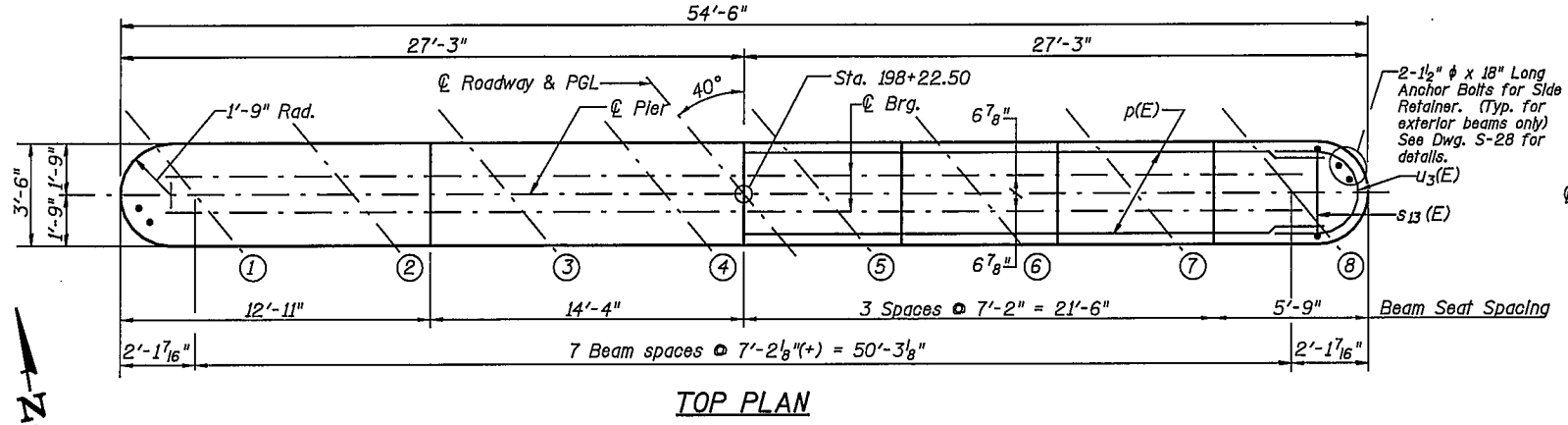


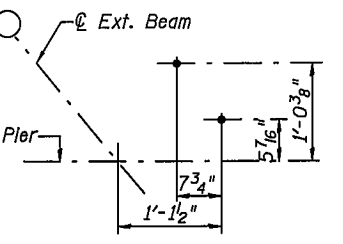
Notes: Space reinforcement in cap to miss anchor bolts.  
 Pour steps monolithically with cap.

**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



**ANCHOR BOLT LAYOUT FOR SIDE RETAINER**

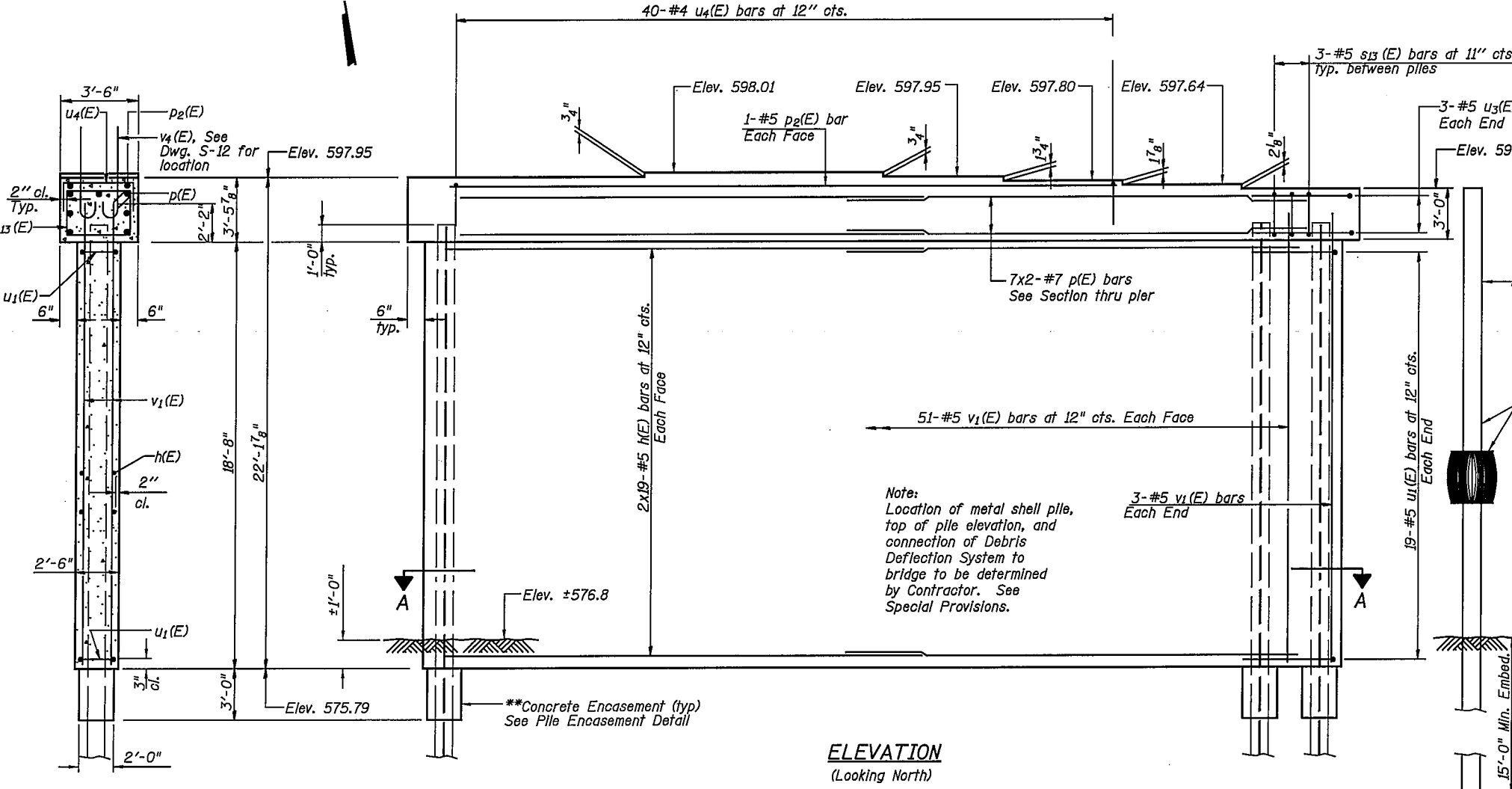


**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	76	#5	27'-0"	—
p(E)	14	#7	27'-4"	—
p2(E)	2	#5	39'-8"	—
s13(E)	51	#5	12'-5"	□
u1(E)	38	#5	9'-5"	U
u3(E)	6	#5	11'-0"	U
u4(E)	40	#4	7'-4"	U
v1(E)	108	#5	20'-10"	—
v4(E)	42	#8	4'-2"	—

Structure Excavation	Cu. Yd.	14
Concrete Structures	Cu. Yd.	115.2
Reinforcement Bars, Epoxy Coated	Pound	7,120
Furnishing Steel Piles HP12x53	Foot	1,292
Driving Steel Piles	Foot	1,292
Test Pile Steel HP12x53	Each	1
Underwater Structure Excavation Protection-Location 2	Each	1
Metal Shoes	Each	17

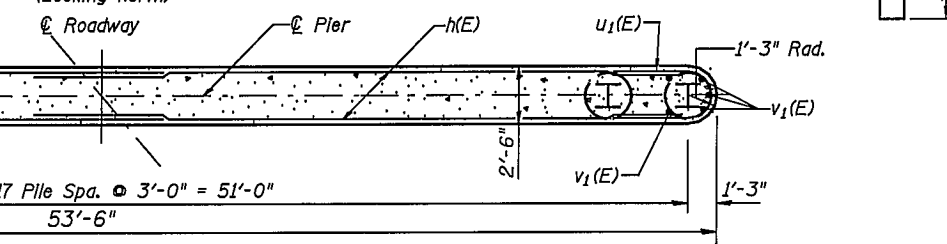
Bars indicated thus 5x3-#5 etc. indicates 5 lines of bars with 3 lengths per line.  
 Reinforcement Bars designated (E) shall be epoxy coated.



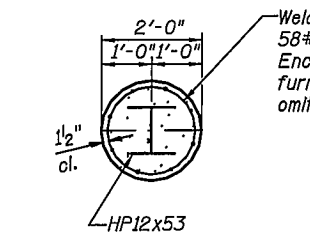
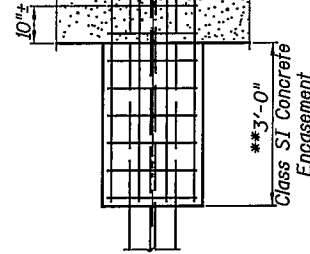
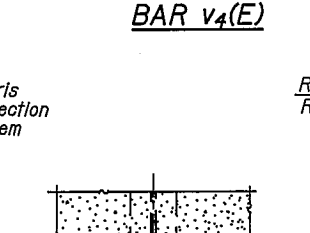
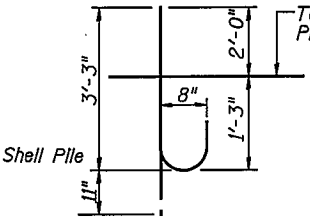
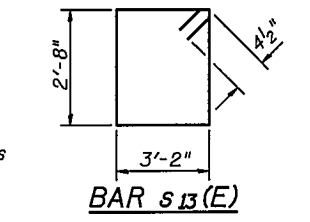
**SECTION THRU PIER**



**ELEVATION (Looking North)**



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



**PILE ENCASEMENT DETAIL**

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.

Welded wire fabric 6X6-W4.0xW4.0 weighing 58#/100 sq. ft. The cost of Excavation, Concrete Encasement and Reinforcement is included with furnishing piles. Forms for encasement may be omitted when soil conditions will permit.

\*\*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 2 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
NAME	DATE	

CHAMPAGNE, ILLINOIS  
 CHICAGO, ILLINOIS  
 EVANSVILLE, INDIANA  
 INDIANAPOLIS, INDIANA  
 KENOSHA, WISCONSIN  
 SPRING GREEN, WISCONSIN

DRAWING NUMBER  
**S-23**