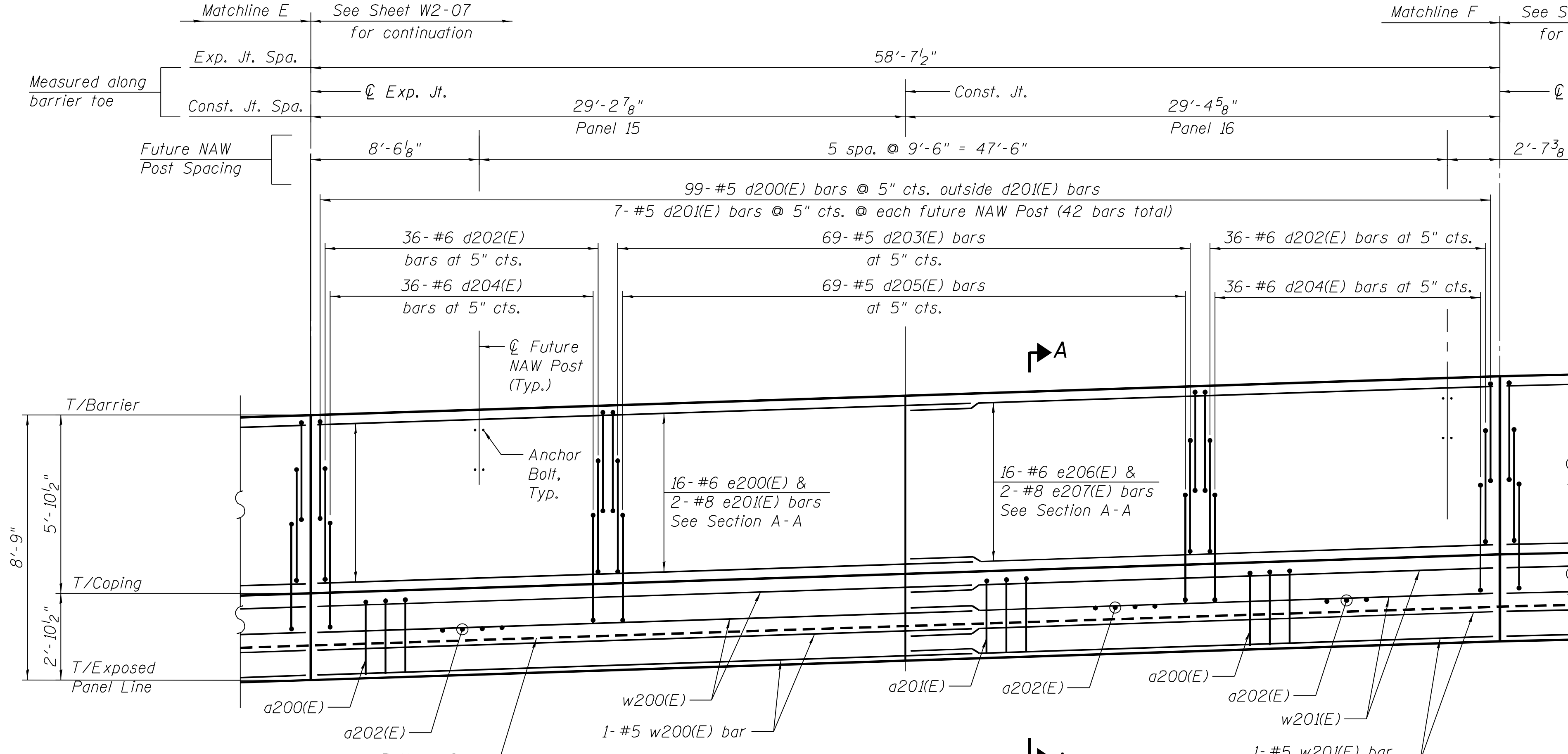
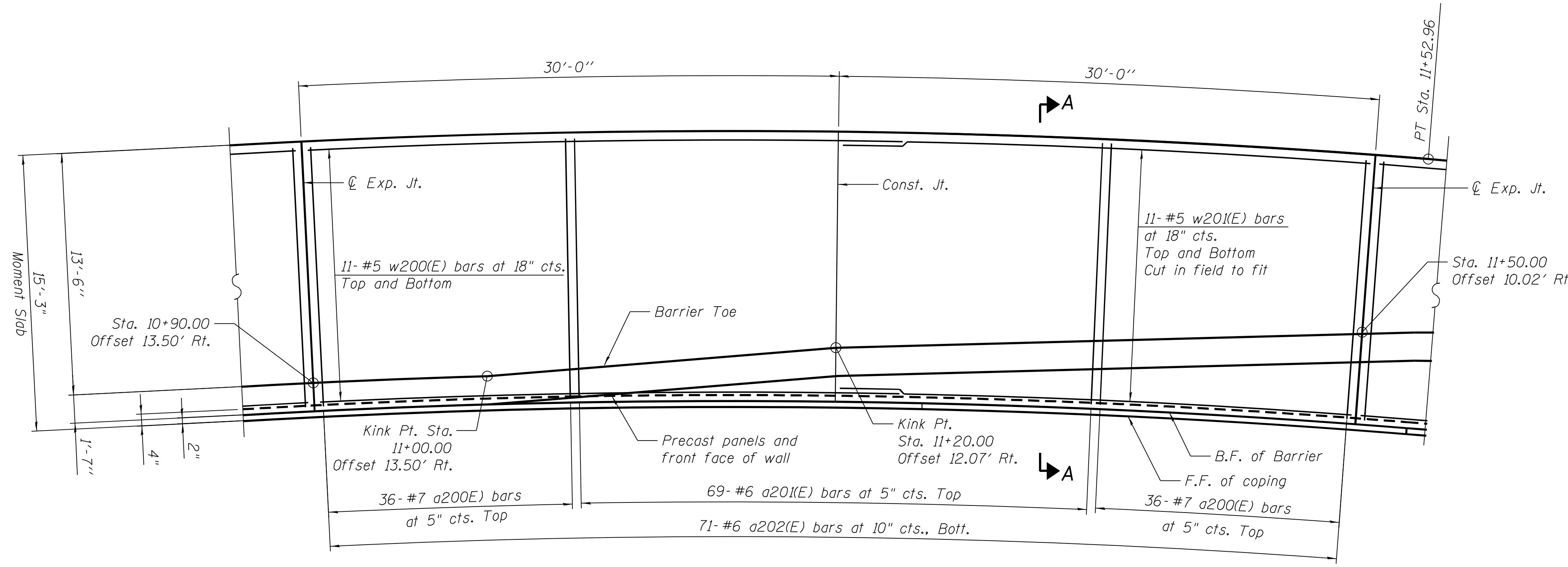


ELEVATION



PLAN

Note:
1. For notes and minimum bar laps, see Sheet W2-03.

MODEL: Default
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exp.

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

DETAILED PLAN AND ELEVATION 6
STRUCTURE NO. 099-W036
SHEET W2-08 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	382
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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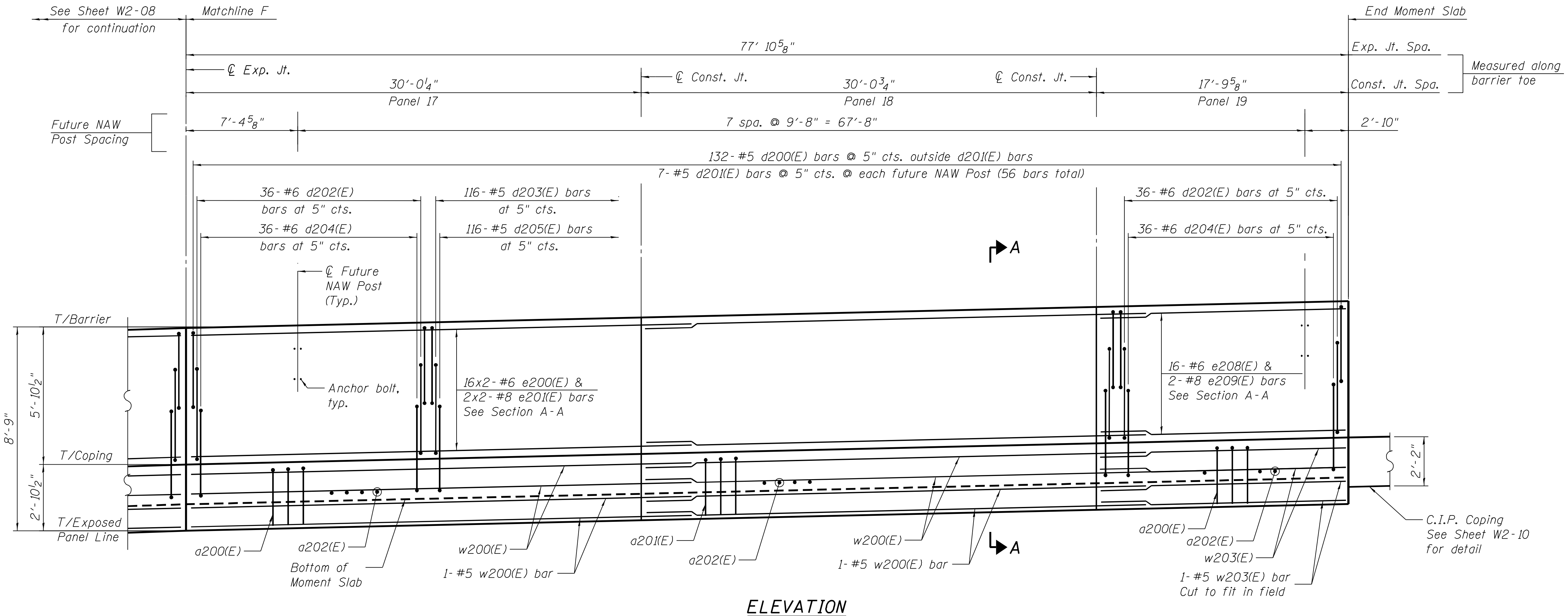
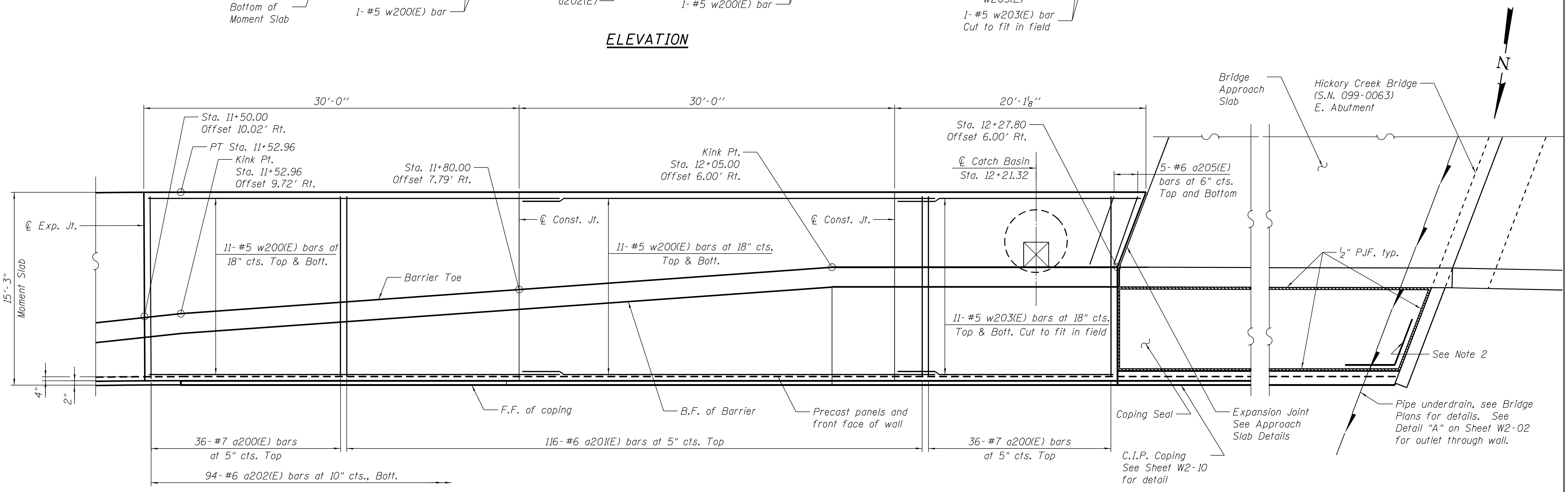
Notes:
1. For notes and minimum bar laps, see Sheet W2-03.
2. The Contractor shall install wire mesh and geotextile fabric closure between the back of abutment and retaining wall. The wire mesh shall be non-coated welded wire reinforcement according to Section 1006.10 and the geotextile fabric shall be according to the BDE special provision for Geotextile Retaining Walls. Cost shall be included with Mechanically Stabilized Earth Retaining Wall.



ELEVATION



PLAN

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exp.

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	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILED PLAN AND ELEVATION 7
STRUCTURE NO. 099-W036

SHEET W2-09 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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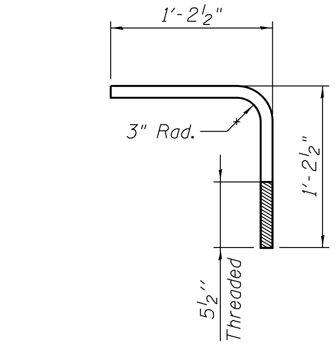
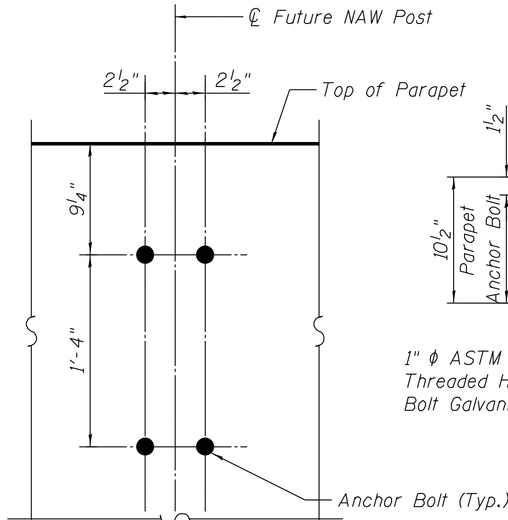
		CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		



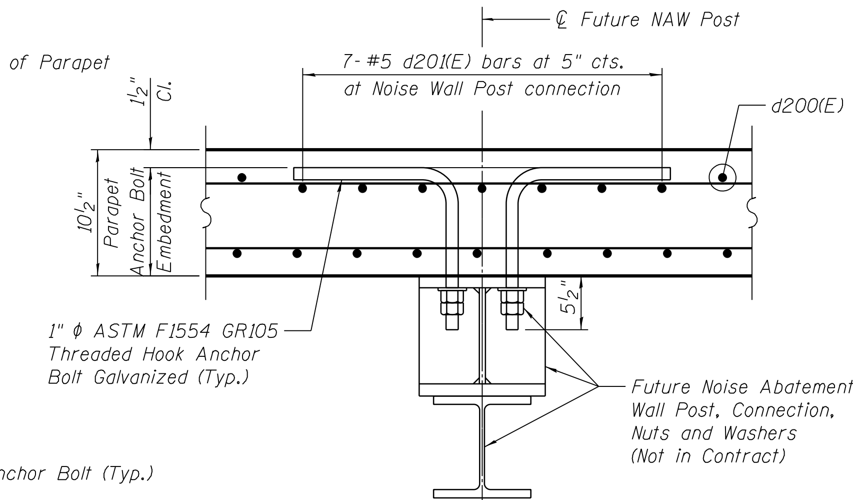
CUSTOM BENT ANCHOR BOLT

ASTM F1554 GR105
4 Thus for Each Post
Cost Included with Concrete Superstructure

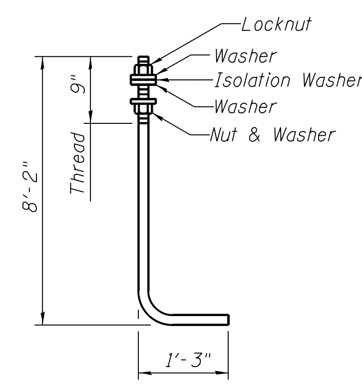


ANCHOR BOLT LAYOUT

(Back of Parapet Elevation)

