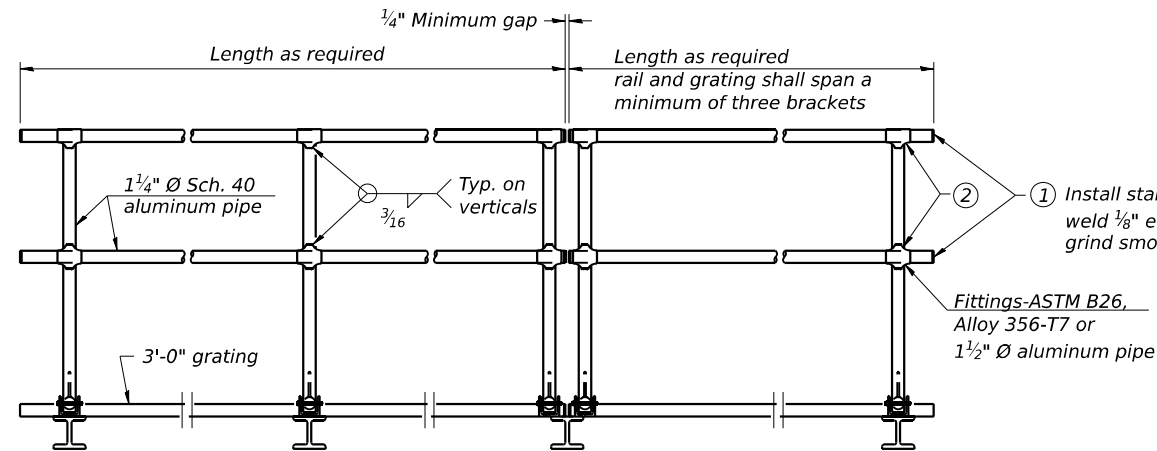
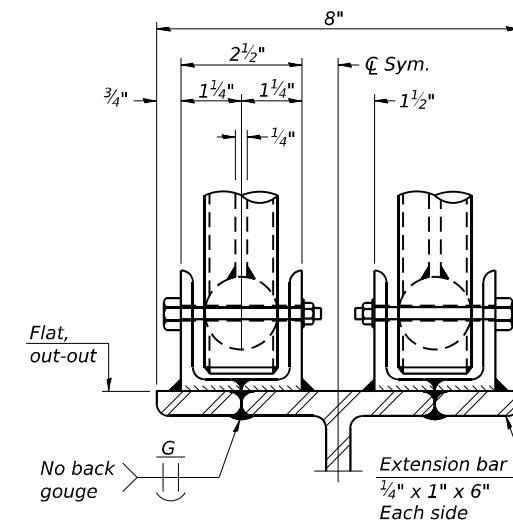


SIDE ELEVATION
(Showing safety chain w/o sign)



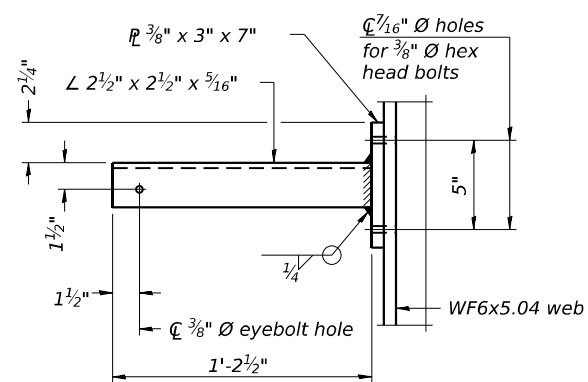
FRONT ELEVATION



ELEVATION AT HANDRAIL JOINT ④

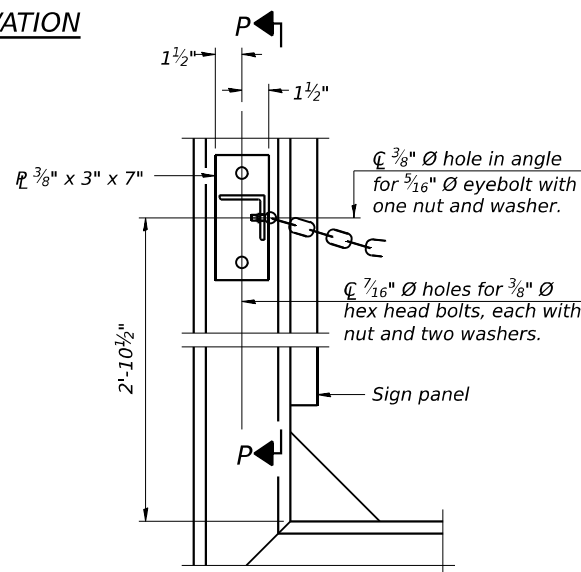
HANDRAIL DETAILS

Handrail pipe shall be ASTM B241, Alloy 6063-T6 or Alloy 6061-T6.

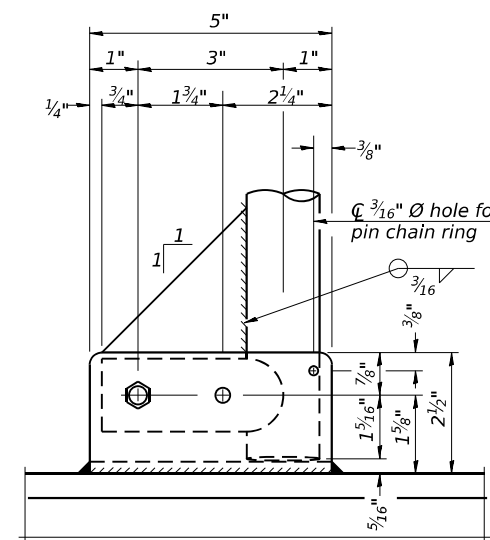


SECTION P-P

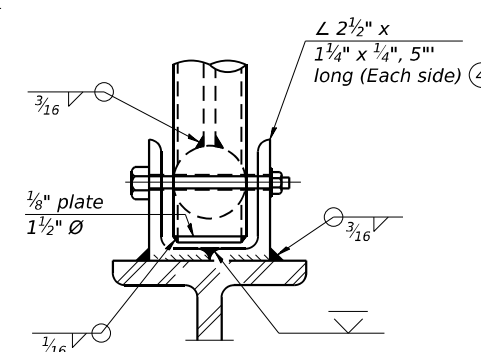
- ② Horizontal handrail member shall be continuous thru fitting. Provide 7/16" diameter hole in fitting for 3/8" diameter bolt. Field drill 7/16" diameter hole in horizontal rail member. Provide washer and locknut for bolt. (Use 5/16" eyebolts in 7/16" diameter holes on top rail at ends only.)
- ③ 3/16" type 304L stainless steel chain, approximately 12 links per foot.
- ④ Extrusions may be used in lieu of the details shown, with approval of the Engineer.



ALTERNATE SAFETY CHAIN ATTACHMENT

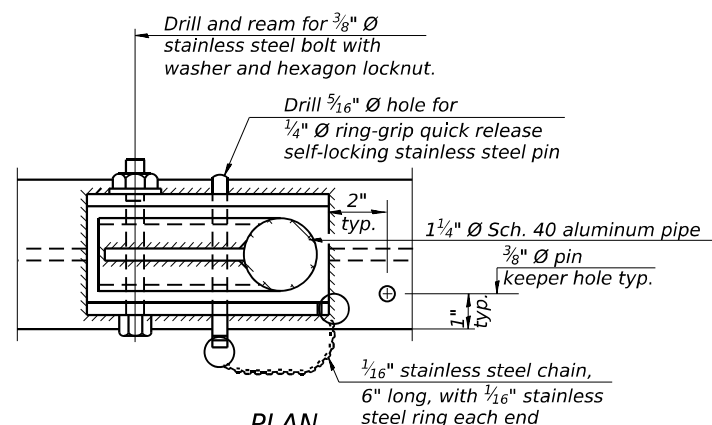


SIDE ELEVATION

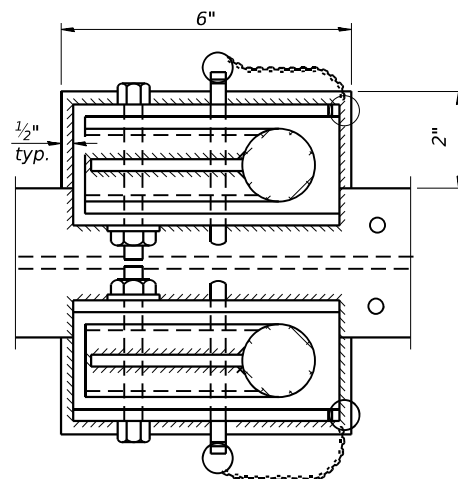


FRONT ELEVATION

See "ELEVATION" at right for dimensions.

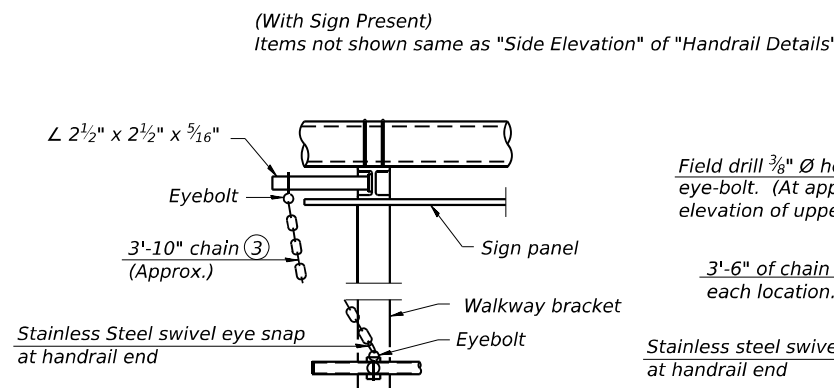


DETAIL E HANDRAIL HINGE



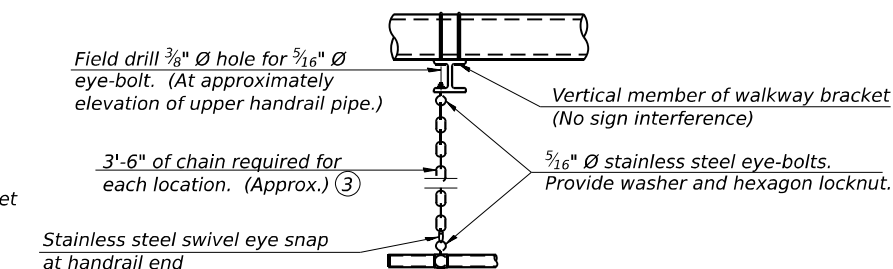
PLAN AT HANDRAIL JOINT

Details not shown same as "PLAN"



ALTERNATE SAFETY CHAIN ATTACHMENT

Details not shown similar to "Safety Chain" Details (Walkway omitted for clarity)



SAFETY CHAIN

One required for each end of each walkway.

OS-A-11-DMS

2-17-2017



USER NAME	= amikjuver
PLOT SCALE	= 31.9987' / in.
PLOT DATE	= 10/5/2023

DESIGNED	- CS	REVISED	-
DRAWN	- CS	REVISED	-
CHECKED	- BAR	REVISED	-
DATE	-	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
ALTERNATE ALUMINUM HANDRAIL DETAILS FOR DMS**

SCALE: SHEET 9 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	601
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

BAR LIST - EACH FOUNDATION

Bar	Number	Size	Length	Shape
v4(E)	24	#9	F less 5"	—
#4 bar spiral (E) - see Side Elevation				

NOTES:

The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Qu) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

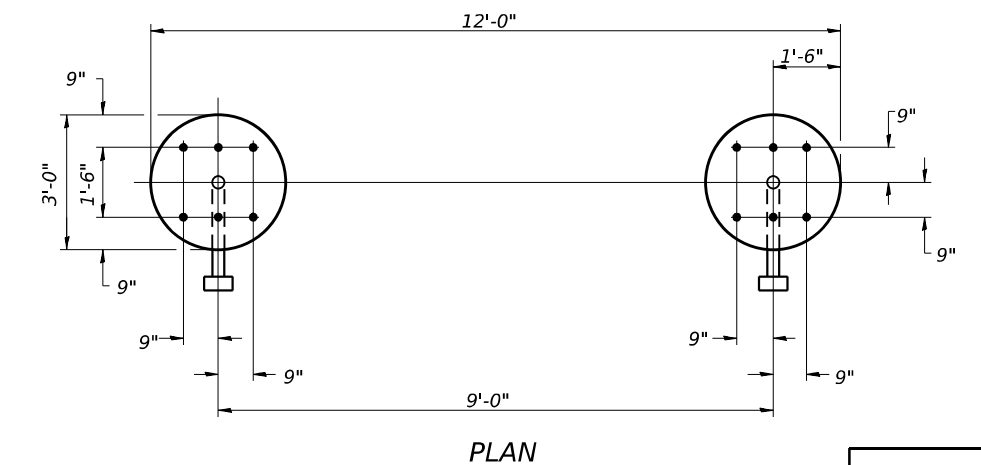
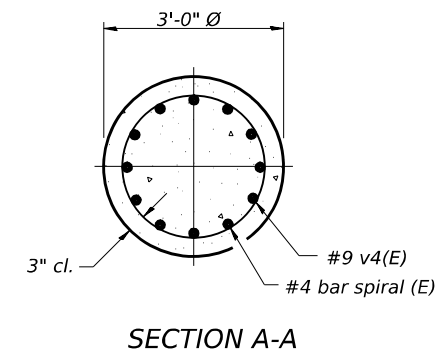
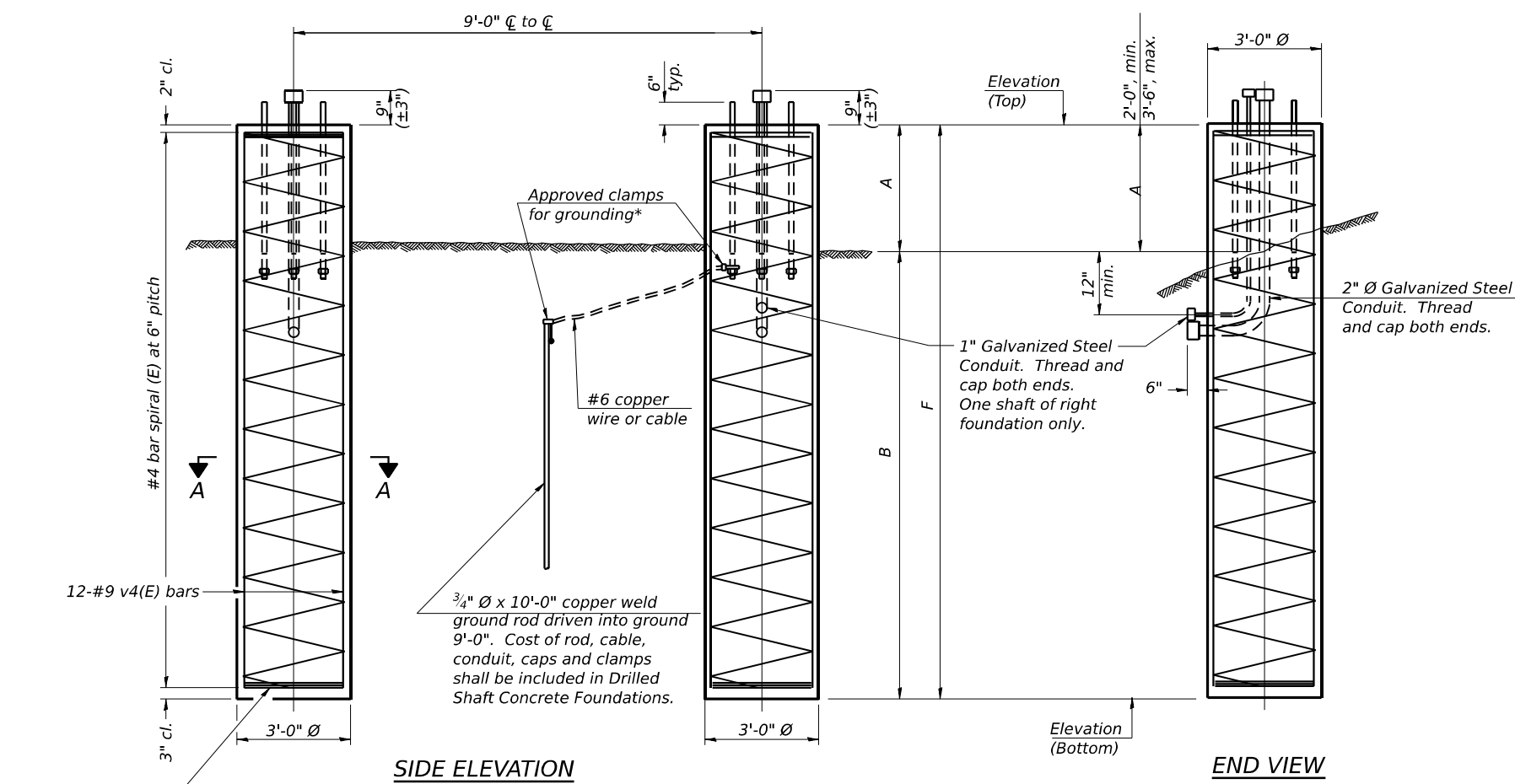
If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints.

Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



For anchor rod size and placement, see Support Frame Detail Sheet.

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

**DETAILS FOR 12" Ø SUPPORT FRAME
TYPE III-A TRUSS**

Structure Number	Station	Left Foundation					Right Foundation					Class DS Concrete (Cu. Yds.)
		Elevation Top	Elevation Bottom	A	B	F	Elevation Top	Elevation Bottom	A	B	F	
1S0991080L131.3	625+00	-	-	-	-	-	620.93	600.43	2'-6"	18'-0"	20'-6"	10.7

M:\E:_Default\...
 FILE NAME: ...
 PROJECT: ...
 DATE: 10/5/2023



USER NAME = amkljuver	DESIGNED - CS	REVISED -
PLOT SCALE = 31.9987' / in.	DRAWN - CS	REVISED -
PLOT DATE = 10/5/2023	CHECKED - BAR	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
DRILLED SHAFT DETAILS**

SCALE: SHEET 10 OF 12 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	602
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

* Anchor rod shall be ground or filed to bright metal at clamp and cable connection location.

NOTES:

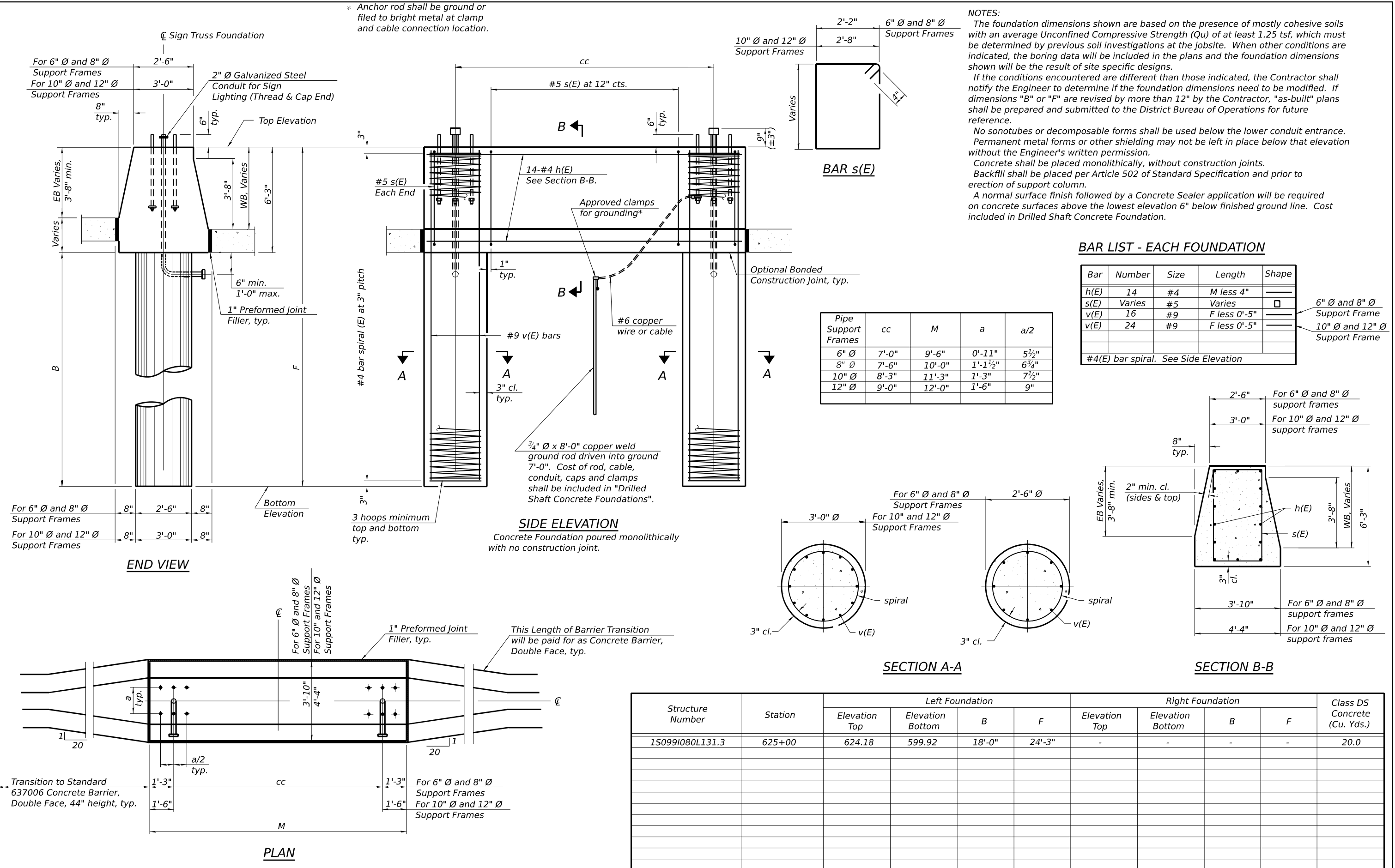
The foundation dimensions shown are based on the presence of mostly cohesive soils with an average Unconfined Compressive Strength (Q_u) of at least 1.25 tsf, which must be determined by previous soil investigations at the jobsite. When other conditions are indicated, the boring data will be included in the plans and the foundation dimensions shown will be the result of site specific designs.

If the conditions encountered are different than those indicated, the Contractor shall notify the Engineer to determine if the foundation dimensions need to be modified. If dimensions "B" or "F" are revised by more than 12" by the Contractor, "as-built" plans shall be prepared and submitted to the District Bureau of Operations for future reference.

No sonotubes or decomposable forms shall be used below the lower conduit entrance. Permanent metal forms or other shielding may not be left in place below that elevation without the Engineer's written permission.

Concrete shall be placed monolithically, without construction joints. Backfill shall be placed per Article 502 of Standard Specification and prior to erection of support column.

A normal surface finish followed by a Concrete Sealer application will be required on concrete surfaces above the lowest elevation 6" below finished ground line. Cost included in Drilled Shaft Concrete Foundation.



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 PLOT DATE = 10/5/2023



USER NAME = amkljuver	DESIGNED - CS	REVISED -
PLOT SCALE = 31.9987' / in.	DRAWN - CS	REVISED -
PLOT DATE = 10/5/2023	CHECKED - BAR	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**OVERHEAD SIGN STRUCTURES
MEDIAN SUPPORT FOUNDATION DETAILS**

F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 603
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

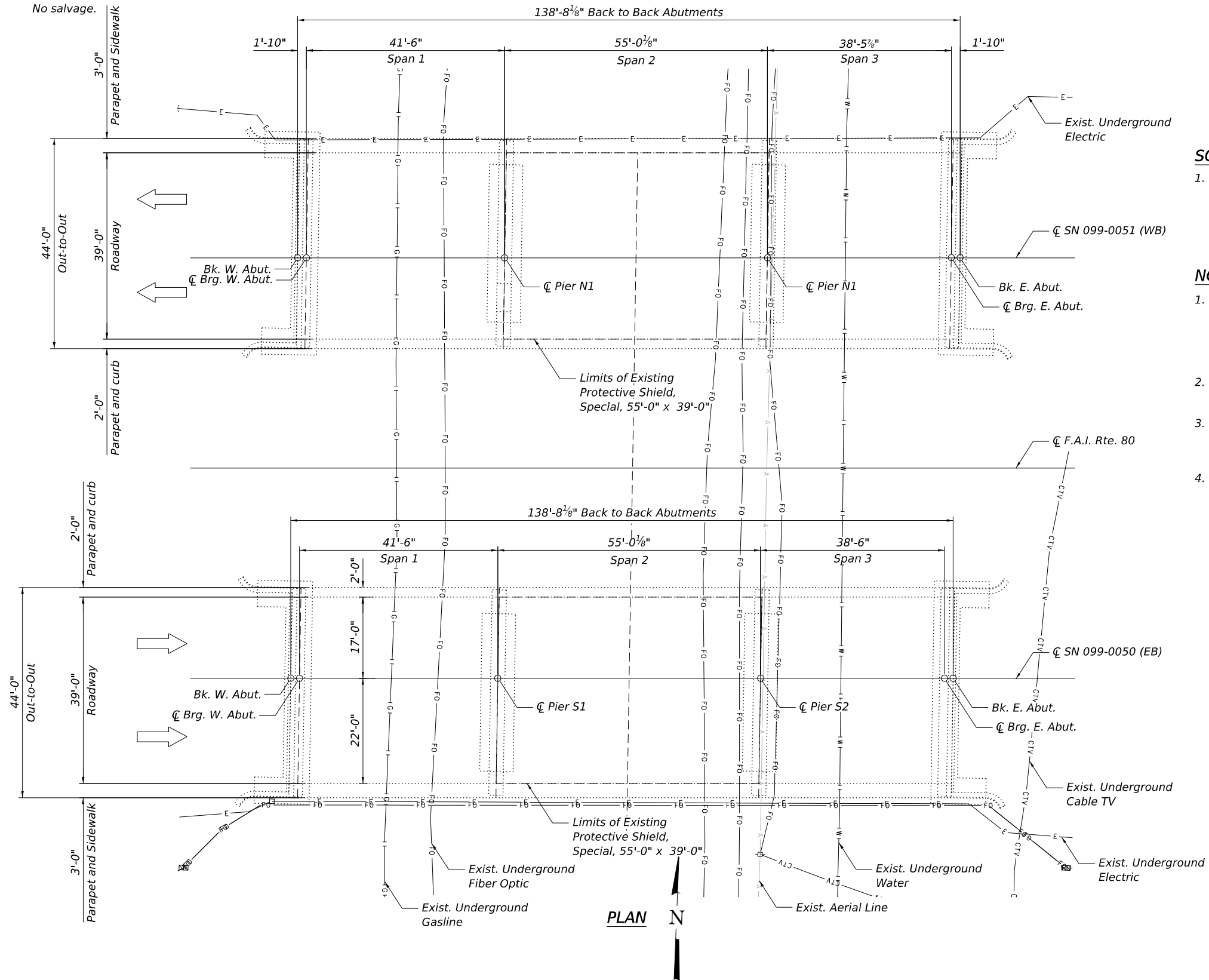
SCALE: SHEET 11 OF 12 SHEETS STA. TO STA.

Benchmark: Set cut square in south face of south pier foundation for sign "Exit 130 B Larkin Avenue North 1/2 mile" on the north side of westbound I-80, approximately 250' east of Midland Avenue; Elev.=633.455.

Existing Structure: S.N. 099-0050 and S.N. 099-0051. Built in 1963 as F.A.I. Rte. 80, Project I-80-4(20)132, Section 99-2HB-4 at Sta. 323+96.74. Existing dual structures each consist of a three-span reinf. concrete deck on steel WF beams supported by cast-in-place reinforced concrete stub abutments. The bridge measures 138'-8 1/8" back to back abutments, 44'-0" out to out width with a skew of 00°-56'-06". Structure to be removed and replaced.

Traffic Control: Stage construction shall be utilized to maintain traffic during construction.

No salvage.



TOTAL BILL OF MATERIAL S.N. 099-0050 (EB)

ITEM	UNIT	QUANTITY
Deck Slab Repair (Partial)	Sq Yd	31

TOTAL BILL OF MATERIAL S.N. 099-0051 (WB)

ITEM	UNIT	QUANTITY
Deck Slab Repair (Partial)	Sq Yd	31

SCOPE OF WORK

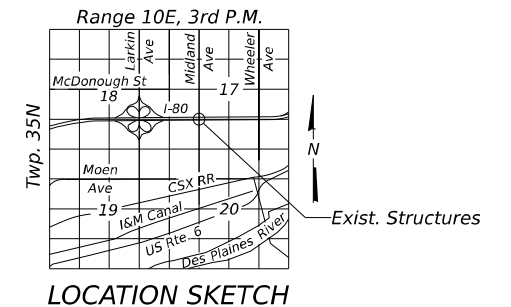
1. Perform partial depth deck slab repair, as directed by the Engineer.

NOTES:

1. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for quantity actually furnished at the unit price bid for the work.
2. Contractor shall not scale dimensions from the contract plans for construction purposes. Scales shown are for information only.
3. Deck slab repair areas are based upon 5% of the deck needing partial depth repairs. Actual location and size patches to be placed shall be determined by the Engineer in the field at the time of construction and shown on As-built plans. See Special Provision "Bridge Deck Maintenance Patching".
4. Patches shall be sloped to drain at existing deck drainage structures.

LEGEND

- G— Exist. Underground Gasline
- FO— Exist. Underground Fiber Optic
- W— Exist. Underground Water
- A— Exist. Underground Aerial Lines
- E— Exist. Underground Electric
- [- - -] Limits of Exist. Permanent Protective Shield



MODEL: BL_R0_R0_Plan 3 (Sheet)
 FILE NAME: P:\Projects\2013\Illinois\Transportation\p13\I-80\Documents\Projects_2013\CH401\401180022\02-TransSystems\CAD\2889\Structural\Sheet_Patching_0990050-0990051-621885-02-DeckPatching.dgn



USER NAME = amkluver	DESIGNED - AMS	REVISED -
PLOT SCALE =	DRAWN - AMS	REVISED -
PLOT DATE = 10/5/2023	CHECKED - RB	REVISED -
	DATE - 10/6/23	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE MAINTENANCE PATCHING
I-80 OVER MIDLAND AVE (SN 099-0050, -0051)**

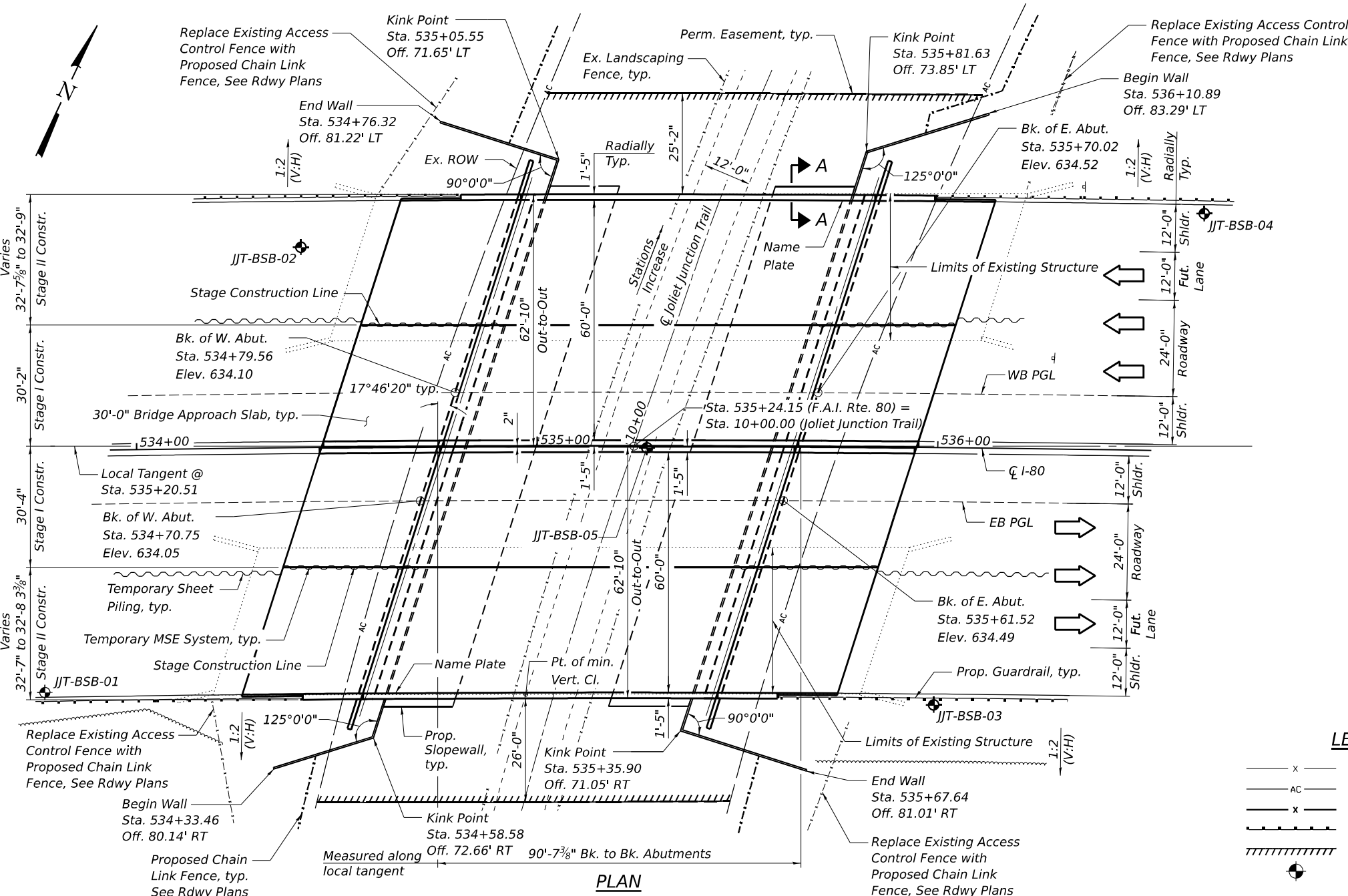
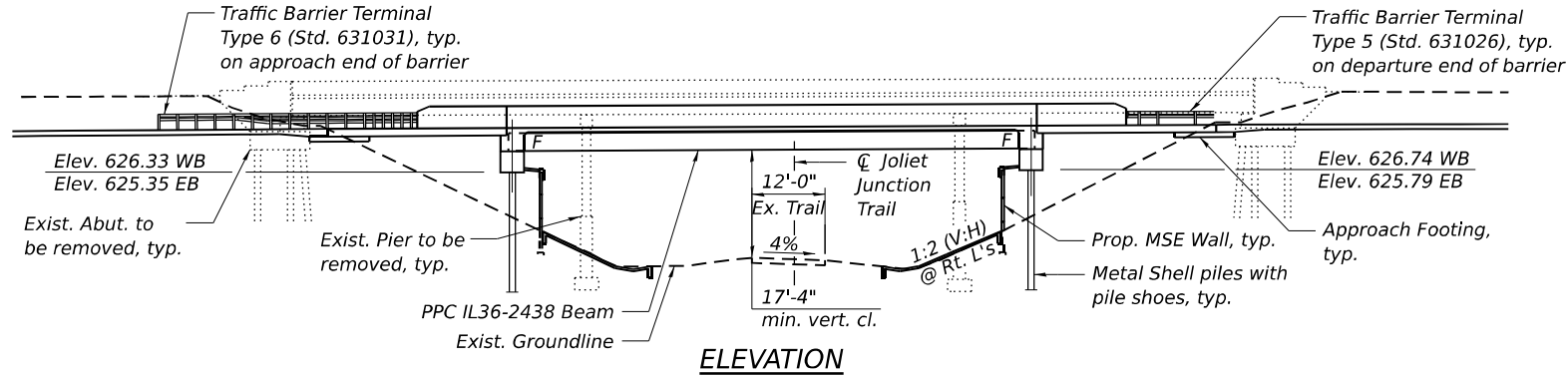
SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 606
			CONTRACT NO. 62R89	
ILLINOIS FED. AID PROJECT				

Benchmark: BM 23 Set cut square on northwesterly corner of northerly bridge wall of westbound I-80 bridge over Joliet Junction bike trail. Elev. = 641.669.

Existing Structures: S.N. 099-0048 and S.N. 099-0049. Built in 1964 as F.A.I. Rte. 80, Section 99-2VB. at Sta. 242+41.64. Existing dual structures each consist of 3-span reinf. concrete deck on continuous steel WF beams supported by spill-thru pile bent abuts. and multi-column piers. 164'-11 1/2" Bk. to Bk. abutments. 36'-7" out-to-out deck. Structures to be removed and replaced. Traffic to be maintained using staged construction.

Salvage: None.



NOTES:
Up to 1/4 inch may be ground off the bridge deck and the bridge approach slabs.
For Section A-A, see sheet S1-3 of S1-50.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

LOADING HL-93

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

DESIGN STRESSES

FIELD UNITS
f_c = 4,000 psi (Superstructure)
f_c = 3,500 psi (Substructure)
f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f_c = 8,500 psi
f_{ci} = 6,500 psi
f_{pu} = 270,000 psi (0.6" Ø low lax. strands)
f_{pbt} = 202,300 psi (0.6" Ø low lax. strands)

PRECAST UNITS

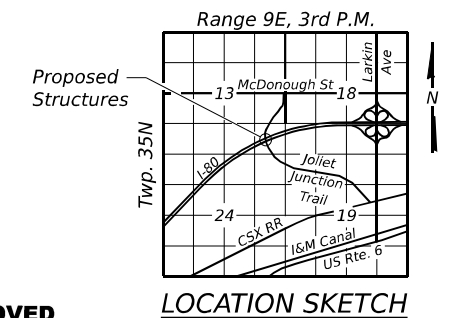
f_c = 5,000 psi (MSE Wall Panels)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.068
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.126
Soil Site Class = C



Anna Dukes
ANNA M. DUKES, S.E.
NO. 081-005598
EXP. DATE 11/30/2024



LEGEND

- x — Exist. Access Control Fence
- ac — Exist. ROW / Access Control
- x — Prop. Chain Link Fence
- — — — — Guardrail
- //// Permanent Easement
- ⊙ Soil Boring Location

GENERAL PLAN AND ELEVATION

I-80 OVER JOLIET JUNCTION TRAIL

F.A.I. RTE. 80 - SEC. FAI 80 22 BR

WILL COUNTY

STATION 535+24.15

S.N. 099-8320 (E.B.)

S.N. 099-8321 (W.B.)

MODEL: Untitled-3
FILE NAME: pw://transystems-pw.bentley.com/transystems-pw1-hosted/Projects/2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-001-CPE.dgn



USER NAME = amkluver	DESIGNED - TJA / CG	REVISED -
PLOT SCALE =	CHECKED - AMD / WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - TJA / CMD	REVISED -
	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SHEET 51-1 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	607
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
3. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
4. Slipforming of interior parapets is not allowed.
5. The Contractor will notify the Forest Preserve District of Will County (FPDWC) four weeks in advance of the start of construction around Joliet Junction Trail and in advance of any trail closures. The Contractor must maintain functional use of the trail and protect its users throughout construction. Construction equipment may only access the area around Joliet Junction Trail via I-80. See Special Provisions.

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S1-2	General Data 1
S1-3	General Data 2
S1-4	Foundation Layout
S1-5	Stage Construction Details 1
S1-6	Stage Construction Details 2
S1-7	Temporary Concrete Barrier
S1-8	Removal Details Stage I
S1-9	Removal Details Stage II
S1-10	Temporary MSE and Soil Retention Details 1
S1-11	Temporary MSE and Soil Retention Details 2
S1-12	Top of Deck Elevations 1
S1-13	Top of Deck Elevations 2
S1-14	Top of Deck Elevations 3
S1-15	Top of Deck Elevations 4
S1-16	Top of Deck Elevations 5
S1-17	Top of West Approach Slab Elevations
S1-18	Top of East Approach Slab Elevations
S1-19	Deck Plan and Cross Section - WB
S1-20	Deck Plan and Cross Section - EB
S1-21	Parapet Details
S1-22	Diaphragm Details 1
S1-23	Diaphragm Details 2
S1-24	Diaphragm Details 3
S1-25	Superstructure Details
S1-26	Approach Slab Details 1
S1-27	Approach Slab Details 2
S1-28	Approach Slab Details 3
S1-29	Approach Slab Details 4
S1-30	Approach Slab Details 5
S1-31	Framing Plan
S1-32	IL36 PPC Beam Details 1
S1-33	IL36 PPC Beam Details 2
S1-34	West Abutment Plan and Elevation - WB
S1-35	West Abutment Plan and Elevation - EB
S1-36	West Abutment Details
S1-37	East Abutment Plan and Elevation - WB
S1-38	East Abutment Plan and Elevation - EB
S1-39	East Abutment Details
S1-40	West MSE Wall Plan and Elevation
S1-41	East MSE Wall Plan and Elevation
S1-42	MSE Wall Sections and Details
S1-43	Concrete Parapet Slipforming Option
S1-44	Pile Details
S1-45	Bar Splicer Assembly Details
S1-46	Boring Logs 1
S1-47	Boring Logs 2
S1-48	Boring Logs 3
S1-49	Boring Logs 4
S1-50	Boring Logs 5

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal Of Existing Structures No. 1	Each	-	-	1
Removal Of Existing Structures No. 2	Each	-	-	1
Protective Shield	Sq. Yd.	1,490	-	1,490
Structure Excavation	Cu. Yd.	-	2,191	2,191
Concrete Structures	Cu. Yd.	-	248.9	248.9
Concrete Superstructure	Cu. Yd.	503.2	-	503.2
Protective Coat	Sq. Yd.	2,270	-	2,270
Concrete Superstructure (Approach Slab)	Cu. Yd.	352.8	-	352.8
Furnishing And Erecting Precast Prestressed Concrete Beams, IL36N	Foot	1,404	-	1,404
Reinforcement Bars, Epoxy Coated	Pound	247,110	25,340	272,450
Bar Splicers	Each	1,066	200	1,266
Mechanical Splicers	Each	8	-	8
Slope Wall 4 Inch	Sq. Yd.	-	602	602
Furnishing Metal Shell Piles 16" X 0.312"	Foot	-	1,351	1,351
Driving Piles	Foot	-	1,351	1,351
Test Pile Metal Shells	Each	-	4	4
Pile Shoes	Each	-	32	32
Name Plates	Each	2	-	2
Preformed Joint Seal 3 1/2"	Foot	149	-	149
Temporary Sheet Piling	Sq. Ft.	-	1,660	1,660
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	-	4,633	4,633
Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	-	1,801	1,801
Granular Backfill For Structures	Cu. Yd.	-	568	568
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	1,190	-	1,190
Diamond Grinding (Bridge Section)	Sq. Yd.	2,182	-	2,182

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	PLOT SCALE =	CHECKED - AMD / WJC	REVISED -
	PLOT DATE = 10/5/2023	DRAWN - TJA / CMD	REVISED -
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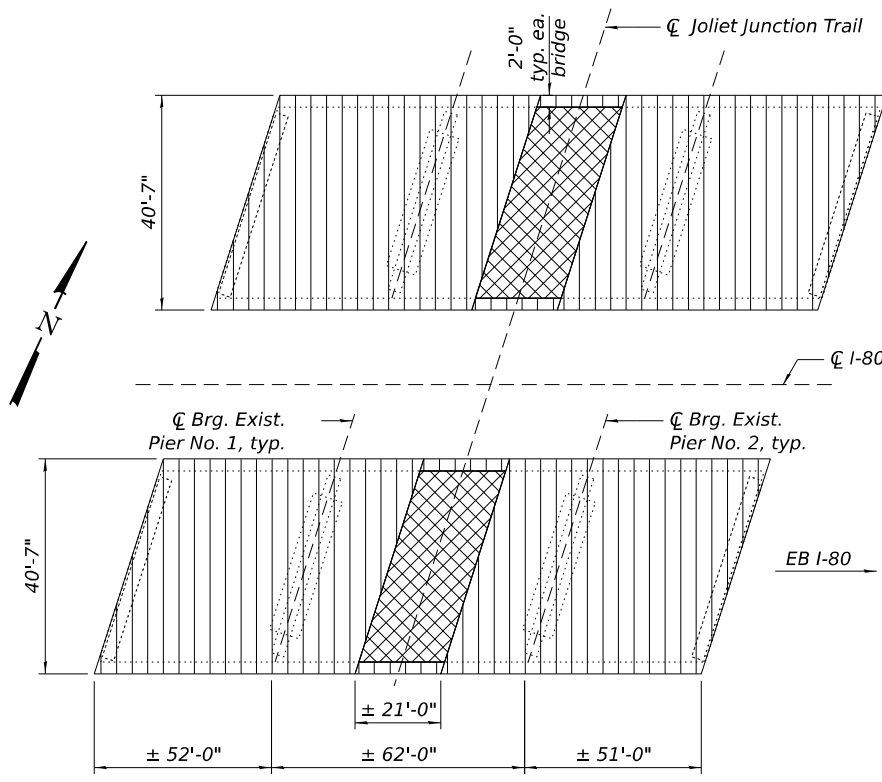
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL DATA 1
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

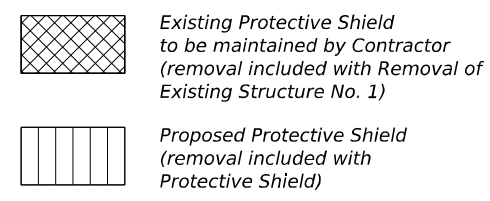
SHEET 51-2 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	608
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

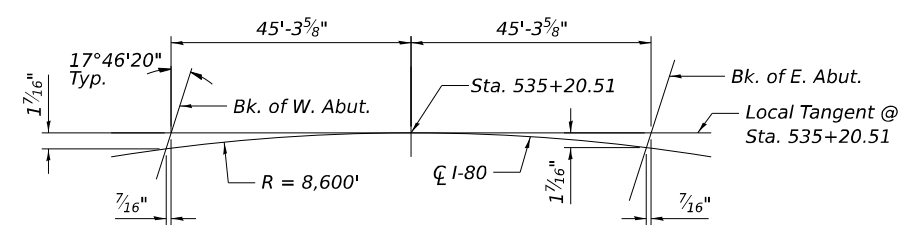
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PLAN
 (Limits of Protective Shield)

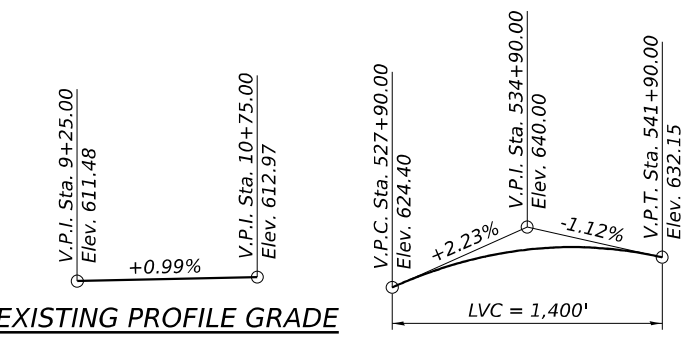


Note:
 Middle spans of existing structures have existing Protective Shield in place as shown on Plan (Limits of Protective Shield). The Contractor shall evaluate the condition of the existing Protective Shield per Article 501.03 of Standard Specifications and determine if it is structurally adequate for demolition of the existing deck. The evaluation shall be performed by an Illinois Licensed Structural Engineer. The Contractor shall remove & replace any inadequate Protective Shield & add Protective Shield at deck overhangs & other areas required by Article 501.03 and as shown on the plan view. The Contractor will not be paid for evaluation of the existing Protective Shield, but will be paid for new Protective Shield at the unit price bid for that work.



OFFSET SKETCH

CURVE DATA
 P.I. Sta. = 537+23.60
 $\Delta = 45^\circ 35' 36''$ (RT)
 $D = 0^\circ 39' 58''$
 $R = 8,600.00'$
 $T = 3,614.53'$
 $L = 6,843.50'$
 $E = 728.71'$
 $e = 2.4\%$
 $T.R. = 103'$
 $S.E. Run = 144'$
 P.C. Sta. = 501+09.07
 P.T. Sta. = 569+52.57



EXISTING PROFILE GRADE
JOLIET JUNCTION TRAIL
 (Along \bar{C} Joliet Junction Trail)

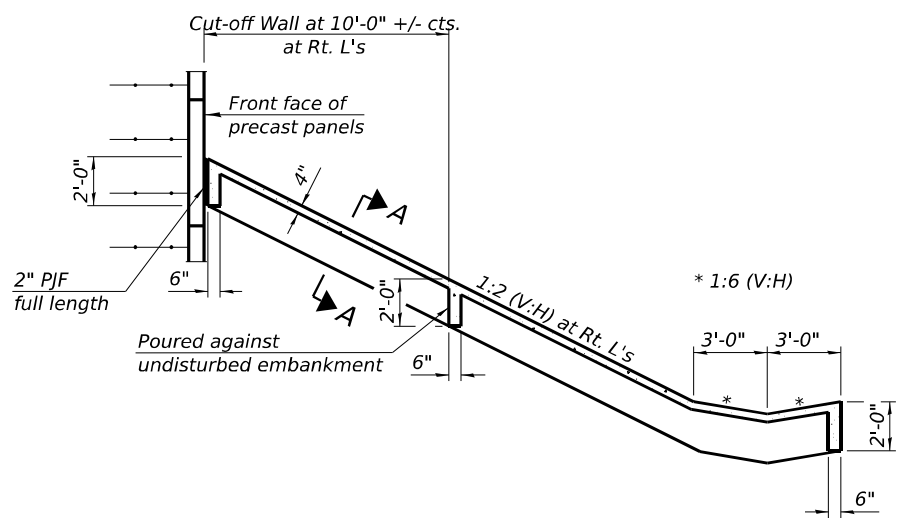
PROFILE GRADE F.A.I. 80
 (Along I-80 EB & WB PGL)
 (The profile grade shows final elevations after grinding)

STATION 535+24.15
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.I. RT. 80 SEC. FAI 80 22 BR
 LOADING HL-93
 STRUCTURE NO. 099-8320

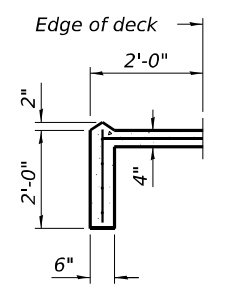
NAME PLATE (EB)
 See Std. 515001

STATION 535+24.15
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.I. RT. 80 SEC. FAI 80 22 BR
 LOADING HL-93
 STRUCTURE NO. 099-8321

NAME PLATE (WB)
 See Std. 515001



SECTION THRU
CONCRETE SLOPEWALL



SECTION A-A

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

BILL OF MATERIAL

Item	Unit	Total
Protective Shield	Sq. Yd.	1,490
Slope Wall 4 inch	Sq. Yd.	602

Note:
 The quantities for Protective Shield shown include the cross-hatched area of existing protective shield.



USER NAME = amkluver	DESIGNED - TJA / CG	REVISED -
PLOT SCALE =	CHECKED - AMD / WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - TJA / CMD	REVISED -
	CHECKED - WJC	REVISED -

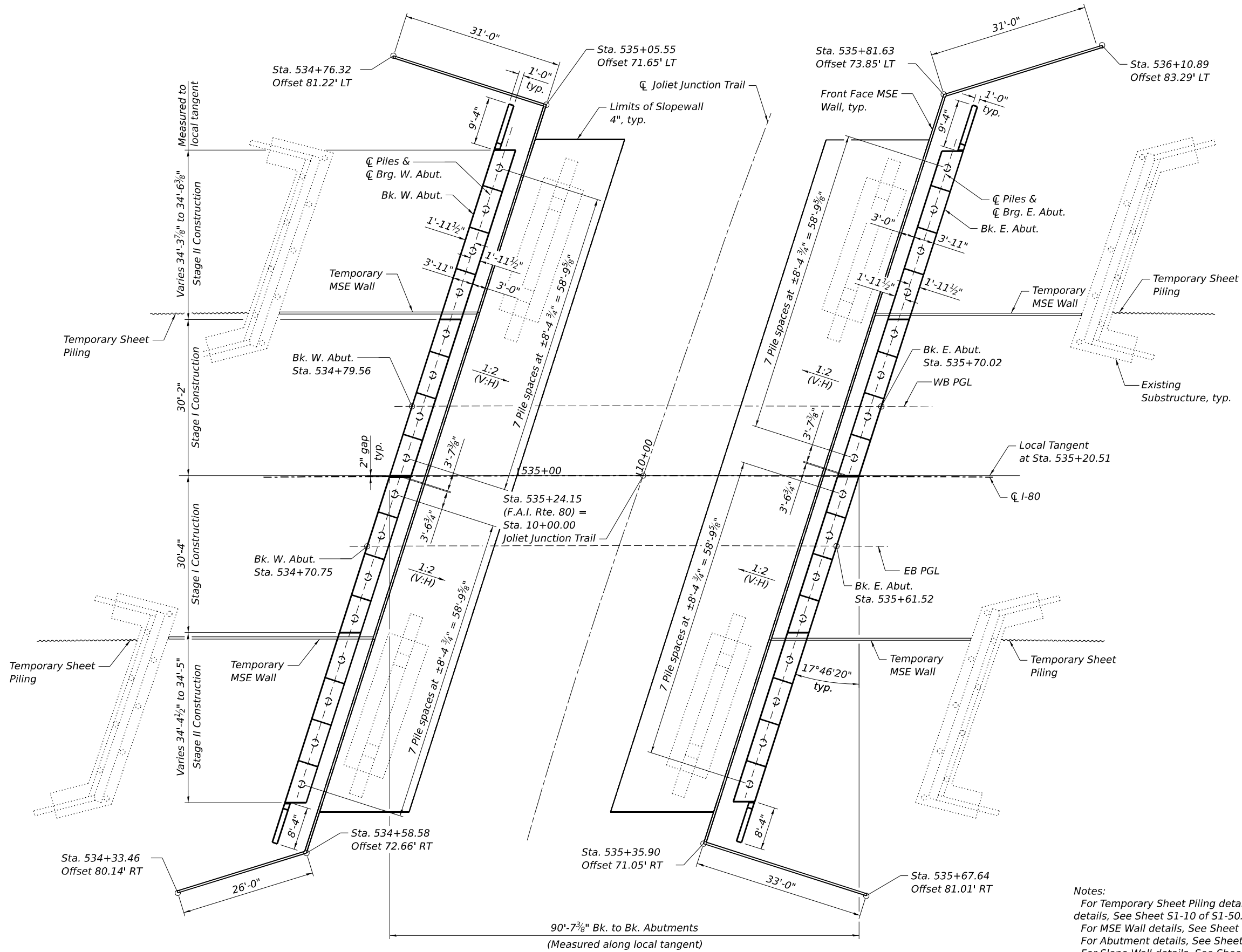
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL DATA 2
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-3 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	609
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

MODEL: Drawing
 FILE NAME: pw://transystems-pw.bentley.com/transystems-pw1-hosted/Projects/2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-004-Foundation/Layout.dgn



FOOTING LAYOUT

Notes:
 For Temporary Sheet Piling details and Temporary MSE Wall details, See Sheet S1-10 of S1-50.
 For MSE Wall details, See Sheet S1-40 thru S1-42 of S1-50.
 For Abutment details, See Sheet S1-34 thru S1-39 of S1-50.
 For Slope Wall details, See Sheet S1-3 of S1-50.



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - TJA	REVISED -
PLOT DATE = 10/5/2023	DRAWN - IS	REVISED -
	CHECKED - TJA	REVISED -

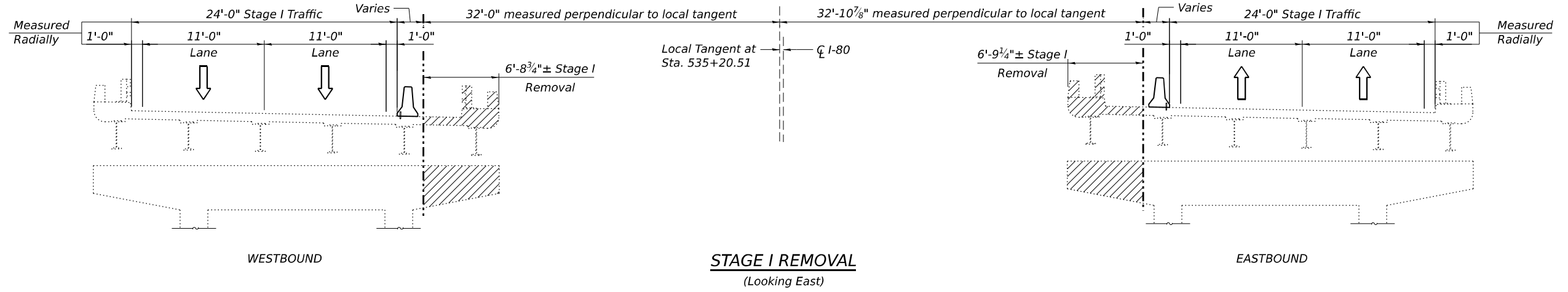
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FOUNDATION LAYOUT
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

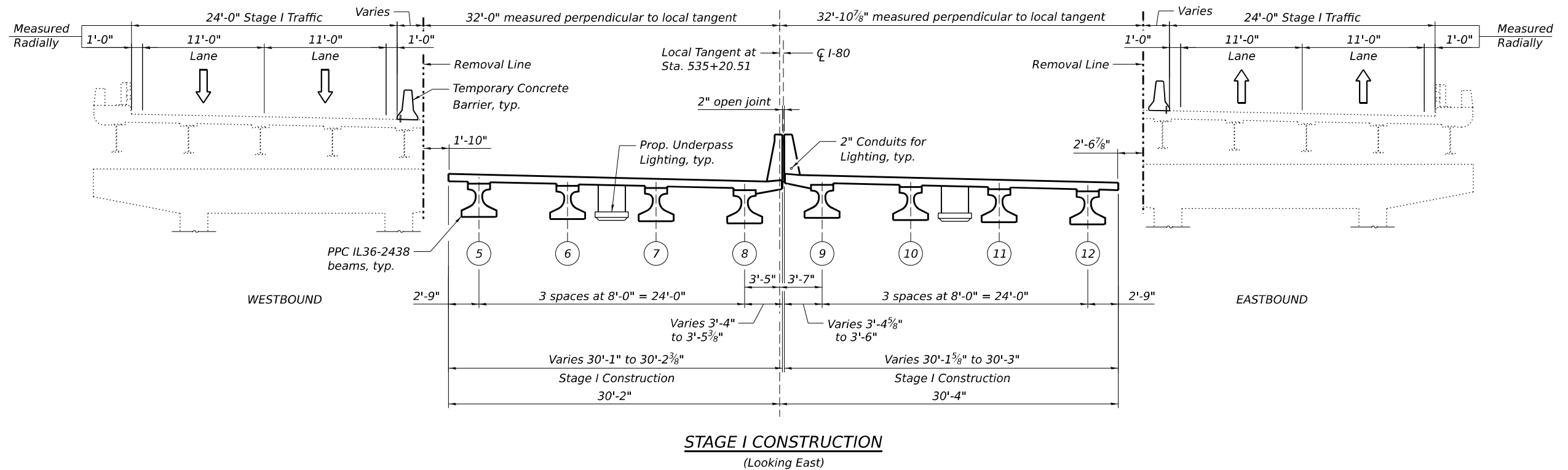
SHEET S1-4 OF S1-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	610
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

MODEL: Drawing
 FILE NAME: pww://transystems-pw.bentley.com/transystems-pw1-hosted/Documents/Projects_2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-005-StagingDetails1.dgn



Notes:
 Hatched areas indicate Removal of Existing Structures No. 1.
 Dimensions shown are taken perpendicular to local tangent unless otherwise noted.
 See Sheet S1-7 of S1-50 for Temporary Concrete Barrier Details. See Roadway plans for quantities.



TRANSYSTEMS

USER NAME =	amkluver	DESIGNED -	TJA / CG	REVISED -	
PLOT SCALE =		CHECKED -	AMD / TJJ	REVISED -	
PLOT DATE =	10/5/2023	DRAWN -	TJA / CMD	REVISED -	
		CHECKED -	AMD / TJJ	REVISED -	

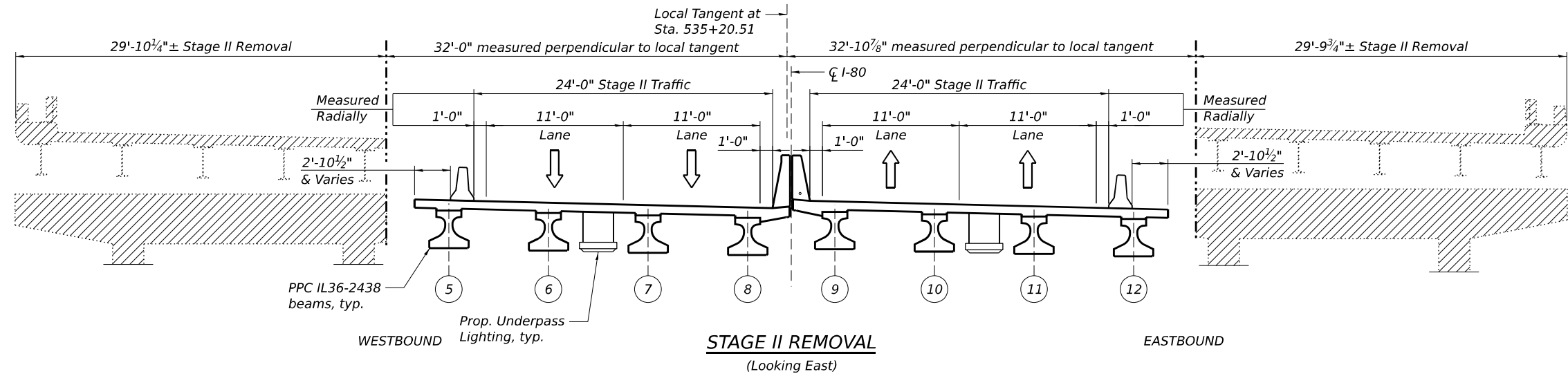
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS 1
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

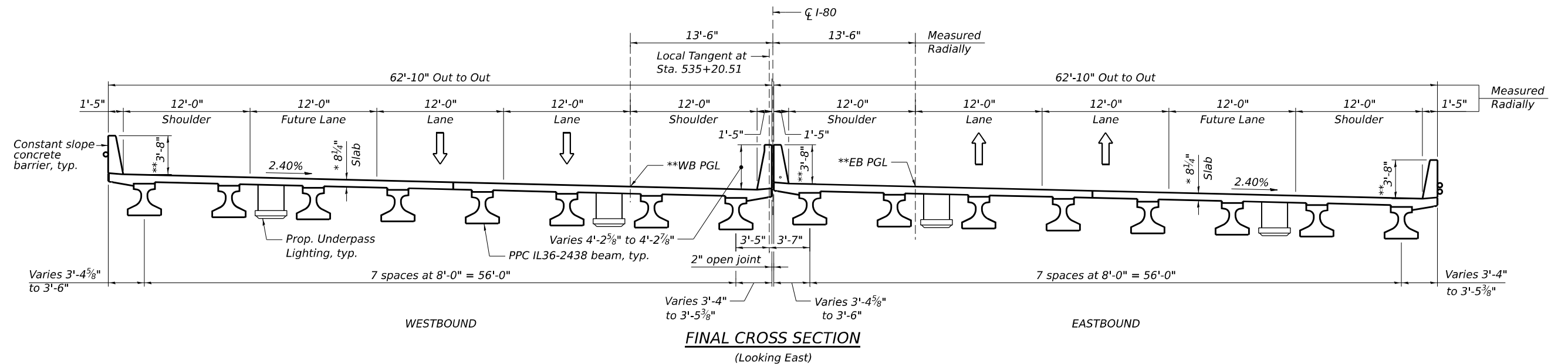
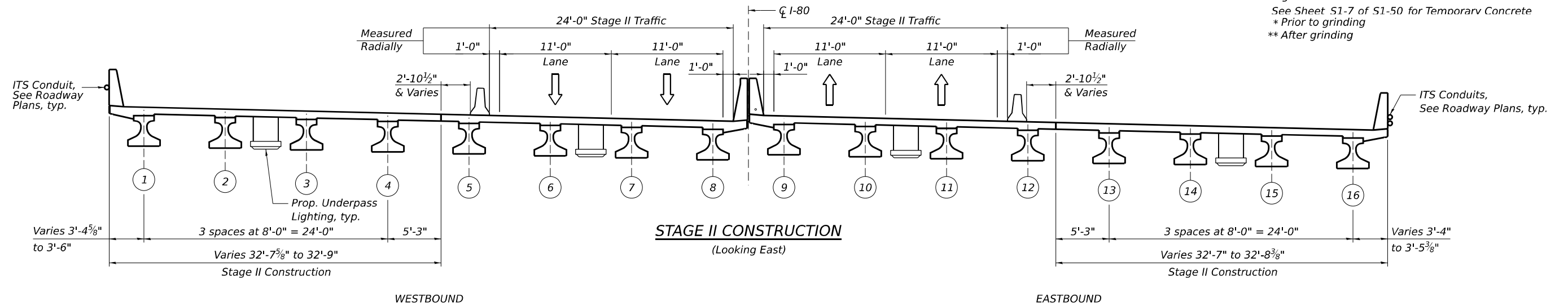
SHEET S1-5 OF S1-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	611
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

MODEL: Drawing
 FILE NAME: p:\transystems-pw\benley.com\transcorp-pw\1-hosted\Documents\Projects_2018\CH401\401180022\02-TransSystems\CAD\62R89\Sheets\23-Structural\099-8320 & 099-8321\0998320-62R89-006-StageII StagingDetails2.dgn



Notes:
 Hatched areas indicate Removal of Existing Structures No. 1.
 Dimensions shown are taken perpendicular to local tangent unless otherwise noted.
 See Sheet S1-7 of S1-50 for Temporary Concrete
 * Prior to grinding
 ** After grinding



TRANSYSTEMS

USER NAME = amkluver	DESIGNED - TJA / CG	REVISED -
PLOT SCALE =	CHECKED - AMD / TJJ	REVISED -
PLOT DATE = 10/5/2023	DRAWN - TJA / CMD	REVISED -
	CHECKED - AMD / TJJ	REVISED -

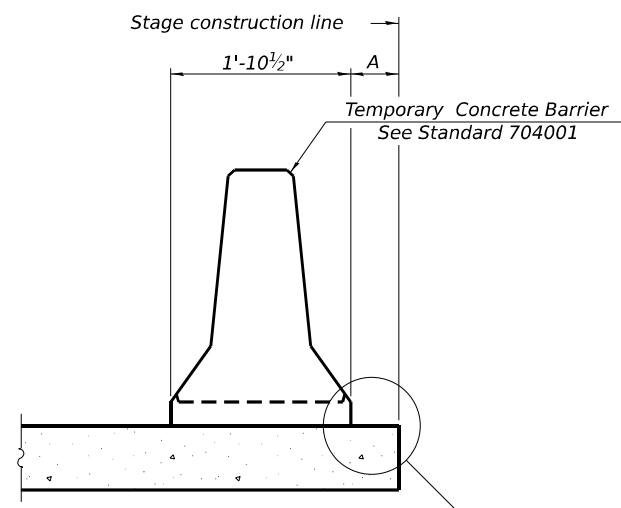
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS 2
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET S1-6 OF S1-50 SHEETS

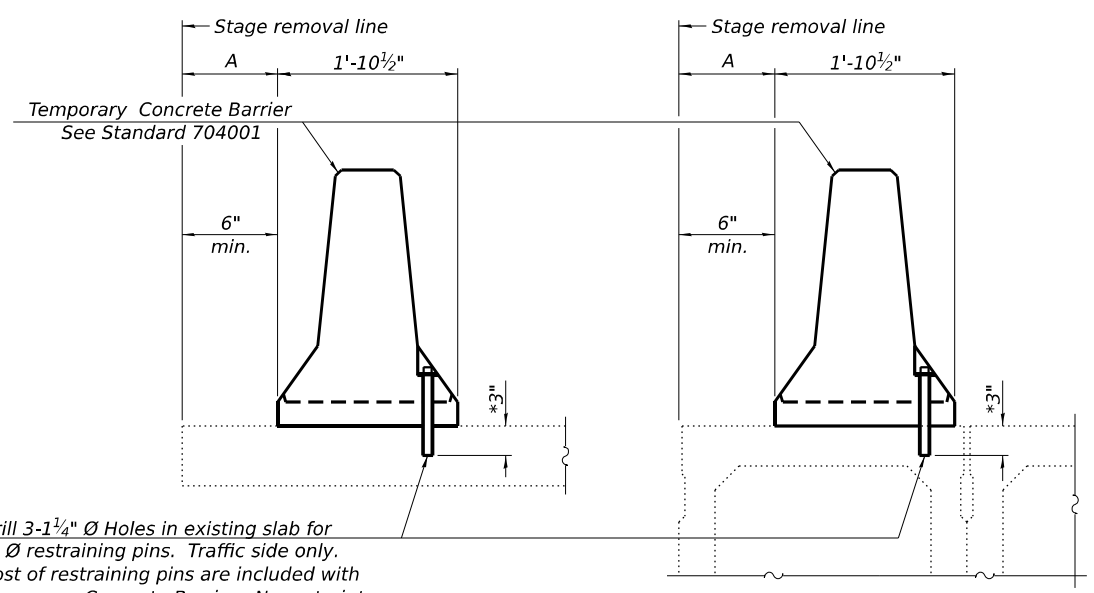
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	612
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

MODEL: Drawing
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When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



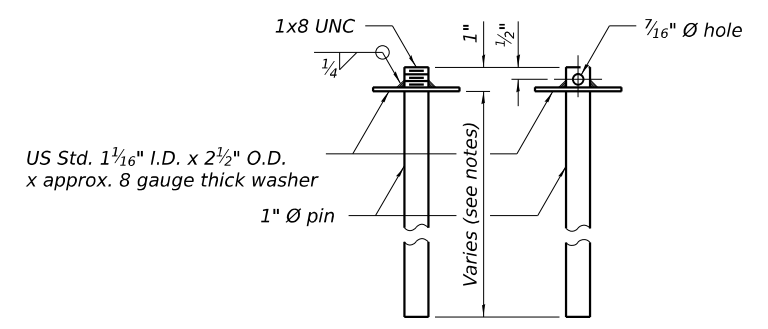
Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

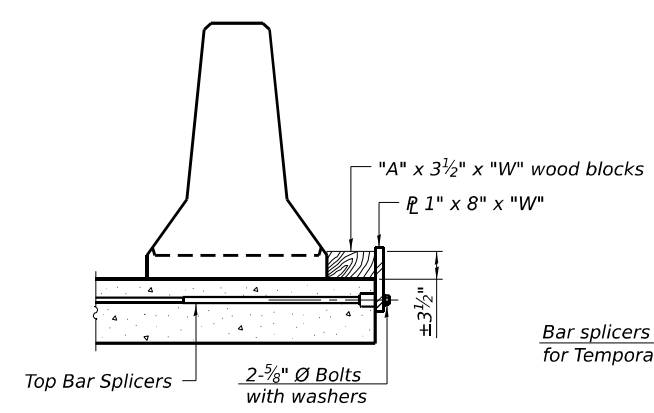
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

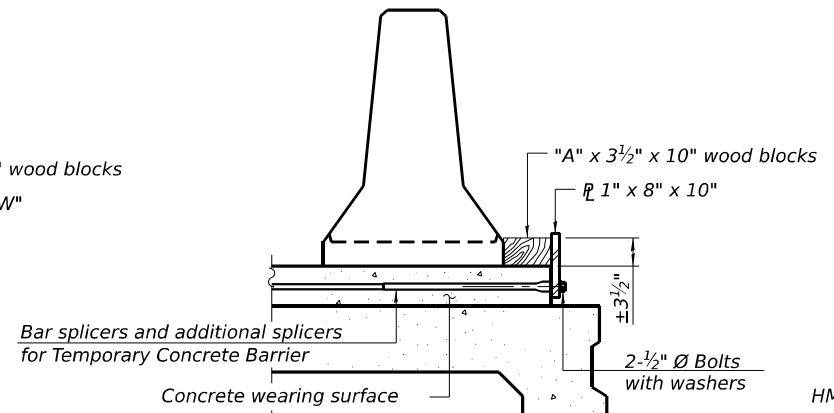


RESTRAINING PIN

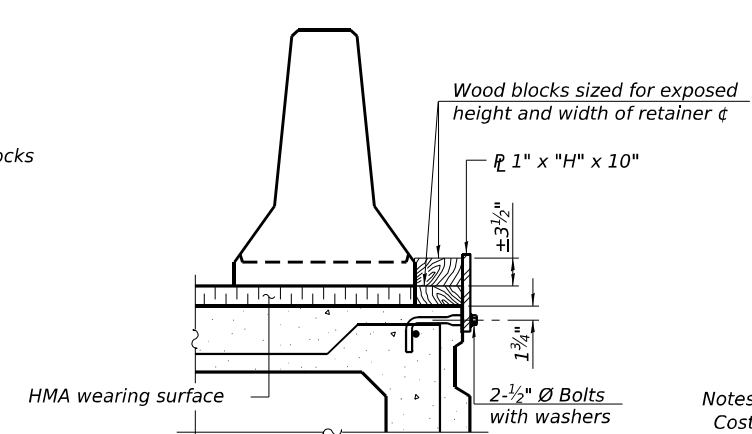
US Std. 1 1/16" I.D. x 2 1/2" O.D. x approx. 8 gauge thick washer



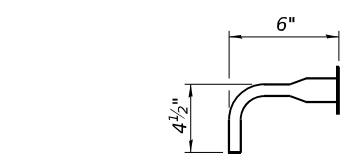
DETAIL I



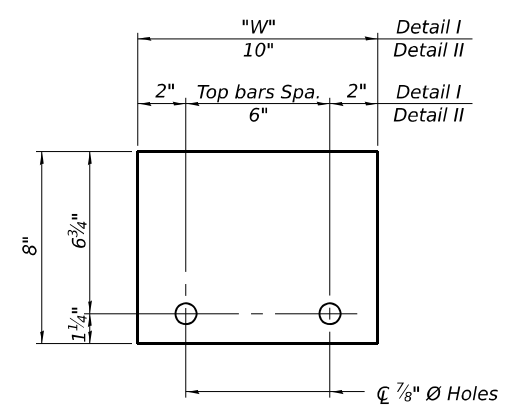
DETAIL II



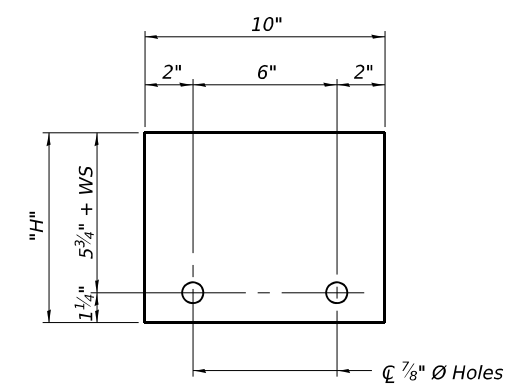
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER 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 1/3 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 1 1/2", 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.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021



USER NAME = amkluver	DESIGNED - CG	REVISED -
	CHECKED - TJJ	REVISED -
PLOT SCALE =	DRAWN - CMD	REVISED -
PLOT DATE = 10/5/2023	CHECKED - TJJ	REVISED -

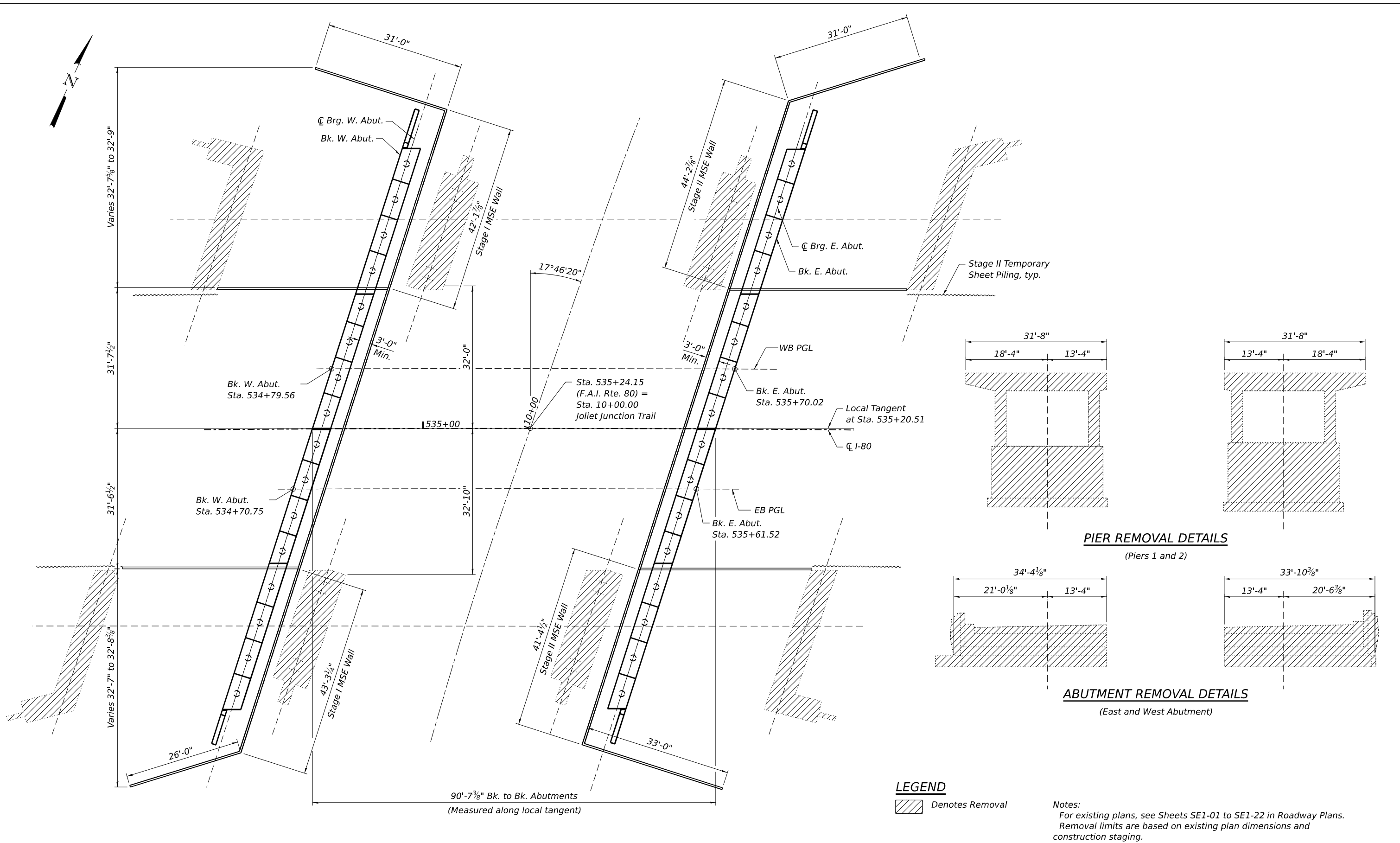
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-7 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	613
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R89	

MODEL: Drawing
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REMOVAL PLAN - STAGE II
 (Bridge superstructure not shown for clarity)

LEGEND
 Denotes Removal

Notes:
 For existing plans, see Sheets SE1-01 to SE1-22 in Roadway Plans.
 Removal limits are based on existing plan dimensions and construction staging.
 Plan dimensions at Rt. angles measured from local tangent.



USER NAME = amkluver	DESIGNED - IS	REVISED -
PLOT SCALE =	CHECKED - AMD	REVISED -
PLOT DATE = 10/5/2023	DRAWN - IS	REVISED -
	CHECKED - AMD	REVISED -

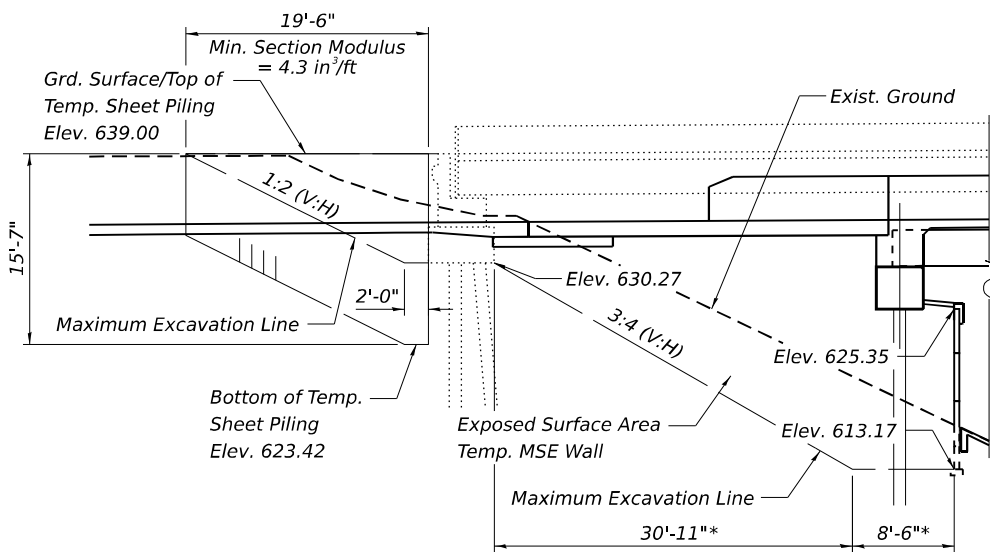
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS STAGE II
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-9 OF 51-50 SHEETS

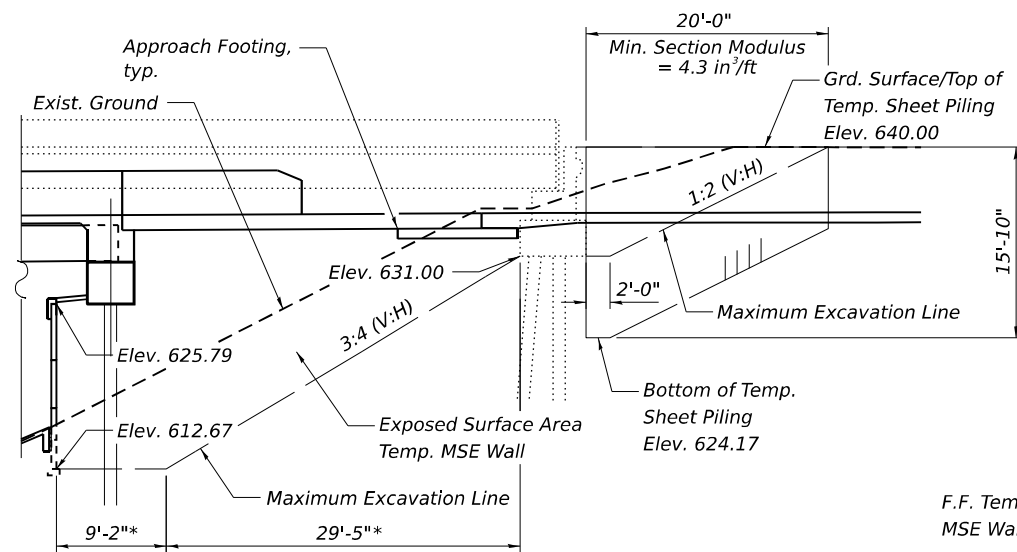
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	615
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

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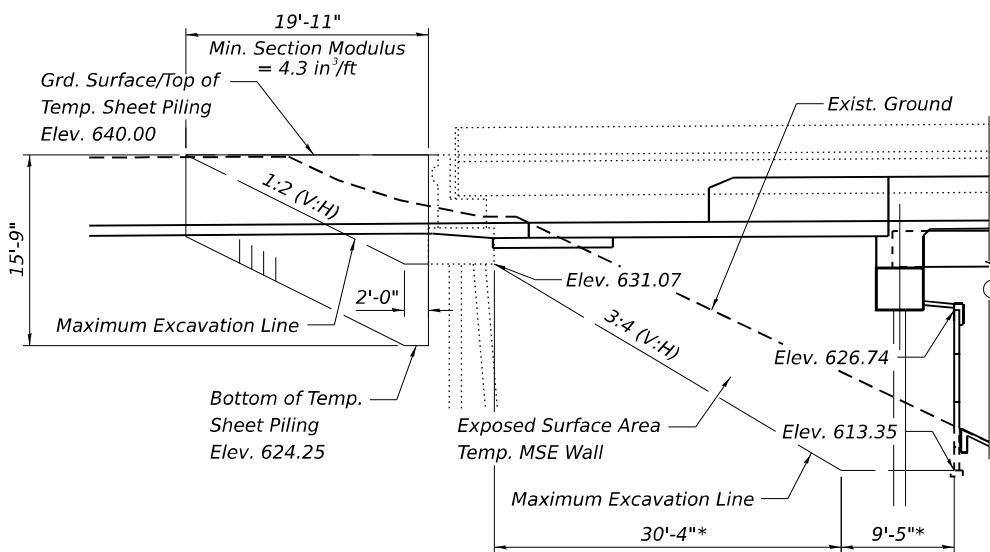


STAGE I TEMPORARY MSE WALL AND TEMPORARY SHEET PILING

(EB Bridge Looking North)
 Exist. Piers not shown for clarity

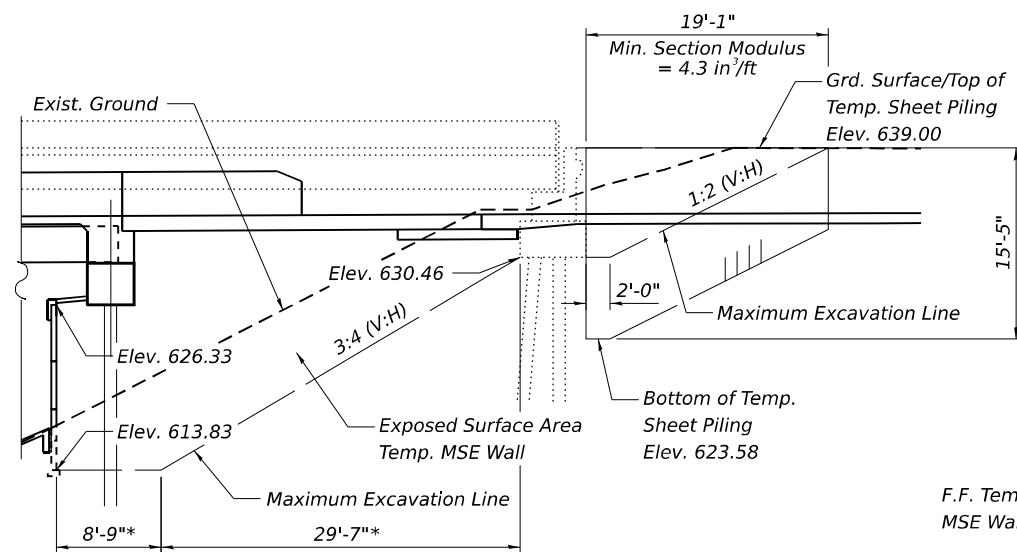


* Dimensions based on 0.7*retained height and may need to be modified based on design by MSE Wall Supplier

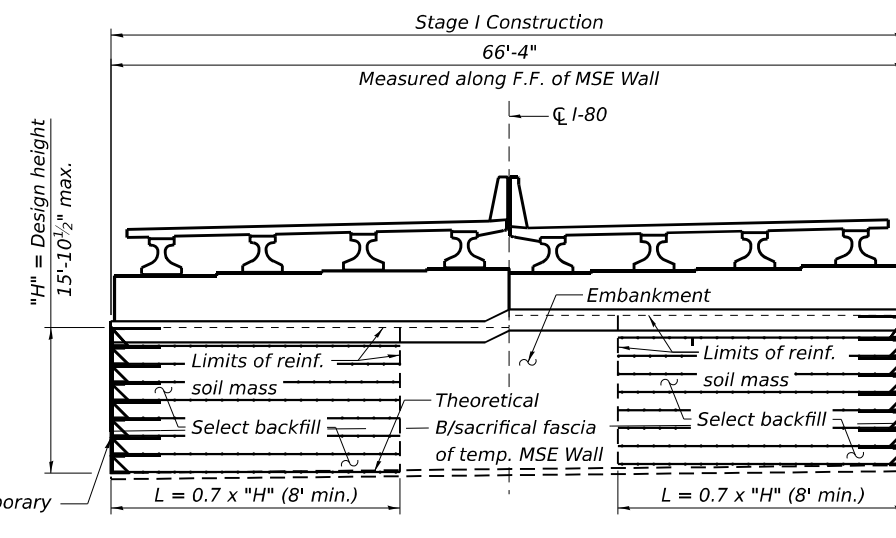


STAGE I TEMPORARY MSE WALL AND TEMPORARY SHEET PILING

(WB Bridge Looking South)
 Exist. Piers not shown for clarity

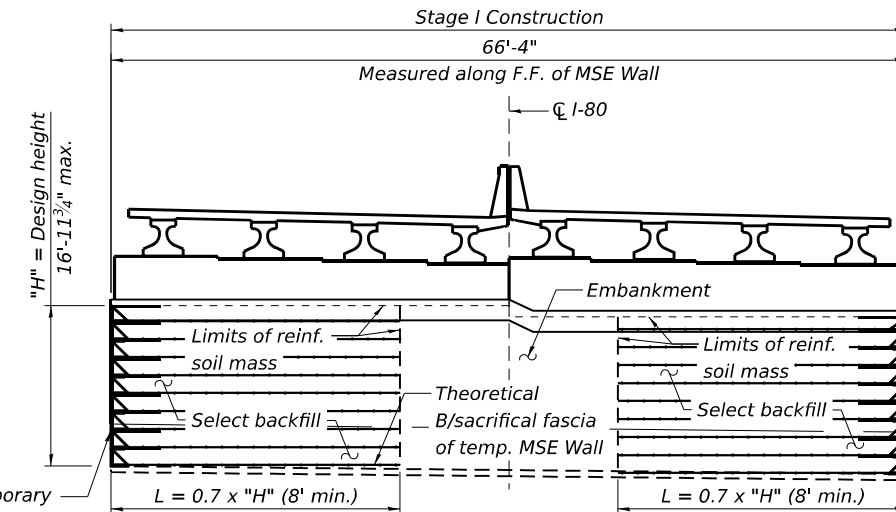


Notes:
 Refer to Sheets S1-34 to S1-39 for Abutment details.
 Refer to Sheets S1-26 to S1-30 for Approach slab details.
 Refer to Sheets S1-40 to S1-42 for MSE Wall details.
 If the contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plan details and calculations will be required for review and acceptance by the Engineer.



