

TRIPLE 10'-0" X 9'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	477A @ 6"	476A @ 6"	712A @ 12"	580A @ 6"	801A @ 12"			
BAR B	736 @ 12"	593 @ 6"	649 @ 6"	735 @ 6"	729 @ 6"			
BAR C	712 @ 12"	553 @ 6"	611 @ 6"	612 @ 6"	714 @ 6"			
BAR D	455 @ 6"	455 @ 6"	455 @ 6"	711 @ 12"	550 @ 6"			
BAR E	451 @ 12"	453 @ 12"	455 @ 12"	457 @ 12"	556 @ 12"			
BAR F	451 @ 12"	453 @ 12"	455 @ 12"	457 @ 12"	460 @ 12"			
BAR G IN 2 SLABS	96 - 401	102 - 401	102 - 401	120 - 401	120 - 401			
BAR H IN 4 WALLS	50 - 402	50 - 402	50 - 402	68 - 402	68 - 402			
BAR J IN EXT. CORNER	0	0	0	0	0			
BAR J IN INT. CORNER	0	0	3-427B @ 11 3/4"	3-430B @ 13"	4-432B @ 14 3/4"			
T <sub>1</sub>	14"	16"	18"	20"	22"			
T <sub>2</sub>	15"	17"	19"	21"	23"			
T <sub>3</sub>	14"	16"	18"	20"	22"			
X	34'-4"	34'-8"	35'-0"	35'-4"	35'-8"			
Y	11'-5"	11'-9"	12'-1"	12'-5"	12'-9"			
YD <sup>3</sup> CLASS AA CONCRETE/FT	4,545	5,114	5,691	6,277	6,870			
LB BAR REINF STEEL/FT	438.7	447.9	615.2	719.8	835.6			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	15.8	16.3	16.8	17.3	17.9			
LB BAR REINF STEEL	1996	2045	2039	2301	2294			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	16.4	16.9	17.5	18.0	18.5			
LB BAR REINF STEEL	2480	2534	2532	2803	2801			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	18.3	18.9	19.5	20.1	20.7			
LB BAR REINF STEEL	2629	2684	2684	2959	2958			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	22.5	23.2	23.9	24.6	25.4			
LB BAR REINF STEEL	2974	3032	3034	3319	3321			

TRIPLE 10'-0" X 11'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	482A @ 6"	713A @ 12"	587A @ 6"	802A @ 12"	613A @ 6"			
BAR B	732 @ 12"	589 @ 6"	650 @ 6"	725 @ 6"	732 @ 6"			
BAR C	712 @ 12"	553 @ 6"	611 @ 6"	612 @ 6"	714 @ 6"			
BAR D	455 @ 6"	455 @ 6"	455 @ 6"	711 @ 12"	550 @ 6"			
BAR E	559 @ 12"	466 @ 6"	467 @ 6"	617 @ 12"	715 @ 12"			
BAR F	464 @ 12"	466 @ 12"	467 @ 12"	470 @ 12"	471 @ 12"			
BAR G IN 2 SLABS	96 - 401	102 - 401	102 - 401	120 - 401	120 - 401			
BAR H IN 4 WALLS	58 - 402	58 - 402	58 - 402	76 - 402	76 - 402			
BAR J IN EXT. CORNER	0	0	0	0	0			
BAR J IN INT. CORNER	0	0	3-427B @ 11 3/4"	4-430B @ 13"	4-432B @ 14 3/4"			
T <sub>1</sub>	14"	16"	18"	20"	22"			
T <sub>2</sub>	15"	17"	19"	21"	23"			
T <sub>3</sub>	14"	16"	18"	20"	22"			
X	34'-4"	34'-8"	35'-0"	35'-4"	35'-8"			
Y	13'-5"	13'-9"	14'-1"	14'-5"	14'-9"			
YD <sup>3</sup> CLASS AA CONCRETE/FT	4,866	5,460	6,062	6,672	7,290			
LB BAR REINF STEEL/FT	481.3	532.0	666.2	816.4	924.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	16.5	17.0	17.6	18.1	18.7			
LB BAR REINF STEEL	2047	2097	2090	2352	2346			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	17.1	17.7	18.2	18.8	19.4			
LB BAR REINF STEEL	2534	2588	2586	2857	2855			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	19.1	19.7	20.3	21.0	21.6			
LB BAR REINF STEEL	2684	2739	2739	3014	3013			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	23.4	24.2	25.0	25.8	26.6			
LB BAR REINF STEEL	3032	3090	3092	3376	3379			

TRIPLE 10'-0" X 10'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	582A @ 12"	480A @ 6"	584A @ 6"	586A @ 6"	612A @ 6"			
BAR B	734 @ 12"	592 @ 6"	652 @ 6"	734 @ 6"	733 @ 6"			
BAR C	712 @ 12"	553 @ 6"	611 @ 6"	612 @ 6"	714 @ 6"			
BAR D	455 @ 6"	455 @ 6"	455 @ 6"	711 @ 6"	550 @ 6"			
BAR E	457 @ 12"	556 @ 12"	558 @ 12"	464 @ 6"	466 @ 6"			
BAR F	457 @ 12"	460 @ 12"	463 @ 12"	464 @ 12"	466 @ 12"			
BAR G IN 2 SLABS	96 - 401	102 - 401	102 - 401	120 - 401	120 - 401			
BAR H IN 4 WALLS	56 - 402	56 - 402	56 - 402	68 - 402	68 - 402			
BAR J IN EXT. CORNER	0	0	0	0	0			
BAR J IN INT. CORNER	0	0	3-427B @ 11 3/4"	4-430B @ 13"	4-432B @ 14 3/4"			
T <sub>1</sub>	14"	16"	18"	20"	22"			
T <sub>2</sub>	15"	17"	19"	21"	23"			
T <sub>3</sub>	14"	16"	18"	20"	22"			
X	34'-4"	34'-8"	35'-0"	35'-4"	35'-8"			
Y	12'-5"	12'-9"	13'-1"	13'-5"	13'-9"			
YD <sup>3</sup> CLASS AA CONCRETE/FT	4,706	5,287	5,877	6,474	7,080			
LB BAR REINF STEEL/FT	432.7	469.7	644.6	762.0	882.9			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	16.2	16.7	17.2	17.7	18.3			
LB BAR REINF STEEL	2023	2073	2066	2301	2294			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	16.8	17.3	17.9	18.4	19.0			
LB BAR REINF STEEL	2509	2563	2561	2803	2801			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	18.7	19.3	19.9	20.5	21.2			
LB BAR REINF STEEL	2659	2715	2714	2959	2958			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	23.0	23.7	24.4	25.2	26.0			
LB BAR REINF STEEL	3006	3064	3066	3319	3321			

TRIPLE 10'-0" X 12'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	481A @ 6"	714A @ 12"	589A @ 6"	614A @ 6"	615A @ 6"			
BAR B	728 @ 12"	586 @ 6"	648 @ 6"	731 @ 6"	730 @ 6"			
BAR C	712 @ 12"	553 @ 6"	611 @ 6"	612 @ 6"	714 @ 6"			
BAR D	455 @ 6"	455 @ 6"	711 @ 12"	711 @ 12"	550 @ 6"			
BAR E	565 @ 12"	471 @ 6"	473 @ 6"	716 @ 12"	717 @ 12"			
BAR F	470 @ 12"	471 @ 12"	473 @ 12"	474 @ 12"	476 @ 12"			
BAR G IN 2 SLABS	96 - 401	102 - 401	102 - 401	120 - 401	120 - 401			
BAR H IN 4 WALLS	66 - 402	66 - 402	66 - 402	90 - 402	90 - 402			
BAR J IN EXT. CORNER	0	0	0	3-429B @ 13"	3-431B @ 14 3/4"			
BAR J IN INT. CORNER	0	0	3-427B @ 11 3/4"	4-430B @ 13"	4-432B @ 14 3/4"			
T <sub>1</sub>	14"	16"	18"	20"	22"			
T <sub>2</sub>	15"	17"	19"	21"	23"			
T <sub>3</sub>	14"	16"	18"	20"	22"			
X	34'-4"	34'-8"	35'-0"	35'-4"	35'-8"			
Y	14'-5"	14'-9"	15'-1"	15'-5"	15'-9"			
YD <sup>3</sup> CLASS AA CONCRETE/FT	5,027	5,633	6,247	6,869	7,500			
LB BAR REINF STEEL/FT	481.3	550.8	700.2	905.8	973.8			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	16.9	17.5	18.1	18.6	19.2			
LB BAR REINF STEEL	2102	2151	2145	2435	2429			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	17.5	18.1	18.7	19.3	19.9			
LB BAR REINF STEEL	2590	2645	2643	2943	2941			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	19.6	20.2	20.9	21.6	22.3			
LB BAR REINF STEEL	2742	2797	2797	3103	3102			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD <sup>3</sup> CLASS AA CONCRETE	24.0	24.8	25.7	26.5	27.3			
LB BAR REINF STEEL	3092	3151	3153	3470	3472			

DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA		
	STANDARD REINFORCED CONCRETE TRIPLE BOX CULVERT 10'X9', 10'X10', 10'X11' AND 10'X12'		
REVISION	NO SCALE		SEPTEMBER 2017
	BY	DES. YSK DRW. EGS TRA. JWB CHK. JWB	(SUBMITTED) <i>B.A. Ste...</i> STATE DESIGN POLICY ENGINEER (APPROVED) <i>Margaret B. Pivelo</i> CHIEF ENGINEER
		NUMBER 2403	SHEET 2-N OF 3