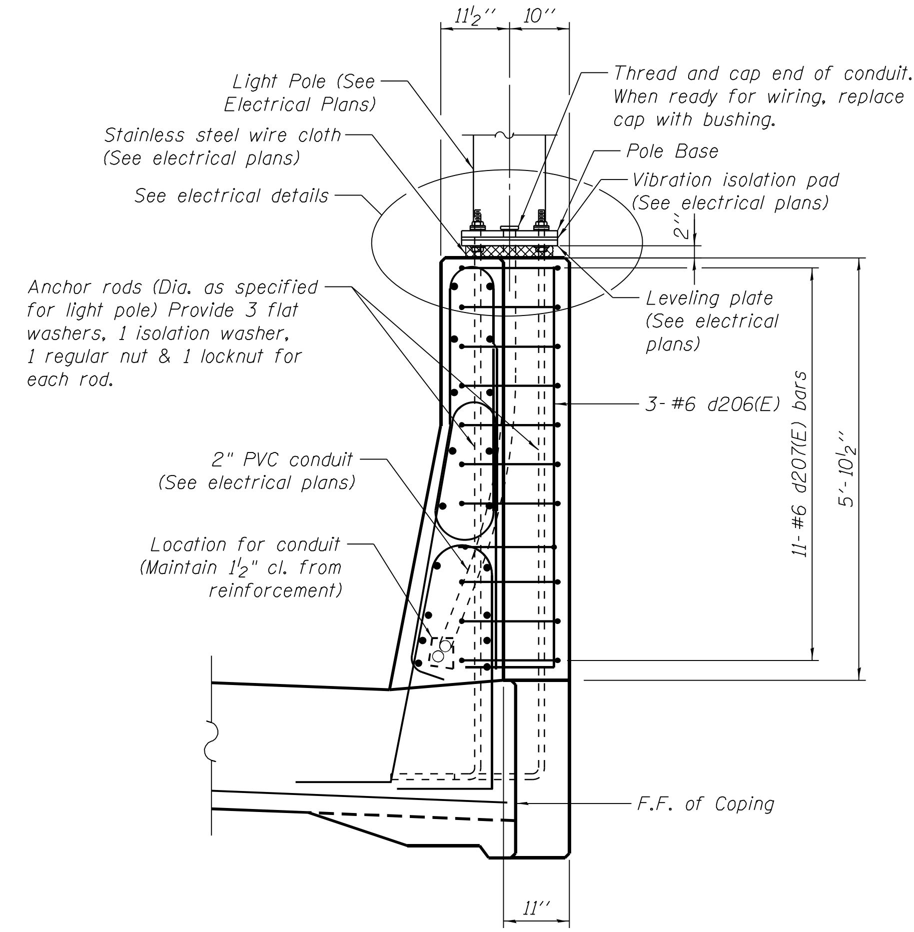


PLAN AT FUTURE NAW POST

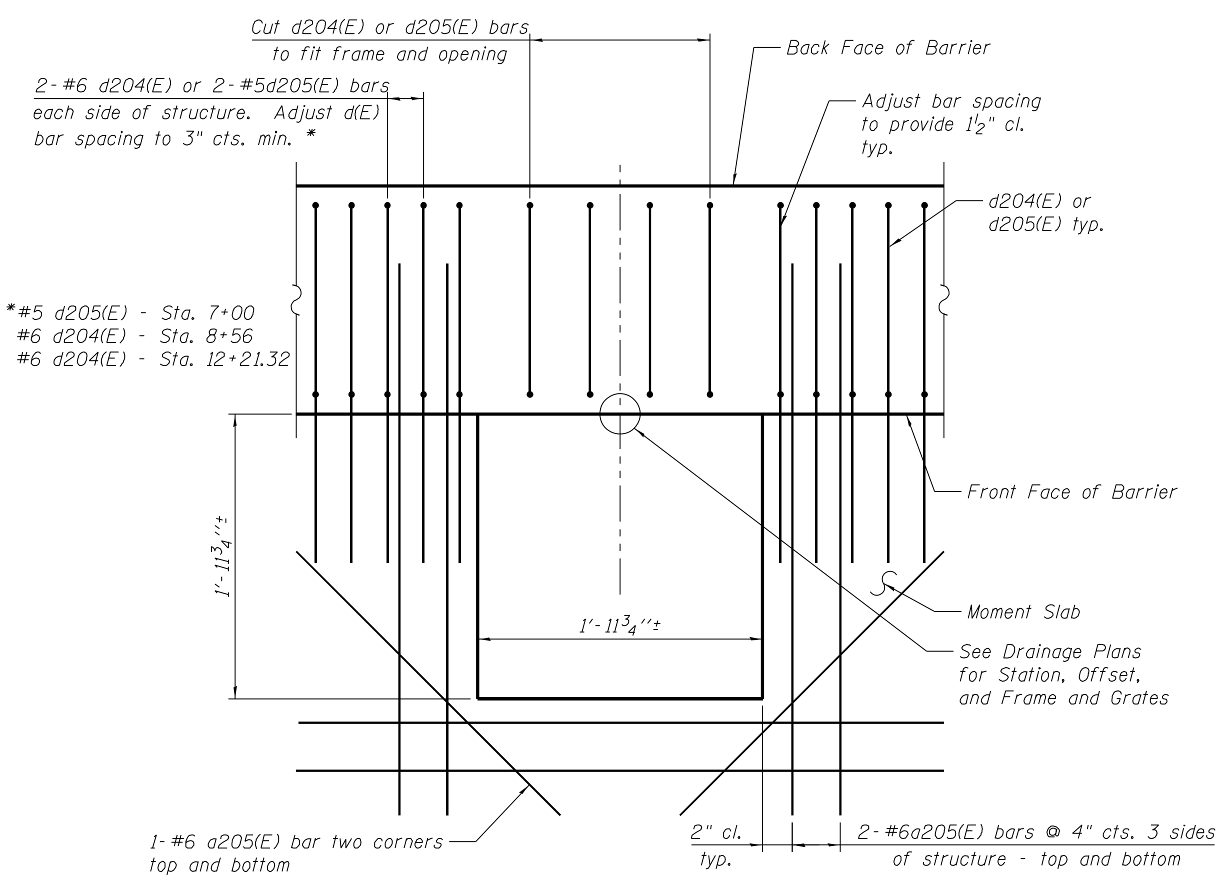


ANCHOR ROD

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

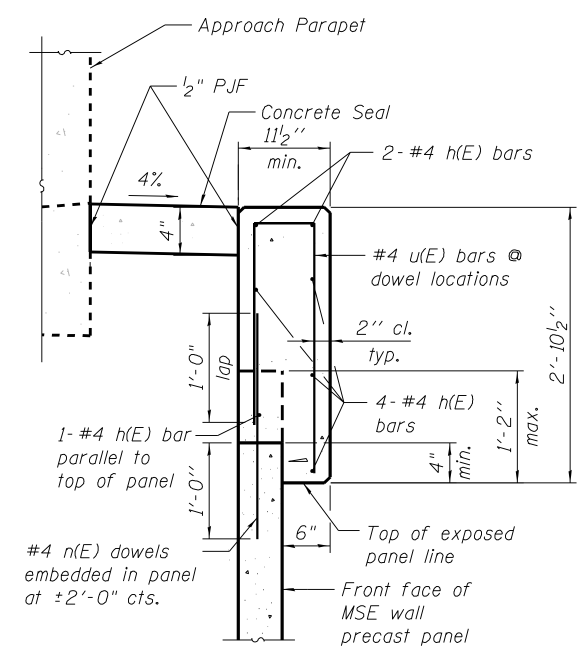


SECTION A-A



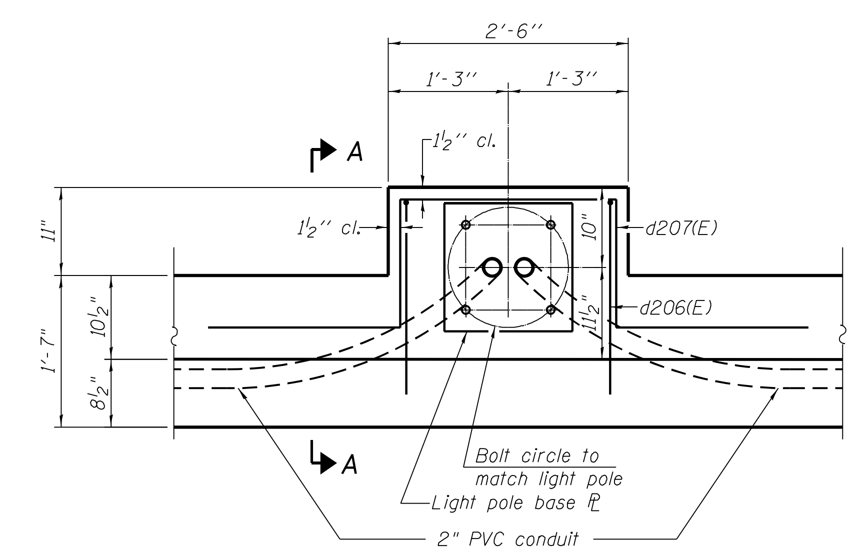
REINFORCEMENT AROUND DRAINAGE OPENING

(For clarity some reinforcement not shown)



COPING DETAIL

All elements of the Coping Detail shall
be in included in the cost of Mechanically
Stabilized Earth Retaining Wall.



LIGHT POLE PLAN

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

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL DETAILS 1 STRUCTURE NO. 099-W036
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W2-10 OF W2-14 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	384
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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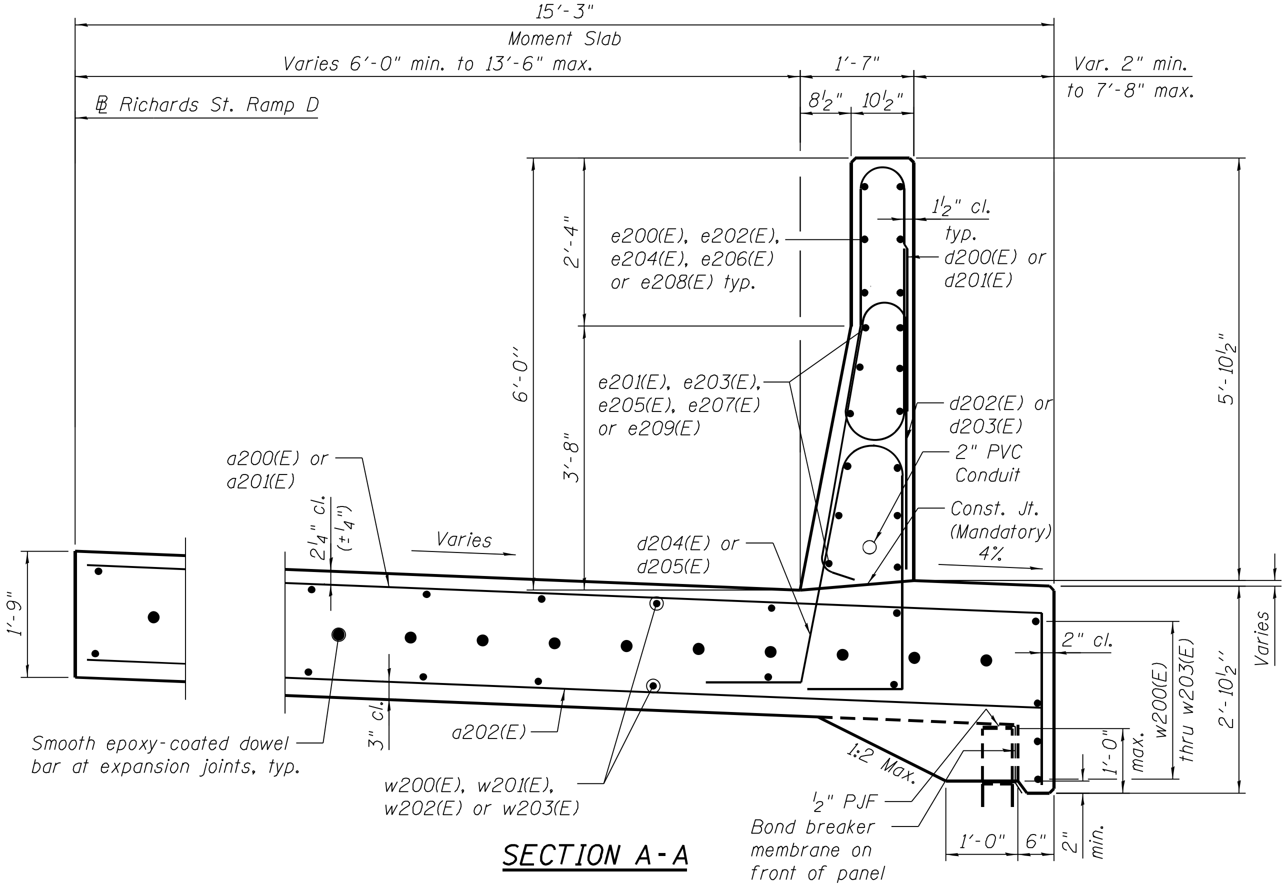
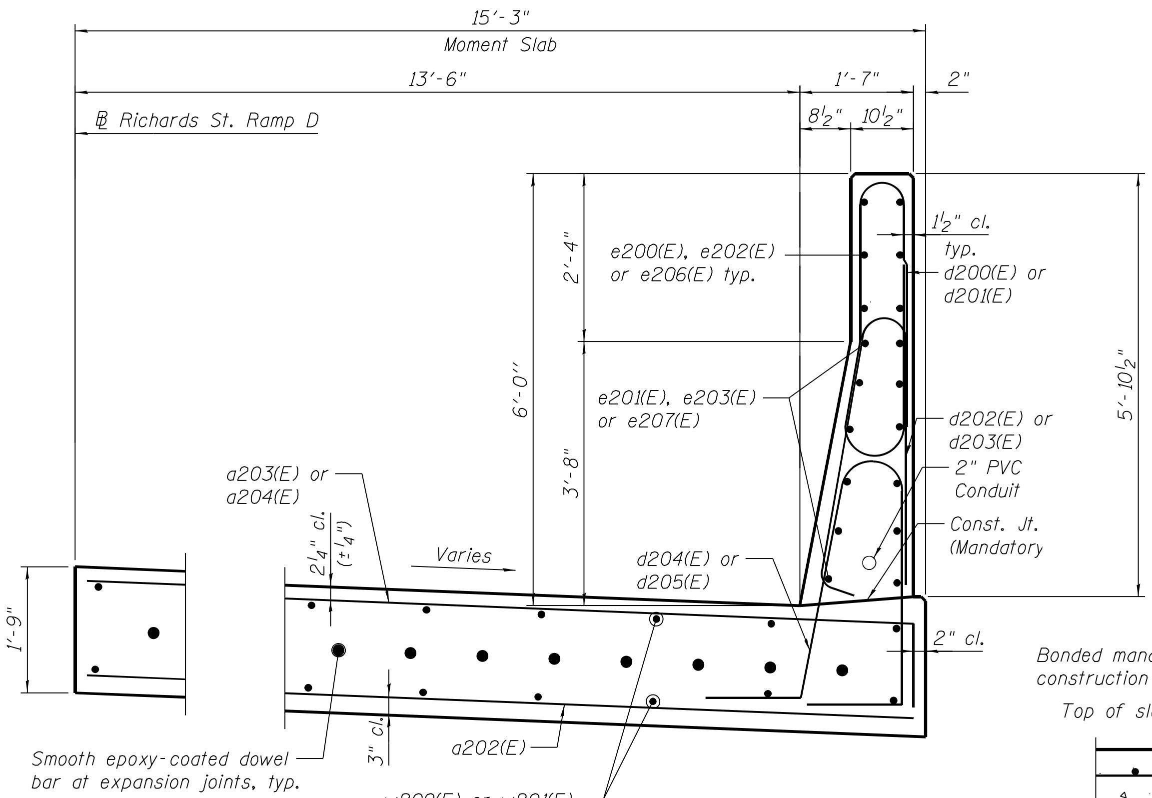
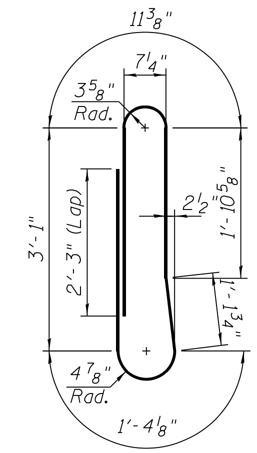