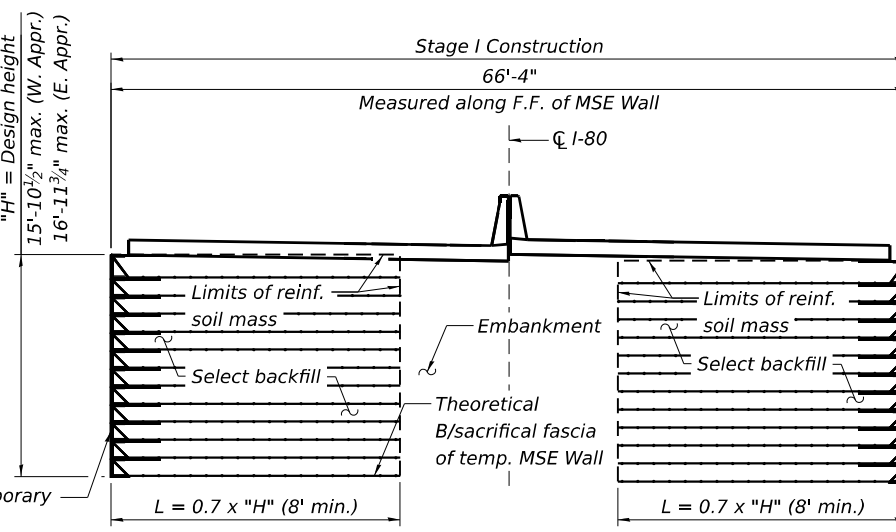
WEST ABUTMENT MSE WALL ELEVATION

(Looking West)



EAST ABUTMENT MSE WALL ELEVATION

(Looking East)



TYPICAL SECTION THROUGH APPROACH SLAB

(East Approach Slab Shown, East Approach Similar)

TRANSYSTEMS

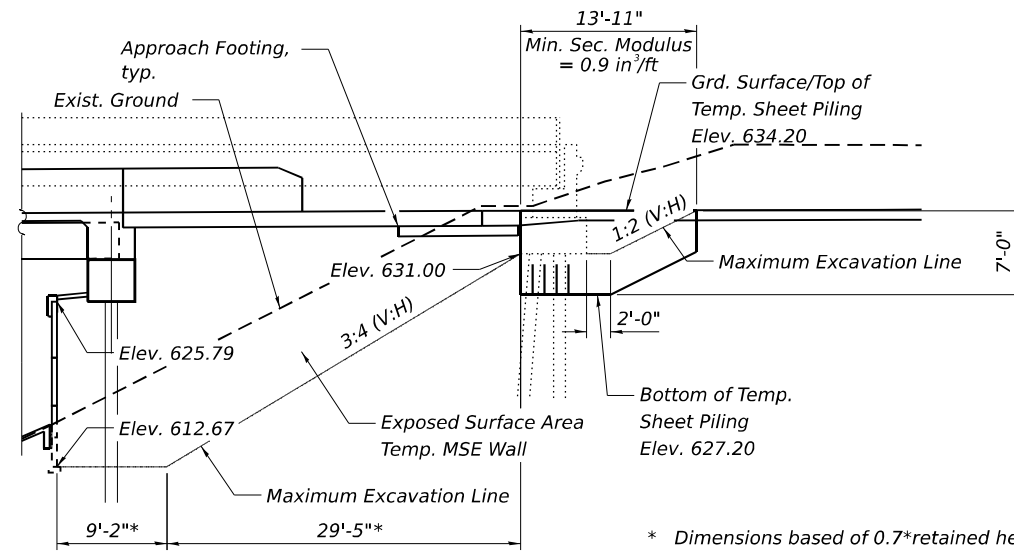
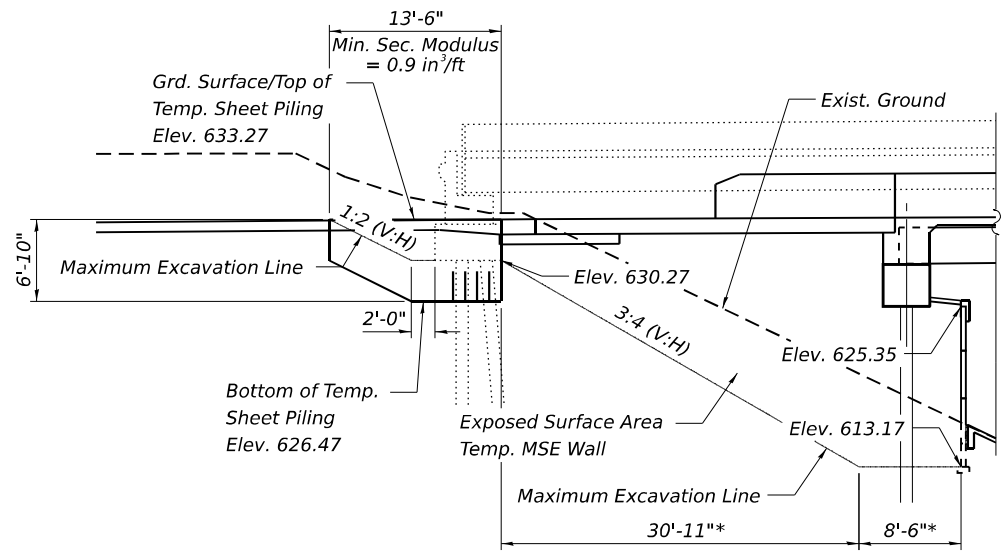
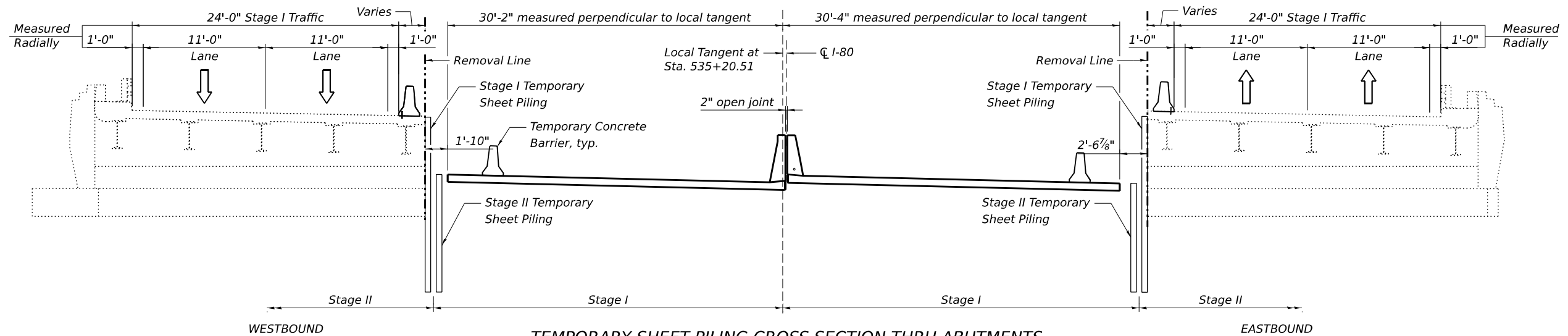
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PLOT SCALE =	CHECKED - AMD	REVISED -
PLOT DATE = 10/5/2023	DRAWN - IS	REVISED -
	CHECKED - AMD	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

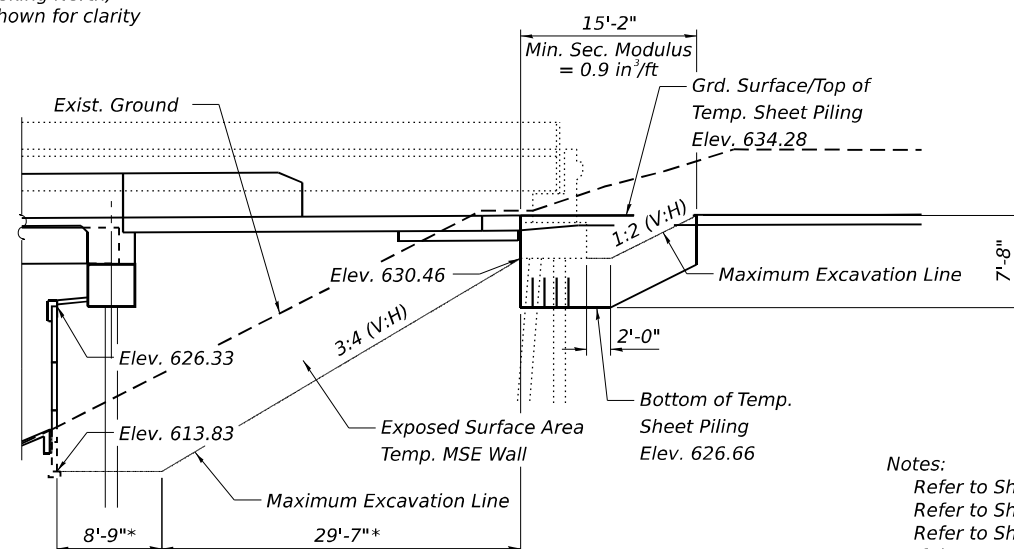
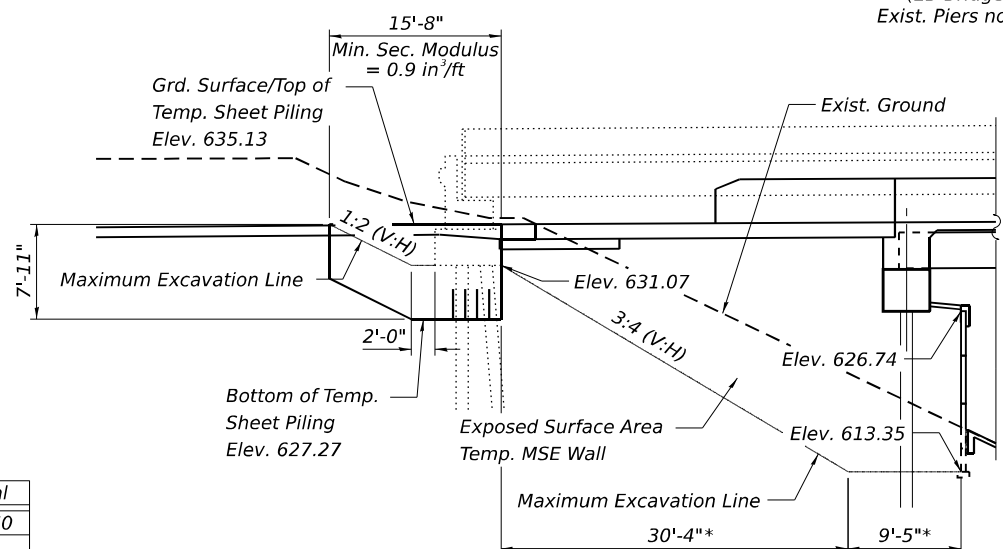
**TEMPORARY MSE AND SOIL RETENTION DETAILS 1
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-10 OF 51-50 SHEETS

F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 616
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	



* Dimensions based on 0.7*retained height and may need to be modified based on design by MSE Wall Supplier



Notes:
 Refer to Sheets S1-34 to S1-39 for Abutment details.
 Refer to Sheets S1-26 to S1-30 for Approach slab details.
 Refer to Sheets S1-40 to S1-42 for MSE Wall details.
 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.

BILL OF MATERIAL

Item	Unit	Total
Temporary Sheet Piling	Sq. Ft.	1,660
Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	1,801

MODEL: Drawing
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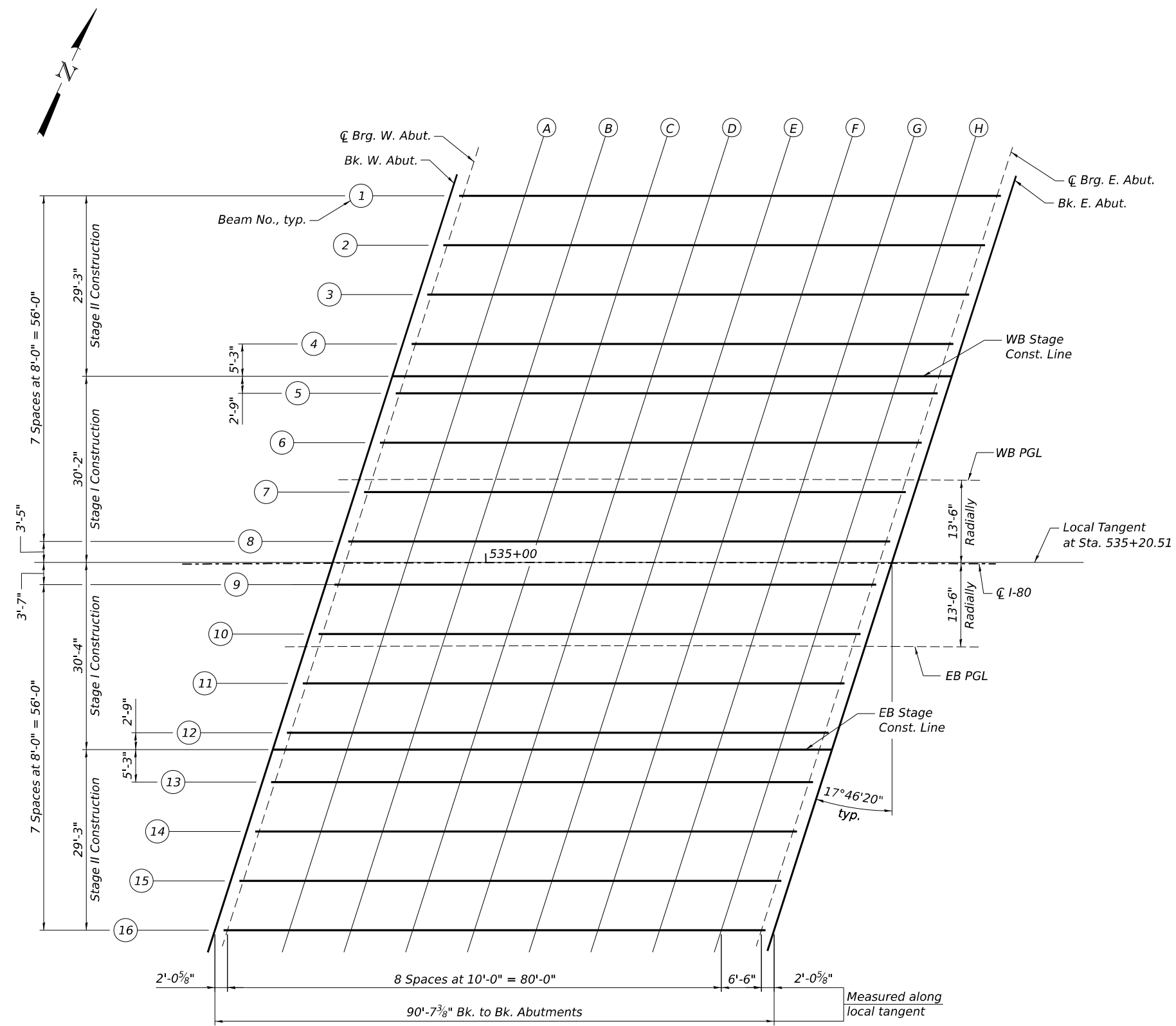
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PLOT SCALE =	CHECKED - AMD	REVISD -
PLOT DATE = 10/5/2023	DRAWN - IS	REVISD -
	CHECKED - AMD	REVISD -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

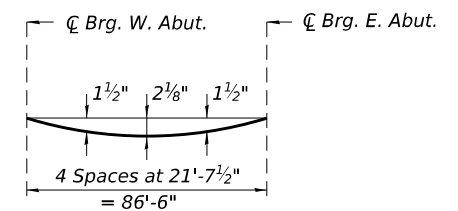
TEMPORARY MSE AND SOIL RETENTION DETAILS 2
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 617
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

MODEL: Drawing
 FILE NAME: p://transystems-pw.bentley.com/transystems-pw1-hosted/Documents/Projects_2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-012-TopSlab_Deck1.dgn

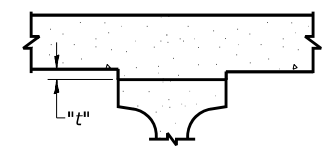


PLAN

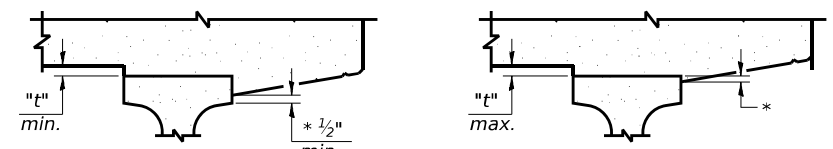


DEAD LOAD DEFLECTION DIAGRAM
 (Includes weight of concrete, excluding beams.)

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 S1-13 thru S1-16 of S1-50.



INTERIOR BEAMS



EXTERIOR BEAMS
 * Variable (not less than 1/2")
 At Minimum Fillet At Maximum Fillet

To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown to the left. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown on sheets S1-13 thru S1-16 of S1-50, minus the initial slab thickness prior to grinding, 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 S1-13 thru S1-16 of S1-50. For grinding the deck, see Special Provisions.

FILLET HEIGHTS



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - SN	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS 1
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-12 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	618
CONTRACT NO. 62R89				

ILLINOIS FED. AID PROJECT

MODEL: Drawing
 FILE NAME: pw://transystems-pw.bentley.com/transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-01-4-TopSlab_Deck3.dgn

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+81.51	-19.51	634.23	634.25
☉ Brg. W. Abut.	534+83.56	-19.50	634.24	634.26
A	534+93.54	-19.46	634.30	634.38
B	535+03.52	-19.43	634.35	634.49
C	535+13.50	-19.42	634.40	634.58
D	535+23.47	-19.42	634.45	634.64
E	535+33.45	-19.43	634.49	634.68
F	535+43.43	-19.45	634.54	634.71
G	535+53.41	-19.48	634.58	634.70
H	535+63.38	-19.52	634.62	634.68
☉ Brg. E. Abut.	535+69.87	-19.56	634.65	634.67
Bk. E. Abut.	535+71.92	-19.57	634.66	634.68

WB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+79.56	-13.50	634.08	634.10
☉ Brg. W. Abut.	534+81.62	-13.50	634.09	634.11
A	534+91.61	-13.50	634.15	634.23
B	535+01.61	-13.50	634.20	634.33
C	535+11.60	-13.50	634.25	634.42
D	535+21.58	-13.50	634.30	634.49
E	535+31.56	-13.50	634.35	634.53
F	535+41.54	-13.50	634.39	634.55
G	535+51.52	-13.50	634.43	634.55
H	535+61.49	-13.50	634.47	634.53
☉ Brg. E. Abut.	535+67.97	-13.50	634.50	634.52
Bk. E. Abut.	535+70.02	-13.50	634.50	634.52

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+78.92	-11.52	634.02	634.04
☉ Brg. W. Abut.	534+80.97	-11.51	634.04	634.06
A	534+90.96	-11.47	634.09	634.17
B	535+00.94	-11.44	634.15	634.29
C	535+10.93	-11.42	634.20	634.37
D	535+20.92	-11.42	634.25	634.44
E	535+30.90	-11.42	634.29	634.48
F	535+40.89	-11.44	634.34	634.50
G	535+50.88	-11.47	634.38	634.50
H	535+60.86	-11.51	634.42	634.48
☉ Brg. E. Abut.	535+67.35	-11.54	634.44	634.46
Bk. E. Abut.	535+69.41	-11.56	634.45	634.47

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+76.31	-3.53	633.82	633.84
☉ Brg. W. Abut.	534+78.37	-3.52	633.83	633.85
A	534+88.37	-3.48	633.89	633.97
B	534+98.36	-3.45	633.94	634.08
C	535+08.36	-3.43	633.99	634.17
D	535+18.35	-3.42	634.04	634.24
E	535+28.35	-3.42	634.09	634.28
F	535+38.35	-3.44	634.14	634.31
G	535+48.34	-3.46	634.18	634.30
H	535+58.34	-3.50	634.22	634.28
☉ Brg. E. Abut.	535+64.83	-3.53	634.24	634.26
Bk. E. Abut.	535+66.89	-3.54	634.25	634.27

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+74.03	3.46	634.28	634.30
☉ Brg. W. Abut.	534+76.09	3.47	634.30	634.32
A	534+86.09	3.52	634.35	634.43
B	534+96.10	3.55	634.41	634.55
C	535+06.10	3.57	634.46	634.64
D	535+16.11	3.58	634.51	634.71
E	535+26.11	3.58	634.56	634.75
F	535+36.11	3.57	634.61	634.78
G	535+46.12	3.55	634.65	634.77
H	535+56.12	3.51	634.69	634.75
☉ Brg. E. Abut.	535+62.63	3.48	634.72	634.74
Bk. E. Abut.	535+64.68	3.47	634.72	634.74

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+71.42	11.44	634.08	634.10
☉ Brg. W. Abut.	534+73.48	11.46	634.09	634.11
A	534+83.49	11.50	634.15	634.23
B	534+93.51	11.54	634.21	634.34
C	535+03.52	11.57	634.26	634.43
D	535+13.53	11.58	634.31	634.50
E	535+23.55	11.58	634.36	634.54
F	535+33.56	11.57	634.40	634.56
G	535+43.58	11.55	634.45	634.56
H	535+53.59	11.52	634.49	634.55
☉ Brg. E. Abut.	535+60.10	11.49	634.52	634.54
Bk. E. Abut.	535+62.16	11.48	634.52	634.54



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PLOT DATE = 10/5/2023	CHECKED - WJC	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TOP OF DECK ELEVATIONS 3
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-14 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	620
ILLINOIS			FED. AID PROJECT	
CONTRACT NO. 62R89				

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BEAM 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+58.29	51.36	633.04	633.06
⊘ Brg. W. Abut.	534+60.36	51.38	633.05	633.07
A	534+70.42	51.44	633.11	633.19
B	534+80.48	51.49	633.17	633.30
C	534+90.54	51.53	633.23	633.40
D	535+00.60	51.56	633.28	633.47
E	535+10.66	51.58	633.34	633.53
F	535+20.72	51.58	633.39	633.55
G	535+30.78	51.58	633.43	633.54
H	535+40.84	51.56	633.48	633.54
⊘ Brg. E. Abut.	535+47.38	51.54	633.50	633.52
Bk. E. Abut.	535+49.45	51.54	633.51	633.53

BEAM 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	534+55.65	59.34	632.83	632.85
⊘ Brg. W. Abut.	534+57.72	59.36	632.85	632.87
A	534+67.79	59.42	632.91	632.99
B	534+77.86	59.48	632.97	633.11
C	534+87.93	59.52	633.02	633.19
D	534+98.00	59.56	633.07	633.27
E	535+08.07	59.58	633.12	633.32
F	535+18.14	59.58	633.17	633.34
G	535+28.21	59.58	633.22	633.35
H	535+38.28	59.57	633.27	633.34
⊘ Brg. E. Abut.	535+44.83	59.55	633.29	633.32
Bk. E. Abut.	535+46.90	59.54	633.30	633.33



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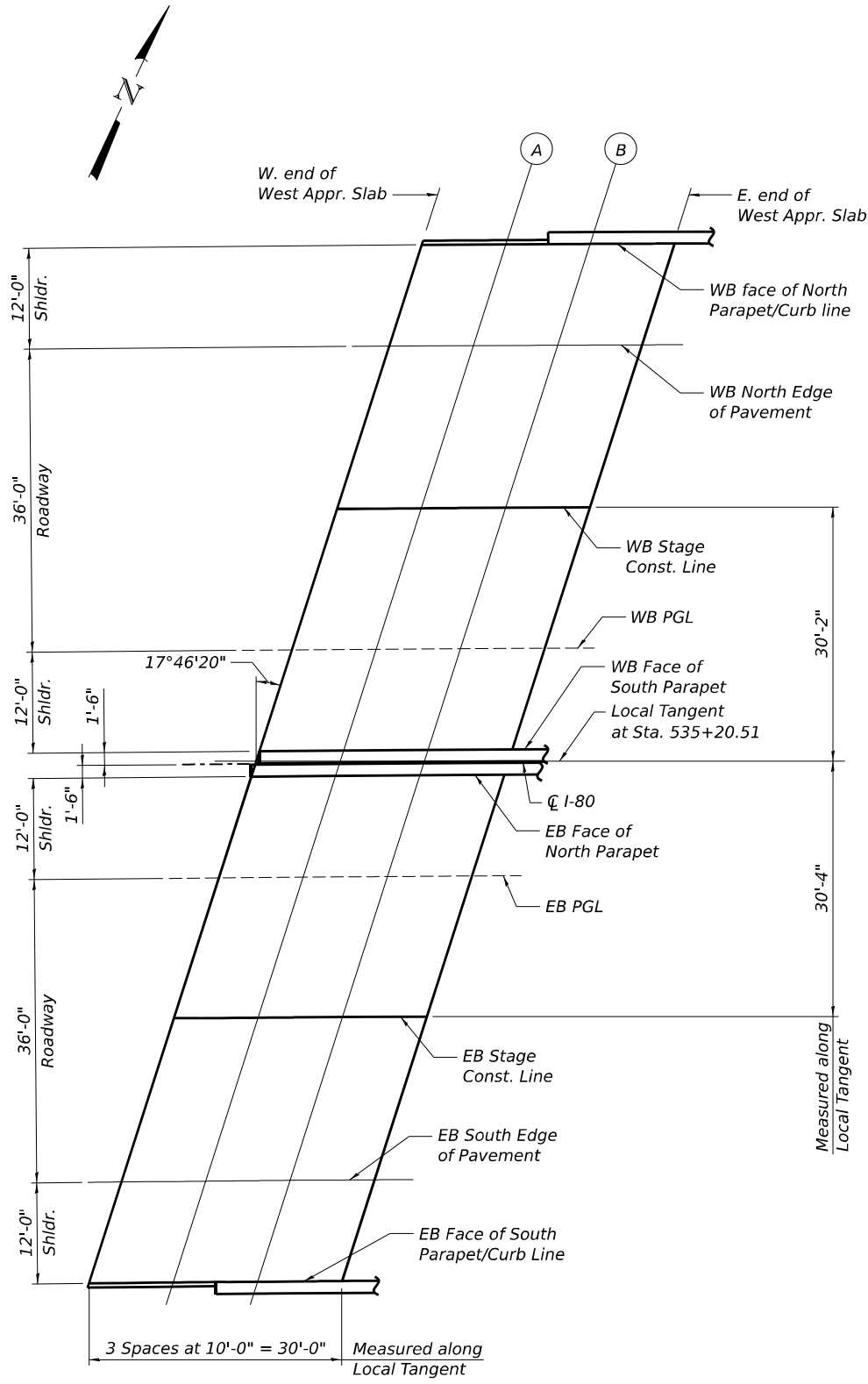
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TOP OF DECK ELEVATIONS 5
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-16 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	622
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

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WEST APPROACH SLAB PLAN

WB FACE OF NORTH PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+66.30	-61.50	635.15	635.17
A	534+76.24	-61.50	635.21	635.23
B	534+86.19	-61.50	635.27	635.29
E. End of West Appr. Slab	534+96.13	-61.50	635.32	635.34

WB NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+62.39	-49.50	634.84	634.86
A	534+72.35	-49.50	634.90	634.92
B	534+82.31	-49.50	634.96	634.98
E. End of West Appr. Slab	534+92.26	-49.50	635.01	635.03

WB STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+56.09	-30.24	634.34	634.36
A	534+66.08	-30.24	634.40	634.42
B	534+76.06	-30.24	634.46	634.48
E. End of West Appr. Slab	534+86.04	-30.24	634.52	634.54

WB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+50.60	-13.50	633.90	633.92
A	534+60.60	-13.50	633.96	633.98
B	534+70.61	-13.50	634.02	634.05
E. End of West Appr. Slab	534+80.61	-13.50	634.08	634.10

WB FACE OF SOUTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+46.64	-1.50	633.59	633.61
A	534+56.67	-1.50	633.65	633.67
B	534+66.69	-1.50	633.71	633.73
E. End of West Appr. Slab	534+76.70	-1.50	633.77	633.79

EB FACE OF NORTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+45.65	1.50	634.16	634.18
A	534+55.68	1.50	634.22	634.24
B	534+65.70	1.50	634.28	634.30
E. End of West Appr. Slab	534+75.72	1.50	634.34	634.36

EB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+41.68	13.50	633.84	633.86
A	534+51.73	13.50	633.91	633.93
B	534+61.77	13.50	633.97	633.99
E. End of West Appr. Slab	534+71.80	13.50	634.03	634.05

EB STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+36.15	30.16	633.40	633.42
A	534+46.22	30.16	633.47	633.49
B	534+56.28	30.16	633.54	633.56
E. End of West Appr. Slab	534+66.34	30.16	633.60	633.62

EB SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+29.71	49.50	632.89	632.92
A	534+39.80	49.50	632.96	632.98
B	534+49.88	49.50	633.03	633.05
E. End of West Appr. Slab	534+59.97	49.50	633.10	633.12

EB FACE OF SOUTH PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End of West Appr. Slab	534+25.69	61.50	632.58	632.60
A	534+35.80	61.50	632.65	632.67
B	534+45.90	61.50	632.72	632.74
E. End of West Appr. Slab	534+56.00	61.50	632.78	632.80



USER NAME = amkluver	DESIGNED - CG	REVISD -
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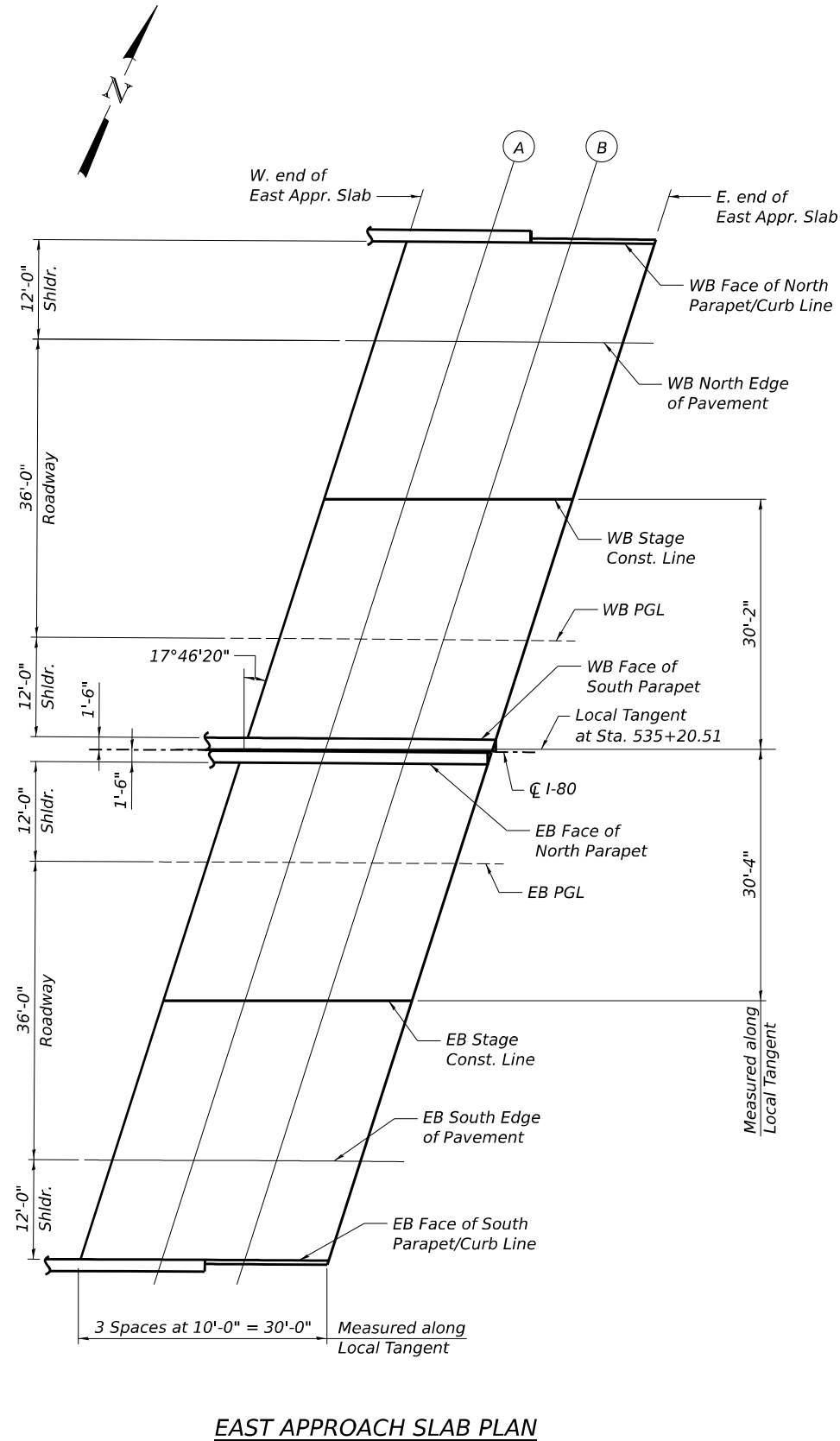
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-17 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	623
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

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EAST APPROACH SLAB PLAN

WB FACE OF NORTH PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+83.95	-61.50	635.70	635.72
A	535+93.85	-61.50	635.73	635.76
B	536+03.75	-61.50	635.76	635.78
E. End of East Appr. Slab	536+13.65	-61.50	635.79	635.81

WB NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+80.22	-49.50	635.40	635.42
A	535+90.14	-49.50	635.43	635.46
B	536+00.05	-49.50	635.46	635.49
E. End of East Appr. Slab	536+09.97	-49.50	635.49	635.51

WB STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+74.24	-30.34	634.92	634.94
A	535+84.19	-30.34	634.96	634.98
B	535+94.13	-30.34	634.99	635.01
E. End of East Appr. Slab	536+04.06	-30.34	635.02	635.04

WB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+68.97	-13.50	634.50	634.52
A	535+78.94	-13.50	634.53	634.56
B	535+88.90	-13.50	634.57	634.59
E. End of East Appr. Slab	535+98.85	-13.50	634.60	634.62

WB FACE OF SOUTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+65.20	-1.50	634.20	634.22
A	535+75.18	-1.50	634.23	634.25
B	535+85.16	-1.50	634.27	634.29
E. End of East Appr. Slab	535+95.13	-1.50	634.30	634.32

EB FACE OF NORTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+64.25	1.50	634.77	634.79
A	535+74.24	1.50	634.81	634.83
B	535+84.22	1.50	634.84	634.86
E. End of East Appr. Slab	535+94.20	1.50	634.87	634.89

EB PGL

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+60.47	13.50	634.47	634.49
A	535+70.47	13.50	634.50	634.53
B	535+80.46	13.50	634.54	634.56
E. End of East Appr. Slab	535+90.46	13.50	634.57	634.59

EB STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+55.16	30.26	634.04	634.06
A	535+65.18	30.26	634.08	634.10
B	535+75.20	30.26	634.12	634.14
E. End of East Appr. Slab	535+85.21	30.26	634.15	634.17

EB SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+49.05	49.50	633.56	633.58
A	535+59.09	49.50	633.60	633.62
B	535+69.13	49.50	633.64	633.66
E. End of East Appr. Slab	535+79.17	49.50	633.67	633.69

EB FACE OF SOUTH PARAPET/CURB LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted for Grinding
W. End of East Appr. Slab	535+45.22	61.50	633.25	633.27
A	535+55.28	61.50	633.29	633.32
B	535+65.33	61.50	633.33	633.35
E. End of East Appr. Slab	535+75.39	61.50	633.37	633.39



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	CHECKED - WJC	REVISD -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TOP OF EAST APPROACH SLAB ELEVATIONS
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

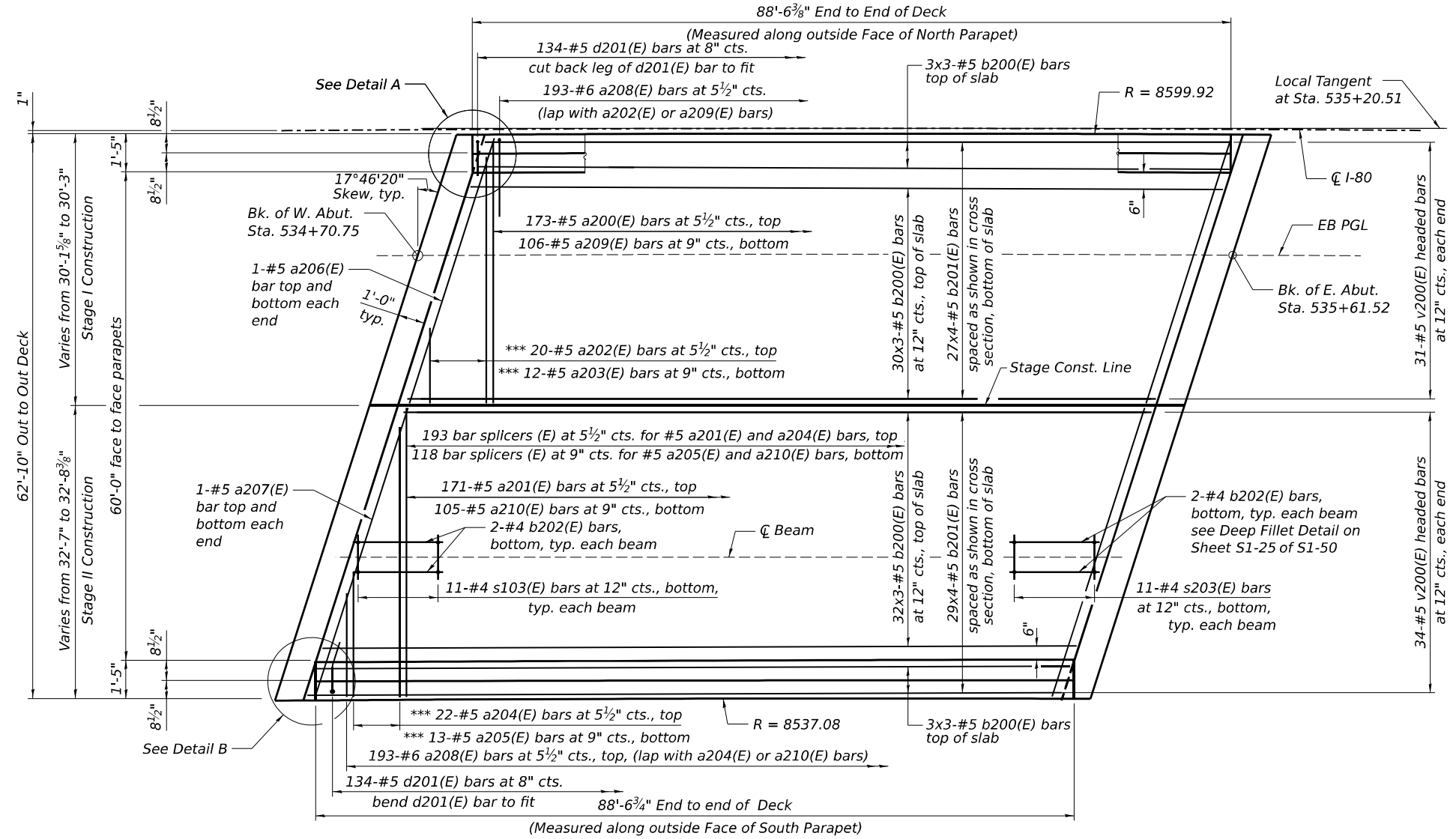
SHEET 51-18 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	624
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

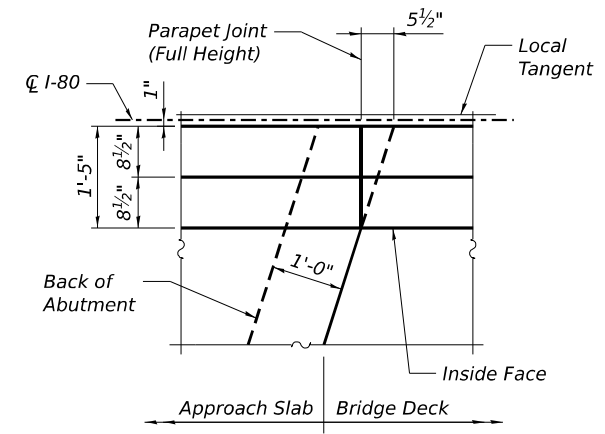
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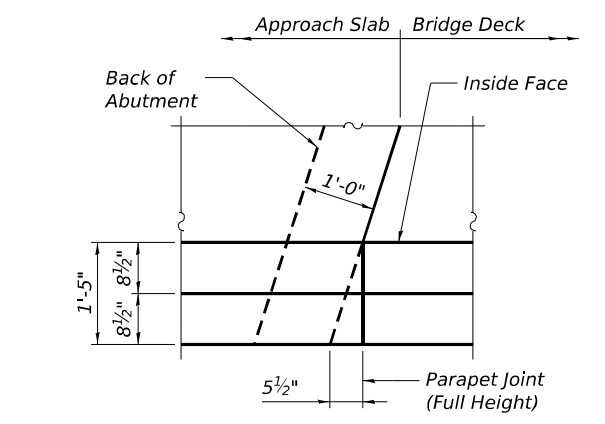
MINIMUM BAR LAP
 #5 bar = 3'-6"



DECK PLAN - EASTBOUND

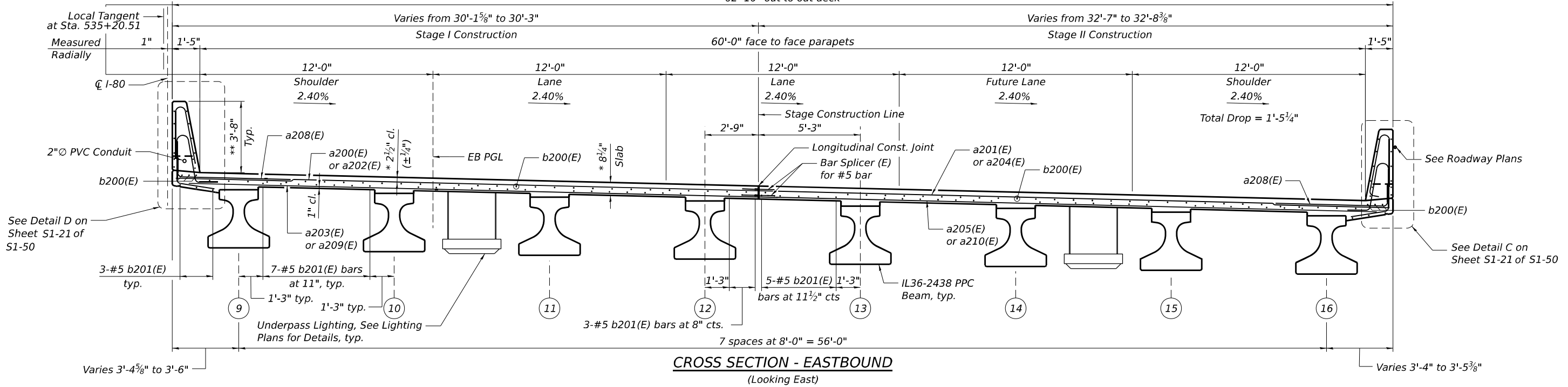


DETAIL A



DETAIL B

Notes:
 See sheets S1-21 and S1-25 of S1-50 for superstructure details and Bill of Material.
 Bars indicated thus 20 x 3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.
 *Prior to Grinding
 **After Grinding
 ***Order bars full length. Cut to fit and use remainder of bars in opposite end



CROSS SECTION - EASTBOUND
 (Looking East)



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PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

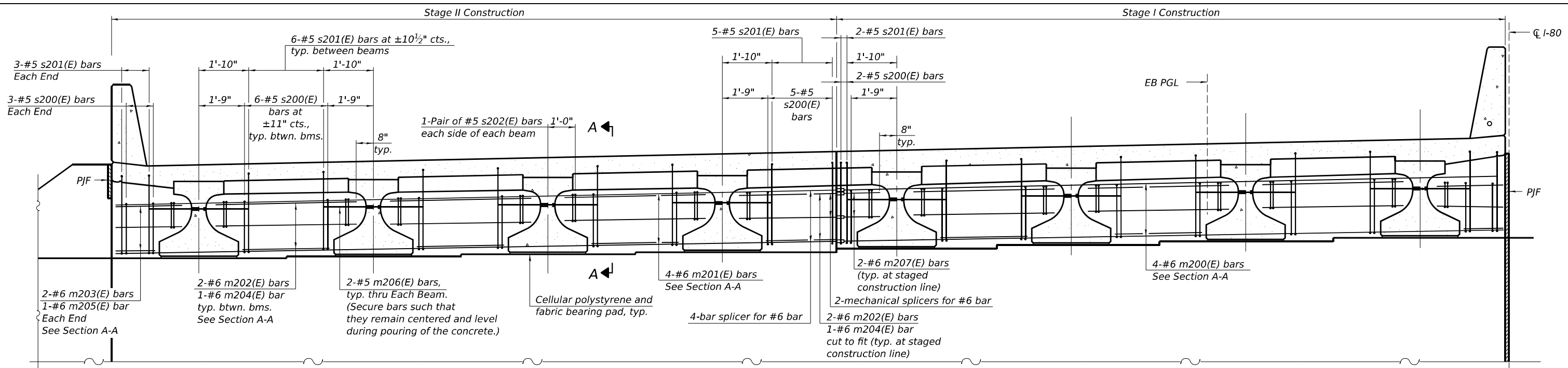
DECK PLAN AND CROSS SECTION - EB
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET S1-20 OF S1-50 SHEETS

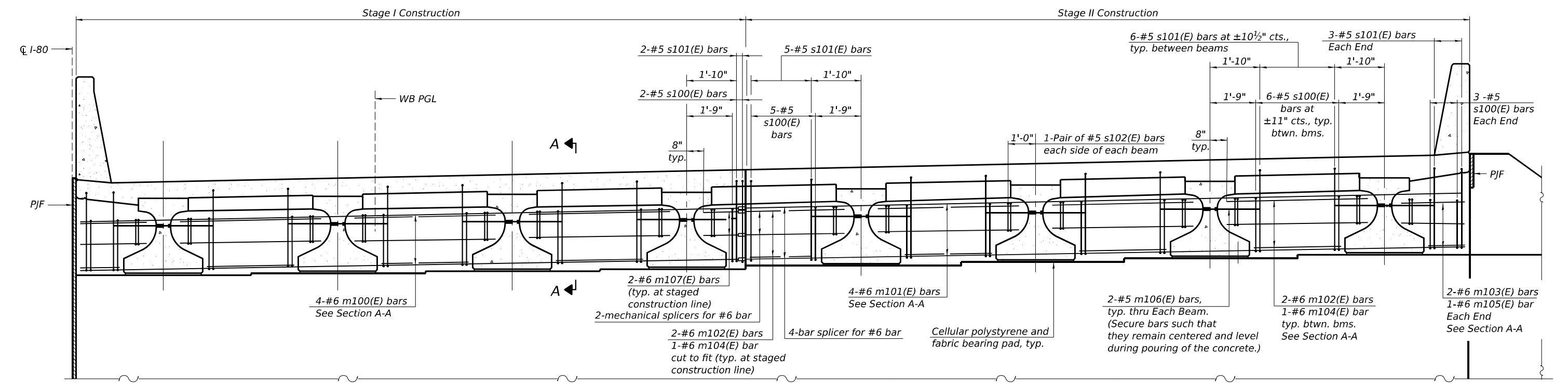
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	626
CONTRACT NO. 62R89				

ILLINOIS FED. AID PROJECT

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WEST ABUTMENT DIAPHRAGM - EASTBOUND
 (Looking West)



WEST ABUTMENT DIAPHRAGM - WESTBOUND
 (Looking West)

Notes:
 See sheet S1-25 of S1-50 for superstructure details and Bill of Material.
 See sheet S1-24 of S1-50 for Section A-A.
 See sheets S1-26 thru S1-29 of S1-50 for P/JF details.
 See sheet S1-45 of S1-50 for mechanical splicers.
 The s100(E), s101(E), s102(E), s200(E), s201(E), and s202(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
 Cost of cellular polystyrene is included with Concrete Superstructure.



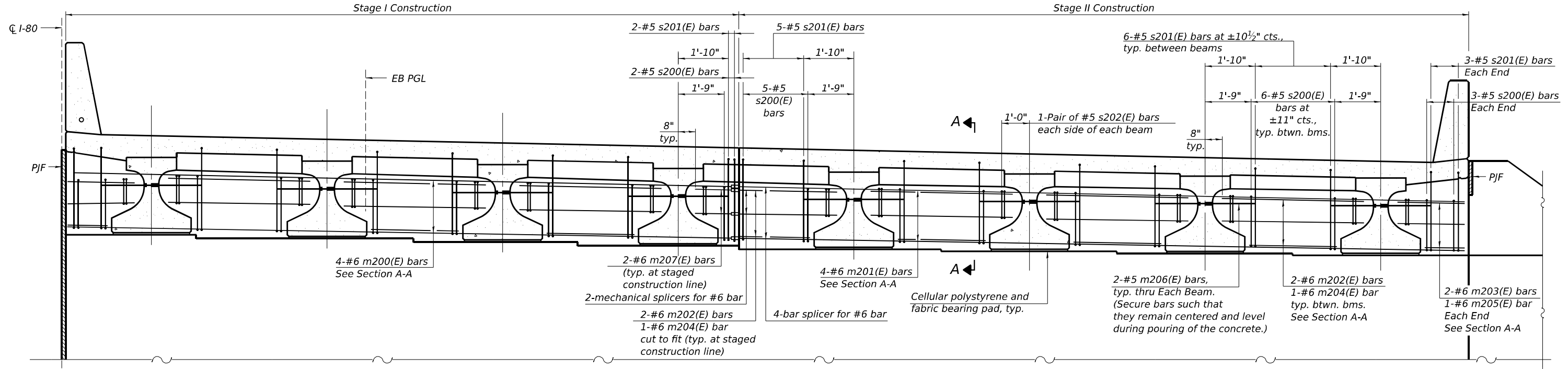
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	CHECKED - WJC	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

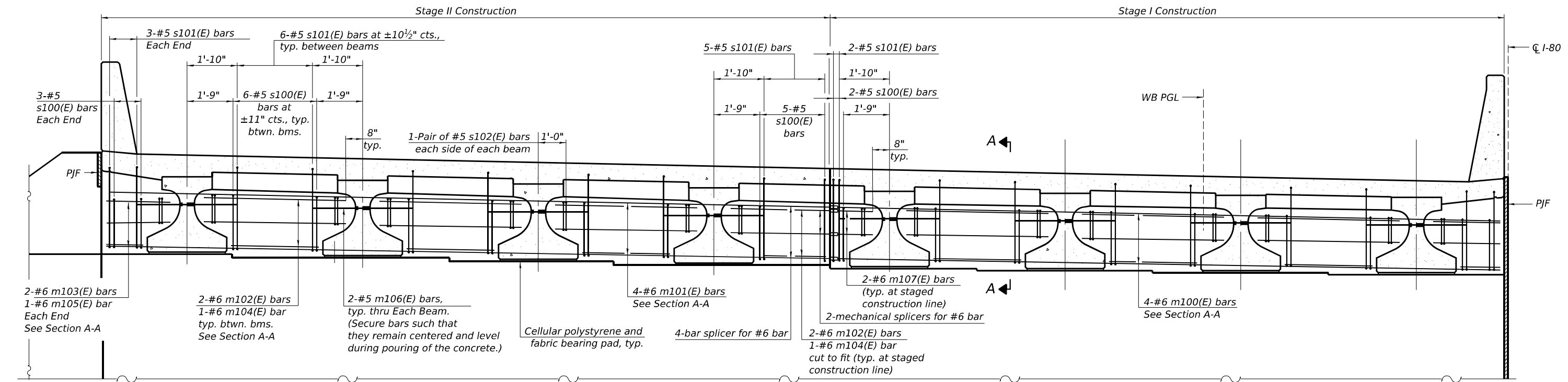
DIAPHRAGM DETAILS 1
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	628
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

SHEET 51-22 OF 51-50 SHEETS



EAST ABUTMENT DIAPHRAGM - EASTBOUND
(Looking East)



EAST ABUTMENT DIAPHRAGM - WESTBOUND
(Looking East)

Notes:
 See sheet S1-25 of S1-50 for superstructure details and Bill of Material.
 See sheet S1-24 of S1-50 for Section A-A.
 See sheets S1-26 thru S1-29 of S1-50 for P/JF details.
 See sheet S1-45 of S1-50 for mechanical splicers.
 The s100(E), s101(E), s102(E), s200(E), s201(E), and s202(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
 Cost of cellular polystyrene is included with Concrete Superstructure.

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TRANSYSTEMS

USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

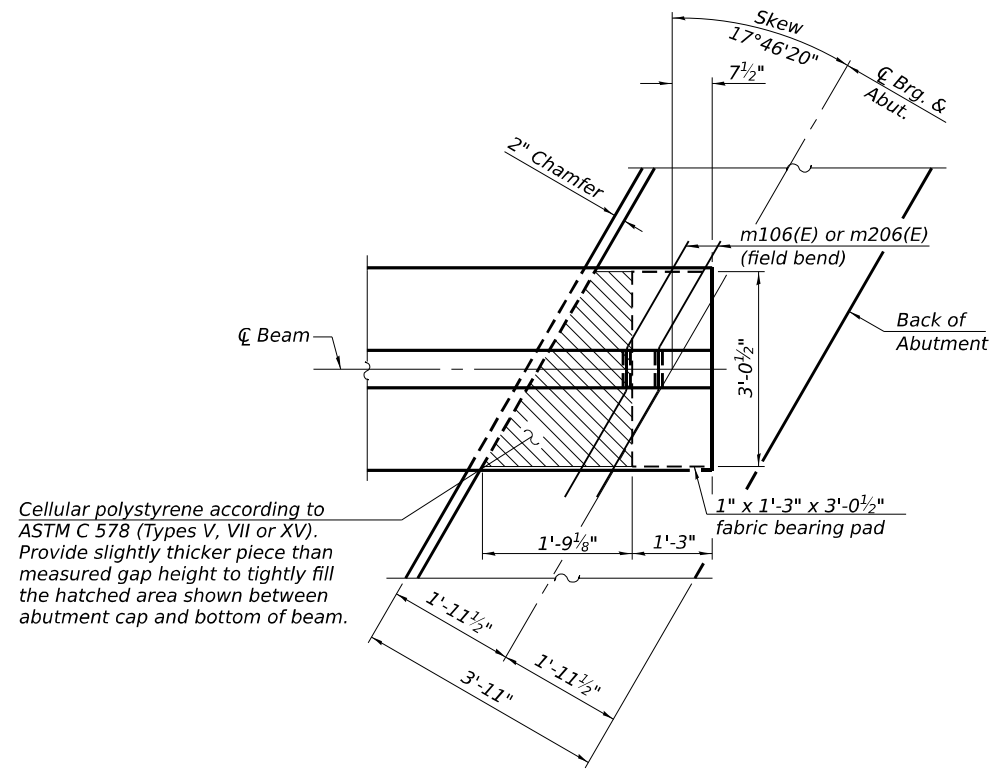
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DIAPHRAGM DETAILS 2
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET S1-23 OF S1-50 SHEETS

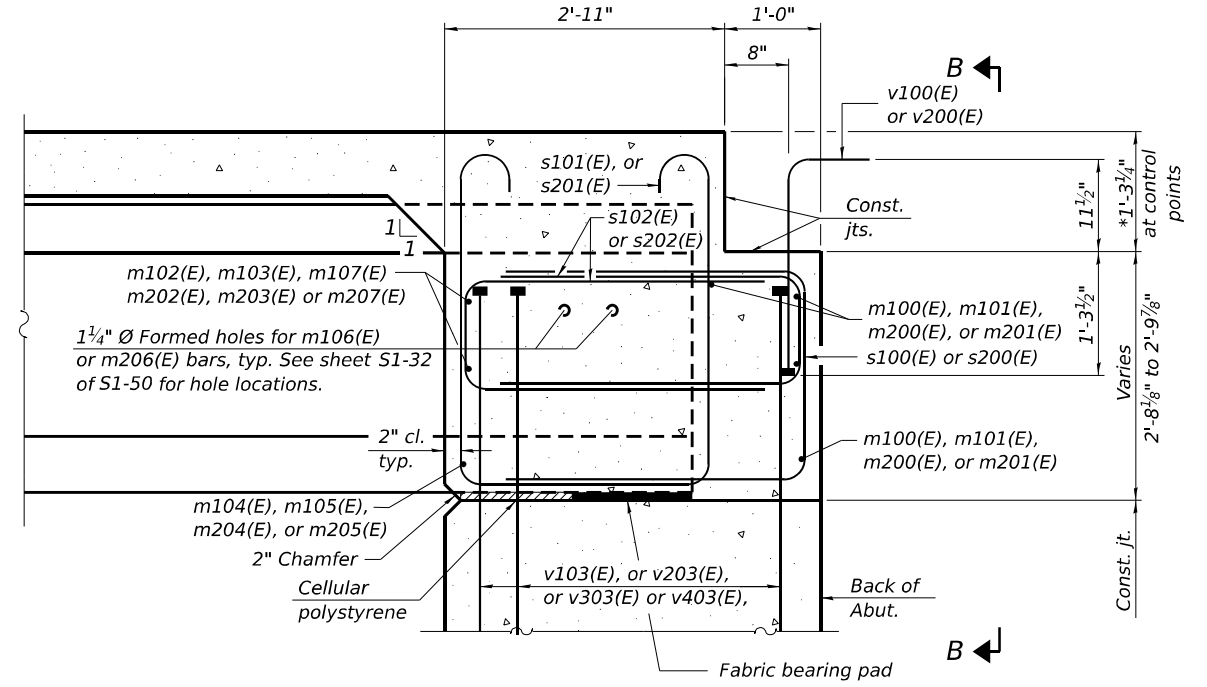
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	629
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

MODEL: Drawing
 FILE NAME: pw://transystems-pw.bentley.com/transystems-pw1-hosted/Documents/Projects_2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-024-AbutDiaphragm3.dgn

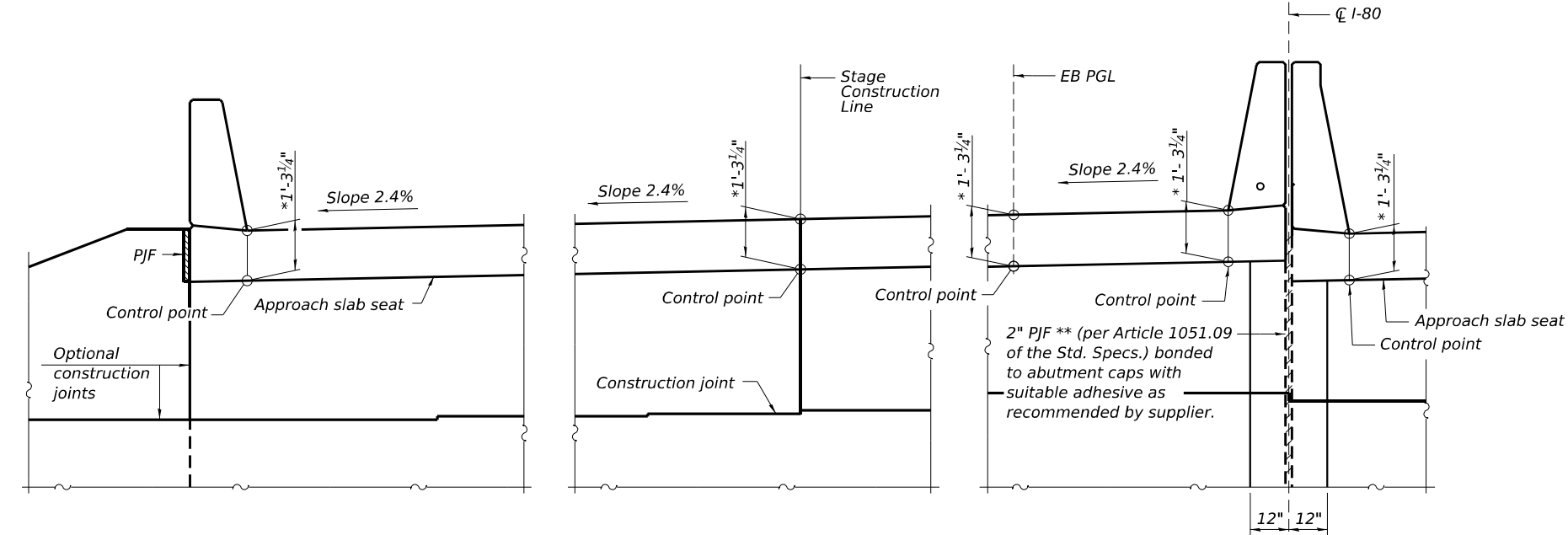


PLAN AT ABUTMENT
 (Showing bottom flange of beam)

Cellular polystyrene according to ASTM C 578 (Types V, VII or XV). Provide slightly thicker piece than measured gap height to tightly fill the hatched area shown between abutment cap and bottom of beam.



SECTION A-A
 (at Rt. L's)



VIEW B-B

(Looking West, West Diaphragm shown here, East Diaphragm similar)

Limits of fabric reinforced elastomeric mat according to Section 1028 of the Std. Specs. and installed according to applicable requirements of Article 520.09 of the Std. Specs.

Notes:
 Cost of fabric reinforced elastomeric mat and installation are included in the cost of Concrete Superstructure.
 Cost of cellular polystyrene is included with Concrete Superstructure.
 The approach slab seat shall have a constant slope determined from the control points shown.
 *Dimension prior to grinding.
 **Cost pf PJF included with Concrete Superstructure.

TRANSYSTEMS

USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

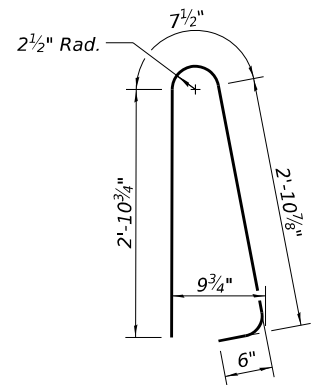
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS 3
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

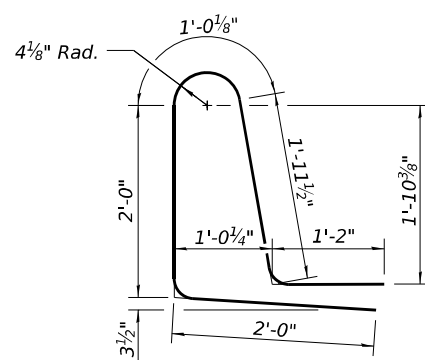
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	630
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

SHEET 51-24 OF 51-50 SHEETS

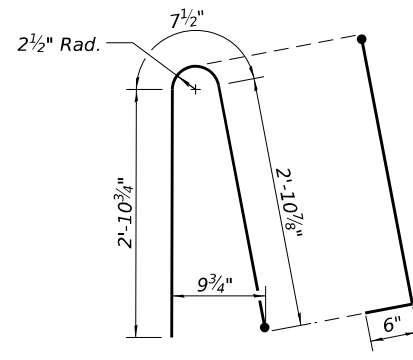
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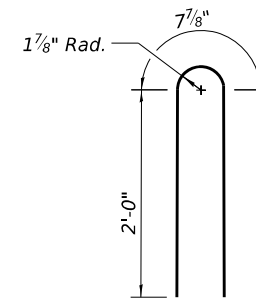
BAR d100(E) & d200(E)



BAR d101(E) & d201(E)

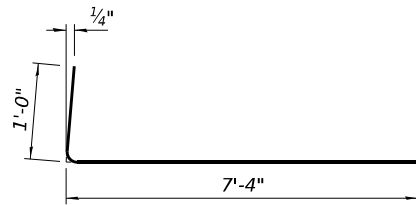


BAR d202(E)

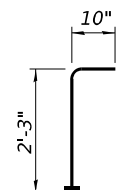


BAR d102(E)

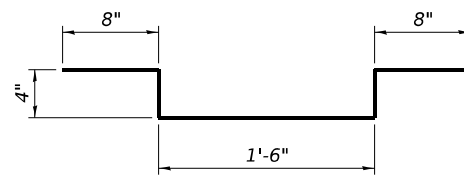
Notes:
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.



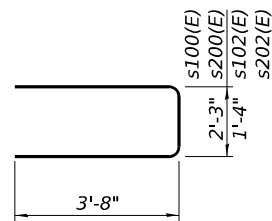
BAR a108(E) & a208(E)



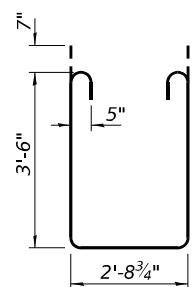
**BAR v100(E) & v200(E)
(Headed)**



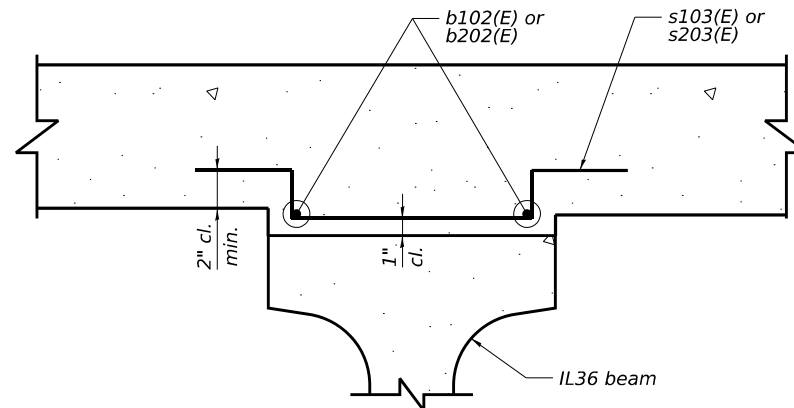
BAR s103(E) & s203(E)



**BARS s100(E), s102(E),
s200(E), & s202(E)**



BAR s101(E) & s201(E)



DEEP FILLET DETAIL

**SUPERSTRUCTURE
BILL OF MATERIAL (WB)**

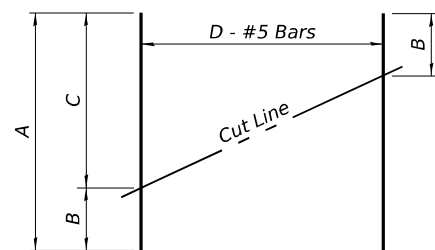
Bar	No.	Size	Length	Shape
a100	173	#5	29'-11"	—
a101	171	#5	32'-5"	—
a102	20	#5	29'-9"	—
a103	12	#5	29'-2"	—
a104	22	#5	32'-4"	—
a105	13	#5	31'-9"	—
a106	4	#5	31'-3"	—
a107	4	#5	34'-0"	—
a108	386	#6	8'-4"	└
a109	106	#5	29'-7"	—
a110	105	#5	32'-1"	—
b100	204	#5	31'-9"	—
b101	224	#5	24'-9"	—
b102	32	#4	10'-0"	—
d100	268	#5	6'-11"	└
d101	268	#5	8'-2"	└
d102	134	#5	4'-8"	└
e100	90	#4	17'-5"	—
e101	32	#4	23'-11"	—
m100	8	#6	31'-5"	—
m101	8	#6	34'-1"	—
m102	28	#6	7'-0"	—
m103	8	#6	2'-9"	—
m104	14	#6	4'-8"	—
m105	4	#6	1'-8"	—
m106	32	#5	4'-0"	—
m107	4	#6	2'-0"	—
s100	98	#5	9'-7"	└
s101	98	#5	10'-11"	└
s102	64	#5	8'-8"	└
s103	176	#4	3'-6"	└
v100	130	#5	3'-1"	└
Concrete Superstructure			Cu. Yd.	239.1
Protective Coat			Sq. Yd.	689
Reinforcement Bars, Epoxy Coated			Pound	49,280
Bridge Deck Grooving (Longitudinal)			Sq. Yd.	355
Diamond Grinding (Bridge Section)			Sq. Yd.	551

**SUPERSTRUCTURE
BILL OF MATERIAL (EB)**

Bar	No.	Size	Length	Shape
a200	173	#5	29'-11"	—
a201	171	#5	32'-5"	—
a202	20	#5	29'-9"	—
a203	12	#5	29'-2"	—
a204	22	#5	32'-4"	—
a205	13	#5	31'-9"	—
a206	4	#5	31'-3"	—
a207	4	#5	34'-0"	—
a208	386	#6	8'-4"	└
a209	106	#5	29'-7"	—
a210	105	#5	32'-1"	—
b200	204	#5	31'-9"	—
b201	224	#5	24'-9"	—
b202	32	#4	10'-0"	—
d200	134	#5	6'-11"	└
d201	268	#5	8'-2"	└
d202	134	#5	4'-8"	└
e200	80	#4	17'-5"	—
e201	32	#4	23'-11"	—
m200	8	#6	31'-5"	—
m201	8	#6	34'-1"	—
m202	28	#6	7'-0"	—
m203	8	#6	2'-9"	—
m204	14	#6	4'-8"	—
m205	4	#6	1'-8"	—
m206	32	#5	4'-0"	—
m207	4	#6	2'-0"	—
s200	98	#5	9'-7"	└
s201	98	#5	10'-11"	└
s202	64	#5	8'-8"	└
s203	176	#4	3'-6"	└
v200	130	#5	3'-1"	└
Concrete Superstructure			Cu. Yd.	237.8
Protective Coat			Sq. Yd.	678
Reinforcement Bars, Epoxy Coated			Pound	48,510
Preformed Joint Seal 3 1/2"			Foot	89
Bridge Deck Grooving (Longitudinal)			Sq. Yd.	355
Diamond Grinding (Bridge Section)			Sq. Yd.	551

FIELD CUTTING TABLE

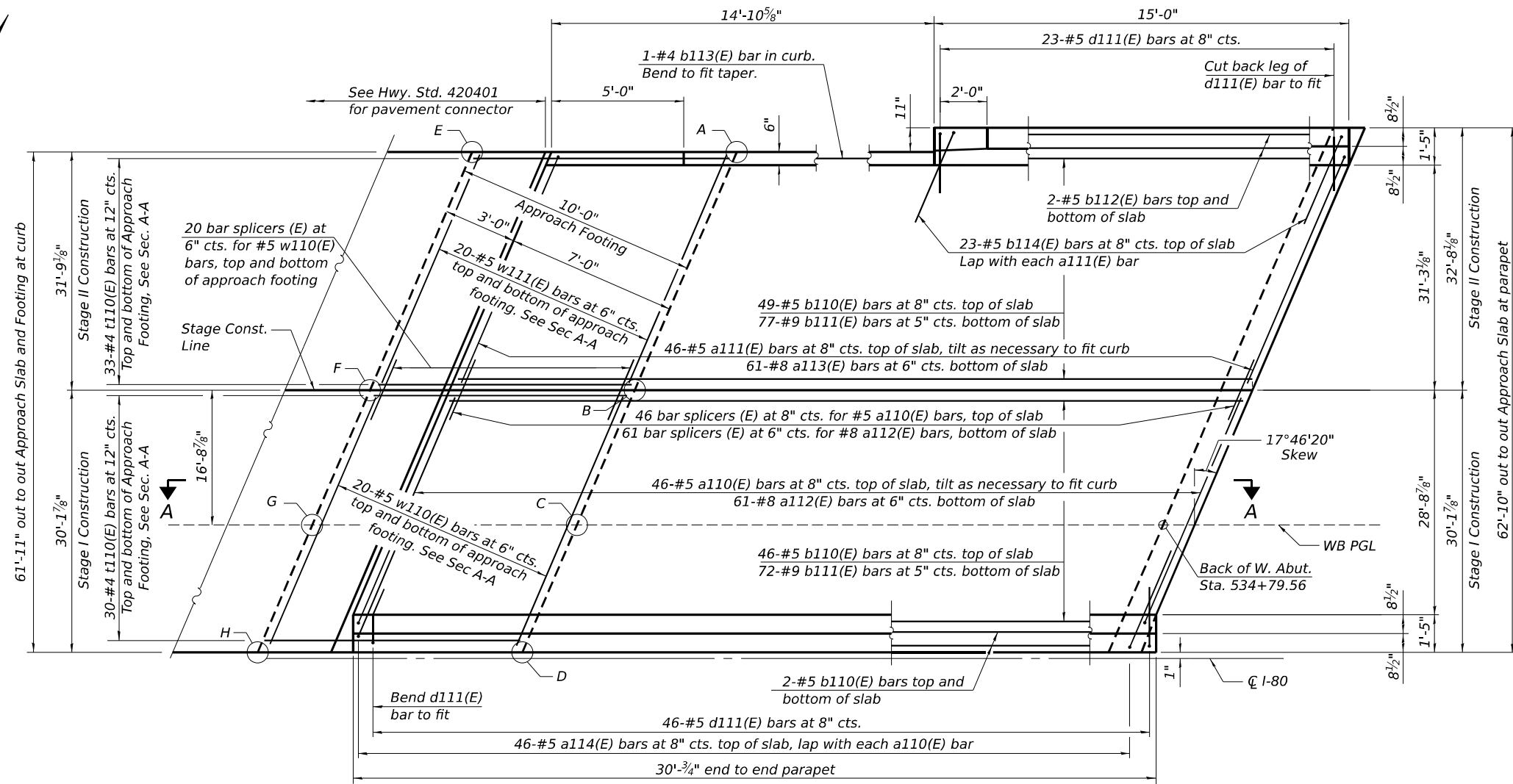
Bar	A	B	C	D
a102(E)	29'-9"	1'-5"	28'-4"	20
a103(E)	29'-2"	2'-0"	27'-2"	12
a104(E)	32'-4"	1'-4"	31'-0"	22
a105(E)	31'-9"	2'-0"	29'-9"	13
a202(E)	29'-9"	1'-5"	28'-4"	20
a203(E)	29'-2"	2'-0"	27'-2"	12
a204(E)	32'-4"	1'-4"	31'-0"	22
a205(E)	31'-9"	2'-0"	29'-9"	13



FIELD CUTTING DIAGRAM

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

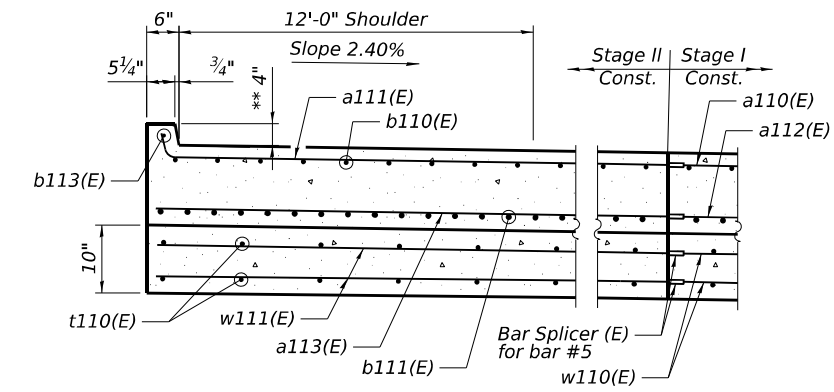
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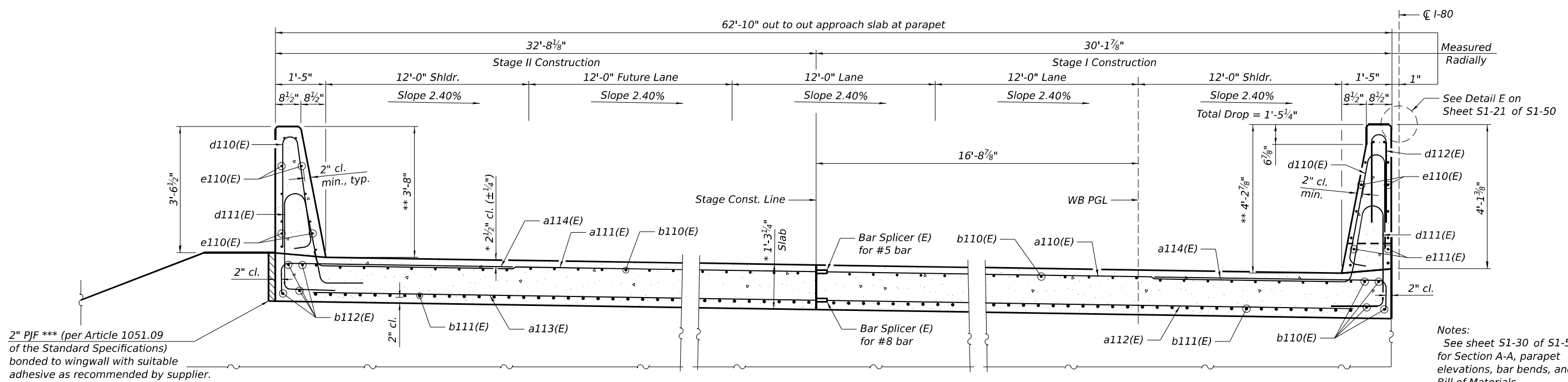
WEST APPROACH PLAN - WESTBOUND

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

West Approach WB		
Point	Top	Bottom
A	633.96	633.12
B	633.13	632.30
C	632.70	631.86
D	632.87	632.03
E	633.89	633.06
F	633.07	632.23
G	632.63	631.80
H	632.28	631.44



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
(Looking East)



CROSS SECTION - NEAR ABUTMENT
(Looking East)

Notes:
 See sheet S1-30 of S1-50 for Section A-A, parapet elevations, bar bends, and Bill of Materials.
 * Dimension prior to grinding.
 ** Dimension after grinding.
 *** Cost of PJJ included with Concrete Structures.



