BILL OF MATERIALS

SQUARE STRUCTURES - ONE SLAB

BRIDGE APPROACH WIDTH	EPOXY COATED REINFORCING BARS				TOTAL WEIGHT LBS.	REINFORCED CONCRETE BRIDGE APPROACH AREA SQ. YDS.
	LONGIT. BARS		TRANSV. BARS			
	NO.	SIZE x LGTH. OR MARK	NO.	SIZE x LGTH.		
24'-0	24	491	21	#4 x 23'-6	1969	54.7
	48	591	11	#5 x 23'-6		
25'-0	26	491	21	#4 x 24'-6	2088	56.9
	51	591	11	#5 x 24'-6		
25'-6	26	491	21	#4 x 25'-0	2122	58.1
	52	591	11	#5 x 25'-0		
27'-0	28	491	21	#4 x 26'-6	2253	61.5
	55	591	11	#5 x 26'-6		
29'-0	30	491	21	#4 x 28'-6	2418	66.1
	59	591	11	#5 x 28'-6		
31'-0	32	491	21	#4 x 30'-6	2583	70.6
	63	591	11	#5 x 30'-6		
33'-0	34	491	21	#4 x 32'-6	2748	75.2
	67	591	11	#5 x 32'-6		
35'-0	36	491	21	#4 x 34'-6	2919	79.7
	71	591	11	#5 x 34'-6		
37'-0	38	491	21	#4 x 36'-6	3079	84.3
	75	591	11	#5 x 36'-6		
39'-0	40	491	21	#4 x 38'-6	3244	88.8
	79	591	11	#5 x 38'-6		
40'-0	41	491	21	#4 x 39'-6	3326	91.1
	81	591	11	#5 x 39'-6		
42'-0	42	491	42	#4 x 21'-9 *	3485	95.7
	83	591	22	#5 x 21'-9 **		
44'-0	46	491	42	#4 x 22'-9 *	3764	100.2
	91	591	22	#5 x 22'-9 **		

* Bars lapped 1'-7 at centerline of roadway. ** Bars lapped 2'-0 at centerline of roadway.

NOTES

1. The Bill of Materials shall be used to determine the bar lengths, total mass of steel, and bridge approach area for square structures.

2. For details, see Standard Drawing E 609-RCBA-03.

INDIANA DEPARTMENT OF TRANSPORTATION

REINFORCED CONCRETE BRIDGE APPROACH

SEPTEMBER 2006

STANDARD DRAWING NO. E 609-RCBA-05

RICHARD L. VanCLEAVE REGISTERED No. 9750 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGN STANDARDS ENGINEER

/s/ Richard L. VanCleave 9-01-06
DESIGN STANDARDS ENGINEER DATE

/s/ Richard K. Smutzer 9-01-06
CHIEF HIGHWAY ENGINEER DATE