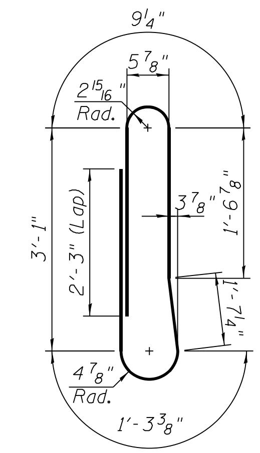
SECTION A-A



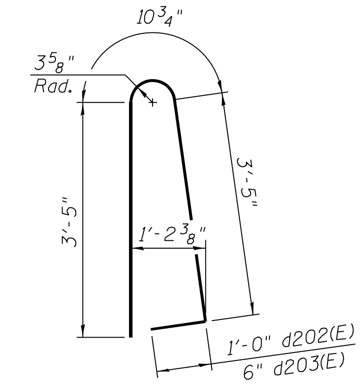
SECTION B-B



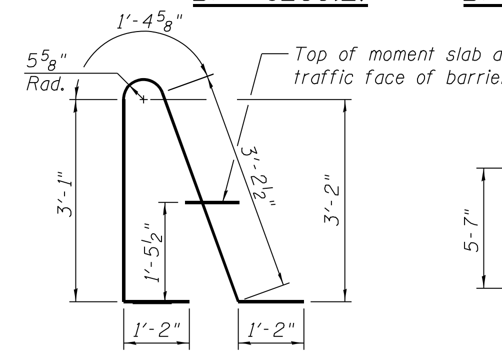
BAR d200(E)



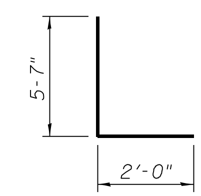
BAR d201(E)



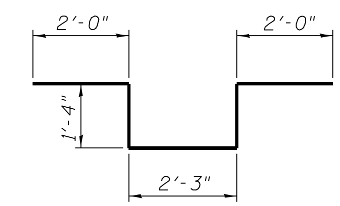
BARS d202(E) & d203(E)



BARS d204(E) & d205(E)



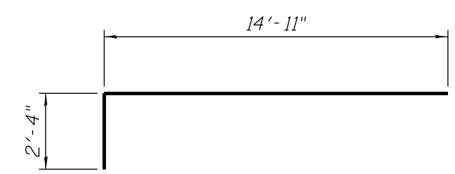
BAR d206(E)



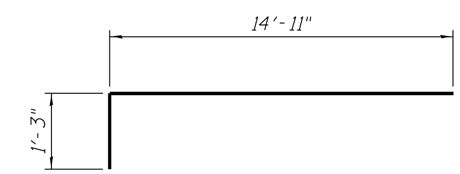
BAR d207(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a200(E)	360	#7	17'-3"	
a201(E)	599	#6	17'-3"	
a202(E)	659	#6	14'-11"	
a203(E)	144	#7	16'-2"	
a204(E)	213	#6	16'-2"	
a205(E)	58	#6	6'-0"	
d200(E)	924	#5	10'-8"	
d201(E)	392	#5	10'-7"	
d202(E)	504	#6	8'-9"	
d203(E)	812	#5	8'-3"	
d204(E)	512	#6	10'-0"	
d205(E)	816	#5	10'-0"	
d206(E)	6	#6	7'-7"	
d207(E)	22	#6	8'-11"	
e200(E)	192	#6	34'-0"	
e201(E)	24	#8	36'-8"	
e202(E)	32	#6	29'-8"	
e203(E)	4	#8	29'-8"	
e204(E)	16	#6	24'-8"	
e205(E)	2	#8	24'-8"	
e206(E)	48	#6	28'-10"	
e207(E)	6	#8	28'-10"	
e208(E)	16	#6	17'-5"	
e209(E)	2	#8	17'-5"	
w200(E)	282	#5	33'-4"	
w201(E)	116	#5	29'-8"	
w202(E)	24	#5	24'-8"	
w203(E)	24	#5	19'-9"	

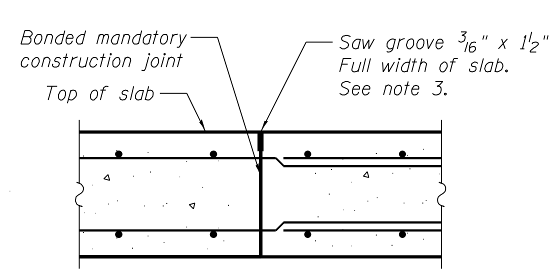


BARS a200(E) & a201(E)

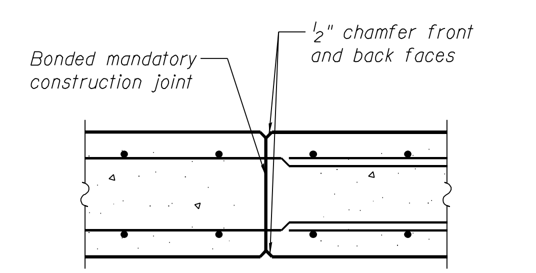


BARS a203(E) & a204(E)

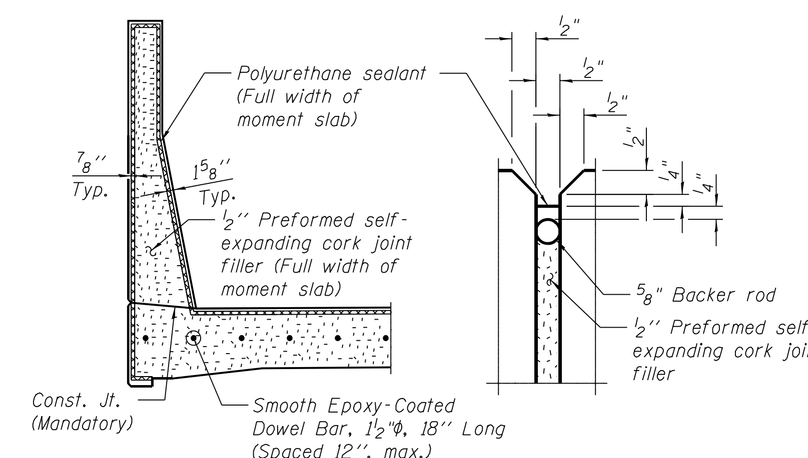
Notes:
1. The Polyurethane Sealant shall be according to Article 1050.04 of the Standard Specifications and the color shall be gray.
2. Cost of expansion joints shall be included with Concrete Superstructure.
3. The saw groove shall use a hot poured joint sealer per Article 1050.02 of the Standard Specifications.



TRANSVERSE CONST. JT. IN SLAB



TRANSVERSE CONST. JT. IN BARRIER



EXPANSION JOINT DETAILS

See Note 2

MODEL: Default
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exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	WALL DETAILS 2 STRUCTURE NO. 099-W036	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	385
	PLOT SCALE =	DRAWN - MTR	REVISED -					CONTRACT NO. 60W35		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W2-11 OF W2-14 SHEETS			ILLINOIS FED. AID PROJECT		

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SOIL BORING LOG

GSI Job No. 20012
Page 1 of 1
Date 4/21/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM
SECTION - LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -
BORING NO. RW-39
Station 12+27
Offset 9.00ft Left
Ground Surface Elev. 555.30 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion - ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.0" ASPHALT	554.47				
CLAY LOAM with Stone-dark brown & black-very stiff (Fill)			5		
			6	3.50	18
	552.30		6	P	
CLAY LOAM-brown & gray-very stiff to hard (Fill)			3		
			5	4.50	20
		-5	7	B	
			6		
			9	3.00	12
			12	P	
			5		
			15	4.50	16
		-10	21	P	
			7		
			5	2.00	21
			6	P	
			5		
			4	3.50	20
		-15	5	P	
			50/6"		
					NR
			9		
			8	3.00	15
		-20	9	P	
CLAY LOAM-brown & gray-very stiff to hard (Fill) *(continued)*			8		
			9	4.00	18
			11	P	
			10		
			24	3.50	14
		-25	16	P	
			10		
			13	2.50	13
			11	P	
			23		
			14	4.00	15
	523.30	-30	10	P	
SANDY CLAY LOAM with Gravel-dark gray-very stiff (Fill)			3		
			7	2.50	17
	517.80	-35	15	P	
Drillers Observation: Apparent bedrock	515.80				
End Of Boring @ -39.5'. Boring backfilled with cuttings.		-40			

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/22/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 20012
Page 1 of 1
Date 4/20/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM
SECTION - LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -
BORING NO. RW-40
Station 11+47
Offset 3.00ft Left
Ground Surface Elev. 552.80 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion - ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.0" ASPHALT	551.97				
CLAYEY GRAVEL & STONE-dark brown & black-loose to medium dense (Fill)			3		
			3		14
			4		
			6		
			7		17
	547.30	-5	10		
CLAY LOAM-brown & gray- very stiff (Fill)			3		
			4	2.75	19
			5	P	
			12		
			12	3.50	15
		-10	9	P	
			7		
			4	4.00	18
	539.80		13	P	
SILTY LOAM-gray-loose (Fill)			6		
			4		18
	537.30	-15	4		
SILTY CLAY LOAM with Gravel-brown & gray-very stiff (Fill)			6		
			7	2.00	18
			7	P	
			5		
			8	3.50	15
		-20	9	P	
SILTY CLAY LOAM with Gravel-brown & gray-very stiff (Fill) *(continued)*			11		
			12	3.00	18
			14	P	
			12		
			13	3.00	14
		-25	17	P	
			11		
			7	3.00	13
	524.80		9	P	
SILTY GRAVEL & FRACTURED ROCK-gray-medium dense			17		
			16		17
		-30	8		
			15		
			11		14
	517.30	-35	10		
Drillers Observation: Possible bedrock	515.30				
End Of Boring @ -37.5'. Boring backfilled with cuttings.		-40			

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/22/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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SOIL BORING LOG

GSI Job No. 20012
Page 1 of 1
Date 4/20/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM
SECTION - LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -
BORING NO. RW-41
Station 10+67
Offset 4.50ft Right
Ground Surface Elev. 550.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft
Groundwater Elev.:
First Encounter Dry ft
Upon Completion - ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.0" ASPHALT	549.87				
CRUSHED ASPHALT & STONE-medium dense (Fill)			6		
			12		4
	547.70		10		
SILTY CLAY-dark brown & black-stiff to very stiff (Fill)			5		
			6	3.50	21
		-5	4	P	
			2		
			7	1.10	19
	542.70		3	B	
CRUSHED STONE-medium dense			4		
			4		6
	540.20	-10	9		
CLAYEY SAND, GRAVEL & STONE-dark brown & gray-medium dense (Fill)			6		
			7		14
	537.70		6		
SILTY LOAM-gray-medium dense (Fill)			3		
			9		20
	535.20	-15	6		
CLAY LOAM-dark brown & gray-stiff to very stiff (Fill)			5		
			3	1.50	19
			3	P	
			4		
			7	1.20	18
		-20	10	B	
CLAY LOAM-dark brown & gray-stiff to very stiff (Fill) *(continued)*			5		
			4	2.50	20
			6	P	
			10		
			4		NR
	525.20	-25	5		
ORGANIC SILTY CLAY-black-medium stiff			7		
			6	0.80	35
	522.70		5	B	
SILTY CLAY LOAM-dark brown & gray-medium stiff			5		
			2	0.75	24
	517.70	-30	4	P	
Drillers Observation: Possible bedrock	515.70	-35			
End Of Boring @ -35.0'. Boring backfilled with cuttings.		-40			

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/22/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Note:
1. For boring locations, see Sheet W2-01.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS 1 STRUCTURE NO. 099-W036	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	386
	PLOT SCALE =	DRAWN - MTR	REVISED -					CONTRACT NO. 60W35		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W2-12 OF W2-14 SHEETS		ILLINOIS	FED. AID PROJECT		

SOIL BORING LOG

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GSI Job No. 20012 | Page 1 of 1 | Date 4/19/21

ROUTE FAI 80 | DESCRIPTION I-80 Phase II | LOGGED BY MM
SECTION - | LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will | DRILLING METHOD Mud Rotary | HAMMER TYPE CME Automatic

STRUCT. NO. - | Station -
BORING NO. RW-42 | Station 9+88 | Offset 10.80ft Right | Ground Surface Elev. 548.90 ft

Surface Water Elev. n/a ft | Stream Bed Elev. n/a ft
Groundwater Elev.: First Encounter Dry to -33.0' ft | Upon Completion n/a ft | After - Hrs. - ft

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
6.0.0" ASPHALT	548.40				
CRUSHED ASPHALT-medium dense (Fill)			26		
			7		3
			7		
	545.90				
CRUSHED STONE-dense (Fill)			23		
			28		3
		-5	9		
	543.40				
CLAY LOAM with Stone-dark brown & black-stiff to very stiff (Fill)			6		
			8	3.50	19
			6	P	
			6		
			8	4.50	19
		-10	8	P	
			5		
			5	1.50	17
			8	P	
	535.90				
CLAYEY GRAVEL-dark gray to black-medium dense (Fill)			9		
			6		30
		-15	6		
			17		
			11		12
			13		
	530.90				
CRUSHED STONE-dense (Fill)			7		
			14		10
		-20	8		
CRUSHED STONE-dense (Fill) *(continued)*	528.40				
ORGANIC SILTY CLAY-dark gray to black-medium stiff to stiff (Apparent Fill)			5		
			4	1.50	39
			6	P	
			5		
			5	0.75	45
		-25	5	P	
	523.40				
CLAYEY SAND, GRAVEL & STONE-dark gray to black-loose to medium dense (Fill)			3		
			5		29
			5		
			3		
			3		27
	519.40	-30	50/4"		
Drillers Observation: Apparent Bedrock					
	515.90				
Borehole continued with rock coring.		-35			
		-40			

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/22/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

ROCK CORE LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 20012 | Page 1 of 1 | Date 4/19/21

ROUTE FAI 80 | DESCRIPTION I-80 Phase II | LOGGED BY MM
SECTION | LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will | CORING METHOD Rotary Wash

STRUCT. NO. | Station
BORING NO. RW-42 | Station 9+88 | Offset 10.80ft Right | Ground Surface Elev. 548.90 ft

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2 in | Top of Rock Elev. 517.90 ft | Begin Core Elev. 515.90 ft

Description	Elev. (ft)	Depth (ft)	Core (#)	Recovery (%)	R.Q.D. (%)	Core Time (min/ft)	Strength (tsf)
RUN 1 (-33.0' to -43.0') SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE Light gray to gray & porous with horizontal bedding. Lightly weathered with horizontal fractures throughout.	515.90		1	93	68		1211.00
		-35					
		-40					
	505.90						
End Of Boring @ -43.0'. Boring backfilled with cuttings.		-45					
		-50					

Color pictures of the cores Yes
Cores will be stored for examination until 5 yrs after const.
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 20012 | Page 1 of 1 | Date 5/11/21

ROUTE FAI 80 | DESCRIPTION I-80 Phase II | LOGGED BY MM
SECTION - | LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will | DRILLING METHOD Hollow Stem Auger/Rotary | HAMMER TYPE CME Automatic

STRUCT. NO. - | Station -
BORING NO. RW-43 | Station 9+09 | Offset 10.50ft Right | Ground Surface Elev. 547.00 ft

Surface Water Elev. n/a ft | Stream Bed Elev. n/a ft
Groundwater Elev.: First Encounter Dry to -15.0' ft | Upon Completion n/a ft | After - Hrs. - ft

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
10.0" ASPHALT	546.17				
SANDY CLAY LOAM-brown, gray & black-stiff (Fill)			1		
			2	1.50	18
			2	P	
	544.00				
CRUSHED STONE & GRAVEL-medium dense			6		
			8		3
		-5	10		
			12		
			8		4
			19		
			5		
			7		5
		-10	11		
			4		
			5		6
			5		
	534.00				
SILTY CLAY-dark brown-medium stiff (Fill)			3		
			5	0.75	21
		-15	6	P	
	531.50				
CRUSHED STONE & GRAVEL-medium dense to dense			26		
			27		10
			17		
			1		
			6		3
		-20	15		
CRUSHED STONE & GRAVEL-medium dense to dense *(continued)*			30		
			20		22
			9		
	524.00				
SILTY LOAM-dark brown to black-dense (Fill)			14		
			12		23
		-25	17		
	521.50				
Drillers observation: Possible Bedrock			50/1"		
					4
	519.50				
End Of Boring @ -27.5'. Boring backfilled with cuttings.		-30			
		-35			
		-40			

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/22/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Note:
1. For boring locations, see Sheet W2-01.

Geo Services, Inc. — SOIL BORING LOG (RW-44)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 20012
Page 1 of 1
Date 5/11/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION - LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. RW-44
Station 8+31
Offset 10.50ft Right
Ground Surface Elev. 544.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

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

Description	Elev. (ft)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
10.0" ASPHALT	543.87				
CLAY LOAM with Stone-gray-stiff (Fill)			2		
			2	1.50	14
	541.70		3	P	
FRACTURED ROCK-medium dense			12		
			9		3
	539.70	-5	10		
Drillers Observation: Possible Bedrock	537.70				
End Of Boring @ -7.0'. Boring backfilled with cuttings.		-10			
		-15			
		-20			

Z:\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/22/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Geo Services, Inc. — SOIL BORING LOG (RW-45)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 20012
Page 1 of 1
Date 5/11/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY ZP

SECTION - LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. RW-45
Station 7+53
Offset 9.60ft Right
Ground Surface Elev. 541.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

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

Description	Elev. (ft)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
3.0" ASPHALT, 9.0" CONCRETE	540.90				
CLAY LOAM-brown & gray-very stiff (Fill)			3		
			2	3.00	22
			3	P	
			2		
			4	2.50	5
	536.40	-5	4	P	
CRUSHED STONE-medium dense	535.40		6		
CLAY LOAM with Stone-dark brown-very stiff (Fill)			10	3.25	17
	533.90		16	P	
CRUSHED STONE-very dense			11		
			21		6
		-10	50/5"		
			50/6"		
	528.90				6
CLAY LOAM with Stone-dark brown-medium dense (Fill)			4		
			6		9
	526.40	-15	6		
SILTY CLAY LOAM-brown-medium dense (Fill)			6		
			9		10
	523.90		12		
SANDY CLAY LOAM-dark brown-stiff (Fill)			2		
			4	1.00	17
	521.40	-20	8	P	
CLAY LOAM with Stone-dark brown-medium dense (Fill)			7		
			12		9
	518.90		7		
FRACTURED ROCK-very dense			50/1"		
	516.90	-25			5
Drillers Observation: Possible Bedrock	514.90				
End Of Boring @ -27.0'. Boring backfilled with cuttings.		-30			
		-35			
		-40			

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The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Geo Services, Inc. — SOIL BORING LOG (RW-46)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 20012
Page 1 of 1
Date 5/11/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY ZP

SECTION - LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM

COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. RW-46
Station 6+75
Offset 10.40ft Right
Ground Surface Elev. 540.80 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter 515.3 ft ▼
Upon Completion 515.8 ft ▽
After - Hrs. - ft

Description	Elev. (ft)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
12.0" ASPHALT	539.80				
CRUSHED ASPHALT-medium dense			8		
	538.80		4		4
CLAY LOAM-brown & gray spotted black-very stiff (Fill)			3	2.50	20
				P	
	536.80		6	3.50	11
CRUSHED STONE-medium dense			12	P	
	535.30	-5	13		8
SILTY CLAY-brown & black-very stiff (Fill)			4		
			9	4.00	19
	532.80		13	P	
CLAY LOAM with Stone-very stiff (Fill)	531.80		5	2.50	10
CRUSHED STONE & GRAVEL-medium dense			16	P	
		-10	10		11
			9		
			6		2
	527.80		9		
SILTY CLAY LOAM with Stone-dark gray to black-loose (Fill)			5		
			8		10
		-15	12		
			3		
			4		11
	522.80		7		
CRUSHED STONE-medium dense			3		
			5		7
	520.30	-20	7		
CLAY LOAM with Stone-dark gray to black-loose (Fill)			2		
			5		9
	517.80		3		
CRUSHED STONE-medium dense			8		
			3		9
		▽ -25	5		
		▼			
	513.80		16		6
Drillers Observation: Possible Bedrock	511.80		50/1"		
End Of Boring @ -29.0'. Boring backfilled with cuttings.		-30			
		-35			
		-40			

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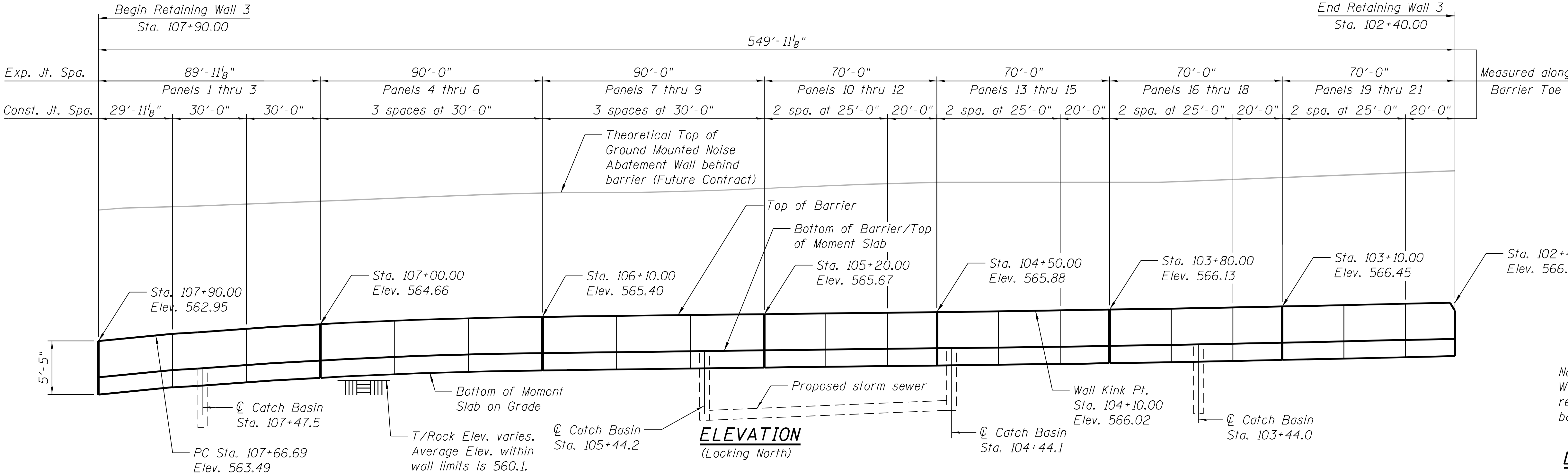
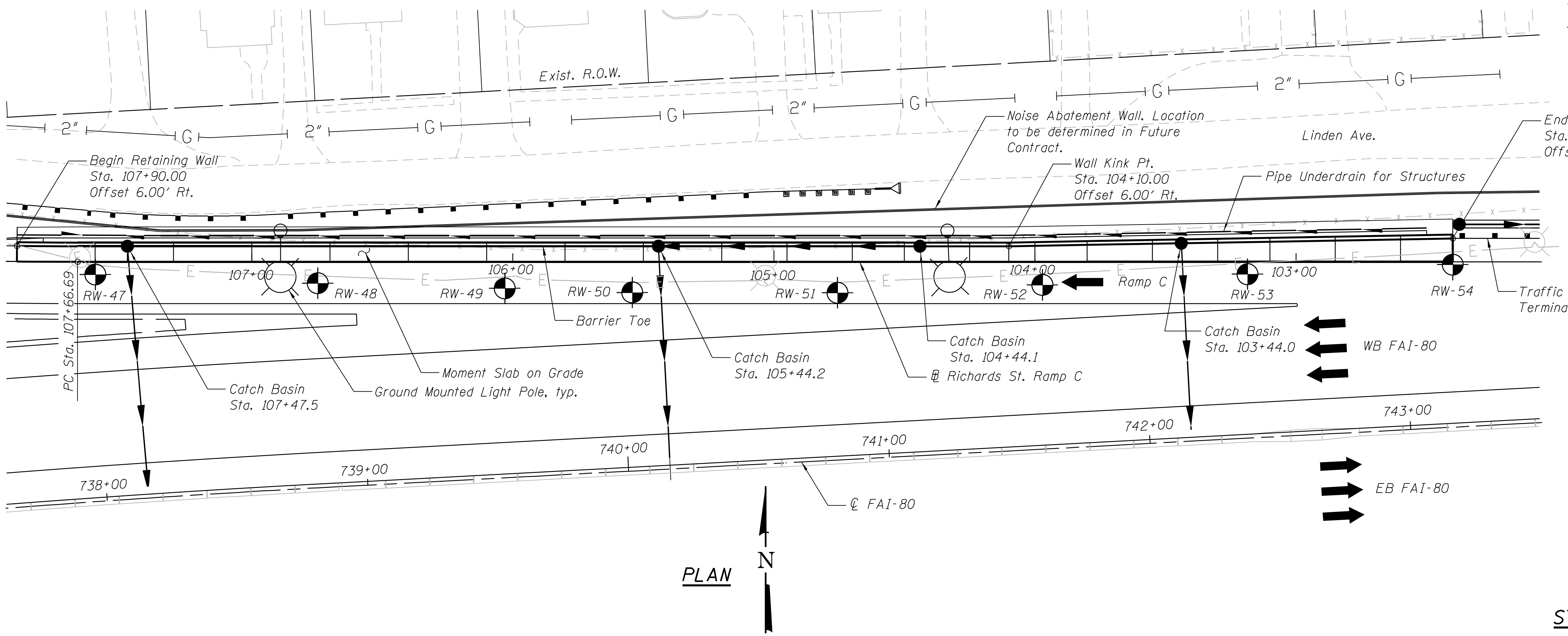
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

Note:
1. For boring locations, see Sheet W2-01.

Benchmark: Control Point #1028 - Iron rod with yellow cap at ℄ FAI Sta. 731+53.25, Offset 5.62' Rt.
Traffic to be maintained using ramp closure and detour
Salvage: None
Existing Structure: None



ELEVATION
(Looking North)



PLAN

DESIGN SPECIFICATIONS
2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES
FIELD UNITS

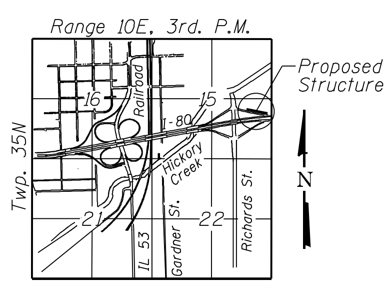
f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)

STATE OF ILLINOIS
VINOD C. PATEL
081-004528
CHICAGO, IL
LICENSED STRUCTURAL ENGINEER

Signed:
Date: 3/10/2022
Exp: 11/30/2022
Sheets: 1 thru 15

Notes:
Wall stations and offsets are measured relative to ℄ Richards St. Ramp C at the barrier toe.

LEGEND
Prop. Storm Sewer
Prop. Catch Basin
Exist. Underground Electric
Exist. Underground Gas
Soil Boring Location/Identifier
XX-XX



LOCATION SKETCH

GENERAL PLAN & ELEVATION
RETAINING WALL 3
ALONG RICHARDS ST. RAMP C
F.A.I. RTE. 80 - SEC. 2013-009B
WILL COUNTY
STATION 102+40.00 TO STA. 107+90.00
STRUCTURE NO. 099-W037

exp.

USER NAME =	DESIGNED - BAR	REVISED -	
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET W3-01 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	389
		CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		

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GENERAL NOTES

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

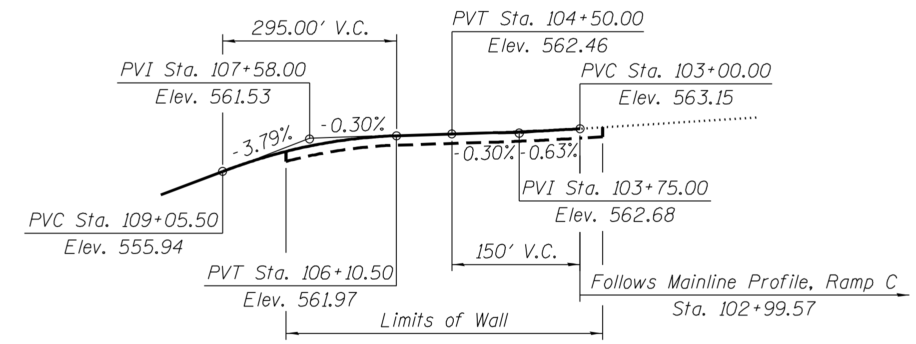
2. Outlet pipe shall be connected from the pipe underdrain to proposed catch basin. Drainage structure shall be manufactured to accomodate a 5" diameter hole or the Contractor shall field core a 5" diameter opening and grout annular space. Cost shall be included with Pipe Underdrains for Structures, 4".

