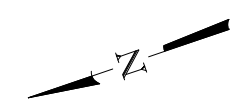
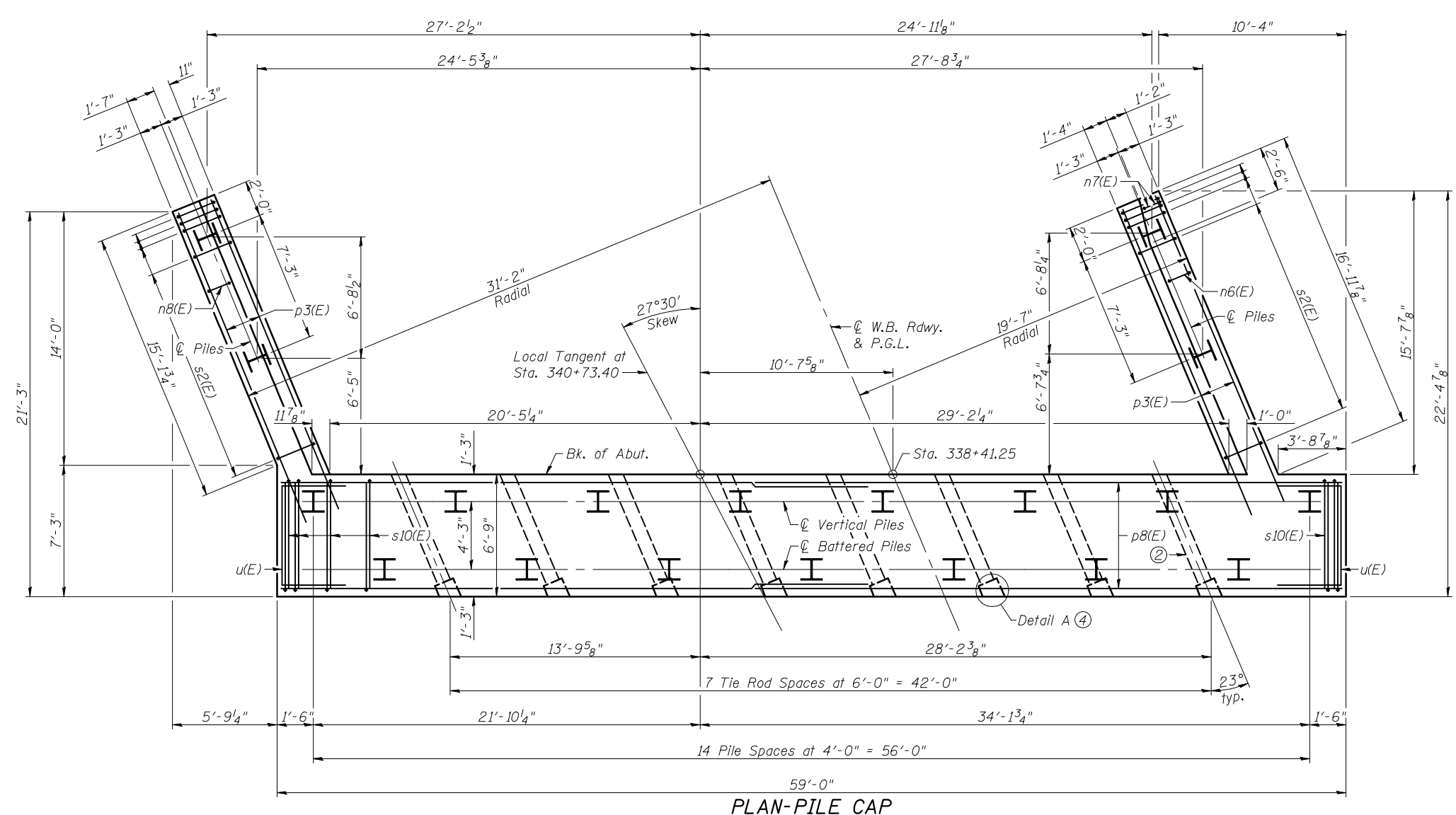
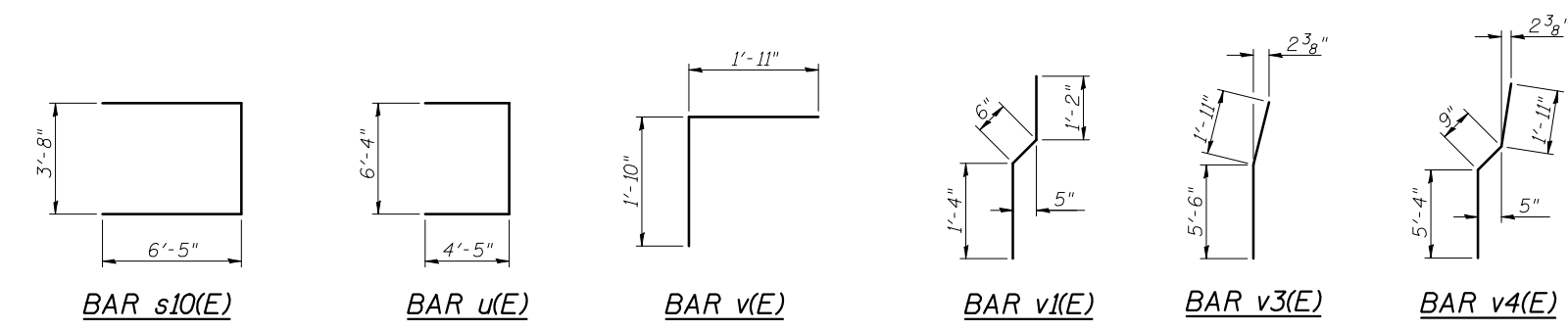
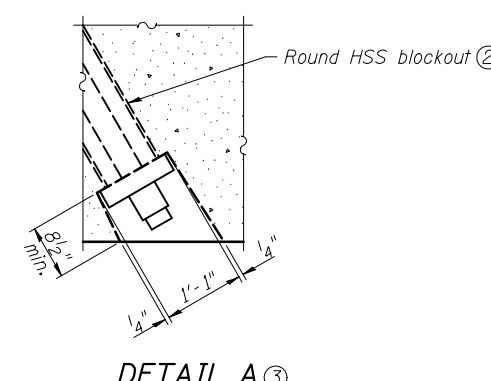
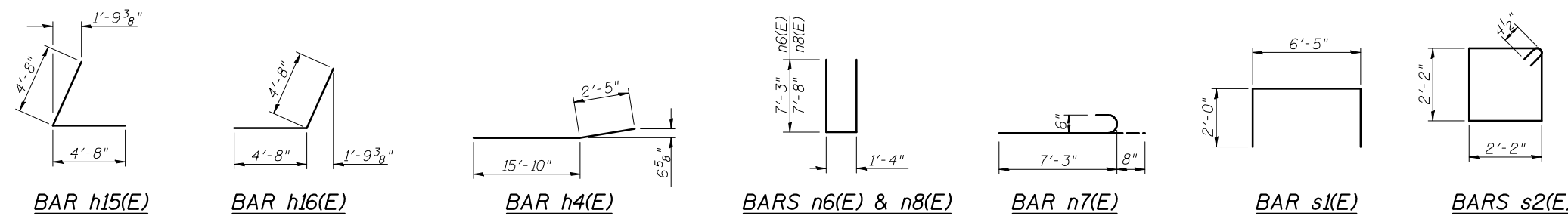


