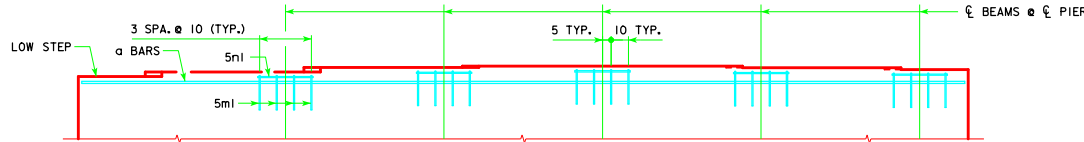


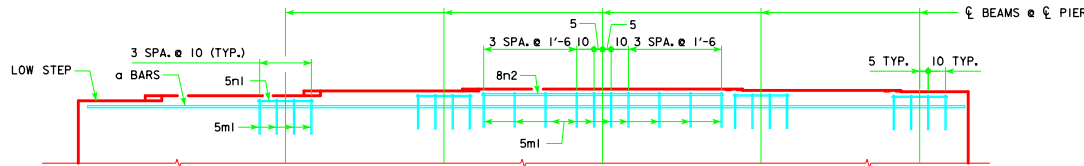
**PART ELEVATION VIEW OF PIER CAP**

GRADE (G):  $G \leq 1.4\%$



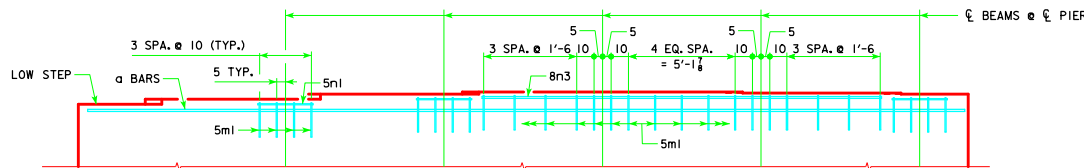
**PART ELEVATION VIEW OF PIER CAP**

GRADE (G):  $1.4\% < G \leq 3.4\%$



**PART ELEVATION VIEW OF PIER CAP**

GRADE (G):  $3.4\% < G \leq 4.4\%$



**PART ELEVATION VIEW OF PIER CAP**

GRADE (G):  $4.4\% < G \leq 5.0\%$

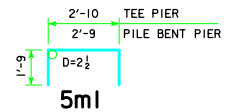
STEP REINFORCING BAR LIST ONE TEE PIER																	
BAR	LENGTH	SHAPE	G ≤ 1.4%			1.4% < G ≤ 3.4%			3.4% < G ≤ 4.4%			4.4% < G ≤ 5.0%					
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT			
5m1	6'-4"		16	5	106	20	5	132	26	5	172	29	5	192			
5n1	2'-8"		16	5	45	20	5	56	16	5	45	12	5	33			
8n2	12'-4"		--	--	--	--	--	--	4	8	132	--	--	--			
8n3	20'-0"		--	--	--	--	--	--	--	--	--	4	8	214			
TOTAL (L.B.)						151			188			349			439		

G = GRADE (%)

STEP REINFORCING BAR LIST ONE PILE BENT PIER																	
BAR	LENGTH	SHAPE	G ≤ 1.4%			1.4% < G ≤ 3.4%			3.4% < G ≤ 4.4%			4.4% < G ≤ 5.0%					
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT			
5m1	6'-3"		16	5	104	20	5	130	26	5	169	29	5	189			
5n1	2'-8"		16	5	45	20	5	56	16	5	45	12	5	33			
8n2	12'-4"		--	--	--	--	--	--	4	8	132	--	--	--			
8n3	20'-0"		--	--	--	--	--	--	--	--	--	4	8	214			
TOTAL (L.B.)						149			186			346			436		

G = GRADE (%)

**BENT BAR DETAILS**



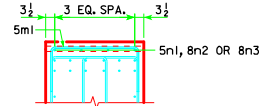
NOTE: ALL DIMENSIONS ARE OUT TO OUT.  
D = PIN DIAMETER.

NOTE: THE REINFORCING STEEL QUANTITIES ARE TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

NOTE: THE CONCRETE QUANTITIES ARE TO BE INCLUDED ON THE SUMMARY QUANTITIES SHEET IN THE PLAN.

**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.



**TYPICAL SECTION**

	ROADWAY GRADE AT SUBSTRUCTURE UNIT				
	1%	2%	3%	4%	5%
EACH ABUTMENT FOOTING					
A, B BEAMS	----	----	0.7	0.9	1.1
C BEAMS	----	0.5	0.8	1.1	1.4
EACH TEE PIER CAP - ALL BEAMS	--	--	0.7	0.9	1.2
EACH PILE BENT PIER - ALL BEAMS	--	--	0.7	0.9	1.2

LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE <b>PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES</b> SEPTEMBER, 2014	
		<b>ADDITIONAL QUANTITIES</b> 15° SKEW	<b>H40-17-14</b>