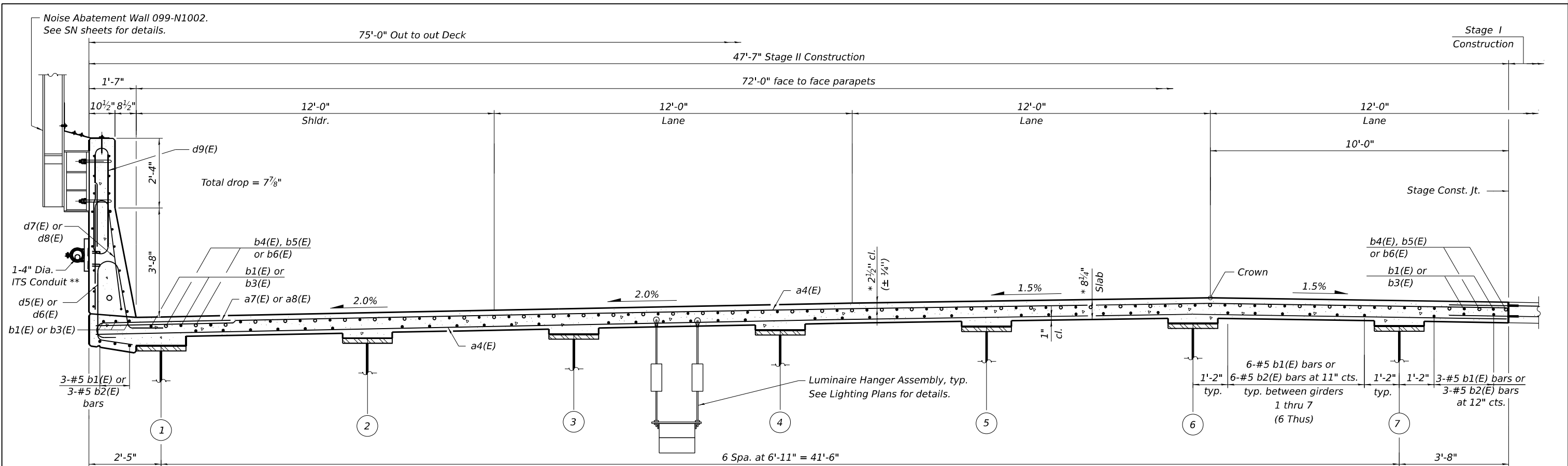
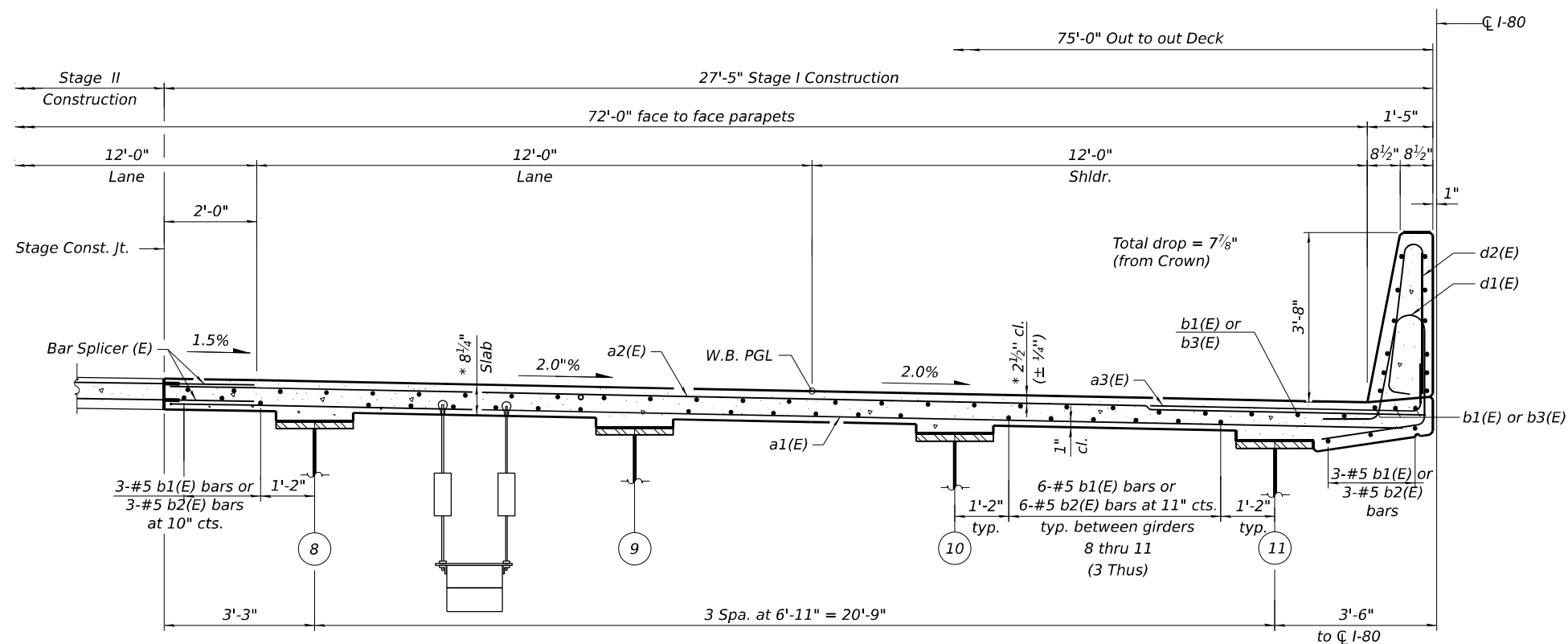


MODEL: SHEET
FILE NAME: C:\TRANSPORT\SYSTEMS\LOCAL\TRANSPORT\SYSTEMS\PW-01\DM520864\090902_0903-62F94-037-DECKSEC1.DGN



* Prior to grinding.
** See ITS Plans for details.

NEAR PIER
CROSS SECTION A-A - STAGE II CONSTRUCTION - WB
(Looking East)



* Prior to grinding.

NEAR MIDSPAN
CROSS SECTION A-A - STAGE I CONSTRUCTION - WB
(Looking East)



USER NAME	=	DESIGNED - BAR	REVISED -
PLOT SCALE	=	CHECKED - KK	REVISED -
PLOT DATE	=	DRAWN - HBJ	REVISED -
		CHECKED - BAR	REVISED -

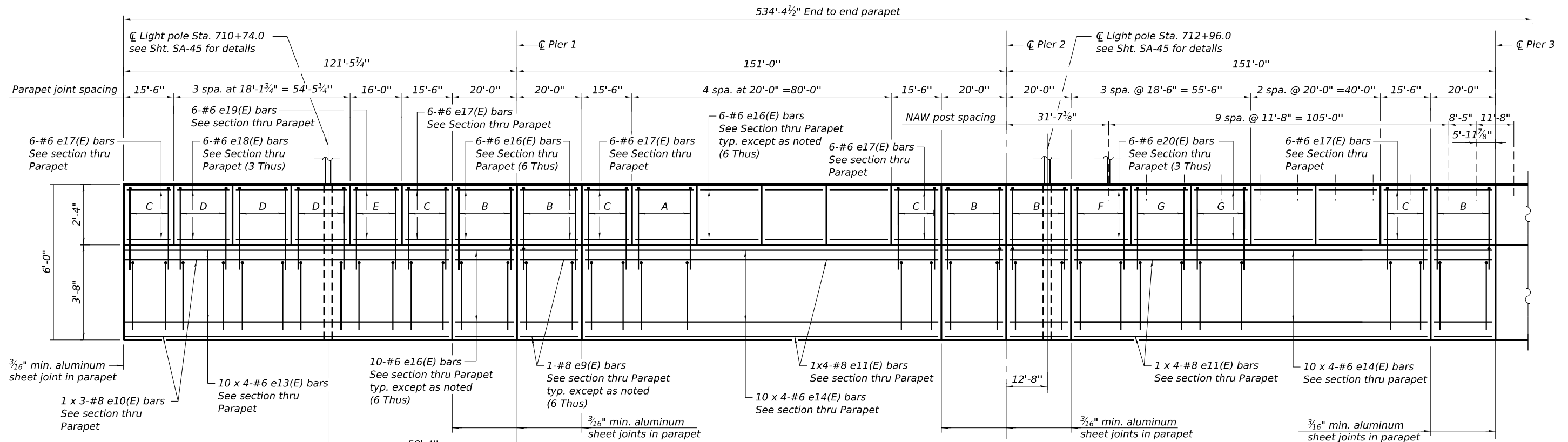
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK SECTIONS
STRUCTURE NO. 099-0903 (WB)

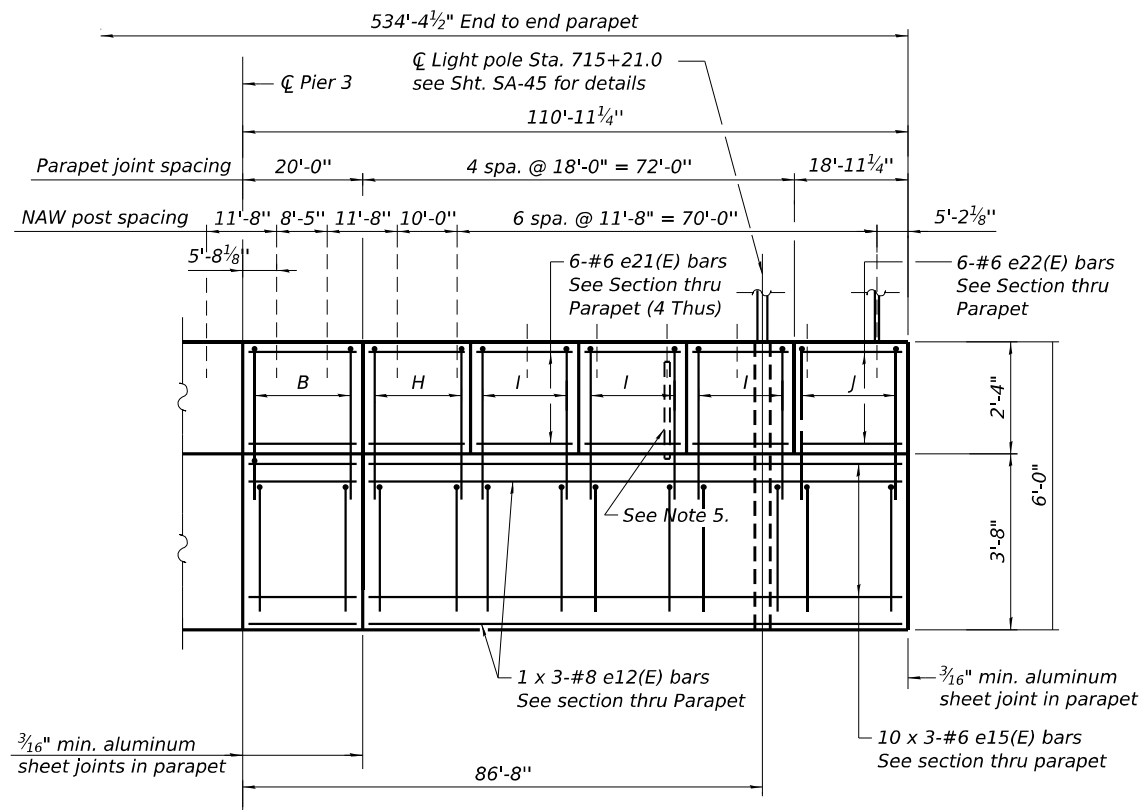
SHEET SA-37 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	701
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS-PW-01\DM520864\090902_0903-62\F94-039-FARELEV1.DGN



INSIDE ELEVATION OF NORTH PARAPET - WB - I
(Looking North, NAW not shown for clarity)



INSIDE ELEVATION OF NORTH PARAPET - WB - II
(Looking North, NAW not shown for clarity)

- A: 48-#5 d8(E) bars & 48-#5 d9(E) bars @ 5" cts.
Typ. unless noted otherwise (6 Thus)
B: 48-#6 d7(E) bars & 48-#5 d9(E) bars @ 5" cts., (6 Thus)
C: 37-#6 d7(E) bars & 37-#5 d9(E) bars @ 5" cts., (5 Thus)
D: 44-#5 d8(E) bars & 44-#5 d9(E) bars @ 5" cts., (3 Thus)
E: 38-#5 d8(E) bars & 38-#5 d9(E) bars @ 5" cts.
F: 44-#6 d7(E) bars & 44-#5 d9(E) bars @ 5" cts.
G: 45-#5 d8(E) bars & 45-#5 d9(E) bars @ 5" cts., (2 Thus)
H: 43-#6 d7(E) bars & 43-#5 d9(E) bars @ 5" cts.
I: 43-#5 d8(E) bars & 43-#5 d9(E) bars @ 5" cts., (3 Thus)
J: 46-#6 d7(E) bars & 46-#5 d9(E) bars @ 5" cts.

Notes:

1. Bars indicated thus 4 x 5-#4 etc. indicates 4 lines of bars with 5 lengths per line.
2. Dimensions are measured along the inside face of parapet.
3. For Section thru Parapet, see Sht. SA-43.
4. For Bar List, see Sht. SA-47.
5. 1/4" Anchor Rod Template $\mathbb{R}$ embedded in parapet, to be installed by bridge contractor. Typ. at each NAW post, see Sht. SA-46 for details.

MINIMUM BAR LAP
(Parapet)

#6 bar = 4'-0"
#8 bar = 5'-11"



USER NAME	=	DESIGNED - BAR	REVISED -
		CHECKED - KK	REVISED -
PLOT SCALE	=	DRAWN - HBJ	REVISED -
PLOT DATE	=	CHECKED - BAR	REVISED -

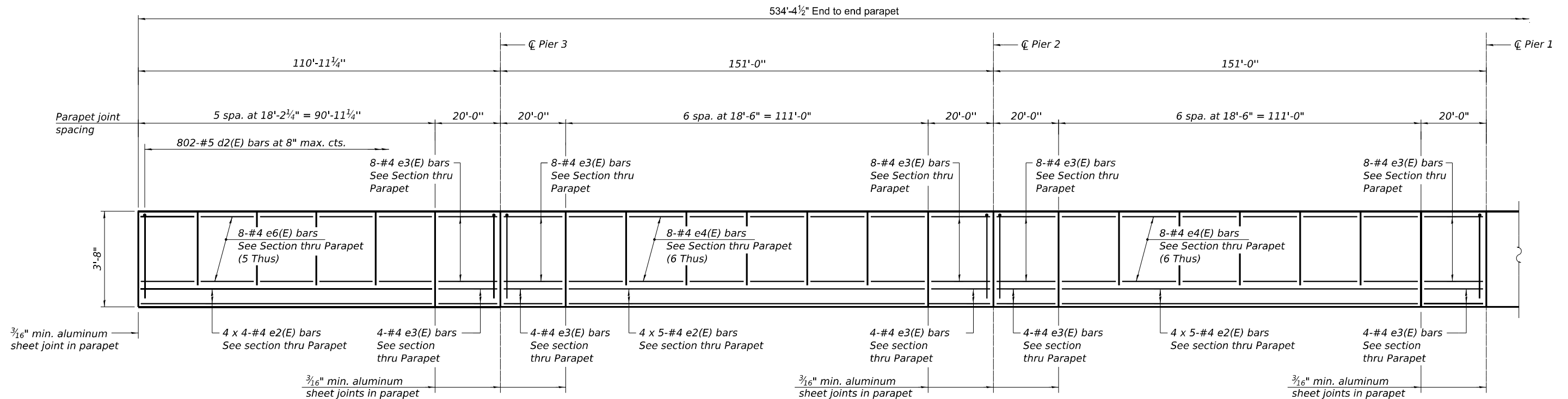
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET ELEVATION 1
STRUCTURE NO. 099-0903 (WB)

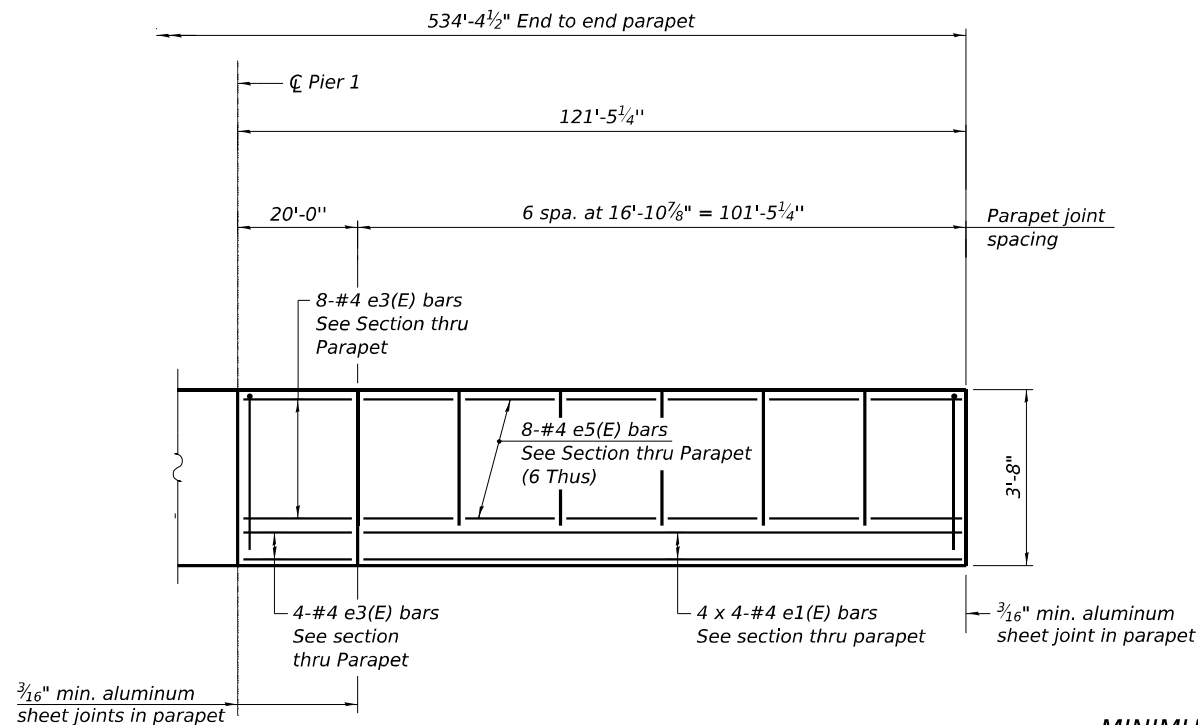
SHEET SA-39 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	703
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: SHEET
FILE NAME: C:\TRANSYS\SYSTEMS\PW_LOCAL\TRANSYS\SYSTEMS\PW-01\DM520864\090902_0903-62F94-040-FARELEV2.DGN



INSIDE ELEVATION OF SOUTH PARAPET - WB - I
(Looking South)



INSIDE ELEVATION OF SOUTH PARAPET - WB - II
(Looking South)

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

- Notes:
1. Bars indicated thus 4 x 5-#4 etc. indicates 4 lines of bars with 5 lengths per line.
 2. Dimensions are measured along the inside face of parapet.
 3. For Section thru Parapet, see Sht. SA-44.
 4. For Bar List, see Sht. SA-47.



USER NAME	=	DESIGNED - BAR	REVISED -
		CHECKED - KK	REVISED -
PLOT SCALE	=	DRAWN - HBJ	REVISED -
PLOT DATE	=	CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET ELEVATION 2
STRUCTURE NO. 099-0903 (WB)

SHEET SA-40 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	704
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: SHEET
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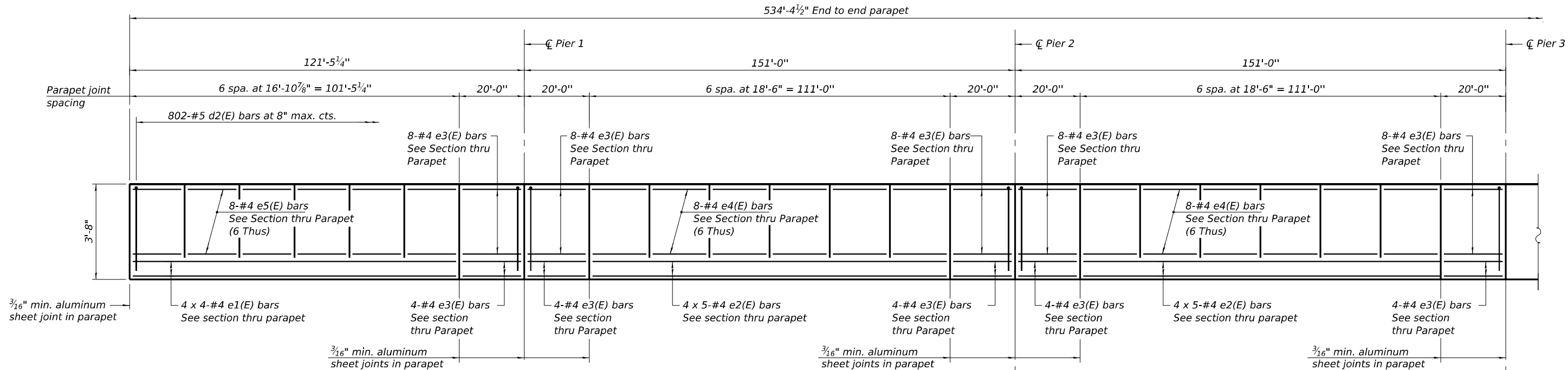
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		CHECKED	-	KK	REVISED	-
PLOT SCALE	=	DRAWN	-	HBJ	REVISED	-
PLOT DATE	=	CHECKED	-	BAR	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

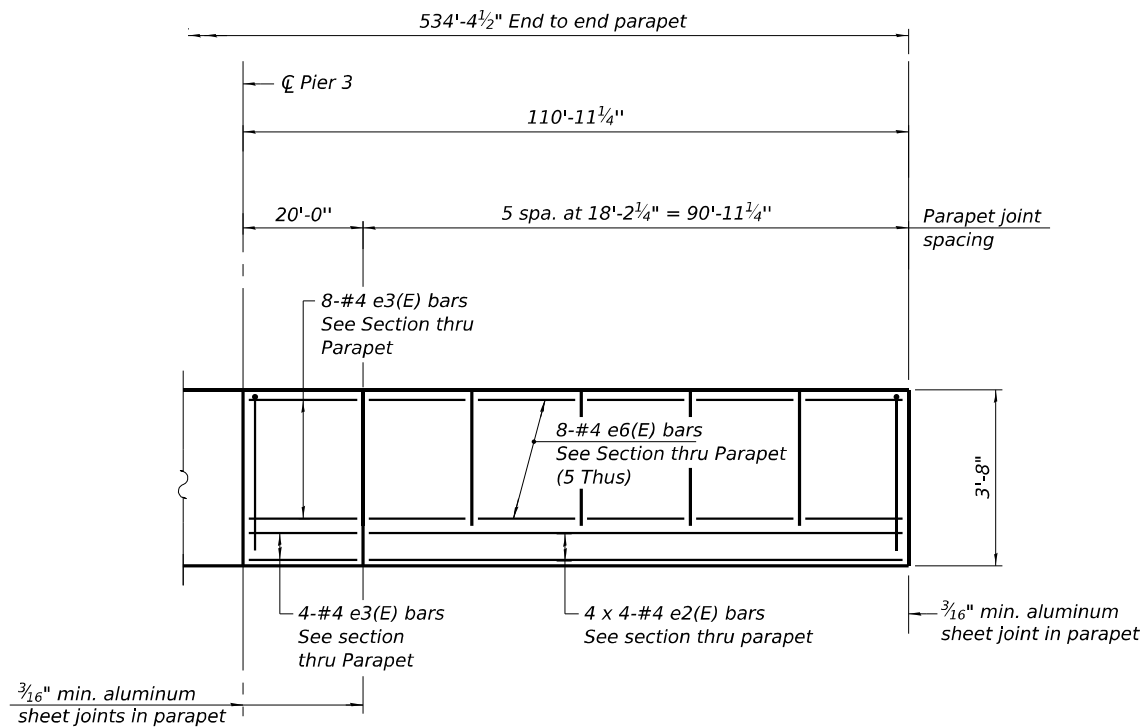
PARAPET ELEVATION 1
STRUCTURE NO. 099-0902 (EB)

SHEET SA-41 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	705
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		



INSIDE ELEVATION OF NORTH PARAPET - EB - I
(Looking North)

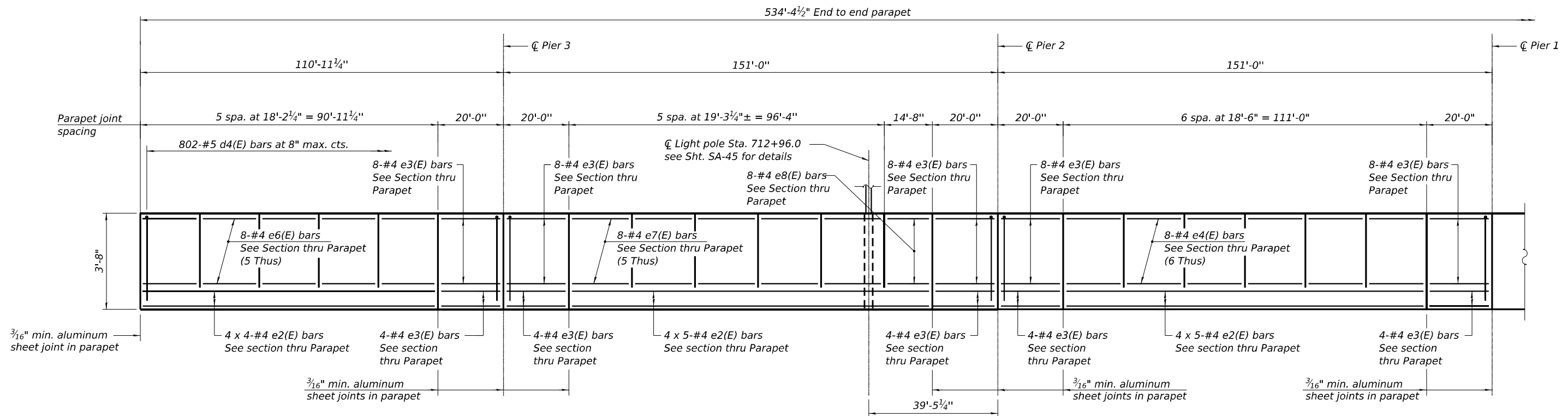


INSIDE ELEVATION OF NORTH PARAPET - EB - II
(Looking North)

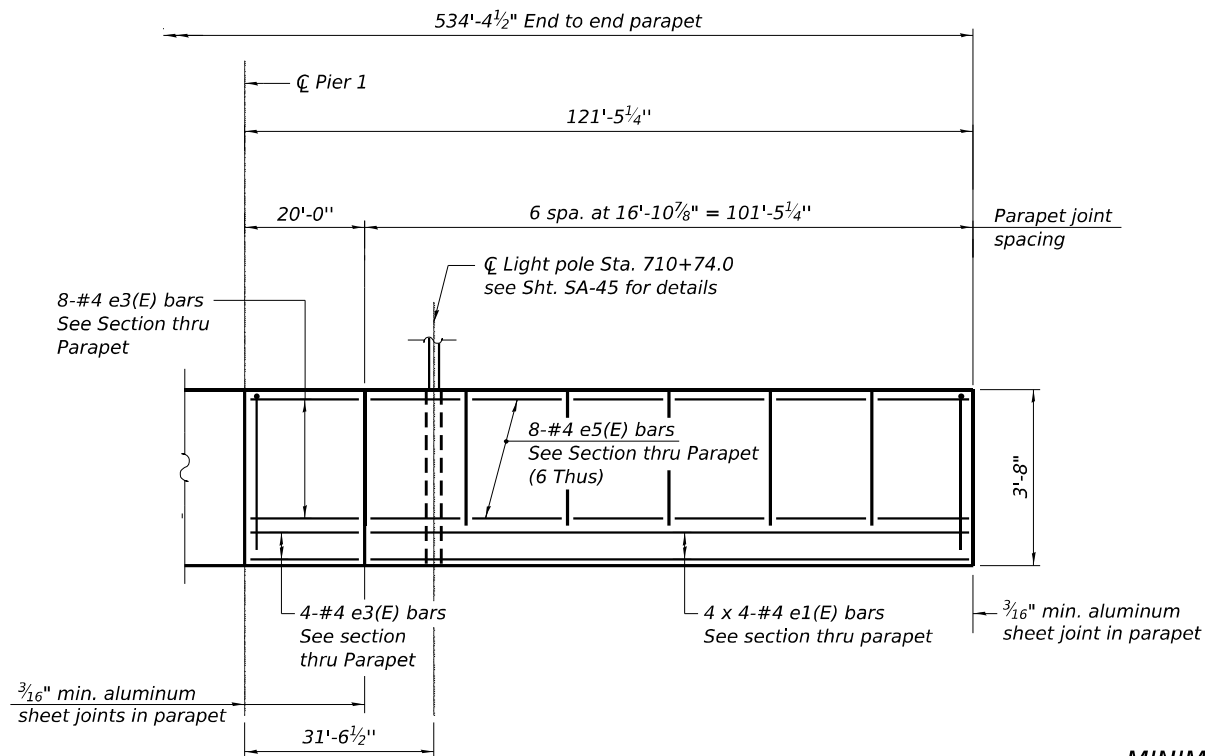
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-8"

- Notes:
1. Bars indicated thus 4 x 5-#4 etc. indicates 4 lines of bars with 5 lengths per line.
 2. Dimensions are measured along the inside face of parapet.
 3. For Section thru Parapet, see Sht. SA-44.
 4. For Bar List, see Sht. SA-47.

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS\PW-01\DM520864\090902_0903-62F94-042-PARELEV4.DGN



INSIDE ELEVATION OF SOUTH PARAPET - EB - I
(Looking South)



INSIDE ELEVATION OF SOUTH PARAPET - EB - II
(Looking South)

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

- Notes:
1. Bars indicated thus 4 x 5-#4 etc. indicates 4 lines of bars with 5 lengths per line.
 2. Dimensions are measured along the inside face of parapet.
 3. For Section thru Parapet, see Sht. SA-44.
 4. For Bar List, see Sht. SA-47.



USER NAME	=	DESIGNED - BAR	REVISED -
		CHECKED - KK	REVISED -
PLOT SCALE	=	DRAWN - HBJ	REVISED -
PLOT DATE	=	CHECKED - BAR	REVISED -

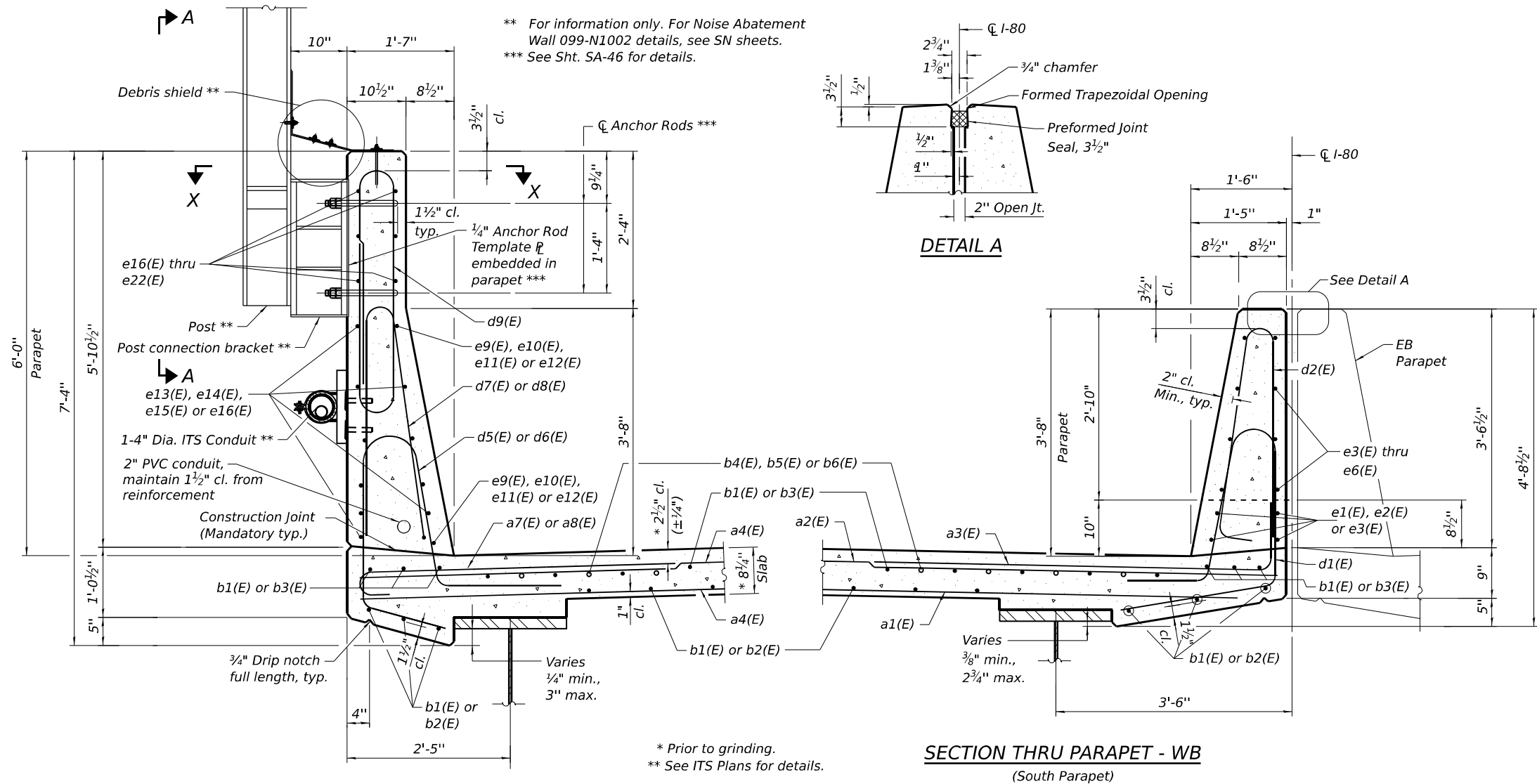
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

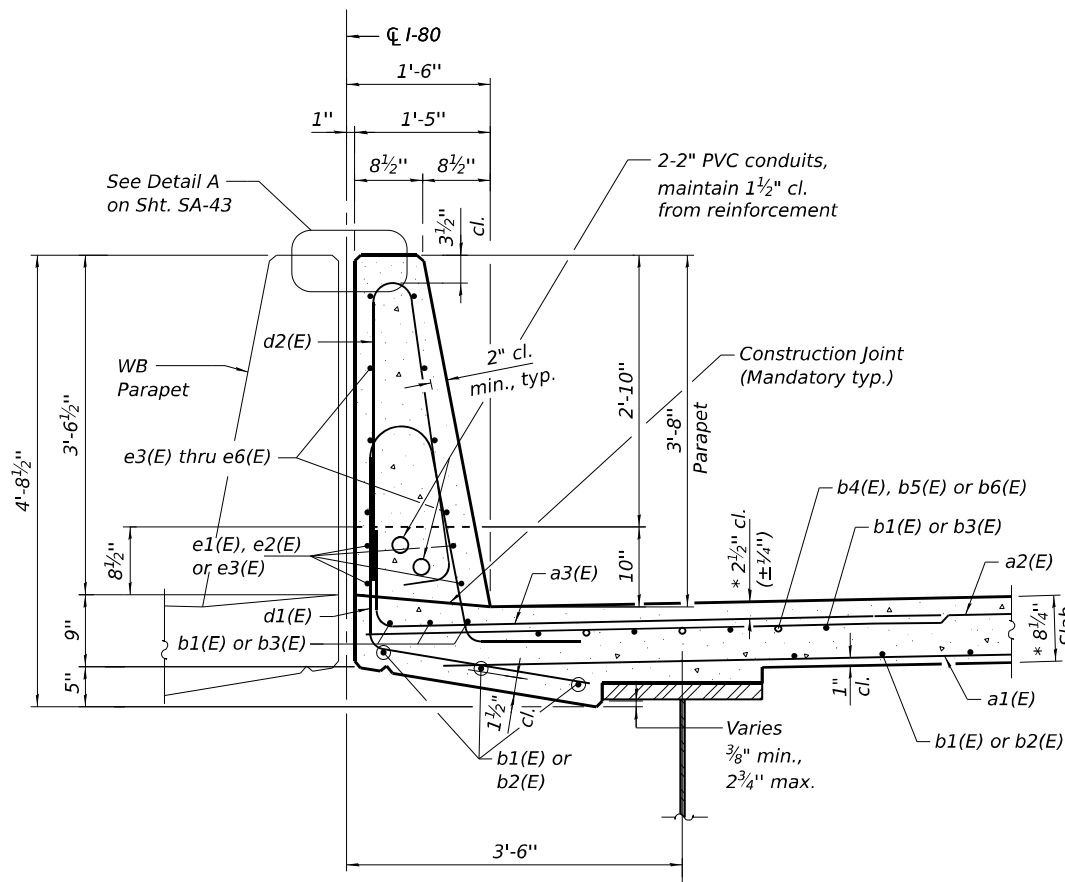
PARAPET ELEVATION 2
STRUCTURE NO. 099-0902 (EB)

SHEET SA-42 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	706
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

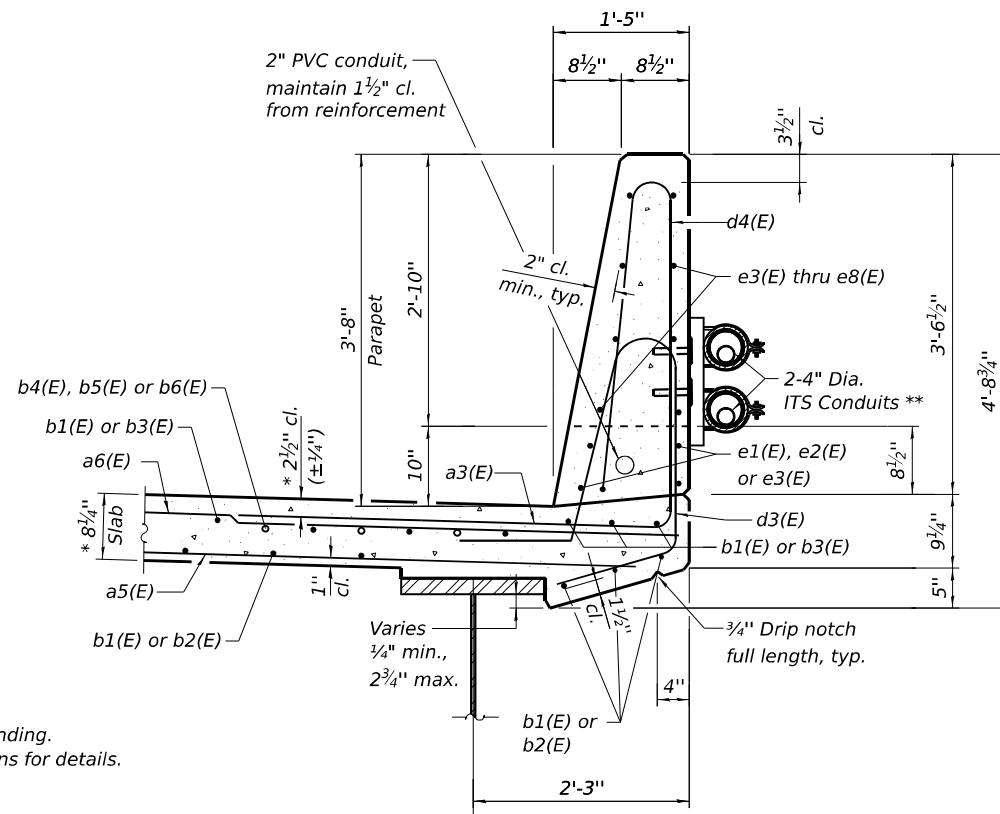
MODEL: SHEET
FILE NAME: C:\TRANSPORT\SYSTEMS\LOCAL\TRANS\SYSTEMS\PW-01\DM520864\090902_0903-62F94-043-DECKDET1.DGN





SECTION THRU PARAPET - EB
(North Parapet)

* Prior to grinding.
** See ITS Plans for details.



SECTION THRU PARAPET - EB
(South Parapet)

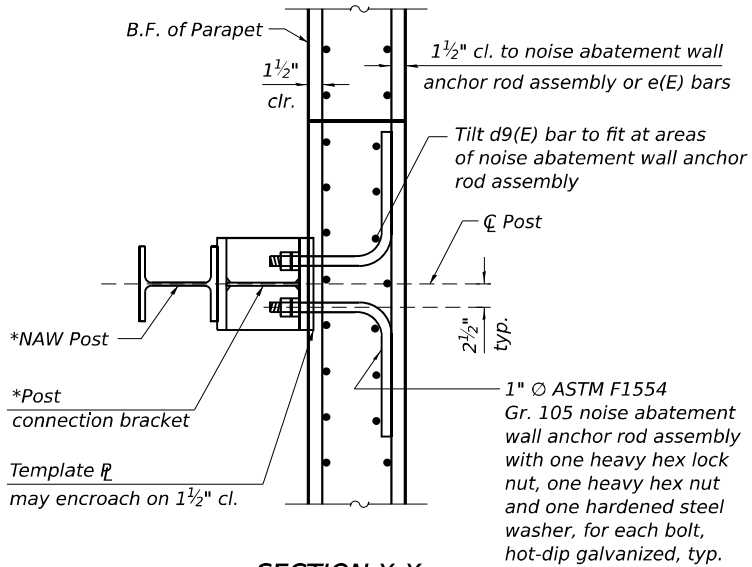
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS 2
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-44 OF SA-112 SHEETS

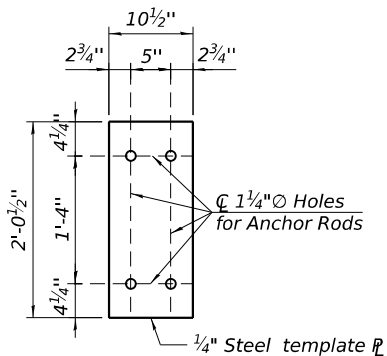
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	708
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



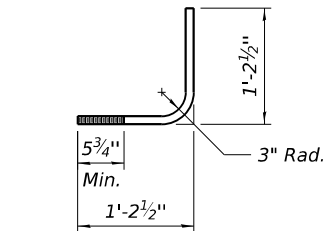


SECTION X-X

* For Noise Abatement Wall 099-N1002 details, see SN sheets.



TEMPLATE PLATE FOR
NOISE ABATEMENT WALL
ANCHOR ROD ASSEMBLY



NOISE ABATEMENT WALL
ANCHOR ROD ASSEMBLY

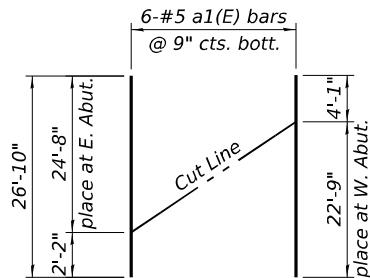


DIAGRAM #1

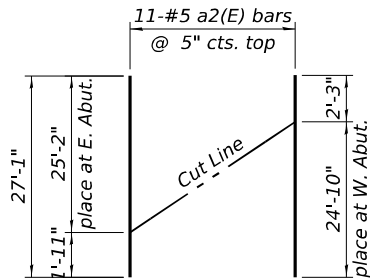


DIAGRAM #2

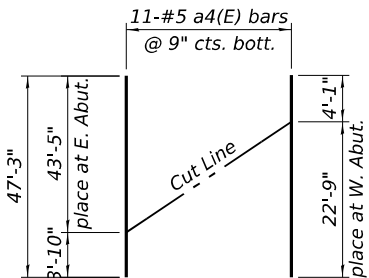


DIAGRAM #3

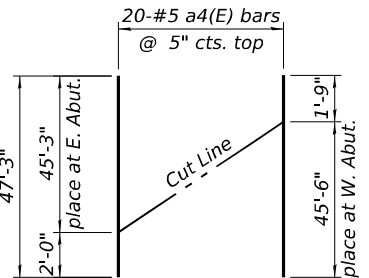


DIAGRAM #4

WB - FIELD CUTTING DIAGRAMS

For placement of bars, see Sht's. SA-31 & SA-33.

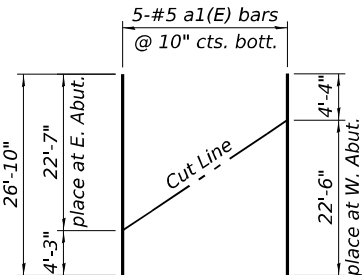


DIAGRAM #5

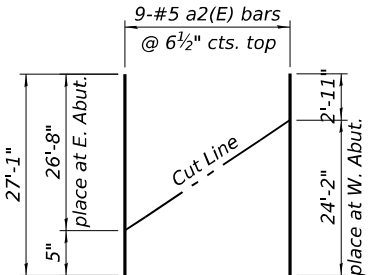


DIAGRAM #6

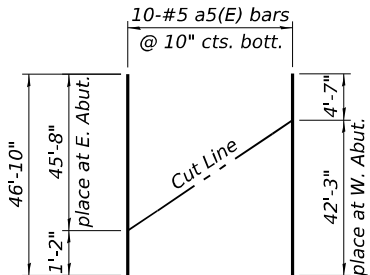


DIAGRAM #7

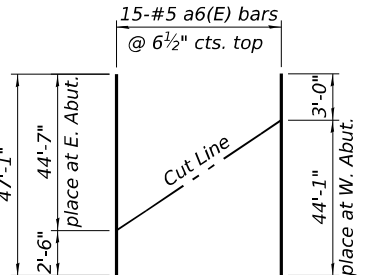


DIAGRAM #8

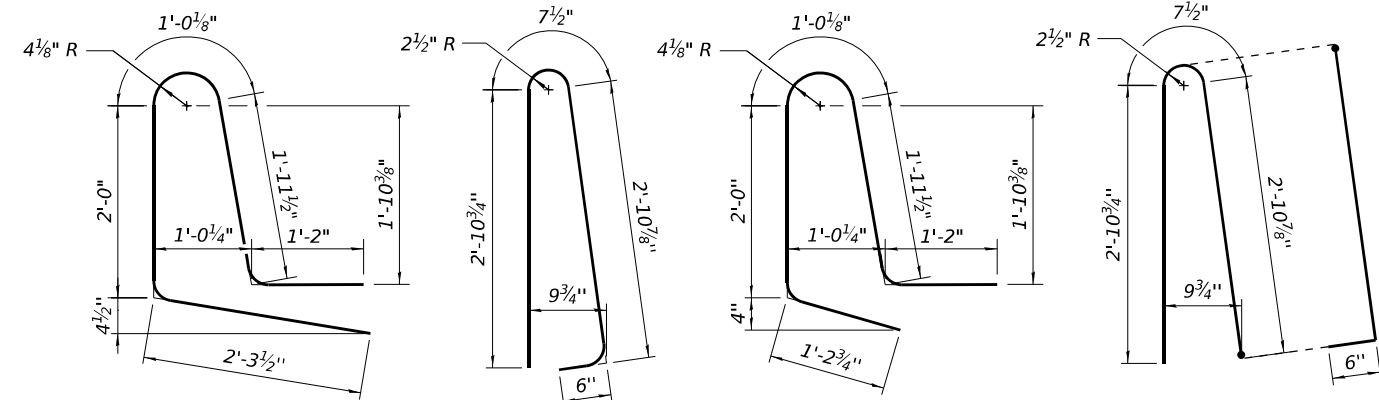
EB - FIELD CUTTING DIAGRAMS

For placement of bars, see Sht's. SA-34 & SA-36.

Notes:

- Cost of four anchor rods, template plate and associated hardware included in the unit cost for one each of Noise Abatement Wall Anchor Rod Assembly.
- For Noise Abatement Wall 099-N1002 details, see SN sheets.

MODEL: SHEET
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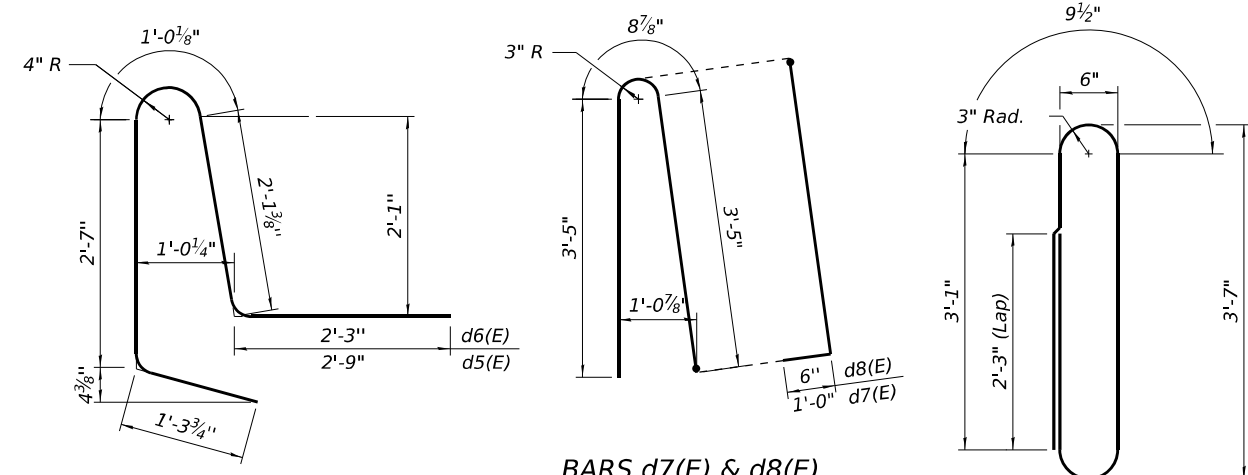


BAR d1(E)

BAR d2(E)

BAR d3(E)

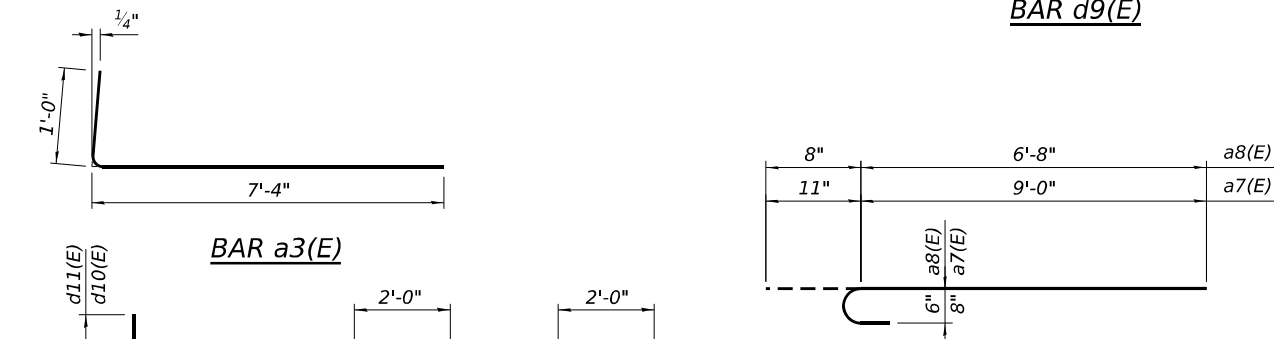
BAR d4(E)



BARS d5(E) & d6(E)

BARS d7(E) & d8(E)

BAR d9(E)

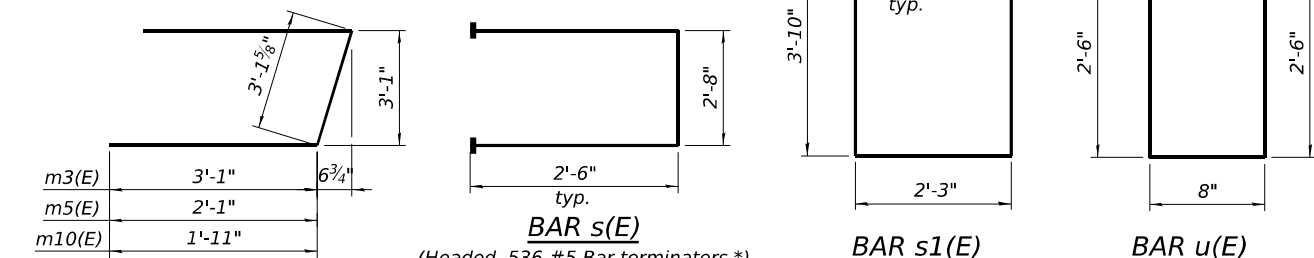


BAR a3(E)

BARS d10(E) & d11(E)

BAR d12(E)

BAR a7(E) and a8(E)



BARS m3(E), m5(E) & m10(E)

BAR s(E)

BAR s1(E)

BAR u(E)

SUPERSTRUCTURE
BILL OF MATERIAL - WB

Bar	No.	Size	Length	Shape
a1(E)	712	#5	26'-10"	—
a2(E)	1282	#5	27'-1"	—
a3(E)	1282	#6	8'-4"	└
a4(E)	1994	#5	47'-3"	—
a7(E)	606	#8	9'-11"	└
a8(E)	677	#6	7'-4"	└
a9(E)	4	#5	27'-6"	—
a10(E)	8	#5	26'-0"	—
b1(E)	2736	#5	30'-0"	—
b2(E)	66	#5	31'-0"	—
b3(E)	156	#5	17'-6"	—
b4(E)	213	#6	36'-0"	—
b5(E)	213	#6	37'-8"	—
b6(E)	213	#6	34'-0"	—
d1(E)	802	#5	8'-5"	└
d2(E)	802	#5	6'-11"	└
d5(E)	606	#6	9'-10"	└
d6(E)	677	#5	9'-4"	└
d7(E)	606	#6	8'-7"	└
d8(E)	677	#5	8'-1"	└
d9(E)	1283	#5	10'-0"	└
d10(E)	9	#6	7'-7"	└
d12(E)	33	#6	8'-11"	└
e1(E)	16	#4	27'-6"	—
e2(E)	56	#4	24'-9"	—
e3(E)	72	#4	19'-8"	—
e4(E)	96	#4	18'-2"	—
e5(E)	48	#4	16'-7"	—
e6(E)	40	#4	17'-10"	—
e9(E)	12	#8	19'-8"	—
e10(E)	6	#8	38'-0"	—
e11(E)	16	#8	32'-0"	—
e12(E)	6	#8	35'-0"	—
e13(E)	40	#6	28'-6"	—
e14(E)	80	#6	31'-0"	—
e15(E)	30	#6	33'-0"	—
e16(E)	132	#6	19'-8"	—
e17(E)	30	#6	15'-2"	—
e18(E)	18	#6	17'-10"	—
e19(E)	6	#6	15'-8"	—
e20(E)	18	#6	18'-2"	—
e21(E)	24	#6	17'-8"	—
e22(E)	6	#6	18'-7"	—

SUPERSTRUCTURE
BILL OF MATERIAL - WB

Bar	No.	Size	Length	Shape
m(E)	12	#6	27'-6"	—
m1(E)	24	#6	26'-0"	—
m2(E)	60	#6	6'-8"	—
m3(E)	8	#6	9'-4"	└
m4(E)	4	#4	27'-6"	—
m5(E)	8	#6	7'-4"	└
m6(E)	8	#4	25'-6"	—
m7(E)	60	#6	6'-8"	└
m8(E)	6	#6	3'-1"	└
m9(E)	3	#6	2'-1"	└
m13(E)	8	#6	3'-0"	—
m14(E)	8	#6	3'-5"	—
m15(E)	6	#6	3'-0"	└
m16(E)	6	#6	3'-5"	└
s(E)	134	#5	7'-8"	└
s1(E)	134	#5	11'-1"	└
u(E)	134	#4	5'-8"	└
Item		Unit	Quantity	
Concrete Superstructure		Cu Yd	1,340.4	
Reinforcement Bars, Epoxy Coated		Pound	402,420	
Noise Abatement Wall Anchor Rod Assembly		Each	21	

SUPERSTRUCTURE
BILL OF MATERIAL - EB

Bar	No.	Size	Length	Shape
a1(E)	642	#5	26'-10"	—
a2(E)	987	#5	27'-1"	—
a3(E)	1974	#6	8'-4"	└
a5(E)	642	#5	46'-10"	—
a6(E)	987	#5	47'-1"	—
a9(E)	4	#5	27'-6"	—
a10(E)	8	#5	26'-0"	—
b1(E)	2736	#5	30'-0"	—
b2(E)	66	#5	31'-0"	—
b3(E)	156	#5	17'-6"	—
b4(E)	213	#6	36'-0"	—
b5(E)	213	#6	37'-8"	—
b6(E)	213	#6	34'-0"	—
d1(E)	802	#5	8'-5"	└
d2(E)	802	#5	6'-11"	└
d3(E)	802	#5	7'-8"	└
d4(E)	802	#5	6'-11"	└
d11(E)	6	#6	5'-3"	└
d12(E)	12	#6	8'-11"	└
e1(E)	32	#4	27'-6"	—
e2(E)	112	#4	24'-9"	—
e3(E)	144	#4	19'-8"	—
e4(E)	144	#4	18'-2"	—
e5(E)	96	#4	16'-7"	—
e6(E)	80	#4	17'-10"	—
e7(E)	40	#4	18'-11"	—
e8(E)	8	#4	14'-4"	—
m(E)	12	#6	27'-6"	—
m1(E)	24	#6	26'-0"	—
m2(E)	60	#6	6'-8"	—
m3(E)	10	#6	9'-4"	└
m4(E)	4	#4	27'-6"	—
m6(E)	8	#4	25'-6"	—
m7(E)	60	#6	6'-8"	└
m8(E)	6	#6	3'-1"	└
m10(E)	10	#6	7'-0"	└
m11(E)	3	#6	1'-11"	└
m13(E)	8	#6	3'-0"	—
m14(E)	8	#6	3'-5"	—
m15(E)	6	#6	3'-0"	└
m16(E)	6	#6	3'-5"	└
s(E)	134	#5	7'-8"	└
s1(E)	134	#5	11'-1"	└
u(E)	134	#4	5'-8"	└
Item		Unit	Quantity	
Concrete Superstructure		Cu Yd	1,270.4	
Reinforcement Bars, Epoxy Coated		Pound	316,060	

* Bar terminators, paid for separately. See Total Bill of Material.

(Headed. 324-#6 Bar terminators *)



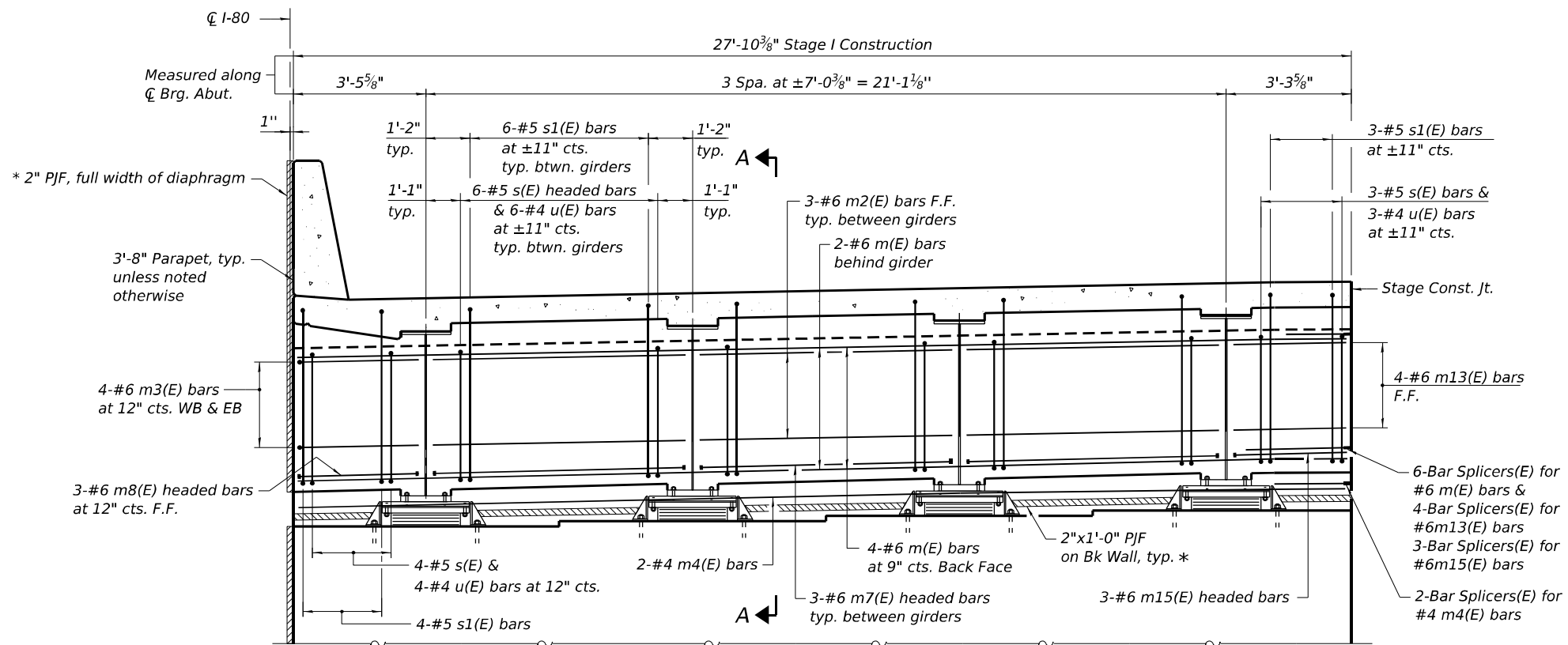
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PLOT SCALE	=	CHECKED - KK	REVISED -
PLOT DATE	=	DRAWN - HBJ	REVISED -
		CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-47 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	711
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



CONCRETE DIAPHRAGM ELEVATION AT WEST ABUTMENT - WB - STAGE I CONSTRUCTION

East Abutment - WB, West Abutment - EB & East Abutment - EB Diaphragms similar

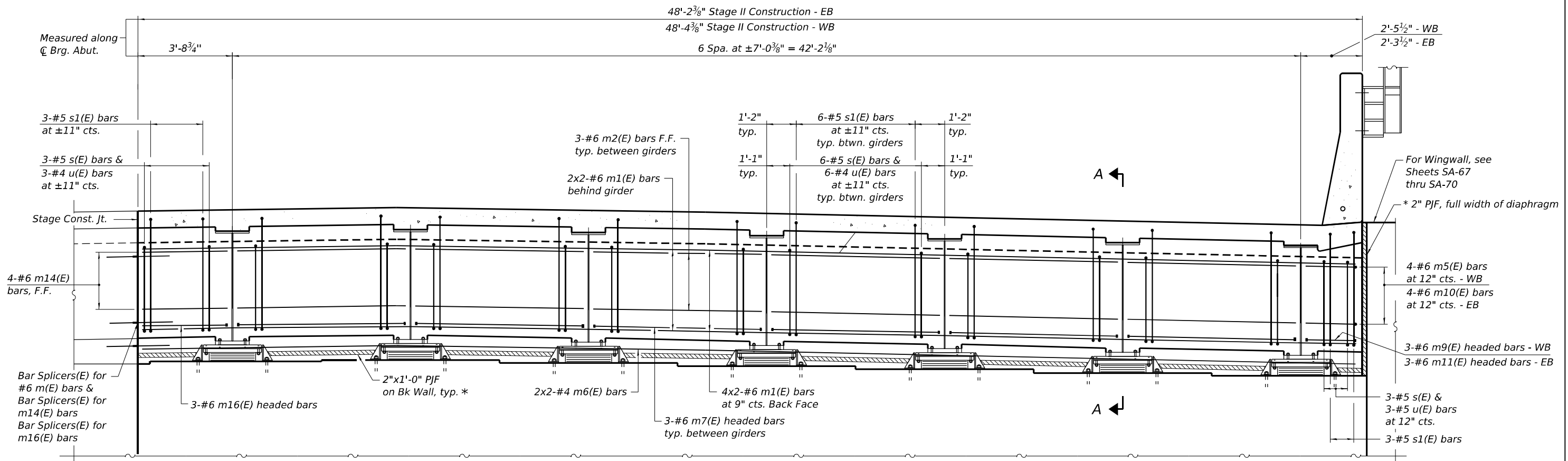
MIN. BAR LAP

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

Notes:

1. Reinforcement bars in diaphragm are billed with superstructure on Sheet SA-47.
2. Concrete in diaphragm is included with Concrete Superstructure on Sheet SA-47.
3. The s(E), s1(E) and u(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
4. Provide 2" PJF (per Article 1051.09 of the Standard Specifications) full width and vertically at edges bonded to abutment cap with suitable adhesive as recommended by supplier.
5. For Section A-A, see Sht. SA-49.
6. For Bar Splicer details, see Sheet SA-92.
7. Bars indicated thus 2 x 3-#4 etc. indicates 2 lines of bars with 3 lengths per line.

