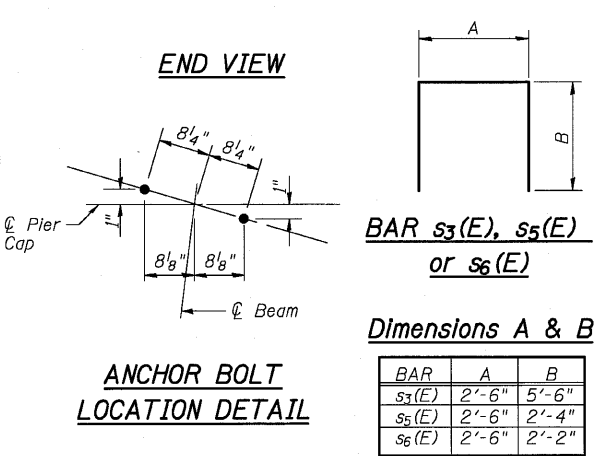
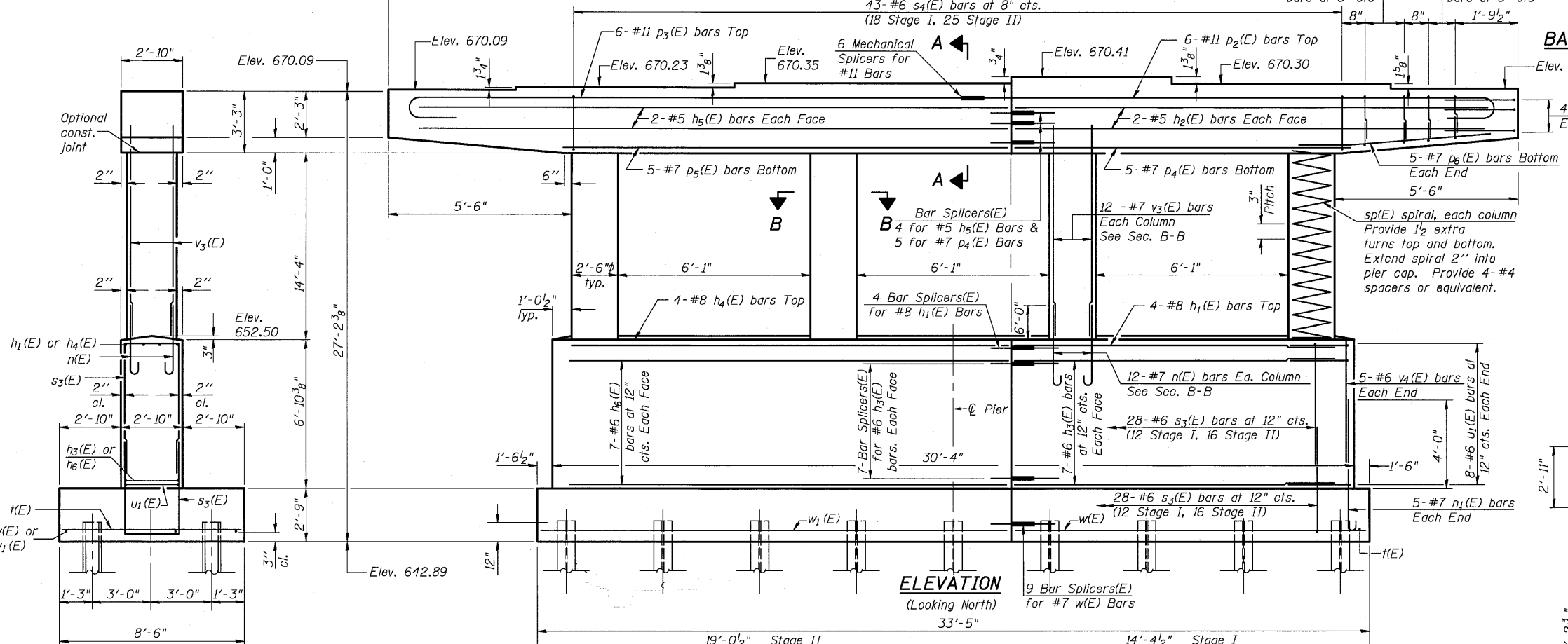
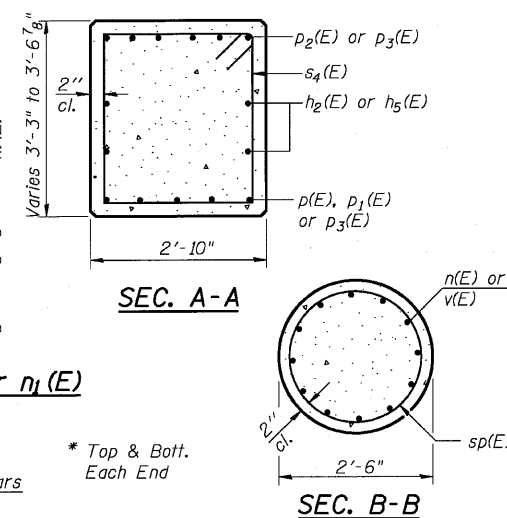
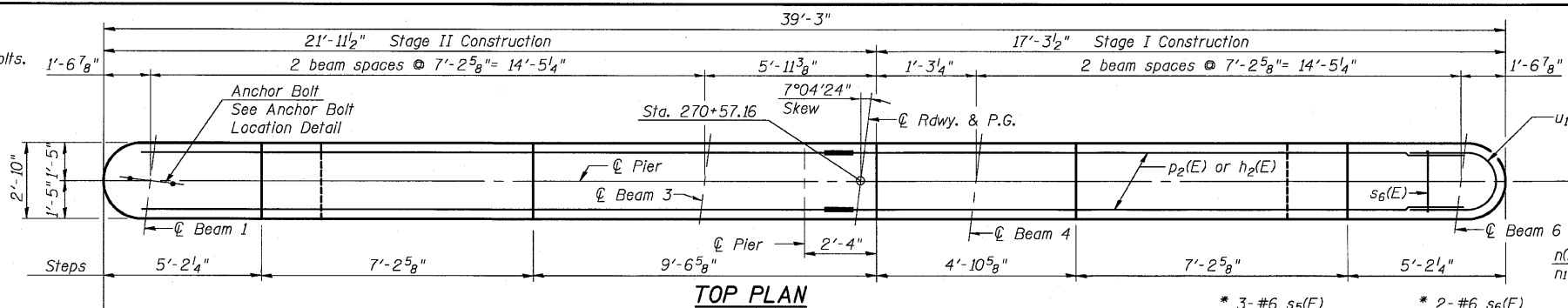


Notes:
 Space reinforcement in cap to miss anchor bolts.
 Four steps monolithically with cap.
 For details of piles, see sheet 33 of 42.

PILE DATA

Type: HP 12x53
 Nominal Required Bearing: 317 kip
 Factored Resistance Available: 159 kip
 Est. Length: 52'
 No. Production Piles: 17
 No. Test Piles: 1



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BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	4	# 8	11'-2"	—
h2(E)	4	# 5	15'-8"	—
h3(E)	14	# 6	11'-2"	—
h4(E)	4	# 8	15'-11"	—
h5(E)	4	# 5	20'-4"	—
h6(E)	14	# 6	15'-11"	—
n(E)	48	# 7	11'-8"	U
n1(E)	10	# 6	7'-2"	U
p2(E)	6	# 11	18'-3"	U
p3(E)	6	# 11	21'-0"	U
p4(E)	5	# 7	12'-1"	—
p5(E)	5	# 7	16'-9"	—
p6(E)	10	# 7	5'-7"	—
s3(E)	56	# 6	13'-6"	U
s4(E)	43	# 6	12'-2"	U
s5(E)	12	# 6	7'-2"	U
s6(E)	8	# 6	6'-10"	U
sp(E)	4	# 4	14'-9"	—
t(E)	34	# 8	8'-2"	—
u1(E)	24	# 6	11'-3"	U
v3(E)	48	# 7	15'-9"	—
v4(E)	10	# 6	6'-6"	—
w(E)	9	# 7	14'-0"	—
w1(E)	9	# 7	18'-8"	—
Braced Excavation		Cu. Yd.	204	
Concrete Structures		Cu. Yd.	74.4	
Reinforcement Bars, Epoxy Coated		Pound	10,530	
Furnishing Steel Piles, HP 12x53		Foot	884	
Driving Piles		Foot	884	
Test Pile Steel, HP 12x53		Each	1	
Bar Splicers		Each	36	
Mechanical Splicers		Each	6	

** Length is height of spiral.

PIER 2

STRUCTURE NO. 053-0186 (SB)

Coombe-Bloxdorf P.C.
 - CIVIL ENGINEERS -
 - STRUCTURAL ENGINEERS -
 - LAND SURVEYORS -
 Design Firm License No. 184-002703

PROJECT NO. 05004-10
 SCALE: 1/4" = 1'-0"
 DATE: 8/10/10
 DESIGN BY: CB/MCB
 DRAWN BY: MML
 CHECKED BY: MCB

SHEET NO. 32
 42 SHEETS

F.A.I. RTE. 55
 SECTION (53-1) HBR & HBR-1
 COUNTY LIVINGSTON
 TOTAL SHEETS 102
 SHEET NO. 51
 CONTRACT NO. 66856
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT