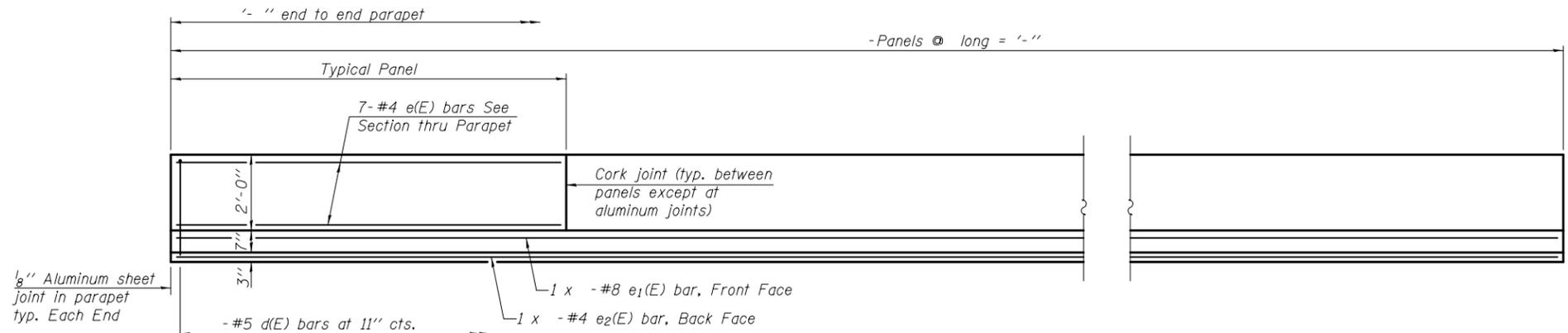
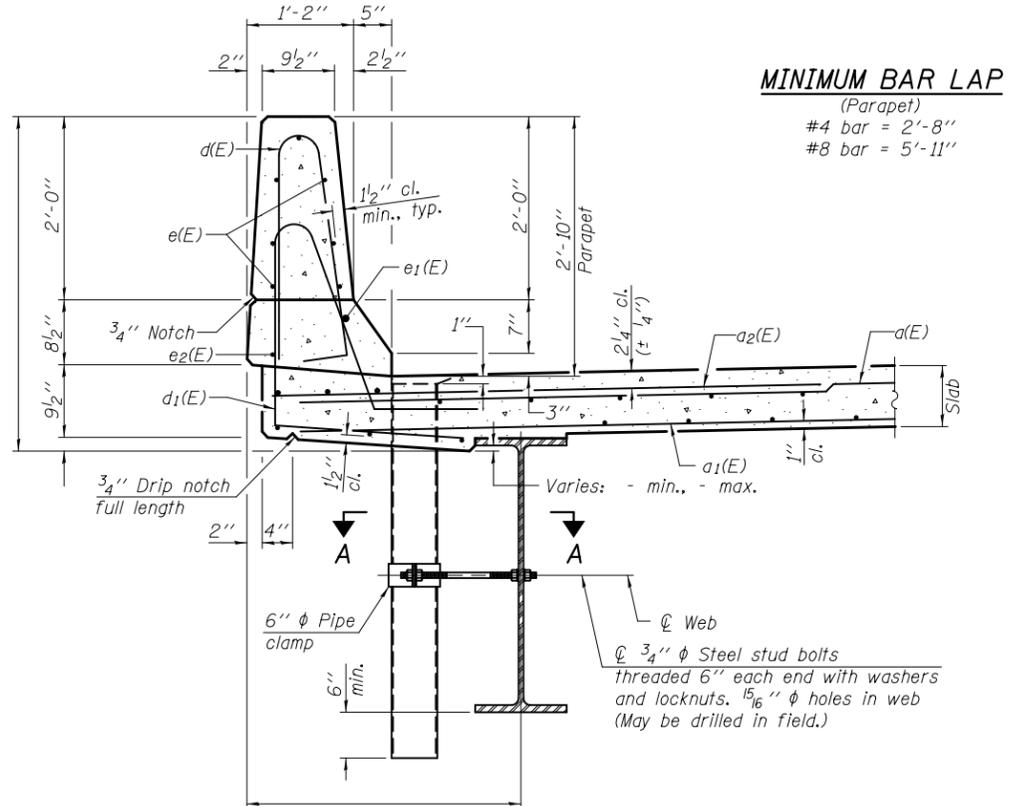


CELL / MODEL NAME	DESCRIPTION	DATE
SDI-SB-1	Superstructure Details; Integral; Steel beam; Single span	11/22/2016
SDI-SB-2	Superstructure Details; Integral; Steel beam; Multi-span	11/22/2016
SDI-SB-TXR4-2	Superstructure Details; integral; steel beam; Texas rail TL-4; multi-span	11/22/2016
SI-SB-1-0	Superstructure; Integral; Steel beam; Single span; No skew	11/22/2016
SI-SB-1-L-Greater than 30 degrees	Superstructure; Integral; Steel beam; Single span; Left skew; Greater than 30 degrees	11/22/2016
SI-SB-1-L-Less than or equal to 30 degrees	Superstructure; Integral; Steel beam; Single span; Left skew; Less than or equal to 30 degrees	11/22/2016
SI-SB-1-R-Greater than 30 degrees	Superstructure; Integral; Steel beam; Single span; Right skew; Greater than 30 degrees	11/22/2016
SI-SB-1-R-Less than or equal to 30 degrees	Superstructure; Integral; Steel beam; Single span; Right skew; Less than or equal to 30 degrees	11/22/2016
SI-SB-2-0	Superstructure; Integral; Steel beam; Multi-span; No skew	11/22/2016
SI-SB-2-L-Greater than 30 degrees	Superstructure; Integral; Steel beam; Multi-span; Left skew; Greater than 30 degrees	11/22/2016
SI-SB-2-L-Less than or equal to 30 degrees	Superstructure; Integral; Steel beam; Multi-span; Left skew; Less than or equal to 30 degrees	11/22/2016
SI-SB-2-R-Greater than 30 degrees	Superstructure; Integral; Steel beam; Multi-span; Right skew; Greater than 30 degrees	11/22/2016
SI-SB-2-R-Less than or equal to 30 degrees	Superstructure; Integral; Steel beam; Multi-span; Right skew; Less than or equal to 30 degrees	11/22/2016

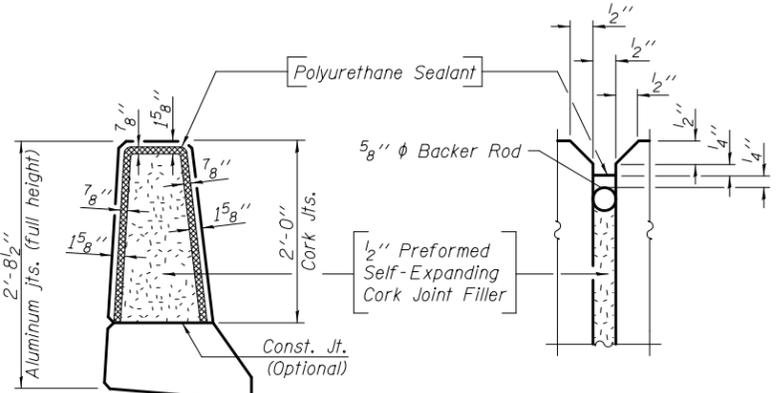


INSIDE ELEVATION OF PARAPET



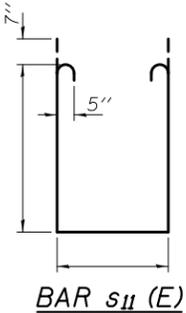
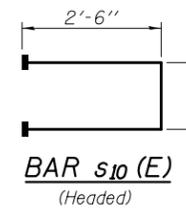
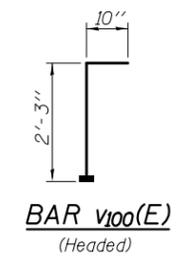
SECTION THRU PARAPET

MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-8"
#8 bar = 5'-11"



PARAPET JOINT DETAILS

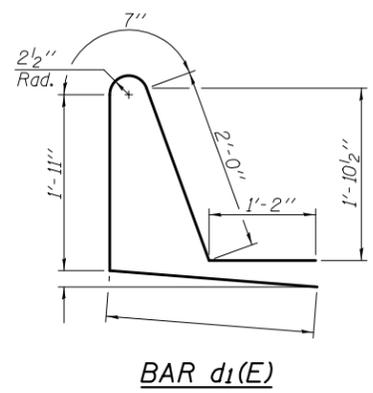
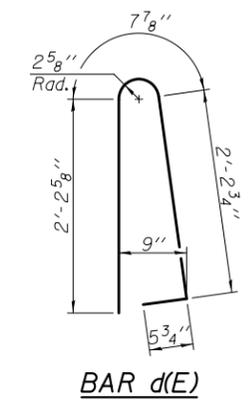
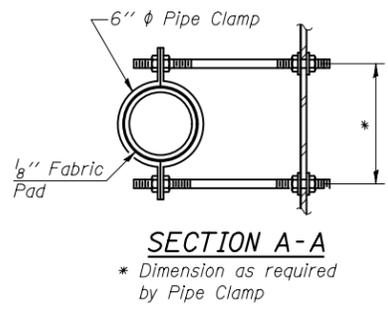
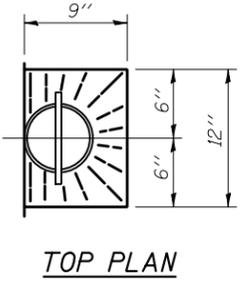
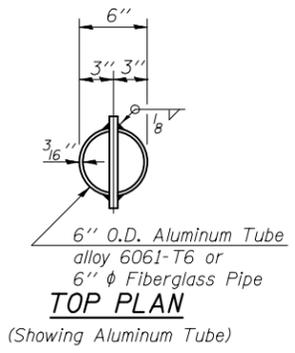
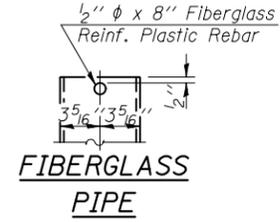
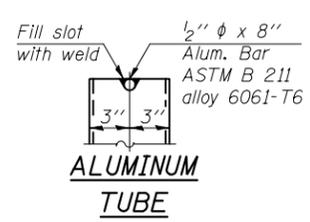
Notes:
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings Spec. SSPC-SP1 prior to painting.
The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete. The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be non-staining gray one component non-sag elastomeric gun grade meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25. Use T with a 5/8" backer rod.
The 1/2" Preformed Self-Expanding Cork Joint Filler shall be according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.
Headed bars shall conform to ASTM A970 Class HA. Cost included with Reinforcement Bars, Epoxy Coated.



SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)		#5		—
a1(E)		#5		—
a2(E)		#6	6'-6"	—
a3(E)		#5		—
b(E)		#5		—
b1(E)		#5		—
d(E)		#5	5'-7"	⌋
d1(E)		#5		⌋
e(E)		#4		—
e1(E)		#8		—
e2(E)		#4		—
m10(E)		#6		—
m11(E)		#6		—
m12(E)		#6		—
m13(E)		#5	4'-0"	—
s10(E)		#5		⌋
s11(E)		#5		⌋
v100(E)		#5	3'-1"	⌋
Reinforcement Bars, Epoxy Coated			Lbs.	
Concrete Superstructure			Cu. Yds.	

Bars indicated thus 1 x 2-#8 etc. indicates 1 line of bars with 2 lengths per line.



SDI-SB-1

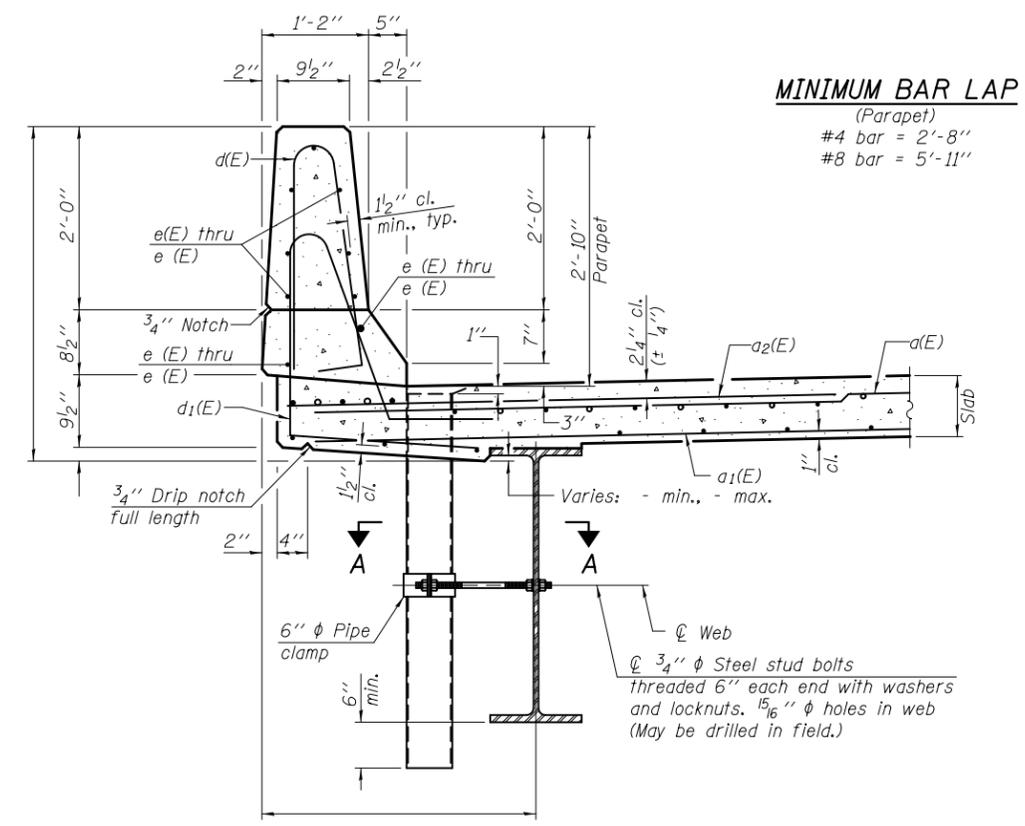
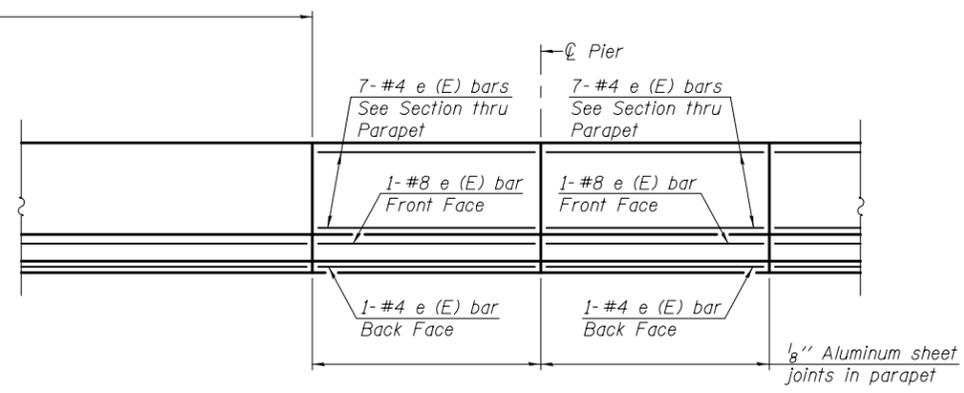
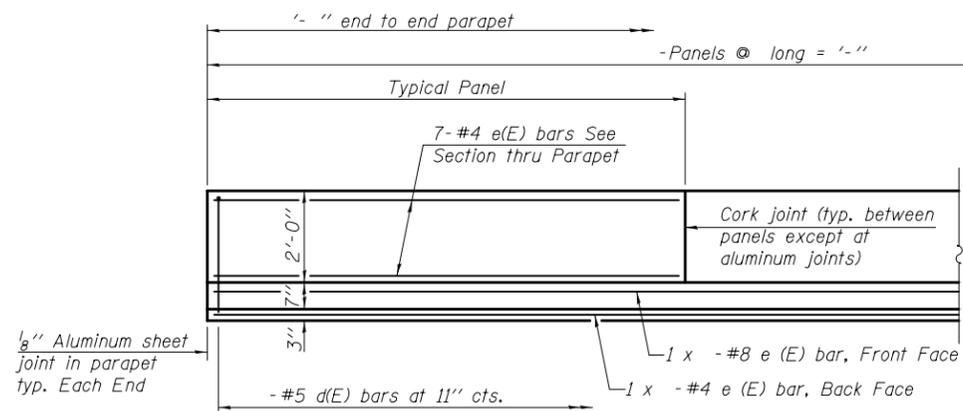
11-22-2016

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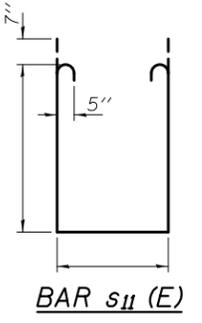
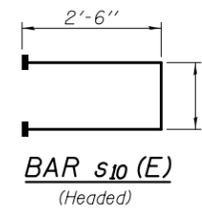
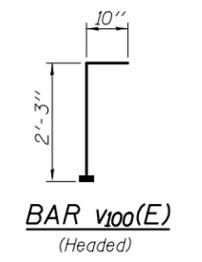
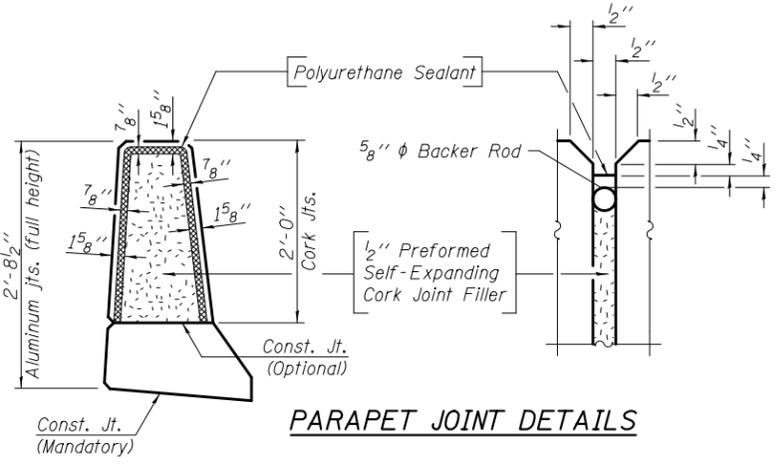
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS STRUCTURE NO.