* Cost included with Concrete Superstructure.



CONCRETE DIAPHRAGM ELEVATION AT WEST ABUTMENT - WB - STAGE II CONSTRUCTION

East Abutment - WB, West Abutment - EB & East Abutment - EB Diaphragms similar

MODEL: SHEET
FILE NAME: C:\TRANSPORT\SYSTEMS\PW-01\DM520864\090902_0903-62F94-048-ABUTDIA1.DGN



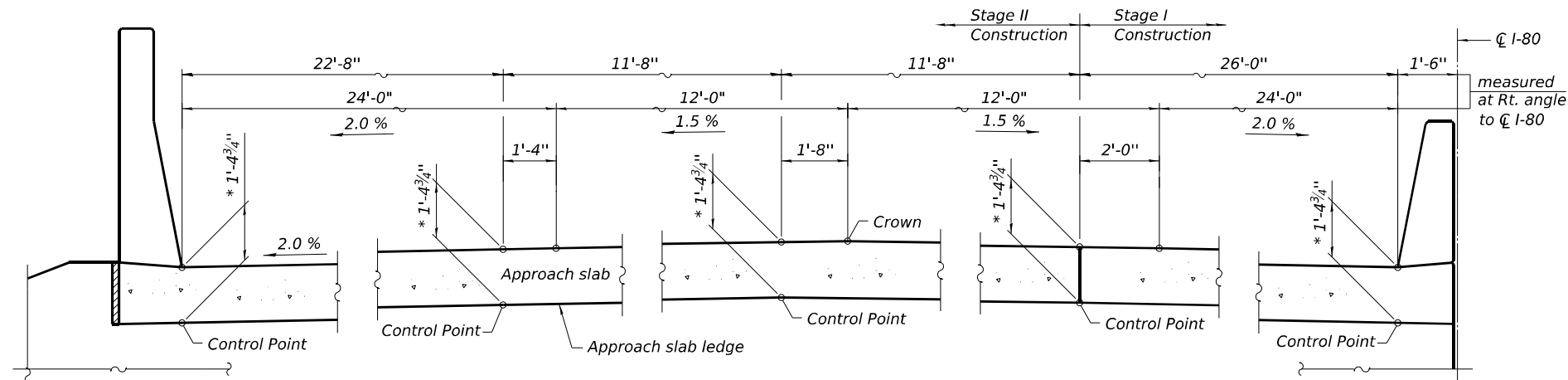
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PLOT SCALE =	CHECKED - KK	REVISED -
PLOT DATE =	DRAWN - HBJ	REVISED -
	CHECKED - BAR	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT DIAPHRAGM DETAILS 1
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)**

SHEET SA-48 OF SA-112 SHEETS

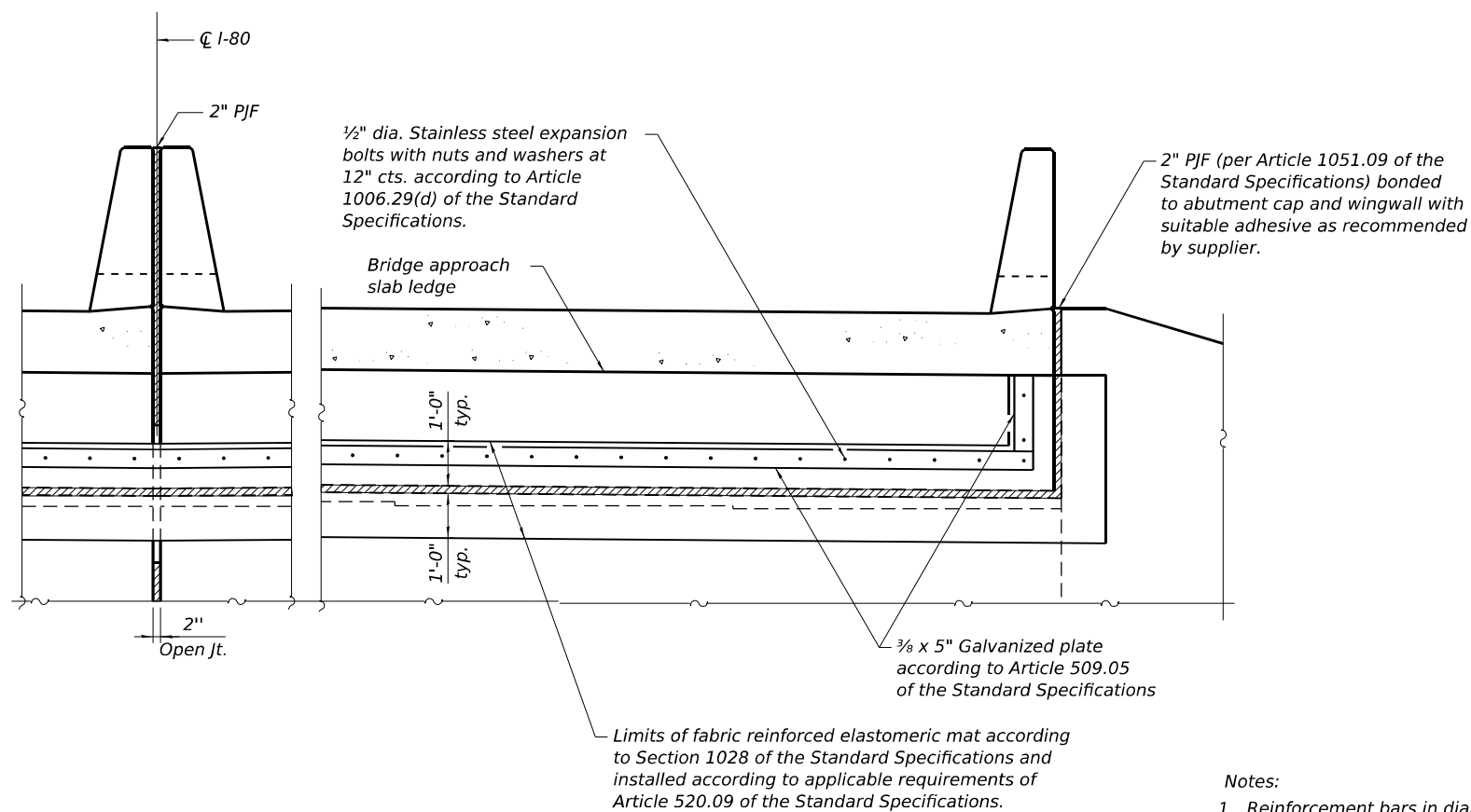
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	712
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



DETAIL OF APPROACH SLAB LEDGE - WEST ABUTMENT - WB

(Looking East at back of abutment)

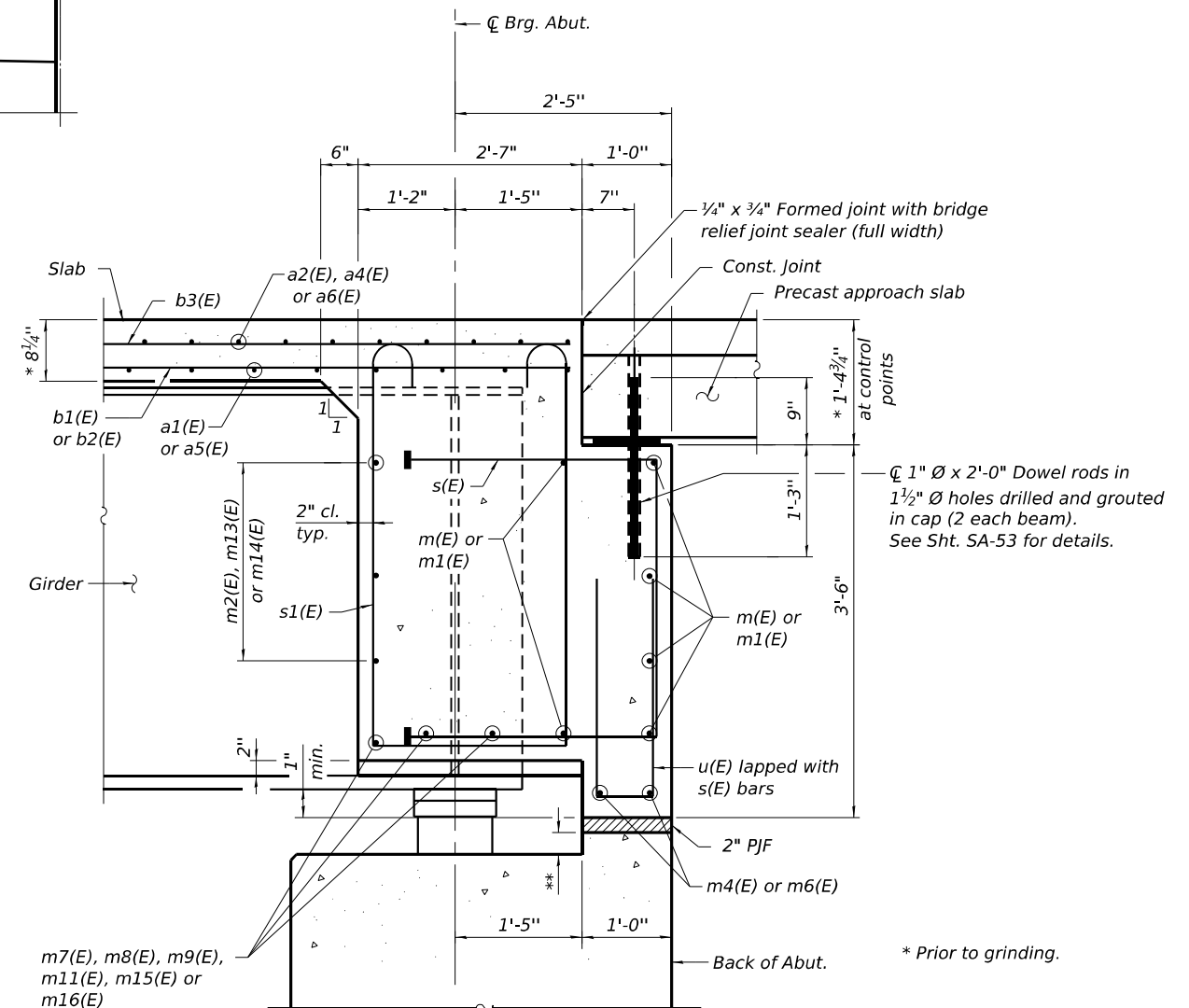
Approach Slab Ledge - East Abutment - WB & West and East Abutments - EB similar



Note:
Cost of fabric reinforced elastomeric mat, galvanized plate, stainless steel expansion bolts with nuts and washers and installation are included in the cost of Concrete Superstructure.

ABUTMENT JOINT DETAILS - ELEVATION

(Looking East at back of abutment, west Abut. shown)



SECTION A-A

Dimensions at right angles to abutment, except as shown.

Notes:

1. Reinforcement bars in diaphragm are billed with superstructure on Sheet SA-47.
2. Concrete in diaphragm is included with Concrete Superstructure on Sheet SA-47.
3. The s(E), s1(E) and u(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
4. For Bar Splicer details, see Sheet SA-92.

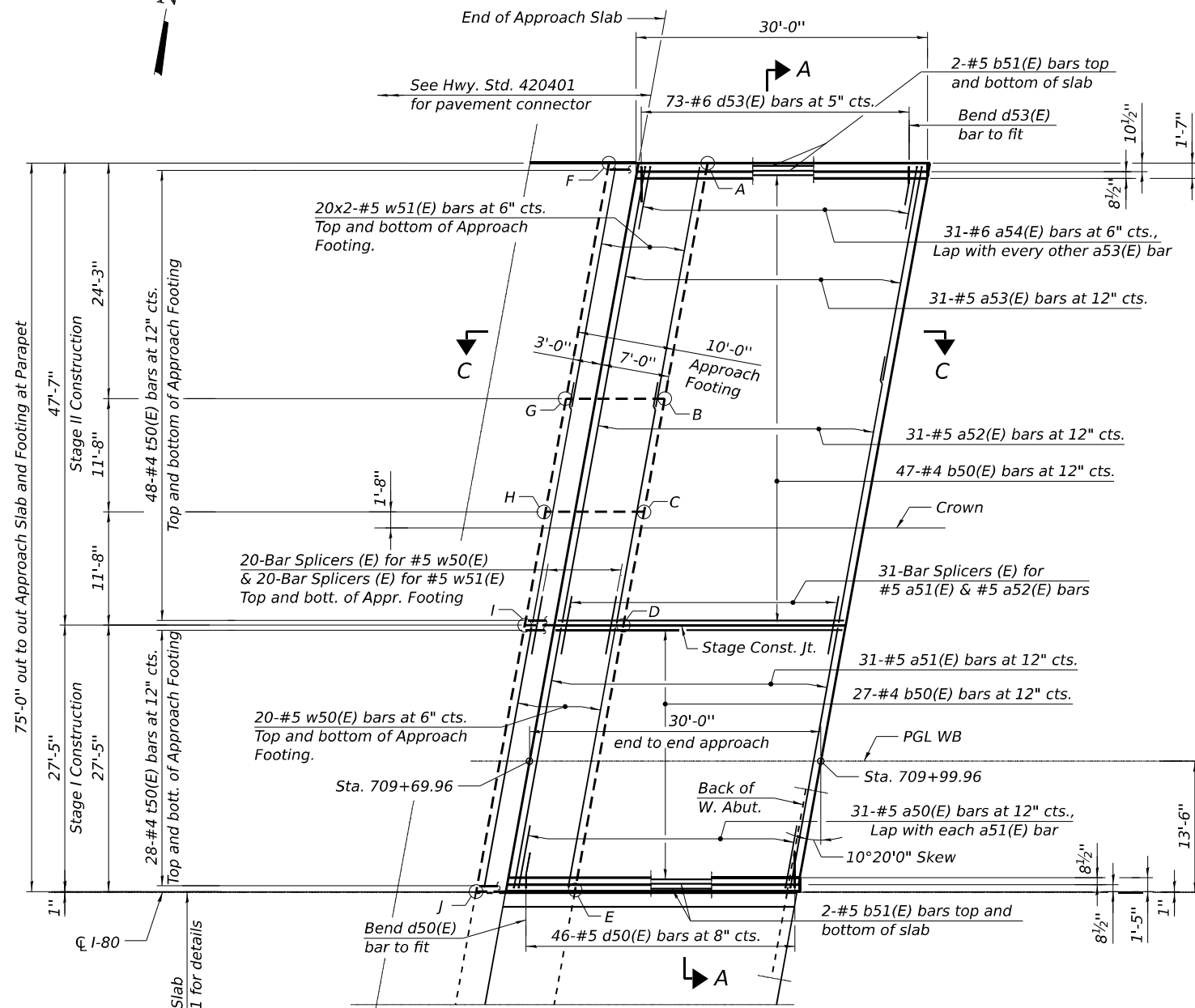
** Varies, see Sheets SA-67, SA-68, SA-69 or SA-70.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DIAPHRAGM DETAILS 2
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-49 OF SA-112 SHEETS

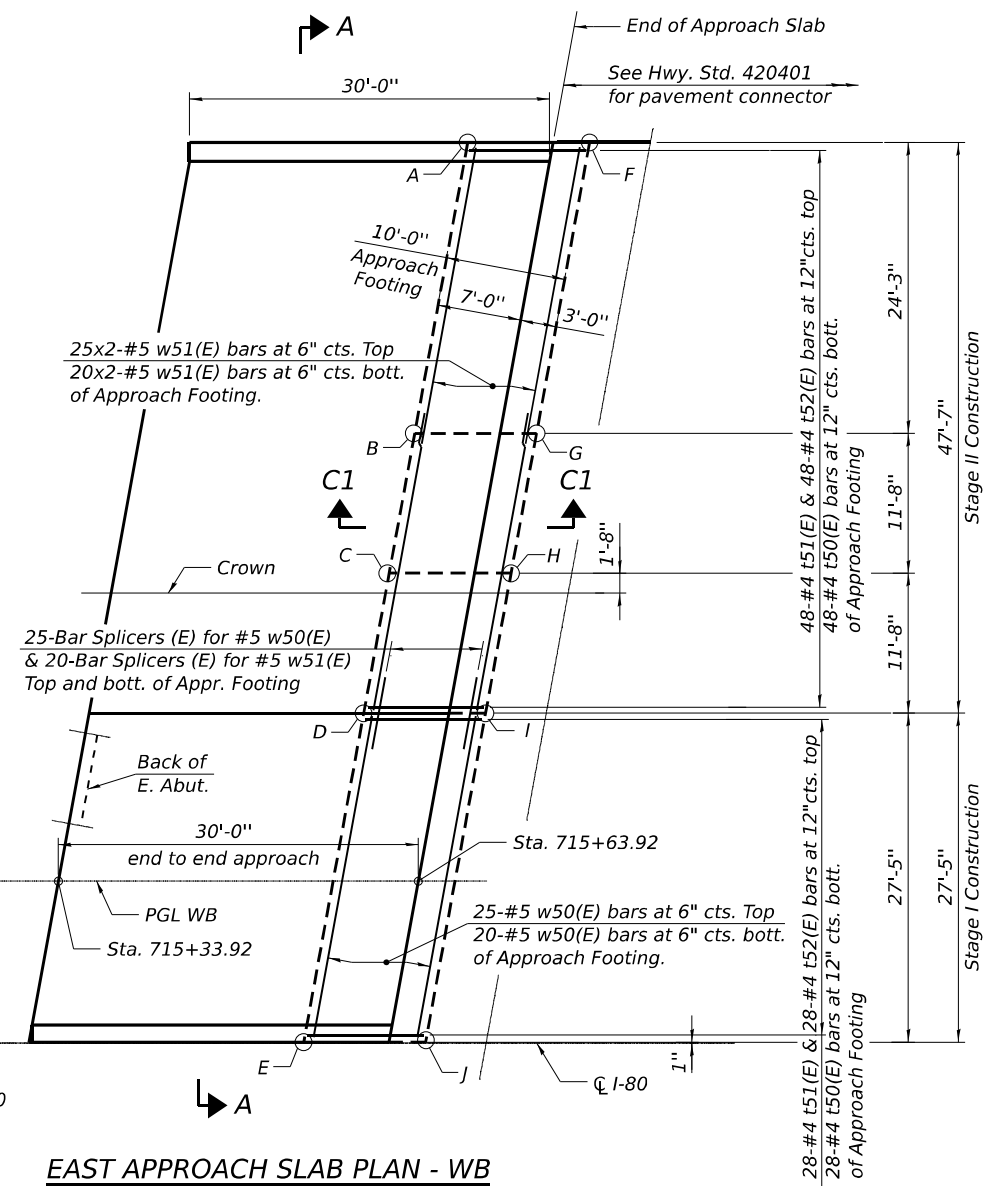
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	713
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



WEST APPROACH SLAB PLAN - WB

(Showing wearing surface)

East Approach Slab Plan - WB similar except as noted



EAST APPROACH SLAB PLAN - WB

(For all other reinforcement, see West Approach Slab Plan)

TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING - WB

West Approach			East Approach		
Point/ Location	Top	Bottom	Point/ Location	Top	Bottom
A - NE	576.55	575.71	A - NW	574.70	573.49
B - NE MID	576.98	576.14	B - NW MID	575.26	574.05
C - SE MID	577.13	576.30	C - SW MID	575.48	574.27
D - E SL	576.98	576.15	D - W SL	575.40	574.19
E - E CL	576.38	575.55	E - W CL	574.95	573.74
F - NW	576.42	575.59	F - NE	574.14	573.30
G - NW MID	576.85	576.02	G - NE MID	574.70	573.87
H - SW MID	577.01	576.17	H - SE MID	574.92	574.09
I - W SL	576.85	576.02	I - E SL	574.84	574.00
I - W CL	576.25	575.42	I - E CL	574.39	573.56

MINIMUM BAR LAP

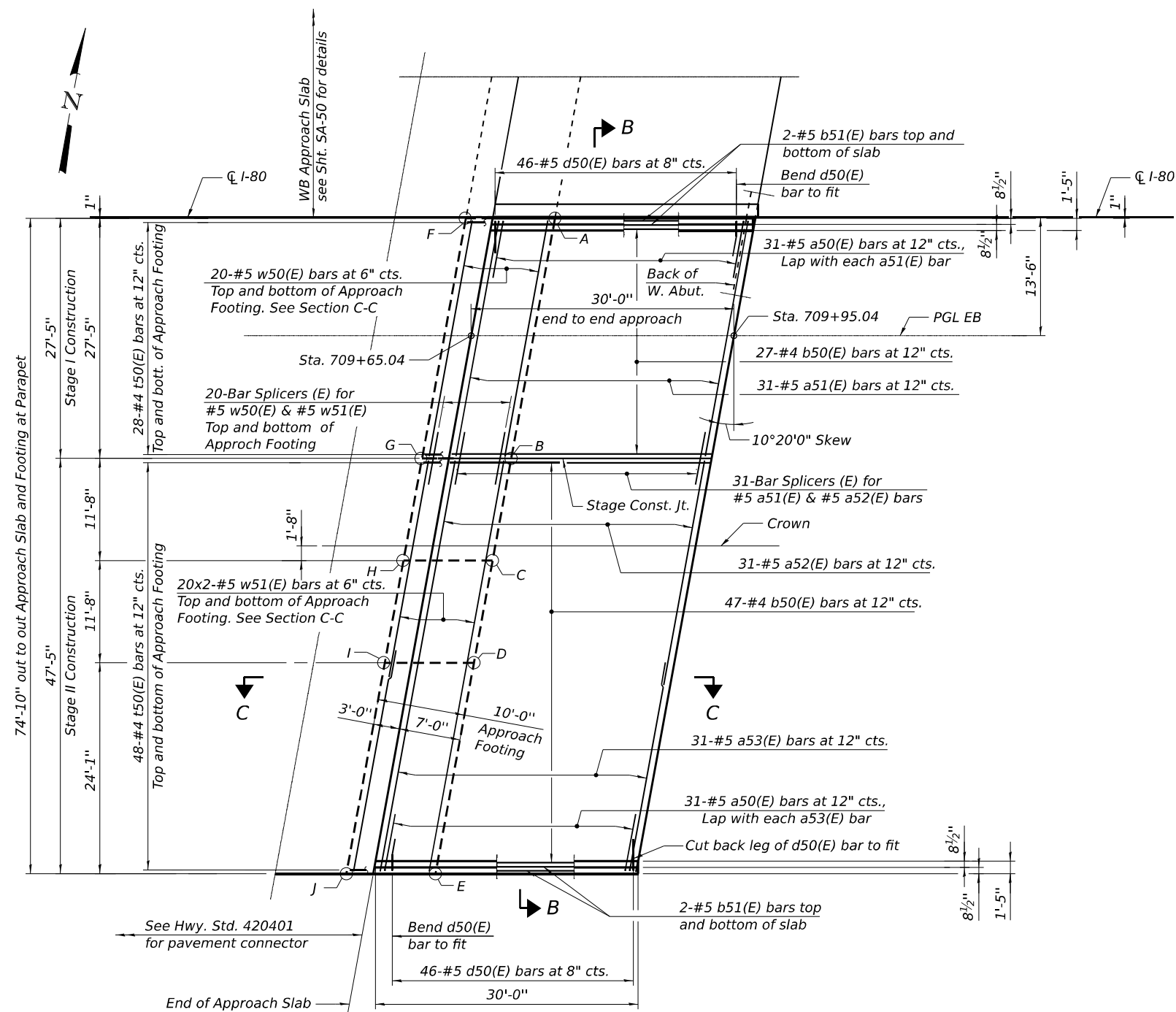
#5 bar = 3'-0" (typ.)

#5 bar = 3'-2" (approach footing)

Notes:

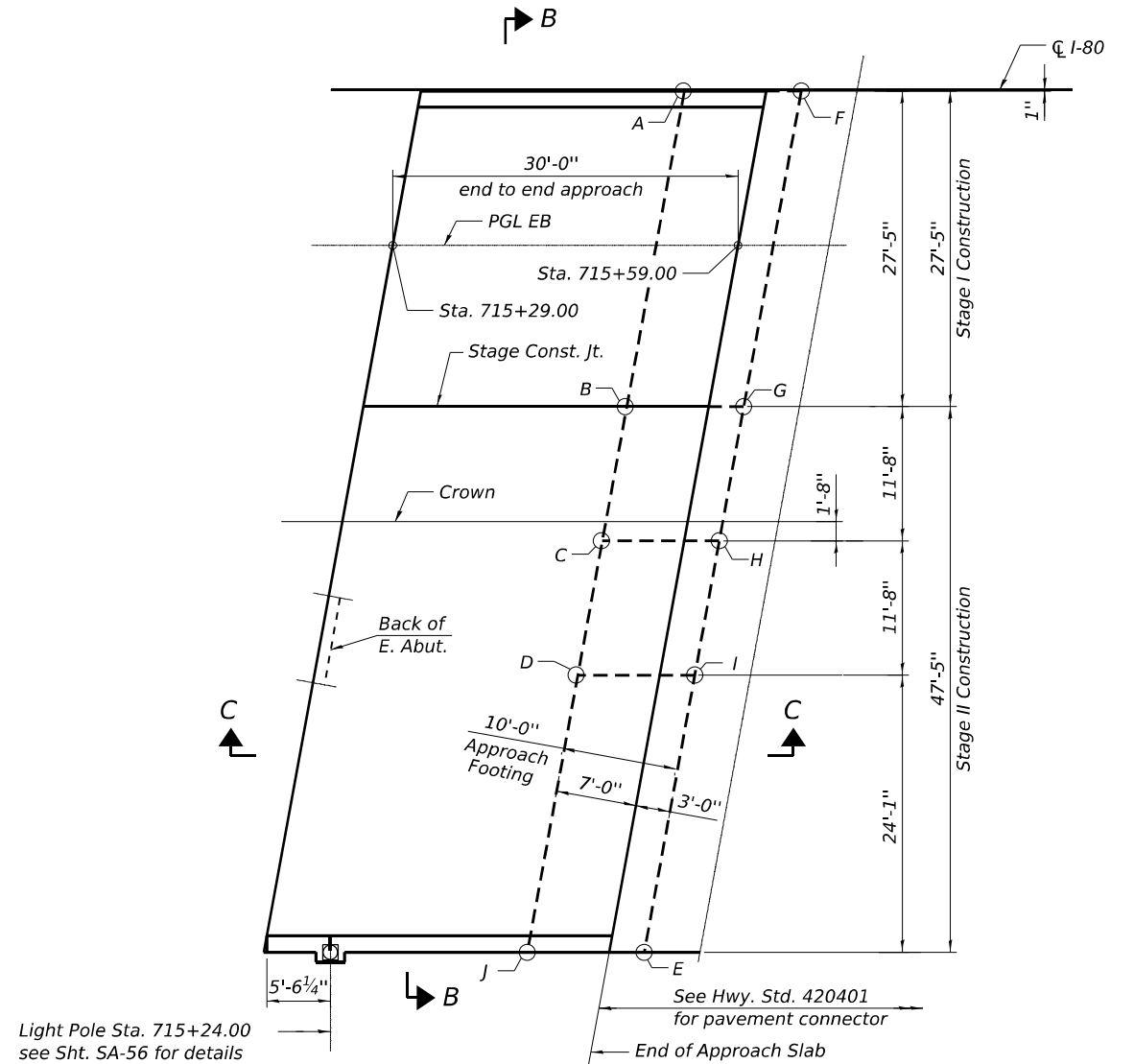
1. For section A-A, see Sht. SA-52.
2. For Section B-B, see Sht SA-52.
3. For Sections C-C & C1-C1, see Sht. SA-53.
4. For Bar Splicer details, see Sht. SA-92.
5. For Modified Strip Seal Joint, see Sht. SA-58.

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS\PW-01\DM520864\090902_0903-62\F94-051-APPR2.DGN



WEST APPROACH SLAB PLAN - EB
(Showing wearing surface)
East Approach Slab Plan - EB similar, except as noted

Note:
For Notes, see Sht. SA-50.



EAST APPROACH SLAB PARTIAL PLAN - EB
(For reinforcement, see West Approach Slab Plan)

MINIMUM BAR LAP
#5 bar = 3'-0" (typ.)
#5 bar = 3'-2" (approach footing)

**TOP AND BOTTOM ELEVATIONS
FOR APPROACH FOOTING - EB**

West Approach			East Approach		
Point/ Location	Top	Bottom	Point/ Location	Top	Bottom
A - NE	576.38	575.55	A - NW	574.95	574.11
B - NE MID	576.86	576.02	B - NW MID	575.57	574.74
C - SE MID	576.95	576.12	C - SW MID	575.73	574.90
D - E SL	576.74	575.91	D - W SL	575.59	574.75
E - E CL	576.21	575.37	E - W CL	575.18	574.35
F - NW	576.25	575.42	F - NE	574.77	573.93
G - NW MID	576.72	575.89	G - NE MID	575.39	574.56
H - SW MID	576.82	575.99	H - SE MID	575.56	574.72
I - W SL	576.61	575.78	I - E SL	575.41	574.58
J - W CL	576.07	575.23	J - E CL	575.01	574.17



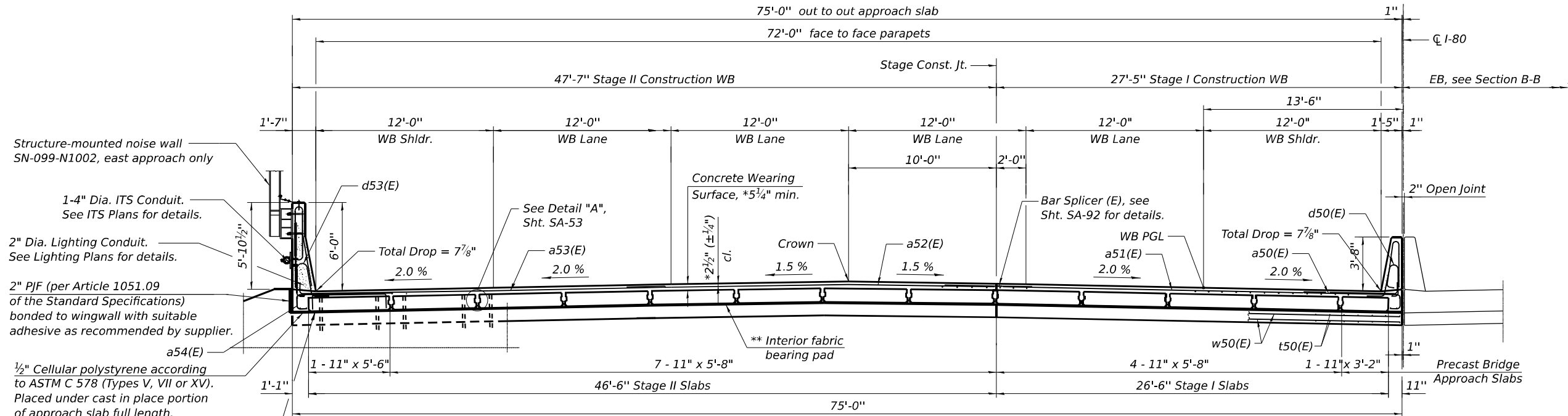
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PLOT SCALE	=	DRAWN - HBJ	REVISED -
PLOT DATE	=	CHECKED - BAR	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PRECAST BRIDGE APPROACH SLAB PLAN
STRUCTURE NO. 099-0902 (EB)**

SHEET SA-51 OF SA-112 SHEETS

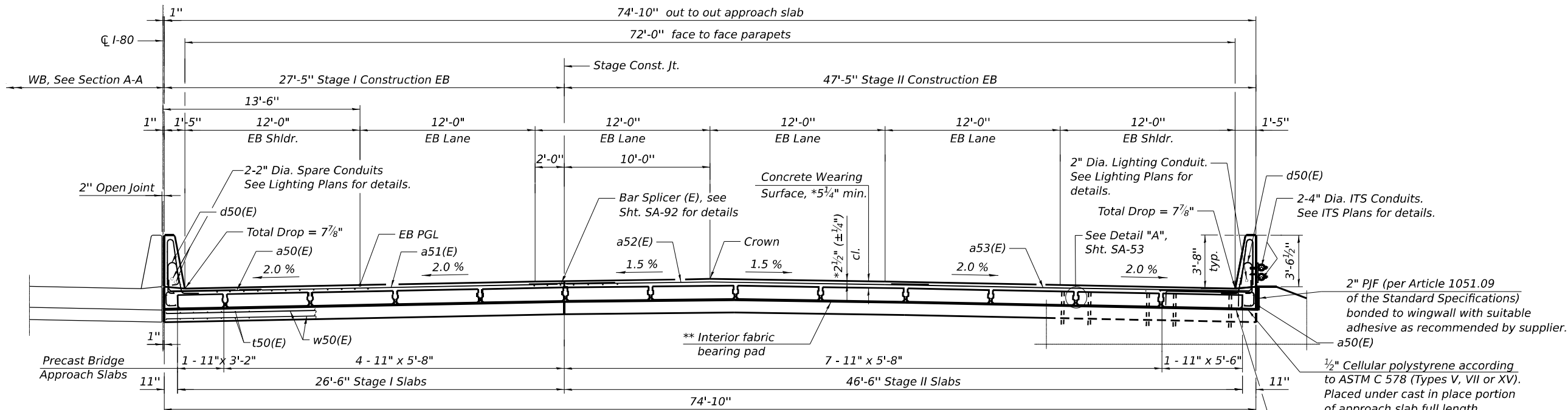
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	715
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



SECTION A-A

(Looking East)

West Approach Slab shown, East Approach Slab similar



SECTION B-B

(Looking East)

West Approach Slab shown, East Approach Slab similar

* Prior to grinding

** Fabric bearing pads at the expansion end shall be recessed 1/4" into the approach footing and bonded. Adjusting shims, when required, shall be bonded to the top of the fabric bearing pads.

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\LOCAL\TRANSSYSTEMS\PW-01\DM520864\090902_0903-62\F94-052-APPRDET1.DGN



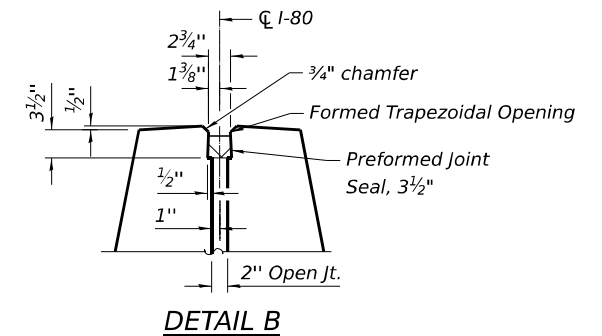
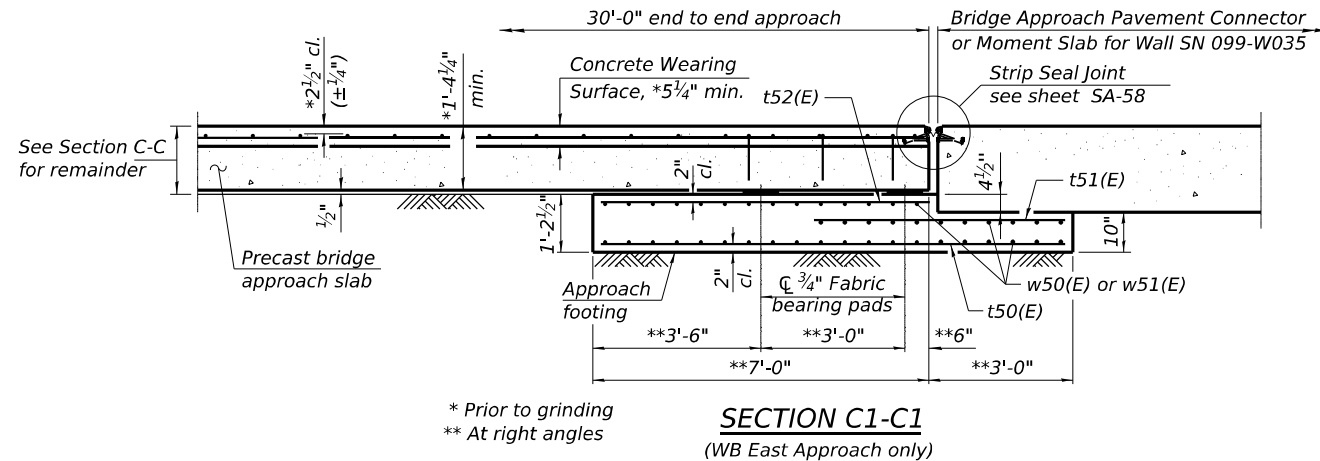
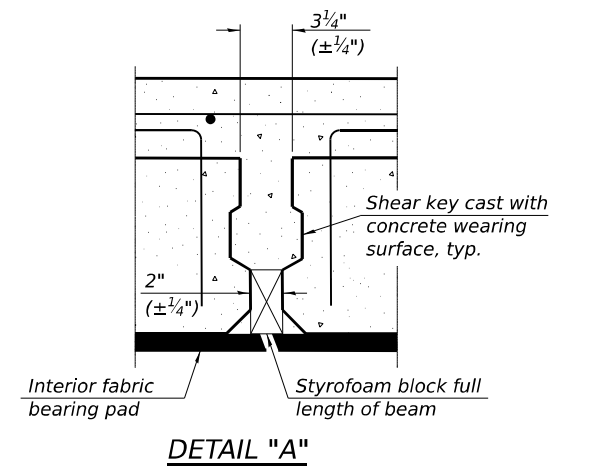
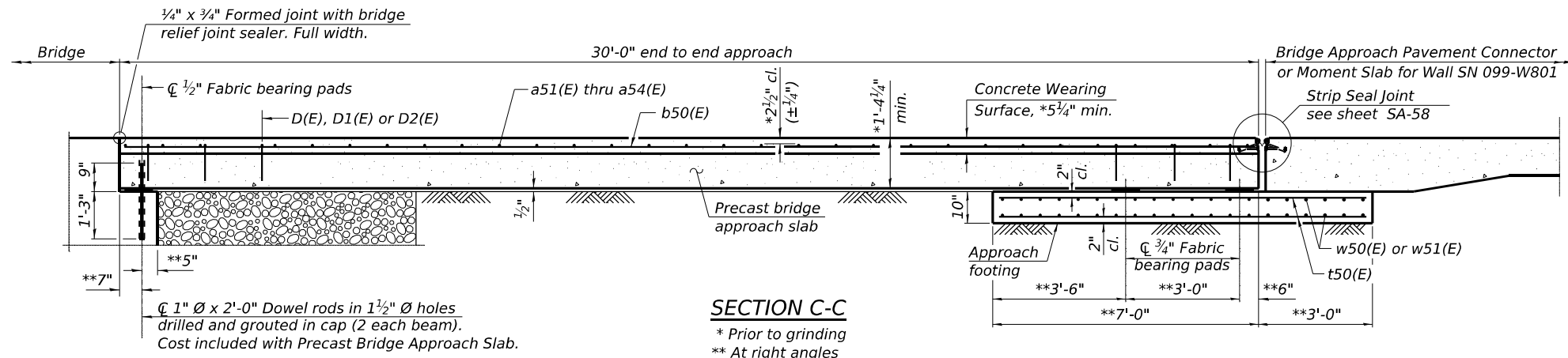
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PLOT SCALE	=	CHECKED - KK	REVISED -
PLOT DATE	=	DRAWN - HBJ	REVISED -
		CHECKED - BAR	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

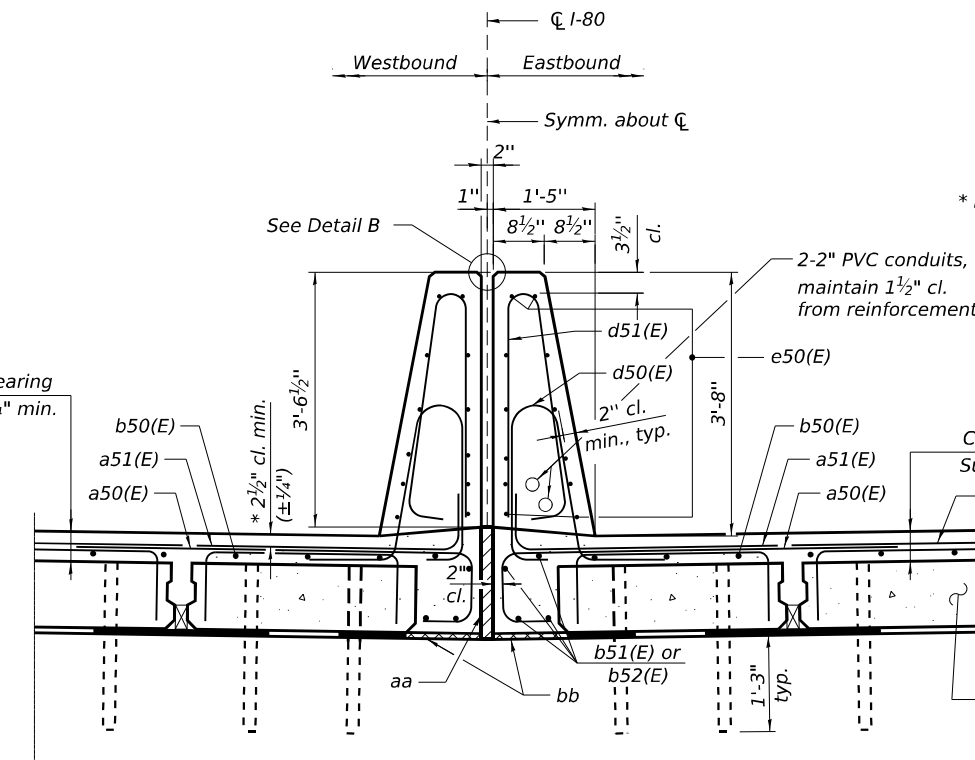
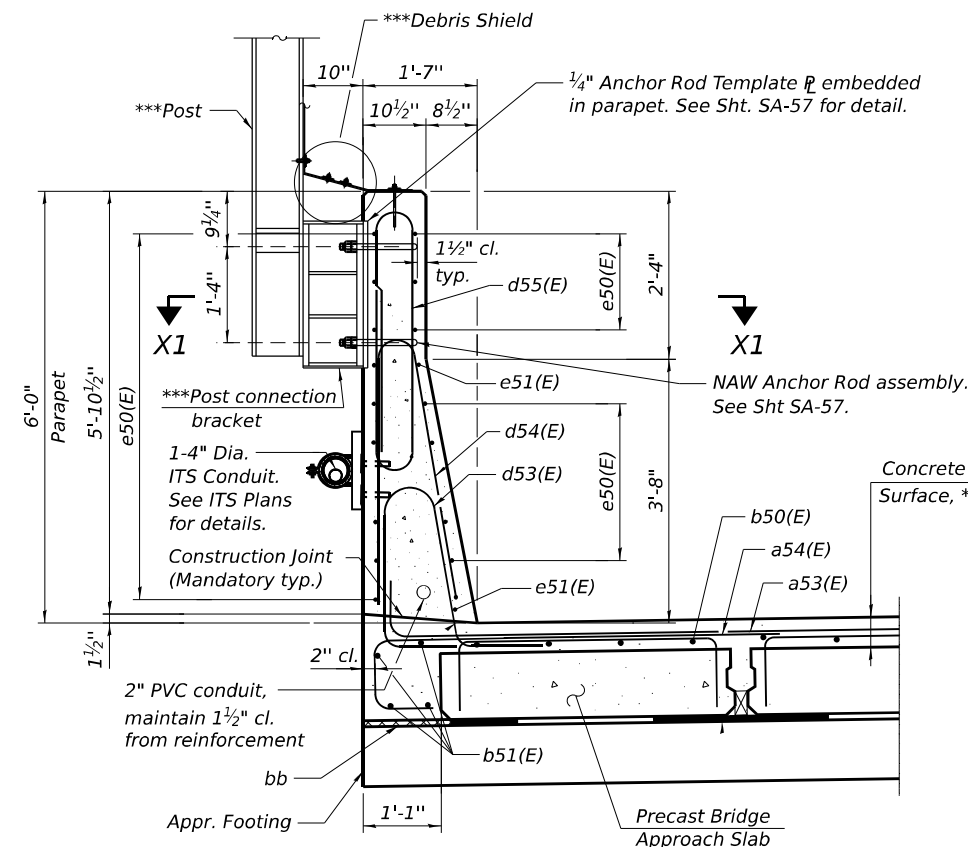
PRECAST BRIDGE APPROACH SLAB DETAILS 1
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-52 OF SA-112 SHEETS

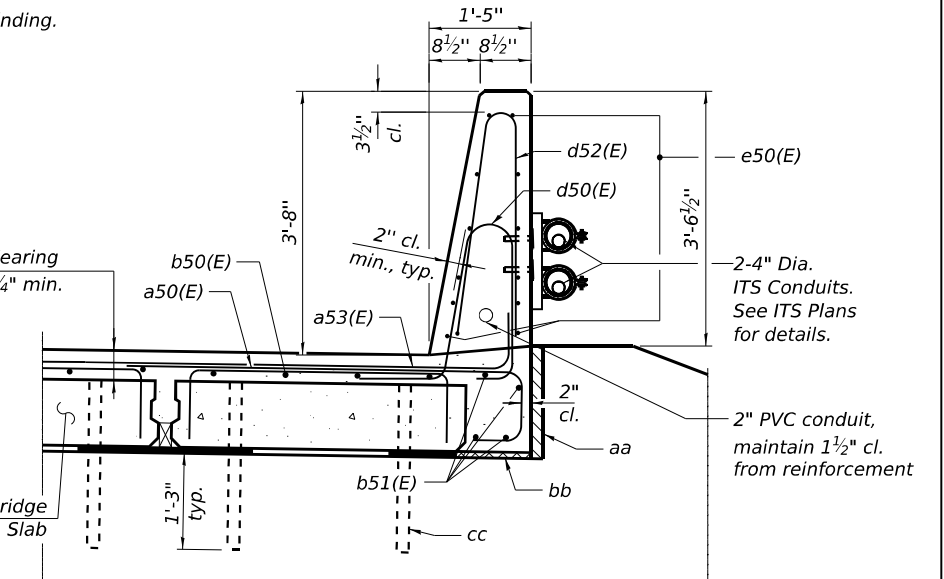
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	716
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



***For information only.
 For Noise Abatement Wall 099-N1002
 details, see SN sheets.



* Prior to grinding.



- Legend:**
- aa: 2" PJF (per Article 1051.09 of the Standard Specifications) bonded to wingwall with suitable adhesive as recommended by supplier.
 - bb: 1/2" Cellular polystyrene according to ASTM C 578 (Types V, VII or XV). Placed under cast in place portion of approach slab full length.
 - cc: 1" Ø x 2'-0" Dowel rods in 1 1/2" Ø holes (at abutment).

Note:
 For Notes, see sheet SA-57.

MODEL: SHEET
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USER NAME =	DESIGNED - BAR	REVISED -
PLOT SCALE =	CHECKED - KK	REVISED -
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	CHECKED - BAR	REVISED -

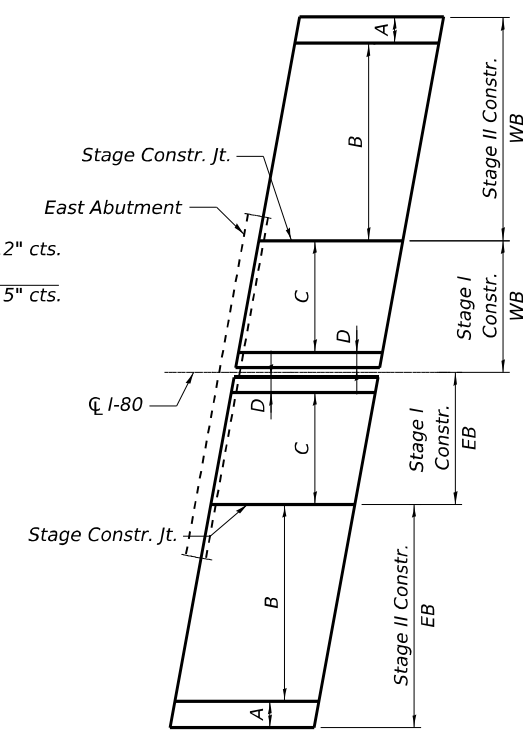
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE APPROACH SLAB DETAILS 2
 STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-53 OF SA-112 SHEETS

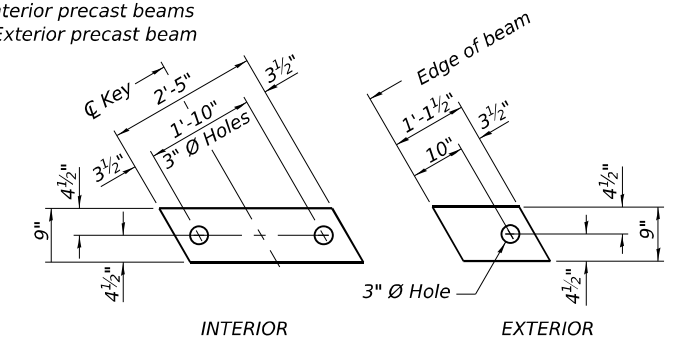
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

10-27-2025, 16:48:50

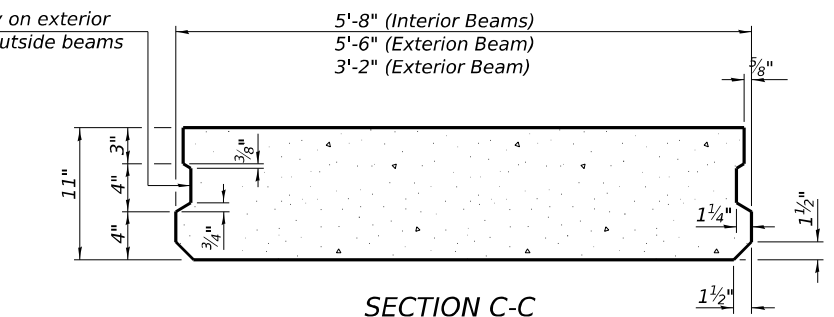


Approach Slabs at East Abutment - shown
Approach Slabs at West Abutment - similar

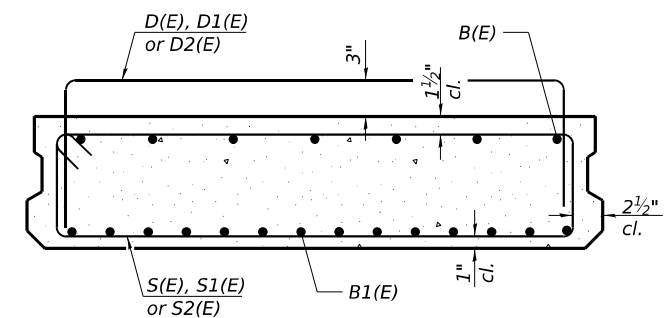
A: 1 - 11"x 5'-6" Exterior precast beam
B: 7 - 11"x 5'-8" Interior precast beams
C: 4 - 11"x 5'-8" Interior precast beams
D: 1 - 11" x 3'-2" Exterior precast beam



Notes:
*Bearing pads at fixed end shall be ½" thick and bearing pads at expansion end shall be ¾" thick.
 Omit holes for fabric bearing pads at approach slab footing end of beams.*



SECTION C-C
(Showing dimensions)



SECTION C-C

(Showing reinforcement)

SHEET SA-54 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	718
		CONTRACT NO. 62F94		
ILLINOIS		FED. AID PROJECT		

MODEL: SHEET
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PLOT DATE	=

DESIGNED	-	BAR
CHECKED	-	KK
DRAWN	-	HBJ
CHECKED	-	BAR

REVISED	-
REVISED	-
REVISED	-
REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PRECAST BRIDGE APPROACH SLAB DETAILS 4
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-55 OF SA-112 SHEETS

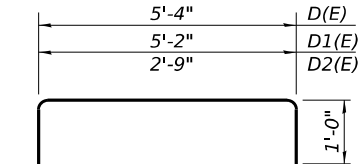
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80	2017-057F	WILL	1342	719
CONTRACT NO. 62F94				
		ILLINOIS	FED. AID PROJECT	

BAR LIST

EACH 3'-2" EXTERIOR BEAM

(For information only)

Bar	No.	Size	Length	Shape
B(E)	4	#5	29'-8"	—
B1(E)	7	#9	29'-8"	—
D2(E)	32	#4	4'-9"	┐
S2(E)	58	#5	7'-10"	▬
S4(E)	10	#5	5'-3"	▬



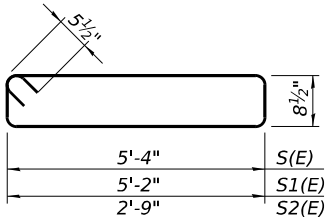
BARS D(E), D1(E) & D2(E)

BAR LIST

EACH 5'-8" INTERIOR BEAM

(For information only)

Bar	No.	Size	Length	Shape
B(E)	7	#5	29'-8"	—
B1(E)	14	#9	29'-8"	—
D(E)	22	#4	7'-4"	┐
S(E)	58	#5	13'-0"	▬
S3(E)	10	#5	7'-9"	▬



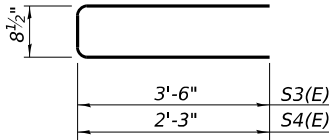
BARS S(E), S1(E) & S2(E)

BAR LIST

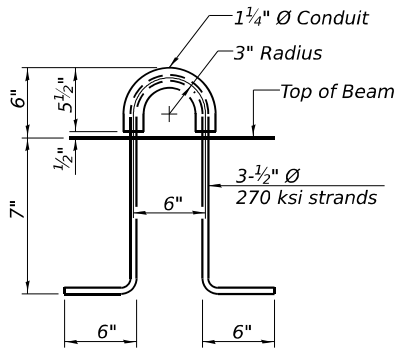
EACH 5'-6" EXTERIOR BEAM

(For information only)

Bar	No.	Size	Length	Shape
B(E)	6	#5	29'-8"	—
B1(E)	13	#9	29'-8"	—
D1(E)	32	#4	7'-2"	┐
S1(E)	58	#5	12'-8"	▬
S3(E)	10	#5	7'-9"	▬

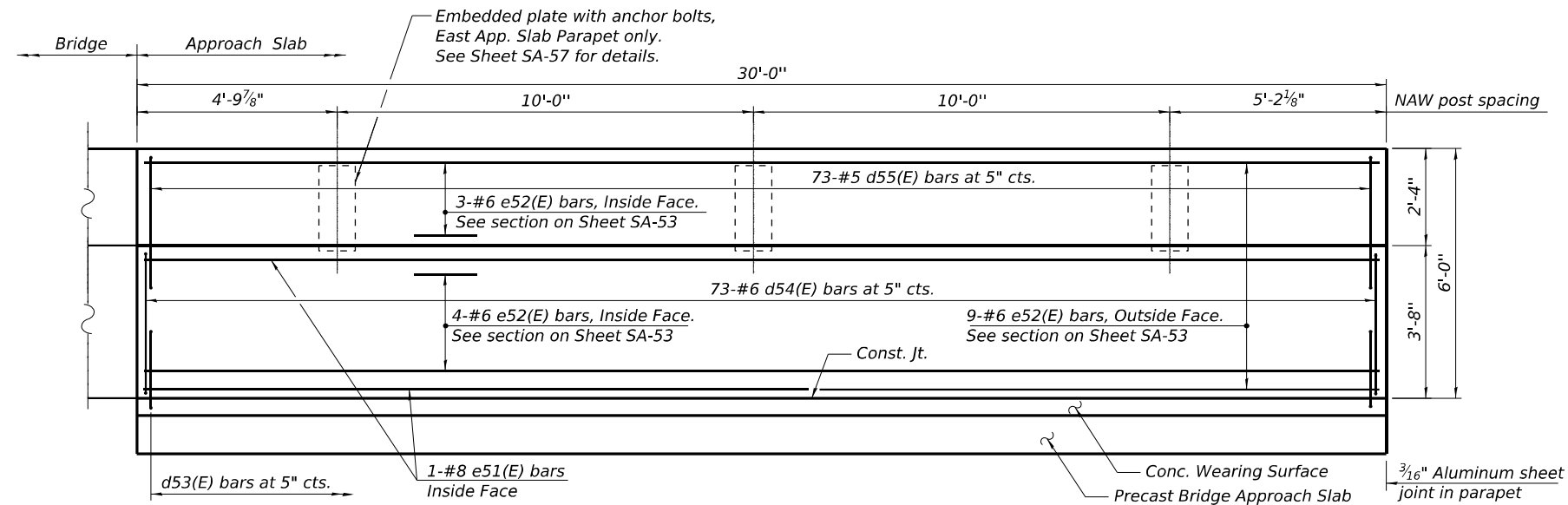


BARS S3(E) & S4(E)



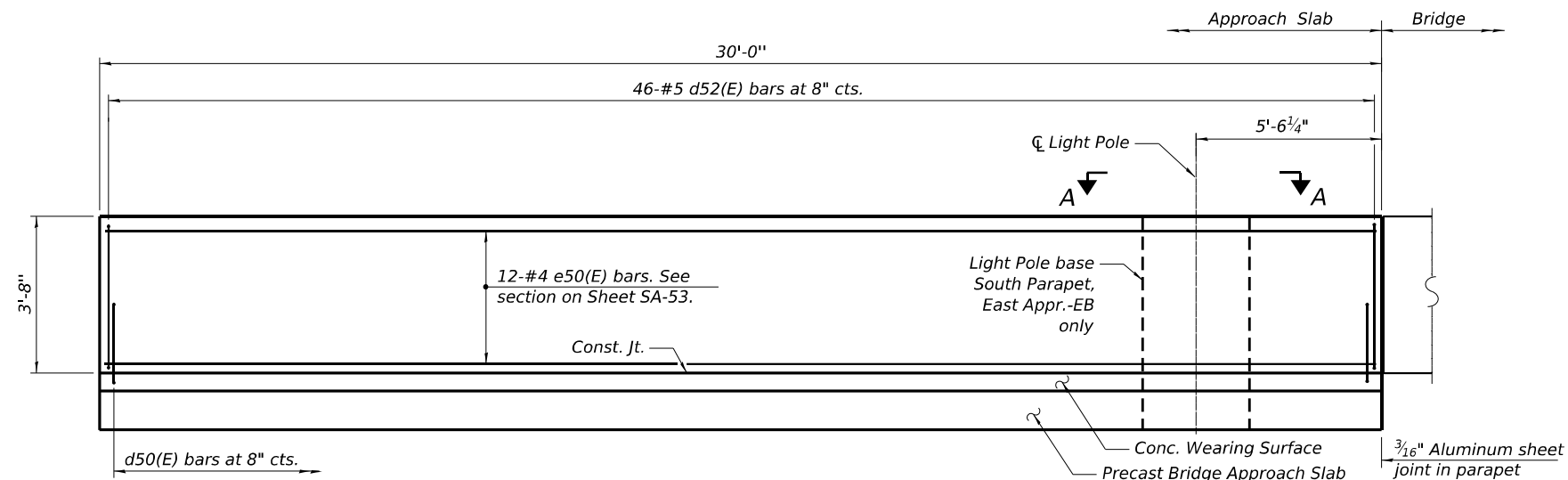
LIFTING LOOP DETAIL

(An alternate lifting loop with a proof load of 25,000 lbs. and utilized according to the manufacturer's recommendations may be used)



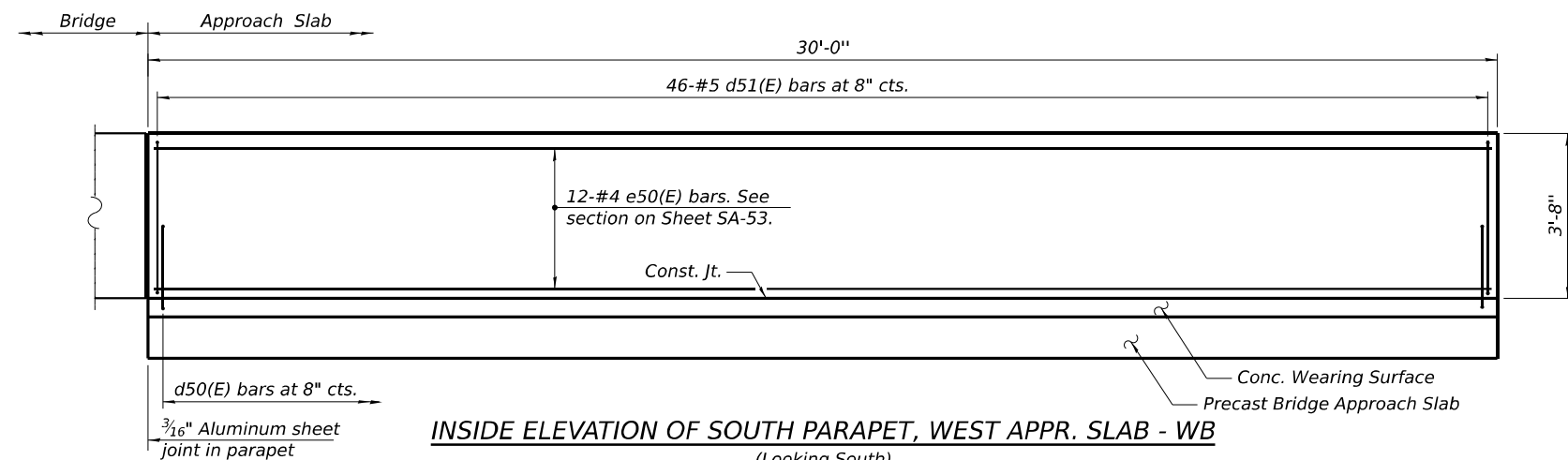
INSIDE ELEVATION OF NORTH PARAPET, EAST APPR. SLAB - WB

(Looking North)
North Parapet, West Appr. Slab - WB similar



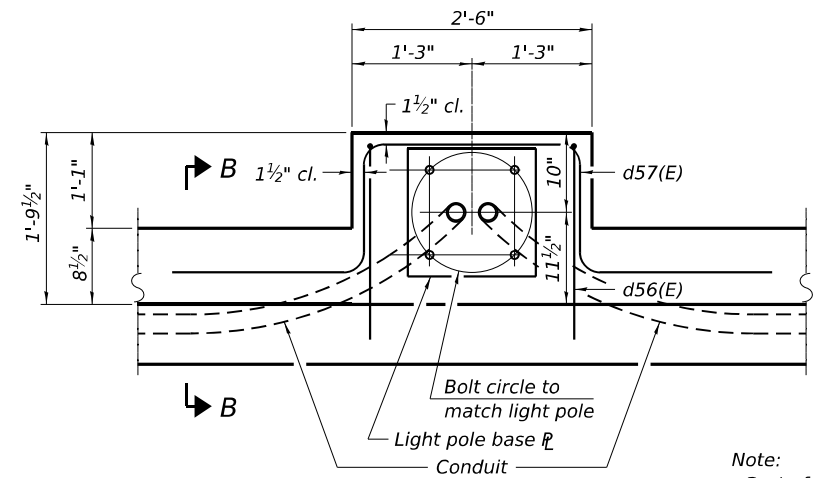
INSIDE ELEVATION OF SOUTH PARAPET, EAST APPR. SLAB - EB

(Looking South)
South Parapet, West Appr. Slab - EB similar, except as noted



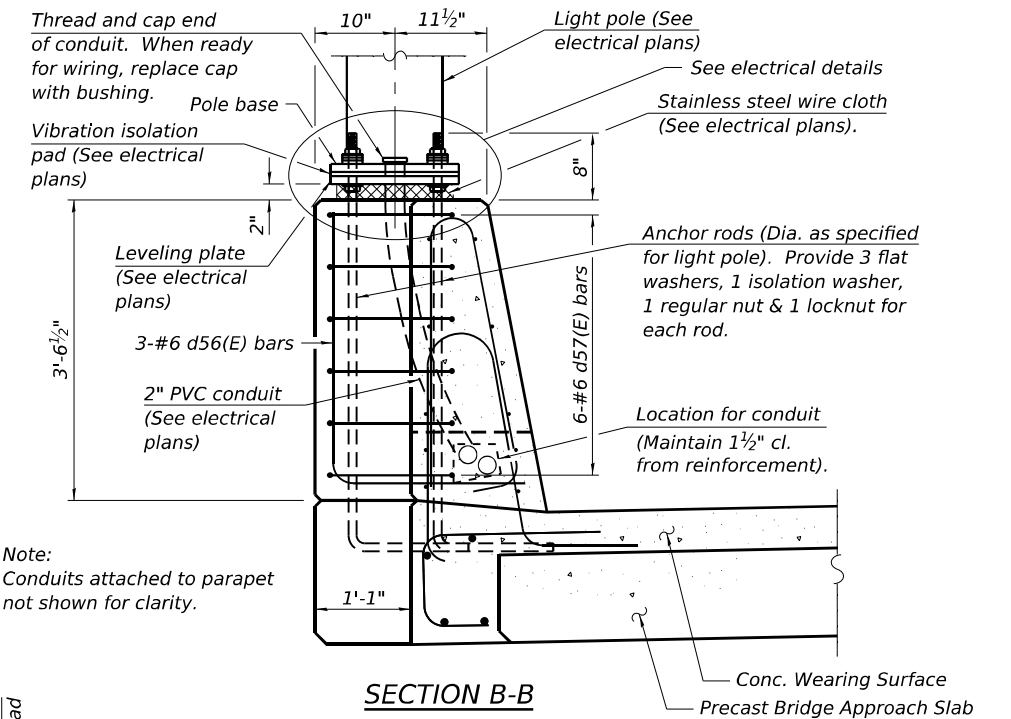
INSIDE ELEVATION OF SOUTH PARAPET, WEST APPR. SLAB - WB

(Looking South)
South Parapet, East Appr. Slab - WB similar
North Parapet, East & West Appr. Slabs - EB similar



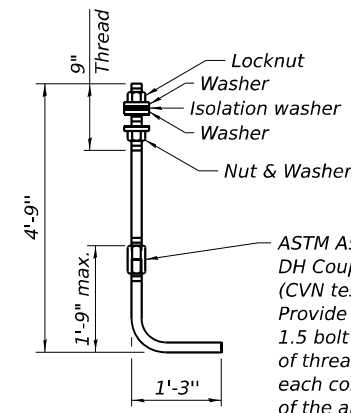
LIGHT POLE PLAN A-A

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



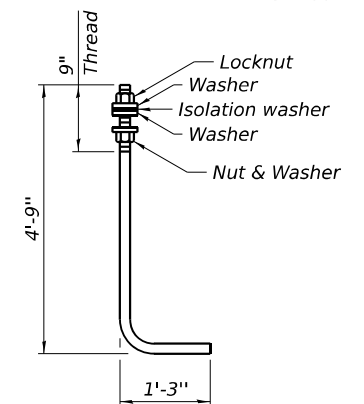
SECTION B-B

Note:
Conduits attached to parapet
not shown for clarity.



**ALTERNATE
ANCHOR ROD**

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



ANCHOR ROD

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

MODEL: SHEET
FILE NAME: C:\TRANSPORT\SYSTEMS\LOCAL\TRANSPORT\SYSTEMS\PW-01\DM520864\090902_0903-62F94-056-APPRDET5.DGN



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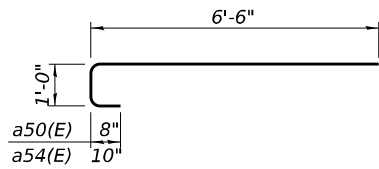
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PRECAST BRIDGE APPROACH SLAB DETAILS 5
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)**

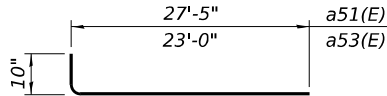
SHEET SA-56 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	720
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

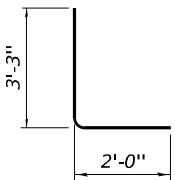
10-27-2025, 16:48:58



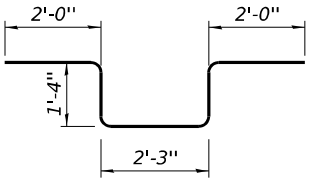
BARS a50(E) & a54(E)



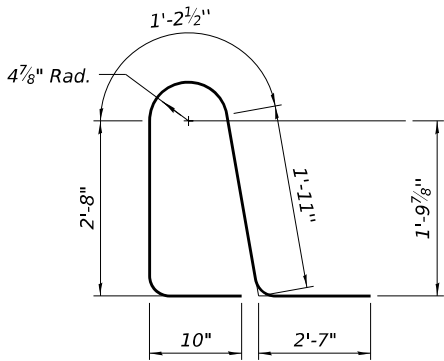
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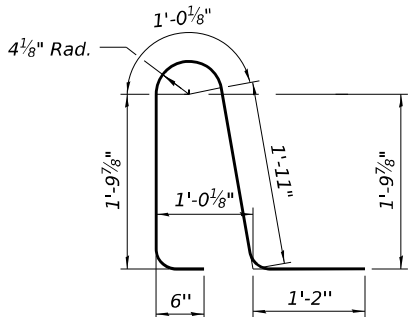
BAR d56(E)



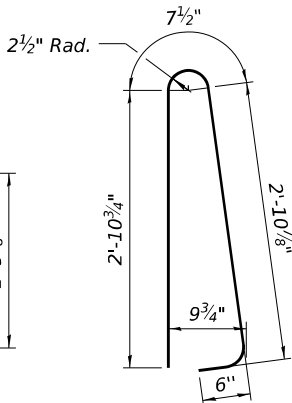
BAR d57(E)



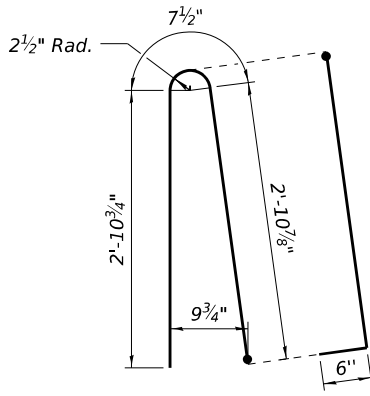
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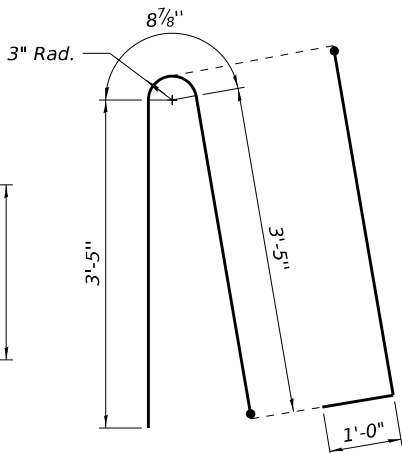
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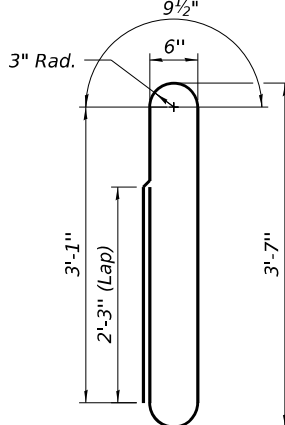
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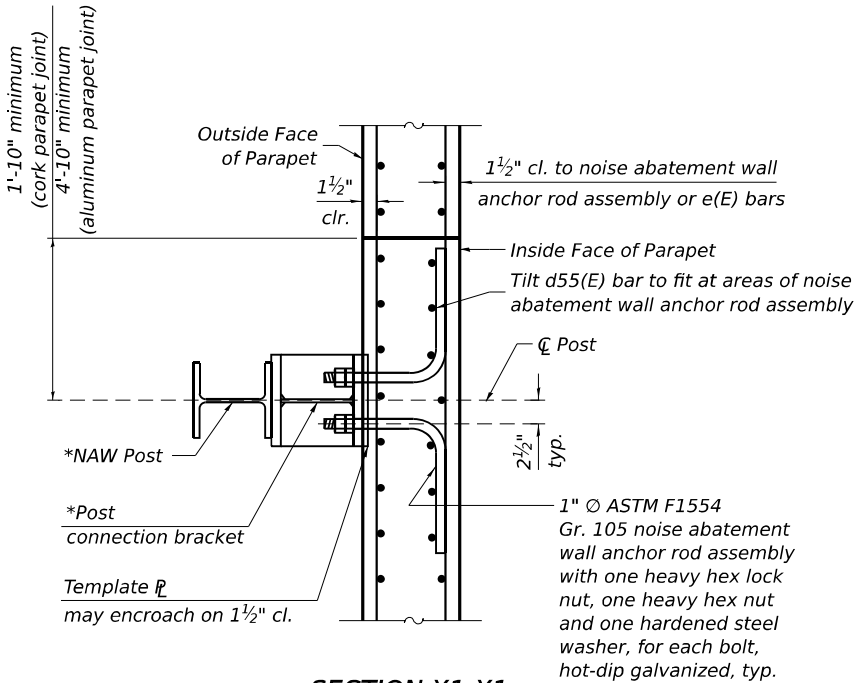
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BAR d54(E)

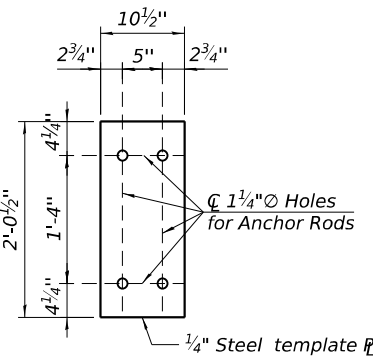


BAR d55(E)

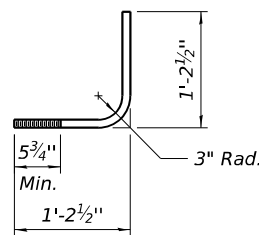


SECTION X1-X1

* For Noise Abatement Wall 099-N1002 details, see SN sheets.



**TEMPLATE PLATE FOR
NOISE ABATEMENT WALL
ANCHOR ROD ASSEMBLY**



**NOISE ABATEMENT WALL
ANCHOR ROD ASSEMBLY**

**TWO APPROACHES - WB
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a50(E)	62	#5	8'-2"	└─┘
a51(E)	62	#5	28'-3"	└─┘
a52(E)	62	#5	28'-0"	└─┘
a53(E)	62	#5	23'-10"	└─┘
a54(E)	62	#6	8'-4"	└─┘
b50(E)	148	#4	29'-8"	─
b51(E)	16	#5	29'-8"	─
d50(E)	92	#5	6'-5"	└─┘
d51(E)	92	#5	6'-11"	└─┘
d52(E)	92	#5	6'-11"	└─┘
d53(E)	146	#6	7'-1"	└─┘
d54(E)	146	#6	8'-7"	└─┘
d55(E)	146	#5	10'-0"	└─┘
e50(E)	24	#4	29'-8"	─
e51(E)	4	#8	29'-8"	─
e52(E)	32	#6	29'-8"	─
t50(E)	228	#4	9'-10"	─
t51(E)	76	#4	4'-10"	─
t52(E)	76	#4	7'-0"	─
w50(E)	85	#5	27'-6"	─
w51(E)	170	#5	25'-6"	─
Item				Unit
Concrete Superstructure				Cu Yd
Concrete Structures				Cu Yd
Reinforcement Bars, Epoxy Coated				Pound
Precast Bridge Approach Slab				Sq. Ft.
Concrete Wearing Surface, 5"				Sq. Yd.
Noise Abatement Wall Anchor Rod Assembly				Each

**TWO APPROACHES - EB
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a50(E)	124	#5	8'-2"	└─┘
a51(E)	62	#5	28'-3"	└─┘
a52(E)	62	#5	28'-0"	└─┘
a53(E)	62	#5	23'-10"	└─┘
b50(E)	148	#4	29'-8"	─
b51(E)	16	#5	29'-8"	─
d50(E)	184	#5	6'-5"	└─┘
d51(E)	92	#5	6'-11"	└─┘
d52(E)	92	#5	6'-11"	└─┘
d56(E)	3	#6	5'-3"	└─┘
d57(E)	6	#6	8'-11"	└─┘
e50(E)	48	#4	29'-8"	─
t50(E)	304	#4	9'-10"	─
w50(E)	80	#5	27'-6"	─
w51(E)	260	#5	25'-6"	─
Item			Unit	Quantity
Concrete Superstructure			Cu Yd	16.9
Concrete Structures			Cu Yd	46.2
Reinforcement Bars, Epoxy Coated			Pound	24,490
Precast Bridge Approach Slab			Sq. Ft.	4,260
Concrete Wearing Surface, 5"			Sq. Yd.	499

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.

After precast bridge approach slabs have been erected, holes shall be drilled into abutment and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of precast slab and cured according to Article 1020.13(a)(3) or 1020.13(a)(5) of the Standard Specifications for a minimum of 24 hours before casting the shear keys and wearing surface.

Any concrete poured monolithically with the wearing surface, such as curbs, shall not be paid for separately, but will be included in the cost of Concrete Wearing Surface, 5".

Parapet concrete shall be paid for as Concrete Superstructure.

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 SA-4.

Cost of cellular polystyrene is included with Concrete Superstructure.



USER NAME	=	DESIGNED	-	BAR	REVISED	-
CHECKED	-	KK	REVISED	-		
PLOT SCALE	=	DRAWN	-	HBJ	REVISED	-
PLOT DATE	=	CHECKED	-	BAR	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PRECAST BRIDGE APPROACH SLAB DETAILS 6
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)**

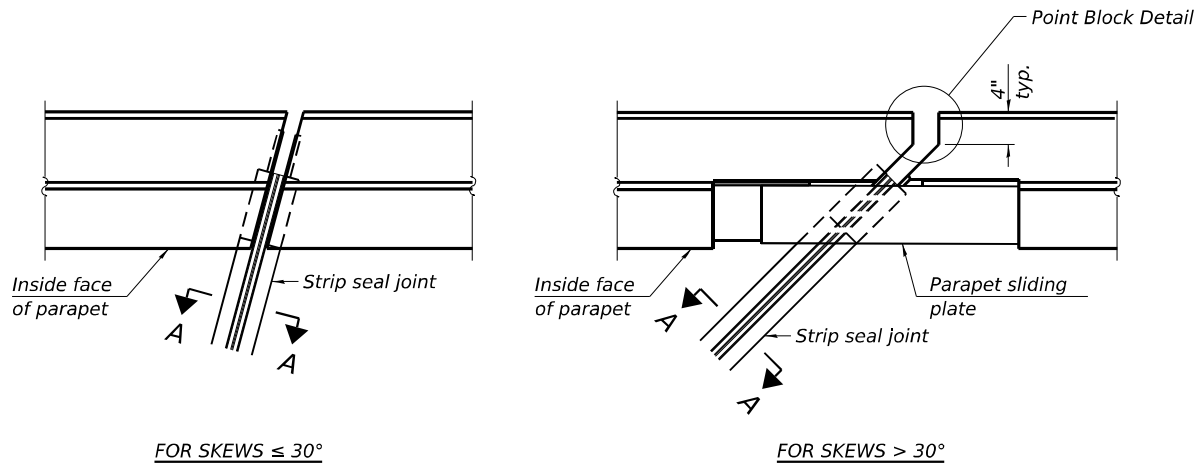
SHEET SA-57 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	721
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

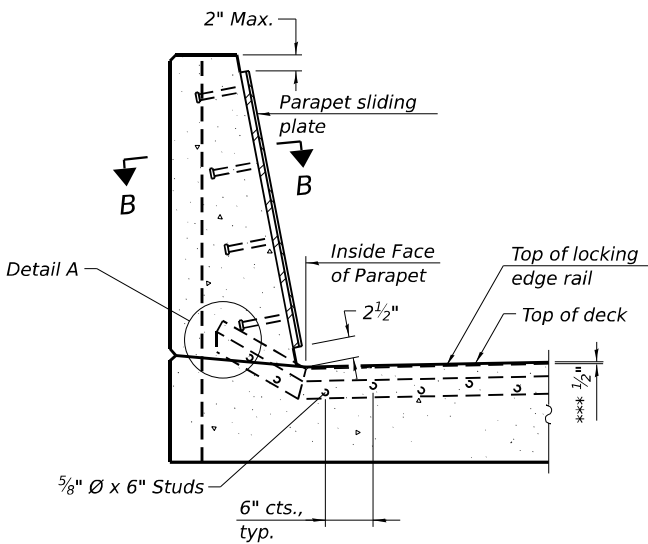
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10-27-2025, 16:49:01



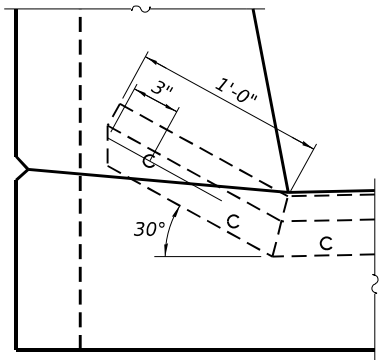
PLAN AT PARAPET



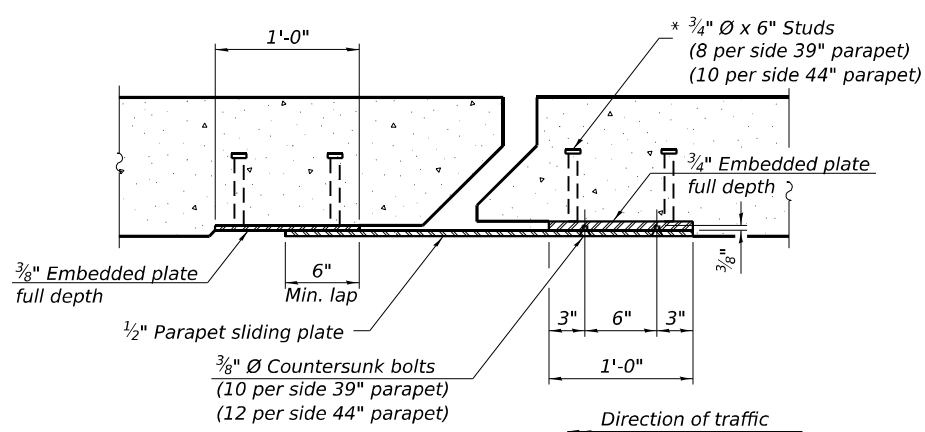
SECTION AT PARAPET

(Skews $> 30^\circ$ shown. Skews $\leq 30^\circ$ similar except as shown in plan view.)

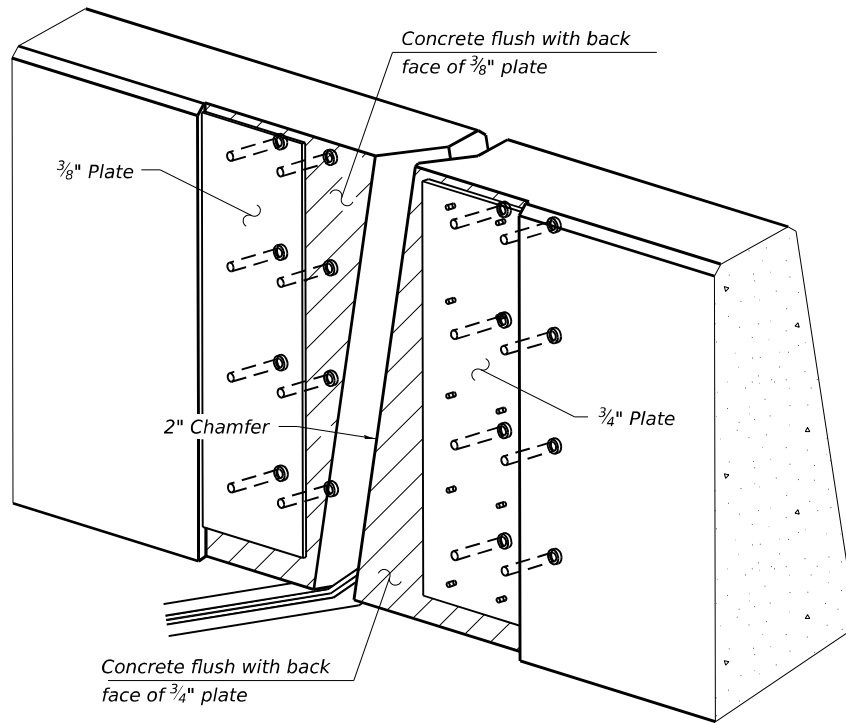
*** Prior to grinding.



DETAIL A

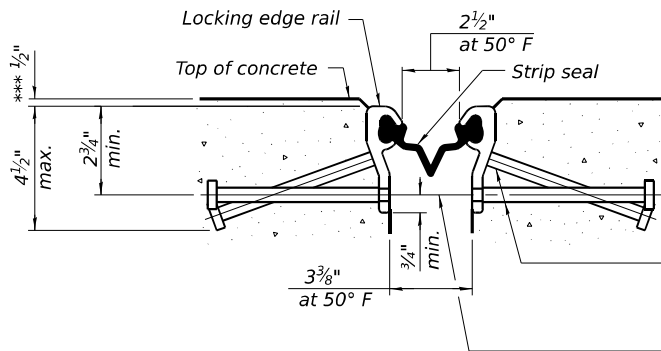


SECTION B-B



TRIMETRIC VIEW

(Showing embedded plates only)



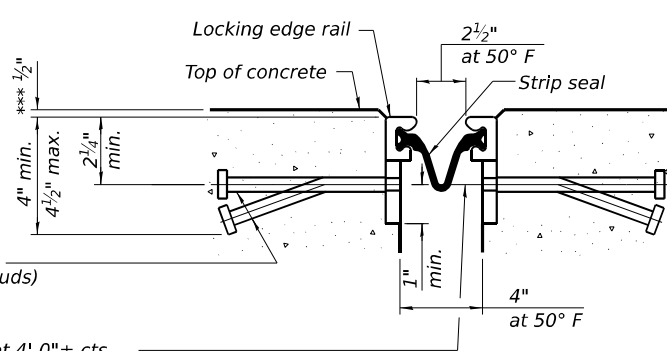
SHOWING ROLLED RAIL JOINT

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

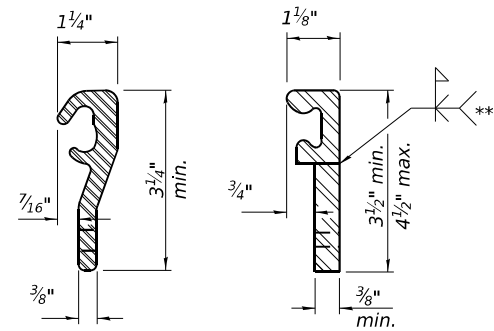
3/8" $\varnothing$ threaded rods in 7/16" $\varnothing$ holes at 4'-0" $\pm$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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

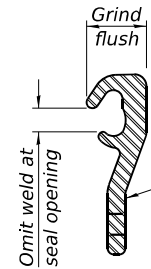


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	302

Notes:

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

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

The manufacturer's recommended installation methods shall be followed.

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

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

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

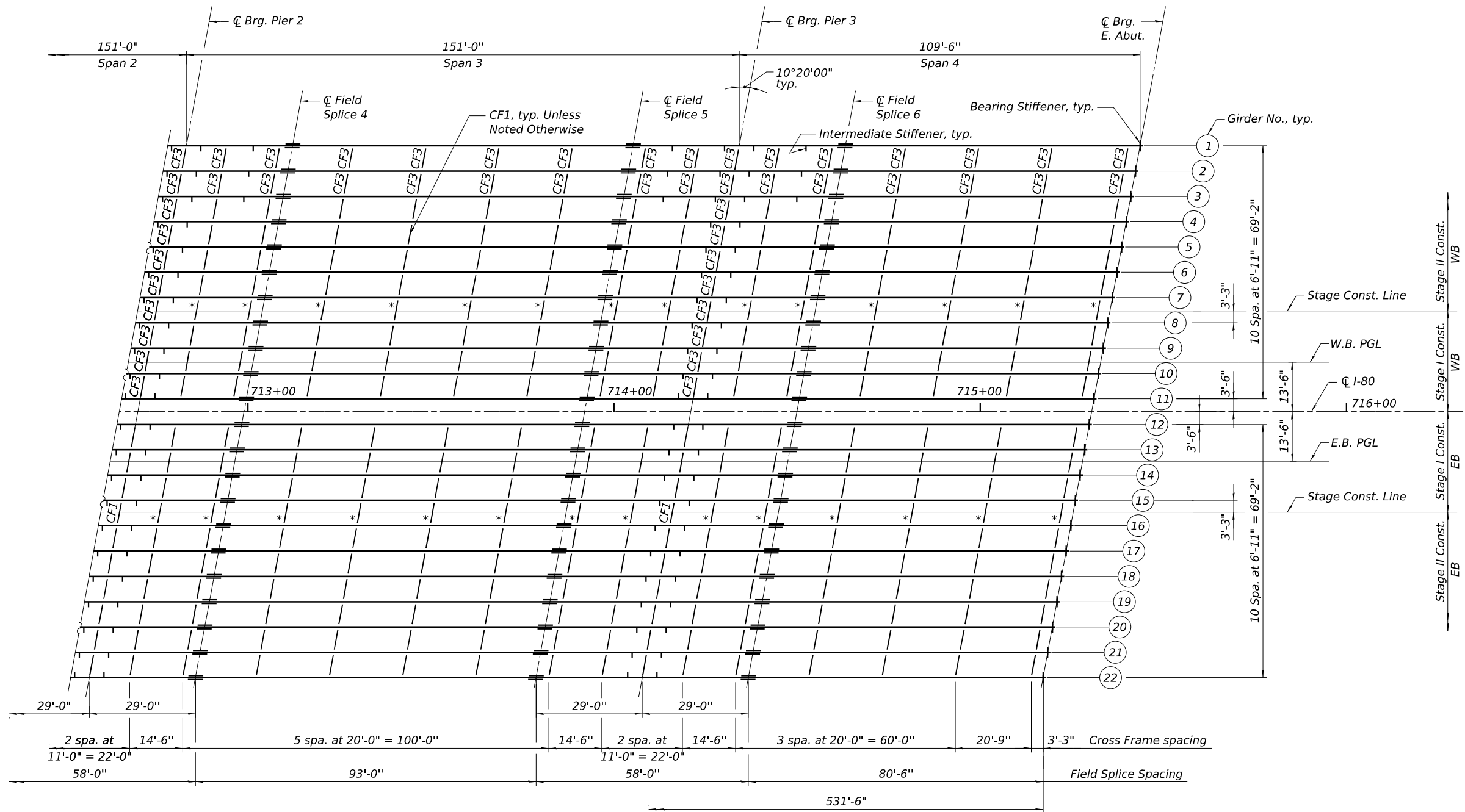
39" constant slope barrier shown, 44" constant slope barrier similar as noted.

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



Notes:

1. All structural steel shall be AASHTO M270 Grade 50 except angle members and gusset plates of CF1 and CF2 cross frames which may be Grade 36.
2. All cross-frames between beams or girders shall be installed with erection pins and bolts in accordance with the erection plan approved by the Engineer. Individual cross-frames at supports may be temporarily disconnected to install bearing anchor bolts.
3. Cross frame spacing shown is measured to centerline of cross frame connection plates.
4. For cross frame details, see Sheet SA-64.



PARTIAL FRAMING PLAN (2 OF 2)

* CF1 permanent. Temporary CF2 for stage construction.
See Cross Frame Stage Construction Sequence on Sheet SA-64.

Note:
For Notes, see Sht. SA-59.

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS\PW-01\DM520864\090902_0903-62F94-060-FRAMING2.DGN



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN 2
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-60 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	724
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		

MODEL: SHEET
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EXTERIOR GIRDER MOMENT TABLE - GIRDER 1								
	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4	
I_s	(in ⁴)	28458	51716	28458	57658	28458	57658	28458
I_c (n)	(in ⁴)	62562	-	62562	-	62562	-	62562
I_c (3n)	(in ⁴)	45380	-	45380	-	45380	-	45380
I_c (cr)	(in ⁴)	-	56310	-	62349	-	62349	-
S_s	(in ³)	1404	2133	1404	2353	1404	2353	1404
S_c (n)	(in ³)	1762	-	1762	-	1762	-	1762
S_c (3n)	(in ³)	1629	-	1629	-	1629	-	1629
S_c (cr)	(in ³)	-	2195	-	2417	-	2417	-
S_x	(in ³)	1664	2174	1685	2397	1669	2398	1688
DC1	(k/')	1.128	1.264	1.128	1.298	1.128	1.298	1.128
M_{DC1}	('k)	1025	2373	835	2470	890	2271	741
DC2	(k/')	0.406	0.406	0.406	0.705	0.705	0.705	0.705
M_{DC2}	('k)	418	708	220	1178	702	1437	440
DW	(k/')	0.327	0.327	0.327	0.327	0.327	0.327	0.327
M_{DW}	('k)	302	658	257	693	273	625	221
LLDF		0.475	0.465	0.457	0.457	0.457	0.468	0.483
$M_{\ell} + IM$	('k)	1416	1683	1365	1773	1346	1662	1282
f_t (Strength I)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$M_u + \frac{1}{3} f_t S_x$	('k)	4735	7784	4093	8702	4755	8481	4051
$\Phi_f M_n$	('k)	8112	9931	8112	10932	8112	10936	8112
f_s DC1	(ksi)	8.76	13.35	7.14	12.59	7.61	11.58	6.33
f_s DC2	(ksi)	3.08	3.87	1.62	5.85	5.17	7.14	3.24
f_s DW	(ksi)	2.22	3.60	1.89	3.44	2.01	3.10	1.63
f_s ($\ell + IM$)	(ksi)	9.64	9.20	9.30	8.80	9.17	8.25	8.73
f_t (Service II)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$f_s + \frac{f_t}{2}$ (Service II)	(ksi)	26.60	32.78	22.74	33.33	26.71	32.55	22.55
Service II Resistance	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50	47.50
$f_s + \frac{f_t}{3}$ (Strength I)	(ksi)	35.02	43.02	30.06	43.62	35.03	42.49	29.69
$\Phi_f F_n$	(ksi)	-	-	-	-	-	-	-
V _f	(k)	57.8	56.0	44.8	59.9	44.9	61.6	56.0

EXTERIOR GIRDER MOMENT TABLE - GIRDERS 11 AND 12								
	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4	
I_s	(in ⁴)	28458	51716	28458	51716	28458	45896	28458
I_c (n)	(in ⁴)	65294	-	65294	-	65294	-	65294
I_c (3n)	(in ⁴)	47468	-	47468	-	47468	-	47468
I_c (cr)	(in ⁴)	-	57049	-	57049	-	51109	-
S_s	(in ³)	1404	2133	1404	2133	1404	1912	1404
S_c (n)	(in ³)	1778	-	1778	-	1778	-	1778
S_c (3n)	(in ³)	1648	-	1648	-	1648	-	1648
S_c (cr)	(in ³)	-	2204	-	2204	-	1984	-
S_x	(in ³)	1684	2181	1700	2180	1690	1960	1706
DC1	(k/')	1.108	1.244	1.108	1.244	1.108	1.210	1.108
M_{DC1}	('k)	1006	2335	830	2395	938	2109	766
DC2	(k/')	0.231	0.231	0.231	0.231	0.231	0.231	0.231
M_{DC2}	('k)	214	463	185	484	206	421	164
DW	(k/')	0.327	0.327	0.327	0.327	0.327	0.327	0.327
M_{DW}	('k)	303	656	262	686	291	597	232
LLDF		0.551	0.540	0.530	0.530	0.530	0.544	0.560
$M_{\ell} + IM$	('k)	1688	2051	1702	2152	1707	1911	1512
f_t (Strength I)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$M_u + \frac{1}{3} f_t S_x$	('k)	4934	8071	4640	8394	4854	7402	4157
$\Phi_f M_n$	('k)	8266	9950	8266	9948	8266	8958	8266
f_s DC1	(ksi)	8.60	13.14	7.09	13.48	8.02	13.23	6.55
f_s DC2	(ksi)	1.56	2.52	1.35	2.63	1.50	2.55	1.19
f_s DW	(ksi)	2.21	3.57	1.91	3.73	2.12	3.61	1.69
f_s ($\ell + IM$)	(ksi)	11.39	11.17	11.49	11.71	11.52	11.56	10.20
f_t (Service II)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$f_s + \frac{f_t}{2}$ (Service II)	(ksi)	27.17	33.74	25.28	35.07	26.61	34.42	22.70
Service II Resistance	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50	47.50
$f_s + \frac{f_t}{3}$ (Strength I)	(ksi)	35.94	44.47	33.51	46.24	35.23	45.37	30.07
$\Phi_f F_n$	(ksi)	-	-	-	-	-	-	-
V _f	(k)	78.7	76.2	61.1	81.3	61.0	83.2	75.8

INTERIOR GIRDER MOMENT TABLE - GIRDERS 2 AND 3								
	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4	
I_s	(in ⁴)	28458	51716	28458	57658	28458	57658	28458
I_c (n)	(in ⁴)	65398	-	65398	-	65398	-	65398
I_c (3n)	(in ⁴)	47551	-	47551	-	47551	-	47551
I_c (cr)	(in ⁴)	-	57079	-	63138	-	63138	-
S_s	(in ³)	1404	2133	1404	2353	1404	2353	1404
S_c (n)	(in ³)	1779	-	1779	-	1779	-	1779
S_c (3n)	(in ³)	1649	-	1649	-	1649	-	1649
S_c (cr)	(in ³)	-	2205	-	2427	-	2427	-
S_x	(in ³)	1687	2182	1705	2405	1692	2407	1710
DC1	(k/')	1.044	1.181	1.044	1.215	1.044	1.215	1.044
M_{DC1}	('k)	950	2200	773	2289	824	2106	686
DC2	(k/')	0.308	0.308	0.308	0.532	0.532	0.532	0.532
M_{DC2}	('k)	317	537	169	889	532	1081	333
DW	(k/')	0.327	0.327	0.327	0.327	0.327	0.327	0.327
M_{DW}	('k)	303	656	259	692	275	623	221
LLDF		0.551	0.540	0.530	0.530	0.530	0.544	0.560
$M_{\ell} + IM$	('k)	1642	1953	1583	2054	1562	1931	1487
f_t (Strength I)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$M_u + \frac{1}{3} f_t S_x$	('k)	4912	7823	4336	8605	4841	8298	4208
$\Phi_f M_n$	('k)	8272	9954	8272	10953	8272	10958	8272
f_s DC1	(ksi)	8.12	12.38	6.61	11.67	7.04	10.74	5.86
f_s DC2	(ksi)	2.31	2.92	1.23	4.40	3.87	5.35	2.42
f_s DW	(ksi)	2.20	3.57	1.88	3.42	2.00	3.08	1.61
f_s ($\ell + IM$)	(ksi)	11.08	10.63	10.68	10.16	10.54	9.55	10.03
f_t (Service II)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$f_s + \frac{f_t}{2}$ (Service II)	(ksi)	27.03	32.69	23.61	32.70	26.61	31.58	22.94
Service II Resistance	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50	47.50
$f_s + \frac{f_t}{3}$ (Strength I)	(ksi)	35.73	43.09	31.31	42.99	35.09	41.44	30.33
$\Phi_f F_n$	(ksi)	-	-	-	-	-	-	-
V _f	(k)	73.8	71.5	57.2	76.4	57.4	78.7	71.5

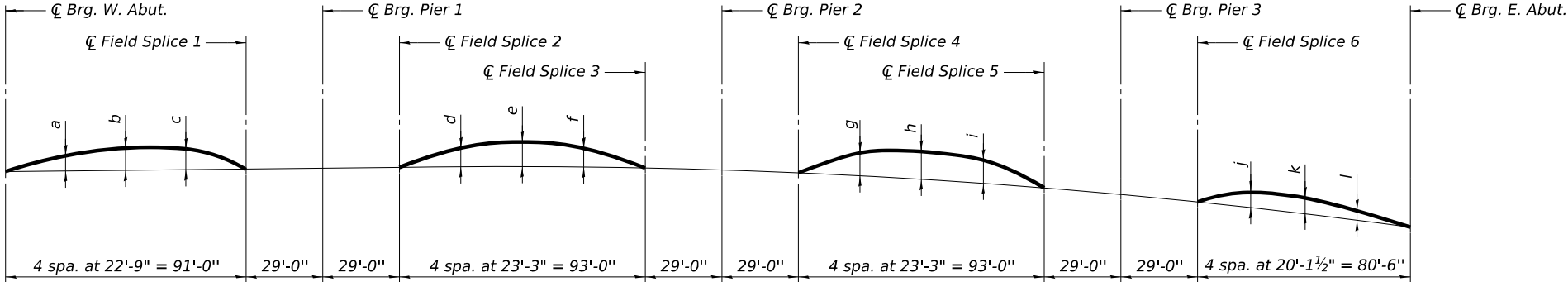
INTERIOR GIRDER MOMENT TABLE - GIRDERS 20 AND 21								
	0.4 Span 1	Pier 1	0.5 Span 2	Pier 2	0.5 Span 3	Pier 3	0.6 Span 4	
I_s	(in ⁴)	28458	51716	28458	51716	28458	45896	28458
I_c (n)	(in ⁴)	65398	-	65398	-	65398	-	65398
I_c (3n)	(in ⁴)	47551	-	47551	-	47551	-	47551
I_c (cr)	(in ⁴)	-	57079	-	57079	-	51139	-
S_s	(in ³)	1404	2133	1404	2133	1404	1912	1404
S_c (n)	(in ³)	1779	-	1779	-	1779	-	1779
S_c (3n)	(in ³)	1649	-	1649	-	1649	-	1649
S_c (cr)	(in ³)	-	2205	-	2205	-	1984	-
S_x	(in ³)	1690	2182	1705	2182	1696	1962	1711
DC1	(k/')	1.043	1.179	1.043	1.179	1.043	1.145	1.043
M_{DC1}	('k)	947	2199	781	2255	883	1986	721
DC2	(k/')	0.185	0.185	0.185	0.185	0.185	0.185	0.185
M_{DC2}	('k)	171	371	148	388	165	338	131
DW	(k/')	0.327	0.327	0.327	0.327	0.327	0.327	0.327
M_{DW}	('k)	303	656	262	686	291	597	232
LLDF		0.551	0.540	0.530	0.530	0.530	0.544	0.560
$M_{\ell} + IM$	('k)	1643	1957	1594	2016	1599	1836	1496
f_t (Strength I)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$M_u + \frac{1}{3} f_t S_x$	('k)	4727	7621	4344	7861	4545	7014	4031
$\Phi_f M_n$	('k)	8272	9954	8272	9952	8272	8962	8272
f_s DC1	(ksi)	8.09	12.37	6.68	12.69	7.55	12.46	6.16
f_s DC2	(ksi)	1.24	2.02	1.08	2.11	1.20	2.04	0.95
f_s DW	(ksi)	2.20	3.57	1.91	3.73	2.12	3.61	1.69
f_s ($\ell + IM$)	(ksi)	11.09	10.65	10.75	10.97	10.79	11.10	10.09
f_t (Service II)	(ksi)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$f_s + \frac{f_t}{2}$ (Service II)	(ksi)	25.95	31.81	23.64	32.80	24.89	32.55	21.93
Service II Resistance	(ksi)	47.50	47.50	47.50	47.50	47.50	47.50	47.50
$f_s + \frac{f_t}{3}$ (Strength I)	(ksi)	34.38	41.99	31.37	43.30	32.99	42.98	29.09
$\Phi_f F_n$	(ksi)	-	-	-	-	-	-	-
V _f	(k)	73.9	71.5	57.3	76.2	57.2	78.1	71.1

- I_s , S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).
- I_c (n), S_c (n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads (in.⁴ and in.³).
- I_c (3n), S_c (3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).
- I_c (cr), S_c (cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in.⁴ and in.³).
- S_x : Section modulus about the major axis of a section to the controlling flange, tension or compression, taken as yield moment with respect to the controlling flange over the yield strength of the controlling flange (in.³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- LLDF: Live Load Distribution Factor for moment and shear computed according to Article 4.6.2.2 and further IDOT provisions.
- $M_{\ell} + IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- M_u : Strength I load combination of factored design moments (kip-ft.).
1.25 ($M_{DC1} + M_{DC2}$) + 1.5 M_{DW} + 1.75 $M_{\ell} + IM$
- f_t : Factored calculated flange lateral bending stress as calculated using Article 6.10.1.6 and as further simplified by IDOT provisions (ksi).
- $\Phi_f M_n$: Factored nominal flexural resistance of the section determined as specified in Article 6.10.7.1 or A6 as applicable (kip-ft.).
- f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
- M_{DC1} / S_s
- f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
- M_{DC2} / S_c (3n) or M_{DC2} / S_c (cr) as applicable.
- f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
- M_{DW} / S_c (3n) or

MODEL: SHEET
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TOP OF WEB ELEVATIONS (FOR FABRICATION ONLY)

Girder	℄ Brg. W. Abut.	℄ Splice 1	℄ Brg. Pier 1	℄ Splice 2	℄ Splice 3	℄ Brg. Pier 2	℄ Splice 4	℄ Splice 5	℄ Brg. Pier 3	℄ Splice 6	℄ Brg. E. Abut.
1	577.15	577.81	577.92	578.03	578.03	577.97	577.91	577.24	576.87	576.51	575.47
2	577.53	578.19	578.30	578.41	578.42	578.36	578.30	577.63	577.27	576.91	575.88
3	577.65	578.32	578.43	578.54	578.56	578.50	578.44	577.78	577.42	577.07	576.04
4	577.78	578.43	578.55	578.68	578.74	578.66	578.58	577.94	577.60	577.25	576.20
5	577.88	578.54	578.66	578.79	578.86	578.78	578.70	578.07	577.73	577.38	576.34
6	577.97	578.63	578.76	578.89	578.96	578.89	578.81	578.19	577.84	577.50	576.46
7	577.87	578.54	578.67	578.80	578.88	578.80	578.73	578.11	577.77	577.43	576.40
8	577.75	578.42	578.55	578.69	578.77	578.70	578.62	578.01	577.67	577.33	576.31
9	577.59	578.27	578.41	578.54	578.63	578.56	578.49	577.89	577.55	577.21	576.19
10	577.44	578.13	578.26	578.40	578.50	578.43	578.36	577.76	577.42	577.09	576.07
11	577.29	577.99	578.12	578.26	578.37	578.30	578.23	577.64	577.30	576.97	575.96
12	577.27	577.98	578.12	578.26	578.37	578.30	578.23	577.65	577.32	576.98	575.98
13	577.40	578.10	578.24	578.39	578.50	578.44	578.37	577.79	577.46	577.13	576.14
14	577.52	578.23	578.38	578.52	578.64	578.58	578.52	577.94	577.62	577.29	576.29
15	577.65	578.36	578.51	578.65	578.78	578.72	578.66	578.09	577.77	577.44	576.45
16	577.74	578.46	578.61	578.76	578.89	578.83	578.77	578.21	577.89	577.57	576.58
17	577.81	578.54	578.69	578.84	578.98	578.92	578.87	578.31	577.99	577.67	576.69
18	577.69	578.43	578.58	578.73	578.88	578.82	578.77	578.22	577.90	577.58	576.61
19	577.56	578.30	578.46	578.61	578.76	578.71	578.66	578.11	577.80	577.48	576.51
20	577.41	578.16	578.31	578.47	578.63	578.57	578.52	577.99	577.67	577.35	576.39
21	577.26	578.01	578.17	578.32	578.49	578.44	578.39	577.86	577.54	577.23	576.27
22	577.10	577.86	578.02	578.18	578.35	578.30	578.25	577.73	577.41	577.10	576.15



CAMBER DIAGRAM

Girder No.	a	b	c	d	e	f	g	h	i	j	k	l
1	2 1/4"	3 1/4"	3"	3 1/2"	4"	3 1/2"	3 3/4"	4 1/4"	3 3/4"	2 1/2"	2 1/2"	1 1/2"
2-3	2"	3 1/4"	3"	3 3/4"	4 1/4"	3 3/4"	3 1/4"	4"	3 1/4"	2 1/2"	2 1/2"	1 1/2"
4-10, 13-21	2"	3 1/4"	3"	3 1/2"	4"	3 1/2"	3 1/2"	4 1/4"	3 1/2"	2 1/4"	2 1/4"	1 1/4"
11-12	2 1/4"	3 1/2"	3 1/4"	3 1/2"	4 1/4"	3 1/2"	3 3/4"	4 1/4"	3 1/2"	2 1/2"	2 1/2"	1 1/2"
22	2"	3 1/4"	3"	3 1/2"	4"	3 1/2"	3 1/2"	4"	3 1/2"	2 1/4"	2 1/4"	1 1/4"

GIRDER REACTION TABLE - GIRDER 1					
	W. Abut. *	Pier 1	Pier 2	Pier 3	E. Abut. *
LLDF	0.504	0.504	0.504	0.504	0.504
OCF	1.035	1.000	1.000	1.000	1.035
R _{DC1} (k)	86.05	178.70	179.96	174.28	83.70
R _{DC2} (k)	18.46	56.11	84.32	103.85	25.47
R _{DW} (k)	14.15	49.59	50.09	47.88	12.20
R _℄ (k)	52.44	104.90	106.52	103.69	50.86
R _{IM} (k)	11.18	18.77	18.66	18.75	11.06
R _{Total (Strength I)(Impact)} (k)	263.20	584.32	624.55	633.75	263.12
R _{Total (Strength I)(No Impact)} (k)	243.63	551.47	591.90	600.94	243.76

GIRDER REACTION TABLE - GIRDERS 2 AND 3					
	W. Abut. *	Pier 1	Pier 2	Pier 3	E. Abut. *
LLDF	0.737	0.737	0.737	0.737	0.737
OCF	1.035	1.000	1.000	1.000	1.035
R _{DC1} (k)	86.56	165.96	167.16	161.97	83.58
R _{DC2} (k)	14.01	42.47	63.50	77.87	19.27
R _{DW} (k)	14.16	49.57	50.10	47.86	12.22
R _℄ (k)	76.68	153.37	155.75	151.60	74.36
R _{IM} (k)	16.35	27.44	27.28	27.42	16.19
R _{Total (Strength I)(Impact)} (k)	309.76	651.31	683.78	684.88	305.36
R _{Total (Strength I)(No Impact)} (k)	281.14	603.29	636.04	636.89	277.03

GIRDER REACTION TABLE - GIRDERS 11 AND 12					
	W. Abut. *	Pier 1	Pier 2	Pier 3	E. Abut. *
LLDF	0.680	0.680	0.680	0.680	0.680
OCF	1.035	1.000	1.000	1.000	1.035
R _{DC1} (k)	88.06	175.88	175.73	166.53	82.25
R _{DC2} (k)	10.00	35.02	35.44	33.52	8.80
R _{DW} (k)	14.16	49.61	50.19	47.48	12.46
R _℄ (k)	70.77	141.61	143.28	138.44	68.65
R _{IM} (k)	15.09	25.33	25.08	25.07	14.96
R _{Total (Strength I)(Impact)} (k)	294.07	630.19	633.88	607.43	278.82
R _{Total (Strength I)(No Impact)} (k)	267.66	585.86	589.99	563.55	252.64

GIRDER REACTION TABLE - GIRDERS 20 AND 21					
	W. Abut. *	Pier 1	Pier 2	Pier 3	E. Abut. *
LLDF	0.737	0.737	0.737	0.737	0.737
OCF	1.035	1.000	1.000	1.000	1.035
R _{DC1} (k)	84.62	165.89	165.69	156.98	79.14
R _{DC2} (k)	8.01	28.05	28.38	26.85	7.05
R _{DW} (k)	14.16	49.61	50.19	47.48	12.46
R _℄ (k)	76.69	153.48	155.29	150.05	74.40
R _{IM} (k)	16.35	27.45	27.18	27.17	16.20
R _{Total (Strength I)(Impact)} (k)	299.84	633.47	637.20	611.14	284.97
R _{Total (Strength I)(No Impact)} (k)	271.23	585.43	589.63	563.60	256.62

* RDC1 includes service reaction due to weight of approach slab and parapet on approach slab.

LLDF: For definition, see Sheet SA-62.

OCF: Obtuse Correction Factor according to Article 4.6.2.2.3c or as further simplified by IDOT provisions.

R_{DC1}: Un-factored reaction due to non-composite dead load (kip).

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

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

R_℄: Un-factored live load reaction (kip).

R_{IM}: Un-factored dynamic load allowance (impact) (kip).

R_{Total (Strength I)(Impact)}: Strength I load combination of factored design reactions (kip).
1.25 (R_{DC1} + R_{DC2}) + 1.5R_{DW} + 1.75 (R_℄ + R_{IM})

R_{Total (Strength I)(No Impact)}: Strength I load combination of factored design reactions, not including dynamic load allowance (Impact) (kip).
1.25 (R_{DC1} + R_{DC2}) + 1.5R_{DW} + 1.75 (R_℄)



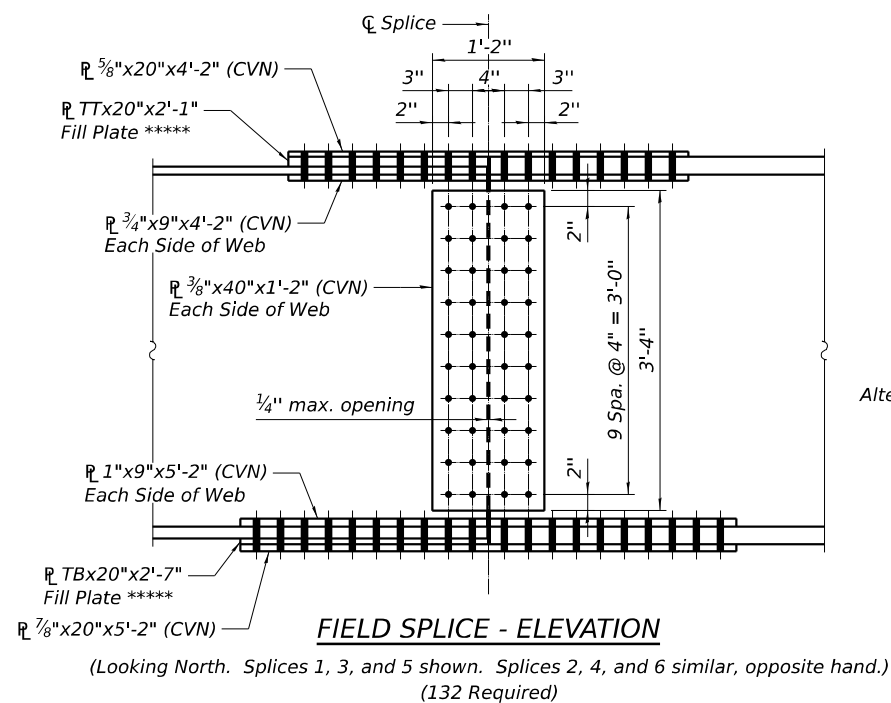
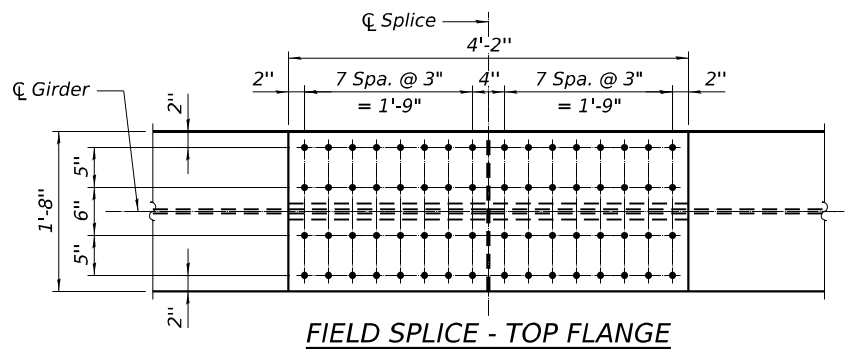
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DEPARTMENT OF TRANSPORTATION

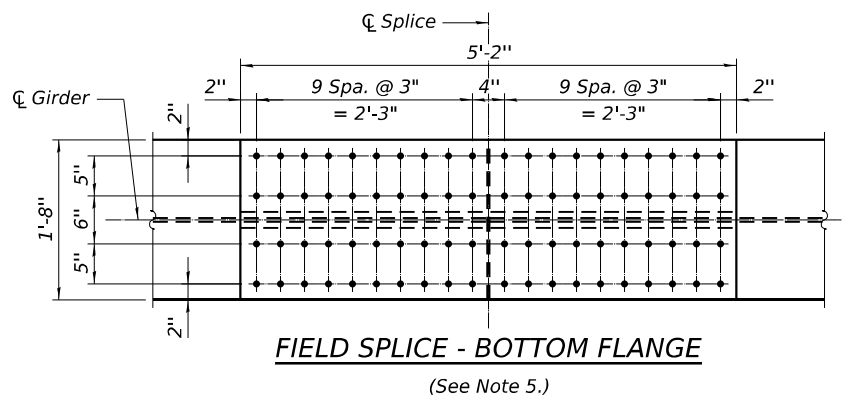
STRUCTURAL STEEL DETAILS 2
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-63 OF SA-112 SHEETS

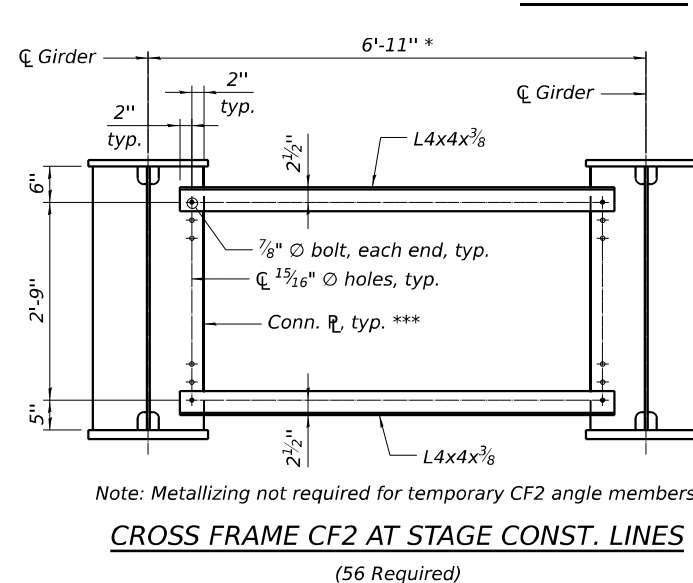
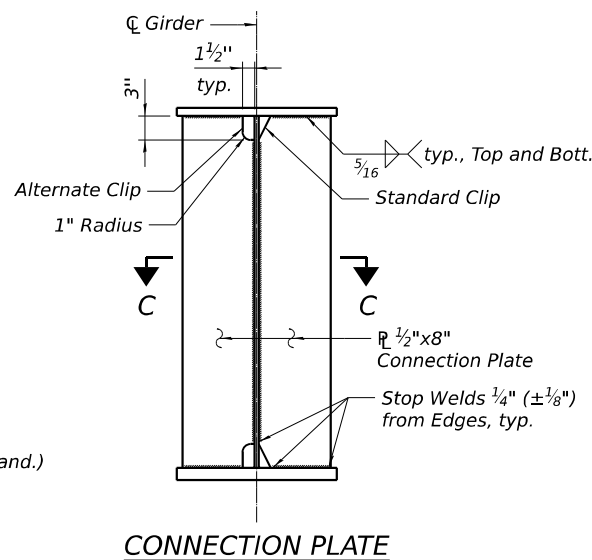
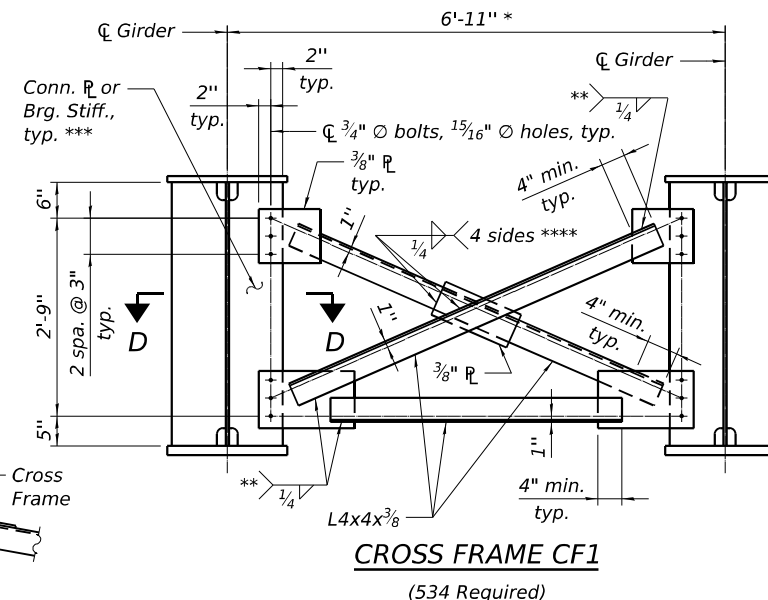
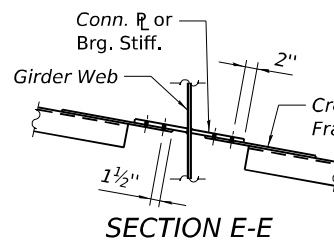
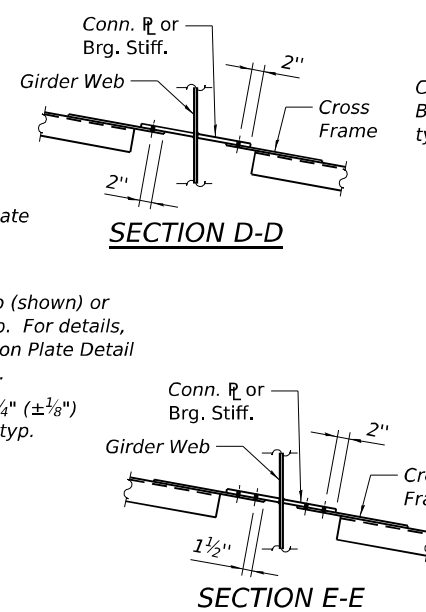
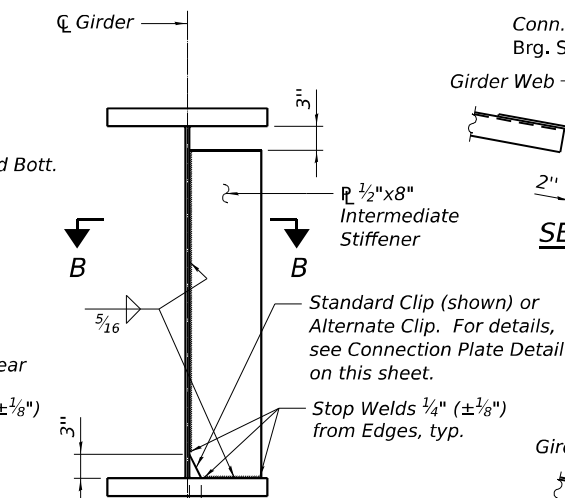
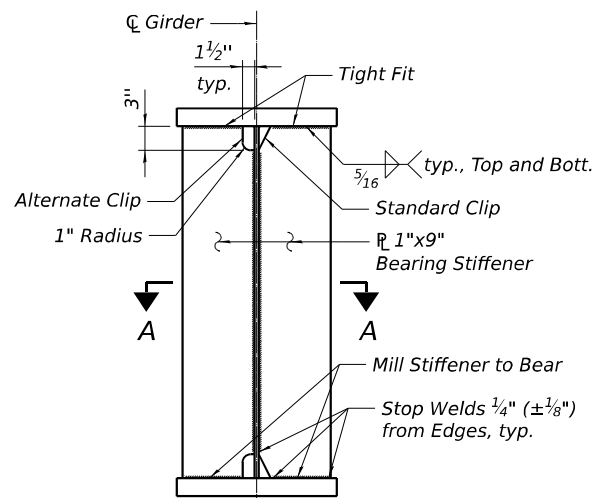
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	727
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		



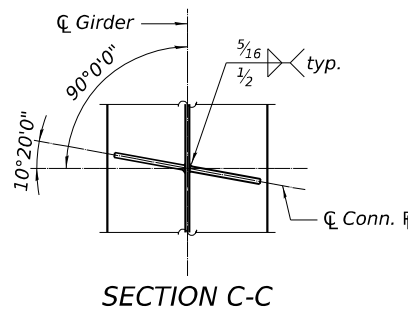
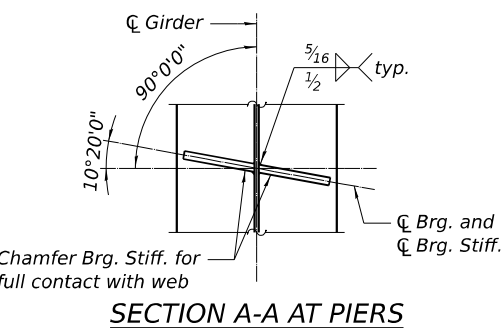
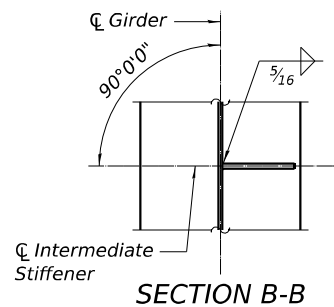
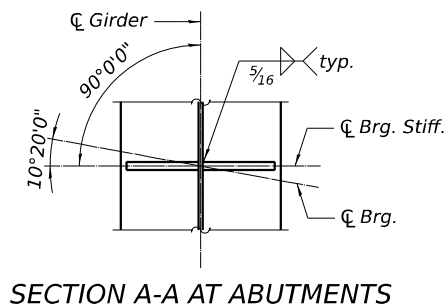
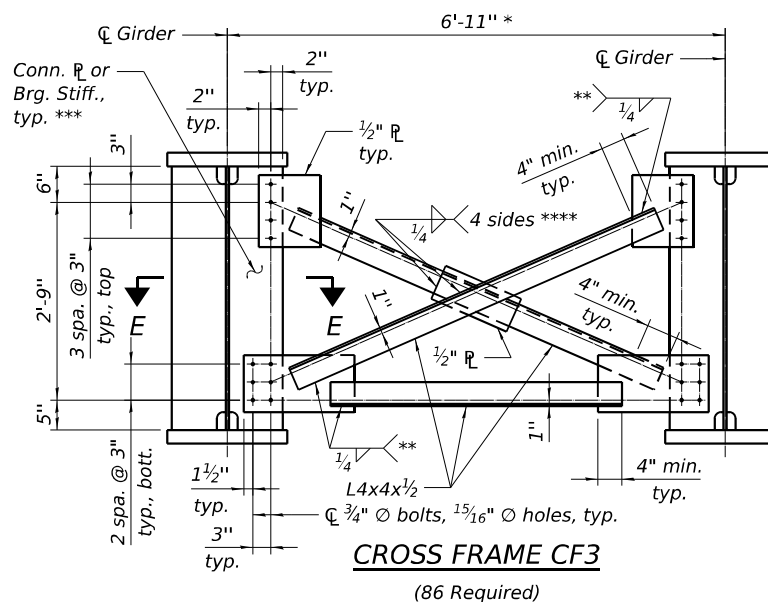
***** For fill plate thickness TT and TB, see table on this sheet.



<i>Girders</i>	<i>Field Splice</i>											
	1		2		3		4		5		6	
	<i>TT</i>	<i>TB</i>	<i>TT</i>	<i>TB</i>	<i>TT</i>	<i>TB</i>	<i>TT</i>	<i>TB</i>	<i>TT</i>	<i>TB</i>	<i>TT</i>	<i>TB</i>
1-3	1¼"	¾"	1¼"	¾"	1½"	1"	1½"	1"	1½"	1"	1½"	1"
4-22	1¼"	¾"	1¼"	¾"	1¼"	¾"	1½"	¾"	1"	½"	1"	½"



Note: Metallizing not required for temporary CF2 angle members.



* Measured perpendicular to girders.

**** Fillet weld angles along three sides on one face of gusset plate; however, if cross frames are galvanized, weld all-around. Typical.**

*** For plate orientation, weld details, and corner clip details, see bearing stiffener and connection plate details on this sheet.

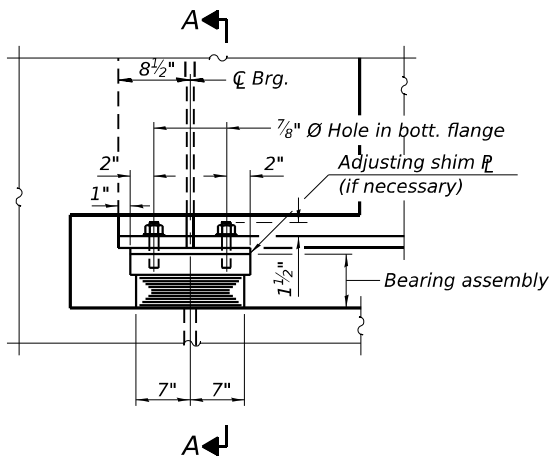
*** If cross frames are galvanized, weld all-around.

