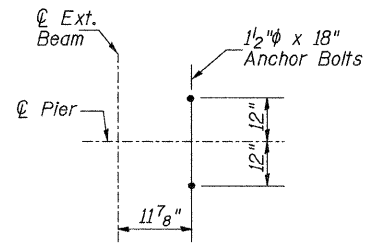
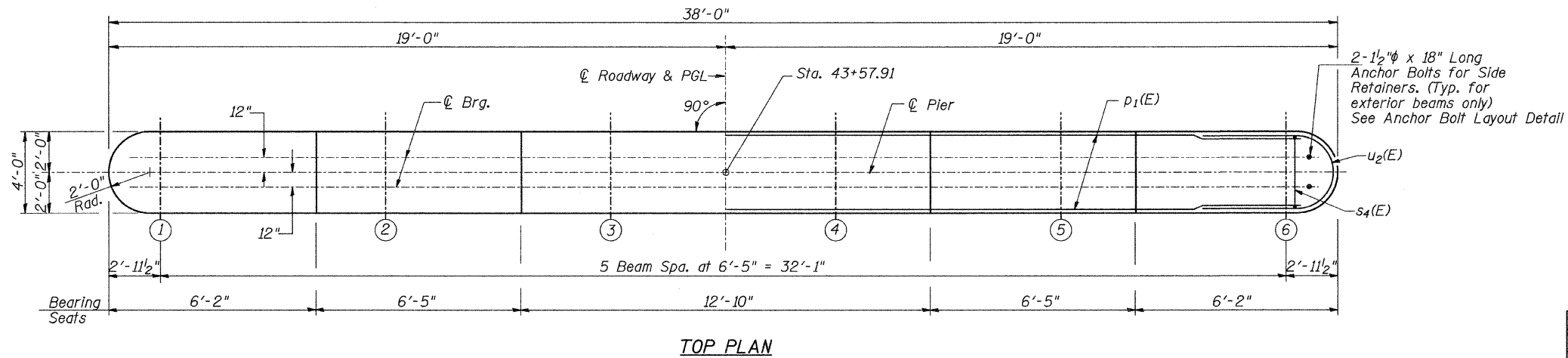


Notes: Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.

