

DOUBLE 8'-0" X 7'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	544A @ 12"	462A @ 6"	464A @ 6"	545A @ 6"	549A @ 6"			
BAR B	452 @ 6"	544 @ 6"	619 @ 6"	714 @ 6"	713 @ 6"			
BAR C	739 @ 12"	479 @ 6"	569 @ 6"	640 @ 6"	641 @ 6"			
BAR E	442 @ 12"	443 @ 12"	444 @ 12"	445 @ 12"	447 @ 12"			
BAR F	442 @ 12"	443 @ 12"	444 @ 12"	445 @ 12"	447 @ 12"			
BAR G IN 2 SLABS	56 - 401	56 - 401	56 - 401	56 - 401	56 - 401			
BAR H IN 3 WALLS	30 - 402	30 - 402	30 - 402	30 - 402	30 - 402			
BAR J IN EXT. CORNER	0	0	0	0	3-424B @ 10"			
BAR J IN INT. CORNER	0	2-417B @ 8"	4-420B @ 8½"	4-423B @ 9"	5-426B @ 8¾"			
T ₁	12"	13"	14"	15"	16"			
T ₂	13"	14"	15"	16"	17"			
T ₃	12"	13"	14"	15"	16"			
X	19'-0"	19'-2"	19'-4"	19'-6"	19'-8"			
Y	9'-1"	9'-3"	9'-5"	9'-7"	9'-9"			
YD³ CLASS AA CONCRETE/FT	2,262	2,437	2,613	2,792	2,972			
LB BAR REINF STEEL/FT	226.8	237.6	297.9	388.2	415.1			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	8.4	8.6	8.8	9.0	9.2			
LB BAR REINF STEEL	1200	1200	1200	1200	1200			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	8.8	9.0	9.2	9.3	9.5			
LB BAR REINF STEEL	1477	1480	1482	1484	1486			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	9.8	10.0	10.2	10.4	10.7			
LB BAR REINF STEEL	1563	1566	1568	1571	1574			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	12.0	12.3	12.6	12.8	13.1			
LB BAR REINF STEEL	1769	1773	1778	1782	1786			

DOUBLE 8'-0" X 8'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	571A @ 12"	473A @ 6"	710A @ 12"	560A @ 6"	563A @ 6"			
BAR B	448 @ 6"	541 @ 6"	617 @ 6"	711 @ 6"	709 @ 6"			
BAR C	739 @ 12"	740 @ 12"	569 @ 6"	640 @ 6"	641 @ 6"			
BAR E	449 @ 12"	450 @ 12"	542 @ 12"	543 @ 12"	453 @ 6"			
BAR F	449 @ 12"	450 @ 12"	451 @ 12"	452 @ 12"	453 @ 12"			
BAR G IN 2 SLABS	56 - 401	56 - 401	56 - 401	56 - 401	56 - 401			
BAR H IN 3 WALLS	32 - 402	32 - 402	32 - 402	32 - 402	32 - 402			
BAR J IN EXT. CORNER	0	0	0	3-421B @ 9"	3-424B @ 10"			
BAR J IN INT. CORNER	0	0	4-420B @ 8½"	4-423B @ 9"	5-426B @ 8¾"			
T ₁	12"	13"	14"	15"	16"			
T ₂	13"	14"	15"	16"	17"			
T ₃	12"	13"	14"	15"	16"			
X	19'-0"	19'-2"	19'-4"	19'-6"	19'-8"			
Y	10'-1"	10'-3"	10'-5"	10'-7"	10'-9"			
YD³ CLASS AA CONCRETE/FT	2,373	2,554	2,737	2,921	3,108			
LB BAR REINF STEEL/FT	243.3	262.3	344.8	423.4	439.3			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	8.8	9.0	9.2	9.4	9.6			
LB BAR REINF STEEL	1228	1228	1227	1227	1227			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	9.1	9.3	9.5	9.7	10.0			
LB BAR REINF STEEL	1505	1507	1509	1512	1514			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	10.2	10.4	10.6	10.9	11.1			
LB BAR REINF STEEL	1591	1594	1596	1599	1602			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	12.5	12.8	13.1	13.4	13.7			
LB BAR REINF STEEL	1798	1802	1806	1811	1815			

