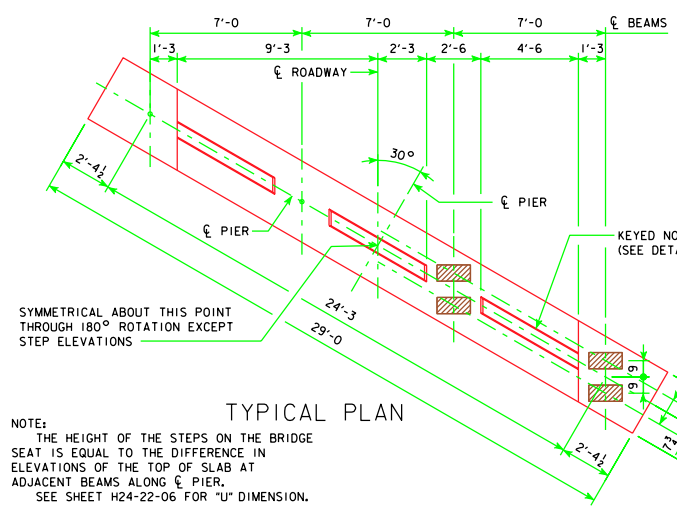
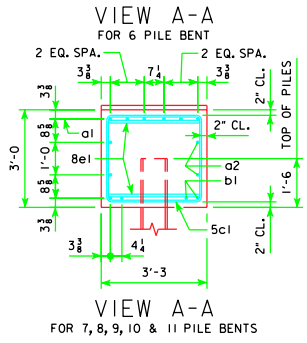
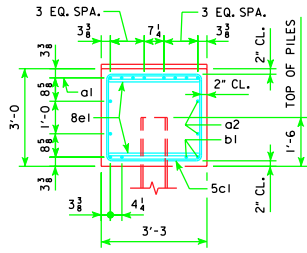
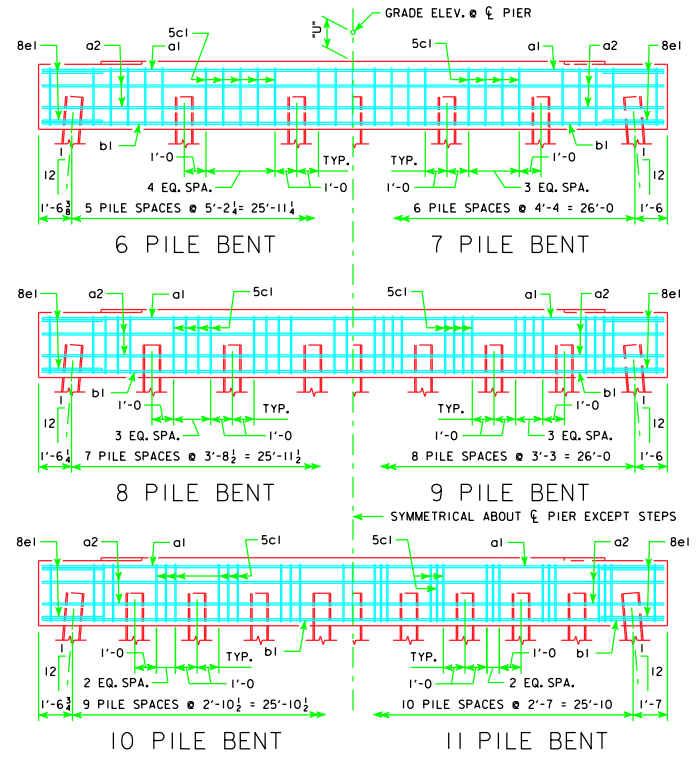
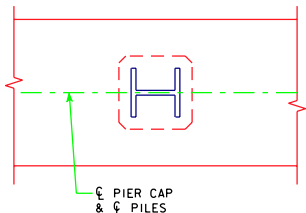


REVISED 01-10 - SHEET WAS REVISED TO MEET LRFD SPECIFICATIONS. PILE ORIENTATION DETAIL ADDED.

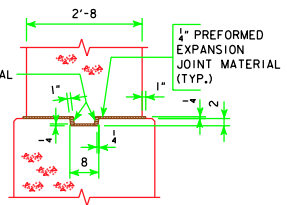


PILE BENT NOTES:

THESE PIER BENTS ARE DESIGNED FOR USE IN LOCATIONS WHERE ICE AND DRIFT CONDITIONS ARE NOT SEVERE.
FOR DETAILS OF TRESTLE PILES, TYPES 1, 2 AND 3, SEE STANDARD PIOL.
MINIMUM CLEAR DISTANCE FROM FACE OF CONCRETE TO NEAR REINFORCING BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED OR SHOWN.



