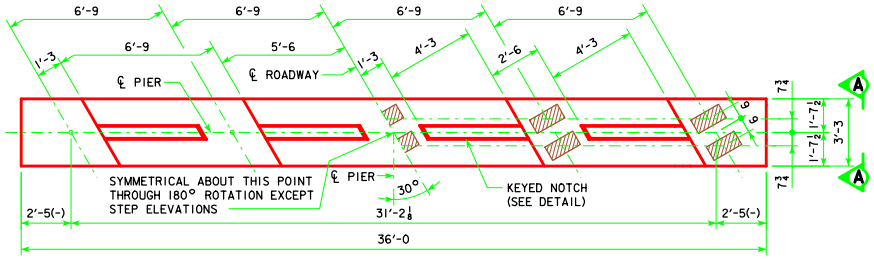
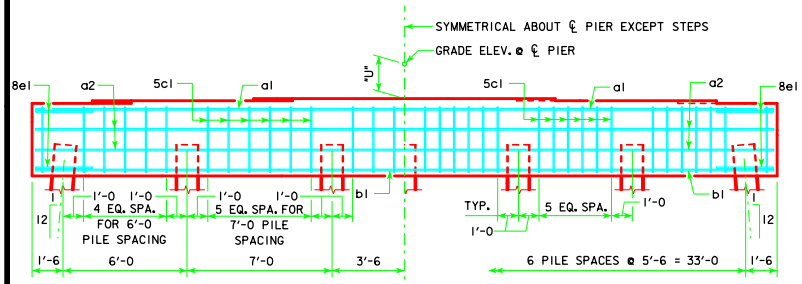
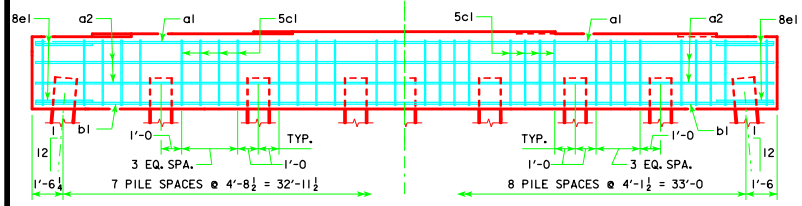


TYPICAL PLAN



6 PILE BENT

7 PILE BENT



8 PILE BENT

9 PILE BENT

PILE BENT NOTES:

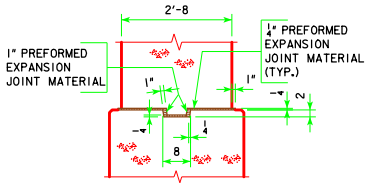
THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.

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.

PIER PILES SHALL BE DRIVEN TO VALUES SHOWN IN DESIGN PLANS.

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.

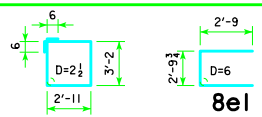


KEYED NOTCH DETAIL

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



5c1 8e1

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

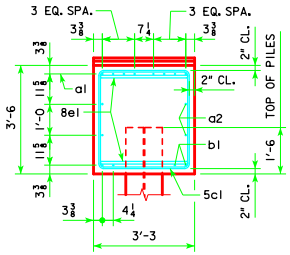
FRICTION OR POINT BEARING PILING

℄-℄ ABUTMENT BEARING	PIOL TYPE 3		
	NUMBER OF TRESTLE PILES	PILE SIZE	(2) LRFD Pu, STRENGTH I, DES. LOAD (KIPS)
138'-10	6	HP14x73	163
	6	HP14x89	163
151'-4	6	HP14x73	171
	6	HP14x89	171
163'-10	6	HP14x73	185
	6	HP14x89	185
176'-4	7	HP14x73	166
	6	HP14x89	193
188'-10	7	HP14x73	173
	6	HP14x89	202
201'-4	8	HP14x73	168
	6	HP14x89	225
213'-10	8	HP14x73	177
	7	HP14x89	202
226'-4	9	HP14x73	165
	7	HP14x89	213
243'-0	9	HP14x73	174
	7	HP14x89	223

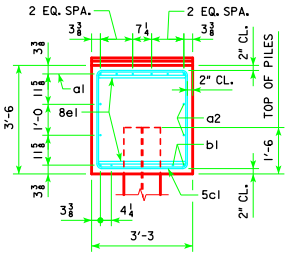
(1) SEE SHEET H30-24-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

(2) NOTE: PU, STRENGTH I DESIGN LOAD (KIPS) IS NOT THE VALUE USED IN THE FIELD FOR DRIVING PILES.

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

04-13
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 04-13 - REVISION FOR LRFD PILE DESIGN.