**EAST ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h4(E)	8	#4	18'-3"	—
h5(E)	7	#4	17'-5"	—
h6(E)	12	#4	18'-9"	—
h13(E)	20	#5	27'-6"	—
h14(E)	10	#6	28'-9"	—
h15(E)	14	#5	9'-4"	L
h16(E)	14	#5	9'-4"	J
h17(E)	7	#4	18'-2"	—
n6(E)	16	#6	15'-10"	U
n7(E)	6	#6	7'-11"	U
n8(E)	18	#6	16'-8"	U
p3(E)	12	#7	20'-0"	—
p8(E)	40	#7	32'-3"	—
p9(E)	7	#4	20'-11"	—
p10(E)	7	#4	19'-10"	—
s1(E)	40	#4	10'-5"	□
s2(E)	56	#4	9'-5"	□
s10(E)	176	#4	16'-6"	□
u(E)	11	#6	15'-2"	U
v(E)	69	#5	3'-9"	Γ
v1(E)	52	#4	3'-0"	—
v2(E)	19	#6	7'-6"	—
v3(E)	3	#6	7'-5"	—
v4(E)	16	#6	8'-0"	—
v5(E)	52	#5	6'-0"	—
v6(E)	52	#5	7'-4"	—
v13(E)	36	#6	5'-1"	—
Structure Excavation		Cu. Yd.	410	
Concrete Structures		Cu. Yd.	104.4	
Concrete Encasement		Cu. Yd.	10.4	
Reinforcement Bars, Epoxy Coated		Pound	10,550	
Furnishing Steel Piles HP14x89		Foot	1,692	
Driving Piles		Foot	1,692	
Test Pile Steel HP14x89		Each	1	
Concrete Sealer		Sq. Ft.	627	

PILE DATA

Type: Steel HP 14x89
 Nominal Required Bearing: 705 kips
 Factored Resistance Available: 390 kips
 Est. Length: 94 ft
 No. Production Piles: 18
 No. Test Piles: 1



- Notes:
- For details of piles and Concrete Encasement, see sheet 47 of 53.
 - Round HSS9.625x0.188 conforming to the requirements of ASTM A500 Grade B cast into cap for Tie Rod. Cost included with Concrete Structures. Adjust location as necessary to miss anchor bolts and adjust corresponding approach bent location.
 - For details of Tie Rod, see sheet 40 of 53.
 - Cut piles as necessary to provide clearance for blockouts.