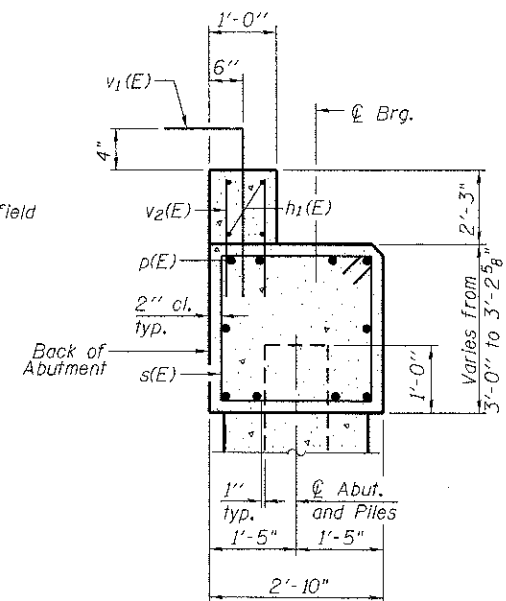
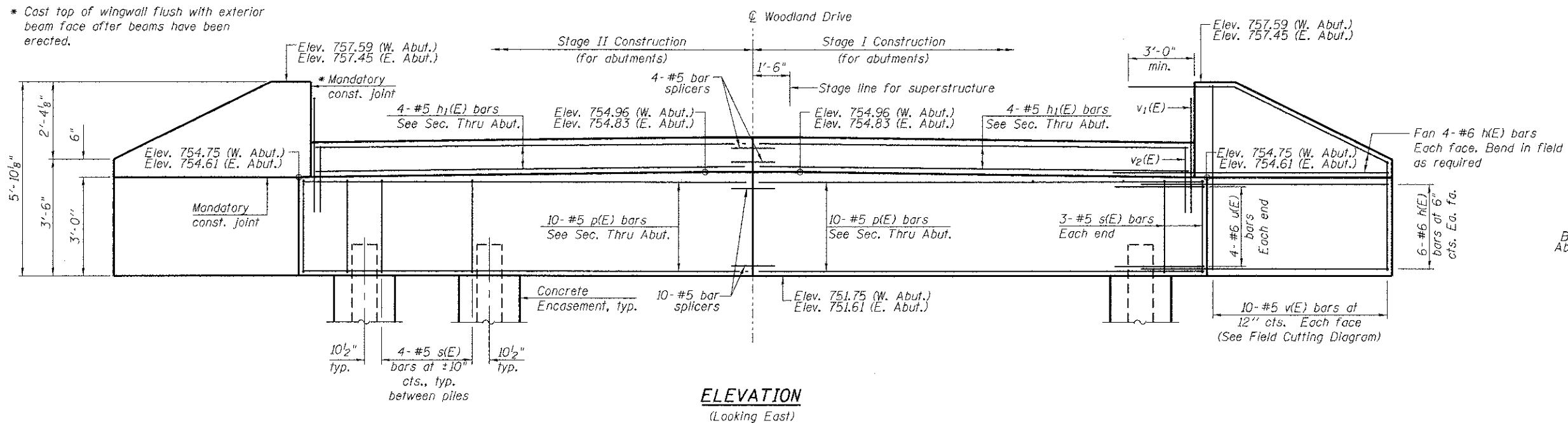


