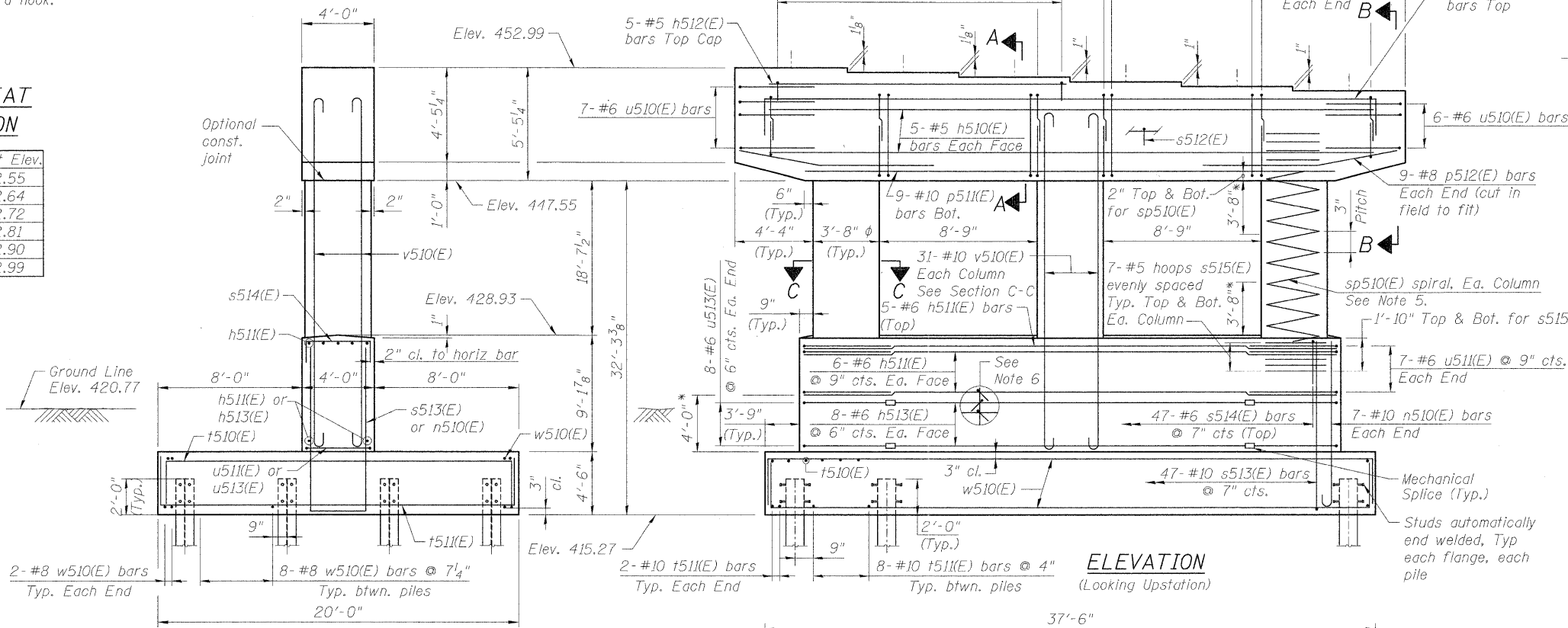


NOTES:

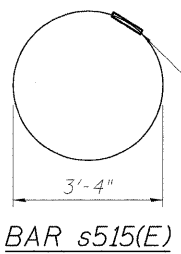
- Space reinforcement in cap to miss anchor bolts.
 - Pour steps monolithically with cap.
 - For details of piles, see sheet S-122.
 - Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 - #5 sp510(E) spiral, each column
 - The s512(E) cross-tie bars shall be placed so that orientation of 180° hook of two successive cross-ties alternate end to end. A single layer of bars shall be provided across top mat of footing reinforcement. Space bars as follows:
9-#5 s512(E) @ 6" (vert) x 47 @ 7" (horiz)
7-#5 s512(E) @ 9" (vert) x 24 @ 1'-2" (horiz)
 - For anchor bolt details, see Sheets S-83 thru S-92.
- 1) Provide 1 1/2 extra turns, shop welded together per AWS D1.4 top and bottom. Extend spiral 2" into pier cap & crashwall. Provide 4-#4 spacers or equivalent.
- 2) When splicing spiral reinforcement is necessary, the spiral shall be provided with 1 1/2 extra turns at the ends to be spliced. These additional turns shall either be welded together according to AWS D1.4, or shall both terminate with a 135° standard hook.
- * Splicing of reinforcement will not be allowed in this region.
- ** Length is height of spiral.

