

ROUTE NO.	SECTION	COUNTY	DATE	SCALE
F.A.P. 332	(A)	VERMILION	1/40	6/6
PROJECT NO.	PROJECT NAME	DATE	SCALE	
Contract #90841				

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	64	#5	27'-0"	—
p(E)	14	#7	27'-4"	—
p ₂ (E)	2	#5	39'-8"	—
s ₁₂ (E)	51	#5	14'-5"	□
u(E)	6	#5	12'-6"	U
u ₁ (E)	32	#5	9'-5"	U
u ₂ (E)	40	#4	8'-4"	U
v ₃ (E)	108	#5	17'-6"	—

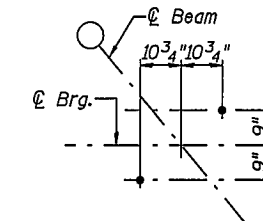
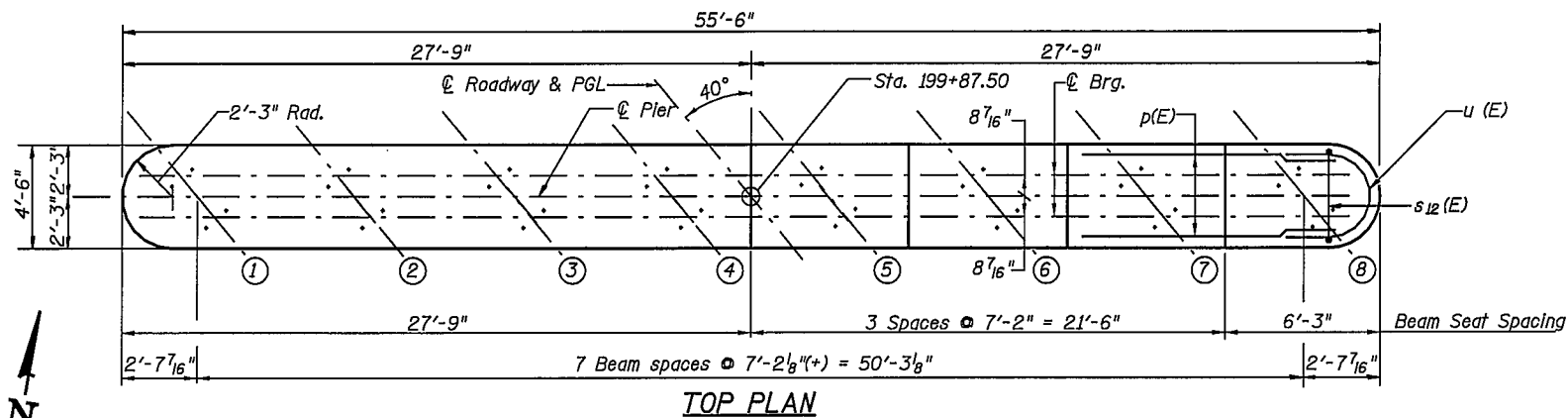
Structure Excavation	Cu. Yd.	14
Concrete Structures	Cu. Yd.	106.8
Reinforcement Bars, Epoxy Coated	Pound	6,020
Furnishing Steel Piles HP12x53	Foot	1,224
Driving Steel Piles HP12x53	Foot	1,224
Test Pile Steel HP12x53	Each	1
Underwater Structure Excavation Protection-Location 4	Each	1
Metal Shoes	Each	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.

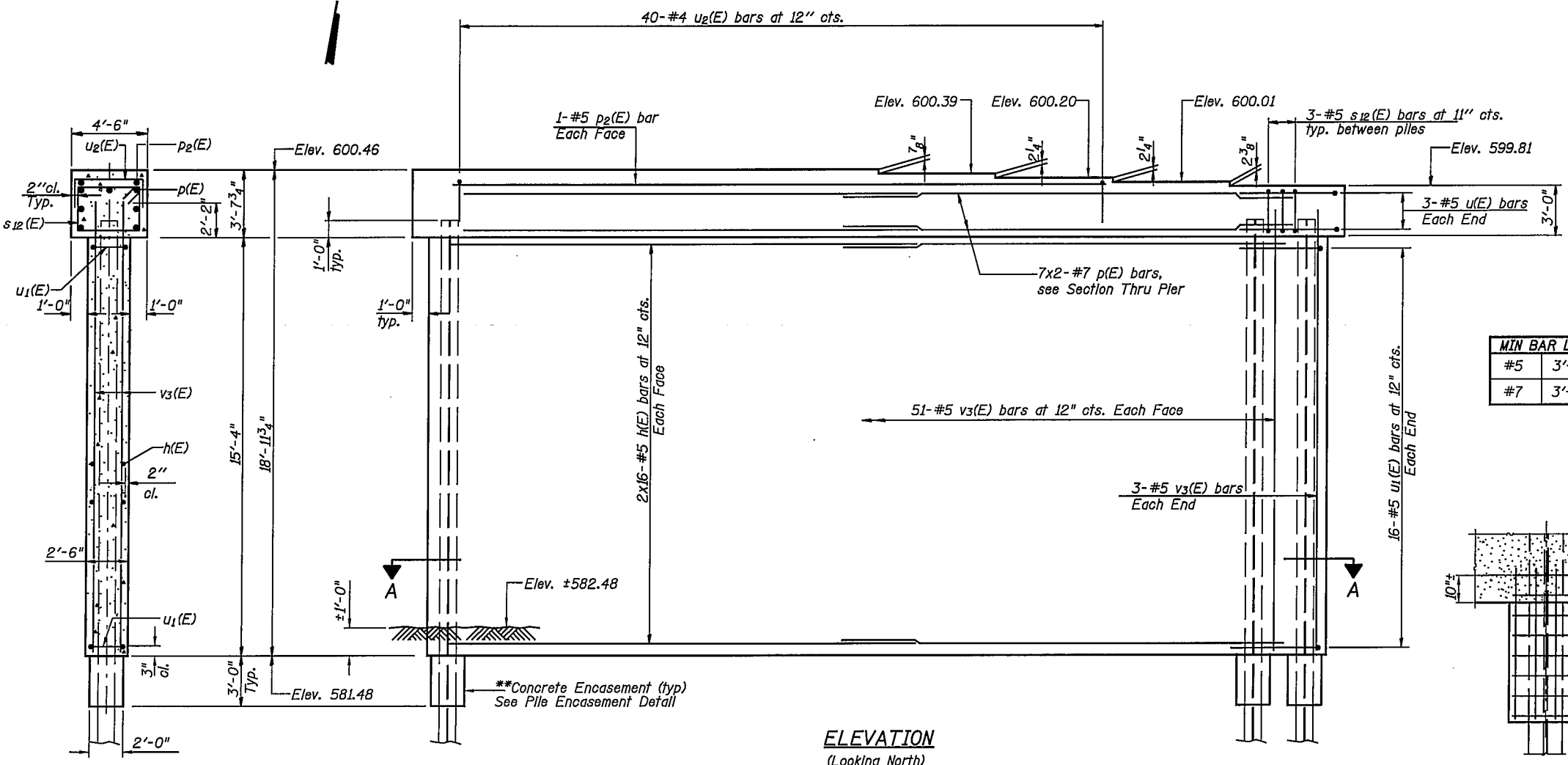
Notes: Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.

