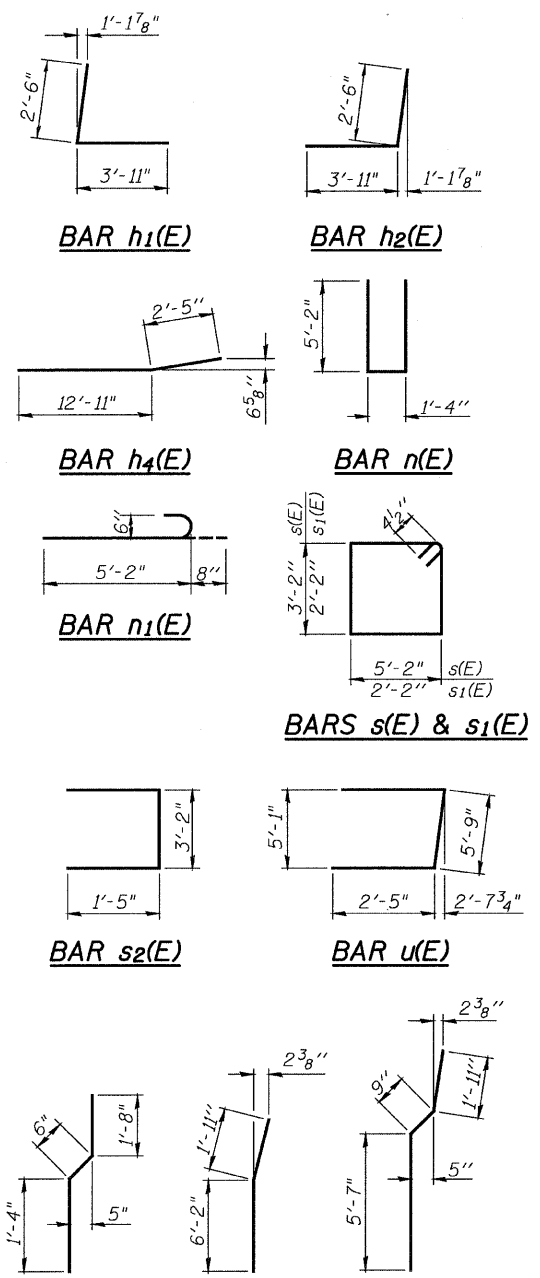
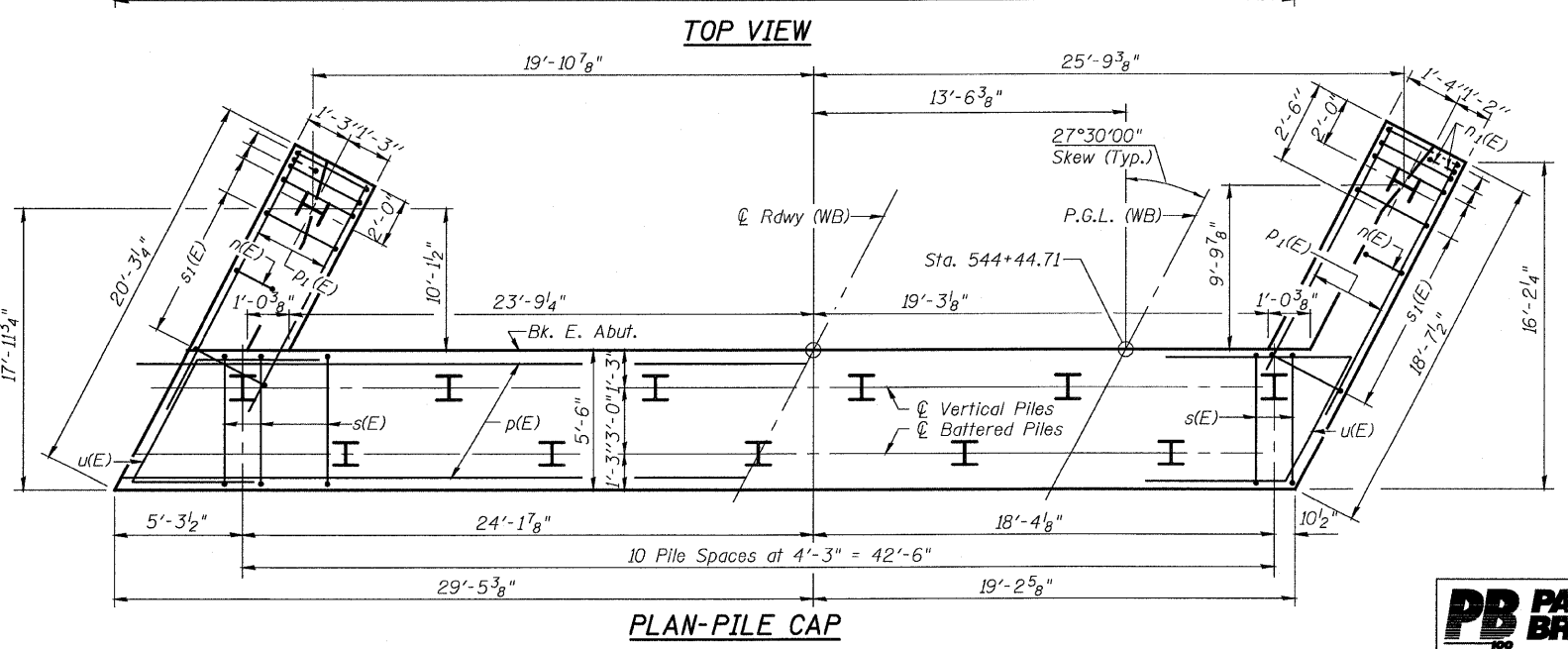
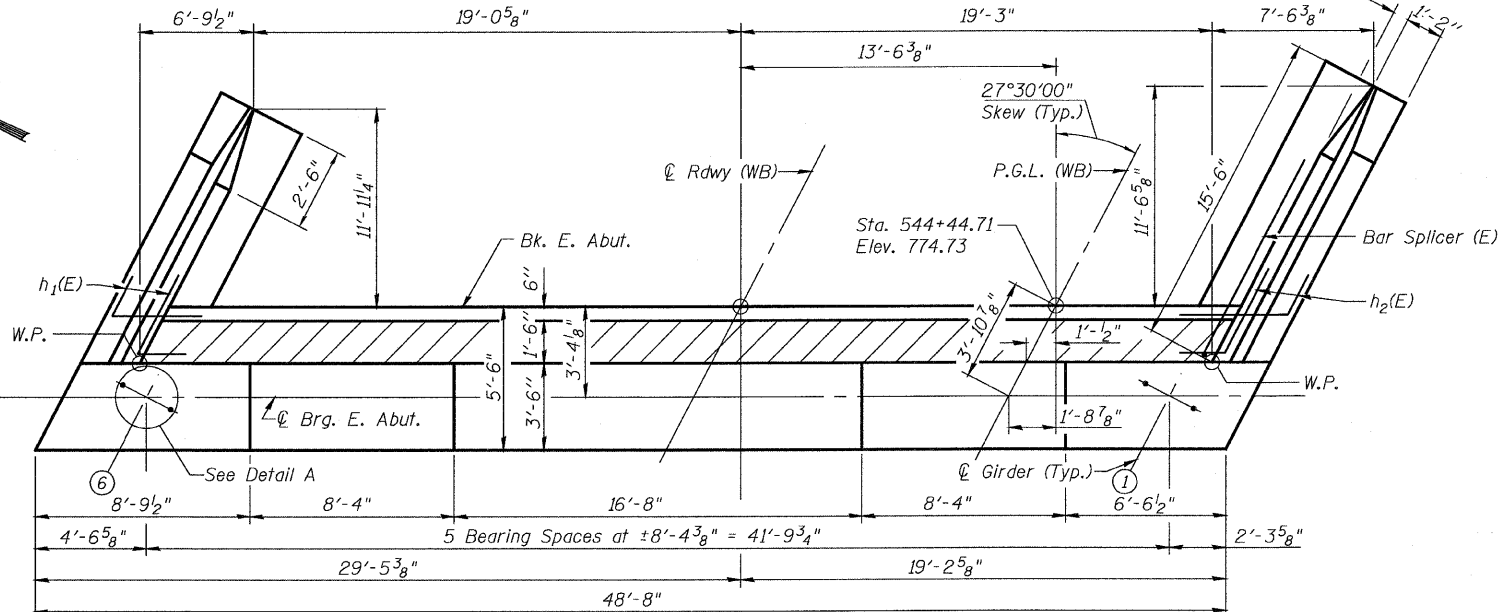
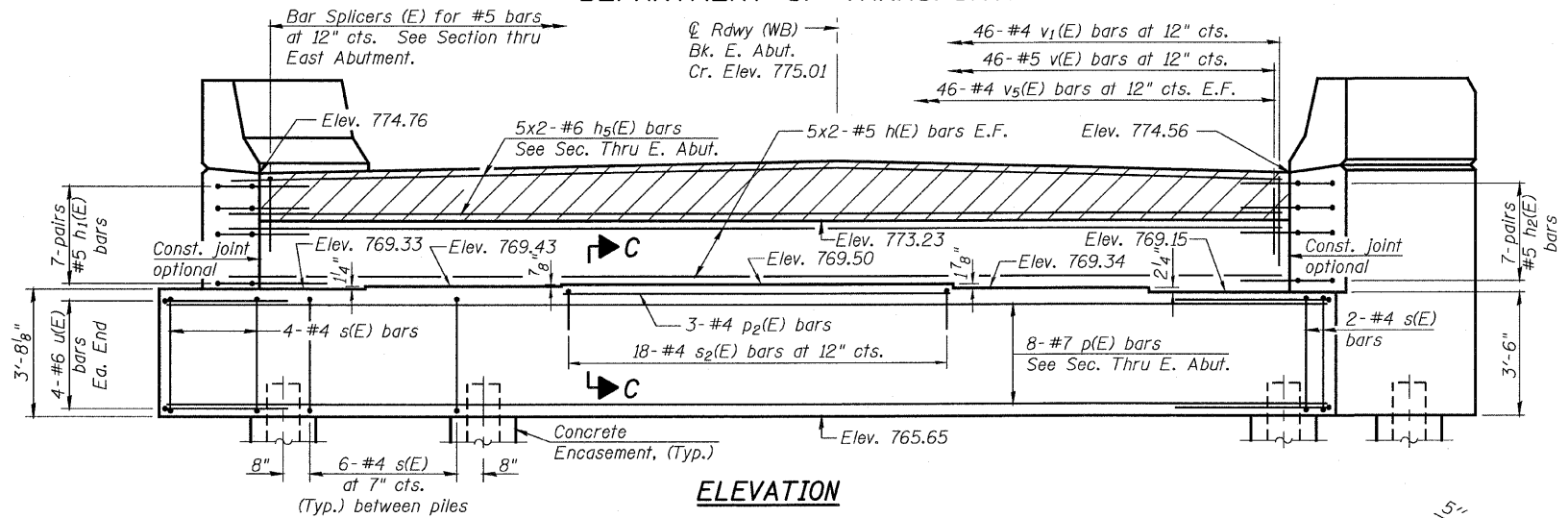