TOP OF SEAT ELEVATION

Beam No.	Seat Elev.
1A	452.55
2A	452.64
3A	452.72
4A	452.81
5A	452.90
6A	452.99

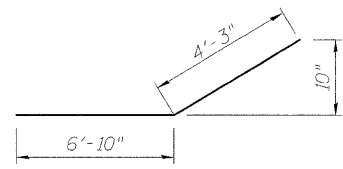


END VIEW

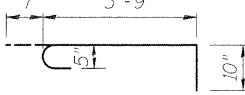


A & B DIMENSIONS

Bar	A	B
p510(E)	33'-2"	2'-0"
s511(E)	2'-8"	3'-8"
s513(E)	3'-6"	13'-2"
s514(E)	3'-6"	3'-0"
u512(E)	3'-8"	1'-0"
w510(E)	37'-2"	4'-0"
t510(E)	19'-8"	3'-10"
t511(E)	19'-8"	3'-10"

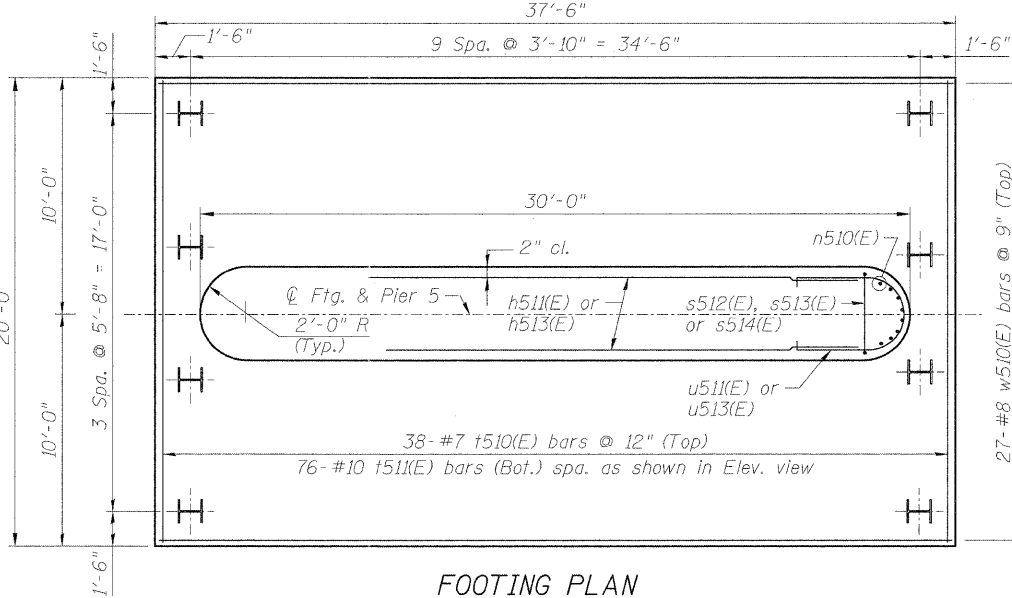


BAR p512(E)

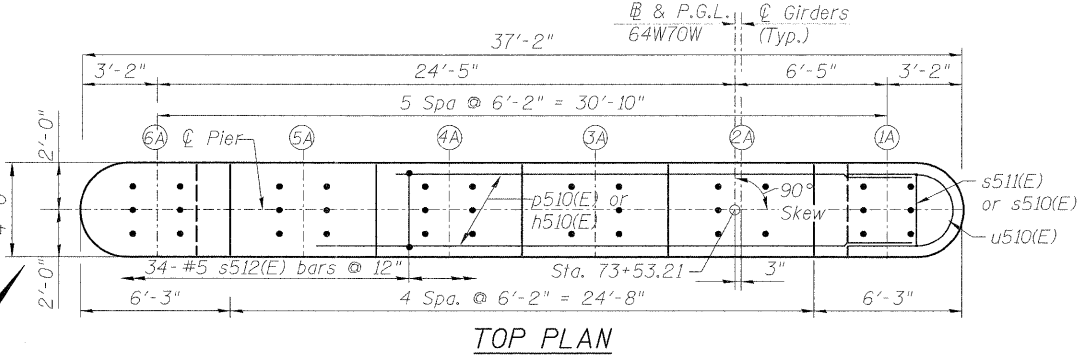


BAR s512(E)

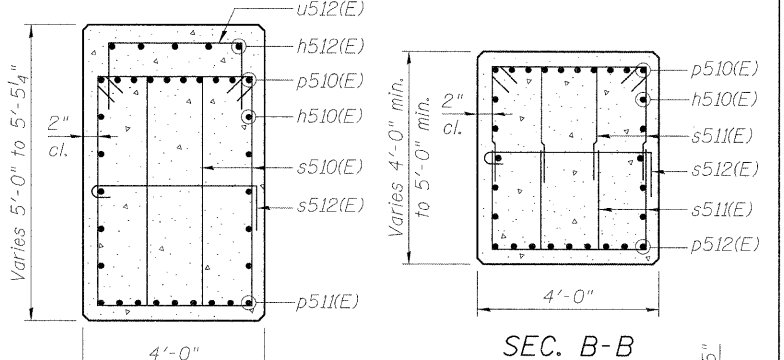
BARS p510(E), s511(E), s513(E), s514(E), u512(E), w510(E), t510(E), t511(E)



FOOTING PLAN

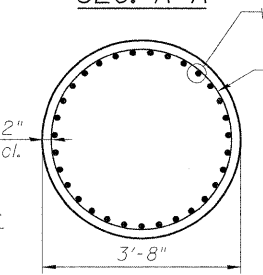


TOP PLAN

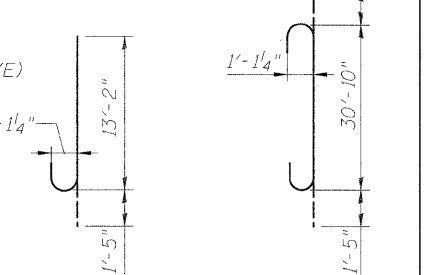


SEC. A-A

SEC. B-B



SEC. C-C



BAR n510(E) BAR v510(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h510(E)	10	#5	32'-10"	—
h511(E)	17	#6	25'-8"	—
h512(E)	5	#5	16'-5"	—
h513(E)	16	#6	19'-10"	—
n510(E)	14	#10	14'-7"	C
p510(E)	10	#11	37'-2"	—
p511(E)	9	#10	29'-2"	—
p512(E)	18	#8	11'-1"	—
s510(E)	100	#5	15'-7"	—
s511(E)	208	#5	10'-0"	—
s512(E)	625	#5	5'-2"	—
s513(E)	47	#10	29'-10"	—
s514(E)	47	#6	9'-6"	—
s515(E)	42	#5	10'-5 5/8"	—
sp510(E)	3	#5	19'-0"	NW
t510(E)	38	#7	27'-4"	—
t511(E)	76	#10	27'-4"	—
u510(E)	13	#6	11'-8"	U
u511(E)	14	#6	13'-11"	U
u512(E)	17	#5	5'-8"	U
u513(E)	16	#6	11'-11"	U
v510(E)	93	#10	33'-8"	C
w510(E)	55	#8	45'-2"	—

PILE DATA

Type: HP14x89
 Nominal Required Bearing: 500 kips
 Factored Resistance Available: 250 kips
 Estimated Length: 112 ft.
 Number of Production Piles: 39
 Number of Test Piles: 1



USER NAME = BhattA	DESIGNED - EJO	REVISED -
PLOT SCALE = 1/8" = 1'-0"	DRAWN - JHR	REVISED -
PLOT DATE = 05-02-11	CHECKED - DB	REVISED -
	DATE - 05-02-11	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PIER 5 - S.N. 082-0325
 I-70W OVER I-55, CSX & KCS RAILROADS

SCALE: NONE SHEET NO. S-112 OF S-138 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-1-B-1	ST. CLAIR	319	227
S.N. 082-0323 & S.N. 082-0325			CONTRACT NO. 76C75	
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	