STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

TRIPLE 8'-0" X 7'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	549A @ 12"	462A @ 6"	464A @ 6"	548A @ 6"	552A @ 6"			
BAR B	484 @ 6"	582 @ 6"	633 @ 6"	631 @ 6"	721 @ 6"			
BAR C	705 @ 12"	532 @ 6"	533 @ 6"	605 @ 6"	606 @ 6"			
BAR D	531 @ 12"	442 @ 6"	442 @ 6"	705 @ 12"	531 @ 6"			
BAR E	433 @ 12"	435 @ 12"	437 @ 12"	439 @ 12"	440 @ 12"			
BAR F	433 @ 12"	435 @ 12"	437 @ 12"	439 @ 12"	440 @ 12"			
BAR G IN 2 SLABS	84 - 401	84 - 401	84 - 401	84 - 401	84 - 401			
BAR H IN 4 WALLS	40 - 402	40 - 402	40 - 402	40 - 402	40 - 402			
BAR J IN EXT. CORNER	0	0	0	3-419B @ 9½"	3-421B @ 10"			
BAR J IN INT. CORNER	0	0	3-418B @ 8½"	4-420B @ 9½"	4-423B @ 10"			
T_1	12"	13"	14"	15"	16"			
T_2	13"	14"	15"	16"	17"			
T_3	12"	13"	14"	15"	16"			
X	28'-0"	28'-2"	28'-4"	28'-6"	28'-8"			
Y	9'-1"	9'-3"	9'-5"	9'-7"	9'-9"			
YD^3 CLASS AA CONCRETE/FT	3.225	3.455	3.687	3.921	4.157			
LB BAR REINF STEEL/FT	311.1	359.0	429.1	542.0	589.6			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	12.3	12.5	12.7	12.9	13.1			
LB BAR REINF STEEL	1673	1671	1669	1667	1665			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	12.7	12.9	13.2	13.4	13.6			
LB BAR REINF STEEL	2071	2071	2072	2072	2072			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	14.2	14.4	14.7	14.9	15.2			
LB BAR REINF STEEL	2193	2194	2195	2196	2197			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	17.5	17.7	18.0	18.3	18.6			
LB BAR REINF STEEL	2480	2483	2485	2488	2490			

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

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	585A @ 12"	474A @ 6"	573A @ 6"	575A @ 6"	607A @ 6"			
BAR B	482 @ 6"	580 @ 6"	629 @ 6"	628 @ 6"	719 @ 6"			
BAR C	705 @ 12"	532 @ 6"	533 @ 6"	605 @ 6"	606 @ 6"			
BAR D	442 @ 6"	442 @ 6"	442 @ 6"	705 @ 12"	531 @ 6"			
BAR E	539 @ 12"	541 @ 12"	543 @ 12"	452 @ 6"	453 @ 6"			
BAR F	449 @ 12"	450 @ 12"	451 @ 12"	452 @ 12"	453 @ 12"			
BAR G IN 2 SLABS	84 - 401	84 - 401	84 - 401	84 - 401	84 - 401			
BAR H IN 4 WALLS	50 - 402	50 - 402	50 - 402	50 - 402	50 - 402			
BAR J IN EXT. CORNER	0	0	0	3-419B @ 9½"	3-422B @ 10"			
BAR J IN INT. CORNER	0	0	3-418B @ 8½"	4-420B @ 9½"	4-423B @ 10"			
T_1	12"	13"	14"	15"	16"			
T_2	13"	14"	15"	16"	17"			
T_3	12"	13"	14"	15"	16"			
X	28'-0"	28'-2"	28'-4"	28'-6"	28'-8"			
Y	11'-1"	11'-3"	11'-5"	11'-7"	11'-9"			
YD^3 CLASS AA CONCRETE/FT	3.522	3.764	4.008	4.255	4.503			
LB BAR REINF STEEL/FT	354.0	391.0	497.9	585.8	679.9			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	13.1	13.3	13.6	13.8	14.0			
LB BAR REINF STEEL	1755	1753	1752	1750	1748			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	13.6	13.8	14.1	14.3	14.6			
LB BAR REINF STEEL	2156	2157	2157	2157	2158			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	15.2	15.4	15.7	16.0	16.3			
LB BAR REINF STEEL	2280	2281	2282	2283	2284			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	18.7	19.0	19.3	19.6	20.0			
LB BAR REINF STEEL	2571	2573	2576	2578	2581			

