STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

TRIPLE 9'-0" X 7'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	553A @ 12"	465A @ 6"	705A @ 12"	557A @ 6"	562A @ 6"			
BAR B	491 @ 6"	589 @ 6"	643 @ 6"	646 @ 6"	727 @ 6"			
BAR C	450 @ 6"	542 @ 6"	543 @ 6"	609 @ 6"	710 @ 6"			
BAR D	539 @ 12"	449 @ 6"	449 @ 6"	707 @ 12"	539 @ 6"			
BAR E	437 @ 12"	439 @ 12"	440 @ 12"	441 @ 12"	442 @ 12"			
BAR F	437 @ 12"	439 @ 12"	440 @ 12"	441 @ 12"	442 @ 12"			
BAR G IN 2 SLABS	96 - 401	96 - 401	96 - 401	96 - 401	96 - 401			
BAR H IN 4 WALLS	40 - 402	40 - 402	40 - 402	40 - 402	40 - 402			
BAR J IN EXT. CORNER	0	0	0	0	3-426B @ 11½"			
BAR J IN INT. CORNER	0	0	3-422B @ 10¼"	4-425B @ 11"	4-428B @ 11½"			
T_1	14"	15"	16"	17"	18"			
T_2	15"	16"	17"	18"	19"			
T_3	14"	15"	16"	17"	18"			
X	31'-4"	31'-6"	31'-8"	31'-10"	32'-0"			
Y	9'-5"	9'-7"	9'-9"	9'-11"	10'-1"			
YD^3 CLASS AA CONCRETE/FT	3.956	4.208	4.463	4.720	4.978			
LB BAR REINF STEEL/FT	309.8	394.2	500.6	576.7	695.7			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	13.8	14.0	14.2	14.4	14.6			
LB BAR REINF STEEL	1849	1846	1844	1841	1839			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	14.3	14.5	14.7	15.0	15.2			
LB BAR REINF STEEL	2291	2291	2290	2290	2290			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	16.0	16.2	16.4	16.7	16.9			
LB BAR REINF STEEL	2427	2427	2427	2428	2428			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	19.6	19.9	20.2	20.5	20.8			
LB BAR REINF STEEL	2742	2744	2746	2748	2749			

TRIPLE 9'-0" X 9'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	578A @ 12"	475A @ 6"	710A @ 12"	577A @ 6"	608A @ 6"			
BAR B	489 @ 6"	587 @ 6"	638 @ 6"	642 @ 6"	725 @ 6"			
BAR C	708 @ 12"	542 @ 6"	608 @ 6"	609 @ 6"	710 @ 6"			
BAR D	539 @ 12"	449 @ 6"	449 @ 6"	707 @ 12"	539 @ 6"			
BAR E	451 @ 12"	545 @ 12"	547 @ 12"	548 @ 12"	455 @ 6"			
BAR F	451 @ 12"	452 @ 12"	453 @ 12"	454 @ 12"	455 @ 12"			
BAR G IN 2 SLABS	96 - 401	96 - 401	96 - 401	96 - 401	96 - 401			
BAR H IN 4 WALLS	50 - 402	50 - 402	50 - 402	50 - 402	50 - 402			
BAR J IN EXT. CORNER	0	0	0	3-424B @ 11"	3-427B @ 11½"			
BAR J IN INT. CORNER	0	0	3-422B @ 10¼"	4-425B @ 11"	4-428B @ 11"			
T_1	14"	15"	16"	17"	18"			
T_2	15"	16"	17"	18"	19"			
T_3	14"	15"	16"	17"	18"			
X	31'-4"	31'-6"	31'-8"	31'-10"	32'-0"			
Y	11'-5"	11'-7"	11'-9"	11'-11"	12'-1"			
YD^3 CLASS AA CONCRETE/FT	4.277	4.542	4.809	5.078	5.349			
LB BAR REINF STEEL/FT	364.8	426.7	579.1	633.0	789.7			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	14.7	14.9	15.2	15.4	15.7			
LB BAR REINF STEEL	1932	1930	1927	1925	1922			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	15.3	15.5	15.8	16.0	16.3			
LB BAR REINF STEEL	2377	2377	2377	2377	2376			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	17.0	17.3	17.6	17.9	18.1			
LB BAR REINF STEEL	2515	2515	2515	2516	2516			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	20.9	21.3	21.6	21.9	22.3			
LB BAR REINF STEEL	2834	2835	2837	2839	2841			

