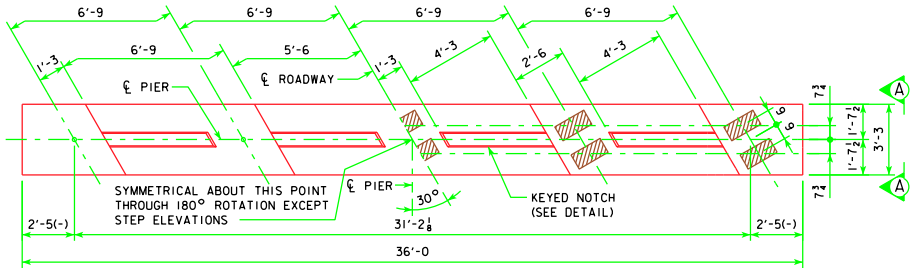


TYPICAL PLAN

PILE BENT NOTES:

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

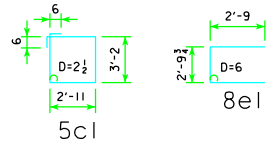
FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

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

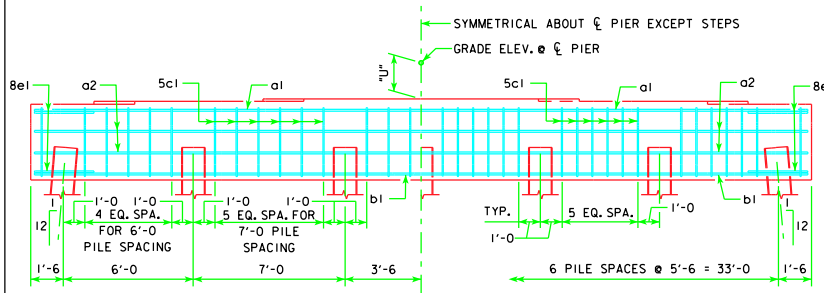
REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

			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	35'-8		8	9	970	8	9	970	6	9	728	6	9	728
a2	35'-8		4	8	381	4	8	381	4	8	381	4	8	381
b1	35'-8		4	9	485	4	9	485	4	9	485	4	9	485
5c1	13'-2		30	5	412	38	5	522	30	5	412	34	5	467
8e1	8'-4		4	8	89	4	8	89	4	8	89	4	8	89
(1) REINFORCING STEEL (LB.)			2337			2447			2095			2150		
STRUCTURAL CONCRETE (CY)		PILE TYPE 3	15.9			15.9			15.9			15.9		

BENT BAR DETAILS



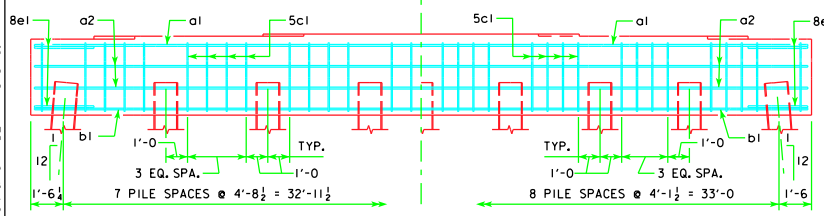
NOTE: ALL DIMENSIONS ARE OUT TO OUT. D=PIN DIAMETER.



6 PILE BENT

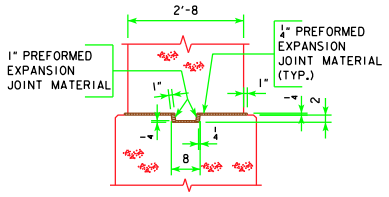
7 PILE BENT

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 H30-22-06 FOR "U" DIMENSION.



8 PILE BENT

9 PILE BENT



KEYED NOTCH DETAIL

FRICTION OR POINT BEARING PILING

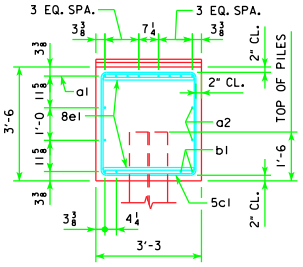
℄-℄ ABUTMENT BEARING	PIOL TYPE 3			
	NUMBER OF TRESTLE PILES	PILE SIZE	(2) DES. PILE BRG. (TONS)	(3) LRFD DES. BRG. (KIPS)
138'-10	6	HP14x73	56	163
	6	HP14x89	56	163
151'-4	6	HP14x73	59	171
	6	HP14x89	59	171
163'-10	6	HP14x73	64	185
	6	HP14x89	64	185
176'-4	7	HP14x73	57	166
	6	HP14x89	67	193
188'-10	7	HP14x73	60	173
	6	HP14x89	70	202
201'-4	8	HP14x73	58	168
	6	HP14x89	77	225
213'-10	8	HP14x73	61	177
	7	HP14x89	70	202
226'-4	9	HP14x73	57	165
	7	HP14x89	73	213
243'-0	9	HP14x73	60	174
	7	HP14x89	77	223

(1) SEE SHEET H30-24-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

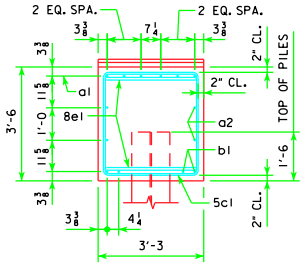
(2) FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.

(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.



VIEW A-A
FOR 6 & 7 PILE BENTS



VIEW A-A
FOR 8 & 9 PILE BENTS

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
30° SKEW

H30-53-06

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