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

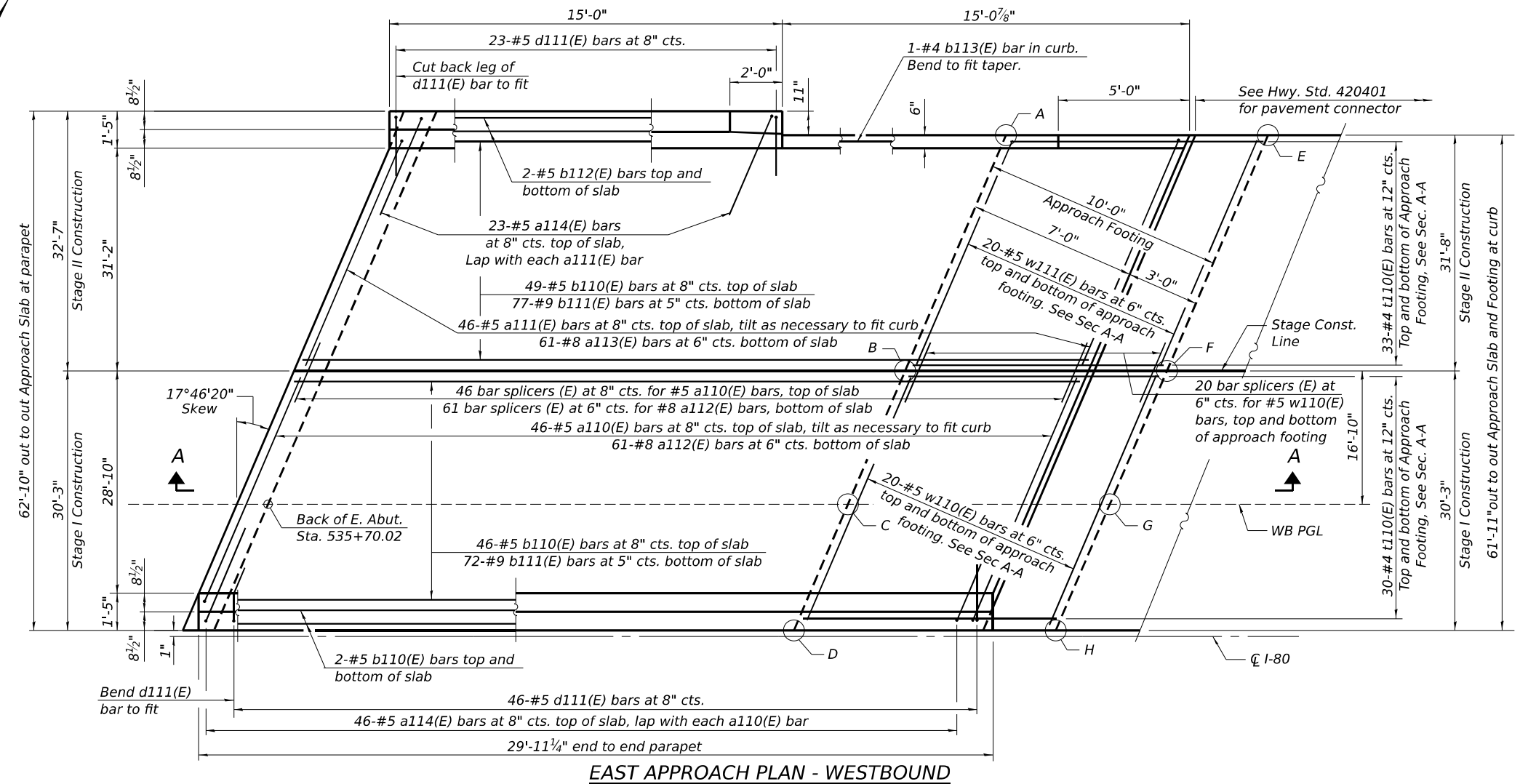
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS 1
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-26 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	632
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

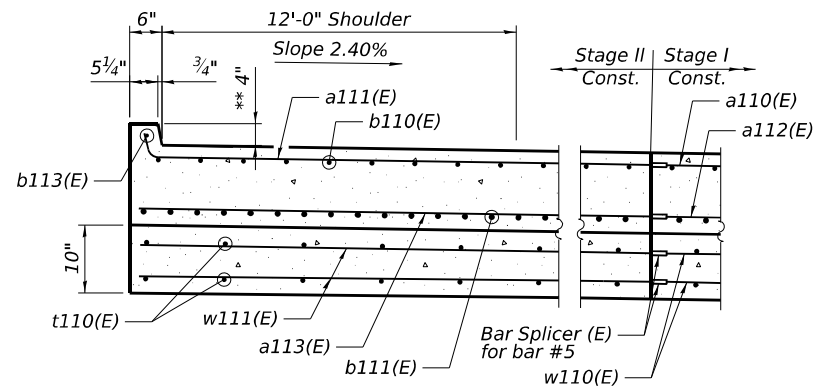
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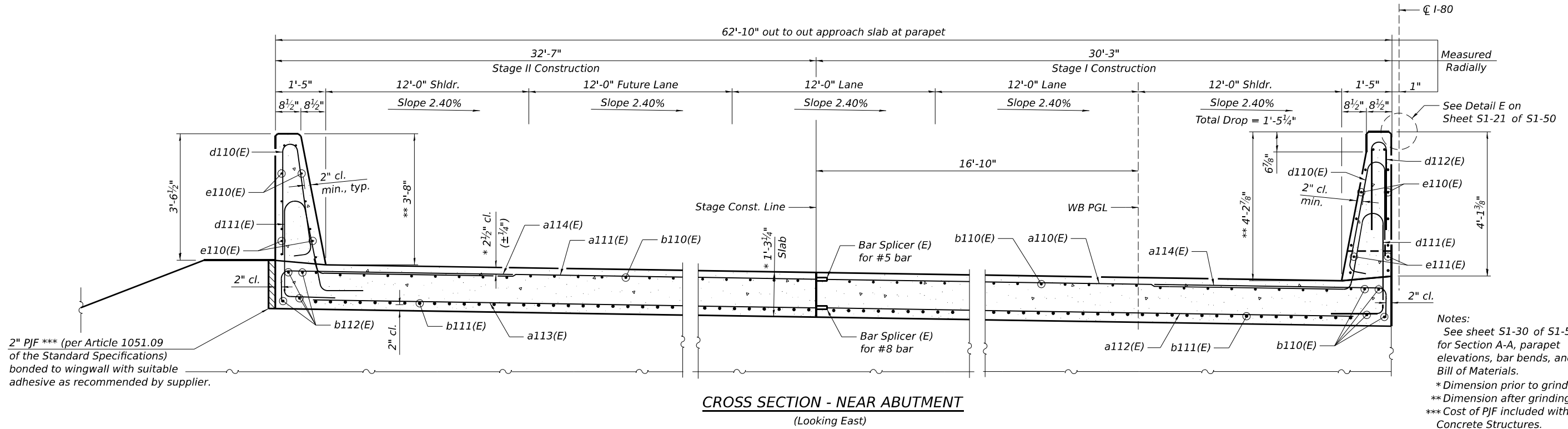
EAST APPROACH PLAN - WESTBOUND

TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

East Approach WB		
Point	Top	Bottom
A	634.53	633.70
B	633.75	632.91
C	633.33	632.49
D	632.99	632.16
E	634.56	633.73
F	633.78	632.94
G	633.36	632.52
H	633.02	632.19



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
(Looking East)



CROSS SECTION - NEAR ABUTMENT
(Looking East)

Notes:
 See sheet S1-30 of S1-50 for Section A-A, parapet elevations, bar bends, and Bill of Materials.
 * Dimension prior to grinding.
 ** Dimension after grinding.
 *** Cost of PJF included with Concrete Structures.



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

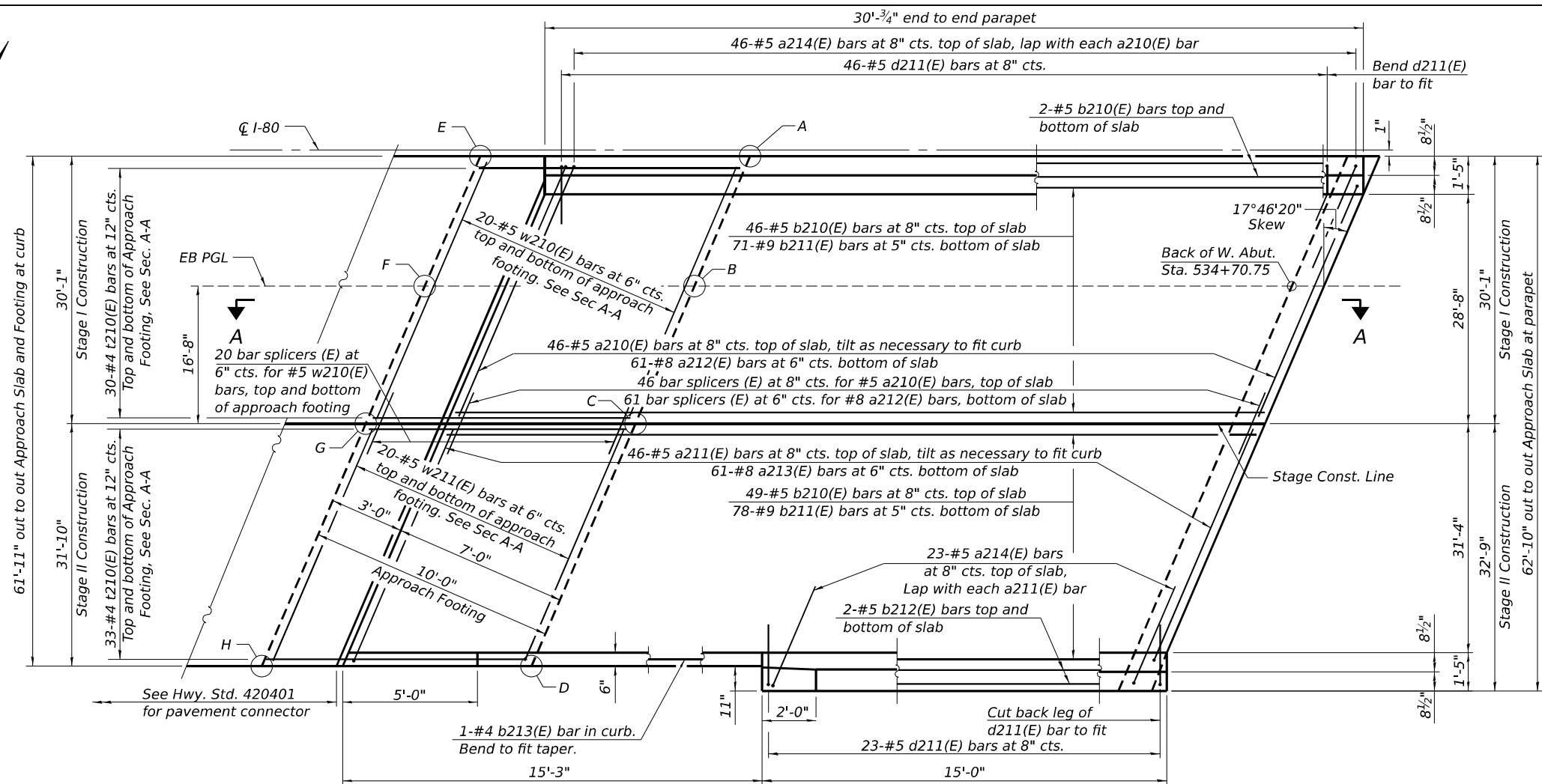
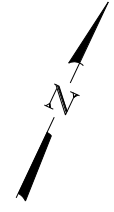
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS 2
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET S1-27 OF S1-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	633
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

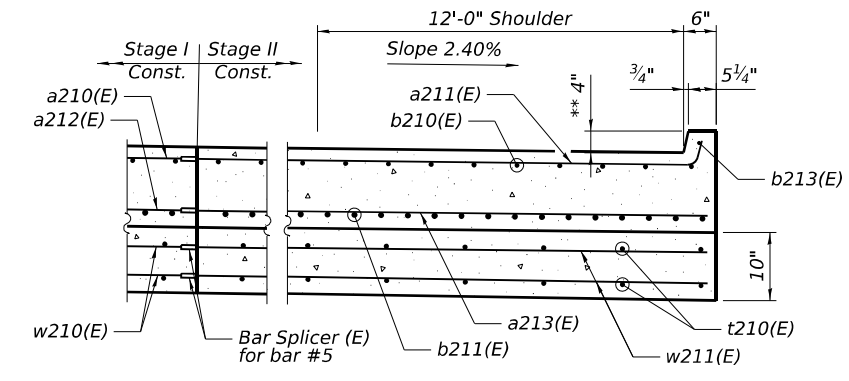
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WEST APPROACH PLAN - EASTBOUND

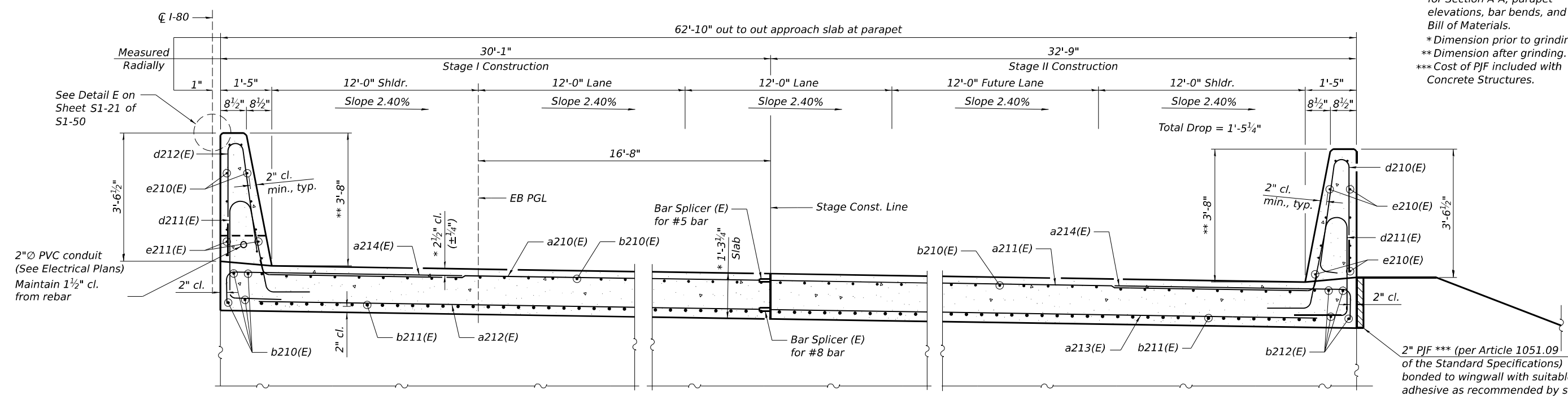
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

West Approach EB		
Point	Top	Bottom
A	632.99	632.16
B	632.64	631.81
C	632.20	631.37
D	631.37	630.53
E	632.92	632.09
F	632.57	631.74
G	632.13	631.30
H	631.29	630.46



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
(Looking East)

Notes:
 See sheet S1-30 of S1-50 for Section A-A, parapet elevations, bar bends, and Bill of Materials.
 * Dimension prior to grinding.
 ** Dimension after grinding.
 *** Cost of PJF included with Concrete Structures.



CROSS SECTION - NEAR ABUTMENT
(Looking East)



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

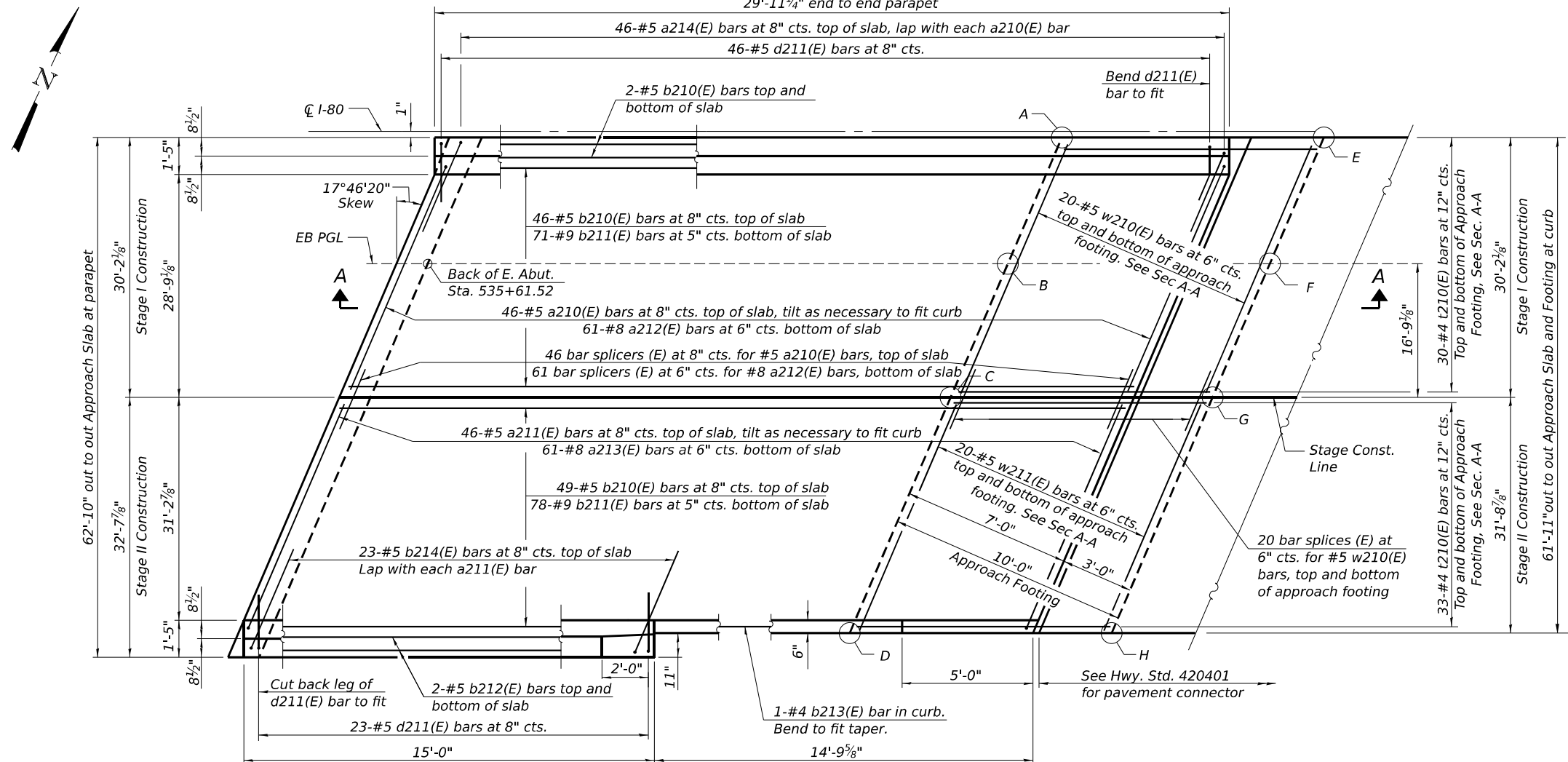
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROACH SLAB DETAILS 3
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-28 OF 51-50 SHEETS

F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 634
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

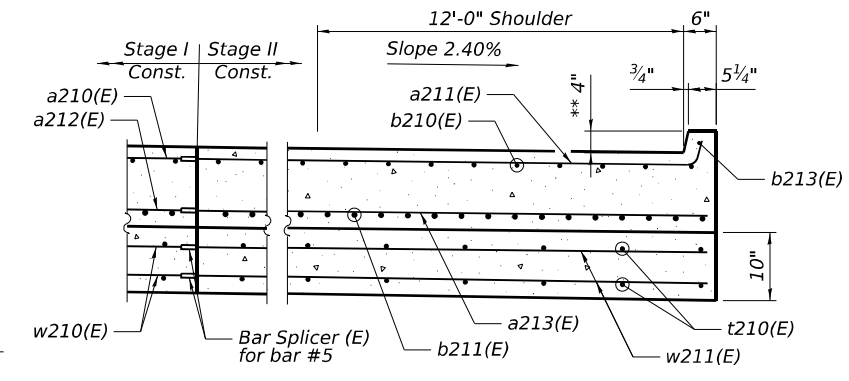
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EAST APPROACH PLAN - EASTBOUND

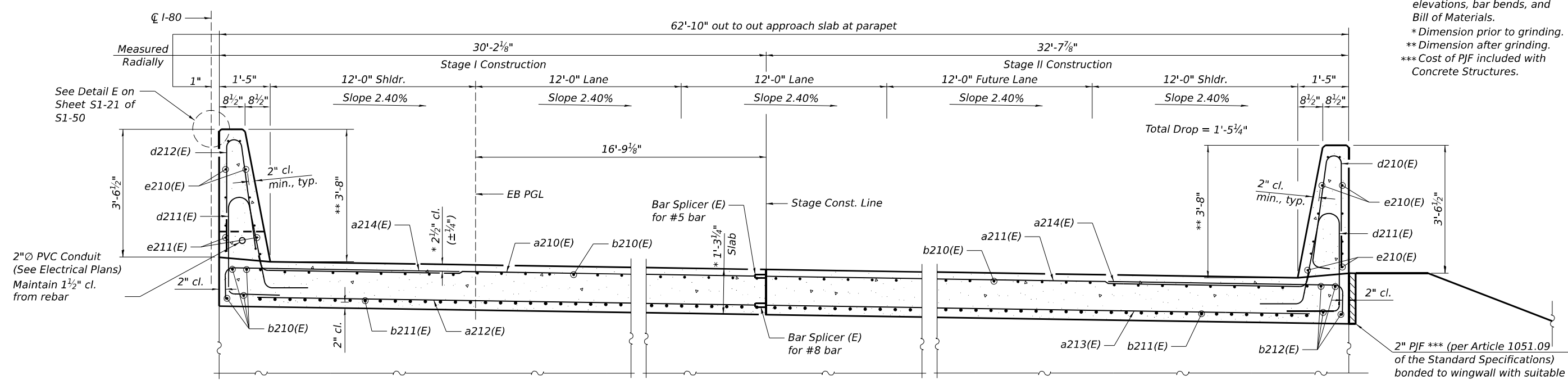
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

East Approach EB		
Point	Top	Bottom
A	633.63	632.80
B	633.30	632.46
C	632.88	632.04
D	632.08	631.25
E	633.67	632.83
F	633.33	632.50
G	632.91	632.08
H	632.12	631.29



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING
(Looking East)

Notes:
 See sheet S1-30 of S1-50 for Section A-A, parapet elevations, bar bends, and Bill of Materials.
 * Dimension prior to grinding.
 ** Dimension after grinding.
 *** Cost of PJF included with Concrete Structures.



CROSS SECTION - NEAR ABUTMENT
(Looking East)



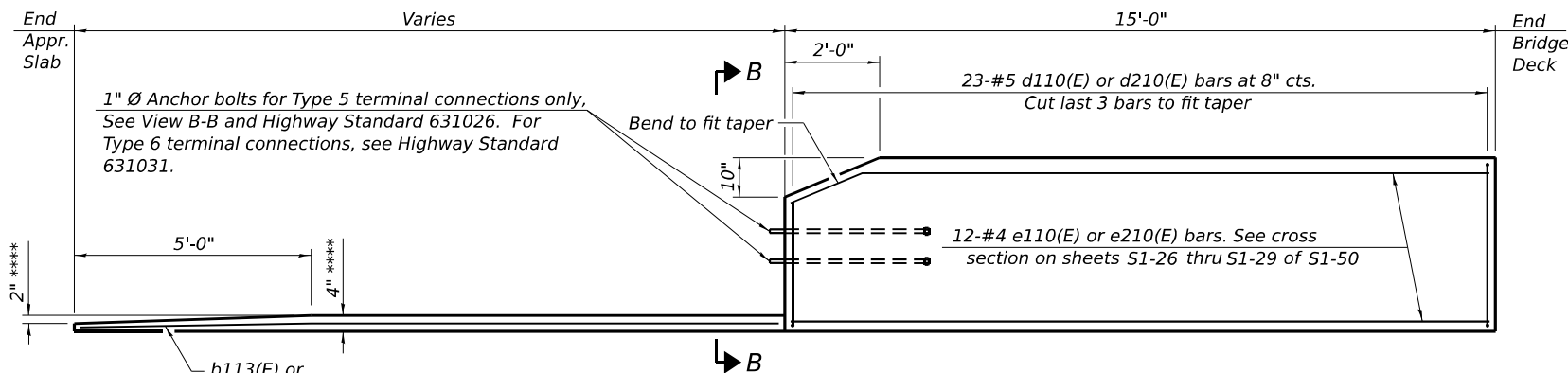
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PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

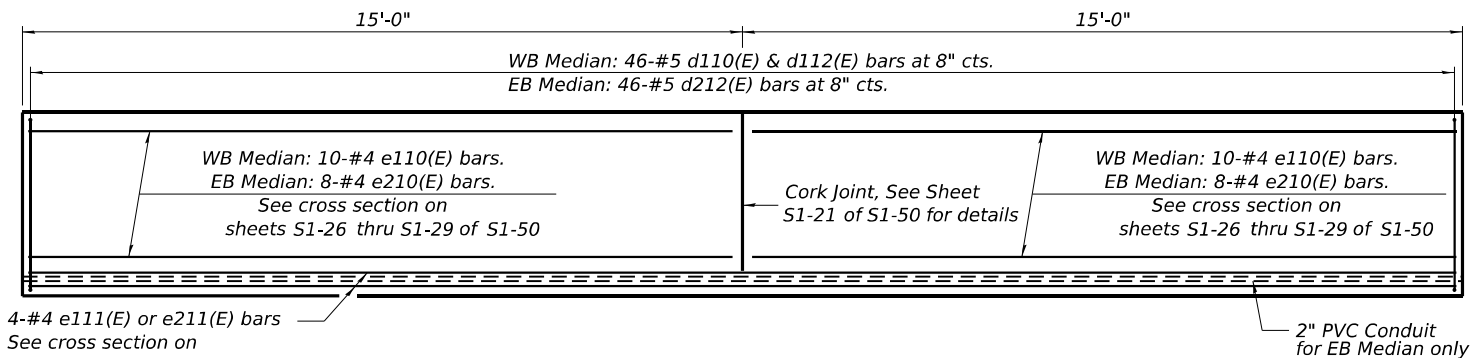
**APPROACH SLAB DETAILS 4
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 635
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

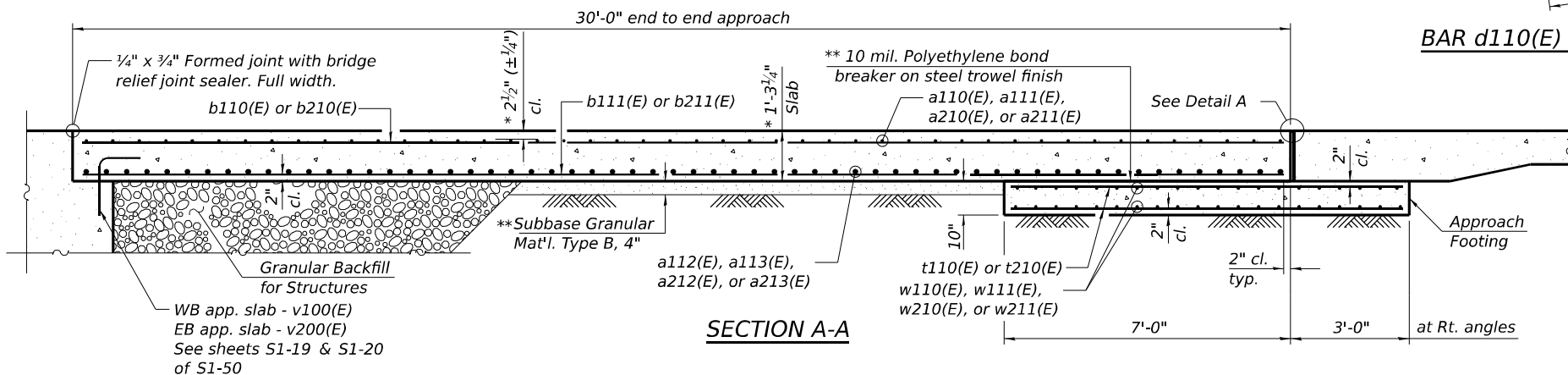
SHEET S1-29 OF S1-50 SHEETS



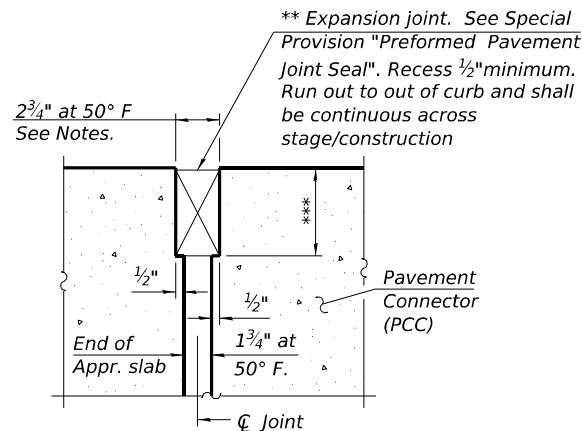
INSIDE ELEVATION OF EXTERIOR PARAPET AND CURB
(Departure End shown, Approach End similar but mirrored)



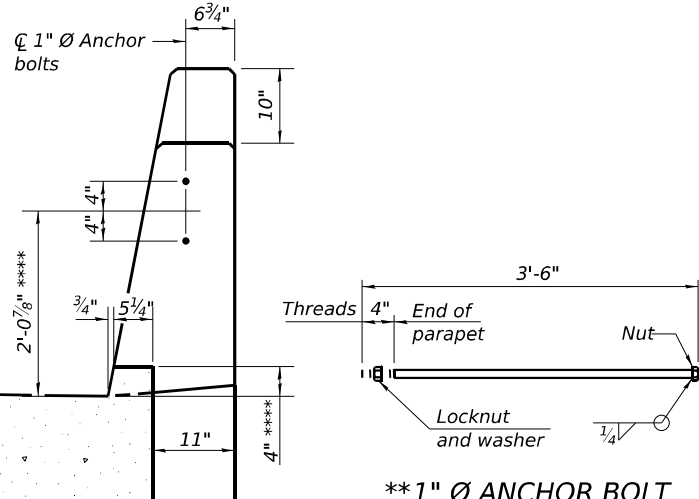
INSIDE ELEVATION OF MEDIAN PARAPET



SECTION A-A



DETAIL A
(at Rt. angles)



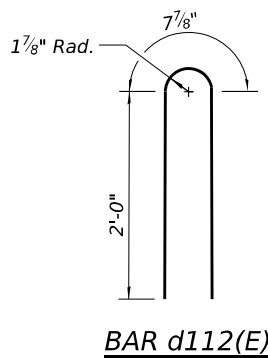
VIEW B-B

**** 1" Ø ANCHOR BOLT**

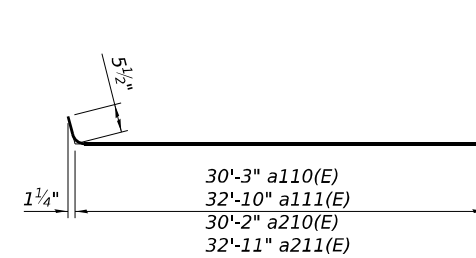
(Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)

Notes:

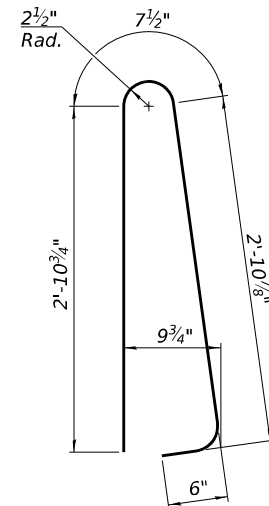
- The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
- Parapet concrete shall be paid for as Concrete Superstructure.
- Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
- Approach footing concrete shall be paid for as Concrete Structures.
- The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- Cost of excavation for approach footing included with Concrete Structures.
- For Granular Backfill for Structures and drainage treatment details, see sheet S1-3 of S1-50.
- The pay item Diamond Grinding (Bridge Section) includes quantity for grinding the approach pavement connectors. See special provisions.



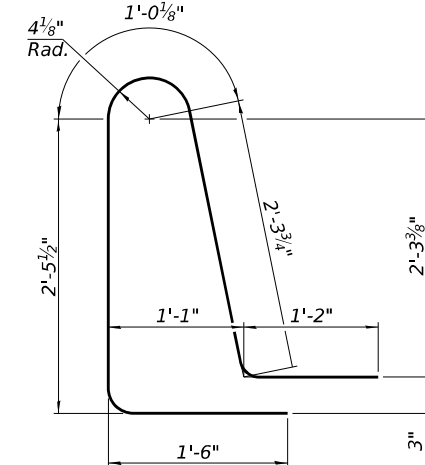
BAR d112(E)



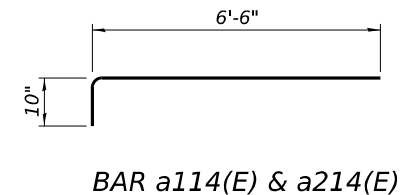
a110(E) & a210(E)
a111(E) & a211(E)



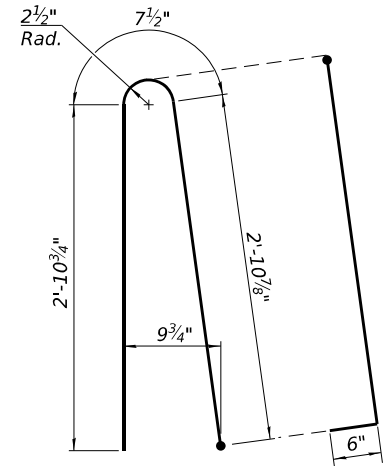
BAR d110(E) & d210(E)



BAR d111(E) & d211(E)



BAR a114(E) & a214(E)



BAR d212(E)

WESTBOUND
BILL OF MATERIAL

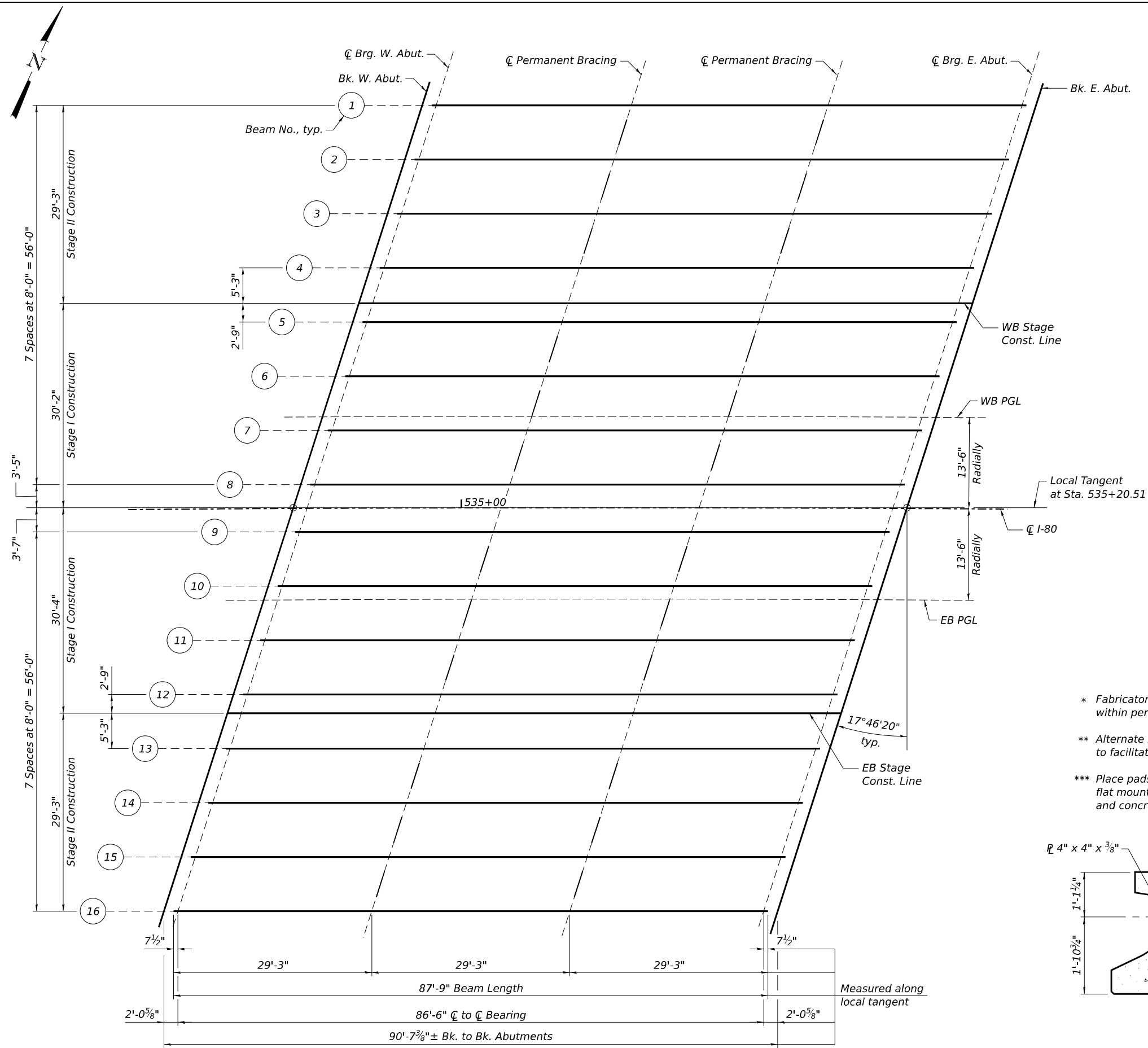
Bar	No.	Size	Length	Shape
a110	92	#5	30'-9"	
a111	92	#5	33'-4"	
a112	122	#8	30'-4"	
a113	122	#8	32'-11"	
a114	138	#5	7'-4"	
b110	198	#5	29'-8"	
b111	298	#9	29'-8"	
b112	8	#5	14'-8"	
b113	2	#4	14'-8"	
d110	138	#5	6'-11"	
d111	138	#5	8'-6"	
d112	92	#5	4'-8"	
e110	64	#4	14'-8"	
e111	8	#4	29'-8"	
t110	252	#4	10'-2"	
w110	80	#5	30'-5"	
w111	80	#5	33'-0"	
Concrete Structures		Cu. Yd.	40.1	
Concrete Superstructure		Cu. Yd.	13.6	
Protective Coat		Sq. Yd.	455	
Concrete Superstructure (Approach Slab)		Cu. Yd.	176.4	
Reinforcement Bars, Epoxy Coated		Pound	74,590	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	240	
Diamond Grinding (Bridge Section)		Sq. Yd.	540	

EASTBOUND
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a210	92	#5	30'-8"	
a211	92	#5	33'-5"	
a212	122	#8	30'-3"	
a213	122	#8	33'-0"	
a214	138	#5	7'-4"	
b210	198	#5	29'-8"	
b211	298	#9	29'-8"	
b212	8	#5	14'-8"	
b213	2	#4	14'-8"	
d210	138	#5	6'-11"	
d211	138	#5	8'-6"	
d212	92	#5	6'-11"	
e210	56	#4	14'-8"	
e211	8	#4	29'-8"	
t210	252	#4	10'-2"	
w210	80	#5	30'-4"	
w211	80	#5	33'-1"	
Concrete Structures		Cu. Yd.	40.1	
Concrete Superstructure		Cu. Yd.	12.7	
Protective Coat		Sq. Yd.	448	
Concrete Superstructure (Approach Slab)		Cu. Yd.	176.4	
Reinforcement Bars, Epoxy Coated		Pound	74,730	
Preformed Joint Seal 3 1/2"		Foot	60	
Bridge Deck Grooving (Longitudinal)		Sq. Yd.	240	
Diamond Grinding (Bridge Section)		Sq. Yd.	540	

MODEL: Drawing
FILE NAME: p:\transystems-pw\benley.com\transystems-pw\1-hosted\Documents\Projects_2018\CH401\401180022\02-Transystems\CAD\62R89\Sheets\23-Structural\099-8320 & 099-8321\0998320-62R89-030-ApprSlab_Details5.dgn

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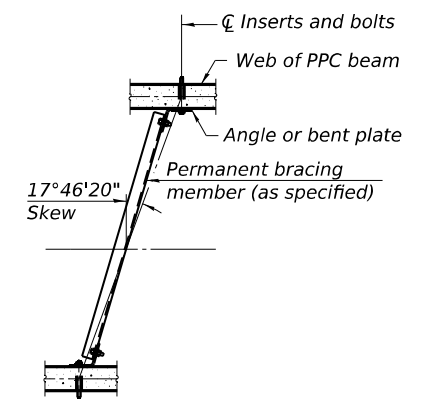


FRAMING PLAN

BEAM MOMENT TABLE		0.5 Span
		Interior
I	(in ⁴)	100,433
I'	(in ⁴)	308,306
Sb	(in ³)	6,832
Sb'	(in ³)	11,940
St	(in ³)	4,715
St'	(in ³)	30,288
DC1	(k/')	1.612
MDC1	(k)	1,509
DC2	(k/')	0.158
MDC2	(k)	148
DW	(k/')	0.375
MDW	(k)	351
M _L + I _M	(k)	1,506

BEAM REACTION TABLE		Abut.
		Interior
RDC1	(k)	69.7
RDC2	(k)	6.8
RDW	(k)	16.2
R _L + I _M	(k)	98.7
RTotal	(k)	191.5

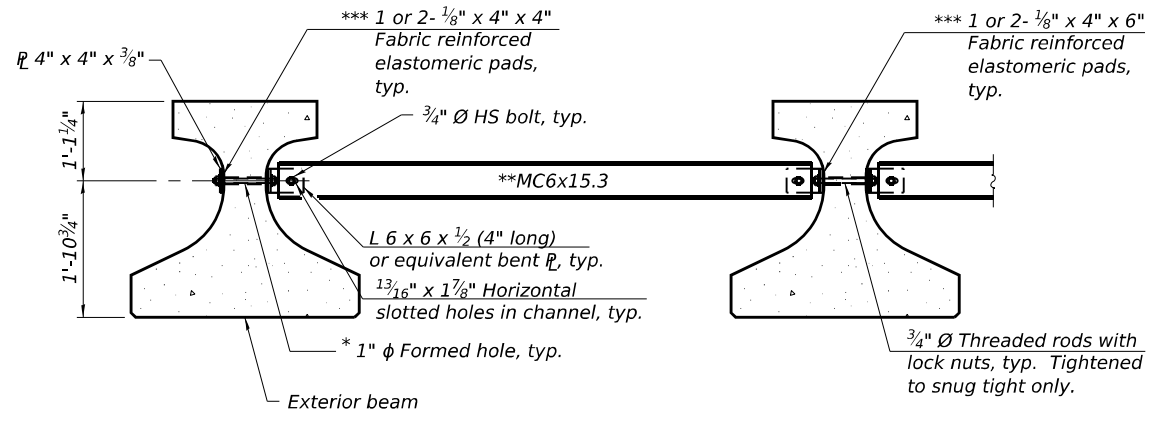
I: Non-composite moment of inertia of beam section (in.⁴).
 I': Composite moment of inertia of beam section (in.⁴).
 Sb: Non-composite section modulus for the bottom fiber of the prestressed beam (in.³).
 Sb': Composite section modulus for the bottom fiber of the prestressed beam (in.³).
 St: Non-composite section modulus for the top fiber of the prestressed beam (in.³).
 St': Composite section modulus for the top fiber of the prestressed beam (in.³).
 DC1: Un-factored non-composite dead load (kips/ft.).
 MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 M_L + I_M: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).



PERMANENT BRACING PLAN

Notes:
 All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes.
 All holes shall be 1⁵/₁₆" Ø unless otherwise noted. 3⁵/₁₆" x 3" x 3" plate washers are required over all slotted holes.
 All bolts, threaded rods, and hardware shall be galvanized according to AASHTO M232. Threaded rods shall be ASTM F 1554 Grade 55. Bracing shall be installed as beams are erected and tightened as soon as possible during erection. Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams, IL36N.

- * Fabricator shall locate to miss strands within permissible tolerances.
- ** Alternate MC6x18 channels are permitted to facilitate material acquisition.
- *** Place pads as necessary to provide a flat mounting surface between the steel and concrete.



PERMANENT BRACING DETAILS

TRANSYSTEMS

USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - ESS	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

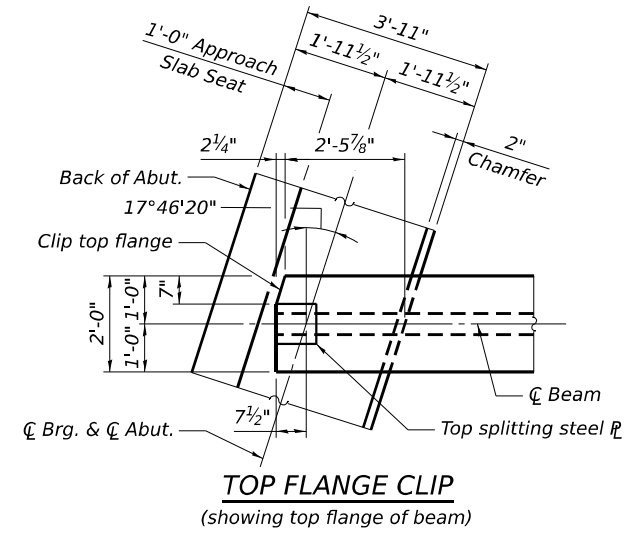
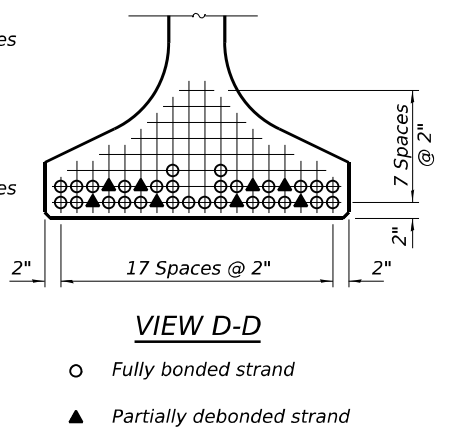
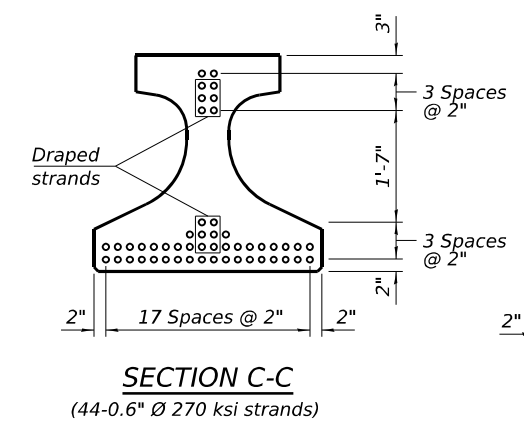
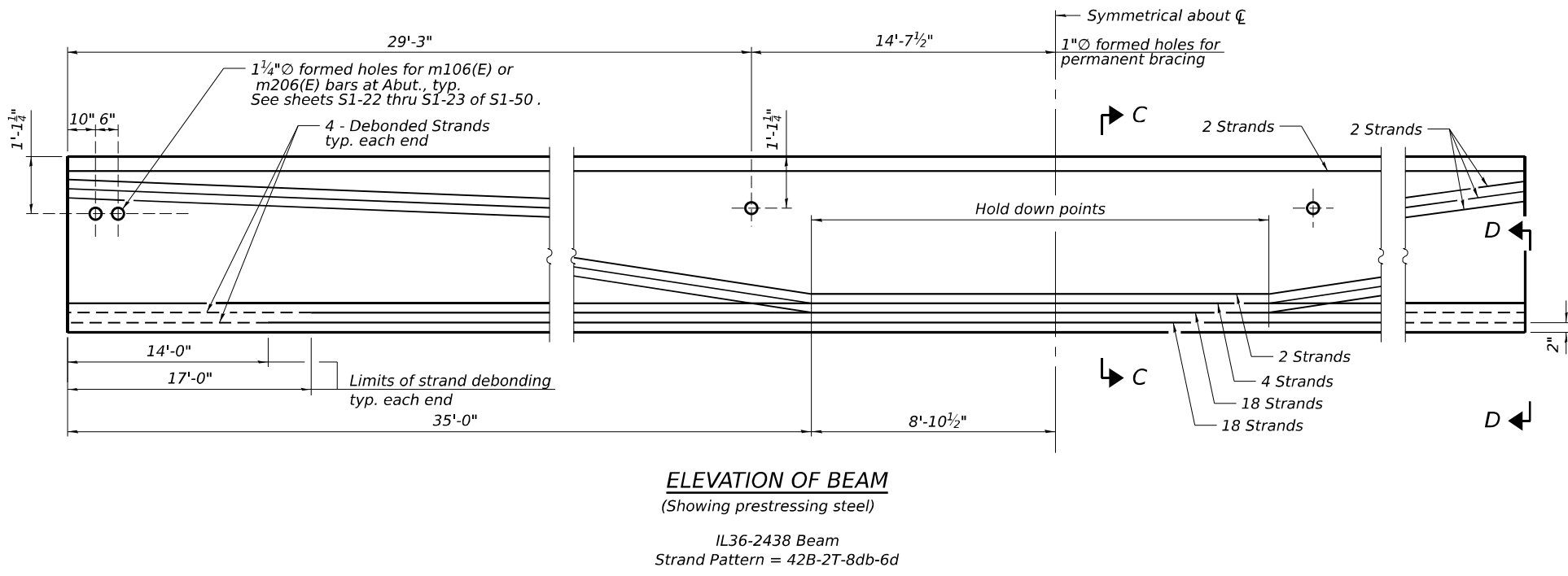
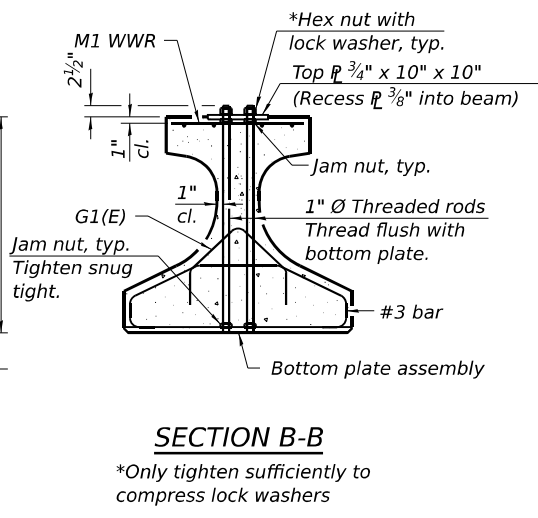
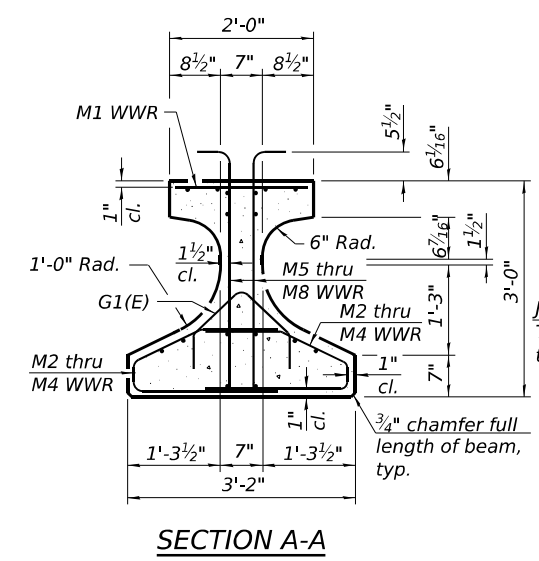
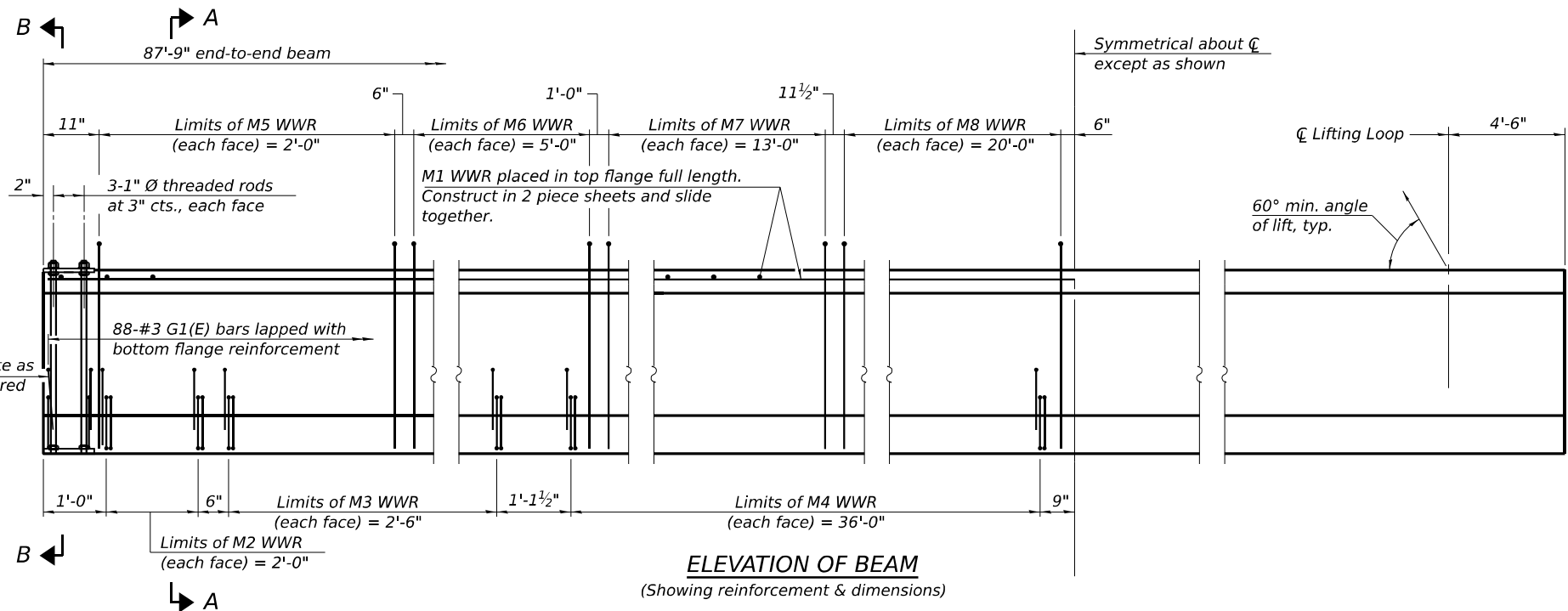
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**FRAMING PLAN
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-31 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	637
CONTRACT NO. 62R89				
ILLINOIS / FED. AID PROJECT				

MODEL: Drawing
FILE NAME: pw://transystems-pw.bentley.com/transystems-pw1-hosted/Documents/Projects/2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-032-PPC_Beam_Det1.dgn



Note:
See sheet S1-33 of S1-50 for additional details and Bill of Material.

IL36-2438

8-13-2021

TRANSYSTEMS

USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - ESS	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

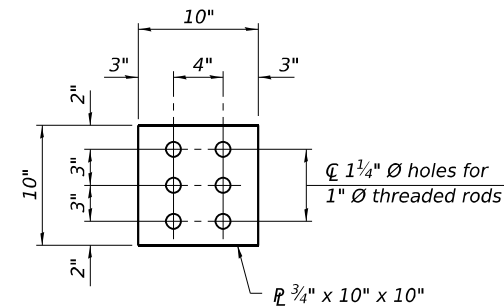
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL36 PPC BEAM DETAILS 1
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

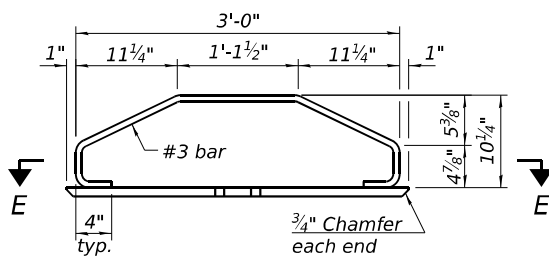
SHEET 51-32 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	638
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

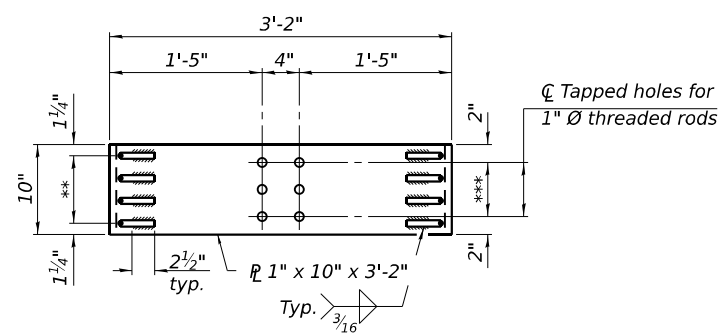
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PLAN - TOP PLATE

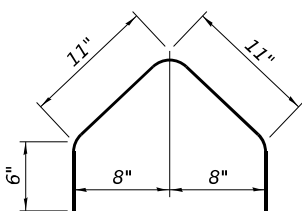


ELEVATION - BOTTOM PLATE ASSEMBLY

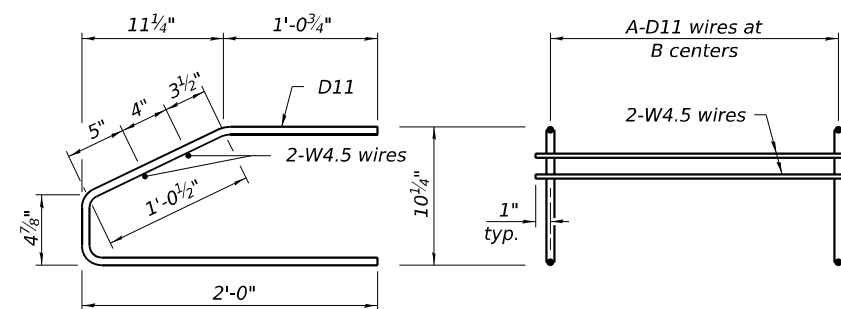


SECTION E-E

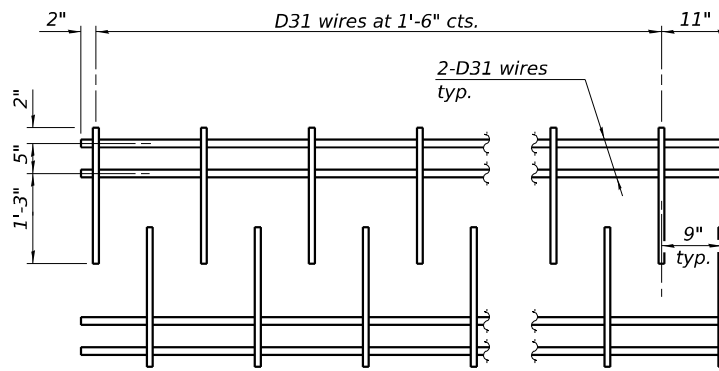
** 3 Spaces at 2 1/2" = 7 1/2"
*** 2 Spaces at 3" = 6"



BAR G1(E)

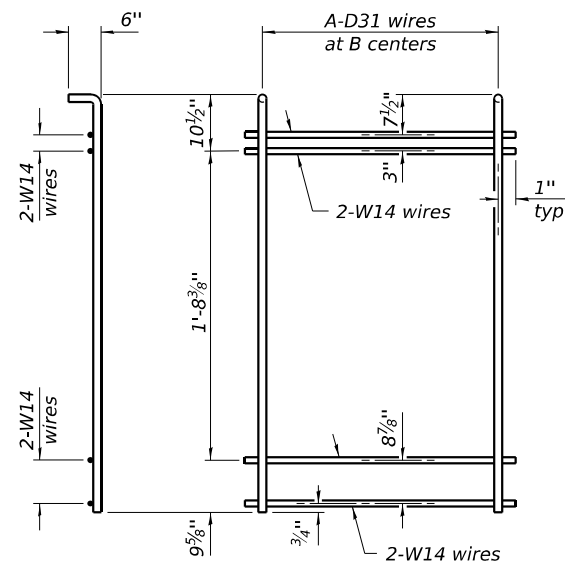


M2 THRU M4 WWR DETAIL
(See Table of Dimensions)



M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").



M5 THRU M8 WWR DETAIL
(See Table of Dimensions)

Notes:

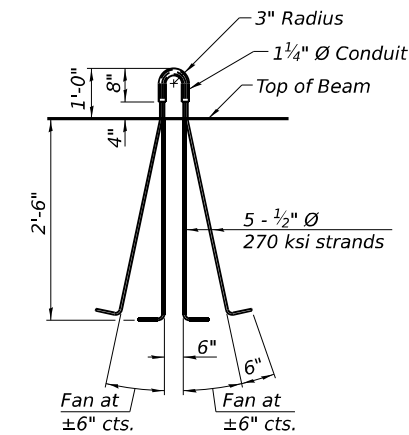
Inserts for 3/4" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams. Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in. The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi. A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling. The top and bottom plates shall be AASHTO M270 Grade 50. The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111. The threaded rods, nuts and washers shall be galvanized according to AASHTO M232. Threaded rods shall be ASTM F 1554 Grade 55. Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.

TABLE OF DIMENSIONS

(The WWR designs assume grade 60. If necessary, this permits the fabricator to directly substitute grade 60 rebar as detailed in the Manual for Fabrication of Precast Prestressed Concrete Products.)

SPAN 1

WWR	A	B
M2	9	3"
M3	6	6"
M4	25	1'-6"
M5	9	3"
M6	11	6"
M7	14	1'-0"
M8	11	2'-0"



LIFTING LOOP DETAIL

BILL OF MATERIAL

Item	Unit	EB	WB	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36N	Ft.	702	702	1,404

IL36-2438D

8-13-2021

TRANSYSTEMS

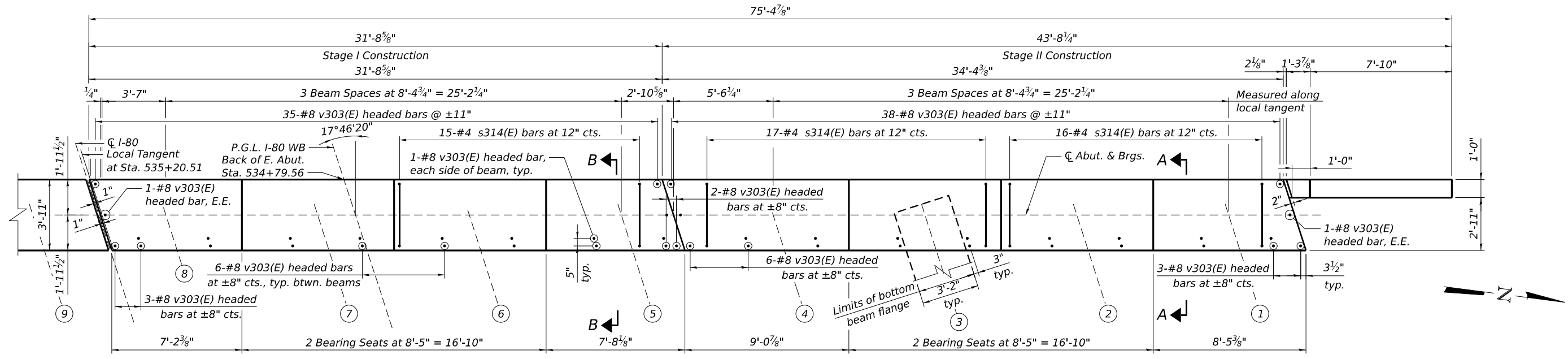
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PLOT SCALE =	CHECKED - ESS	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

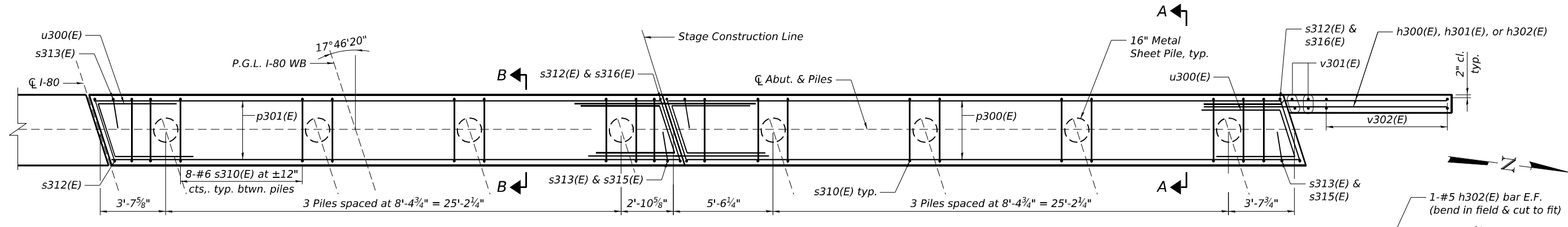
**IL36 PPC BEAM DETAILS 2
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-33 OF 51-50 SHEETS

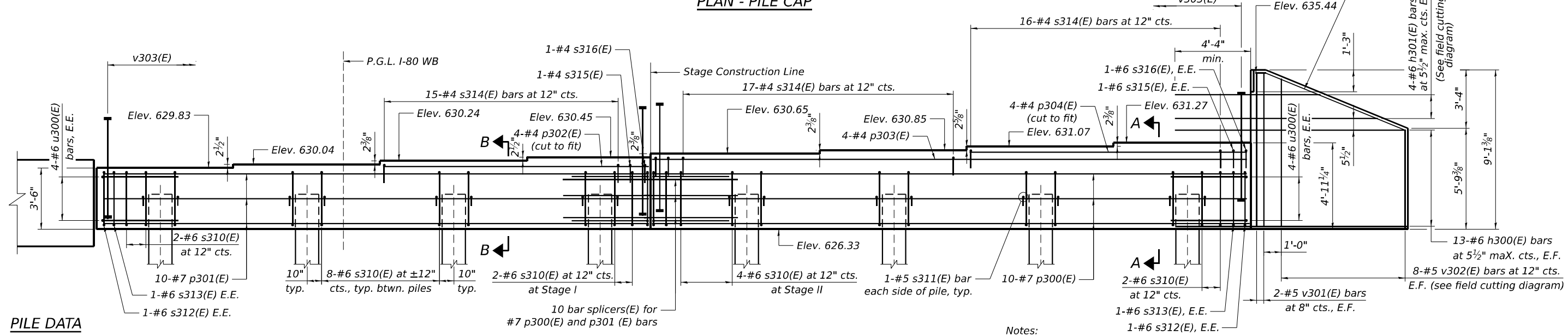
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	639
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	



TOP VIEW



PLAN - PILE CAP



ELEVATION
(Looking West)

Notes:
 Pour steps monolithically with cap.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 For details of piles see sheet S1-44 of S1-50.
 E.E. denotes Each End. E.F. denotes Each Face.
 For B.O.M., bar Bending Diagrams, and Section Thru Abut. see sheet S1-36 of S1-50.

PILE DATA

Type: MSP 16x0.312 with Pile Shoes
 Nominal Required Bearing: 654 kips
 Factored Resistance Available: 303 kips
 Est. Length: 50 Feet
 No. Production Piles: 7
 No. Test Piles: 1

MINIMUM BAR LAP

#7 bar = 5'-0"

MODEL: Drawing
 FILE NAME: pw://transystems-pw.bentley.com/transystems-pw1-hosted/Documents/Projects_2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-034-Abutment_WestP&E_WB.dgn



USER NAME = amkluver	DESIGNED - CG	REVISED -
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PLOT DATE = 10/5/2023	DRAWN - IIP	REVISED -
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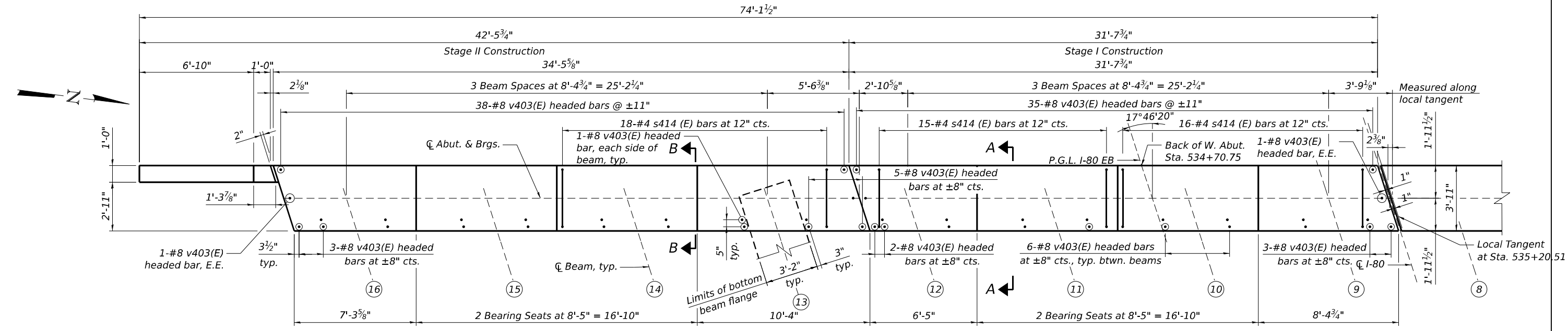
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT PLAN AND ELEVATION - WB
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

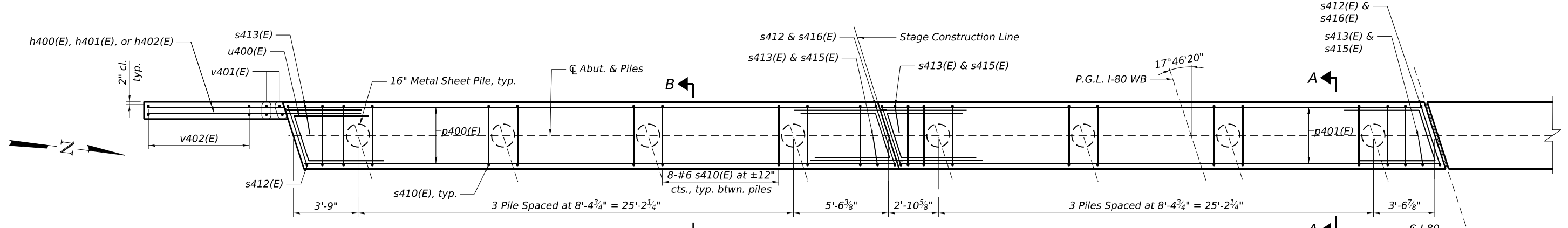
SHEET S1-34 OF S1-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	640
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

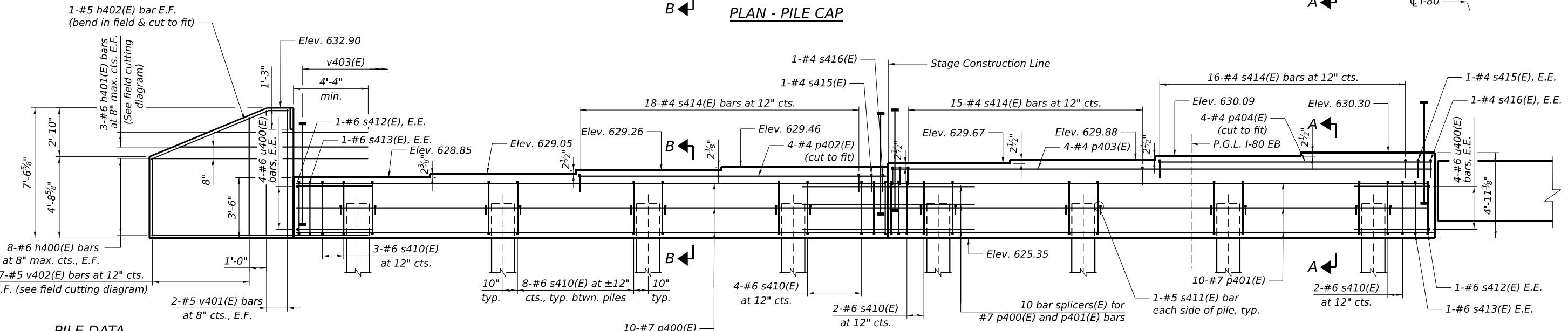
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TOP VIEW



PLAN - PILE CAP



ELEVATION
(Looking West)

PILE DATA

Type: MSP 16x0.312 with Pile Shoes
 Nominal Required Bearing: 654 kips
 Factored Resistance Available: 284 kips
 Est. Length: 45 Feet
 No. Production Piles: 7
 No. Test Piles: 1

MINIMUM BAR LAP

#7 bar = 5'-0"



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - TJJ	REVISED -
PLOT DATE = 10/5/2023	DRAWN - IIP	REVISED -
	CHECKED - TJJ	REVISED -

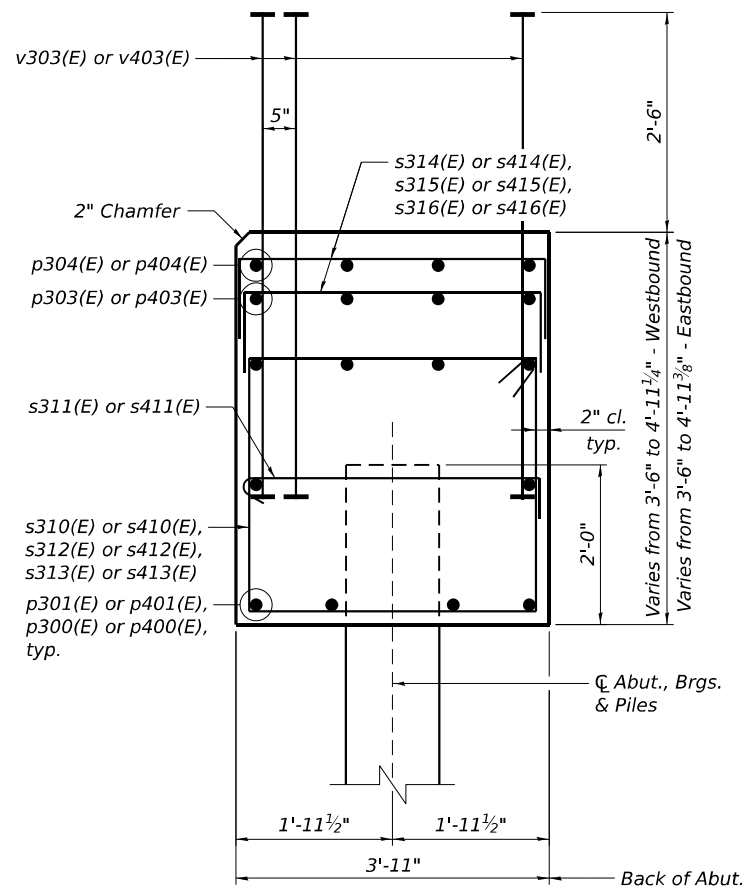
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT PLAN AND ELEVATION - EB
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-35 OF 51-50 SHEETS

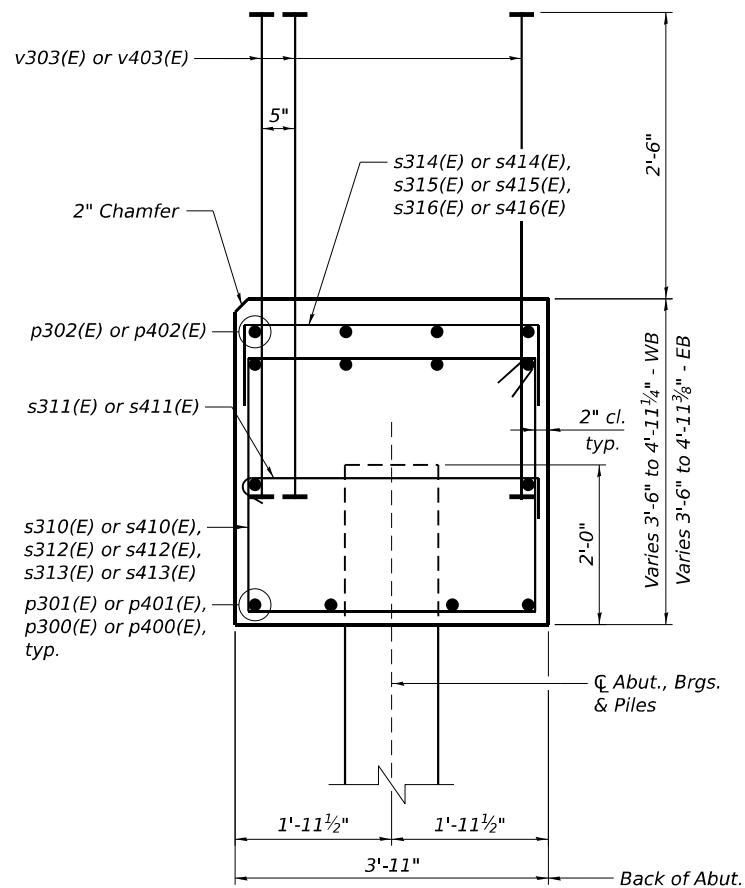
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	641
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

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SECTION A-A

Dimensions at right angles to abutment



SECTION B-B

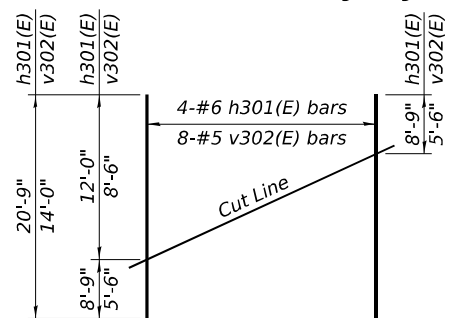
Dimensions at right angles to abutment

BILL OF MATERIAL - W. ABUT. WESTBOUND

Bar	No.	Size	Length	Shape
h300(E)	26	#6	13'-6"	—
h301(E)	4	#6	20'-9"	—
h302(E)	2	#5	9'-6"	—
p300(E)	10	#7	34'-0"	—
p301(E)	10	#7	31'-4"	—
p302(E)	4	#4	15'-9"	—
p303(E)	4	#4	34'-0"	—
p304(E)	4	#4	16'-6"	—
s310(E)	56	#6	14'-10"	□
s311(E)	16	#5	4'-7"	⌋
s312(E)	4	#6	15'-2"	□
s313(E)	4	#6	6'-10"	□
s314(E)	48	#4	5'-7"	□
s315(E)	3	#4	2'-10"	□
s316(E)	3	#4	5'-9"	□
u300(E)	16	#6	12'-3"	⌋
v301(E)	4	#5	8'-9"	—
v302(E)	8	#5	14'-0"	—
v303(E)	143	#8	5'-8"	—
Concrete Structures			Cu. Yd.	42.7
Reinforcement Bars, Epoxy Coated			Pound	6,450
Furnishing Metal Shell Piles 16" x 0.312"			Foot	350
Driving Piles			Foot	350
Test Pile Metal Shells			Each	1
Pile Shoes			Each	8

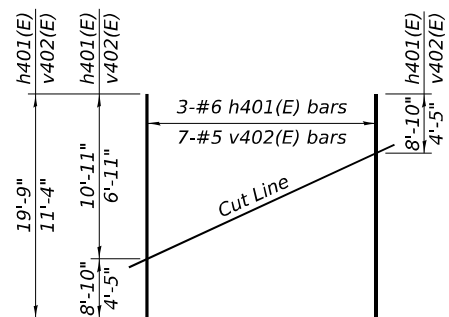
BILL OF MATERIAL - W. ABUT. EASTBOUND

Bar	No.	Size	Length	Shape
h400(E)	16	#6	12'-6"	—
h401(E)	3	#6	19'-9"	—
h402(E)	2	#5	8'-4"	—
p400(E)	10	#7	34'-0"	—
p401(E)	10	#7	31'-3"	—
p402(E)	4	#4	18'-5"	—
p403(E)	4	#4	31'-3"	—
p404(E)	4	#4	16'-5"	—
s410(E)	59	#6	14'-10"	□
s411(E)	16	#5	4'-7"	⌋
s412(E)	4	#6	15'-2"	□
s413(E)	4	#6	6'-10"	□
s414(E)	49	#4	5'-7"	□
s415(E)	3	#4	2'-10"	□
s416(E)	3	#4	5'-9"	□
u400(E)	16	#6	12'-3"	⌋
v401(E)	4	#5	7'-2"	—
v402(E)	7	#5	11'-4"	—
v403(E)	142	#8	5'-8"	—
Concrete Structures			Cu. Yd.	42.1
Reinforcement Bars, Epoxy Coated			Pound	6,200
Furnishing Metal Shell Piles 16" x 0.312"			Foot	315
Driving Piles			Foot	315
Test Pile Metal Shells			Each	1
Pile Shoes			Each	8



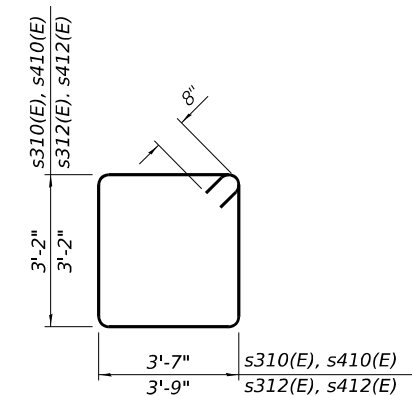
FIELD CUTTING DIAGRAM

Order h301(E) and v302(E) full length for quantity of one wall face. Cut as shown and use remainder of bars in second wall face.

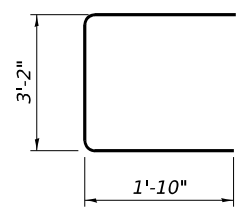


FIELD CUTTING DIAGRAM

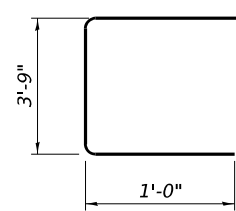
Order h401(E) and v402(E) full length for quantity of one wall face. Cut as shown and use remainder of bars in second wall face.



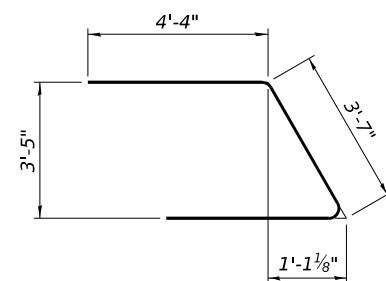
BAR s310(E), s312(E), s410(E) & s412(E)



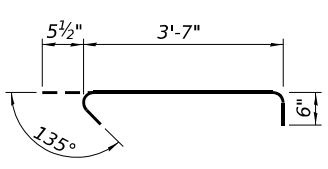
BAR s313(E) & s413(E)



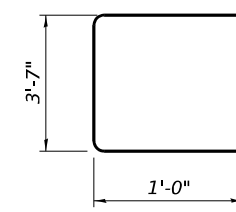
BAR s316(E) & s416(E)



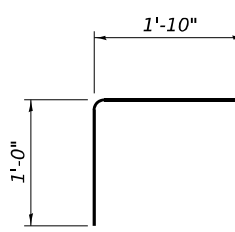
BAR u300(E) & u400(E)



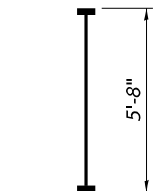
BAR s311(E) & s411(E)



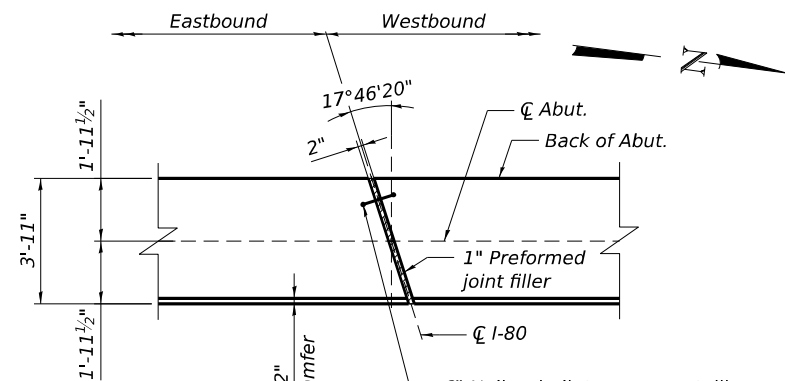
BAR s314(E) & s414(E)



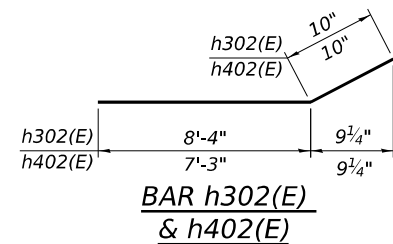
BAR s315(E) & s415(E)



BAR v303(E) & v403(E)
(Headed)



PLAN AT I-80 CENTERLINE



BAR h302(E) & h402(E)



USER NAME =	ilpsaropasslone	DESIGNED -	CG	REVISED -	
PLOT SCALE =		CHECKED -	TJJ	REVISED -	
PLOT DATE =	12/5/2023	DRAWN -	IIP	REVISED -	
		CHECKED -	TJJ	REVISED -	

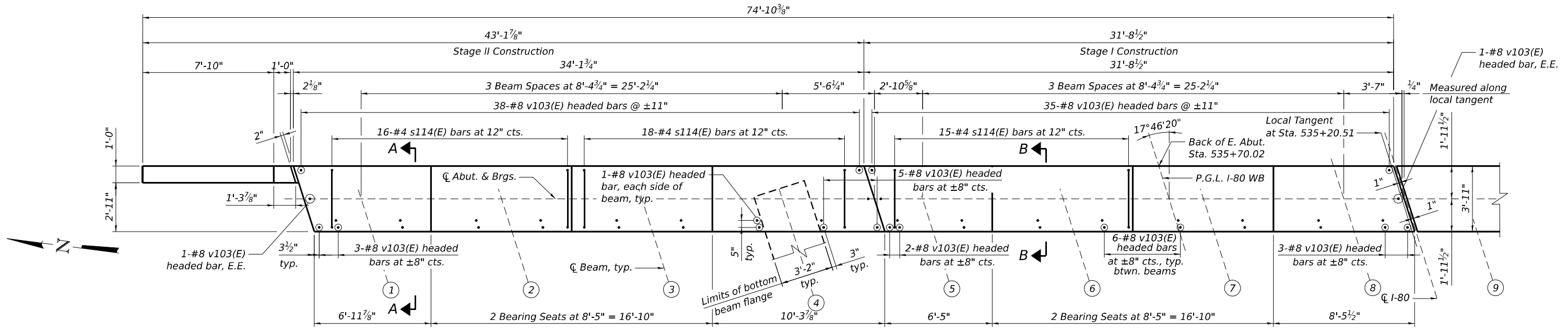
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEST ABUTMENT DETAILS
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

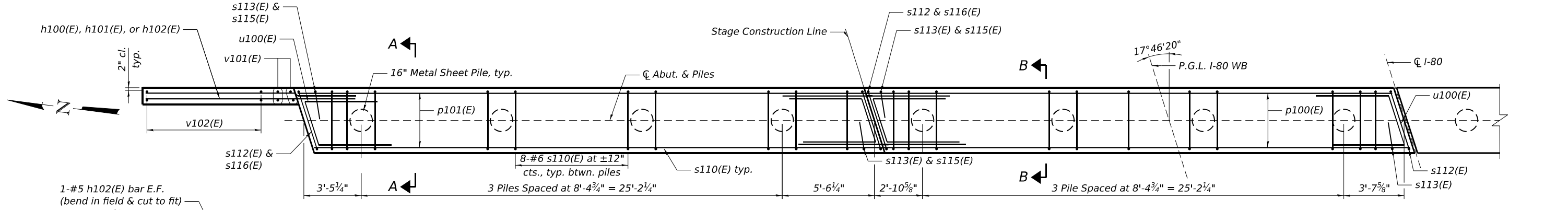
SHEET 51-36 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	642
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

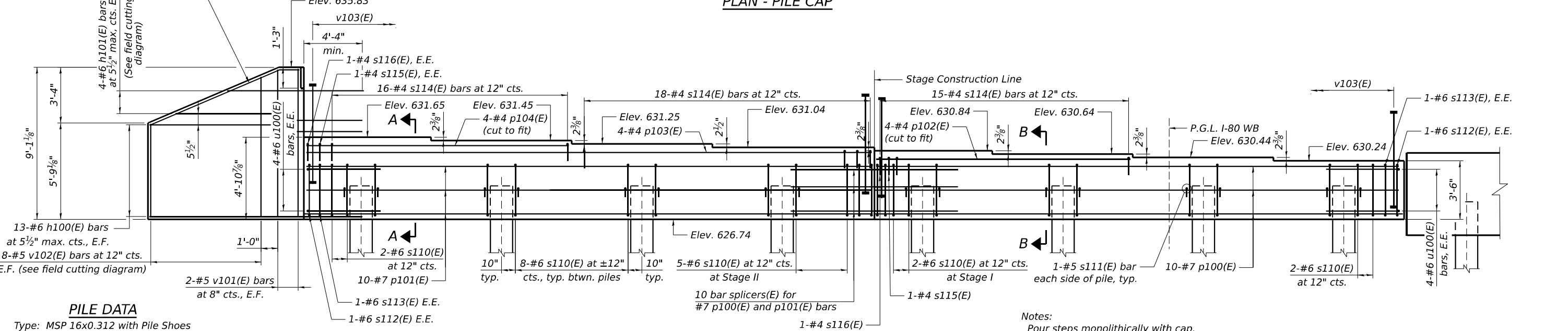
MODEL: Drawing
 FILE NAME: pw://transystems-pw-bentley.com/transystems-pw-bentley.com/transystems-pw-bentley.com/Projects/2018/CH401/401180022/02-TransSystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-037-Abutment_EastP&E_WB.dgn



TOP VIEW



PLAN - PILE CAP



ELEVATION
(Looking East)

PILE DATA
 Type: MSP 16x0.312 with Pile Shoes
 Nominal Required Bearing: 654 kips
 Factored Resistance Available: 296 kips
 Est. Length: 49 Feet
 No. Production Piles: 7
 No. Test Piles: 1

MINIMUM BAR LAP
 #7 bar = 5'-0"

Notes:
 Pour steps monolithically with cap.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 For details of piles see sheet S1-44 of S1-50.
 E.E. denotes Each End. E.F. denotes Each Face.
 For B.O.M., bar Bending Diagrams, and Section Thru Abut. see sheet S1-39 of S1-50.