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



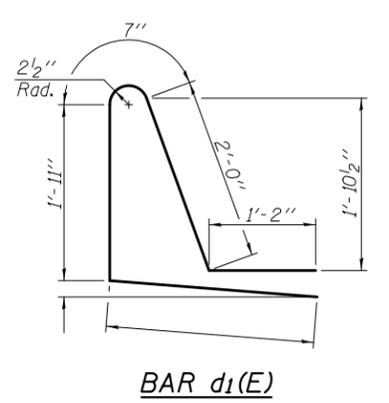
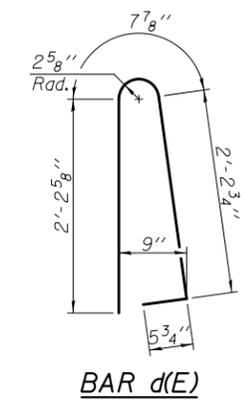
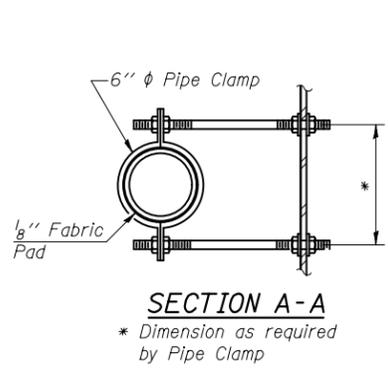
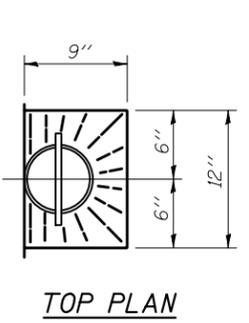
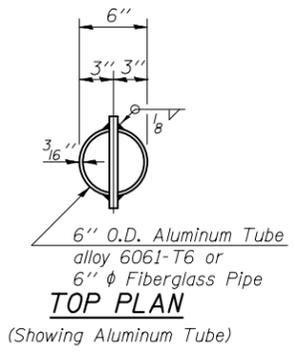
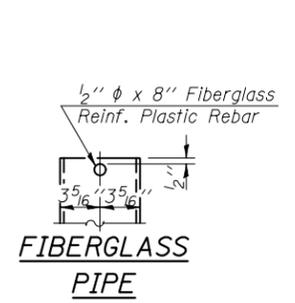
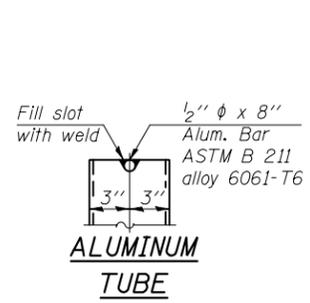
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-8"
#8 bar = 5'-11"



SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)		#5		
a1(E)		#5		
a2(E)		#6	6'-6"	
a3(E)		#5		
b(E)		#5		
b1(E)		#6		
b2(E)		#5		
d(E)		#5	5'-7"	
d1(E)		#5		
e(E)		#4		
m10(E)		#6		
m11(E)		#6		
m12(E)		#6		
m13(E)		#5	4'-0"	
s10(E)		#5		
s11(E)		#5		
v100(E)		#5	3'-1"	
Reinforcement Bars, Epoxy Coated			Lbs.	
Concrete Superstructure			Cu. Yds.	

Notes:
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings Spec. SSPC-SP1 prior to painting.
The top portion of aluminum floor drains shall be coated to minimize reaction with wet concrete. The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.
The 1/8" Aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated to minimize reaction with wet concrete. Cost included with Concrete Superstructure.
The Polyurethane Sealant shall be non-staining gray one component non-sag elastomeric gun grade meeting the requirements of ASTM C-920, Type S, Grade NS, Class 25. Use T with a 5/8" backer rod.
The 1/2" Preformed Self-Expanding Cork Joint Filler shall be according to Article 1051.07 of the Std. Spec. Cost included with Concrete Superstructure.
Headed bars shall conform to ASTM A970 Class HA. Cost included with Reinforcement Bars, Epoxy Coated.



SDI-SB-2

11-22-2016

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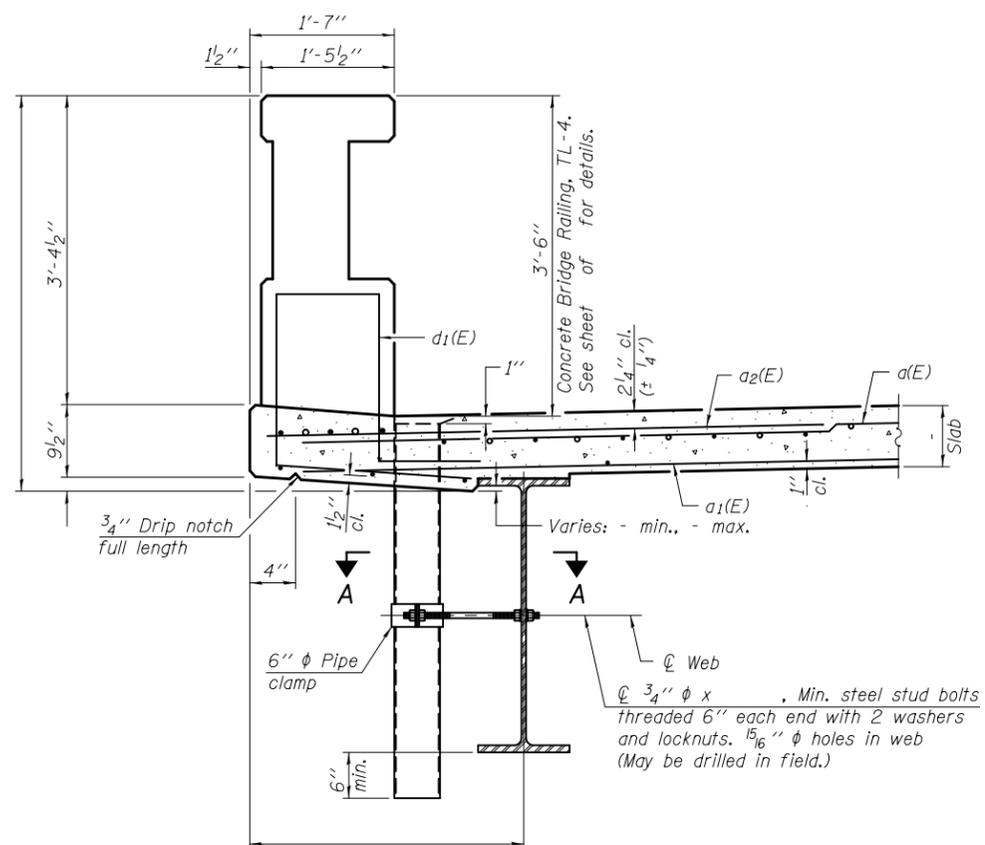
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO.

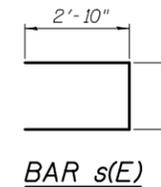
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				

**SUPERSTRUCTURE
BILL OF MATERIAL**

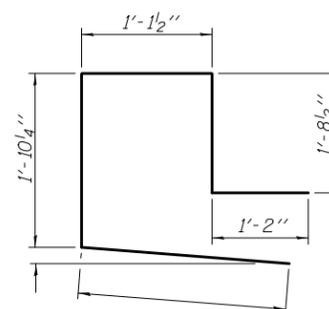
Bar	No.	Size	Length	Shape
a(E)				—
a ₁ (E)				—
a ₂ (E)		#6	6'-6"	—
b(E)		#5		—
b ₁ (E)		#6		—
b ₂ (E)				—
b ₃ (E)				—
b ₄ (E)				—
d ₁ (E)		#5		⊏
m(E)		#6		—
m ₁ (E)		#6		—
m ₂ (E)		#6		—
m ₃ (E)		#5	4'-0"	—
s(E)		#5		⊏
s ₁ (E)		#5		⊏
v(E)		#5	3'-1"	⊏
Reinforcement Bars, Epoxy Coated		Pound		
Concrete Superstructure		Cu. Yds.		



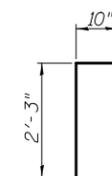
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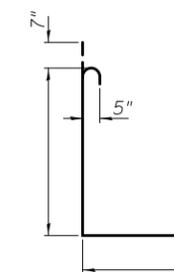
BAR s(E)



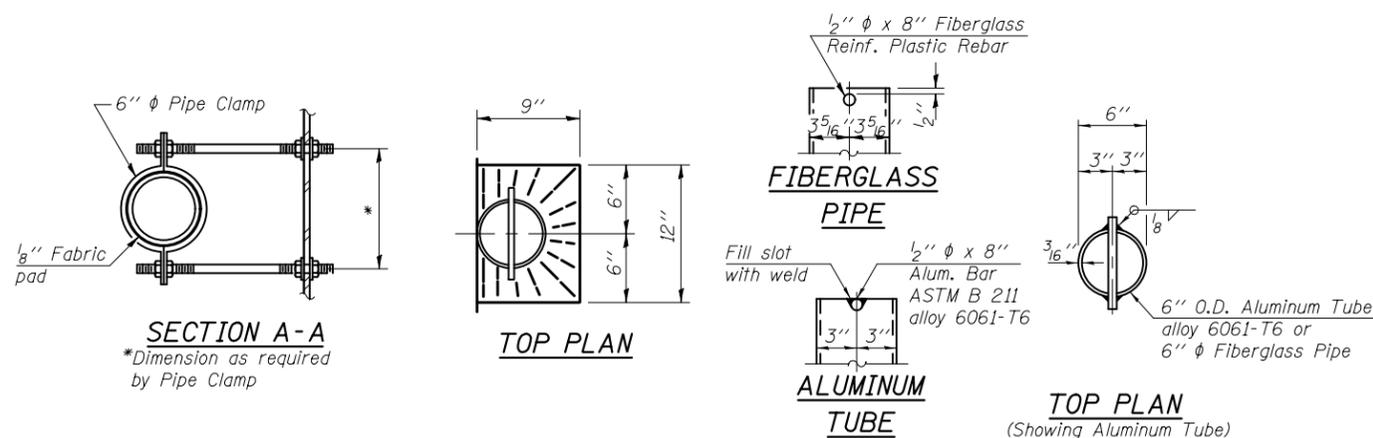
BAR d1(E)



BAR v(E)



BAR s1(E)



SECTION A-A
*Dimension as required by Pipe Clamp

TOP PLAN

FIBERGLASS PIPE

ALUMINUM TUBE

TOP PLAN
(Showing Aluminum Tube)

Notes:

The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings Spec. SSPC-SP1 prior to painting.

Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

Galvanize clamping device according to AASHTO M232. Cost of clamping device and inserts is included with Floor Drains.

SDI-SB-TXR4-2

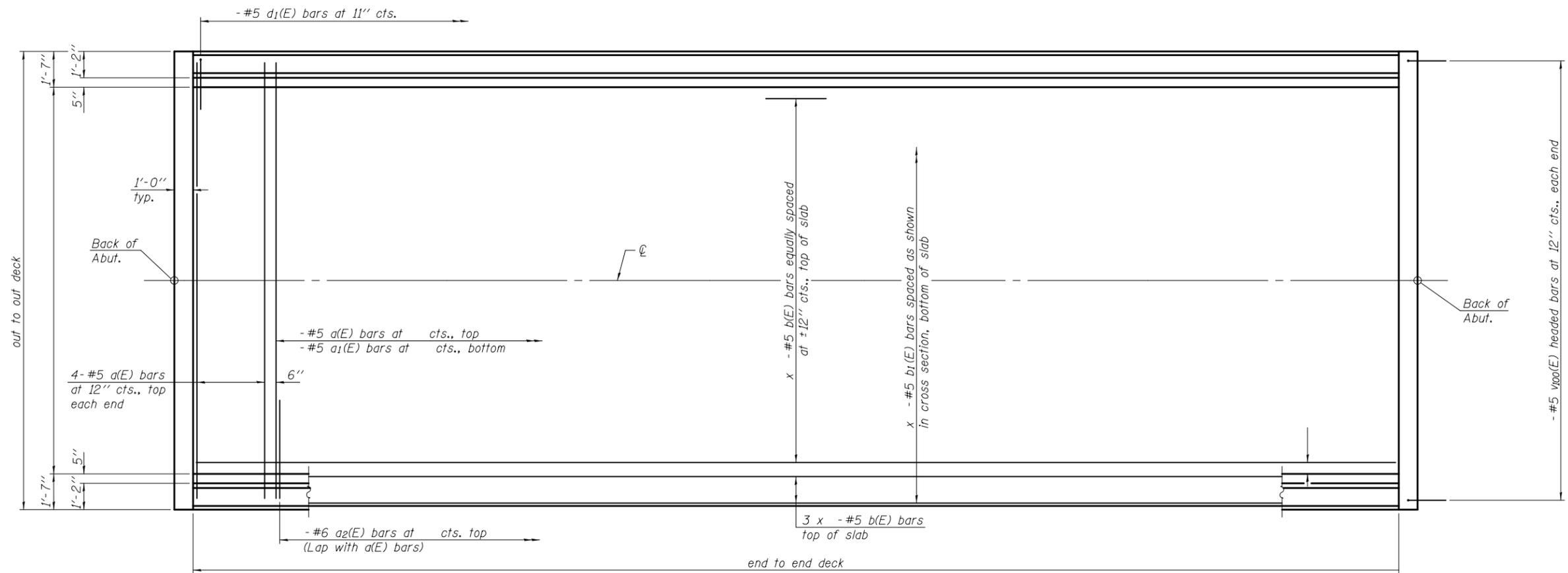
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS
STRUCTURE NO.**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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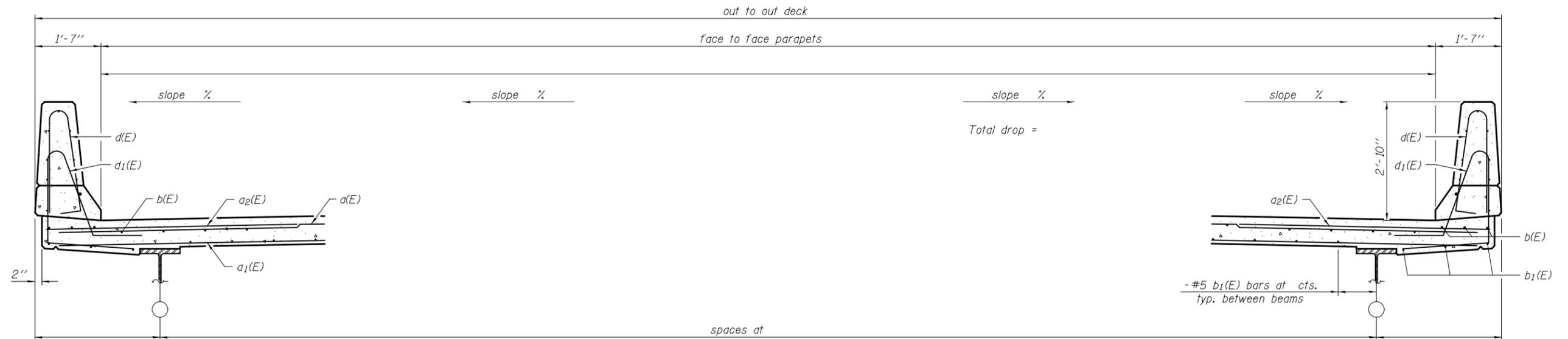


PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

Notes:
See Sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION
(Looking)

SI-SB-1-0

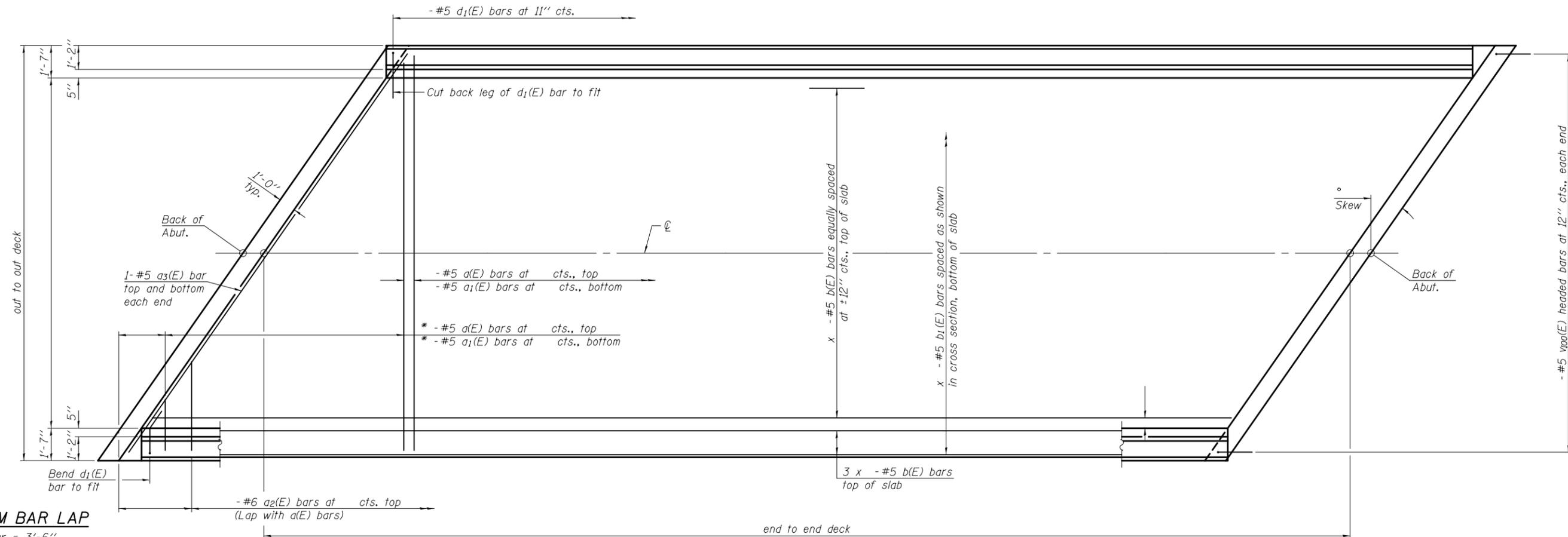
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO.

