PILE BENT NOTES:

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

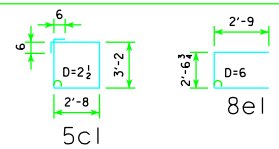
FOR DETAILS OF TRESTLE PILES, SEE STANDARD PIOL.

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

			7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT			12 PILE BENT			13 PILE BENT		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	47'-2		8	9	1283	8	9	1283	8	9	1283	8	9	1283	8	9	1283	8	9	1283	8	9	1283
a2	47'-2		4	8	504	4	8	504	4	8	504	4	8	504	4	8	504	4	8	504	4	8	504
b1	47'-2		4	10	812	4	10	812	4	10	812	4	10	812	4	10	812	4	9	641	4	10	812
5c1	12'-8		46	5	608	54	5	713	64	5	846	70	5	925	78	5	1030	68	5	898	74	5	978
8e1	8'-1		4	8	86	4	8	86	4	8	86	4	8	86	4	8	86	4	8	86	4	8	86
(1) REINFORCING STEEL (LB.)			3293			3398			3531			3610			3715			3412			3663		
STRUCTURAL CONCRETE (CY)		PILE TYPE 3	19.6			19.6			19.6			19.6			19.6			19.6			19.6		

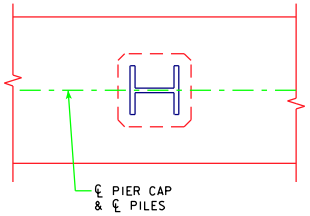
BENT BAR DETAILS



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 SIZE	(2) DES. PILE BRG. (TONS)	(3) LRFD DES. BRG. (KIPS)
160'-0	7	HP14x73	60	175
	7	HP14x89	60	175
180'-0	8	HP14x73	57	167
	7	HP14x89	66	190
200'-0	8	HP14x73	62	180
	7	HP14x89	71	206
220'-0	9	HP14x73	60	175
	7	HP14x89	77	225
240'-0	10	HP14x73	59	172
	8	HP14x89	74	215
260'-0	11	HP14x73	58	169
	9	HP14x89	71	207
280'-0	11	HP14x73	63	181
	9	HP14x89	76	222
300'-0	12	HP14x73	62	179
	10	HP14x89	74	214
320'-0	13	HP14x73	61	176
	11	HP14x89	72	208
340'-0	13	HP14x73	64	185
	11	HP14x89	75	218



PILE ORIENTATION DETAIL FOR TYPE 3 TRESTLE BENT PILES

(1) SEE SHEET RS40-168-10 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.

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

JUNE, 2010

PILE BENT PIERS
HP14 PILES
30° SKEW

RS40-111-10