Cross Frame Stage Construction Sequence:

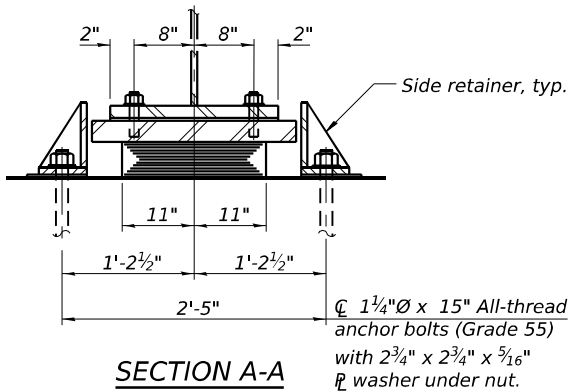
1. Install CF2 cross frames in Stage II Construction prior to placing deck concrete.
2. CF2 cross frame bolts shall be finger-tight.
3. Remove CF2 cross frames and replace with CF1 cross frames in Stage II Construction after deck pour is complete.

Notes:

1. All structural steel shall be AASHTO M270 Grade 50 except angle members and gusset plates of CF1 and CF2 cross frames which may be Grade 36.
2. Load carrying components designated "CVN" shall conform to the Charpy-V-Notch Impact Energy Requirement, Zone 2.
3. Fasteners shall be ASTM F3125 Grade A325 Type 1, hot dip galvanized bolts.
4. Bolts for field splices shall be 7/8" diameter, holes 15/16" diameter.
5. Bolts in the bottom flange of field splices shall be installed with the bolt head below the flange and nut above the flange.
6. Two hardened washers required for each set of oversized holes in cross frame connections.
7. Omit cross frame connection plates on exterior side of Girders 1, 11, 12, and 22.

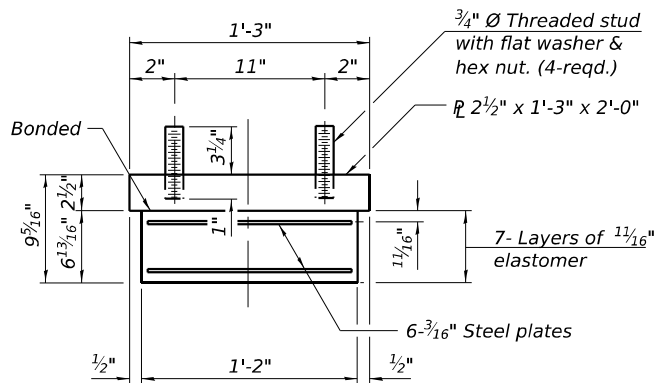


ELEVATION AT ABUT.
(West Abut. shown, East Abut. similar)



SECTION A-A

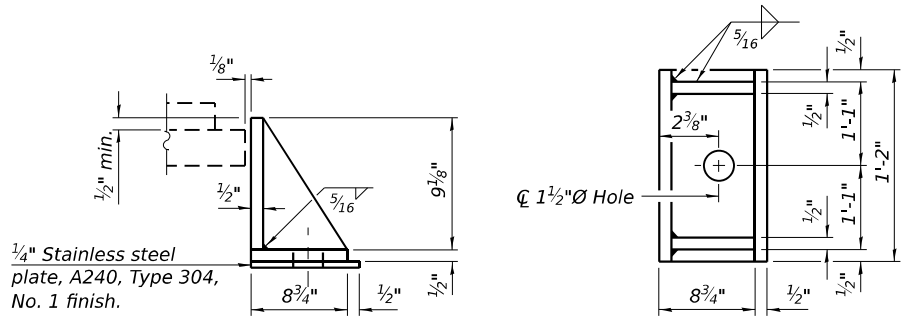
TYPE I ELASTOMERIC EXP. BRG. AT ABUTMENTS



BEARING ASSEMBLY

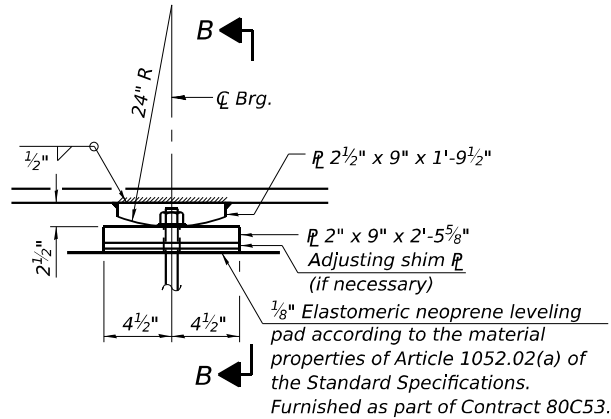
Note:
Shim plates shall not be placed
under bearing assembly.

Notes:
Installation of all bearing plates, shims, leveling pads,
and pintles shall be included in the cost of Erecting
Structural Steel.
Anchor bolts and side retainers at all supports shall
be installed as each member is erected unless an
equivalent temporary means of lateral restraint is used.
All bearing plates, side retainers, anchor bolts, nuts,
washers and pintles shall be galvanized according to
M111 or M232 as applicable.
The structural steel plates of the Bearing Assembly
shall conform to the requirements of AASHTO M270
Grade 50.
Two 1/8 in. adjusting shims will be furnished as part of
Contract 80C53 for each bearing in addition to all other
plates or shims and placed as shown on bearing details.
The structural steel plates and pintles of the fixed
bearing shall conform to the requirements of
AASHTO M270 Grade 50.

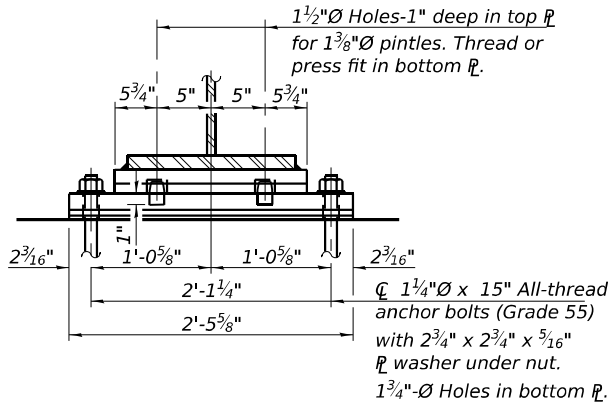


SIDE RETAINER

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

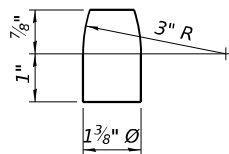


ELEVATION AT PIER



SECTION B-B

FIXED BEARING AT PIER 2



PINTLE

BILL OF MATERIAL

Item	Unit	Total
Erecting Elastomeric Bearing Assembly, Type I	Each	44
Anchor Bolts, 1 1/4"	Each	132

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ELASTOMERIC EXPANSION AND FIXED BEARING DETAILS
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

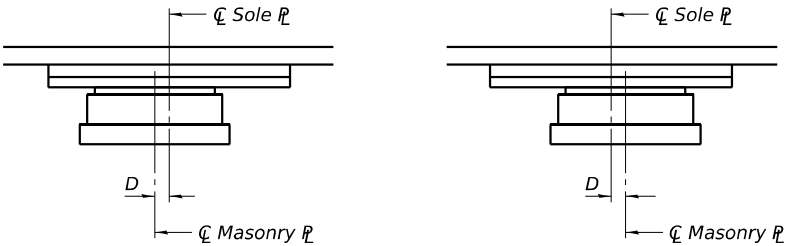
SHEET SA-65 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	729
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

DESIGN DATA

	Pier 1	Pier 3
Unfactored Vertical Dead Load Reaction (R _{DC})	208.4 kips	239.8 kips
Unfactored Vertical Wearing Surface Reaction (R _{DW})	49.57 kips	47.86 kips
Unfactored Vertical Live Load without Impact Reaction (R _{LL})	153.37 kips	151.6 kips
Maximum Strength or Extreme Event Lateral Reaction (H _u)	56.5 kips	64.8 kips
Maximum Strength Limit State Rotation (Θ _u according to Article 14.4.2.2)	0.0093 rad	0.0104 rad
Unfactored Design Thermal Movement from 50° F (ΔT)	0.82 in.	0.82 in.
Service I Factored Lateral Reaction	23.4 kips	23.6 kips
Service I Rotation	0.0026 rad	0.0034 rad
Strength I Factored Total Longitudinal Movement	1.98 in.	1.98 in.
Service I Factored Vertical Reaction	411.4 kips	439.3 kips
Strength I Factored Vertical Reaction	603.3 kips	636.9 kips

Service I Load Factors = 1.0DC + 1.0DW + 1.00LL
Strength I Load Factors = 1.25DC + 1.5DW + 1.75LL + 1.2TU
Extreme Event Load Factors = 1.0EQ



BELOW 50°F.

(Move masonry R away from fixed bearing)

ABOVE 50°F.

(Move masonry R toward fixed bearing)

SETTING ANCHOR BOLTS AT EXPANSION BEARING

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

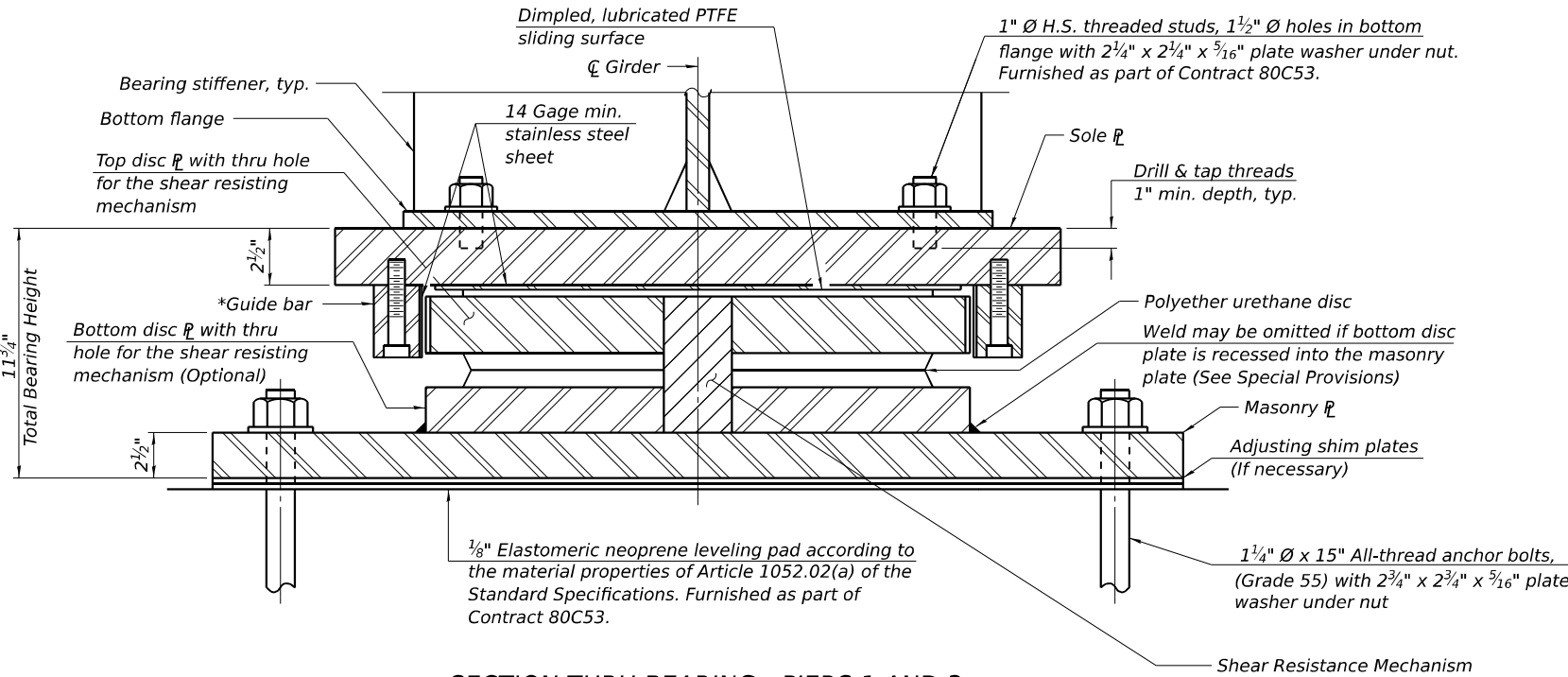
NOTES:

- Two 1/8 in. adjusting shims will be furnished as part of Contract 80C53 for each bearing in addition to all other plates or shims and placed as shown on bearing details. Shim plates not included in total bearing height.
- Total bearing height is estimated based on manufacturer data. Actual bearing height may differ from contract plans. The Contractor shall be responsible for verifying bearing heights and adjusting seat elevations, if required, prior to placing pier or abutment concrete.

BILL OF MATERIAL

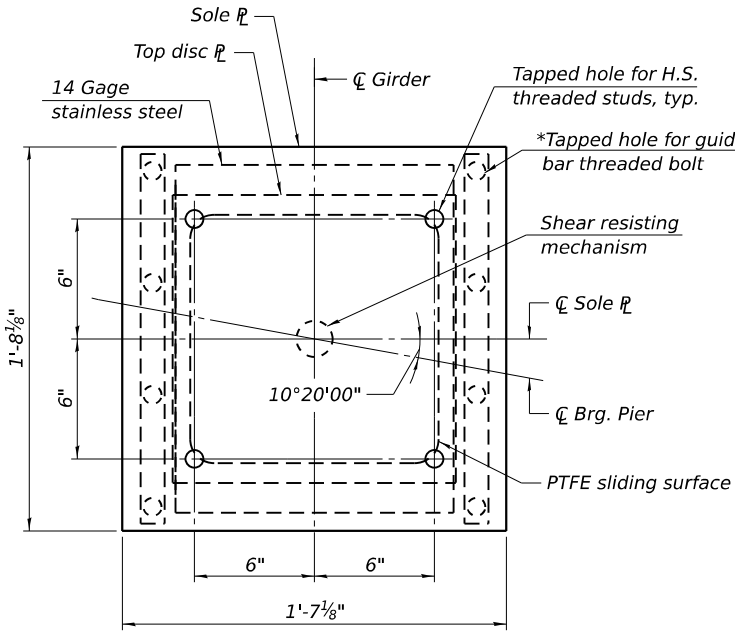
Item	Unit	Total
** Erecting High Load Multi-Rotational Bearings, Disc, Guided Expansion-500k	Each	44
Anchor Bolts, 1 1/4"	Each	176

** The value specified in the pay item name is an approximate vertical load capacity that is used for letting and bidding purposes only. Exact bearing capacity will vary subject to final design.

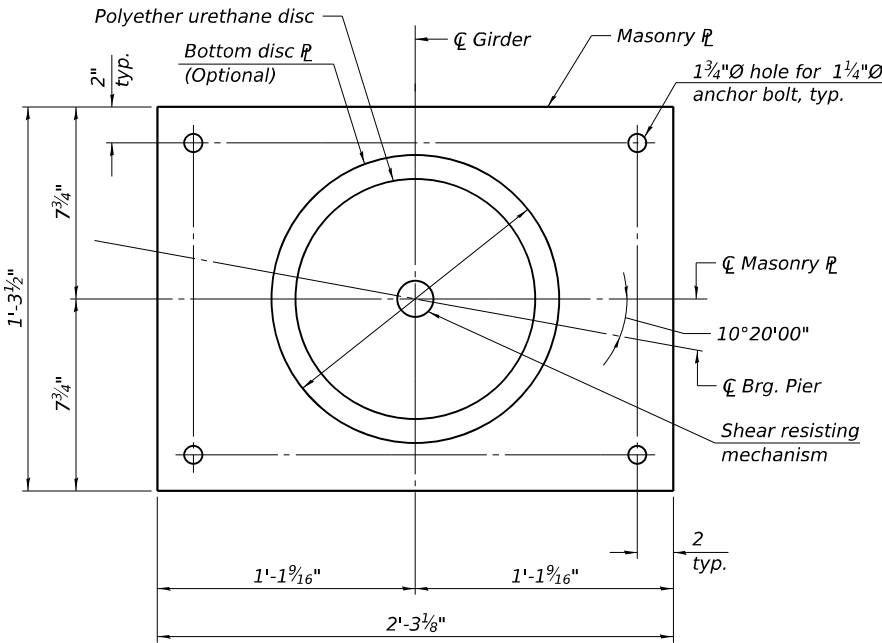


SECTION THRU BEARING - PIERS 1 AND 3

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



SOLE PLATE AND TOP DISC PLATE PLAN



MASONRY PLATE AND
BOTTOM DISC PLATE PLAN

HLMR-D-GE

5/15/2023



USER NAME	=	DESIGNED - BAR	REvised -
PLOT SCALE	=	CHECKED - KK	REvised -
PLOT DATE	=	DRAWN - MTR	REvised -
		CHECKED - BAR	REvised -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUIDED EXPANSION HLMR DISC BEARING DETAILS
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-66 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	730
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\LOCAL\TRANSSYSTEMS\PW-01\DM520864\090902_0903-62F94-066-BRGDET2.DGN

<i>Girder</i>	<i>Elev.</i>
12	572.71
13	572.83
14	572.95
15	573.08
16	573.17
17	573.25
18	573.13
19	573.00
20	572.84
21	572.69
22	572.54



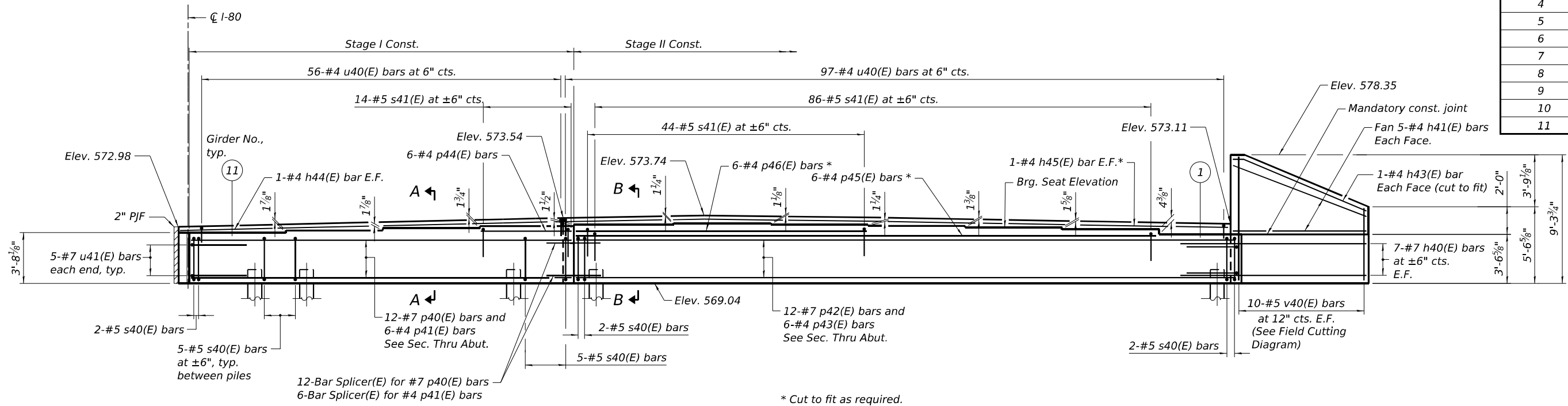
Type: HP 12x53 with pile shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 61'
No. Production Piles: 19
No. Test Piles: 1

Notes:

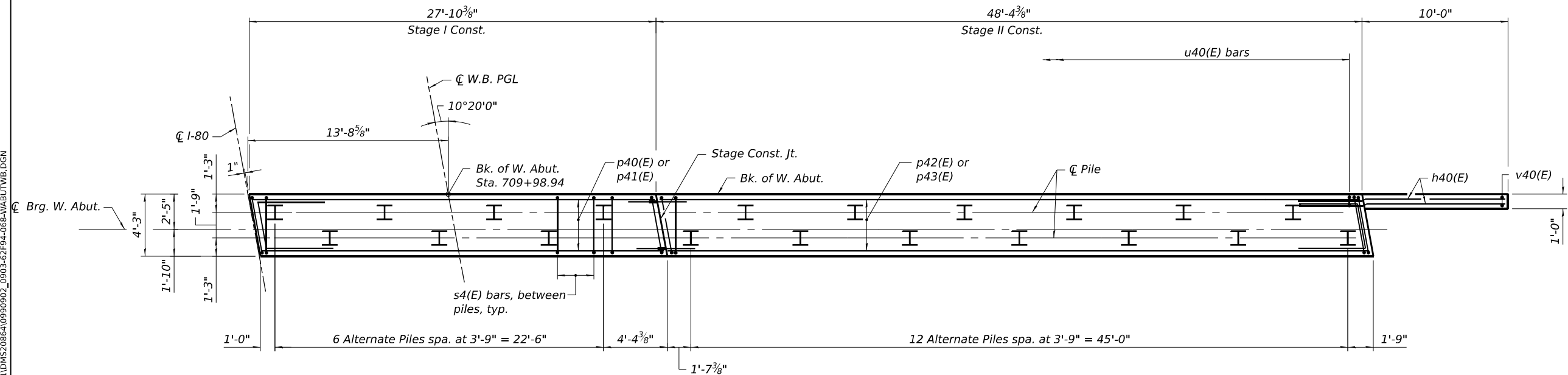
1. For Section A-A and B-B, see Sheet SA-73.
2. For plan dimensions, see Sheet SA-71.
3. Pour steps monolithically with cap.
4. For Bar Splicer details, see Sheet SA-92.

BRG. SEAT ELEVATIONS

Girder	Elev.
1	572.59
2	572.96
3	573.09
4	573.21
5	573.31
6	573.40
7	573.30
8	573.18
9	573.03
10	572.87
11	572.72



ELEVATION



PILE DATA

Type: HP 12x53 with pile shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 57'
No. Production Piles: 19
No. Test Piles: 1

PLAN - PILE CAP

- Notes:
- For Section A-A and B-B, see Sheet SA-73.
 - For plan dimensions, see Sheet SA-71.
 - Pour steps monolithically with cap.
 - For Bar Splicer details, see Sheet SA-92.

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS\PW-01\DM520864\0990902_0903-62\F94-068-WABUTWB.DGN



USER NAME	=	DESIGNED	-	SH	REVISED	-
		CHECKED	-	APC	REVISED	-
PLOT SCALE	=	DRAWN	-	LK	REVISED	-
PLOT DATE	=	CHECKED	-	SH	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT WB
STRUCTURE NO. 099-0903 (WB)

SHEET SA-68 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	732
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

<i>Girder</i>	<i>Elev.</i>
1	570.91
2	571.32
3	571.47
4	571.63
5	571.77
6	571.90
7	571.83
8	571.74
9	571.62
10	571.51
11	571.39

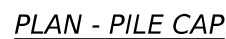


Type: HP 12x53 with pile shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 61'
No. Production Piles: 19
No. Test Piles: 1

Notes:

1. For Section C-C and D-D see Sheet SA-73.
2. For Plan dimensions, see Sheet SA-72.
3. Pour steps monolithically with cap.
4. For Bar Splicer details, see Sheet SA-92.

<i>Girder</i>	<i>Elev.</i>
12	571.41
13	571.57
14	571.73
15	571.89
16	572.02
17	572.12
18	572.04
19	571.94
20	571.82
21	571.70
22	571.59



Type: HP 12x53 with pile shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 59'
No. Production Piles: 19
No. Test Piles: 1

Notes:

1. For Section C-C and D-D see Sheet SA-73.
2. For Plan dimensions, see Sheet SA-72.
3. Pour steps monolithically with cap.
4. For Bar Splicer details, see Sheet SA-92.

MODEL: SHEET
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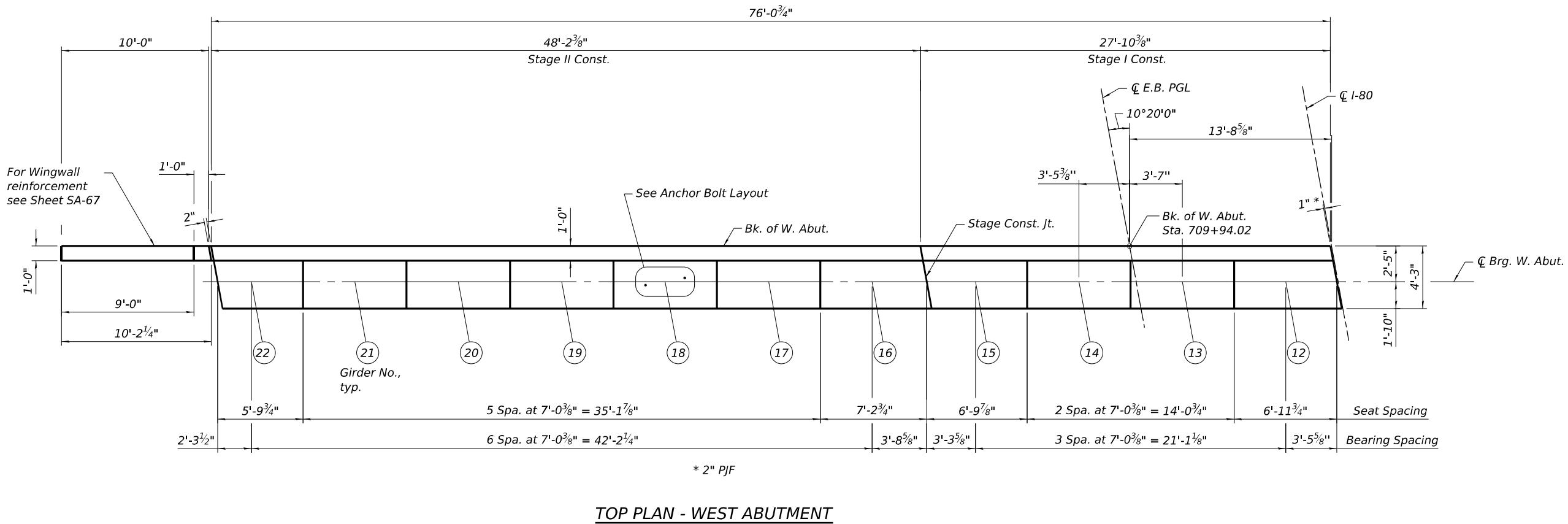
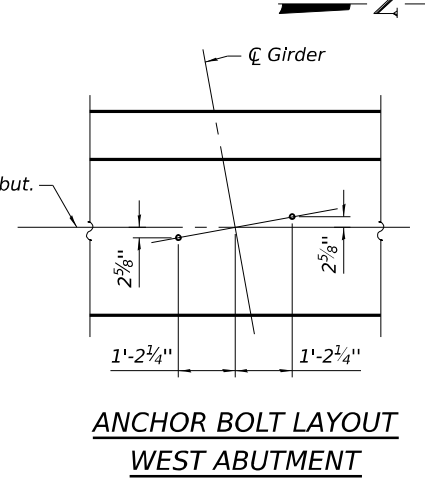
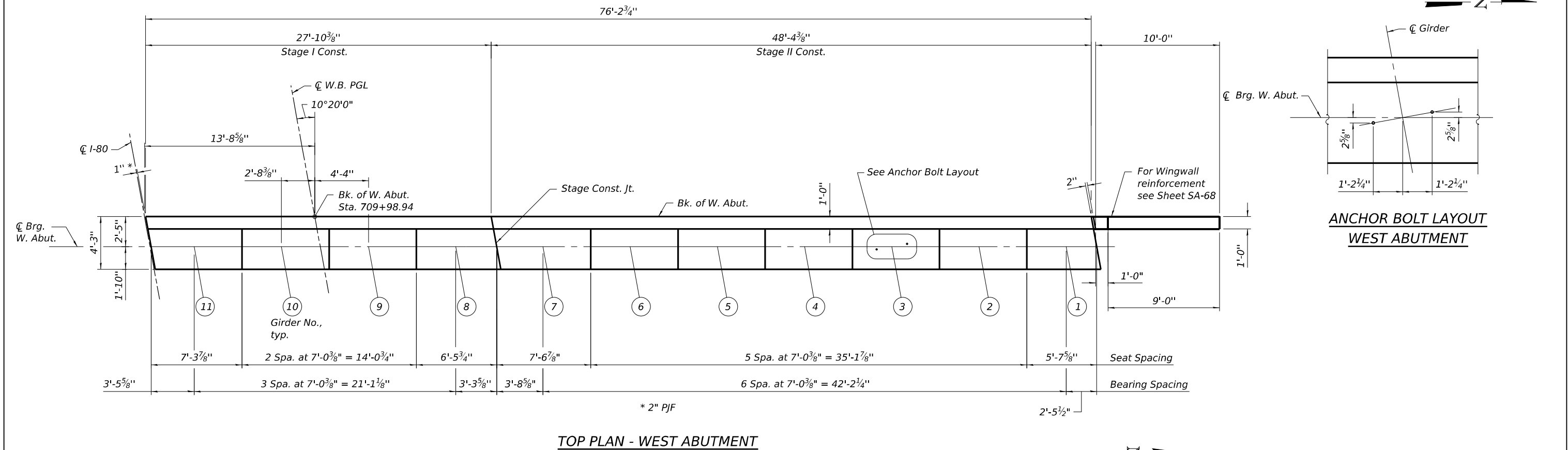
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PLOT SCALE	=	DRAWN	-	LK	REVISED	-
PLOT DATE	=	CHECKED	-	SH	REVISED	-

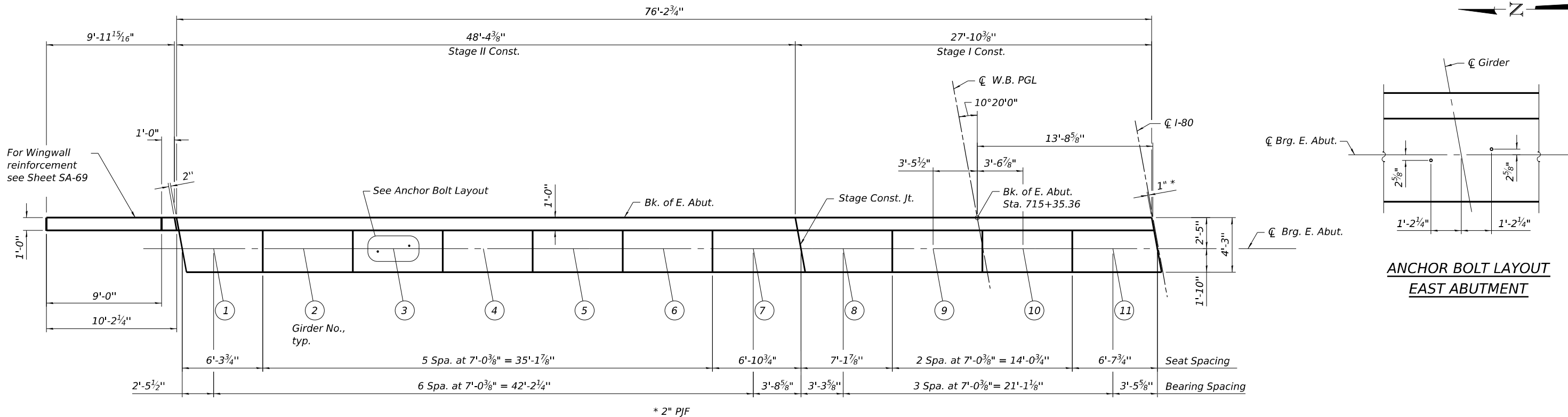
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS 1
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

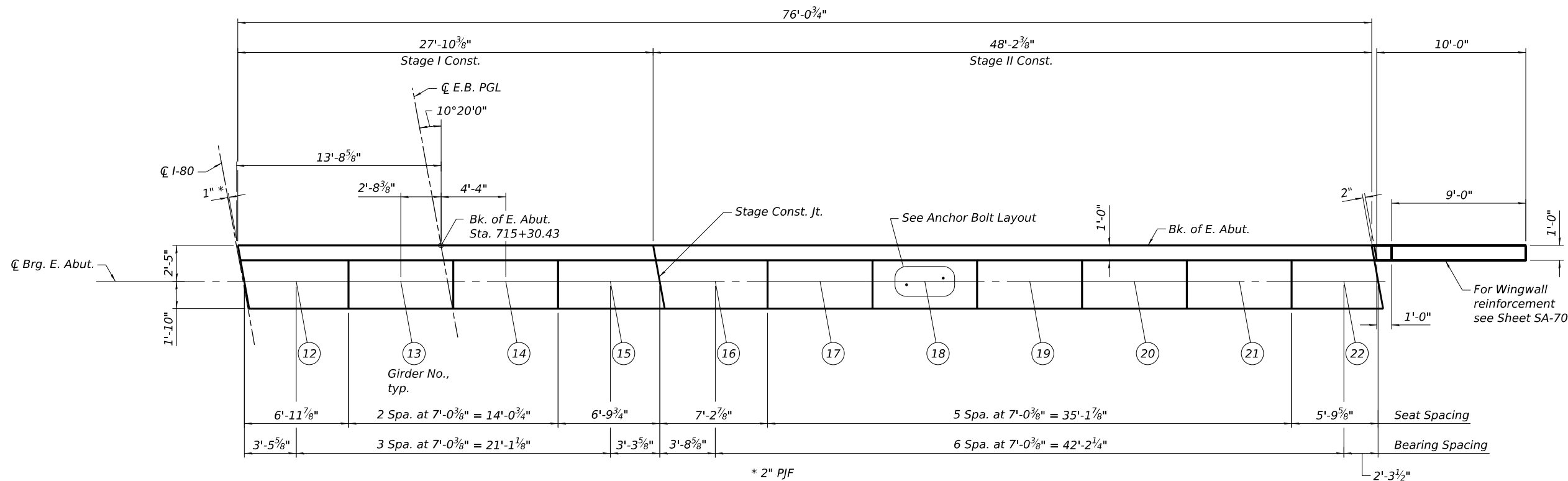
SHEET SA-71 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	735
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		





TOP PLAN - EAST ABUTMENT



TOP PLAN - EAST ABUTMENT

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS\PW-01\DM520864\0990902_0903-62\F94-072-ABUTDET2.DGN



USER NAME	=	DESIGNED	-	SH	REVISED	-
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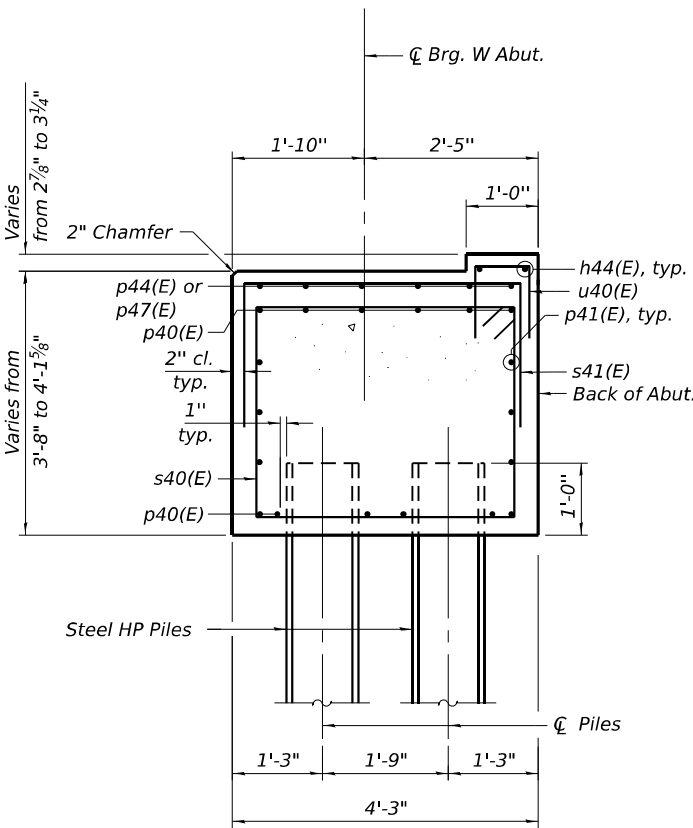
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS 2
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

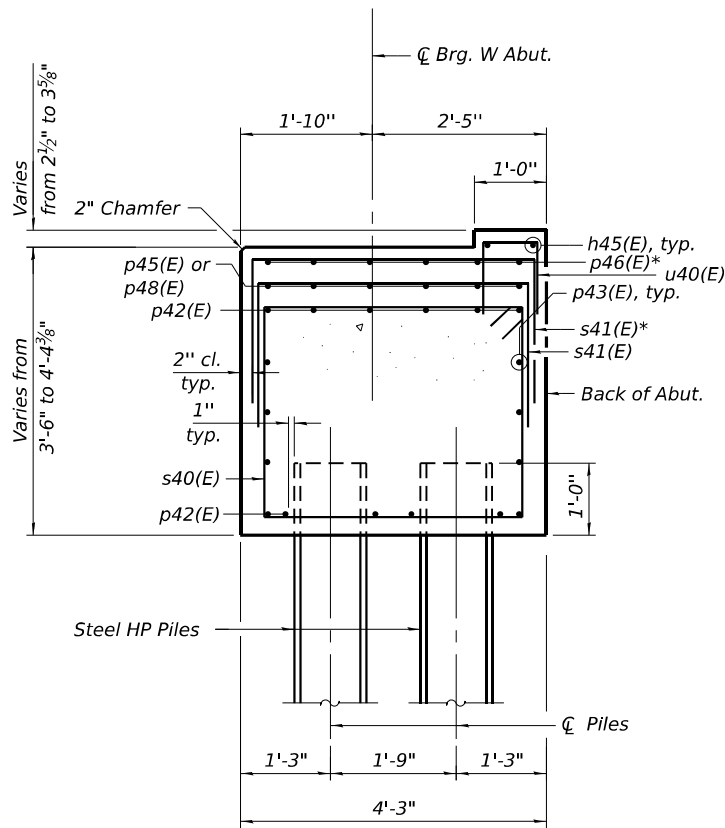
SHEET SA-72 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	736
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: SHEET
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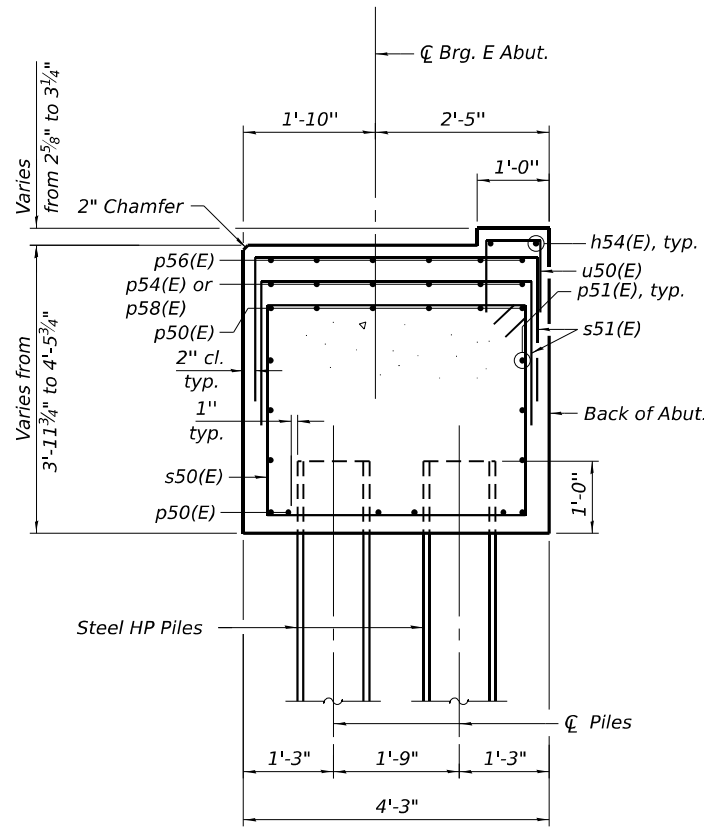


SECTION A-A

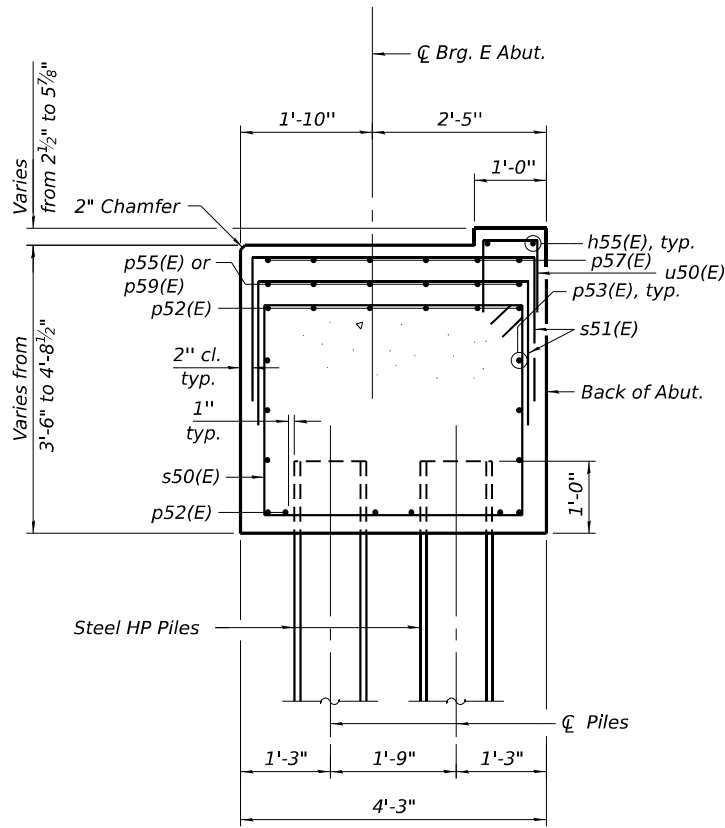


SECTION B-B

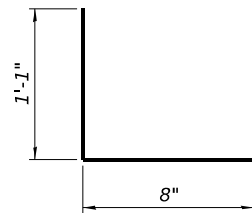
* for West Abutment WB only



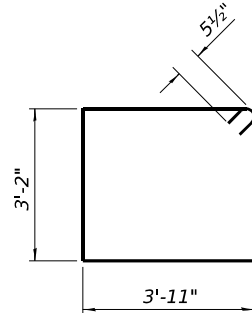
SECTION C-C



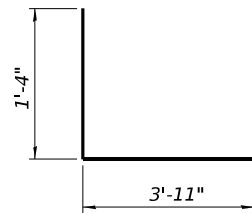
SECTION D-D



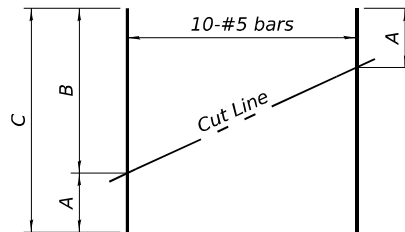
BAR u40(E) & u50(E)



BARS s40(E) & s50(E)



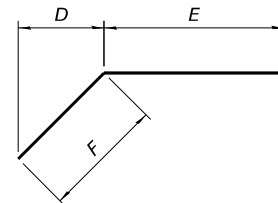
BAR s41(E) & s51(E)



BAR v40(E), v41(E), v50(E) & v51(E)

FIELD CUTTING DIAGRAM

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



BAR h42(E), h43(E),
h52(E) & h53(E)

WEST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h40(E)	28	#7	13'-4"	—
h41(E)	20	#4	9'-8"	—
h42(E)	2	#4	10'-4"	└─┐
h43(E)	2	#4	10'-4"	└─┐
h44(E)	4	#4	27'-6"	—
h45(E)	4	#4	48'-0"	—
p40(E)	24	#7	27'-6"	—
p41(E)	12	#4	27'-6"	—
p42(E)	24	#7	48'-0"	—
p43(E)	12	#4	48'-0"	—
p44(E)	6	#4	6'-2"	—
p45(E)	6	#4	42'-5"	—
p46(E)	6	#4	21'-4"	—
p47(E)	6	#4	6'-6"	—
p48(E)	6	#4	28'-0"	—
s40(E)	200	#5	15'-1"	└─┐
s41(E)	215	#5	6'-7"	└─┐
u40(E)	306	#4	2'-10"	└─┐
u41(E)	20	#7	12'-6"	└─┐
v40(E)	10	#5	14'-1"	—
v41(E)	10	#5	13'-10"	—
Concrete Structures			Cu. Yd.	99.5
Reinforcement Bars, Epoxy Coated			Pound	11,860
Furnishing Steel Piles, HP12x53			Foot	2,242
Driving Piles			Foot	2,242
Test Pile Steel HP12x53			Each	2
Pile Shoes			Each	40

For details of Bar Splicers, see sheet SA-92.
For details of piles, see sheet SA-91.

A, B & C DIMENSIONS

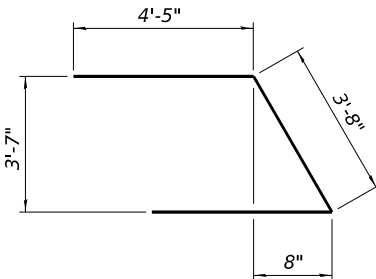
Bar	A	B	C
v40(E)	5'-2"	8'-11"	14'-1"
v41(E)	5'-2"	8'-8"	13'-10"
v50(E)	5'-2"	8'-10"	14'-0"
v51(E)	5'-10"	9'-4"	15'-2"

D, E & F DIMENSIONS

Bar	D	E	F
h42(E)	8'-8"	1'-0"	9'-4"
h43(E)	8'-10"	9"	9'-7"
h52(E)	8'-8"	11"	9'-5"
h53(E)	8'-6"	1'-1"	9'-2"

EAST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h50(E)	28	#7	13'-4"	—
h51(E)	20	#4	9'-8"	—
h52(E)	2	#4	10'-4"	└─┐
h53(E)	2	#4	10'-3"	└─┐
h54(E)	4	#4	27'-6"	—
h55(E)	4	#4	48'-0"	—
p50(E)	24	#7	27'-6"	—
p51(E)	12	#4	27'-6"	—
p52(E)	24	#7	48'-0"	—
p53(E)	12	#4	48'-0"	—
p54(E)	6	#4	27'-6"	—
p55(E)	6	#4	41'-9"	—
p56(E)	6	#4	6'-10"	—
p57(E)	6	#4	20'-8"	—
p58(E)	6	#4	6'-6"	—
p59(E)	6	#4	28'-0"	—
s50(E)	200	#5	15'-1"	└─┐
s51(E)	271	#5	6'-7"	└─┐
u50(E)	306	#4	2'-10"	└─┐
u51(E)	20	#7	12'-6"	└─┐
v50(E)	10	#5	14'-0"	—
v51(E)	10	#5	15'-2"	—
Concrete Structures			Cu. Yd.	107.1
Reinforcement Bars, Epoxy Coated			Pound	12,370
Furnishing Steel Piles, HP12x53			Foot	2,280
Driving Piles			Foot	2,280
Test Pile Steel HP12x53			Each	2
Pile Shoes			Each	40



BAR u41(E) & u51(E)

Notes:
1. Space reinforcement in pile cap to miss piles.

HNTB

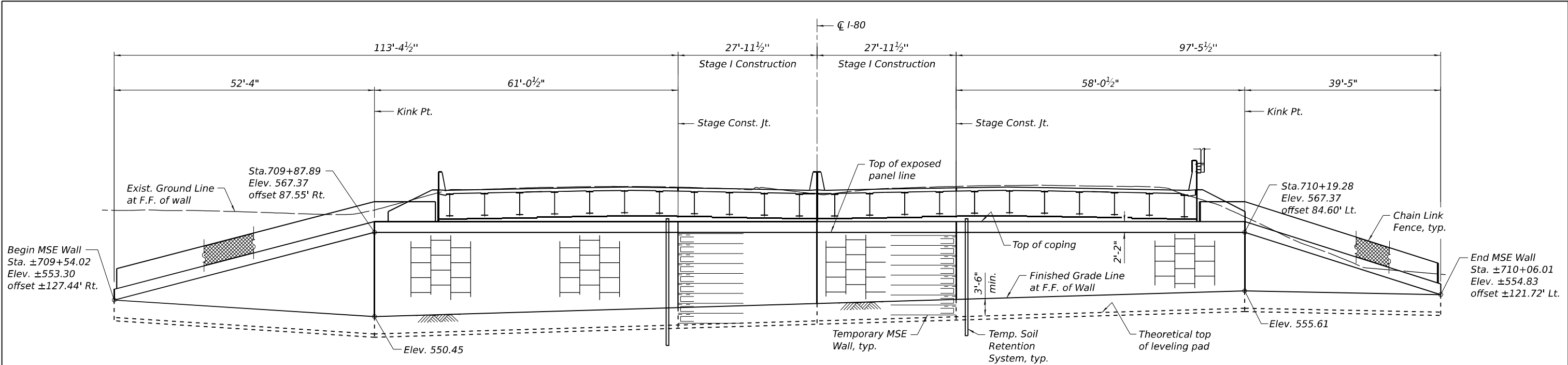
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT DETAILS 3
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-73 OF SA-112 SHEETS

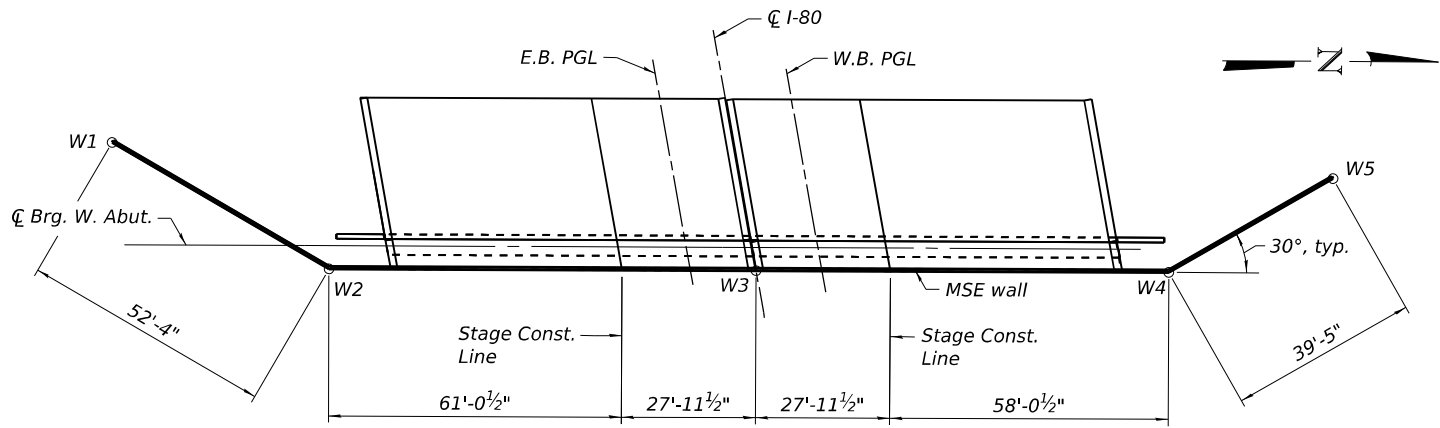
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	737
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		



WEST ABUTMENT WALL
Developed elevation along front face of wall

STATIONS & OFFSETS

Location	Point	Station	Offset
South MSE	W1	709+54.02	127.44 Rt
	W2	709+87.89	87.55 Rt
	W3	710+03.85	0.00 Rt
North MSE	W4	710+19.28	84.60 Lt
	W5	710+06.01	121.72 Lt



PLAN

BILL OF MATERIAL

Item	Unit	Quantity
Mechanically Stabilized Earth Retaining Wall	Sq Ft	4,119
Structure Excavation	Cu Yd	6,160
Chain Link Fence, 4' Attached to Structure	Ft	113

MODEL: SHEET
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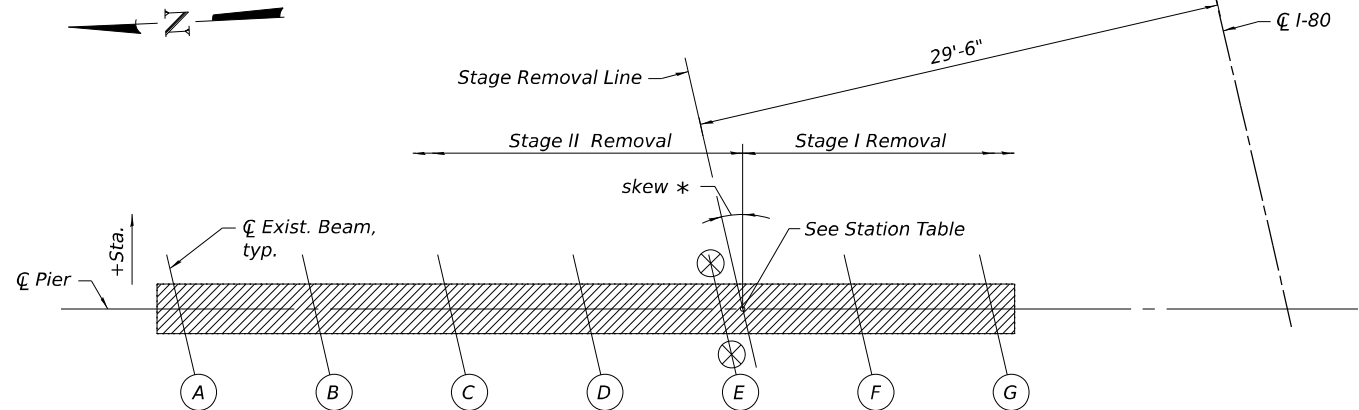
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MSE WALL AT WEST ABUTMENT
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-74 OF SA-112 SHEETS

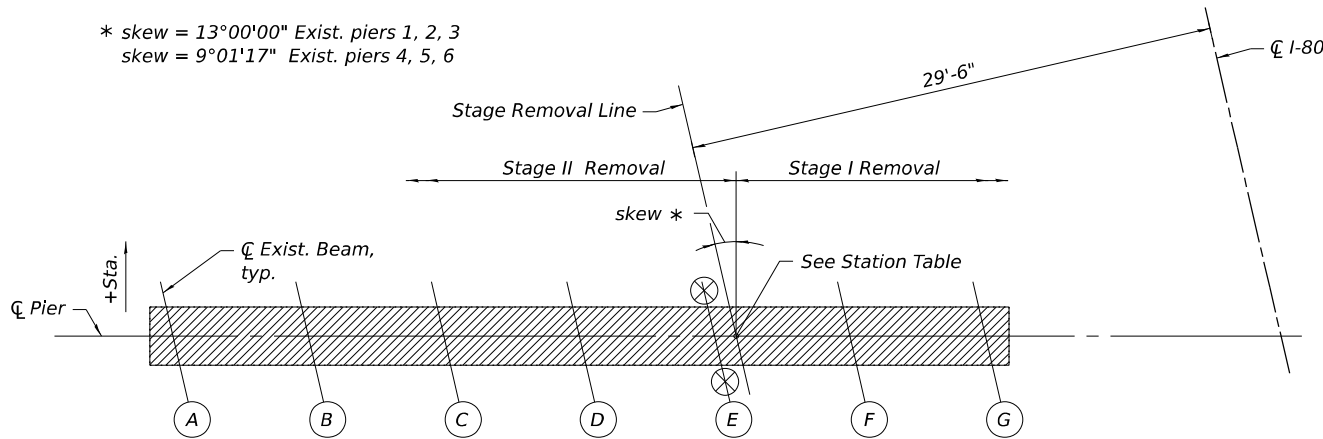
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CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

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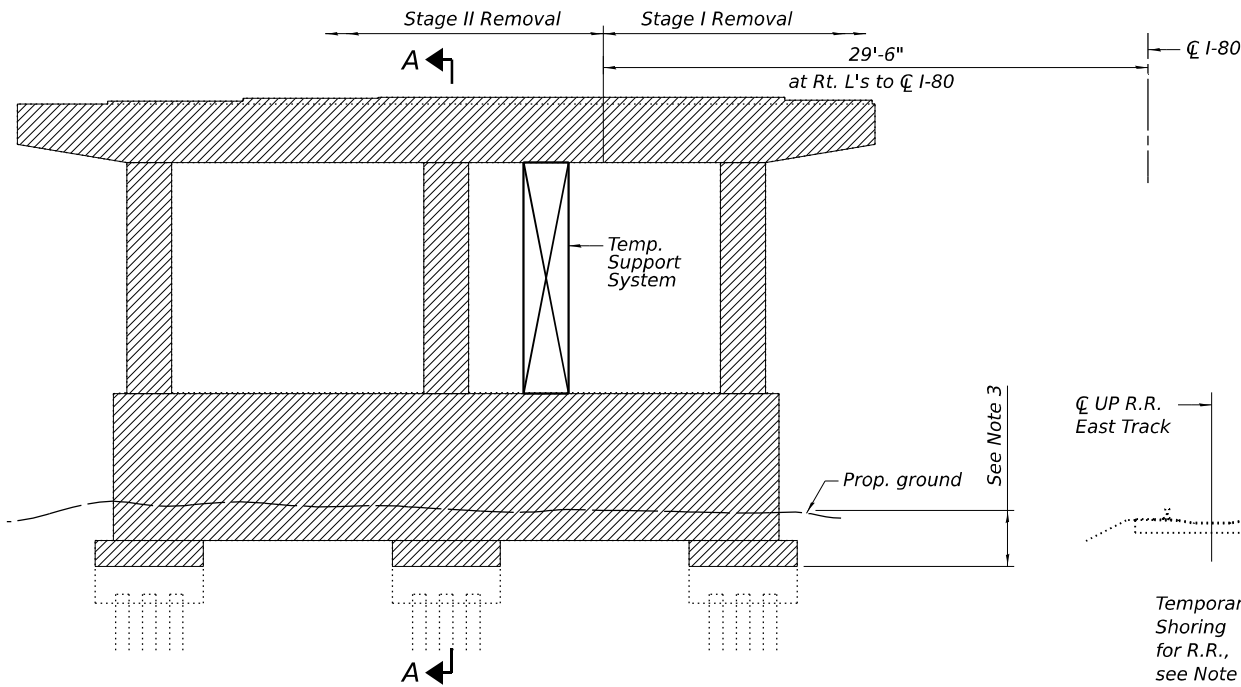


TOP PLAN PIERS 1, 2, 5 & 6

* skew = 13°00'00" Exist. piers 1, 2, 3
skew = 9°01'17" Exist. piers 4, 5, 6

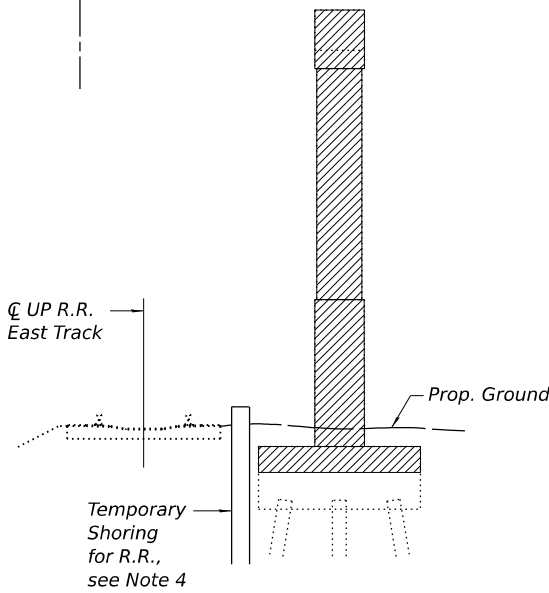


TOP PLAN PIERS 3 & 4



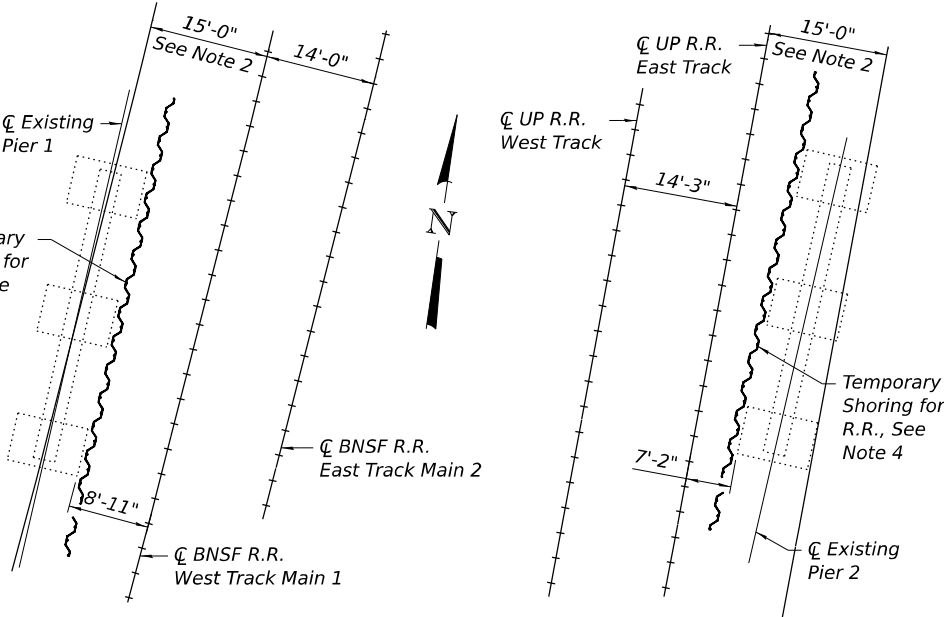
ELEVATION - PIERS 1, 2, 5 & 6

Looking East

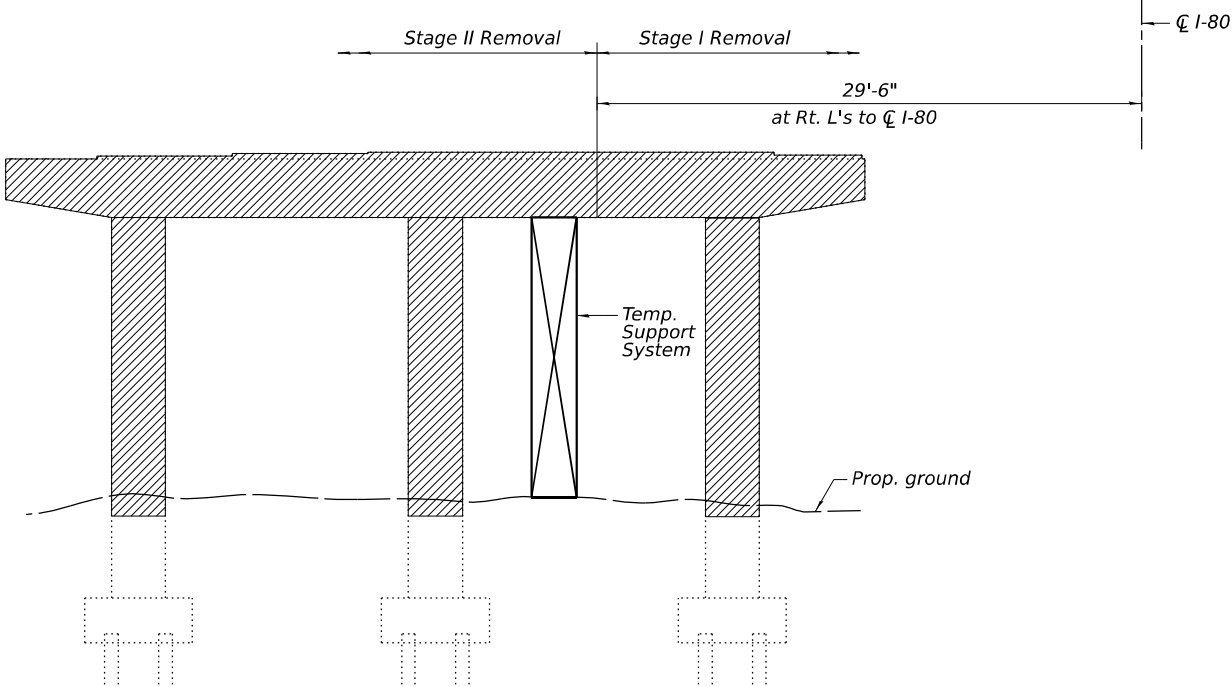


SECTION A-A - EXISTING PIER 2

Existing Pier 1 Similar



PLAN TEMPORARY SHORING



ELEVATION - PIERS 3 & 4

Looking East

SERVICE REACTIONS FOR TEMPORARY SUPPORT

Reaction	Ex Pier 1 or 2	** Ex. Pier 3		** Ex. Pier 4		Ex. Pier 5 or 6
		West	East	West	East	
Dead Load	138 k	26 k	48 k	48 k	41 k	133 k
Live Load and Impact	65 k	49 k	51 k	51 k	50 k	65 k
Total	203 k	75 k	99 k	99 k	92 k	199 k

** Contractor shall combine East and West values for design of the Temporary Support System.

LEGEND:

-  Concrete to be Removed
-  Temporary Support Location

STATION TABLE

Pier	Station
Ex. Pier 1	711+64.79
Ex. Pier 2	712+60.79
Ex. Pier 3	713+15.88
Ex. Pier 4	713+69.59
Ex. Pier 5	714+37.17
Ex. Pier 6	715+17.67

Temporary Shoring Notes:

- Excavation, backfill, and concrete to be removed will not be paid for separately but shall be included in the cost of Removal of Existing Structures No. 1.
- 15'-0" is the no excavation zone per BNSF R.R. & UP R.R. "Guidelines for Temporary Shoring". Contractor shall follow these guidelines and coordinate with BNSF R.R. & UP R.R. regarding the design and installation of Temporary Shoring for Railroad prior to starting any removal work.
- For Existing Piers 1 & 2 only, extend removal to 3'-0" below ground line. This will not be paid for separately but shall be included in the cost of Removal of Existing Structures No. 1.
- Contractor shall design and install Temporary Shoring for Railroad per BNSF R.R. & UP R.R. "Guidelines for Temporary Shoring". The Temporary Shoring for Railroad may be left in place at the discretion of the railroad at no additional cost to the Department. The Temporary Shoring for Railroad will not be paid for separately but shall be included in the cost of Removal of Existing Structures No. 1.