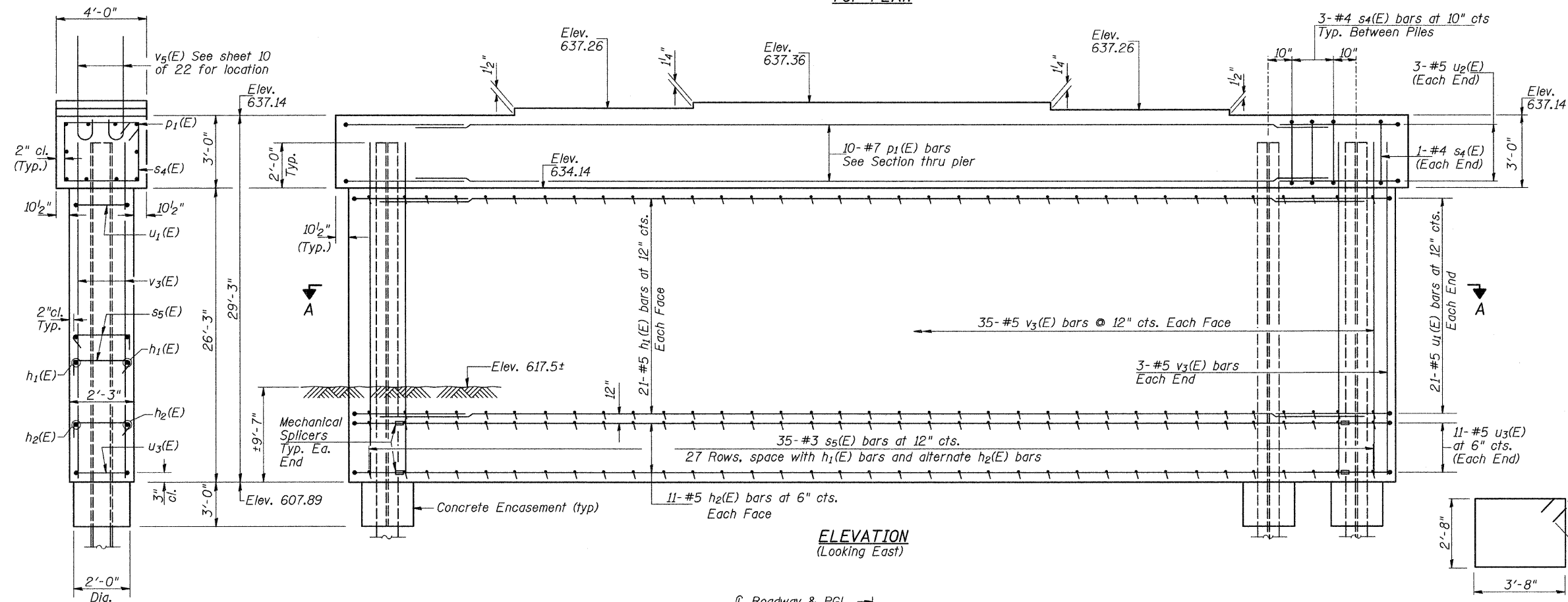


ANCHOR BOLT LAYOUT FOR SIDE RETAINER

BILL OF MATERIAL - PIER #1

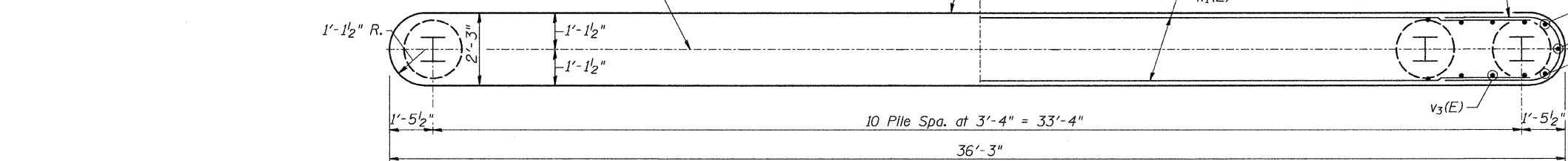
Bar	No.	Size	Length	Shape
h1(E)	42	#5	34'-0"	—
h2(E)	22	#5	31'-0"	—
p1(E)	10	#7	34'-0"	—
s4(E)	32	#4	13'-5"	□
s5(E)	945	#3	2'-11"	└
u1(E)	42	#5	9'-0"	U
u2(E)	6	#5	11'-8"	U
u3(E)	22	#5	6'-0"	U
v3(E)	76	#5	28'-3"	—
v5(E)	30	#8	4'-5"	U
Anchor Bolts, 1/2"			Each	4
Structure Excavation			Cu. Yd.	90
Concrete Encasement			Cu. Yd.	3.8
Concrete Structures			Cu. Yd.	95.4
Reinforcement Bars, Epoxy Coated			Pound	7,420
Furnishing Steel Piles HP12x53			Foot	760
Driving Piles			Foot	760
Mechanical Splicers			Each	44
Test Pile Steel HP12x53			Each	1
Underwater Structure Excavation Protection, Location 1			Each	1

- ① See Special Provisions



ELEVATION (Looking East)

SECTION THRU PIER



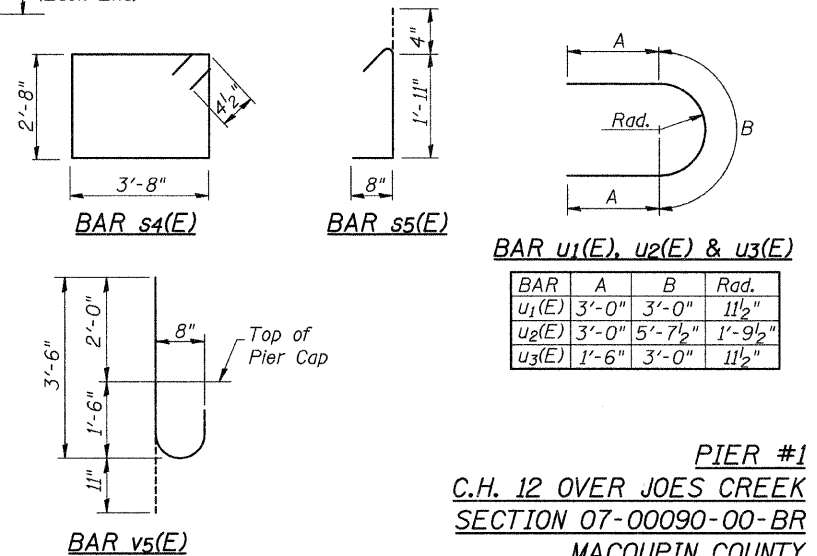
PILE DATA

Type: Steel HP12x53  
 Nominal Required Bearing: 320 kips  
 Factored Resistance Available: 160 kips  
 Est. Length: 76'  
 No. Production Piles: 10  
 No. Test Piles: 1

SECTION A-A

Notes: For details of Piles and Concrete Encasement, see sheet 20 of 22. For Side Retainer Details, see sheet 9 of 22.

If a portion of the pier wall is under water, concrete shall be tremied under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be tremied to an elevation 1'-0" above the water level at the time of construction.



BAR	A	B	Rad.
u1(E)	3'-0"	3'-0"	1 1/2"
u2(E)	3'-0"	5'-7 1/2"	1'-9 1/2"
u3(E)	1'-6"	3'-0"	1 1/2"

PIER #1  
 C.H. 12 OVER JOES CREEK  
 SECTION 07-00090-00-BR  
 MACOUPIN COUNTY

SHEET NO. 17	ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	CH 12	07-00090-00-BR	MACOUPIN	77	46
22 SHEETS	SN 059-3557		CONTRACT NO. 93538		
FED. ROAD DIST. NO. 7 ILLINOIS		FED. AID PROJECT BRS-0732(148)			