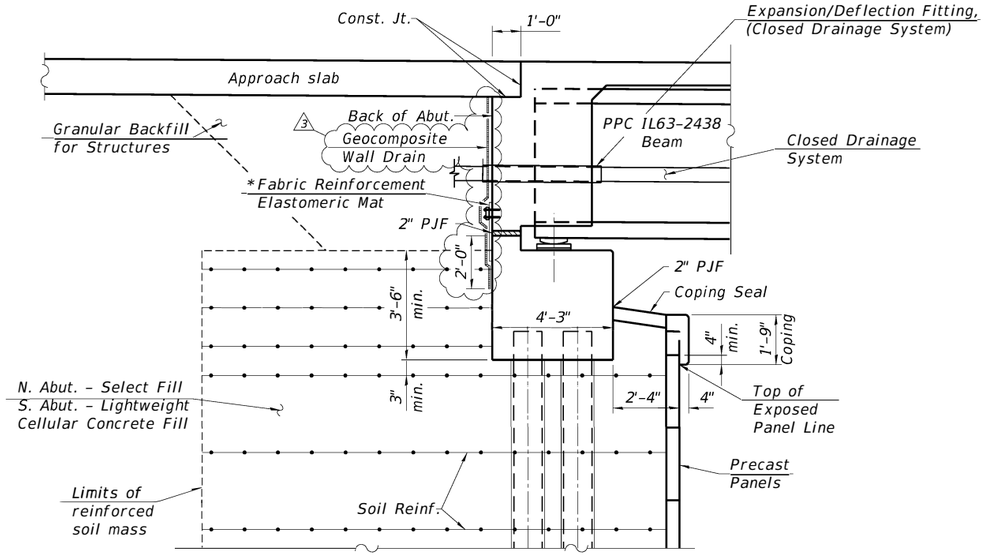
GENERAL NOTES:

1. Reinforcement bars designated (E) shall be epoxy coated.
2. Protective coat shall be applied to the top of multi-use path, top of parapets, inside faces of exterior parapets, and both faces of interior parapet.
3. Slipforming of the parapets is not allowed.

SUGGESTED SEQUENCE OF CONSTRUCTION

1. Locate existing utilities that are to remain. Contractor to coordinate any required improvements to or removals of existing utilities with utility owner(s). See Utility Location Plans.
2. Complete the Removal and Disposal of Unsuitable Materials and replace with Aggregate Subgrade Improvement.
3. Install Piles
4. Construct the abutments and MSE walls.
5. Place the Precast Prestressed Concrete Beams on the abutments.
6. Construct the bridge deck, parapets, and railings.
7. All Lightweight Cellular Concrete Fill shall be Class IV. See Special Provisions.

INDEX OF SHEETS



SECTION THRU ABUTMENT

(South Abutment shown, North Abutment similar)
(See sheets 31 thru 33 of 40 for MSE Wall details)
* Cost included with Concrete Superstructure