DOUBLE 8'-0" X 9'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	579A @ 12"	476A @ 6"	713A @ 12"	568A @ 6"	605A @ 6"			
BAR B	443 @ 6"	539 @ 6"	614 @ 6"	706 @ 6"	707 @ 6"			
BAR C	739 @ 12"	740 @ 12"	569 @ 6"	640 @ 6"	641 @ 6"			
BAR E	455 @ 12"	546 @ 12"	547 @ 12"	458 @ 6"	459 @ 6"			
BAR F	455 @ 12"	456 @ 12"	457 @ 12"	458 @ 12"	458 @ 12"			
BAR G IN 2 SLABS	56 - 401	56 - 401	56 - 401	56 - 401	56 - 401			
BAR H IN 3 WALLS	38 - 402	38 - 402	38 - 402	38 - 402	38 - 402			
BAR J IN EXT. CORNER	0	0	0	3-421B @ 9"	3-425B @ 10"			
BAR J IN INT. CORNER	0	0	4-420 @ 8½"	4-423B @ 9"	5-426B @ 8¾"			
T ₁	12"	13"	14"	15"	16"			
T ₂	13"	14"	15"	16"	17"			
T ₃	12"	13"	14"	15"	16"			
X	19'-0"	19'-2"	19'-4"	19'-6"	19'-8"			
Y	11'-1"	11'-3"	11'-5"	11'-7"	11'-9"			
YD³ CLASS AA CONCRETE/FT	2,485	2,671	2,860	3,051	3,244			
LB BAR REINF STEEL/FT	254.2	281.7	359.2	443.0	502.1			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	9.1	9.3	9.5	9.7	9.9			
LB BAR REINF STEEL	1279	1279	1279	1279	1279			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	9.4	9.6	9.8	10.1	10.3			
LB BAR REINF STEEL	1558	1560	1563	1565	1567			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	10.5	10.7	11.0	11.2	11.5			
LB BAR REINF STEEL	1645	1648	1650	1653	1656			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	12.9	13.2	13.5	13.8	14.1			
LB BAR REINF STEEL	1854	1858	1862	1867	1871			

DOUBLE 8'-0" X 10'-0" BOX CULVERT								
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS								
DESIGN	1	2	3	4	5	6	7	8
BAR A	482A @ 6"	481A @ 6"	572A @ 6"	607A @ 6"	608A @ 6"			
BAR B	440 @ 6"	536 @ 6"	614 @ 6"	703 @ 6"	705 @ 6"			
BAR C	739 @ 12"	740 @ 12"	569 @ 6"	640 @ 6"	641 @ 6"			
BAR E	551 @ 12"	552 @ 12"	463 @ 6"	628 @ 12"	726 @ 12"			
BAR F	461 @ 12"	462 @ 12"	463 @ 12"	464 @ 12"	465 @ 12"			
BAR G IN 2 SLABS	56 - 401	56 - 401	56 - 401	56 - 401	56 - 401			
BAR H IN 3 WALLS	42 - 402	42 - 402	42 - 402	42 - 402	42 - 402			
BAR J IN EXT. CORNER	0	0	0	3-422B @ 9"	3-425B @ 10"			
BAR J IN INT. CORNER	0	2-417B @ 8"	4-420B @ 8½"	4-423B @ 9"	5-426B @ 8¾"			
T ₁	12"	13"	14"	15"	16"			
T ₂	13"	14"	15"	16"	17"			
T ₃	12"	13"	14"	15"	16"			
X	19'-0"	19'-2"	19'-4"	19'-6"	19'-8"			
Y	12'-1"	12'-3"	12'-5"	12'-7"	12'-9"			
YD³ CLASS AA CONCRETE/FT	2,596	2,789	2,984	3,181	3,380			
LB BAR REINF STEEL/FT	277.0	303.0	382.8	512.2	540.5			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	9.3	9.5	9.7	9.9	10.2			
LB BAR REINF STEEL	1305	1305	1305	1305	1305			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	9.6	9.9	10.1	10.3	10.6			
LB BAR REINF STEEL	1585	1587	1589	1592	1594			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	10.8	11.0	11.3	11.5	11.8			
LB BAR REINF STEEL	1672	1675	1678	1681	1684			
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL								
YD³ CLASS AA CONCRETE	13.2	13.6	13.9	14.2	14.5			
LB BAR REINF STEEL	1883	1887	1891	1896	1900			

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

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

NO SCALE SEPTEMBER 2017

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

(SUBMITTED) *[Signature]*
STATE DESIGN POLICY ENGINEER
(APPROVED) *[Signature]*
CHIEF ENGINEER

NUMBER
2402
SHEET 2-1 OF 3