Temporary Support System Notes:

- Provide Temporary Support System under existing girder E under the pier cap at each pier prior to Stage I removal. See Special Provisions.

HNTB

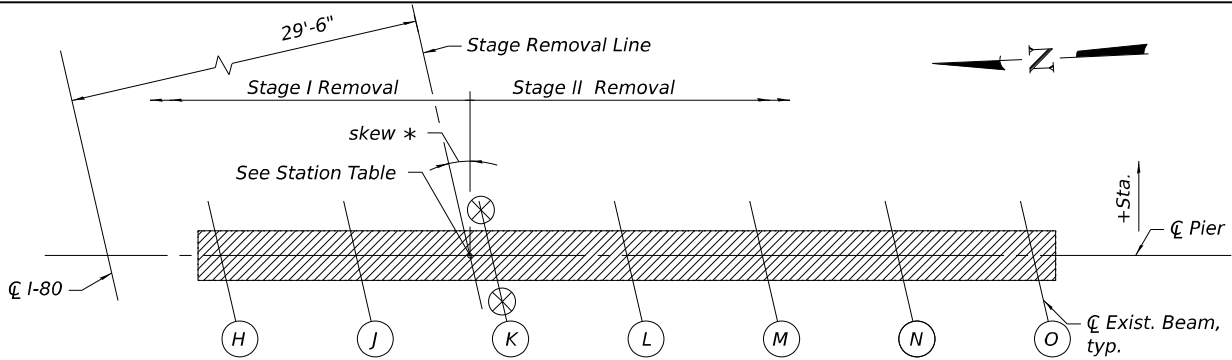
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CHECKED - APC	REVISED -	
PLOT SCALE =	DRAWN - LK	REVISED -
PLOT DATE =	CHECKED - SH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER REMOVAL DETAILS
STRUCTURE NO. 099-0903 (WB)

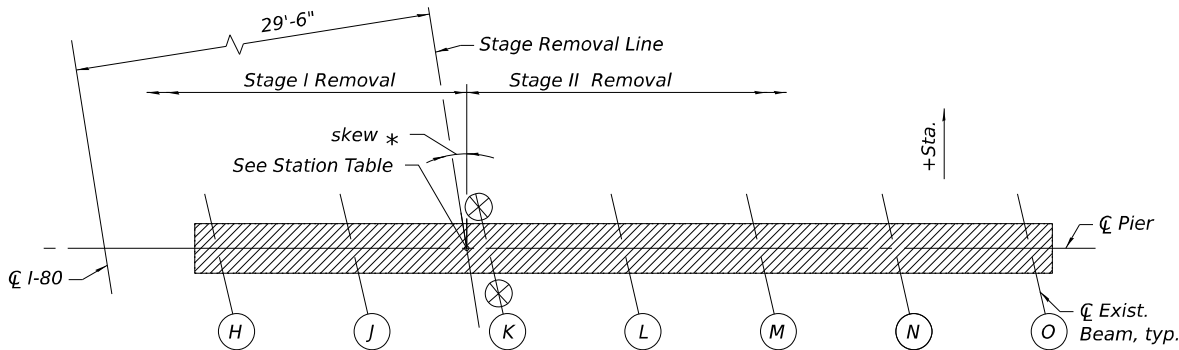
SHEET SA-77 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	741
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

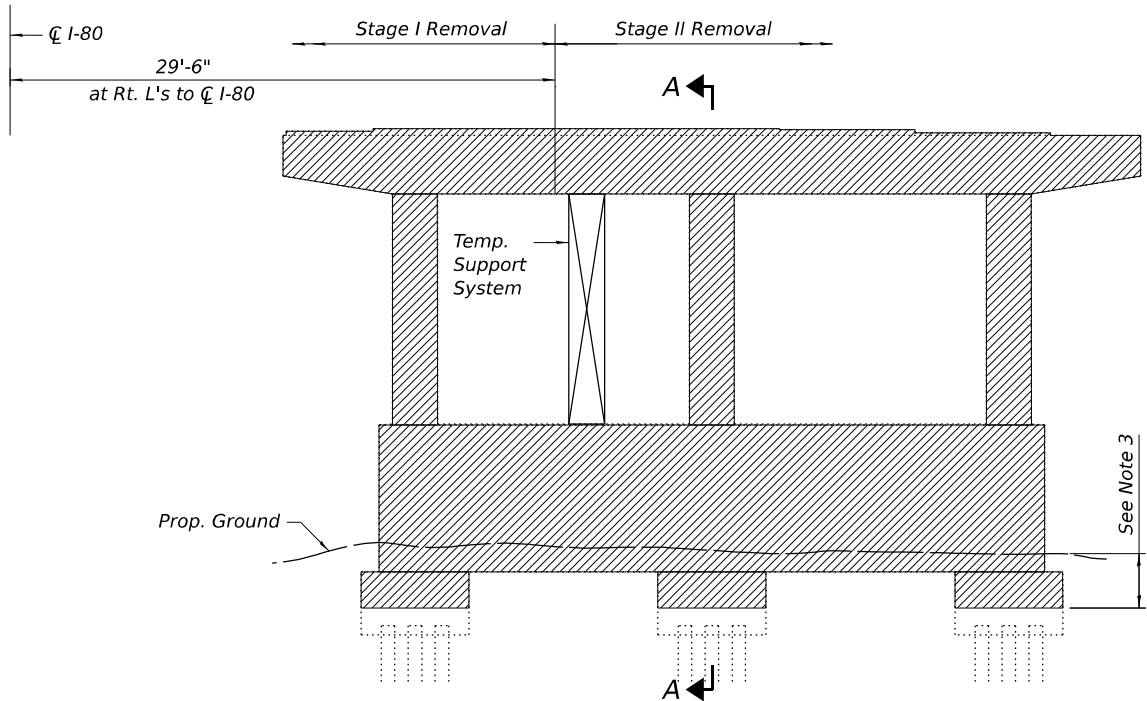


TOP PLAN PIERS 7, 8, 11, & 12

* skew = 13°00'00" Exist. piers 7, 8, 9
skew = 9°01'17" Exist. piers 10, 11, 12

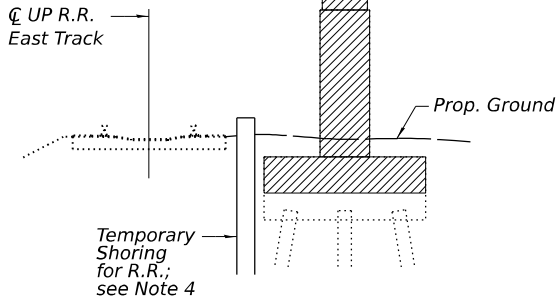


TOP PLAN PIERS 9 & 10



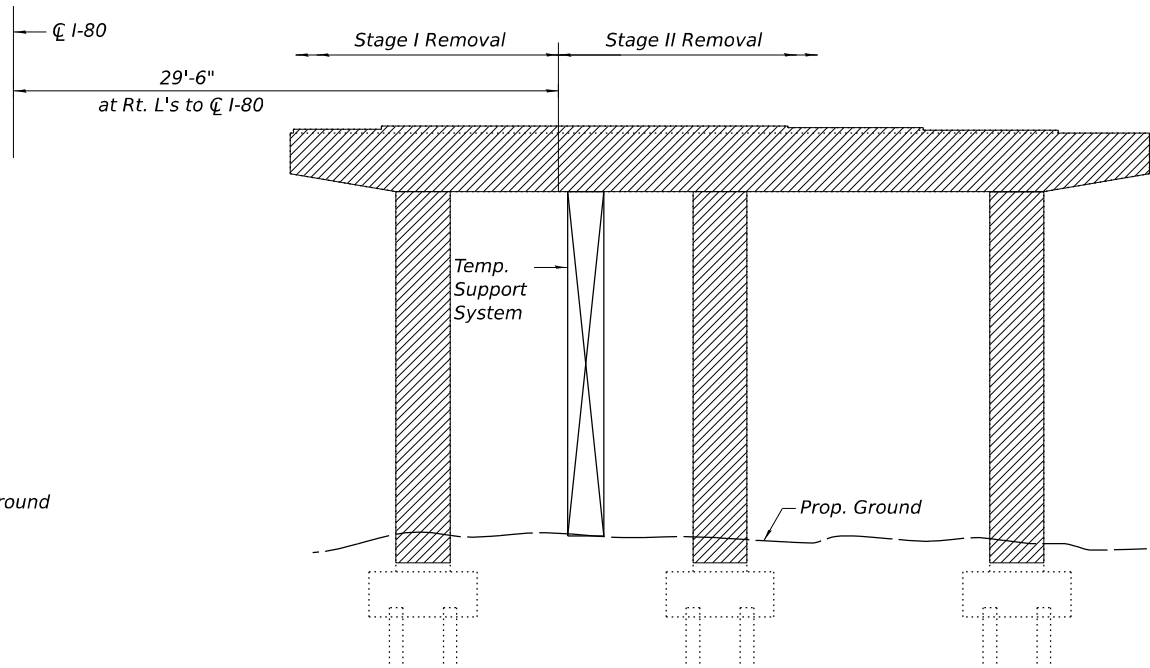
ELEVATION - EXISTING PIERS 7, 8, 11 & 12

Looking East



SECTION A-A - EXISTING PIER 8

Existing Pier 7 Similar



ELEVATION - EXISTING PIERS 9 & 10

Looking East

SERVICE REACTIONS FOR TEMPORARY SUPPORT

Reaction	Ex. Pier 7 or 8	** Ex. Pier 9		** Ex. Pier 10		Ex. Pier 11 or 12
		West	East	West	East	
Dead Load	138 k	26 k	48 k	48 k	41 k	133 k
Live Load and Impact	65 k	49 k	51 k	51 k	50 k	65 k
Total	203 k	75 k	99 k	99 k	92 k	199 k

** Contractor shall combine East and West values for design of the Temporary Support System.

LEGEND:

- Concrete to be Removed
- Temporary Support Location

STATION TABLE

Pier	Station
Ex. Pier 7	711+51.17
Ex. Pier 8	712+47.17
Ex. Pier 9	713+02.25
Ex. Pier 10	713+60.22
Ex. Pier 11	714+27.80
Ex. Pier 12	715+08.30

Temporary Shoring Notes:

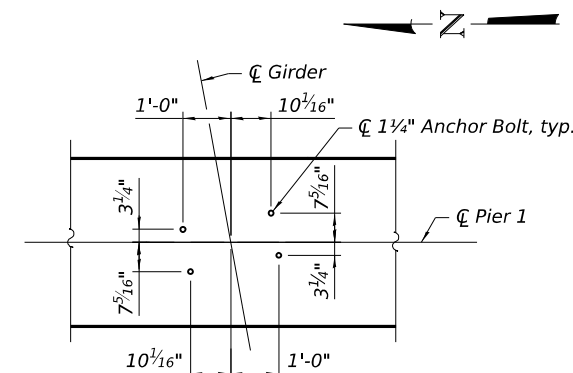
- Excavation, backfill, and concrete to be removed will not be paid for separately but shall be included in the cost of Removal of Existing Structures No. 2.
- 15'-0" is the no excavation zone per BNSF R.R. & UP R.R. "Guidelines for Temporary Shoring". Contractor shall follow these guidelines and coordinate with BNSF R.R. & UP R.R. regarding the design and installation of Temporary Shoring for Railroad prior to starting any removal work.
- For Existing Piers 7 & 8 only, extend removal to 3'-0" below ground line. This will not be paid for separately but shall be included in the cost of Removal of Existing Structures No. 2.
- Contractor shall design and install Temporary Shoring for Railroad per BNSF R.R. & UP R.R. "Guidelines for Temporary Shoring". The Temporary Shoring for Railroad may be left in place at the discretion of the railroad at no additional cost to the Department. The Temporary Shoring for Railroad will not be paid for separately but shall be included in the cost of Removal of Existing Structures No. 2.

Temporary Support System Notes:

- Provide Temporary Support System under existing girder K under the pier cap at each pier prior to Stage I removal. See Special Provisions.



<i>Girder</i>	<i>Elev.</i>
1	573.08
2	573.45
3	573.59
4	573.71
5	573.82
6	573.92
7	573.83
8	573.71
9	573.56
10	573.42
11	573.28



- 1 4-#6 h12(E) bars E.F.
Bend in field as req'd.
- 2 4-Bar Splicers for
#6 h12(E) bars, E.F.
- 3 4-#6 h13(E) bars E.F.
Bend in field as req'd.
- 4 6-#5 u11(E) bars
Each End
- A 8-#6 h11(E) bars
at 12" max. cts. E.F.
- B 8-#6 h10(E) bars
at 12" max. cts. E.F.
- C 29-#6 s11(E) bars at
6" max. cts. Top of Crashwall

Notes:

- 1. Space reinforcement in cap to miss anchor bolts.*
- 2. Pour steps monolithically with cap.*
- 3. For details of piles, see Sheet SA-91.*
- 4. For Sections A-A, A1-A1, and B-B, see Sheet SA-80.*
- 5. For Bill of Material and bar bending diagrams, see Sheet SA-80.*
- 6. For Bar Splicer and Mechanical Splicer details, see Sheet SA-92.*



ELEVATION - PIER 1
Looking East

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS-PW-01\DM520864\090902_0903-62\F94-081-PIER1EB1.DGN



USER NAME	=	
DESIGNED	-	SH
CHECKED	-	APC
PLOT SCALE	=	
DRAWN	-	LK
PLOT DATE	=	
CHECKED	-	SH

DESIGNED	-	SH
CHECKED	-	APC
DRAWN	-	LK
CHECKED	-	SH

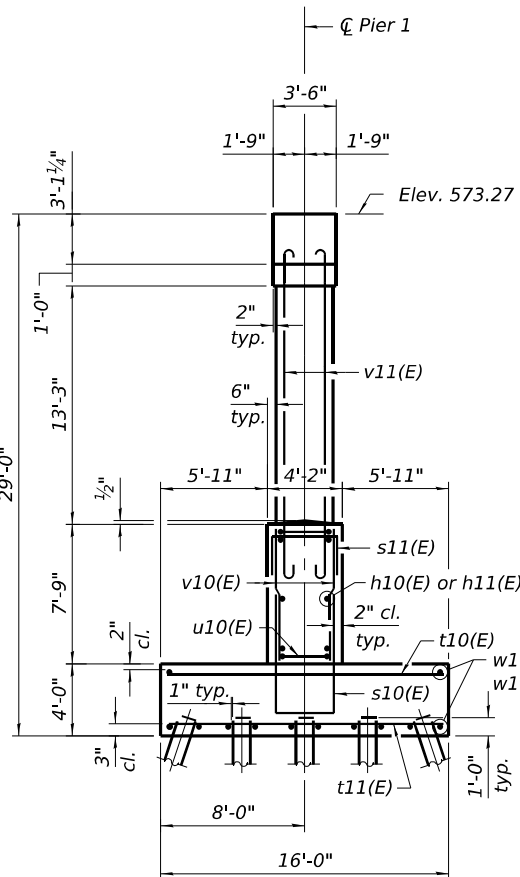
REVISED	-	
REVISED	-	
REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

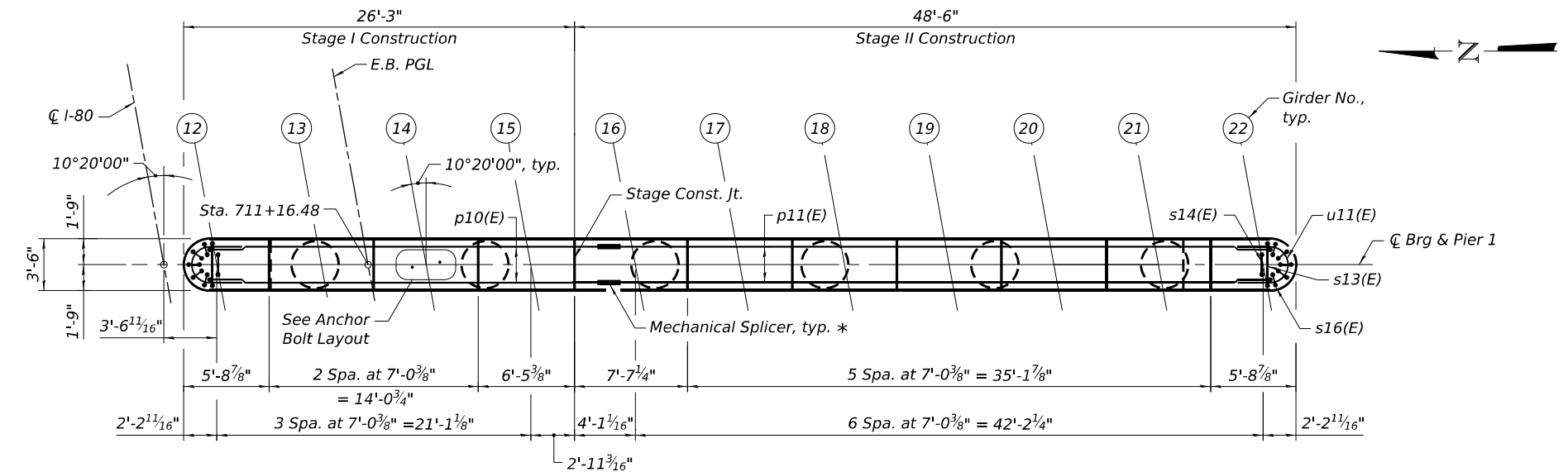
PIER 1 DETAILS 1 EB
STRUCTURE NO. 099-0902 (EB)

SHEET SA-81 OF SA-112 SHEETS

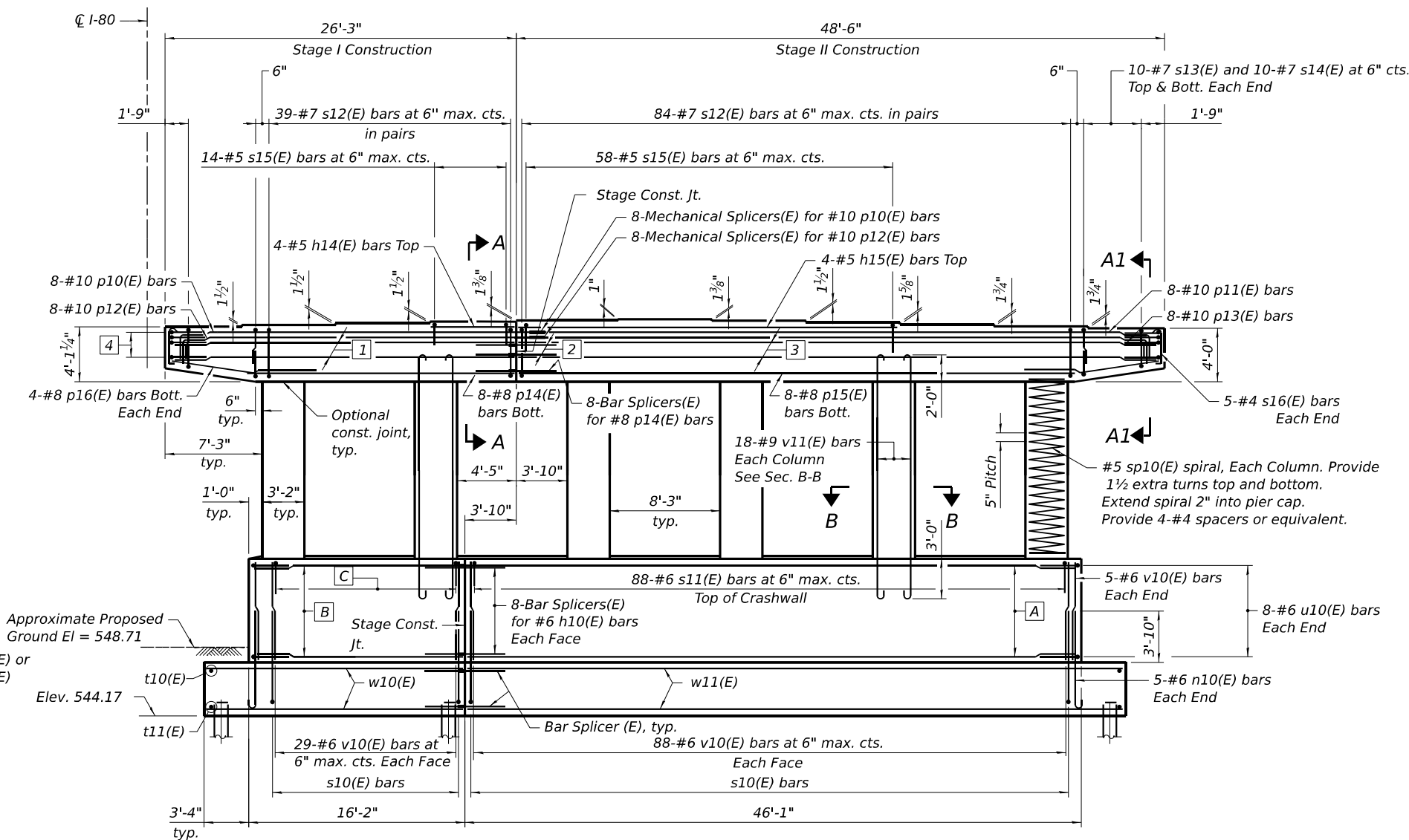
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	745
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



END VIEW



TOP PLAN

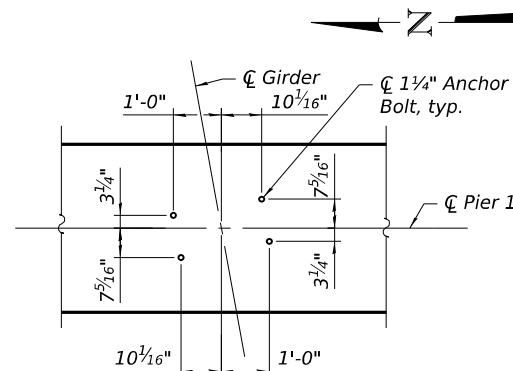


ELEVATION - PIER 1
Looking East

* The longitudinal bars in the pier cap are detailed with a 1 foot extension length beyond the stage construction joint to accommodate the mechanical couplers. Contractor shall adjust the extension length based on the selected mechanical splicer assembly.

BRG. SEAT ELEVATIONS

Girder	Elev.
12	573.27
13	573.40
14	573.53
15	573.66
16	573.77
17	573.85
18	573.74
19	573.61
20	573.47
21	573.32
22	573.17



ANCHOR BOLT
LAYOUT

- 4-#6 h12(E) bars E.F. Bend in field as req'd.
- 4-Bar Splicers for #6 h12(E) bars, E.F.
- 4-#6 h13(E) bars E.F. Bend in field as req'd.
- 6-#5 u11(E) bars Each End
- 8-#6 h11(E) bars at 12" max. cts. E.F.
- 8-#6 h10(E) bars at 12" max. cts. E.F.
- 29-#6 s11(E) bars at 6" max. cts. Top of Crashwall

- Notes:
- Space reinforcement in cap to miss anchor bolts.
 - Pour steps monolithically with cap.
 - For details of piles, see Sheet SA-91.
 - For Sections A-A, A1-A1, and B-B, see Sheet SA-82.
 - For Bill of Material and bar bending diagrams, see Sheet SA-82.
 - For Bar Splicer and Mechanical Splicer details, see Sheet SA-92.



<i>Girder</i>	<i>Elev.</i>
1	573.71
2	574.10
3	574.24
4	574.42
5	574.54
6	574.65
7	574.56
8	574.46
9	574.32
10	574.19
11	574.06

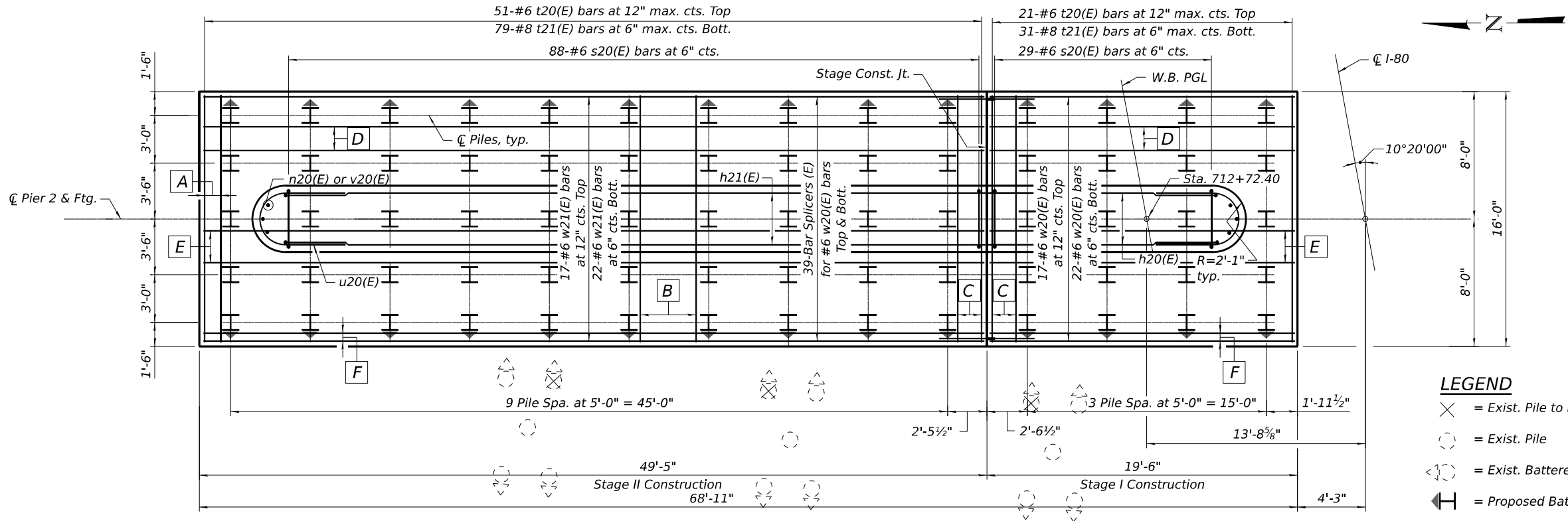


- 1 4-#6 h22(E) bars E.F.
Bend in field as req'd.
- 2 4-Bar Splicers for
#6 h22(E) bars, E.F.
- 3 4-#6 h23(E) bars E.F.
Bend in field as req'd.
- 4 6-#5 u21(E) bars
Each End

Notes:

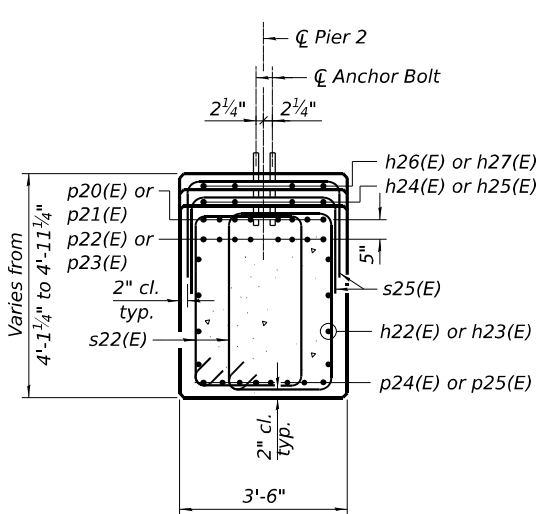
- 1. Space reinforcement in cap to miss anchor bolts.*
- 2. Pour steps monolithically with cap.*
- 3. For details of piles, see Sheet SA-91.*
- 4. For Sections A-A, A1-A1, and B-B, see Sheet SA-84.*
- 5. For Bill of Material and bar bending diagrams, see Sheet SA-84.*
- 6. For Bar Splicer and Mechanical Splicer details, see Sheet SA-92.*

MODEL: SHEET
FILE NAME: C:\TRANSPORT\SYSTEMS\PW-01\DM520864\0990902_0903-62F94-084-PIER2WB2.DGN

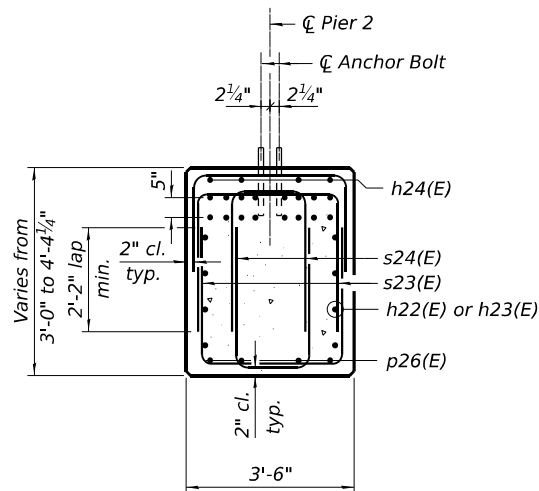


FOOTING PLAN

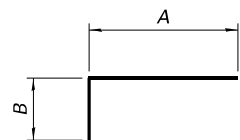
- A** 3-#8 t21(E) bars at 6" max. cts. Bott., typ.
- B** 8-#8 t21(E) bars at 6" max. cts. Bott., typ.
- C** 4-#8 t21(E) bars at 6" max. cts. Bott.
- D** 4-#6 w20(E) or w21(E) bars at 6" max. cts. Bott., typ.
- E** 5-#6 w20(E) or w21(E) bars at 6" max. cts. Bott., typ.
- F** 2-#6 w20(E) or w21(E) bars at 6" max. cts. Bott., typ.



SECTION A-A



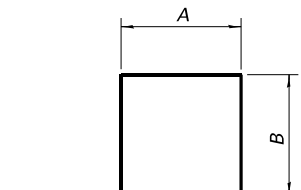
SECTION A1-A1



BARS p20(E), p21(E),
p22(E) & p23(E)

A & B DIMENSIONS

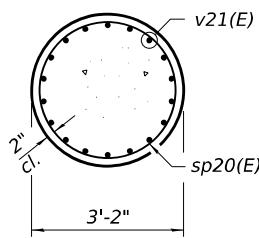
Bar	A	B
p20(E)	25'-6"	1'-10"
p21(E)	45'-9"	1'-10"
p22(E)	25'-0"	1'-10"
p23(E)	45'-3"	1'-10"



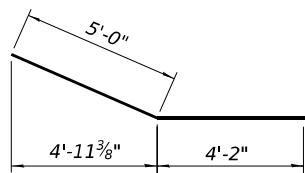
BARS s20(E), s21(E), s23(E)
s24(E) & s25(E)

A & B DIMENSIONS

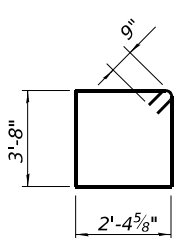
Bar	A	B
s20(E)	3'-10"	6'-8"
s21(E)	3'-10"	2'-3"
s23(E)	3'-2"	2'-11"
s24(E)	1'-7 3/8"	2'-11"
s25(E)	3'-2"	2'-0"



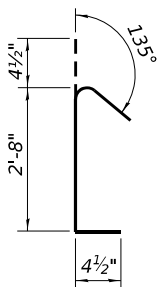
SECTION B-B



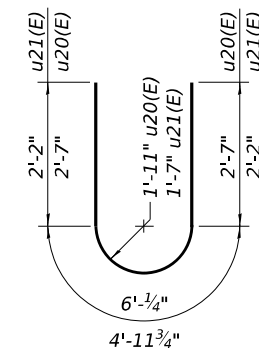
BAR p26(E)



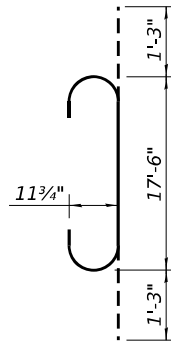
BAR s22(E)



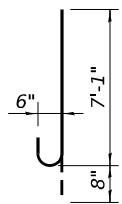
BAR s26(E)



BARS u20(E) & u21(E)



BAR v21(E)



BAR n20(E)

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h20(E)	32	#6	13'-11"	—
h21(E)	32	#6	43'-10"	—
h22(E)	8	#6	24'-4"	—
h23(E)	8	#6	46'-7"	—
h24(E)	4	#5	24'-2"	—
h25(E)	4	#5	42'-5"	—
h26(E)	4	#5	21'-4"	—
h27(E)	4	#5	6'-1"	—
n20(E)	10	#6	7'-9"	U
p20(E)	8	#10	27'-4"	—
p21(E)	8	#10	47'-7"	—
p22(E)	8	#10	26'-10"	—
p23(E)	8	#10	47'-1"	—
p24(E)	8	#8	19'-4"	—
p25(E)	8	#8	41'-7"	—
p26(E)	8	#8	9'-2"	—
s20(E)	117	#6	17'-2"	—
s21(E)	117	#6	8'-4"	—
s22(E)	246	#7	13'-7"	—
s23(E)	40	#7	9'-0"	—
s24(E)	40	#7	7'-5"	—
s25(E)	194	#5	7'-2"	—
s26(E)	10	#4	3'-5"	—
sp20(E)	6	#5	12'-8"	—
t20(E)	72	#6	15'-6"	—
t21(E)	110	#8	15'-6"	—
u20(E)	32	#6	11'-2"	—
u21(E)	12	#5	9'-4"	—
v20(E)	244	#6	14'-11"	—
v21(E)	108	#9	20'-0"	—
w20(E)	39	#6	19'-1"	—
w21(E)	39	#6	49'-0"	—
Structure Excavation		Cu Yd	343	
Concrete Structures		Cu Yd	375.4	
Reinforcement Bars, Epoxy Coated		Pound	50,450	
Furnishing Steel Piles, HP 12x53		Foot	1,794	
Driving Piles		Foot	1,794	
Test Pile Steel HP12x53		Each	1	
Pile Shoes		Each	70	
Pile Removal		Each	3	

** Length is height of spiral.

PILE DATA

Type: HP 12x53 with pile shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 26 ft
No. Production Piles: 69
No. Test Piles: 1

Notes:

- For section locations, see Sheet SA-83.
- Space reinforcement in pile cap to miss piles.
- Piles shown as battered should be battered at 3H:12V.
- For Bar Splicer details, see Sheet SA-92.
- Contractor to verify all conflict locations between the existing and proposed piles.

HNTB

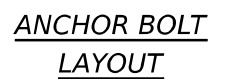
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PLOT SCALE	CHECKED - APC	REVISED -
PLOT DATE	DRAWN - LK	REVISED -
	CHECKED - SH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS 2 WB
STRUCTURE NO. 099-0903 (WB)

SHEET SA-84 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	748
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



<i>Girder</i>	<i>Elev.</i>
12	574.06
13	574.20
14	574.34
15	574.48
16	574.59
17	574.68
18	574.58
19	574.47
20	574.33
21	574.20
22	574.06

- 1 4-#6 h22(E) bars E.F.
Bend in field as req'd.
- 2 4-Bar Splicers for
#6 h22(E) bars, E.F.
- 3 4-#6 h23(E) bars E.F.
Bend in field as req'd.
- 4 6-#5 u21(E) bars
Each End

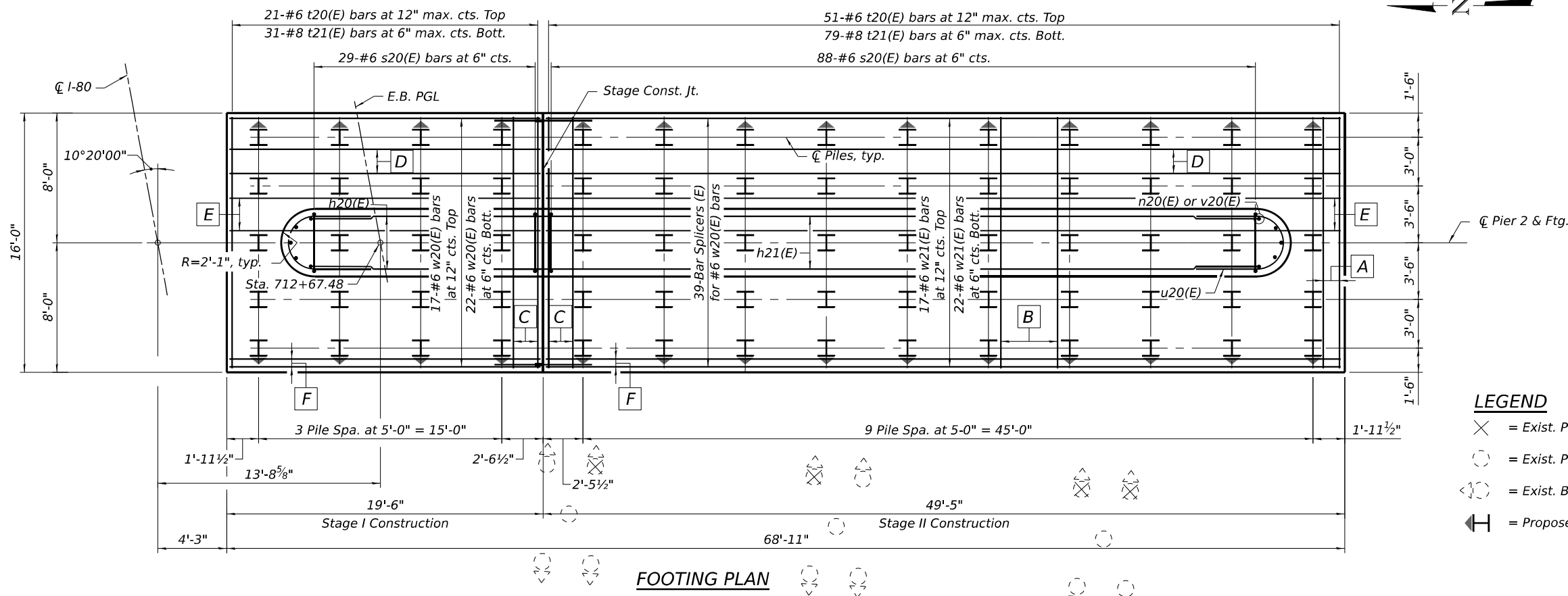
1. *Space reinforcement in cap to miss anchor bolts.*
2. *Pour steps monolithically with cap.*
3. *For details of piles, see Sheet SA-91.*
4. *For Sections A-A, A1-A1, and B-B, see Sheet SA-86.*
5. *For Bill of Material and bar bending diagrams, see Sheet SA-86.*
6. *For Bar Splicer and Mechanical Splicer details, see Sheet SA-92.*

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PIER 2 DETAILS 1 EB
STRUCTURE NO. 099-0902 (EB)

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	749
		CONTRACT NO. 62F94		
		ILLINOIS	FED. AID PROJECT	

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS-PW-01\DM520864\0990902_0903-62\F94-086-PIER2EB2.DGN



FOOTING PLAN

LEGEND

- ✕ = Exist. Pile to be Removed
○ = Exist. Pile
◁○ = Exist. Battered Pile
◁ = Proposed Battered Pile

A 3-#8 t21(E) bars at 6" max. cts. Bott., typ.

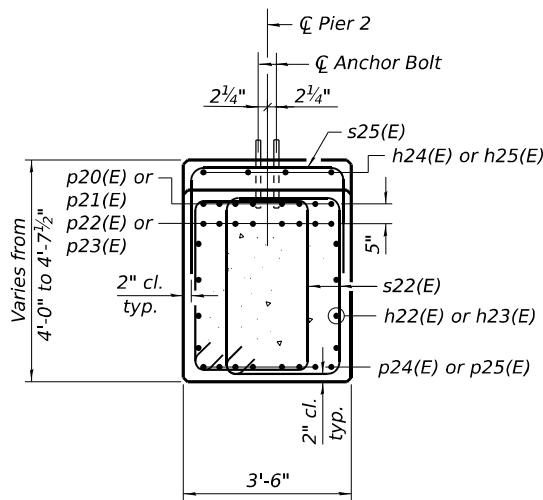
C 4-#8 t21(E) bars at 6" max. cts. Bott.

E 5-#6 w20(E) or w21(E) bars at 6" max. cts. Bott., typ.

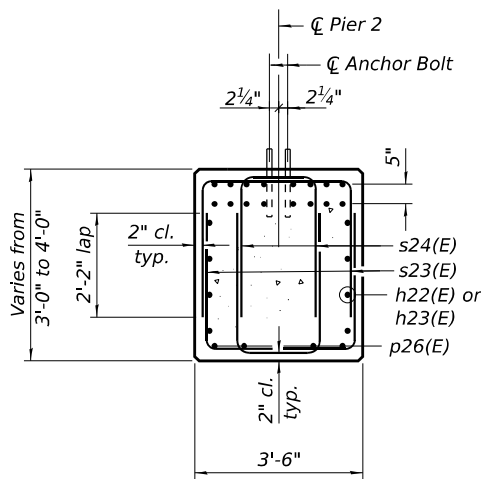
B 8-#8 t21(E) bars at 6" max. cts. Bott., typ.

D 4-#6 w20(E) or w21(E) bars at 6" max. cts. Bott., typ.

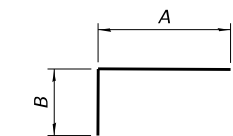
F 2-#6 w20(E) or w21(E) bars at 6" max. cts. Bott., typ.



SECTION A-A

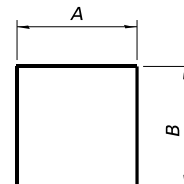


SECTION A1-A1



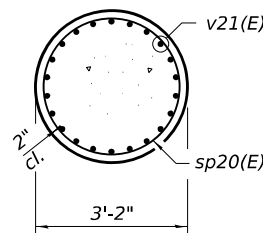
BARS p20(E) & p21(E),
p22(E) & p23(E)

A & B DIMENSIONS		
Bar	A	B
p20(E)	25'-6"	1'-10"
p21(E)	45'-9"	1'-10"
p22(E)	25'-0"	1'-10"
p23(E)	45'-3"	1'-10"

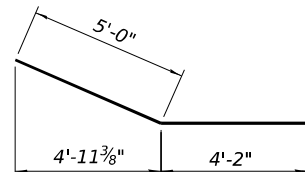


BARS s20(E), s21(E), s23(E)
s24(E) & s25(E)

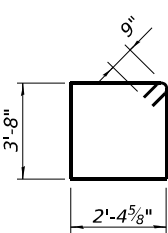
A & B DIMENSIONS		
Bar	A	B
s20(E)	3'-10"	6'-8"
s21(E)	3'-10"	2'-3"
s23(E)	3'-2"	2'-11"
s24(E)	1'-7 3/8"	2'-11"
s25(E)	3'-2"	2'-0"



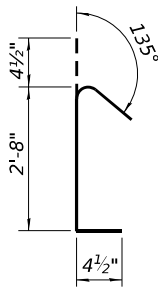
SECTION B-B



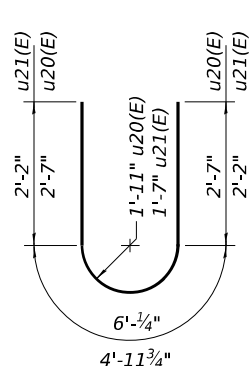
BAR p26(E)



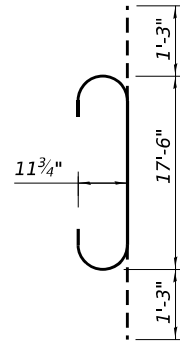
BAR s22(E)



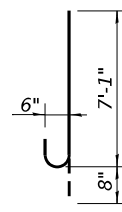
BAR s26(E)



BARS u20(E) & u21(E)



BAR v21(E)



BAR n20(E)

PIER 2

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h20(E)	32	#6	13'-11"	—
h21(E)	32	#6	43'-10"	—
h22(E)	8	#6	24'-4"	—
h23(E)	8	#6	46'-7"	—
h24(E)	4	#5	6'-1"	—
h25(E)	4	#5	28'-4"	—
n20(E)	10	#6	7'-9"	U
p20(E)	8	#10	27'-4"	—
p21(E)	8	#10	47'-7"	—
p22(E)	8	#10	26'-10"	—
p23(E)	8	#10	47'-1"	—
p24(E)	8	#8	19'-4"	—
p25(E)	8	#8	41'-7"	—
p26(E)	8	#8	9'-2"	—
s20(E)	117	#6	17'-2"	—
s21(E)	117	#6	8'-4"	—
s22(E)	246	#7	13'-7"	—
s23(E)	40	#7	9'-0"	—
s24(E)	40	#7	7'-5"	—
s25(E)	72	#5	7'-2"	—
s26(E)	10	#4	3'-5"	—
sp20(E)	6	#5	12'-8"	—
t20(E)	72	#6	15'-6"	—
t21(E)	110	#8	15'-6"	—
u20(E)	32	#6	11'-2"	—
u21(E)	12	#5	9'-4"	—
v20(E)	244	#6	14'-11"	—
v21(E)	108	#9	20'-0"	—
w20(E)	39	#6	19'-1"	—
w21(E)	39	#6	49'-0"	—
Structure Excavation			Cu. Yd.	281
Concrete Structures			Cu. Yd.	372.8
Reinforcement Bars, Epoxy Coated			Pound	49,290
Furnishing Steel Piles, HP 12x53			Foot	2,070
Driving Piles			Foot	2,070
Test Pile Steel HP12x53			Each	1
Pile Shoes			Each	70
Pile Removal			Each	4

** Length is height of spiral.

PILE DATA

Type: HP 12x53 with pile shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 30 ft
No. Production Piles: 69
No. Test Piles: 1

Notes:

- For section locations, see Sheet SA-85.
- Space reinforcement in pile cap to miss piles.
- Piles shown as battered should be battered at 3H:12V.
- For Bar Splicer details, see Sheet SA-93.
- Contractor to verify all conflict locations between the existing and proposed piles.

HNTB

USER NAME =	DESIGNED - SH	REVISED -
PLOT SCALE =	CHECKED - APC	REVISED -
PLOT DATE =	DRAWN - LK	REVISED -
	CHECKED - SH	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS 2 EB
STRUCTURE NO. 099-0902 (EB)

SHEET SA-86 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	750
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: SHEET
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10-27-2025, 16:50:36

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PLOT SCALE	=	
PLOT DATE	=	

DESIGNED	-	SH
CHECKED	-	APC
DRAWN	-	LK
CHECKED	-	SH

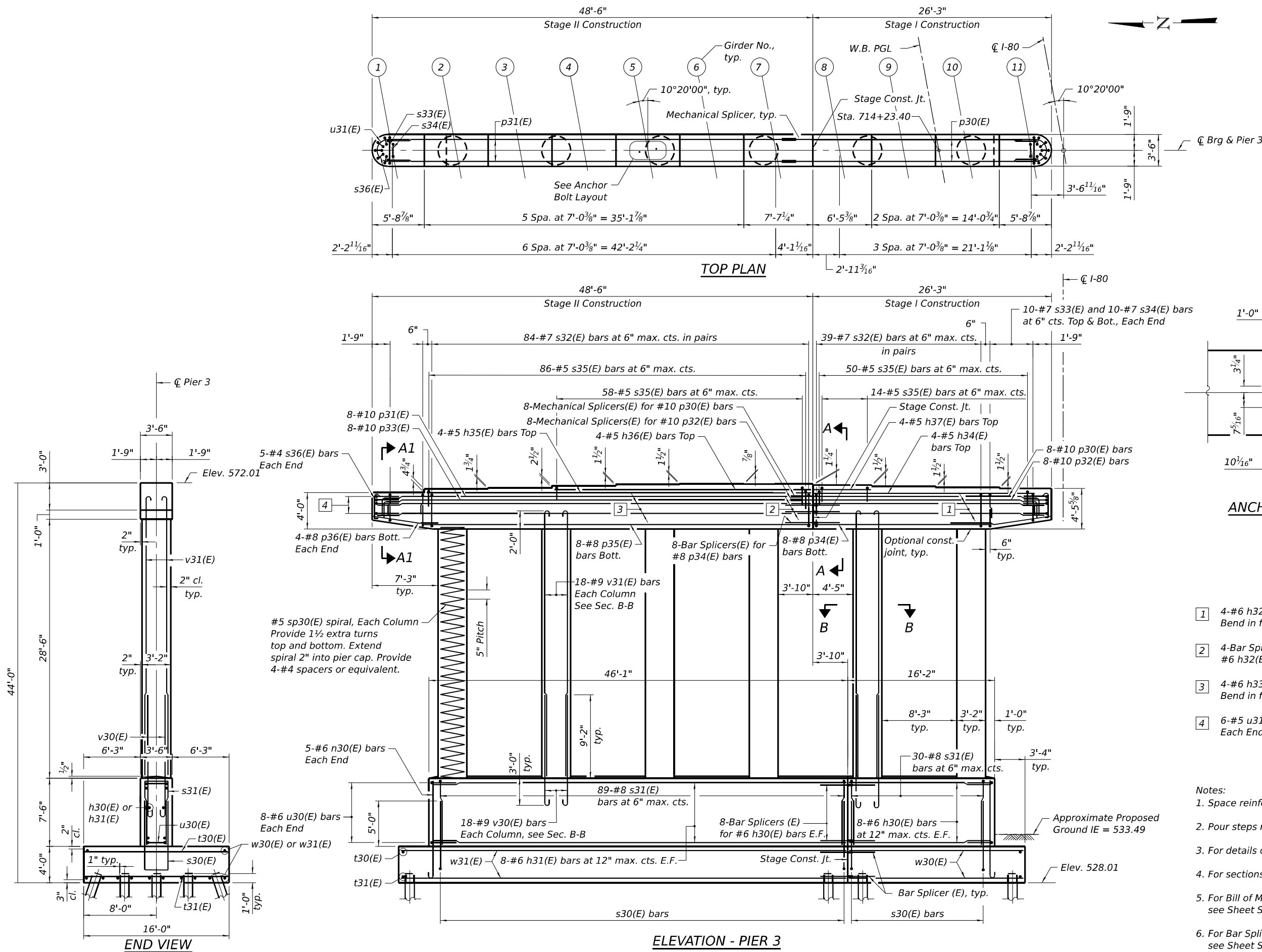
REVISED	-	
REVISED	-	
REVISED	-	
REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS 1 WB
STRUCTURE NO. 099-0903 (WB)

SHEET SA-87 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	751
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



BRG. SEAT ELEVATIONS

Girder	Elev.
1	572.01
2	572.41
3	572.56
4	572.77
5	572.90
6	573.02
7	572.95
8	572.85
9	572.73
10	572.60
11	572.48

ANCHOR BOLT LAYOUT

- 4-#6 h32(E) bars E.F. Bend in field as req'd.
- 4-Bar Splicers for #6 h32(E) bars, E.F.
- 4-#6 h33(E) bars E.F. Bend in field as req'd.
- 6-#5 u31(E) bars Each End

Notes:

- Space reinforcement in cap to miss anchor bolts.
- Pour steps monolithically with cap.
- For details of piles, see Sheet SA-91.
- For sections A-A, A1-A1, B-B see, Sheet SA-88.
- For Bill of Material and bar bending diagrams, see Sheet SA-88.
- For Bar Splicer and Mechanical Splicer details, see Sheet SA-92.

MODEL: SHEET
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		CHECKED	-	APC
PLOT SCALE	=	DRAWN	-	LK
PLOT DATE	=	CHECKED	-	SH
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DESIGNED	-	SH
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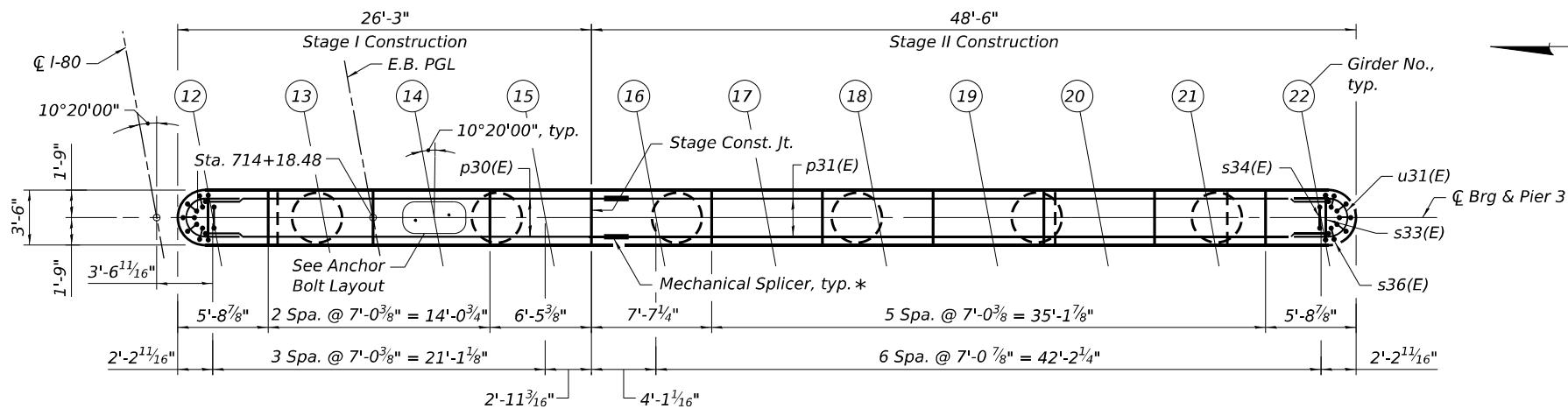
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REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS 1 EB
STRUCTURE NO. 099-0902 (EB)

SHEET SA-89 OF SA-112 SHEETS

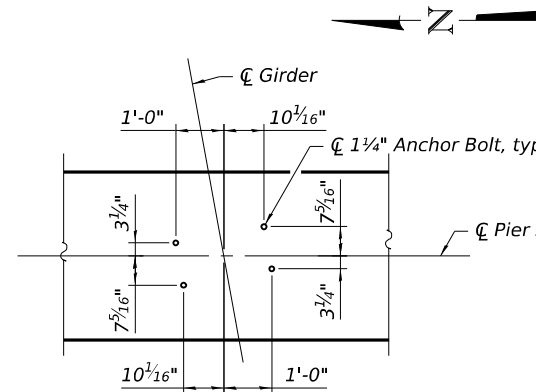
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	753
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



TOP PLAN

BRG. SEAT ELEVATIONS

Girder	Elev.
12	572.49
13	572.64
14	572.79
15	572.94
16	573.07
17	573.17
18	573.08
19	572.97
20	572.85
21	572.72
22	572.59

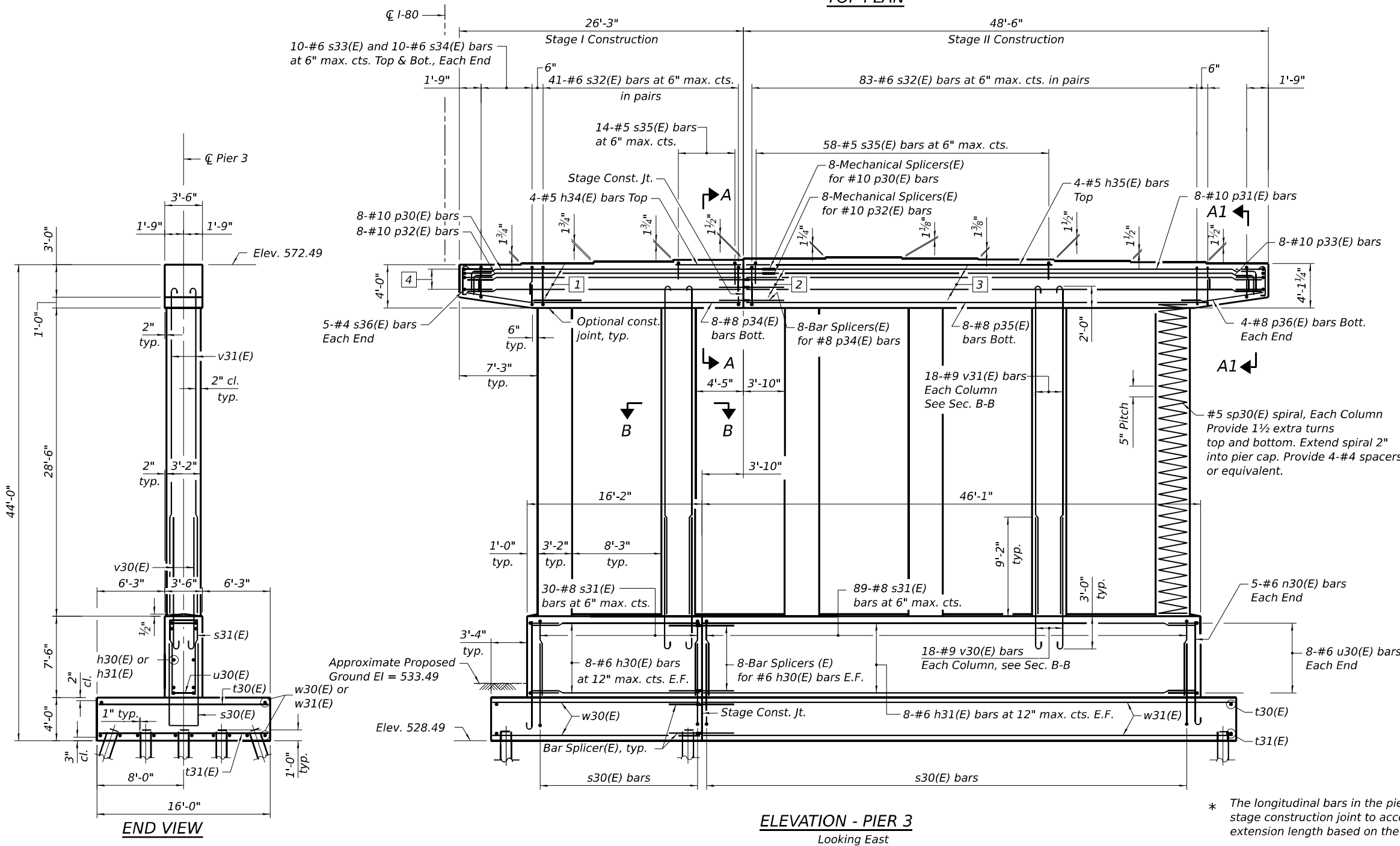


ANCHOR BOLT LAYOUT

- 1 4-#6 h32(E) bars E.F. Bend in field as req'd.
- 2 4-Bar Splicers for #6 h32(E) bars, E.F.
- 3 4-#6 h33(E) bars E.F. Bend in field as req'd.
- 4 6-#5 u31(E) bars Each End

- Notes:
1. Space reinforcement in cap to miss anchor bolts.
 2. Pour steps monolithically with cap.
 3. For details of piles, see Sheet SA-91.
 4. For sections A-A, A1-A1, B-B see, Sheet SA-90.
 5. For Bill of Material and bar bending diagrams, see Sheet SA-90.
 6. For Bar Splicer and Mechanical Splicer details, see Sheet SA-92.

* The longitudinal bars in the pier cap are detailed with a 1 foot extension length beyond the stage construction joint to accommodate the mechanical couplers. Contractor shall adjust the extension length based on the selected mechanical splicer assembly.



ELEVATION - PIER 3

Looking East

END VIEW

MODEL: SHEET
FILE NAME: C:\TRANSYS\SYSTEMS\LOCAL\TRANSYS\SYSTEMS\PW-01\DM520864\090902_0903-62F94-090-PIER3EB2.DGN



USER NAME	=	DESIGNED	-	SH
CHECKED	-	APC	REVISED	-
PLOT SCALE	=	DRAWN	-	LK
PLOT DATE	=	CHECKED	-	SH
		REVISED	-	

DESIGNED	-	SH
CHECKED	-	APC
DRAWN	-	LK
CHECKED	-	SH
REVISED	-	

REVISED	-
REVISED	-
REVISED	-
REVISED	-

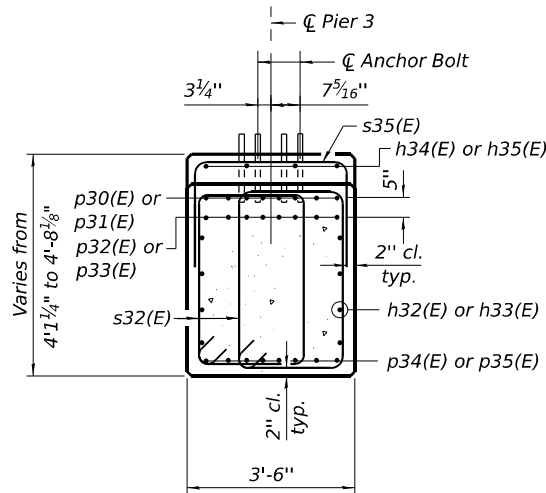
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 DETAILS 2 EB
STRUCTURE NO. 099-0902 (EB)

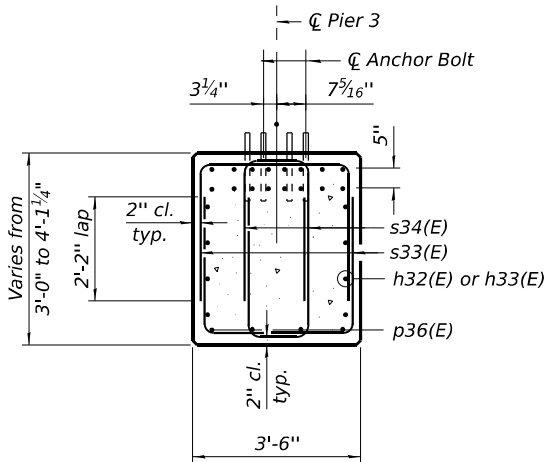
SHEET SA-90 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

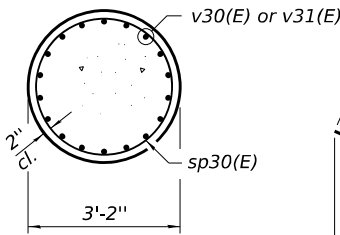
- Notes:
- For section locations, see Sheet SA-89.
 - Space reinforcement in pile cap to miss piles.
 - Piles shown as battered should be battered at 3H:12V.
 - When splicing of spiral reinforcement is necessary, the spirals shall be provided with 1½ extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.
 - For Bar Splicer details, see Sheet SA-92.
 - Contractor to verify all conflict locations between the existing and proposed piles.



