STATE	PROJECT NO.
MISS.	

GENERAL DATA & ESTIMATED QUANTITIES FOR BOX CULVERTS UNDER HIGH COVER

MAX. 25 FT. COVER ~ L = 150 FT.

AREA OF OPENING SQ. FT.	SIZE OF CULVERT	MOD. DWG. NO.	"T"	"V"	"W"	BARS "A" SIZE	BARS "A" SPAC. IN.	BARS "B" SIZE	BARS "B" SPAC. IN.	BARS "C" SIZE	BARS "C" SPAC. IN.	BARS "D" SIZE	BARS "D" SPAC. IN.	TOTAL CULVERT CONC. CU. YDS.	TOTAL CULVERT REINF. LBS.	PER LIN. FT. BARREL CONC. CU. YDS.	PER LIN. FT. BARREL REINF. LBS.	1 AUX. SLAB "J" CONC. CU. YDS.	1 AUX. SLAB "J" REINF. LBS.	SIZE OF CULVERT
32	4x4		6"	6"	1'-0"	#4	1'-0"	#4	6½"	#4	1'-0"	#5	1'-0"	96.82	15,692	0.5905	98.41	0.47	28	4x4
40	5x4		6"	6"	1'-0"	#6	1'-4"	#4	6½"	#6	1'-4"	#7	1'-4"	109.51	21,009	0.6687	133.11	0.57	34	5x4
48	6x4		7"	6"	1'-1"	#5	10"	#4	5"	#5	10"	#7	10"	134.76	27,612	0.8303	176.51	0.67	39	6x4
64	8x4		9½"	6½"	1'-3½"	#6	11"	#5	6½"	#6	11"	#8	11"	20840	39,389	1.3072	253.70	0.87	51	8x4
80	10x4		1'-1"	7"	1'-7"	#5	10"	#5	6"	#7	10"	#8	10"	321.34	50,823	2.0458	328.55	1.07	62	10x4
50	5x5		6"	6½"	1'-4"	#4	1'-0"	#5	7"	#6	1'-0"	#6	1'-0"	124.17	24,262	0.7521	153.12	0.57	34	5x5
60	6x5		7"	6½"	1'-5"	#4	10"	#5	6½"	#6	10"	#6	10"	149.64	29,690	0.9144	188.87	0.67	39	6x5
80	8x5		10"	7"	1'-8"	#5	10"	#5	6½"	#6	10"	#7	10"	232.77	39,453	1.4527	252.51	0.88	51	8x5
100	10x5		1'-0½"	7½"	1'-10½"	#5	11"	#5	5"	#7	11"	#8	11"	328.63	51,927	2.0762	334.15	1.08	62	10x5
120	12x5		1'-4½"	7½"	2'-2½"	#6	11"	#5	6"	#7	11"	#9	11"	47437	63,511	3.0320	409.64	1.28	73	12x5
72	6x6		7"	7½"	1'-2"	#4	11"	#5	6"	#6	11"	#6	11"	174.74	31,558	1.0409	198.35	0.69	40	6x6
96	8x6		9½"	8"	1'-4½"	#5	10"	#6	7½"	#6	10"	#7	10"	251.62	43,806	1.5329	278.31	0.89	51	8x6
120	10x6		1'-1"	8½"	1'-8"	#5	11"	#6	7"	#7	11"	#8	11"	368.19	55,435	2.2889	353.97	1.09	62	10x6
144	12x6		1'-4½"	8½"	1'-11½"	#5	10"	#6	7"	#7	10"	#9	10"	505.32	68,429	3.1825	438.65	1.29	73	12x6
128	8x8		9"	8½"	1'-9"	#6	10"	#6	5"	#6	10"	#7	10"	290.07	58,818	1.6860	368.86	0.90	51	8x8
160	10x8		1'-0"	9½"	2'-0"	#6	10"	#7	6"	#7	10"	#8	10"	405.89	77,016	2.4228	487.98	1.10	63	10x8
192	12x8		1'-2½"	10"	2'-2½"	#6	10"	#7	6"	#7	10"	#9	10"	525.74	88,635	3.1868	563.35	1.31	74	12x8
224	14x8		1'-6½"	10½"	2'-6½"	#7	10"	#7	6"	#7	10"	#10	10"	707.77	108,558	4.3615	693.84	1.51	85	14x8
256	16x8		1'-10"	10½"	2'-10"	#7	10"	#7	6"	#7	10"	#10	10"	896.10	119,337	5.5787	763.45	1.71	96	16x8
200	10x10		11½"	10½"	2'-11½"	#6	10"	#7	6"	#7	10"	#8	10"	448.13	83,327	2.6401	522.22	1.12	63	10x10
240	12x10		1'-3½"	11"	3'-3½"	#6	10"	#7	6"	#8	10"	#8	10"	605.30	99,310	3.6520	626.28	1.32	74	12x10
280	14x10		1'-7"	11"	3'-7"	#6	10"	#7	6"	#8	10"	#9	10"	769.49	112,832	4.7115	713.94	1.52	86	14x10
320	16x10		1'-10"	11½"	3'-10"	#7	10"	#7	5"	#8	10"	#9	10"	953.08	137,023	5.8997	872.76	1.72	97	16x10
288	12x12		1'-4"	1'-0½"	4'-1"	#6	10"	#8	7"	#7	10"	#9	10"	696.79	108,543	4.1420	674.86	1.34	75	12x12
336	14x12		1'-7½"	1'-1"	4'-4½"	#7	10"	#8	6"	#7	10"	#10	10"	875.37	134,729	5.2924	847.46	1.54	86	14x12
384	16x12		1'-11"	1'-1"	4'-8"	#7	10"	#8	6"	#8	10"	#10	10"	1069.70	154,372	6.5478	975.58	1.74	97	16x12

MAX. 30 FT. COVER ~ L = 150 FT.

"T"	"V"	"W"	BARS "A" SIZE	BARS "A" SPAC. IN.	BARS "B" SIZE	BARS "B" SPAC. IN.	BARS "C" SIZE	BARS "C" SPAC. IN.	BARS "D" SIZE	BARS "D" SPAC. IN.	TOTAL CULVERT CONC. CU. YDS.	TOTAL CULVERT REINF. LBS.	PER LIN. FT. BARREL CONC. CU. YDS.	PER LIN. FT. BARREL REINF. LBS.	1 AUX. SLAB "J" CONC. CU. YDS.	1 AUX. SLAB "J" REINF. LBS.	SIZE OF CULVERT
6"	6"	1'-0"	#5	1'-3"	#4	5½"	#5	1'-3"	#6	1'-3"	96.82	17,391	0.5905	109.68	0.47	28	4x4
6½"	6"	1'-0½"	#6	1'-3"	#4	5½"	#6	1'-3"	#7	1'-3"	114.86	22,337	0.7042	142.05	0.57	34	5x4
8½"	6"	1'-2½"	#5	11"	#5	7"	#5	11"	#7	11"	153.59	27,359	0.9553	174.48	0.67	39	6x4
1'-0"	6½"	1'-6"	#6	11"	#5	5½"	#6	11"	#8	11"	249.33	41,071	1.5792	264.71	0.87	51	8x4
6½"	6½"	1'-4½"	#4	11"	#5	6"	#6	11"	#6	11"	129.57	26,097	0.7879	165.47	0.57	34	5x5
8½"	7"	1'-6½"	#4	11"	#5	6"	#6	11"	#6	11"	173.17	29,382	1.0702	186.68	0.68	40	6x5
1'-0½"	7"	1'-10½"	#5	11"	#5	5½"	#6	11"	#8	11"	274.00	40,888	1.7266	260.39	0.88	51	8x5
8"	7½"	1'-3"	#4	11"	#6	7"	#6	11"	#6	11"	187.67	33,891	1.1265	213.60	0.69	40	6x6
1'-0"	8½"	1'-7"	#5	11"	#6	7"	#6	11"	#8	11"	299.17	44,646	1.8477	283.44	0.90	51	8x6
1'-4"	9"	1'-11"	#5	1'-0"	#6	6½"	#7	1'-0"	#8	1'-0"	436.04	54,793	2.7387	349.91	1.10	63	10x6
10½"	9½"	1'-10½"	#6	10"	#6	5"	#6	10"	#7	10"	329.41	59,548	1.9441	373.57	0.91	52	8x8
1'-2½"	10½"	2'-2½"	#6	10"	#7	6"	#7	10"	#8	10"	473.16	78,107	2.8646	495.00	1.12	63	10x8
1'-5½"	11"	2'-5½"	#6	10"	#7	6"	#7	10"	#9	10"	615.68	89,908	3.7786	571.57	1.32	74	12x8
1'-9"	11½"	2'-9"	#6	10"	#7	6"	#8	10"	#9	10"	795.73	107,421	4.9406	685.98	1.52	86	14x8
1'-2½"	11½"	3'-2½"	#5	10"	#7	6"	#7	10"	#8	10"	529.51	80,840	3.1740	505.31	1.13	63	10x10
1'-6½"	11½"	3'-6½"	#6	10"	#7	5"	#7	10"	#9	10"	689.93	102,706	4.2079	650.92	1.33	74	12x10
1'-10"	11½"	3'-10"	#6	10"	#7	5"	#7	10"	#10	10"	865.68	116,600	5.3442	739.36	1.52	86	14x10
1'-7½"	1'-1"	4'-4½"	#6	10"	#8	6"	#7	10"	#9	10"	796.94	115,707	4.7986	722.91	1.35	75	12x12
2'-0"	1'-1½"	4'-9"	#7	10"	#8	6"	#7	10"	#10	10"	1018.90	136,599	6.2346	859.23	1.55	86	14x12

MAX. 35 FT. COVER ~ L = 150 FT.