TRIPLE 9'-0" X 8'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	570A @ 12"	472A @ 6"	708A @ 12"	569A @ 6"	572A @ 6"			
BAR B	490 @ 6"	588 @ 6"	640 @ 6"	645 @ 6"	726 @ 6"			
BAR C	708 @ 12"	542 @ 6"	608 @ 6"	609 @ 6"	710 @ 6"			
BAR D	539 @ 12"	449 @ 6"	449 @ 6"	707 @ 12"	539 @ 6"			
BAR E	444 @ 12"	445 @ 12"	447 @ 12"	448 @ 12"	449 @ 12"			
BAR F	444 @ 12"	445 @ 12"	447 @ 12"	448 @ 12"	449 @ 12"			
BAR G IN 2 SLABS	96 - 401	96 - 401	96 - 401	96 - 401	96 - 401			
BAR H IN 4 WALLS	42 - 402	42 - 402	42 - 402	42 - 402	42 - 402			
BAR J IN EXT. CORNER	0	0	0	3-424B @ 11"	3-426B @ 11½"			
BAR J IN INT. CORNER	0	0	3-422B @ 10¼"	4-425B @ 11"	4-428B @ 11¼"			
T_1	14"	15"	16"	17"	18"			
T_2	15"	16"	17"	18"	19"			
T_3	14"	15"	16"	17"	18"			
X	31'-4"	31'-6"	31'-8"	31'-10"	32'-0"			
Y	10'-5"	10'-7"	10'-9"	10'-11"	11'-1"			
YD^3 CLASS AA CONCRETE/FT	4.116	4.375	4.636	4.899	5.164			
LB BAR REINF STEEL/FT	350.2	404.1	554.0	607.9	708.1			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	14.3	14.5	14.7	15.0	15.2			
LB BAR REINF STEEL	1878	1876	1873	1871	1868			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	14.8	15.1	15.3	15.5	15.8			
LB BAR REINF STEEL	2321	2321	2320	2320	2320			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	16.5	16.8	17.1	17.3	17.6			
LB BAR REINF STEEL	2457	2457	2458	2458	2458			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	20.3	20.6	21.0	21.3	21.6			
LB BAR REINF STEEL	2773	2775	2777	2778	2780			

TRIPLE 9'-0" X 10'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	588A @ 12"	479A @ 6"	581A @ 6"	583A @ 6"	611A @ 6"			
BAR B	488 @ 6"	585 @ 6"	641 @ 6"	639 @ 6"	724 @ 6"			
BAR C	708 @ 12"	542 @ 6"	608 @ 6"	609 @ 6"	710 @ 6"			
BAR D	539 @ 12"	449 @ 6"	449 @ 6"	707 @ 12"	539 @ 6"			
BAR E	553 @ 12"	555 @ 12"	460 @ 6"	461 @ 6"	463 @ 6"			
BAR F	457 @ 12"	459 @ 12"	460 @ 12"	461 @ 12"	463 @ 12"			
BAR G IN 2 SLABS	96 - 401	96 - 401	96 - 401	96 - 401	96 - 401			
BAR H IN 4 WALLS	56 - 402	56 - 402	56 - 402	56 - 402	56 - 402			
BAR J IN EXT. CORNER	0	0	0	3-424B @ 11"	3-427B @ 11½"			
BAR J IN INT. CORNER	0	0	3-422B @ 10¼"	4-425B @ 11"	4-428B @ 11"			
T_1	14"	15"	16"	17"	18"			
T_2	15"	16"	17"	18"	19"			
T_3	14"	15"	16"	17"	18"			
X	31'-4"	31'-6"	31'-8"	31'-10"	32'-0"			
Y	12'-5"	12'-7"	12'-9"	12'-11"	13'-1"			
YD^3 CLASS AA CONCRETE/FT	4.437	4.708	4.981	5.257	5.534			
LB BAR REINF STEEL/FT	392.5	440.1	606.4	656.5	809.6			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	15.0	15.3	15.5	15.8	16.0			
LB BAR REINF STEEL	1960	1958	1955	1953	1950			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	15.6	15.9	16.1	16.4	16.6			
LB BAR REINF STEEL	2407	2406	2406	2406	2405			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	17.4	17.7	18.0	18.3	18.6			
LB BAR REINF STEEL	2545	2545	2545	2546	2546			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	21.4	21.7	22.1	22.4	22.8			
LB BAR REINF STEEL	2866	2868	2869	2871	2873			

DATE	REVISION	BY

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

REINFORCED CONCRETE
TRIPLE BOX CULVERT
9'X7', 9'X8', 9'X9' AND 9'X10'

NO SCALE — SEPTEMBER 2017

DES. YSK
DRW. FGS
TRA. ____
CHK. JWB

(SUBMITTED) STATE DESIGN POLICY ENGINEER
(APPROVED) Margaret B. Pickelo CHIEF ENGINEER

NUMBER 2403

SHEET 2-K OF 3