INDEX OF SHEETS

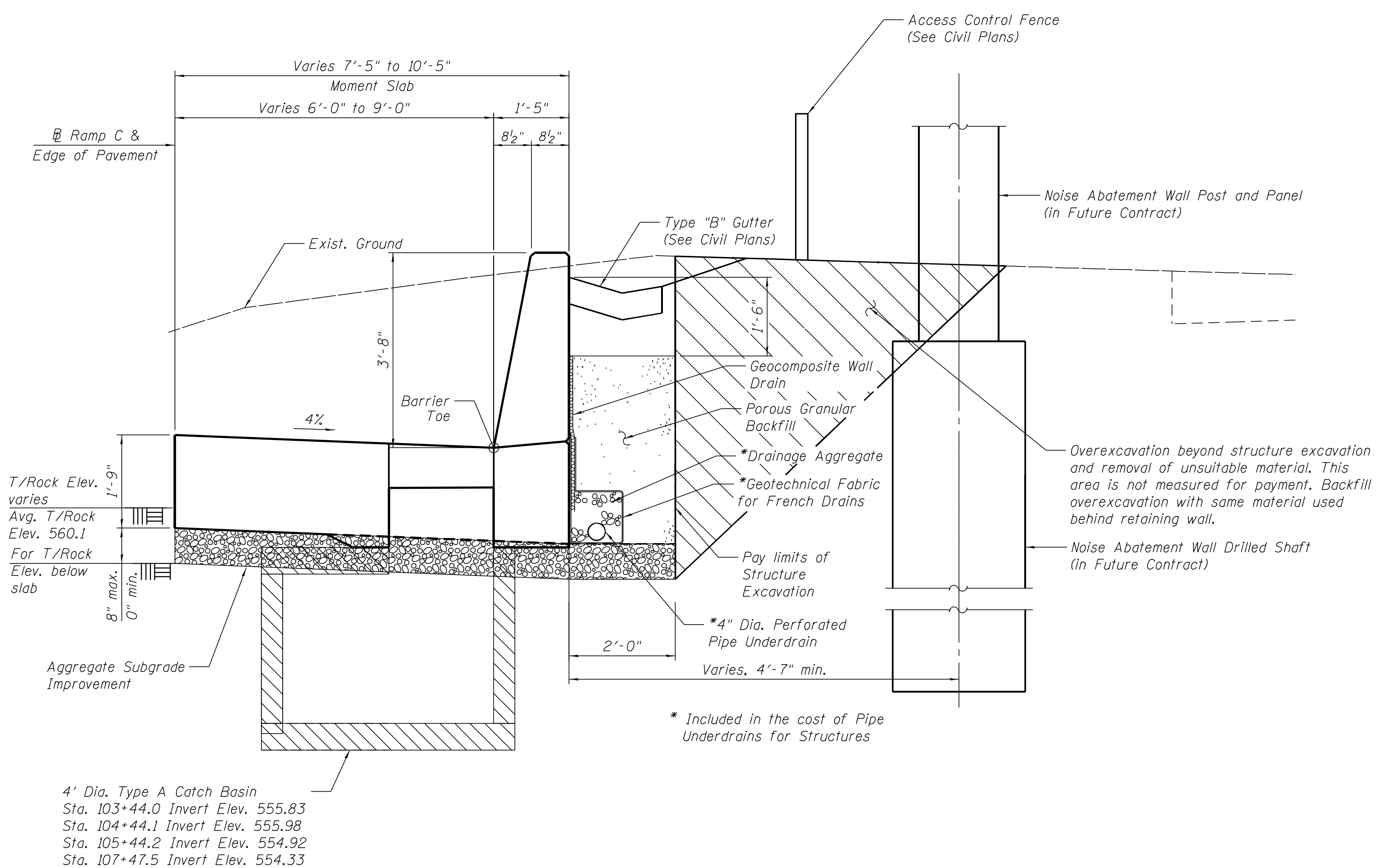
TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Backfill	Cu Yd	160
Aggregate Subgrade Improvement	Cu Yd	84
Structure Excavation	Cu Yd	977
Rock Excavation For Structures	Cu Yd	75
Concrete Superstructure	Cu Yd	362.0
Protective Coat	Sq Yd	667
Reinforcement Bars, Epoxy Coated	Pound	40,180
Geocomposite Wall Drain	Sq Yd	240
Pipe Underdrains For Structures 4"	Foot	566

PROFILE GRADE
(Along WB FAI-80)



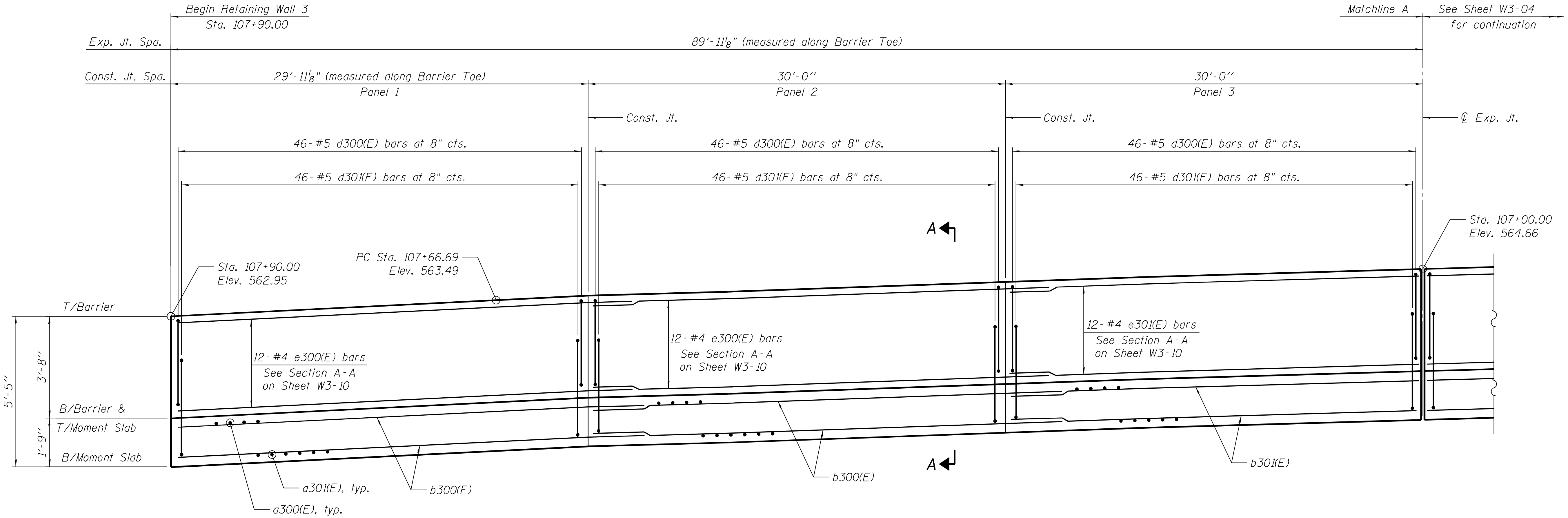
PROFILE GRADE
(Along ℄ Richards St. Ramp C)



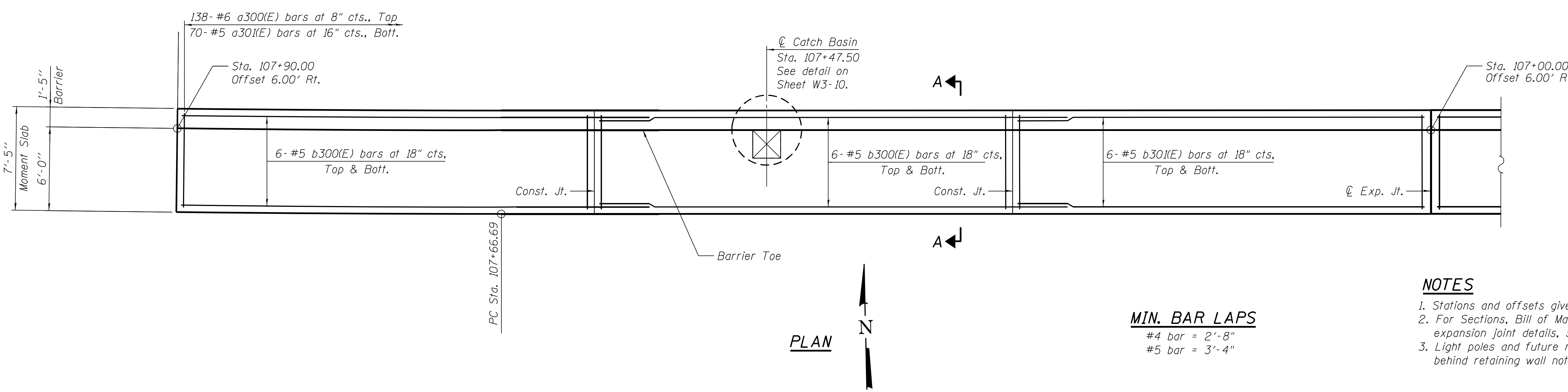
SECTION THRU WALL

CURVE DATA
(Along ℄ Richards St. Ramp C)

PI Sta. = 109+42.22
Δ = 10°33'23" Rt.
D = 3°00'56"
R = 1,900.00'
T = 175.53'
L = 350.06'
E = 8.09'
e = 4.6%
P.C. Sta. = 107+66.69
P.T. Sta. = 111+16.75



ELEVATION



PLAN

MIN. BAR LAPS

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

NOTES

1. Stations and offsets given to toe of barrier.
2. For Sections, Bill of Material, construction and expansion joint details, see Sheet W3-10
3. Light poles and future noise abatement wall behind retaining wall not shown for clarity.

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		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W3-03 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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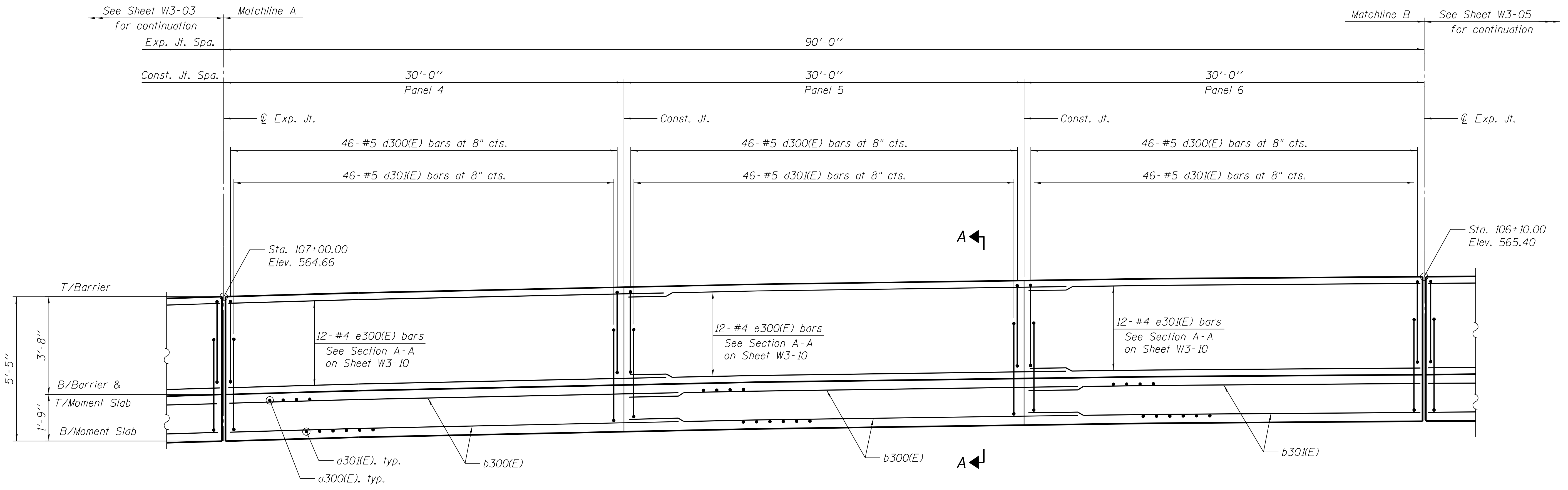
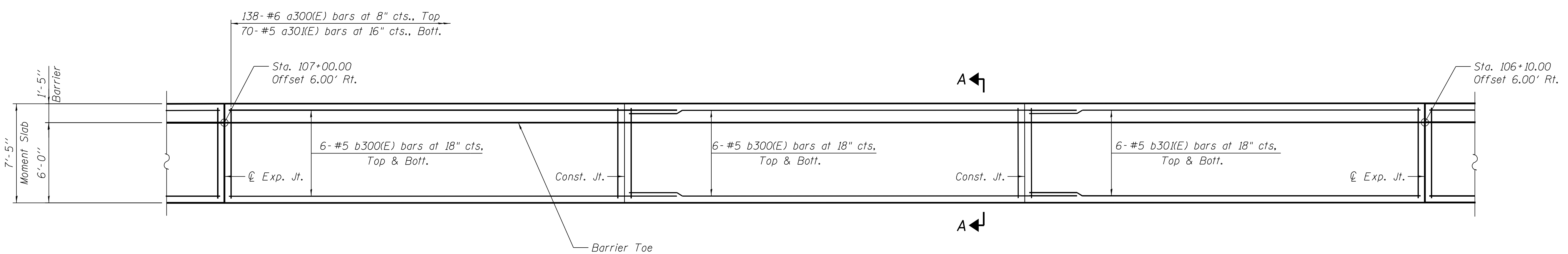
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	



ELEVATION



PLAN

N

MIN. BAR LAPS

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

NOTES

1. For notes, see Sheet W3-03.

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILED PLAN AND ELEVATION 2
STRUCTURE NO. 099-W037