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

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	568A @ 12"	470A @ 6"	706A @ 12"	566A @ 6"	567A @ 6"			
BAR B	483 @ 6"	581 @ 6"	630 @ 6"	630 @ 6"	720 @ 6"			
BAR C	705 @ 12"	532 @ 6"	533 @ 6"	605 @ 6"	606 @ 6"			
BAR D	442 @ 6"	442 @ 6"	442 @ 6"	705 @ 12"	531 @ 6"			
BAR E	442 @ 12"	443 @ 12"	534 @ 12"	535 @ 12"	537 @ 12"			
BAR F	442 @ 12"	443 @ 12"	444 @ 12"	445 @ 12"	447 @ 12"			
BAR G IN 2 SLABS	84 - 401	84 - 401	84 - 401	84 - 401	84 - 401			
BAR H IN 4 WALLS	42 - 402	42 - 402	42 - 402	42 - 402	42 - 402			
BAR J IN EXT. CORNER	0	0	0	3-419B @ 9½"	3-421B @ 10"			
BAR J IN INT. CORNER	0	0	3-418B @ 8½"	4-420B @ 9½"	4-423B @ 10"			
T_1	12"	13"	14"	15"	16"			
T_2	13"	14"	15"	16"	17"			
T_3	12"	13"	14"	15"	16"			
X	28'-0"	28'-2"	28'-4"	28'-6"	28'-8"			
Y	10'-1"	10'-3"	10'-5"	10'-7"	10'-9"			
YD^3 CLASS AA CONCRETE/FT	3.373	3.610	3.848	4.088	4.330			
LB BAR REINF STEEL/FT	326.6	368.9	477.4	562.4	609.0			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	12.7	12.9	13.2	13.4	13.6			
LB BAR REINF STEEL	1701	1699	1698	1696	1694			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	13.2	13.4	13.7	13.9	14.1			
LB BAR REINF STEEL	2100	2101	2101	2101	2102			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	14.7	15.0	15.2	15.5	15.8			
LB BAR REINF STEEL	2223	2224	2225	2226	2227			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	18.1	18.4	18.7	19.0	19.4			
LB BAR REINF STEEL	2511	2513	2516	2518	2520			

TRIPLE 8'-0" X 10'-0" BOX CULVERT

BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS

DESIGN	1	2	3	4	5	6	7	8
BAR A	478A @ 6"	711A @ 12"	579A @ 6"	609A @ 6"	610A @ 6"			
BAR B	480 @ 6"	577 @ 6"	628 @ 6"	627 @ 6"	718 @ 6"			
BAR C	705 @ 12"	532 @ 6"	533 @ 6"	605 @ 6"	606 @ 6"			
BAR D	442 @ 6"	442 @ 6"	442 @ 6"	705 @ 12"	531 @ 6"			
BAR E	550 @ 12"	551 @ 12"	457 @ 6"	611 @ 12"	713 @ 12"			
BAR F	455 @ 12"	456 @ 12"	457 @ 12"	459 @ 12"	460 @ 12"			
BAR G IN 2 SLABS	84 - 401	84 - 401	84 - 401	84 - 401	84 - 401			
BAR H IN 4 WALLS	56 - 402	56 - 402	56 - 402	56 - 402	56 - 402			
BAR J IN EXT. CORNER	0	0	2-417B @ 8½"	3-420B @ 9½"	3-422B @ 10"			
BAR J IN INT. CORNER	0	0	3-418B @ 8½"	4-420B @ 9½"	4-423B @ 9¾"			
T_1	12"	13"	14"	15"	16"			
T_2	13"	14"	15"	16"	17"			
T_3	12"	13"	14"	15"	16"			
X	28'-0"	28'-2"	28'-4"	28'-6"	28'-8"			
Y	12'-1"	12'-3"	12'-5"	12'-7"	12'-9"			
YD^3 CLASS AA CONCRETE/FT	3.670	3.918	4.169	4.421	4.676			
LB BAR REINF STEEL/FT	373.2	442.4	531.4	659.5	716.9			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	13.4	13.6	13.9	14.1	14.4			
LB BAR REINF STEEL	1783	1781	1779	1777	1776			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	13.9	14.2	14.4	14.7	14.9			
LB BAR REINF STEEL	2186	2186	2186	2187	2187			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	15.5	15.8	16.1	16.4	16.7			
LB BAR REINF STEEL	2311	2312	2313	2314	2315			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD^3 CLASS AA CONCRETE	19.1	19.4	19.8	20.1	20.5			
LB BAR REINF STEEL	2603	2606	2608	2610	2613			

DATE	REVISION	BY

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD

REINFORCED CONCRETE
TRIPLE BOX CULVERT
8'X7', 8'X8', 8'X9' AND 8'X10'

NO SCALE — SEPTEMBER 2017

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

(SUBMITTED) STATE DESIGN POLICY ENGINEER
(APPROVED) Margaret B Pinkelo CHIEF ENGINEER

NUMBER 2403
SHEET 2-1 OF 3