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



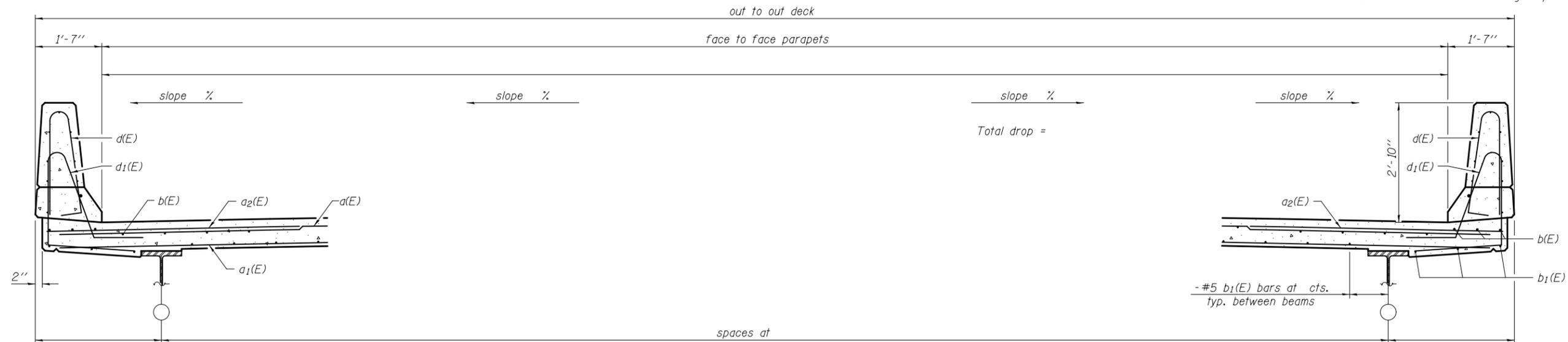
MINIMUM BAR LAP

#5 bar = 3'-6"

* Order a(E) & a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PLAN

Notes:
See sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION

(Looking)

SI-SB-1-L(>30°)

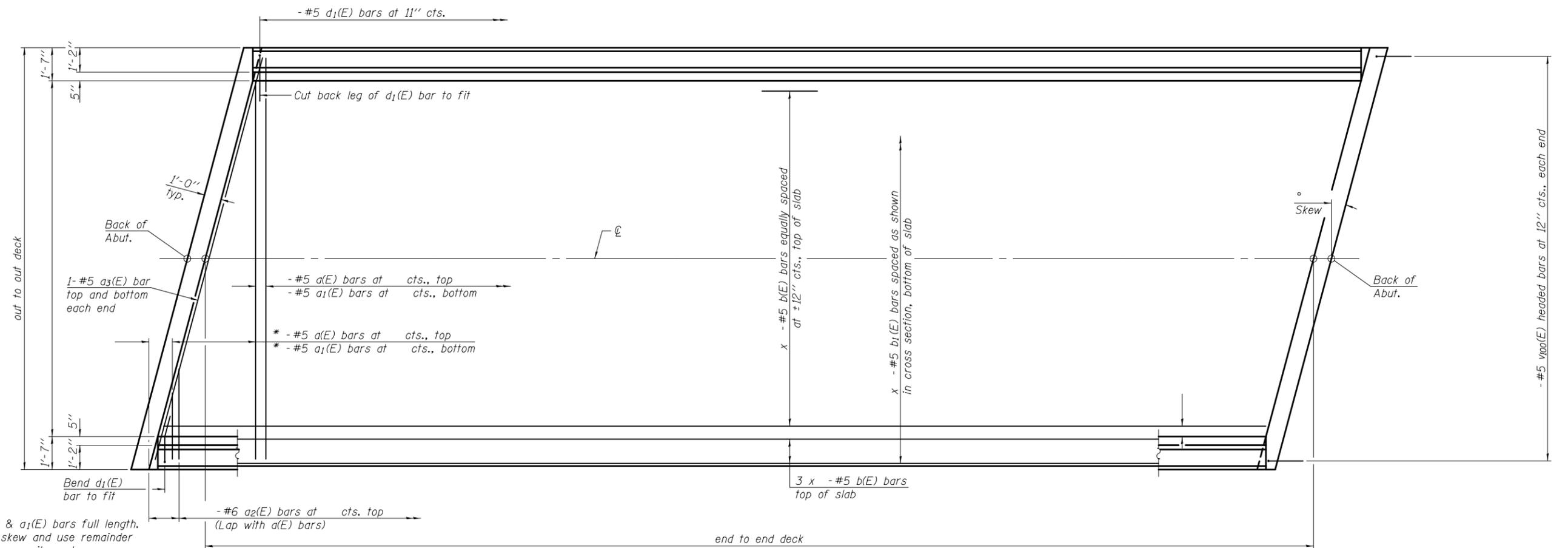
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE
STRUCTURE NO.**

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

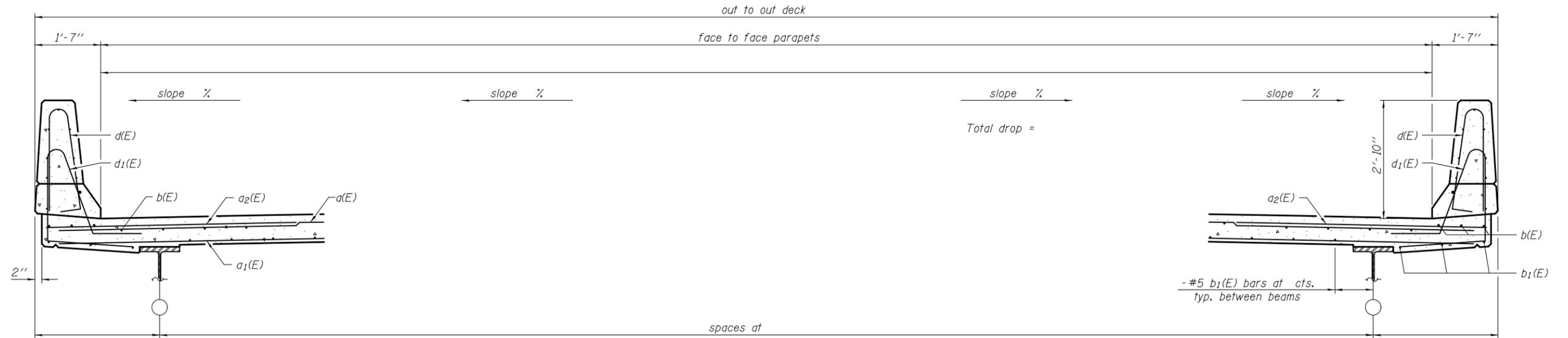


PLAN

Notes:
See Sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

MINIMUM BAR LAP

#5 bar = 3'-6"



CROSS SECTION

(Looking)

SI-SB-1-L(30°)

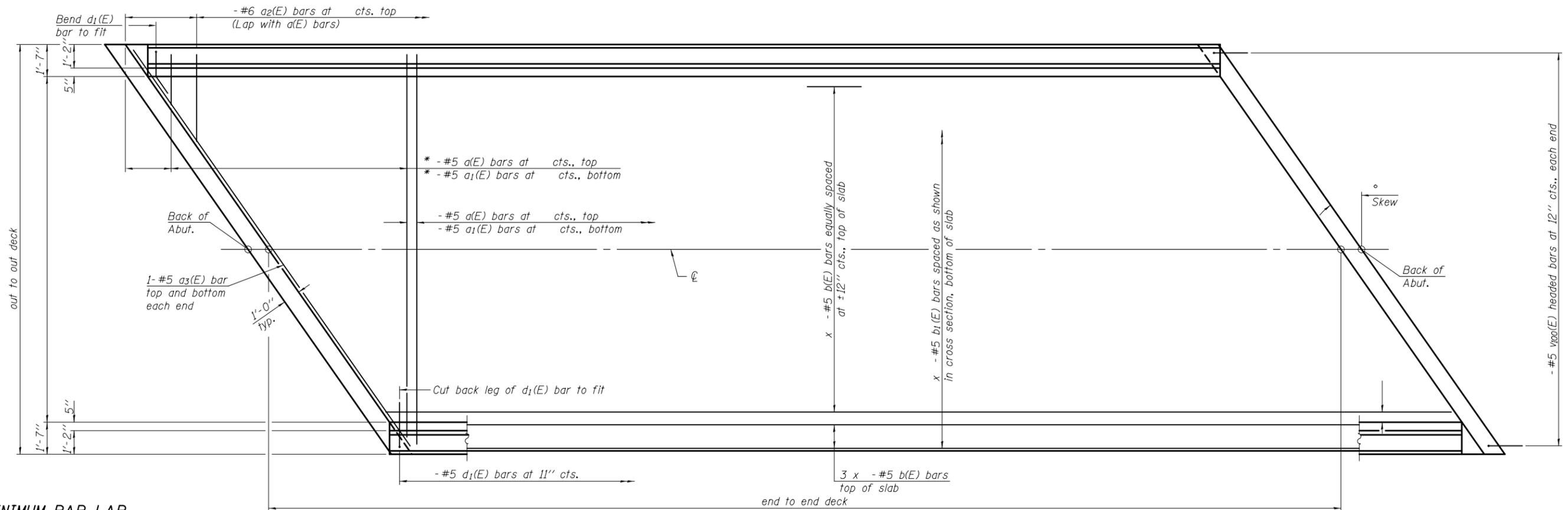
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE
STRUCTURE NO.**

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



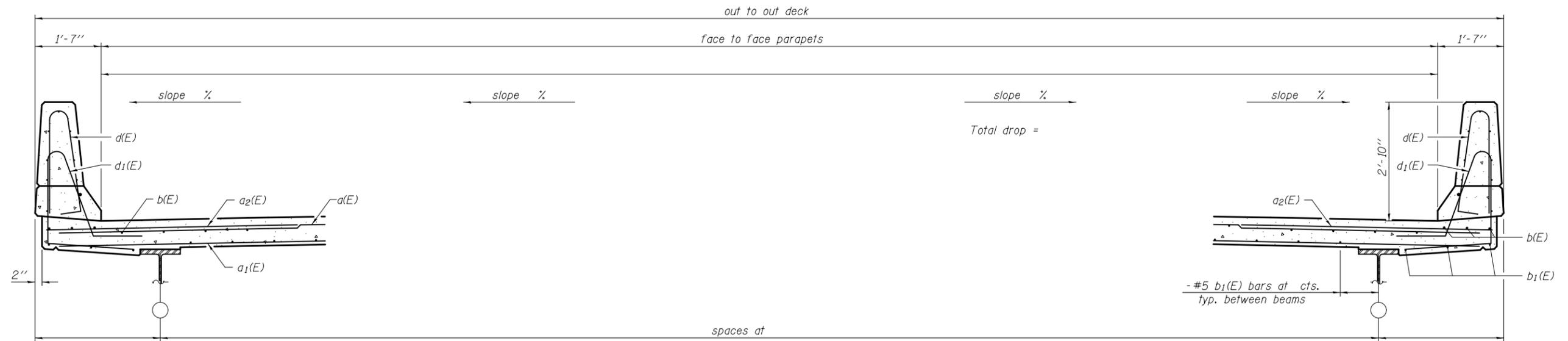
MINIMUM BAR LAP

#5 bar = 3'-6"

