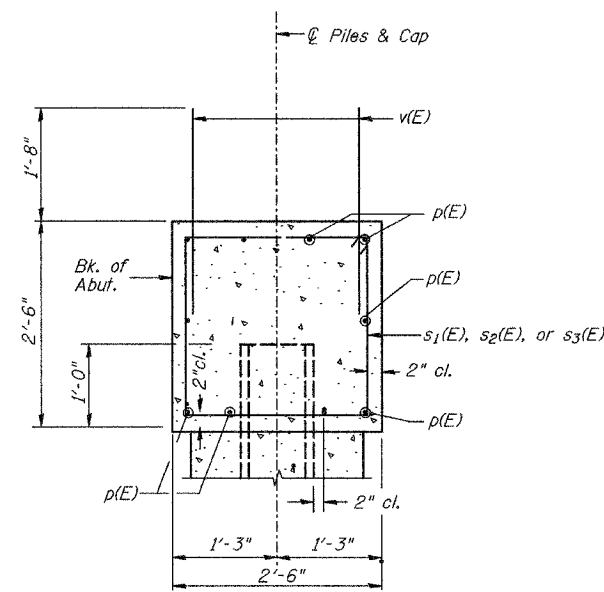
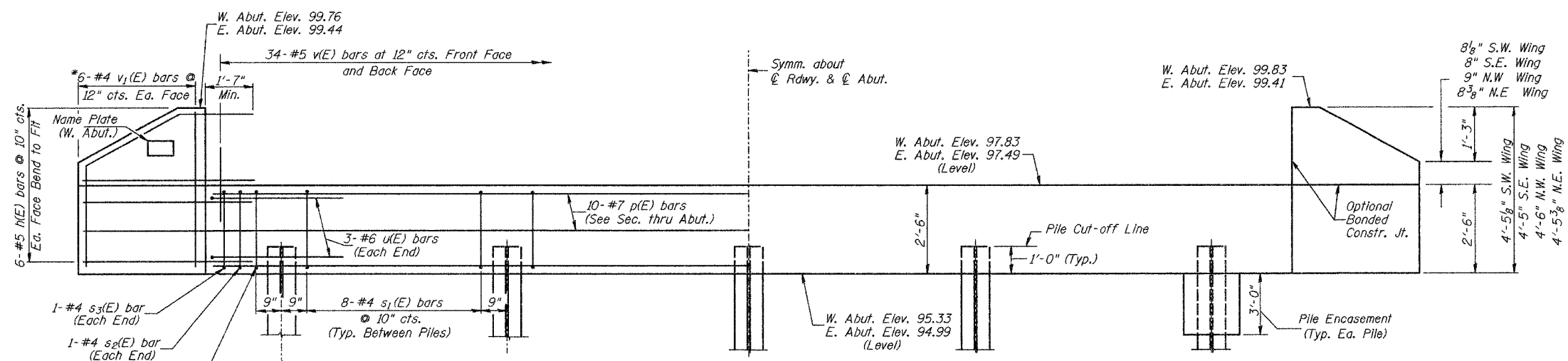


**PLAN**



**SECTION THRU ABUT.**  
(At Right Angles)



**ELEVATION**  
(Front View of Abutment)

**TWO ABUTMENTS  
BILL OF MATERIAL**

BAR NO.	SIZE	LENGTH	SHAPE
v(E)	48	#5	6'-9"
p(E)	20	#7	32'-10"
s1(E)	68	#4	9'-5"
s2(E)	4	#4	9'-7"
s3(E)	4	#4	9'-11"
u(E)	12	#6	11'-4"
v1(E)	24	#4	7'-1"
Concrete Structures			CU YD 18.3
Reinforcement Bars, Epoxy Coated			POUND 2,780
Structure Excavation			CU YD 70
Name Plates			EACH 1
Furnishing Steel Piles HP10x42			FOOT 236
Driving Piles			FOOT 236
Test Pile Steel HP10x42			EACH 1
Concrete Encasement			CU YD 2.7

① See Special Provisions

**PILE DATA**

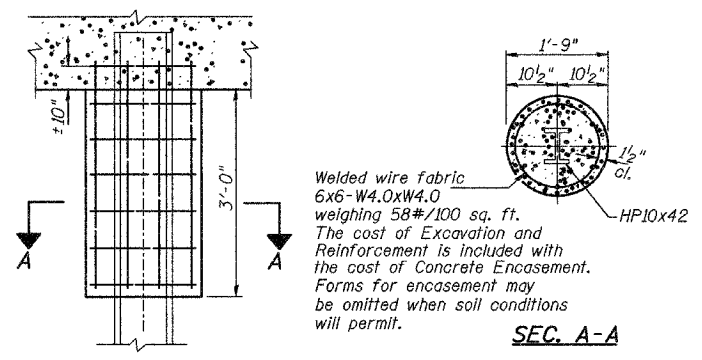
Type & Size: Steel HP10x42  
 Nominal Required Bearing: 336 kips  
 Allowable Resistance Available: 112 kips  
 Est. Length: 24' West Abutment  
 29' East Abutment  
 No. Req'd.: 10 (Includes 1 Test Pile at East Abut.)

**DESIGN STRESSES**

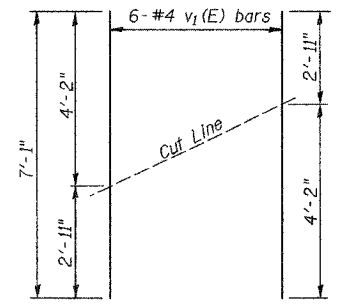
$f'_c = 3,500$  p.s.i.  
 $f_y = 60,000$  p.s.i.

**NOTES**

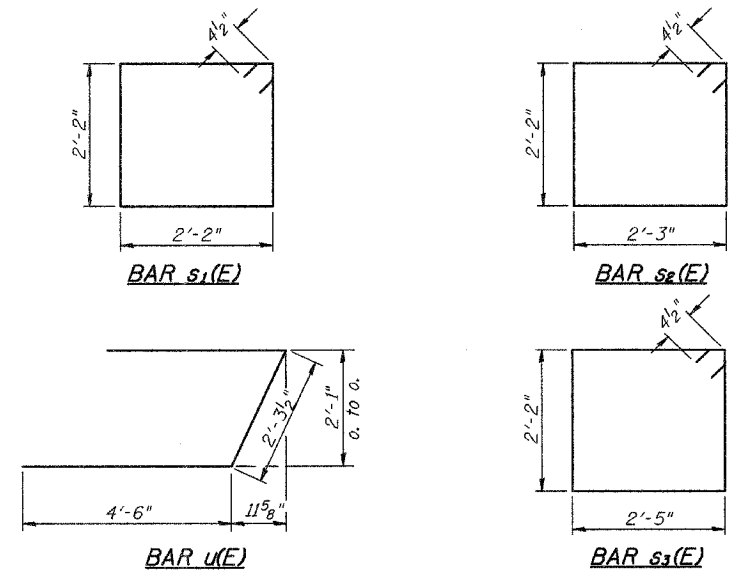
1. Reinforcement bars shall conform to ASTM A706 Grade 60 (IL Modified).
2. All edges shall have standard  $3/4$ " chamfer.



**PILE ENCASEMENT DETAIL**



**\* BAR CUTTING DIAGRAM**  
 Order v1(E) bars full length. Cut as shown and use remainder of bars in opposite face.



**ABUTMENTS  
 C.H. 9 OVER MUD CREEK  
 SECTION 04-00052-03-BR  
 IROQUOIS COUNTY  
 STATION 39+90.04**