

DOUBLE 5'-0" X 3'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	502A @ 12"	402A @ 6"	403A @ 6"	405A @ 6"	409A @ 6"			
BAR B	423 @ 6"	419 @ 6"	513 @ 6"	512 @ 6"	509 @ 6"			
BAR C	463 @ 6"	463 @ 6"	464 @ 6"	554 @ 6"	555 @ 6"			
BAR E	406 @ 12"	406 @ 12"	408 @ 12"	408 @ 12"	410 @ 12"			
BAR F	406 @ 12"	406 @ 12"	408 @ 12"	408 @ 12"	410 @ 12"			
BAR G IN 2 SLABS	36 - 401	36 - 401	40 - 401	40 - 401	40 - 401			
BAR H IN 3 WALLS	14 - 402	14 - 402	14 - 402	14 - 402	14 - 402			
BAR J IN EXT. CORNER	0	0	0	3-403B @ 5"	3-406B @ 5¾"			
BAR J IN INT. CORNER	0	0	3-404B @ 5"	4-404B @ 5"	4-407B @ 5¾"			
T ₁	8"	8"	9"	9"	10"			
T ₂	9"	9"	10"	10"	11"			
T ₃	8"	8"	9"	9"	10"			
X	12'-4"	12'-4"	12'-6"	12'-6"	12'-8"			
Y	4'-5"	4'-5"	4'-7"	4'-7"	4'-9"			
YD³ CLASS AA CONCRETE/FT	0.925	0.925	1.029	1.029	1.136			
LB BAR REINF STEEL/FT	112.8	114.5	141.1	176.7	179.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	4.4	4.4	4.5	4.5	4.6			
LB BAR REINF STEEL	736	736	775	775	776			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	4.6	4.6	4.7	4.7	4.8			
LB BAR REINF STEEL	921	921	962	962	965			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	5.2	5.2	5.3	5.3	5.4			
LB BAR REINF STEEL	978	978	1020	1020	1023			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	6.4	6.4	6.5	6.5	6.7			
LB BAR REINF STEEL	1121	1121	1165	1165	1170			

DOUBLE 5'-0" X 4'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	505A @ 12"	411A @ 6"	413A @ 6"	413A @ 6"	416A @ 6"			
BAR B	427 @ 6"	418 @ 6"	510 @ 6"	510 @ 6"	603 @ 6"			
BAR C	463 @ 6"	463 @ 6"	464 @ 6"	554 @ 6"	555 @ 6"			
BAR E	414 @ 12"	414 @ 12"	415 @ 12"	415 @ 12"	416 @ 12"			
BAR F	414 @ 12"	414 @ 12"	415 @ 12"	415 @ 12"	416 @ 12"			
BAR G IN 2 SLABS	36 - 401	36 - 401	40 - 401	40 - 401	40 - 401			
BAR H IN 3 WALLS	18 - 402	18 - 402	18 - 402	18 - 402	18 - 402			
BAR J IN EXT. CORNER	0	0	0	3-403B @ 5"	3-406B @ 5¾"			
BAR J IN INT. CORNER	0	2 - 401B @ 4½"	3-404B @ 5"	4-404B @ 5"	4-408B @ 5¾"			
T ₁	8"	8"	9"	9"	10"			
T ₂	9"	9"	10"	10"	11"			
T ₃	8"	8"	9"	9"	10"			
X	12'-4"	12'-4"	12'-6"	12'-6"	12'-8"			
Y	5'-5"	5'-5"	5'-7"	5'-7"	5'-9"			
YD³ CLASS AA CONCRETE/FT	1.011	1.011	1.122	1.122	1.235			
LB BAR REINF STEEL/FT	123.6	133.5	151.3	187.2	200.7			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	5.0	5.0	5.1	5.1	5.3			
LB BAR REINF STEEL	773	773	813	813	814			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	5.2	5.2	5.4	5.4	5.5			
LB BAR REINF STEEL	959	959	1002	1002	1005			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	5.8	5.8	6.0	6.0	6.1			
LB BAR REINF STEEL	1016	1016	1059	1059	1063			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	7.2	7.2	7.4	7.4	7.6			
LB BAR REINF STEEL	1161	1161	1206	1206	1211			

		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		
		REVISION	STANDARD REINFORCED CONCRETE DOUBLE BOX CULVERT 5'X3' AND 5'X4' NO SCALE SEPTEMBER 2017		
	BY	DES. YSK. DRW. FGS. TRA. _____ CHK. JWB.	(SUBMITTED) <i>B. A. Ste...</i> STATE DESIGN POLICY ENGINEER (APPROVED) <i>Margaret B. P...</i> CHIEF ENGINEER	NUMBER 2402 SHEET 2-B OF 3	