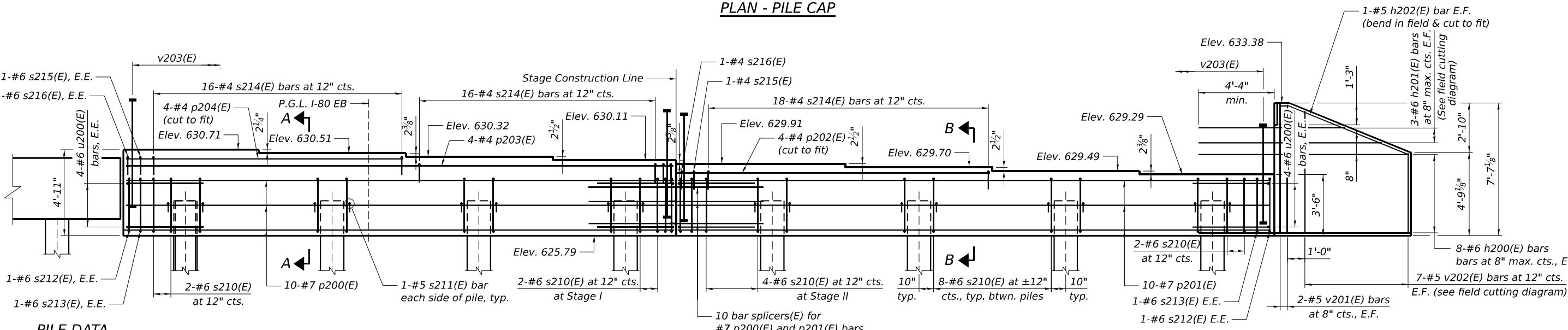
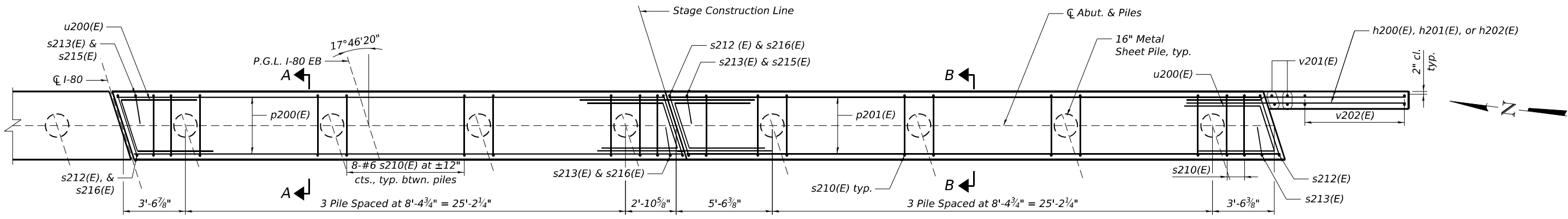
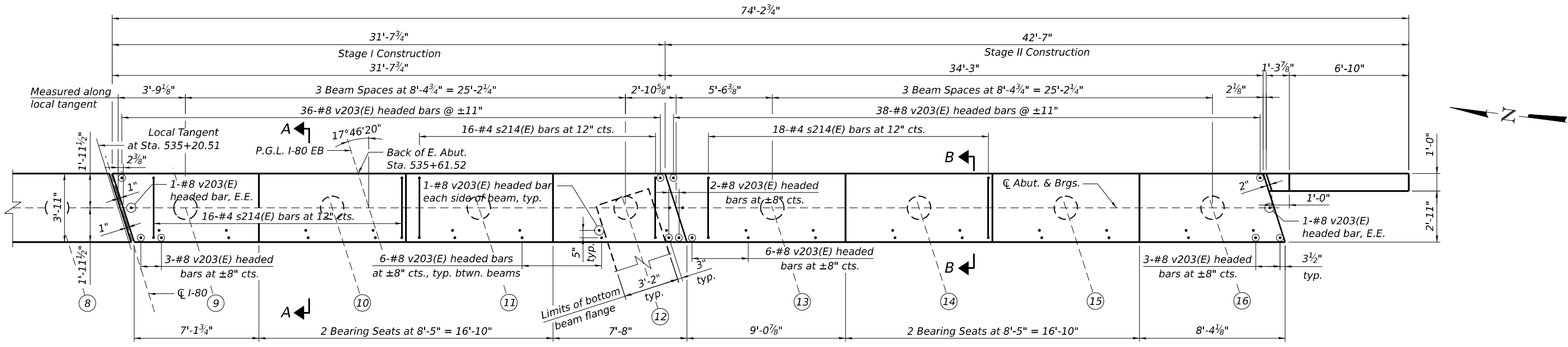
USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - TJJ	REVISED -
PLOT DATE = 10/5/2023	DRAWN - IIP	REVISED -
	CHECKED - TJJ	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT PLAN AND ELEVATION - WB
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 643
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R89	

MODEL: Drawing
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PILE DATA

Type: MSP 16x0.312 with Pile Shoes
 Nominal Required Bearing: 654 kips
 Factored Resistance Available: 324 kips
 Est. Length: 49 Feet
 No. Production Piles: 7
 No. Test Piles: 1

MINIMUM BAR LAP

#7 bar = 5'-0"

ELEVATION

(Looking East)



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - TJJ	REVISED -
PLOT DATE = 10/5/2023	DRAWN - IIP	REVISED -
	CHECKED - TJJ	REVISED -

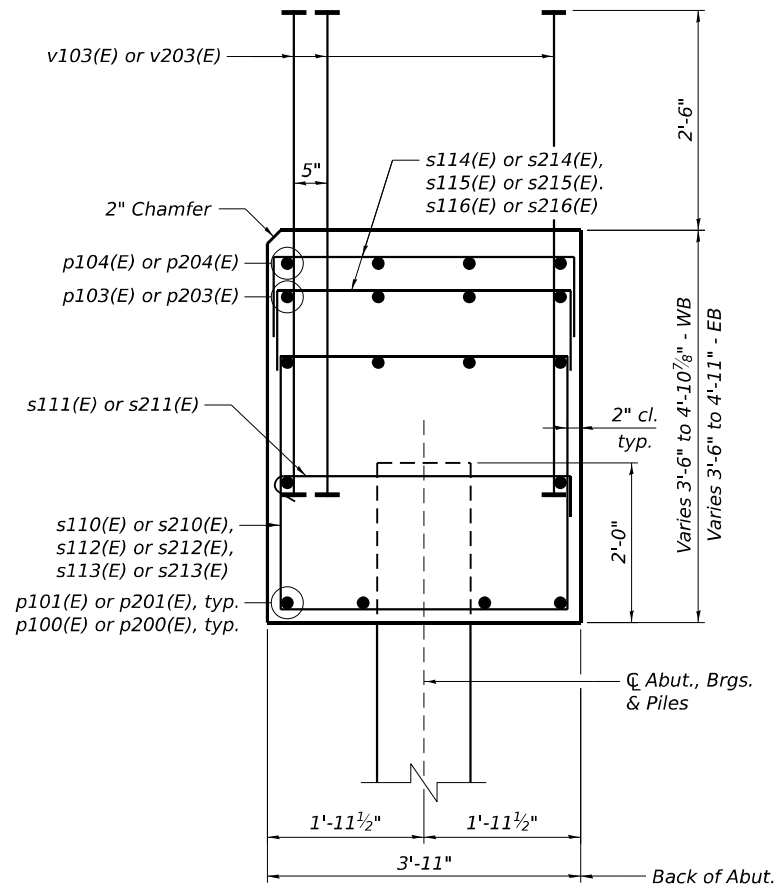
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT PLAN AND ELEVATION - EB
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-38 OF 51-50 SHEETS

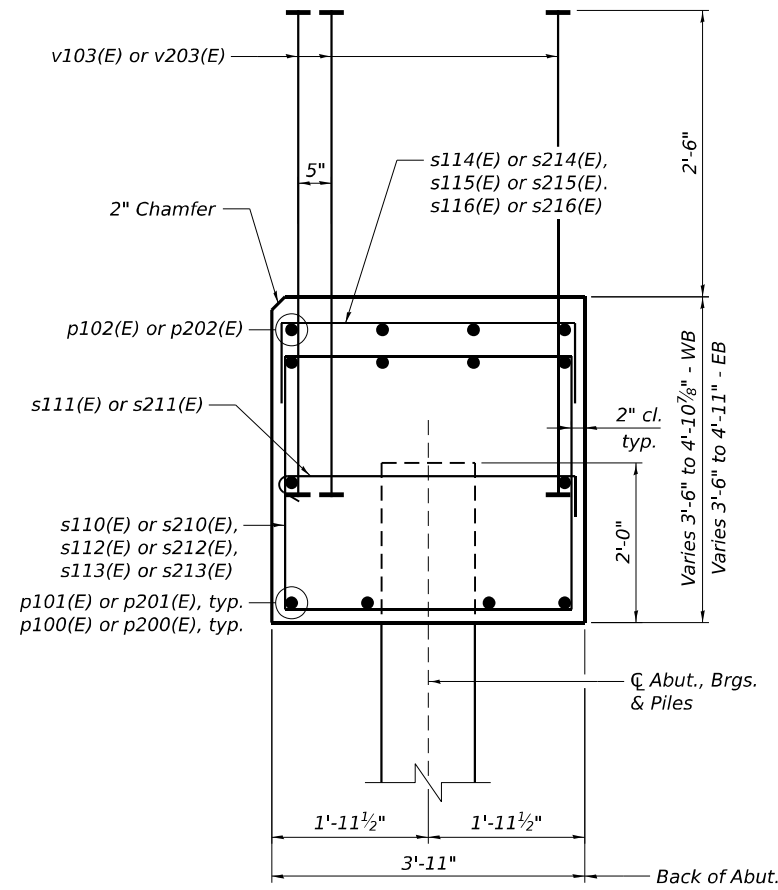
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	644
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R89	

MODEL: Default
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 TRANSYSTEMS



SECTION A-A

Dimensions at right angles to abutment



SECTION B-B

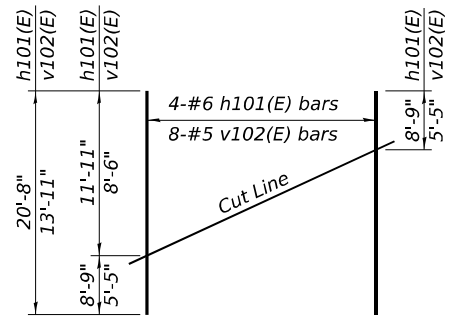
Dimensions at right angles to abutment

BILL OF MATERIAL E. ABUT. - WESTBOUND

Bar	No.	Size	Length	Shape
h100(E)	26	#6	13'-6"	—
h101(E)	4	#6	20'-8"	—
h102(E)	2	#5	9'-6"	—
p100(E)	10	#7	31'-4"	—
p101(E)	10	#7	33'-9"	—
p102(E)	4	#4	15'-7"	—
p103(E)	4	#4	33'-9"	—
p104(E)	4	#4	16'-1"	—
s110(E)	59	#6	14'-10"	□
s111(E)	16	#5	4'-7"	┌┐
s112(E)	4	#6	15'-2"	□
s113(E)	4	#6	6'-10"	┌┐
s114(E)	49	#4	5'-7"	┌┐
s115(E)	3	#4	2'-10"	┌┐
s116(E)	3	#4	5'-9"	┌┐
u100(E)	16	#6	12'-3"	┌┐
v101(E)	4	#5	8'-9"	—
v102(E)	8	#5	13'-11"	—
v103(E)	142	#8	5'-8"	—
Concrete Structures			Cu. Yd.	42.2
Reinforcement Bars, Epoxy Coated			Pound	6,500
Furnishing Metal Shell Piles 16" x 0.312"			Foot	343
Driving Piles			Foot	343
Test Pile Metal Shells			Each	1
Pile Shoes			Each	8

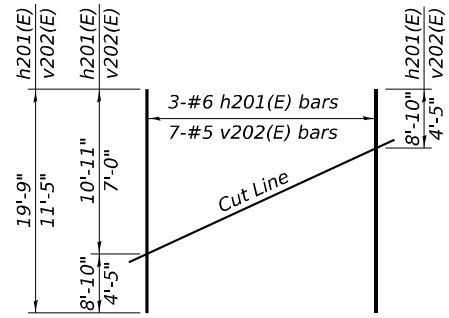
BILL OF MATERIAL E. ABUT. - EASTBOUND

Bar	No.	Size	Length	Shape
h200(E)	16	#6	12'-6"	—
h201(E)	3	#6	19'-9"	—
h202(E)	2	#5	8'-4"	—
p200(E)	10	#7	31'-3"	—
p201(E)	10	#7	33'-11"	—
p202(E)	4	#4	18'-2"	—
p203(E)	4	#4	31'-3"	—
p204(E)	4	#4	16'-2"	—
s210(E)	58	#6	14'-10"	□
s211(E)	16	#5	4'-7"	┌┐
s212(E)	4	#6	15'-2"	□
s213(E)	4	#6	6'-10"	┌┐
s214(E)	50	#4	5'-7"	┌┐
s215(E)	3	#4	2'-10"	┌┐
s216(E)	3	#4	5'-9"	┌┐
u200(E)	16	#6	12'-3"	┌┐
v201(E)	4	#5	7'-2"	—
v202(E)	7	#5	11'-5"	—
v203(E)	143	#8	5'-8"	—
Concrete Structures			Cu. Yd.	41.7
Reinforcement Bars, Epoxy Coated			Pound	6,190
Furnishing Metal Shell Piles 16" x 0.312"			Foot	343
Driving Piles			Foot	343
Test Pile Metal Shells			Each	1
Pile Shoes			Each	8



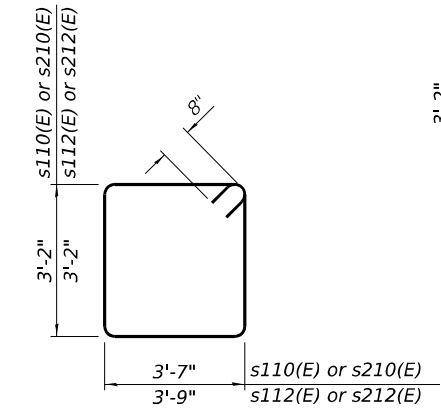
FIELD CUTTING DIAGRAM

Order h101(E) and v102(E) full length for quantity of one face. Cut as shown and use remainder of bars in second wall face.

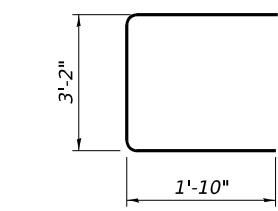


FIELD CUTTING DIAGRAM

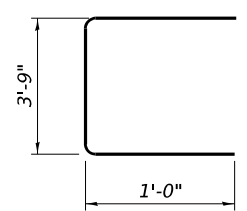
Order h201(E) and v202(E) full length for quantity of one face. Cut as shown and use remainder of bars in second wall face.



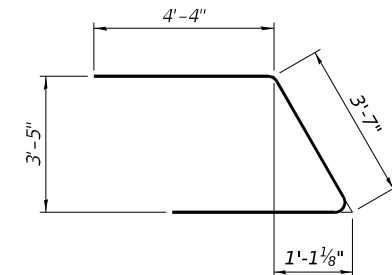
BAR s110(E), s112(E), s210(E) OR s212(E)



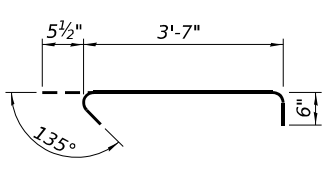
BAR s113(E) & s213(E)



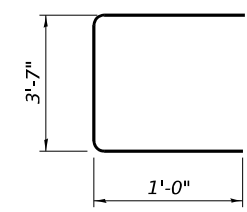
BAR s116(E) & s216(E)



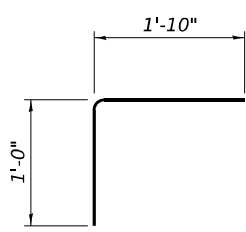
BAR u100(E) & u200(E)



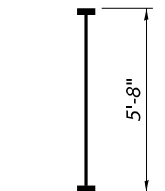
BAR s111(E) & s211(E)



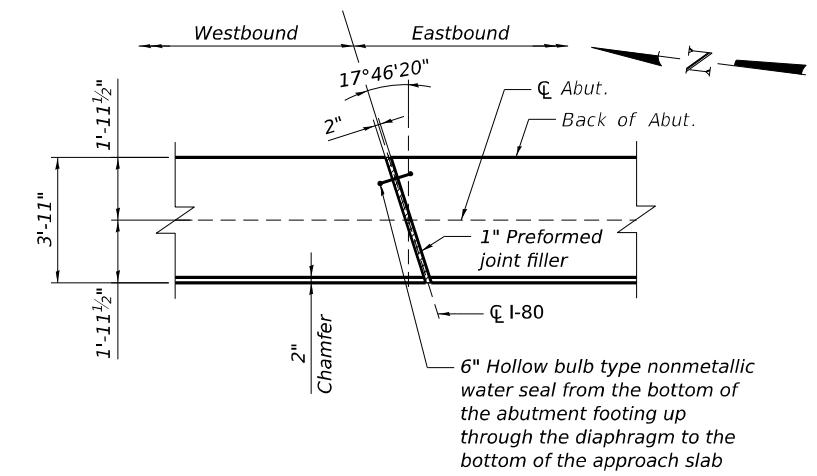
BAR s114(E) & s214(E)



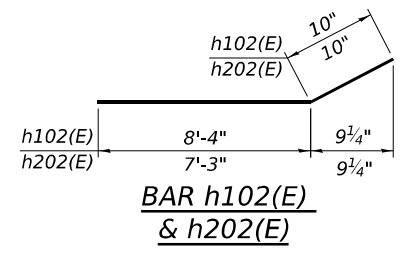
BAR s115(E) & s215(E)



BAR v103(E) & v203(E)
(Headed)



PLAN AT I-80 CENTERLINE



BAR h102(E) & h202(E)



USER NAME =	ilpsaropasslone	DESIGNED -	CG	REVISED -	
CHECKED -	TJJ	CHECKED -	TJJ	REVISED -	
PLOT SCALE =		DRAWN -	IIP	REVISED -	
PLOT DATE =	12/5/2023	CHECKED -	TJJ	REVISED -	

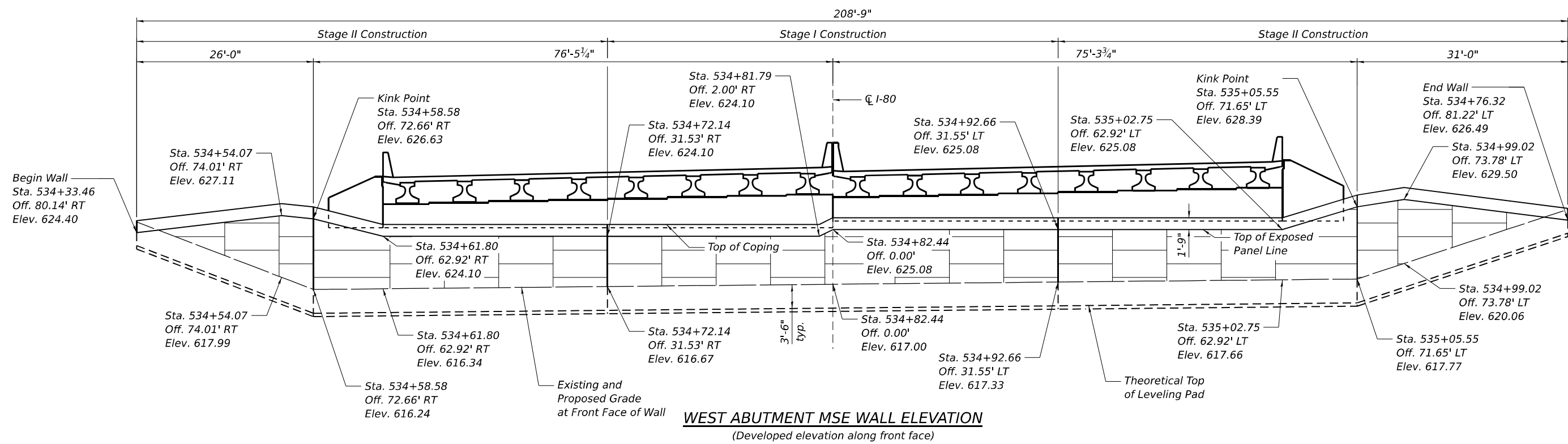
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT DETAILS
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

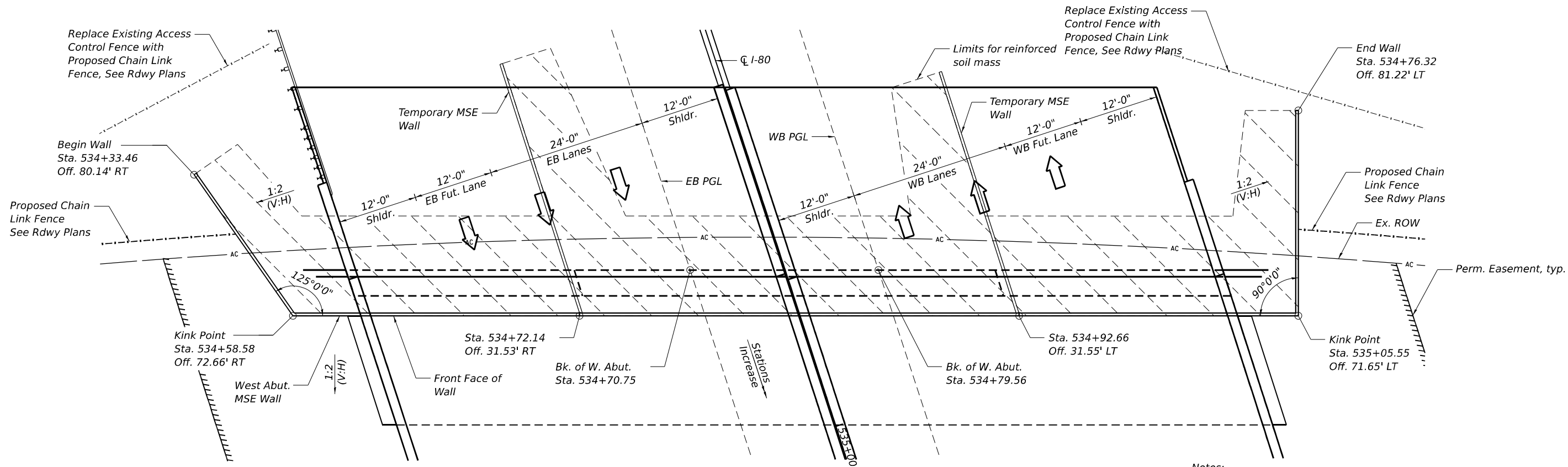
SHEET 51-39 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	645
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

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WEST ABUTMENT MSE WALL ELEVATION
 (Developed elevation along front face)



WEST ABUTMENT MSE WALL PLAN

Notes:
 Wall stations offsets are given to the front face of wall and are measured from the CL of I-80.
 Horizontal dimensions measured along front face of precast panels.
 Contractor shall coordinate MSE retaining wall construction with abutment construction. Piles are to be driven prior to MSE retaining wall construction. See sheet S1-42 of S1-50 for additional details.
 For Temporary Sheet Piling details and Temporary MSE Wall Details, See Sheet S1-10 of S1-50.



USER NAME = amkluver	DESIGNED - IS	REvised -
PLOT SCALE =	CHECKED - TJA	REvised -
PLOT DATE = 10/5/2023	DRAWN - IS	REvised -
	CHECKED - TJA	REvised -

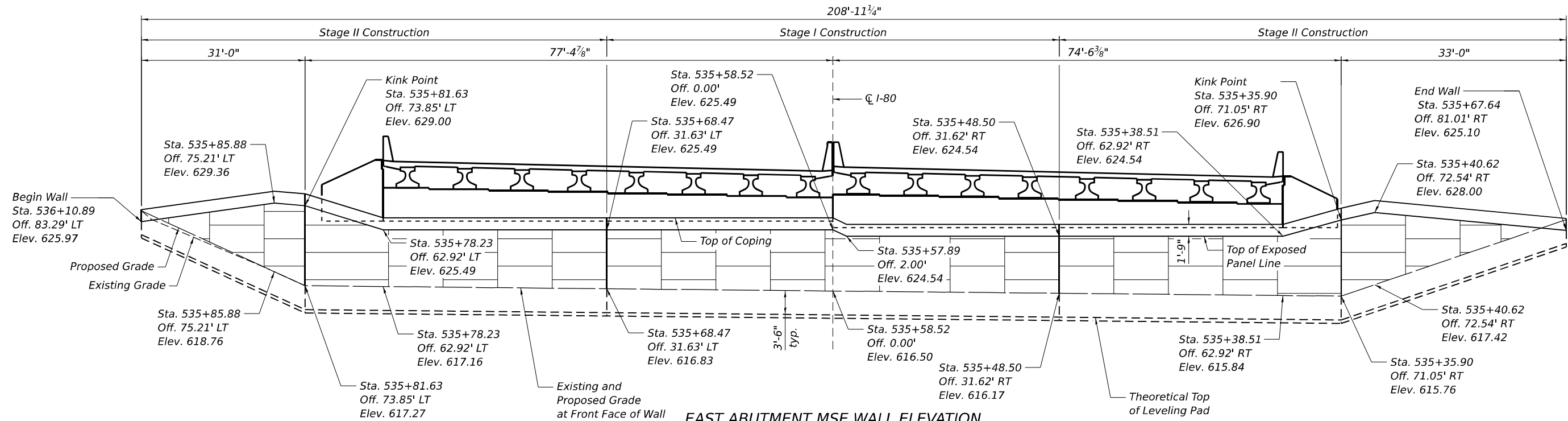
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**WEST MSE WALL PLAN AND ELEVATION
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

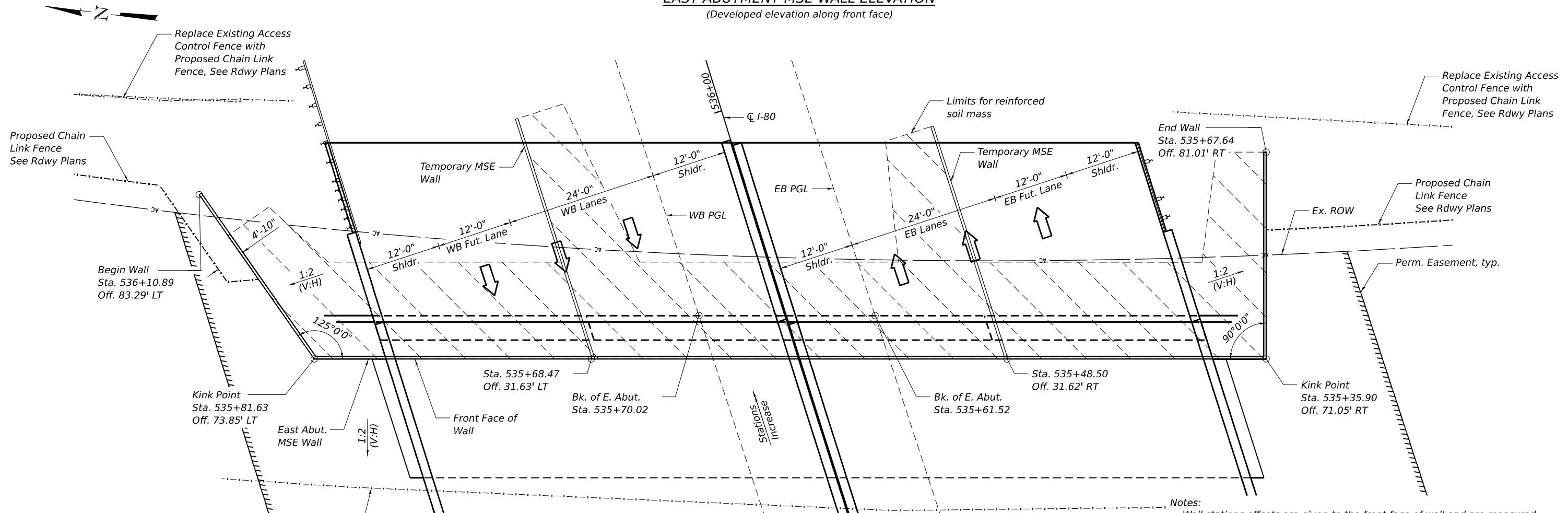
F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 646
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

SHEET S1-40 OF S1-50 SHEETS

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EAST ABUTMENT MSE WALL ELEVATION
(Developed elevation along front face)



EAST ABUTMENT MSE WALL PLAN

Notes:
 Wall stations offsets are given to the front face of wall and are measured from the CL of I-80.
 Horizontal dimensions measured along front face of precast panels.
 Contractor shall coordinate MSE retaining wall construction with abutment construction. Piles are to be driven prior to MSE retaining wall construction.
 See sheet S1-42 of S1-50 for additional details.
 For Temporary Sheet Piling details and Temporary MSE Wall Details, See Sheet S1-10 of S1-50.



USER NAME = amkluver	DESIGNED - IS	REVISIONS
	CHECKED - TJA	REVISIONS
PLOT SCALE =	DRAWN - IS	REVISIONS
PLOT DATE = 10/5/2023	CHECKED - TJA	REVISIONS

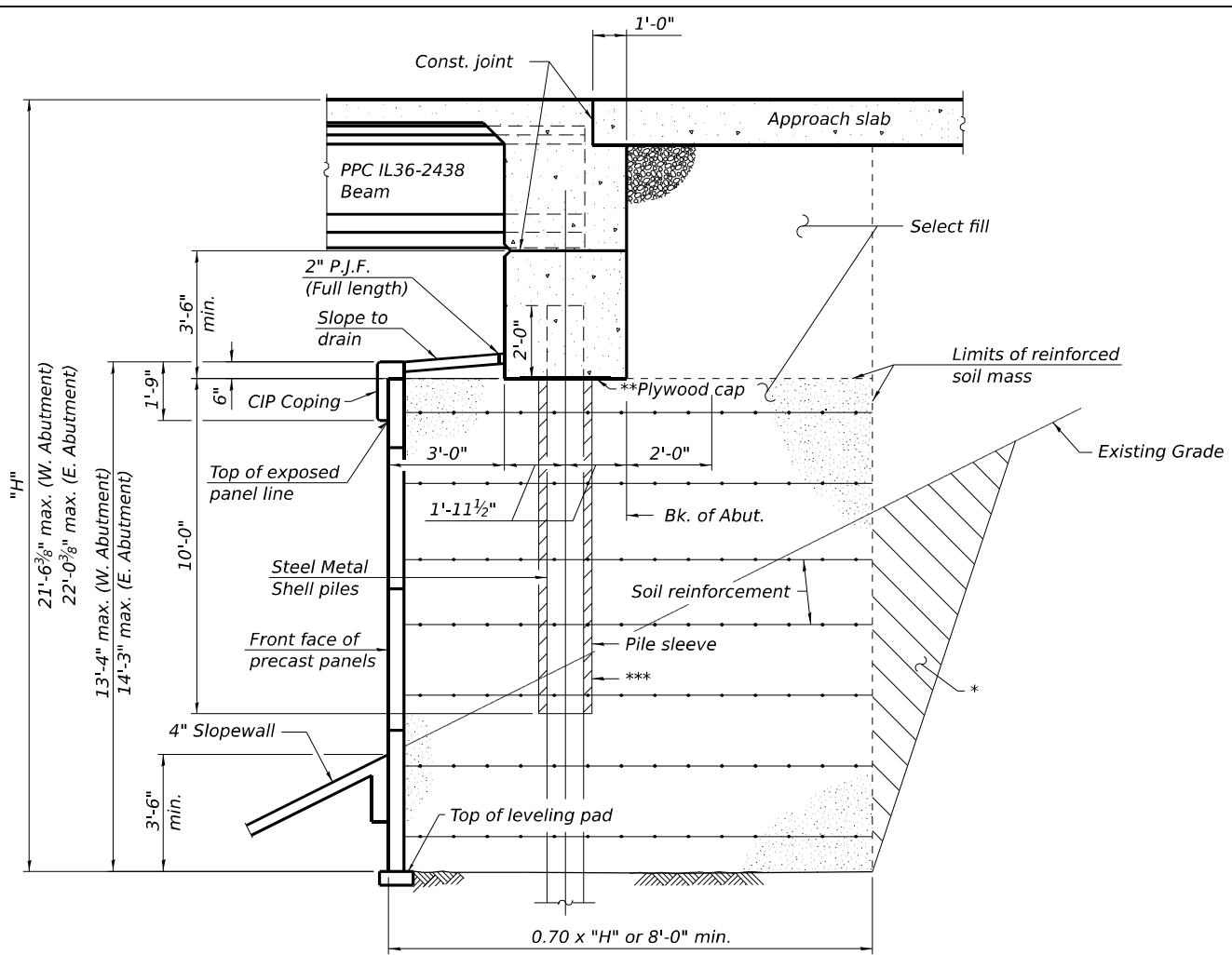
STATE OF ILLINOIS
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EAST MSE WALL PLAN AND ELEVATION
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-41 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	647
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

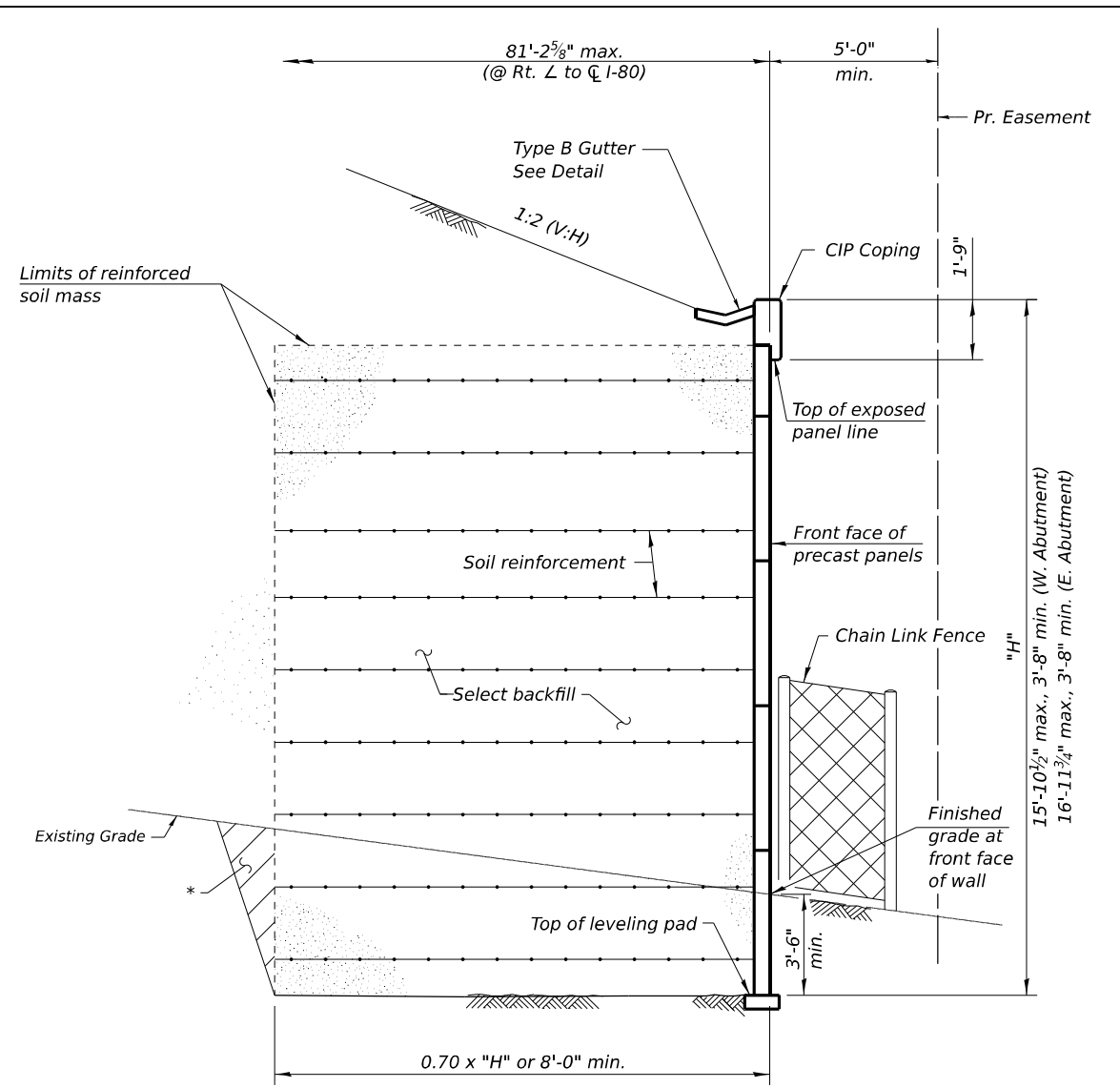
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SECTION THRU ABUTMENT

(Horiz. dim. @ Rt. L's)

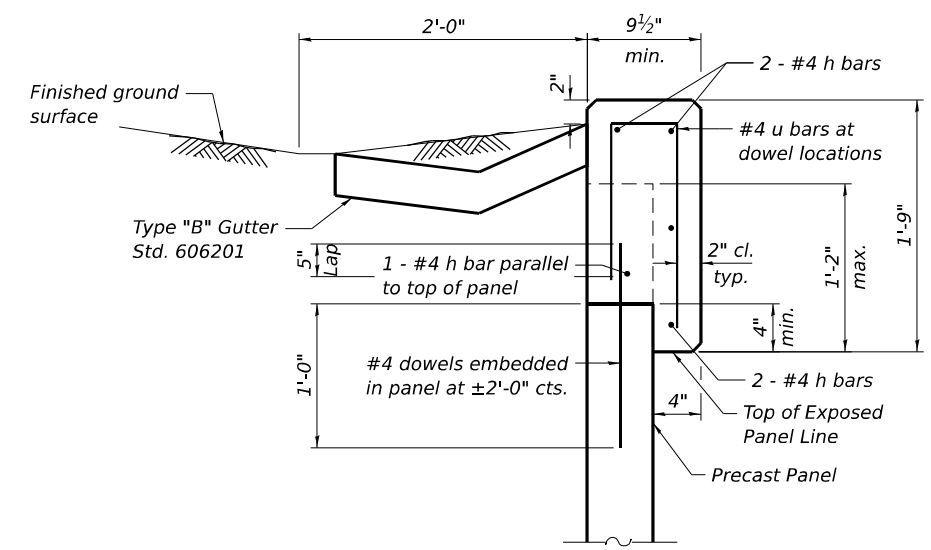
- * Overexcavation beyond the limits of structure excavation. This area not measured for payment. Backfill overexcavation with same material used for select fill used in MSE wall.
- ** Bottom of cap poured against top of plywood, Cut opening to match pile perimeter within 1/8". Support with bars tack welded to webs rater for 500 lbs. Seal gaps to keep concrete out. Cost included with "Concrete Structures" of the Abutment.
- *** Sleeve to remain empty in hatched regions. Cost included with "Furnishing Metal Shell Piles 16" x 0.312"



SECTION THRU MSE WALL

(Horiz. dim. @ Rt. L's)

Notes:
 Cast-in-place concrete and reinforced steel, epoxy coated, required for coping shall be included in payment for Mechanically Stabilized Earth Retaining Wall.
 Cost of P.J.F., Sealant and Concrete Seal required for coping shall be included in payment for Mechanically Stabilized Earth Retaining Wall.
 For Abutment Details, see Sheets S1-34 thru S1-39 of S1-50.



COPING DETAIL

BILL OF MATERIAL

Item	Unit	EB	WB	Total
Structure Excavation	Cu. Yd.	1,141	1,050	2,191
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	2,266	2,367	4,633
Granular Backfill For Structures	Cu. Yd.	284	284	568



USER NAME = amkluver	DESIGNED - IS	REVISED -
PLOT SCALE =	CHECKED - TJA	REVISED -
PLOT DATE = 10/5/2023	DRAWN - IS	REVISED -
	CHECKED - TJA	REVISED -

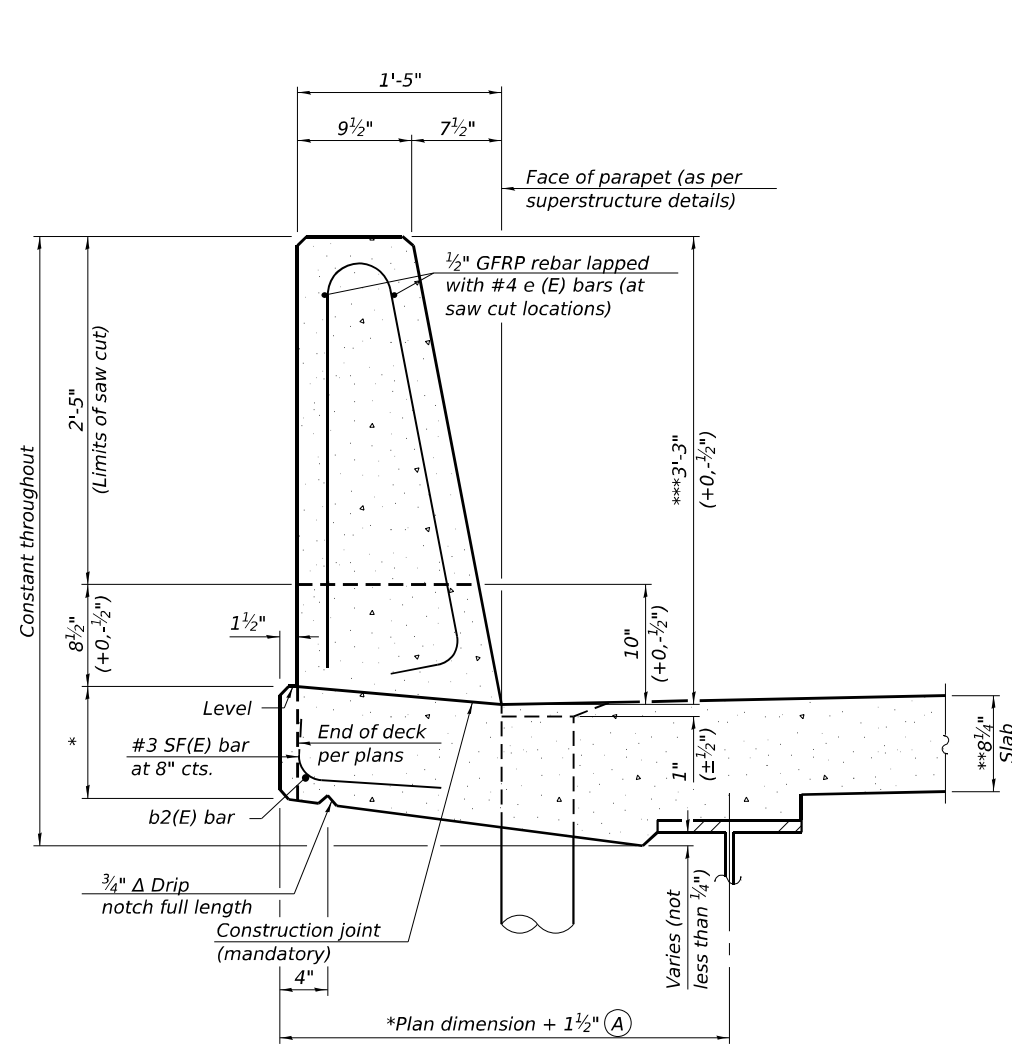
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MSE WALL SECTIONS AND DETAILS
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-42 OF 51-50 SHEETS

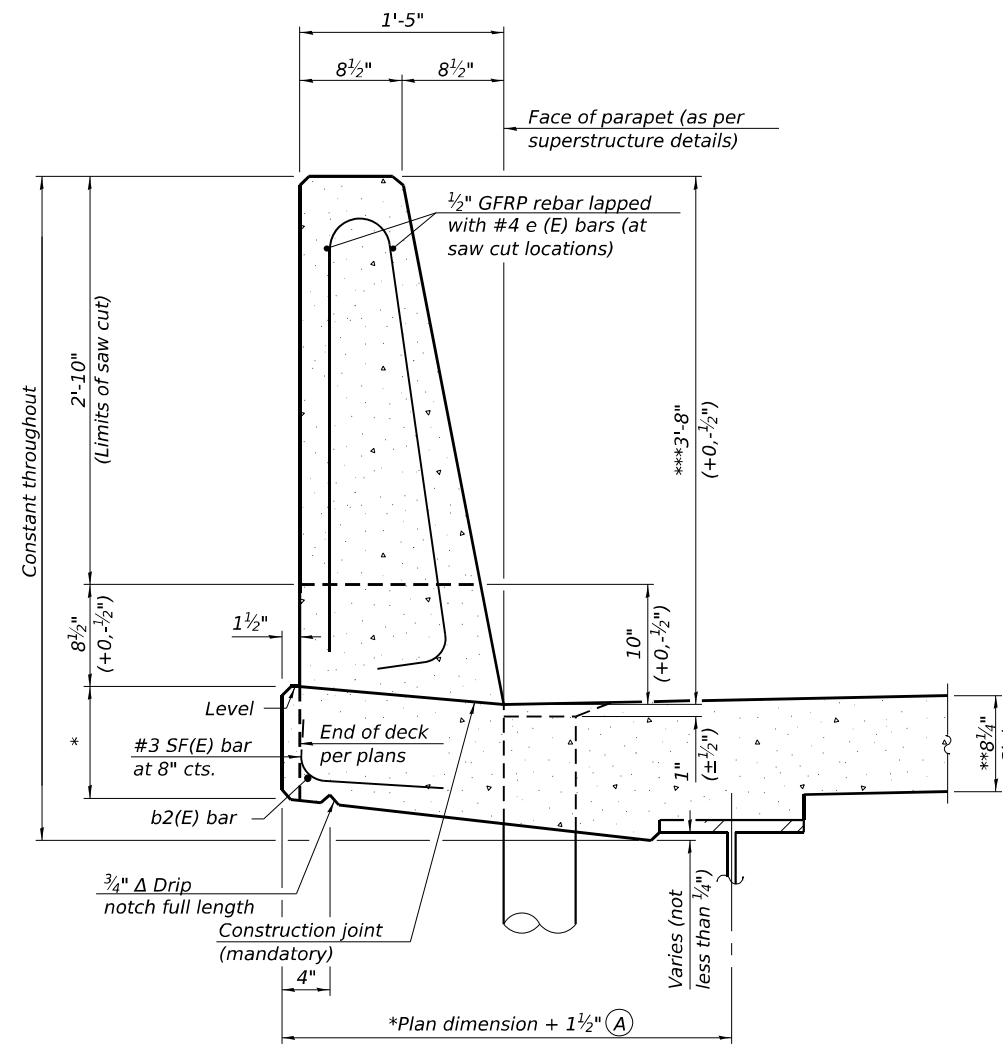
F.A.I. RTE. I-80	SECTION FAI 80 22 BR	COUNTY WILL	TOTAL SHEETS 1201	SHEET NO. 648
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

MODEL: Drawing
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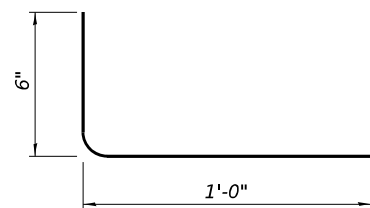
**39" CONSTANT-SLOPE
 PARAPET SECTION**

(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

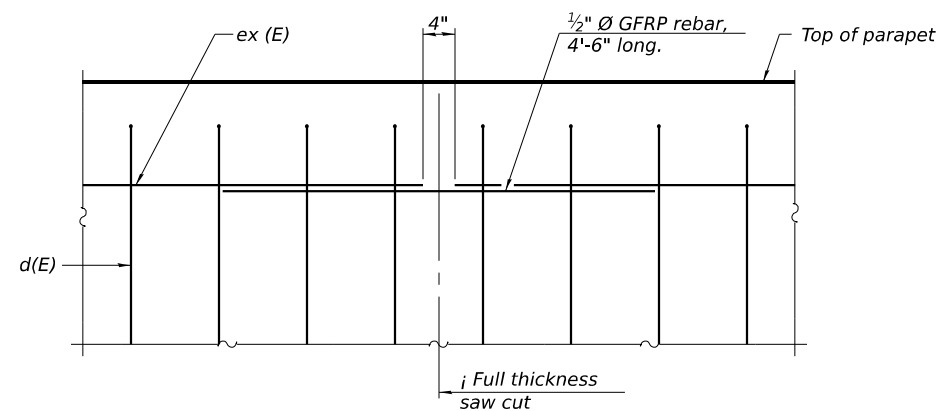


**44" CONSTANT-SLOPE
 PARAPET SECTION**

(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)



SF(E) BAR



GFRP REBAR STIFFENING DETAIL

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

- 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 39" and 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 interior parapets is not allowed.
 - *See Superstructure Details
 - **Prior to Grinding
 - ***After Grinding

TRANSYSTEMS

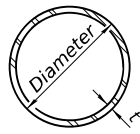
USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**CONCRETE PARAPET SLIPFORMING OPTION
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

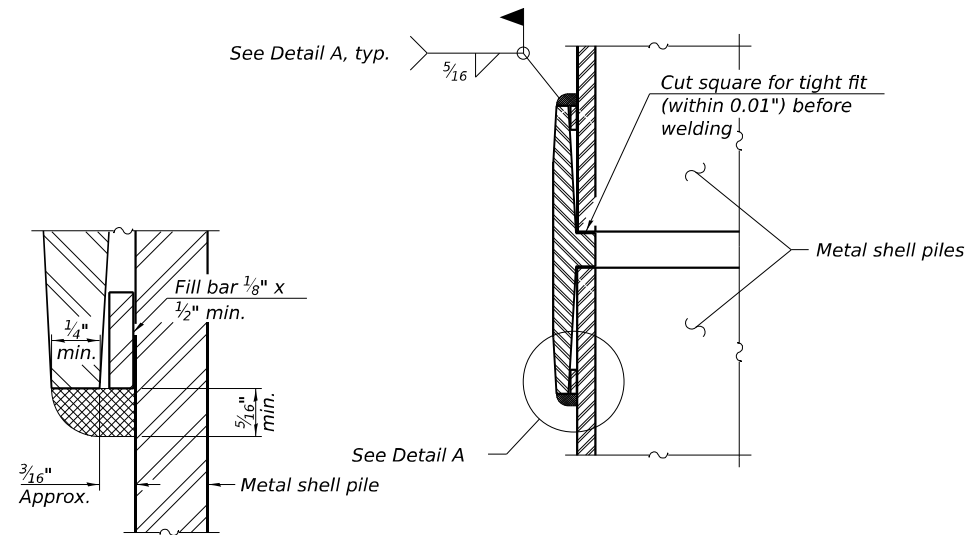
SHEET 51-43 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	649
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R89	

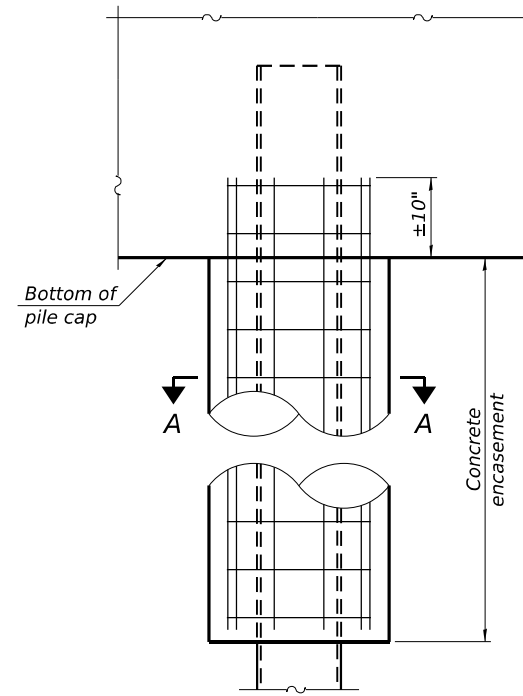


METAL SHELL PILE TABLE

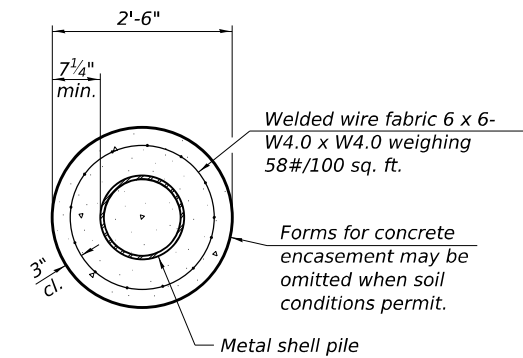
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.250"	31.40	0.0267
PP14	0.250"	36.75	0.0368
PP14	0.312"	45.65	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



DETAIL A

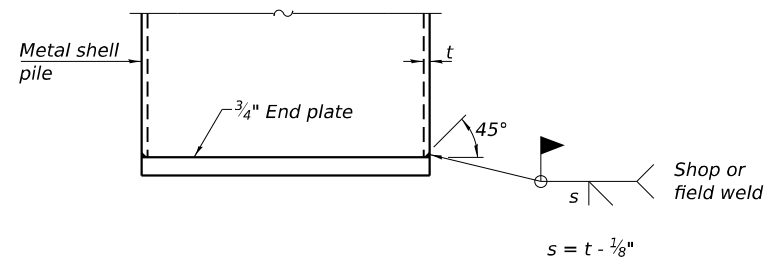


ELEVATION



SECTION A-A

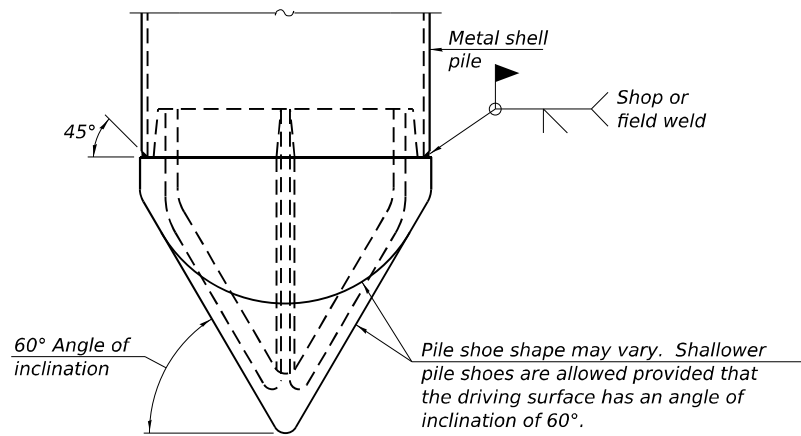
INDIVIDUAL PILE CONCRETE ENCASUREMENT
(When specified)



END PLATE ATTACHMENT

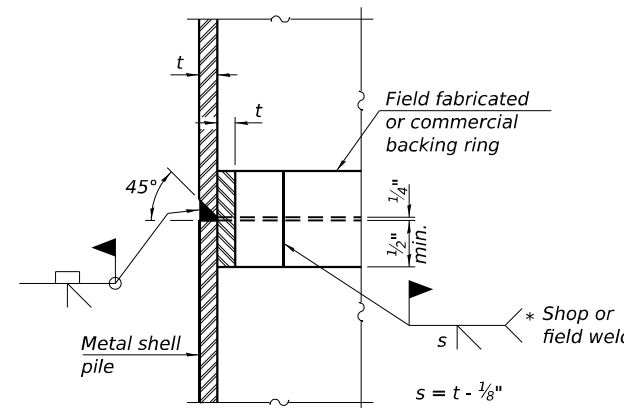
WELDED COMMERCIAL SPLICE

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



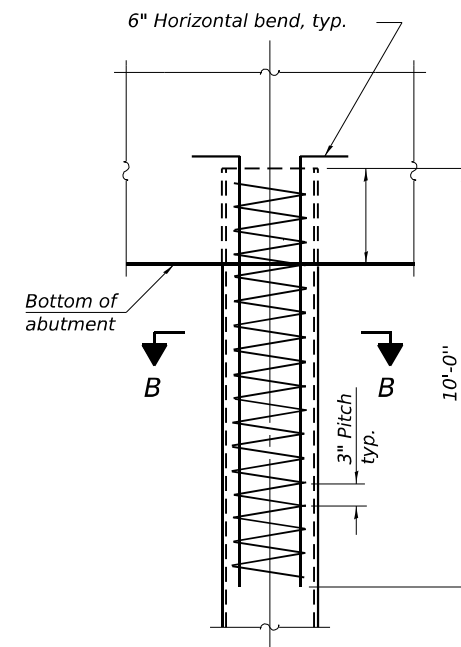
PILE SHOE ATTACHMENT

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

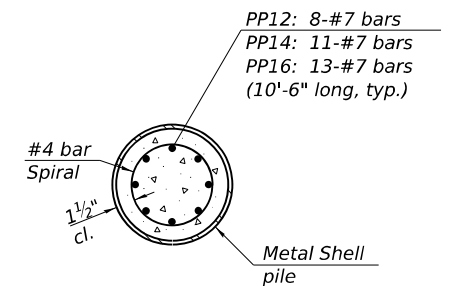


COMPLETE PENETRATION WELD SPLICE

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



ELEVATION



SECTION B-B

REINFORCEMENT AT ABUTMENTS
(Omit when concrete encasement is specified)

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

MODEL: Drawing TRANSYSTEMS-pw.bentley.com:transyscorp-pw1-hosted/Drawings/Projects_2018/CH401/401180022/02-TransSystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-044-PileDetails.dgn
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F-MS 2-1-2023

TRANSYSTEMS

USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - TJJ	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - TJJ	REVISED -

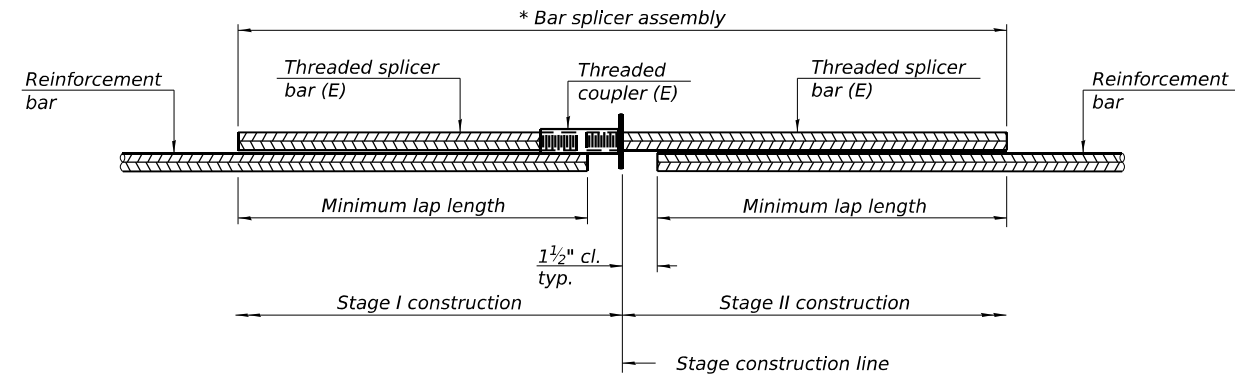
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PILE DETAILS
STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-44 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	650
ILLINOIS FED. AID PROJECT			CONTRACT NO. 62R89	

MODEL: Drawing
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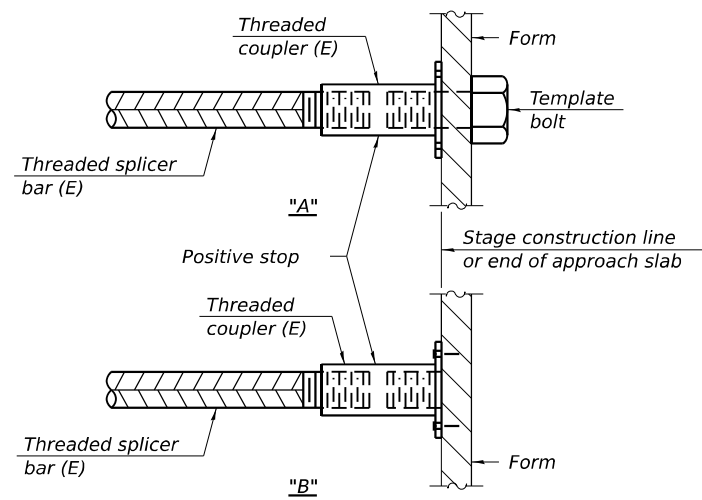


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

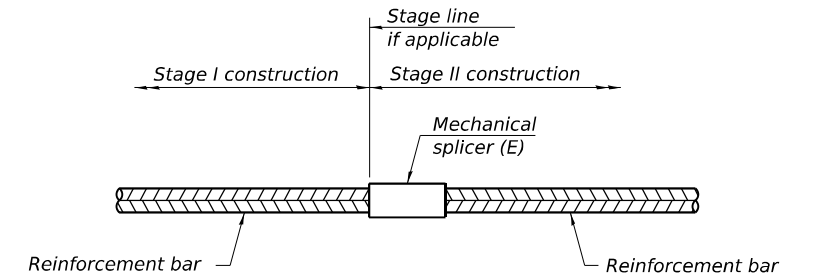
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck WB	#5	311	3'-6"
Deck EB	#5	311	3'-6"
W Diaphragm WB	#6	4	4'-0"
W Diaphragm EB	#6	4	4'-0"
E Diaphragm WB	#6	4	4'-0"
E Diaphragm EB	#6	4	4'-0"
W Appr. Slab WB (top)	#5	46	3'-6"
W Appr. Slab WB (bot)	#8	61	5'-1"
W Appr. Slab EB (top)	#5	46	3'-6"
W Appr. Slab EB (bot)	#8	61	5'-1"
E Appr. Slab WB (top)	#5	46	3'-6"
E Appr. Slab WB (bot)	#8	61	5'-1"
E Appr. Slab EB (top)	#5	46	3'-6"
E Appr. Slab EB (bot)	#8	61	5'-1"
W Appr. Footing WB	#5	40	3'-6"
W Appr. Footing EB	#5	40	3'-6"
E Appr. Footing WB	#5	40	3'-6"
E Appr. Footing EB	#5	40	3'-6"
W Abut. WB	#7	10	5'-0"
W Abut. EB	#7	10	5'-0"
E Abut. WB	#7	10	5'-0"
E Abut. EB	#7	10	5'-0"



INSTALLATION AND SETTING METHODS

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



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
W Diaphragm WB	#6	2
W Diaphragm EB	#6	2
E Diaphragm WB	#6	2
E Diaphragm EB	#6	2

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



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PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

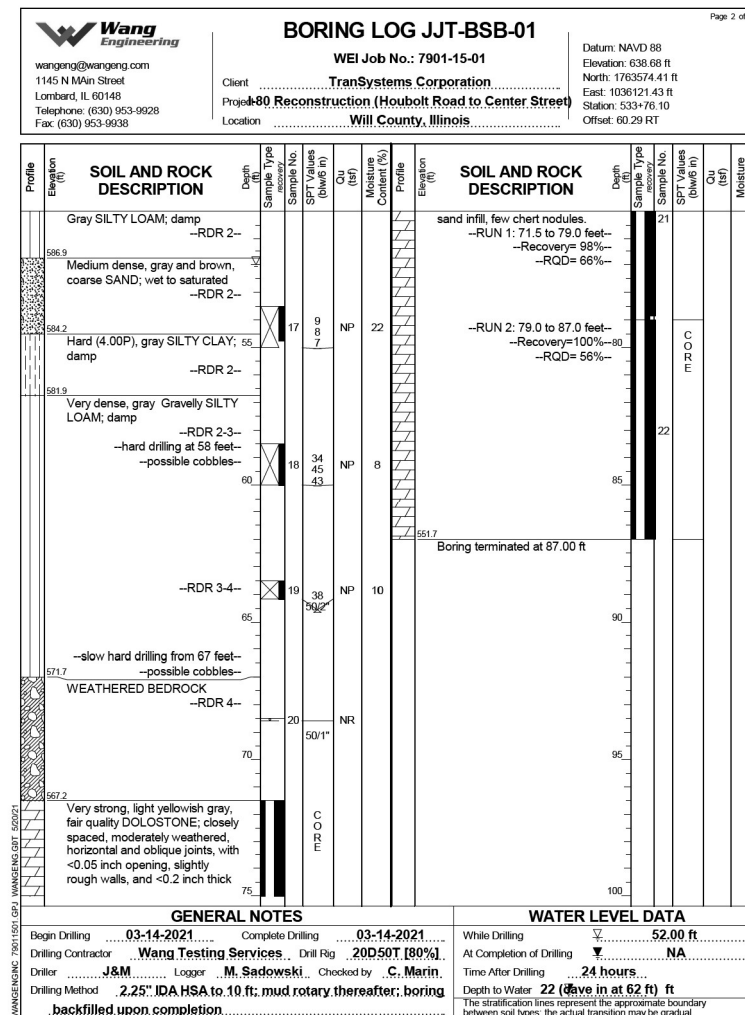
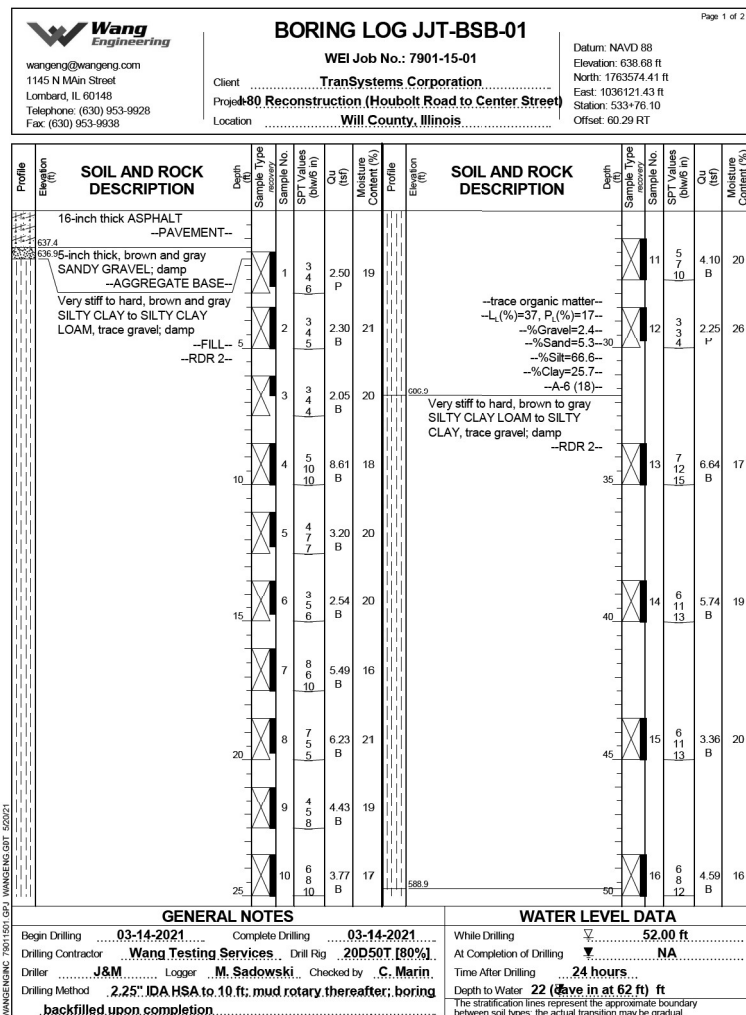
BAR SPLICER ASSEMBLY DETAILS
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-45 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	651
			CONTRACT NO. 62R89	

ILLINOIS FED. AID PROJECT

MODEL: Drawing
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	CHECKED - WJC	REVISED -

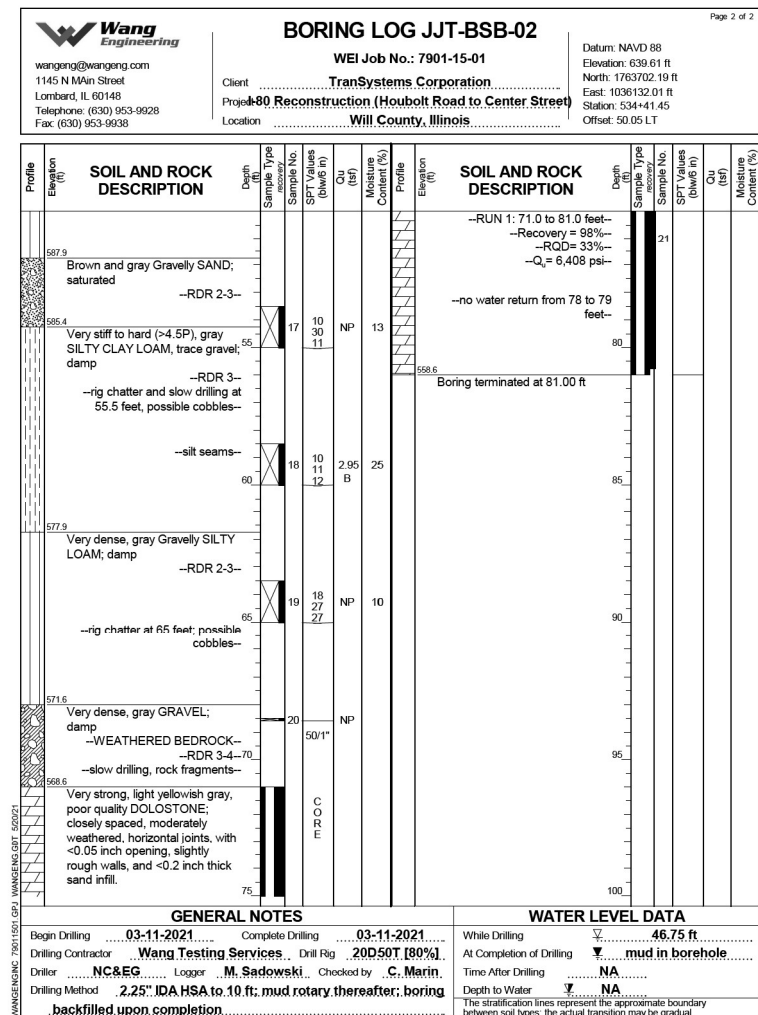
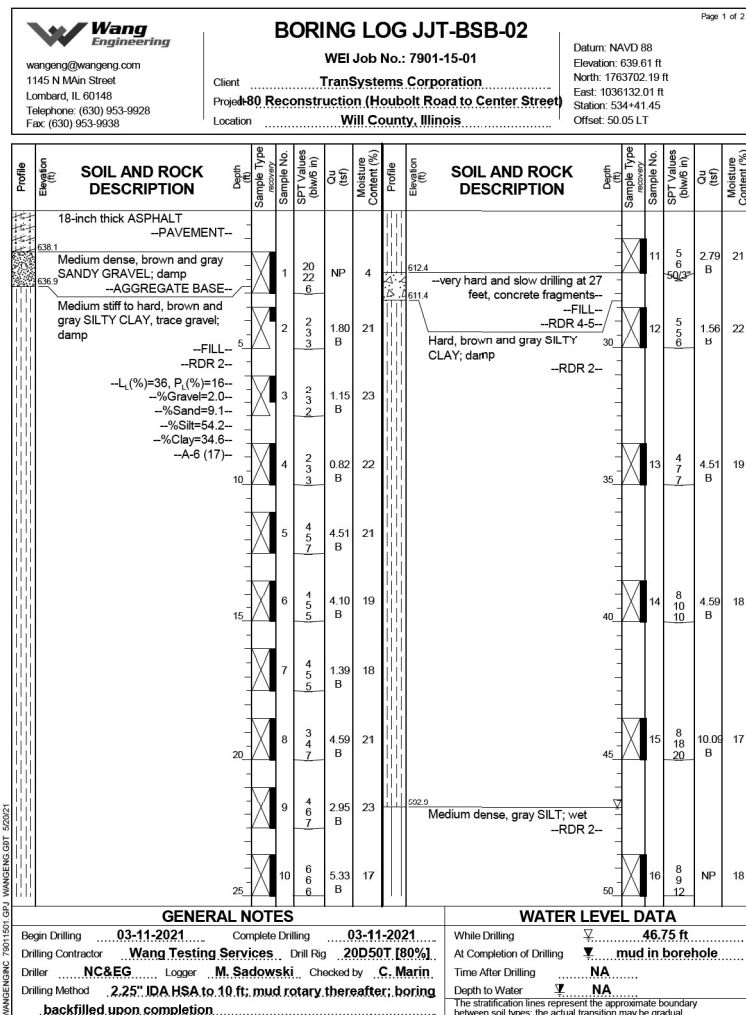
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BORING LOGS 1
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-46 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	652
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

MODEL: Drawing
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PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BORING LOGS 2
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)
 SHEET 51-47 OF 51-50 SHEETS**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	653
			CONTRACT NO. 62R89	
			ILLINOIS FED. AID PROJECT	

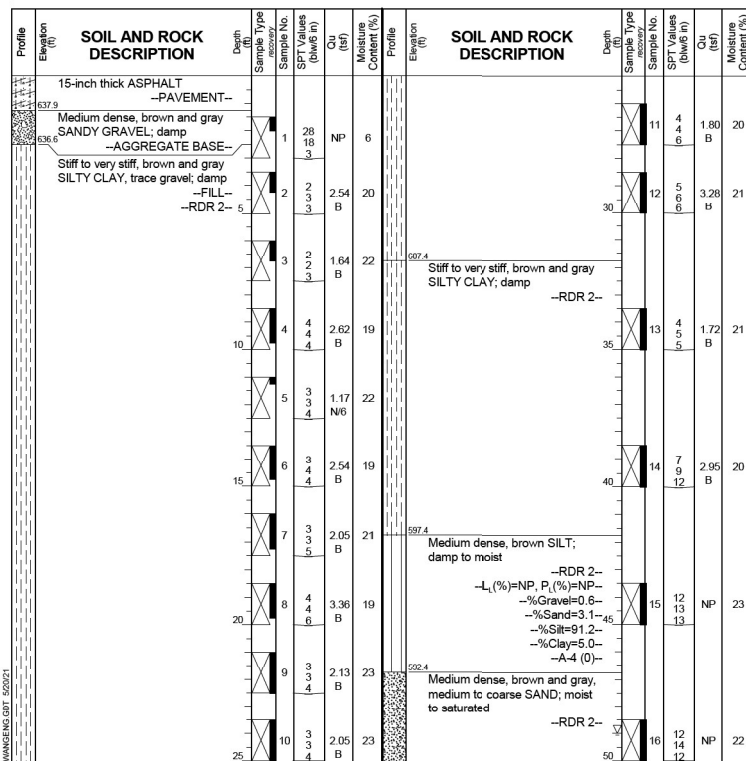
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Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: (630) 953-9928
 Fax: (630) 953-9938

BORING LOG JJT-BSB-03
 WEI Job No.: 7901-15-01
 Client: **TransSystems Corporation**
 Project: **I-80 Reconstruction (Houbolt Road to Center Street)**
 Location: **Will County, Illinois**

Datum: NAVD 88
 Elevation: 639.13 ft
 North: 1763665.90 ft
 East: 1036323.57 ft
 Station: 535+99.56
 Offset: 64.22 RT

Page 1 of 2



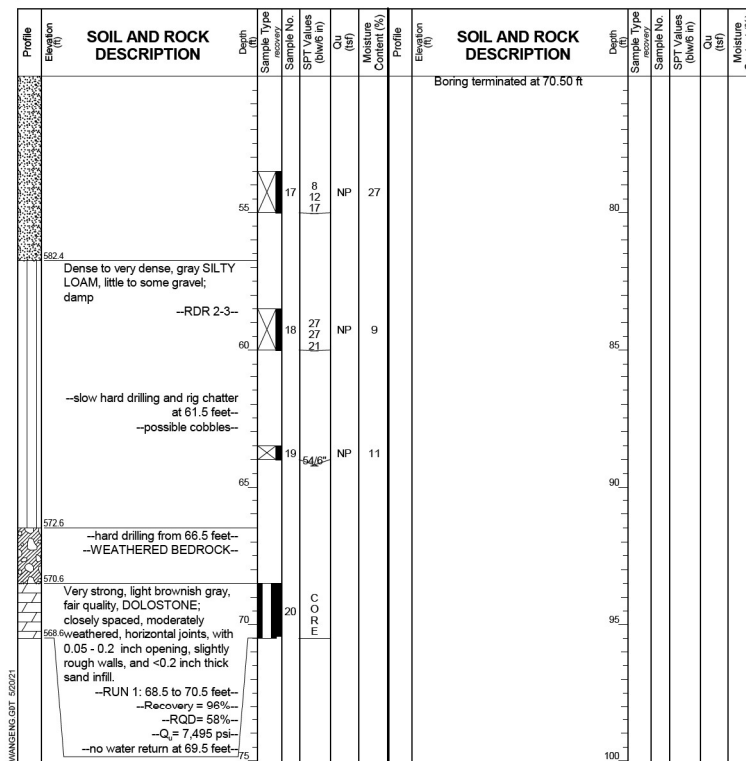
GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-15-2021	Complete Drilling	03-15-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	J&M	Logger	M. Sadowski
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion.	Depth to Water	NA

Wang Engineering
 wangeng@wangeng.com
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 Lombard, IL 60148
 Telephone: (630) 953-9928
 Fax: (630) 953-9938

BORING LOG JJT-BSB-03
 WEI Job No.: 7901-15-01
 Client: **TransSystems Corporation**
 Project: **I-80 Reconstruction (Houbolt Road to Center Street)**
 Location: **Will County, Illinois**

Datum: NAVD 88
 Elevation: 639.13 ft
 North: 1763665.90 ft
 East: 1036323.57 ft
 Station: 535+99.56
 Offset: 64.22 RT

Page 2 of 2



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-15-2021	Complete Drilling	03-15-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	J&M	Logger	M. Sadowski
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion.	Depth to Water	NA



USER NAME = amkluver	DESIGNED - CG	REVISED -
PLOT SCALE =	CHECKED - WJC	REVISED -
PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

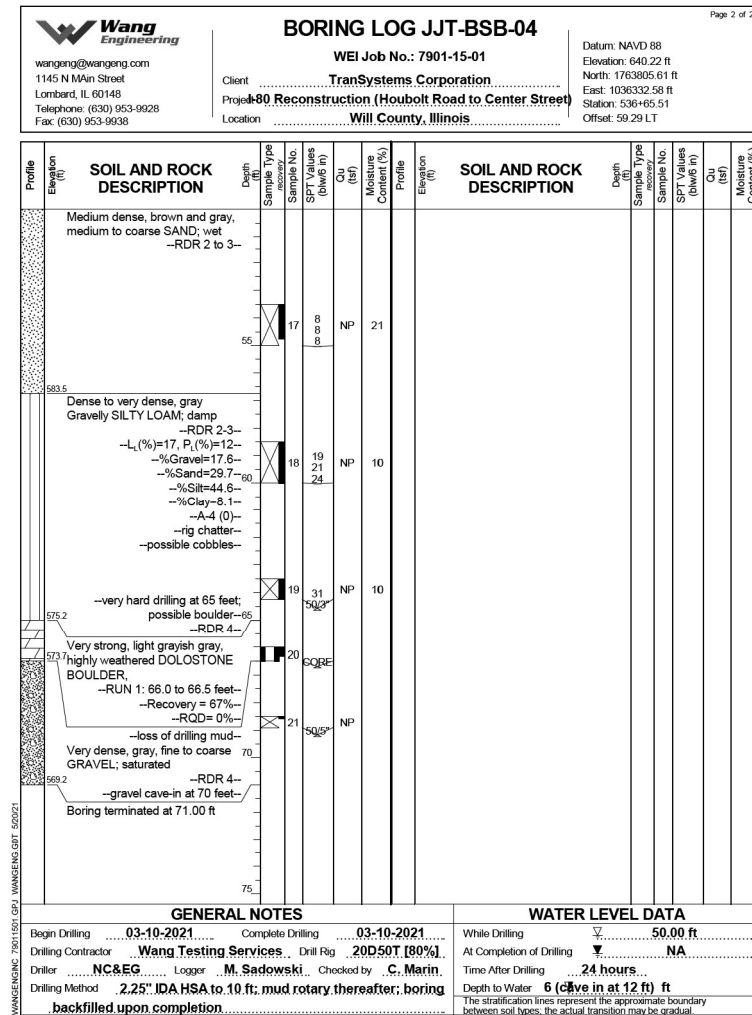
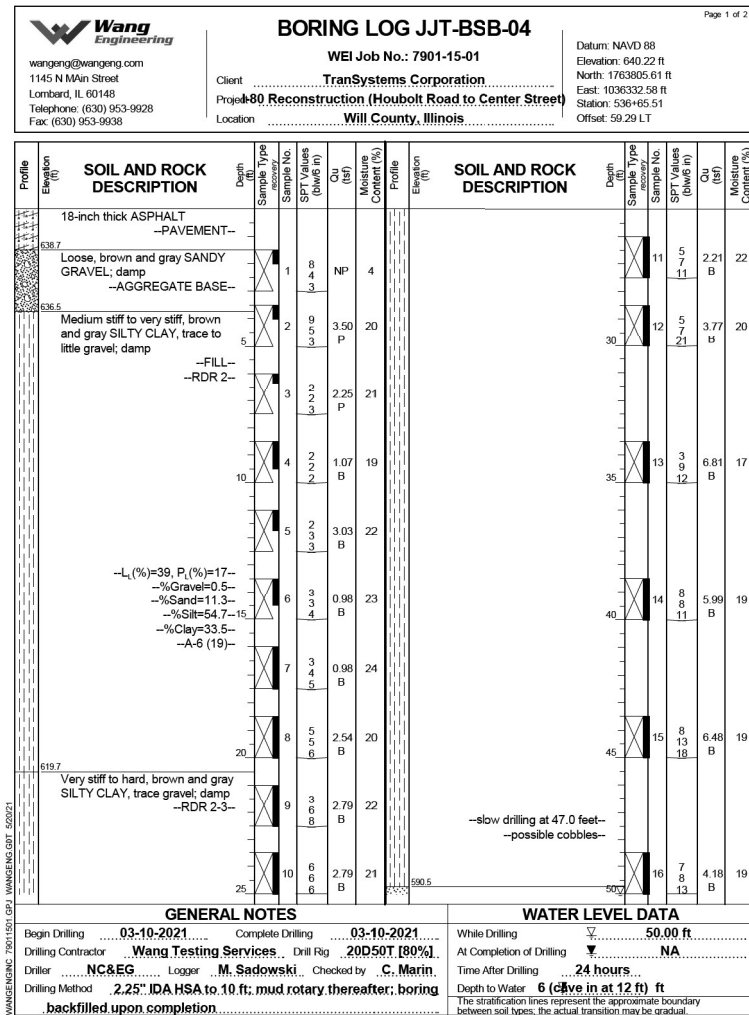
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BORING LOGS 3
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-48 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	654
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

MODEL: Drawing
 FILE NAME: pw://transystems-pw.bentley.com/transystems-pw-1-hosted/Documents/Projects_2018/CH401/401.180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-049-Boring_4.dgn



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CHECKED -	WJC	REVISOR -			
PLOT SCALE =		DRAWN -	CMD	REVISED -	
PLOT DATE =	10/5/2023	CHECKED -	WJC	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING LOGS 4
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)

SHEET 51-49 OF 51-50 SHEETS

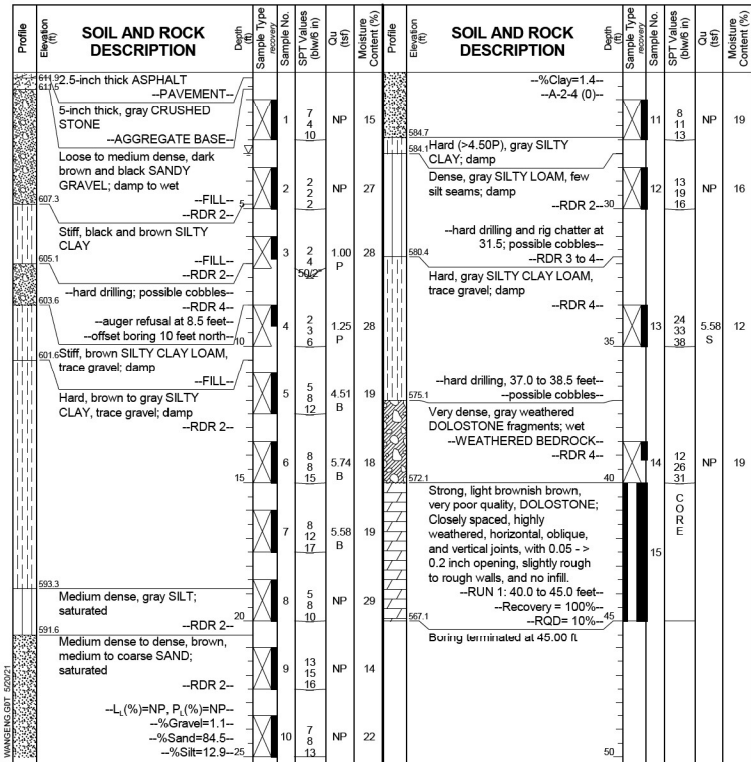
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	655
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

Wang Engineering
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 Telephone: (630) 953-9928
 Fax: (630) 953-9938

BORING LOG JJT-BSB-05
 WEI Job No.: 7901-15-01
 Client: TranSystems Corporation
 Project: I-80 Reconstruction (Houbolt Road to Center Street)
 Location: Will County, Illinois

Datum: NAVD 88
 Elevation: 612.10 ft
 North: 1763693.55 ft
 East: 1036231.49 ft
 Station: 535+27.37
 Offset: 0.41 RT

Page 1 of 1



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-22-2021	Complete Drilling	03-24-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D25A (837)
Driller	J&M	Logger	F. Bozga
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	NA
		The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.	

