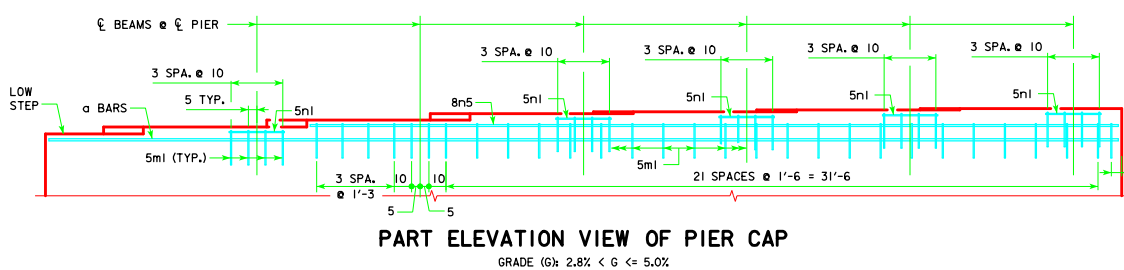
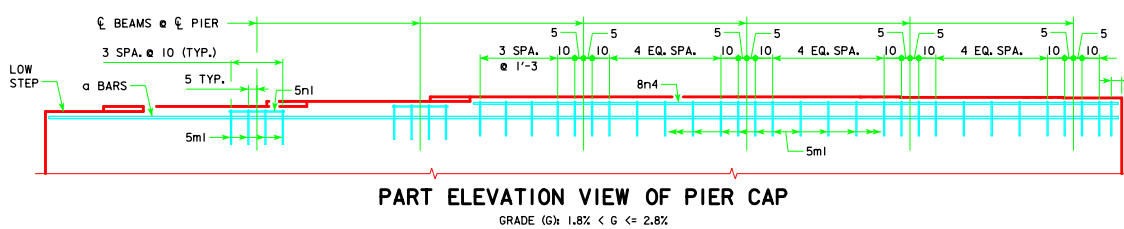
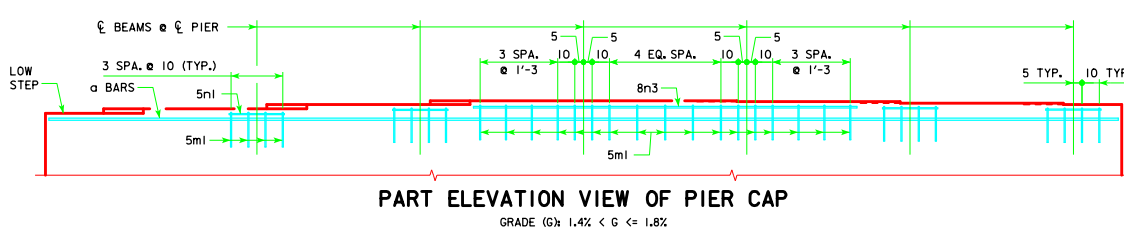
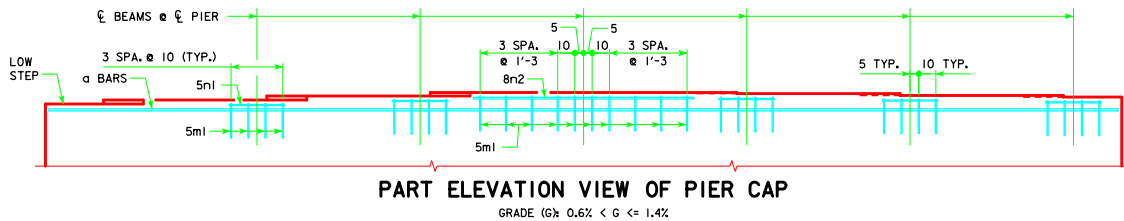
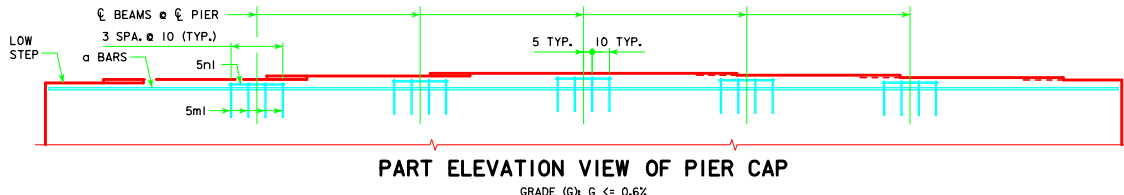


CORRECTION 06-2014 - THE HEADER AND GRADE INFORMATION WAS ADDED TO THE 0.6% TO 1.4% FOR THE PART ELEVATION VIEW OF PIER CAP.



### STEP REINFORCING BAR LIST ONE TEE PIER

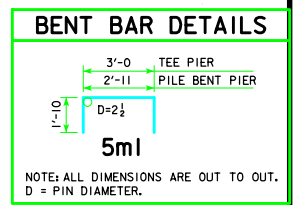
BAR	LENGTH	SHAPE	$G \leq 0.6\%$			$0.6\% < G \leq 1.4\%$			$1.4\% < G \leq 1.8\%$			$1.8\% < G \leq 2.8\%$			$2.8\% < G \leq 5.0\%$		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
5m1	6'-8		20	5	139	30	5	209	33	5	229	37	5	257	49	5	341
5n1	2'-8		20	5	56	20	5	56	16	5	45	8	5	22	20	5	56
8n2	12'-5		--	--	--	4	8	133	--	--	--	--	--	--	--	--	--
8n3	20'-4		--	--	--	--	--	--	4	8	217	--	--	--	--	--	--
*8n4	VARIES		--	--	--	--	--	--	--	--	--	4	8	342	--	--	--
*8n5	VARIES		--	--	--	--	--	--	--	--	--	--	--	4	8	426	
TOTAL (L.B.)			195			398			491			621			823		

G = GRADE (%)  
\*8n4 BARS VARY FROM 31'-3 TO 32'-10  
8n5 BARS VARY FROM 39'-2 TO 40'-8

### STEP REINFORCING BAR LIST ONE PILE BENT PIER

BAR	LENGTH	SHAPE	$G \leq 0.6\%$			$0.6\% < G \leq 1.4\%$			$1.4\% < G \leq 1.8\%$			$1.8\% < G \leq 2.8\%$			$2.8\% < G \leq 5.0\%$		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
5m1	6'-7		20	5	137	30	5	206	33	5	227	37	5	254	49	5	336
5n1	2'-8		20	5	56	20	5	56	16	5	45	8	5	22	20	5	56
8n2	12'-5		--	--	--	4	8	133	--	--	--	--	--	--	--	--	--
8n3	20'-4		--	--	--	--	--	--	4	8	217	--	--	--	--	--	--
*8n4	VARIES		--	--	--	--	--	--	--	--	--	4	8	342	--	--	--
*8n5	VARIES		--	--	--	--	--	--	--	--	--	--	--	4	8	426	
TOTAL (L.B.)			193			395			489			618			818		

G = GRADE (%)  
\*8n4 BARS VARY FROM 31'-3 TO 32'-10  
8n5 BARS VARY FROM 39'-2 TO 40'-8

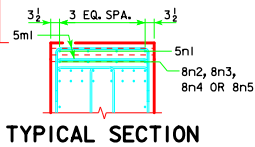


### NOTES:

THE TABLE BELOW LISTS THE ADDITIONAL CONCRETE VOLUME REQUIRED IN EACH ABUTMENT FOOTING/PIER CAP BASED ON THE ROADWAY GRADE AT EACH ABUTMENT FOOTING/PIER CAP. ADDITIONAL CONCRETE SHOULD BE ADDED TO THE PLANS FOR EACH ABUTMENT FOOTING/PIER CAP THAT HAS 0.5 CU. YDS. OR MORE OF ADDITIONAL CONCRETE. VALUES SHOULD BE EXCLUDED FOR SCENARIOS THAT HAVE LESS THAN 0.5 CU. YDS. OF ADDITIONAL CONCRETE PER SUBSTRUCTURE UNIT. VALUES MAY BE INTERPOLATED FOR GRADES BETWEEN THE VALUES SHOWN IN THE TABLE.

### ADDITIONAL CONCRETE VOLUME PER SUBSTRUCTURE UNIT (C.Y.)

	ROADWAY GRADE AT SUBSTRUCTURE UNIT				
	1%	2%	3%	4%	5%
EACH ABUTMENT FOOTING					
A, B BEAMS	0.5	1.2	1.9	2.7	3.4
C BEAMS	0.6	1.4	2.3	3.1	4.0
EACH TEE PIER CAP - ALL BEAMS	0.5	1.3	2.1	2.9	3.7
EACH PILE BENT PIER - ALL BEAMS	0.5	1.3	2.0	2.8	3.6



LATEST REVISION DATE  
06-14  
APPROVED BY BRIDGE ENGINEER  
M. J. D. [Signature]

**Iowa Department of Transportation**  
Highway Division  
STANDARD DESIGN - 44' ROADWAY, THREE SPAN BRIDGE  
**PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES**  
MARCH, 2007

ADDITIONAL QUANTITIES  
30° SKEW  
**H44-24-07**