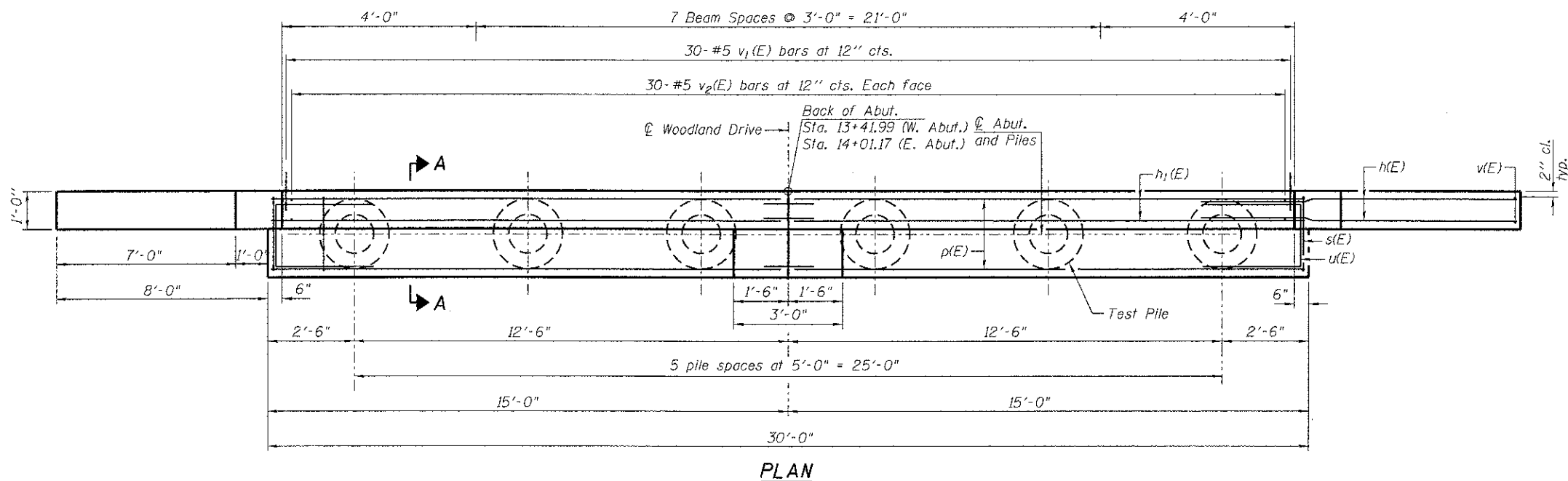
* Cast top of wingwall flush with exterior beam face after beams have been erected.



SECTION A-A

BILL OF MATERIAL FOR EAST AND WEST ABUTMENTS

Bar No.	Size	Length	Shape
h(E)	#6	11'-8"	—
h1(E)	#5	14'-2"	—
p(E)	#5	14'-8"	—
s(E)	#5	10'-11"	□
u(E)	#6	7'-5"	⌋
v(E)	#5	8'-8"	—
v1(E)	#5	5'-0"	⌋
v2(E)	#5	4'-1"	—
Structure Excavation	Cu. Yd.	213	
Concrete Structures	Cu. Yd.	30.3	
Reinforcement Bars, Epoxy Coated	Pound	4,570	
Furnishing Metal Shell Piles 12" X 0.179"	Foot	430	
Driving Piles	Foot	430	
Test Pile Metal Shells	Each	2	
Concrete Encasement	Cu. Yd.	6.6	
Bar Splicers	Each	28	



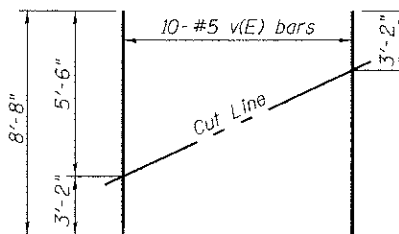
PLAN

WEST ABUTMENT PILE DATA

Type: Metal Shell 12" ϕ w/.179" Walls
 Nominal Required Bearing: 218k
 Factored Resistance Available: 120k
 Est. Length: 39 ft
 No. Production Piles: 5
 No. Test Piles: 1

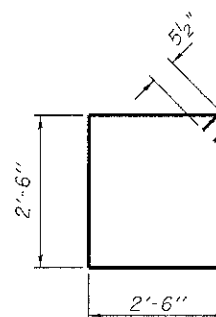
EAST ABUTMENT PILE DATA

Type: Metal Shell 12" ϕ w/.179" Walls
 Nominal Required Bearing: 218k
 Factored Resistance Available: 120k
 Est. Length: 47
 No. Production Piles: 5
 No. Test Piles: 1

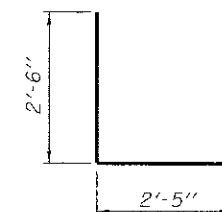


FIELD CUTTING DIAGRAM

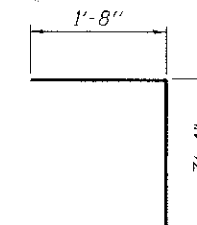
Order v(E) bars full length. Cut as shown and use remainder of bars in opposite face.



BAR s(E)



BAR u(E)



BAR v1(E)

Notes:
 For details of piles and Concrete Encasement, see sheet 14 of 16.
 Cast backwall after beams and concrete wearing surface, if applicable, have been erected.
 For details of bar splicers see Sheet 13.