TOTAL BILL OF MATERIAL

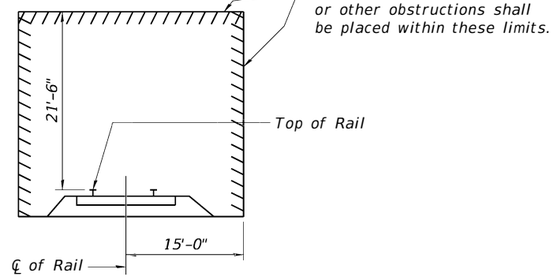
Item	Unit	Super	Sub	Total
Porous Granular Embankment	Cu. Yd.		703	703
Structure Excavation	Cu. Yd.		990	990
Removal And Disposal Of Unsuitable Material For Structures	Cu. Yd.		703	703
Floor Drains	Each	16		16
Concrete Structures	Cu. Yd.		107.2	107.2
Concrete Superstructure	Cu. Yd.	321.9		321.9
Protective Coat	Sq. Yd.	545		545
Furnishing And Erecting Precast Prestressed Concrete Beams, IL63N	Foot	1,054		1,054
Reinforcement Bars, Epoxy Coated	Pound	71,740	9,280	81,020
Bridge Fence Railing	Foot	266		266
Parapet Railing	Foot	253		253
Furnishing Steel Piles HP12X53	Foot		3,216	3,216
Driving Piles	Foot		3,216	3,216
Test Pile Steel HP12X53	Each		2	2
Pile Shoes	Each		26	26
Name Plates	Each	1		1
Preformed Joint Strip Seal	Foot	107		107
Elastomeric Bearing Assembly, Type I	Each	8		8
Anchor Bolts, 1 1/4"	Each	32		32
Mechanically Stabilized Earth Retaining Wall	Sq. Ft.		4,297	4,297
Drainage System For Structures	L. Sum	1.0		1.0
Granular Backfill For Structures	Cu. Yd.		184	184
Geocomposite Wall Drain	Sq. Yd.	118		118
Chain Link Fence, 4'	Foot	219		219
Lightweight Cellular Concrete Fill	Cu. Yd.		7,450	7,450
Anti-Graffiti Coating	Sq. Ft.		8,308	8,308
Concrete Wearing Surface, 5"	Sq. Yd.	356		356
Precast Bridge Approach Slab	Sq. Ft.	3,065		3,065
Bridge Deck Thin Polymer Overlay 3/8"	Sq. Yd.	857		857
Mechanically Stabilized Earth Retaining Wall, Special	Sq. Ft.		4,613	4,613

3

BNSF CROSSING NUMBER 977805V
BUILT 20-- BY
KANE COUNTY
SEC. 15-00277-01-BR
F.A.S. RT. 1107 STA. 654+70.12
STR. NO. 045-3401 LOADING HL-93

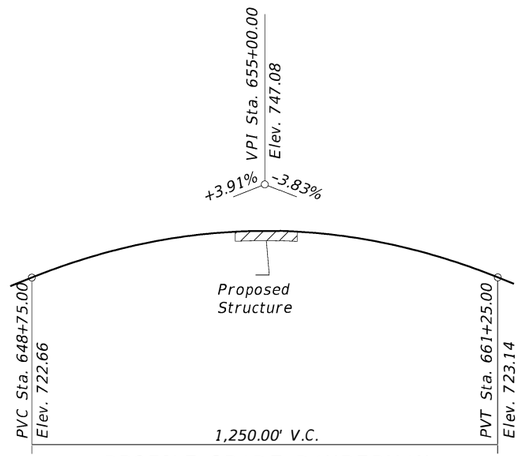
NAME PLATE

See Std. 515001



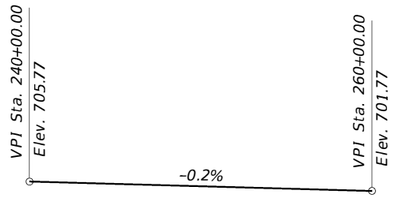
MINIMUM CONSTRUCTION CLEARANCES

(Normal to railroad)
Not to scale



PROFILE GRADE DAUBERMAN

Along ℄ Dauberman Rd.



PROFILE GRADE BNSF

Along ℄ BNSF Railroad

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		CHECKED - MDS	REVISED -		
	PLOT SCALE = NTS	DRAWN - TJA	REVISED -		SHEET NO. 2 OF 40 SHEETS
	PLOT DATE = 1/11/2023	CHECKED - MDS	REVISED -		