MODEL: Drawing
 FILE NAME: pw://transystems-pw.bentley.com/transystems-pw-hosted/Documents/Projects/2018/CH401/401180022/02-Transystems/CAD/62R89/Sheets/23-Structural/099-8320 & 099-8321/0998320-62R89-050-Boring_5.dgn



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PLOT DATE = 10/5/2023	DRAWN - CMD	REVISED -
	CHECKED - WJC	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BORING LOGS 5
 STRUCTURE NOS. 099-8320 (EB) & 099-8321 (WB)**

SHEET 51-50 OF 51-50 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	656
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

Benchmark: Set cut square in south face of south pier foundation for sign "Exit 130 B Larkin Avenue North 1/2 mile" on the north side of westbound I-80, approximately 250' east of Midland Avenue; Elev.=633.455.

Existing Structure: S.N. 099-0050 and S.N. 099-0051. Built in 1963 as F.A.I. Rte. 80, Project I-80-4(20)132, Section 99-2HB-4 at Sta. 323+96.74. Existing dual structures each consist of a three-span reinf. concrete deck on steel WF beams supported by cast-in-place reinforced concrete stub abutments. The bridge measures 138'-8 1/8" back to back abutments, 44'-0" out to out width with a skew of 00°-56'-06". Structure to be removed and replaced.

Traffic Control: Traffic to be maintained using staged construction. The road shall remain open to at least two lanes of traffic in each direction at all times.

No salvage.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

DESIGN STRESSES

FILED UNITS

f_c = 4,000 psi (Superstructure)
f_c = 3,500 psi (Substructure)
f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f_c = 8,500 psi
f_{ci} = 6,500 psi
f_{pu} = 270,000 psi (0.6" Ø low lax. strands)
f_{pbt} = 202,300 psi (0.6" Ø low lax. strands)

LOADING HL-93

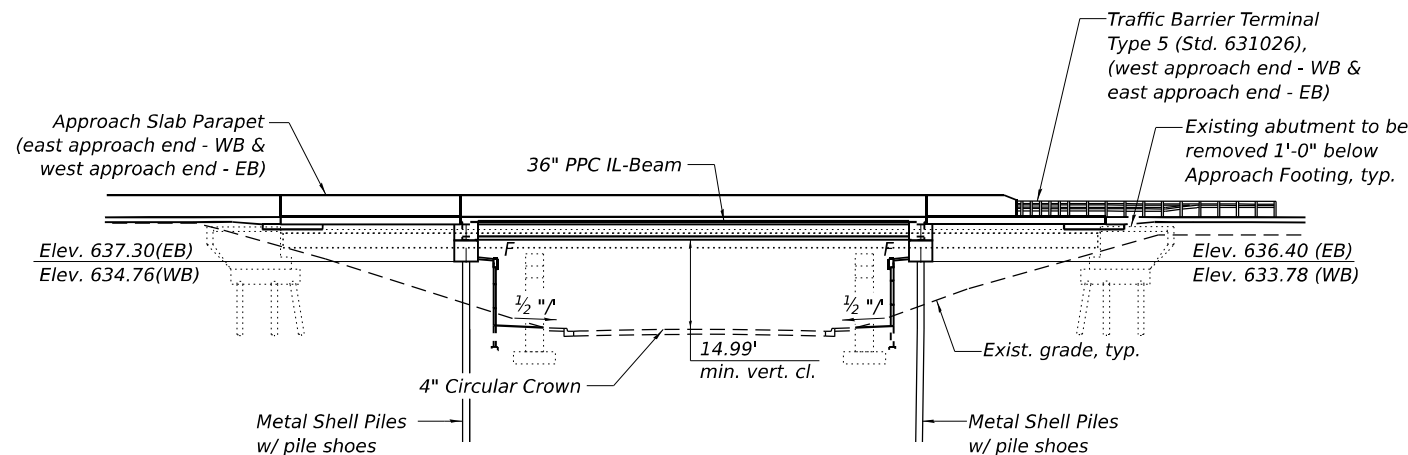
Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

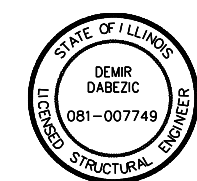
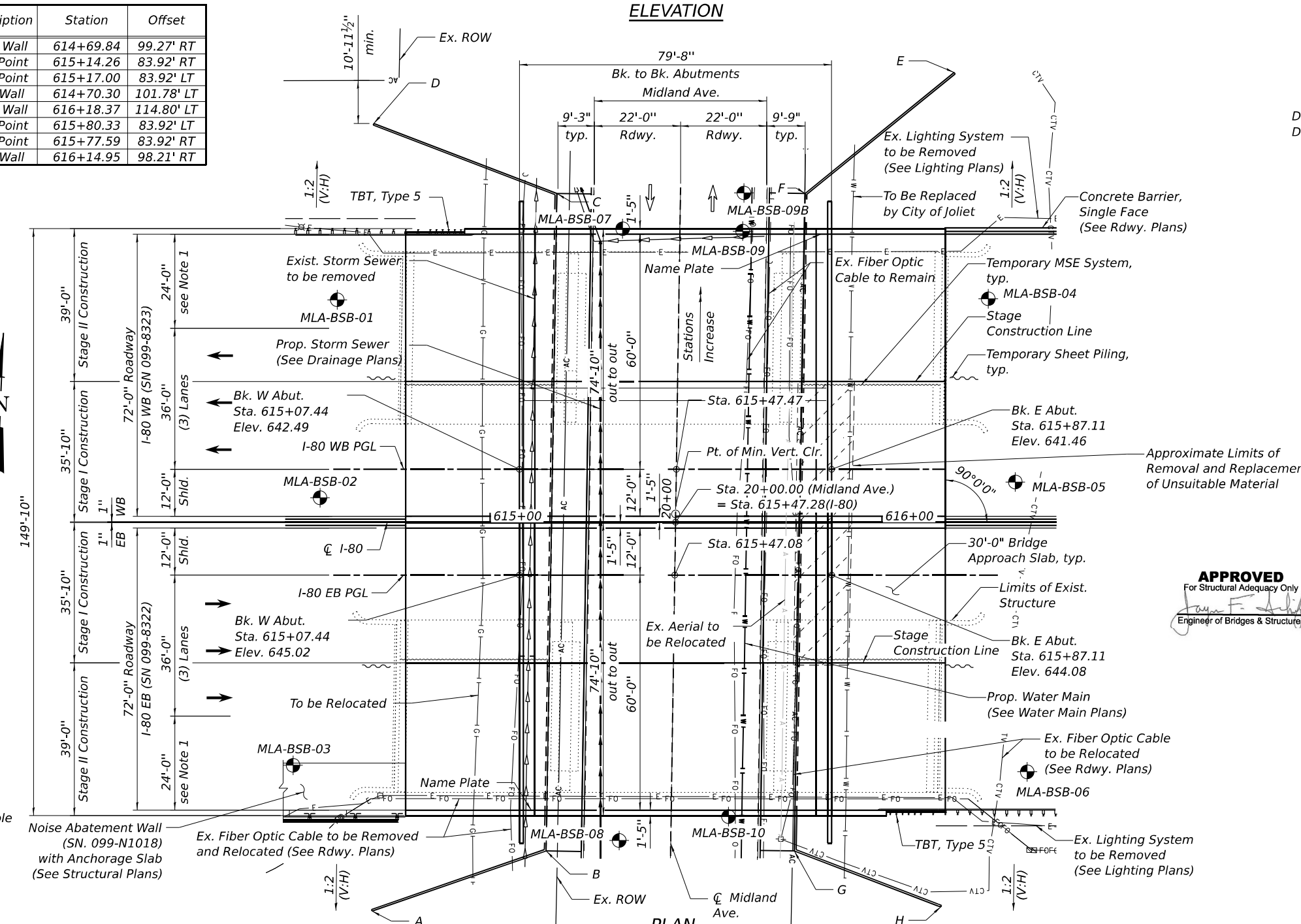
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.096g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.168g
Soil Site Class = D

TABLE 1 - MSE WALL LAYOUT

Wall Location	Description	Station	Offset
A	Start Wall	614+69.84	99.27' RT
B	Kink Point	615+14.26	83.92' RT
C	Kink Point	615+17.00	83.92' LT
D	End Wall	614+70.30	101.78' LT
E	Start Wall	616+18.37	114.80' LT
F	Kink Point	615+80.33	83.92' LT
G	Kink Point	615+77.59	83.92' RT
H	End Wall	616+14.95	98.21' RT

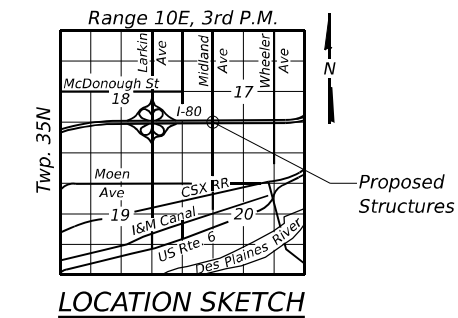


ELEVATION



Demir Dabecic 10/06/2023
DATE
11/30/2024
LICENSE EXPIRES:

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



LOCATION SKETCH

Notes:
1. 12'-0" shoulder and 12'-0" shoulder / future aux. lane.

LEGEND

- A — Exist. Aerial Electric
- FO — Exist. Fiber Optic Cable
- E — Exist. Electric
- CTV — Exist. Cable TV
- W — Exist. Water
- G — Exist. Gas
- T — Exist. Telephone
- AC — Exist. ROW
- ⊙ Soil Boring Location
- Noise Abatement Wall (SN. 099-N1018) with Anchorage Slab (See Structural Plans)
- Ex. Fiber Optic Cable to be Removed and Relocated (See Rdwy. Plans)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
I-80 OVER MIDLAND AVENUE
F.A.I. RTE. 80 - SEC. FAI 80 22 BR
WILL COUNTY
STATION 615+47.28
S.N. 099-8322 (E.B.)
S.N. 099-8323 (W.B.)

USER NAME =	DESIGNED - MK	REVISD -
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PLOT DATE =	DRAWN - MK	REVISD -
	CHECKED - DD	REVISD -

SHEET S2-1 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	657
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

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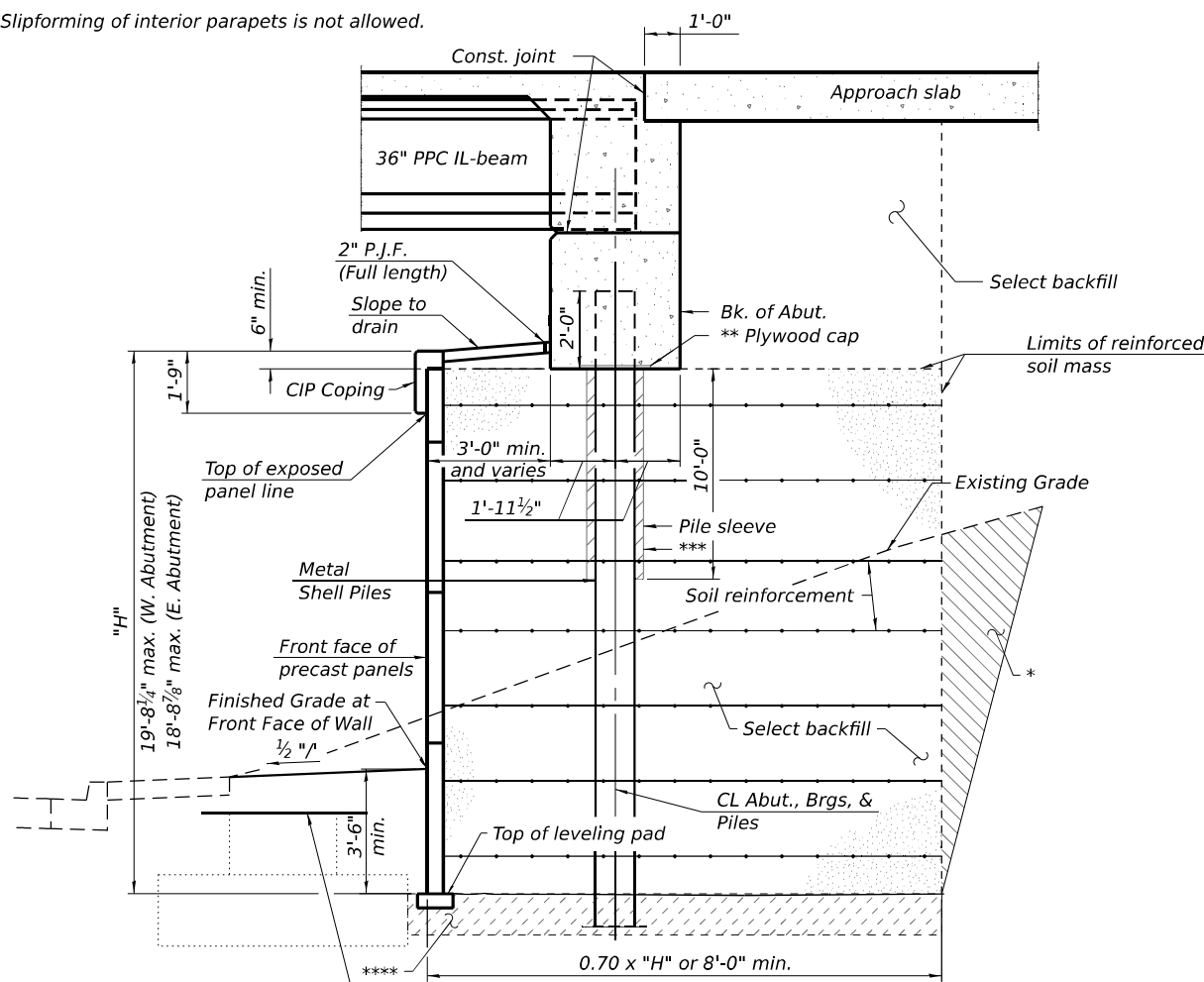
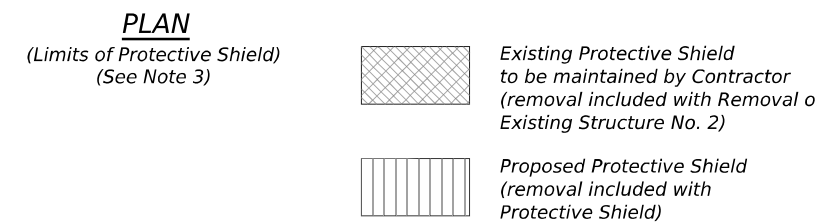
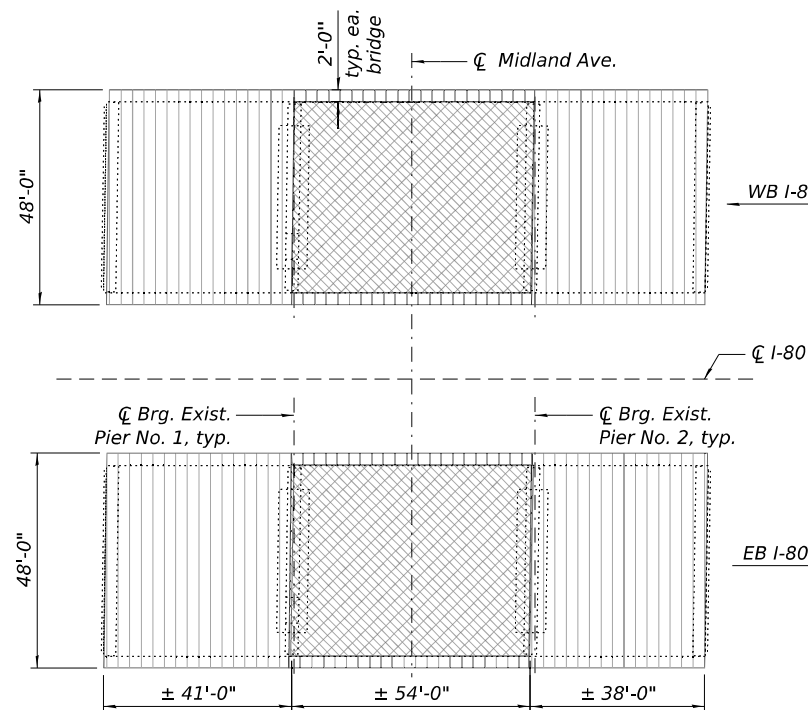


GENERAL NOTES

1. Reinforcement bars designated (E) shall be epoxy coated.
2. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
3. Middle spans of existing structures have existing Protective Shield in place as shown on Plan (Limits of Protective Shield). The Contractor shall evaluate the condition of the existing Protective Shield per Article 501.03 of Standard Specifications and determine if it is structurally adequate for demolition of the existing deck. The evaluation shall be performed by an Illinois Licensed Structural Engineer. The Contractor shall remove & replace any inadequate Protective Shield & add Protective Shield at deck overhangs & other areas required by Article 501.03 and as shown on the plan view. The Contractor will not be paid for evaluation of the existing Protective Shield, but will be paid for new Protective Shield at the unit price bid for that work. The quantity for Protective Shield shown does not include the cross-hatched area of existing Protective Shield.
4. Slipforming of interior parapets is not allowed.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment	Cu Yd		62	62
Removal of Existing Structures No. 3	Each			1
Removal of Existing Structures No. 4	Each			1
Protective Shield	Sq Yd	891		891
Structure Excavation	Cu Yd		2,744	2,744
Removal and Disposal of Unsuitable Material for Structures	Cu Yd		62	62
Concrete Structures	Cu Yd		263.4	263.4
Concrete Superstructure	Cu Yd	545.7		545.7
Bridge Deck Grooving	Sq Yd	2,143		2,143
Protective Coat	Sq Yd	2,504		2,504
Concrete Superstructure (Approach Slab)	Cu Yd	415.6		415.6
Furnishing And Erecting Precast Prestressed Concrete Beams, IL36	Foot	1,232		1,232
Reinforcement Bars, Epoxy Coated	Pound	275,510	27,480	302,990
Bar Splicers	Each	1,182	56	1,238
Mechanical Splicers	Each	12		12
Furnishing Metal Shell Piles 16"X0.375"	Foot		1,869	1,869
Driving Piles	Foot		1,869	1,869
Test Pile Metal Shells	Each		2	2
Pile Shoes	Each		32	32
Name Plates	Each	2		2
Preformed Joint Seal 3 1/2"	Foot	138		138
Temporary Sheet Piling	Sq Ft		264	264
Mechanically Stabilized Earth Retaining Wall	Sq Ft		7,246	7,246
Temporary Mechanically Stabilized Earth Retaining Wall	Sq Ft		2,995	2,995

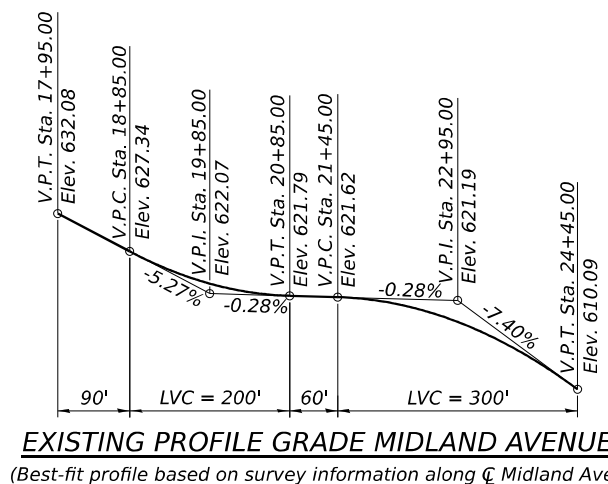
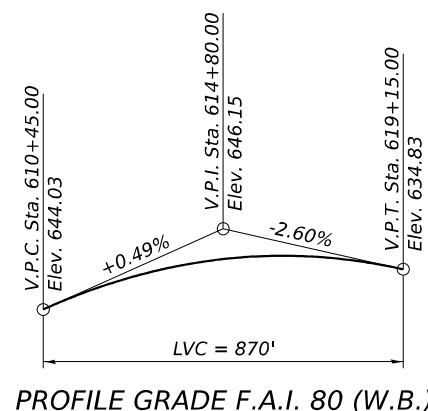
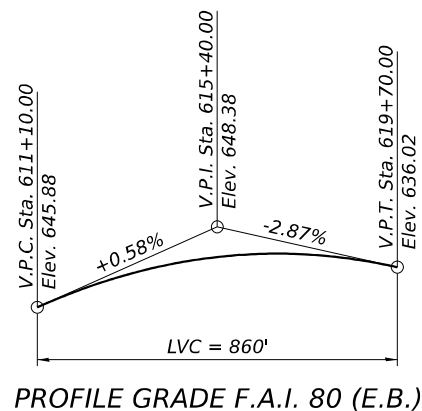


Remove existing pier during Stage II to 1'-0" below proposed grade

- * Overexcavation beyond structure excavation and removal of unsuitable material. This area not measured for payment. Backfill overexcavation with same material used for select fill used in MSE wall.
- ** Bottom of cap poured against top of plywood. Cut opening to match pile perimeter within 1/8". Support with bars tack welded to webs rated for 500 lbs. Seal gaps to keep concrete out. Cost included with Concrete Structures.
- *** Sleeve to remain empty in hatched region. Cost of pile sleeve included with Furnishing Metal Shell Piles.
- **** Removal of unsuitable material and replace with porous granular embankment.

STATION 615+47.28
BUILT 202_BY
STATE OF ILLINOIS
F.A.I. RT. 80
SEC. FAI 80 22 BR
LOADING HL-93
STRUCTURE NO. 099-8323
See Std. 515001

STATION 615+47.28
BUILT 202_BY
STATE OF ILLINOIS
F.A.I. RT. 80
SEC. FAI 80 22 BR
LOADING HL-93
STRUCTURE NO. 099-8322
See Std. 515001



INDEX OF SHEETS

- S2-1 General Plan and Elevation
- S2-2 General Data
- S2-3 Foundation Layout
- S2-4-7 Stage Construction Details
- S2-8 Temporary Concrete Barrier
- S2-9 Temporary MSE Wall Details
- S2-10-13 Top of Slab Elevations
- S2-14-15 Top of Approach Slab Elevations
- S2-16-17 Superstructure Plan and Cross Section
- S2-18-19 Parapet Elevations and Superstructure Details
- S2-20 Diaphragm Details
- S2-21-25 Bridge Approach Slab Details
- S2-26 Framing Plan
- S2-27 Framing Details
- S2-28 IL36 Beam
- S2-29 IL36 Beam Details
- S2-30 West Abutment - W.B.
- S2-31 West Abutment - E.B.
- S2-32 East Abutment - W.B.
- S2-33 East Abutment - E.B.
- S2-34-35 MSE Wrap Around Abutment
- S2-36 Concrete Parapet Slipforming Option
- S2-37 Metal Shell Pile Details
- S2-38 Bar Splicer Assembly and Mechanical Splicer Details
- S2-39-46 Soil Boring Logs

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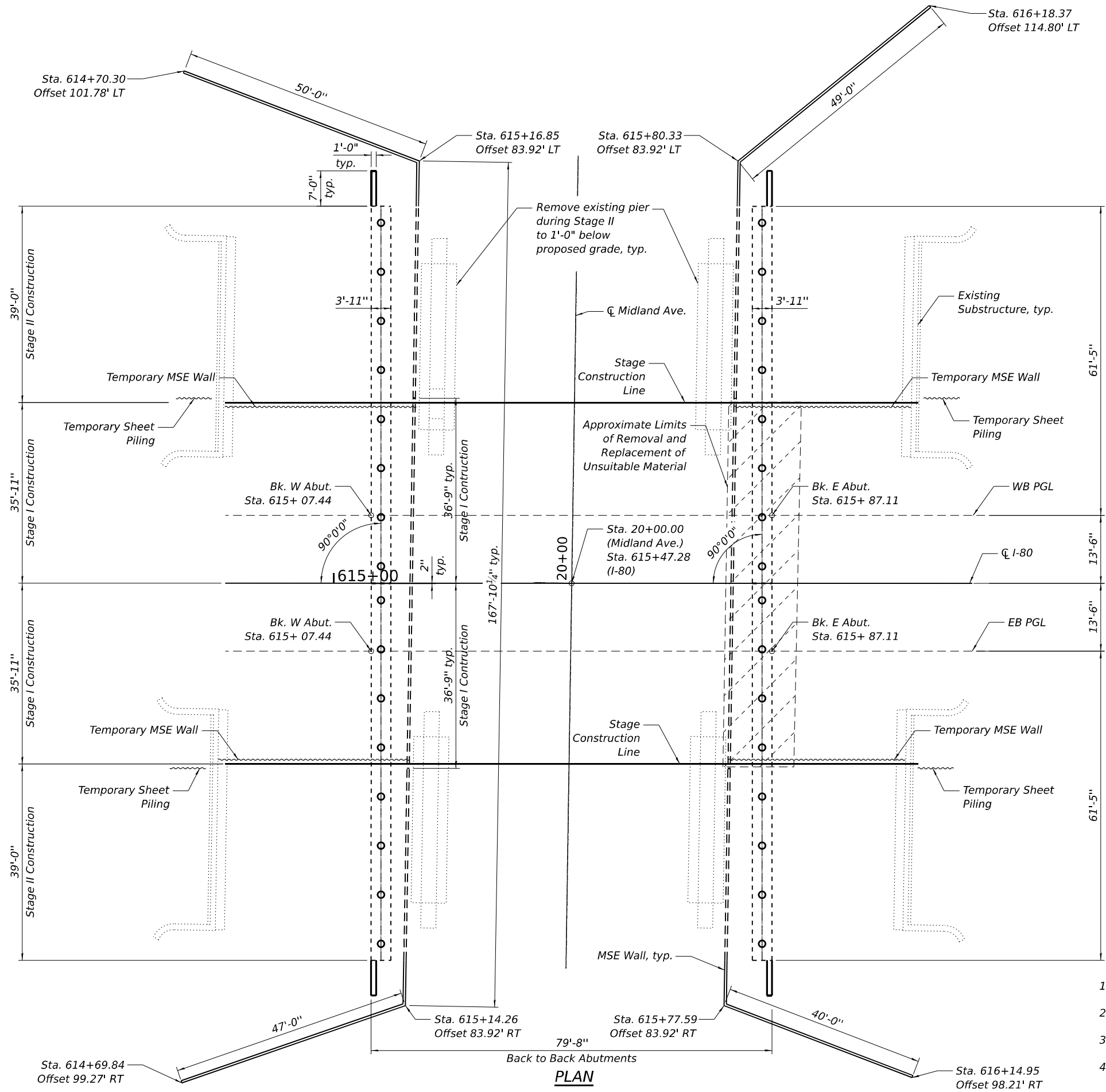
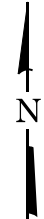
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-2 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

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- NOTES:**
1. For Temporary Sheet Piling details, see Sheets S2-6 and S2-7 of S2-46.
 2. For Temporary MSE Wall details, see Sheets S2-9 of S2-46.
 3. For Abutment details, see Sheets S2-30 thru S2-33 of S2-46.
 4. For MSE Wall details, see Sheets S2-34 and S2-35 of S2-46.

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FOUNDATION LAYOUT
 STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)


SHEET S2-3 OF S2-46 SHEETS

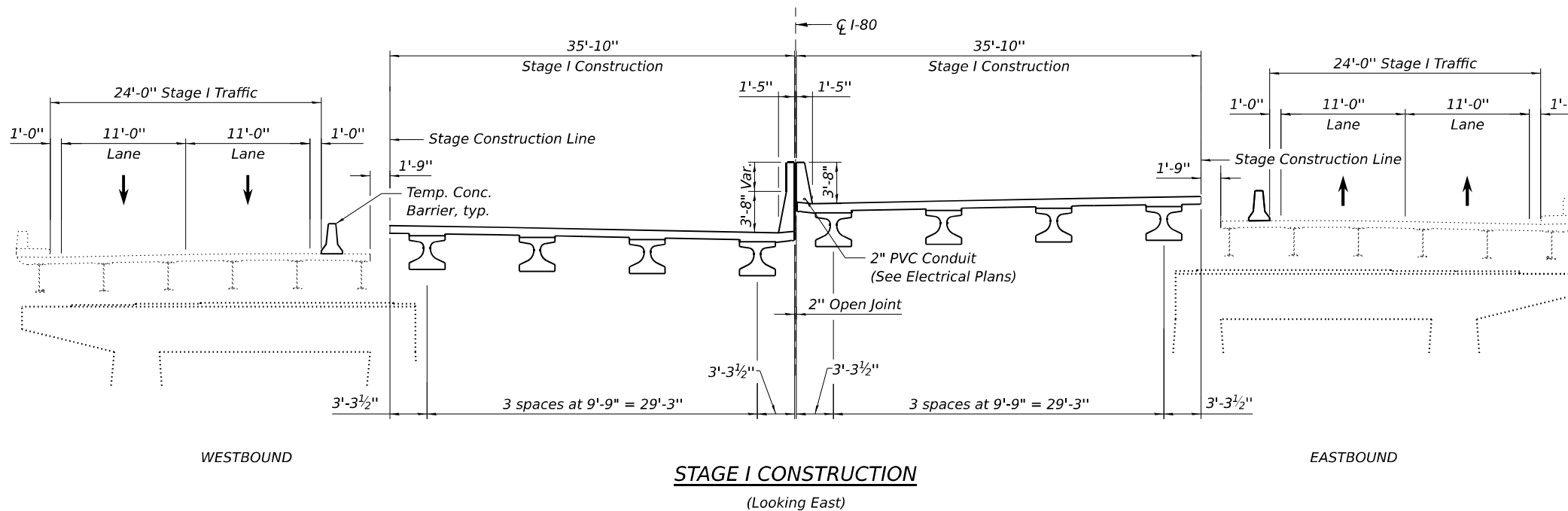
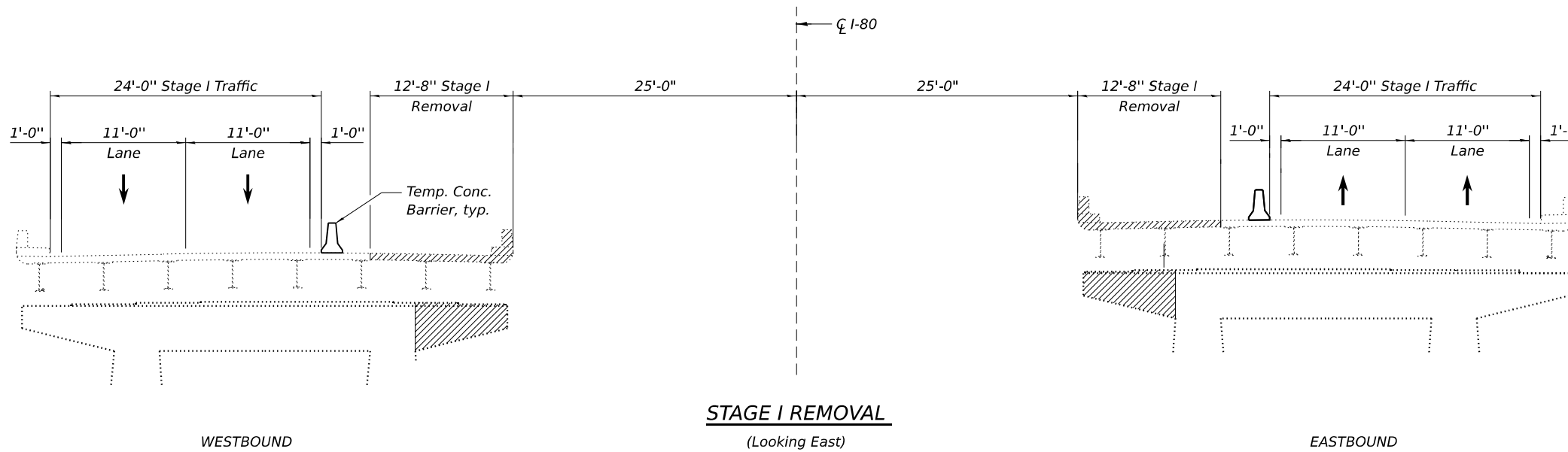
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I-80	FAI 80 22 BR	WILL	1201	659
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				



LEGEND

 Denotes Removal



NOTES

1. For details of the Temporary Concrete Barrier, see Sheet S2-8 of S2-46.
2. For quantity of the Temporary Concrete Barrier, see Rdwy. Plans.

(Sheet 1 of 4)

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

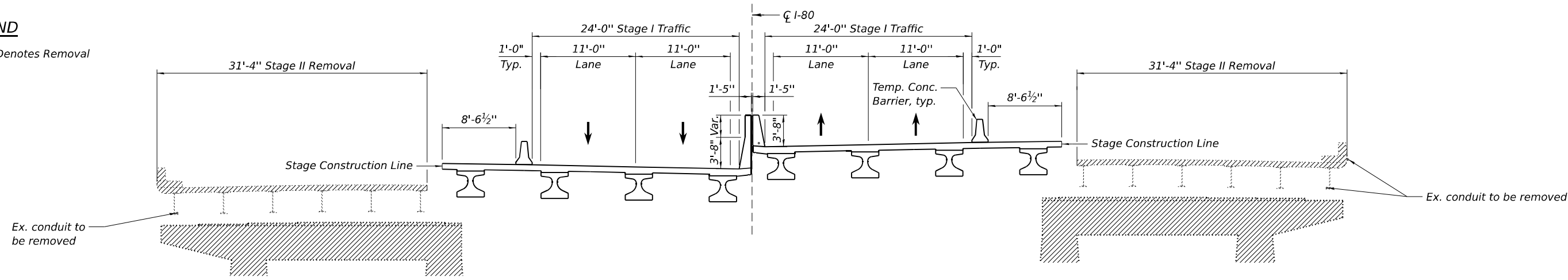
**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

SHEET S2-4 OF S2-46 SHEETS

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			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

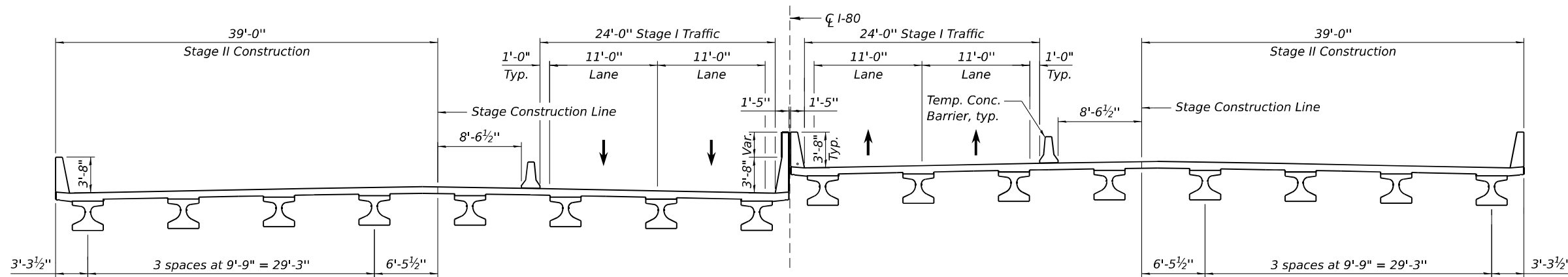
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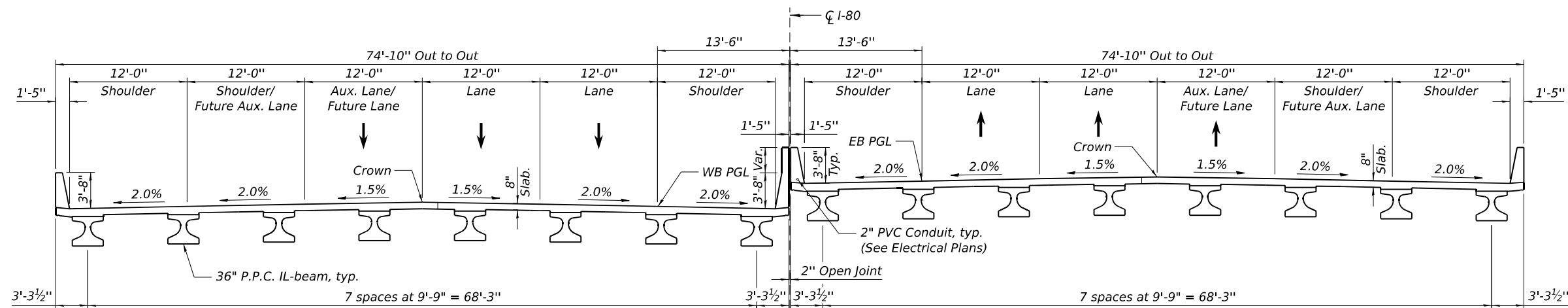
STAGE II REMOVAL

(Looking East)



STAGE II CONSTRUCTION

(Looking East)



FINAL CROSS SECTION

(Looking East)

NOTES

1. For details of the Temporary Concrete Barrier, see Sheet S2-8 of S2-46.
2. For quantity of the Temporary Concrete Barrier, see Rdwy. Plans.

(Sheet 2 of 4)

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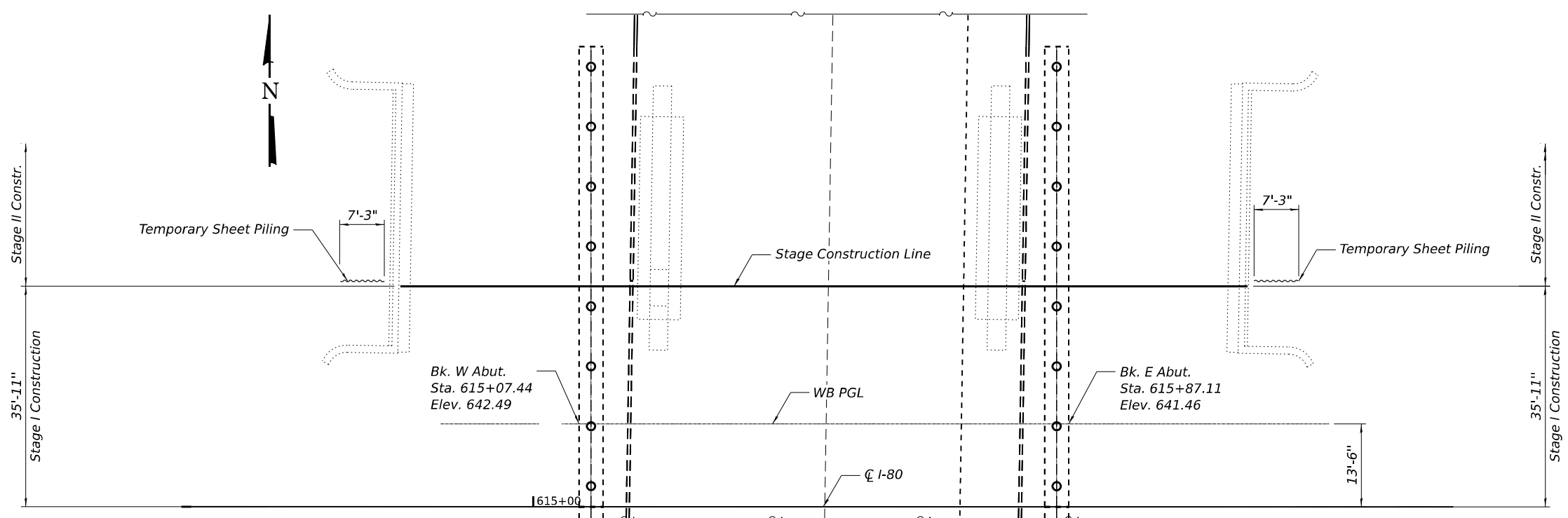
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

SHEET S2-5 OF S2-46 SHEETS

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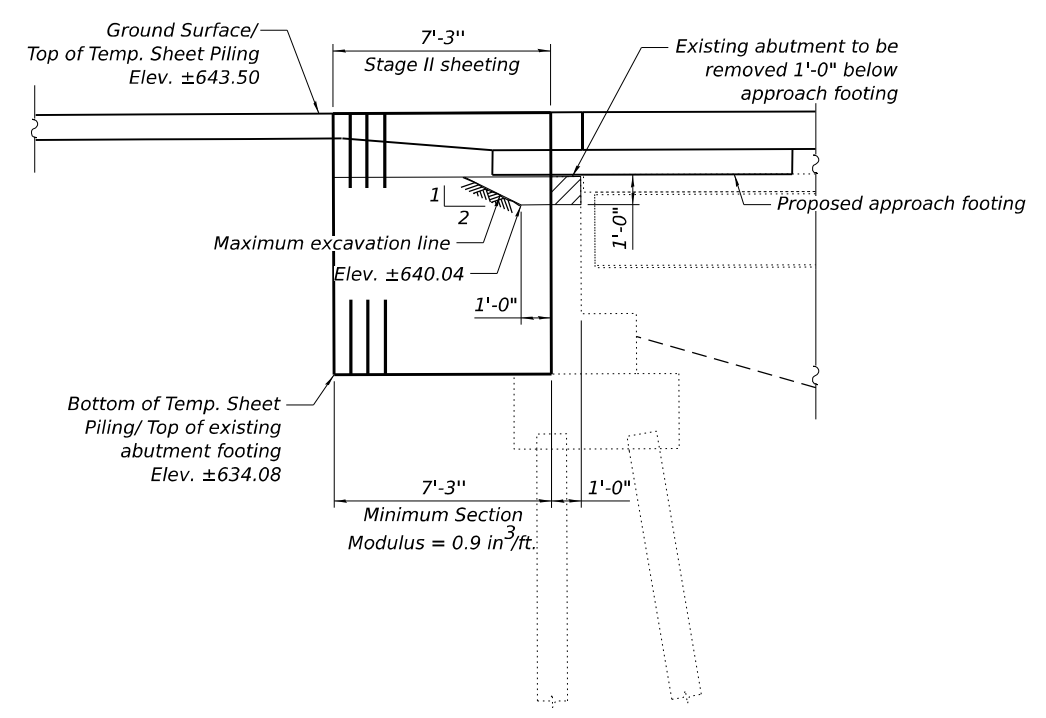
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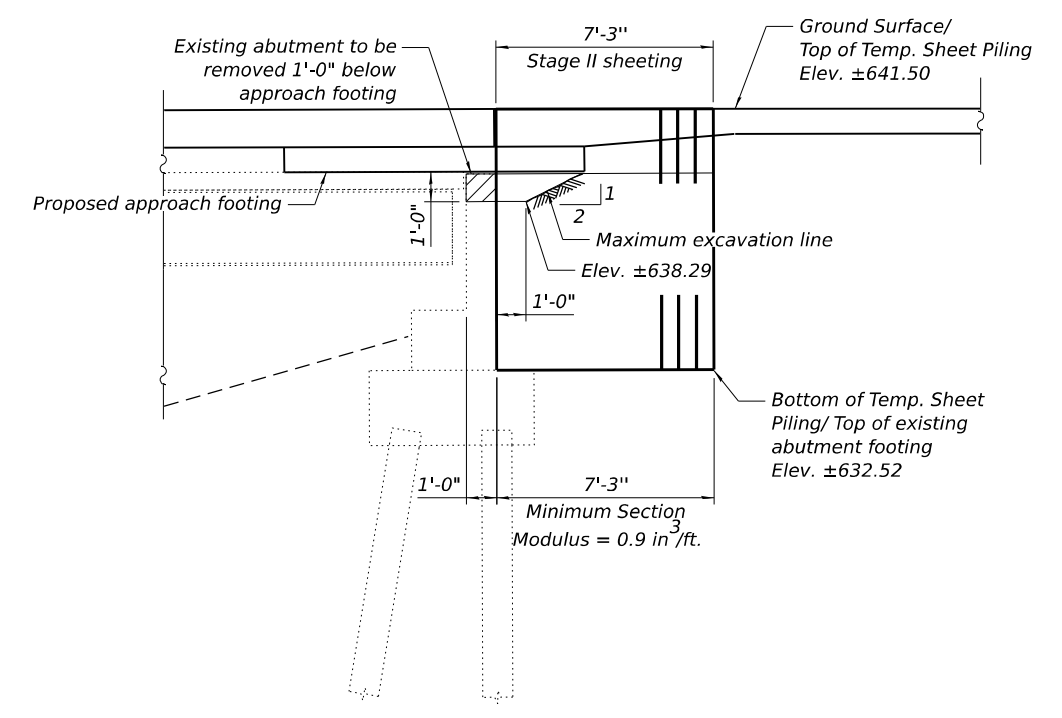
NOTES

1. 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.
2. The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.
3. Install Temporary Sheet Piling prior to the Stage II removal of the existing abutment to retain Stage I Construction.

PLAN - W.B.
TEMPORARY SHEET PILING



ELEVATION - W.B.
TEMPORARY SHEET PILING - EXISTING WEST ABUTMENT



ELEVATION - W.B.
TEMPORARY SHEET PILING - EXISTING EAST ABUTMENT

(Sheet 3 of 4)



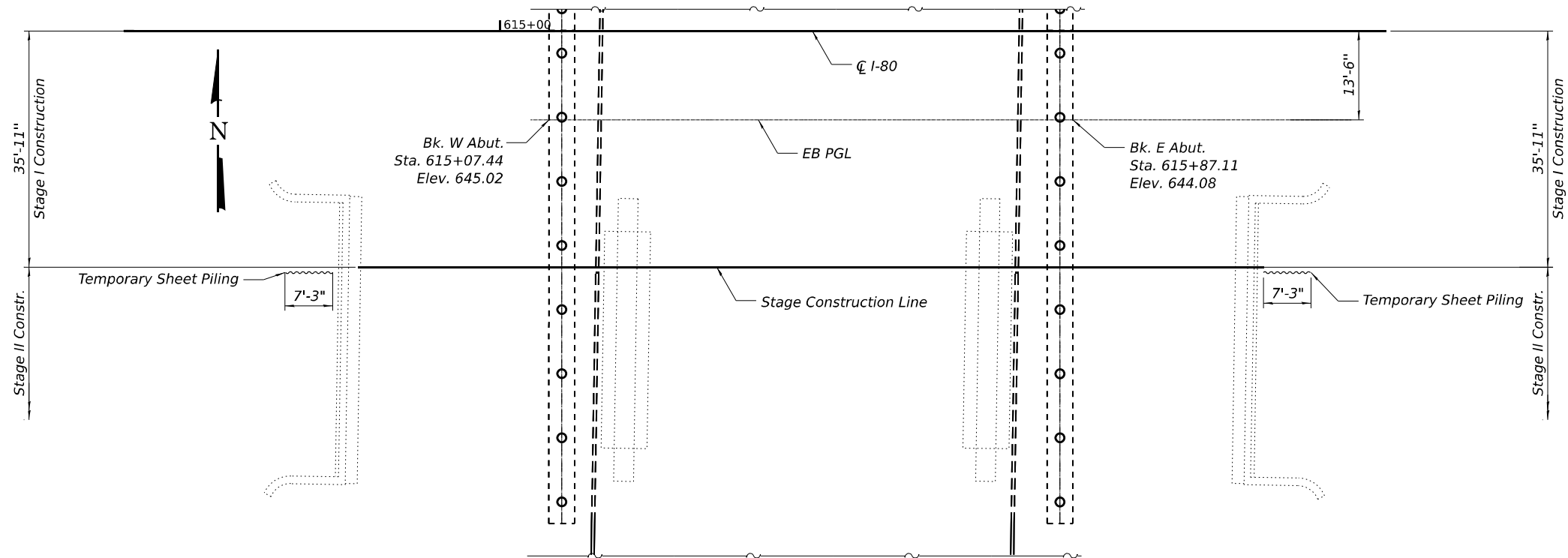
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-6 OF S2-46 SHEETS

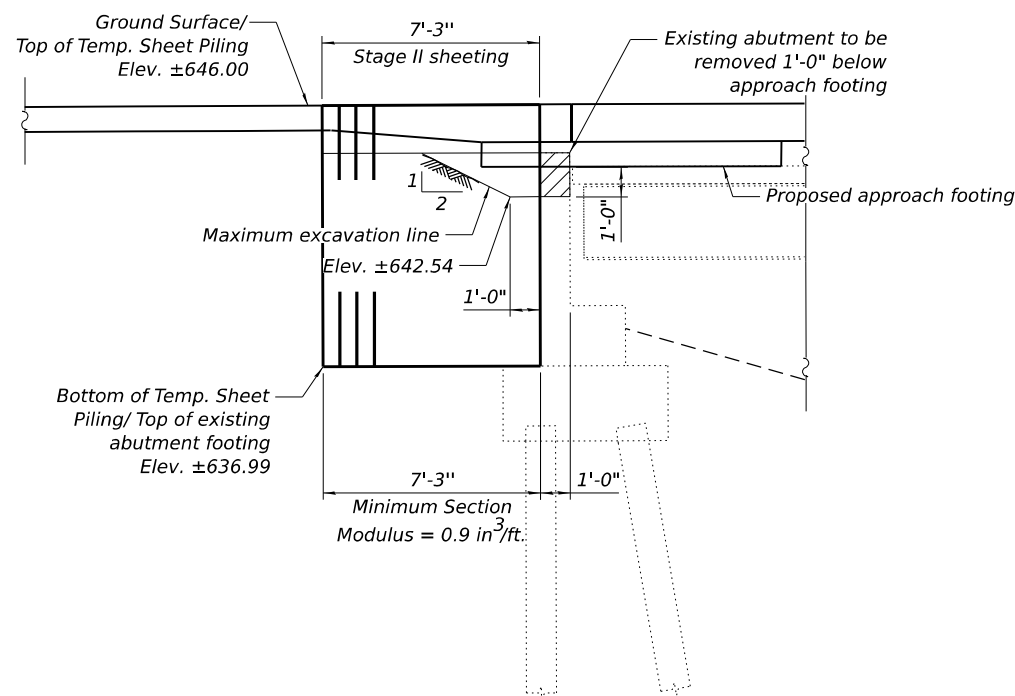
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ILLINOIS			FED. AID PROJECT	
CONTRACT NO. 62R89				



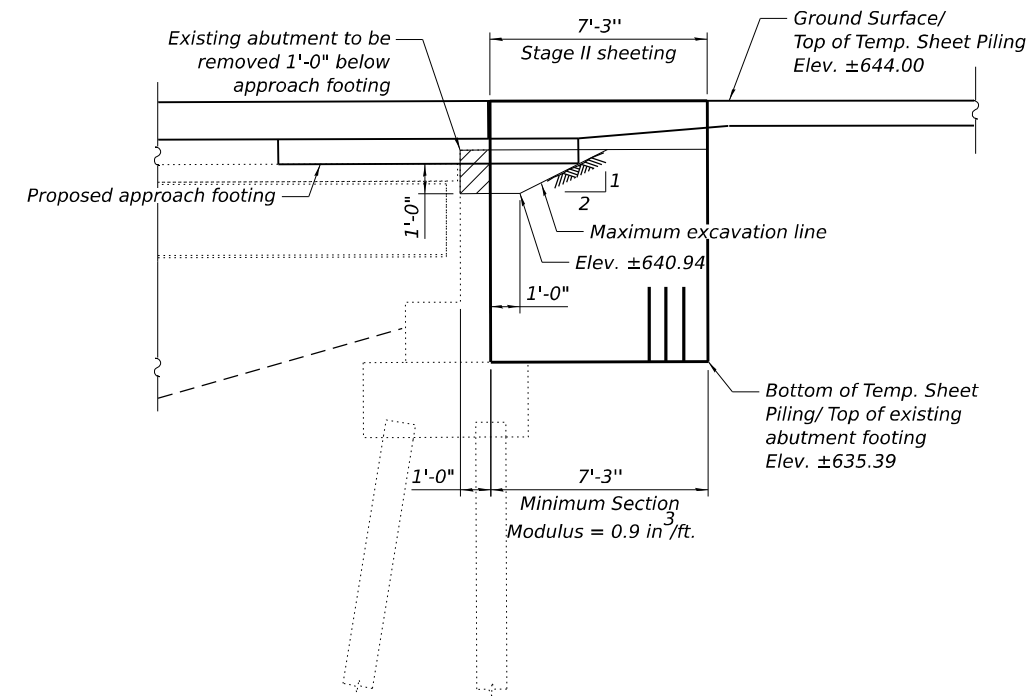
PLAN - E.B.
TEMPORARY SHEET PILING

NOTES

1. 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.
2. The Contractor shall connect the first sheet to the existing abutment wall to ensure stability of sheets driven to the top of the existing footing. This connection shall be reviewed and accepted by the Engineer and included in the cost for Temporary Sheet Piling.
3. Install Temporary Sheet Piling prior to the Stage II removal of the existing abutment to retain Stage I Construction.



ELEVATION - E.B.
TEMPORARY SHEET PILING - EXISTING WEST ABUTMENT



ELEVATION - E.B.
TEMPORARY SHEET PILING - EXISTING EAST ABUTMENT

(Sheet 4 of 4)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

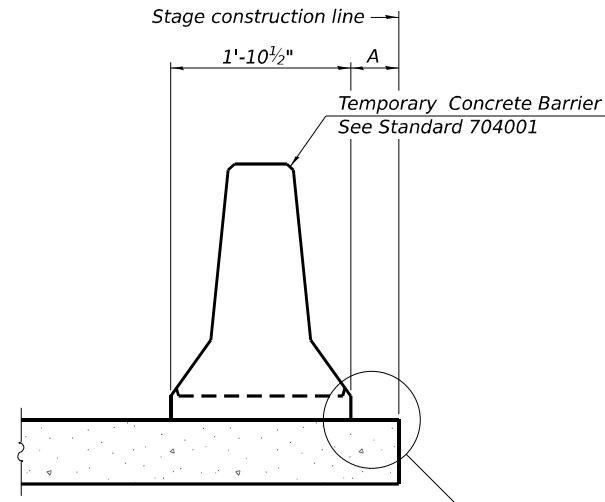
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SHEET S2-7 OF S2-46 SHEETS

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CONTRACT NO. 62R89				

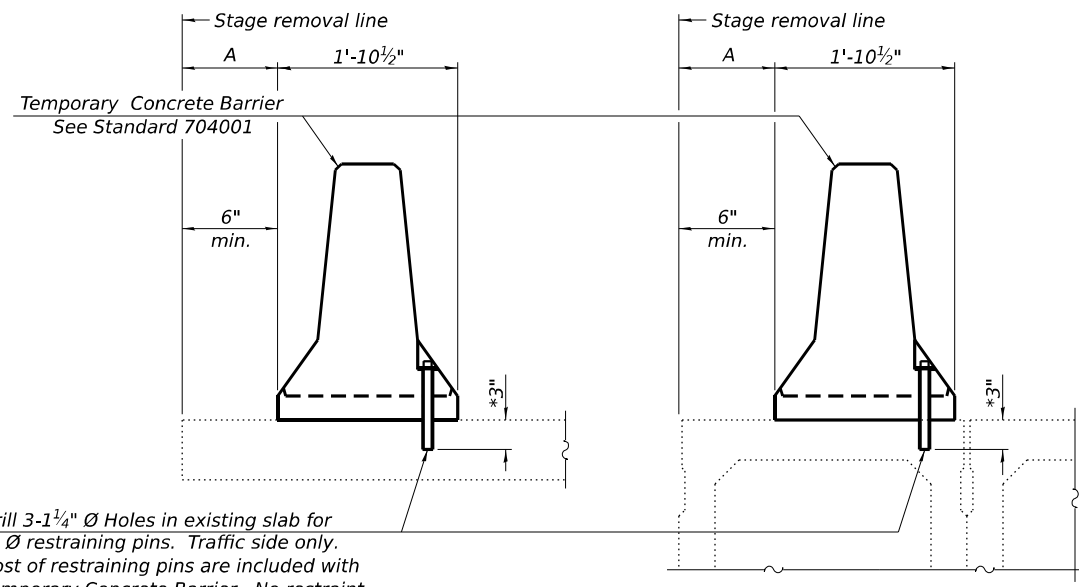
ILLINOIS FED. AID PROJECT

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

NEW SLAB OR NEW DECK BEAM



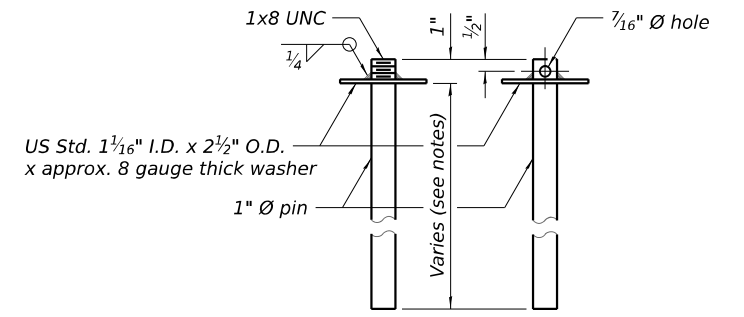
Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

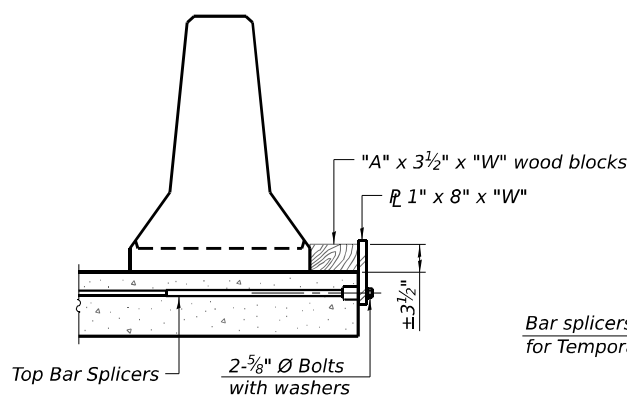
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

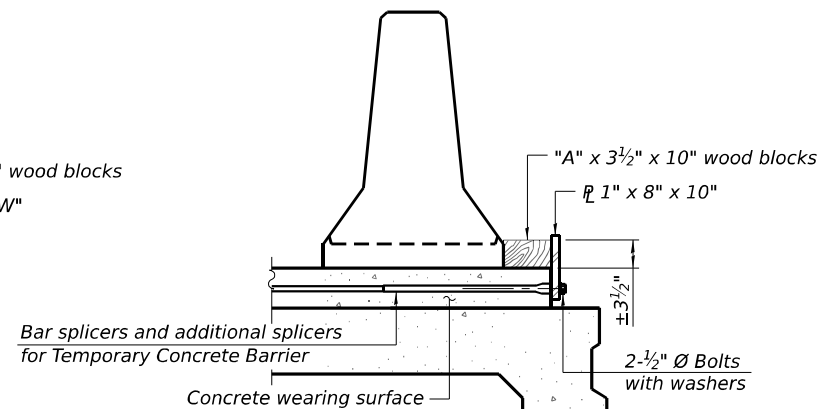
SECTIONS THRU SLAB OR DECK BEAM



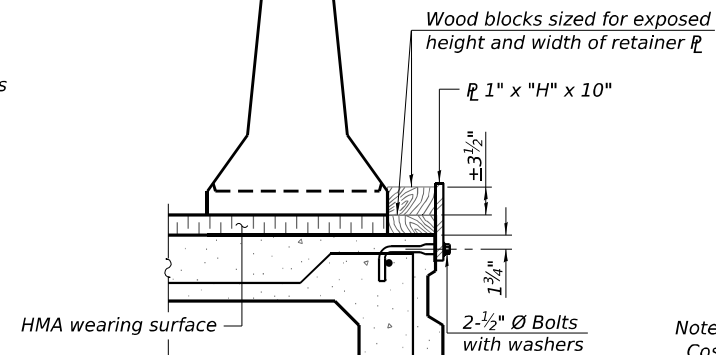
RESTRAINING PIN



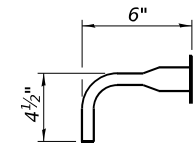
DETAIL I



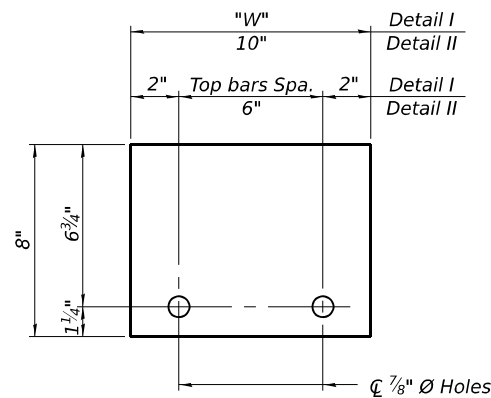
DETAIL II



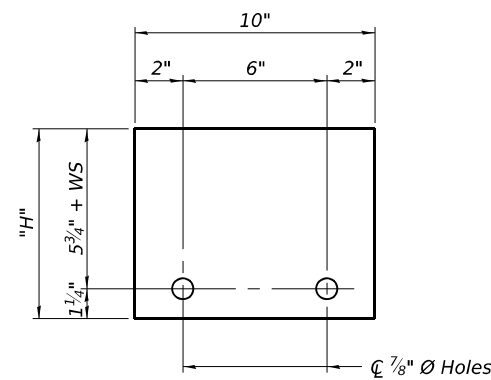
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



STEEL RETAINER 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER 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 C 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 1 1/2", 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.

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021



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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

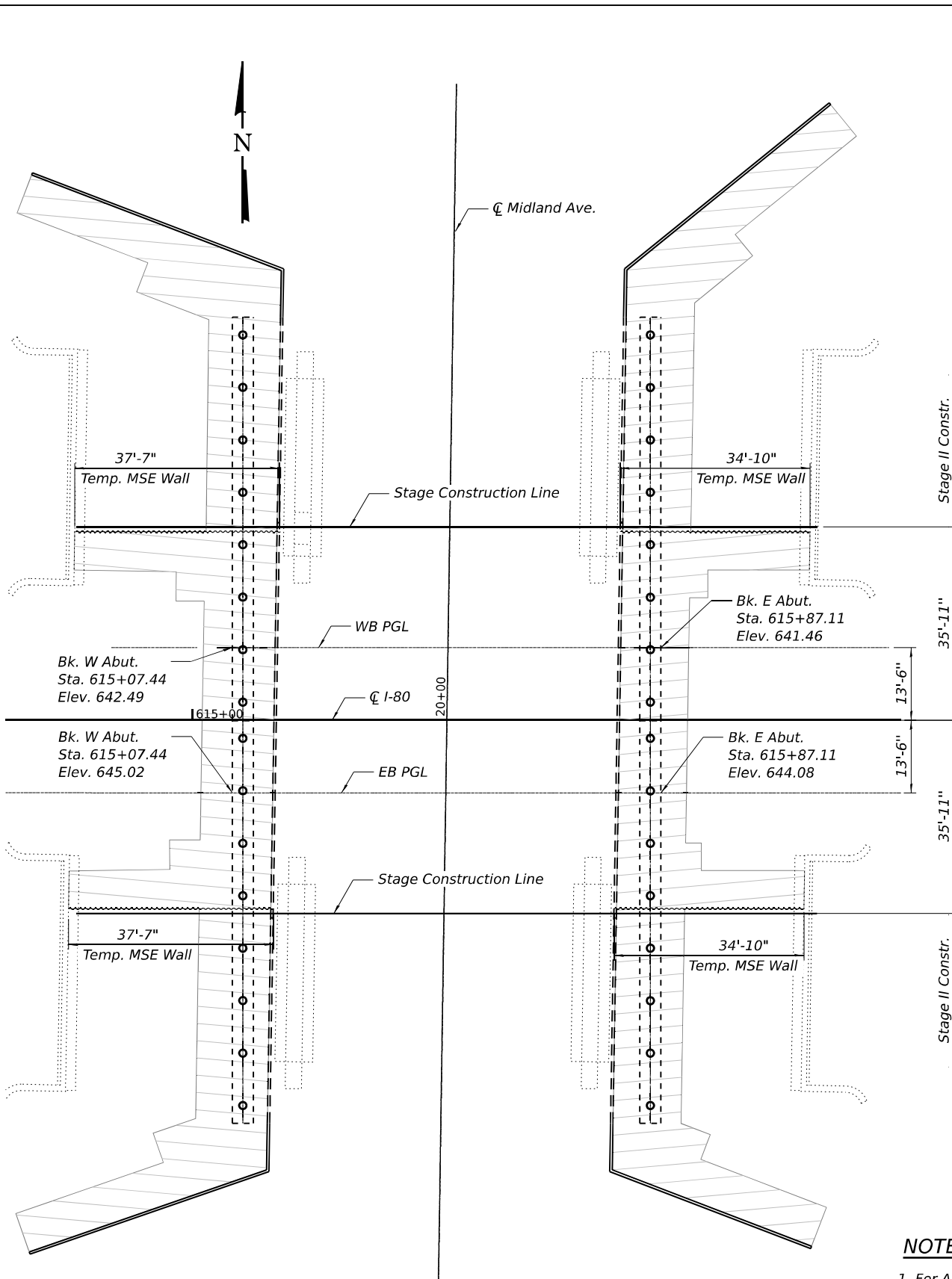
**TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

SHEET S2-8 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 62R89	

ILLINOIS FED. AID PROJECT

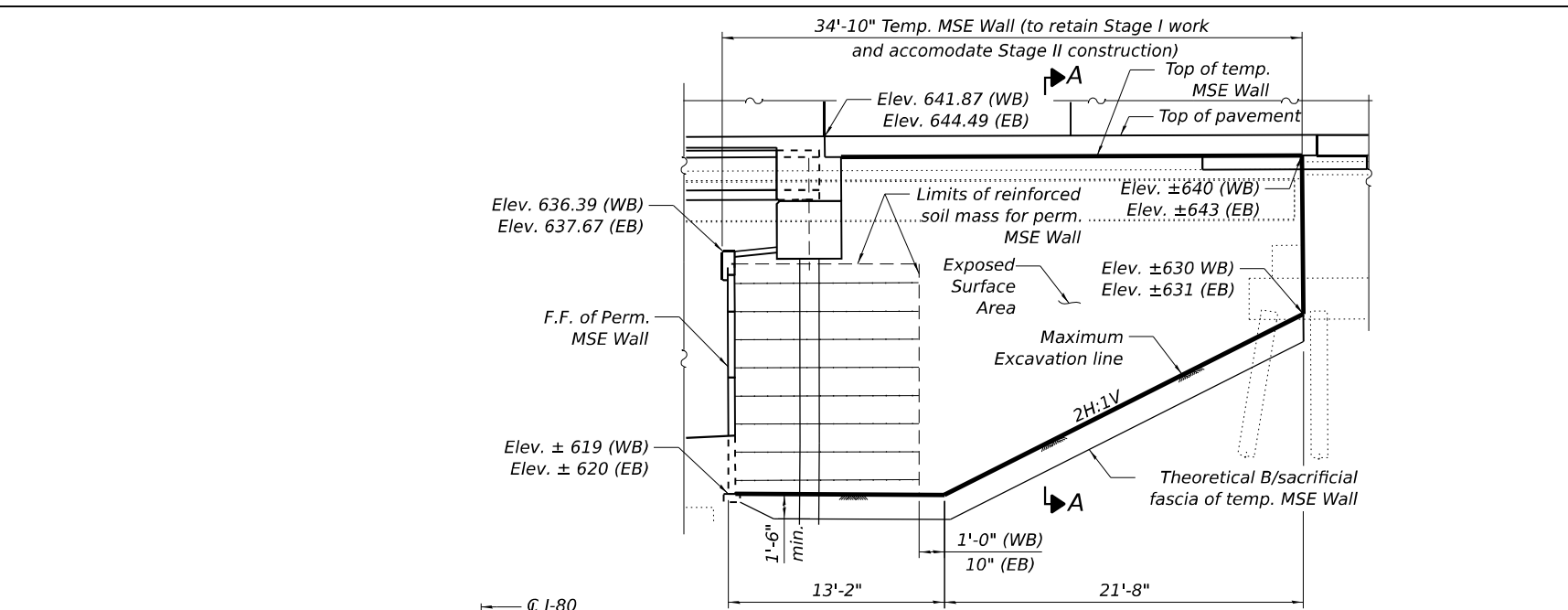
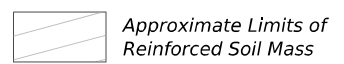
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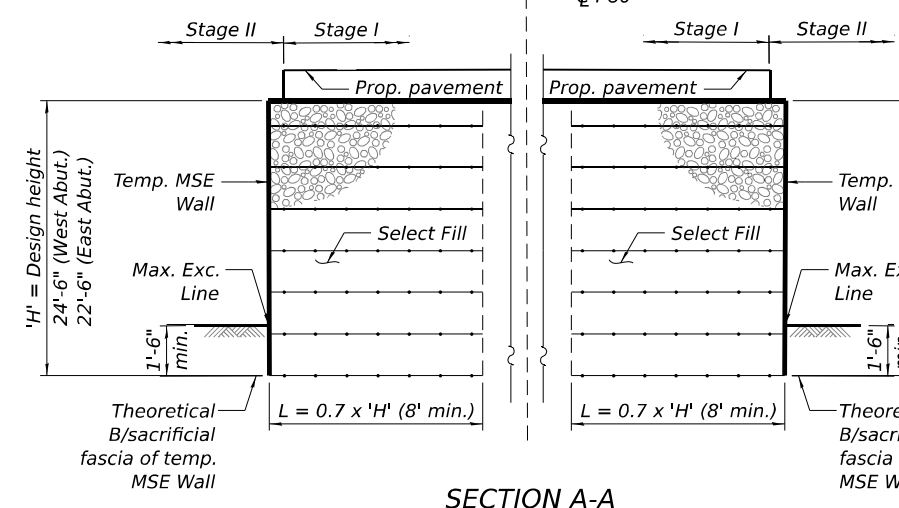
PLAN
TEMPORARY MSE WALL

NOTES

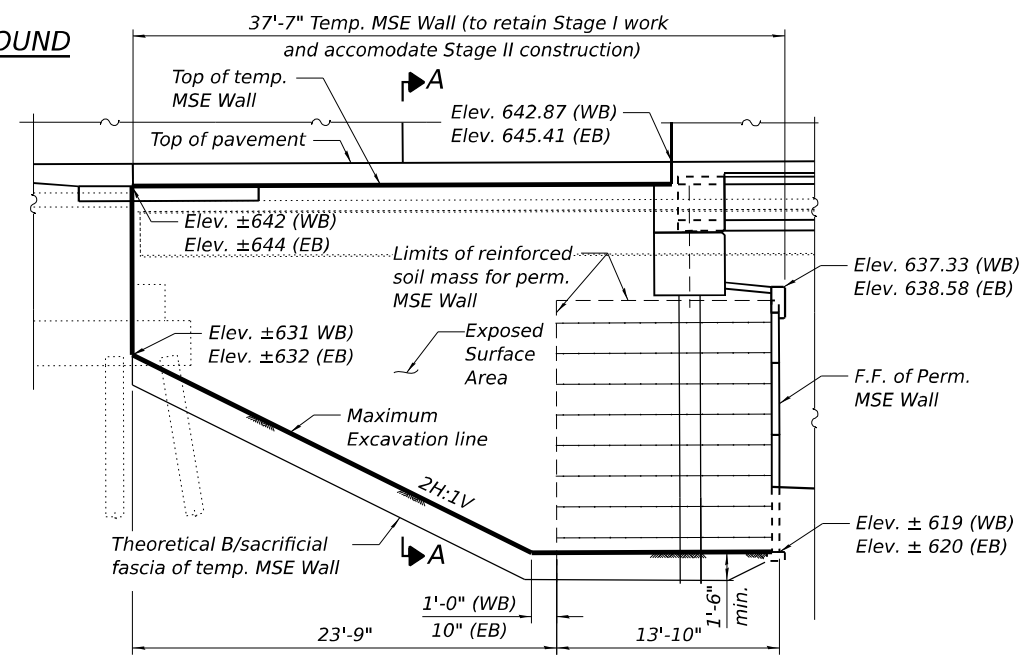
1. For Abutment details, see Sheets S2-30 thru S2-33 of S2-46.
2. For Approach slab details, see Sheets S2-21 thru S2-25 of S2-46.
3. For MSE Wall details, see Sheets S2-34 and S2-35 of S2-46.



ELEVATION - EAST ABUTMENT
TEMPORARY MSE WALL



SECTION A-A
WESTBOUND EASTBOUND



ELEVATION - WEST ABUTMENT
TEMPORARY MSE WALL

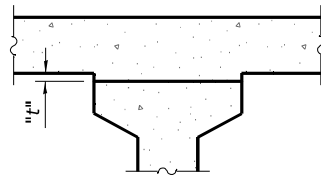
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY MSE WALL DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-9 OF S2-46 SHEETS

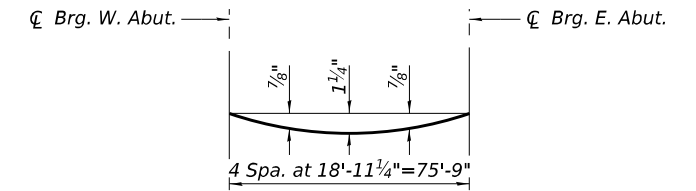
FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	665
CONTRACT NO. 62R89				

ILLINOIS FED. AID PROJECT



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown on sheets S2-11 thru S2-13 of S2-46, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

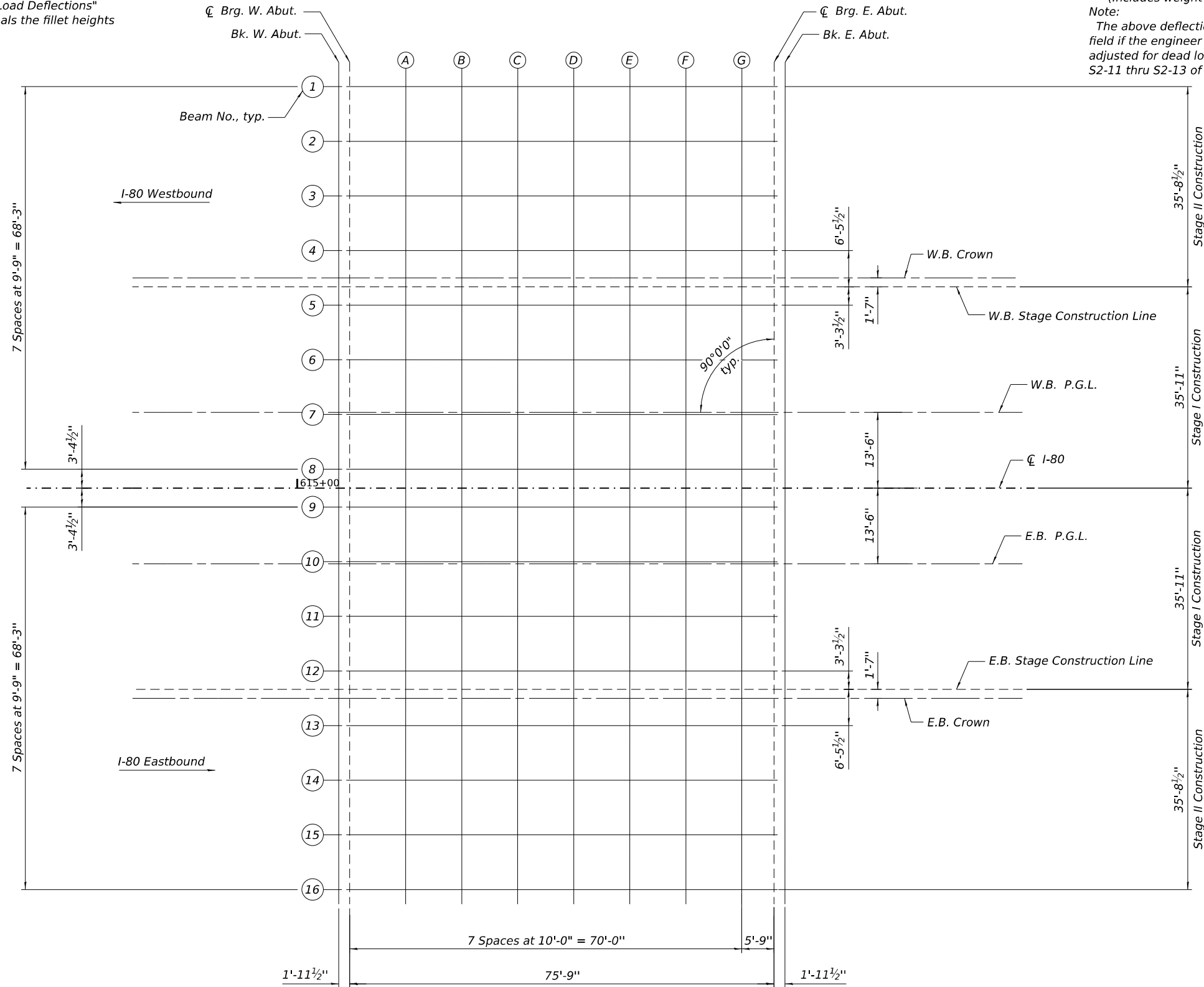
FILLET HEIGHTS



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams).

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets S2-11 thru S2-13 of S2-46.



PLAN

(Sheet 1 of 4)

MODEL: Sheet
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USER NAME =	DESIGNED - MK	REVISED -
	CHECKED - DD	REVISED -
PLOT SCALE =	DRAWN - MK	REVISED -
PLOT DATE =	CHECKED - DD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-10 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	666
CONTRACT NO. 62R89				

ILLINOIS FED. AID PROJECT

MODEL: Sheet
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 10/4/2023 3:56:34 PM

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-71.63	642.28	642.28
☉ Brg. W. Abut.	615+09.40	-71.63	642.26	642.26
A	615+19.40	-71.63	642.14	642.18
B	615+29.40	-71.63	642.02	642.10
C	615+39.40	-71.63	641.90	641.99
D	615+49.40	-71.63	641.77	641.87
E	615+59.40	-71.63	641.64	641.73
F	615+69.40	-71.63	641.50	641.56
G	615+79.40	-71.63	641.36	641.39
☉ Brg. E. Abut.	615+85.15	-71.63	641.28	641.28
Bk. E. Abut.	615+87.11	-71.63	641.26	641.26

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-61.88	642.48	642.48
☉ Brg. W. Abut.	615+09.40	-61.88	642.46	642.46
A	615+19.40	-61.88	642.34	642.38
B	615+29.40	-61.88	642.22	642.29
C	615+39.40	-61.88	642.09	642.19
D	615+49.40	-61.88	641.96	642.07
E	615+59.40	-61.88	641.83	641.92
F	615+69.40	-61.88	641.70	641.76
G	615+79.40	-61.88	641.56	641.58
☉ Brg. E. Abut.	615+85.15	-61.88	641.47	641.47
Bk. E. Abut.	615+87.11	-61.88	641.45	641.45

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-52.13	642.67	642.67
☉ Brg. W. Abut.	615+09.40	-52.13	642.65	642.65
A	615+19.40	-52.13	642.53	642.57
B	615+29.40	-52.13	642.41	642.49
C	615+39.40	-52.13	642.29	642.38
D	615+49.40	-52.13	642.16	642.26
E	615+59.40	-52.13	642.03	642.12
F	615+69.40	-52.13	641.89	641.95
G	615+79.40	-52.13	641.75	641.78
☉ Brg. E. Abut.	615+85.15	-52.13	641.67	641.67
Bk. E. Abut.	615+87.11	-52.13	641.65	641.65

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-42.38	642.83	642.83
☉ Brg. W. Abut.	615+09.40	-42.38	642.81	642.81
A	615+19.40	-42.38	642.69	642.73
B	615+29.40	-42.38	642.57	642.65
C	615+39.40	-42.38	642.45	642.54
D	615+49.40	-42.38	642.32	642.42
E	615+59.40	-42.38	642.19	642.28
F	615+69.40	-42.38	642.05	642.11
G	615+79.40	-42.38	641.91	641.94
☉ Brg. E. Abut.	615+85.15	-42.38	641.83	641.83
Bk. E. Abut.	615+87.11	-42.38	641.81	641.81

W.B. CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-37.50	642.91	642.91
☉ Brg. W. Abut.	615+09.40	-37.50	642.88	642.88
A	615+19.40	-37.50	642.77	642.81
B	615+29.40	-37.50	642.64	642.72
C	615+39.40	-37.50	642.52	642.62
D	615+49.40	-37.50	642.39	642.49
E	615+59.40	-37.50	642.26	642.35
F	615+69.40	-37.50	642.12	642.19
G	615+79.40	-37.50	641.98	642.01
☉ Brg. E. Abut.	615+85.15	-37.50	641.90	641.90
Bk. E. Abut.	615+87.11	-37.50	641.88	641.88

W.B. STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-35.92	642.88	642.88
☉ Brg. W. Abut.	615+09.40	-35.92	642.86	642.86
A	615+19.40	-35.92	642.74	642.78
B	615+29.40	-35.92	642.62	642.70
C	615+39.40	-35.92	642.50	642.59
D	615+49.40	-35.92	642.37	642.47
E	615+59.40	-35.92	642.23	642.33
F	615+69.40	-35.92	642.10	642.16
G	615+79.40	-35.92	641.96	641.98
☉ Brg. E. Abut.	615+85.15	-35.92	641.88	641.88
Bk. E. Abut.	615+87.11	-35.92	641.86	641.86

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-32.63	642.83	642.83
☉ Brg. W. Abut.	615+09.40	-32.63	642.81	642.81
A	615+19.40	-32.63	642.69	642.73
B	615+29.40	-32.63	642.57	642.65
C	615+39.40	-32.63	642.45	642.54
D	615+49.40	-32.63	642.32	642.42
E	615+59.40	-32.63	642.19	642.28
F	615+69.40	-32.63	642.05	642.11
G	615+79.40	-32.63	641.91	641.94
☉ Brg. E. Abut.	615+85.15	-32.63	641.83	641.83
Bk. E. Abut.	615+87.11	-32.63	641.81	641.81

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-22.88	642.67	642.67
☉ Brg. W. Abut.	615+09.40	-22.88	642.65	642.65
A	615+19.40	-22.88	642.53	642.57
B	615+29.40	-22.88	642.41	642.49
C	615+39.40	-22.88	642.29	642.38
D	615+49.40	-22.88	642.16	642.26
E	615+59.40	-22.88	642.03	642.12
F	615+69.40	-22.88	641.89	641.95
G	615+79.40	-22.88	641.75	641.78
☉ Brg. E. Abut.	615+85.15	-22.88	641.67	641.67
Bk. E. Abut.	615+87.11	-22.88	641.65	641.65

W.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-13.50	642.49	642.49
☉ Brg. W. Abut.	615+09.40	-13.50	642.46	642.46
A	615+19.40	-13.50	642.35	642.39
B	615+29.40	-13.50	642.22	642.30
C	615+39.40	-13.50	642.10	642.20
D	615+49.40	-13.50	641.97	642.07
E	615+59.40	-13.50	641.84	641.93
F	615+69.40	-13.50	641.70	641.77
G	615+79.40	-13.50	641.56	641.59
☉ Brg. E. Abut.	615+85.15	-13.50	641.48	641.48
Bk. E. Abut.	615+87.11	-13.50	641.46	641.46

(Sheet 2 of 4)

NOTE:
Offsets measured from ☉ I-80.



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	667
CONTRACT NO. 62R89				

SHEET S2-11 OF S2-46 SHEETS

ILLINOIS FED. AID PROJECT

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BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-13.13	642.48	642.48
☉ Brg. W. Abut.	615+09.40	-13.13	642.46	642.46
A	615+19.40	-13.13	642.34	642.38
B	615+29.40	-13.13	642.22	642.29
C	615+39.40	-13.13	642.09	642.19
D	615+49.40	-13.13	641.96	642.07
E	615+59.40	-13.13	641.83	641.92
F	615+69.40	-13.13	641.70	641.76
G	615+79.40	-13.13	641.56	641.58
☉ Brg. E. Abut.	615+85.15	-13.13	641.47	641.47
Bk. E. Abut.	615+87.11	-13.13	641.45	641.45

BEAM 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	-3.38	642.28	642.28
☉ Brg. W. Abut.	615+09.40	-3.38	642.26	642.26
A	615+19.40	-3.38	642.14	642.18
B	615+29.40	-3.38	642.02	642.10
C	615+39.40	-3.38	641.90	641.99
D	615+49.40	-3.38	641.77	641.87
E	615+59.40	-3.38	641.64	641.73
F	615+69.40	-3.38	641.50	641.56
G	615+79.40	-3.38	641.36	641.39
☉ Brg. E. Abut.	615+85.15	-3.38	641.28	641.28
Bk. E. Abut.	615+87.11	-3.38	641.26	641.26

BEAM 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	3.38	644.81	644.81
☉ Brg. W. Abut.	615+09.40	3.38	644.79	644.79
A	615+19.40	3.38	644.69	644.73
B	615+29.40	3.38	644.58	644.66
C	615+39.40	3.38	644.47	644.57
D	615+49.40	3.38	644.35	644.46
E	615+59.40	3.38	644.23	644.32
F	615+69.40	3.38	644.11	644.17
G	615+79.40	3.38	643.98	644.00
☉ Brg. E. Abut.	615+85.15	3.38	643.90	643.90
Bk. E. Abut.	615+87.11	3.38	643.88	643.88

BEAM 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	13.13	645.01	645.01
☉ Brg. W. Abut.	615+09.40	13.13	644.99	644.99
A	615+19.40	13.13	644.89	644.93
B	615+29.40	13.13	644.78	644.85
C	615+39.40	13.13	644.66	644.76
D	615+49.40	13.13	644.55	644.65
E	615+59.40	13.13	644.43	644.52
F	615+69.40	13.13	644.30	644.37
G	615+79.40	13.13	644.17	644.20
☉ Brg. E. Abut.	615+85.15	13.13	644.10	644.10
Bk. E. Abut.	615+87.11	13.13	644.07	644.07

E.B. P.G.L.

