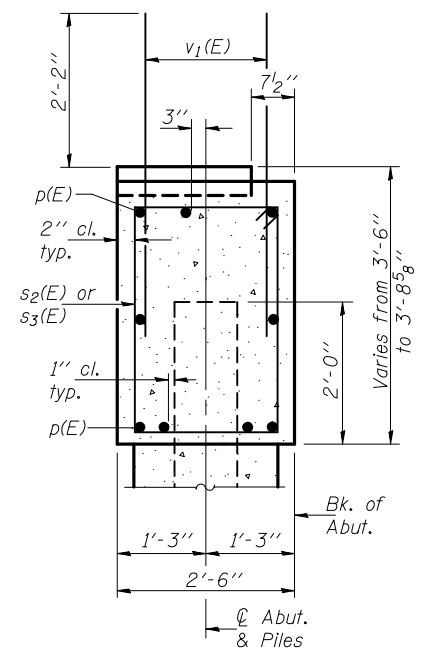
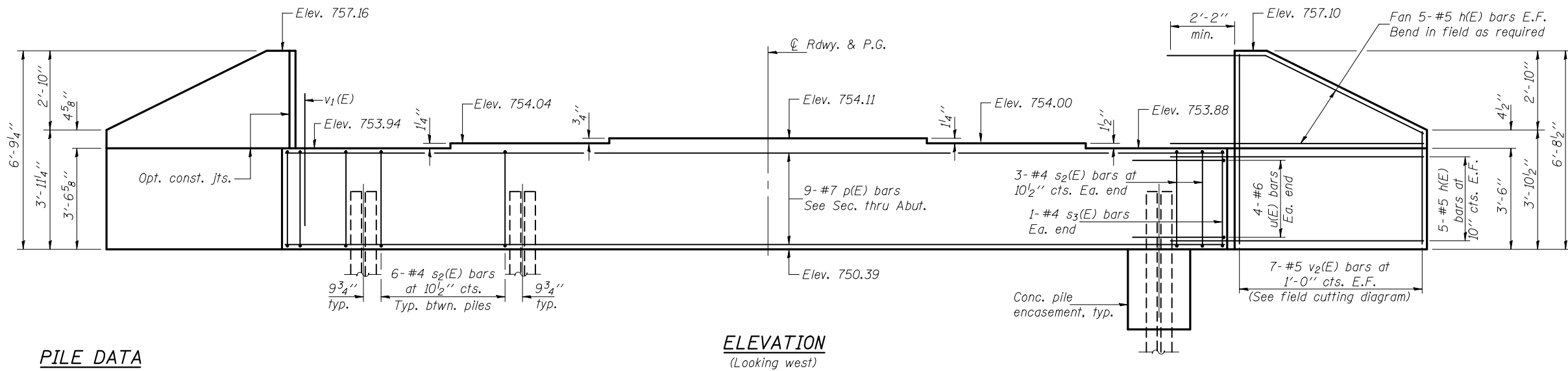


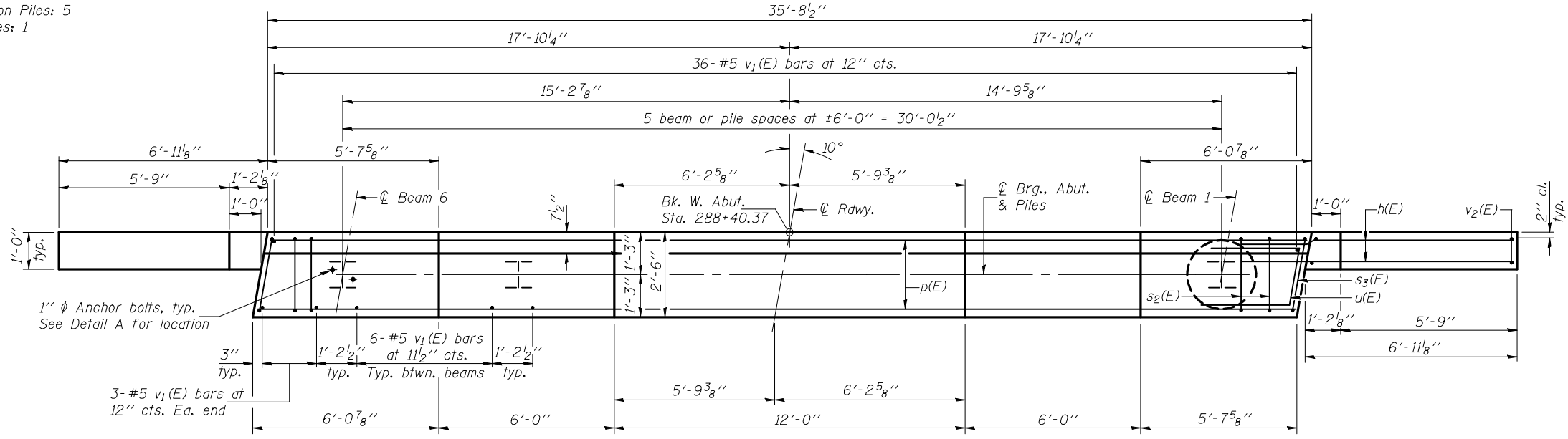
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



SEC. THRU ABUT.

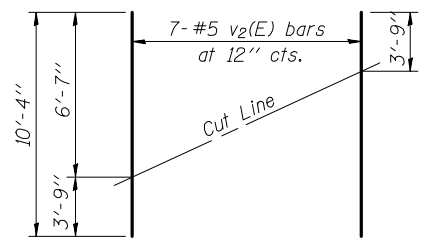
**PILE DATA**  
 Type: Steel HP12x53  
 Nominal Required Bearing: 280 Kips  
 Factored Resistance Available: 140 Kips  
 Est. Length: 71'  
 No. Production Piles: 5  
 No. Test Piles: 1

**ELEVATION**  
(Looking west)

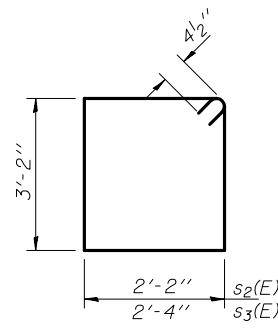


**PLAN**

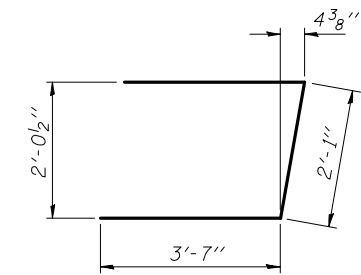
Notes: Pour steps monolithically with cap.  
 Pile shall be driven through 18" diameter pre-cored holes extending to Elev. 716.0 according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.



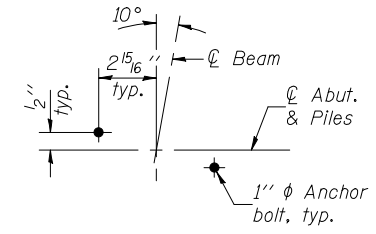
**FIELD CUTTING DIAGRAM**  
 Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



**BARS s2(E) & s3(E)**



**BAR u(E)**



**DETAIL A**

**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	40	#5	9'-6"	—
p(E)	9	#7	35'-4"	—
s2(E)	36	#4	11'-5"	□
s3(E)	2	#4	11'-9"	□
u(E)	8	#6	9'-3"	┘
v1(E)	72	#5	4'-4"	—
v2(E)	14	#5	10'-4"	—
Structure Excavation		Cu. Yd.	69	
Concrete Structures		Cu. Yd.	14.8	
Reinforcement Bars, Epoxy Coated		Pound	1920	
Furnishing Steel Piles HP12x53		Foot	355	
Driving Piles		Foot	355	
Test Pile Steel HP12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.1	
Anchor Bolts 1"		Each	12	

For details of piles and concrete encasement, see sheet 22 of 25.

DESIGNED	D.P. Narielwala
CHECKED	S.M. Ryan
DRAWN	h.t. duong
CHECKED	DPN/SMR

November 25, 2009  
 EXAMINED *Thomas J. Domagala*  
 ENGINEER OF BRIDGE DESIGN  
 PASSED *Ralph E. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES

**WEST ABUTMENT  
STRUCTURE NO. 074-0086**

SHEET NO. 16 25 SHEETS	F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1517	12VBR-1	PIATT	168	101
CONTRACT NO. 70388					
FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT					