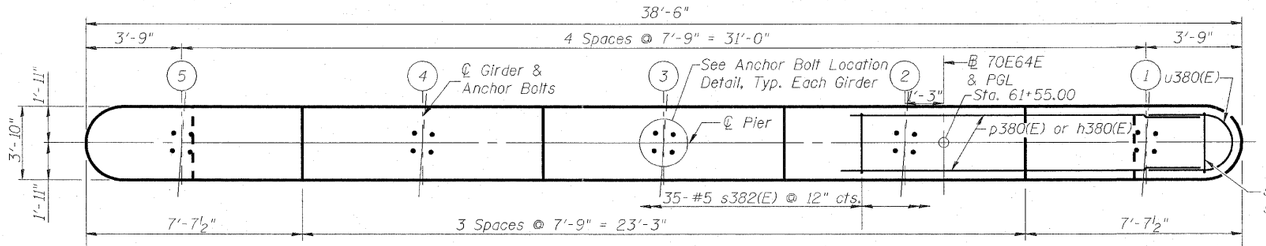
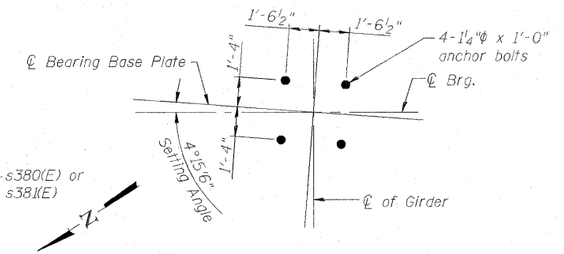
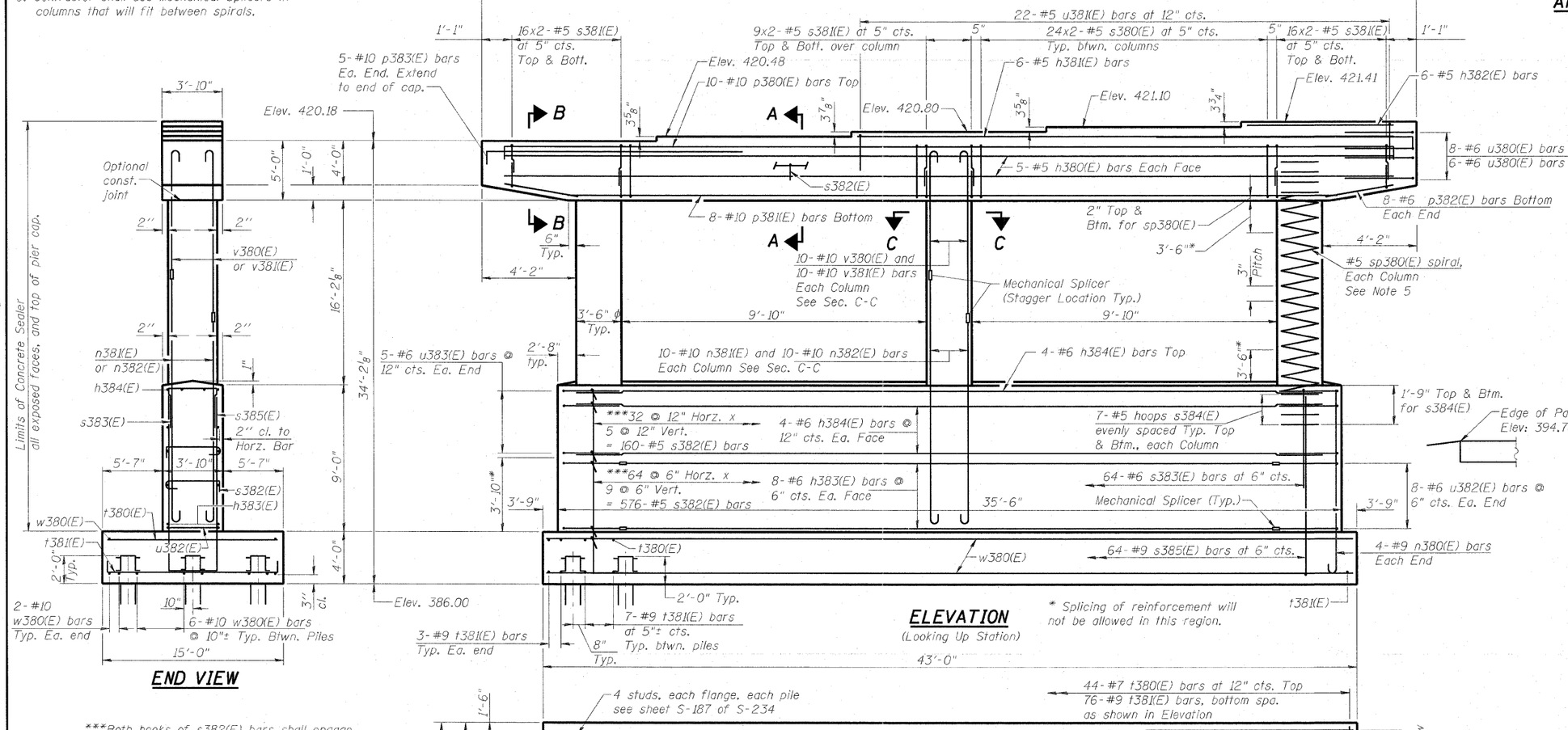
Notes:
1. Space reinforcement in cap to miss anchor bolts.
2. Pour steps monolithically with cap.
3. For details of piles, see sheet S-187 of S-234.
4. ℄ of Pier is radial to ℄ 70E64E at Sta. 61+55.00.
5. #5 sp380(E) spiral, each column
   1) Provide $1\frac{1}{2}$ extra turns, shop welded together per 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 spirals shall be provided with $1\frac{1}{2}$ 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.
6. Contractor shall use Mechanical Splicers in columns that will fit between spirals.