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	13.50	645.02	645.02
☉ Brg. W. Abut.	615+09.40	13.50	645.00	645.00
A	615+19.40	13.50	644.89	644.93
B	615+29.40	13.50	644.78	644.86
C	615+39.40	13.50	644.67	644.77
D	615+49.40	13.50	644.56	644.66
E	615+59.40	13.50	644.44	644.53
F	615+69.40	13.50	644.31	644.37
G	615+79.40	13.50	644.18	644.21
☉ Brg. E. Abut.	615+85.15	13.50	644.11	644.11
Bk. E. Abut.	615+87.11	13.50	644.08	644.08

BEAM 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	22.88	645.20	645.20
☉ Brg. W. Abut.	615+09.40	22.88	645.18	645.18
A	615+19.40	22.88	645.08	645.12
B	615+29.40	22.88	644.97	645.05
C	615+39.40	22.88	644.86	644.96
D	615+49.40	22.88	644.74	644.85
E	615+59.40	22.88	644.62	644.71
F	615+69.40	22.88	644.50	644.56
G	615+79.40	22.88	644.37	644.39
☉ Brg. E. Abut.	615+85.15	22.88	644.29	644.29
Bk. E. Abut.	615+87.11	22.88	644.27	644.27

BEAM 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	32.63	645.36	645.36
☉ Brg. W. Abut.	615+09.40	32.63	645.34	645.34
A	615+19.40	32.63	645.24	645.28
B	615+29.40	32.63	645.13	645.21
C	615+39.40	32.63	645.02	645.12
D	615+49.40	32.63	644.90	645.00
E	615+59.40	32.63	644.78	644.87
F	615+69.40	32.63	644.66	644.72
G	615+79.40	32.63	644.53	644.55
☉ Brg. E. Abut.	615+85.15	32.63	644.45	644.45
Bk. E. Abut.	615+87.11	32.63	644.43	644.43

E.B. STAGE CONSTRUCTION LINE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	35.92	645.41	645.41
☉ Brg. W. Abut.	615+09.40	35.92	645.39	645.39
A	615+19.40	35.92	645.29	645.33
B	615+29.40	35.92	645.18	645.26
C	615+39.40	35.92	645.07	645.17
D	615+49.40	35.92	644.95	645.05
E	615+59.40	35.92	644.83	644.92
F	615+69.40	35.92	644.71	644.77
G	615+79.40	35.92	644.58	644.60
☉ Brg. E. Abut.	615+85.15	35.92	644.50	644.50
Bk. E. Abut.	615+87.11	35.92	644.48	644.48

E.B. CROWN

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	37.50	645.44	645.44
☉ Brg. W. Abut.	615+09.40	37.50	645.42	645.42
A	615+19.40	37.50	645.31	645.35
B	615+29.40	37.50	645.20	645.28
C	615+39.40	37.50	645.09	645.19
D	615+49.40	37.50	644.98	645.08
E	615+59.40	37.50	644.86	644.95
F	615+69.40	37.50	644.73	644.79
G	615+79.40	37.50	644.60	644.63
☉ Brg. E. Abut.	615+85.15	37.50	644.53	644.53
Bk. E. Abut.	615+87.11	37.50	644.50	644.50

(Sheet 3 of 4)

NOTE:
Offsets measured from ☉ I-80.



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	668
CONTRACT NO. 62R89				

SHEET S2-12 OF S2-46 SHEETS

ILLINOIS FED. AID PROJECT

BEAM 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	42.38	645.36	645.36
☉ Brg. W. Abut.	615+09.40	42.38	645.34	645.34
A	615+19.40	42.38	645.24	645.28
B	615+29.40	42.38	645.13	645.21
C	615+39.40	42.38	645.02	645.12
D	615+49.40	42.38	644.90	645.00
E	615+59.40	42.38	644.78	644.87
F	615+69.40	42.38	644.66	644.72
G	615+79.40	42.38	644.53	644.55
☉ Brg. E. Abut.	615+85.15	42.38	644.45	644.45
Bk. E. Abut.	615+87.11	42.38	644.43	644.43

BEAM 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	52.13	645.20	645.20
☉ Brg. W. Abut.	615+09.40	52.13	645.18	645.18
A	615+19.40	52.13	645.08	645.12
B	615+29.40	52.13	644.97	645.05
C	615+39.40	52.13	644.86	644.96
D	615+49.40	52.13	644.74	644.85
E	615+59.40	52.13	644.62	644.71
F	615+69.40	52.13	644.50	644.56
G	615+79.40	52.13	644.37	644.39
☉ Brg. E. Abut.	615+85.15	52.13	644.29	644.29
Bk. E. Abut.	615+87.11	52.13	644.27	644.27

BEAM 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	61.88	645.01	645.01
☉ Brg. W. Abut.	615+09.40	61.88	644.99	644.99
A	615+19.40	61.88	644.89	644.93
B	615+29.40	61.88	644.78	644.85
C	615+39.40	61.88	644.66	644.76
D	615+49.40	61.88	644.55	644.65
E	615+59.40	61.88	644.43	644.52
F	615+69.40	61.88	644.30	644.37
G	615+79.40	61.88	644.17	644.20
☉ Brg. E. Abut.	615+85.15	61.88	644.10	644.10
Bk. E. Abut.	615+87.11	61.88	644.07	644.07

BEAM 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	615+07.44	71.63	644.81	644.81
☉ Brg. W. Abut.	615+09.40	71.63	644.79	644.79
A	615+19.40	71.63	644.69	644.73
B	615+29.40	71.63	644.58	644.66
C	615+39.40	71.63	644.47	644.57
D	615+49.40	71.63	644.35	644.46
E	615+59.40	71.63	644.23	644.32
F	615+69.40	71.63	644.11	644.17
G	615+79.40	71.63	643.98	644.00
☉ Brg. E. Abut.	615+85.15	71.63	643.90	643.90
Bk. E. Abut.	615+87.11	71.63	643.88	643.88

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(Sheet 4 of 4)

NOTE:
Offsets measured from ☉ I-80.



USER NAME =	DESIGNED - MK	REVISED -
	CHECKED - DD	REVISED -
PLOT SCALE =	DRAWN - MK	REVISED -
PLOT DATE =	CHECKED - DD	REVISED -

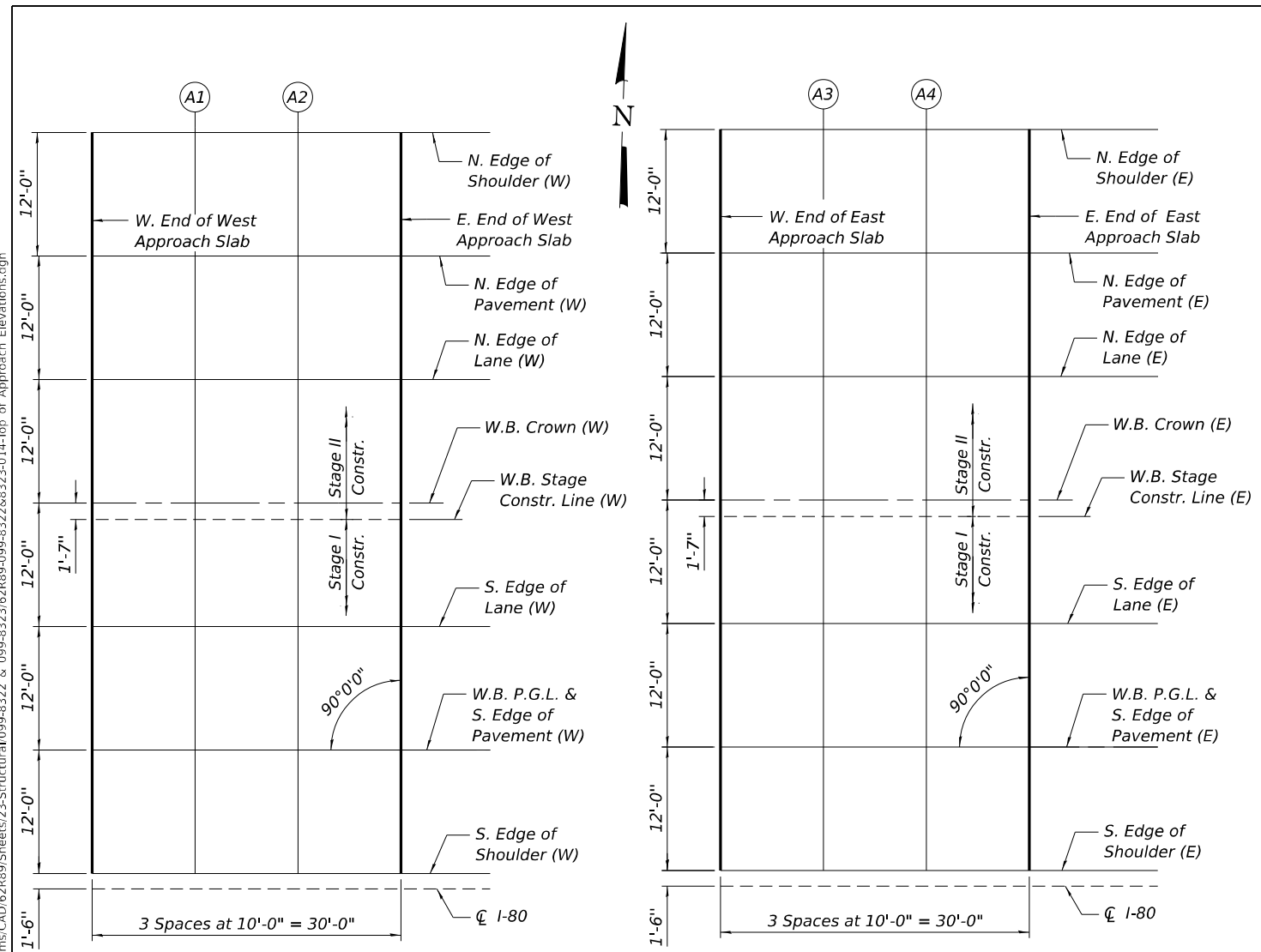
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF SLAB ELEVATIONS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

SHEET S2-13 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	669
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

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WEST APPROACH SLAB PLAN-WB

EAST APPROACH SLAB PLAN-WB

NOTE:
Offsets measured from CL I-80 .

W.B. STAGE CONSTRUCTION LINE (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-35.92	643.21
A1	614+88.44	-35.92	643.10
A2	614+98.44	-35.92	642.99
E. End of W. Appr. Slab	615+08.44	-35.92	642.87

N. EDGE OF LANE (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-49.50	641.71
A3	615+96.11	-49.50	641.56
A4	616+06.11	-49.50	641.41
E. End of E. Appr. Slab	616+16.11	-49.50	641.26

S. EDGE OF LANE (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-25.50	643.05
A1	614+88.44	-25.50	642.94
A2	614+98.44	-25.50	642.83
E. End of W. Appr. Slab	615+08.44	-25.50	642.71

W.B. CROWN (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-37.50	641.89
A3	615+96.11	-37.50	641.74
A4	616+06.11	-37.50	641.59
E. End of E. Appr. Slab	616+16.11	-37.50	641.44

W.B. P.G.L. & S. EDGE OF PAVEMENT (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-13.50	642.81
A1	614+88.44	-13.50	642.70
A2	614+98.44	-13.50	642.59
E. End of W. Appr. Slab	615+08.44	-13.50	642.47

W.B. STAGE CONSTRUCTION LINE (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-35.92	641.87
A3	615+96.11	-35.92	641.72
A4	616+06.11	-35.92	641.57
E. End of E. Appr. Slab	616+16.11	-35.92	641.42

S. EDGE OF SHOULDER (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-1.50	642.57
A1	614+88.44	-1.50	642.46
A2	614+98.44	-1.50	642.35
E. End of W. Appr. Slab	615+08.44	-1.50	642.23

S. EDGE OF LANE (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-25.50	641.71
A3	615+96.11	-25.50	641.56
A4	616+06.11	-25.50	641.41
E. End of E. Appr. Slab	616+16.11	-25.50	641.26

N. EDGE OF SHOULDER (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-73.50	642.57
A1	614+88.44	-73.50	642.46
A2	614+98.44	-73.50	642.35
E. End of W. Appr. Slab	615+08.44	-73.50	642.23

N. EDGE OF LANE (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-49.50	643.05
A1	614+88.44	-49.50	642.94
A2	614+98.44	-49.50	642.83
E. End of W. Appr. Slab	615+08.44	-49.50	642.71

N. EDGE OF SHOULDER (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-73.50	641.23
A3	615+96.11	-73.50	641.08
A4	616+06.11	-73.50	640.93
E. End of E. Appr. Slab	616+16.11	-73.50	640.78

W.B. P.G.L. & S. EDGE OF PAVEMENT (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-13.50	641.47
A3	615+96.11	-13.50	641.32
A4	616+06.11	-13.50	641.17
E. End of E. Appr. Slab	616+16.11	-13.50	641.02

N. EDGE OF PAVEMENT (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-61.50	642.81
A1	614+88.44	-61.50	642.70
A2	614+98.44	-61.50	642.59
E. End of W. Appr. Slab	615+08.44	-61.50	642.47

W.B. CROWN (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	-37.50	643.23
A1	614+88.44	-37.50	643.12
A2	614+98.44	-37.50	643.01
E. End of W. Appr. Slab	615+08.44	-37.50	642.89

N. EDGE OF PAVEMENT (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-61.50	641.47
A3	615+96.11	-61.50	641.32
A4	616+06.11	-61.50	641.17
E. End of E. Appr. Slab	616+16.11	-61.50	641.02

S. EDGE OF SHOULDER (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	-1.50	641.23
A3	615+96.11	-1.50	641.08
A4	616+06.11	-1.50	640.93
E. End of E. Appr. Slab	616+16.11	-1.50	640.78

(Sheet 1 of 2)



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PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

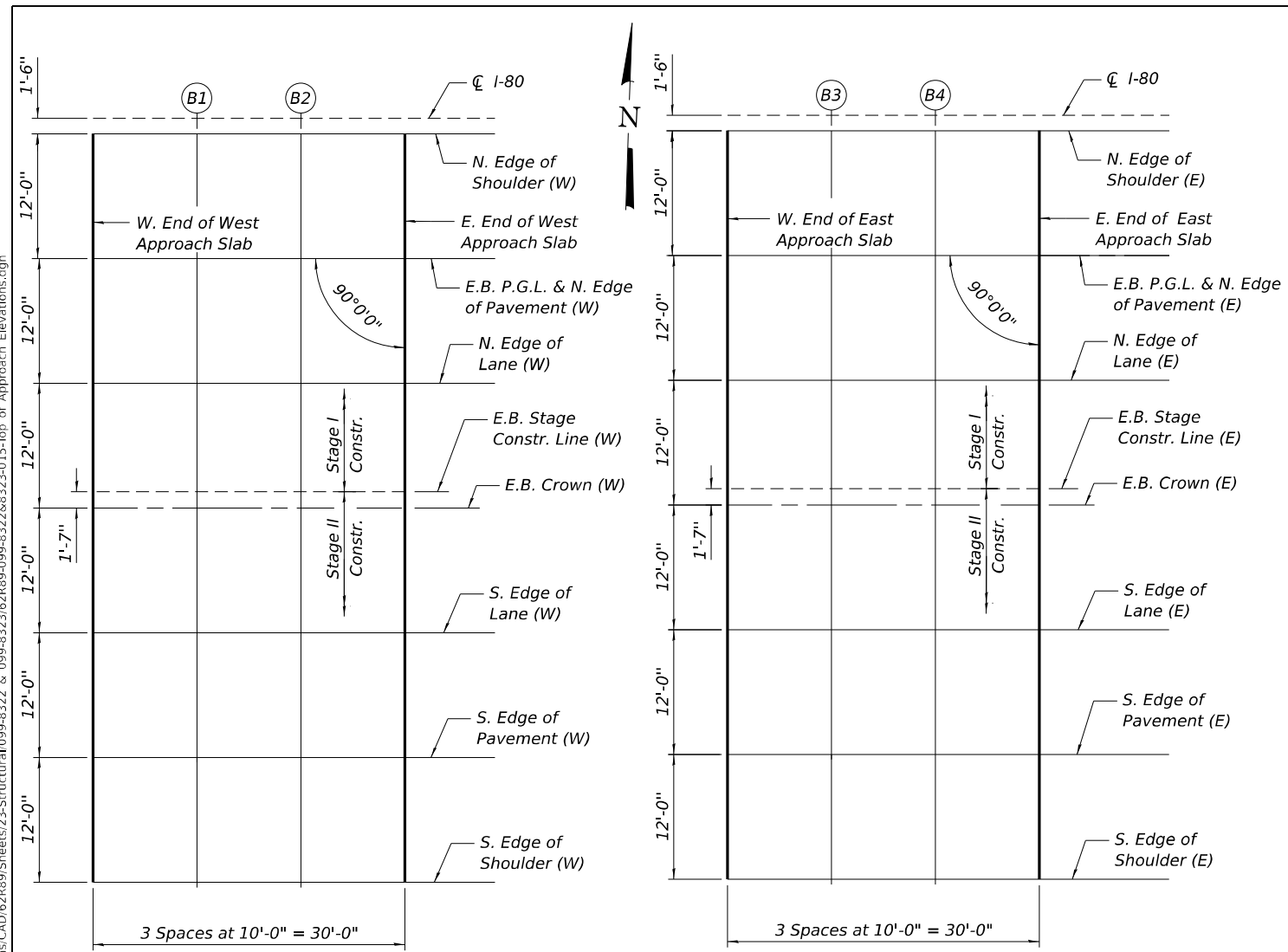
**TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	670
CONTRACT NO. 62R89				

SHEET S2-14 OF S2-46 SHEETS

ILLINOIS FED. AID PROJECT

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WEST APPROACH SLAB PLAN-EB

EAST APPROACH SLAB PLAN-EB

NOTE:
Offsets measured from ϕ I-80.

E.B. CROWN (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	37.50	645.71
B1	614+88.44	37.50	645.62
B2	614+98.44	37.50	645.53
E. End of W. Appr. Slab	615+08.44	37.50	645.43

N. EDGE OF LANE (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	25.50	644.33
B3	615+96.11	25.50	644.20
B4	616+06.11	25.50	644.06
E. End of E. Appr. Slab	616+16.11	25.50	643.92

S. EDGE OF LANE (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	49.50	645.53
B1	614+88.44	49.50	645.44
B2	614+98.44	49.50	645.35
E. End of W. Appr. Slab	615+08.44	49.50	645.25

E.B. STAGE CONSTRUCTION LINE (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	35.92	644.49
B3	615+96.11	35.92	644.36
B4	616+06.11	35.92	644.22
E. End of E. Appr. Slab	616+16.11	35.92	644.08

S. EDGE OF PAVEMENT (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	61.50	645.29
B1	614+88.44	61.50	645.20
B2	614+98.44	61.50	645.11
E. End of W. Appr. Slab	615+08.44	61.50	645.01

E.B. CROWN (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	37.50	644.51
B3	615+96.11	37.50	644.38
B4	616+06.11	37.50	644.24
E. End of E. Appr. Slab	616+16.11	37.50	644.10

S. EDGE OF SHOULDER (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	73.50	645.05
B1	614+88.44	73.50	644.96
B2	614+98.44	73.50	644.87
E. End of W. Appr. Slab	615+08.44	73.50	644.77

S. EDGE OF LANE (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	49.50	644.33
B3	615+96.11	49.50	644.20
B4	616+06.11	49.50	644.06
E. End of E. Appr. Slab	616+16.11	49.50	643.92

N. EDGE OF SHOULDER (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	1.50	645.05
B1	614+88.44	1.50	644.96
B2	614+98.44	1.50	644.87
E. End of W. Appr. Slab	615+08.44	1.50	644.77

N. EDGE OF LANE (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	25.50	645.53
B1	614+88.44	25.50	645.44
B2	614+98.44	25.50	645.35
E. End of W. Appr. Slab	615+08.44	25.50	645.25

N. EDGE OF SHOULDER (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	1.50	643.85
B3	615+96.11	1.50	643.72
B4	616+06.11	1.50	643.58
E. End of E. Appr. Slab	616+16.11	1.50	643.44

S. EDGE OF PAVEMENT (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	61.50	644.09
B3	615+96.11	61.50	643.96
B4	616+06.11	61.50	643.82
E. End of E. Appr. Slab	616+16.11	61.50	643.68

E.B. P.G.L. & N. EDGE OF PAVEMENT (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	13.50	645.29
B1	614+88.44	13.50	645.20
B2	614+98.44	13.50	645.11
E. End of W. Appr. Slab	615+08.44	13.50	645.01

E.B. STAGE CONSTRUCTION LINE (W)

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr. Slab	614+78.44	35.92	645.69
B1	614+88.44	35.92	645.60
B2	614+98.44	35.92	645.51
E. End of W. Appr. Slab	615+08.44	35.92	645.41

E.B. P.G.L. & N. EDGE OF PAVEMENT (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	13.50	644.09
B3	615+96.11	13.50	643.96
B4	616+06.11	13.50	643.82
E. End of E. Appr. Slab	616+16.11	13.50	643.68

S. EDGE OF SHOULDER (E)

Location	Station	Offset	Theoretical Grade Elevations
W. End of E. Appr. Slab	615+86.11	73.50	643.85
B3	615+96.11	73.50	643.72
B4	616+06.11	73.50	643.58
E. End of E. Appr. Slab	616+16.11	73.50	643.44

(Sheet 2 of 2)



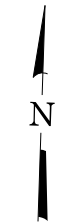
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

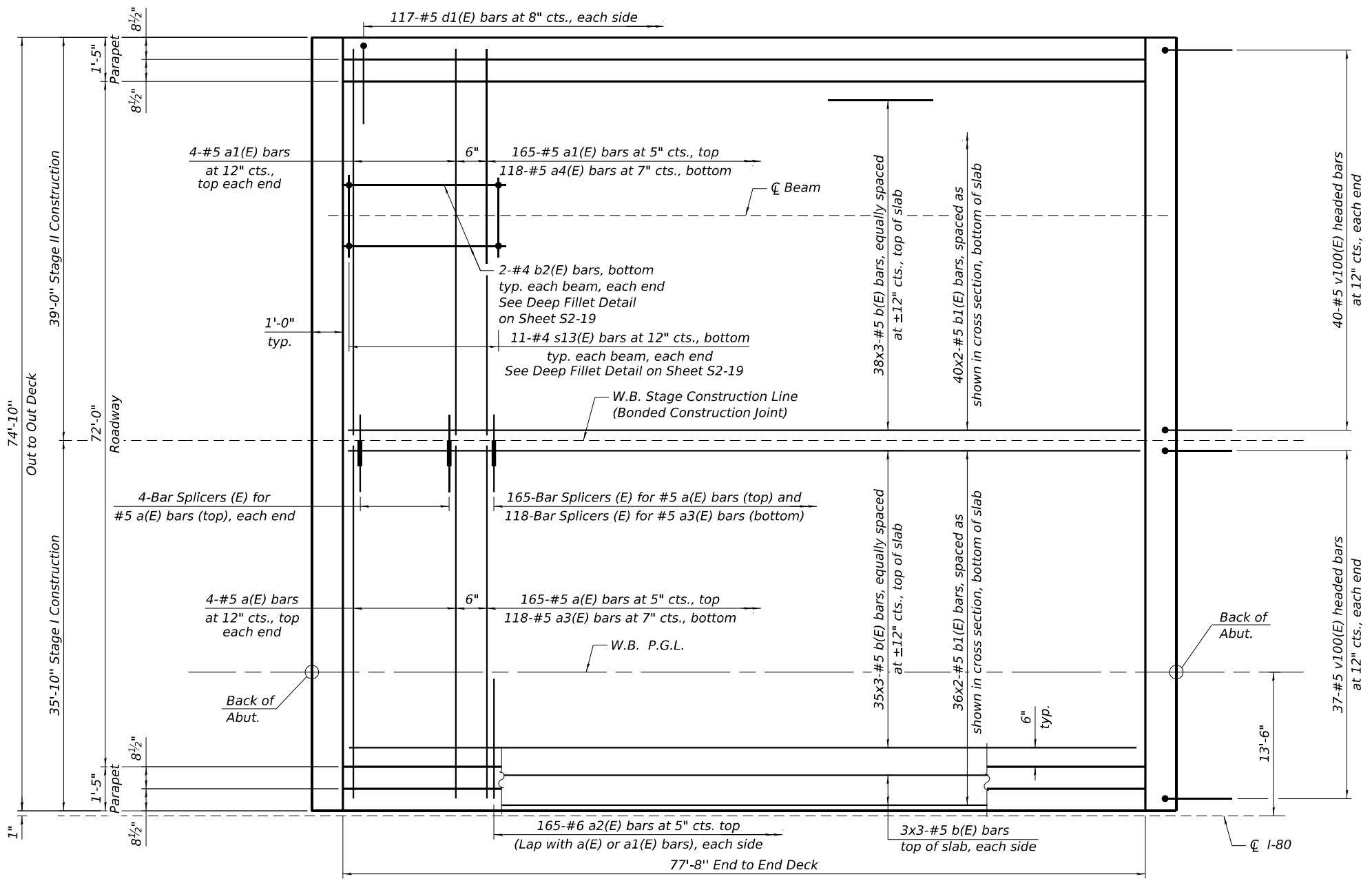
**TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

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I-80	FAI 80 22 BR	WILL	1201	671
CONTRACT NO. 62R89			ILLINOIS FED. AID PROJECT	

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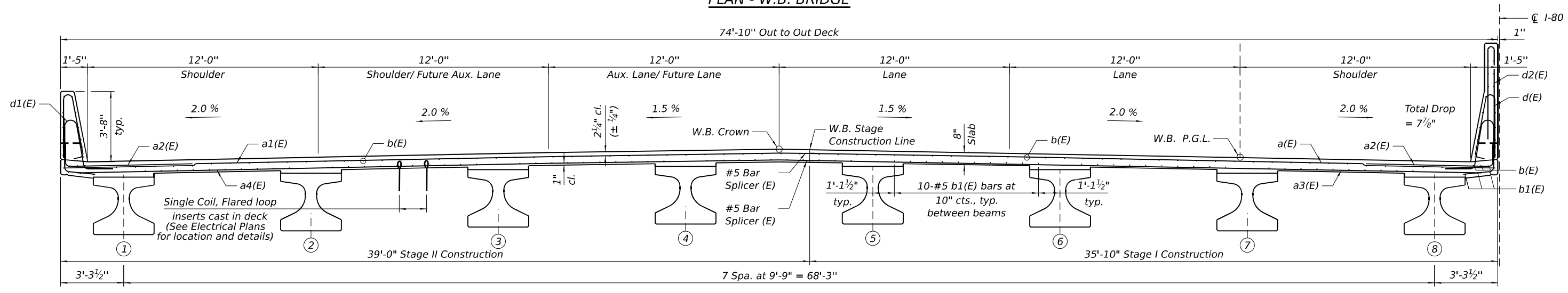


MINIMUM BAR LAP
 #5 bar = 3'-6"



PLAN - W.B. BRIDGE

Notes:
 See sheets S2-18 and S2-19 of S2-46 for superstructure details and Bill of Material.
 Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See sheet S2-38 of S2-46 for Bar Splicer details.



CROSS SECTION
 (Looking East)

(Sheet 1 of 2)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

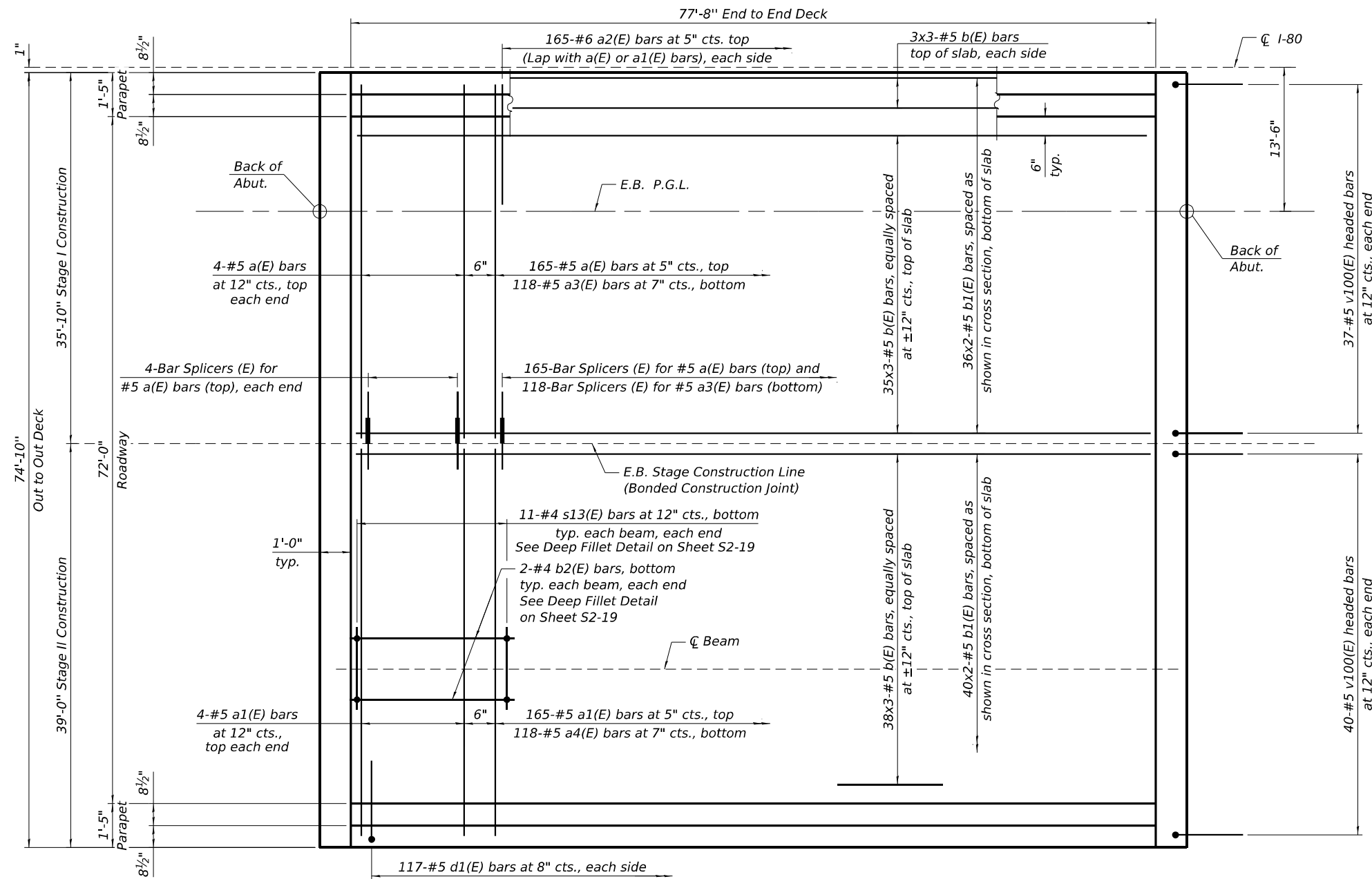
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STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

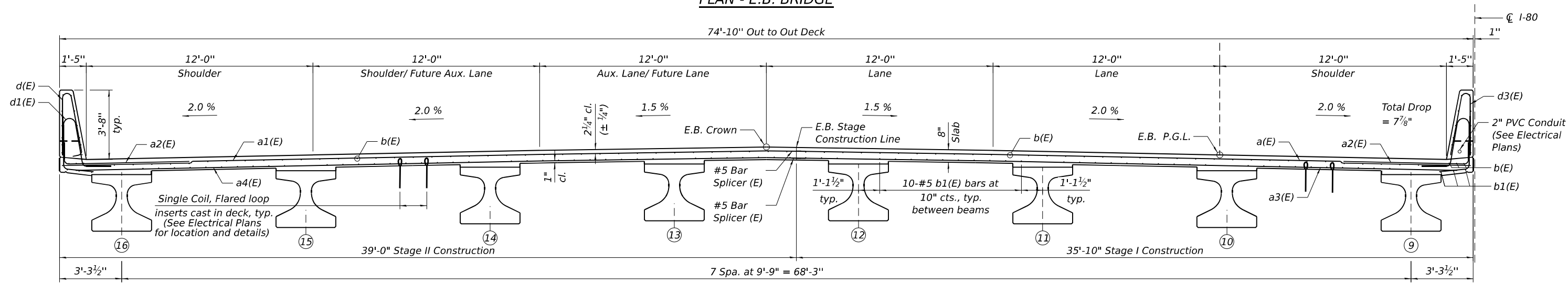
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MINIMUM BAR LAP
 #5 bar = 3'-6"



PLAN - E.B. BRIDGE



CROSS SECTION
 (Looking West)

(Sheet 2 of 2)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

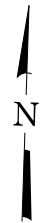
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN AND CROSS SECTION - E.B.
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

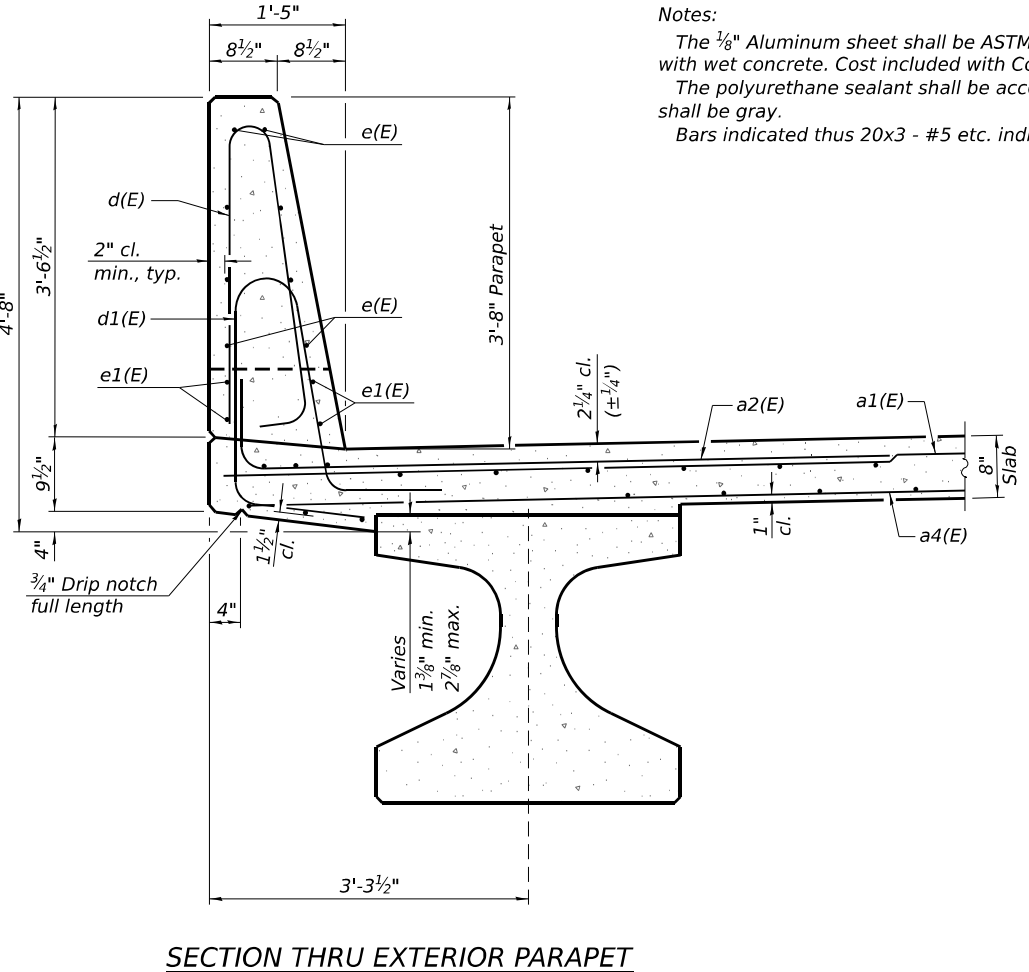
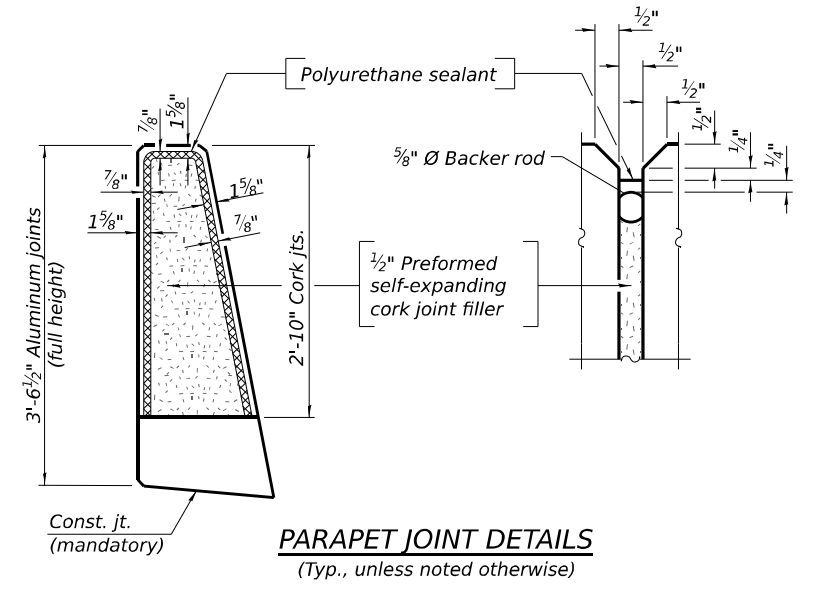
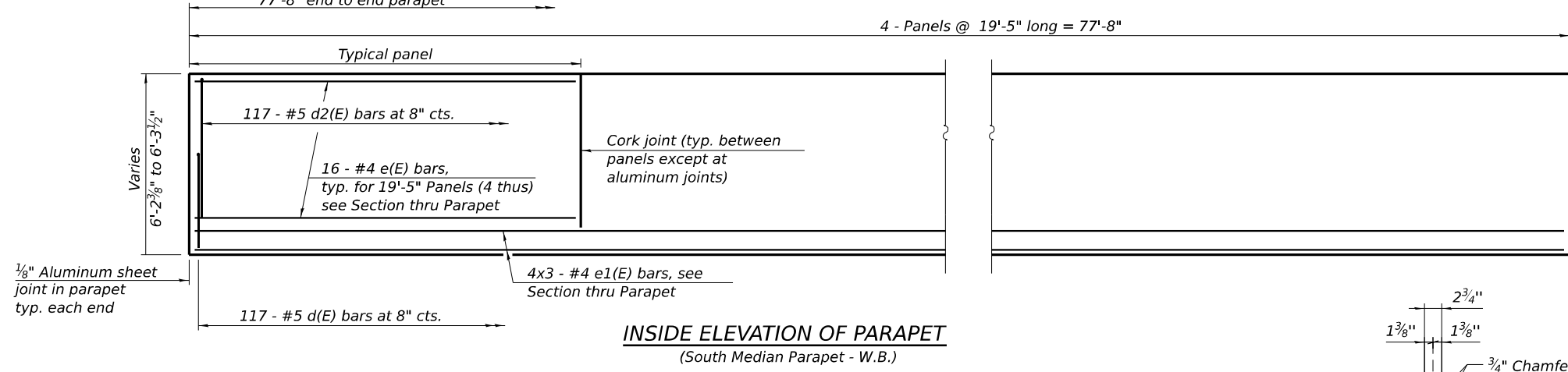
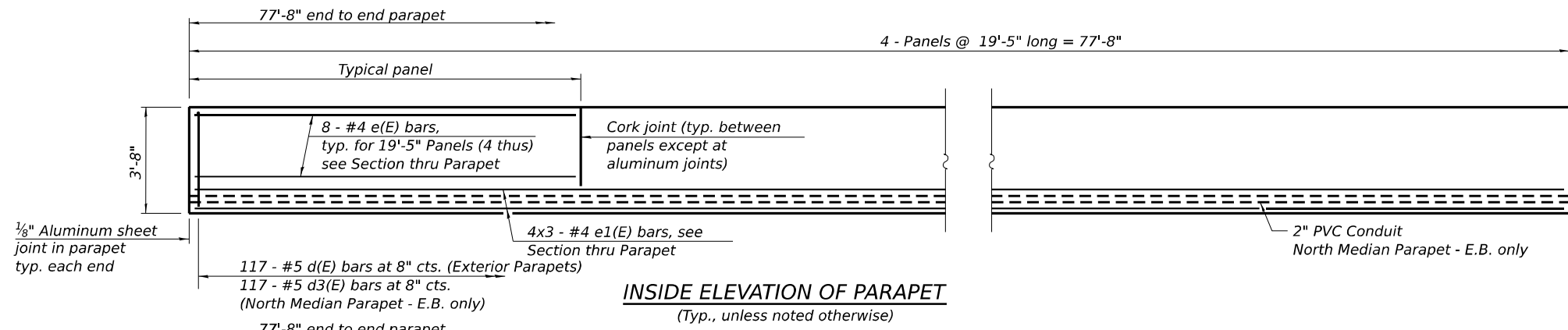
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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62R89				

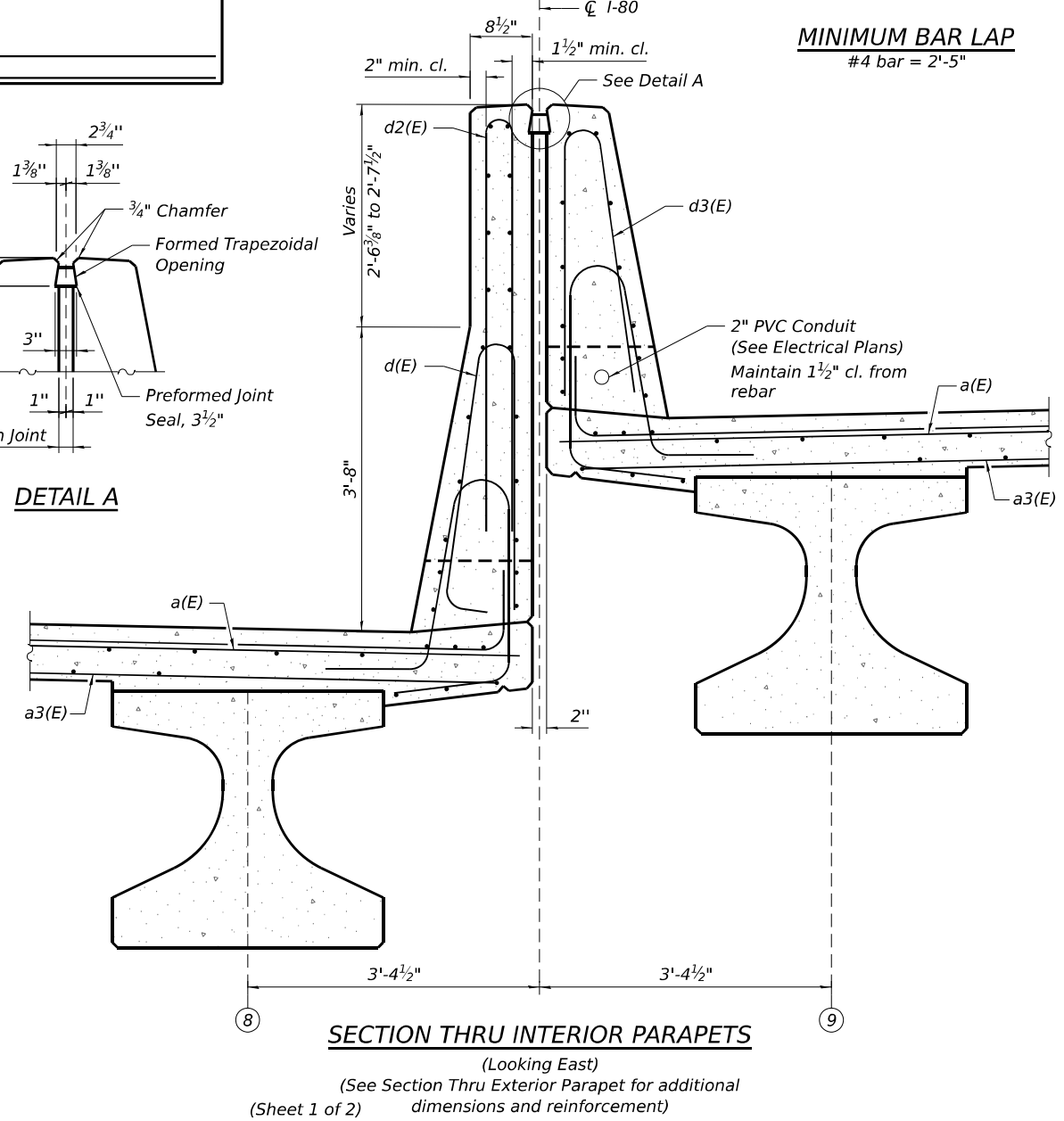
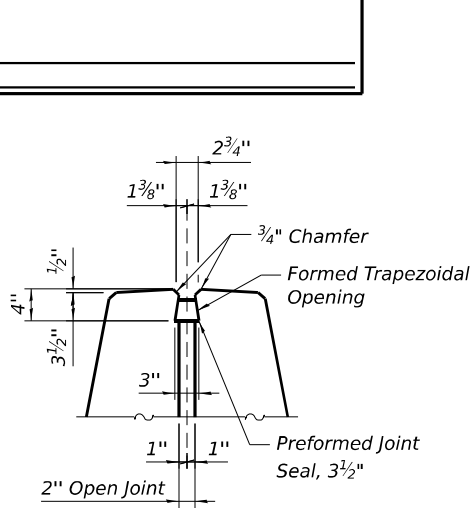
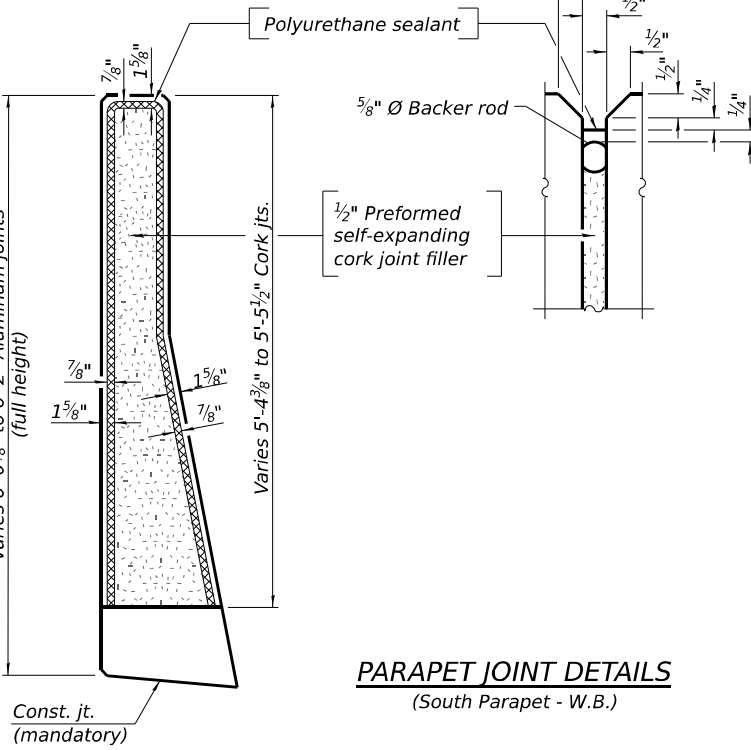
Notes:
 See sheets S2-18 and S2-19 of S2-46 for superstructure details and Bill of Material.
 Bars indicated thus 20x3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 See sheet S2-38 of S2-46 for Bar Splicer details.



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Notes:
 The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
 The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
 Bars indicated thus 20x3 - #5 etc. indicates 20 lines of bars with 3 lengths per line.



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



USER NAME =	DESIGNED - MK	REVISIONS
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PLOT DATE =	DRAWN - MK	REVISIONS
	CHECKED - DD	REVISIONS

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

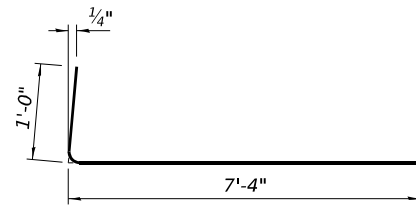
PARAPET ELEVATIONS AND SUPERSTRUCTURE DETAILS
 STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62R89				

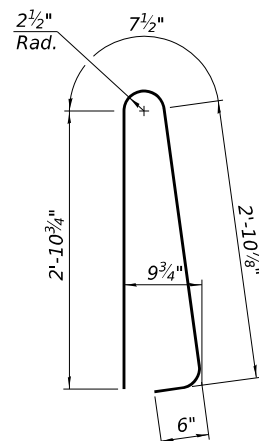
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ILLINOIS FED. AID PROJECT

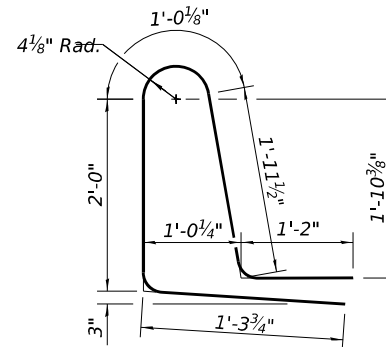
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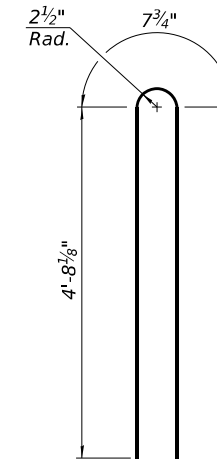
BAR a2(E)



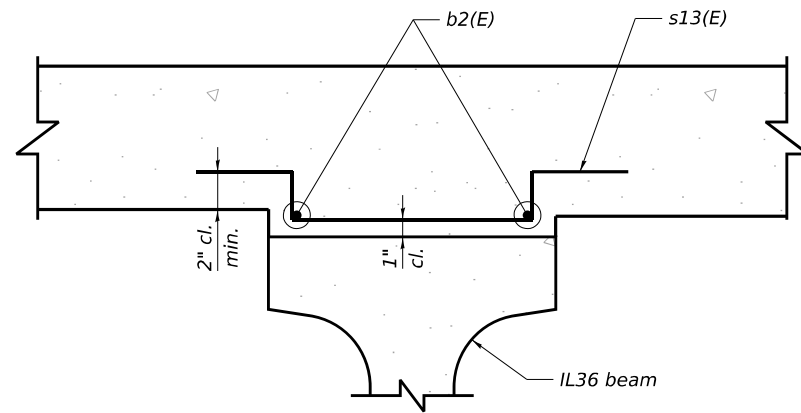
BAR d(E)



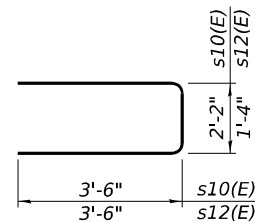
BAR d1(E)



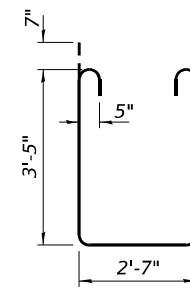
BAR d2(E)



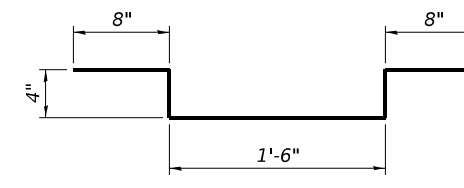
DEEP FILLET DETAIL



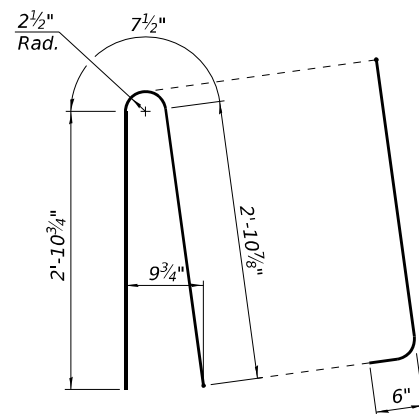
BARS s10(E) & s12(E)



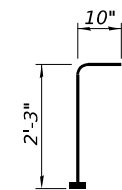
BAR s11(E)



BAR s13(E)



BAR d3(E)



**BAR v100(E)
(Headed)**

**TWO SUPERSTRUCTURES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	346	#5	35'-6"	—
a1(E)	346	#5	38'-8"	—
a2(E)	660	#6	8'-4"	—
a3(E)	236	#5	35'-0"	—
a4(E)	236	#5	38'-2"	—
b(E)	474	#5	28'-2"	—
b1(E)	304	#5	40'-5"	—
b2(E)	64	#4	10'-0"	—
d(E)	351	#5	7'-0"	—
d1(E)	468	#5	7'-6"	—
d2(E)	117	#5	10'-0"	—
d3(E)	117	#5	7'-0"	—
e(E)	160	#4	19'-1"	—
e1(E)	48	#4	27'-5"	—
m10(E)	16	#6	35'-6"	—
m11(E)	48	#6	8'-5"	—
m12(E)	16	#6	2'-5"	—
m13(E)	24	#6	6'-3"	—
m14(E)	8	#6	1'-5"	—
m15(E)	64	#5	4'-0"	—
m16(E)	16	#6	38'-8"	—
m17(E)	8	#6	2'-6"	—
m18(E)	4	#6	1'-4"	—
m19(E)	8	#6	5'-8"	—
m20(E)	4	#6	4'-6"	—
s10(E)	228	#5	9'-2"	—
s11(E)	228	#5	10'-7"	—
s12(E)	128	#5	8'-4"	—
s13(E)	352	#4	3'-6"	—
v100(E)	308	#5	3'-1"	—
Concrete Superstructure		Cu. Yds.	511.8	
Reinforcement Bars, Epoxy Coated		Pound	102,140	
Protective Coat		Sq. Yd.	1,420	
Preformed Joint Seal 3 1/2"		Foot	78	
Bridge Deck Grooving		Sq. Yd.	1,209	

Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.

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

(Sheet 2 of 2)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

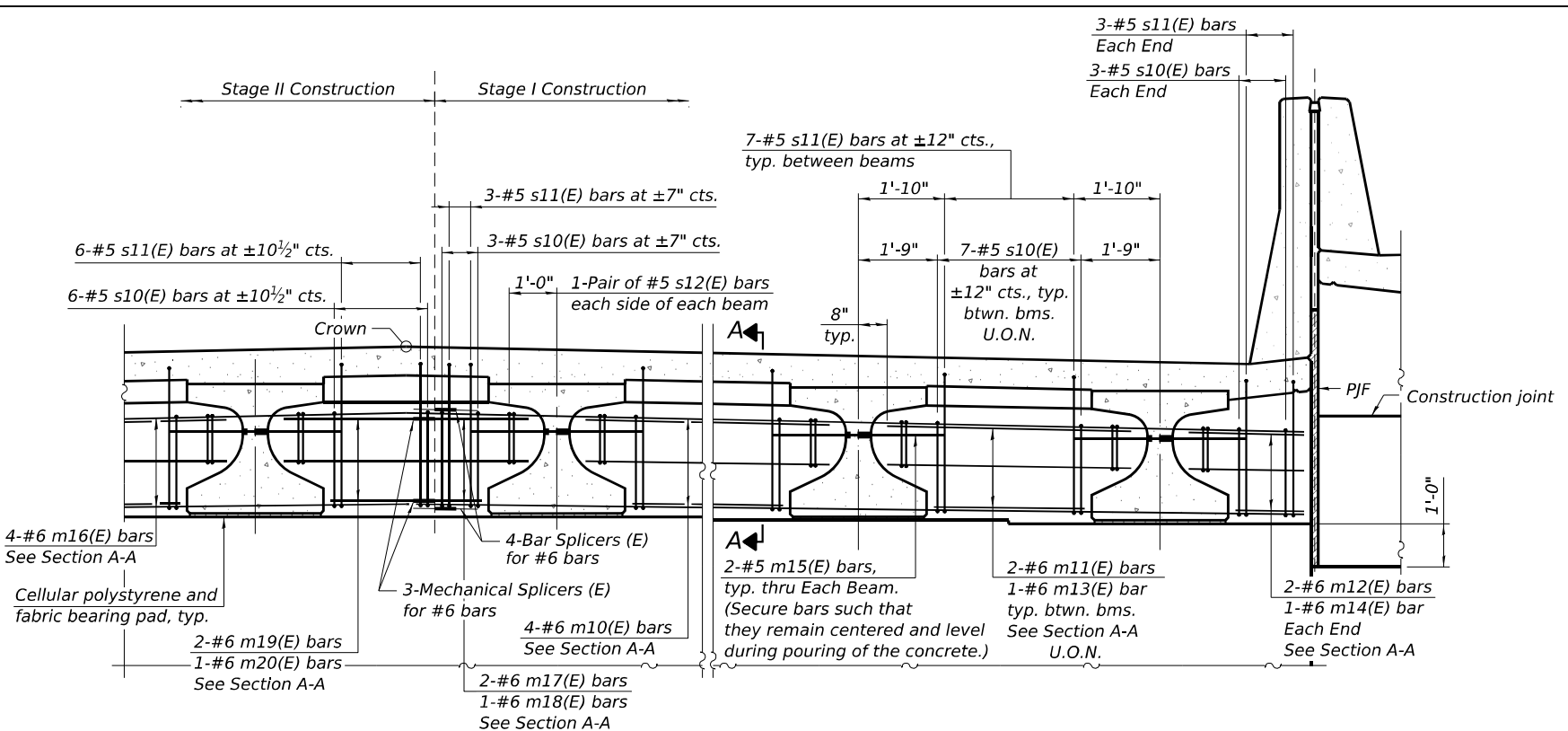
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET ELEVATIONS AND SUPERSTRUCTURE DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

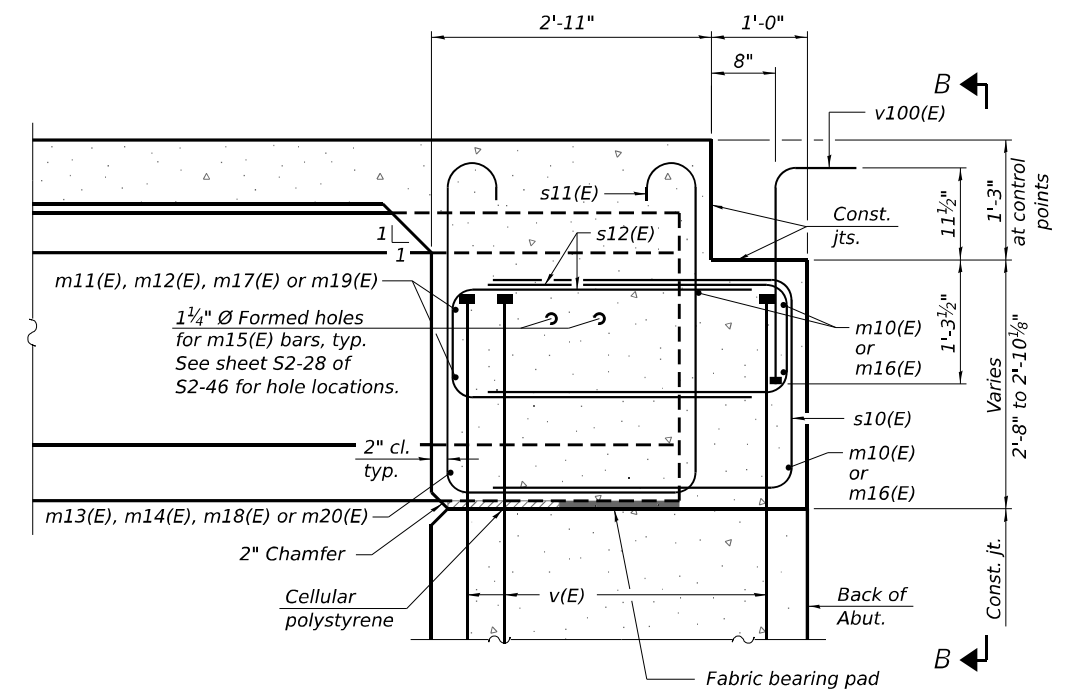
SHEET S2-19 OF S2-46 SHEETS

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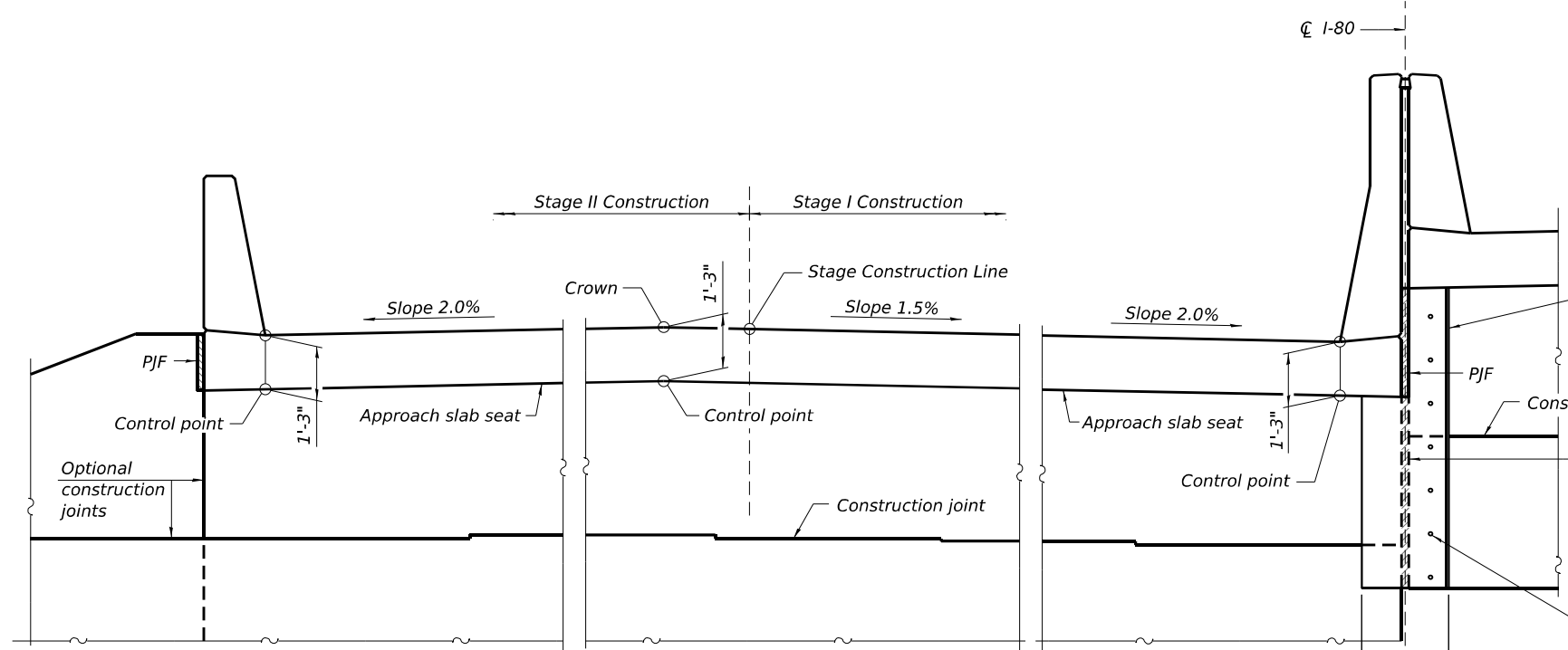


DIAPHRAGM AT ABUTMENT

(W.B. East Abutment looking East shown; other abutments similar)

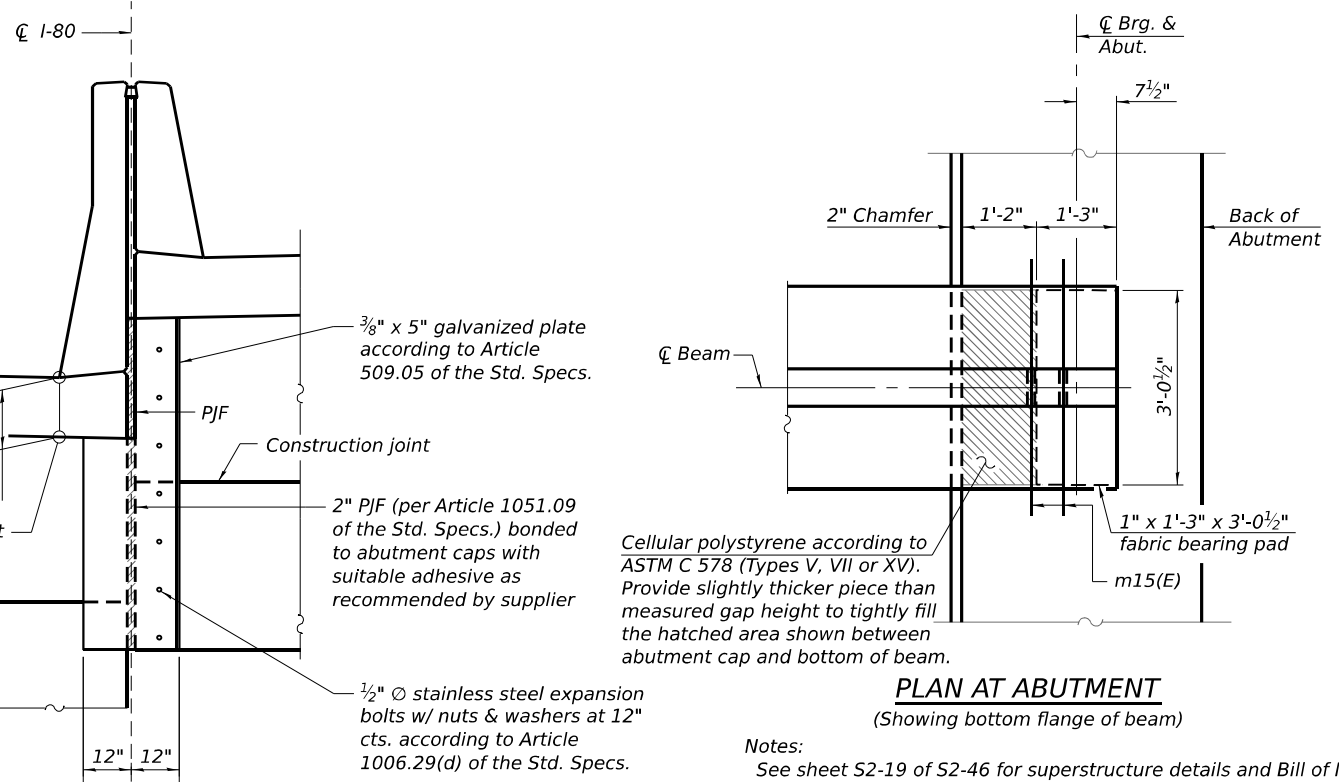


SECTION A-A



VIEW B-B

(W.B. East Abutment looking East shown; other abutments similar)



PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:
 See sheet S2-19 of S2-46 for superstructure details and Bill of Material.
 See sheet S2-21 thru S2-24 of S2-46 for P.J.F. details.
 The approach slab seat shall have a constant slope determined from the control points shown.
 Cost of cellular polystyrene is included with Concrete Superstructure.
 See sheet S2-38 of S2-46 for Bar Splicer and Mechanical Splicer details.
 Cost of fabric reinforced elastomeric mat, galvanized plate, stainless steel expansion bolts with nuts & washers and installation are included with Concrete Superstructure.
 U.O.N. = Unless Otherwise Noted



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

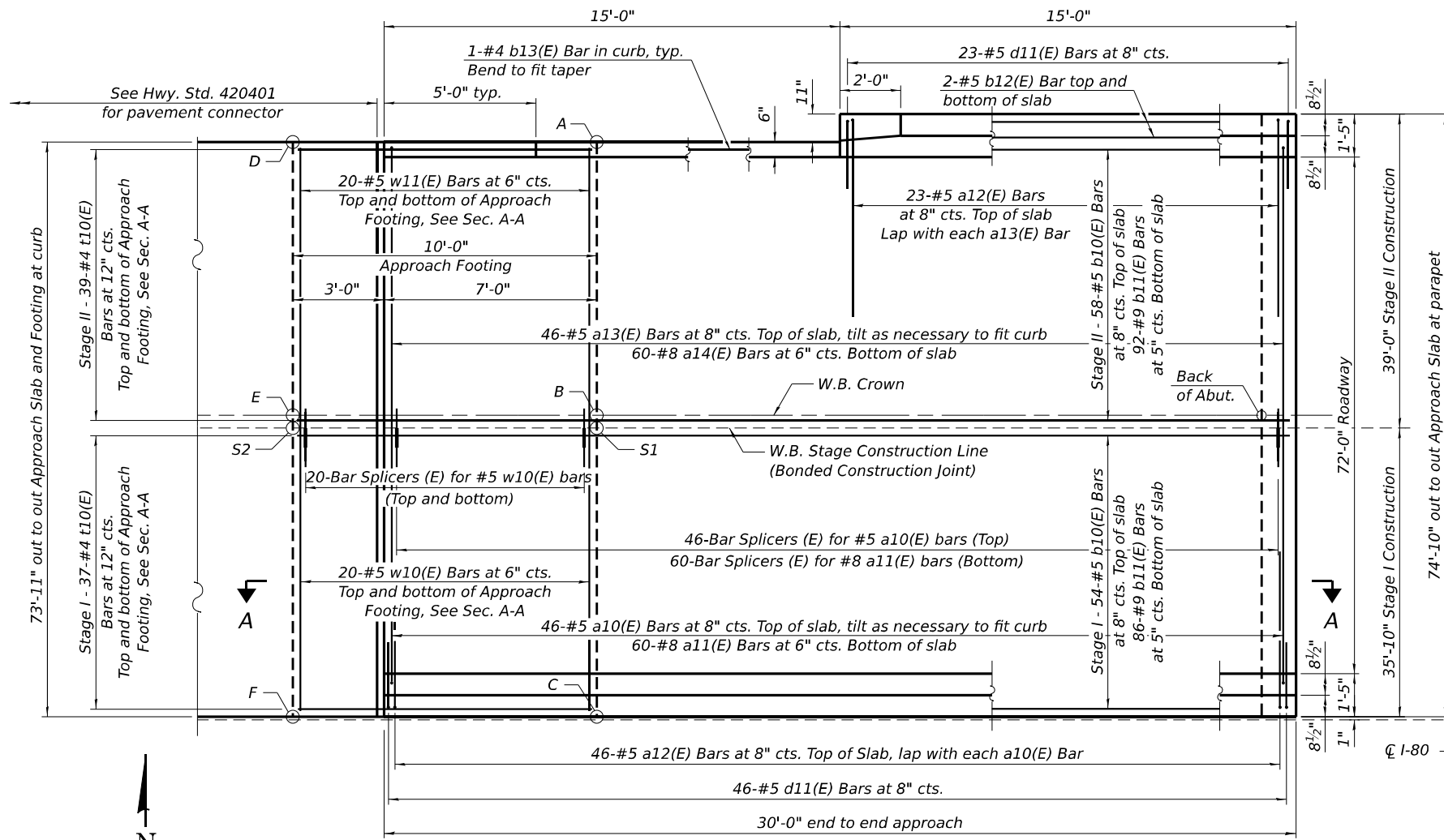
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIAPHRAGM DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-20 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	676
			CONTRACT NO. 62R89	
		ILLINOIS FED. AID PROJECT		

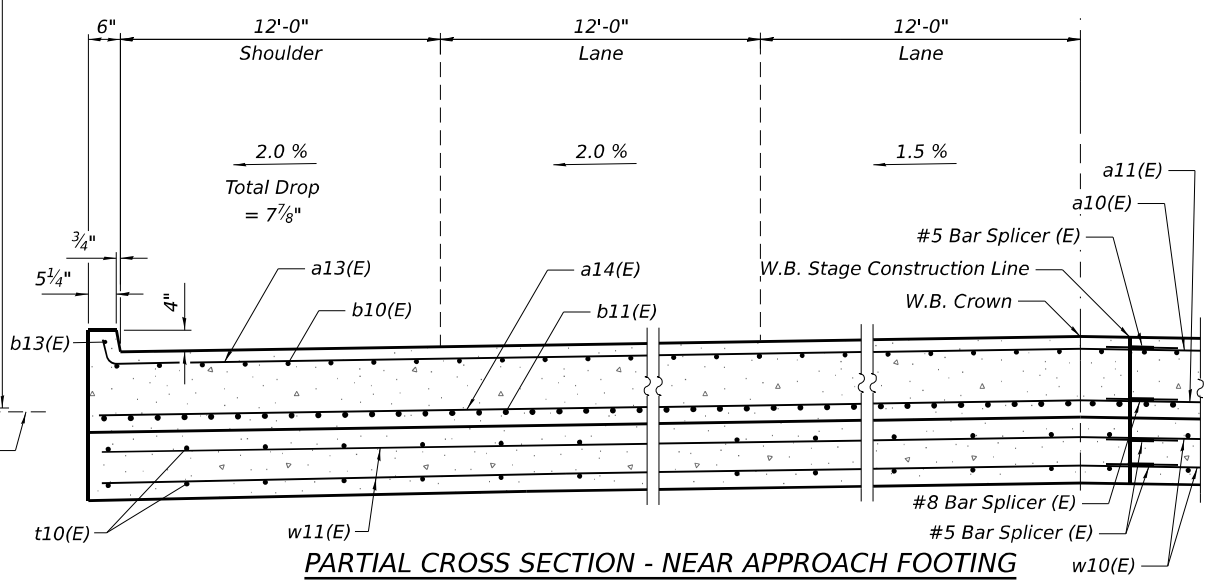
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WEST APPROACH PLAN - WESTBOUND

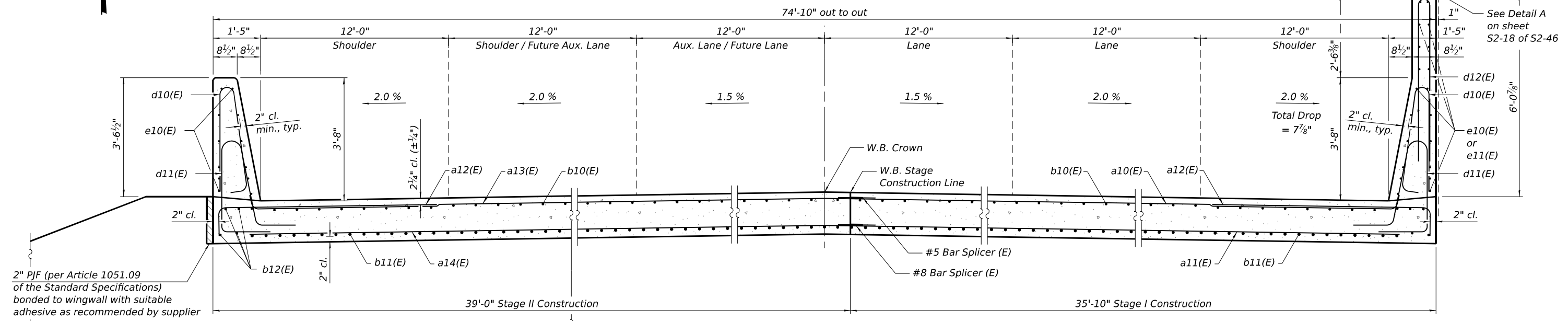
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

West Approach		
Point/Location	Top	Bottom
A	641.23	640.40
B	641.90	641.07
S1	641.87	641.04
C	641.21	640.38
D	641.34	640.51
E	642.01	641.18
S2	641.98	641.15
F	641.32	640.49



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING

(Looking East)



CROSS SECTION
(Looking East)

(Sheet 1 of 5)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

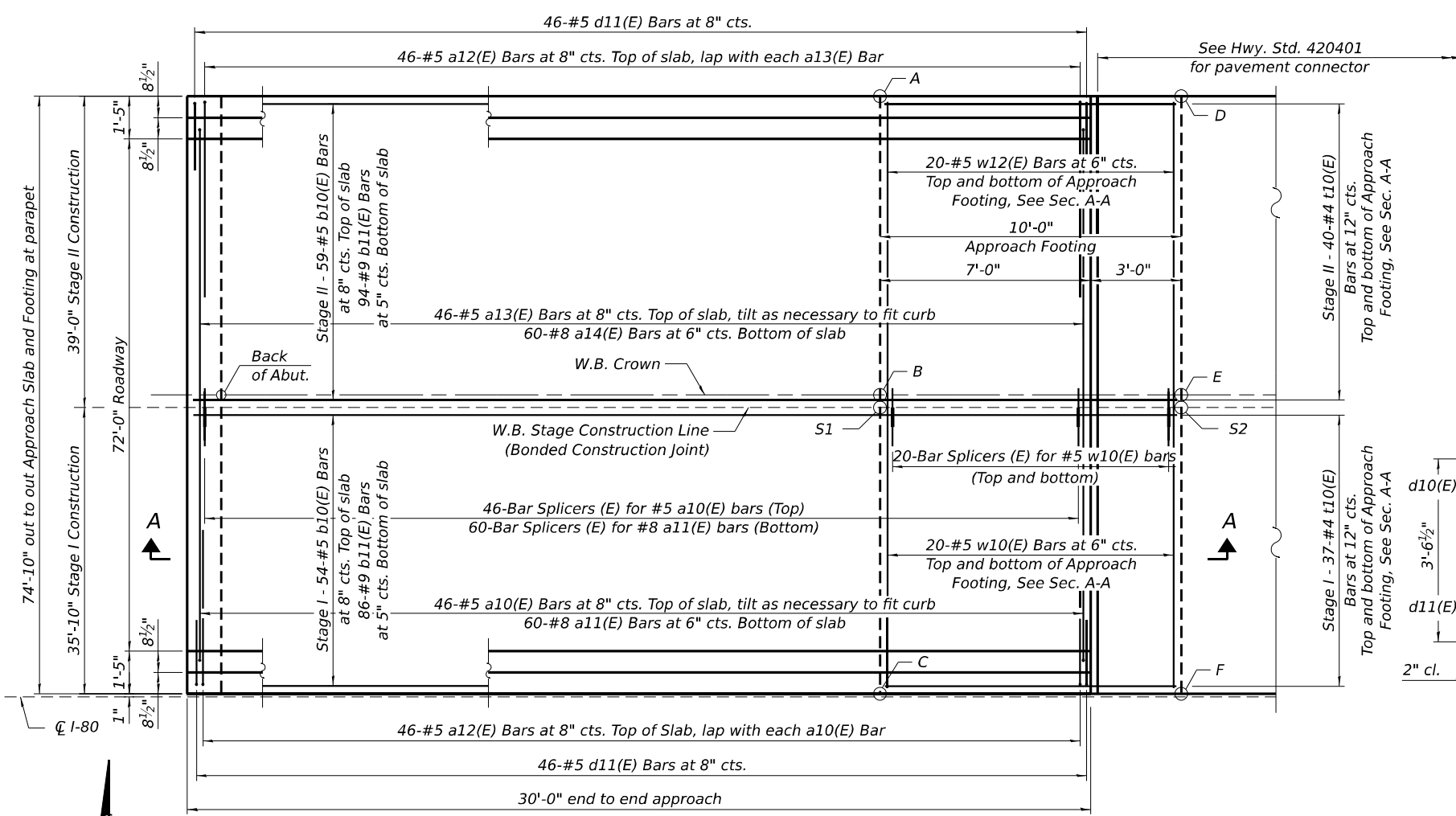
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	677
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

SHEET S2-21 OF S2-46 SHEETS

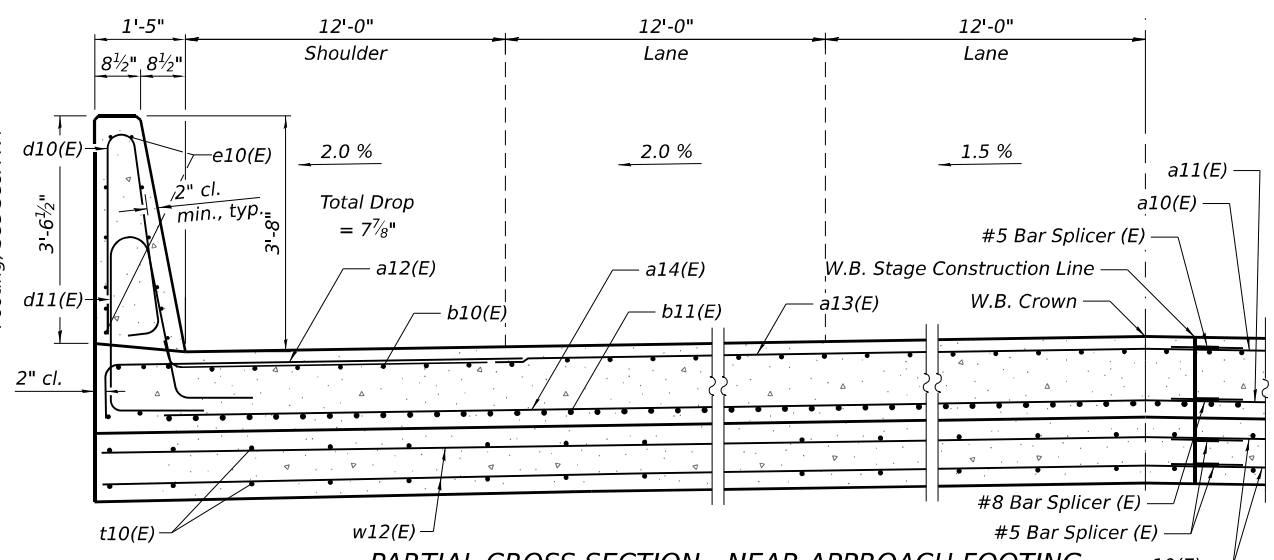
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EAST APPROACH PLAN - WESTBOUND

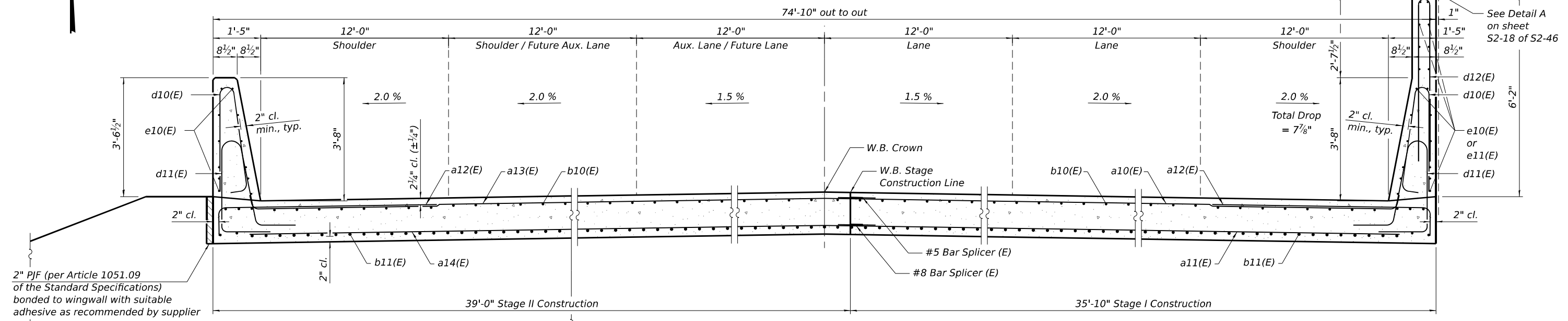
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

East Approach		
Point/Location	Top	Bottom
A	639.61	638.78
B	640.30	639.47
S1	640.27	639.44
C	639.61	638.78
D	639.46	638.63
E	640.15	639.32
S2	640.12	639.29
F	639.46	638.63



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING

(Looking East)



CROSS SECTION
(Looking East)

2" P.J.F. (per Article 1051.09 of the Standard Specifications) bonded to wingwall with suitable adhesive as recommended by supplier

See Detail A on sheet S2-18 of S2-46

(Sheet 2 of 5)



USER NAME =	DESIGNED - MK	REVISED -
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PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

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DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