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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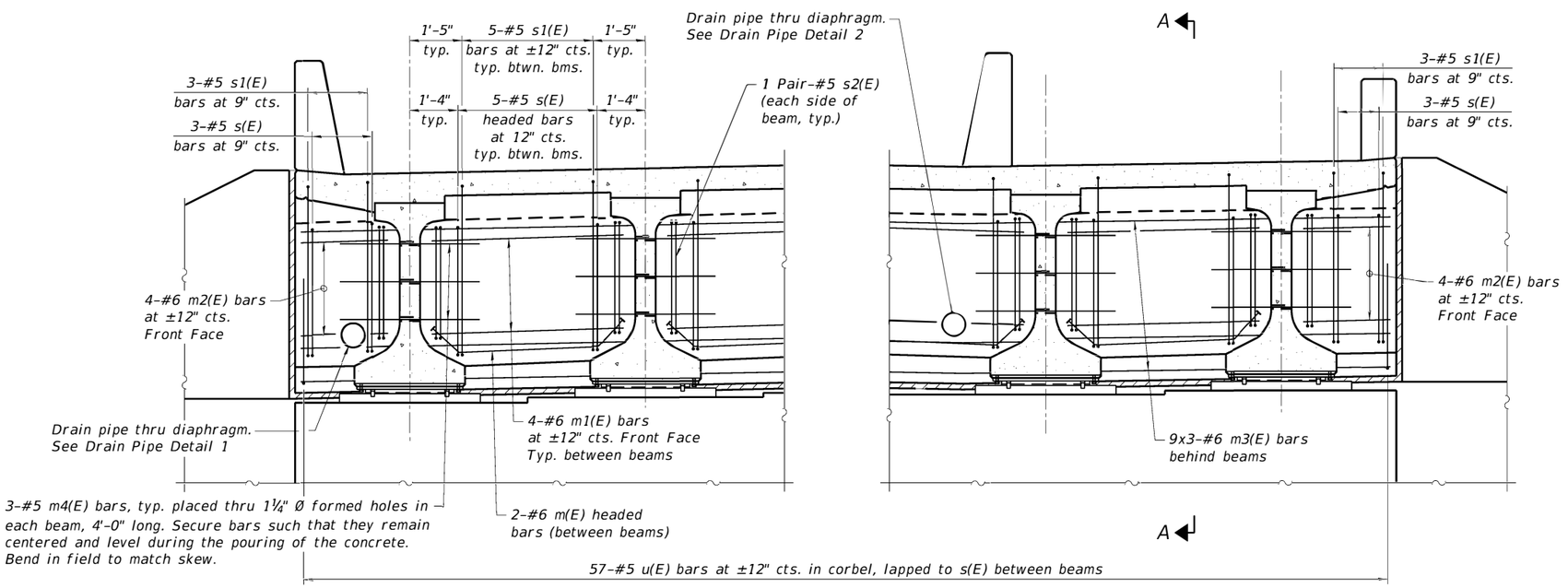
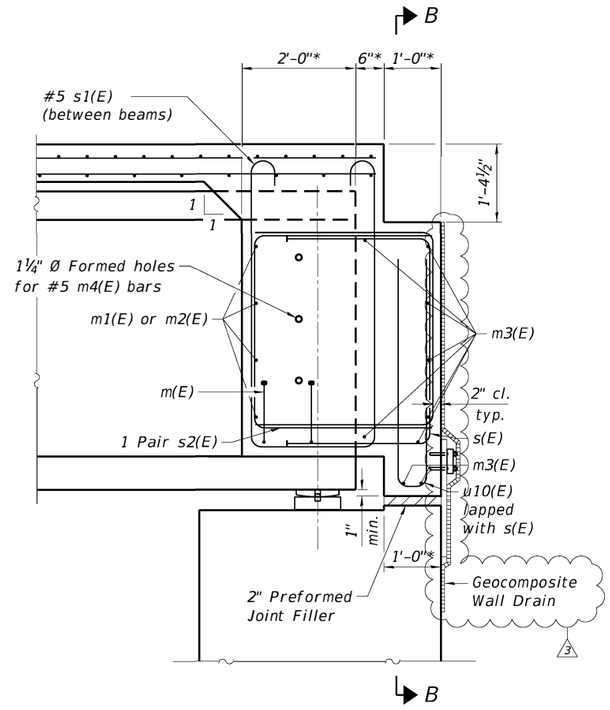
		CONTRACT NO. 61H95		
		ILLINOIS	FED. AID PROJECT	