"T"	"V"	"W"	BARS "A" SIZE	BARS "A" SPAC. IN.	BARS "B" SIZE	BARS "B" SPAC. IN.	BARS "C" SIZE	BARS "C" SPAC. IN.	BARS "D" SIZE	BARS "D" SPAC. IN.	TOTAL CULVERT CONC. CU. YDS.	TOTAL CULVERT REINF. LBS.	PER LIN. FT. BARREL CONC. CU. YDS.	PER LIN. FT. BARREL REINF. LBS.	1 AUX. SLAB "J" CONC. CU. YDS.	1 AUX. SLAB "J" REINF. LBS.	SIZE OF CULVERT
6"	6"	1'-0"	#5	1'-2"	#5	7"	#5	1'-2"	#6	1'-2"	96.82	18,958	0.5905	119.85	0.47	28	4x4
8"	6"	1'-2"	#6	1'-3"	#5	7"	#6	1'-3"	#7	1'-3"	130.91	23,718	0.8107	151.08	0.57	34	5x4
1'-0"	6½"	1'-6"	#5	11"	#5	7"	#5	11"	#6	11"	201.73	27,165	1.2747	173.12	0.67	39	6x4
8"	7"	1'-6"	#4	11"	#5	6"	#6	11"	#6	11"	150.29	26,488	0.9249	168.10	0.58	34	5x5
10"	7½"	1'-8"	#4	11"	#5	6"	#6	11"	#6	11"	197.07	29,793	1.2284	189.41	0.69	40	6x5
1'-2½"	7½"	2'-0½"	#5	11"	#5	5"	#6	11"	#8	11"	312.21	42,184	1.9801	270.28	0.88	51	8x5
10"	8"	1'-5"	#4	1'-0"	#6	6½"	#6	1'-0"	#6	1'-0"	218.97	34,205	1.3334	216.03	0.69	40	6x6
1'-2½"	9"	1'-9½"	#5	11"	#6	6½"	#6	11"	#7	11"	347.29	44,885	2.1664	285.54	0.90	51	8x6
1'-1"	10"	2'-1"	#5	10"	#6	5"	#6	10"	#7	10"	379.75	57,428	2.2747	359.27	0.91	52	8x8
1'-5"	11"	2'-5"	#5	10"	#7	5"	#7	10"	#7	10"	533.87	78,440	3.2639	497.04	1.12	63	10x8
1'-9"	11½"	2'-9"	#5	10"	#7	5"	#7	10"	#8	10"	711.58	89,705	4.4097	569.88	1.33	74	12x8
1'-5"	1'-0"	3'-5"	#5	10"	#7	5"	#7	10"	#8	10"	592.40	87,148	3.5865	547.08	1.14	64	10x10
1'-10"	1'-0"	3'-10"	#6	10"	#7	5"	#7	10"	#9	10"	787.91	104,080	4.8518	657.30	1.33	75	12x10
1'-11"	1'-2"	4'-8"	#6	10"	#8	6"	#7	10"	#9	10"	909.12	117,943	5.5341	737.31	1.36	75	12x12

GENERAL NOTES:

This Drawing Shows The Additional Reinforcing Bars And The Increased Dimensions And Reinforcing Bar Sizes Necessary To Modify A Double Cell Culvert For Cover Less Than Or In Excess Of That Provided By Basic Culvert Drawings.

All Other Dimensions, Reinforcement Details And General Requirements Of Basic Culvert Drawings Shall Apply Except As Specifically Modified By This Drawing.

Barrel Details Shown On This Drawing Shall Be Used With Cover Less Than 2'-6" And More Than Maximum Shown On Basic Culvert Drawings.

Quantities Shown On This Drawing Are For Culverts With Barrels Per This Drawing And Wings With 2:1 Slope Per This Drawing And Basic Culvert Drawing.

Quantities Shown On This Drawing Are For Culverts Constructed Normal To The Centerline Of The Roadway.

Quantities Shown On This Drawing For "TOTAL CULVERT" Are For A Complete Culvert Of The Length Noted And Include Barrel, Parapets, Wings, Aprons, Cut-Off Walls, Auxiliary Slabs "W" Where Required And Two Auxiliary Slabs "J."

Quantities Shown On This Drawing Will Be Used As A Basis For Final Payment For Culverts Constructed In Accordance With This Drawing And Basic Culvert Drawings.

BY

REVISION

DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BOX CULVERT DRAWING

IBD CULVERTS MODIFIED FOR HIGH COVER WINGS WITH 2:1 SLOPE

WORKING NUMBER
SD-IBDM-2WA

SHEET NUMBER

FILENAME:______

DESIGN TEAM______ CHECKED______ DATE______

COUNTY:

PROJECT NO.:

DESIGN TEAM:

FILENAME: