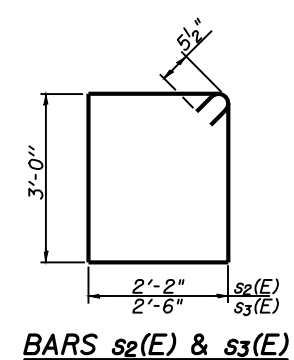
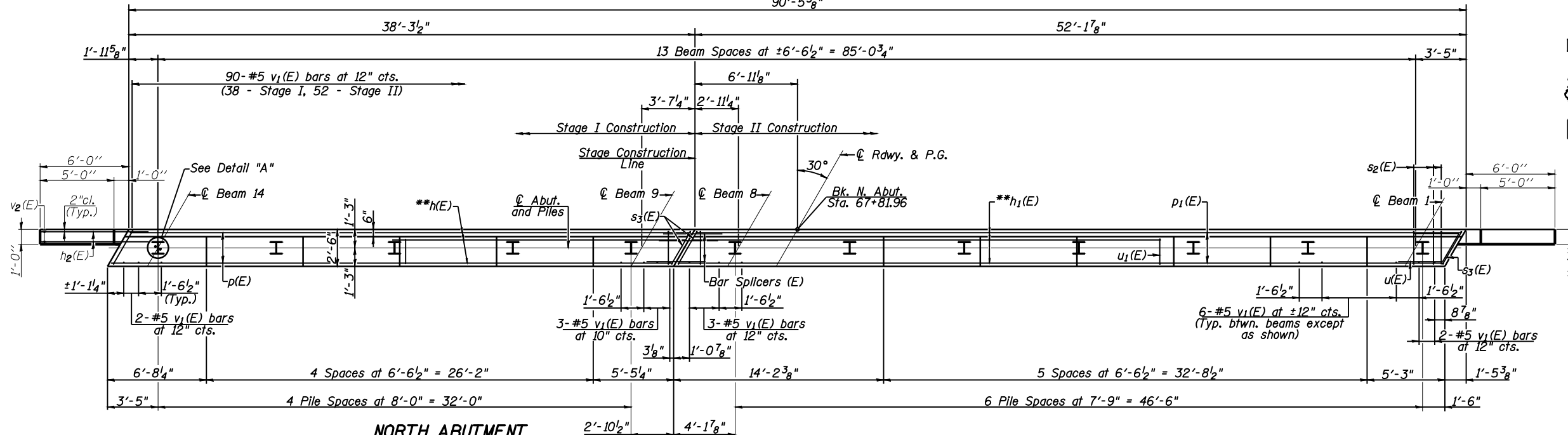
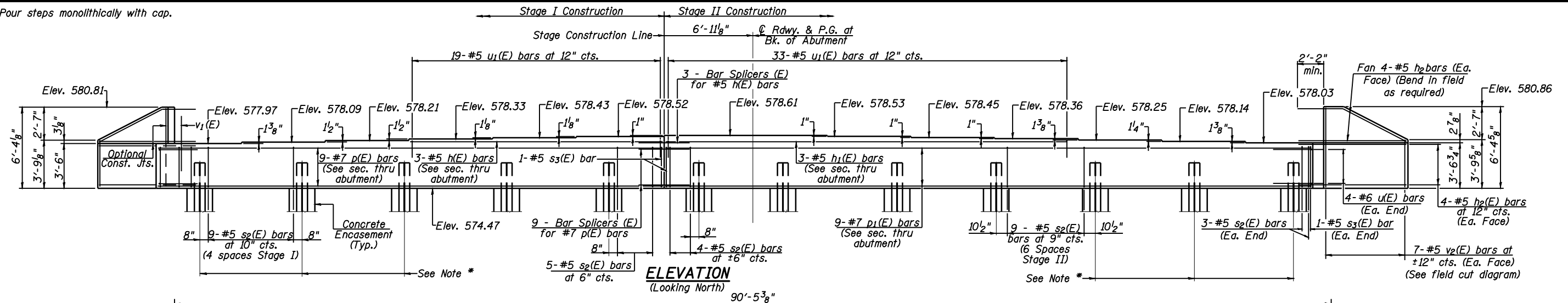
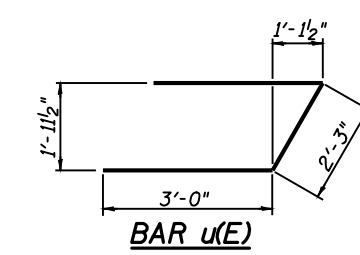


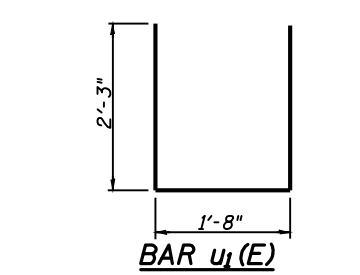
Note: Four steps monolithically with cap.



BARS s₂(E) & s₃(E)



BAR u₁(E)



BAR u₁(E)

NORTH ABUTMENT
S.N. 084-0521

**NORTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	3	#5	19'-7"	—
h ₁ (E)	3	#5	33'-6"	—
h ₂ (E)	32	#5	9'-0"	—
p(E)	9	#7	37'-11"	—
p ₁ (E)	9	#7	51'-9"	—
s ₂ (E)	105	#5	11'-3"	□
s ₃ (E)	4	#5	11'-11"	□
u(E)	8	#6	8'-3"	—
u ₁ (E)	52	#5	6'-2"	—
v ₁ (E)	172	#5	5'-0"	—
v ₂ (E)	14	#5	9'-6"	—
Structure Excavation		Cu. Yd.	69	
Concrete Structures		Cu. Yd.	33.8	
Reinforcement Bars, Epoxy Coated		Pound	4870	
Furnishing Steel Piles HP 10x42		Foot	275	
Driving Piles		Foot	275	
Test Pile, Steel HP 10x42		Each	1	
Pile Shoes		Each	12	
Concrete Encasement		Cu. Yd.	4.2	

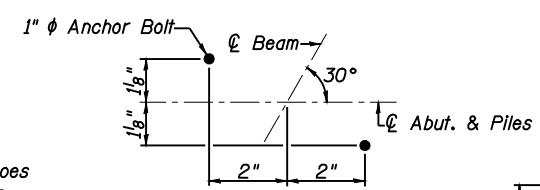
For details of Bar Splicers, see sheet 26 of 30.
For details of piles and Concrete Encasement, see sheet 25 of 30.

PLAN

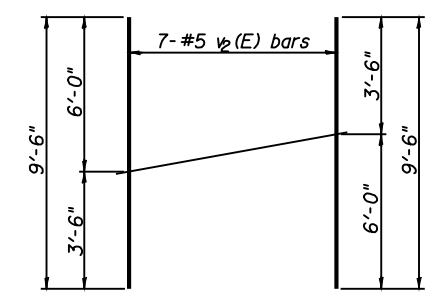
PILE DATA

Type: Steel HP 10x42 with Pile Shoes
Nominal Required Bearing: 335 kips
Factored Resistance Available: 184 kips
Est. Length: 25 ft.
No. Production Piles: 11
No. Test Piles: 1

* The three end piles on each side of the abutment shall be driven through 2' diameter precored holes extending to elevation 566.0 according to Article 512.09(c) of the Standard Specifications. Cost included with driving piles.
** Cut bars to fit

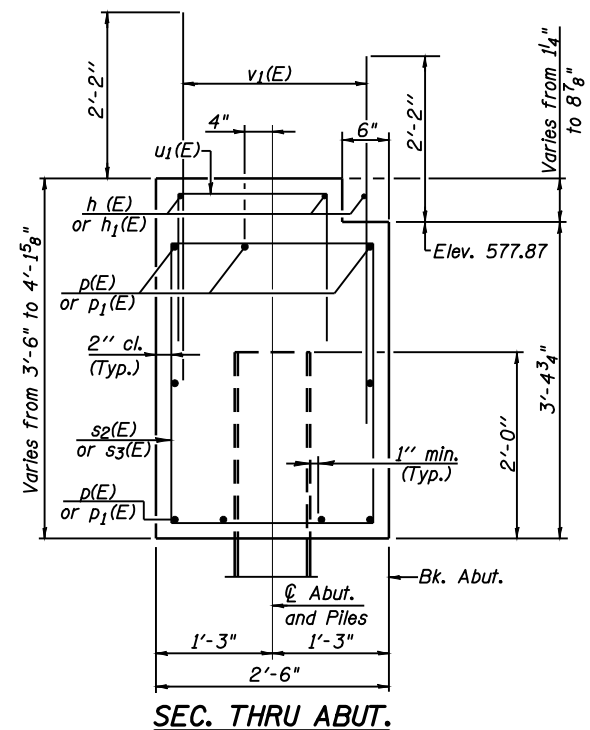


DETAIL A



FIELD CUTTING DIAGRAM

Order v₂(E) full length. Cut as shown and use remainder of bars in opposite face.



SEC. THRU ABUT.



Allen Henderson & Associates, Inc.
Civil and Structural Engineers Springfield, IL.
62703 Phone: (217)544-8033 IL. Design Firm
No. 184-001907

SHEET NO. 21
30 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
662	HRS-10,B-2)	SANGAMON	84	65
CONTRACT NO. 72A73				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		