* Order a(E) & a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PLAN

Notes:
See sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



CROSS SECTION

(Looking)

SI-SB-1-R(>30°)

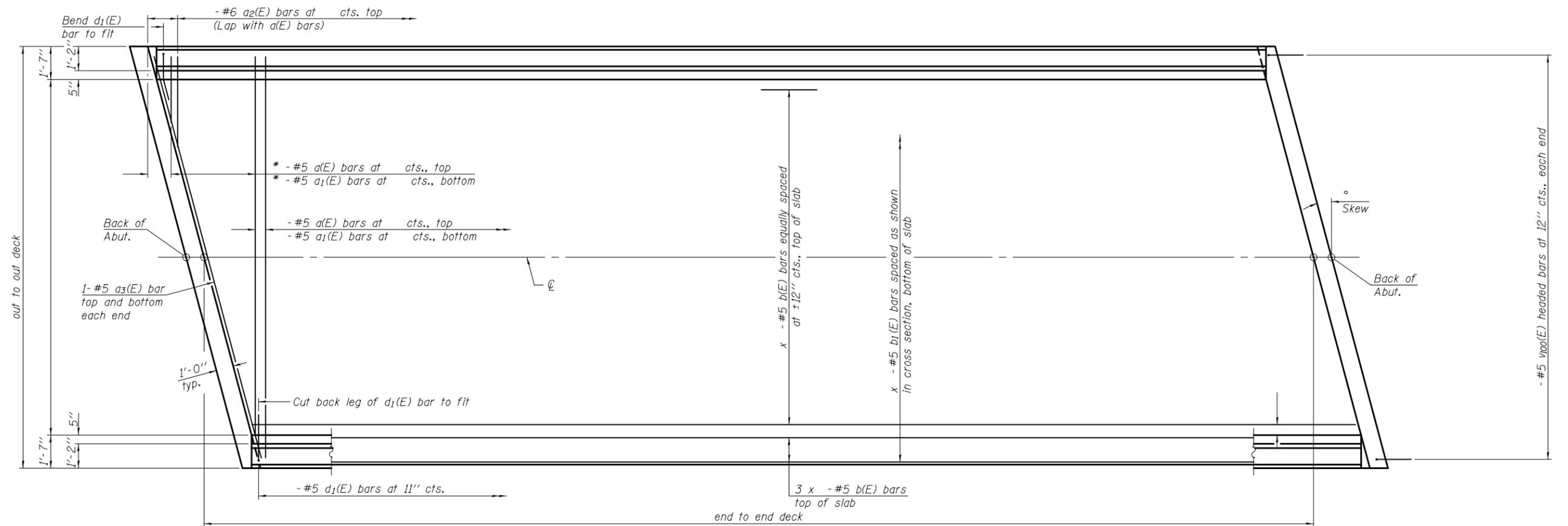
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE
STRUCTURE NO.**

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



PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

* Order a(E) & a₁(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

Notes:
See sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

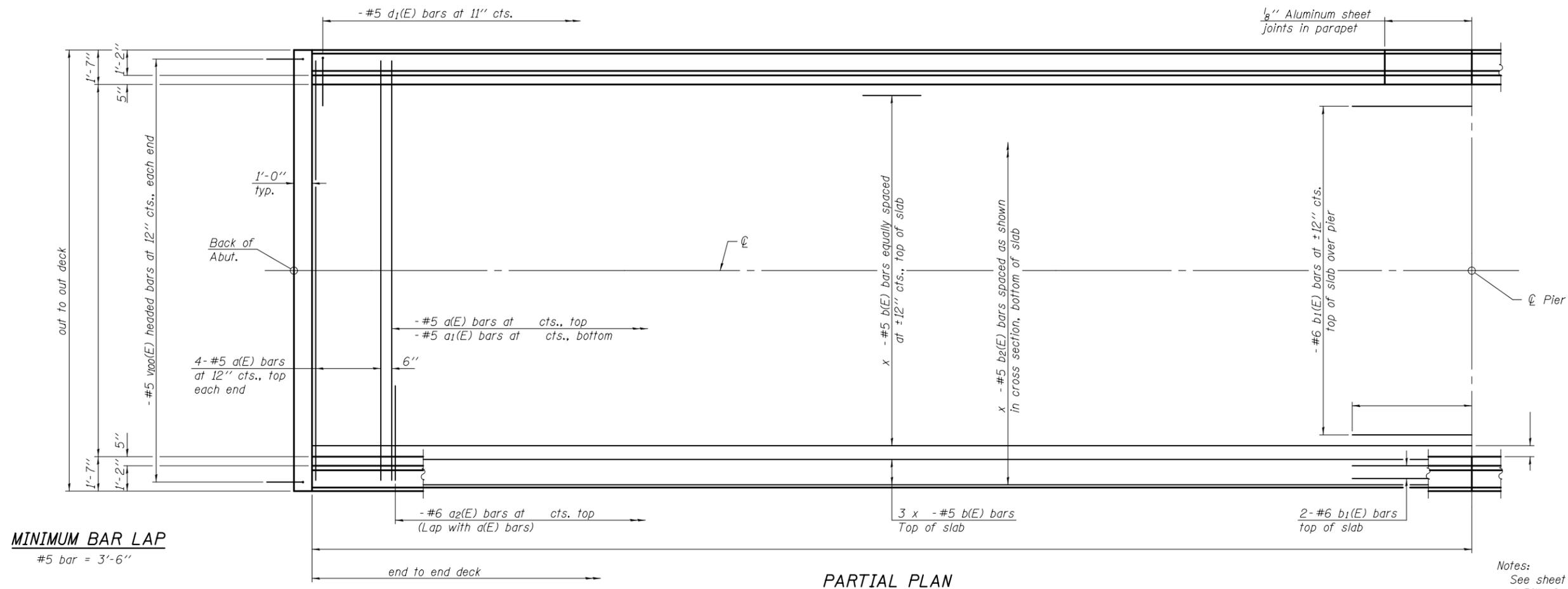


CROSS SECTION
(Looking)

SI-SB-1-R(30°)

11-22-2016

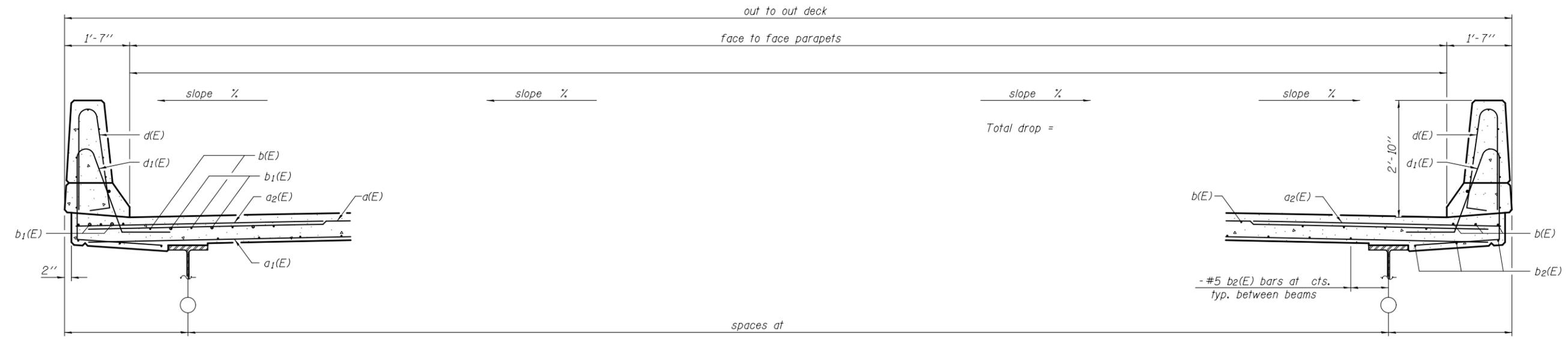
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		PLOT SCALE =	REVISED -								
		PLOT DATE =	CHECKED -								