SHEET W3-04 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	392
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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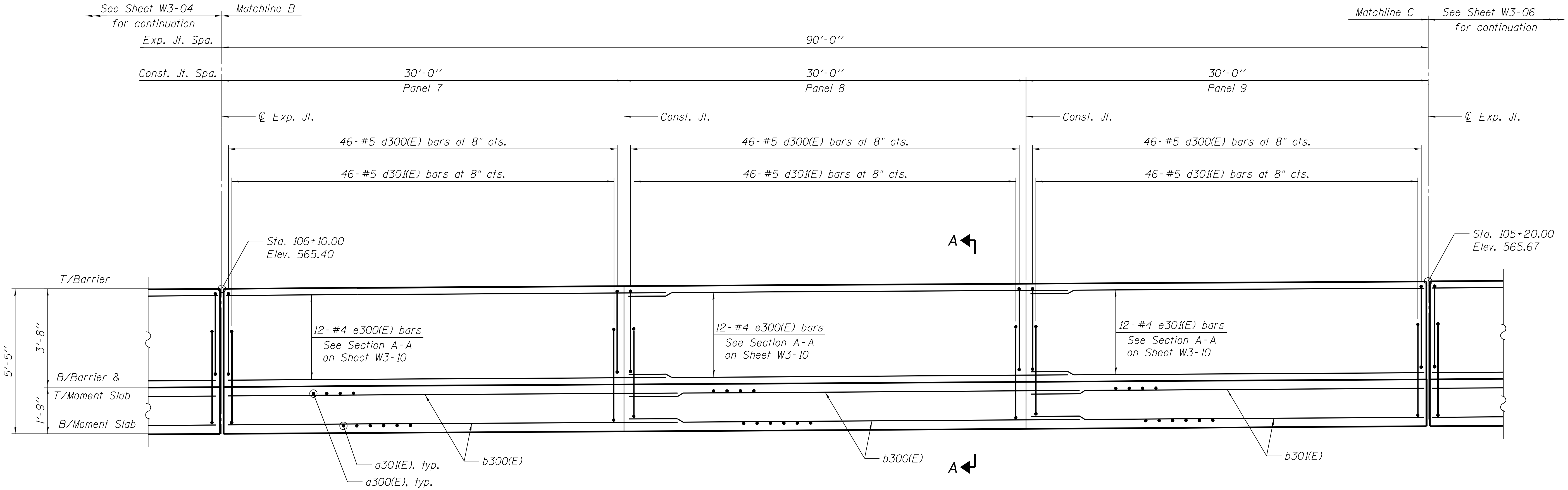
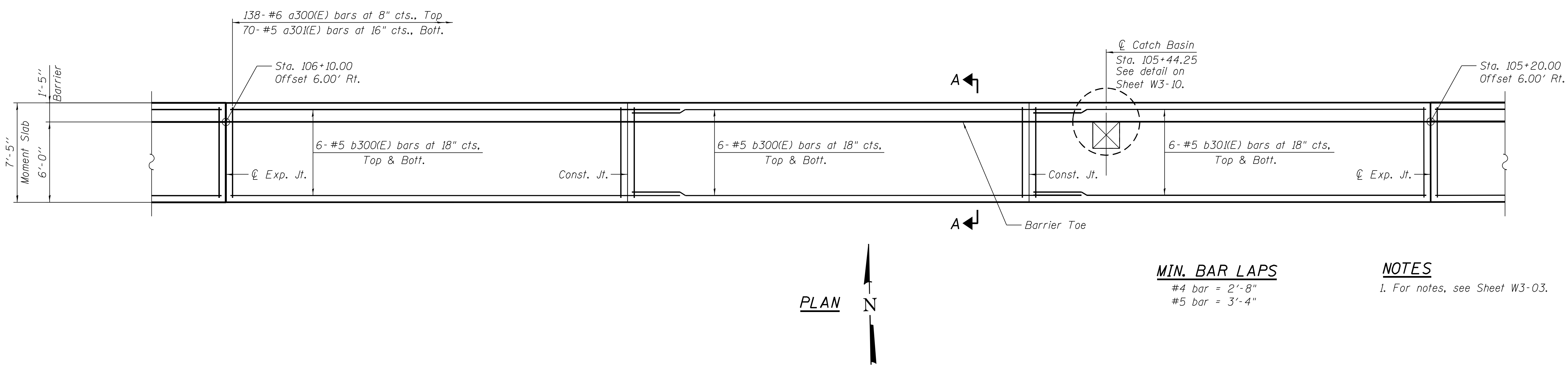


ELEVATION



PLAN

MIN. BAR LAPS

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

NOTES

1. For notes, see Sheet W3-03.

exp.	USER NAME =	DESIGNED - BAR	REVISED -
		CHECKED - VCP	REVISED -
	PLOT SCALE =	DRAWN - MTR	REVISED -
	PLOT DATE =	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILED PLAN AND ELEVATION 3
STRUCTURE NO. 099-W037

SHEET W3-05 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	393
		CONTRACT NO. 60W35		
		ILLINOIS FED. AID PROJECT		

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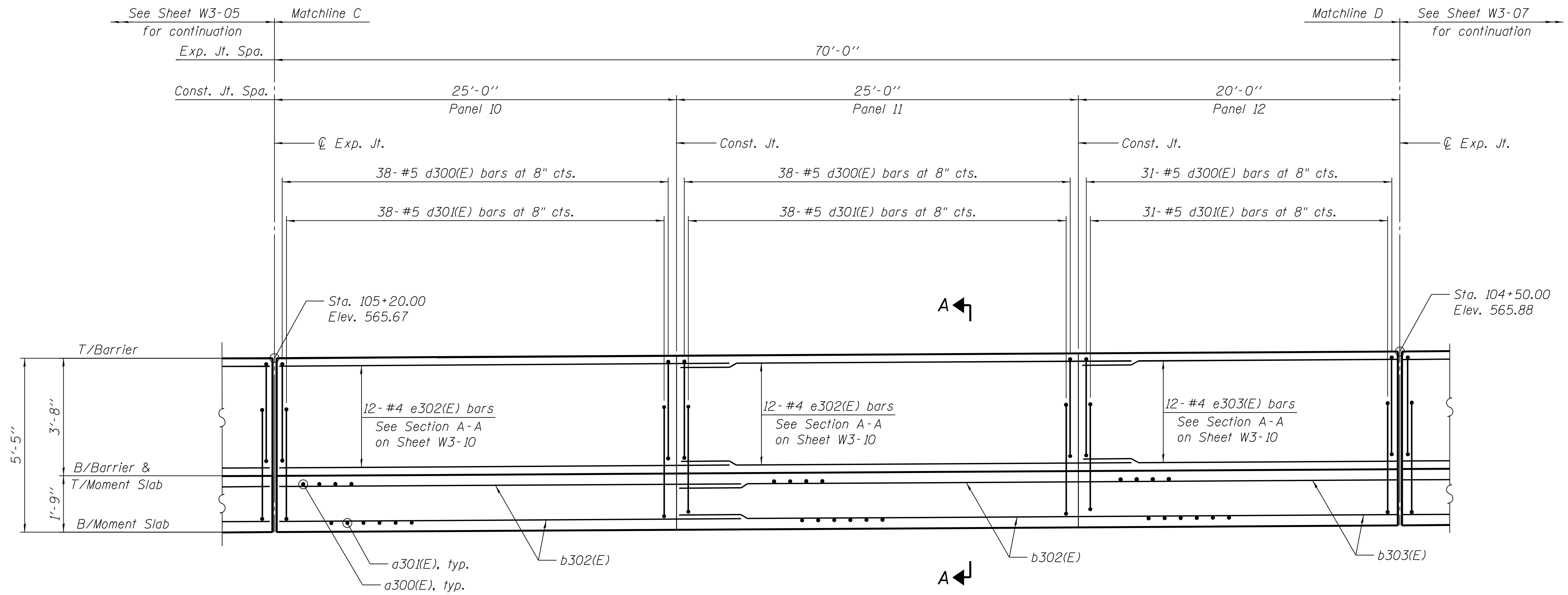
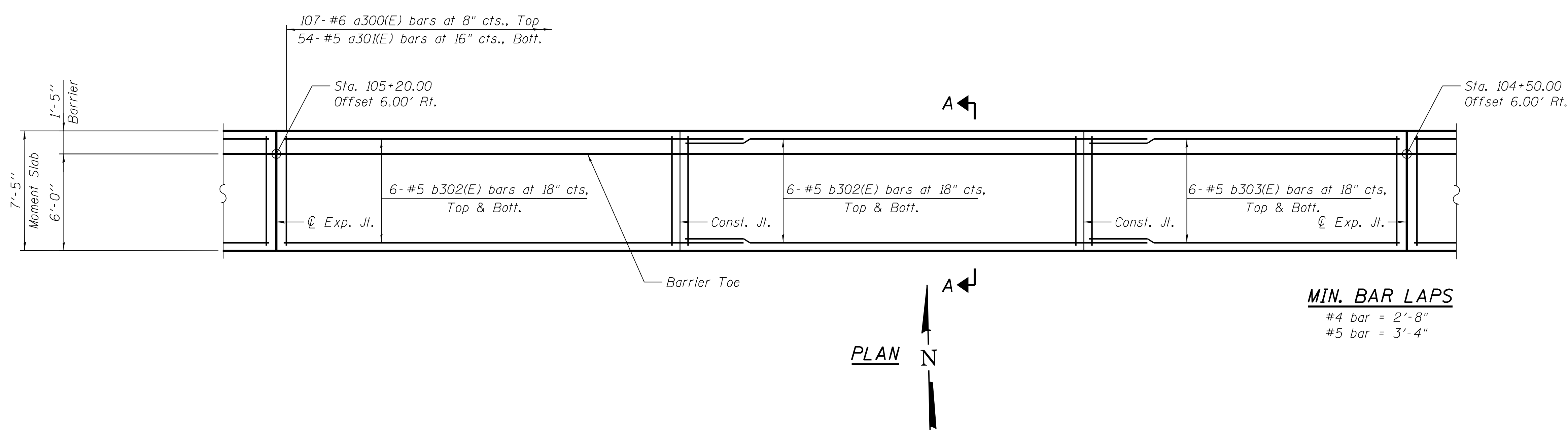


ELEVATION



PLAN

MIN. BAR LAPS

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

NOTES

1. For notes, see Sheet W3-03.

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exp.

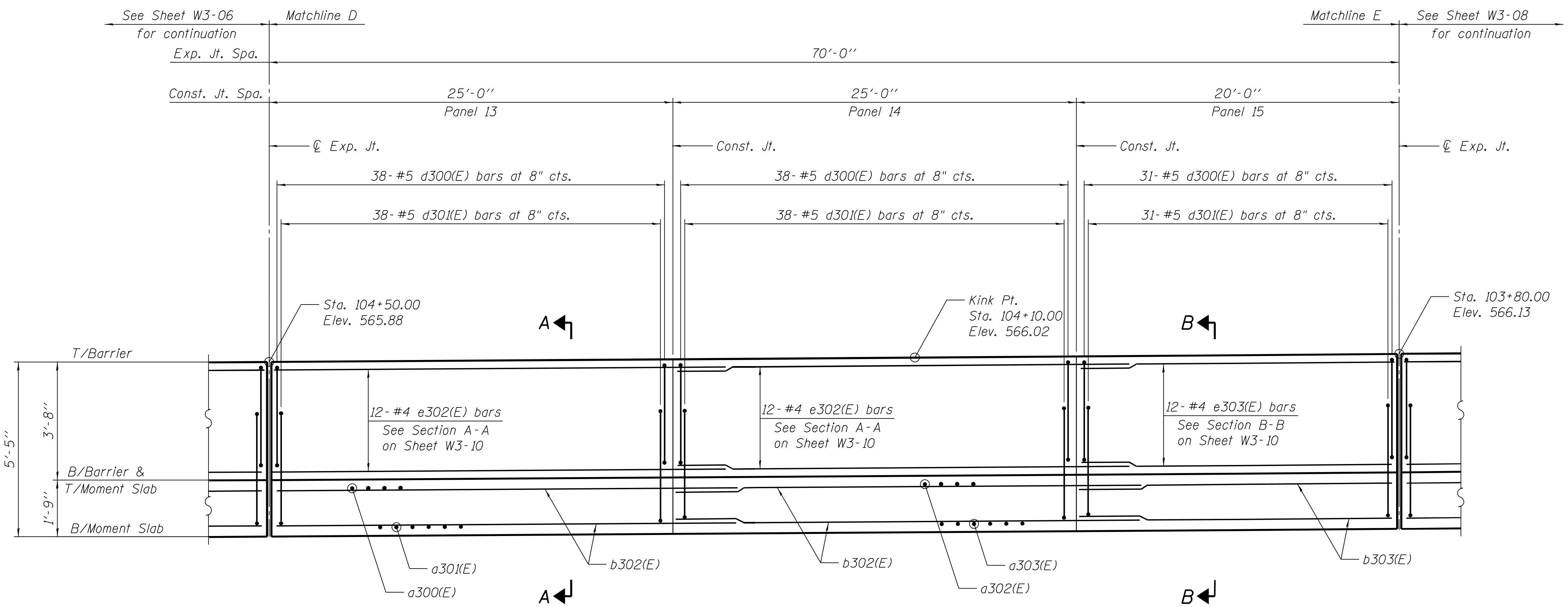
USER NAME =	DESIGNED - BAR	REVISED -	
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

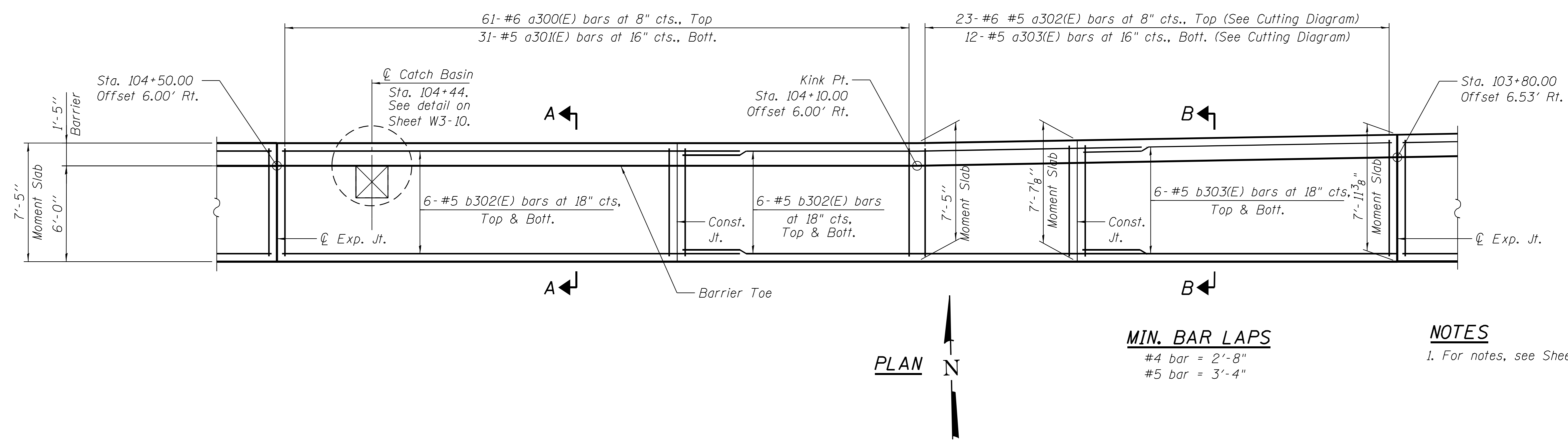
DETAILED PLAN AND ELEVATION 4
STRUCTURE NO. 099-W037

SHEET W3-06 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	394
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	



ELEVATION



PLAN

MIN. BAR LAPS

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

NOTES

1. For notes, see Sheet W3-03.

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DETAILED PLAN AND ELEVATION 5 STRUCTURE NO. 099-W037
		CHECKED - VCP	REVISED -		
	PLOT SCALE =	DRAWN - MTR	REVISED -		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W3-07 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	395
		CONTRACT NO. 60W35		
	ILLINOIS	FED. AID PROJECT		

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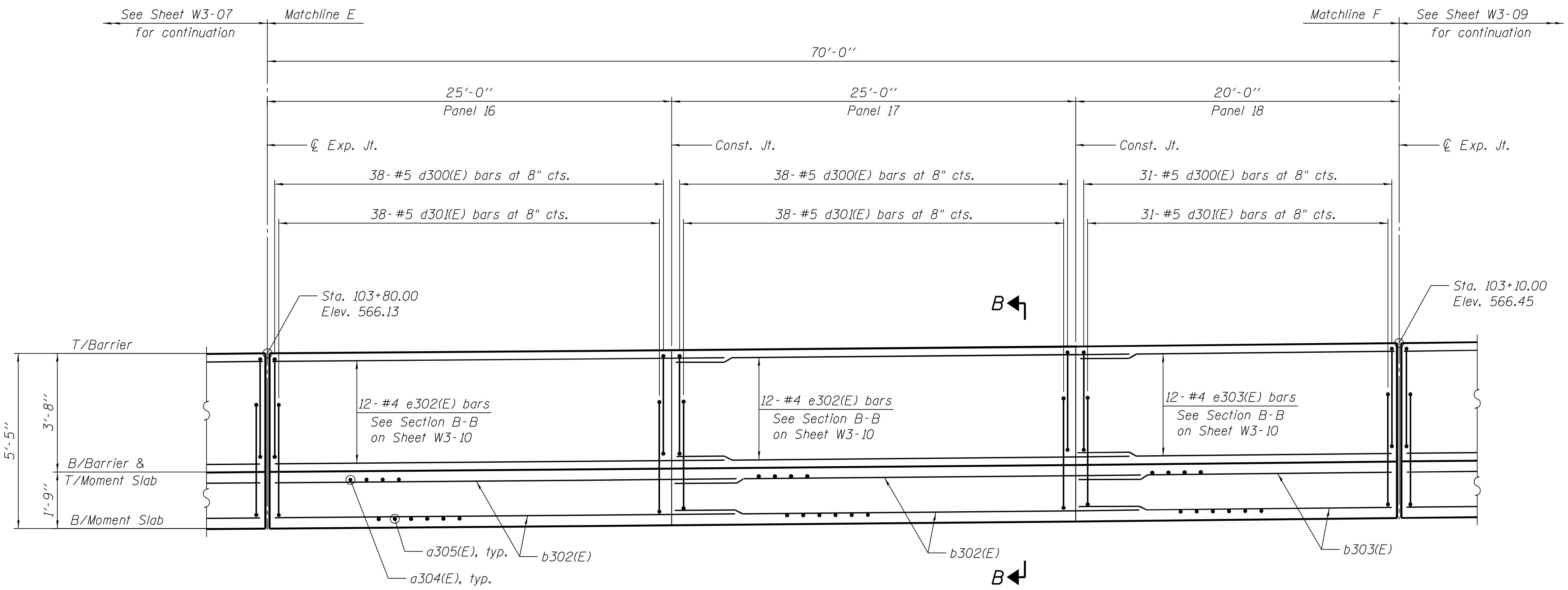
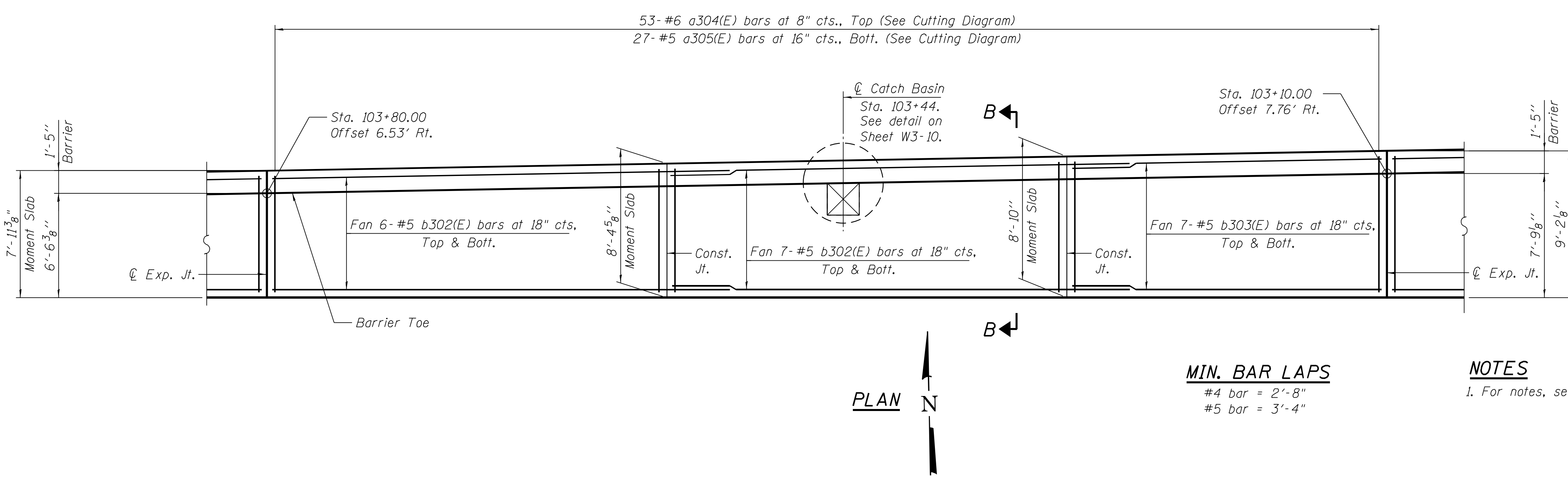


ELEVATION



PLAN

MIN. BAR LAPS

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

NOTES

1. For notes, see Sheet W3-03.

MODEL: Default
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exp.

USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

DETAILED PLAN AND ELEVATION 6
STRUCTURE NO. 099-W037

SHEET W3-08 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	396
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	

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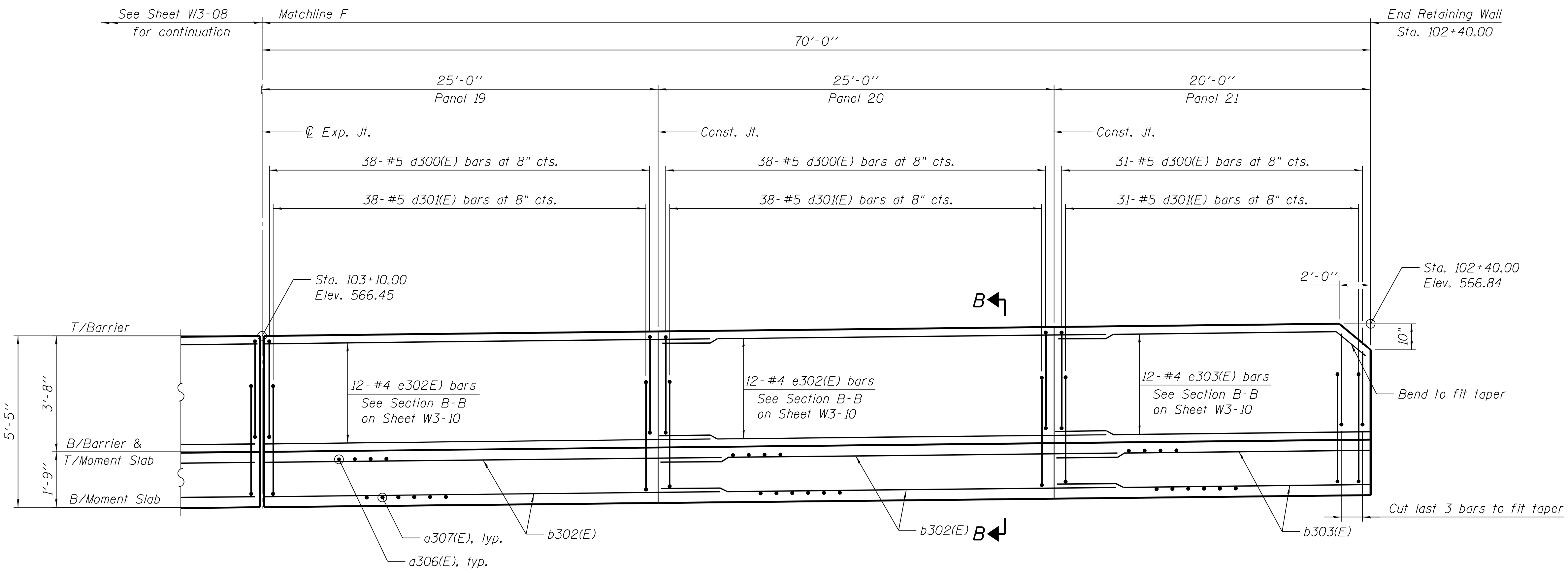
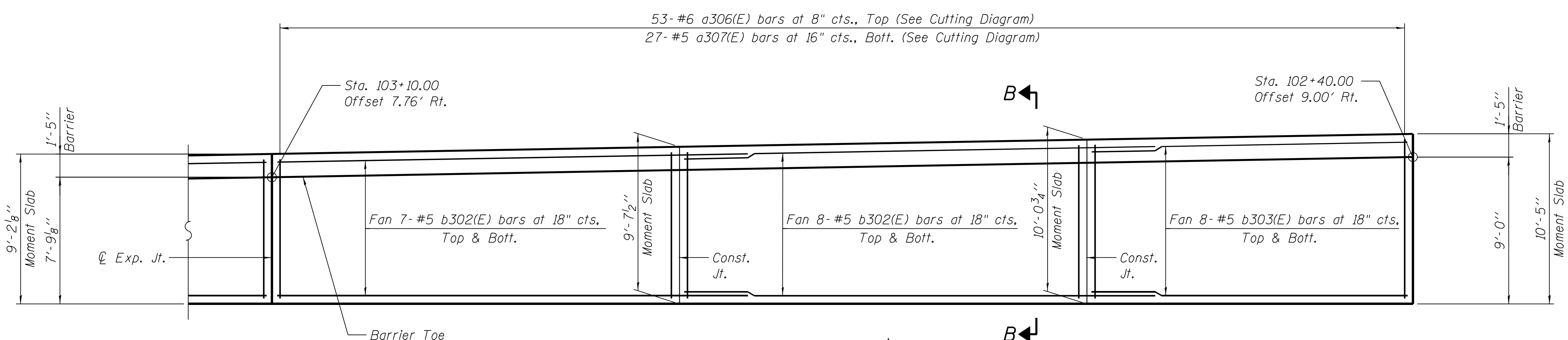


ELEVATION



PLAN

N

MIN. BAR LAPS

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

NOTES

1. For notes, see Sheet W3-03.

MODEL: Default
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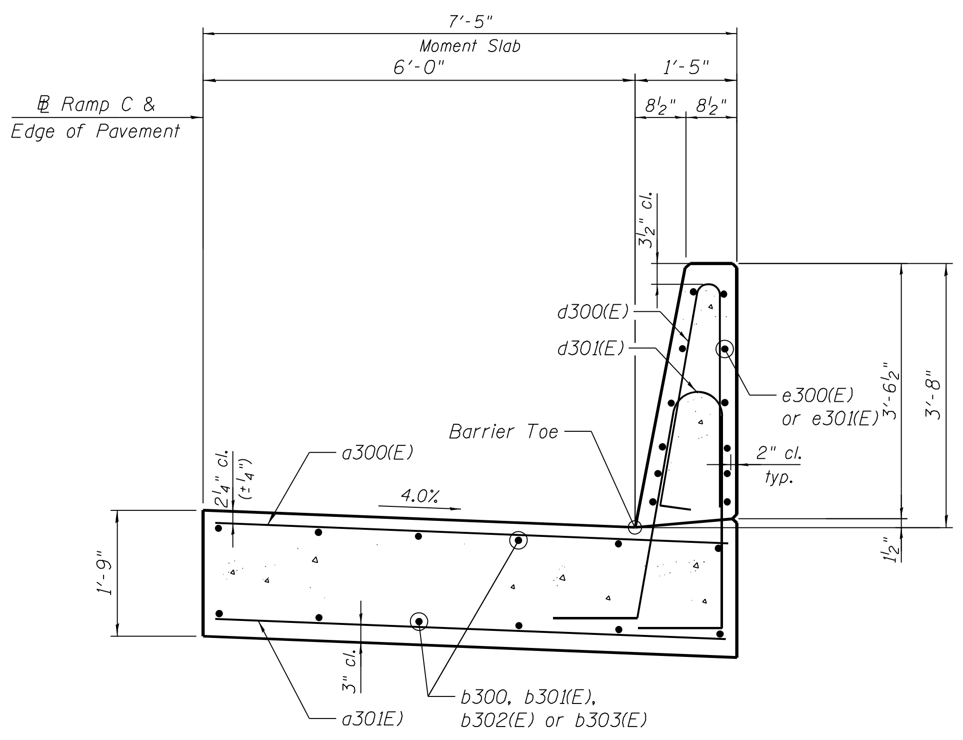
	CHECKED - VCP	REVISED -	
PLOT SCALE =	DRAWN - MTR	REVISED -	
PLOT DATE =	CHECKED - BAR	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

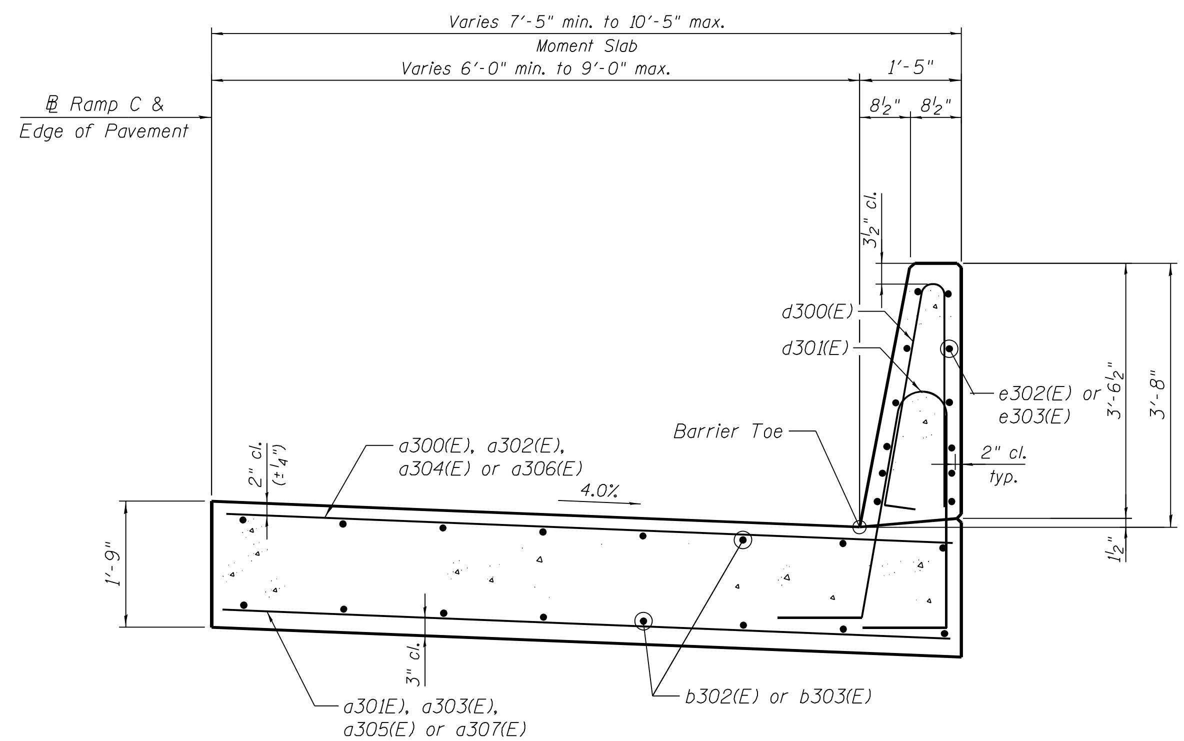
DETAILED PLAN AND ELEVATION 7
STRUCTURE NO. 099-W037