PILE DATA

Type: HP12x53 w/ Metal Shoes
Design Capacity: 55T
Required Bearing Capacity: 82.5 Ton
Est. Length: 72'
No. Required: 17 + 1 Test Pile w/ Metal Shoes



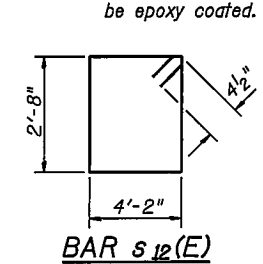
ANCHOR BOLT LAYOUT



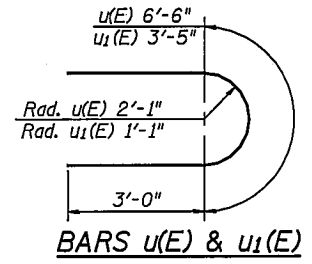
ELEVATION (Looking North)

MIN BAR LAP

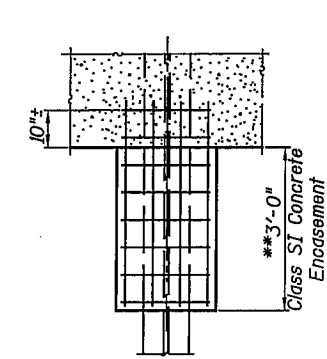
#5	3'-0"
#7	3'-8"



BAR s₁₂(E)

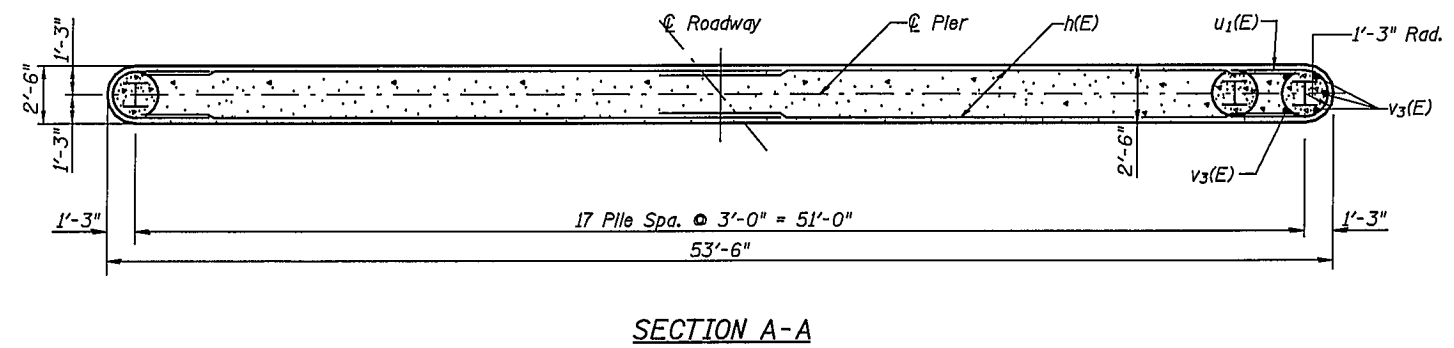


BARS u(E) & u₁(E)



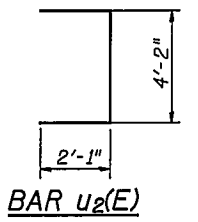
PILE ENCASEMENT DETAIL

SECTION THRU PIER



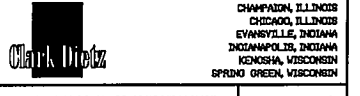
SECTION A-A

**Forms shall be placed below Elevation 581.48 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.



BAR u₂(E)

PIER 4 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	NAME	DATE	DESCRIPTION