

BILL OF REINFORCING STEEL - ONE ABUTMENT - 0° SKEW

BRIDGE LENGTH		70'-0"		80'-0"		90'-0"		100'-0"		110'-0"		120'-0"		130'-0"		140'-0"		150'-0"		
MARK	LOCATION	SHAPE	LENGTH	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	
8r1	ABUTMENT FOOTING LONGITUDINAL		26'-10"	7	502	7	502	7	502	7	502	7	502	7	502	7	502	7	502	
5s1	ABUTMENT FOOTING HOOPS		11'-0"	25	287	25	287	25	287	24	275	24	275	24	275	24	275	24	275	
6+1	FOOTING TO SLAB DOWELS		5'-0"	30	225	30	225	30	225	30	225	30	225	30	225	30	225	30	225	
6+2	FOOTING TO SLAB DOWELS		5'-7"	30	252	30	252	30	252	30	252	30	252	30	252	30	252	30	252	
#2	PILE SPIRAL		38'-6"	4	26	4	26	4	26	5	32	5	32	5	32	6	39	6	39	
	SPIRAL SPACERS, L _{1/2} x L _{1/2} x L _{1/2} 0.70		1'-10"	12	15	12	15	12	15	15	19	15	19	15	19	18	23	18	23	
REINFORCING STEEL - TOTAL (LBS.)				1307	1307	1307	1307	1305	1305	1305	1305	1305	1305	1316	1316					

BILL OF REINFORCING STEEL - ONE ABUTMENT - 15° SKEW

BRIDGE LENGTH		70'-0"		80'-0"		90'-0"		100'-0"		110'-0"		120'-0"		130'-0"		140'-0"		150'-0"		
MARK	LOCATION	SHAPE	LENGTH	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	
8r2	ABUTMENT FOOTING LONGITUDINAL		27'-8"	7	517	7	517	7	517	7	517	7	517	7	517	7	517	7	517	
5s1	ABUTMENT FOOTING HOOPS		11'-0"	24	275	24	275	24	275	24	275	24	275	24	275	20	229	20	229	
5s2	ABUTMENT FOOTING HOOPS		11'-3"	4	47	4	47	4	47	4	47	4	47	4	47	4	47	4	47	
6+1	FOOTING TO SLAB DOWELS		5'-0"	30	225	30	225	30	225	30	225	30	225	30	225	30	225	30	225	
6+2	FOOTING TO SLAB DOWELS		5'-7"	30	252	30	252	30	252	30	252	30	252	30	252	30	252	30	252	
#2	PILE SPIRAL		38'-6"	5	32	5	32	5	32	5	32	5	32	5	32	6	39	6	39	
	SPIRAL SPACERS, L _{1/2} x L _{1/2} x L _{1/2} 0.70		1'-10"	15	19	15	19	15	19	15	19	15	19	15	19	18	23	18	23	
REINFORCING STEEL - TOTAL (LBS.)				1367	1367	1367	1367	1367	1367	1367	1367	1367	1367	1332	1332					

BILL OF REINFORCING STEEL - ONE ABUTMENT - 30° SKEW

BRIDGE LENGTH		70'-0"		80'-0"		90'-0"		100'-0"		110'-0"		120'-0"		130'-0"		140'-0"		150'-0"		
MARK	LOCATION	SHAPE	LENGTH	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	
8r2	ABUTMENT FOOTING LONGITUDINAL		30'-7"	7	572	7	572	7	572	7	572	7	572	7	572	7	572	7	572	
5s1	ABUTMENT FOOTING HOOPS		11'-0"	24	275	24	275	24	275	24	275	24	275	24	275	25	287	25	287	
5s2	ABUTMENT FOOTING HOOPS		11'-3"	4	47	4	47	4	47	4	47	4	47	4	47	4	47	4	47	
6+1	FOOTING TO SLAB DOWELS		5'-0"	30	225	30	225	30	225	30	225	30	225	30	225	30	225	30	225	
6+2	FOOTING TO SLAB DOWELS		5'-7"	30	252	30	252	30	252	30	252	30	252	30	252	30	252	30	252	
#2	PILE SPIRAL		38'-6"	5	32	5	32	5	32	5	32	5	32	5	32	6	39	6	39	
	SPIRAL SPACERS, L _{1/2} x L _{1/2} x L _{1/2} 0.70		1'-10"	15	19	15	19	15	19	15	19	15	19	15	19	18	23	18	23	
REINFORCING STEEL - TOTAL (LBS.)				1425	1425	1425	1425	1425	1425	1425	1425	1425	1425	1448	1448					