SHEET W3-09 OF W3-15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2013-009B	WILL	465	397
		CONTRACT NO. 60W35		
		ILLINOIS	FED. AID PROJECT	



SECTION A-A



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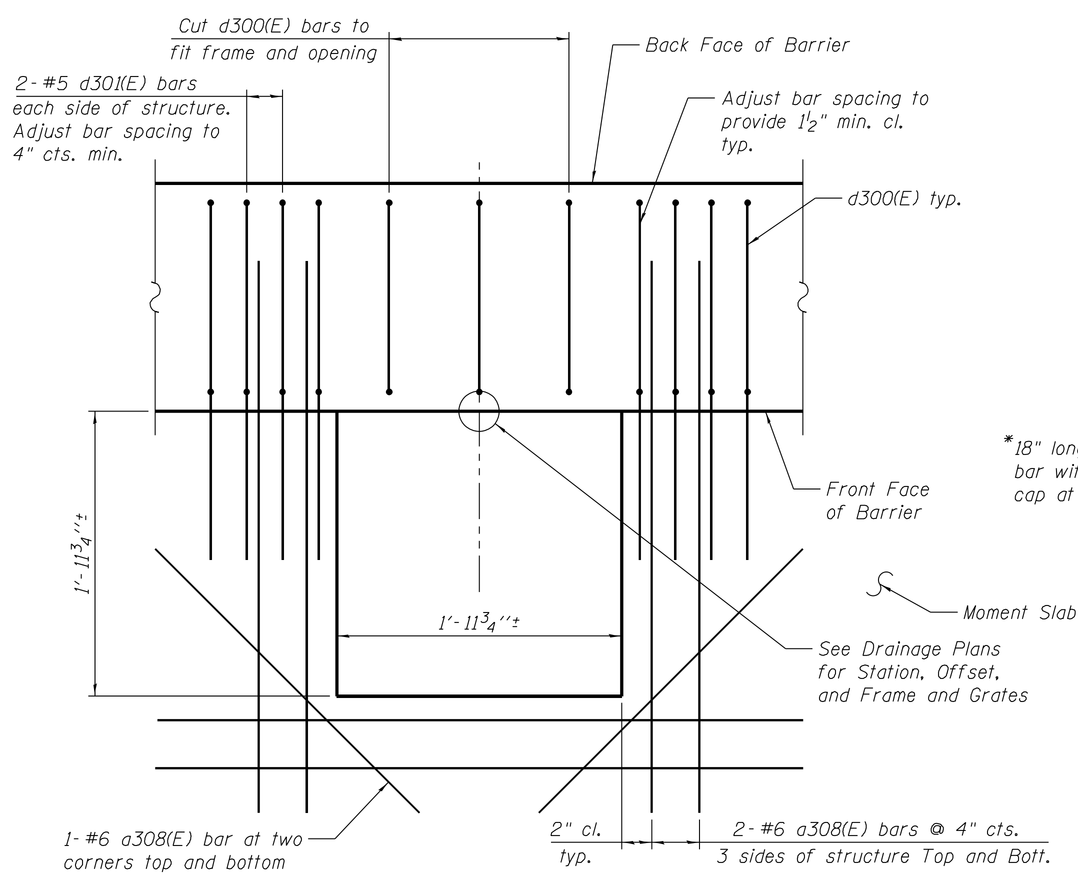
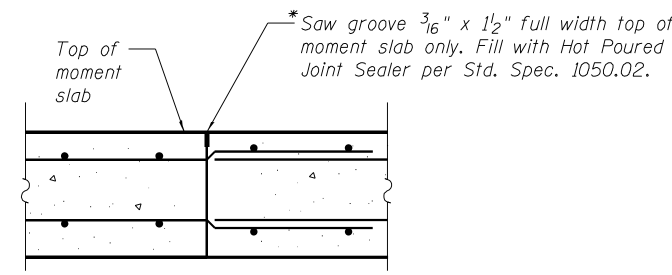
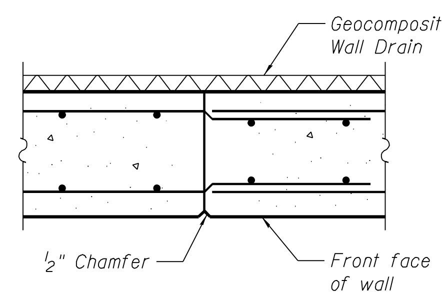


REINFORCEMENT AROUND DRAINAGE OPENING

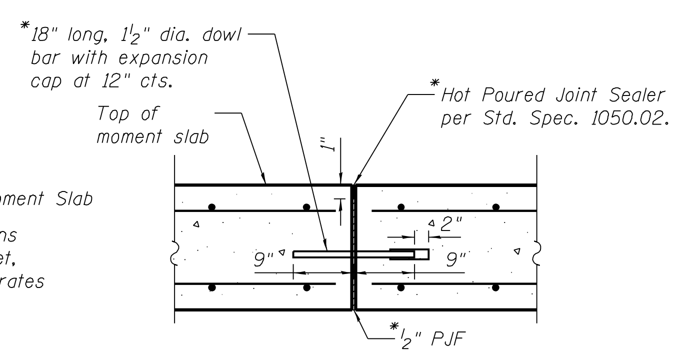
(For clarity some reinforcement not shown)



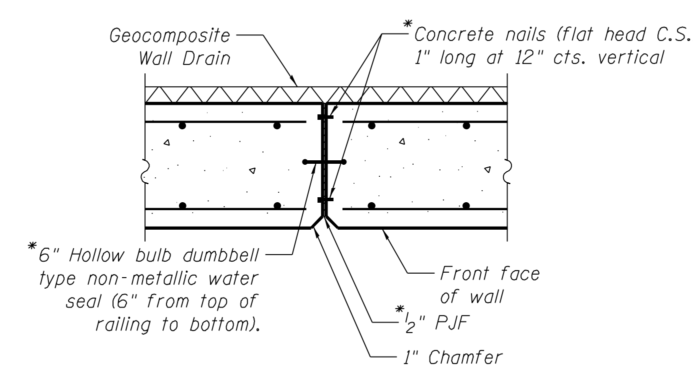
TRANSVERSE CONSTRUCTION JOINT DETAIL AT MOMENT SLAB



TRANSVERSE CONSTRUCTION JOINT DETAIL AT BARRIER



TRANSVERSE EXPANSION JOINT DETAIL AT MOMENT SLAB

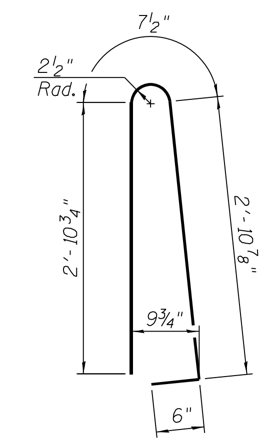


TRANSVERSE EXPANSION JOINT DETAIL AT BARRIER

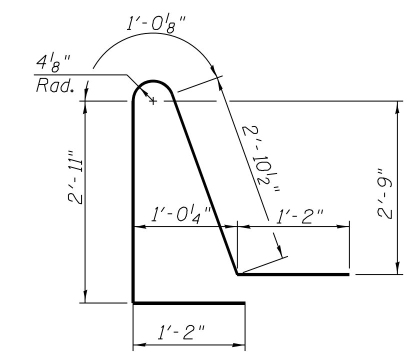
* Cost included with
Concrete Superstructure

BILL OF MATERIAL

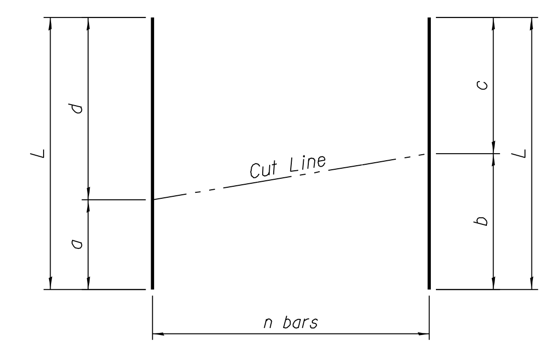
Bar	No.	Size	Length	Shape
a300(E)	582	#6	7'-1"	
a301(E)	311	#5	7'-1"	
a302(E)	23	#6	14'-8"	
a303(E)	12	#5	14'-8"	
a304(E)	53	#6	16'-5"	
a305(E)	27	#5	16'-5"	
a306(E)	53	#6	18'-11"	
a307(E)	27	#5	18'-11"	
a308(E)	64	#6	6'-0"	
b300(E)	72	#5	33'-4"	
b301(E)	36	#5	29'-8"	
b302(E)	104	#5	28'-4"	
b303(E)	54	#5	19'-8"	
d300(E)	842	#5	6'-11"	
d301(E)	842	#5	9'-2"	
e300(E)	72	#4	32'-8"	
e301(E)	36	#4	29'-8"	
e302(E)	96	#4	27'-8"	
e303(E)	48	#4	19'-8"	



BAR d300(E)



BAR d301(E)



BAR CUTTING DIAGRAM

Order bars full length. Cut as shown and use remainder of bars in other end.

Bar	a	b	c	d	L	n
a302(E)	7'-1"	7'-4"	7'-4"	7'-7"	14'-8"	23
a303(E)	7'-1"	7'-4"	7'-4"	7'-7"	14'-8"	12
a304(E)	7'-7"	8'-2"	8'-3"	8'-10"	16'-5"	53
a305(E)	7'-7"	8'-2"	8'-3"	8'-10"	16'-5"	27
a306(E)	8'-10"	9'-5"	9'-6"	10'-1"	18'-11'	53
a307(E)	8'-10"	9'-5"	9'-6"	10'-1"	18'-11'	27

SOIL BORING LOG

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

GSI Job No. 20012
Page 1 of 1
Date 4/13/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM
SECTION - LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. RW-47
Station 107+60
Offset 4.80ft Left
Ground Surface Elev. 559.70 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to -10.5' ft
Upon Completion n/a ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT	559.03				
CRUSHED STONE-very loose to medium dense (Fill)			13 6 5		5
		-5	5 3 2		6
			3 1 1		5
	550.70		10		
Drillers Observation: Apparent bedrock	549.20	-10	50/0"		5
Borehole continued with rock coring.		-15			
		-20			

\\ETHEL3\GEOSERVICES\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/25/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

ROCK CORE LOG

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Geotechnical, Environmental & Civil Engineering
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(630) 355-2838

GSI Job No. 20012
Page 1 of 1
Date 4/13/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM
SECTION - LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO. -
Station -

BORING NO. RW-47
Station 107+60
Offset 4.80ft Left
Ground Surface Elev. 559.70 ft

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Core Diameter 2 in
Top of Rock Elev. 551.20 ft
Begin Core Elev. 549.20 ft

Description	Elev.	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
RUN 1 (-10.5' to -20.5') SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE Light gray & porous with horizontal bedding. Porous & vuggy with some weathering & rust staining. Some horizontal fractures throughout.	549.20		1				513.00
		-15					
	539.20	-20					
End Of Boring @ -20.5'. Boring backfilled with cuttings.		-25					
		-30					

Color pictures of the cores Yes
Cores will be stored for examination until 5 yrs after const.
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

SOIL BORING LOG

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(630) 355-2838

GSI Job No. 20012
Page 1 of 1
Date 4/12/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM
SECTION - LOCATION SE 1/4, SEC. 15, TWP. T35N, RNG. R30E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. RW-48
Station 106+75
Offset 8.20ft Left
Ground Surface Elev. 560.50 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

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

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT	559.83				
CRUSHED STONE-very dense	558.50		42 16		6
FRACTURED ROCK-very dense			50/5"		
		-5	50/3"		3
			50/4"		4
	549.50	-10	50/4"		13
Drillers Observation: Apparent bedrock	549.00		50/4"		6
End Of Boring @ -11.5'. Boring backfilled with cuttings.		-15			
		-20			

\\ETHEL3\GEOSERVICES\PROJECTS\2020\20012 EXP, I-80 FROM CHICAGO ST. TO RT 30, PTB 194-9\20012 BORING LOGS\20012_LOG.GPJ 6/25/21

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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Naperville, Illinois 60565
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SOIL BORING LOG

GSI Job No. 20012
Page 1 of 1
Date 4/12/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION - LOCATION SE 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. RW-49
Station 106+03
Offset 10.10ft Left
Ground Surface Elev. 560.90 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to -16.0' ft
Upon Completion n/a ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT	560.23				
FRACTURED ROCK-very dense			50/5"		7
			50/2"		4
		-5			
			50/3"		3
			50/3"		5
		-10			
			50/1"		6
			50/1"		4
		-15			
Borehole continued with rock coring.	544.90				
		-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

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Naperville, Illinois 60565
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ROCK CORE LOG

GSI Job No. 20012
Page 1 of 1
Date 4/12/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION - LOCATION SE 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**

COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO. -
Station -

CORING BARREL TYPE & SIZE NX Double Swivel-10 ft

Core Diameter 2 in
Top of Rock Elev. 544.90 ft
Begin Core Elev. 544.90 ft

BORING NO. RW-49
Station 106+03
Offset 10.10ft Left
Ground Surface Elev. 560.90 ft

Description	Elev.	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
RUN 1 (-16.0' to -26.0') SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE Light gray & porous with horizontal bedding. Porous & vuggy with some weathering & rust staining. Some horizontal fractures throughout.	544.90		1	94	73		1400.00
		-20					
		-25					
End Of Boring @ -26.0'. Boring backfilled with cuttings.	534.90						
		-30					
		-35					

Color pictures of the cores Yes
Cores will be stored for examination until 5 yrs after const.
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)
BBS, form 138 (Rev. 8-99)

Geo Services, Inc.
Geotechnical, Environmental & Civil Engineering
805 Amherst Court, Suite 204
Naperville, Illinois 60565
(630) 355-2838

SOIL BORING LOG

GSI Job No. 20012
Page 1 of 1
Date 4/28/21

ROUTE FAI 80 DESCRIPTION I-80 Phase II LOGGED BY MM

SECTION - LOCATION SE 1/4, **SEC.** 15, **TWP.** T35N, **RNG.** R30E, 3rd **PM**

COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO. -
Station -

BORING NO. RW-50
Station 105+54
Offset 11.70ft Left
Ground Surface Elev. 561.20 ft

Surface Water Elev. n/a ft
Stream Bed Elev. n/a ft

Groundwater Elev.:
First Encounter Dry to -4.5' ft
Upon Completion n/a ft
After - Hrs. - ft

Description	Elev.	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
8.0" ASPHALT, 22.0" CRUSHED STONE-dense			20		
			19		5
	558.70		20		
Drillers Observation: Apparent Bedrock	556.70				
Borehole continued with rock coring.		-5			
		-10			
		-15			
		-20			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206), GP-Geoprobe Hand Auger
BBS, from 137 (Rev. 8-99)

exp.	USER NAME =	DESIGNED - BAR	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS 2 STRUCTURE NO. 099-W037	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - VCP	REVISED -			80	2013-009B	WILL	465	400
	PLOT SCALE =	DRAWN - MTR	REVISED -					CONTRACT NO. 60W35		
	PLOT DATE =	CHECKED - BAR	REVISED -		SHEET W3-12 OF W3-15 SHEETS			ILLINOIS FED. AID PROJECT		

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