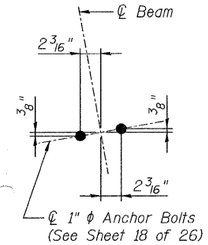
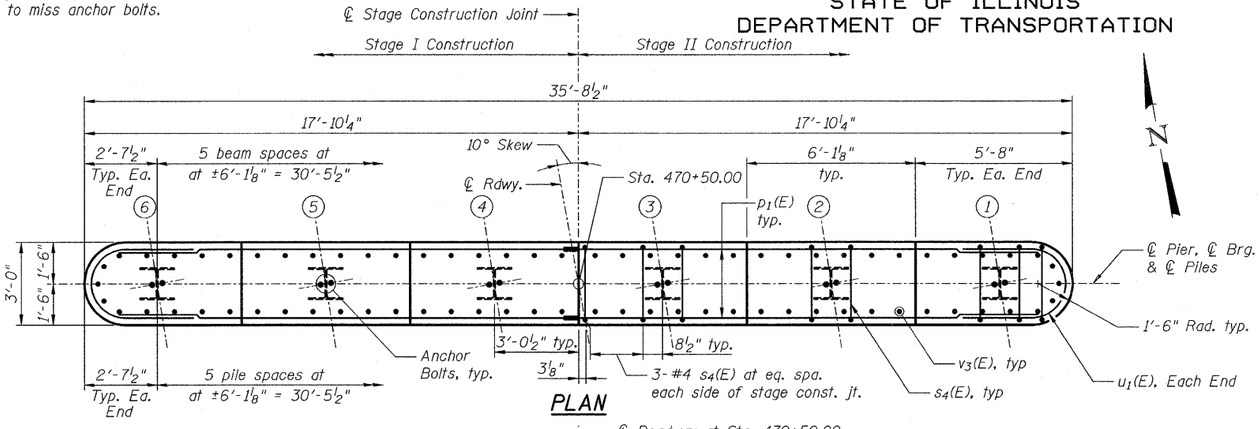
Note: Pour steps monolithically with cap.
Place reinforcement in cap to miss anchor bolts.

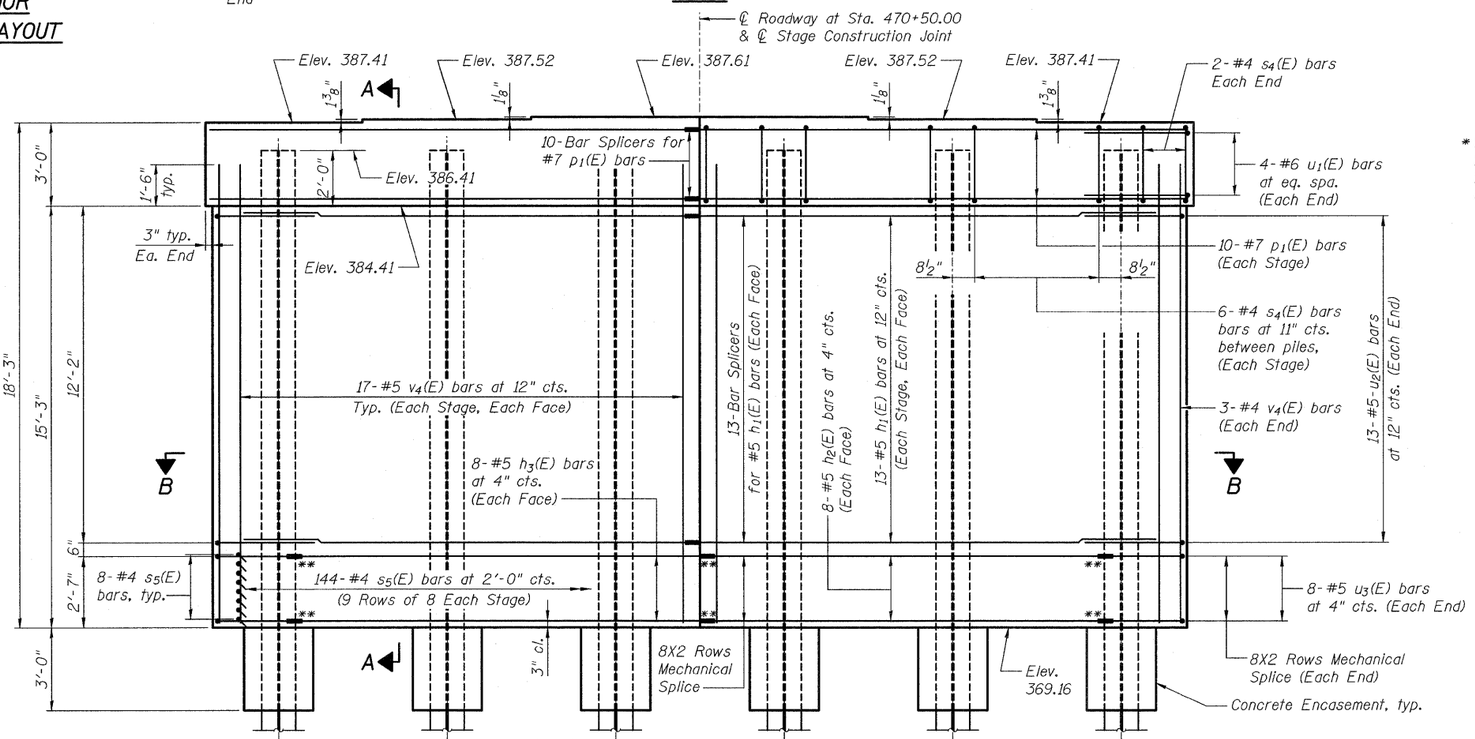
STATE OF ILLINOIS
DEPARTMENT OF TRANSTATION



