

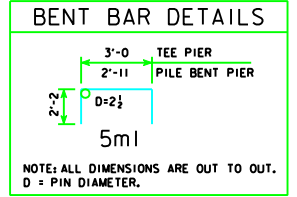
STEP REINFORCING BAR LIST ONE TEE PIER

BAR	LENGTH	SHAPE	$G < 0.3\%$			$0.3\% < G < 0.9\%$			$0.9\% < G < 1.9\%$			$1.9\% < G < 3.5\%$			$3.5\% < G < 4.3\%$			$4.3\% < G < 5.0\%$		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
5n1	7'-4"		16	5	122	20	5	153	40	5	306	46	5	352	51	5	390	59	5	451
5n1	2'-8"		16	5	45	20	5	56	4	5	11	16	5	45	12	5	33	12	5	33
8n2	VARIABLES		--	--	--	--	--	--	4	8	453	4	8	453	4	8	453	4	8	453
8n3	VARIABLES		--	--	--	--	--	--	--	--	--	--	--	--	4	8	118	--	--	--
8n4	VARIABLES		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	8	230
TOTAL (L.B.)			167			209			770			850			994			1167		

STEP REINFORCING BAR LIST ONE PILE BENT PIER

BAR	LENGTH	SHAPE	$G < 0.3\%$			$0.3\% < G < 0.9\%$			$0.9\% < G < 1.9\%$			$1.9\% < G < 3.5\%$			$3.5\% < G < 4.3\%$			$4.3\% < G < 5.0\%$		
			NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT	NO.	SIZE	WEIGHT
5n1	7'-3"		16	5	121	20	5	151	40	5	302	46	5	348	51	5	386	59	5	446
5n1	2'-8"		16	5	45	20	5	56	4	5	11	16	5	45	12	5	33	12	5	33
8n2	VARIABLES		--	--	--	--	--	--	4	8	453	4	8	453	4	8	453	4	8	453
8n3	VARIABLES		--	--	--	--	--	--	--	--	--	--	--	--	4	8	118	--	--	--
8n4	VARIABLES		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4	8	230
TOTAL (L.B.)			166			207			766			846			990			1162		

G = GRADE (%)
 *8n2 BARS VARY FROM 41'-1 TO 43'-9
 *8n3 BARS VARY FROM 9'-8 TO 12'-5
 *8n4 BARS VARY FROM 20'-2 TO 22'-10

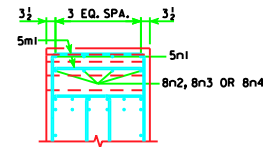


NOTES:

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	0.9	2.1	3.4	4.7	5.9
C BEAMS	1.0	2.5	3.9	5.4	6.8
EACH TEE PIER CAP - ALL BEAMS	0.9	2.3	3.8	5.3	6.8
EACH PILE BENT PIER - ALL BEAMS	0.9	2.2	3.7	5.1	6.6



LATEST REVISION DATE	 APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 40' ROADWAY, THREE SPAN BRIDGE PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGES	
		HL93 SUPERSTRUCTURE DECEMBER, 2006 HS25 SUBSTRUCTURE	
		ADDITIONAL QUANTITIES 45° SKEW	H40-31-06