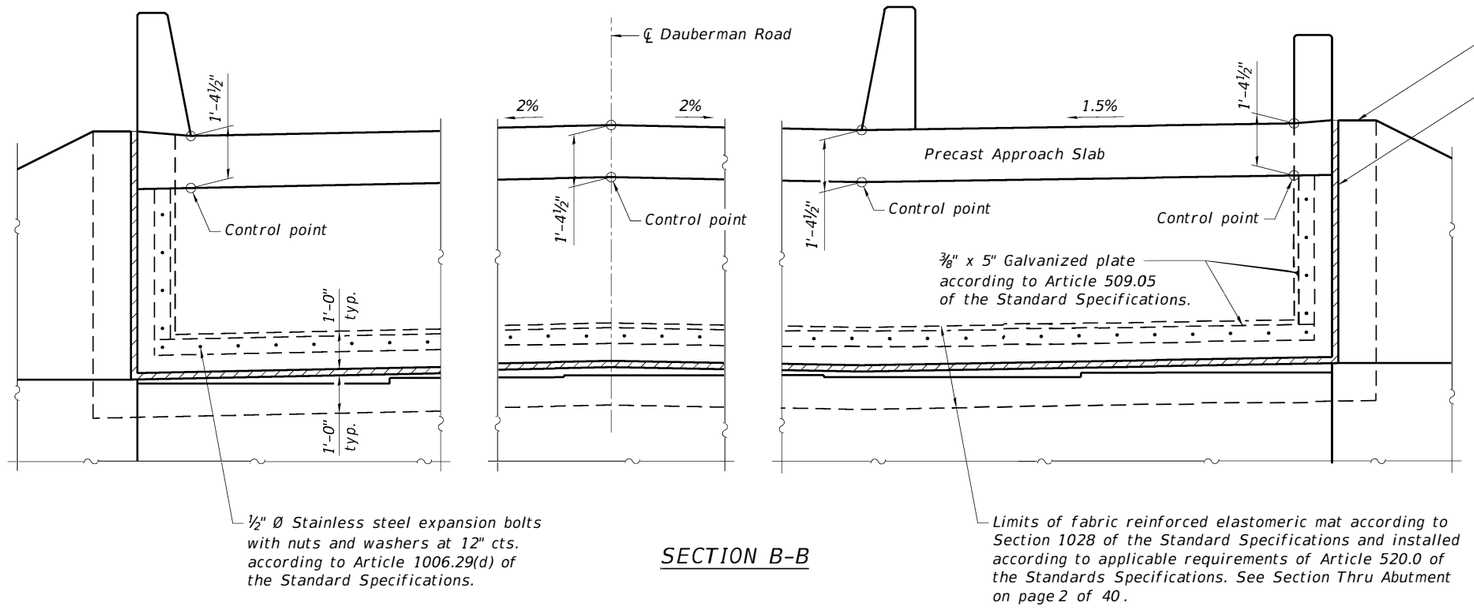
DIAPHRAGM ELEVATION AT ABUTMENT

(Looking North at North Abutment)
(South Abutment similar)



SECTION A-A

** Measured along skew*



SECTION B-B

Notes:

See sheet 12 of 40 for drain pipe details.

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

The s(E), s1(E), s2(E), and u(E) bars are placed parallel to beams and spaced at right angles to beams.

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.

MINIMUM BAR LAP

#6 bar = 4'-5"

FILE NAME = 0453401-XXXXX-011-Superstructure_Details2.dgn

TranSystems	USER NAME = CEComin	DESIGNED - TJA	REVISED - TJA 1/10/2023 3	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE DETAILS 2 SN 045-3401
		CHECKED - MDS	REVISED -		
	PLOT SCALE = NTS	DRAWN - TJA	REVISED -		
	PLOT DATE = 1/11/2023	CHECKED - MDS	REVISED -		SHEET NO. 11 OF 40 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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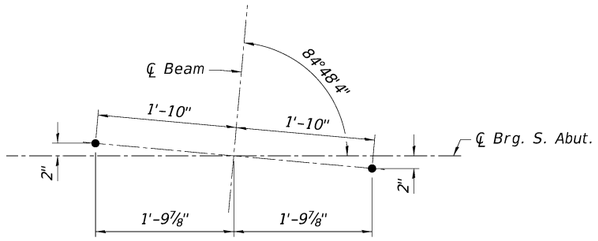
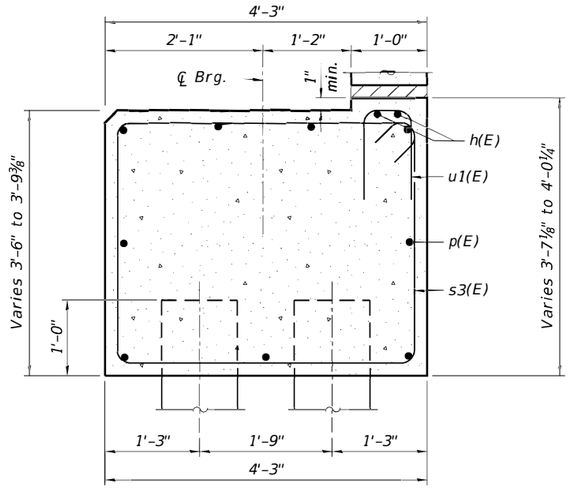
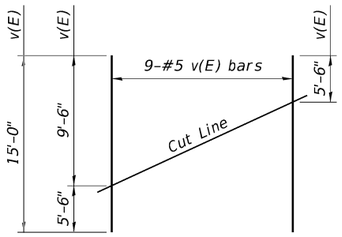
		CONTRACT NO. 61H95		
	ILLINOIS	FED. AID PROJECT		



