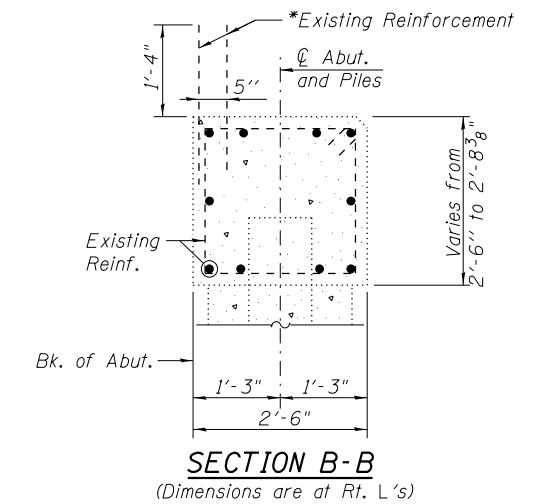
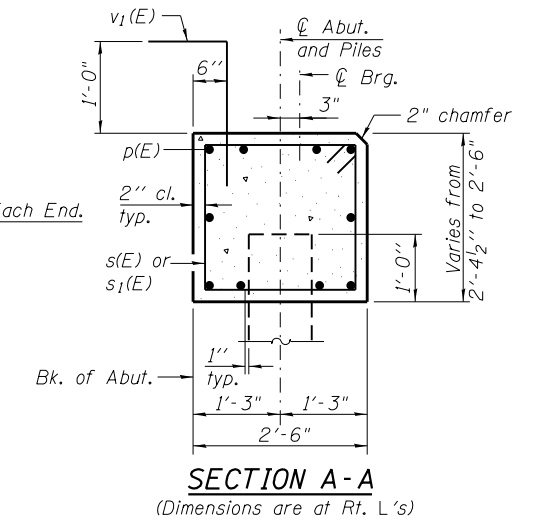
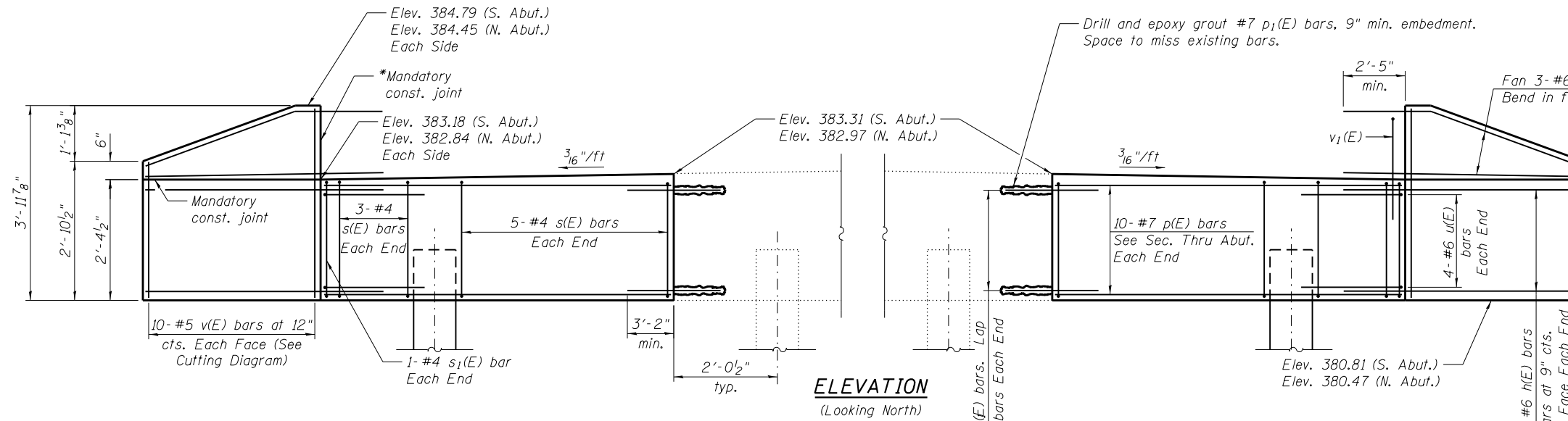
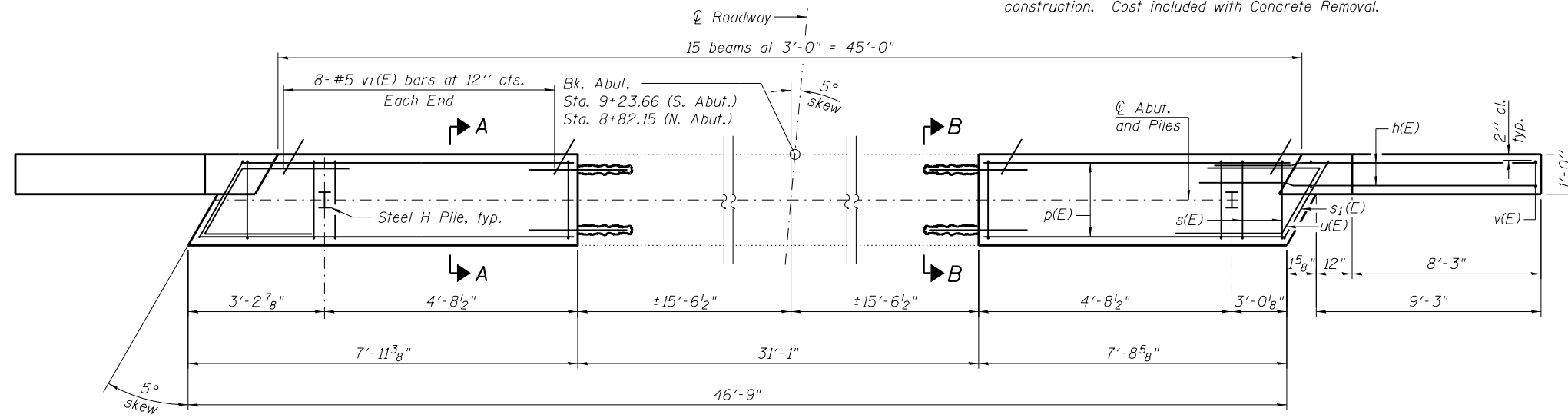


* Cast top of wingwall flush with exterior beam face after beams have been erected.



*Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

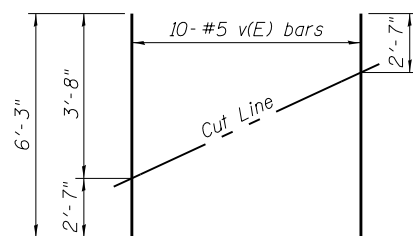


PILE DATA
(North Abutment)

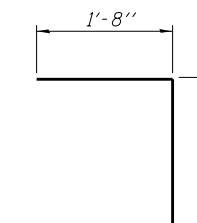
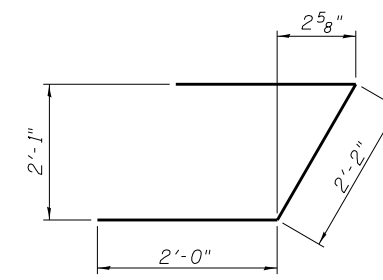
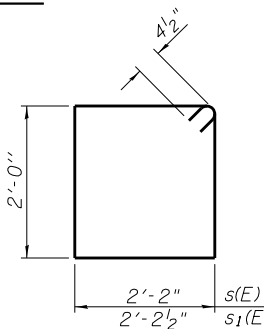
Type: HP 10x42
Nominal Required Bearing: 334 Kips
Factored Resistance Available: 184 Kips
Est. Length: 25 feet
No. Production Piles: 2
No. Test Piles: 0

PILE DATA
(South Abutment)

Type: HP 10x42
Nominal Required Bearing: 329 Kips
Factored Resistance Available: 181 Kips
Est. Length: 22 feet
No. Production Piles: 2
No. Test Piles: 0



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



TWO ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	56	#6	12'-0"	—
p(E)	40	#7	7'-8"	—
p ₁ (E)	40	#7	4'-0"	—
s(E)	32	#4	9'-1"	□
s ₁ (E)	4	#4	9'-2"	□
u(E)	16	#6	6'-2"	┘
v(E)	40	#5	6'-3"	—
v ₁ (E)	32	#5	3'-6"	┘
Structure Excavation	Cu. Yd.	43		
Concrete Structures	Cu. Yd.	11.7		
Reinforcement Bars, Epoxy Coated	Pound	2710		
Furnishing Steel Piles, HP 10x42	Foot	94		
Driving Piles	Foot	94		
Pile Shoes	Each	4		

For details of piles see sheet 15 of 17. Cut p(E) bars to fit. Space reinforcement in cap to miss dowel rods. Cost of drilling and grouting included with Reinforcement Bars, Epoxy Coated.