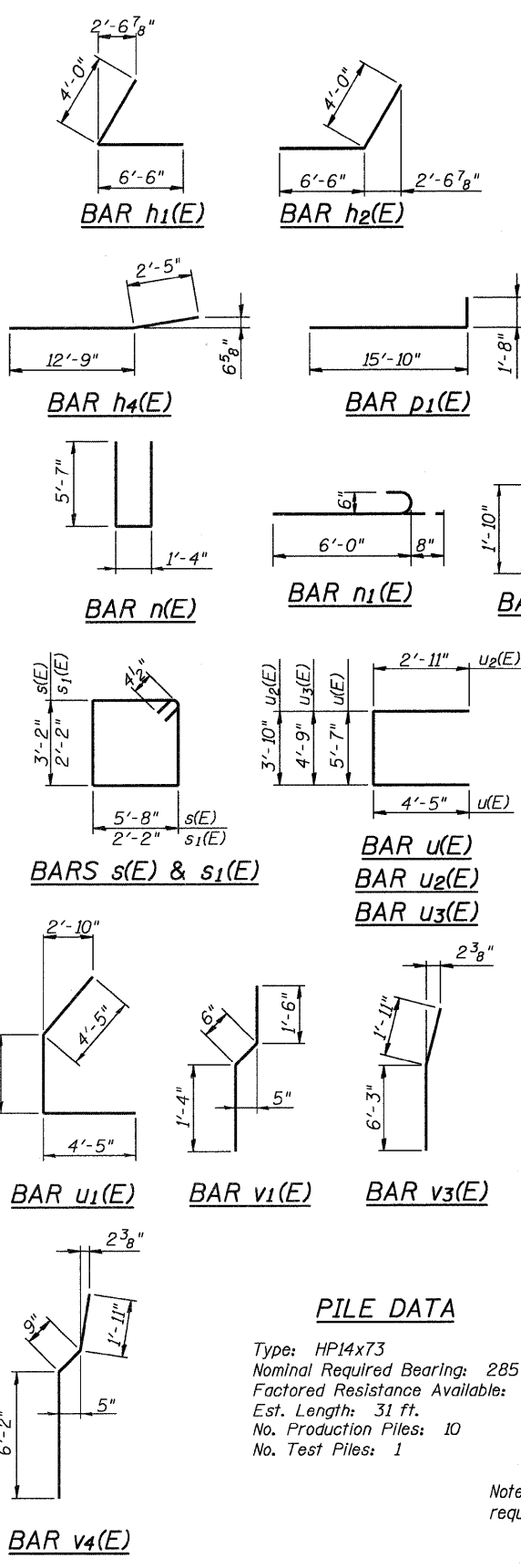
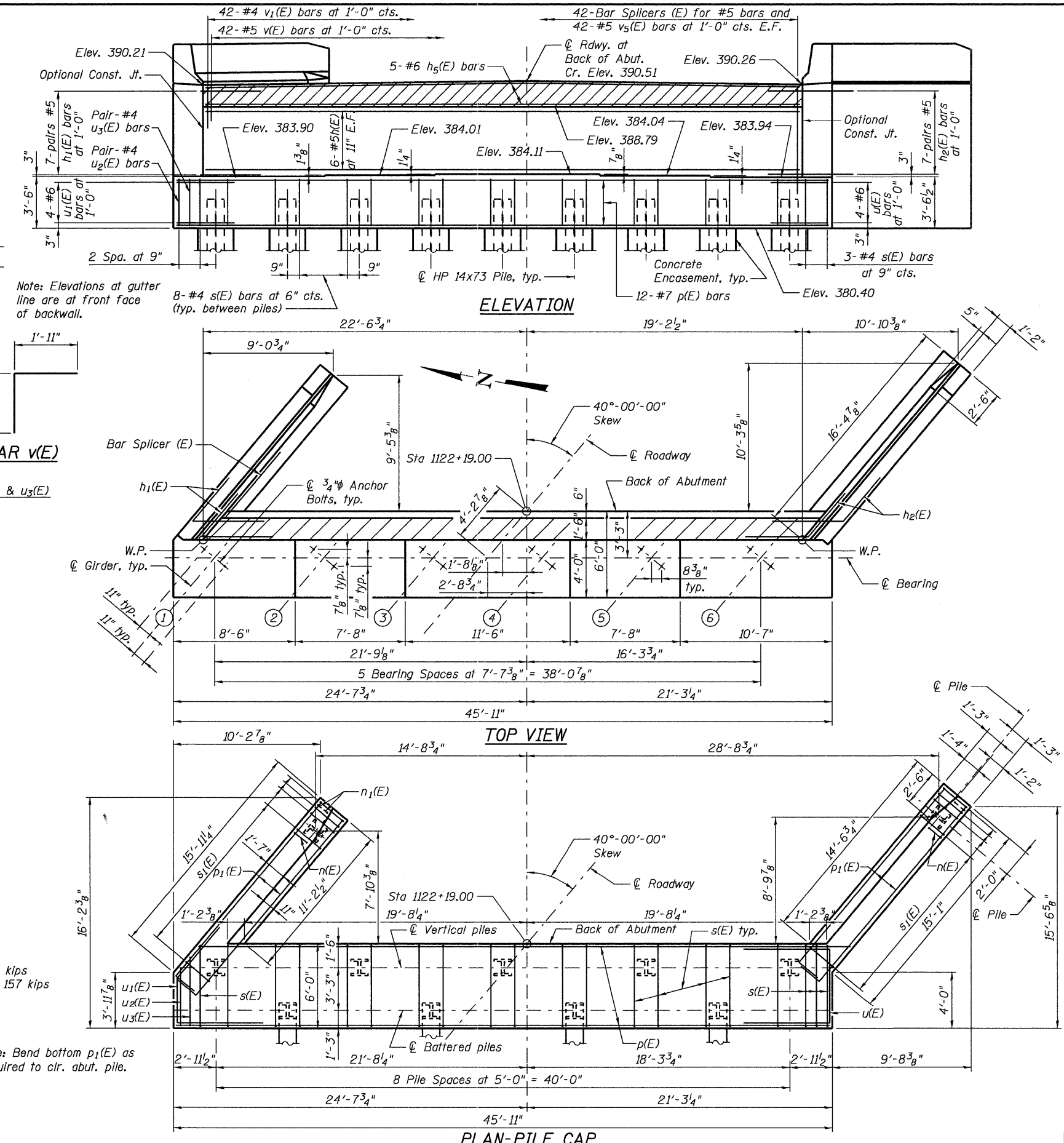