ANCHOR BOLT DETAILS

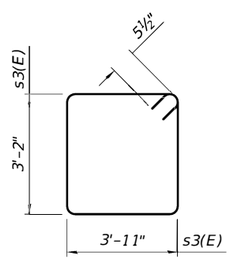


SECTION THRU ABUT.

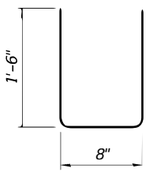


FIELD CUTTING DIAGRAM

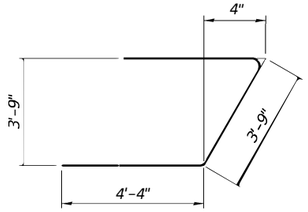
Order v(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s3(E)



BAR u1(E)



BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#5	28'-5"	
h1(E)	32	#8	18'-5"	
h2(E)	20	#4	9'-6"	
h3(E)	4	#6	10'-6"	
p(E)	27	#7	20'-10"	
s3(E)	56	#5	14'-11"	
u(E)	8	#6	13'-0"	
u1(E)	55	#5	3'-8"	
v(E)	18	#5	15'-0"	
v1(E)	4	#5	9'-11"	
v2(E)	4	#5	9'-9"	
Concrete Structures			Cu. Yd.	37.2
Reinforcement Bars, Epoxy Coated			Pound	4,640
Furnishing Steel Piles HP12x53			Foot	1,704
Driving Piles			Foot	1,704
Test Pile Steel HP12x53			Each	1
Pile Shoes			Each	13
3 Geocomposite Wall Drain			Sq. Yd.	59

Notes:
Pour steps monolithically with cap.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
For details of piles see Sheet 30 of 40.

FILE NAME = 0453401-XXXXX-027-Abutment_SouthDetails.dgn

TranSystems

USER NAME = CEComin	DESIGNED - TJA	REVISED - TJA 1/10/2023 3	
	CHECKED - MDS	REVISED -	
PLOT SCALE = NTS	DRAWN - TJA	REVISED -	
PLOT DATE = 1/11/2023	CHECKED - MDS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH ABUTMENT DETAILS
SN 045-3401
SHEET NO. 27 OF 40 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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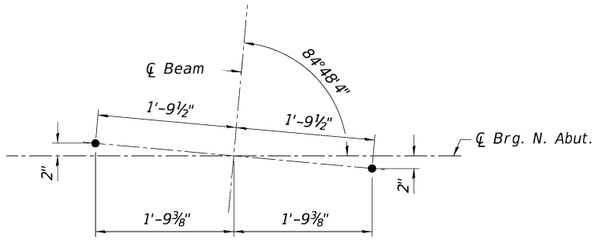
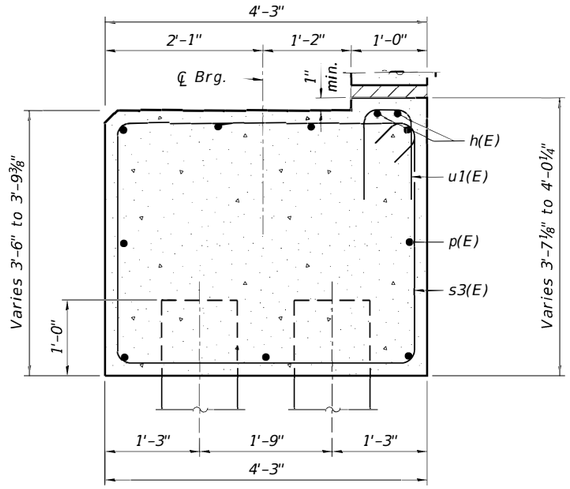
		CONTRACT NO. 61H95		
	ILLINOIS FED. AID PROJECT			