BILL OF REINFORCING STEEL - ONE ABUTMENT - 45° SKEW

BRIDGE LENGTH		70'-0"		80'-0"		90'-0"		100'-0"		110'-0"		120'-0"		130'-0"		140'-0"		150'-0"		
MARK	LOCATION	SHAPE	LENGTH	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT	
8r2	ABUTMENT FOOTING LONGITUDINAL		36'-9"	7	687	7	687	7	687	7	687	7	687	7	687	7	687	7	687	
5s1	ABUTMENT FOOTING HOOPS		11'-0"	30	344	30	344	30	344	30	344	30	344	30	344	30	344	30	344	
5s2	ABUTMENT FOOTING HOOPS		13'-6"	4	56	4	56	4	56	4	56	4	56	4	56	4	56	4	56	
6+1	FOOTING TO SLAB DOWELS		5'-0"	30	225	30	225	30	225	30	225	30	225	30	225	30	225	30	225	
6+2	FOOTING TO SLAB DOWELS		5'-7"	30	252	30	252	30	252	30	252	30	252	30	252	30	252	30	252	
#2	PILE SPIRAL		38'-6"	6	39	6	39	6	39	6	39	6	39	6	39	6	39	7	45	
	SPIRAL SPACERS, L _{1/2} x L _{1/2} x L _{1/2} 0.70		1'-10"	18	23	18	23	18	23	18	23	18	23	18	23	18	23	21	27	
REINFORCING STEEL - TOTAL (LBS.)				1626	1626	1626	1626	1626	1626	1626	1626	1626	1626	1626	1626	1636				

ESTIMATED QUANTITIES - ONE ABUT. - 0° SKEW

LOCATION	UNIT	QUANTITY									
BRIDGE LENGTH		70'-0"	80'-0"	90'-0"	100'-0"	110'-0"	120'-0"	130'-0"	140'-0"	150'-0"	
STRUCTURAL CONCRETE (BRIDGE)	C.Y.	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	
REINFORCING STEEL	LBS.	1307	1307	1307	1305	1305	1305	1305	1316	1316	
STEEL PILING HP 10x42	NO.	4	4	4	5	5	5	5	6	6	
PREBORE HOLES	FT.	-	-	-	-	-	-	-	60	60	

ESTIMATED QUANTITIES - ONE ABUT. - 15° SKEW

LOCATION	UNIT	QUANTITY									
BRIDGE LENGTH		70'-0"	80'-0"	90'-0"	100'-0"	110'-0"	120'-0"	130'-0"	140'-0"	150'-0"	
STRUCTURAL CONCRETE (BRIDGE)	C.Y.	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	
REINFORCING STEEL	LBS.	1367	1367	1367	1367	1367	1367	1367	1332	1332	
STEEL PILING HP 10x42	NO.	5	5	5	5	5	5	5	6	6	
PREBORE HOLES	FT.	-	-	-	-	-	-	-	60	60	

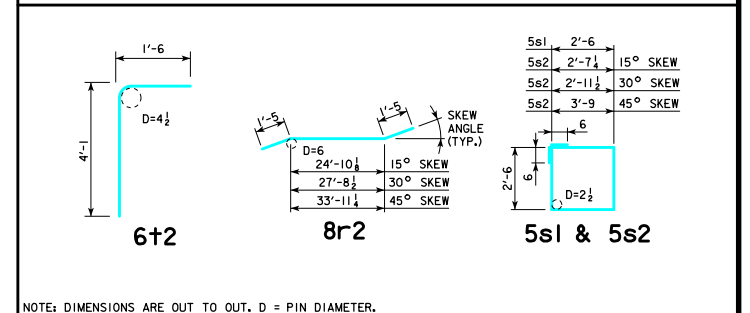
ESTIMATED QUANTITIES - ONE ABUT. - 30° SKEW

LOCATION	UNIT	QUANTITY									
BRIDGE LENGTH		70'-0"	80'-0"	90'-0"	100'-0"	110'-0"	120'-0"	130'-0"	140'-0"	150'-0"	
STRUCTURAL CONCRETE (BRIDGE)	C.Y.	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	
REINFORCING STEEL	LBS.	1425	1425	1425	1425	1425	1425	1425	1448	1448	
STEEL PILING HP 10x42	NO.	5	5	5	5	5	5	5	6	6	
PREBORE HOLES	FT.	-	-	-	-	-	-	-	60	60	

ESTIMATED QUANTITIES - ONE ABUT. - 45° SKEW

LOCATION	UNIT	QUANTITY									
BRIDGE LENGTH		70'-0"	80'-0"	90'-0"	100'-0"	110'-0"	120'-0"	130'-0"	140'-0"	150'-0"	
STRUCTURAL CONCRETE (BRIDGE)	C.Y.	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	12.8	
REINFORCING STEEL	LBS.	1626	1626	1626	1626	1626	1626	1626	1626	1636	
STEEL PILING HP 10x42	NO.	6	6	6	6	6	6	6	6	7	
PREBORE HOLES	FT.	-	-	-	-	-	-	-	60	70	

BENT BAR DETAILS



REVISED 07-09 - CONCRETE QUANTITIES CHANGED.
REVISED 08-2022: UPDATED BRIDGE ENGINEER SIGNATURE.

08-2022 LATEST REVISION DATE APPROVED BY BRIDGE ENGINEER	 STANDARD DESIGN - 24'-0" ROADWAY, 3 SPAN BRIDGES CONTINUOUS CONCRETE SLAB BRIDGES NOVEMBER, 2006	
	ABUTMENT DETAILS STEEL PILING	J24-39-06