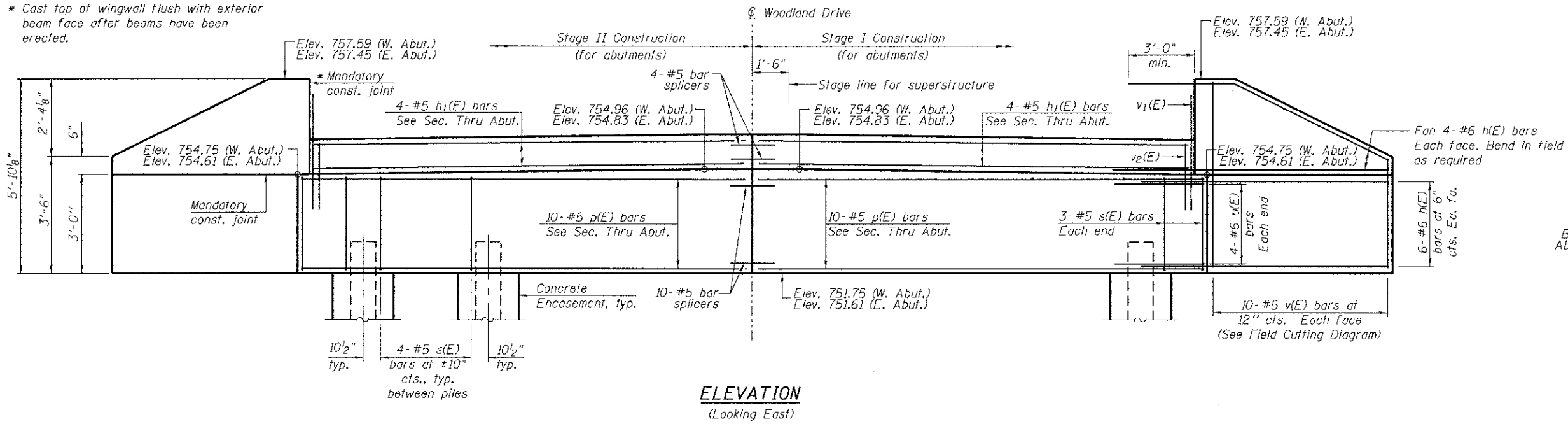
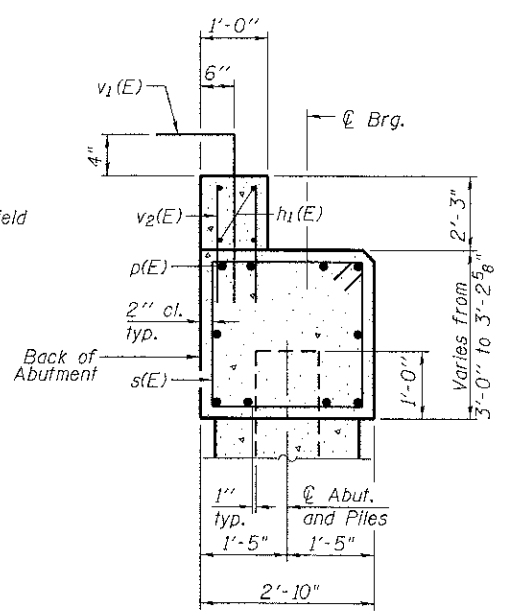


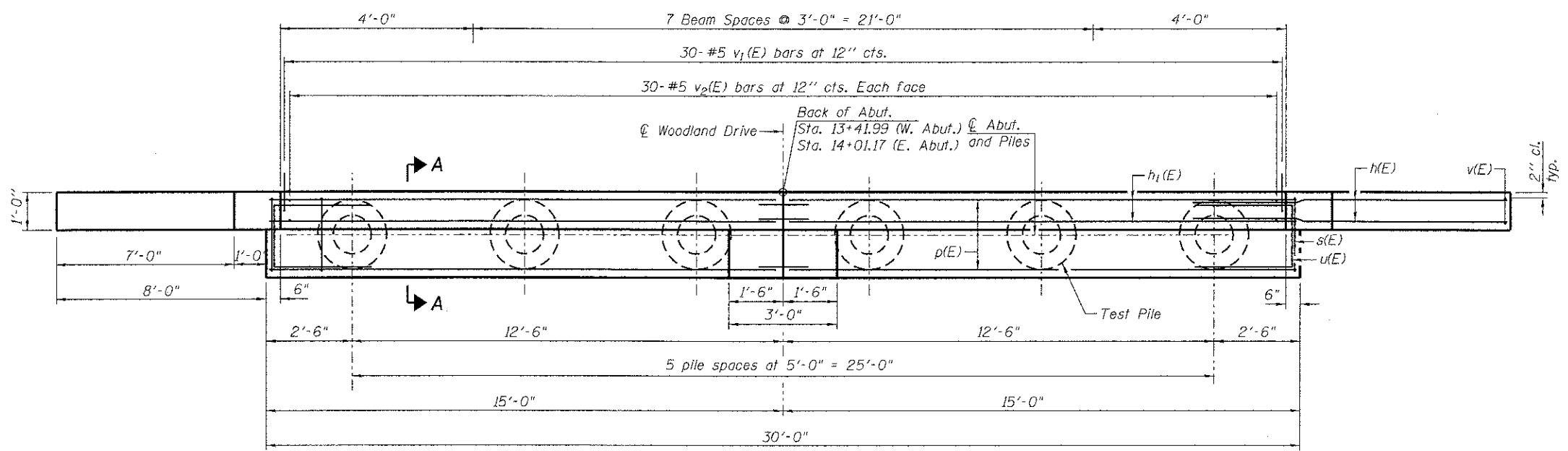
* Cast top of wingwall flush with exterior beam face after beams have been erected.



ELEVATION
(Looking East)



SECTION A-A



PLAN

**BILL OF MATERIAL
FOR EAST AND WEST ABUTMENTS**

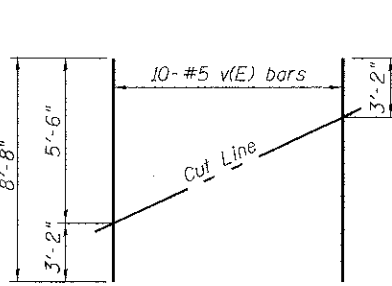
Bar	No.	Size	Length	Shape
h(E)	80	#6	11'-8"	—
h1(E)	16	#5	14'-2"	—
p(E)	40	#5	14'-8"	—
s(E)	52	#5	10'-11"	□
u(E)	16	#6	7'-5"	⊏
v(E)	80	#5	8'-8"	—
v1(E)	60	#5	5'-0"	└
v2(E)	120	#5	4'-1"	—
Structure Excavation		Cu. Yd.	213	
Concrete Structures		Cu. Yd.	30.3	
Reinforcement Bars, Epoxy Coated		Pound	4,570	
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	

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

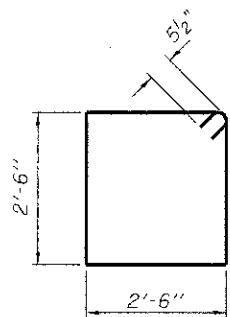
EAST ABUTMENT PILE DATA

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

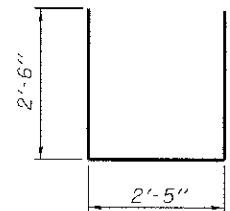


FIELD CUTTING DIAGRAM

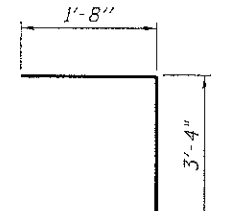
Order v(E) bars full length. Cut as shown and use remainder of bars in opposite face.



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.