ANCHOR BOLT DETAILS



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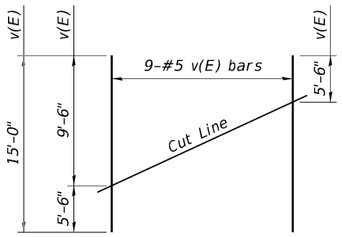
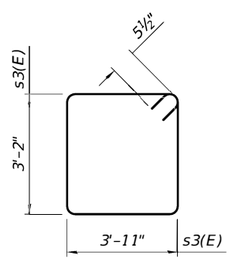
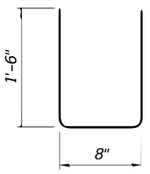


FIELD CUTTING DIAGRAM

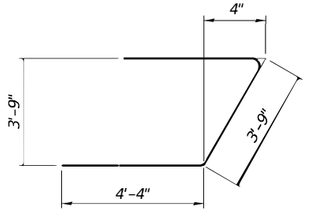
Order v(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s3(E)



BAR u1(E)



BAR u(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	4	#5	28'-5"	
h1(E)	32	#8	18'-5"	
h2(E)	20	#4	9'-6"	
h3(E)	4	#6	10'-6"	
p(E)	27	#7	20'-10"	
s3(E)	56	#5	14'-11"	
u(E)	8	#6	13'-0"	
u1(E)	55	#5	3'-8"	
v(E)	18	#5	15'-0"	
v1(E)	4	#5	9'-11"	
v2(E)	4	#5	9'-9"	
Concrete Structures			Cu. Yd.	37.2
Reinforcement Bars, Epoxy Coated			Pound	4,640
Furnishing Steel Piles HP12x53			Foot	1,512
Driving Piles			Foot	1,512
Test Pile Steel HP12x53			Each	1
Pile Shoes			Each	13
3 Geocomposite Wall Drain			Sq. Yd.	59

Notes:
Pour steps monolithically with cap.
Headed bars shall conform to ASTM A970 with threaded attachment; Class HA; and reinforcement bars conforming to ASTM A706. Cost included with Reinforcement Bars, Epoxy Coated.
For details of piles see Sheet 30 of 40.

FILE NAME = 0453401-XXXXX-029-Abutment_NorthDetails1.dgn

TranSystems

USER NAME = CEComin	DESIGNED - TJA	REVISED - TJA 1/10/2023 3
	CHECKED - MDS	REVISED -
PLOT SCALE = NTS	DRAWN - TJA	REVISED -
PLOT DATE = 1/11/2023	CHECKED - MDS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH ABUTMENT DETAILS
SN 045-3401
SHEET NO. 29 OF 40 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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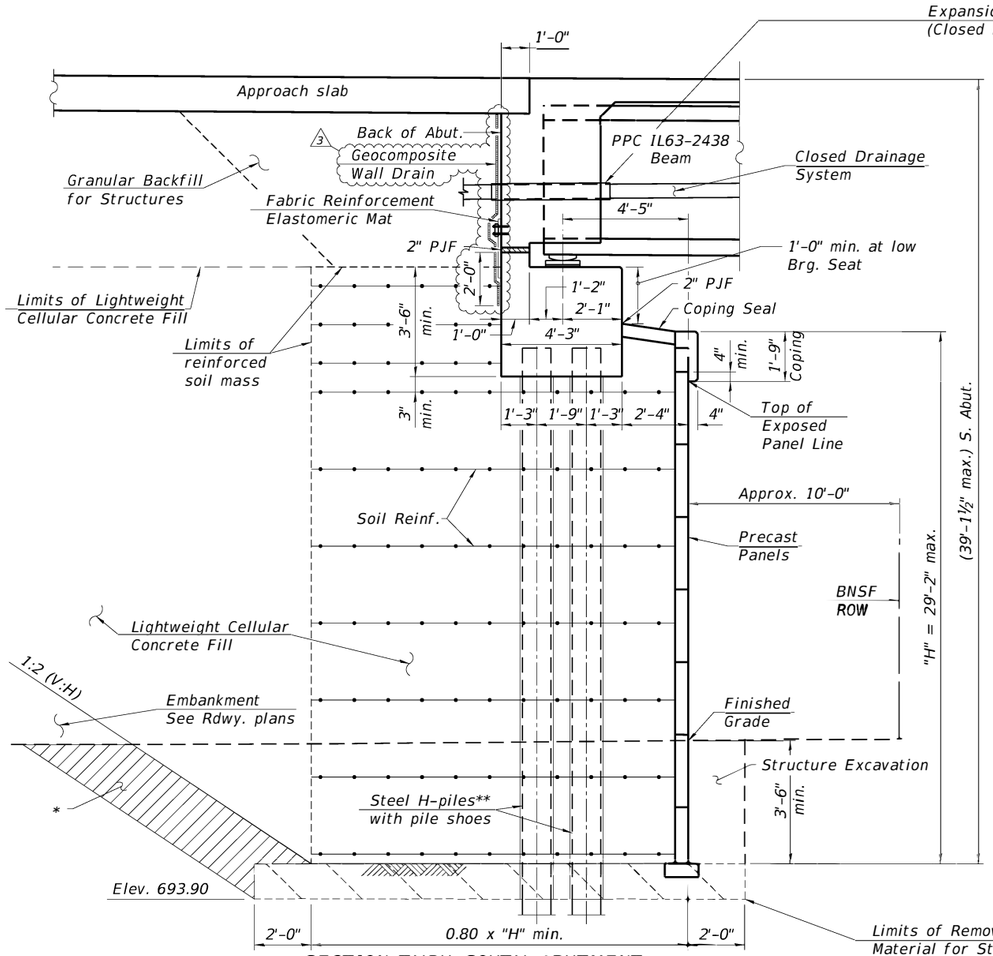
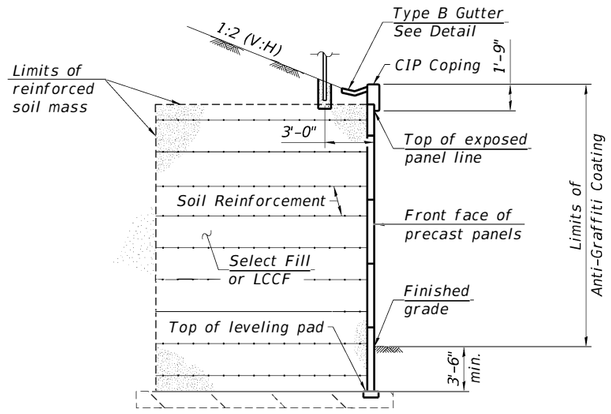
		CONTRACT NO. 61H95		
	ILLINOIS FED. AID PROJECT			

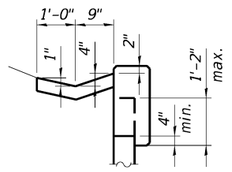


* Overexcavation beyond structure excavation and removal of unsuitable material.

** Piles shall be driven before the construction of MSE walls. 21" Ø corrugated galvanized steel pipe, 10 gage min. shall be provided from the bottom of the abutment cap to the bottom of the excavation level. Install sleeves around piles and backfill sleeves with dry, loose sand.



SECTION THRU MSE WALL



COPING DETAIL

LEGEND

Approximate Limits of Removal of Unsuitable Material for Structures

FILE NAME = 045340i-XXXXX-033-MSE_Det_Xsections1.dgn

TranSystems

USER NAME = CEComin	DESIGNED - TJA	REVISED - TJA 1/10/2023 3	
	CHECKED - MDS	REVISED -	
PLOT SCALE = NTS	DRAWN - TJA	REVISED -	
PLOT DATE = 1/11/2023	CHECKED - MDS	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MSE WALL SECTIONS AND DETAILS
SN 045-3401
SHEET NO. 33 OF 40 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1107	15-00277-01-BR	KANE	542	238
		CONTRACT NO. **61H95**		
	ILLINOIS	FED. AID PROJECT		