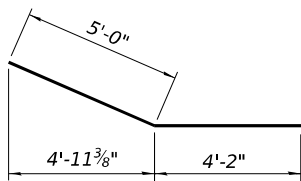
SECTION A-A



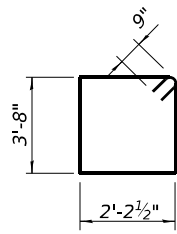
SECTION A1-A1



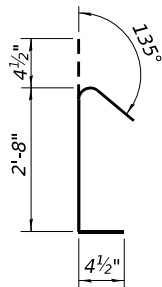
SECTION B-B



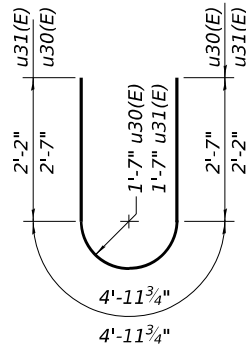
BAR p36(E)



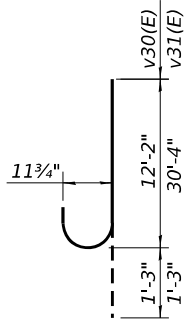
BAR s32(E)



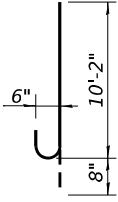
BAR s36(E)



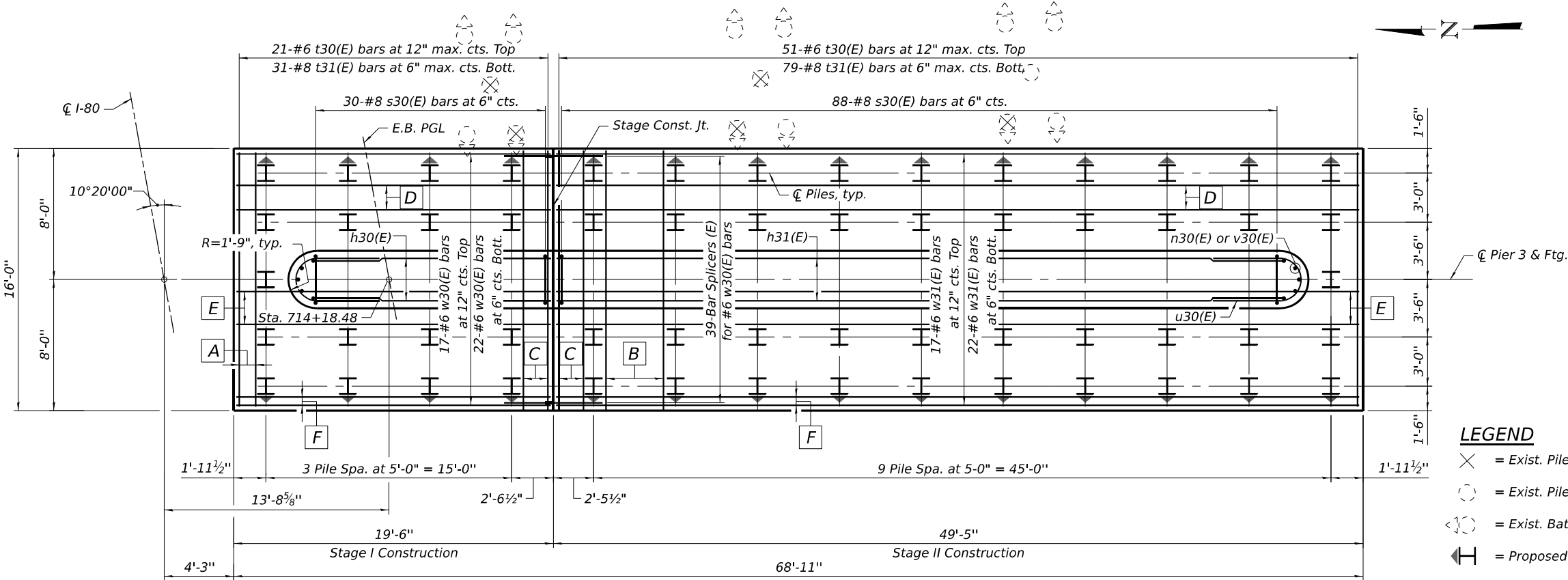
BARS u30(E) & u31(E)



BARS v30(E) & v31(E)



BAR n30(E)



FOOTING PLAN

- A 3-#8 t31(E) bars at 6" max. cts. Bott., typ.
- B 8-#8 t31(E) bars at 6" max. cts. Bott., typ.
- C 4-#8 t31(E) bars at 6" max. cts. Bott.

- D 4-#6 w30(E) or w31(E) bars at 6" max. cts. Bott., typ.
- E 5-#6 w30(E) or w31(E) bars at 6" max. cts. Bott., typ.
- F 2-#6 w30(E) or w31(E) bars at 6" max. cts. Bott., typ.

A & B DIMENSIONS

Bar	A	B
p30(E)	25'-6"	1'-10"
p31(E)	45'-9"	1'-10"
p32(E)	25'-0"	1'-10"
p33(E)	45'-3"	1'-10"

A & B DIMENSIONS

Bar	A	B
s30(E)	3'-2"	7'-10"
s31(E)	3'-2"	7'-2"
s33(E)	3'-2"	2'-11"
s34(E)	1'-3 1/8"	2'-11"
s35(E)	3'-2"	2'-0"

LEGEND

- × = Exist. Pile to be Removed
- = Exist. Pile
- ⊕ = Exist. Battered Pile
- ⊕ = Proposed Battered Pile

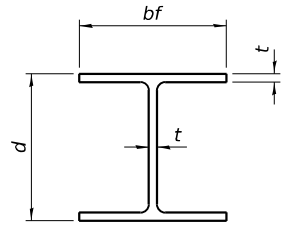
PILE DATA

Type: HP 12x53 with pile shoes
Nominal Required Bearing: 418 kips
Factored Resistance Available: 230 kips
Est. Length: 19 ft
No. Production Piles: 69
No. Test Piles: 1

PIER 3
BILL OF MATERIAL

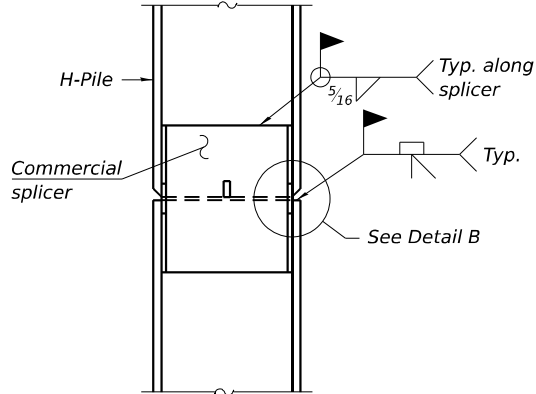
Bar	No.	Size	Length	Shape
h30(E)	16	#6	14'-3"	—
h31(E)	16	#6	44'-2"	—
h32(E)	8	#6	24'-4"	—
h33(E)	8	#6	46'-7"	—
h34(E)	4	#5	6'-1"	—
h35(E)	4	#5	28'-4"	—
n30(E)	10	#6	10'-10"	⊕
p30(E)	8	#10	27'-4"	⊕
p31(E)	8	#10	47'-7"	⊕
p32(E)	8	#10	26'-10"	⊕
p33(E)	8	#10	47'-1"	⊕
p34(E)	8	#8	19'-4"	⊕
p35(E)	8	#8	41'-7"	⊕
p36(E)	8	#8	9'-2"	⊕
s30(E)	119	#8	18'-10"	⊕
s31(E)	119	#8	17'-6"	⊕
s32(E)	246	#6	13'-3"	⊕
s33(E)	40	#6	9'-0"	⊕
s34(E)	40	#6	7'-1"	⊕
s35(E)	72	#5	7'-2"	⊕
s36(E)	10	#4	3'-5"	⊕
sp30(E)	6	#5	28'-8"	⊕
t30(E)	72	#6	15'-6"	—
t31(E)	110	#8	15'-6"	—
u30(E)	16	#6	10'-2"	⊕
u31(E)	12	#5	9'-4"	⊕
v30(E)	108	#9	13'-5"	⊕
v31(E)	108	#9	31'-7"	⊕
w30(E)	39	#6	19'-1"	—
w31(E)	39	#6	49'-0"	—
Structure Excavation			Cu. Yd.	266
Concrete Structures			Cu. Yd.	314.7
Reinforcement Bars, Epoxy Coated			Pound	60,380
Furnishing Steel Piles, HP12x53			Foot	1,311
Driving Piles			Foot	1,311
Test Pile Steel HP12x53			Each	1
Pile Shoes			Each	70
Pile Removal			Each	5

** Length is height of spiral.

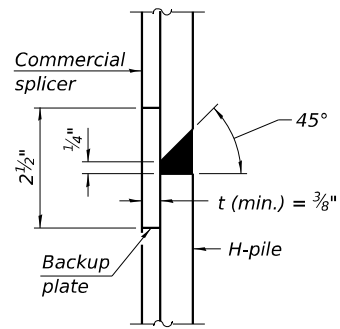


STEEL PILE TABLE

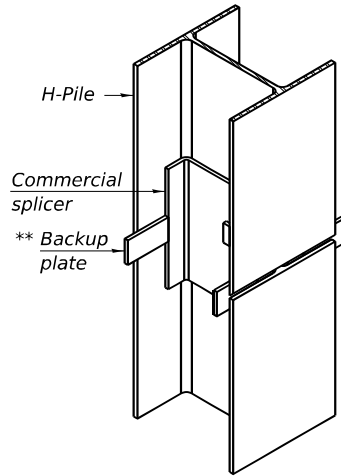
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 18x181	18	18	1	36"
x157	17¾"	17⅞"	⅞"	36"
x135	17½"	17¾"	¾"	36"
HP 16x183	16½"	16½"	1⅛"	36"
x162	16¼"	16⅞"	1"	36"
x141	16	16	⅞"	36"
x121	15¾"	15⅞"	¾"	36"
HP 14x117	14¼"	14⅞"	1⅜"	30"
x102	14"	14¾"	1⅜"	30"
x89	13⅞"	14¾"	⅝"	30"
x73	13⅝"	14⅝"	½"	30"
HP 12x84	12¼"	12¼"	1⅜"	24"
x74	12⅞"	12¼"	⅝"	24"
x63	12"	12⅞"	½"	24"
x53	11¾"	12"	⅞"	24"
HP 10x57	10"	10¼"	⅞"	24"
x42	9¾"	10⅞"	⅞"	24"
HP 8x36	8"	8⅞"	⅞"	18"



ELEVATION

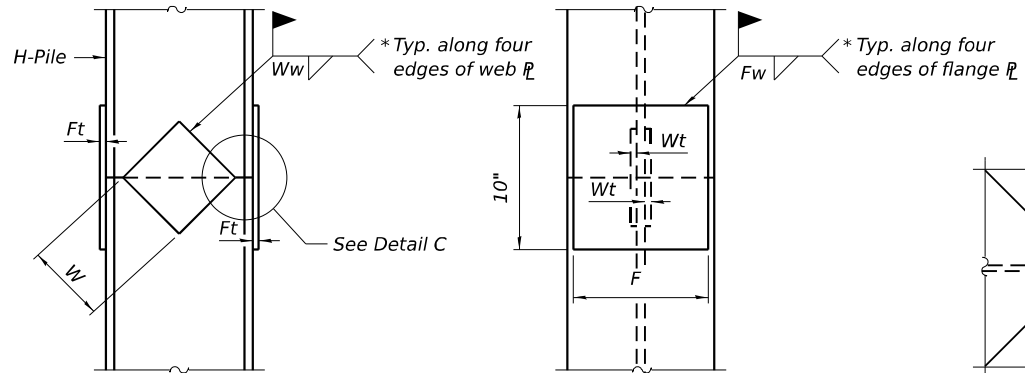


DETAIL B



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



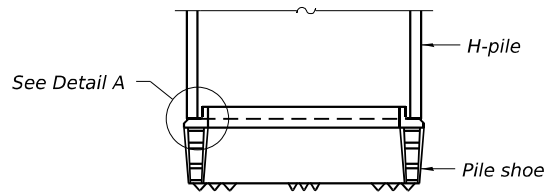
ELEVATION

END VIEW

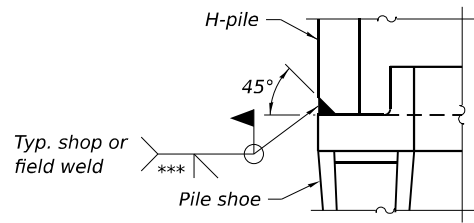
DETAIL C

Designation	F	Ft	Fw	W	Wt	Ww
HP 18x181	15½"	1½"	1"	9½"	⅞"	¾"
x157	15¼"	1¼"	1"	9½"	⅞"	¾"
x135	15¼"	1¼"	1"	9½"	⅞"	¾"
HP 16x183	13¾"	1½"	1"	8¼"	⅞"	¾"
x162	13½"	1½"	1"	8¼"	¾"	⅝"
x141	13½"	1¼"	⅞"	8¼"	¾"	⅝"
x121	13½"	1¼"	⅞"	8¼"	¾"	⅝"
HP 14x117	12½"	1¼"	⅞"	7¾"	⅝"	½"
x102	12½"	1"	¾"	7¾"	⅝"	½"
x89	12½"	⅞"	1⅜"	7¾"	⅝"	½"
x73	12½"	¾"	⅞"	7¾"	⅝"	½"
HP 12x84	10"	1"	1⅜"	6½"	⅝"	½"
x74	10"	⅞"	1⅜"	6½"	⅝"	½"
x63	10"	¾"	½"	6½"	½"	⅜"
x53	10"	¾"	½"	6½"	½"	⅜"
HP 10x57	8"	⅞"	⅞"	5¼"	½"	⅜"
x42	8"	¾"	⅞"	5¼"	½"	⅜"
HP 8x36	6¾"	⅝"	⅞"	4"	½"	⅜"

WELDED PLATE FIELD SPLICE

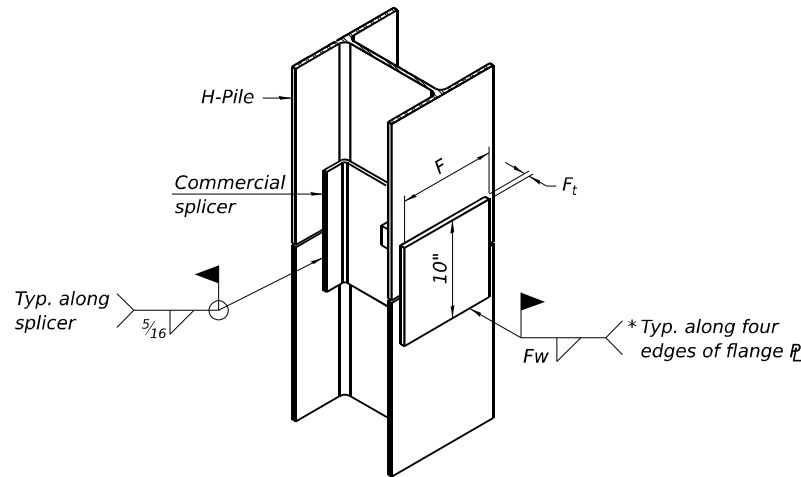


ELEVATION



DETAIL A

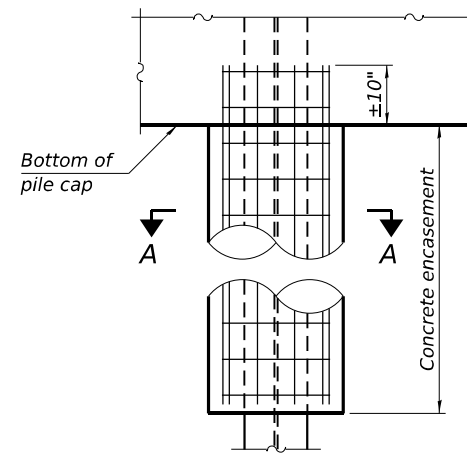
SHOE ATTACHMENT



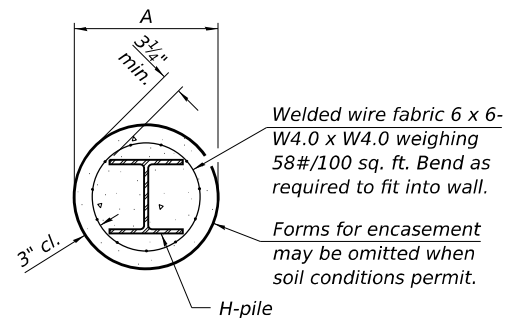
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds ¼" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (⅝" min.).



ELEVATION



SECTION A-A

INDIVIDUAL PILE
CONCRETE ENCASUREMENT
(when specified)

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

F-HP

10-27-2023

HNTB

USER NAME	=	DESIGNED - MVV	REVIS	-
PLOT SCALE	=	CHECKED - APC	REVIS	-
PLOT DATE	=	DRAWN - LK	REVIS	-
		CHECKED - MVV	REVIS	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

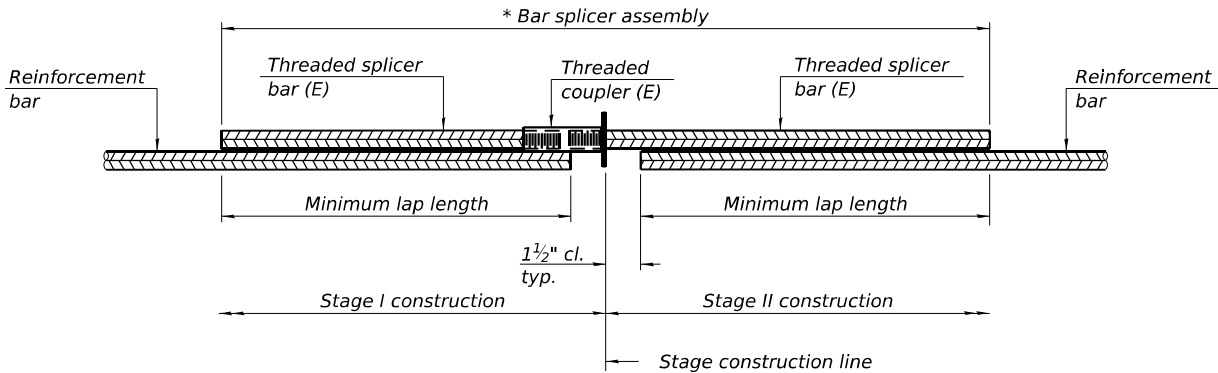
HP PILE DETAIL
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-91 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	755
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: SHEET
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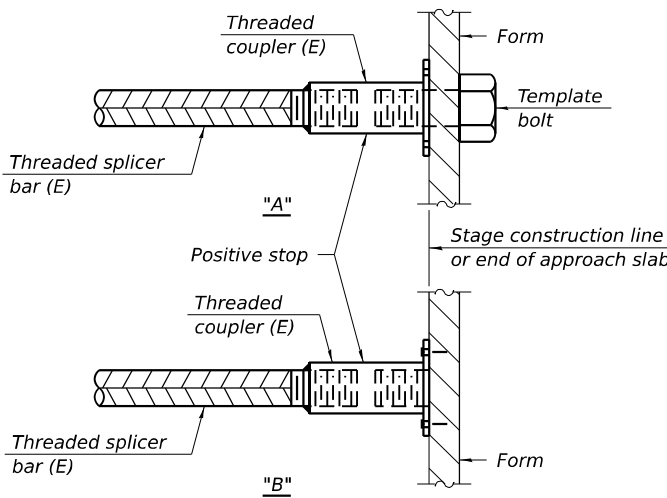
STANDARD BAR SPLICER ASSEMBLY PLAN

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

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

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

Location	Bar size	No. assemblies required	Minimum lap length
Pier 1 (WB)	#8	8	7'-2"
Pier 1 (WB)	#6	63	3'-10"
Pier 1 (EB)	#8	8	7'-2"
Pier 1 (EB)	#6	63	3'-10"
Pier 2 (WB)	#8	8	7'-2"
Pier 2 (WB)	#6	79	3'-10"
Pier 2 (EB)	#8	8	7'-2"
Pier 2 (EB)	#6	79	3'-10"
Pier 3 (WB)	#8	8	7'-2"
Pier 3 (WB)	#6	63	3'-10"
Pier 3 (EB)	#8	8	7'-2"
Pier 3 (EB)	#6	63	3'-10"
West Abut. (WB)	#7	12	5'-6"
West Abut. (WB)	#4	6	2'-7"
West Abut. (EB)	#7	12	5'-6"
West Abut. (EB)	#4	6	2'-7"
East Abut. (WB)	#7	12	5'-6"
East Abut. (WB)	#4	6	2'-7"
East Abut. (EB)	#7	12	5'-6"
East Abut. (EB)	#4	6	2'-7"
Deck Slab (WB)	#5	1,994	3'-6"
Deck Slab (EB)	#5	1,629	3'-6"
Appr. Slabs (WB)	#5	147	3'-6"
Appr. Slabs (EB)	#5	142	3'-6"
Diaphragms (WB)	#6	26	4'-0"
Diaphragms (WB)	#4	4	2'-8"
Diaphragms (EB)	#6	26	4'-0"
Diaphragms (EB)	#4	4	2'-8"

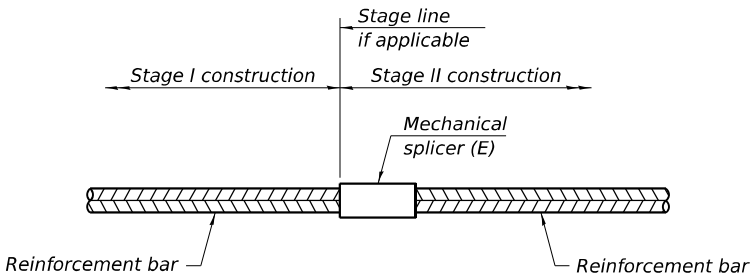


INSTALLATION AND SETTING METHODS

"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
Pier 1 (WB)	#10	16
Pier 1 (EB)	#10	16
Pier 2 (WB)	#10	16
Pier 2 (EB)	#10	16
Pier 3 (WB)	#10	16
Pier 3 (EB)	#10	16

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

5-15-2023



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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-92 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	756
CONTRACT NO. 62F94				
		ILLINOIS	FED. AID PROJECT	

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS-PW-01\DM520864\090902_0903-62F94-094-094-BORING1.DGN



USER NAME	=	DESIGNED	-	MVV	REVISED	-
		CHECKED	-	APC	REVISED	-
PLOT SCALE	=	DRAWN	-	LK	REVISED	-
PLOT DATE	=	CHECKED	-	MVV	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 1
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-93 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	757
			CONTRACT NO. 62F94	
		ILLINOIS	FED. AID PROJECT	

Notes:
1. For location of soil boring, see Sheet SA-1.



GSI Job No. 13125

SOIL BORING LOG

Page 1 of 3

Date 3/11/14

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

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

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

STRUCT. NO.			D	B	U	M	Surface Water Elev.	n/a	ft	D	B	U	M
Station			E	L	C	O	Stream Bed Elev.	n/a	ft	P	O	C	I
			P	W	S	I				T	S	Q	S
BORING NO.	BSB-01		T	H	S	T	Groundwater Elev.:			H	W	S	T
Station	711+03						First Encounter	561.1	ft				
Offset	55.20ft Left						Upon Completion	574.1	ft				
Ground Surface Elev.	577.10	ft	(ft)	(/6")	(tsf)	(%)	After	Hrs.		(ft)	(/6")	(tsf)	(%)
7.5" ASPHALT, 12.0" CONCRETE													
	575.48			1							9		
CLAY LOAM-brown & gray-stiff to hard (Fill)				2	1.1	22					14	1.0	19
				2	B						14	P	
				4							8		
				6	2.0	16					6	2.4	15
				8	P						9	B	
				3							4		
				4	4.0	17					5	2.5	18
				5	P						9	P	
				4							3		
				4	1.3	23					7	2.2	20
				5	B						7	B	
				5									
				7		22							
				8									
				2							6		
				3		21					7		15
											8		
				3									
				4	1.2	18							
				8	R								
				7							8		
				11		17					11	2.0	17
				13							17	P	

[illegible]

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

[illegible]

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

BBS, from 137 (Rev. 8-99)

P:\PROJECTS\2013\13125 H1B, 180 PHASE II (NEAR TERM)\13125 BORING LOGS\ 3125 LOG.GPJ, 4/20/15

Geo Services, Inc.
 Geotechnical, Environmental & Civil Engineering
 800 Ambwest Court, Suite 204
 Naperville, Illinois 60565
 (630) 555-3555

GSJ Job No. 13125

SOIL BORING LOG

Page 2 of 2

Date 4/4/14

ROUTE F.A.I.R.T.E. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY NW

SECTION 2013-008B & 2013-009B LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

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

STRUCT. NO. _____
 Station _____

BORING NO. BSB-01A
 Station 710+93
 Offset 55.20ft Left
 Ground Surface Elev. 577.10 ft

Blind Drill (continued)

Drillers Note: Rough drilling from
 -41.0' to -64.0'

D E P T H
 B L O W S
 U C S
 M O I S T
 Qu
 (%)

(ft) (f/6") (tsf)

-45

-80

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

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

Blind Drill (continued)

Drillers Observation: Apparent bedrock

D E P T H
 B L O W S
 U C S
 M O I S T
 Qu
 (%)

(ft) (f/6") (tsf)

-65

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

BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheet SA-1.

HNTB

USER NAME	=	DESIGNED	-	MVV	REVISED	-
		CHECKED	-	APC	REVISED	-
PLOT SCALE	=	DRAWN	-	LK	REVISED	-
PLOT DATE	=	CHECKED	-	MVV	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 2
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-94 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	758
		CONTRACT NO. 62F94		
ILLINOIS		FED. AID PROJECT		

MODEL: SHEET
FILE NAME: C:\TRANSSYSTEMS\PW_LOCAL\TRANSSYSTEMS-PW-01\DM520864\090902_0903-62\F94-096-BORING3.DGN



USER NAME	=	DESIGNED -	MVV	REVISED -	
		CHECKED -	APC	REVISED -	
PLOT SCALE	=	DRAWN -	LK	REVISED -	
PLOT DATE	=	CHECKED -	MVV	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 3
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-95 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	759
			CONTRACT NO. 62F94	
		ILLINOIS	FED. AID PROJECT	

Notes:
1. For location of soil boring, see Sheet SA-1.



ROCK CORE LOG

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

ROUTE F.A.I.R.T.E. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY NW
SECTION 2013-008B & 2013-009B LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO.	CORING BARREL TYPE & SIZE	NX Double Swivel-10 ft	DEPTH (ft)	CORRECTION (%)	RECOVERY (%)	OVER-D (min/ft)	CORE TIME (tsf)	STRENGTH (tsf)
BORING NO. BSB-01A	Core Diameter 2 in	Top of Rock Elev. 513.10 ft						
Station 710+93	Begin Core Elev. 510.40 ft							
Offset 55.20ft Left								
Ground Surface Elev. 577.10 ft								
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE - Run 1								
Light gray & porous with horizontal bedding. Highly fractured & weathered from -71.2' to -78.0' with numerous intersecting horizontal & vertical fractures.								
			509.10	1	100	40		950.0
			-70					
			-75					
			499.10	2	22	0		
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE - Run 2								
Light gray & porous with horizontal bedding. Highly fractured & weathered throughout with numerous intersecting horizontal & vertical fractures. Numerous clay seams throughout.								
			-80					
			-85					
			490.10	3	97	18		

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



ROCK CORE LOG

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

ROUTE F.A.I.R.T.E. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY NW
SECTION 2013-008B & 2013-009B LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO.	CORING BARREL TYPE & SIZE	NX Double Swivel-10 ft	DEPTH (ft)	CORRECTION (%)	RECOVERY (%)	OVER-D (min/ft)	CORE TIME (tsf)	STRENGTH (tsf)
BORING NO. BSB-01A	Core Diameter 2 in	Top of Rock Elev. 513.10 ft						
Station 710+93	Begin Core Elev. 510.40 ft							
Offset 55.20ft Left								
Ground Surface Elev. 577.10 ft								
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE - Run 3								
Light gray & porous with horizontal bedding. Weathered & fractured throughout becoming highly weathered & fractured with clay seams from -93.5' to -95.0'. (continued)								
			-90					845.0
			-95					
			482.10	4	100	0		
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE - Run 4								
Light gray & porous. Highly weathered & fractured throughout with some thin clay partings & chert nodules.								
			479.10					
End Of Boring @ -98.0'. Boring backfilled with cuttings.								
			-100					
			-105					

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



ROCK CORE LOG

PAGE 1 of 3
DATE 4/5/2014
LOGGED BY JK
GSI JOB No. 13125

ROUTE --- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION --- LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash

STRUCT. NO.	CORING BARREL TYPE & SIZE	NX Double Swivel-10 ft	DEPTH (ft)	CORRECTION (%)	RECOVERY (%)	OVER-D (%)	CORE TIME (min)	STRENGTH (tsf)
BORING NO. BSB-01A	Core Diameter 2.0 in	Top of Rock Elev. 513.1						
Station 710+93	Begin Core Elev. 509.1							
Offset 55.2' Left								
Ground Surface Elev. 577.1								
SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE								
RUN 1 (-68.0' to -78.0')								
Light gray & porous with horizontal bedding. Highly fractured & weathered from -71.2' to -78.0' with numerous intersecting horizontal & vertical fractures.								
			-70					
			-75					
			-78					
			-78					



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



USER NAME	=	DESIGNED -	MVV	REVISED -	
		CHECKED -	APC	REVISED -	
PLOT SCALE	=	DRAWN -	LK	REVISED -	
PLOT DATE	=	CHECKED -	MVV	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS 7
STRUCTURE NOS. 099-0902 (EB) & 099-0903 (WB)

SHEET SA-99 OF SA-112 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	763
CONTRACT NO. 62F94				
		ILLINOIS	FED. AID PROJECT	

Notes:
1. For location of soil boring, see Sheet SA-1.



SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 10/23/13

ROUTE F.A.I. RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY TZ
SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.		D	B	U	M	Surface Water Elev.	n/a	ft	D	B	U	M
Station		E	L	C	O	Stream Bed Elev.	n/a	ft	E	L	C	O
		P	O	S	I				P	O	S	I
		T	W	Qu	S				H	W	S	T
BORING NO.	BSB-09					Groundwater Elev.:						
Station	713+77					First Encounter	Dry to 24.0'	ft				
Offset	66.20ft Left					Upon Completion	n/a	ft				
Ground Surface Elev.	534.70	ft	(ft)	(/6")	(tsf)	After	Hrs.		(ft)	(/6")	(tsf)	(%)
SANDY CLAY LOAM with GRAVEL-brown & black-loose (Fill)												
			2									
			3		19							
			3					512.20				
	531.70					Drillers Observation: Apparent bedrock		510.70				
			6			Borehole continued with rock coring.		-25				
			12		6							
			14									
			9									
			10		6							
			15									
			10									
			14		5							
			18					-30				
			23									
			50/3"		24							
			11									
			11		10							
			18					-35				
			17									
			27		10							
			36									
			25									
			32		12							
			37					-40				
			-20									

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



ROCK CORE LOG

PAGE 1 of 1
DATE 10/23/2013
LOGGED BY JK
GSI JOB No. 13125

ROUTE -- DESCRIPTION I-80 Reconstruction (Near Term Phase 2)
SECTION -- LOCATION SEC 15, T35N, R10E, SW 1/4, 3rd PM
COUNTY Will CORING METHOD Rotary Wash
STRUCT. NO. -- CORING BARREL TYPE & SIZE NX Double Swivel-10 ft
Station -- Core Diameter 2.0 in
BORING NO. BSB-09 Top of Rock Elev. 512.2
Station 713+77 Begin Core Elev. 510.7
Offset 66.2' Left
Ground Surface Elev. 534.7

SILURIAN SYSTEM, NIAGARAN SERIES DOLOMITE
RUN 1 (-24.0' to -34.0')
Light gray with horizontal to wavy bedding & some chert inclusions. Horizontal fractures at -31.1', -31.2', -31.75' & -32.5'. Highly fractured & weathered from -24.0' to -24.8' & from -28.9' to -30.0'.



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



SOIL BORING LOG

GSI Job No. 13125
Page 1 of 1
Date 10/30/13

ROUTE F.A.I. RTE. 80 DESCRIPTION I-80 Phase II (Near Term) LOGGED BY TZ
SECTION LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM
COUNTY Will DRILLING METHOD Hollow Stem Auger/Rotary HAMMER TYPE CME Automatic

STRUCT. NO.		D	B	U	M	Surface Water Elev.	n/a	ft	D	B	U	M
Station		E	L	C	O	Stream Bed Elev.	n/a	ft	E	L	C	O
		P	O	S	I				P	O	S	I
		T	W	Qu	S				H	W	S	T
BORING NO.	BSB-11					Groundwater Elev.:						
Station	714+35					First Encounter	Dry to 13.5'	ft				
Offset	6.90ft Left					Upon Completion	n/a	ft				
Ground Surface Elev.	533.10	ft	(ft)	(/6")	(tsf)	After	Hrs.		(ft)	(/6")	(tsf)	(%)
12.0' SANDY TOPSOIL-black												
					20			512.60				
	532.10					FRACTURED ROCK & SHALE-very dense						
			10					50/5"				22
			12		14							
			9									
			8									
			10		13			509.10		50/2"		15
			12					-25				
			5									
			3									
			4		12							
			5									
	525.10					FRACTURED ROCK-gray-dense to very dense						
			8									
			18		7							
			19					-30				
			19									
			24		6							
			20									
			50/4"									
					6							
			15					-35				
			50/0"									
			37									
			21		7							
			24					-40				
			-20									

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

Geo Services, Inc.
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805 Jamboree Court, Suite 204
Naperville, Illinois 60563
(630) 355-7588

GSI Job No. 13125

SOIL BORING LOG

Page 1 of 1

Date 10/30/13

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

SECTION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3rd PM

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

STRUCT. NO.
Station

BORING NO. BSB-12
Station 714+21
Offset 67.50ft Right
Ground Surface Elev. 533.40 ft

DEPTH F T	BLOWS P W S	UCS Qu	MOIST S T
(ft)	(/6")	(tsf)	(%)

Surface Water Elev.	n/a	ft
Stream Bed Elev.	n/a	ft
Groundwater Elev.:		
First Encounter	517.9	ft
Upon Completion	n/a	ft
After		ft

DEPTH F T	BLOWS P W S	UCS Qu	MOIST S T
(ft)	(/6")	(tsf)	(%)

12.0" SANDY TOPSOIL

532.40

15

512.40

CRUSHED STONE,
GRAVEL, SAND &
CINDERS-black-medium dense to
dense (F ill)

4		
6	11	
7		

Borehole continued with rock
coring.

3		
5	23	
5		

-25

12		
16	15	
20		

5		
7	21	
10		

-30

522.90

SAND, GRAVEL & FRACTURED
ROCK-brown-medium dense to
very dense

7		
8	16	
10		

15		
22	7	
24		

-35

13		
15	7	
19		

19		
50/3"	10	

-40

Z:\PROJECTS\2013\13125 HNTB I-80 PHASE II (NEAR TERM)\13125 BORING LOGS\13125 LOG.dwg 8/10/14

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

BBS, from 137 (Rev. 8-99)

[illegible]

Geo Services, Inc.		Geotechnical, Environmental & Civil Engineering		895 Jamhuri Court, Suite 204 Naperville, Illinois 60563 (630) 355-7318		GSI Job No. 13125	
SOIL BORING LOG						Page 1 of 1	
Date 10/21/13							
ROUTE F.A.I.R.T.E. 80		DESCRIPTION I-80 Phase II (Near Term)		LOGGED BY TZ			
SECTION		LOCATION SW 1/4, SEC. 15, TWP. T35N, RNG. R10E, 3 rd PM					
COUNTY Will		DRILLING METHOD Hollow Stem Auger/Rotary		HAMMER TYPE CME Automatic			
STRUCT. NO.		B O L D U C S M O I S T		Surface Water Elev. n/a ft		D E P T H S Qu T	
Station		(ft) (/6") (tsf) (%)		Stream Bed Elev. n/a ft		(ft) (/6") (tsf) (%)	
BORING NO. BSB-14				Groundwater Elev.: 519.7 ft ▼			
Station 714+93				First Encounter			
Offset 11.00ft Right				Upon Completion			
Ground Surface Elev. 533.20				After Hrs.			
4.0' CONCRETE		532.87		SAND, GRAVEL & FRACTURE			
CLAY LOAM-dark brown &				ROCK-brown & gray-very dense		512.20	
black-very stiff (Fill)		5		(continued)		50/2"	
		6 3.0 P 19		Drillers Observation: Apparent			
		7		bedrock		510.70	
530.20				Borehole continued with rock			
CLAYEY GRAVEL & STONE-dark				coring.			
brown & black medium dense (Fill)		4					
		5					
		6				-25	
527.70		-5					
CLAY LOAM-dark brown &							
black-dense (Fill)		15					
		17					
		20					
525.20							
SILTY CLAY-dark brown to		2					
black-very stiff		3		2.5 P 26			
		4					
		-10				-30	
522.70							
SILTY LOAM-brown-medium		7					
dense		11		18			
		15					
520.20							
SAND, GRAVEL & FRACTURE		▼					
ROCK-brown & gray-very dense		19					
		20		10			
		23				-35	
		-15					
		26					
		50/3"		8			
		21					
		50/4"		12			
		-20				-40	

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

BBS, from 137 (Rev. 8-99)

Notes:
1. For location of soil boring, see Sheet SA-1.

Benchmark: Chiseled 'X' on top of east bolt of fire hydrant at east ROW of S. Eastern Ave. and WB ramp to I-80. Elev. 538.265

Existing Structures: S.N 099-0059 (EB) and 099-0058 (WB) were original constructed in 1967 under F.I.A. Route 80 Project I-80-4(31)134 Section 99-4HB. Various repairs were made to the structure in 1987, 1988, and 2003. The existing structures are 3 spans, of length 34'-7", 97'-10 1/4", and 43'-6" respectively, measuring 179'-7 1/4" from back to back of abutments with a skew of 7°46'20" right forward. The WB deck tapers from 65'-4" to 61'-9" while the EB deck tapers from 65'-0" to 61'-6". The structure is a concrete deck on steel girders and is supported on concrete stub abutments and trapezoidal column piers. The structure will be removed and replaced.

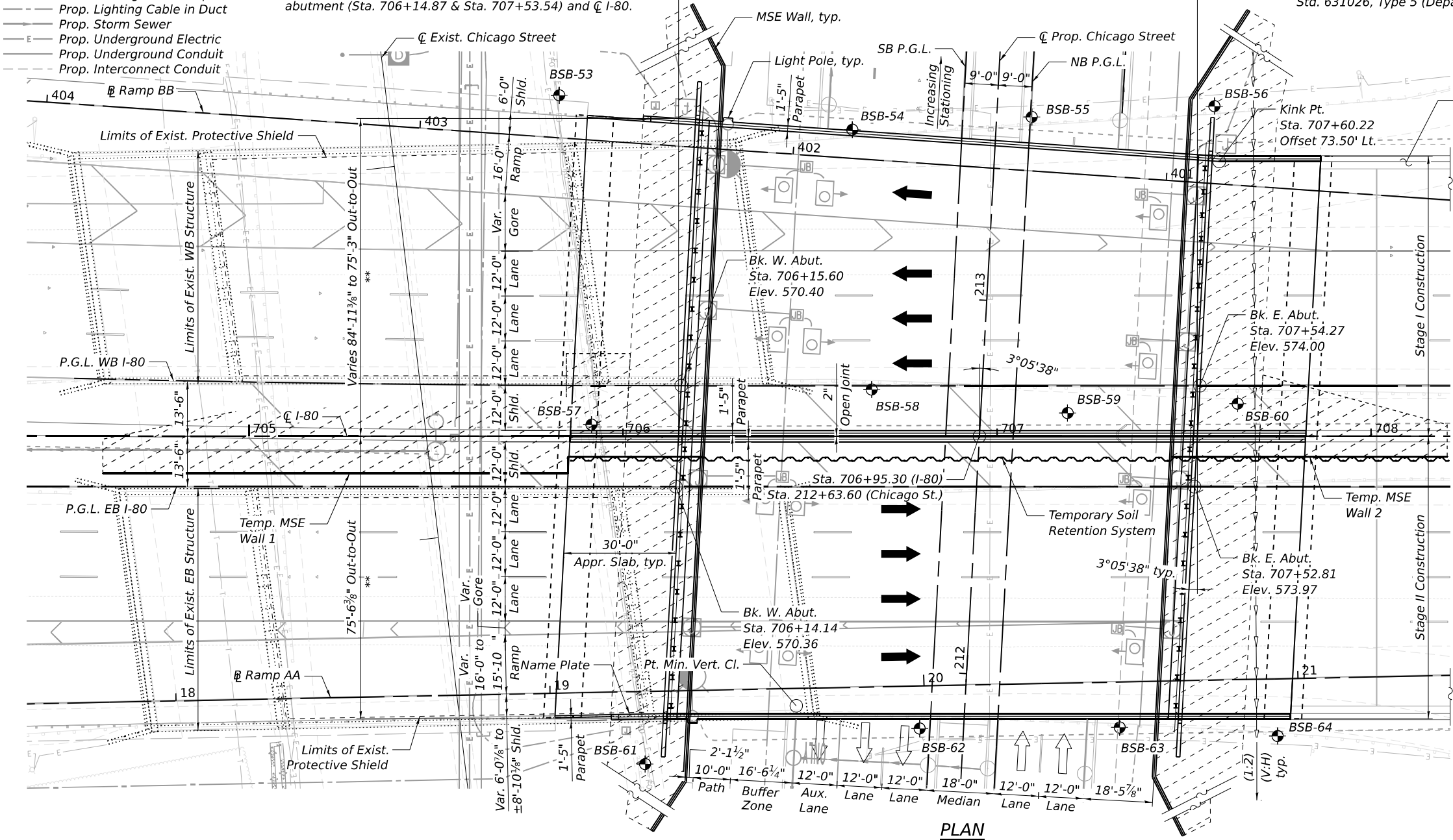
Traffic on I-80 shall be maintained utilizing median crossover for staged construction. Traffic on existing Chicago St. shall be detoured to newly constructed Ramp B.

Salvage: None

LEGEND

- Soil Borings
- Exist. Storm Sewer
- Exist. Fiber Optic
- Exist. Underground Electric
- Exist. Underground Telephone
- Prop. Lighting Cable in Duct
- Prop. Storm Sewer
- Prop. Underground Electric
- Prop. Underground Conduit
- Prop. Interconnect Conduit
- Approximate Limits of Reinforced Soil Mass

** Out-to-Out dimensions are taken at intersection of back of abutment (Sta. 706+14.87 & Sta. 707+53.54) and C Chicago St.



SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.095 g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.167 g
Soil Site Class = D

DESIGN STRESSES

FIELD UNITS

f_c = 4,000 psi (Superstructure)
f_c = 3,500 psi (Substructure)
f_y = 50,000 psi - M270 Gr. 50 (P Girders)
f_y = 36,000 psi - M270 Gr. 36 (Other Structural Steel)
f_y = 60,000 psi (Reinforcement)

PRECAST UNITS

f_c = 4,500 psi (Precast Panels)

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

LOADING HL-93

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

SEQUENCE OF CONSTRUCTION

1. Move all traffic to existing EB lanes.
2. Install TSRS and remove existing WB structure.
3. Excavate and install Temporary MSE Wall 1, Stage I West Abut., embankment and pavement.
4. Excavate and install Temporary MSE Wall 2, Stage I East Abut., embankment and pavement.
5. Construct WB structure and move traffic to WB lanes.
6. Remove and fill existing EB structure.
7. Excavate, remove TSRS, and construct proposed EB structure.

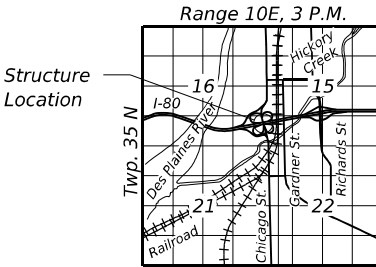
APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures



SIGNATURE

EXPIRES: NOVEMBER 30, 2026

DATE: 10/31/2025



GENERAL PLAN AND ELEVATION

I-80 EB/WB OVER CHICAGO ST.

F.A.I. RTE. 80 - SEC 2017-057F

WILL COUNTY

STATION 706+95.30

STRUCTURE NO. 099-8310

MODEL: Default
FILE NAME: 0998310-62F94-001-GPE.dgn



USER NAME =	DESIGNED - ECK	REVISED -
PLOT SCALE =	CHECKED - GEK	REVISED -
PLOT DATE =	DRAWN - ECK	REVISED -
	CHECKED - GEK	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET SB-1 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	777
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

10/27/2025 4:58:15 PM

INDEX OF SHEETS

- SB-1 - General Plan & Elevation
SB-2 - Index of Sheets, General Notes & Total Bill of Material
SB-3 - General Data
SB-4 - Construction Staging
SB-5 - Temporary Concrete Barrier
SB-6 - Substructure Layout & Removal Plan
SB-7 - TSRS & Temporary MSE Wall Details
SB-8 - Removal Details
SB-9 - Top of Deck Slab Elevations Layout - WB
SB-10 - Top of Deck Slab Elevations I - WB
SB-11 - Top of Deck Slab Elevations II - WB
SB-12 - Top of Deck Slab Elevations Layout - EB
SB-13 - Top of Deck Slab Elevations I - EB
SB-14 - Top of Deck Slab Elevations II - EB
SB-15 - Top of Slab Elevations & Layout - West Approach - WB
SB-16 - Top of Slab Elevations & Layout - East Approach - WB
SB-17 - Top of Slab Elevations & Layout - West Approach - EB
SB-18 - Top of Slab Elevations & Layout - East Approach - EB
SB-19 - Deck Plan - WB
SB-20 - Deck Plan - EB
SB-21 - Deck Cross Section - WB
SB-22 - Deck Cross Section - EB
SB-23 - Superstructure Details I
SB-24 - Superstructure Details II
SB-25 - Diaphragm Details I
SB-26 - Diaphragm Details II
SB-27 - Bridge Approach Slabs - WB
SB-28 - Bridge Approach Slabs - EB
SB-29 - Bridge Approach Slab Details I
SB-30 - Bridge Approach Slab Details II
SB-31 - Framing Plan
SB-32 - Structural Steel Details
SB-33 - Moment & Reaction Tables
SB-34 - West Abutment - WB
SB-35 - East Abutment - WB
SB-36 - West Abutment - EB
SB-37 - East Abutment - EB
SB-38 - Abutment Details
SB-39 - West MSE Wall Plan & Elevation
SB-40 - East MSE Wall Plan & Elevation
SB-41 - MSE Wall Details
SB-42 - HP Pile Details
SB-43 - Soil Boring Logs I
SB-44 - Soil Boring Logs II
SB-45 - Soil Boring Logs III
SB-46 - Soil Boring Logs IV
SB-47 - Soil Boring Logs V
SB-48 - Soil Boring Logs VI
SB-49 - Soil Boring Logs VII
SB-50 - Soil Boring Logs VIII
SB-51 - Soil Boring Logs IX
SB-52 - Soil Boring Logs X
SB-53 - Soil Boring Logs XI

GENERAL NOTES:

1. Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts in painted or coated metallized areas. Bolts ¾ in. Ø, holes 15/16 in. Ø, unless otherwise noted.
2. Calculated weight of Structural Steel = 787,110 Pounds (M 270 Grade 50)
51,280 Pounds (M 270 Grade 36)
3. All structural steel shall be metallized. See Special Provision for "Metallizing of Structural Steel."
4. The interior metallized areas shall be painted with System 1. Exterior fascia and bottom of bottom flange areas shall be metallized and shop painted (System 3). See special provision for "Metallizing of Structural Steel." The color of the final finish coat of the paint shall be Gray, Munsell No. 5B 7/1.
5. No field welding is permitted except as specified in the contract documents.
6. Reinforcement bars designated (E) shall be epoxy coated.
7. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
8. Slipforming of the parapets is not allowed.
9. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
10. Roadway embankment within the limits of the existing Chicago St. bridge must be placed a minimum of 3 months prior to roadway construction. Cost of embankment included in roadway plans.
11. Removal of existing abutments, piers, piles (unless otherwise noted), bearings and bolsters, superstructure, slopewall, temporary cribbing, existing deck protective shield or portions thereof included in cost of Removal of Existing Structures No. 3 - S.N. 099-0059 (EB) and Existing Structures No. 4 - S.N. 099-0058 (WB)
12. The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of abutments.
13. Bridge plans Stage I and Stage II correspond to MOT Stage 3 and MOT Stage 5 respectively.

TOTAL BILL OF MATERIAL

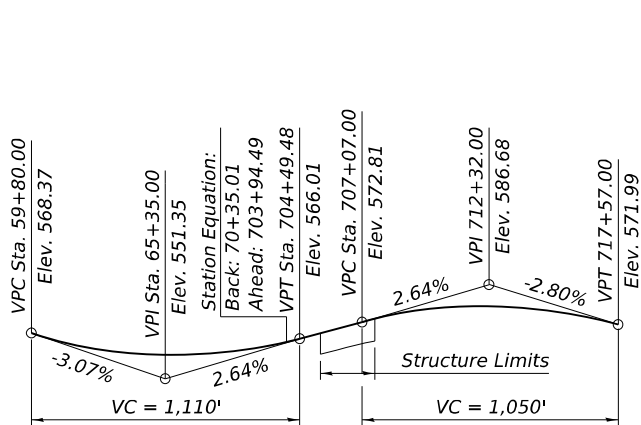
ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures No. 3	Each	1	-	1
Removal of Existing Structures No. 4	Each	1	-	1
Structure Excavation	Cu. Yd.	-	8,237	8,237
Concrete Structures	Cu. Yd.	-	289.5	289.5
Concrete Superstructure	Cu. Yd.	889.8	-	889.8
Protective Coat	Sq. Yd.	3,653	-	3,653
Concrete Superstructure (Approach Slab)	Cu. Yd.	440.1	-	440.1
Furnishing And Erecting Structural Steel	L. Sum	1	-	1
Stud Shear Connectors	Each	13,356	-	13,356
Reinforcement Bars, Epoxy Coated	Pound	342,210	48,440	390,650
Furnishing Steel Piles HP14X89	Foot	-	2,220	2,220
Driving Piles	Foot	-	2,220	2,220
Test Pile Steel HP14X89	Each	-	2	2
Pile Shoes	Each	-	42	42
Name Plates	Each	1	-	1
Preformed Joint Seal 3½"	Foot	197	-	197
Anchor Bolts, 1"	Each	84	-	84
Temporary Soil Retention System	Sq. Ft.	-	3,905	3,905
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	-	9,006	9,006
Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	-	4,496	4,496
Aggregate Column Ground Improvement	L. Sum	-	0.6	0.6
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	2,273	-	2,273
Bar Terminators	Each	312	1,436	1,748
Pile Removal	Each	-	7	7
Chain Link Fence, 4' Attached to Structure	Foot	-	212	212
Diamond Grinding (Bridge Section)	Sq. Yd.	3,101	-	3,101

STATION 706+95.30
BUILT 20__ BY
STATE OF ILLINOIS
F.A.I. RTE. 80 SEC. 2017-057F
LOADING HL-93
STRUCTURE NO. 099-8310

NAME PLATE

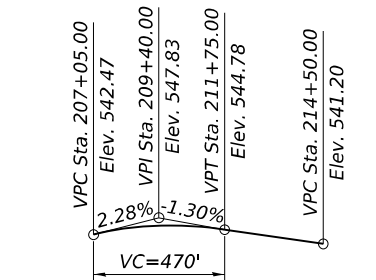
See Std. 515001

	USER NAME =	DESIGNED - ECK	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, GENERAL NOTES & TOTAL BILL OF MATERIAL STRUCTURE NO. 099-8310	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - GEK	REVISED -			80	2017-057F	WILL	1342	778
	PLOT SCALE =	DRAWN - ECK	REVISED -			CONTRACT NO. 62F94				
	PLOT DATE =	CHECKED - SLM	REVISED -			ILLINOIS FED. AID PROJECT				



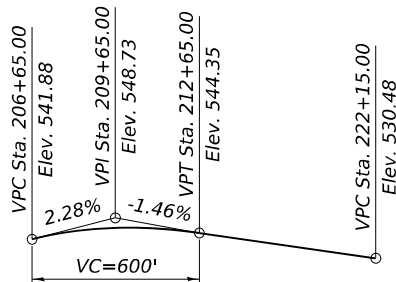
PROFILE GRADE

(Along Prop. P.G.L. EB & WB I-80)
(Up to ¼ inch to be ground off the bridge deck and the bridge approach slabs. The Profile Grade shows the final grade after grinding.)



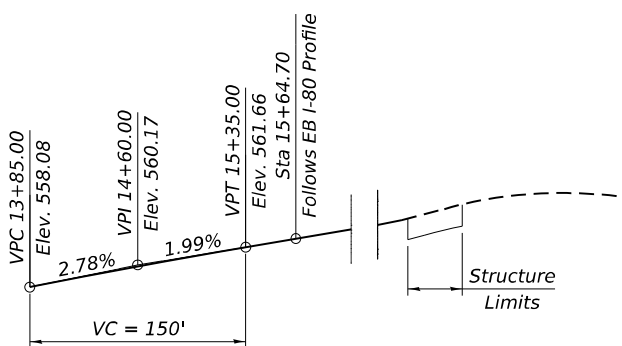
PROFILE GRADE

(Along Prop. NB P.G.L. Chicago St.)



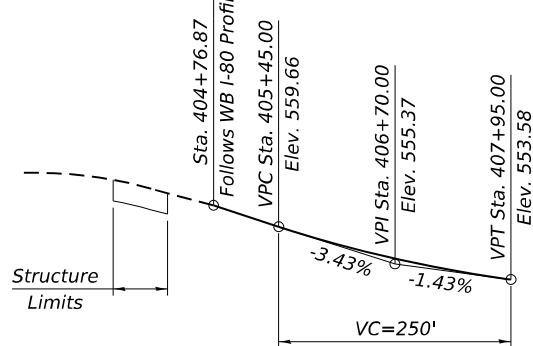
PROFILE GRADE

(Along Prop. SB P.G.L. Chicago St.)



PROFILE GRADE

(Along Prop. Ramp AA)



PROFILE GRADE

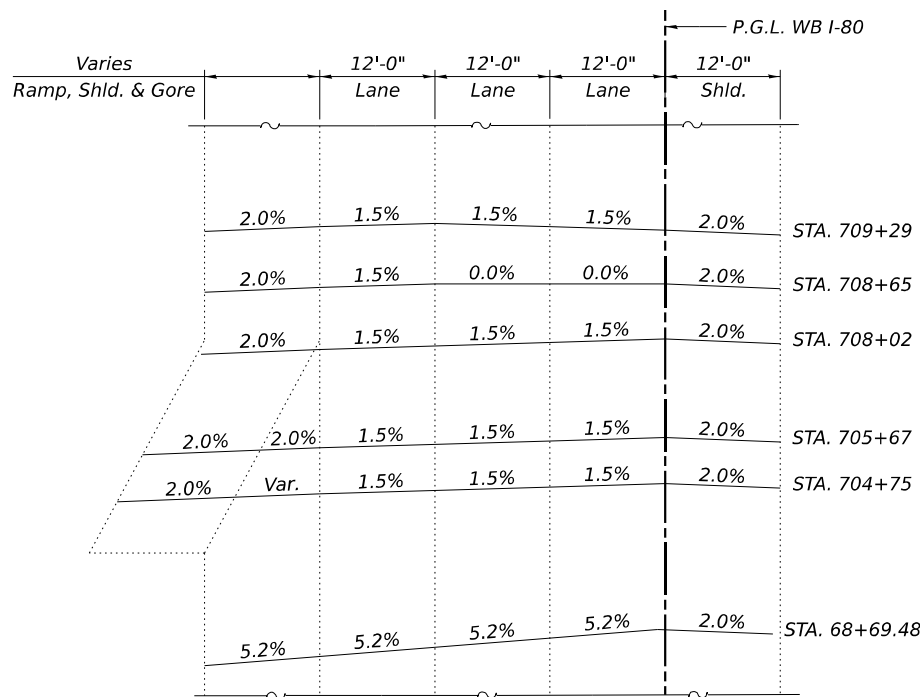
(Along Prop. Ramp BB)

CURVE DATA - I-80

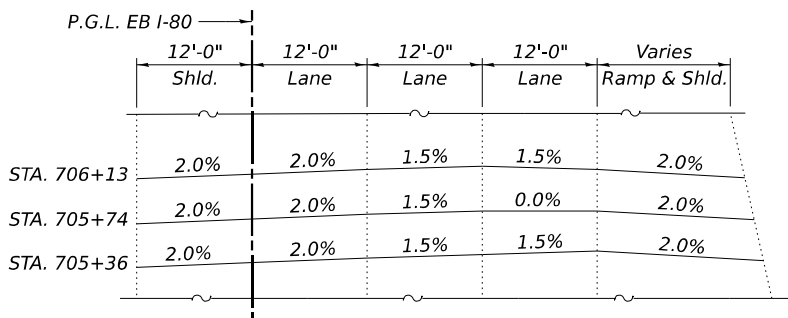
P.I. Sta. = 64+27.70
 $\Delta = 22^\circ 01' 22''$ (LT)
 $D = 1^\circ 47' 26''$
 $R = 3,200.00'$
 $T = 622.68'$
 $L = 1,229.99'$
 $E = 60.02'$
 $e = 5.2%$
P.C. Sta. = 58+05.02 (West of Project Limits)
P.T. Sta. = 703+94.49
EB S.E. Run = 312'
EB T.R. = 38.68'
EB S.E. Attained West of Project Limits
EB S.E. Removed from Sta. 69+02.77 to Sta. 706+12.93
WB S.E. Run = 63.5'
WB T.R. = 74.09'
WB S.E. Attained West of Project Limits
WB S.E. Transition from Sta. 68+69.48 (5.2%) to Sta. 704+74.58 (1.5%)
WB S.E. Held (1.5%) from Sta. 704+74.58 to Sta. 708+01.51
WB S.E. Removed from Sta. 708+01.51 to Sta. 709+39.10

CURVE DATA - CHICAGO ST.

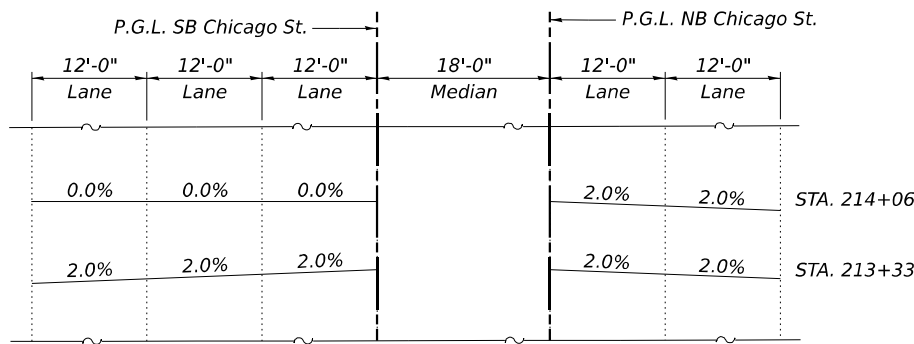
P.I. Sta. = 217+34.18
 $\Delta = 17^\circ 44' 42''$ (RT)
 $D = 03^\circ 15' 00''$
 $R = 1,763.00'$
 $T = 275.21'$
 $L = 546.02'$
 $E = 21.35'$
 $e = 2.20\%$
T.R. = 72.70'
S.E. Run = 80.00'
P.C. Sta. = 214+58.97
P.T. Sta. = 220+04.99
S.E. Attained from Sta. 213+32.93 to Sta. 214+85.63
S.E. Removed from Sta. 219+78.33 to Sta. 221+31.03



WB SUPERELEVATION DIAGRAM



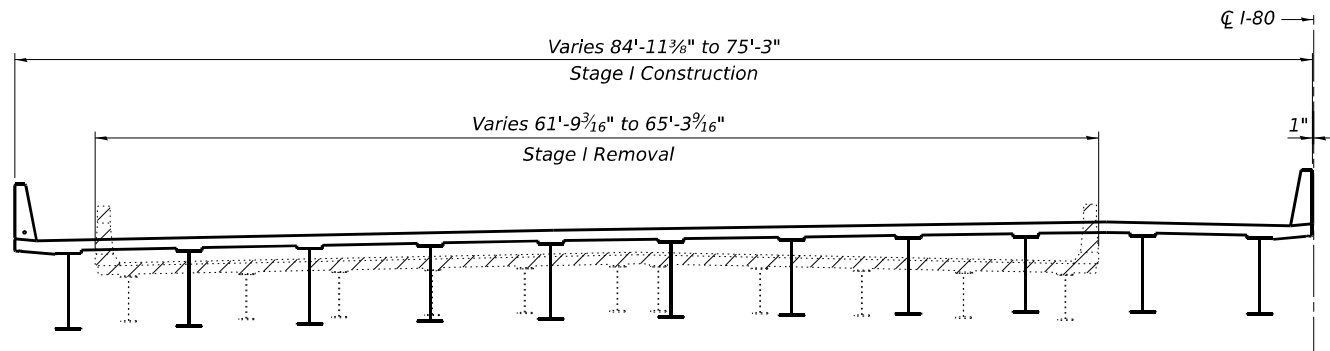
EB SUPERELEVATION DIAGRAM



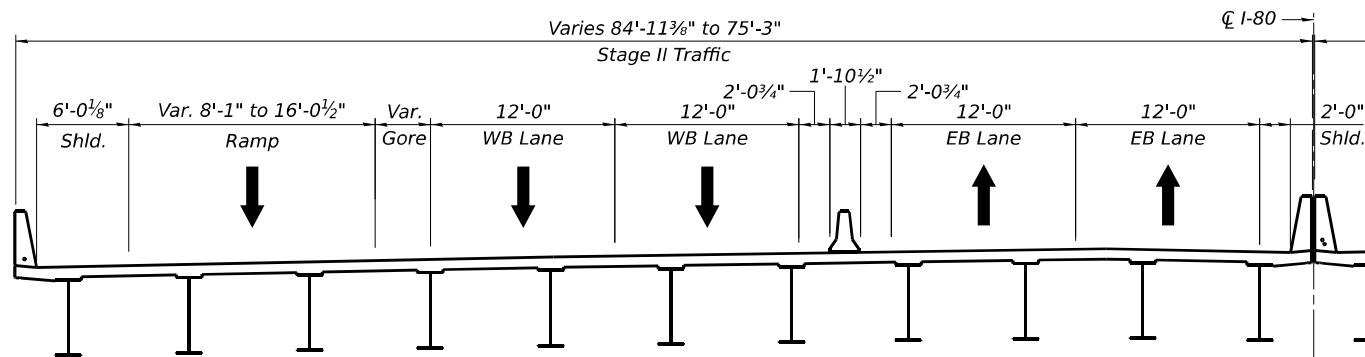
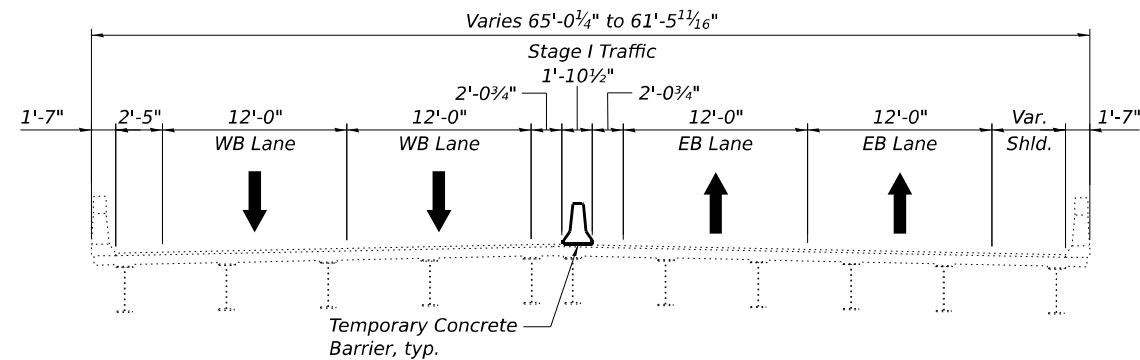
CHICAGO STREET SUPERELEVATION DIAGRAM

USER NAME =	DESIGNED - ECK	REVISED -
	CHECKED - GEK	REVISED -
PLOT SCALE =	DRAWN - ECK	REVISED -
PLOT DATE =	CHECKED - KMD	REVISED -

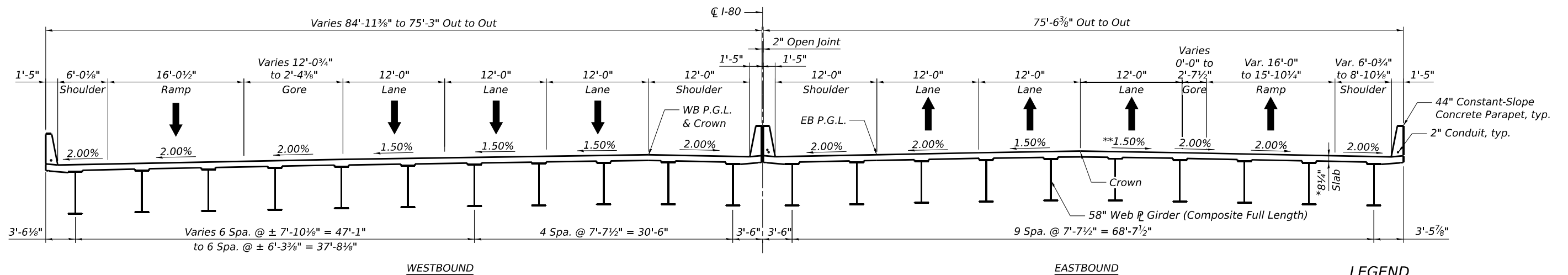
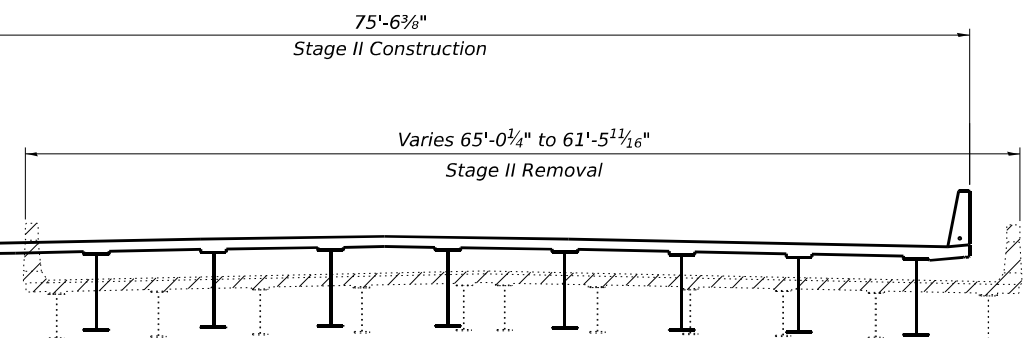
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	779
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



STAGE I CROSS SECTION
(Looking East)



STAGE II CROSS SECTION
(Looking East)



FINAL CROSS SECTION
(Looking East)

* Prior to Grinding.
** Varies from 0.29% to 1.50% on West Approach

NOTES:

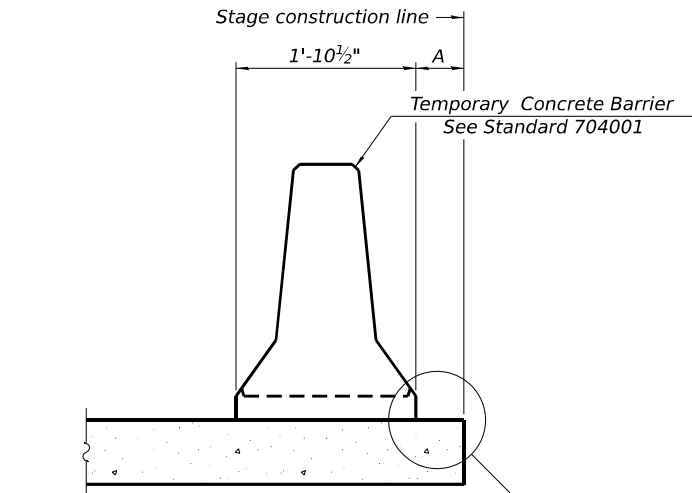
1. Out-to-Out dimensions are taken at intersection of back of abutment (Sta. 706+14.87 & Sta. 707+53.54) and CL I-80 .
2. Dimensions are measured at Rt. Ls to CL I-80 .
3. For Temporary Concrete Barrier details see Sheet SB-5 of SB-53.
4. See roadway plans for quantity of temporary concrete barrier and Type II Barricade or Drum.
5. See Sheet SB-39 & SB-40 of SB-53 for Stage Construction for MSE wall.

LEGEND

Removal of Existing Structures No. 3 or No. 4

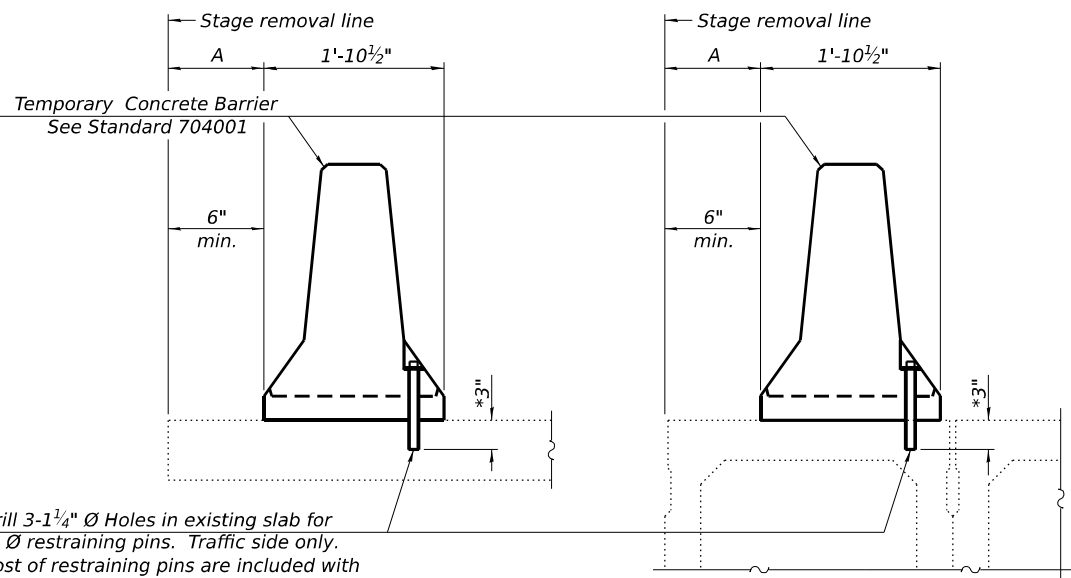
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		CHECKED - GEK	REVISED -
PLOT SCALE	=	DRAWN - ECK	REVISED -
PLOT DATE	=	CHECKED - KMD	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	780
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



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

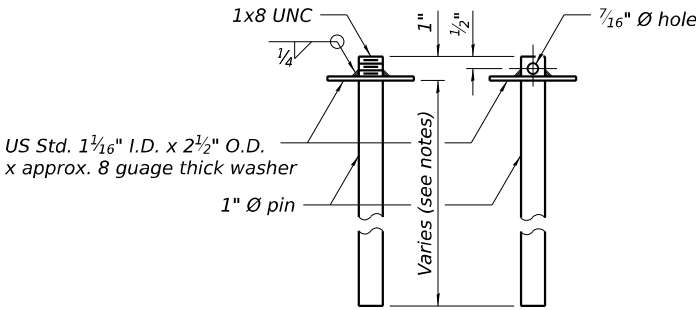


Drill 3-1 1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

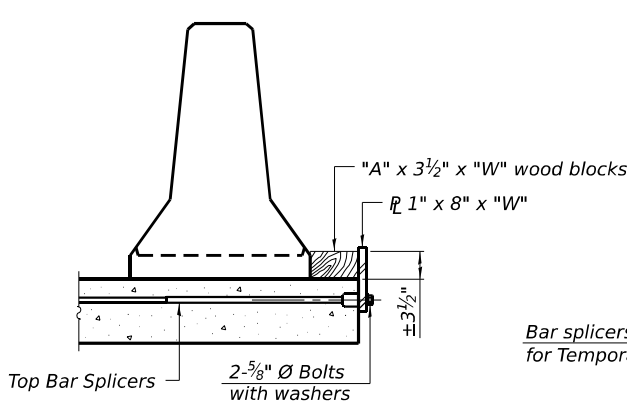
* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

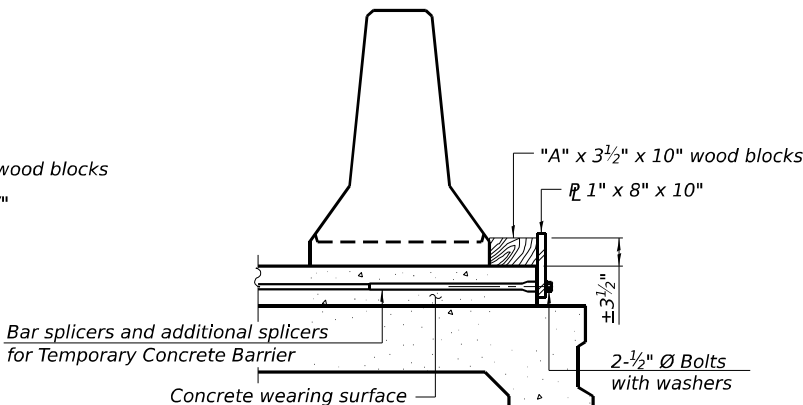


RESTRAINING PIN

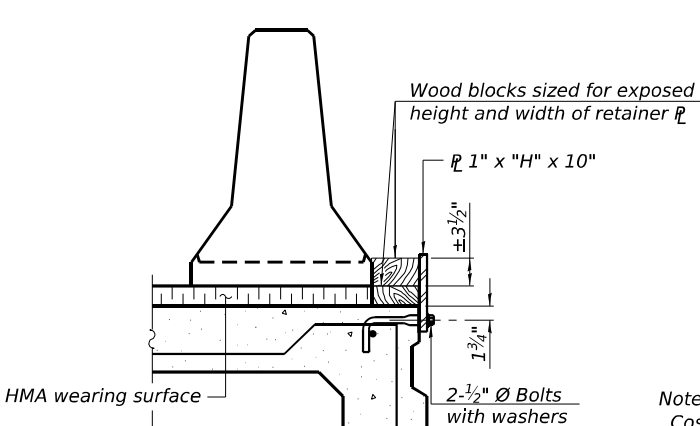
SECTIONS THRU SLAB OR DECK BEAM



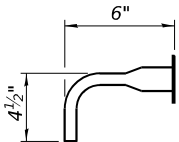
DETAIL I



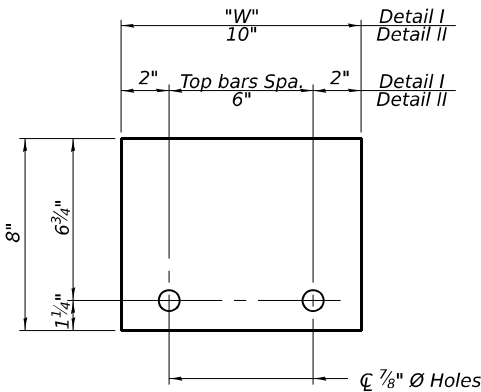
DETAIL II



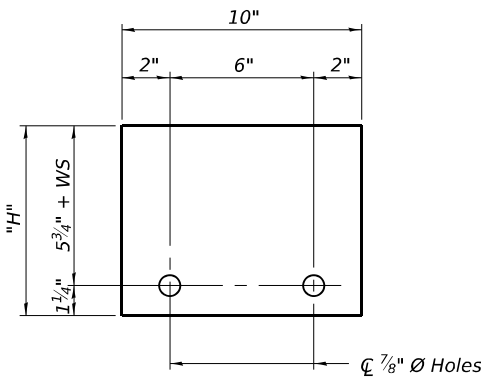
DETAIL III



BAR SPLICER FOR #4 BAR - DETAIL III



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



STEEL RETAINER R 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

5-15-2023



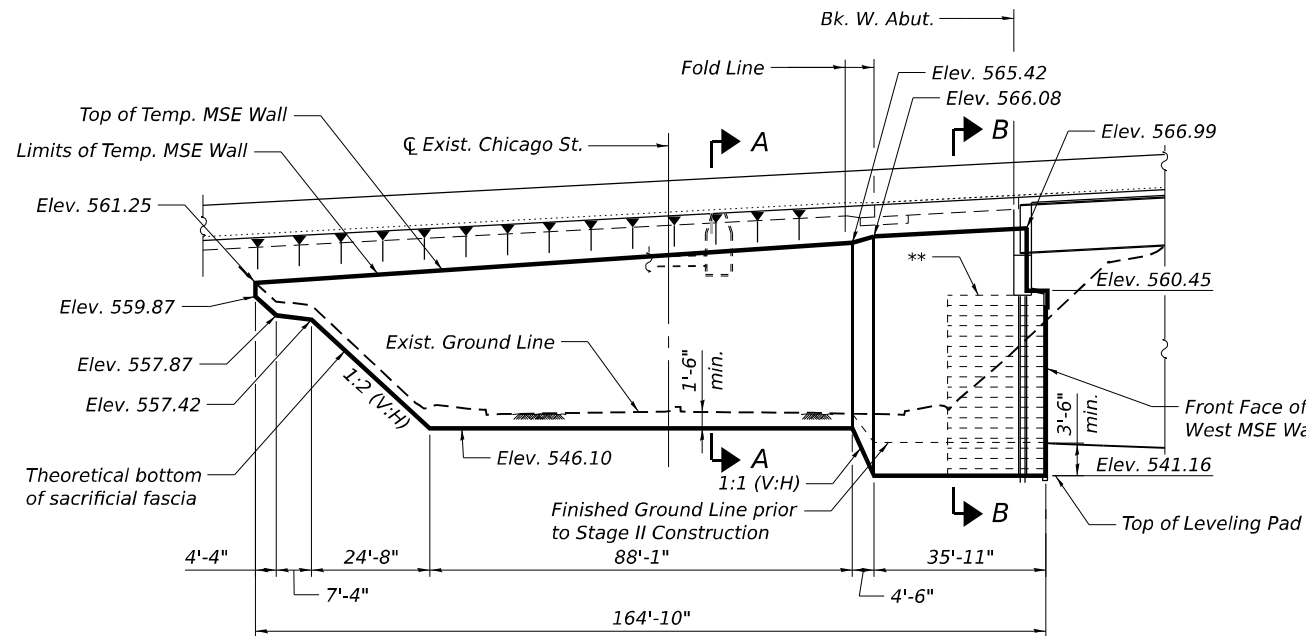
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		CHECKED - GEK	REVISED -
PLOT SCALE	=	DRAWN - ECK	REVISED -
PLOT DATE	=	CHECKED - IS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

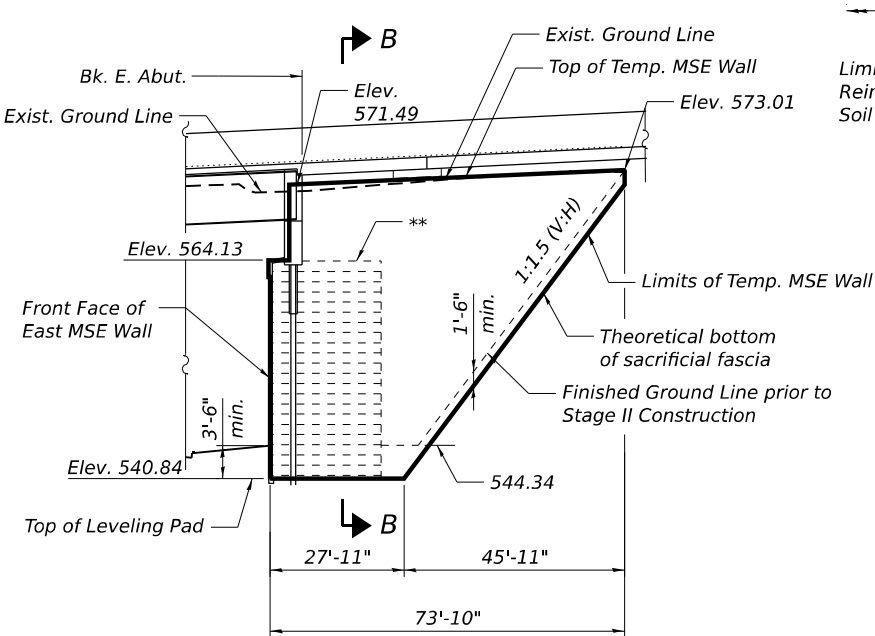
TEMPORARY CONCRETE BARRIER
STRUCTURE NO. 099-8310

SHEET SB-5 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	781
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

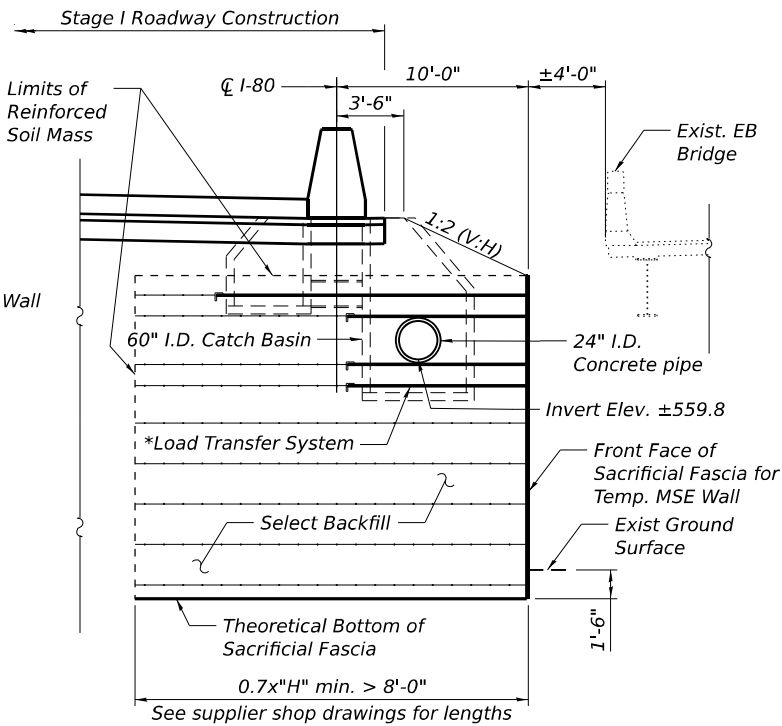


TEMP. MSE WALL 1 UNFOLDED ELEVATION
(Stage I Construction, Looking North)



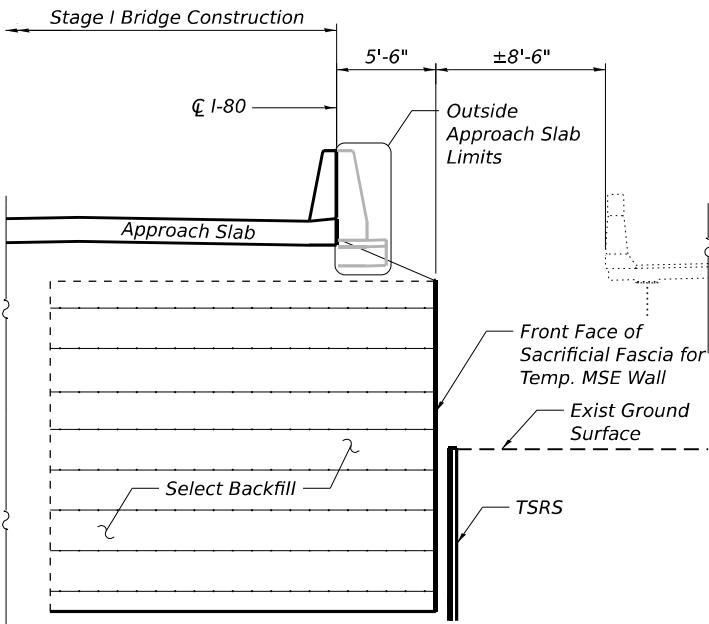
TEMP. MSE WALL 2 ELEVATION
(Stage I Construction, Looking North)

** Limits of Reinforced
Fill for permanent
MSE Wall



SECTION A-A

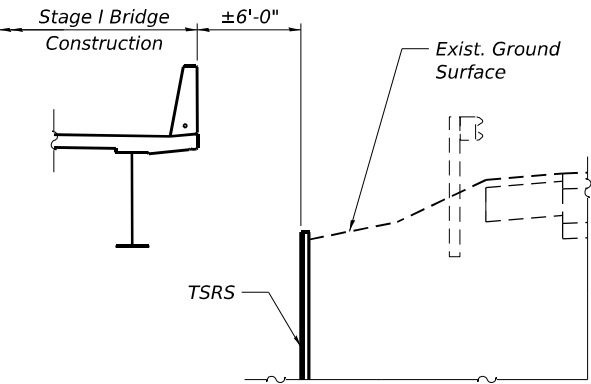
* MSE Wall supplier to design load transfer system to
accommodate concrete pipe and catch basin



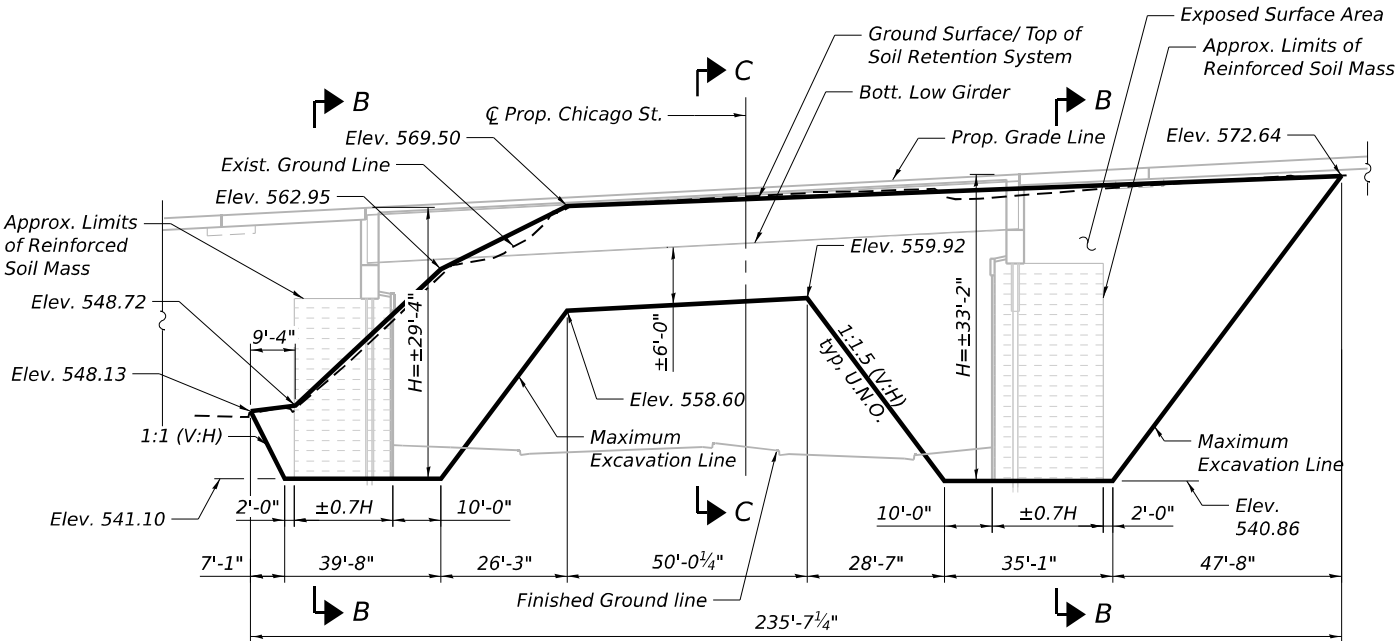
SECTION B-B

BILL OF MATERIAL

Item	Unit	Quantity
Temporary Soil Retention System	Sq. Ft.	3,905
Temporary Mechanically Stabilized Earth Retaining Wall	Sq. Ft.	4,496



SECTION C-C



TSRS ELEVATION

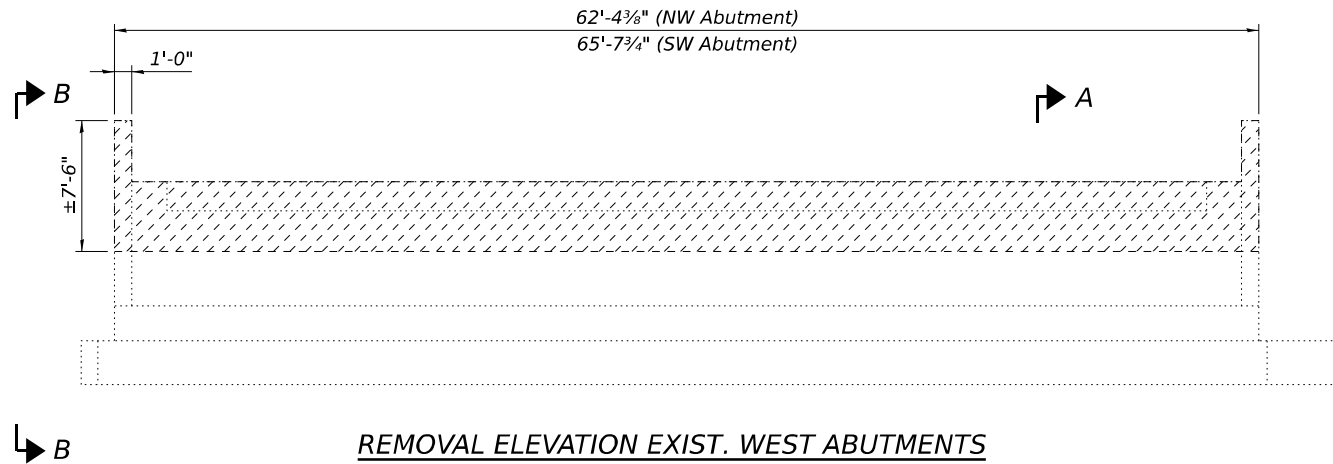
(Stage I Construction, Looking North)

NOTES:

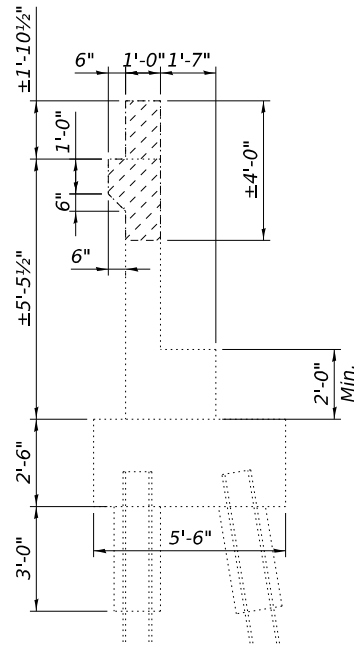
- Aggregate column ground improvement not shown for clarity.
- A cantilevered sheet piling design does not appear feasible and additional members or other retention systems may be necessary. The Contractor shall submit a temporary soil retention system design including plan details and calculations for review and acceptance by the Engineer.
- U.N.O. is abbreviation for Unless Noted Otherwise.

USER NAME =	DESIGNED - ECK	REVISED -
PLOT SCALE =	CHECKED - GEK	REVISED -
PLOT DATE =	DRAWN - ECK	REVISED -
	CHECKED - SLM	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	783
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

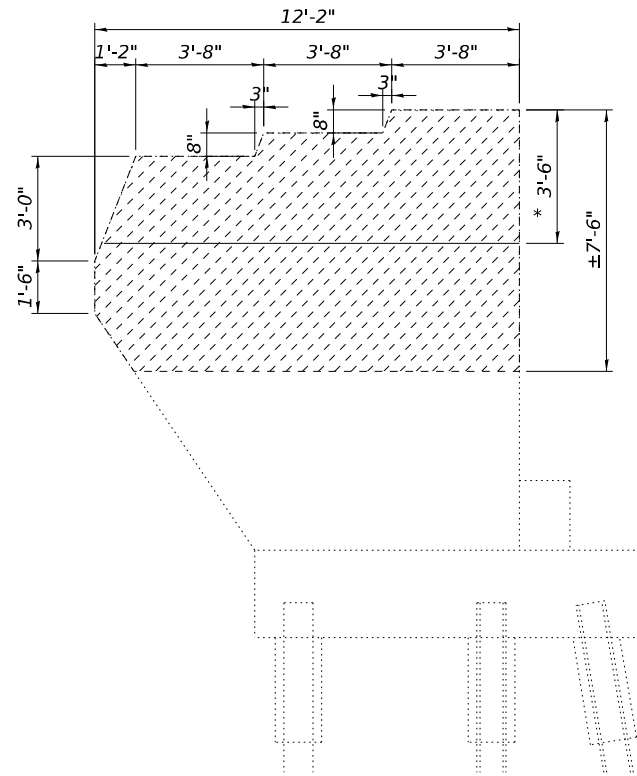


REMOVAL ELEVATION EXIST. WEST ABUTMENTS



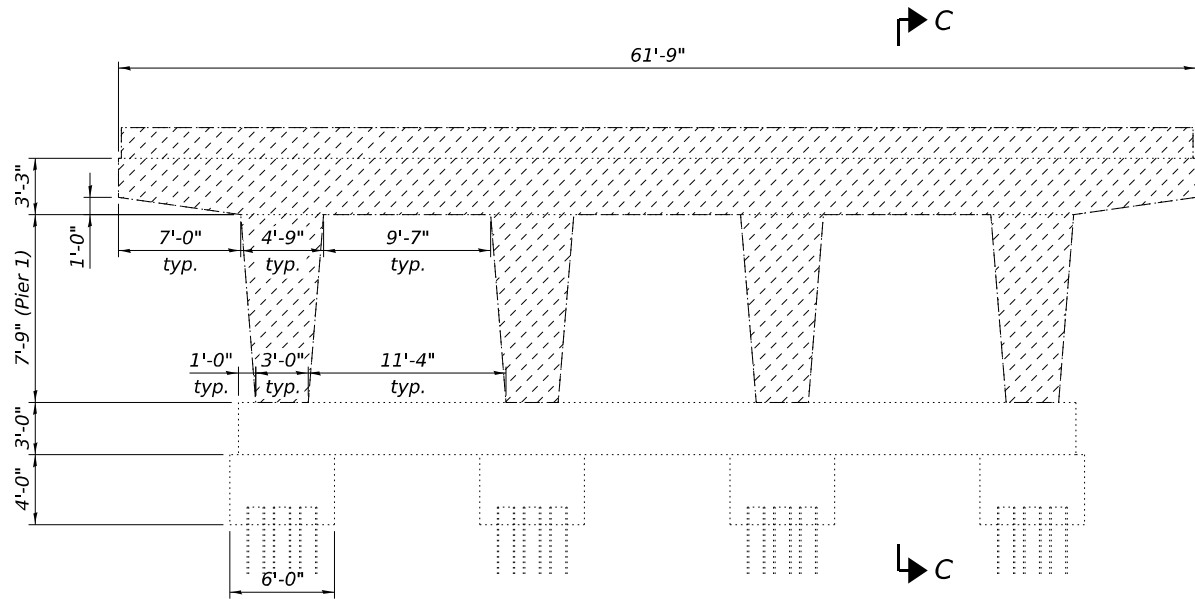
SECTION A-A

(Abutment Removal)



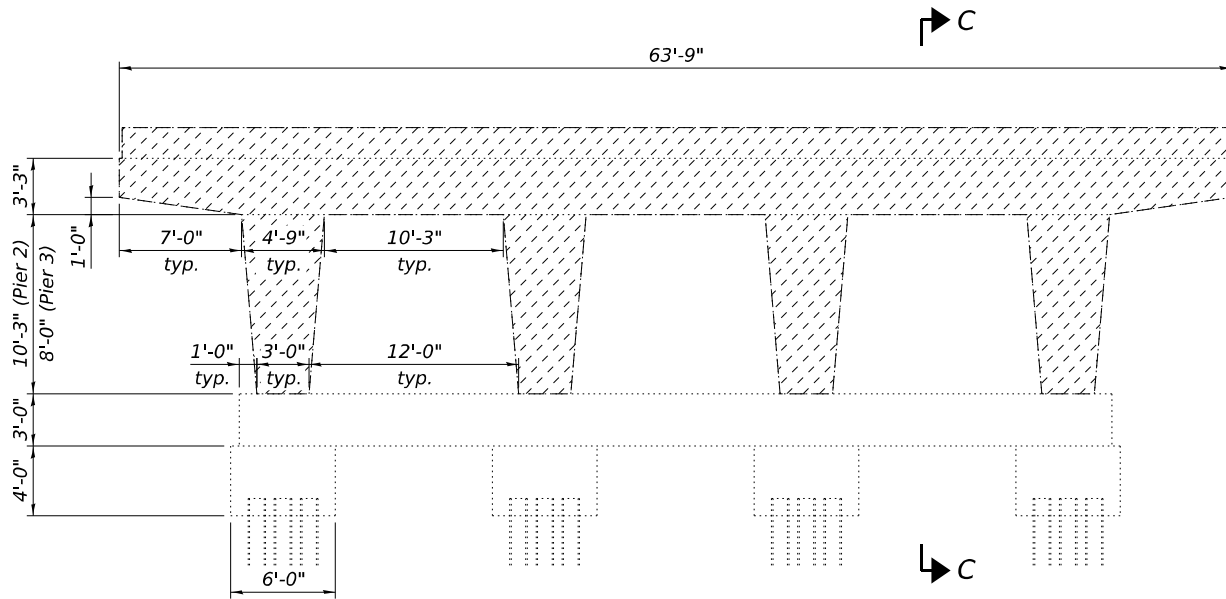
VIEW B-B

(*Wingwall Removal)



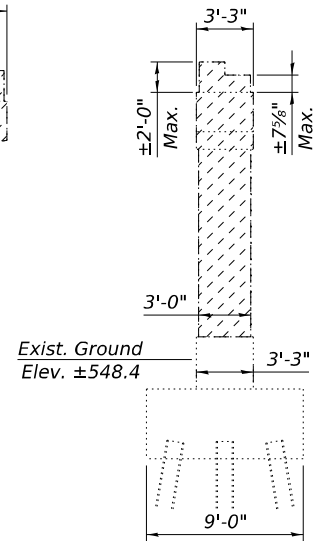
REMOVAL ELEVATION EXIST. PIER 1

(Looking East)



REMOVAL ELEVATION EXIST. PIER 2 & PIER 3

(Looking East)



SECTION C-C

(Pier Removal)

NOTES:

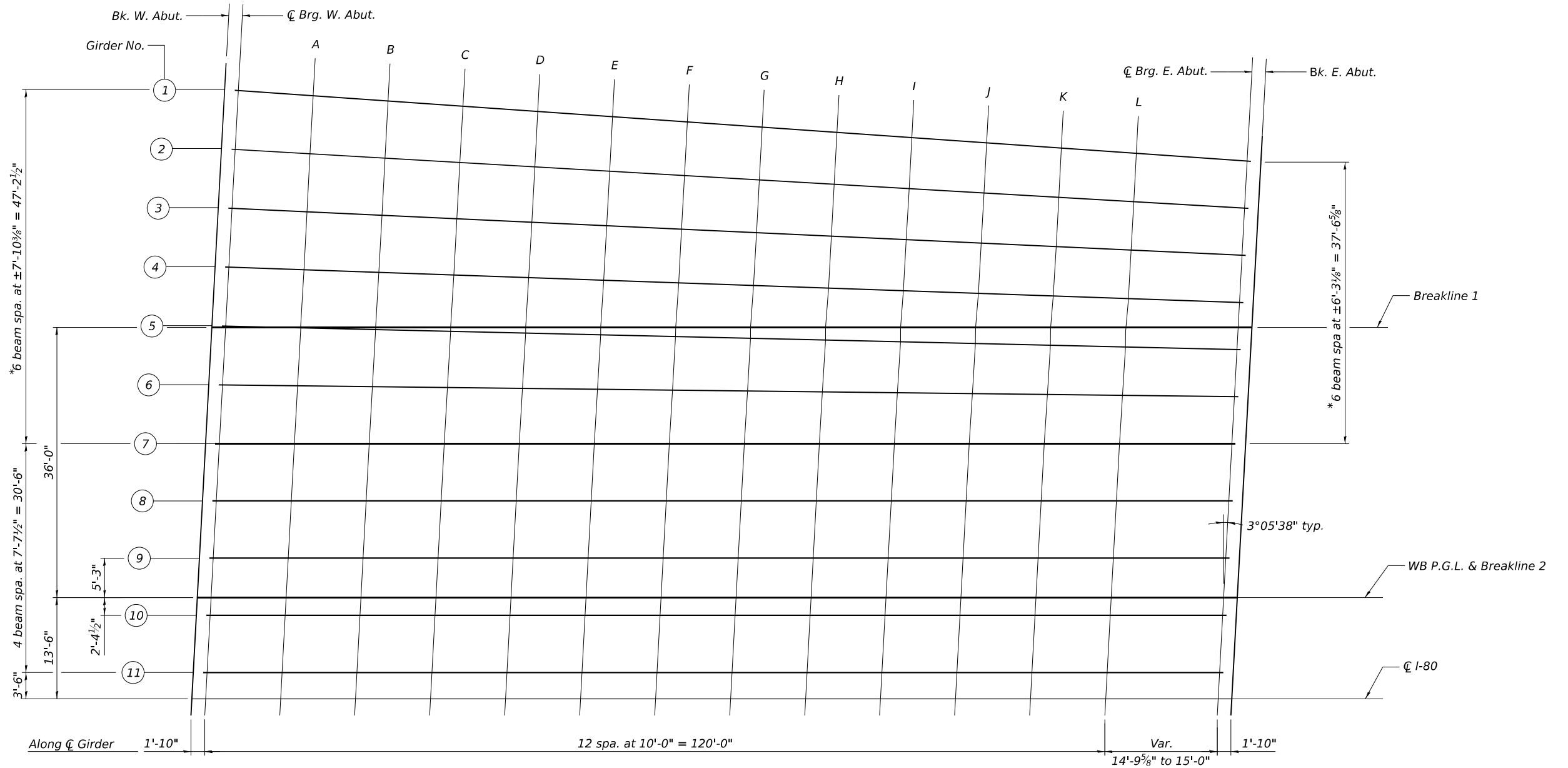
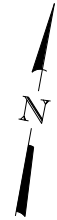
1. Exist. East Abutments and Pier 4 to be fully removed. Minimum removal limits of remaining substructure elements shown. Piles shall be cut a minimum of 1 foot below final ground elevation or subgrade, unless noted otherwise. Contractor may remove additional areas of existing structure as required for installation of MSE walls, and placement and compaction of embankment within limits of existing Chicago Street. Cost of additional removal areas included with Removal of Existing Structures No. 3 & 4.
2. See Sheet SB-6 of SB-53 for Pile Removal Locations.

LEGEND

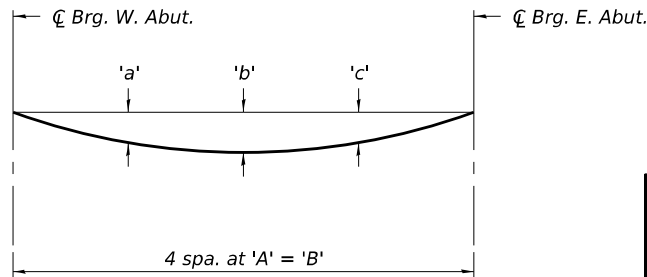
 Removal of Exist. Structures No. 3 or No. 4

USER NAME	=	DESIGNED - ECK	REVISED -
		CHECKED - GEK	REVISED -
PLOT SCALE	=	DRAWN - ECK	REVISED -
PLOT DATE	=	CHECKED - KMD	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	784
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		



PLAN

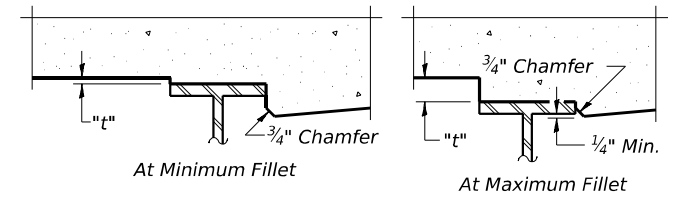


DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

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 SB-10 & SB-11 of SB-53 .

DEFLECTION DIAGRAM TABLE

Girder	A	B	a	b	c
1	±33'-8 ¹ / ₁₆ "	134'-9 ¹³ / ₁₆ "	3 ⁵ / ₈ "	5 ¹ / ₈ "	3 ⁵ / ₈ "
2	±33'-8 ¹ / ₁₆ "	134'-9 ⁹ / ₁₆ "	3 ³ / ₈ "	4 ⁵ / ₈ "	3 ³ / ₈ "
3	±33'-8 ¹ / ₁₆ "	134'-9 ¹¹ / ₁₆ "	3 ³ / ₈ "	4 ⁵ / ₈ "	3 ³ / ₈ "
4	±33'-8 ¹ / ₂ "	134'-9 ¹⁵ / ₁₆ "	3"	4 ¹ / ₈ "	2 ⁷ / ₈ "
5	±33'-8 ³ / ₈ "	134'-10 ³ / ₈ "			
6	±33'-8 ³ / ₄ "	134'-11 ¹ / ₁₆ "	3 ¹ / ₈ "	4 ¹ / ₄ "	3"
7	33'-9"	135'-0"	3 ¹ / ₈ "	4 ¹ / ₄ "	3"
8	33'-9"	135'-0"	3 ¹ / ₄ "	4 ³ / ₈ "	3 ¹ / ₄ "
9 & 10	33'-9"	135'-0"	3 ⁵ / ₈ "	5"	3 ⁵ / ₈ "
11	33'-9"	135'-0"	3 ³ / ₄ "	5 ¹ / ₄ "	3 ³ / ₄ "



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding", on Sheets SB-10 thru SB-11 of SB-53, 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" on Sheets SB-10 thru SB-11 of SB-53. For grinding the deck, see Special Provisions.

FILLET HEIGHTS

USER NAME =	DESIGNED - ECK	REVISED -
	CHECKED - GEK	REVISED -
PLOT SCALE =	DRAWN - ECK	REVISED -
PLOT DATE =	CHECKED - KMD	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	785
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: 0098310-62F9+010-WT05E1.dgn

GIRDER 1				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+19.26	-81.21	569.32	569.34
⌒ Brg. W. Abut.	706+21.09	-81.08	569.37	569.39
A	706+31.07	-80.39	569.65	569.77
B	706+41.04	-79.69	569.93	570.14
C	706+51.02	-78.99	570.20	570.50
D	706+60.99	-78.29	570.48	570.85
E	706+70.97	-77.60	570.76	571.17
F	706+80.95	-76.90	571.04	571.47
G	706+90.92	-76.20	571.31	571.76
H	707+00.90	-75.50	571.59	572.02
I	707+10.87	-74.81	571.87	572.26
J	707+20.85	-74.11	572.14	572.48
K	707+30.82	-73.41	572.41	572.67
L	707+40.80	-72.71	572.67	572.84
⌒ Brg. E. Abut.	707+55.58	-71.68	573.05	573.07
Bk. E. Abut.	707+57.41	-71.55	573.10	573.12

GIRDER 4				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+17.98	-57.61	569.76	569.78
⌒ Brg. W. Abut.	706+19.82	-57.54	569.81	569.83
A	706+29.81	-57.19	570.08	570.18
B	706+39.81	-56.84	570.35	570.53
C	706+49.80	-56.50	570.62	570.87
D	706+59.79	-56.15	570.89	571.19
E	706+69.79	-55.80	571.16	571.50
F	706+79.78	-55.45	571.43	571.79
G	706+89.78	-55.10	571.71	572.06
H	706+99.77	-54.75	571.98	572.32
I	707+09.76	-54.40	572.25	572.56
J	707+19.76	-54.05	572.51	572.79
K	707+29.75	-53.71	572.78	572.99
L	707+39.75	-53.36	573.03	573.17
⌒ Brg. E. Abut.	707+54.56	-52.84	573.40	573.42
Bk. E. Abut.	707+56.39	-52.78	573.45	573.47

GIRDER 6				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+17.13	-41.87	570.01	570.03
⌒ Brg. W. Abut.	706+18.97	-41.85	570.06	570.08
A	706+28.97	-41.73	570.33	570.43
B	706+38.97	-41.61	570.59	570.77
C	706+48.97	-41.50	570.86	571.11
D	706+58.97	-41.38	571.13	571.42
E	706+68.97	-41.27	571.39	571.73
F	706+78.97	-41.15	571.66	572.01
G	706+88.96	-41.03	571.92	572.28
H	706+98.96	-40.92	572.19	572.53
I	707+08.96	-40.80	572.45	572.77
J	707+18.96	-40.69	572.72	572.99
K	707+28.96	-40.57	572.97	573.19
L	707+38.96	-40.45	573.23	573.37
⌒ Brg. E. Abut.	707+53.88	-40.28	573.59	573.61
Bk. E. Abut.	707+55.72	-40.26	573.64	573.66

GIRDER 2				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+18.83	-73.34	569.47	569.49
⌒ Brg. W. Abut.	706+20.67	-73.24	569.52	569.54
A	706+30.65	-72.66	569.79	569.91
B	706+40.63	-72.07	570.07	570.27
C	706+50.62	-71.49	570.34	570.62
D	706+60.60	-70.91	570.62	570.96
E	706+70.58	-70.33	570.89	571.28
F	706+80.57	-69.75	571.17	571.58
G	706+90.55	-69.17	571.44	571.85
H	707+00.53	-68.59	571.72	572.12
I	707+10.52	-68.00	571.99	572.36
J	707+20.50	-67.42	572.27	572.58
K	707+30.48	-66.84	572.53	572.77
L	707+40.46	-66.26	572.79	572.95
⌒ Brg. E. Abut.	707+55.24	-65.40	573.17	573.19
Bk. E. Abut.	707+57.07	-65.29	573.21	573.23

BREAKLINE 1				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+17.55	-49.50	569.91	569.93
⌒ Brg. W. Abut.	706+19.38	-49.50	569.96	569.98
A	706+29.38	-49.50	570.22	570.33
B	706+39.38	-49.50	570.49	570.67
C	706+49.38	-49.50	570.75	571.00
D	706+59.38	-49.50	571.01	571.31
E	706+69.38	-49.50	571.28	571.61
F	706+79.38	-49.50	571.54	571.90
G	706+89.38	-49.50	571.81	572.17
H	706+99.38	-49.50	572.07	572.42
I	707+09.38	-49.50	572.33	572.65
J	707+19.38	-49.50	572.60	572.87
K	707+29.38	-49.50	572.85	573.06
L	707+39.38	-49.50	573.10	573.24
⌒ Brg. E. Abut.	707+54.38	-49.50	573.47	573.49
Bk. E. Abut.	707+56.22	-49.50	573.51	573.53

GIRDER 7				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+16.71	-34.00	570.12	570.14
⌒ Brg. W. Abut.	706+18.54	-34.00	570.17	570.19
A	706+28.54	-34.00	570.43	570.54
B	706+38.54	-34.00	570.70	570.88
C	706+48.54	-34.00	570.96	571.21
D	706+58.54	-34.00	571.22	571.53
E	706+68.54	-34.00	571.49	571.84
F	706+78.54	-34.00	571.75	572.12
G	706+88.54	-34.00	572.02	572.39
H	706+98.54	-34.00	572.28	572.64
I	707+08.54	-34.00	572.55	572.88
J	707+18.54	-34.00	572.81	573.09
K	707+28.54	-34.00	573.06	573.28
L	707+38.54	-34.00	573.31	573.46
⌒ Brg. E. Abut.	707+53.54	-34.00	573.68	573.70
Bk. E. Abut.	707+55.38	-34.00	573.72	573.74

GIRDER 3				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+18.41	-65.47	569.61	569.63
⌒ Brg. W. Abut.	706+20.24	-65.39	569.66	569.68
A	706+30.23	-64.92	569.94	570.05
B	706+40.22	-64.46	570.21	570.41
C	706+50.21	-63.99	570.48	570.76
D	706+60.20	-63.53	570.76	571.10
E	706+70.19	-63.06	571.03	571.41
F	706+80.18	-62.60	571.30	571.71
G	706+90.17	-62.13	571.57	571.99
H	707+00.16	-61.67	571.85	572.24
I	707+10.15	-61.20	572.12	572.48
J	707+20.14	-60.74	572.39	572.70
K	707+30.12	-60.27	572.65	572.89
L	707+40.11	-59.81	572.91	573.07
⌒ Brg. E. Abut.	707+54.90	-59.12	573.29	573.31
Bk. E. Abut.	707+56.73	-59.03	573.33	573.35

GIRDER 5				
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+17.56	-49.74	569.90	569.93
⌒ Brg. W. Abut.	706+19.39	-49.69	569.95	569.98
A	706+29.39	-49.46	570.22	570.33
B	706+39.39	-49.23	570.49	570.67
C	706+49.39	-49.00	570.76	571.00
D	706+59.38	-48.76	571.03	571.32
E	706+69.38	-48.53	571.29	571.63
F	706+79.38	-48.30	571.56	571.92
G	706+89.38	-48.07	571.83	572.19
H	706+99.37	-47.84	572.10	572.44
I	707+09.37	-47.60	572.36	572.68
J	707+19.37	-47.37	572.63	572.90
K	707+29.36	-47.14	572.89	573.10
L	707+39.36	-46.91	573.14	573.28
⌒ Brg. E. Abut.	707+54.22	-46.56	573.51	573.53
Bk. E. Abut.	707+56.06	-46.52	573.55	573.57

NOTE:

1. Offsets are measured in feet and are given relative to ⌒ I-80.

MODEL: Default
FILE NAME: 0998310-62F9+011-WT05E2.dgn



USER NAME	=	DESIGNED	-	ECK	REVISED	-
		CHECKED	-	GEK	REVISED	-
PLOT SCALE	=	DRAWN	-	ECK	REVISED	-
PLOT DATE	=	CHECKED	-	KMD	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK SLAB ELEVATIONS II - WB
STRUCTURE NO. 099-8310

SHEET SB-11 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	787
CONTRACT NO. 62F94				
		ILLINOIS	FED. AID PROJECT	

GIRDER 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+16.30	-26.38	570.22	570.24
⌒ Brg. W. Abut.	706+18.13	-26.38	570.27	570.29
A	706+28.13	-26.38	570.54	570.65
B	706+38.13	-26.38	570.80	570.99
C	706+48.13	-26.38	571.06	571.33
D	706+58.13	-26.38	571.33	571.65
E	706+68.13	-26.38	571.59	571.95
F	706+78.13	-26.38	571.86	572.24
G	706+88.13	-26.38	572.12	572.51
H	706+98.13	-26.38	572.38	572.76
I	707+08.13	-26.38	572.65	572.99
J	707+18.13	-26.38	572.91	573.20
K	707+28.13	-26.38	573.17	573.39
L	707+38.13	-26.38	573.42	573.57
⌒ Brg. E. Abut.	707+53.13	-26.38	573.78	573.80
Bk. E. Abut.	707+54.97	-26.38	573.83	573.85

GIRDER 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+15.47	-11.13	570.35	570.37
⌒ Brg. W. Abut.	706+17.31	-11.13	570.40	570.42
A	706+27.31	-11.13	570.66	570.78
B	706+37.31	-11.13	570.92	571.14
C	706+47.31	-11.13	571.19	571.48
D	706+57.31	-11.13	571.45	571.81
E	706+67.31	-11.13	571.72	572.12
F	706+77.31	-11.13	571.98	572.41
G	706+87.31	-11.13	572.24	572.68
H	706+97.31	-11.13	572.51	572.93
I	707+07.31	-11.13	572.77	573.16
J	707+17.31	-11.13	573.03	573.37
K	707+27.31	-11.13	573.29	573.55
L	707+37.31	-11.13	573.54	573.71
⌒ Brg. E. Abut.	707+52.31	-11.13	573.91	573.93
Bk. E. Abut.	707+54.14	-11.13	573.95	573.97

GIRDER 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+15.88	-18.75	570.33	570.35
⌒ Brg. W. Abut.	706+17.72	-18.75	570.38	570.40
A	706+27.72	-18.75	570.64	570.76
B	706+37.72	-18.75	570.90	571.12
C	706+47.72	-18.75	571.17	571.46
D	706+57.72	-18.75	571.43	571.79
E	706+67.72	-18.75	571.70	572.10
F	706+77.72	-18.75	571.96	572.39
G	706+87.72	-18.75	572.22	572.66
H	706+97.72	-18.75	572.49	572.91
I	707+07.72	-18.75	572.75	573.14
J	707+17.72	-18.75	573.01	573.35
K	707+27.72	-18.75	573.27	573.53
L	707+37.72	-18.75	573.52	573.69
⌒ Brg. E. Abut.	707+52.72	-18.75	573.89	573.91
Bk. E. Abut.	707+54.56	-18.75	573.93	573.95

GIRDER 11

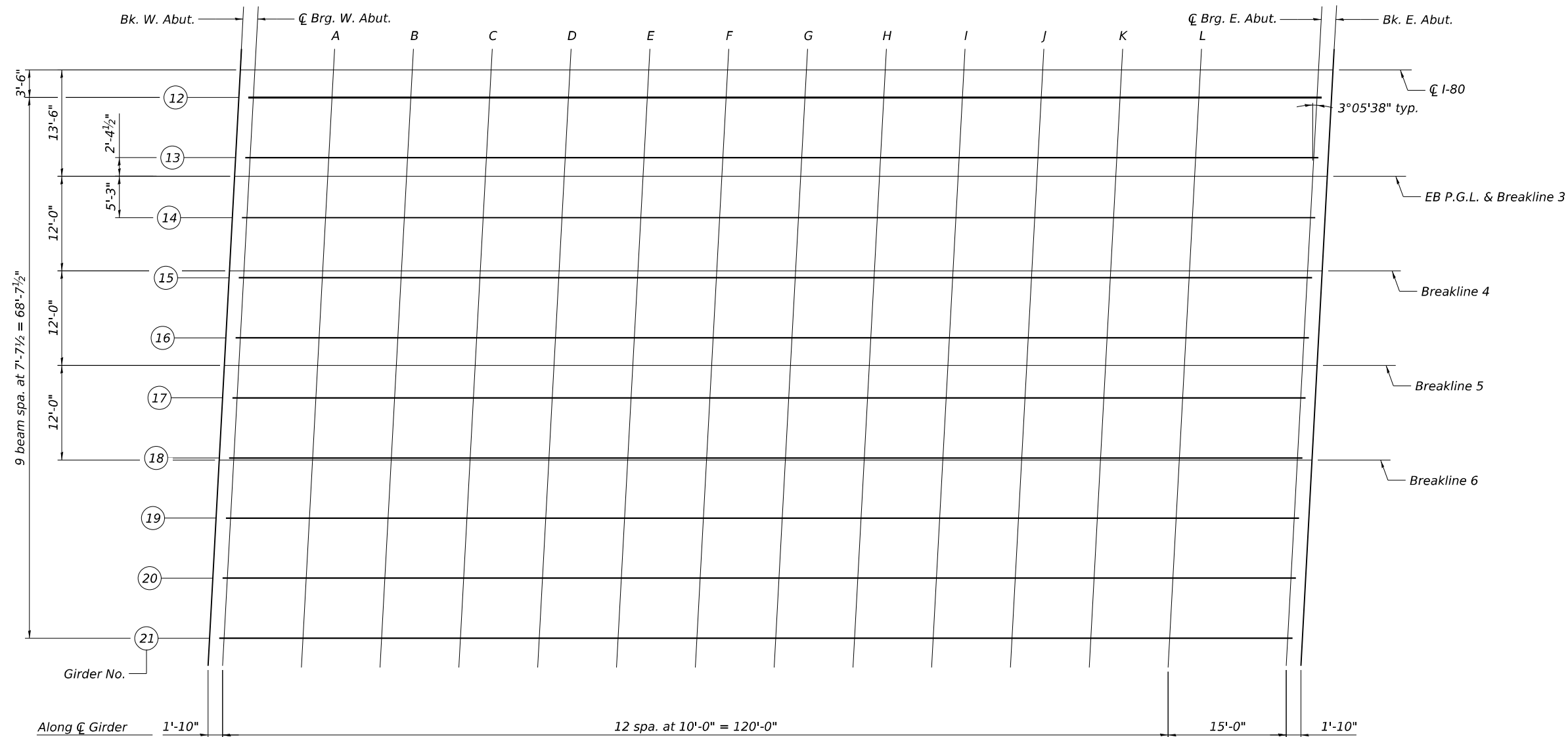
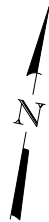
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+15.06	-3.50	570.18	570.20
⌒ Brg. W. Abut.	706+16.90	-3.50	570.23	570.25
A	706+26.90	-3.50	570.50	570.62
B	706+36.90	-3.50	570.76	570.98
C	706+46.90	-3.50	571.02	571.33
D	706+56.90	-3.50	571.29	571.66
E	706+66.90	-3.50	571.55	571.98
F	706+76.90	-3.50	571.82	572.27
G	706+86.90	-3.50	572.08	572.54
H	706+96.90	-3.50	572.35	572.78
I	707+06.90	-3.50	572.61	573.01
J	707+16.90	-3.50	572.87	573.22
K	707+26.90	-3.50	573.13	573.40
L	707+36.90	-3.50	573.38	573.55
⌒ Brg. E. Abut.	707+51.90	-3.50	573.75	573.77
Bk. E. Abut.	707+53.73	-3.50	573.79	573.81

WB P.G.L. & BREAKLINE 2

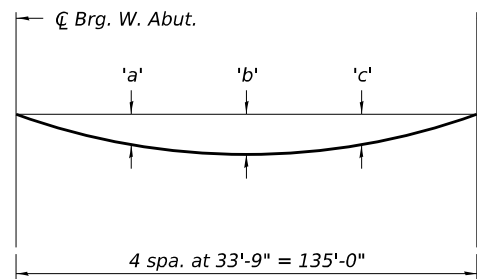
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+15.60	-13.50	570.40	570.42
⌒ Brg. W. Abut.	706+17.44	-13.50	570.45	570.47
A	706+27.44	-13.50	570.71	570.83
B	706+37.44	-13.50	570.97	571.19
C	706+47.44	-13.50	571.24	571.54
D	706+57.44	-13.50	571.50	571.87
E	706+67.44	-13.50	571.77	572.17
F	706+77.44	-13.50	572.03	572.46
G	706+87.44	-13.50	572.30	572.73
H	706+97.44	-13.50	572.56	572.98
I	707+07.44	-13.50	572.82	573.21
J	707+17.44	-13.50	573.08	573.42
K	707+27.44	-13.50	573.34	573.60
L	707+37.44	-13.50	573.59	573.76
⌒ Brg. E. Abut.	707+52.44	-13.50	573.96	573.98
Bk. E. Abut.	707+54.27	-13.50	574.00	574.02

NOTE:

1. Offsets are measured in feet and are given relative to ⌒ I-80.



PLAN

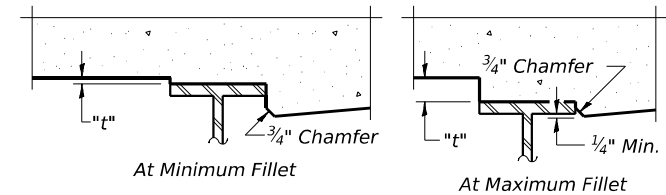


DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

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 SB-13 & SB-14 of SB-53 .

DEFLECTION DIAGRAM TABLE

Girder	a	b	c
12 & 21	3 3/4"	5 1/4"	3 3/4"
13,14,19 & 20	3 5/8"	5"	3 5/8"
15,16,17 & 18	3 1/4"	4 3/8"	3 1/4"



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection and Grinding" shown, on Sheets SB-13 thru SB-14 of SB-53, 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" on Sheets SB-13 thru SB-14 of SB-53 . For grinding the deck, see Special Provisions.