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

PARTIAL PLAN

Notes:
See sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



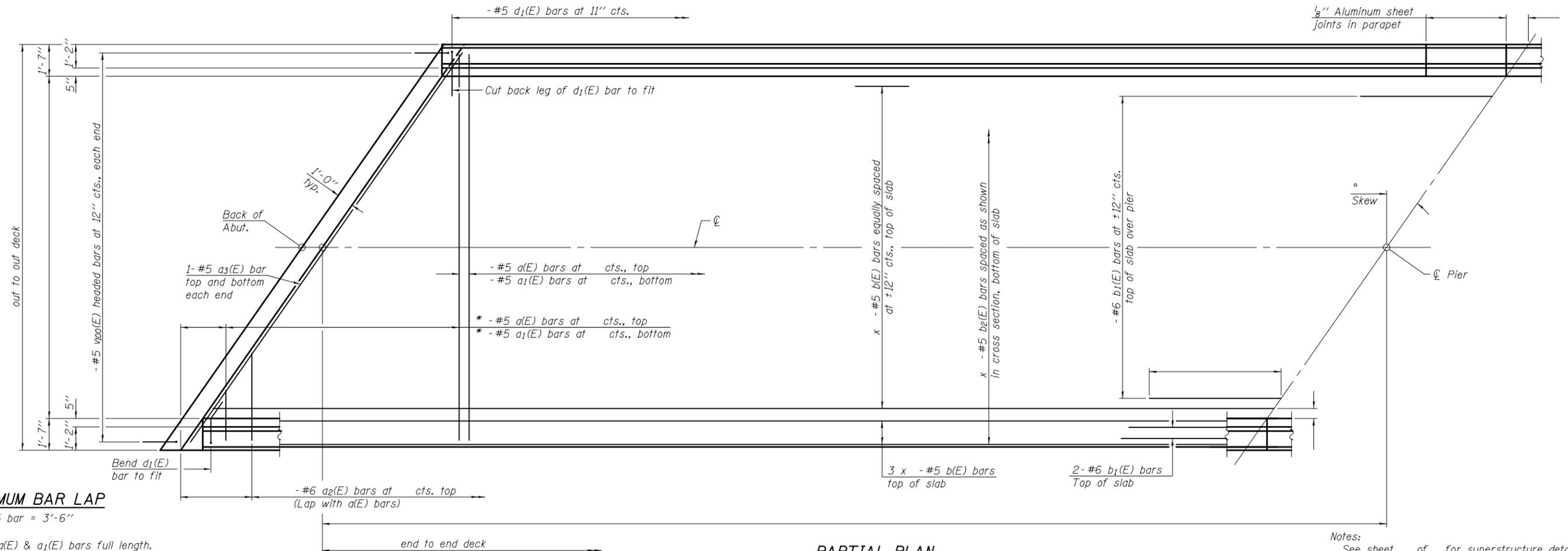
NEAR PIER

NEAR MIDSPAN

CROSS SECTION
(Looking)

SI-SB-2-0 11-22-2016

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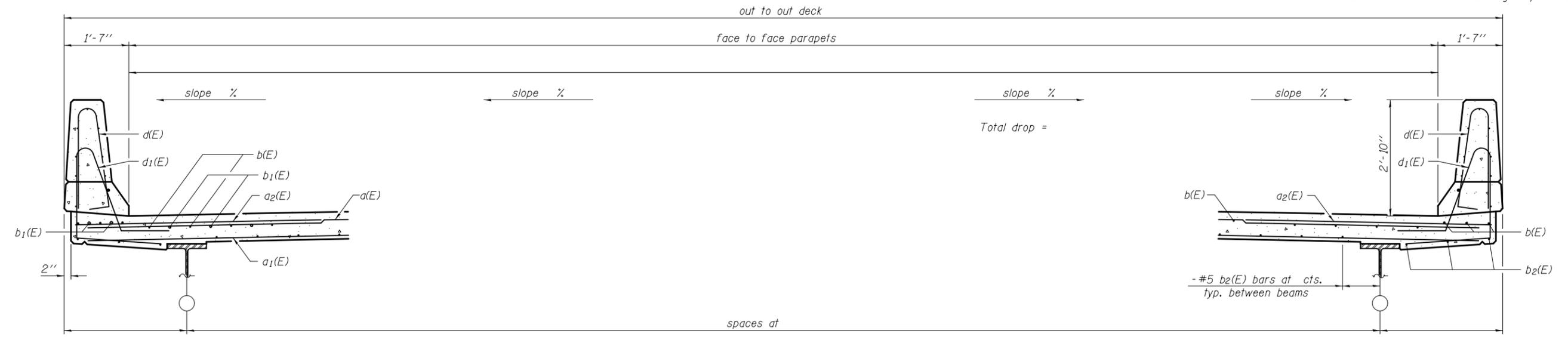
MINIMUM BAR LAP

#5 bar = 3'-6"

* Order a(E) & a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PARTIAL PLAN

Notes:
See sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



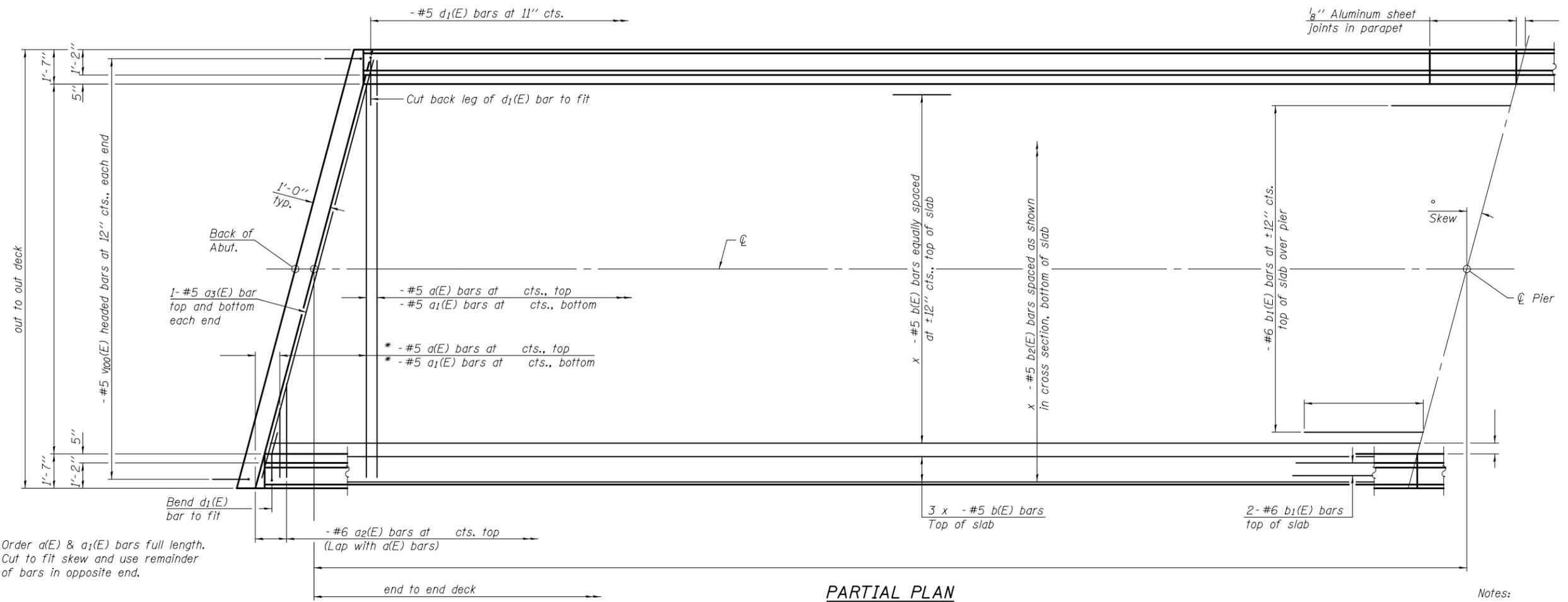
NEAR PIER

NEAR MIDSPAN

CROSS SECTION
(Looking)

SI-SB-2-L(>30°) 11-22-2016

FILE NAME =	USER NAME =	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE STRUCTURE NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISD -			CONTRACT NO.					
		DRAWN -	REVISD -			ILLINOIS FED. AID PROJECT					
		CHECKED -	REVISD -								

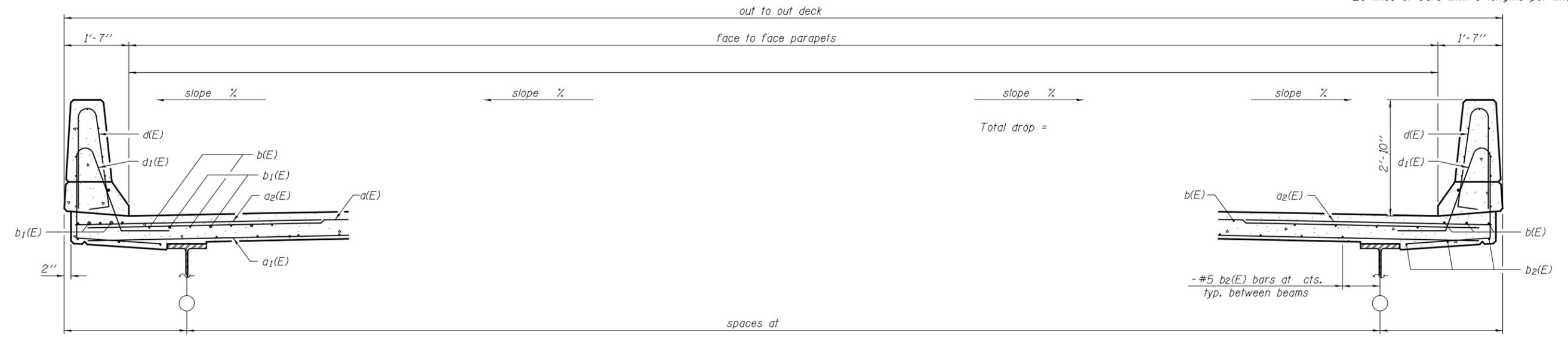


PARTIAL PLAN

Notes:
See sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

MINIMUM BAR LAP

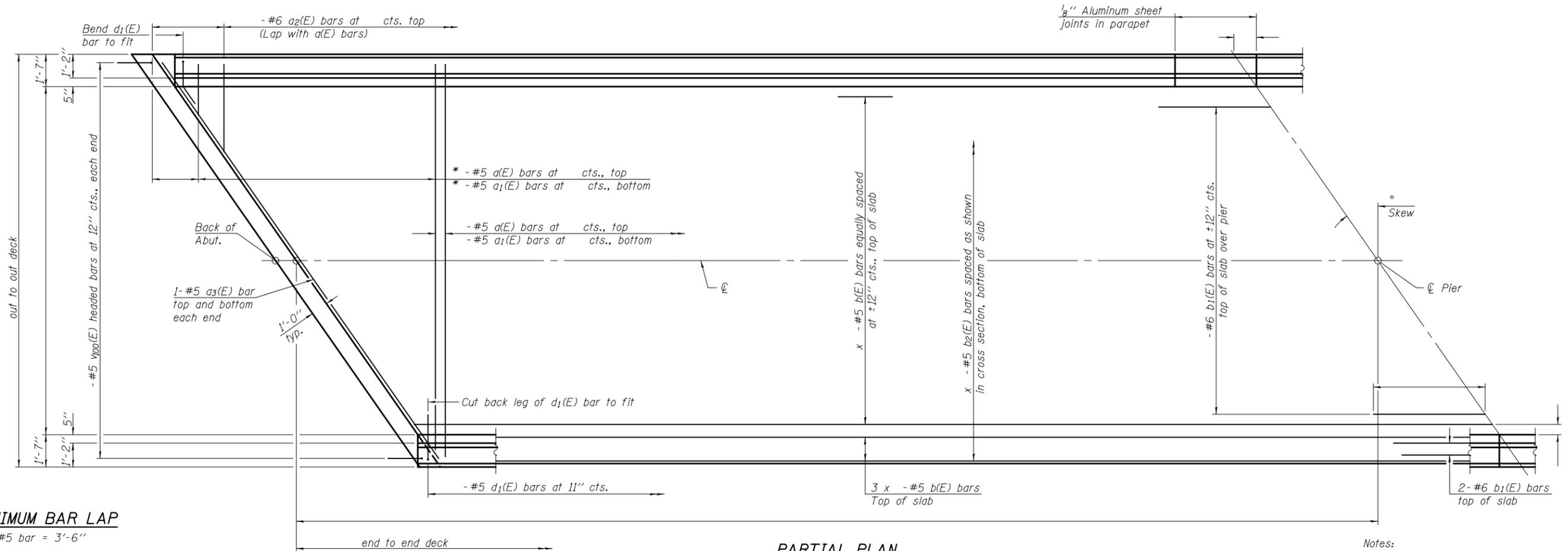
#5 bar = 3'-6"



CROSS SECTION
(Looking)

SI-SB-2-L(30°) 11-22-2016

FILE NAME =	USER NAME =	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE STRUCTURE NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		CHECKED -	REVISD -			CONTRACT NO.					
		DRAWN -	REVISD -			ILLINOIS FED. AID PROJECT					
		CHECKED -	REVISD -								



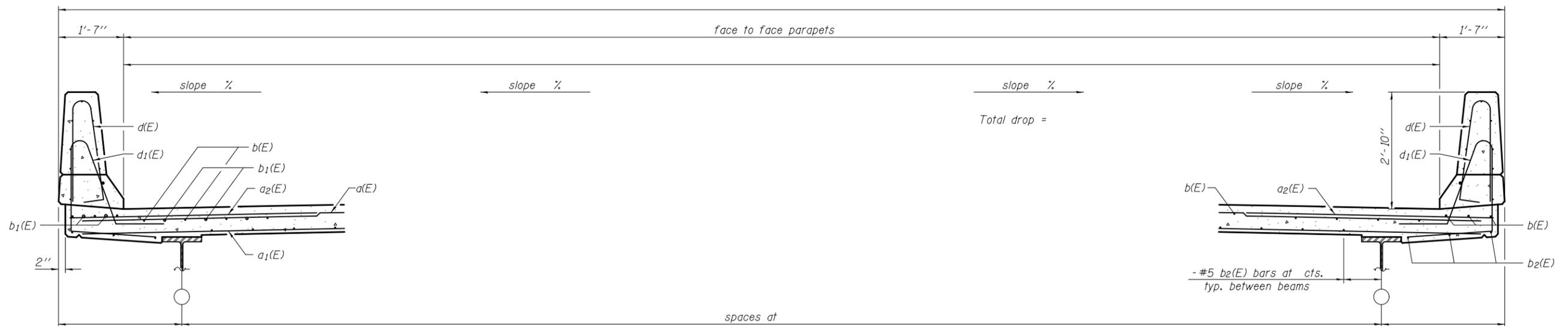
MINIMUM BAR LAP

#5 bar = 3'-6"

* Order a(E) & a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PARTIAL PLAN

Notes:
See sheet of for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



NEAR PIER

NEAR MIDSPAN

CROSS SECTION

(Looking)

SI-SB-2-R(>30°)

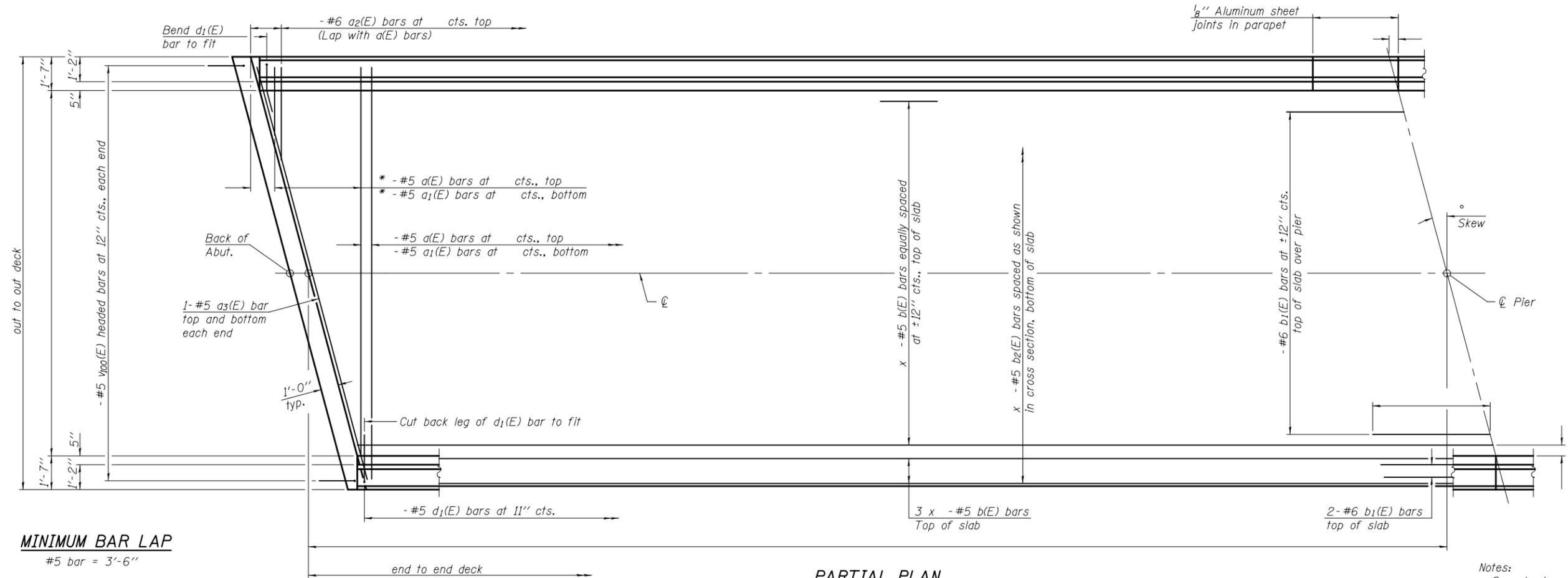
11-22-2016

FILE NAME =	USER NAME =	DESIGNED -	REVISED -
		CHECKED -	REVISED -
	PLOT SCALE =	DRAWN -	REVISED -
	PLOT DATE =	CHECKED -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE
STRUCTURE NO.**

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



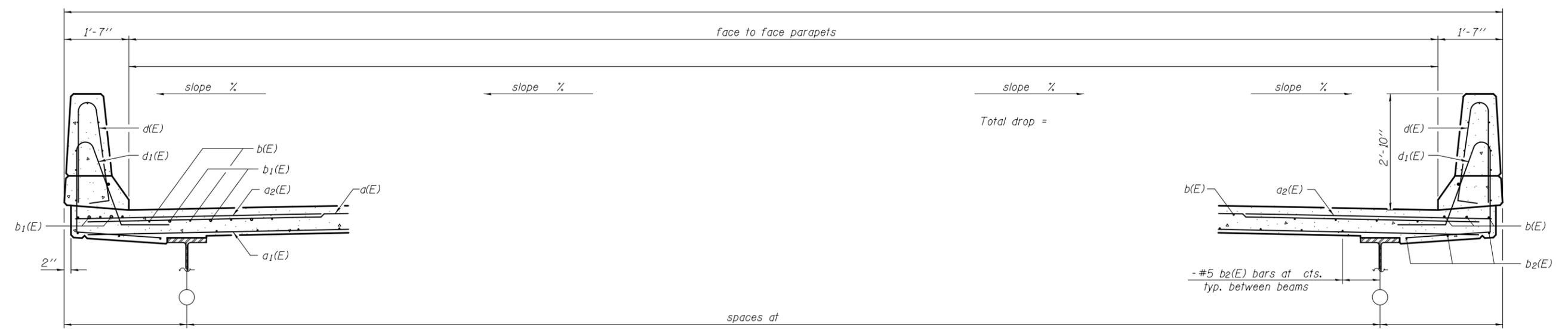
MINIMUM BAR LAP

#5 bar = 3'-6"

* Order a(E) & a1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

PARTIAL PLAN

Notes:
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Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



NEAR PIER

NEAR MIDSPAN

CROSS SECTION
(Looking)

SI-SB-2-R(30°) 11-22-2016

FILE NAME =	USER NAME =	DESIGNED -	REVISD -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE STRUCTURE NO.	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE =	CHECKED -	REVISD -			CONTRACT NO.					
	PLOT DATE =	DRAWN -	REVISD -			ILLINOIS FED. AID PROJECT					
		CHECKED -	REVISD -								