

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

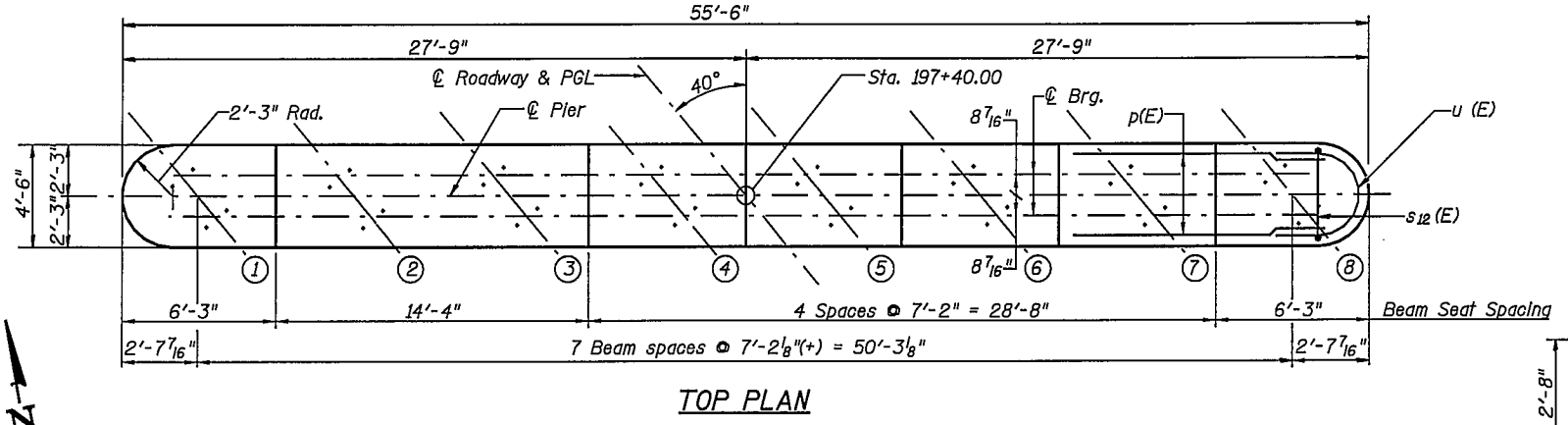
PILE DATA

Type: HP12x53 w/ Metal Shoes
 Design Capacity: 55T
 Required Bearing Capacity: 82.5 Ton
 Est. Length: 76'
 No. Required: 17 + 1 Test Pile
 w/ Metal Shoes

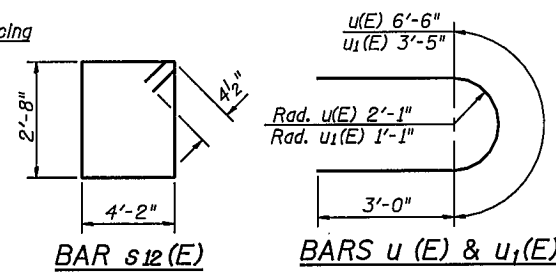
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	68	#5	27'-0"	—
p(E)	14	#7	27'-4"	—
p ₁ (E)	2	#5	32'-6"	—
s ₁₂ (E)	51	#5	14'-5"	□
u(E)	6	#5	12'-6"	U
u ₁ (E)	34	#5	9'-5"	U
u ₂ (E)	33	#4	8'-4"	U
v(E)	108	#5	19'-3"	—
Structure Excavation		Cu. Yd.	14	
Concrete Structures		Cu. Yd.	114.3	
Reinforcement Bars, Epoxy Coated		Pound	6,300	
Furnishing Steel Piles HP12x53		Foot	1,292	
Driving Steel Piles		Foot	1,292	
Test Pile Steel HP12x53		Each	1	
Underwater Structure Excavation Protection Location 1		Each	1	
Metal Shoes		Each	17	