FILLET HEIGHTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK SLAB ELEVATIONS LAYOUT - EB
STRUCTURE NO. 099-8310

SHEET SB-12 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	788
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: Default
FILE NAME: 0098310-62F94-013-ETOSL.dgn

GIRDER 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+14.68	3.50	570.17	570.19
☐ Brg. W. Abut.	706+16.52	3.50	570.22	570.24
A	706+26.52	3.50	570.49	570.61
B	706+36.52	3.50	570.75	570.97
C	706+46.52	3.50	571.01	571.32
D	706+56.52	3.50	571.28	571.65
E	706+66.52	3.50	571.54	571.97
F	706+76.52	3.50	571.81	572.26
G	706+86.52	3.50	572.07	572.53
H	706+96.52	3.50	572.34	572.77
I	707+06.52	3.50	572.60	573.00
J	707+16.52	3.50	572.86	573.21
K	707+26.52	3.50	573.12	573.39
L	707+36.52	3.50	573.37	573.54
☐ Brg. E. Abut.	707+51.52	3.50	573.74	573.76
Bk. E. Abut.	707+53.35	3.50	573.78	573.80

GIRDER 14

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+13.86	18.75	570.46	570.48
☐ Brg. W. Abut.	706+15.69	18.75	570.51	570.53
A	706+25.69	18.75	570.77	570.89
B	706+35.69	18.75	571.03	571.25
C	706+45.69	18.75	571.30	571.59
D	706+55.69	18.75	571.56	571.92
E	706+65.69	18.75	571.83	572.23
F	706+75.69	18.75	572.09	572.52
G	706+85.69	18.75	572.35	572.79
H	706+95.69	18.75	572.62	573.04
I	707+05.69	18.75	572.88	573.27
J	707+15.69	18.75	573.14	573.48
K	707+25.69	18.75	573.40	573.66
L	707+35.69	18.75	573.65	573.82
☐ Brg. E. Abut.	707+50.69	18.75	574.02	574.04
Bk. E. Abut.	707+52.53	18.75	574.07	574.09

GIRDER 16

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+13.03	34.00	570.70	570.72
☐ Brg. W. Abut.	706+14.87	34.00	570.75	570.77
A	706+24.87	34.00	571.01	571.12
B	706+34.87	34.00	571.27	571.47
C	706+44.87	34.00	571.54	571.80
D	706+54.87	34.00	571.80	572.12
E	706+64.87	34.00	572.07	572.43
F	706+74.87	34.00	572.33	572.71
G	706+84.87	34.00	572.59	572.98
H	706+94.87	34.00	572.86	573.23
I	707+04.87	34.00	573.12	573.47
J	707+14.87	34.00	573.39	573.68
K	707+24.87	34.00	573.64	573.87
L	707+34.87	34.00	573.90	574.05
☐ Brg. E. Abut.	707+49.87	34.00	574.26	574.29
Bk. E. Abut.	707+51.70	34.00	574.31	574.33

GIRDER 13

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+14.27	11.13	570.32	570.34
☐ Brg. W. Abut.	706+16.10	11.13	570.36	570.38
A	706+26.10	11.13	570.63	570.75
B	706+36.10	11.13	570.89	571.11
C	706+46.10	11.13	571.16	571.45
D	706+56.10	11.13	571.42	571.78
E	706+66.10	11.13	571.68	572.09
F	706+76.10	11.13	571.95	572.38
G	706+86.10	11.13	572.21	572.65
H	706+96.10	11.13	572.48	572.90
I	707+06.10	11.13	572.74	573.13
J	707+16.10	11.13	573.00	573.34
K	707+26.10	11.13	573.26	573.52
L	707+36.10	11.13	573.51	573.68
☐ Brg. E. Abut.	707+51.10	11.13	573.88	573.90
Bk. E. Abut.	707+52.94	11.13	573.92	573.94

BREAKLINE 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+13.49	25.50	570.58	570.60
☐ Brg. W. Abut.	706+15.33	25.50	570.63	570.65
A	706+25.33	25.50	570.89	571.01
B	706+35.33	25.50	571.16	571.35
C	706+45.33	25.50	571.42	571.69
D	706+55.33	25.50	571.69	572.01
E	706+65.33	25.50	571.95	572.32
F	706+75.33	25.50	572.22	572.60
G	706+85.33	25.50	572.48	572.87
H	706+95.33	25.50	572.74	573.12
I	707+05.33	25.50	573.01	573.36
J	707+15.33	25.50	573.27	573.57
K	707+25.33	25.50	573.53	573.76
L	707+35.33	25.50	573.78	573.93
☐ Brg. E. Abut.	707+50.33	25.50	574.15	574.17
Bk. E. Abut.	707+52.16	25.50	574.19	574.21

BREAKLINE 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+12.84	37.50	570.75	570.77
☐ Brg. W. Abut.	706+14.68	37.50	570.79	570.81
A	706+24.68	37.50	571.06	571.17
B	706+34.68	37.50	571.32	571.51
C	706+44.68	37.50	571.59	571.85
D	706+54.68	37.50	571.85	572.17
E	706+64.68	37.50	572.11	572.47
F	706+74.68	37.50	572.38	572.76
G	706+84.68	37.50	572.64	573.03
H	706+94.68	37.50	572.91	573.28
I	707+04.68	37.50	573.17	573.51
J	707+14.68	37.50	573.43	573.73
K	707+24.68	37.50	573.69	573.92
L	707+34.68	37.50	573.94	574.09
☐ Brg. E. Abut.	707+49.68	37.50	574.31	574.33
Bk. E. Abut.	707+51.51	37.50	574.36	574.38

EB P.G.L. & BREAKLINE 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+14.14	13.50	570.36	570.38
☐ Brg. W. Abut.	706+15.98	13.50	570.41	570.43
A	706+25.98	13.50	570.67	570.79
B	706+35.98	13.50	570.94	571.15
C	706+45.98	13.50	571.20	571.50
D	706+55.98	13.50	571.46	571.83
E	706+65.98	13.50	571.73	572.14
F	706+75.98	13.50	571.99	572.43
G	706+85.98	13.50	572.26	572.69
H	706+95.98	13.50	572.52	572.94
I	707+05.98	13.50	572.79	573.17
J	707+15.98	13.50	573.05	573.38
K	707+25.98	13.50	573.30	573.56
L	707+35.98	13.50	573.56	573.72
☐ Brg. E. Abut.	707+50.98	13.50	573.92	573.94
Bk. E. Abut.	707+52.81	13.50	573.97	573.99

GIRDER 15

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+13.44	26.38	570.59	570.61
☐ Brg. W. Abut.	706+15.28	26.38	570.64	570.66
A	706+25.28	26.38	570.91	571.02
B	706+35.28	26.38	571.17	571.36
C	706+45.28	26.38	571.43	571.70
D	706+55.28	26.38	571.70	572.02
E	706+65.28	26.38	571.96	572.32
F	706+75.28	26.38	572.23	572.61
G	706+85.28	26.38	572.49	572.88
H	706+95.28	26.38	572.76	573.13
I	707+05.28	26.38	573.02	573.36
J	707+15.28	26.38	573.28	573.58
K	707+25.28	26.38	573.54	573.77
L	707+35.28	26.38	573.79	573.94
☐ Brg. E. Abut.	707+50.28	26.38	574.16	574.18
Bk. E. Abut.	707+52.12	26.38	574.20	574.23

NOTE:

1. Offsets are measured in feet and are given relative to ☐ I-80.

GIRDER 17

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+12.62	41.63	570.68	570.70
☐ Brg. W. Abut.	706+14.46	41.63	570.73	570.75
A	706+24.46	41.63	570.99	571.10
B	706+34.46	41.63	571.25	571.45
C	706+44.46	41.63	571.52	571.78
D	706+54.46	41.63	571.78	572.10
E	706+64.46	41.63	572.05	572.41
F	706+74.46	41.63	572.31	572.69
G	706+84.46	41.63	572.57	572.96
H	706+94.46	41.63	572.84	573.21
I	707+04.46	41.63	573.10	573.45
J	707+14.46	41.63	573.37	573.66
K	707+24.46	41.63	573.62	573.85
L	707+34.46	41.63	573.88	574.03
☐ Brg. E. Abut.	707+49.46	41.63	574.24	574.27
Bk. E. Abut.	707+51.29	41.63	574.29	574.31

GIRDER 18

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+12.21	49.25	570.56	570.58
☐ Brg. W. Abut.	706+14.04	49.25	570.60	570.62
A	706+24.04	49.25	570.86	570.97
B	706+34.04	49.25	571.13	571.32
C	706+44.04	49.25	571.39	571.66
D	706+54.04	49.25	571.66	571.98
E	706+64.04	49.25	571.92	572.28
F	706+74.04	49.25	572.19	572.57
G	706+84.04	49.25	572.45	572.84
H	706+94.04	49.25	572.71	573.09
I	707+04.04	49.25	572.98	573.32
J	707+14.04	49.25	573.24	573.53
K	707+24.04	49.25	573.50	573.73
L	707+34.04	49.25	573.75	573.90
☐ Brg. E. Abut.	707+49.04	49.25	574.12	574.14
Bk. E. Abut.	707+50.88	49.25	574.17	574.19

BREAKLINE 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+12.19	49.50	570.55	570.57
☐ Brg. W. Abut.	706+14.03	49.50	570.60	570.62
A	706+24.03	49.50	570.86	570.97
B	706+34.03	49.50	571.12	571.32
C	706+44.03	49.50	571.39	571.65
D	706+54.03	49.50	571.65	571.97
E	706+64.03	49.50	571.92	572.28
F	706+74.03	49.50	572.18	572.57
G	706+84.03	49.50	572.45	572.83
H	706+94.03	49.50	572.71	573.08
I	707+04.03	49.50	572.97	573.32
J	707+14.03	49.50	573.24	573.53
K	707+24.03	49.50	573.49	573.72
L	707+34.03	49.50	573.75	573.90
☐ Brg. E. Abut.	707+49.03	49.50	574.12	574.14
Bk. E. Abut.	707+50.87	49.50	574.16	574.18

GIRDER 19

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+11.80	56.88	570.40	570.42
☐ Brg. W. Abut.	706+13.63	56.88	570.44	570.46
A	706+23.63	56.88	570.70	570.82
B	706+33.63	56.88	570.97	571.18
C	706+43.63	56.88	571.23	571.53
D	706+53.63	56.88	571.49	571.86
E	706+63.63	56.88	571.76	572.17
F	706+73.63	56.88	572.02	572.46
G	706+83.63	56.88	572.29	572.73
H	706+93.63	56.88	572.55	572.97
I	707+03.63	56.88	572.82	573.20
J	707+13.63	56.88	573.08	573.41
K	707+23.63	56.88	573.34	573.59
L	707+33.63	56.88	573.59	573.76
☐ Brg. E. Abut.	707+48.63	56.88	573.96	573.98
Bk. E. Abut.	707+50.47	56.88	574.00	574.02

GIRDER 20

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+11.38	64.50	570.23	570.25
☐ Brg. W. Abut.	706+13.22	64.50	570.27	570.30
A	706+23.22	64.50	570.54	570.66
B	706+33.22	64.50	570.80	571.02
C	706+43.22	64.50	571.07	571.36
D	706+53.22	64.50	571.33	571.69
E	706+63.22	64.50	571.60	572.00
F	706+73.22	64.50	571.86	572.29
G	706+83.22	64.50	572.12	572.56
H	706+93.22	64.50	572.39	572.81
I	707+03.22	64.50	572.65	573.04
J	707+13.22	64.50	572.92	573.25
K	707+23.22	64.50	573.17	573.43
L	707+33.22	64.50	573.43	573.60
☐ Brg. E. Abut.	707+48.22	64.50	573.80	573.82
Bk. E. Abut.	707+50.06	64.50	573.84	573.86

GIRDER 21

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection and Grinding
Bk. W. Abut.	706+10.97	72.13	570.07	570.09
☐ Brg. W. Abut.	706+12.81	72.13	570.11	570.13
A	706+22.81	72.13	570.38	570.50
B	706+32.81	72.13	570.64	570.86
C	706+42.81	72.13	570.90	571.21
D	706+52.81	72.13	571.17	571.54
E	706+62.81	72.13	571.43	571.86
F	706+72.81	72.13	571.70	572.15
G	706+82.81	72.13	571.96	572.42
H	706+92.81	72.13	572.22	572.66
I	707+02.81	72.13	572.49	572.89
J	707+12.81	72.13	572.75	573.10
K	707+22.81	72.13	573.01	573.28
L	707+32.81	72.13	573.26	573.44
☐ Brg. E. Abut.	707+47.81	72.13	573.63	573.66
Bk. E. Abut.	707+49.64	72.13	573.68	573.70

NOTE:

1. Offsets are measured in feet and are given relative to ☐ I-80.



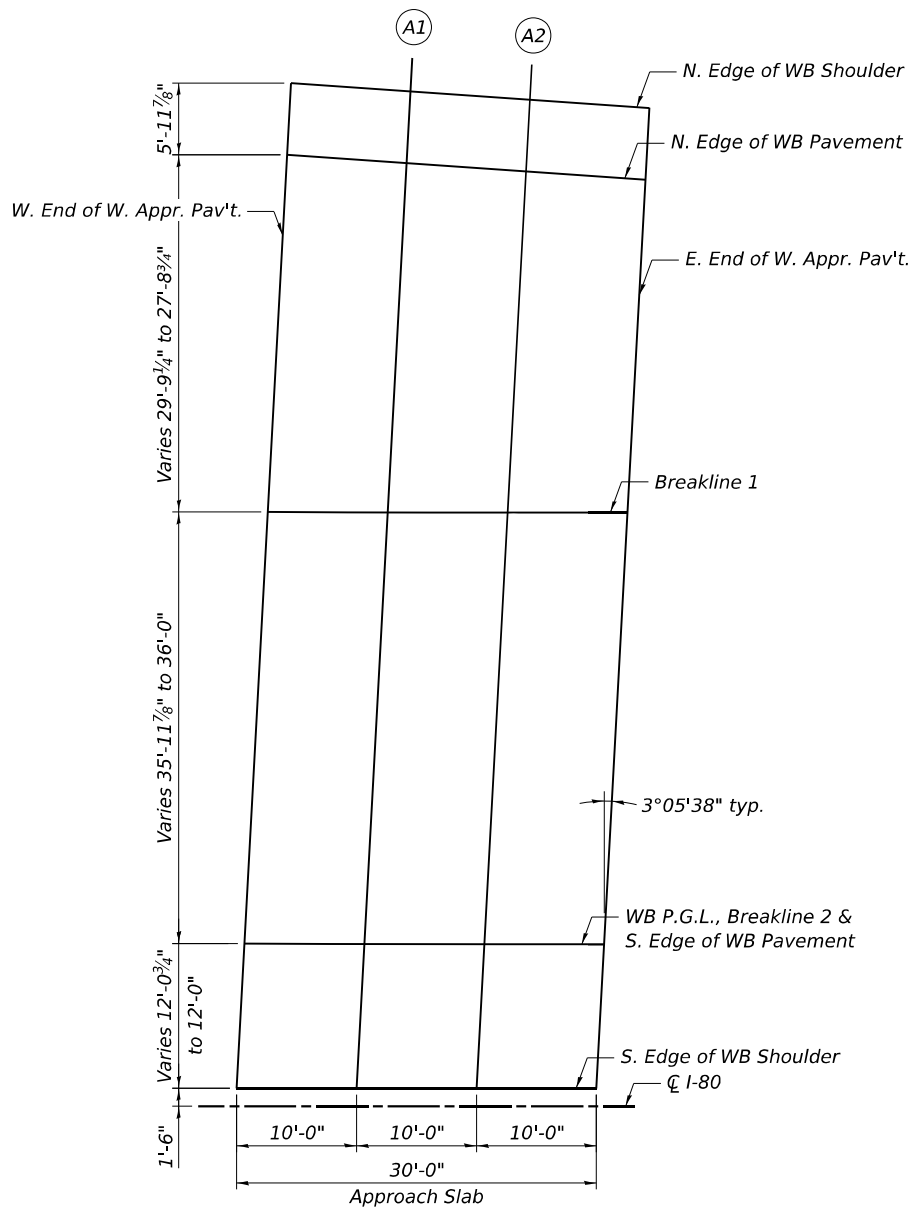
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PLOT SCALE	=	DRAWN	-	ECK	REVISED	-
PLOT DATE	=	CHECKED	-	KMD	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF DECK SLAB ELEVATIONS II - EB
STRUCTURE NO. 099-8310

SHEET SB-14 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	790
		CONTRACT NO. 62F94		
		ILLINOIS	FED. AID PROJECT	



N. EDGE OF WB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+90.48	-85.31	568.48	568.50
A1	706+00.44	-84.61	568.76	568.78
A2	706+10.41	-83.92	569.03	569.05
E. End W. Appr. Pav't.	706+20.37	-83.22	569.31	569.33

N. EDGE OF WB PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+90.16	-79.32	568.59	568.61
A1	706+00.12	-78.62	568.87	568.89
A2	706+10.08	-77.93	569.14	569.16
E. End W. Appr. Pav't.	706+20.04	-77.23	569.42	569.44

BREAKLINE 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+88.55	-49.50	569.14	569.16
A1	705+98.54	-49.50	569.41	569.43
A2	706+08.54	-49.50	569.67	569.69
E. End W. Appr. Pav't.	706+18.54	-49.50	569.94	569.96

WB P.G.L., BREAKLINE 2 & S. EDGE OF WB PAVEMENT

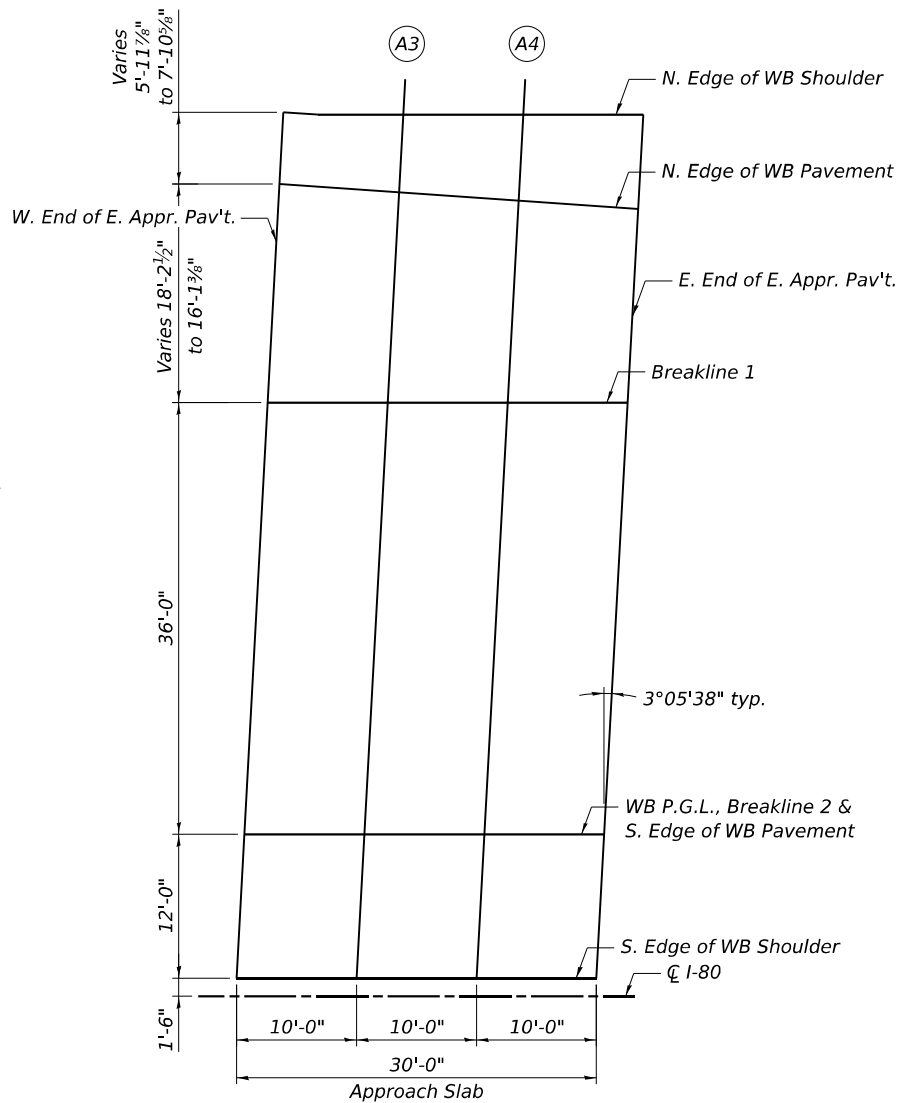
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+86.60	-13.50	569.63	569.65
A1	705+96.60	-13.50	569.90	569.92
A2	706+06.60	-13.50	570.16	570.18
E. End W. Appr. Pav't.	706+16.60	-13.50	570.42	570.45

S. EDGE OF WB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+85.95	-1.50	569.37	569.40
A1	705+95.95	-1.50	569.64	569.66
A2	706+05.95	-1.50	569.90	569.92
E. End W. Appr. Pav't.	706+15.95	-1.50	570.17	570.19

NOTE:

1. Offsets are measured in feet and are given relative to CL I-80.



EAST APPROACH SLAB

N. EDGE OF WB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Apr. Pav't.	707+56.52	-73.690	573.03	573.05
A3	707+66.52	-73.500	573.27	573.29
A4	707+76.52	-73.500	573.50	573.52
E. End E. Apr. Pav't.	707+86.51	-73.500	573.73	573.75

N. EDGE OF WB PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Apr. Pav't.	707+56.20	-67.71	573.14	573.17
A3	707+66.16	-67.01	573.39	573.41
A4	707+76.12	-66.32	573.64	573.66
E. End E. Apr. Pav't.	707+86.08	-65.62	573.88	573.90

BREAKLINE 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Apr. Pav't.	707+55.22	-49.50	573.49	573.51
A3	707+65.21	-49.50	573.72	573.74
A4	707+75.21	-49.50	573.95	573.97
E. End E. Apr. Pav't.	707+85.21	-49.50	574.18	574.20

WB P.G.L., BREAKLINE 2 & S. EDGE OF WB PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Apr. Pav't.	707+53.27	-13.50	573.98	574.00
A3	707+63.27	-13.50	574.22	574.24
A4	707+73.27	-13.50	574.45	574.47
E. End E. Apr. Pav't.	707+83.27	-13.50	574.68	574.70

S. EDGE OF WB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Apr. Pav't.	707+52.62	-1.50	573.72	573.74
A3	707+62.61	-1.50	573.96	573.98
A4	707+72.61	-1.50	574.19	574.21
E. End E. Apr. Pav't.	707+82.61	-1.50	574.42	574.44

NOTE:

1. Offsets are measured in feet and are given relative to CL I-80.

USER NAME	=	DESIGNED - ECK	REVISED -
		CHECKED - GEK	REVISED -
PLOT SCALE	=	DRAWN - ECK	REVISED -
PLOT DATE	=	CHECKED - KMD	REVISED -

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	792
CONTRACT NO. 62F94				
		ILLINOIS	FED. AID PROJECT	



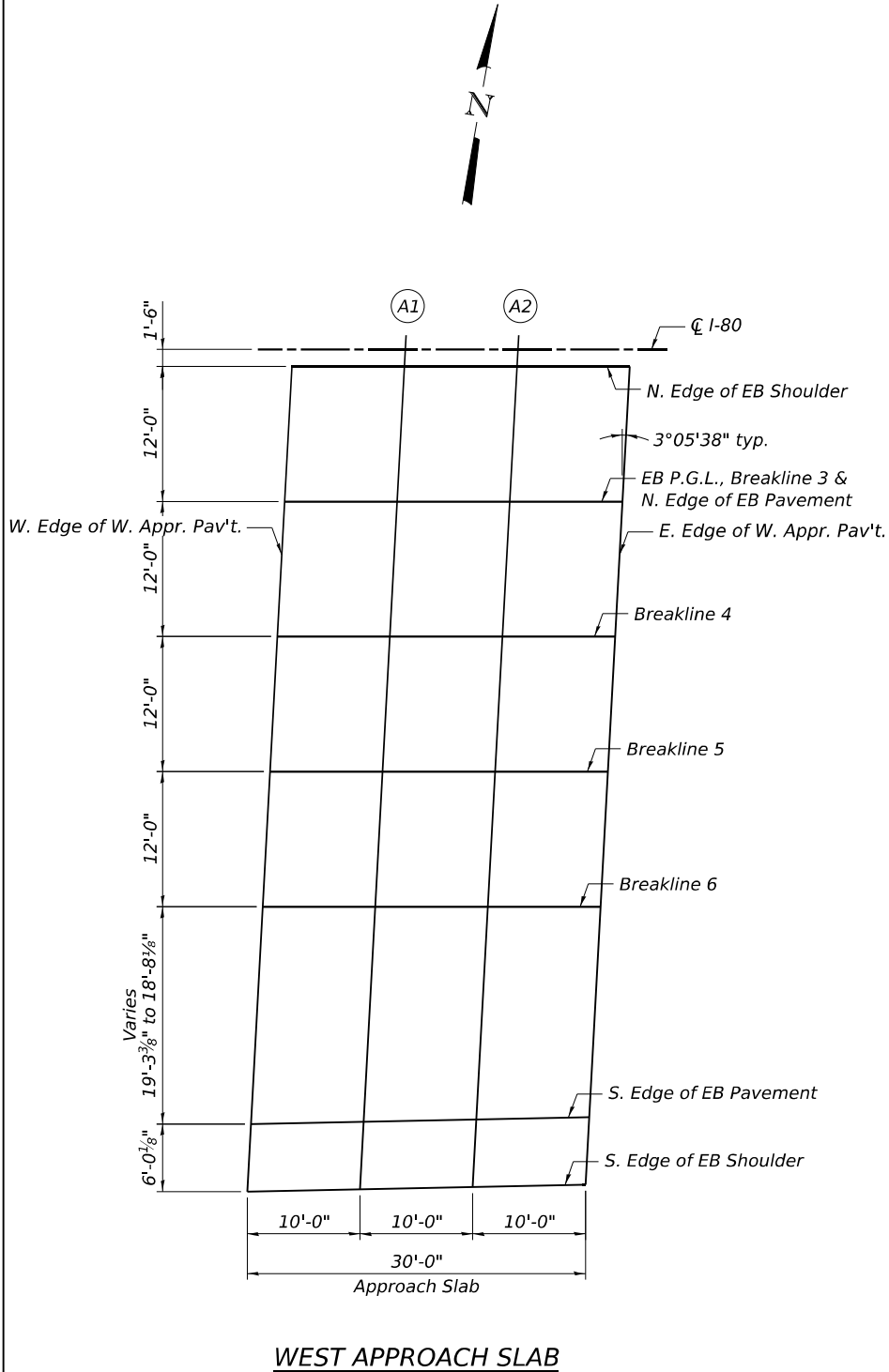
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PLOT SCALE	=	DRAWN	-	ECK	REVISED	-
PLOT DATE	=	CHECKED	-	KMD	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS & LAYOUT - WEST APPROACH - EB
STRUCTURE NO. 099-8310

SHEET SB-17 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	793
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		



N. EDGE OF EB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+85.79	1.50	569.37	569.39
A1	705+95.79	1.50	569.63	569.66
A2	706+05.79	1.50	569.90	569.92
E. End W. Appr. Pav't.	706+15.79	1.50	570.16	570.18

EB P.G.L., BREAKLINE 3 & N. EDGE OF EB PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+85.14	13.50	569.59	569.61
A1	705+95.14	13.50	569.86	569.88
A2	706+05.14	13.50	570.12	570.14
E. End W. Appr. Pav't.	706+15.14	13.50	570.39	570.41

BREAKLINE 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+84.49	25.50	569.82	569.84
A1	705+94.49	25.50	570.08	570.10
A2	706+04.49	25.50	570.34	570.37
E. End W. Appr. Pav't.	706+14.49	25.50	570.61	570.63

BREAKLINE 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+83.84	37.50	569.98	570.00
A1	705+93.84	37.50	570.24	570.26
A2	706+03.84	37.50	570.51	570.53
E. End W. Appr. Pav't.	706+13.84	37.50	570.77	570.79

BREAKLINE 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+83.19	49.50	569.92	569.94
A1	705+93.19	49.50	570.14	570.16
A2	706+03.19	49.50	570.36	570.38
E. End W. Appr. Pav't.	706+13.19	49.50	570.57	570.60

S. EDGE OF EB PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+82.15	68.78	569.51	569.53
A1	705+92.16	68.58	569.73	569.75
A2	706+02.17	68.38	569.96	569.98
E. End W. Appr. Pav't.	706+12.18	68.18	570.18	570.20

S. EDGE OF EB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End W. Appr. Pav't.	705+81.83	74.79	569.38	569.41
A1	705+91.84	74.59	569.61	569.63
A2	706+01.85	74.39	569.83	569.85
E. End W. Appr. Pav't.	706+11.86	74.19	570.05	570.07

NOTE:

1. Offsets are measured in feet and are given relative to C I-80 .



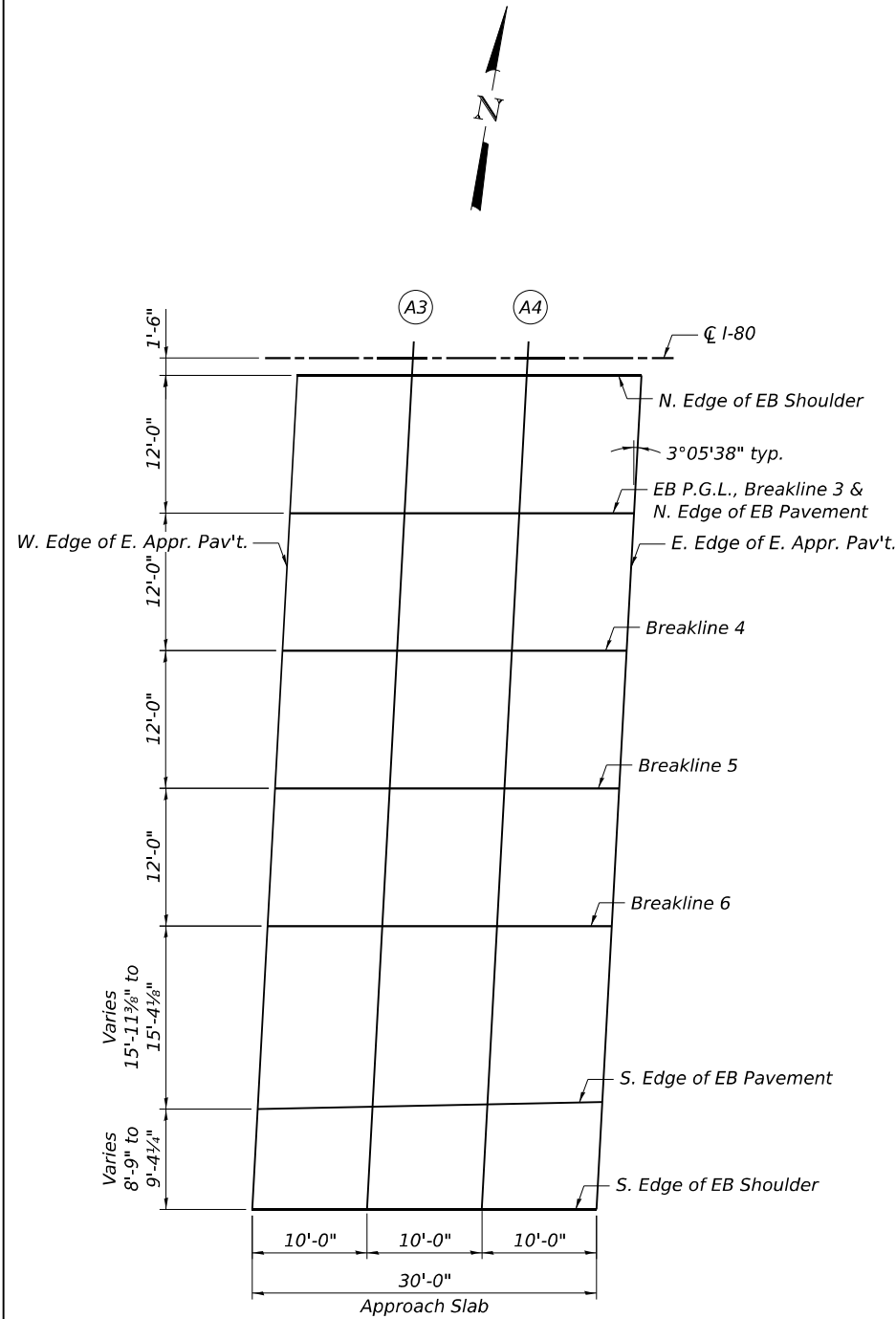
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS & LAYOUT - EAST APPROACH - EB
STRUCTURE NO. 099-8310

SHEET SB-18 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	794
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		



EAST APPROACH SLAB

N. EDGE OF EB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Appr. Pav't.	707+52.46	1.50	573.72	573.74
A3	707+62.46	1.50	573.96	573.98
A4	707+72.46	1.50	574.19	574.21
E. End E. Appr. Pav't.	707+82.46	1.50	574.42	574.44

EB P.G.L., BREAKLINE 3 & N. EDGE OF EB PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Appr. Pav't.	707+51.81	13.50	573.94	573.96
A3	707+61.81	13.50	574.18	574.20
A4	707+71.81	13.50	574.42	574.44
E. End E. Appr. Pav't.	707+81.81	13.50	574.64	574.66

BREAKLINE 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Appr. Pav't.	707+51.16	25.50	574.17	574.19
A3	707+61.16	25.50	574.41	574.43
A4	707+71.16	25.50	574.64	574.66
E. End E. Appr. Pav't.	707+81.16	25.50	574.87	574.89

BREAKLINE 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Appr. Pav't.	707+50.51	37.50	574.33	574.35
A3	707+60.51	37.50	574.57	574.59
A4	707+70.51	37.50	574.81	574.83
E. End E. Appr. Pav't.	707+80.51	37.50	575.03	575.05

BREAKLINE 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Appr. Pav't.	707+49.86	49.50	574.14	574.16
A3	707+59.86	49.50	574.38	574.40
A4	707+69.86	49.50	574.61	574.63
E. End E. Appr. Pav't.	707+79.86	49.50	574.84	574.86

S. EDGE OF EB PAVEMENT

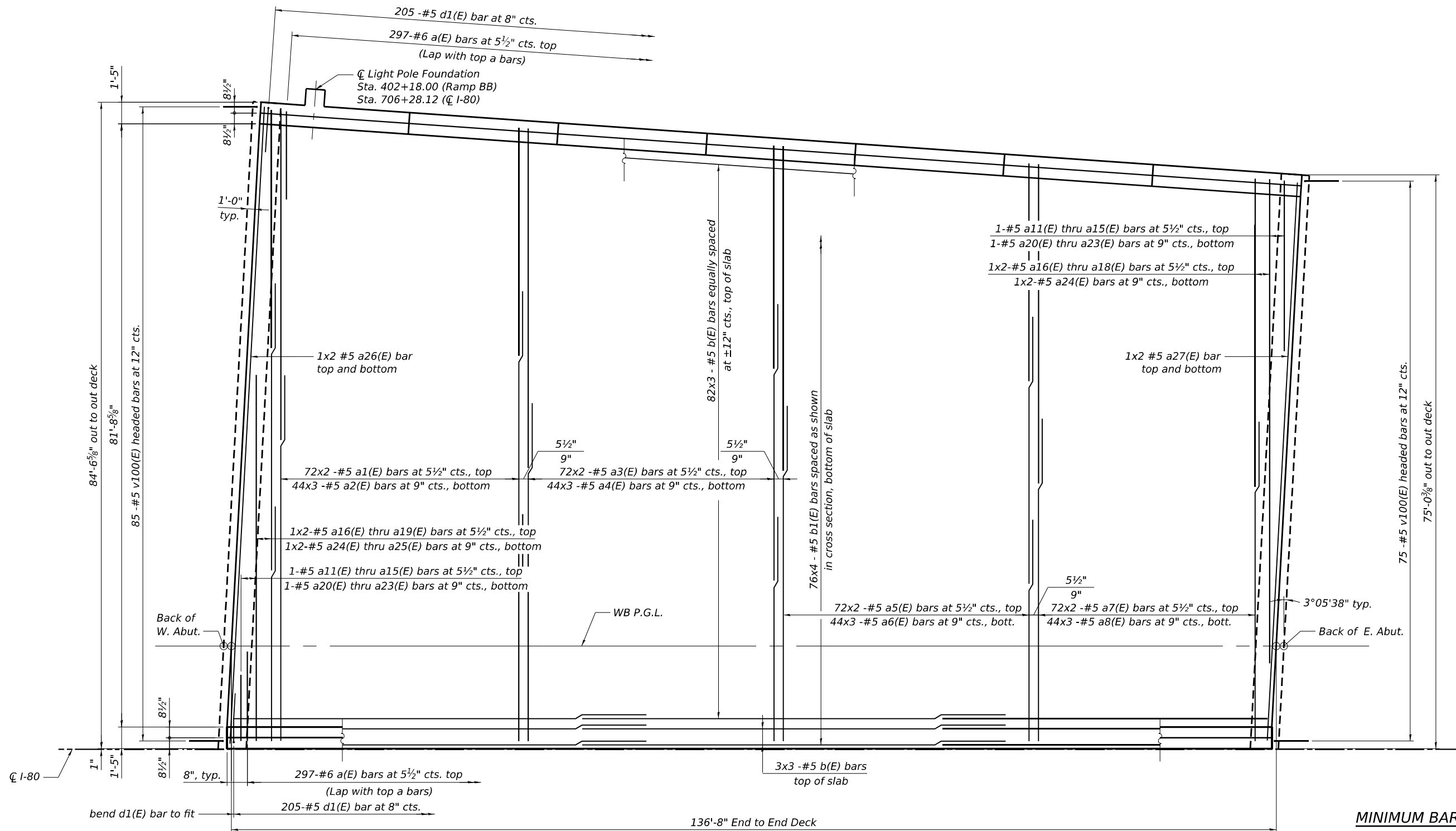
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W. End E. Appr. Pav't.	707+49.00	65.45	573.80	573.82
A3	707+59.01	65.25	574.04	574.06
A4	707+69.02	65.04	574.28	574.30
E. End E. Appr. Pav't.	707+79.03	64.84	574.51	574.53

S. EDGE OF EB SHOULDER

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Grinding
W. End E. Appr. Pav't.	707+48.53	74.19	573.61	573.63
A3	707+58.53	74.19	573.85	573.87
A4	707+68.53	74.19	574.09	574.11
E. End E. Appr. Pav't.	707+78.53	74.19	574.32	574.34

NOTE:

1. Offsets are measured in feet and are given relative to $\mathbb{C}$ I-80.



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

PLAN



NOTES:

1. See sheet SB-23 of SB-53 for superstructure details and Bill of Material.
2. Bars indicated thus 20x3 -#5 etc. indicates 20 lines of bars with 3 lengths per line.

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	CHECKED - GEK	REVISED -
PLOT SCALE =	DRAWN - ECK	REVISED -
PLOT DATE =	CHECKED - SLM	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLAN - WB
STRUCTURE NO. 099-8310

SHEET SB-19 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	795
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

MODEL: Default
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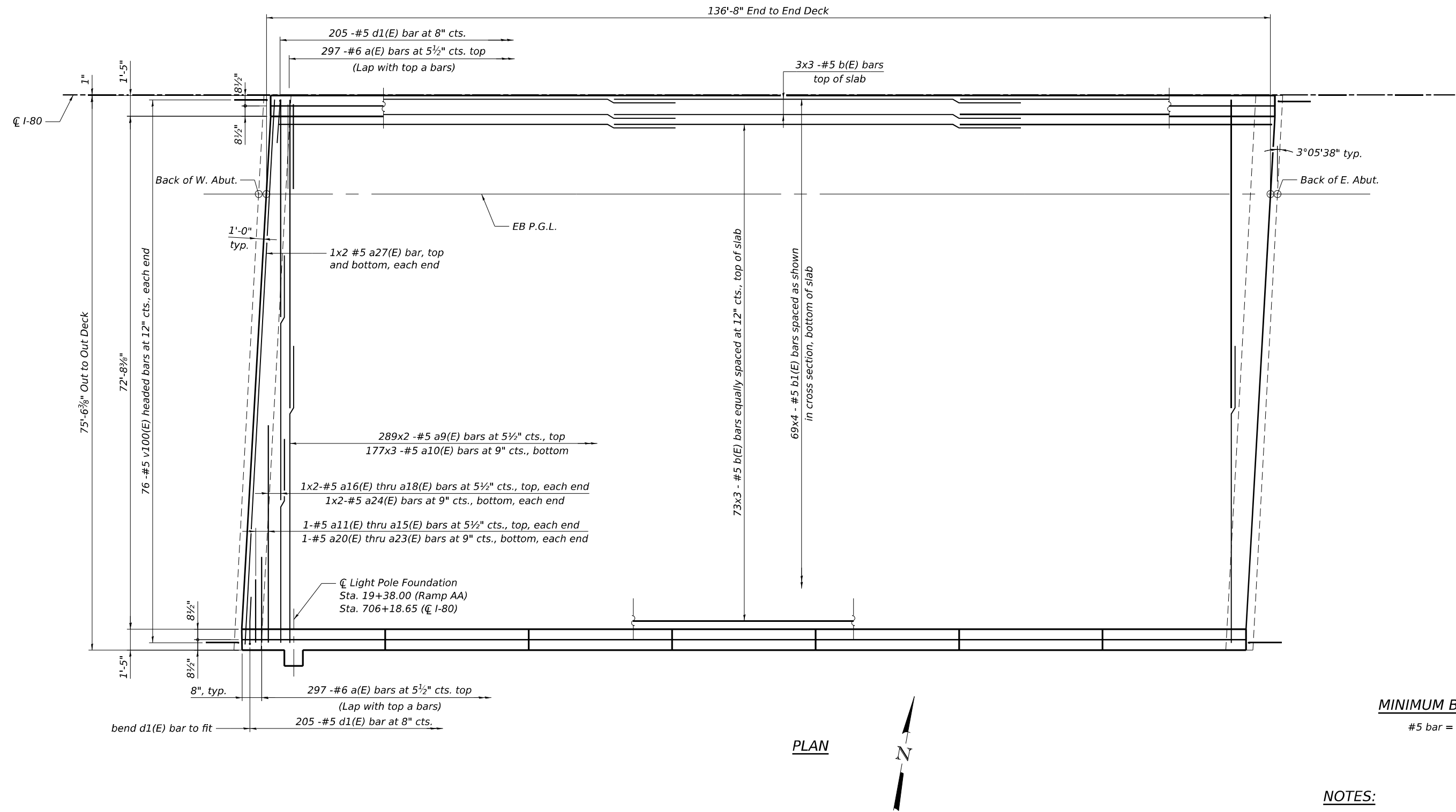
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PLOT DATE	=	CHECKED	-	SLM	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK PLAN - EB
STRUCTURE NO. 099-8310

SHEET SB-20 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	796
CONTRACT NO. 62F94				
ILLINOIS		FED. AID PROJECT		

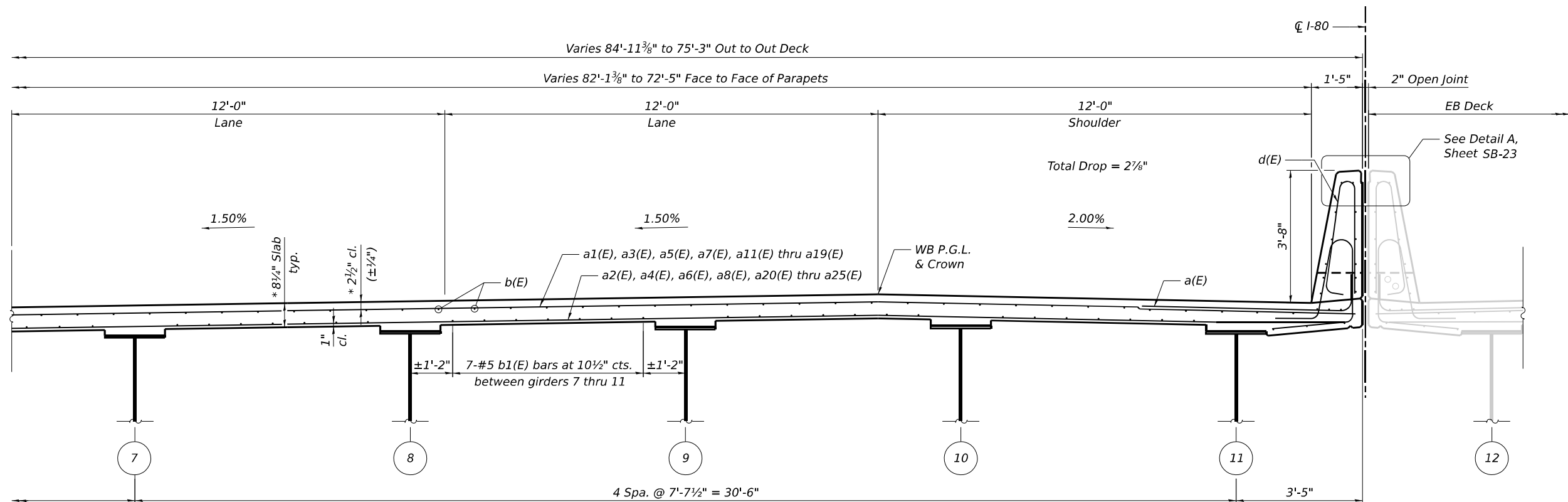
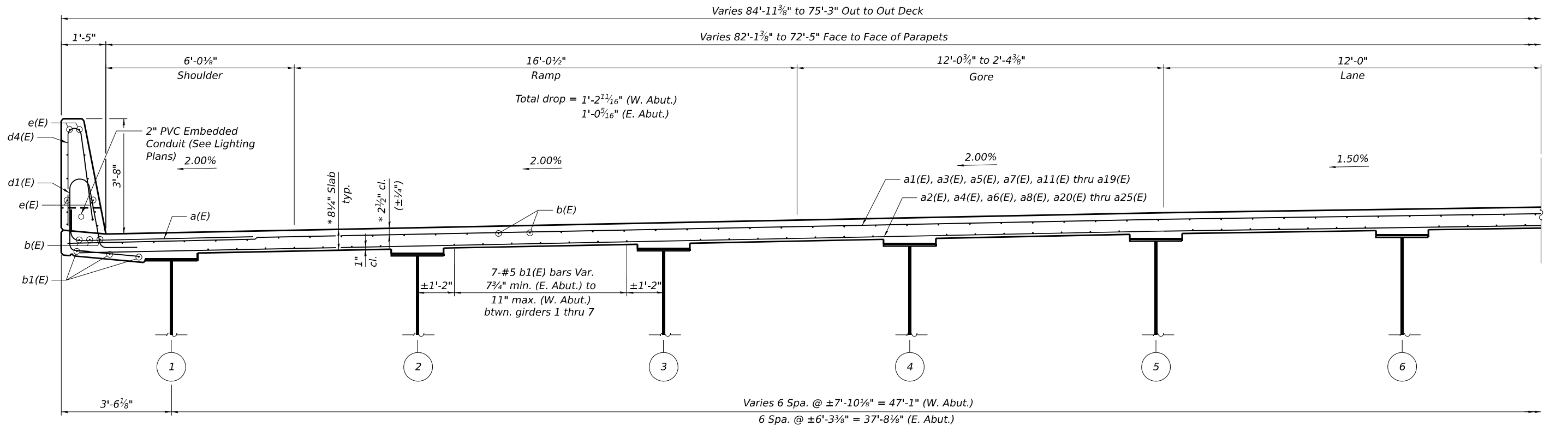


MINIMUM BAR LAP
#5 bar = 3'-6"

NOTES:

- See sheet SB-23 of SB-53 for superstructure details and Bill of Material.
- Bars indicated thus 20x3 -#5 etc. indicated 20 lines of bars with 3 lengths per line.

MODEL: Default
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CROSS SECTION
(Looking East)

*Prior to Grinding.

NOTES:

1. Out-to-Out dimensions are taken at intersection of back of abutment (Sta. 706+14.87 & Sta. 707+53.54) and $\mathcal{C}$ I-80.
2. Dimensions are measured at Rt. Ls to $\mathcal{C}$ I-80.



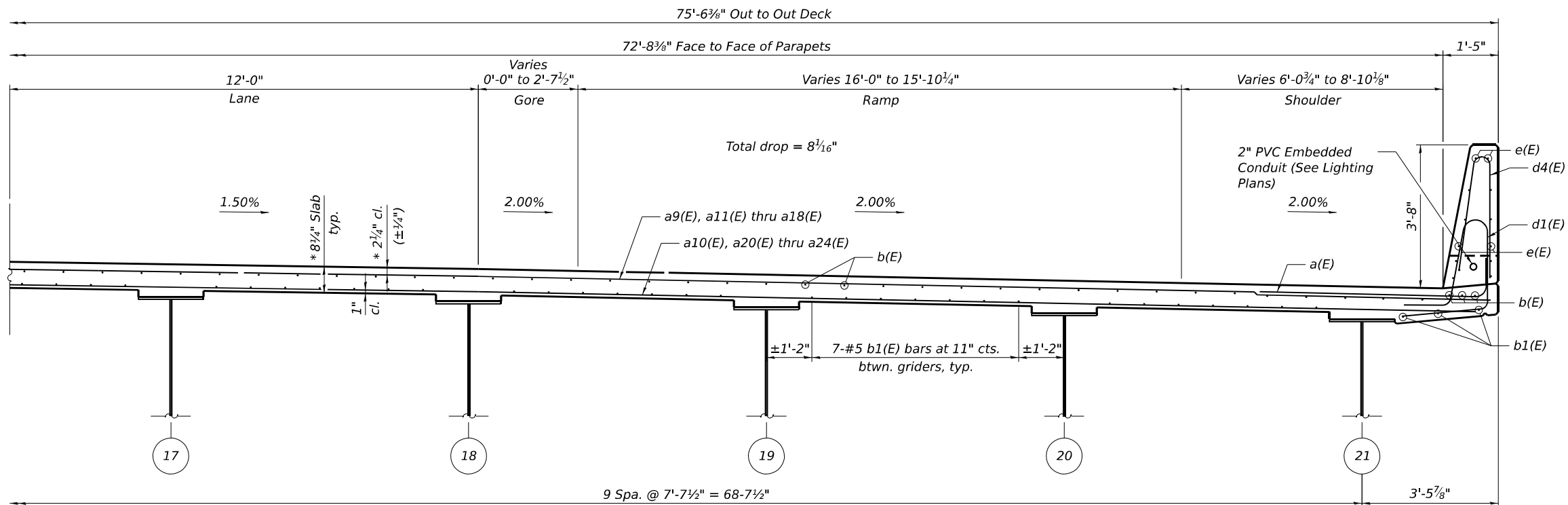
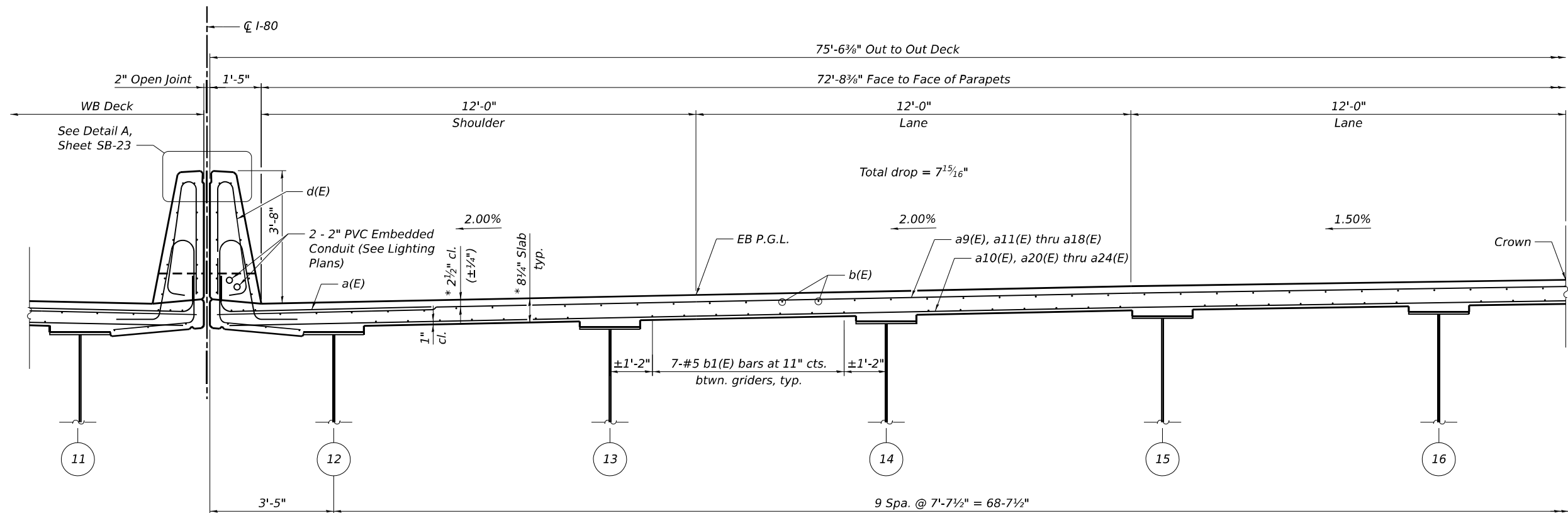
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PLOT DATE	=	CHECKED	-	SLM	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK CROSS SECTION - WB
STRUCTURE NO. 099-8310

SHEET SB-21 OF SB-53 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	797
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				



CROSS SECTION
(Looking East)

* Prior to Grinding.

NOTES:

1. Out-to-Out dimensions are taken at intersection of back of abutment (Sta. 706+14.87 & Sta. 707+53.54) and CL I-80 .
2. Dimensions are measured at Rt. Ls to CL I-80 .

MODEL: Default
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	CHECKED - GEK	REVISED -
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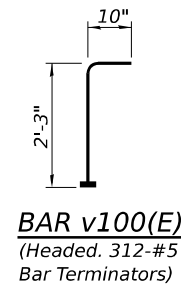
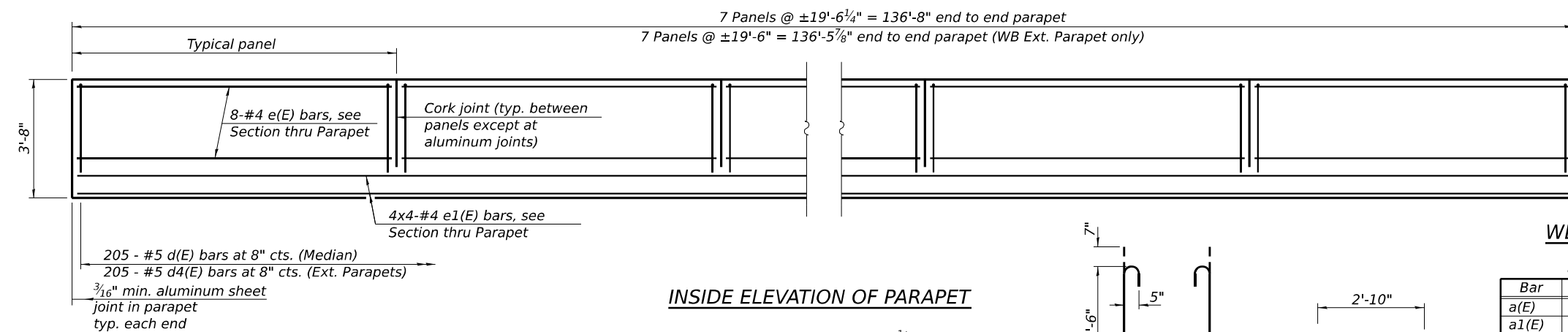
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK CROSS SECTION - EB
STRUCTURE NO. 099-8310**

SHEET SB-22 OF SB-53 SHEETS

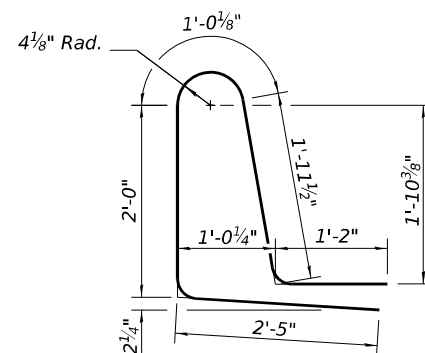
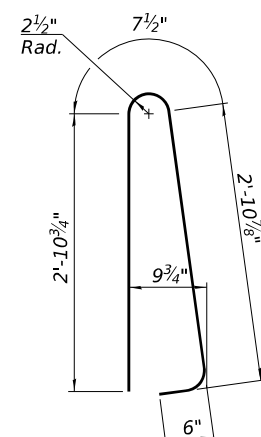
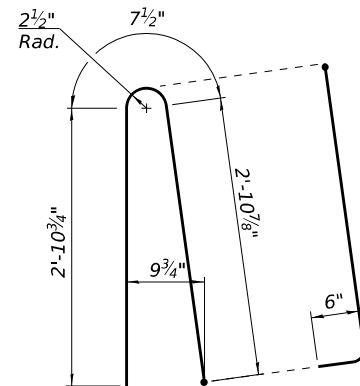
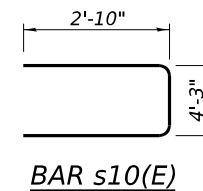
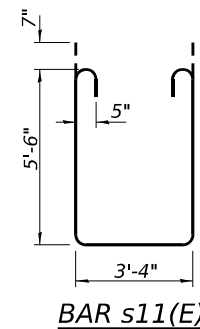
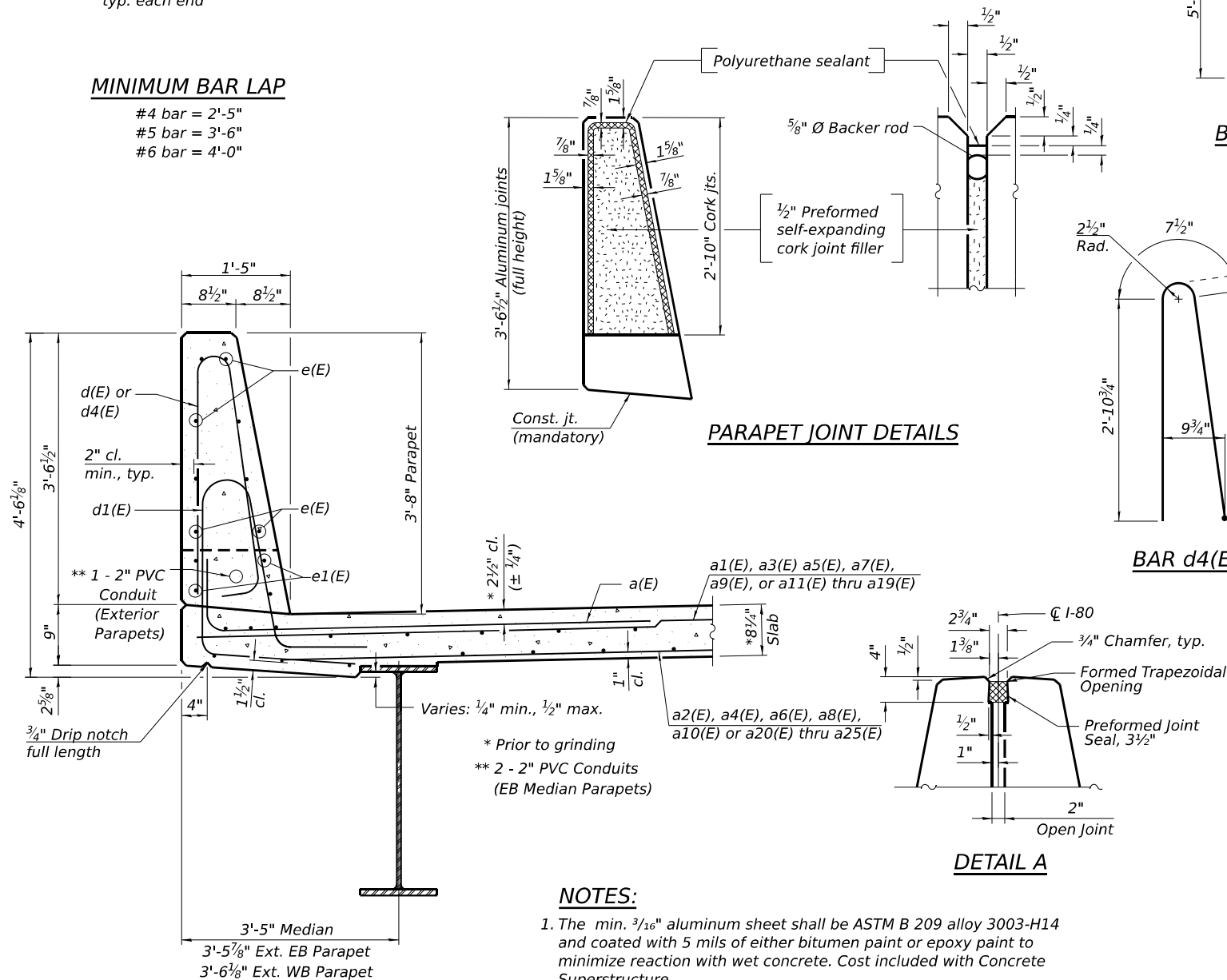
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	2017-057F	WILL	1342	798
CONTRACT NO. 62F94				
ILLINOIS FED. AID PROJECT				

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MINIMUM BAR LAP

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



PARAPET JOINT DETAILS

DETAIL A

NOTES:

1. The min. 3/16" aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated with 5 mils of either bitumen paint or epoxy paint to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
2. The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.
3. Bar terminators paid for separately. See Total Bill of Material.

SECTION THRU PARAPET

WB SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	594	#6	8'-4"	┐
a1(E)	144	#5	43'-11"	—
a2(E)	132	#5	30'-5"	—
a3(E)	144	#5	42'-9"	—
a4(E)	132	#5	29'-8"	—
a5(E)	144	#5	41'-7"	—
a6(E)	132	#5	28'-11"	—
a7(E)	144	#5	40'-5"	—
a8(E)	132	#5	28'-2"	—
a11(E)	2	#5	10'-0"	—
a12(E)	2	#5	18'-6"	—
a13(E)	2	#5	26'-11"	—
a14(E)	2	#5	35'-5"	—
a15(E)	2	#5	43'-11"	—
a16(E)	4	#5	28'-1"	—
a17(E)	4	#5	32'-4"	—
a18(E)	4	#5	36'-7"	—
a19(E)	2	#5	40'-8"	—
a20(E)	2	#5	7'-2"	—
a21(E)	2	#5	21'-1"	—
a22(E)	2	#5	35'-0"	—
a23(E)	2	#5	48'-11"	—
a24(E)	4	#5	33'-2"	—
a25(E)	2	#5	40'-1"	—
a26(E)	4	#5	44'-0"	—
a27(E)	4	#5	39'-5"	—

$b(E)$	264	#5	47'-10"	_____
$b1(E)$	304	#5	36'-9"	_____

d1(E)	205	#5	7'-0"	
d1(E)	410	#5	8'-7"	
d2(E)	3	#6	5'-3"	
d3(E)	6	#6	8'-11"	
d4(E)	205	#5	7'-0"	

e(E)	112	#4	19'-2"	—
e1(E)	32	#4	35'-11"	—

$m10(E)$	30	#6	7'-6"	_____
$m11(E)$	40	#6	7'-3"	_____
$m12(E)$	20	#6	3'-1"	_____
$m13(E)$	12	#6	39'-8"	_____
$m14(E)$	12	#6	44'-3"	_____
$m15(E)$	30	#6	5'-11"	_____

$s_{10}(E)$	140	#5	9'-11"	$\supset$
$s_{11}(E)$	140	#5	15'-6"	$\sqcup$

$\nu 100(E)$	160	#5	3'-1"	L
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Reinforcement Bars, Epoxy Coated	Pound	91,140
Concrete Superstructure	Cu. Yd.	441.0
Protective Coat	Sq. Yd.	1,304
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	790
Diamond Grinding (Bridge Section)	Sq. Yd.	1,108

EB SUPERSTRUCTURE
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	594	#6	8'-4"	
a9(E)	578	#5	39'-5"	
a10(E)	531	#5	27'-5"	
a11(E)	2	#5	10'-0"	
a12(E)	2	#5	18'-6"	
a13(E)	2	#5	26'-11"	
a14(E)	2	#5	35'-5"	
a15(E)	2	#5	43'-11"	
a16(E)	4	#5	28'-1"	
a17(E)	4	#5	32'-4"	
a18(E)	4	#5	36'-7"	
a20(E)	2	#5	7'-2"	
a21(E)	2	#5	21'-1"	
a22(E)	2	#5	35'-0"	
a23(E)	2	#5	48'-11"	
a24(E)	4	#5	33'-2"	
a27(E)	8	#5	39'-5"	

$b(E)$	237	#5	47'-10"	————
$b1(E)$	276	#5	36'-9"	————

d(E)	205	#5	7'-0"	
d1(E)	410	#5	8'-7"	
d2(E)	3	#6	5'-3"	
d3(E)	6	#6	8'-11"	
d4(E)	205	#5	7'-0"	

e(E)	112	#4	19'-2"	————
e1(E)	32	#4	35'-11"	————

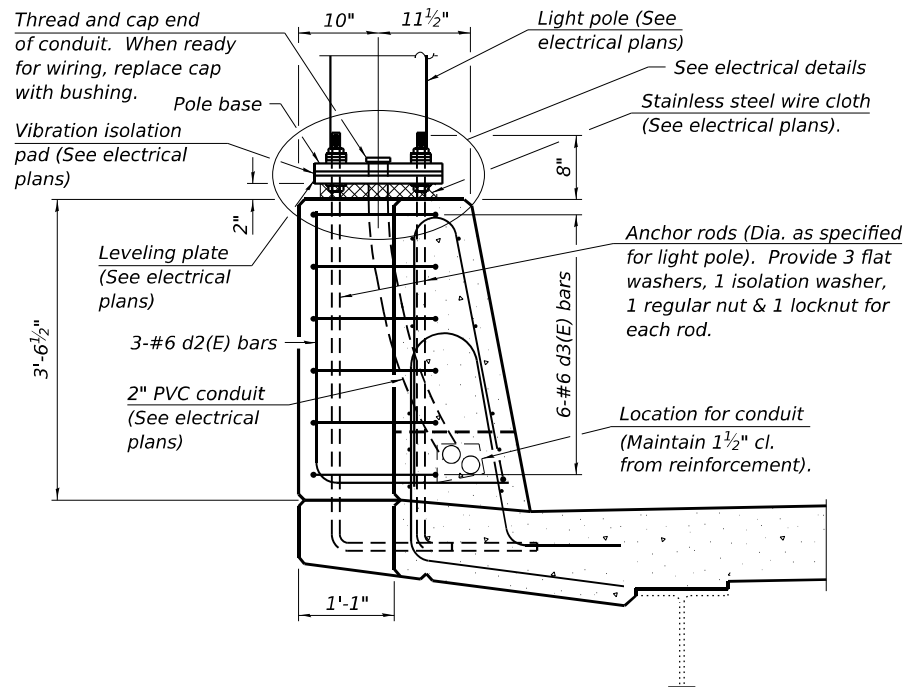
$m_{11}(E)$	90	#6	7'-3"	————
$m_{12}(E)$	20	#6	3'-1"	————
$m_{13}(E)$	24	#6	39'-8"	————

$s_{10}(E)$	138	#5	9'-11"	⊃
$s_{11}(E)$	138	#5	15'-6"	⊂

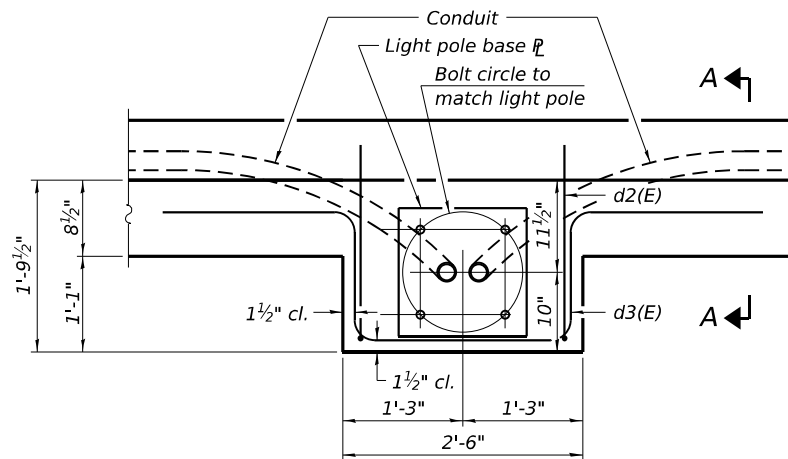
v100(E)	152	#5	3'-1"	└
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Reinforcement Bars, Epoxy Coated	Pound	85,800
Concrete Superstructure	Cu. Yd.	419.0
Protective Coat	Sq. Yd.	1,240
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	790
Diamond Grinding (Bridge Section)	Sq. Yd.	1,044
Preformed Joint Seal, 3½"	Foot	137

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

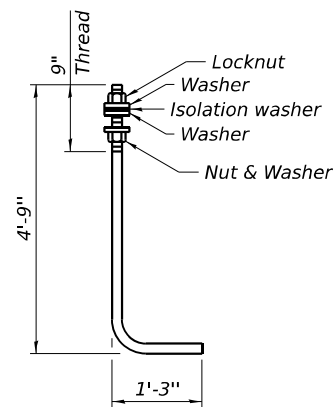


SECTION A-A



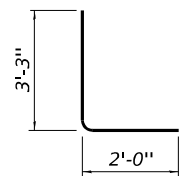
PLAN

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

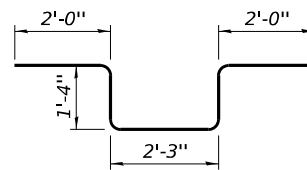


ANCHOR ROD

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



BAR d2(E)



BAR d3(E)