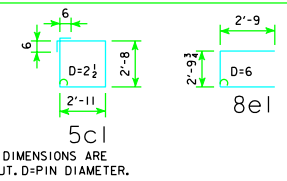
KEYED NOTCH DETAIL



REINFORCING BAR LIST AND ESTIMATED QUANTITIES - PER PILE BENT

BAR	LENGTH	SHAPE	6 PILE BENT			7 PILE BENT			8 PILE BENT			9 PILE BENT			10 PILE BENT			11 PILE BENT		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
a1	28'-8"		8	9	780	6	9	585	6	9	585	6	9	585	6	9	585	6	9	585
a2	28'-8"		4	8	306	4	8	306	4	8	306	4	8	306	4	8	306	4	8	306
b1	28'-8"		4	9	390	4	9	390	4	9	390	4	9	390	4	9	390	4	9	390
5c1	12'-2"		27	5	343	26	5	330	30	5	381	34	5	431	29	5	368	32	5	406
8e1	8'-4"		4	8	89	4	8	89	4	8	89	4	8	89	4	8	89	4	8	89
① REINFORCING STEEL (L.B.)			1908			1700			1751			1801			1654			1692		
STRUCTURAL CONCRETE (CY)	② PILE TYPE	1, 2	-----			-----			10.5			10.4			10.4			10.3		
		3	10.8			10.8			10.8			10.8			10.8			10.8		

BENT BAR DETAILS



℄-℄ ABUTMENT BEARING	FRICTION BEARING PILING					FRICTION OR POINT BEARING PILING				
	PIOL TYPE 1 OR 2					PIOL TYPE 3				
	NUMBER OF TRESTLE PILES	③ "K" (INCHES)	④ DES. PILE BRG. (TONS)	⑤ LRFD DES. BRG. (KIPS)		NUMBER OF TRESTLE PILES	PILE SIZE	④ DES. PILE BRG. (TONS)	⑤ LRFD DES. BRG. (KIPS)	
138'-10"	10	14	30	87		6	HP10x57	50	145	
	8	16	37	109		7	HP12x53	43	124	
151'-4"	10	14	31	91		7	HP10x57	45	130	
	9	16	35	101		7	HP12x53	45	130	
163'-10"	11	14	31	89		7	HP10x57	48	140	
	9	16	38	109		8	HP12x53	42	123	
176'-4"	11	14	32	93		8	HP10x57	44	128	
	10	16	35	103		8	HP12x53	44	128	
188'-10"	10	16	37	107		8	HP10x57	46	134	
						8	HP12x53	46	134	
201'-4"	11	16	37	107		9	HP10x57	45	131	
						9	HP12x53	45	131	
213'-10"	-----	--	--	--		9	HP10x57	48	138	
						10	HP12x53	43	124	
226'-4"	-----	--	--	--		9	HP10x57	50	145	
						10	HP12x53	45	131	
243'-0"	-----	--	--	--		10	HP10x57	47	138	
						11	HP12x53	43	125	

- ① SEE SHEET H24-24-06 FOR STEP REINFORCING STEEL QUANTITIES AND DETAILS.
- ② CONCRETE QUANTITIES SHOWN HAVE HAD THE VOLUME OF EMBEDDED PILES DEDUCTED FOR TYPES 1 AND 2 BASED ON 0.8 FT³ PER FOOT OF EMBEDMENT. THE CONCRETE QUANTITIES FOR TYPE 3 PILES DO NOT REQUIRE REDUCTION FOR PILE EMBEDMENT.
- ③ SEE STANDARD PIOL FOR "K" DIMENSION.
- ④ FOR DETERMINING ACTUAL PILE LENGTHS IN FIELD.
- ⑤ 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.

01-10

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

Thomas C. McQuinn

STANDARD DESIGN - 24' ROADWAY, THREE SPAN BRIDGE
PRETENSIONED PRESTRESSED
CONCRETE BEAM BRIDGES
DECEMBER, 2006

PILE BENT PIERS

30° SKEW

H24-46-06