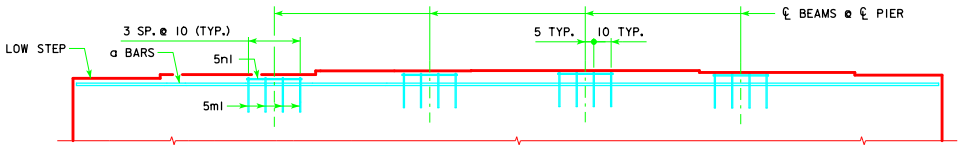
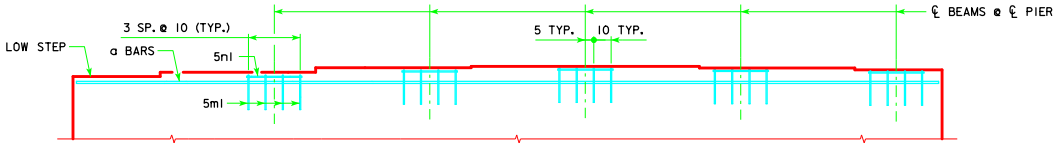


PART ELEVATION VIEW OF PIER CAP

GRADE (G): G <= 2.2%



PART ELEVATION VIEW OF PIER CAP

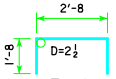
GRADE (G): 2.2% < G <= 5.0%

STEP REINFORCING BAR LIST ONE PIER

			G <= 2.2%			2.2% < G <= 5.0%		
BAR	LENGTH	SHAPE	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
5ml	6'-0		16	5	100	20	5	125
5nl	2'-10		16	5	47	20	5	59
		TOTAL (LB.)			147			184

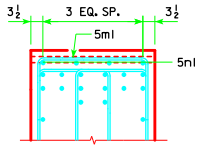
G = GRADE (%)

BENT BAR DETAILS



5ml

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



TYPICAL SECTION

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.

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

	ROADWAY GRADE AT SUBSTRUCTURE UNIT				
	1%	2%	3%	4%	5%
EACH ABUTMENT FOOTING					
160'-0 TO 320'-0 SPANS	--	--	--	0.6	0.8
340'-0 SPAN	--	--	0.5	0.7	0.9
EACH PILE BENT OR TEE PIER CAP					
160'-0 TO 340'-0 SPANS	--	--	--	0.6	0.7

LATEST REVISION DATE

APPROVED BY BRIDGE ENGINEER

IOWADOT Highway Division

STANDARD DESIGN - 40' ROADWAY, 3 SPAN BRIDGES

ROLLED STEEL BEAM BRIDGES

OCTOBER, 2014

ADDITIONAL QUANTITIES

10° SKEW

RS40-166-14