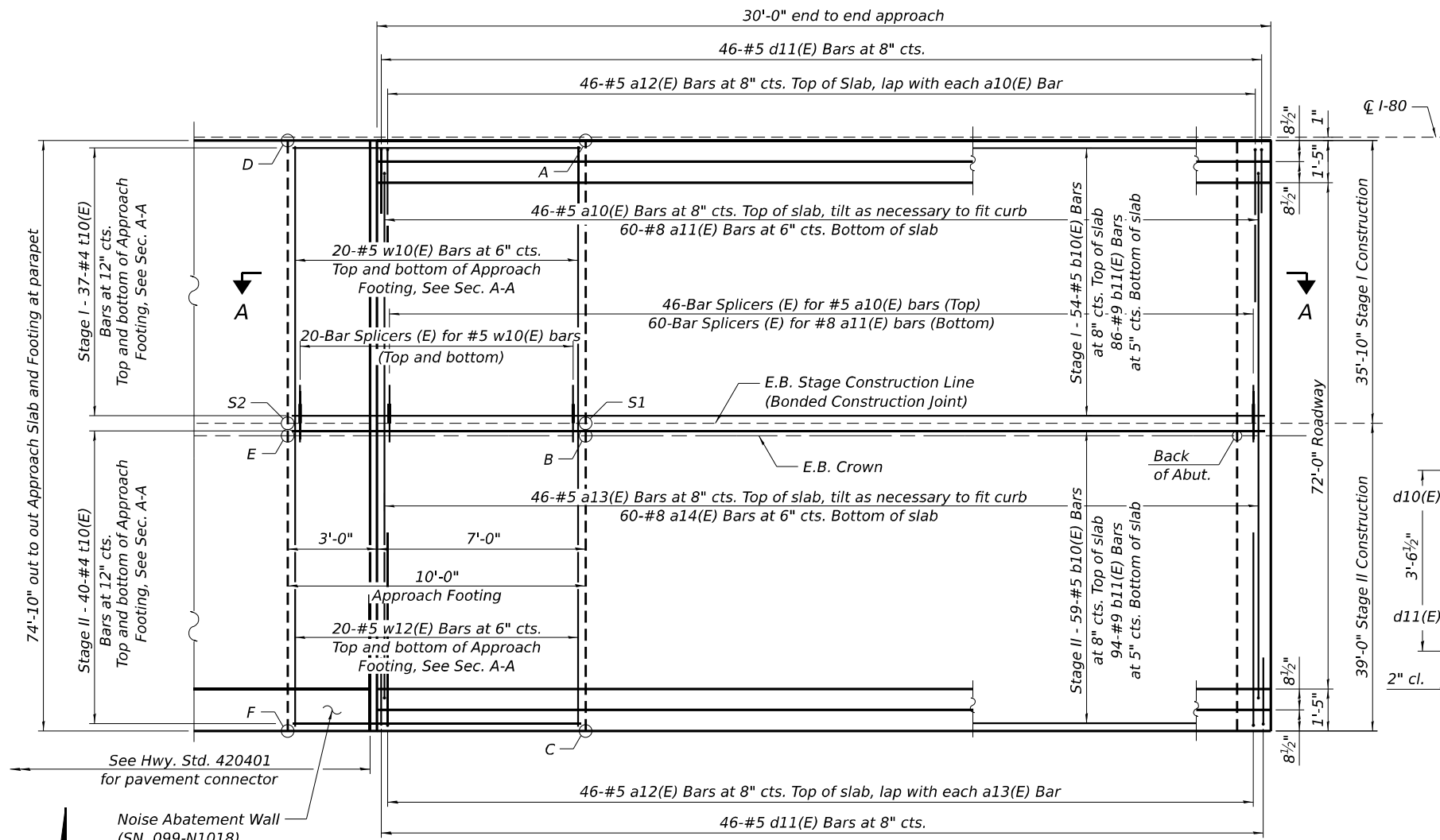
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	678
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

SHEET S2-22 OF S2-46 SHEETS

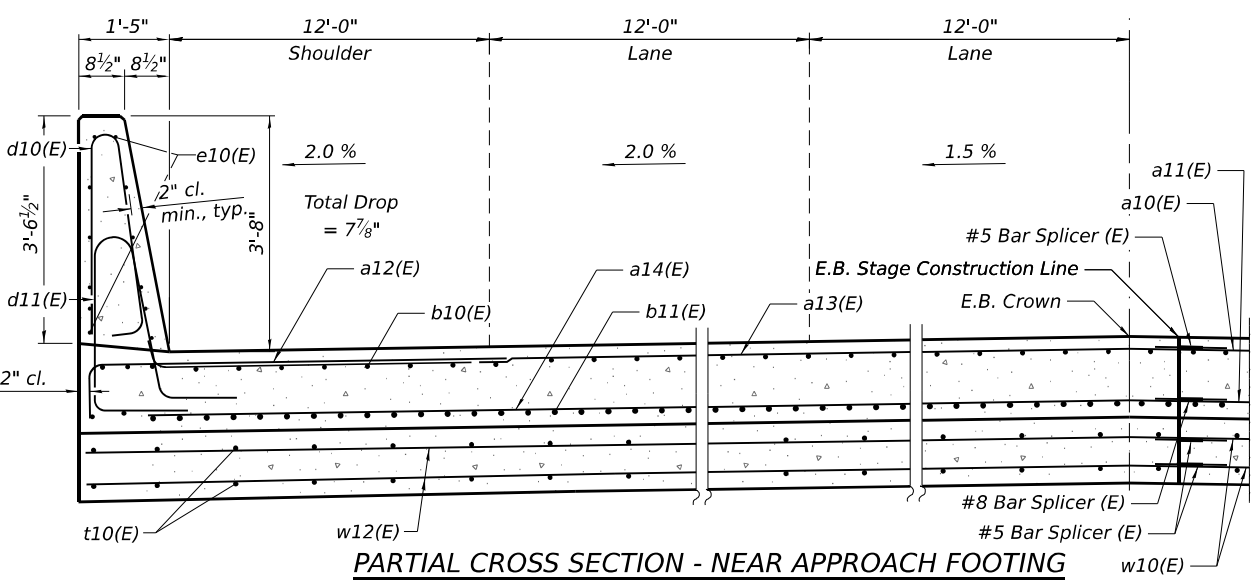
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**TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING**

West Approach		
Point/Location	Top	Bottom
A	643.71	642.88
S1	644.37	643.54
B	644.40	643.57
C	643.71	642.88
D	643.80	642.97
S2	644.46	643.63
E	644.49	643.66
F	643.80	642.97

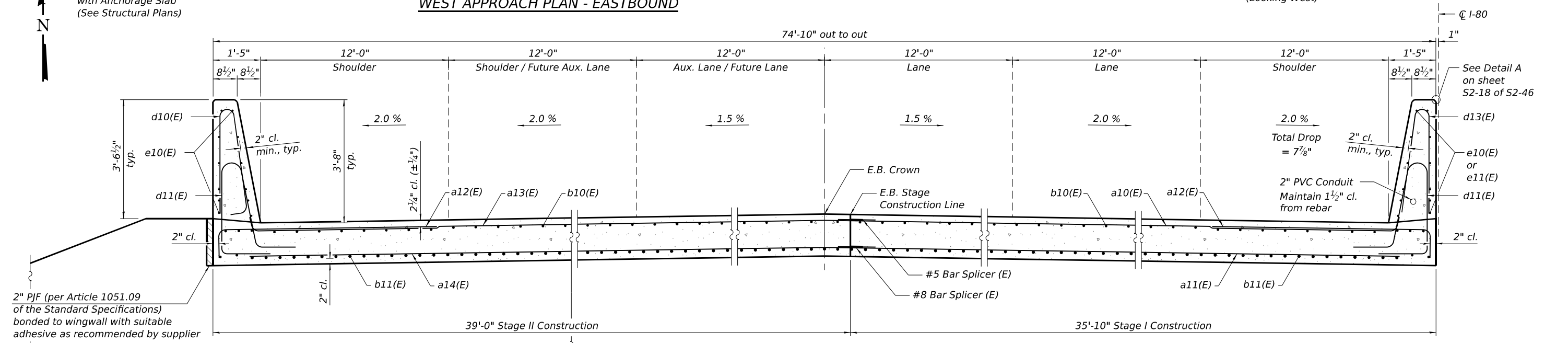


WEST APPROACH PLAN - EASTBOUND



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING

(Looking West)



CROSS SECTION
(Looking West)

(Sheet 3 of 5)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

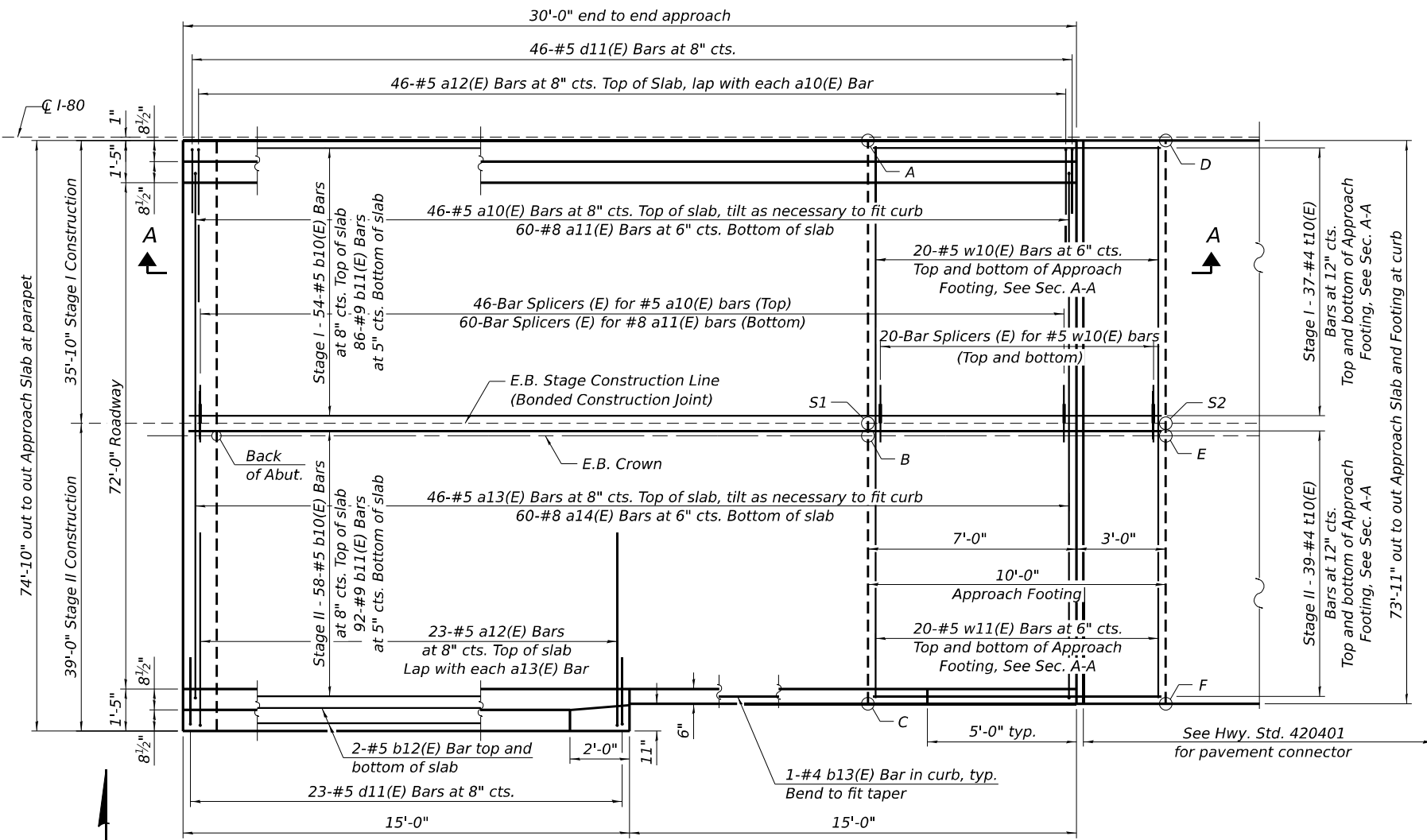
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62R89				
ILLINOIS / FED. AID PROJECT				

SHEET S2-23 OF S2-46 SHEETS

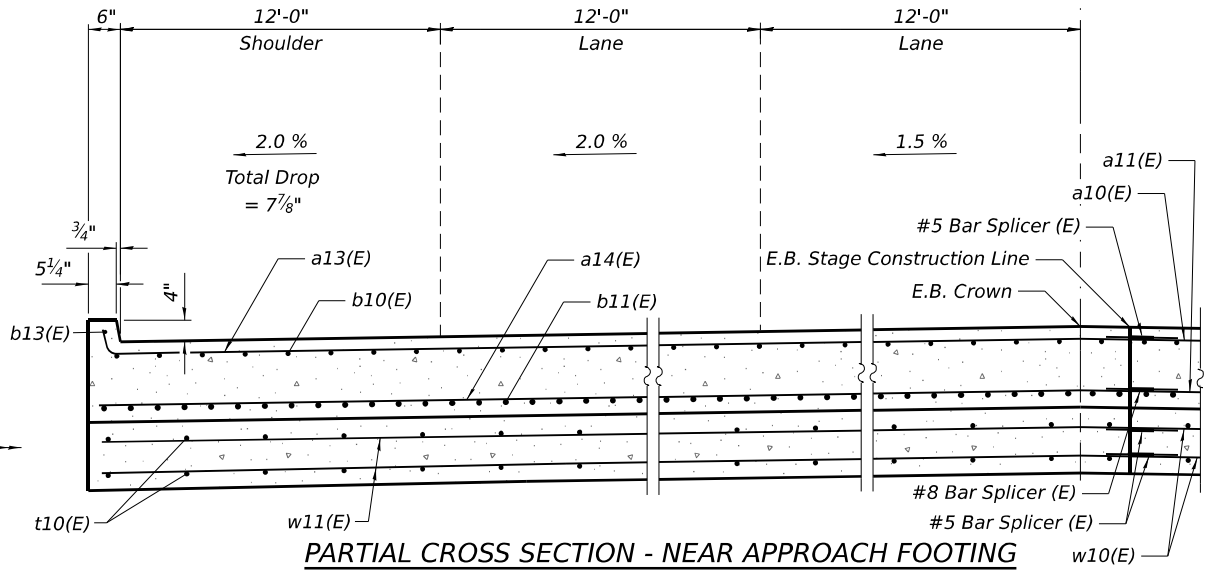
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EAST APPROACH PLAN - EASTBOUND

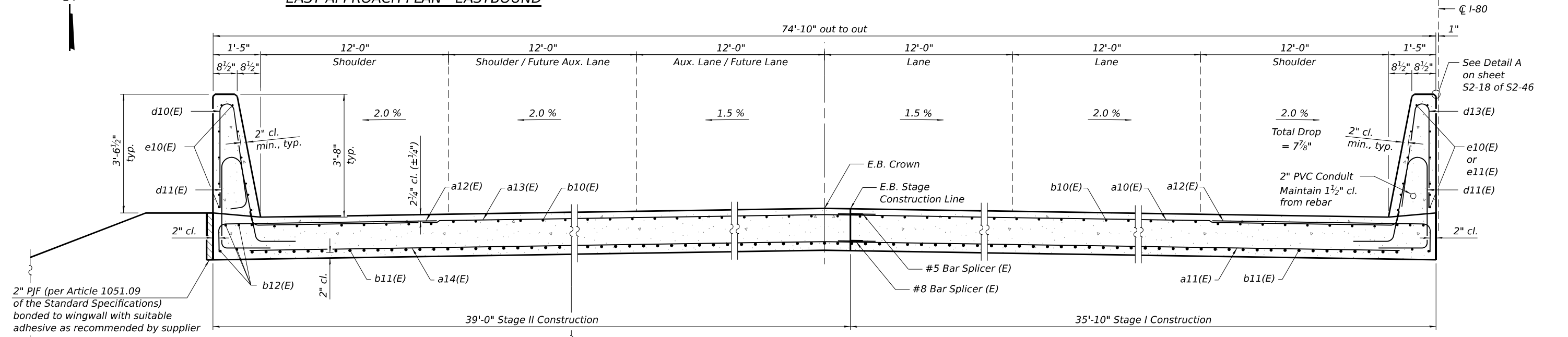
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

East Approach		
Point/Location	Top	Bottom
A	642.26	641.43
S1	642.92	642.09
B	642.95	642.12
C	642.28	641.45
D	642.11	642.28
S2	642.77	641.94
E	642.80	641.97
F	642.13	641.30



PARTIAL CROSS SECTION - NEAR APPROACH FOOTING

(Looking West)



CROSS SECTION

(Looking West)

(Sheet 4 of 5)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
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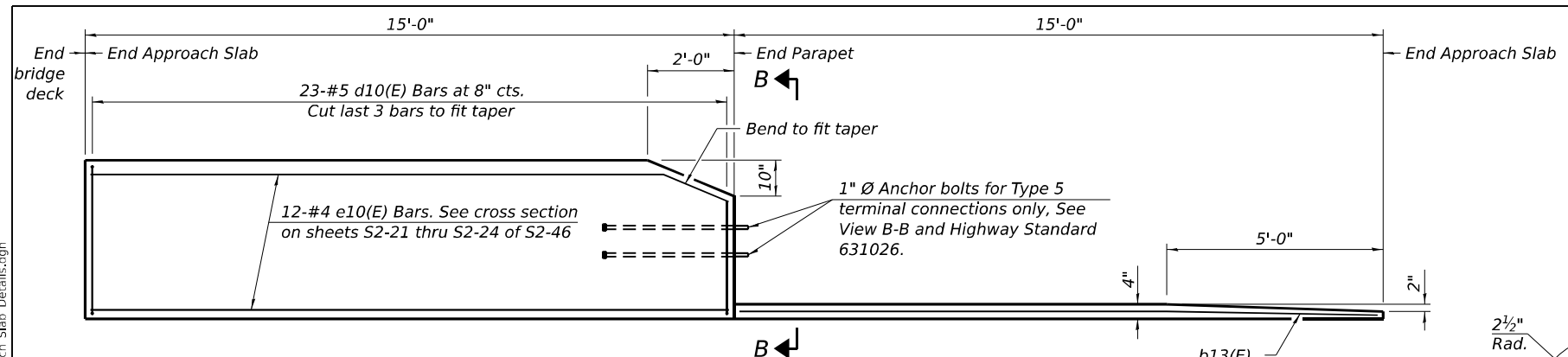
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS
 STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

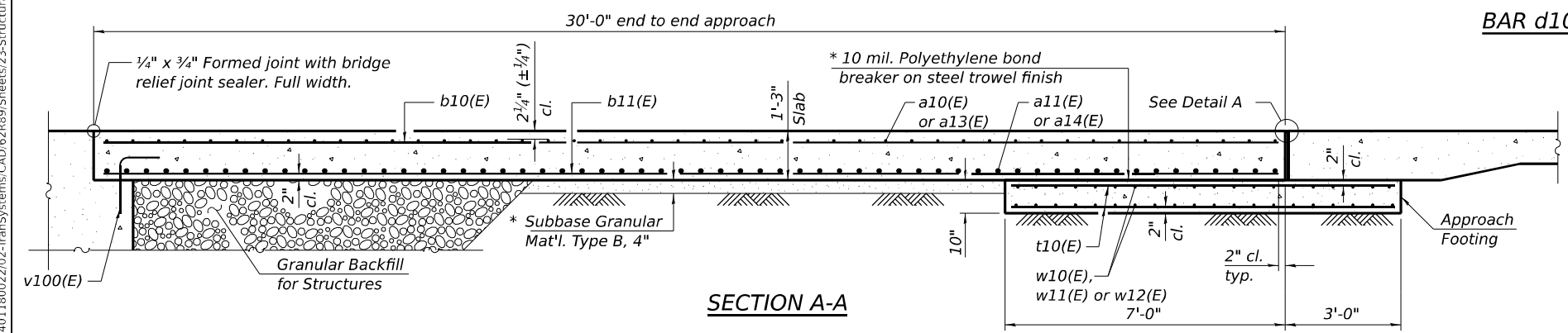
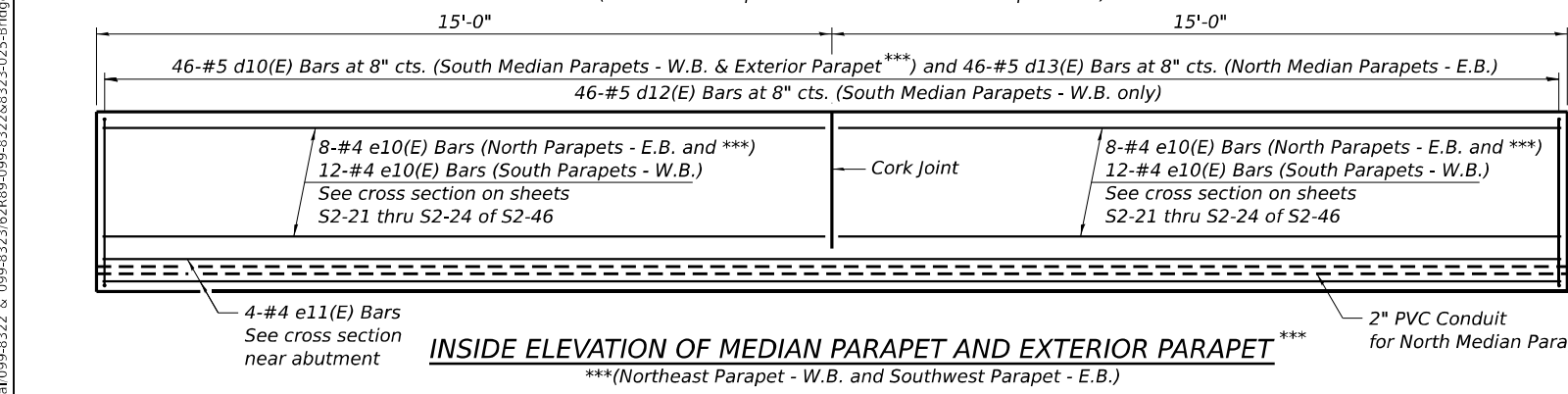
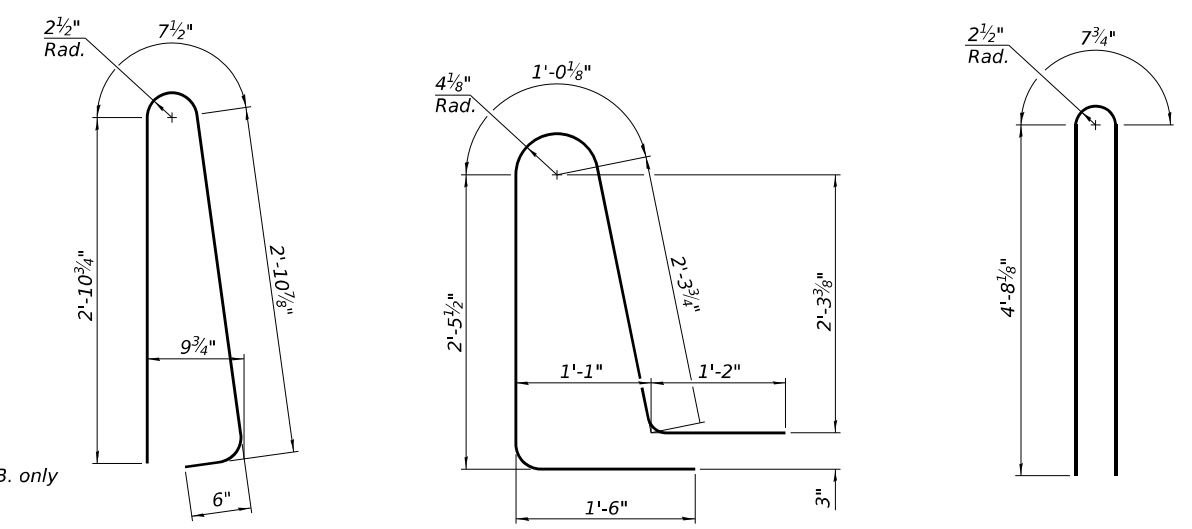
SHEET S2-24 OF S2-46 SHEETS

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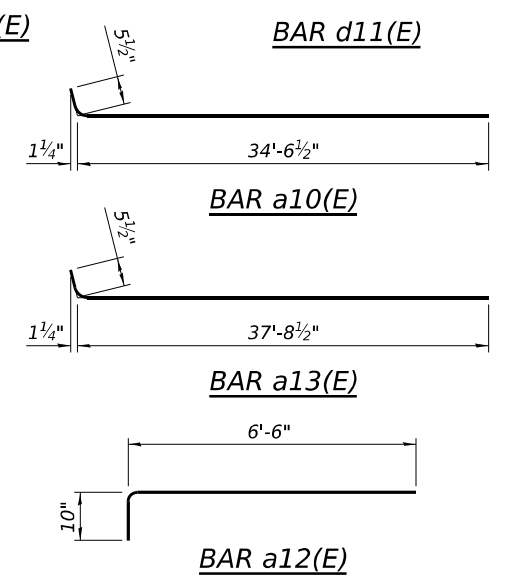


INSIDE ELEVATION OF EXTERIOR PARAPET AND CURB
(Northwest Parapet - W.B. and Southeast Parapet - E.B.)

Notes:
 The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.
 Parapet concrete shall be paid for as Concrete Superstructure.
 Approach slab shall be paid for as Concrete Superstructure (Approach Slab).
 Approach footing concrete shall be paid for as Concrete Structures.
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
 Cost of excavation for approach footing included with Concrete Structures.
 For Granular Backfill for Structures details, see sheet S2-2 of S2-46.
 See sheet S2-18 of S2-46 for parapet joint details.
 See sheet S2-38 of S2-46 for Bar Splicer details.

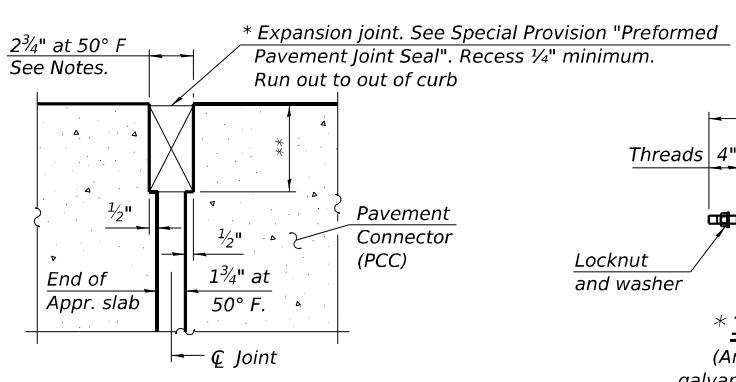


SECTION A-A

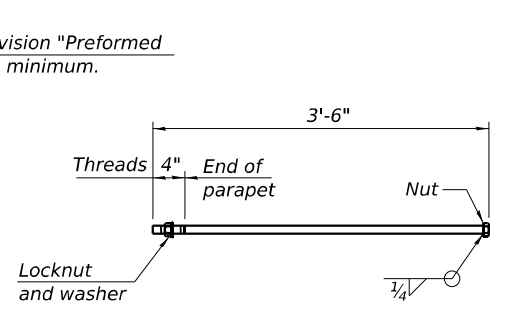


FOUR APPROACHES BILL OF MATERIAL

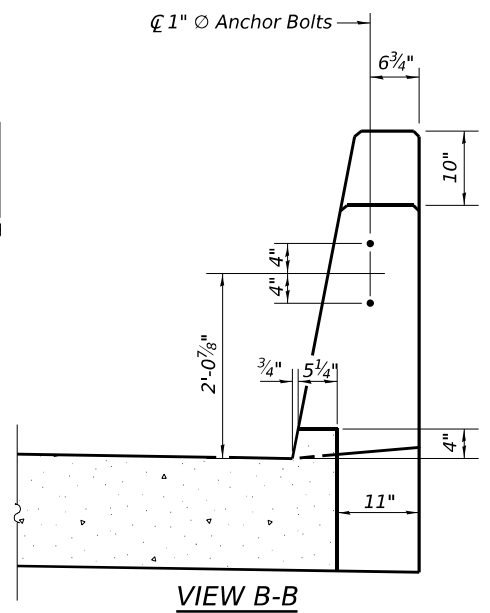
Bar	No.	Size	Length	Shape
a10(E)	184	#5	35'-0"	
a11(E)	240	#8	34'-7"	
a12(E)	322	#5	7'-4"	
a13(E)	184	#5	38'-2"	
a14(E)	240	#8	37'-9"	
b10(E)	450	#5	29'-8"	
b11(E)	716	#9	29'-8"	
b12(E)	8	#5	14'-8"	
b13(E)	2	#4	14'-8"	
d10(E)	230	#5	7'-0"	
d11(E)	322	#5	8'-6"	
d12(E)	92	#5	10'-0"	
d13(E)	92	#5	7'-0"	
e10(E)	136	#4	14'-8"	
e11(E)	24	#4	29'-8"	
t10(E)	612	#4	9'-8"	
w10(E)	160	#5	35'-6"	
w11(E)	80	#5	37'-9"	
w12(E)	80	#5	38'-8"	
Concrete Superstructure		Cu. Yd.	33.9	
Concrete Superstructure (Approach Slab)		Cu. Yd.	415.6	
Concrete Structures		Cu. Yd.	91.8	
Reinforcement Bars, Epoxy Coated		Pound	173,370	
Protective Coat		Sq. Yd.	1,084	
Preformed Joint Seal 3 1/2"		Foot	60	
Bridge Deck Grooving		Sq. Yd.	934	



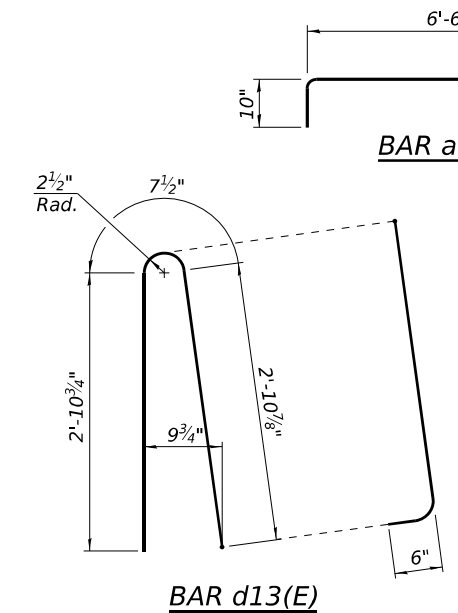
DETAIL A



*** 1" Ø ANCHOR BOLT**
 (Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)



VIEW B-B



BAR d13(E)

(Sheet 5 of 5)

* Cost included with Concrete Superstructure (Approach Slab).
 ** Per manufacturer recommendations

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-25 OF S2-46 SHEETS

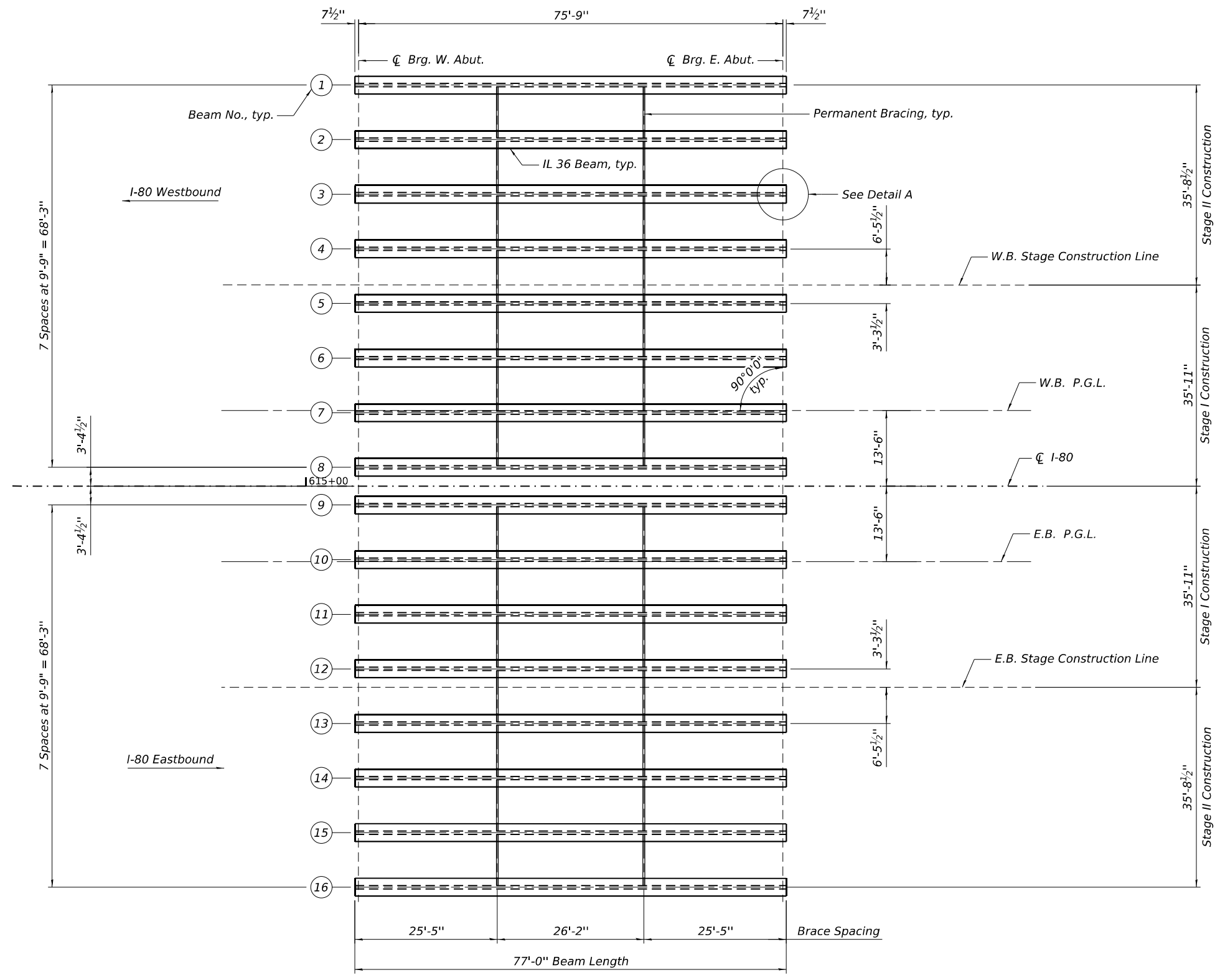
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	681
CONTRACT NO. 62R89				



USER NAME	DESIGNED	REVISIONS
=	- MK	-
	- DD	-
PLOT SCALE	DRAWN	REVISIONS
=	- MK	-
	- DD	-
PLOT DATE	CHECKED	REVISIONS
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ILLINOIS FED. AID PROJECT

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FRAMING PLAN

Notes:
 See Sheet S2-27 of S2-46 for Permanent Bracing
 Details, Detail A, Interior Beam Moment Table
 and Beam Reaction Table.



USER NAME =	DESIGNED - MK	REVISED -
	CHECKED - DD	REVISED -
PLOT SCALE =	DRAWN - MK	REVISED -
PLOT DATE =	CHECKED - DD	REVISED -

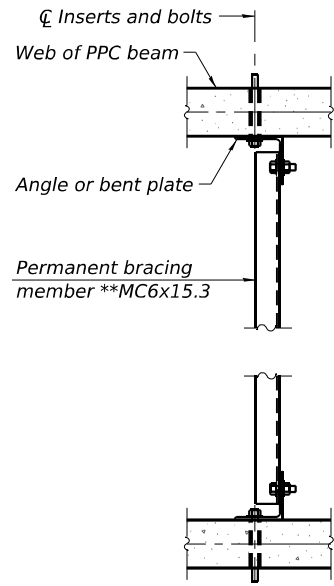
STATE OF ILLINOIS
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FRAMING PLAN
 STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

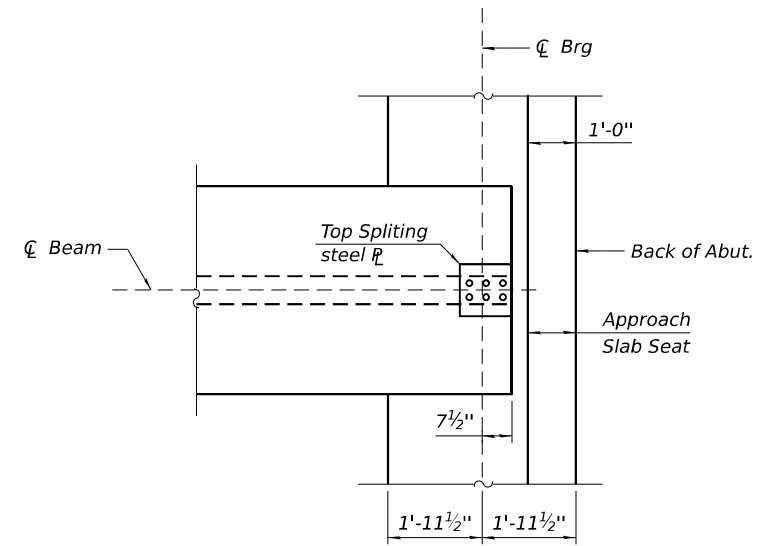
SHEET S2-26 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	682
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

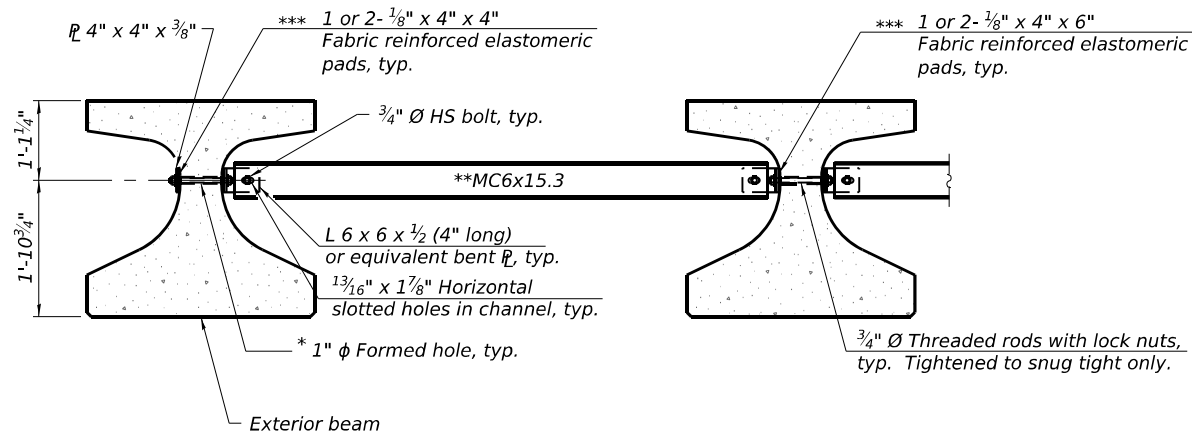
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PLAN
(When 90° bracing is specified)



DETAIL A



Notes:

All material for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted. Two hardened washers are required for each set of oversized holes.

All holes shall be 15/16" Ø unless otherwise noted. 5/16" x 3" x 3" plate washers are required over all slotted holes.

All bolts, threaded rods, and hardware shall be galvanized according to AASHTO M232.

Threaded rods shall be ASTM F 1554 Grade 55. Bracing shall be installed as beams are erected and tightened as soon as possible during erection.

Permanent bracing shall not be paid for separately, but shall be included in the cost of Furnishing and Erecting Precast Prestressed Concrete Beams.

* Fabricator shall locate to miss strands within permissible tolerances.

** Alternate MC6x18 channels are permitted to facilitate material acquisition.

*** Place pads as necessary to provide a flat mounting surface between the steel and concrete.

PERMANENT BRACING DETAILS FOR IL36 BEAMS

INTERIOR BEAM MOMENT TABLE		
0.5 Sp. 1		
I	(in ⁴)	124,639
I'	(in ⁴)	334,868
S _b	(in ³)	7,563
S _b '	(in ³)	12,230
S _t	(in ³)	6,385
S _t '	(in ³)	38,857
DC1	(k/ft)	1.894
MDC1	(k)	1,359
DC2	(k/ft)	0.143
MDC2	(k)	102
DW	(k/ft)	0.488
MDW	(k)	350
LLDF	(k)	0.784
M _L + I _M	(k)	1,489

GIRDER REACTION TABLE		
	Abut.	
	Interior	Exterior
LLDF	0.935	0.815
OCF	-	1.0
RDC1	(k) 71.7	65.8
RDC2	(k) 5.4	5.4
RDW	(k) 18.5	12.8
R _L	(k) 81.7	71.2
R _{IM}	(k) 19.5	17.0
R _{Total}	(k) 196.8	172.2

I: Non-composite moment of inertia of beam section (in.⁴).
 I': Composite moment of inertia of beam section (in.⁴).
 S_b: Non-composite section modulus for the bottom fiber of the prestressed beam (in.³).
 S_b': Composite section modulus for the bottom fiber of the prestressed beam (in.³).
 S_t: Non-composite section modulus for the top fiber of the prestressed beam (in.³).
 S_t': Composite section modulus for the top fiber of the prestressed beam (in.³).
 DC1: Un-factored non-composite dead load (kips/ft.).
 MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 M_L + I_M: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 LLDF: Live Load Distribution Factor.
 OCF: Obtuse Correction Factor.



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

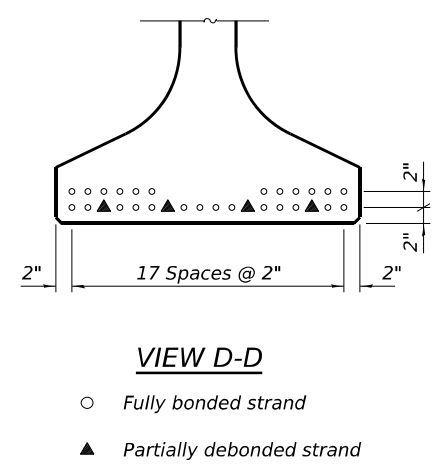
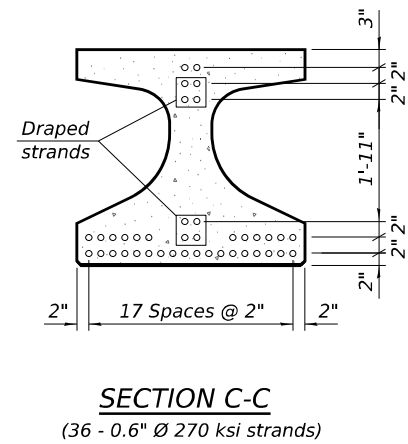
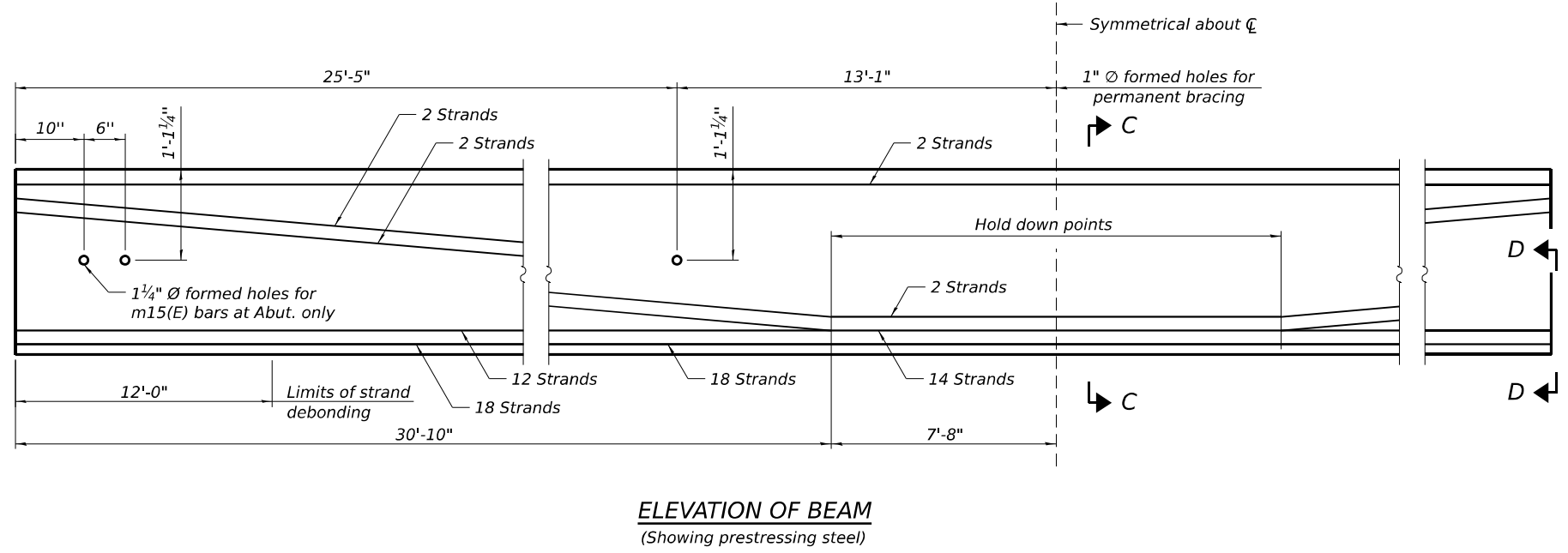
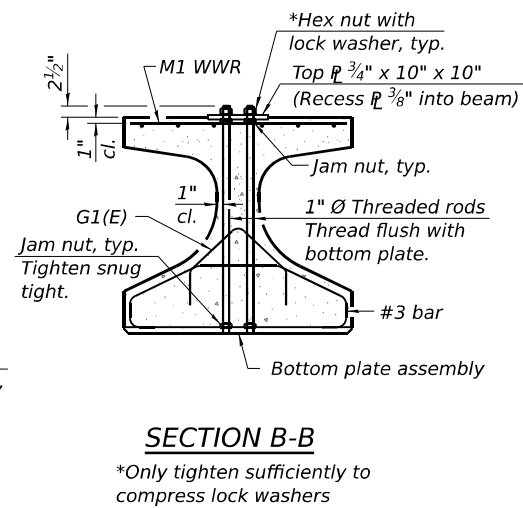
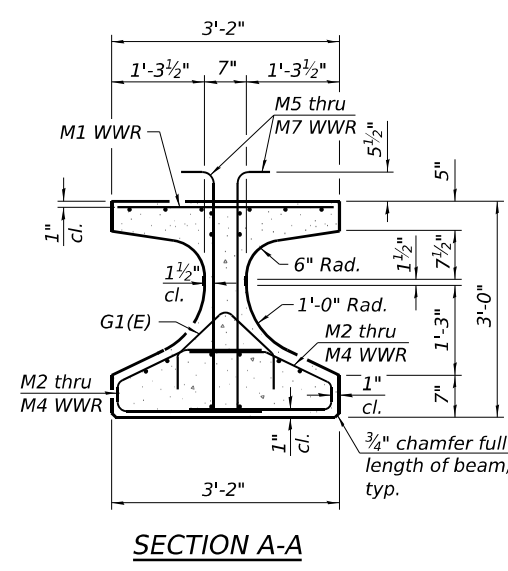
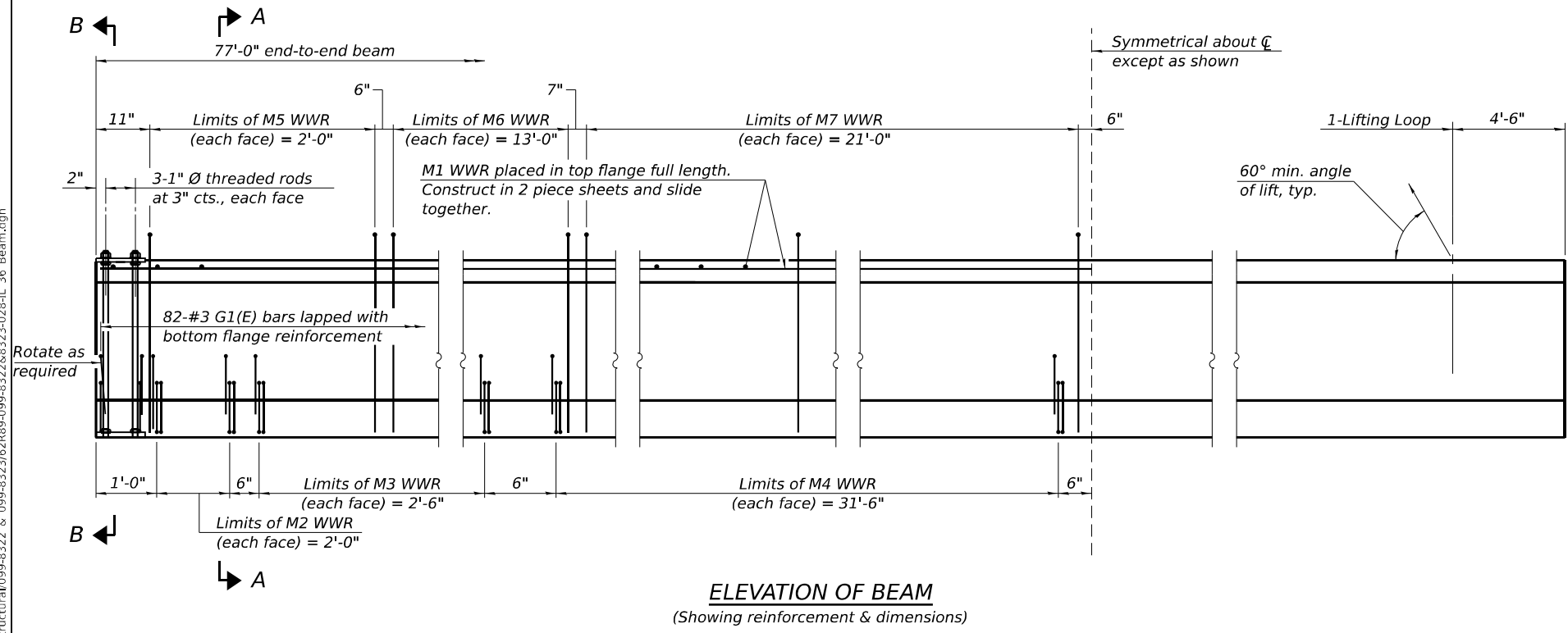
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-27 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	683
CONTRACT NO. 62R89				
ILLINOIS		FED. AID PROJECT		

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SPAN 1
 IL36-3838 Beam
 Strand Pattern = 34B-2T-4db-4d

Note:
See sheet S2-29 of S2-46 for additional details and Bill of Material.

IL36-3838

8-13-2021



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

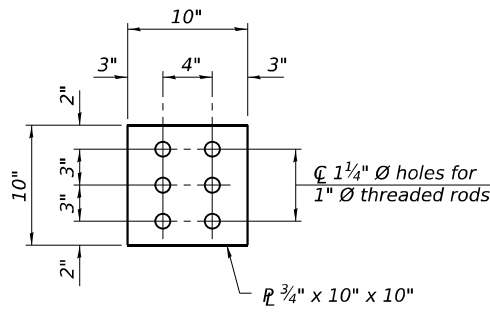
IL36 BEAM
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-28 OF S2-46 SHEETS

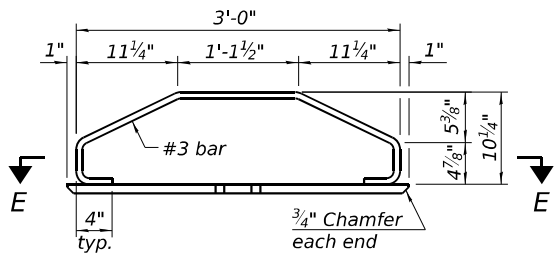
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CONTRACT NO. 62R89				

ILLINOIS FED. AID PROJECT

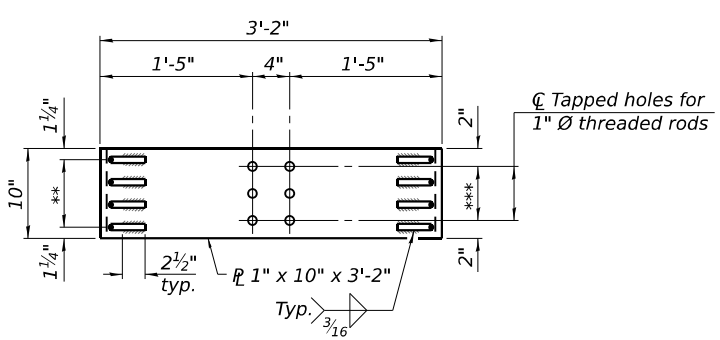
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PLAN - TOP PLATE

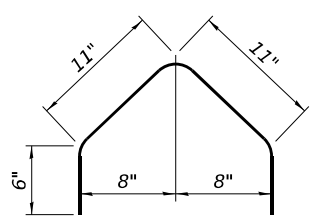


ELEVATION - BOTTOM PLATE ASSEMBLY

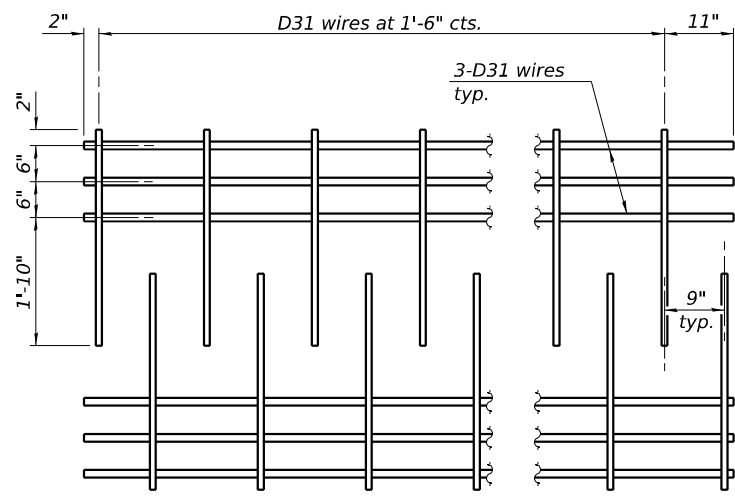


SECTION E-E

** 3 Spaces at 2 1/2" = 7 1/2"
 *** 2 Spaces at 3" = 6"

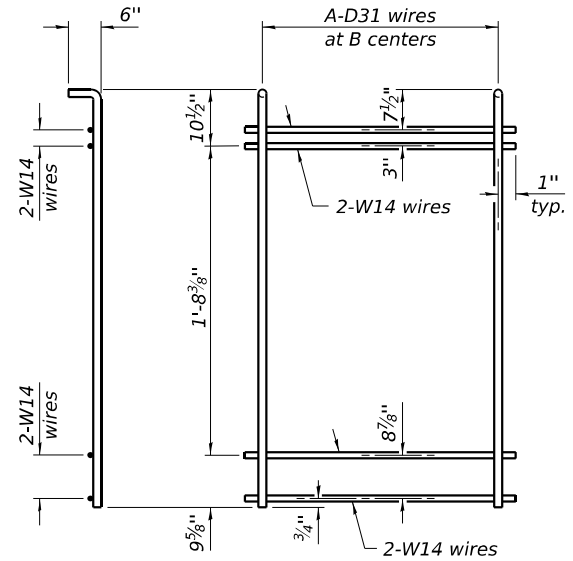


BAR G1(E)



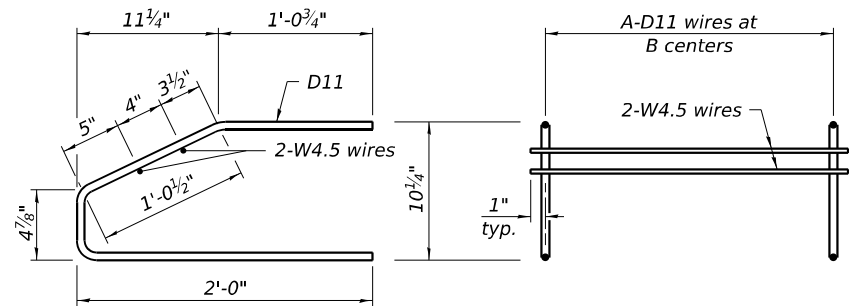
M1 WWR DETAIL

When multiple sheets of M1 WWR are required along the beam length, #5(E) bars (5'-0" long) shall be used to splice the longitudinal D31 wires together (Min. Lap 2'-2").



M5 THRU M8 WWR DETAIL

(See Table of Dimensions)



M2 THRU M4 WWR DETAIL

(See Table of Dimensions)

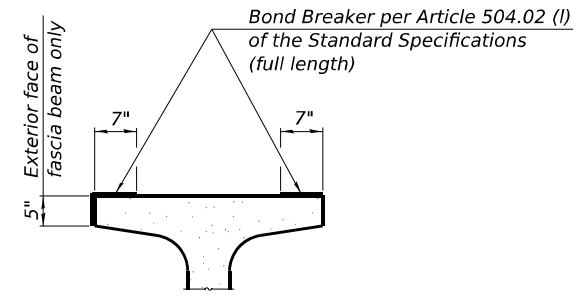
NOTES

Inserts for 3/4" Ø threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.
 Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter for beam strands shall be 0.6" and the nominal cross-sectional area shall be 0.217 sq. in. The nominal diameter for lifting loops shall be 1/2" and the nominal cross sectional area shall be 0.153 sq. in.
 The beams shall have a final concrete compressive strength, f'c, of 8500 psi and a release concrete compressive strength, f'ci, of 6500 psi.
 A minimum 2 1/2" Ø lifting pin shall be used to engage the lifting loops during handling.
 The top and bottom plates shall be galvanized according to AASHTO M270 Grade 50.
 The top plates and bottom plate assemblies shall be galvanized according to AASHTO M111.
 The threaded rods, nuts and washers shall be galvanized according to AASHTO M232.
 Threaded rods shall be ASTM F 1554 Grade 55.
 Welded Wire Reinforcement (WWR) shall conform to ASTM A884 with a Class A, Type 1 epoxy coating or ASTM A1060, Table 3 galvanized coating.

TABLE OF DIMENSIONS

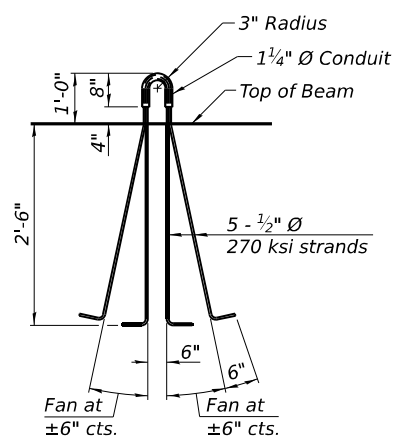
(The WWR designs assume grade 60. If necessary, this permits the fabricator to directly substitute grade 60 rebar as detailed in the Manual for Fabrication of Precast Prestressed Concrete Products.)

SPAN 1		
WWR	A	B
M2	9	3"
M3	6	6"
M4	22	1'-6"
M5	9	3"
M6	27	6"
M7	22	1'-0"



SECTION THRU TOP FLANGE

(Showing limits of bond breaker)



LIFTING LOOP DETAIL

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete Beams, IL36	Ft.	1,232

IL36-3838D

2-1-2023



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
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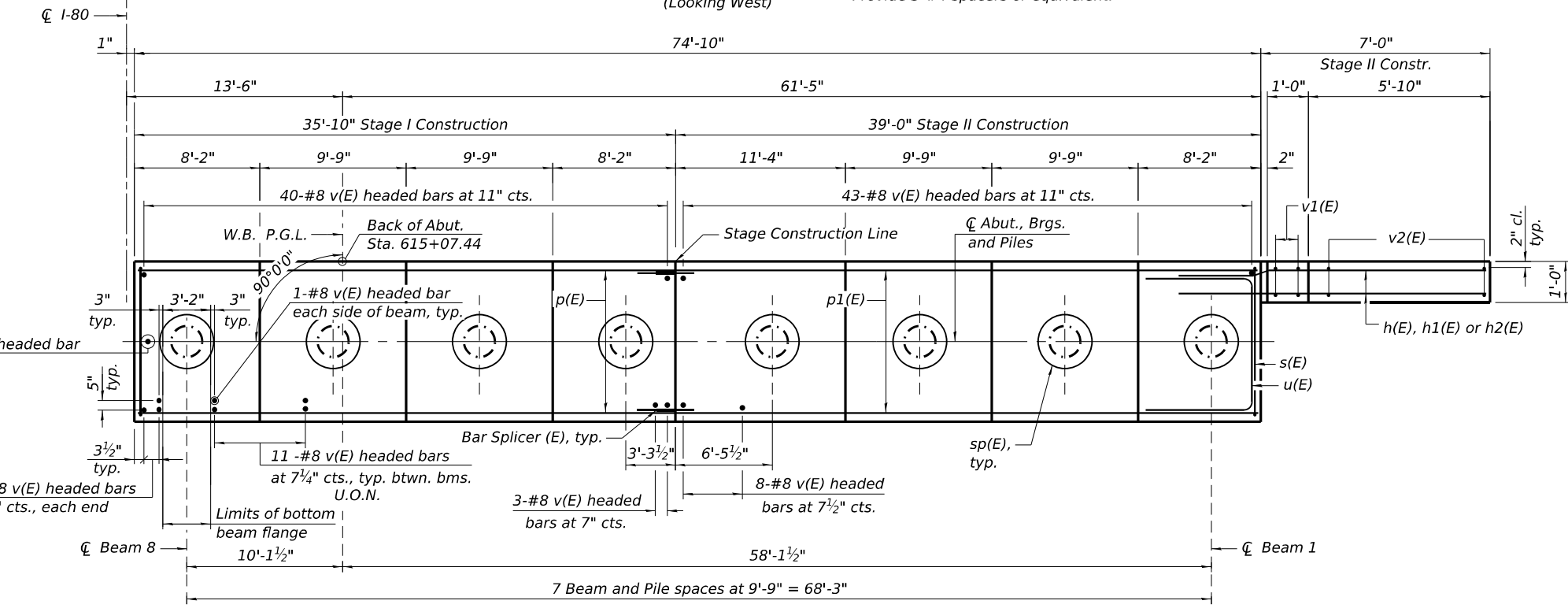
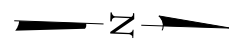
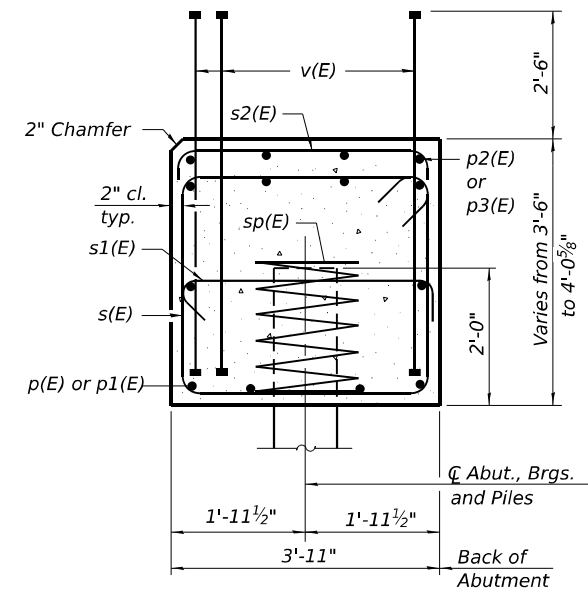
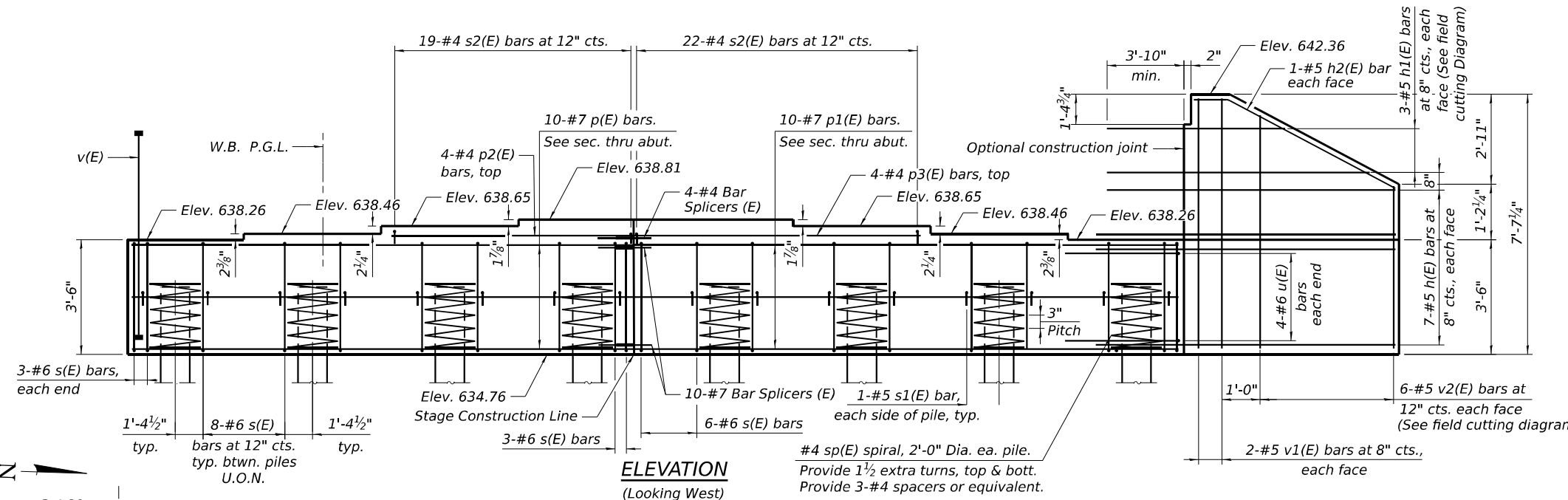
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL36 BEAM DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-29 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	685
			CONTRACT NO. 62R89	
		ILLINOIS	FED. AID PROJECT	

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SEC. THRU ABUT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	14	#5	10'-8"	—
h1(E)	3	#5	18'-8"	—
h2(E)	2	#5	7'-1"	—
p(E)	10	#7	35'-6"	—
p1(E)	10	#7	38'-8"	—
p2(E)	4	#4	17'-7"	—
p3(E)	4	#4	20'-9"	—
s(E)	63	#6	14'-10"	□
s1(E)	16	#5	4'-7"	┌
s2(E)	41	#4	4'-11"	┌
sp(E)	8	#4	2'-0"	≡≡≡
u(E)	8	#6	12'-1"	□
v(E)	184	#8	5'-8"	—
v1(E)	4	#5	7'-3"	—
v2(E)	6	#5	11'-2"	—
Structure Excavation		Cu. Yd.	725	
Concrete Structures		Cu. Yd.	42.9	
Reinforcement Bars, Epoxy Coated		Pound	6,870	
Furnishing Metal Shell Piles 16"x0.375"		Foot	434	
Driving Piles		Foot	434	
Test Pile Metal Shells		Each	1	
Pile shoes		Each	8	

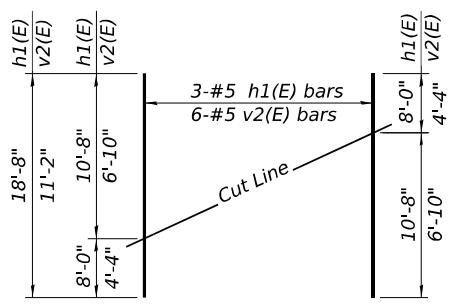
* Length is height of spiral.

PILE DATA

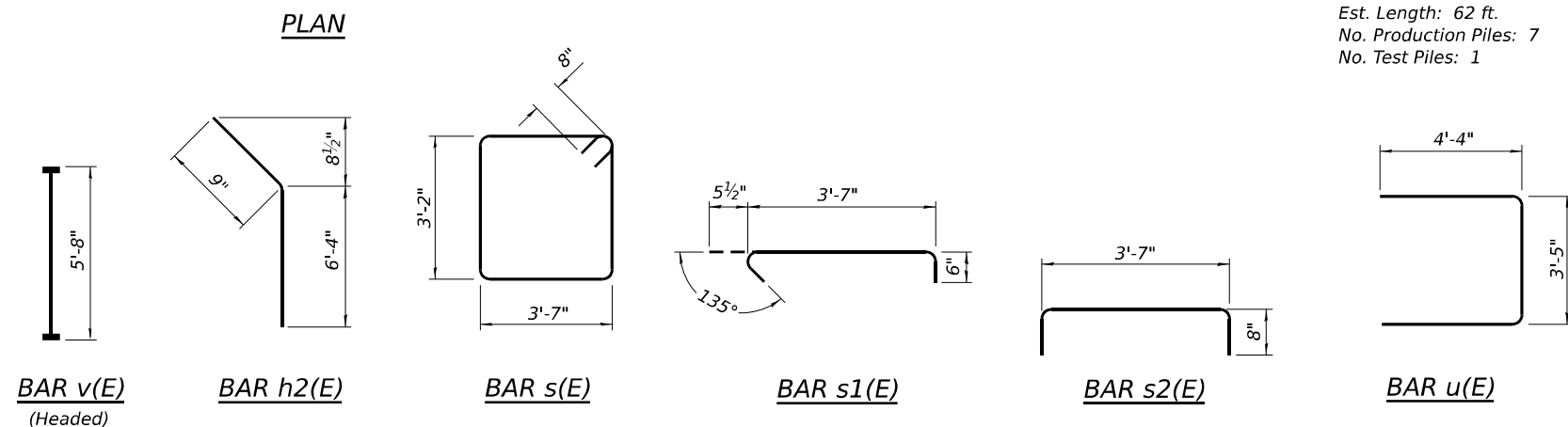
Type: MS 16" x 0.375" with Pile Shoes
 Nominal Required Bearing: 782 kips
 Factored Resistance Available: 373 kips
 Est. Length: 62 ft.
 No. Production Piles: 7
 No. Test Piles: 1

Notes:

Pour steps monolithically with cap.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 For details of piles see sheet S2-37 of S2-46. See sheet S2-38 of S2-46 for Bar Splicer details.
 U.O.N. = Unless Otherwise Noted



FIELD CUTTING DIAGRAM
 Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in other face.



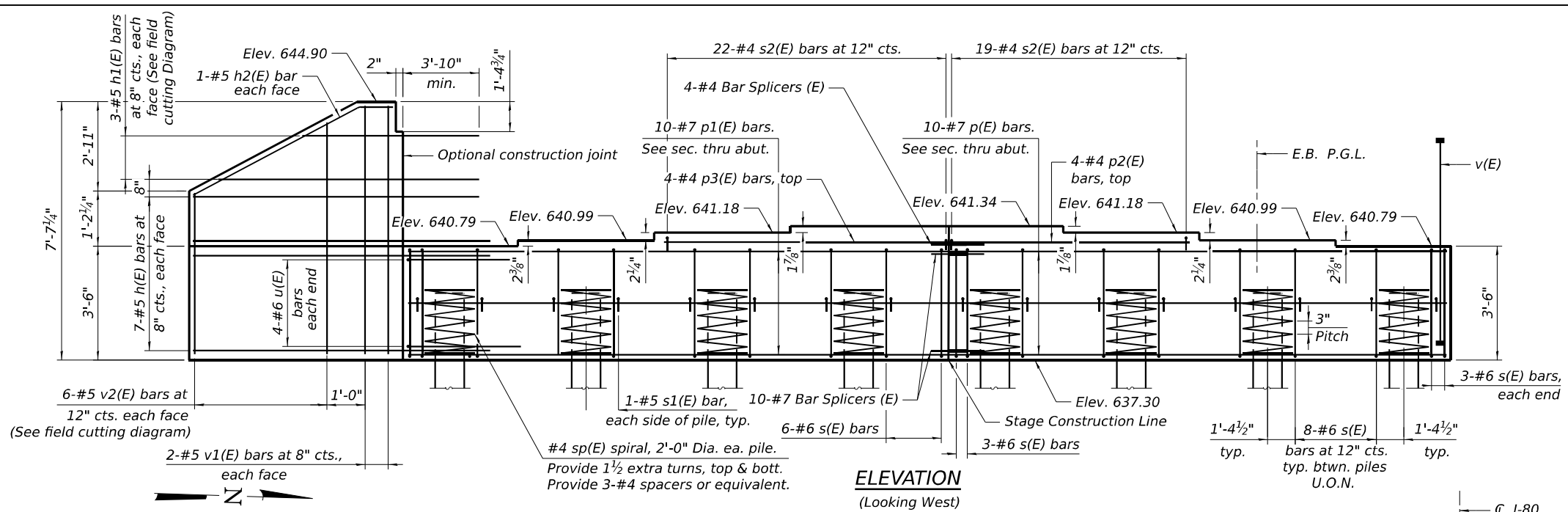
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

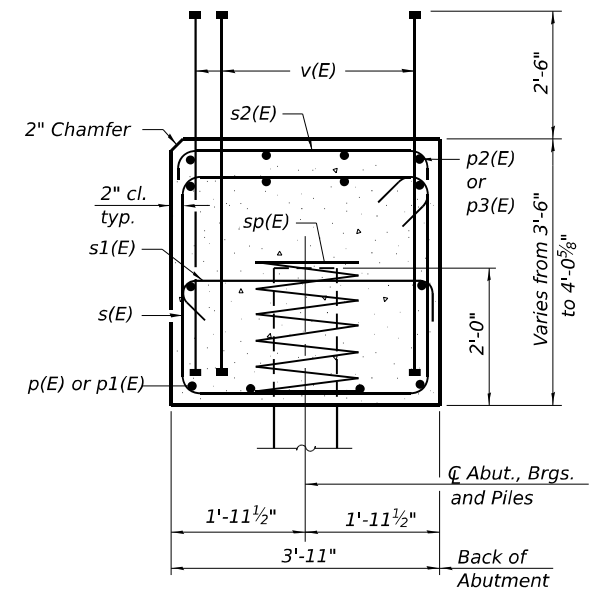
WEST ABUTMENT - W.B.
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

FAI R.TE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 62R89	
ILLINOIS / FED. AID PROJECT				

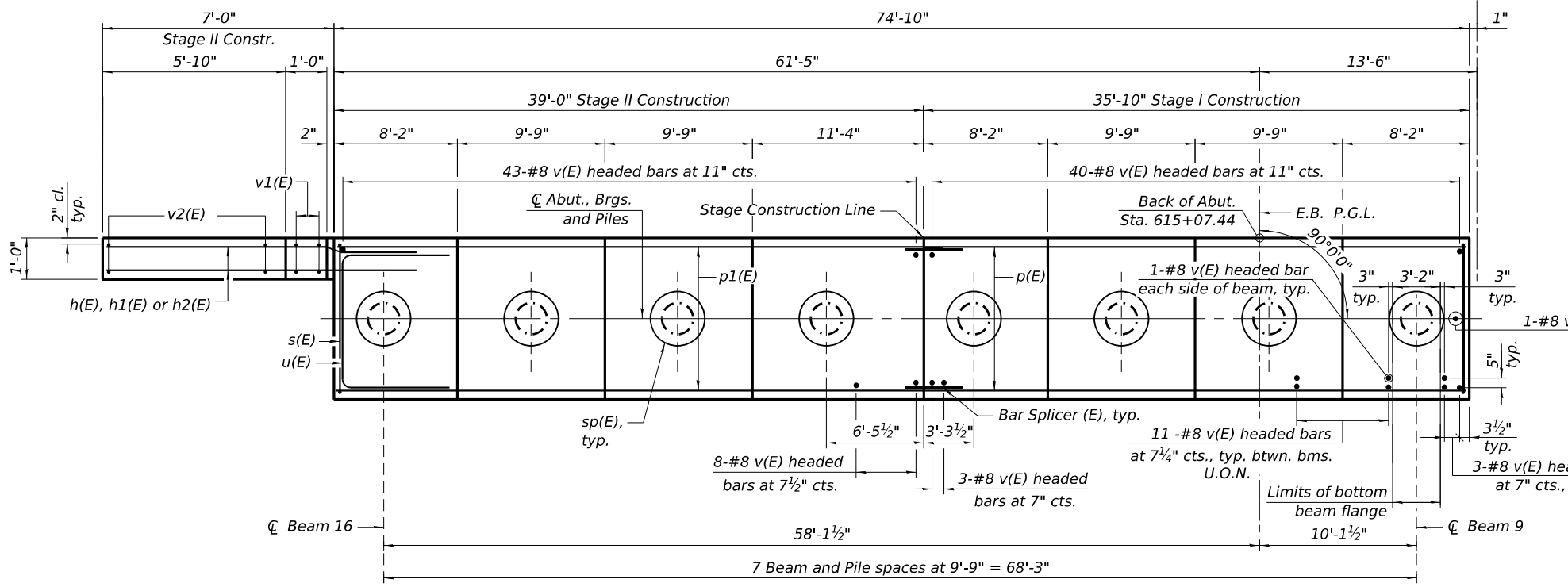
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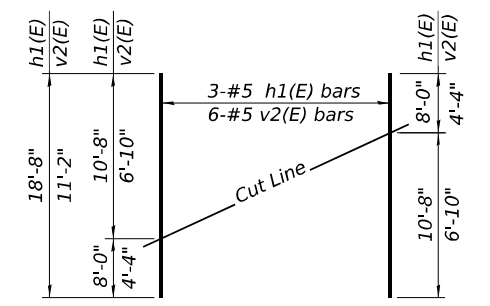
ELEVATION
(Looking West)



SEC. THRU ABUT.

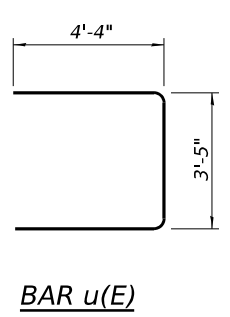
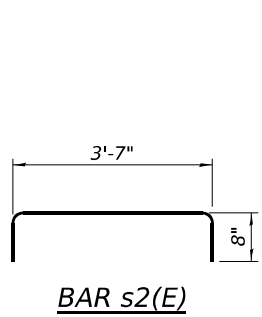
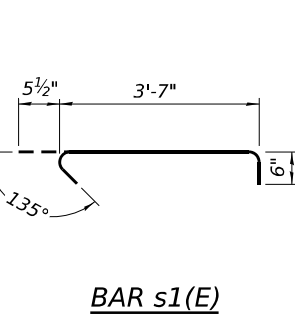
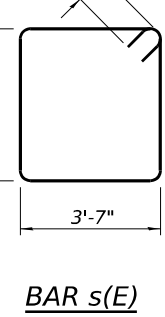
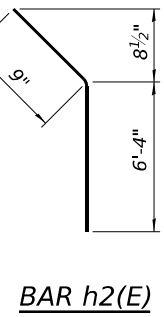
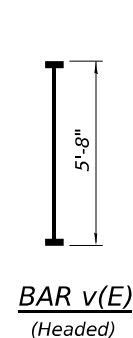


PLAN



FIELD CUTTING DIAGRAM

Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in other face.



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	14	#5	10'-8"	—
h1(E)	3	#5	18'-8"	—
h2(E)	2	#5	7'-1"	—
p(E)	10	#7	35'-6"	—
p1(E)	10	#7	38'-8"	—
p2(E)	4	#4	17'-7"	—
p3(E)	4	#4	20'-9"	—
s(E)	63	#6	14'-10"	□
s1(E)	16	#5	4'-7"	U
s2(E)	41	#4	4'-11"	□
sp(E)	8	#4	2'-0"	WWW
u(E)	8	#6	12'-1"	□
v(E)	184	#8	5'-8"	—
v1(E)	4	#5	7'-3"	—
v2(E)	6	#5	11'-2"	—

Structure Excavation	Cu. Yd.	709
Concrete Structures	Cu. Yd.	42.9
Reinforcement Bars, Epoxy Coated	Pound	6,870
Furnishing Metal Shell Piles 16"x0.375"	Foot	384
Driving Piles	Foot	384
Pile shoes	Each	8

* Length is height of spiral.

PILE DATA

Type: MS 16" x 0.375" with Pile Shoes
 Nominal Required Bearing: 782 kips
 Factored Resistance Available: 384 kips
 Est. Length: 48 ft.
 No. Production Piles: 8

Notes:
 Pour steps monolithically with cap.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 For details of piles see sheet S2-37 of S2-46. See sheet S2-38 of S2-46 for Bar Splicer details. U.O.N. = Unless Otherwise Noted



USER NAME =	DESIGNED - MK	REVISIONS -
PLOT SCALE =	CHECKED - DD	REVISIONS -
PLOT DATE =	DRAWN - MK	REVISIONS -
	CHECKED - DD	REVISIONS -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT - E.B.
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

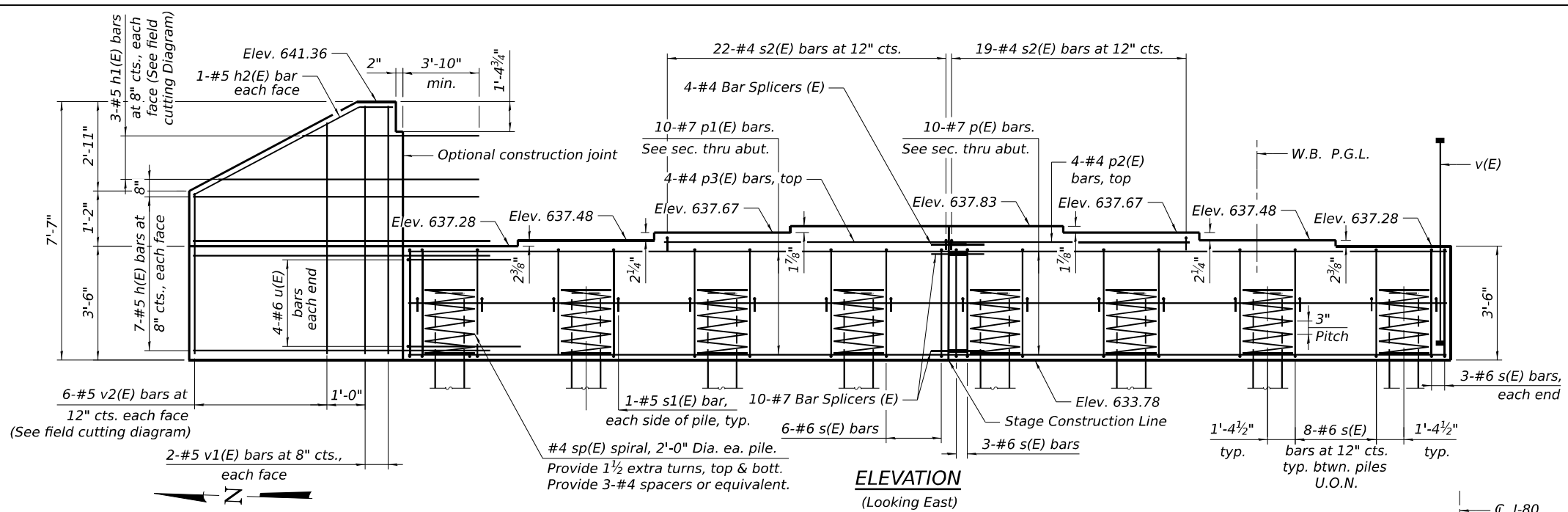
SHEET S2-31 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	687

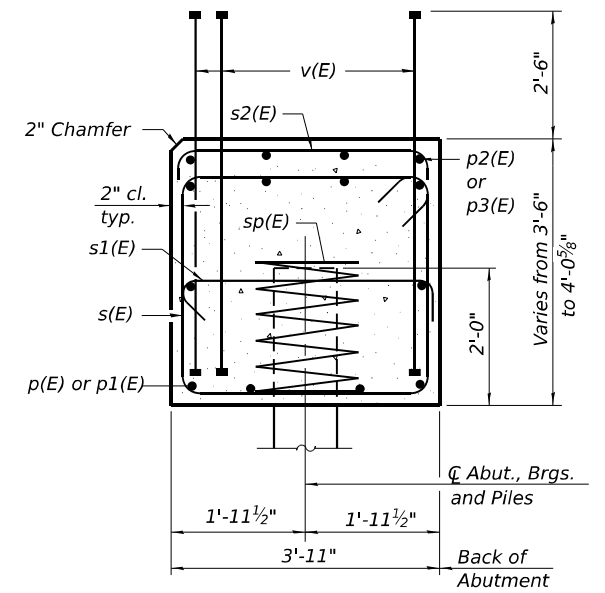
CONTRACT NO. 62R89

ILLINOIS FED. AID PROJECT

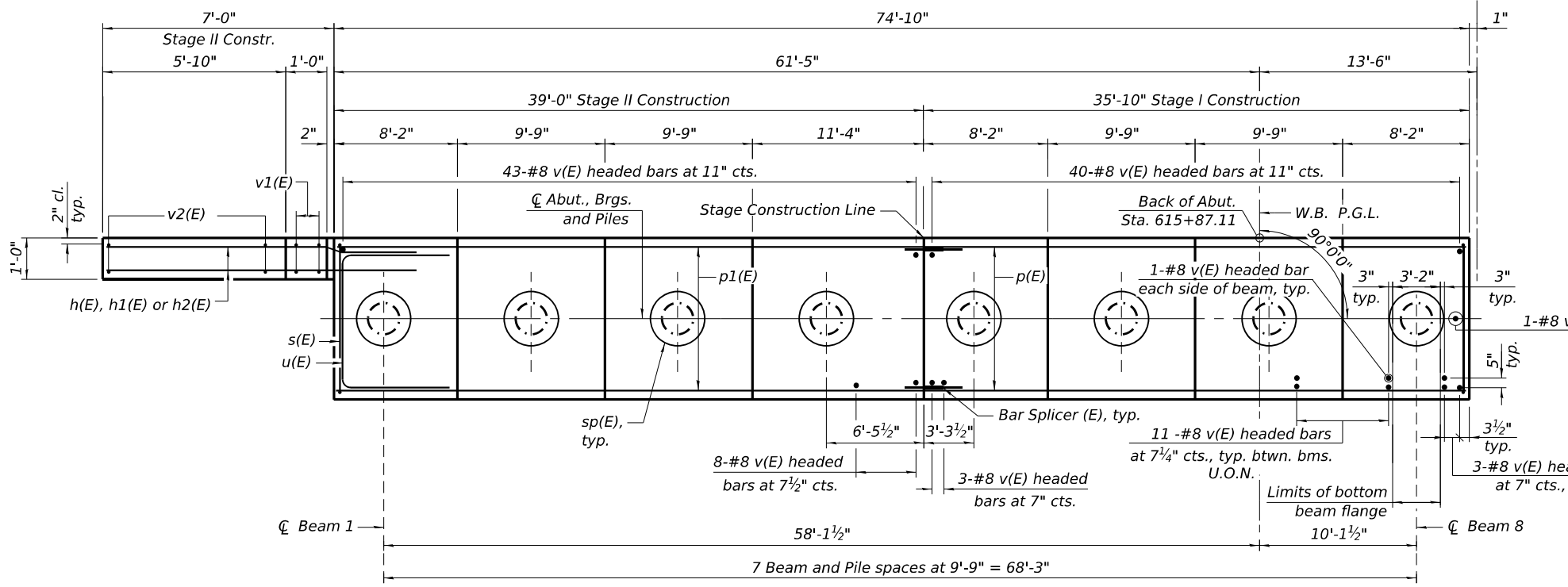
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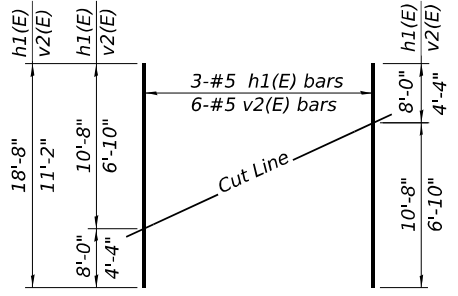
ELEVATION
(Looking East)



SEC. THRU ABUT.