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**EAST ABUTMENT  
BILL OF MATERIAL**

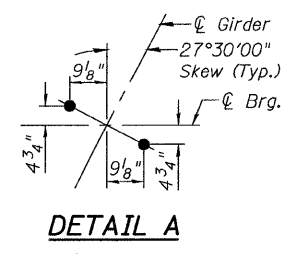
Bar	No.	Size	Length	Shape
h(E)	20	#5	23'-8"	
h1(E)	14	#5	6'-5"	
h2(E)	14	#5	6'-5"	
h3(E)	26	#4	15'-3"	
h4(E)	18	#4	15'-4"	
h5(E)	10	#6	23'-10"	
n(E)	28	#6	11'-8"	
n1(E)	12	#6	5'-10"	
p(E)	8	#7	48'-4"	
p1(E)	12	#7	16'-1"	
p2(E)	3	#4	16'-5"	
s(E)	66	#4	17'-5"	
s1(E)	34	#4	9'-5"	
s2(E)	18	#4	6'-0"	
u(E)	8	#6	10'-7"	
v(E)	46	#5	3'-2"	
v1(E)	46	#4	3'-6"	
v2(E)	34	#6	8'-1"	
v3(E)	6	#6	8'-1"	
v4(E)	28	#6	8'-3"	
v5(E)	92	#4	6'-9"	
Structure Excavation		Cu. Yd.	251	
Concrete Structures		Cu. Yd.	67.7	
Reinforcement Bars, Epoxy Coated		Pound	5,990	
Furnishing Steel Piles, HP12x53		Foot	852	
Driving Piles		Foot	852	
Test Pile, HP12x53		Each	1	
Pile Shoes		Each	12	
Concrete Encasement		Cu. Yd.	4.6	
Concrete Sealer		Sq. Ft.	173	
Porous Granular Embankment, Special		Cu. Yd.	82	
Geocomposite Wall Drain		Sq. Yd.	38	
Pipe Underdrain for Structures, 4" φ		Foot	53	



**PILE DATA**

Type: Steel HP12x53 w/Pile Shoes  
Nominal Required Bearing: 419 Kips  
Allowable Resistance Available: 130 Kips  
Est. Length: 71 Ft.  
No. Production Piles: 12  
No. Test Piles: 1

DESIGNED	S.CHELBIAN
CHECKED	R.TINGLEY
DRAWN	D.C.PATEL
CHECKED	J.GRAINAWI



**Notes:**

- For details of Bar Splicers, see Sheet No. 40.
- For details of piles and Concrete Encasement, see Sheet No. 41.
- For details of the Drainage System behind the abutment, see Section Thru Abutment on Sheet No. 2.
- For Section Thru East Abutment & Section C-C, see Sheet No. 33.
- Work this sheet with Sheet No. 33.

**MINIMUM BAR LAP**

#5 bar = 2'-2"  
#6 bar = 2'-7"

**EAST ABUTMENT  
F.A.P. ROUTE 301 SECTION 177-2B-1  
STEPHENSON COUNTY  
STATION 540+65.71  
STRUCTURE NO. 089-0082**

