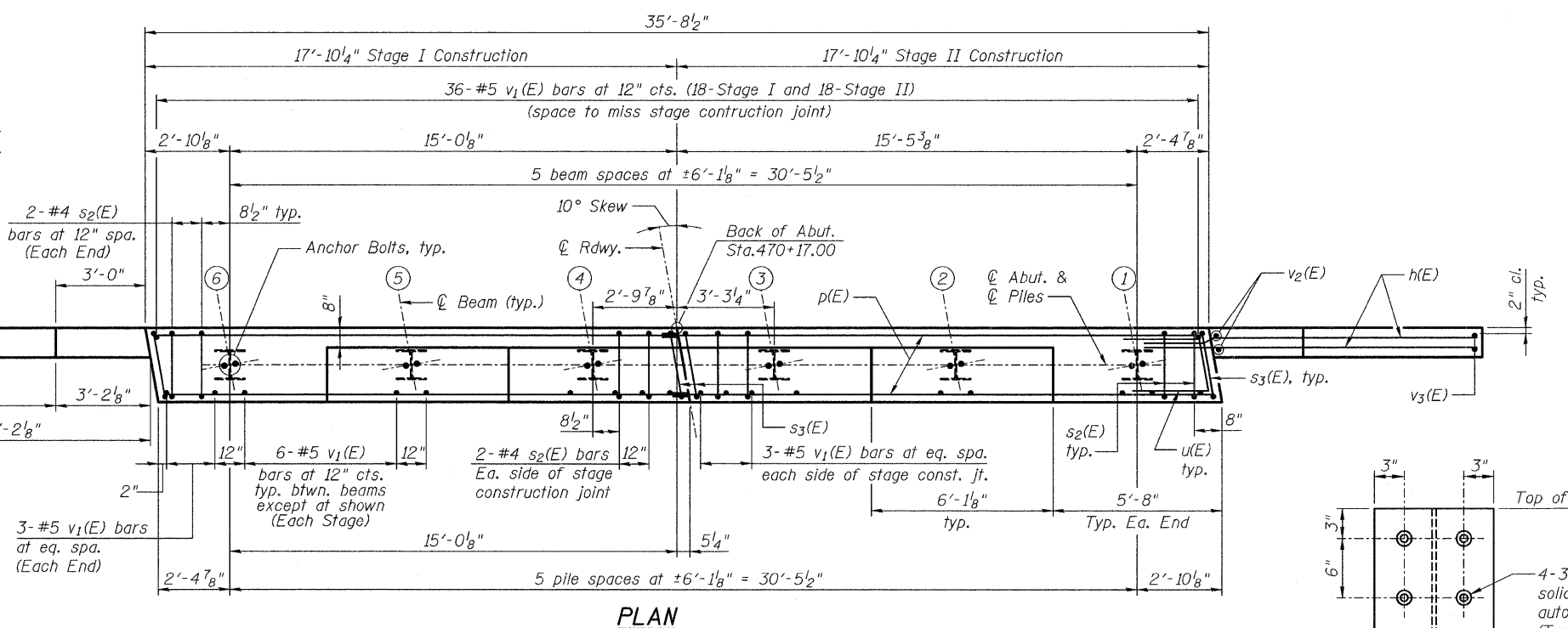
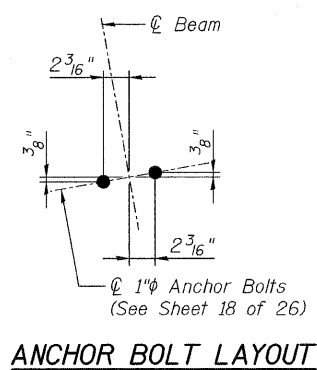
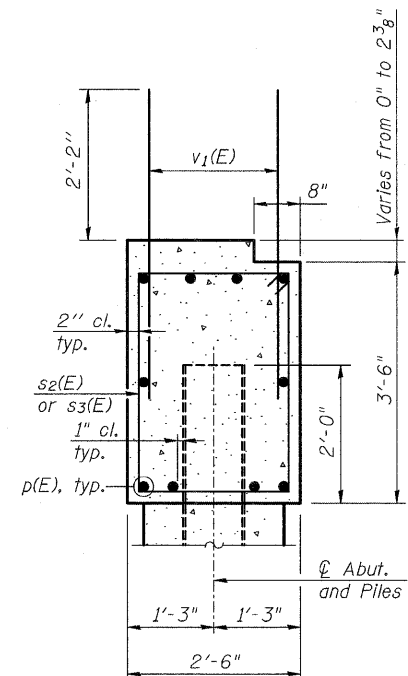
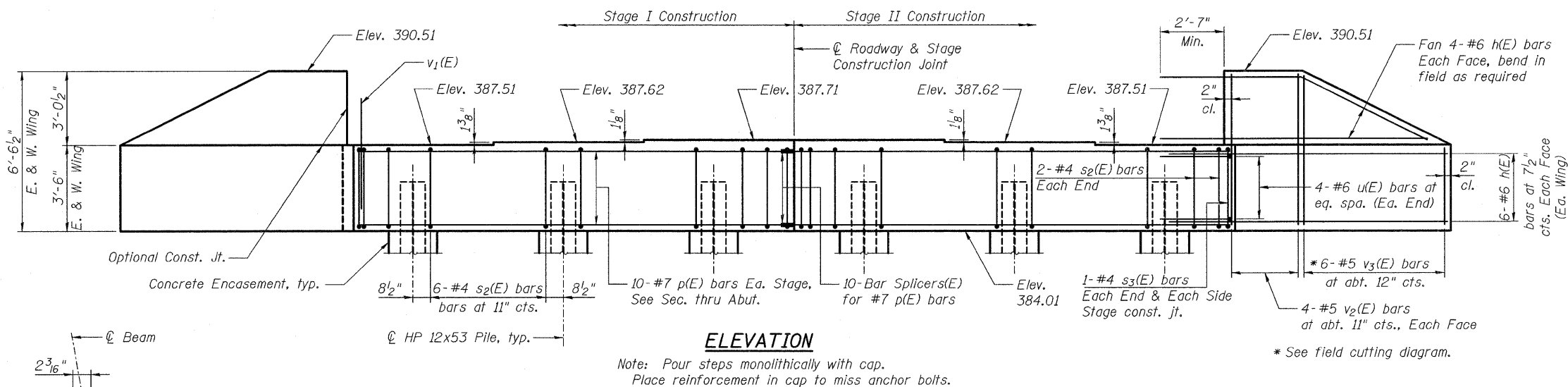


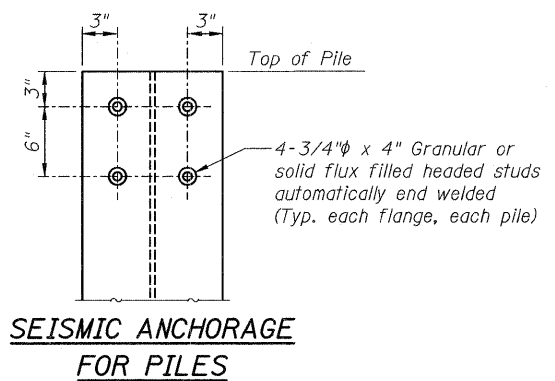
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



BILL OF MATERIAL

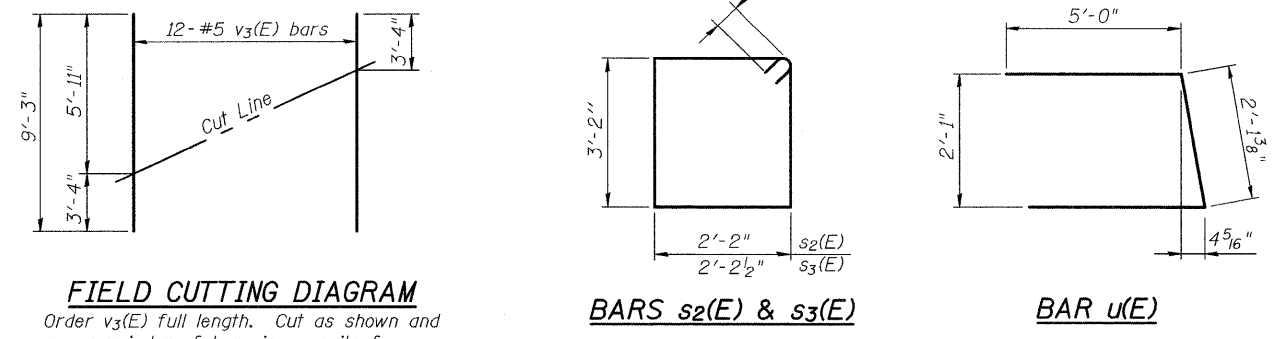
Bar	No.	Size	Length	Shape
h(E)	40	#6	12'-1"	
p(E)	20	#7	17'-7"	
s ₂ (E)	32	#4	11'-8"	□
s ₃ (E)	4	#4	11'-9"	□
u(E)	8	#6	12'-1"	∩
v ₁ (E)	72	#5	4'-4"	
v ₂ (E)	16	#5	6'-3"	
v ₃ (E)	12	#5	9'-3"	
Structure Excavation		Cu. Yd.	76.7	
Concrete Structures		Cu. Yd.	15.5	
Stud Shear Connectors		Each	48	
Reinforcement Bars, Epoxy Coated		Pound	2420	
Bar Splicers		Each	10	
Furnishing Steel Piles, HP 12x53		Foot	280	
Driving Piles		Foot	280	
Test Pile Steel HP 12x53		Each	1	
Pile Shoes		Each	6	
Concrete Encasement		Cu. Yd.	2.1	

For details of Bar Splicers, see sheet 24 of 26.
For details of piles and Concrete Encasement, see sheet 23 of 26.



PILE DATA

Type: Steel HP 12x53
Nominal Required Bearing: 419 kips
Factored Resistance Available: 209 kips
Est. Length: 56 ft
No. Production Piles: 5
No. Test Piles: 1



DESIGNED	-	NK
CHECKED	-	CJW
DRAWN	-	CLS
CHECKED	-	CJW



SHEET NO. 19	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	776	(102)B-1	HAMILTON	53	46
26 SHEETS	S.N. 033-0053		CONTRACT NO. 78016		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			