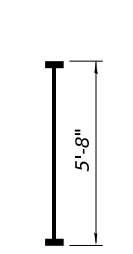


PLAN

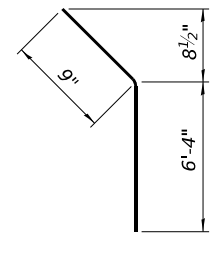


FIELD CUTTING DIAGRAM

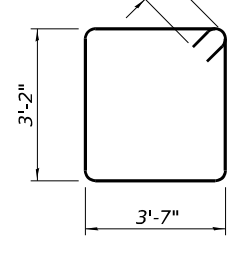
Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in other face.



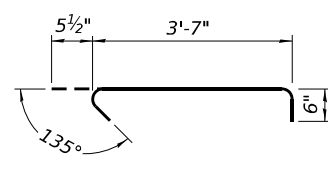
BAR v(E)
(Headed)



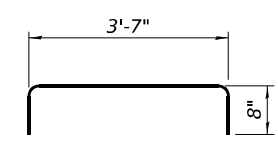
BAR h2(E)



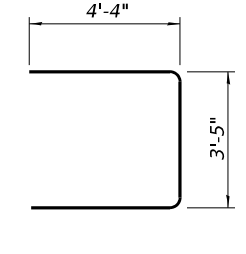
BAR s(E)



BAR s1(E)



BAR s2(E)



BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	14	#5	10'-8"	—
h1(E)	3	#5	18'-8"	—
h2(E)	2	#5	7'-1"	—
p(E)	10	#7	35'-6"	—
p1(E)	10	#7	38'-8"	—
p2(E)	4	#4	17'-7"	—
p3(E)	4	#4	20'-9"	—
s(E)	63	#6	14'-10"	□
s1(E)	16	#5	4'-7"	┌┐
s2(E)	41	#4	4'-11"	┌┐
sp(E)	8	#4	2'-0"	≡≡≡
u(E)	#6	12'-1"	U	
v(E)	184	#8	5'-8"	—
v1(E)	4	#5	7'-3"	—
v2(E)	6	#5	11'-2"	—

PILE DATA

Type: MS 16" x 0.375" with Pile Shoes
 Nominal Required Bearing: 782 kips
 Factored Resistance Available: 358 kips
 Est. Length: 69 ft.
 No. Production Piles: 7
 No. Test Piles: 1

* Length is height of spiral.

Notes:
 Pour steps monolithically with cap.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 For details of piles see sheet S2-37 of S2-46. See sheet S2-38 of S2-46 for Bar Splicer details. U.O.N. = Unless Otherwise Noted



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PLOT SCALE =	CHECKED - DD	REVISIONS -
PLOT DATE =	DRAWN - MK	REVISIONS -
	CHECKED - DD	REVISIONS -

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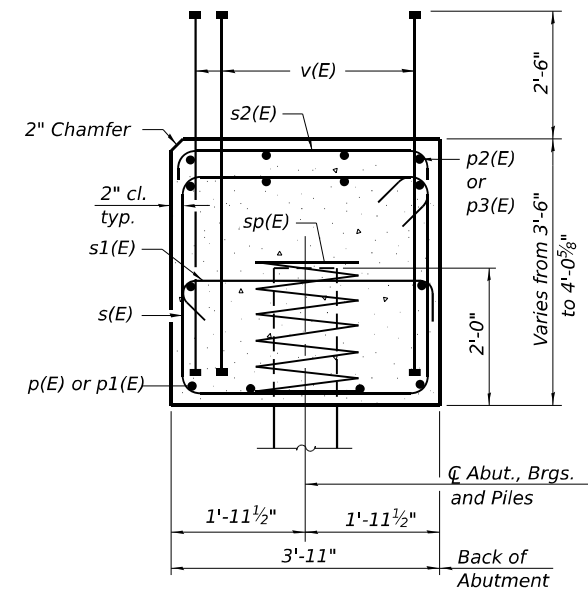
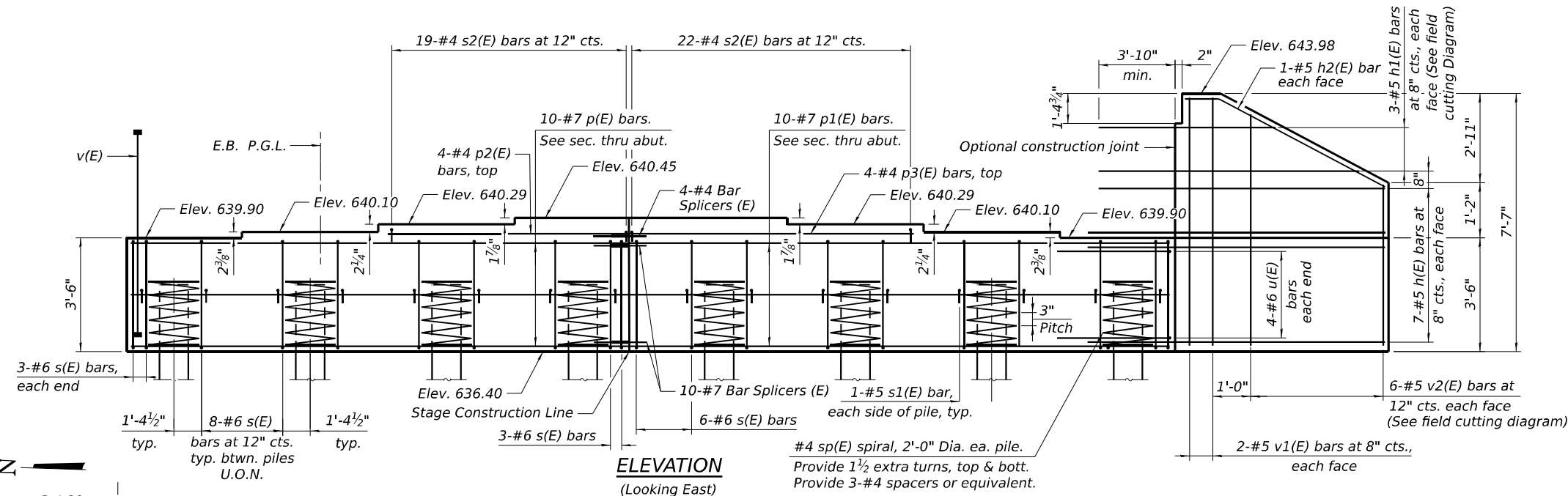
EAST ABUTMENT - W.B.
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	688
			CONTRACT NO. 62R89	

SHEET S2-32 OF S2-46 SHEETS

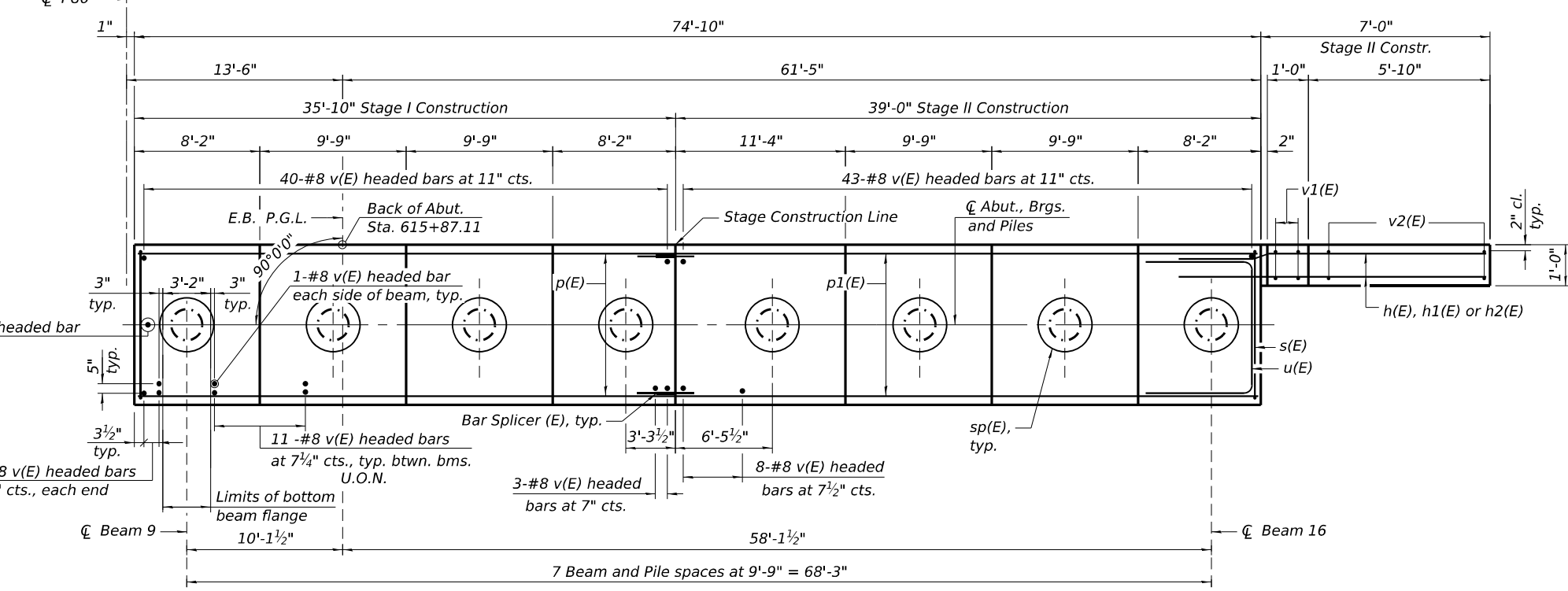
ILLINOIS FED. AID PROJECT

MODEL: Sheet
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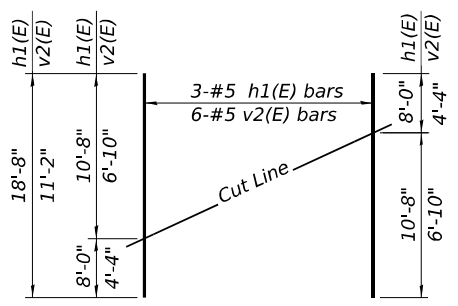


ELEVATION
(Looking East)

SEC. THRU ABUT.

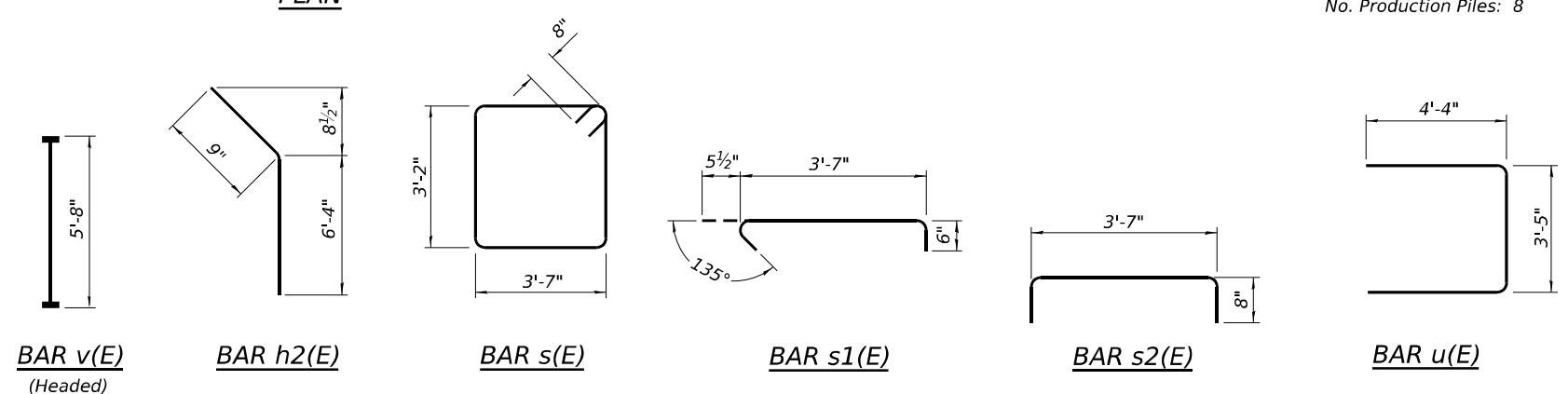


PLAN



FIELD CUTTING DIAGRAM

Order h1(E) and v2(E) full length. Cut as shown and use remainder of bars in other face.



PILE DATA

Type: MS 16" x 0.375" with Pile Shoes
 Nominal Required Bearing: 782 kips
 Factored Resistance Available: 367 kips
 Est. Length: 71 ft.
 No. Production Piles: 8

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	14	#5	10'-8"	—
h1(E)	3	#5	18'-8"	—
h2(E)	2	#5	7'-1"	—
p(E)	10	#7	35'-6"	—
p1(E)	10	#7	38'-8"	—
p2(E)	4	#4	17'-7"	—
p3(E)	4	#4	20'-9"	—
s(E)	63	#6	14'-10"	—
s1(E)	16	#5	4'-7"	—
s2(E)	41	#4	4'-11"	—
sp(E)	8	#4	2'-0"	—
u(E)	8	#6	12'-1"	—
v(E)	184	#8	5'-8"	—
v1(E)	4	#5	7'-3"	—
v2(E)	6	#5	11'-2"	—

Structure Excavation	Cu. Yd.	633
Concrete Structures	Cu. Yd.	42.9
Reinforcement Bars, Epoxy Coated	Pound	6,870
Furnishing Metal Shell Piles 16"x0.375"	Foot	568
Driving Piles	Foot	568
Pile shoes	Each	8

* Length is height of spiral.

Notes:

Pour steps monolithically with cap.
 Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
 For details of piles see sheet S2-37 of S2-46. See sheet S2-38 of S2-46 for Bar Splicer details.
 U.O.N. = Unless Otherwise Noted



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EAST ABUTMENT - E.B.
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

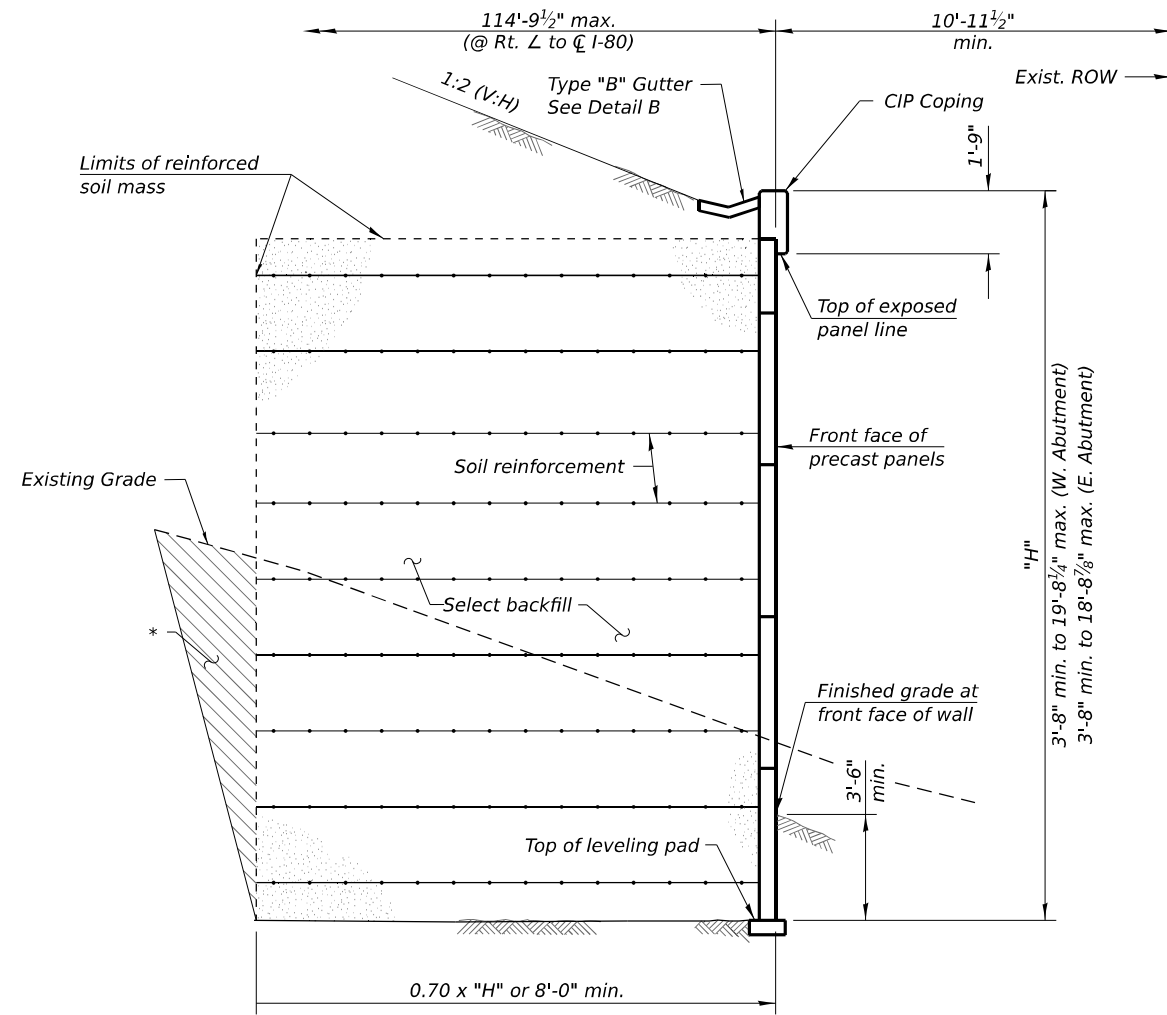
SHEET S2-33 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	689

CONTRACT NO. 62R89

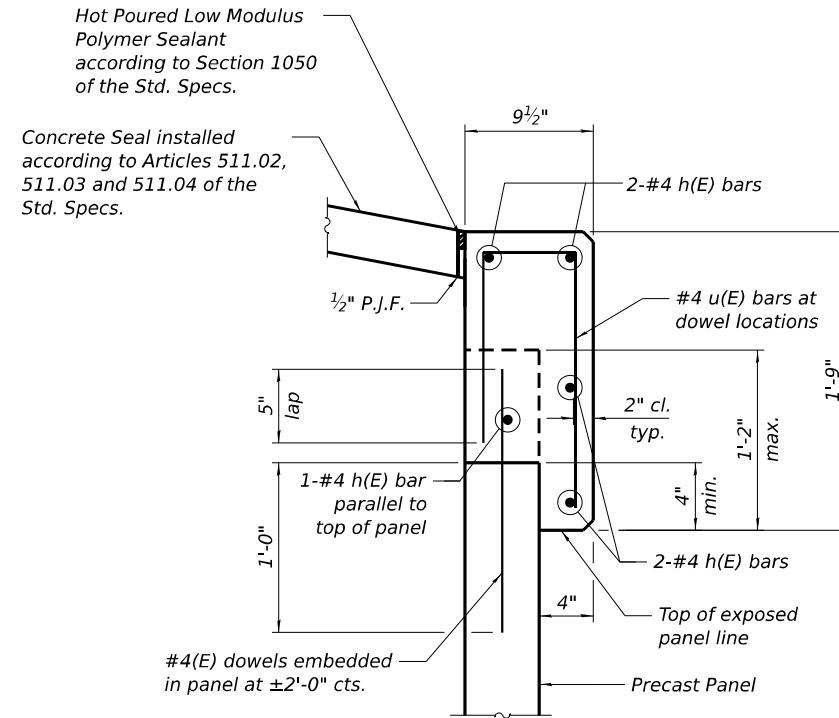
ILLINOIS FED. AID PROJECT

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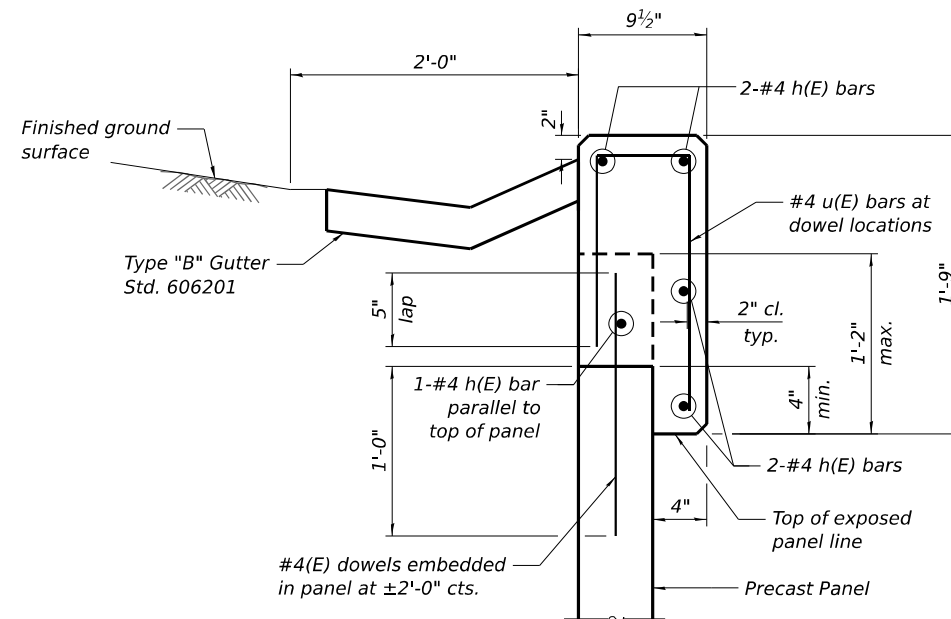


SECTION THRU MSE WALL
 (Horiz. dim. @ Rt. L's)

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



DETAIL A - CIP CONCRETE COPING
 (Detail in front of the abutment cap)



DETAIL B - CIP CONCRETE COPING
 (Detail for all location other than the front of the abutment cap)

Notes:
 Shop Drawings submitted by MSE Wall Supplier shall include all dimensions, elevations and details necessary to accommodate bridge skew, bridge piles, and any other structural system shown on the plans.
 Cost included with Mechanically Stabilized Earth Retaining Wall.
 Cost of P.J.F., CIP Coping and reinforcement, Sealant and Concrete Seal shall be included with the cost of Mechanically Stabilized Earth Retaining Wall.
 For Abutment Details, see Sheets S2-30 thru S2-33 of S2-46.
 For Approach Slab Details, see Sheets S2-21 thru S2-25 of S2-46.
 For Section thru Abutment, see Sheet S2-2.

(Sheet 2 of 2)



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PLOT DATE =	CHECKED - DD	REVISED -

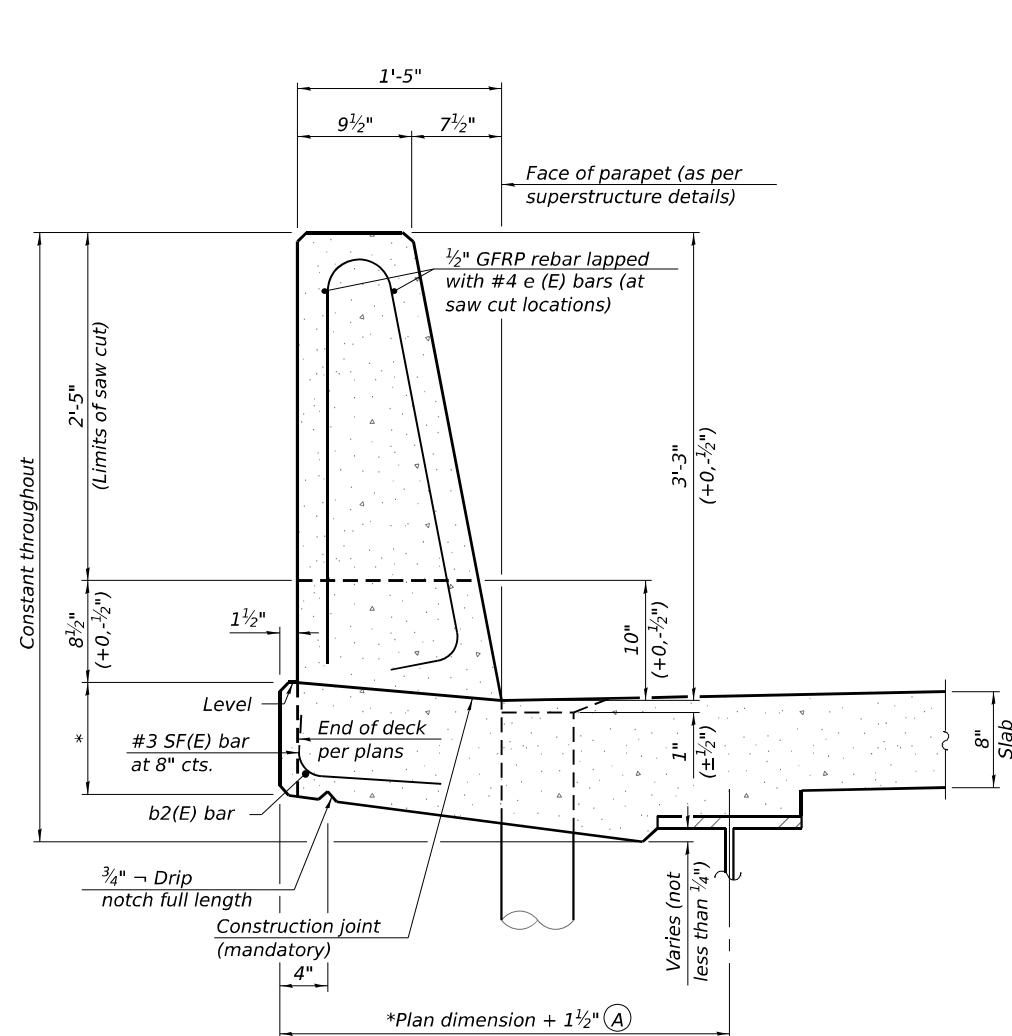
STATE OF ILLINOIS
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MSE WRAP AROUND ABUTMENT
 STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	691
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

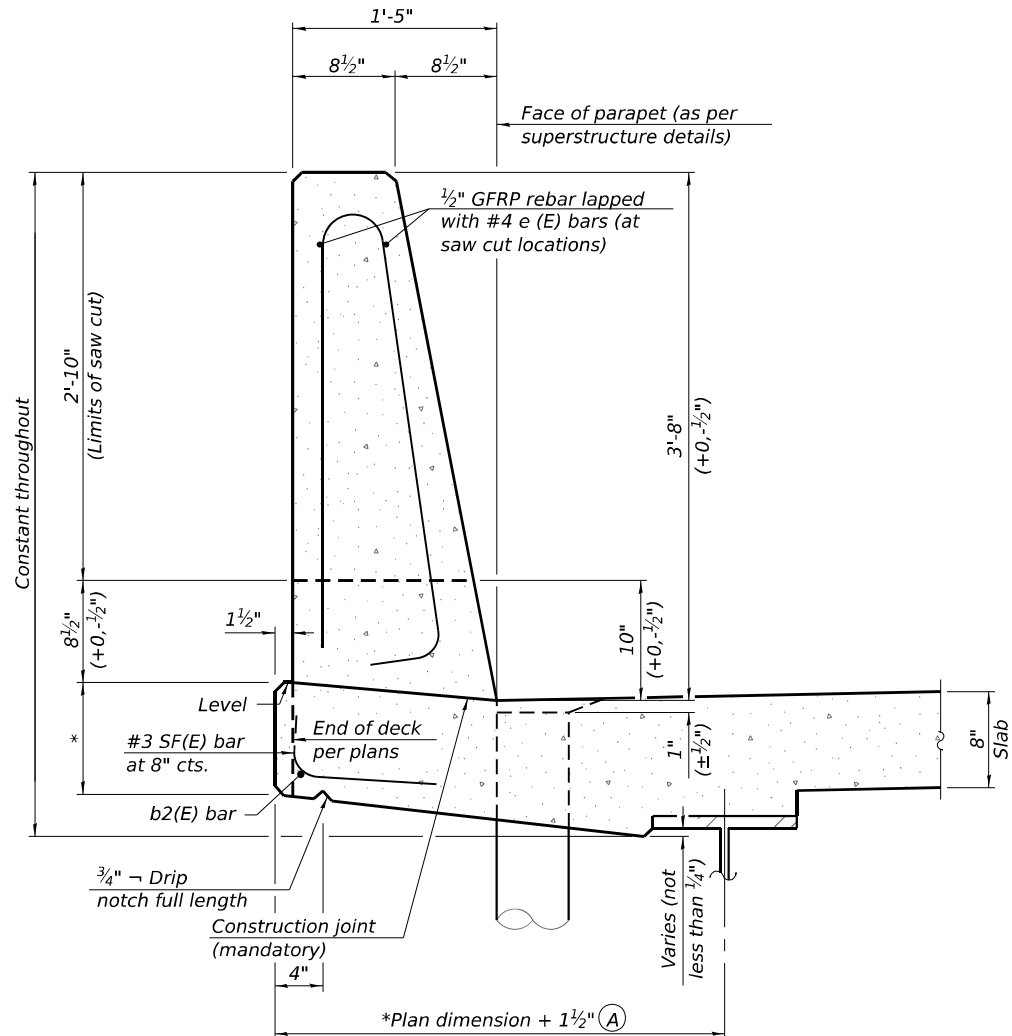
SHEET S2-35 OF S2-46 SHEETS

MODEL: Sheet
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**39" CONSTANT-SLOPE
 PARAPET SECTION**

(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

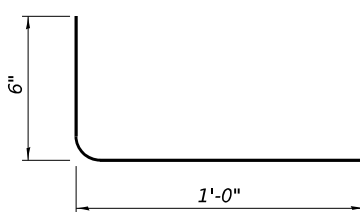


**44" CONSTANT-SLOPE
 PARAPET SECTION**

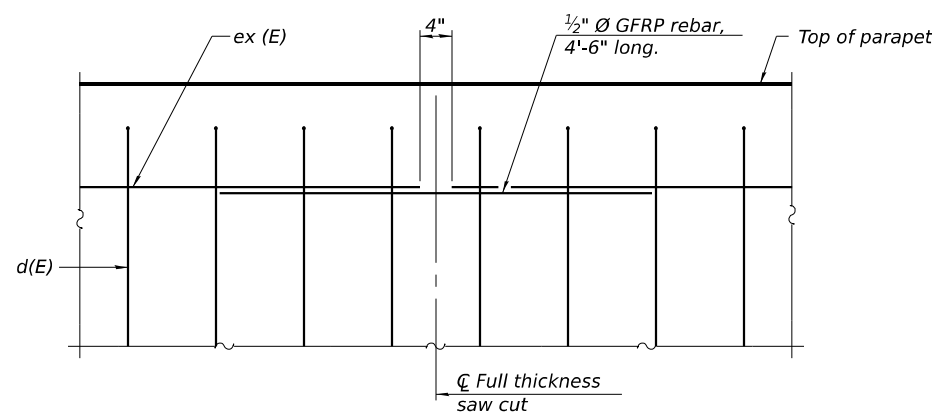
(Showing dimensions, d(E), and 1/2" Ø GFRP rebar)

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 39" and 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.

*See Superstructure Details.



SF(E) BAR



GFRP REBAR STIFFENING DETAIL

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

SFP 39-44

11-1-2022



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PLOT DATE =	CHECKED - DD	REVISION -

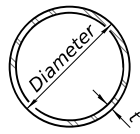
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
 STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	692
CONTRACT NO. 62R89				

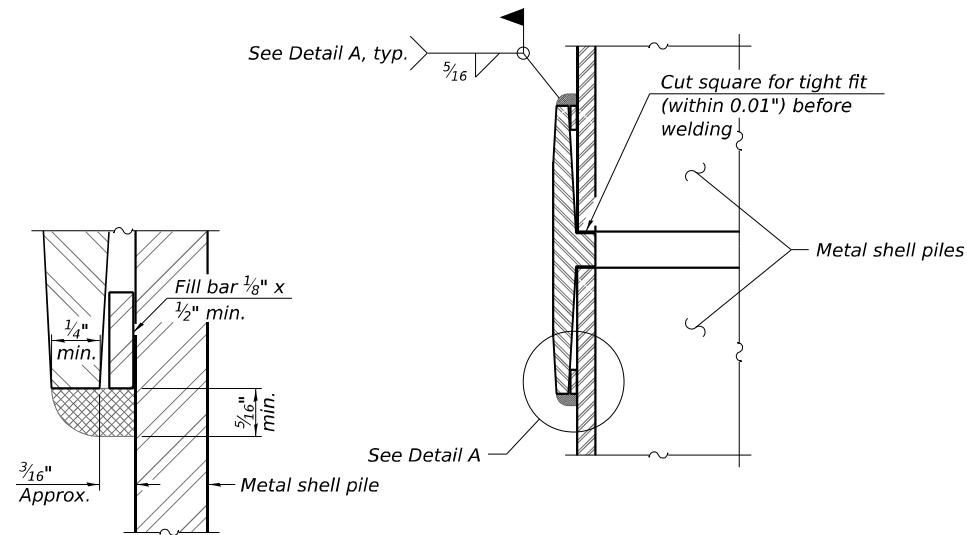
SHEET S2-36 OF S2-46 SHEETS

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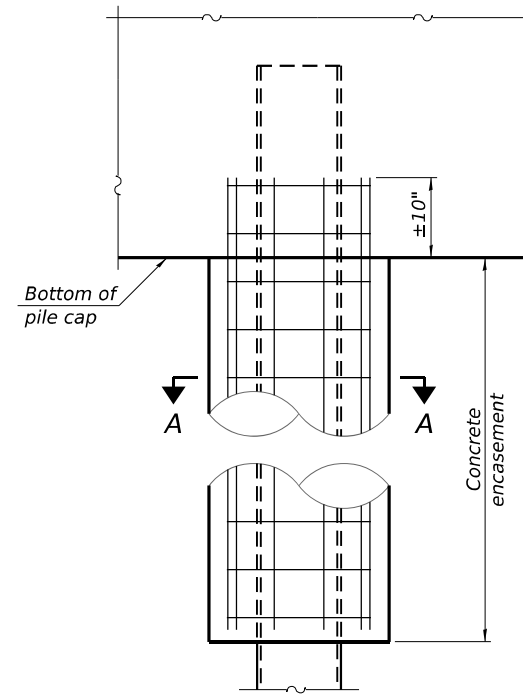


METAL SHELL PILE TABLE

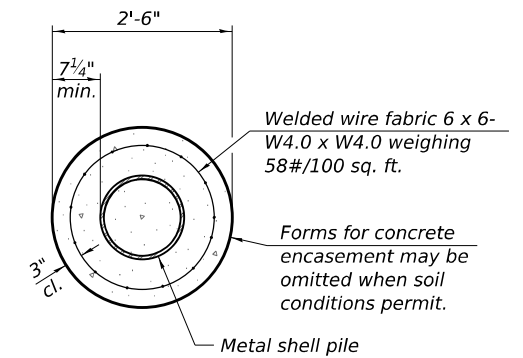
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.250"	31.40	0.0267
PP14	0.250"	36.75	0.0368
PP14	0.312"	45.65	0.0361
PP16	0.312"	52.32	0.0478
PP16	0.375"	62.64	0.0470



DETAIL A

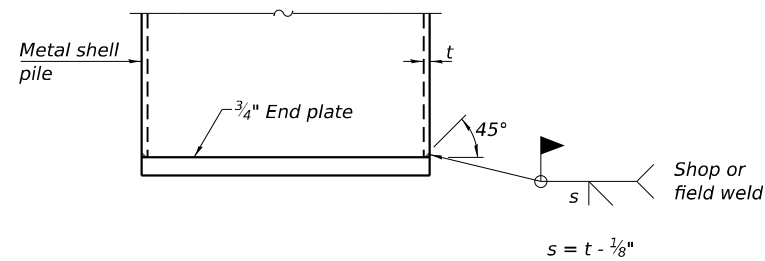


ELEVATION



SECTION A-A

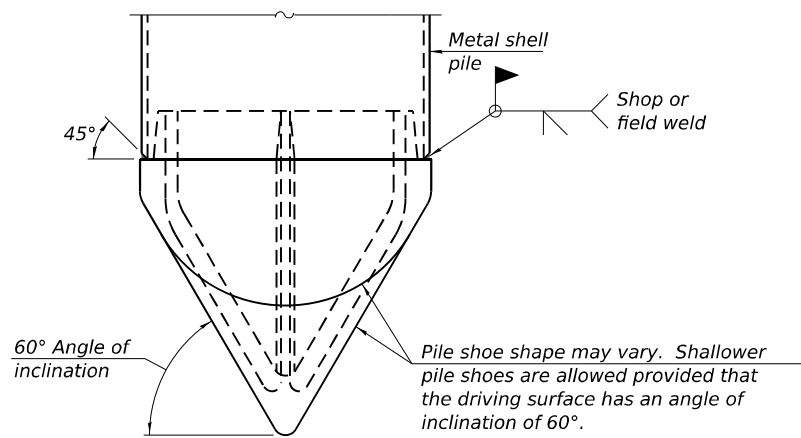
INDIVIDUAL PILE CONCRETE ENCASUREMENT
(When specified)



END PLATE ATTACHMENT

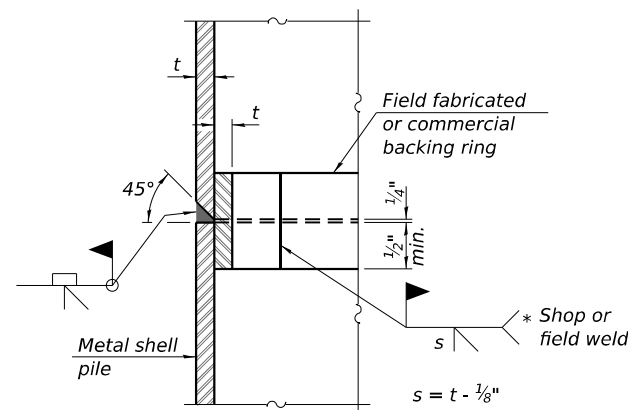
WELDED COMMERCIAL SPLICE

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



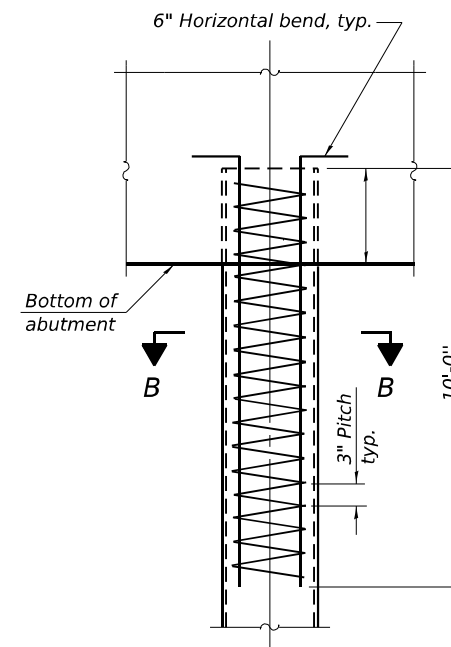
PILE SHOE ATTACHMENT

(When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 80-50 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld).

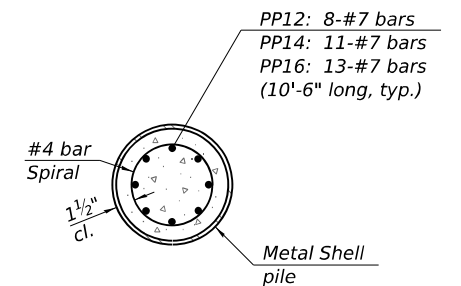


COMPLETE PENETRATION WELD SPLICE

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



ELEVATION



SECTION B-B

REINFORCEMENT AT ABUTMENTS
(Omit when concrete encasement is specified)

Note:
The metal shell piles shall be according to Article 1006.05 of the Standard Specifications.

F-MS 2-1-2023



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	CHECKED - DD	REVISED -

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DEPARTMENT OF TRANSPORTATION

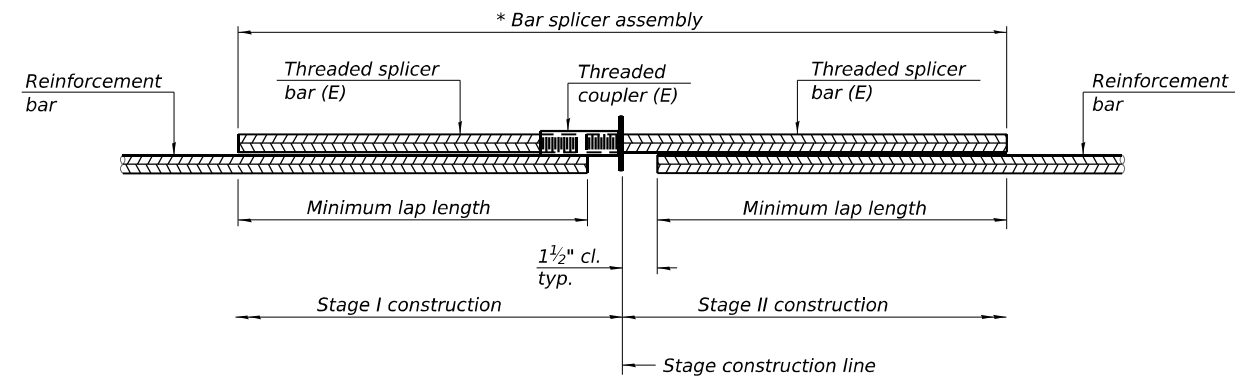
METAL SHELL PILE DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

SHEET S2-37 OF S2-46 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	693
			CONTRACT NO. 62R89	

ILLINOIS FED. AID PROJECT

MODEL: Sheet FILE NAME: pw://transystems-pw.bentley.com/TRANSSYS/SCORP-PW1-HOSTED/Projects_2018/CH401/40118002202-Transystems/CAD/62R89/Sheets/2-3-Structural/099-8322 & 099-8323/62R89-099-8322-037-Pile_Details.dgn 10/4/2023 4:01:15 PM



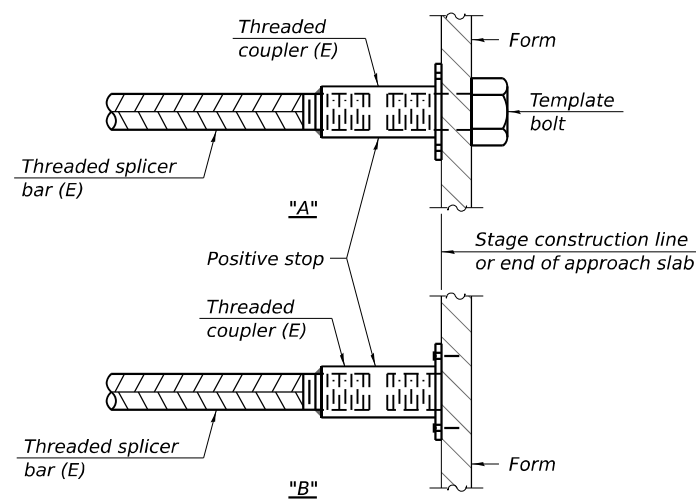
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

Threaded splicer bar length = min. lap length + 1 1/2" + 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
Slab - W.B.	#5	291	3'-6"
Slab - E.B.	#5	291	3'-6"
W. Abutment Diaphragm - W.B.	#6	4	4'-0"
E. Abutment Diaphragm - W.B.	#6	4	4'-0"
W. Abutment Diaphragm - E.B.	#6	4	4'-0"
E. Abutment Diaphragm - E.B.	#6	4	4'-0"
W. Approach Slab - W.B.	#5	86	3'-6"
W. Approach Slab - W.B.	#8	60	4'-9"
E. Approach Slab - W.B.	#5	86	3'-6"
E. Approach Slab - W.B.	#8	60	4'-9"
W. Approach Slab - E.B.	#5	86	3'-6"
W. Approach Slab - E.B.	#8	60	4'-9"
E. Approach Slab - E.B.	#5	86	3'-6"
E. Approach Slab - E.B.	#8	60	4'-9"
West Abutment - W.B.	#4	4	2'-11"
West Abutment - W.B.	#7	10	5'-0"
East Abutment - W.B.	#4	4	2'-11"
East Abutment - W.B.	#7	10	5'-0"
West Abutment - E.B.	#4	4	2'-11"
West Abutment - E.B.	#7	10	5'-0"
East Abutment - E.B.	#4	4	2'-11"
East Abutment - E.B.	#7	10	5'-0"

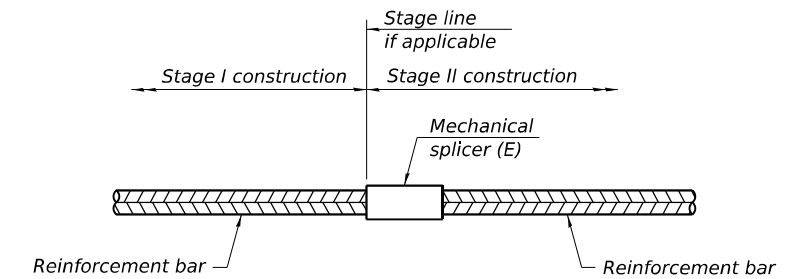


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
W. Abutment Diaphragm - W.B.	#6	3
E. Abutment Diaphragm - W.B.	#6	3
W. Abutment Diaphragm - E.B.	#6	3
E. Abutment Diaphragm - E.B.	#6	3

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

2-1-2023



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BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	694
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

SHEET S2-38 OF S2-46 SHEETS

MODEL: Sheet
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 10/4/2023 4:01:33 PM

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: (630) 953-9928
 Fax: (630) 953-9938

BORING LOG MLA-BSB-01
 WEI Job No.: 7901-15-01
 Client: **TranSystems Corporation**
 Project: **80 Reconstruction (Houbolt Road to Center Street)**
 Location: **Will County, Illinois**

Datum: NAVD 88
 Elevation: 640.88 ft
 North: 1764736.17 ft
 East: 1044039.14 ft
 Station: 614+60.37
 Offset: 57.14 LT

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	
639.4	18-inch thick ASPHALT --PAVEMENT--													
638.9	Brown and gray SANDY GRAVEL; damp --BASE COURSE--	1	5	4	3.77	D			11	7	10	2.95	22	
	Very stiff brown, gray and black SILTY CLAY to SILTY CLAY LOAM, trace gravel; damp --FILL-- --RDR 2--	2	4	5	2.30	B			12	7	11	3.08	21	
		3	11	4	2.62	B			13	6	10	3.12	18	
630.4	Very stiff to hard, brown to gray SILTY CLAY, trace gravel; damp --RDR 2--	4	13	7	3.20	B			14	4	5	3.53	21	
		5	6	10	4.43	B			15	5	7	2.21	22	
		6	5	6	6.07	B			16	11	15	18	NP	15
		7	5	8	6.31	B			17	8	9	NP	13	
		8	5	11	6.23	B	599.4	Gray SILTY LOAM; wet --RDR 2--	46	5	7	12	2.21	22
		9	6	9	4.43	B	594.1	Dense, brown, medium to coarse SAND; wet to saturated --RDR 2--						
		10	6	10	5.00	B			18	8	9	NP	18	

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-09-2021	Complete Drilling	03-09-2021	While Drilling	44.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]	At Completion of Drilling	mud in borehole		
Driller	NC&EG	Logger	M. Sadowski	Time After Drilling	NA		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	NA		
				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

Wang Engineering
 wangeng@wangeng.com
 1145 N Main Street
 Lombard, IL 60148
 Telephone: (630) 953-9928
 Fax: (630) 953-9938

BORING LOG MLA-BSB-01
 WEI Job No.: 7901-15-01
 Client: **TranSystems Corporation**
 Project: **80 Reconstruction (Houbolt Road to Center Street)**
 Location: **Will County, Illinois**

Datum: NAVD 88
 Elevation: 640.88 ft
 North: 1764736.17 ft
 East: 1044039.14 ft
 Station: 614+60.37
 Offset: 57.14 LT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)
564.1	Stiff to hard, gray SILTY CLAY LOAM to SILTY LOAM, trace to little gravel; damp to moist --RDR 2-3--	17	15	15	16	NP			22	10	8	1.31	17
		18	8	16	27	NP			23	12	16	7.02	15
		19	13	15	11	NP			24	10	25	40	13
		20	9	9	9	NP			20	9	9	9	13
		21	8	9	11	NP			21	8	9	11	18

Boring terminated at 90.00 ft

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-09-2021	Complete Drilling	03-09-2021	While Drilling	44.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]	At Completion of Drilling	mud in borehole		
Driller	NC&EG	Logger	M. Sadowski	Time After Drilling	NA		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	NA		
				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

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BORING LOG MLA-BSB-02
 WEI Job No.: 7901-15-01
 Client: **TranSystems Corporation**
 Project: **80 Reconstruction (Houbolt Road to Center Street)**
 Location: **Will County, Illinois**

Datum: NAVD 88
 Elevation: 641.53 ft
 North: 1764685.15 ft
 East: 1044037.36 ft
 Station: 614+56.55
 Offset: 623.1 T

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/ft)	Qu (tsf)	Moisture Content (%)		
641.0	6-inch thick, black SILTY CLAY LOAM --TOPSOIL--	1	5	4	4.00	P			11	7	9	3.33	24		
	Very stiff to hard, brown SILTY CLAY, trace gravel; damp --FILL-- --RDR 2--	2	5	6	5.33	B			12	5	9	2.54	23		
		3	3	4	2.46	B			13	2	2	3	0.08	22	
		4	6	7	3.69	B			14	5	6	10	3.03	19	
		5	6	11	8.61	B			15	9	8	14	NP	22	
		6	6	12	6.21	B			16	28	43	32	NP	11	
		7	7	10	3.69	B			17	10	15				
		8	6	10	6.56	B	597.7	Medium dense, gray SILT; wet --RDR 2--	46	15	9	8	14	NP	22
		9	5	8	4.50	P	594.8	Very dense, gray, coarse SAND; damp --RDR 2--							
		10	6	7	5.33	B			16	28	43	32	NP	11	

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-20-2021	Complete Drilling	04-20-2021	While Drilling	58.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20CME55T [81%]	At Completion of Drilling	mud in borehole		
Driller	R&J	Logger	I. Nenn	Time After Drilling	NA		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	NA		
				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

(Sheet 1 of 8)

AECOM 303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-3276 PHONE: (312) 373-1700 FAX: (312) 373-6800	USER NAME =	DESIGNED - MK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - DD	REVISED -			I-80	FAI 80 22 BR	WILL	1201	695
PLOT DATE =	DRAWN - MK	REVISED -	CHECKED - DD	REVISED -	SHEET S2-39 OF S2-46 SHEETS	CONTRACT NO. 62R89		ILLINOIS FED. AID PROJECT		

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BORING LOG MLA-BSB-02
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.53 ft
North: 1764685.15 ft
East: 1044037.36 ft
Station: 614+56.55
Offset: 6.23 LT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
589.8	Dense, brown SANDY LOAM; wet --RDR 2--	55	17	11 16 16	NP	22		564.8	Medium dense, gray SILT; wet to saturated --RDR 2--	80	22	6 6 6	NP	26	
584.8	Dense, gray coarse SAND; saturated --RDR 2--	60	18	12 17 21	NP	16		559.8	Stiff to hard, gray SILTY CLAY LOAM to SILTY LOAM, trace gravel; damp --RDR 2--	85	23	9 15 18	6.15 B	16	
569.8	Stiff, gray SILTY CLAY LOAM, trace gravel; moist --RDR 2--	75	21	9 8 11	1.23 B	17		551.5	Boring terminated at 90.00 ft	90	24	11 19 39	1.72 B	15	

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	04-20-2021	Complete Drilling	04-20-2021	While Drilling	58.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20CME55T [81%]	At Completion of Drilling	mud in borehole		
Driller	R&J	Logger	I. Nenn	Time After Drilling	NA		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	NA		

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BORING LOG MLA-BSB-03
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 643.51 ft
North: 1764616.64 ft
East: 1044033.20 ft
Station: 614+50.47
Offset: 62.88 RT

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
642.0	18-inch thick ASPHALT --PAVEMENT--							614.0	--silt=56.9-- --%Clay=41.3-- --A-7-6 (24)--	55	11	5 10 15	5.33 B	24	
630.5	Brown and gray SANDY GRAVEL; damp --FILL-- Stiff to very stiff, gray, black and brown SILTY CLAY, trace gravel; damp --trace wood fragments-- --FILL-- --RDR 2--	5	2	8 5 7	2.71 B	22		611.8	--sand seams; wet-- Brown, fine SAND; saturated --RDR 2--	30	12	9 14 17	4.50 P	25	
		10	3	5 4 4	1.25 P	19			--slow hard drilling-- --possible cobbles-- Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp to moist --RDR 2-3--	35	13	5 6 11	1.80 B	20	
		15	4	14 12 6	2.25 P	23				40	14	5 9 12	4.76 B	18	
		20	5	4 5 5	1.48 B	27				45	15	3 6 9	2.05 B	22	
	Very stiff to hard, gray and brown SILTY CLAY, trace gravel; damp --RDR 2--	25	6	5 8 16	6.64 B	19		596.8	Dense, gray SILT; wet --RDR 2--	50	16	17 25 18	NP	16	
		30	7	9 15 23	NR					55	17	8 9 12	4.35 B	24	
		35	8	5 10 12	5.00 B	21				60	18	7 9 13	NP	21	
		40	9	9 10 16	3.77 B	22				65	19	7 10 13	NP	21	
		45	10	8 9 12	4.35 B	24				70	20	7 9 13	NP	21	

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-16-2021	Complete Drilling	03-16-2021	While Drilling	29.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]	At Completion of Drilling	mud in borehole		
Driller	J&M	Logger	M. Sadowski	Time After Drilling	48 hours		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	22.00 ft		

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BORING LOG MLA-BSB-03
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 643.51 ft
North: 1764616.64 ft
East: 1044033.20 ft
Station: 614+50.47
Offset: 62.88 RT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
591.8	--rig chatter-- Dense to very dense, brown and gray, medium to coarse SAND, trace to little gravel; saturated --RDR 2--	55	17	26 28 25	NP	16		566.8	Dense, gray SILT; wet to saturated --RDR 2--	80	22	11 12 18	NP	19	
		60	18	5 20 23	NP	12		562.0	--hard drilling-- Very stiff, gray SILTY CLAY LOAM to SILTY LOAM, little gravel; damp --RDR 3--	85	23	13 13 14	3.50 P	17	
		65	19	9 12 13	NP	15		557.5	--hard slow drilling; boulder-- Black GRANITE --RUN 1: 87.5 to 88.0 feet-- --Recovery = 100%-- --RQD = 100%--	90	24	SOLE	4.50 P	14	
		70	20	7 9 13	NP	21		553.5	Hard, gray SILTY CLAY LOAM to SILTY LOAM, some gravel; damp --RDR 3-5-- Boring terminated at 90.00 ft	95	25	SOLE	4.50 P	14	
		75	21	7 10 10	NP	17				100					

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-16-2021	Complete Drilling	03-16-2021	While Drilling	29.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]	At Completion of Drilling	mud in borehole		
Driller	J&M	Logger	M. Sadowski	Time After Drilling	48 hours		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	22.00 ft		

(Sheet 2 of 8)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SOIL BORING LOGS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	696
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

MODEL: Sheet
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BORING LOG MLA-BSB-04
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.88 ft
North: 1764742.68 ft
East: 1044205.72 ft
Station: 616+27.08
Offset: 57.01 LT

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
638.1	9-inch thick ASPHALT PAVEMENT												
636	Gray and black SANDY GRAVEL; damp	1	1	26 14 4	NP	4			11	8 16 19	8.20	20	
	Medium stiff to very stiff, brown and gray SILTY CLAY to SILTY CLAY LOAM, trace to little gravel; damp	2	2	3 4 5	2.00	21			12	7 10 13	6.56	20	
	FILL RDR 2	3	3	4 7 8	1.80	16			13	7 8 10	3.69	20	
		4	4	3 6 7	0.75	21			14	4 7 9	3.28	22	
		5	5	3 3 5	2.05	28			15	5 8 5	NP	23	
		6	6	3 4 7	3.28	22			16	8 15 18	NP	14	
623.4	Very stiff to hard, brown to gray SILTY CLAY, trace gravel; damp	7	7	3 4 6	5.58	17			17	12 12 13	NP	19	
		8	8	6 11 13	7.05	19	594.6	Medium dense, gray SILTY LOAM; moist to wet	18	11 11 15	NP	13	
		9	9	11 17 25	8.69	20	592.1	Medium dense to dense, brown and gray, fine to medium SAND to SANDY LOAM, trace gravel; wet to saturated	19	14 14 11	NP	16	
		10	10	8 16 21	7.87	20	597.1	Gray SILTY LOAM; moist to wet	20	8 9 13	NP	16	
							594.6	Medium dense, gray SANDY	21	12 12 13	NP	19	
							593.9		22	12 12 13	NP	19	

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-08-2021	Complete Drilling	03-09-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	NC&EG	Logger	M. Sadowski
Checked by	C. Marin	Time After Drilling	24 hours
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	36.00 ft

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BORING LOG MLA-BSB-04
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.88 ft
North: 1764742.68 ft
East: 1044205.72 ft
Station: 616+27.08
Offset: 57.01 LT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
	LOAM; saturated												
	Boring terminated at 75.00 ft												
		17	17	5 9 13	NP	20			17	5 9 13	NP	20	
		18	18	11 11 15	NP	13			18	11 11 15	NP	13	
		19	19	14 14 11	NP	16			19	14 14 11	NP	16	
		20	20	8 9 13	NP	16			20	8 9 13	NP	16	
		21	21	12 12 13	NP	19			21	12 12 13	NP	19	

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-08-2021	Complete Drilling	03-09-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	NC&EG	Logger	M. Sadowski
Checked by	C. Marin	Time After Drilling	24 hours
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	36.00 ft

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BORING LOG MLA-BSB-05
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.63 ft
North: 1764696.23 ft
East: 1044214.48 ft
Station: 616+33.98
Offset: 10.25 LT

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
	Very stiff (2.50F), black and brown SILTY CLAY LOAM, trace gravel; damp	1	1	4 4 4	3.25	20			11	9 9 16	7.38	20	
		2	2	3 3 6	3.69	18			12	12 15 15	1.00	26	
		3	3	6 8 9	1.50	20			13	6 7 12	3.94	19	
		4	4	3 4 6	2.21	17			14	5 7 10	2.71	23	
		5	5	4 5 5	2.54	17			15	5 9 10	3.28	27	
		6	6	9 50/50	2.05	21			16	22 24 14	NP	15	
623.4	Soft, black and gray SILTY CLAY LOAM; damp	7	7	3 3 4	0.41	31	596.9	Very stiff, gray CLAY; damp					
620.6	Stiff to hard, brown to gray SILTY CLAY, trace to little gravel; damp	8	8	9 7 6	4.35	23	594.1	Gray SILTY LOAM; moist					
		9	9	12 22	8.04	19	591.9	Medium dense to dense, brown and gray, medium to coarse SAND, trace gravel; moist to saturated					
		10	10	16 23	7.22	19							

GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-20-2021	Complete Drilling	04-20-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	R&J	Logger	M. Sadowski
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA; boring backfilled upon completion	Depth to Water	NA

(Sheet 3 of 8)

AECOM 303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-3276 PHONE: (312) 373-7700 FAX: (312) 373-6800	USER NAME =	DESIGNED - MK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)	F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - MK	REVISED -			I-80	FAI 80 22 BR	WILL	1201	697
PLOT DATE =	CHECKED - DD	REVISED -		SHEET S2-41 OF S2-46 SHEETS			CONTRACT NO. 62R89			
							ILLINOIS FED. AID PROJECT			

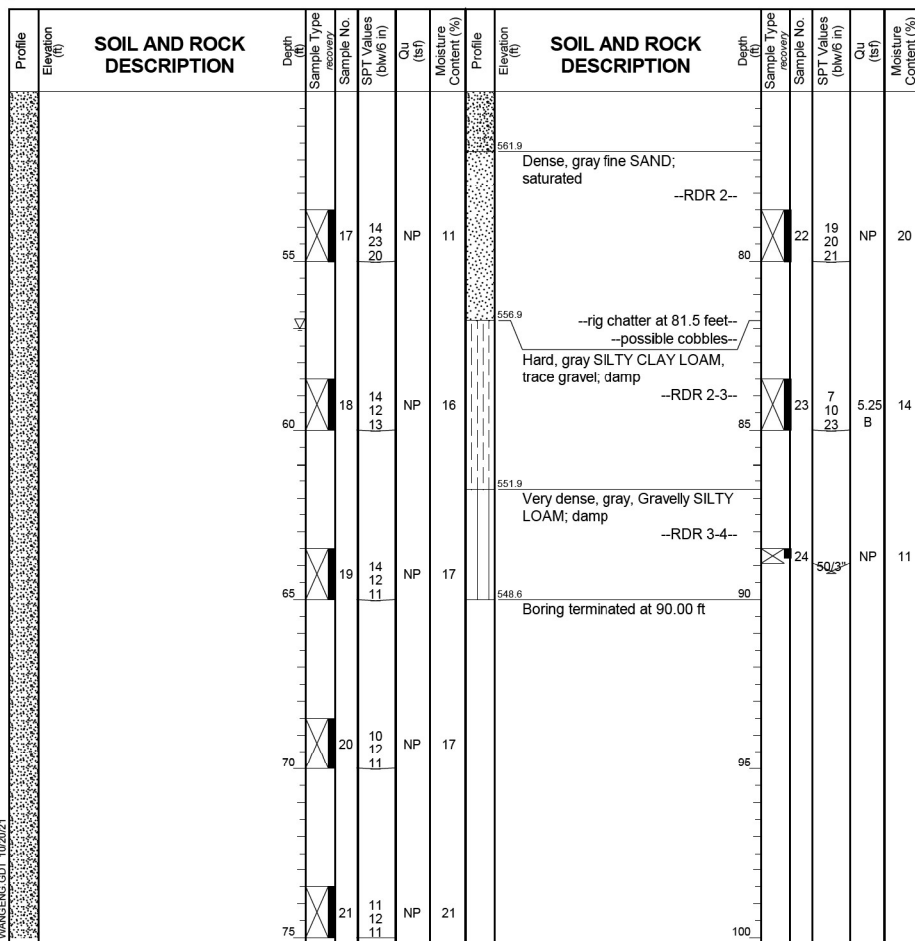
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BORING LOG MLA-BSB-05
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 638.63 ft
North: 1764696.23 ft
East: 1044214.48 ft
Station: 616+33.98
Offset: 10.25 LT

Page 2 of 2



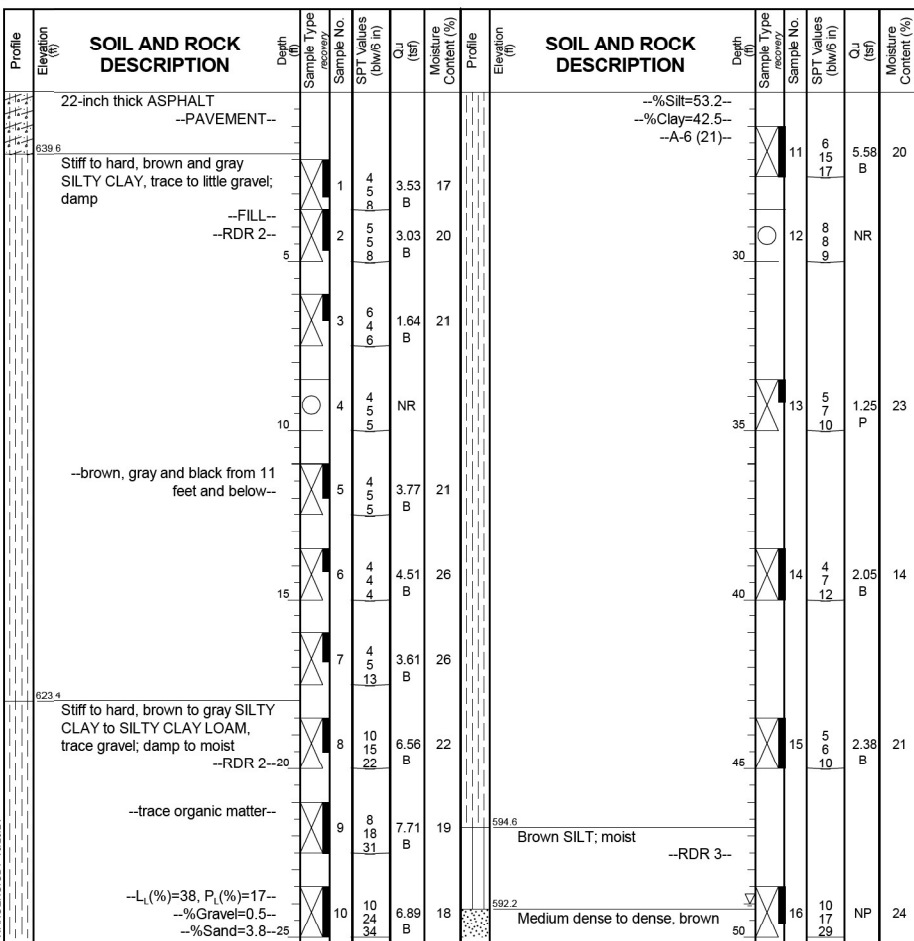
GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	04-20-2021	Complete Drilling	04-20-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	R&J	Logger	M. Sadowski
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA; boring backfilled upon completion	Depth to Water	NA

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BORING LOG MLA-BSB-06
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.38 ft
North: 1764622.45 ft
East: 1044220.46 ft
Station: 616+37.07
Offset: 63.71 RT

Page 1 of 2



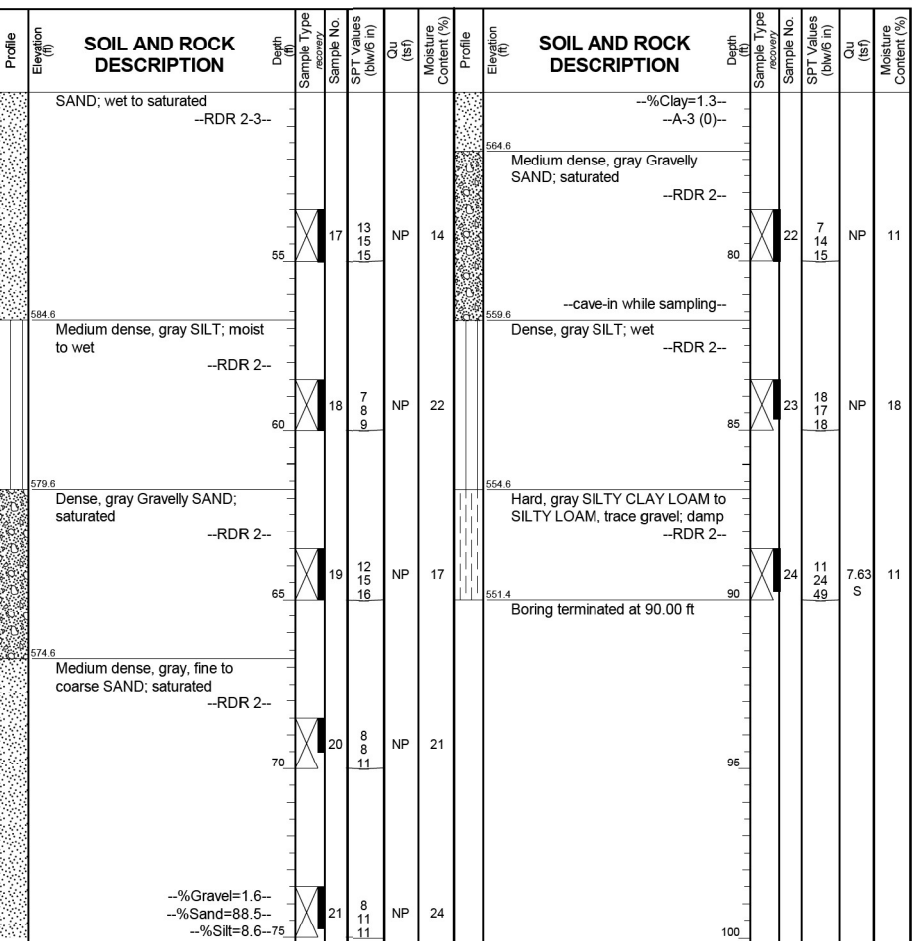
GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-18-2021	Complete Drilling	03-18-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	J&M	Logger	M. Ciapas
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	NA

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Telephone: (630) 953-9928
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BORING LOG MLA-BSB-06
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 641.38 ft
North: 1764622.45 ft
East: 1044220.46 ft
Station: 616+37.02
Offset: 63.71 RT

Page 2 of 2



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-18-2021	Complete Drilling	03-18-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	J&M	Logger	M. Ciapas
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	NA

(Sheet 4 of 8)

<p>303 EAST WACKER DRIVE, SUITE 1400 CHICAGO, IL 60601-5276 PHONE: (312) 373-1700 FAX: (312) 373-6800</p>	USER NAME =	DESIGNED - MK	REVISED -	<p style="text-align: center;">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p style="text-align: center;">SOIL BORING LOGS STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)</p>	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN - MK	REVISED -			I-80	FAI 80 22 BR	WILL	1201	698
PLOT DATE =	CHECKED - DD	REVISED -		SHEET S2-42 OF S2-46 SHEETS			CONTRACT NO. 62R89			
				ILLINOIS			FED. AID PROJECT			

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10/4/2023 4:02:21 PM

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BORING LOG MLA-BSB-07
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 621.60 ft
North: 1764756.83 ft
East: 1044111.77 ft
Station: 615+33.76
Offset: 74.89 LT

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
820.7	11-inch thick ASPHALT --PAVEMENT-- Medium dense, gray SANDY GRAVEL; damp to saturated --FILL-- --RDR 2--	1	8	NP	16	NP	8	596.1	Loose, gray SILTY LOAM; saturated --RDR 2--	11	5	NP	4	NP	25
616.1	Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp --RDR 2-3--	2	7	NP	8	NP	19	585.8	Medium dense to very dense, brown, medium to coarse SAND, trace gravel; moist --RDR 2-30--	12	15	NP	24	NP	11
	--rig chatter, possible cobbles-- --L ₁ (%)=34, P ₁ (%)=19-- --%Gravel=3.8-- --%Sand=5.7-- --%Silt=57.0-- --%Clay=33.5-- --A-6 (13)--	3	5	B	9	3.61	22								
		4	5	B	20	3.28	22								
		5	10	B	6	1.56	21								
		6	4	NR	6										
		7	4	B	7	4.84	19	579.9	Dense, brown SANDY GRAVEL; saturated --RDR 2-- --cave-in at 43.5 feet--	15	9	NP	16	14	11
		8	8	B	5	2.62	20								
		9	5	NR	6			574.9	Medium dense, brown to gray, fine to coarse SAND, little to some gravel; saturated --RDR 2--	16	10	NP	12	13	13
		10	7	P	12	2.50	23								

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-11-2021	Complete Drilling	03-12-2021	While Drilling	3.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]	At Completion of Drilling	mud in borehole		
Driller	RH&JD	Logger	E. Yim	Time After Drilling	NA		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	NA		
				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

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BORING LOG MLA-BSB-07
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
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Offset: 74.89 LT

Page 2 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
544.1	Very dense, gray DOLOSTONE FRAGMENTS --RDR 3-4--							544.1	Strong, light grayish gray, fair to good quality, DOLOSTONE; closely spaced, slightly weathered, horizontal joints, with <0.05 inch opening, slightly rough walls, and no infill. --RUN 1: 77.5 to 87.5 feet-- --Recovery= 100%-- --RQD= 76%-- --Q _u = 8,046 psi--						
567.9	Medium dense, gray SILTY LOAM; saturated --RDR 2-55--	17	14	NP	11	18									
562.9	Medium stiff, gray SILTY CLAY LOAM, trace gravel; damp --RDR 2-60--	18	9	B	6	0.82	14								
559.9	Hard, gray SILTY CLAY; damp --RDR 2--	19	14	B	18	4.50	21								
554.9	Very dense, gray SILTY LOAM; saturated --RDR 2-4--	20	15	NP	28	16									
548.0	--rig chatter at 73.5 feet, possible cobbles--	21	50	NP	10										

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-11-2021	Complete Drilling	03-12-2021	While Drilling	3.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]	At Completion of Drilling	mud in borehole		
Driller	RH&JD	Logger	E. Yim	Time After Drilling	NA		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	NA		
				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

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BORING LOG MLA-BSB-08
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 625.43 ft
North: 1764600.78 ft
East: 1044117.12 ft
Station: 615+32.90
Offset: 81.24 RT

Page 1 of 2

Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)	Profile Elevation (ft)	SOIL AND ROCK DESCRIPTION	Depth (ft)	Sample No.	Sample Type	SPT Values (blows/in)	Qu (ksf)	Moisture Content (%)
624.6	10.5-inch thick ASPHALT --PAVEMENT-- 3-inch thick, gray SANDY GRAVEL; damp --AGGREGATE BASE-- Stiff to hard, brown to gray SILTY CLAY, trace gravel; damp --RDR 2--	1	7	B	4	4.50	22	597.4	Very dense, brown SILTY LOAM; wet to saturated --RDR 2--	11	6	B	9	2.30	24
		2	7	B	10	6.40	20								
		3	6	B	9	7.87	20	593.7	Very dense, brown SAND to SANDY LOAM, little gravel; damp --RDR 2--	12	15	NP	21	32	17
		4	6	B	9	5.66	21								
		5	5	B	11	6.40	24	588.7	Dense, brown to gray SILT; saturated --RDR 2--	13	17	NP	32	32	11
		6	7	B	9	3.84	23								
		7	3	B	5	1.64	21	583.7	Medium dense to dense, brown to gray Gravelly SAND; wet to saturated --RDR 2--	14	19	NP	22	21	28
		8	4	B	5	2.46	22								
		9	5	B	7	3.36	24								
		10	5	B	7	2.21	23								

GENERAL NOTES				WATER LEVEL DATA			
Begin Drilling	03-24-2021	Complete Drilling	03-25-2021	While Drilling	28.50 ft		
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]	At Completion of Drilling	mud in borehole		
Driller	RH&JD	Logger	E. Yim	Time After Drilling	NA		
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion			Depth to Water	NA		
				The stratification lines represent the approximate boundary between soil types; the actual transition may be gradual.			

(Sheet 5 of 8)



USER NAME =	DESIGNED - MK	REVISED -
PLOT SCALE =	CHECKED - DD	REVISED -
PLOT DATE =	DRAWN - MK	REVISED -
	CHECKED - DD	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-80	FAI 80 22 BR	WILL	1201	699
CONTRACT NO. 62R89				
ILLINOIS FED. AID PROJECT				

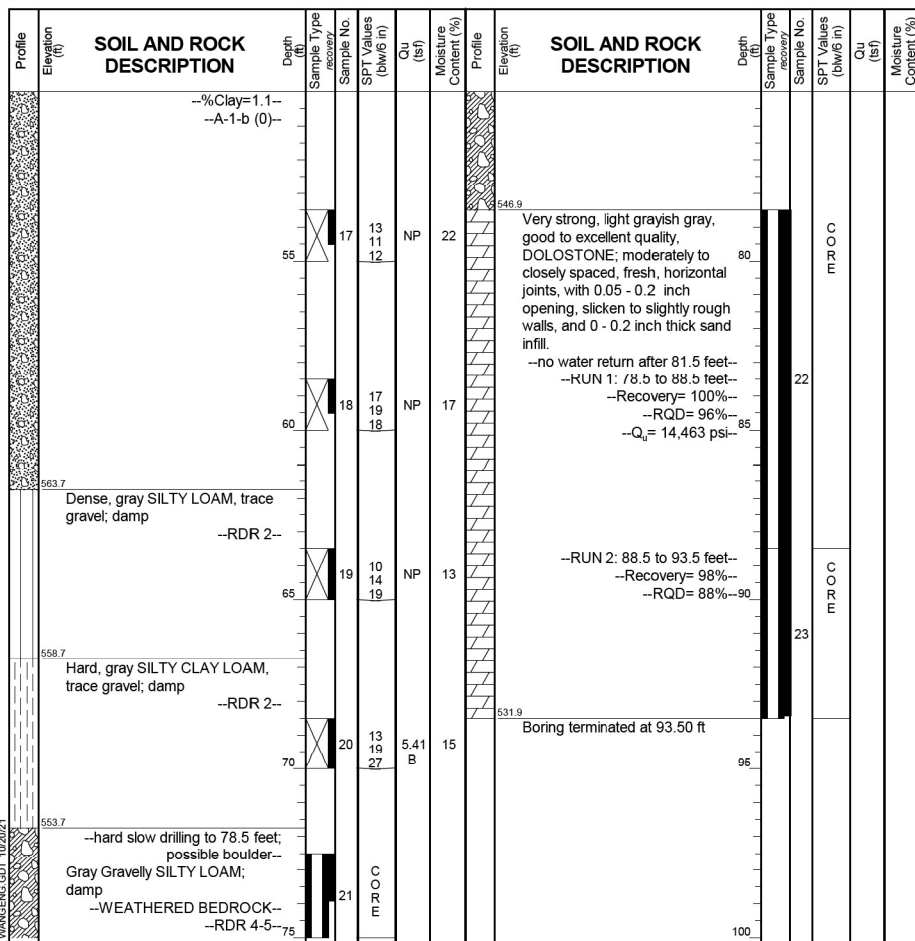
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BORING LOG MLA-BSB-08
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 625.43 ft
North: 1764600.78 ft
East: 1044117.12 ft
Station: 615+32.90
Offset: 81.24 RT

Page 2 of 2



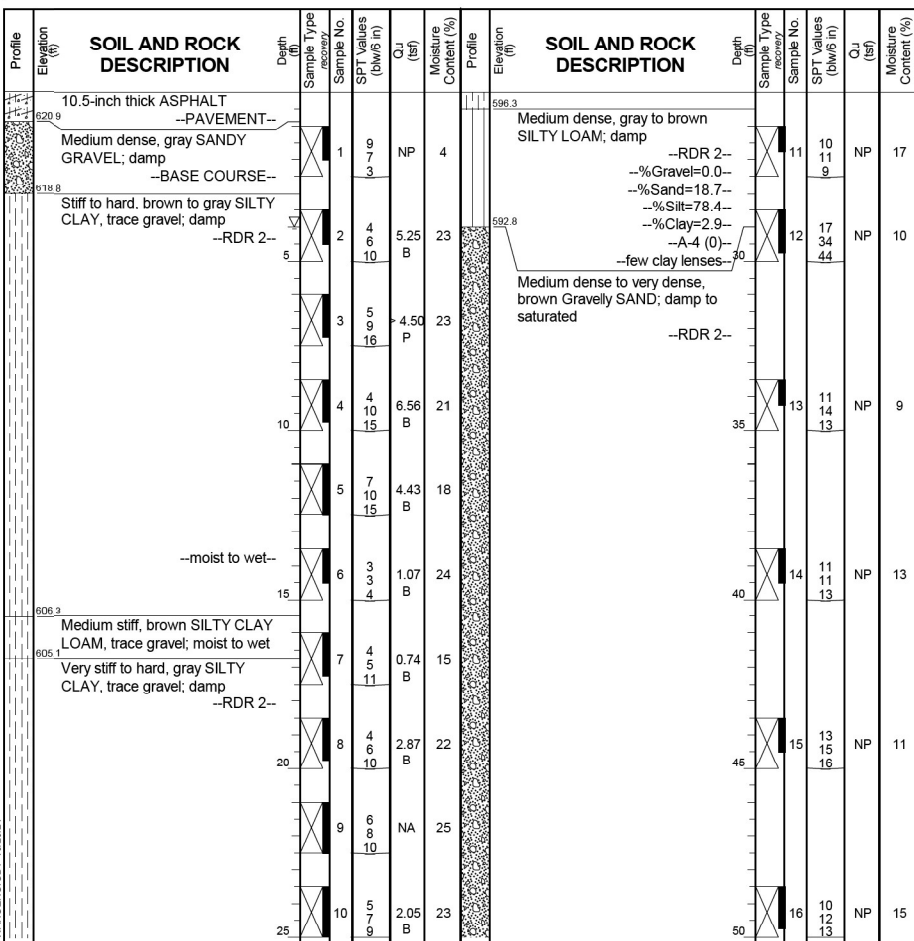
GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-24-2021	Complete Drilling	03-25-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	RH&JD	Logger	E. Yim
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	NA
		While Drilling	28.50 ft
		At Completion of Drilling	mud in borehole

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BORING LOG MLA-BSB-09
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 621.80 ft
North: 1764757.43 ft
East: 1044142.41 ft
Station: 615+64.40
Offset: 74.27 LT

Page 1 of 2



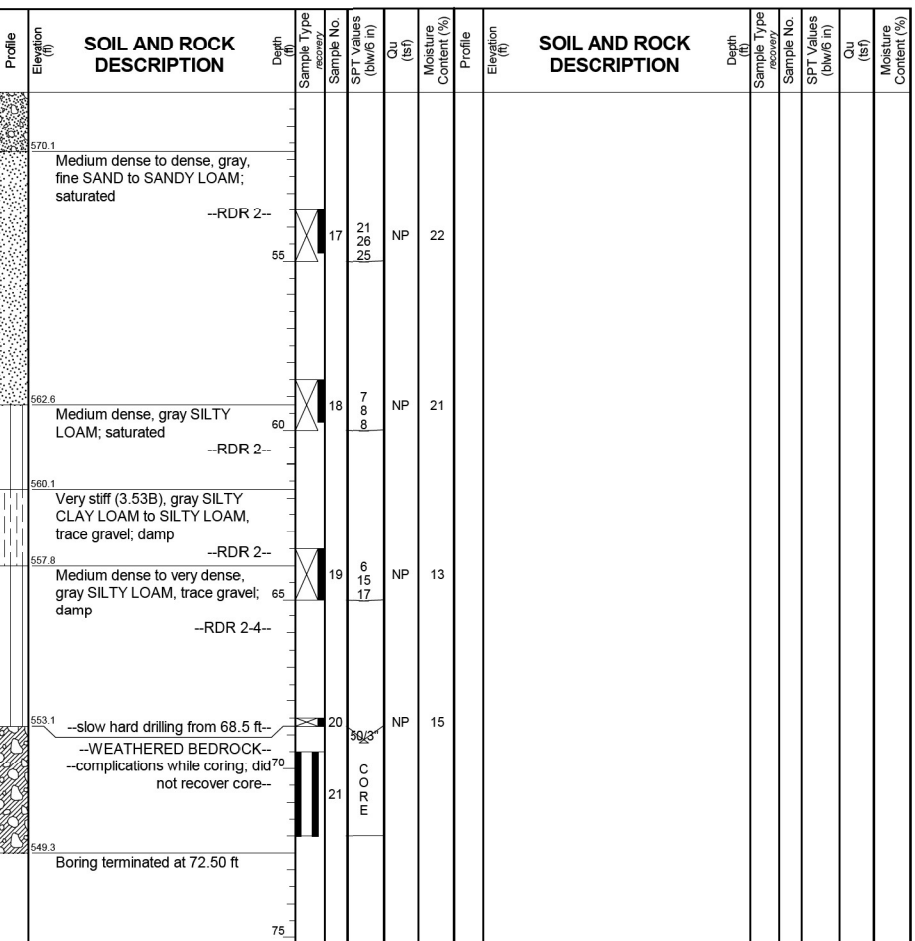
GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-19-2021	Complete Drilling	03-22-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	RH&AP	Logger	E. Yim
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	NA
		While Drilling	4.00 ft
		At Completion of Drilling	mud in borehole

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BORING LOG MLA-BSB-09
WEI Job No.: 7901-15-01
Client: **TranSystems Corporation**
Project: **80 Reconstruction (Houbolt Road to Center Street)**
Location: **Will County, Illinois**

Datum: NAVD 88
Elevation: 621.80 ft
North: 1764757.43 ft
East: 1044142.41 ft
Station: 615+64.40
Offset: 74.27 LT

Page 2 of 2



GENERAL NOTES		WATER LEVEL DATA	
Begin Drilling	03-19-2021	Complete Drilling	03-22-2021
Drilling Contractor	Wang Testing Services	Drill Rig	20D50T [80%]
Driller	RH&AP	Logger	E. Yim
Checked by	C. Marin	Time After Drilling	NA
Drilling Method	2.25" IDA HSA to 10 ft; mud rotary thereafter; boring backfilled upon completion	Depth to Water	NA
		While Drilling	4.00 ft
		At Completion of Drilling	mud in borehole

(Sheet 6 of 8)

	USER NAME =	DESIGNED - MK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING LOGS STRUCTURE NO. 099-8322 (E.B.) & 099-8323 (W.B.)	F.A.I. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED - DD	REVISED -			I-80	FAI 80 22 BR	WILL	1201	700
	PLOT DATE =	DRAWN - MK	REVISED -			CONTRACT NO. 62R89				
		CHECKED - DD	REVISED -			ILLINOIS		FED. AID PROJECT		