TOP PLAN



ANCHOR BOLT LOCATION DETAIL



END VIEW

ELEVATION
(Looking Up Station)

FOOTING PLAN

* Splicing of reinforcement will not be allowed in this region.

***Both hooks of s382(E) bars shall engage horiz. & vert. bars and 90° hook on two successive s382(E) bars on same vert. bar shall be alternated end for end. Includes row of s382(E) bars on the top mat of pile cap.

PILE DATA

Type: HP 12x63
Nominal Required Bearing: 400 kips
Factored Resistance Available: 200 kips
Est. Length: 88'
No. Production Piles: 33
No. Test Piles: 0

BILL OF MATERIAL

	Bar	No.	Size	Length	Shape
	h380(E)	10	#5	34'-8"	
	h381(E)	6	#5	21'-0"	
	h382(E)	6	#5	5'-6"	
	h383(E)	16	#6	19'-8"	
	h384(E)	12	#6	31'-8"	
	n380(E)	8	#9	13'-9"	
	n381(E)	30	#10	15'-5"	
	n382(E)	30	#10	17'-5"	
	p380(E)	10	#10	38'-4"	
	p381(E)	8	#10	31'-2"	
	p382(E)	16	#6	5'-8"	
	p383(E)	10	#10	11'-10"	
	s380(E)	96	#5	14'-11"	
	s381(E)	164	#5	10'-4"	
	s382(E)	771	#5	5'-0"	
	s383(E)	64	#6	7'-10"	
	s384(E)	42	#5	9'-11"	
	s385(E)	64	#9	28'-4"	
**	sp380(E)	3	#5	16'-7"	
	t380(E)	44	#7	14'-8"	
	t381(E)	76	#9	18'-4"	
	u380(E)	14	#6	17'-4"	
	u381(E)	22	#5	10'-0"	
	u382(E)	16	#6	17'-6"	
	u383(E)	10	#6	14'-10"	
	v380(E)	30	#10	15'-7"	
	v381(E)	30	#10	13'-7"	
	w380(E)	32	#10	42'-8"	

Structure Excavation	Cu. Yd.	264.6
Concrete Structures	Cu. Yd.	186.9
Reinforcement Bars, Epoxy Coated	Pound	43,240
Furnishing Steel Piles, HP 12x63	Foot	2,904
Driving Piles	Foot	2,904
Pile Shoes	Each	33
Mechanical Splicers	Each	92
Concrete Sealer	Sq. Ft.	2102

** Length is height of spiral.
See next sheet for Bar Details and Sections.

AECOM

USER NAME =	DESIGNED - DDB	REVISED -	
	DRAWN - BRD	REVISED -	
PLOT SCALE = 0.166667 ' / IN.	CHECKED - LLV	REVISED -	
PLOT DATE = 8/15/2011	DATE - 08-12-11	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER – S.N. 082-0324 – PIER 5 – PLANS & ELEVATIONS
I-70E OVER I-55, CSX & KCS RAILROADS
SCALE: | SHEET S-183 OF S-234 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
70	82-1-B-2	ST. CLAIR	399	310
	S.N. 082-0322 & S.N. 082-0324	CONTRACT NO. 76C76		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

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