ANCHOR BOLT LAYOUT

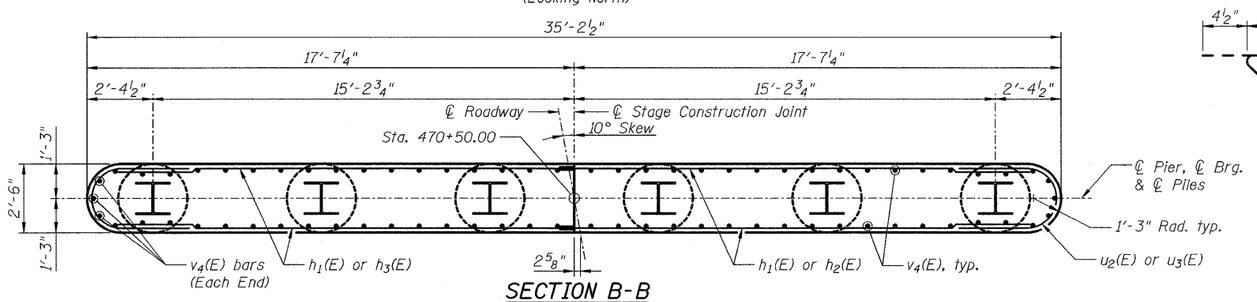


PLAN

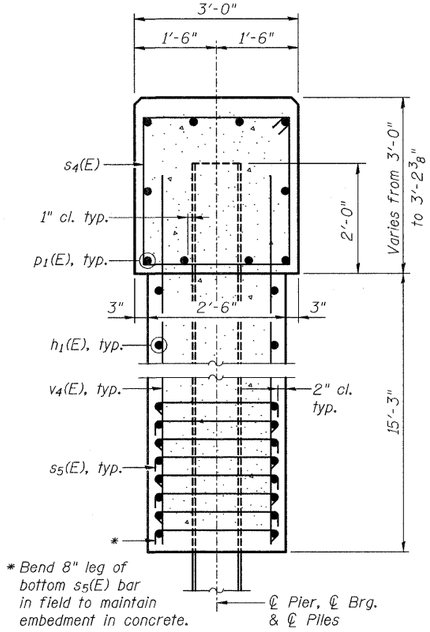


ELEVATION
(Looking North)

Note: h3(E) bars shall extend past the Stage I construction joint by a minimum of 6" to allow for attachment of mechanical splice.

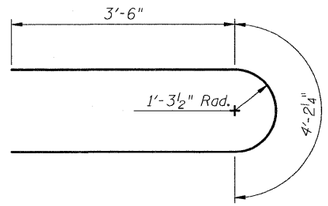


SECTION B-B

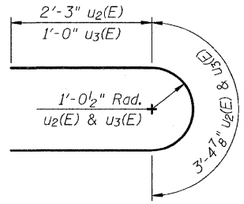


* Bend 8" leg of bottom s5(E) bar in field to maintain embedment in concrete.

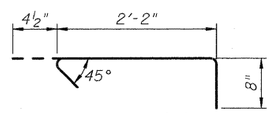
SECTION A-A



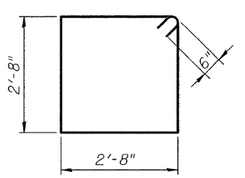
BAR u1(E)



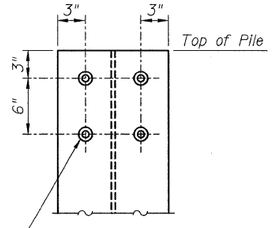
BARS u2(E) & u3(E)



BAR s5(E)



BAR s4(E)



SEISMIC ANCHORAGE FOR PILES

PILE DATA

Type: Steel HP 14x89
Nominal Required Bearing: 705 kips
Factored Resistance Available: 251 kips
Est. Length: 58 ft
No. Production Piles: 5
No. Test Piles: 1

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	52	#5	16'-2"	——
h2(E)	16	#5	14'-10"	——
h3(E)	16	#5	15'-10"	——
p1(E)	20	#7	16'-0"	——
s4(E)	34	#4	11'-8"	⊓
s5(E)	144	#4	3'-3"	⊓
u1(E)	8	#6	11'-2"	⊃
u2(E)	26	#5	7'-11"	⊃
u3(E)	16	#5	5'-5"	⊃
v4(E)	74	#5	16'-7"	——
Structure Excavation		Cu. Yd.	11.8	
Concrete Structures		Cu. Yd.	61.1	
Stud Shear Connectors		Each	48	
Reinforcement Bars, Epoxy Coated		Pound	4,340	
Bar Splicers		Each	36	
Furnishing Steel Piles, HP 14x89		Foot	290	
Driving Piles		Foot	290	
Test Pile Steel HP 14x89		Each	1	
Underwater Structure Excavation Protection Location 1		Each	1	
Pile Shoes		Each	6	
Concrete Encasement		Cu. Yd.	3.3	
Mechanical Splice		Each	48	

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

PIER 1 DETAILS
IL ROUTE 242 OVER SHELTON CREEK
STATION 470+76

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

JACOBS

SHEET NO. 21	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
26 SHEETS	776	(102)B-1	HAMILTON	53	48
	S.N. 033-0053		CONTRACT NO. 78016		
	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		