

SINGLE 9'-0" X 7'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	461A @ 6"	463A @ 6"	564A @ 6"	566A @ 6"	625A @ 6"			
BAR C	709 @ 12"	526 @ 6"	614 @ 6"	711 @ 6"	803 @ 6"			
BAR E	432 @ 12"	433 @ 12"	434 @ 12"	435 @ 12"	436 @ 12"			
BAR G IN 2 SLABS	32 - 401	32 - 401	32 - 401	32 - 401	32 - 401			
BAR H IN 2 WALLS	20 - 402	20 - 402	20 - 402	20 - 402	20 - 402			
BAR J IN EXT. CORNER	0	0	3-415B @ 10¼"	3-417B @ 10¾"	3-420B @ 11¼"			
T ₁	14"	15"	16"	17"	18"			
T ₂	15"	16"	17"	18"	19"			
T ₃	14"	15"	16"	17"	18"			
X	11'-4"	11'-6"	11'-8"	11'-10"	12'-0"			
Y	9'-5"	9'-7"	9'-9"	9'-11"	10'-1"			
YD³CLASS AA CONCRETE/FT	1.629	1.758	1.889	2.022	2.157			
LB BAR REINF STEEL/FT	155.4	158.1	235.4	263.6	342.7			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.3	5.5	5.7	5.8	6.0			
LB BAR REINF STEEL	792	793	795	796	798			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.5	5.7	5.9	6.1	6.3			
LB BAR REINF STEEL	965	969	972	976	980			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.2	6.4	6.6	6.8	7.0			
LB BAR REINF STEEL	1018	1023	1027	1031	1036			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	7.6	7.9	8.1	8.4	8.6			
LB BAR REINF STEEL	1156	1161	1167	1173	1179			

SINGLE 9'-0" X 8'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	467A @ 6"	468A @ 6"	569A @ 6"	571A @ 6"	629A @ 6"			
BAR C	709 @ 12"	613 @ 6"	614 @ 6"	711 @ 6"	803 @ 6"			
BAR E	438 @ 12"	439 @ 12"	440 @ 12"	441 @ 12"	442 @ 12"			
BAR G IN 2 SLABS	32 - 401	32 - 401	32 - 401	32 - 401	32 - 401			
BAR H IN 2 WALLS	22 - 402	22 - 402	22 - 402	22 - 402	22 - 402			
BAR J IN EXT. CORNER	0	0	3-415B @ 10¼"	3-417B @ 10¾"	4-420B @ 11¼"			
T ₁	14"	15"	16"	17"	18"			
T ₂	15"	16"	17"	18"	19"			
T ₃	14"	15"	16"	17"	18"			
X	11'-4"	11'-6"	11'-8"	11'-10"	12'-0"			
Y	10'-5"	10'-7"	10'-9"	10'-11"	11'-1"			
YD³CLASS AA CONCRETE/FT	1.715	1.850	1.988	2.127	2.269			
LB BAR REINF STEEL/FT	163.4	186.7	246.4	274.7	363.9			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.6	5.7	5.9	6.1	6.3			
LB BAR REINF STEEL	817	819	820	822	823			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.8	6.0	6.2	6.4	6.6			
LB BAR REINF STEEL	991	995	999	1002	1006			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.5	6.7	6.9	7.1	7.3			
LB BAR REINF STEEL	1045	1049	1054	1058	1062			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	8.0	8.2	8.5	8.8	9.0			
LB BAR REINF STEEL	1183	1189	1194	1200	1206			

SINGLE 9'-0" X 9'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	471A @ 6"	472A @ 6"	574A @ 6"	632A @ 6"	635A @ 6"			
BAR C	709 @ 12"	613 @ 6"	614 @ 6"	711 @ 6"	803 @ 6"			
BAR E	443 @ 12"	444 @ 12"	527 @ 12"	528 @ 12"	529 @ 12"			
BAR G IN 2 SLABS	32 - 401	32 - 401	32 - 401	32 - 401	32 - 401			
BAR H IN 2 WALLS	26 - 402	26 - 402	26 - 402	26 - 402	26 - 402			
BAR J IN EXT. CORNER	0	0	3-415B @ 10¼"	3-418B @ 10¾"	4-420B @ 11¼"			
T ₁	14"	15"	16"	17"	18"			
T ₂	15"	16"	17"	18"	19"			
T ₃	14"	15"	16"	17"	18"			
X	11'-4"	11'-6"	11'-8"	11'-10"	12'-0"			
Y	11'-5"	11'-7"	11'-9"	11'-11"	12'-1"			
YD³CLASS AA CONCRETE/FT	1.801	1.943	2.086	2.232	2.380			
LB BAR REINF STEEL/FT	172.8	196.0	267.3	348.6	388.6			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.8	6.0	6.2	6.4	6.6			
LB BAR REINF STEEL	866	868	869	871	872			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.0	6.2	6.4	6.6	6.8			
LB BAR REINF STEEL	1041	1045	1049	1052	1056			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.7	6.9	7.2	7.4	7.6			
LB BAR REINF STEEL	1096	1100	1104	1109	1113			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	8.3	8.5	8.8	9.1	9.4			
LB BAR REINF STEEL	1235	1241	1247	1252	1258			

SINGLE 9'-0" X 10'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	478A @ 6"	706A @ 12"	577A @ 6"	638A @ 6"	640A @ 6"			
BAR C	525 @ 6"	613 @ 6"	710 @ 6"	711 @ 6"	803 @ 6"			
BAR E	531 @ 12"	532 @ 12"	448 @ 6"	449 @ 6"	450 @ 6"			
BAR G IN 2 SLABS	32 - 401	32 - 401	32 - 401	32 - 401	32 - 401			
BAR H IN 2 WALLS	28 - 402	28 - 402	28 - 402	28 - 402	28 - 402			
BAR J IN EXT. CORNER	0	0	3-415B @ 10"	3-418B @ 10¾"	4-420B @ 11¼"			
T ₁	14"	15"	16"	17"	18"			
T ₂	15"	16"	17"	18"	19"			
T ₃	14"	15"	16"	17"	18"			
X	11'-4"	11'-6"	11'-8"	11'-10"	12'-0"			
Y	12'-5"	12'-7"	12'-9"	12'-11"	13'-1"			
YD³CLASS AA CONCRETE/FT	1.888	2.035	2.185	2.337	2.491			
LB BAR REINF STEEL/FT	199.2	255.9	310.9	371.4	411.5			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³CLASS AA CONCRETE	5.9	6.1	6.4	6.6	6.8			
LB BAR REINF STEEL	891	892	894	895	897			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.2	6.4	6.6	6.8	7.1			
LB BAR REINF STEEL	1066	1070	1073	1077	1081			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³CLASS AA CONCRETE	6.9	7.1	7.4	7.6	7.9			
LB BAR REINF STEEL	1121	1125	1129	1134	1138			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³CLASS AA CONCRETE	8.5	8.8	9.1	9.4	9.7			
LB BAR REINF STEEL	1261	1266	1272	1278	1284			

		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		REVISION	STANDARD REINFORCED CONCRETE SINGLE BOX CULVERT 9'X7', 9'X8', 9'X9' AND 9'X10' NO SCALE SEPTEMBER 2017	
	BY	DES. YSK. DRW. EGS. TRA. _____ CHK. JWB.	(SUBMITTED) <i>B. A. H.</i> STATE DESIGN POLICY ENGINEER (APPROVED) <i>Margaret B. Pucke</i> CHIEF ENGINEER	NUMBER 2401 SHEET 2-K OF 3