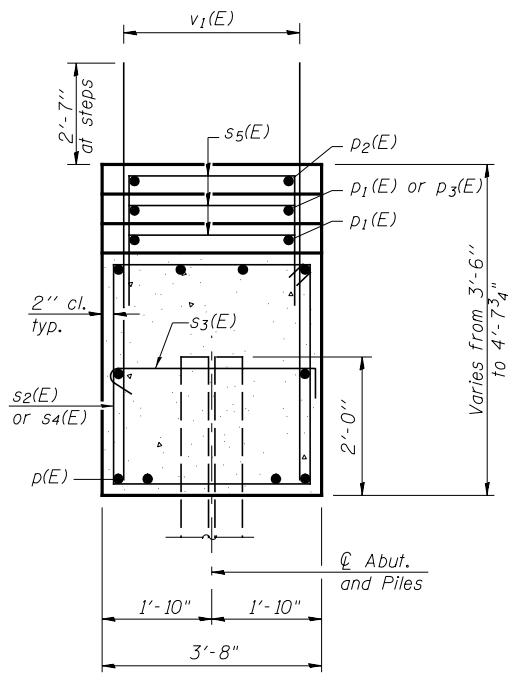


ELEVATION

MIN. BAR LAP
#7 = 5'-10"

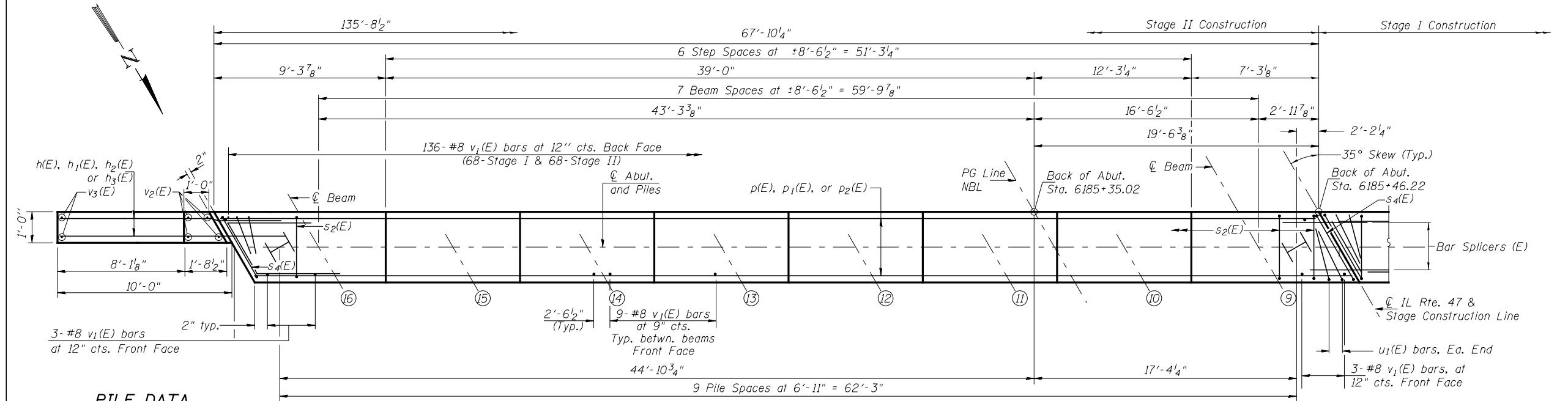
Notes:
Pour steps monolithically with cap.
See sheet 20 of 30 for Bar Details.
See sheet 23 or 30 for Pile Details.
See sheet 24 of 30 for Bar Splicer Details.



SEC. THRU ABUT.
Dimensions at right angles to abutment.

**SOUTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	#7	13'-9"	—
h ₁ (E)	8	#7	18'-5"	—
h ₂ (E)	4	#5	10'-5"	—
h ₃ (E)	4	#5	2'-9"	—
p(E)	40	#7	36'-9"	—
p ₁ (E)	6	#5	33'-10"	—
p ₂ (E)	2	#5	8'-2"	—
p ₃ (E)	2	#5	27'-10"	—
s ₂ (E)	112	#5	13'-9"	□
s ₃ (E)	40	#5	4'-4"	□
s ₄ (E)	4	#5	15'-1"	□
s ₅ (E)	111	#5	8'-8"	□
u(E)	8	#6	14'-3"	—
u ₁ (E)	8	#5	9'-2"	—
v ₁ (E)	274	#8	5'-11"	—
v ₂ (E)	4	#5	8'-10"	—
v ₃ (E)	8	#5	13'-4"	—
v ₄ (E)	4	#5	8'-8"	—
v ₅ (E)	8	#5	12'-10"	—
Structure Excavation		Cu. Yd.	485	
Concrete Structures		Cu. Yd.	82.2	
Reinforcement Bars, Epoxy Coated		Pound	12,160	
Furnishing Steel Piles, HP12x63		Foot	817	
Driving Piles		Foot	817	
Test Pile, Steel HP 12x63		Each	1	
Pile Shoes		Each	20	



PLAN

PILE DATA

Type: Steel HP12x63 with Pile Shoes
Nominal Required Bearing: 497 kips
Factored Resistance Available: 273 kips
Est. Length: 43'
No. Production Piles: 19
No. Test Piles: 1

Piles shall be driven through 2'-0" diameter precored holes extending to elevation 567.5 according to Article 512.09(c) of the Standard Specifications. Cost included with driving piles.
Portions of a previous existing structure may need to be removed to allow driving of new piles. Precoring through the existing embankment and abutment according to Article 512.09(c) of the Standard Specifications may be an allowed option. Cost included with the Removal of Existing Structures.