

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
8r1	ABUTMENT FOOTING LONGITUDINAL		32'-10	7	614	7	614	7	614	7	614	7	614
5s1	ABUTMENT FOOTING HOOPS		11'-0	25	287	25	287	25	287	28	321	28	321
6+1	FOOTING TO SLAB DOWELS		5'-0	36	270	36	270	36	270	36	270	36	270
6+2	FOOTING TO SLAB DOWELS		5'-7	36	302	36	302	36	302	36	302	36	302
#2	PILE SPIRAL		38'-6	8	51	8	51	8	51	9	58	10	64
	SPIRAL SPACERS - L 1/8 x 1/8 x 1/8 x 0.70		1'-10	24	31	24	31	24	31	27	35	27	35
REINFORCING STEEL - TOTAL (LBS.)					1555	1555	1555	1600	1600	1645	1645	1607	1641

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
8r2	ABUTMENT FOOTING LONGITUDINAL		33'-11	7	634	7	634	7	634	7	634	7	634
5s1	ABUTMENT FOOTING HOOPS		11'-0	21	241	21	241	21	241	24	275	24	275
5s2	ABUTMENT FOOTING HOOPS		11'-3	4	47	4	47	4	47	4	47	4	47
6+1	FOOTING TO SLAB DOWELS		5'-0	36	270	36	270	36	270	36	270	36	270
6+2	FOOTING TO SLAB DOWELS		5'-7	36	302	36	302	36	302	36	302	36	302
#2	PILE SPIRAL		38'-6	8	51	8	51	8	51	9	58	10	64
	SPIRAL SPACERS - L 1/8 x 1/8 x 1/8 x 0.70		1'-10	24	31	24	31	24	31	27	35	27	35
REINFORCING STEEL - TOTAL (LBS.)					1576	1576	1576	1621	1621	1666	1710	1628	1662

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
8r2	ABUTMENT FOOTING LONGITUDINAL		37'-6	7	701	7	701	7	701	7	701	7	701
5s1	ABUTMENT FOOTING HOOPS		11'-0	28	321	28	321	32	367	27	310	30	344
5s2	ABUTMENT FOOTING HOOPS		11'-11	4	50	4	50	4	50	4	50	4	50
6+1	FOOTING TO SLAB DOWELS		5'-0	36	270	36	270	36	270	36	270	36	270
6+2	FOOTING TO SLAB DOWELS		5'-7	36	302	36	302	36	302	36	302	36	302
#2	PILE SPIRAL		38'-6	8	51	8	51	9	58	9	58	10	64
	SPIRAL SPACERS - L 1/8 x 1/8 x 1/8 x 0.70		1'-10	24	31	24	31	27	35	27	35	30	39
REINFORCING STEEL - TOTAL (LBS.)					1726	1726	1783	1783	1736	1736	1780	1698	1732

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
8r2	ABUTMENT FOOTING LONGITUDINAL		45'-3	7	846	7	846	7	846	7	846	7	846
5s1	ABUTMENT FOOTING HOOPS		11'-0	40	459	40	459	40	459	36	413	36	413
5s2	ABUTMENT FOOTING HOOPS		13'-6	4	56	4	56	4	56	4	56	4	56
6+1	FOOTING TO SLAB DOWELS		5'-0	36	270	36	270	36	270	36	270	36	270
6+2	FOOTING TO SLAB DOWELS		5'-7	36	302	36	302	36	302	36	302	36	302
#2	PILE SPIRAL		38'-6	9	58	9	58	9	58	10	64	11	71
	SPIRAL SPACERS - L 1/8 x 1/8 x 1/8 x 0.70		1'-10	27	35	27	35	27	35	30	39	30	39
REINFORCING STEEL - TOTAL (LBS.)					2026	2026	2026	1990	1990	2046	1976	2021	2065

ESTIMATED QUANTITIES - ONE ABUT. - 0° SKEW

		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		11.6	11.6	11.6	11.6	11.6	11.5	11.5	11.4	11.3
REINFORCING STEEL	LBS.		1555	1555	1555	1600	1600	1645	1645	1607	1641
WOOD PILES (TREATED)	NO.		8	8	8	9	9	10	10	12	13
PREBORE HOLES	FT.		-	-	-	-	-	-	-	120	130

ESTIMATED QUANTITIES - ONE ABUT. - 15° SKEW

		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		11.0	11.0	11.0	11.0	11.0	10.9	10.9	10.8	10.7
REINFORCING STEEL	LBS.		1576	1576	1576	1621	1621	1666	1710	1628	1662
WOOD PILES (TREATED)	NO.		8	8	8	9	9	10	11	12	13
PREBORE HOLES	FT.		-	-	-	-	-	-	-	120	130

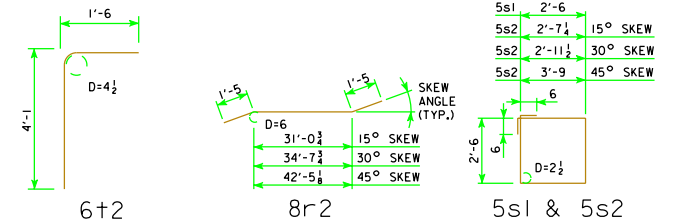
ESTIMATED QUANTITIES - ONE ABUT. - 30° SKEW

		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		12.3	12.3	12.2	12.2	12.2	12.2	12.2	12.1	12.0
REINFORCING STEEL	LBS.		1726	1726	1783	1783	1736	1736	1780	1698	1732
WOOD PILES (TREATED)	NO.		8	8	9	9	10	10	11	12	13
PREBORE HOLES	FT.		-	-	-	-	-	-	-	120	130

ESTIMATED QUANTITIES - ONE ABUT. - 45° SKEW

		UNIT	70'-0	80'-0	90'-0	100'-0	110'-0	120'-0	130'-0	140'-0	150'-0
STRUCTURAL CONCRETE (BRIDGE)	C.Y.		15.2	15.2	15.1	15.1	15.1	15.1	15.0	15.0	14.9
REINFORCING STEEL	LBS.		2026	2026	2026	1990	1990	2046	1976	2021	2065
WOOD PILES (TREATED)	NO.		9	9	9	10	10	11	12	13	14
PREBORE HOLES	FT.		-	-	-	-	-	-	-	130	140

BENT BAR DETAILS



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

07-09
LATEST REVISION DATE

Thomas C. McQuinn
APPROVED BY BRIDGE ENGINEER

Iowa Department of Transportation
Highway Division

STANDARD DESIGN - 30' ROADWAY, 3 SPAN BRIDGES

CONTINUOUS CONCRETE
SLAB BRIDGES

NOVEMBER, 2006

ABUTMENT DETAILS
TIMBER PILING

J30-33-06

NOTE: THE PILE SPIRALS AND SPIRAL SPACERS ARE TO BE NON-COATED REINFORCING BUT MAY BE EPOXY COATED AT THE CONTRACTORS OPTION AND EXPENSE.