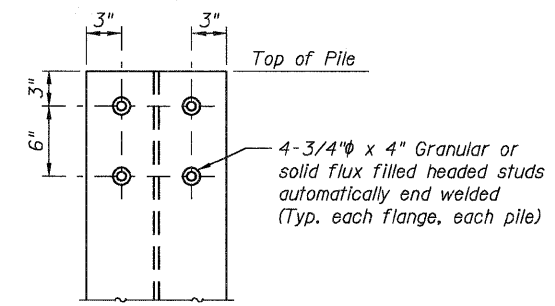
EAST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	12	#5	41'-7"	
h ₁ (E)	14	#5	10'-6"	
h ₂ (E)	14	#5	10'-6"	
h ₃ (E)	26	#4	15'-3"	
h ₄ (E)	18	#4	15'-2"	
h ₅ (E)	5	#6	41'-7"	
n(E)	26	#6	12'-6"	
n ₁ (E)	12	#6	6'-8"	
p(E)	12	#7	45'-7"	
p ₁ (E)	12	#7	17'-6"	
s(E)	68	#4	18'-5"	
s ₁ (E)	32	#4	9'-5"	
u(E)	4	#6	14'-5"	
u ₁ (E)	4	#6	12'-7"	
u ₂ (E)	2	#4	9'-8"	
u ₃ (E)	2	#4	10'-7"	
v(E)	42	#5	3'-9"	
v ₁ (E)	42	#4	3'-4"	
v ₂ (E)	32	#6	8'-10"	
v ₃ (E)	6	#6	8'-2"	
v ₄ (E)	26	#6	8'-10"	
v ₅ (E)	84	#5	7'-3"	
Structure Excavation	Cu. Yd.		186	
Concrete Structures	Cu. Yd.		70.4	
Reinforcement Bars, Epoxy Coated	Pound		6,710	
Furnishing - Piles, HP14x73	Foot		310	
Driving Piles	Foot		310	
Test Pile, HP14x73	Each		1	
Pile Shoe	Each		4	
Concrete Encasement	Cu. Yd.		6.0	
Concrete Sealer	Sq. Ft.		640	



PILE DATA
 Type: HP14x73
 Nominal Required Bearing: 285 kips
 Factored Resistance Available: 157 kips
 Est. Length: 31 ft.
 No. Production Piles: 10
 No. Test Piles: 1

Note: Bend bottom p₁(E) as required to clr. abut. pile.



SEISMIC PILE DETAILS
 Cost of 3/4" Studs shall be included in item "Furnishing Steel Piles, HP14x73."

NOTES
 Top of backwall shall conform to longitudinal grade and cross slope of roadway.
 Pour steps monolithically with cap.
 Space reinforcement in cap to miss anchor bolts.
 Concrete Sealer should be applied to the designated areas of the abutment shown on sheet 25 of 35.
 All edges shall have a standard 3/4" chamfer except as noted.
 For details of Bar Splicers, see sheet 29 of 35.
 For details of piles and Concrete Encasement, see sheet 30 of 35.

FOR INFORMATION ONLY