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.

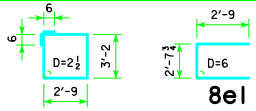
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.

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

REINFORCING BAR LIST AND ESTIMATED QUANTITIES PER PILE BENT

				7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT		
BAR	LENGTH	SHAPE		NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	46'-8			8	9	1269	8	9	1269	8	9	1269	8	9	1269	6	9	952	6	9	952
a2	46'-8			4	8	498	4	8	498	4	8	498	4	8	498	4	8	498	4	8	498
b1	46'-8			4	10	803	4	9	635	4	9	635	4	9	635	4	9	635	4	9	635
(1) 5c1	12'-10			42	5	562	42	5	562	42	5	562	47	5	629	42	5	562	46	5	616
8e1	8'-2			4	8	87	4	8	87	4	8	87	4	8	87	4	8	87	4	8	87
REINFORCING STEEL (LB.)				3219			3051			3051			3118			2734			2788		
STRUCTURAL CONCRETE (CY)	PILE TYPE		3	20.0			20.0			20.0			20.0			20.0			20.0		

BENT BAR DETAILS



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	(3) LRFD PU, STRENGTH I DES. BRG. (KIPS)
138'-10	7	HP14x73	182
	7	HP14x89	182
151'-4	8	HP14x73	168
	7	HP14x89	192
163'-10	8	HP14x73	182
	7	HP14x89	208
176'-4	9	HP14x73	169
	7	HP14x89	217
188'-10	9	HP14x73	177
	8	HP14x89	199
201'-4	10	HP14x73	178
	8	HP14x89	222
213'-10	11	HP14x73	170
	9	HP14x89	207
226'-4	11	HP14x73	179
	9	HP14x89	218
243'-0	12	HP14x73	172
	10	HP14x89	206

(1) SEE SHEET H44-17-07 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.

(2) FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.

(3) 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.

05-13
LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE

PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES

MARCH, 2007

PILE BENT PIERS HP14 PILES

15° SKEW

H44-45-07

REVISED 05-13 - REVISION FOR LRFD PILE DESIGN.