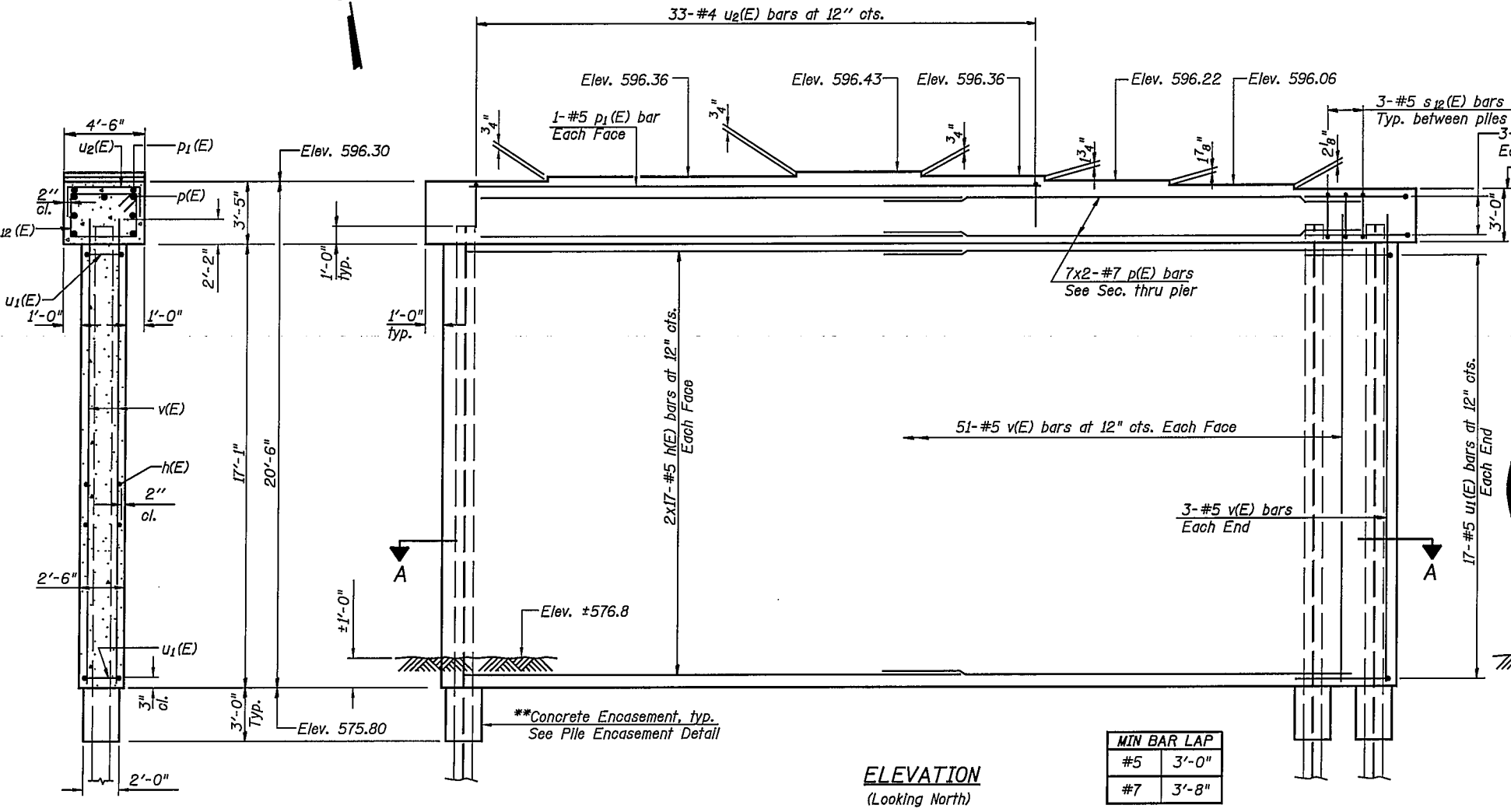
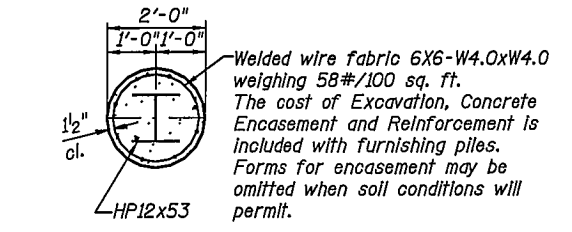
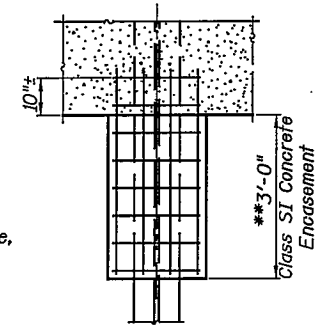
Bars Indicated thus 5x3-#5 etc. Indicates 5 lines of bars with 3 lengths per line.
 Reinforcement bars designated (E) shall be epoxy coated.



ANCHOR BOLT LAYOUT



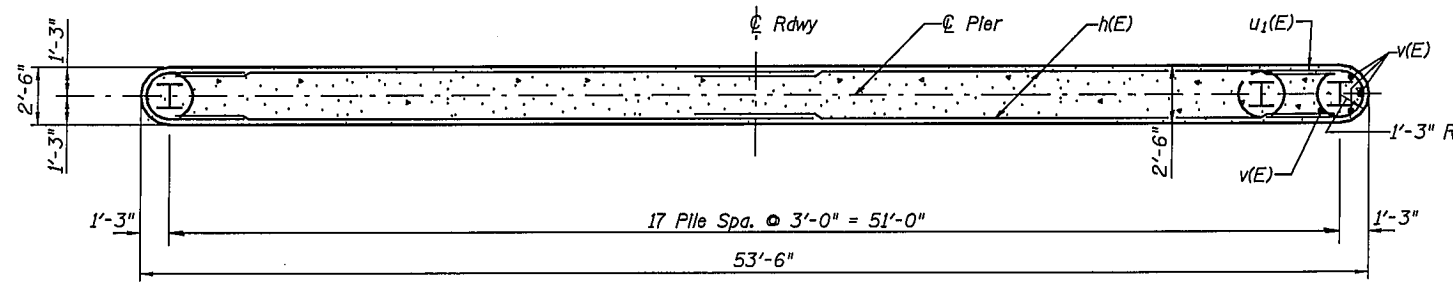
BAR u₂(E)



Note: Location of metal shell pile, top of pile elevation, and connection of Debris Deflection System to bridge to be determined by Contractor. See Special Provisions.

MIN BAR LAP	
#5	3'-0"
#7	3'-8"

SECTION THRU PIER



SECTION A-A

**Forms shall be placed below Elevation 575.8 after excavation for Pier walls. Reinforcement and Concrete Encasement shall be poured underwater into forms. The cost of Concrete Encasement, Reinforcement, form excavation, and furnishing and placing forms is included with furnishing piles. If a portion of the pier wall is under water, concrete shall be trimmed under water into forms according to Article 503.08 of the Standard Specifications. Concrete shall be trimmed to an Elevation 1'-0" above the water level at the time of Construction.

PIER 1 DETAILS
 U.S. ROUTE 136/IL. ROUTE 1 OVER
 NORTH FORK VERMILION RIVER
 F.A.P. ROUTE 332 SEC. RX-1-BR-1
 VERMILION COUNTY
 STATION 198+63.75
 STRUCTURE NO. 092-0205

REVISIONS		DATE	