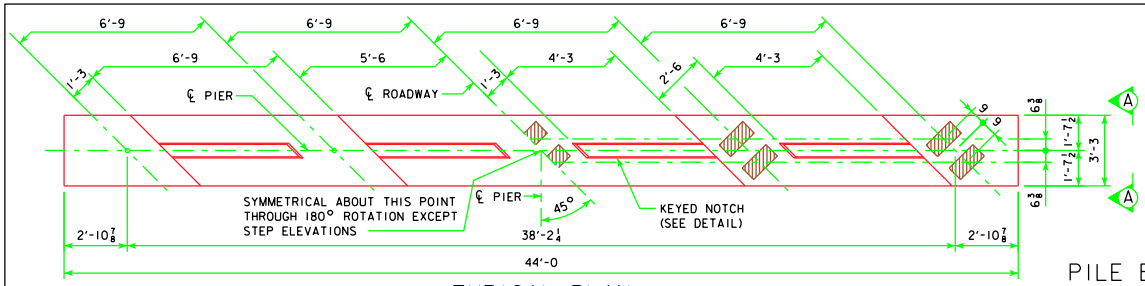
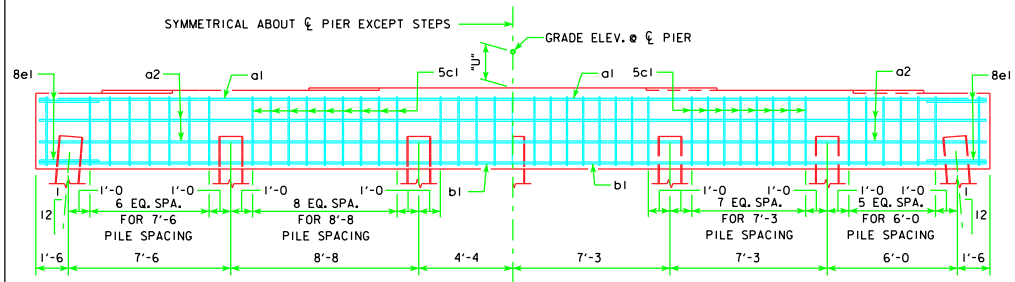
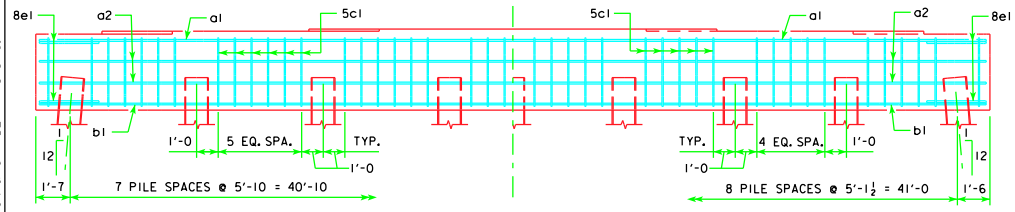


TYPICAL PLAN



6 PILE BENT

7 PILE BENT



8 PILE BENT

9 PILE BENT

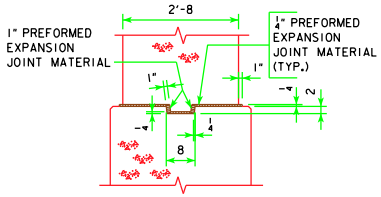
PILE BENT NOTES:

THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

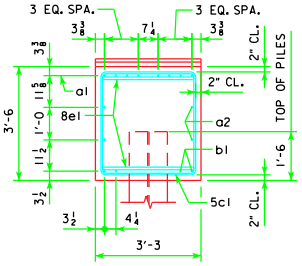
FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

NOTE:
THE HEIGHT OF THE STEPS ON THE BRIDGE SEAT IS EQUAL TO THE DIFFERENCE IN ELEVATIONS OF THE TOP OF SLAB AT ADJACENT BEAMS ALONG ℄ PIER.
SEE SHEET H30-29-06 FOR "U" DIMENSION.



KEYED NOTCH DETAIL

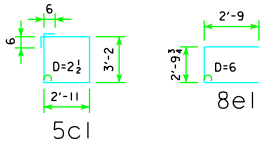


VIEW A-A
FOR 6, 7, 8 & 9 PILE BENTS

REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

			6 PILE BENT			7 PILE BENT			8 PILE BENT			9 PILE BENT		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	43'-8		8	9	1188	8	9	1188	8	9	1188	8	9	1188
a2	43'-8		4	8	466	4	8	466	4	8	466	4	8	466
b1	43'-8		4	9	594	4	10	752	4	9	594	4	9	594
5c1	13'-2		43	5	591	46	5	632	44	5	604	42	5	577
8e1	8'-4		4	8	89	4	8	89	4	8	89	4	8	89
(1) REINFORCING STEEL (LB.)			2928			3127			2941			2914		
STRUCTURAL CONCRETE (CY)		PILE TYPE 3	19.5			19.5			19.5			19.5		

BENT BAR DETAILS



5c1

8e1

NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.

FRICTION OR POINT BEARING PILING

℄-℄ ABUTMENT BEARING	PIOL TYPE 3			
	NUMBER OF TRESTLE PILES	PILE SIZE	(2) DES. PILE BRG. (TONS)	(3) LRFD DES. BRG. (KIPS)
138'-10	6	HP14x73	58	167
	6	HP14x89	58	167
151'-4	6	HP14x73	61	176
	6	HP14x89	61	176
163'-10	7	HP14x73	56	163
	6	HP14x89	65	190
176'-4	7	HP14x73	59	170
	6	HP14x89	68	198
188'-10	7	HP14x73	61	177
	6	HP14x89	71	207
201'-4	8	HP14x73	59	172
	7	HP14x89	68	197
213'-10	8	HP14x73	62	181
	7	HP14x89	71	207
226'-4	9	HP14x73	58	169
	7	HP14x89	75	217
243'-0	9	HP14x73	61	177
	8	HP14x89	69	199

(1) SEE SHEET H30-31-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

(2) FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.

(3) FOR ESTIMATING PILE LENGTHS USING AASHTO LRFD SPECIFICATIONS.

NOTE: FRICTION BEARING INCLUDES SIDE FRICTION AND END BEARING IN SOIL. POINT BEARING INCLUDES SIDE FRICTION AND POINT BEARING IN ROCK.

07-10
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, THREE SPAN BRIDGES
PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES
DECEMBER, 2006

PILE BENT PIERS
HP14 PILES
45° SKEW

H30-56-06

REVISED 07-10 - THIS SHEET WAS ADDED FOR THE 14" PILE OPTION & CAP DEPTH IS 3'-6.