

								STATE	PROJECT NUMBER		SHEET NO.	TOTAL SHEETS
DOUBLE 9'-0" X 7'-0" BOX CULVERT								GA.				
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS												
DESIGN	1	2	3	4	5	6	7	8				
BAR A	550A @ 12"	465A @ 6"	470A @ 6"	553A @ 6"	557A @ 6"							
BAR B	462 @ 6"	553 @ 6"	627 @ 6"	722 @ 6"	805 @ 6"							
BAR C	480 @ 6"	742 @ 12"	570 @ 6"	642 @ 6"	643 @ 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	64 - 401	64 - 401	64 - 401	64 - 401	64 - 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	3-429B @ 11¼"							
BAR J IN INT. CORNER	0	0	3-425B @ 10¼"	4-428B @ 10¾"	5-432B @ 8¾"							
T ₁	14"	15"	16"	17"	18"							
T ₂	15"	16"	17"	18"	19"							
T ₃	14"	15"	16"	17"	18"							
X	21'-4"	21'-6"	21'-8"	21'-10"	22'-0"							
Y	9'-5"	9'-7"	9'-9"	9'-11"	10'-1"							
YD³ CLASS AA CONCRETE/FT	2.792	2.983	3.176	3.371	3.568							
LB BAR REINF STEEL/FT	218.7	279.1	322.3	428.7	486.7							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	9.5	9.7	9.9	10.1	10.3							
LB BAR REINF STEEL	1320	1320	1319	1319	1318							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	9.9	10.1	10.3	10.5	10.7							
LB BAR REINF STEEL	1628	1630	1631	1633	1635							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	11.1	11.3	11.5	11.7	12.0							
LB BAR REINF STEEL	1722	1725	1727	1730	1732							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	13.6	13.9	14.2	14.4	14.7							
LB BAR REINF STEEL	1949	1953	1956	1960	1964							

DOUBLE 9'-0" X 8'-0" BOX CULVERT												
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS												
DESIGN	1	2	3	4	5	6	7	8				
BAR A	564A @ 12"	474A @ 6"	711A @ 12"	562A @ 6"	566A @ 6"							
BAR B	720 @ 12"	626 @ 6"	621 @ 6"	720 @ 6"	803 @ 6"							
BAR C	741 @ 12"	742 @ 12"	570 @ 6"	642 @ 6"	643 @ 6"							
BAR E	451 @ 12"	452 @ 12"	453 @ 12"	454 @ 12"	455 @ 12"							
BAR F	451 @ 12"	452 @ 12"	453 @ 12"	454 @ 12"	455 @ 12"							
BAR G IN 2 SLABS	64 - 401	64 - 401	64 - 401	64 - 401	64 - 401							
BAR H IN 3 WALLS	32 - 402	32 - 402	32 - 402	32 - 402	32 - 402							
BAR J IN EXT. CORNER	0	0	0	0	3-429B @ 11¼"							
BAR J IN INT. CORNER	0	0	4-425B @ 10¼"	4-428B @ 10¾"	5-432B @ 8½"							
T ₁	14"	15"	16"	17"	18"							
T ₂	15"	16"	17"	18"	19"							
T ₃	14"	15"	16"	17"	18"							
X	21'-4"	21'-6"	21'-8"	21'-10"	22'-0"							
Y	10'-5"	10'-7"	10'-9"	10'-11"	11'-1"							
YD³ CLASS AA CONCRETE/FT	2.916	3.113	3.312	3.513	3.716							
LB BAR REINF STEEL/FT	273.8	309.4	368.2	439.7	504.7							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	9.9	10.1	10.3	10.5	10.8							
LB BAR REINF STEEL	1348	1347	1347	1346	1346							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	10.3	10.5	10.7	11.0	11.2							
LB BAR REINF STEEL	1656	1658	1660	1661	1663							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	11.5	11.7	12.0	12.2	12.5							
LB BAR REINF STEEL	1751	1753	1756	1758	1760							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	14.1	14.4	14.7	15.0	15.3							
LB BAR REINF STEEL	1978	1982	1986	1989	1993							

DOUBLE 9'-0" X 9'-0" BOX CULVERT												
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS												
DESIGN	1	2	3	4	5	6	7	8				
BAR A	581A @ 12"	478A @ 6"	714A @ 12"	569A @ 6"	606A @ 6"							
BAR B	718 @ 12"	623 @ 6"	618 @ 6"	718 @ 6"	802 @ 6"							
BAR C	741 @ 12"	742 @ 12"	570 @ 6"	642 @ 6"	643 @ 6"							
BAR E	457 @ 12"	548 @ 12"	549 @ 12"	550 @ 12"	461 @ 6"							
BAR F	457 @ 12"	548 @ 12"	549 @ 12"	460 @ 12"	461 @ 12"							
BAR G IN 2 SLABS	64 - 401	64 - 401	64 - 401	64 - 401	64 - 401							
BAR H IN 3 WALLS	38 - 402	38 - 402	38 - 402	38 - 402	38 - 402							
BAR J IN EXT. CORNER	0	0	0	3-427B @ 10¾"	3-430B @ 11¼"							
BAR J IN INT. CORNER	0	0	4-425B @ 10¼"	4-428B @ 10¾"	5-432B @ 8½"							
T ₁	14"	15"	16"	17"	18"							
T ₂	15"	16"	17"	18"	19"							
T ₃	14"	15"	16"	17"	18"							
X	21'-4"	21'-6"	21'-8"	21'-10"	22'-0"							
Y	11'-5"	11'-7"	11'-9"	11'-11"	12'-1"							
YD³ CLASS AA CONCRETE/FT	3.039	3.242	3.448	3.655	3.864							
LB BAR REINF STEEL/FT	293.4	328.1	390.8	479.9	574.3							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	10.2	10.5	10.7	10.9	11.1							
LB BAR REINF STEEL	1399	1399	1398	1398	1397							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	10.6	10.9	11.1	11.3	11.6							
LB BAR REINF STEEL	1709	1711	1713	1714	1716							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	11.9	12.1	12.4	12.6	12.9							
LB BAR REINF STEEL	1805	1808	1810	1812	1815							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	14.6	14.9	15.2	15.5	15.8							
LB BAR REINF STEEL	2034	2038	2042	2046	2049							

DOUBLE 9'-0" X 10'-0" BOX CULVERT												
BARREL REINFORCEMENT QUANTITIES AND DIMENSIONS												
DESIGN	1	2	3	4	5	6	7	8				
BAR A	583A @ 12"	483A @ 6"	574A @ 6"	577A @ 6"	609A @ 6"							
BAR B	716 @ 12"	621 @ 6"	621 @ 6"	716 @ 6"	801 @ 6"							
BAR C	741 @ 12"	742 @ 12"	570 @ 6"	642 @ 6"	643 @ 6"							
BAR E	553 @ 12"	554 @ 12"	465 @ 6"	466 @ 6"	467 @ 6"							
BAR F	463 @ 12"	464 @ 12"	465 @ 12"	466 @ 12"	467 @ 12"							
BAR G IN 2 SLABS	64 - 401	64 - 401	64 - 401	64 - 401	64 - 401							
BAR H IN 3 WALLS	42 - 402	42 - 402	42 - 402	42 - 402	42 - 402							
BAR J IN EXT. CORNER	0	0	0	3-427B @ 10¾"	3-430B @ 11¼"							
BAR J IN INT. CORNER	0	0	4-425B @ 10¼"	4-428B @ 10¾"	5-432B @ 8½"							
T ₁	14"	15"	16"	17"	18"							
T ₂	15"	16"	17"	18"	19"							
T ₃	14"	15"	16"	17"	18"							
X	21'-4"	21'-6"	21'-8"	21'-10"	22'-0"							
Y	12'-5"	12'-7"	12'-9"	12'-11"	13'-1"							
YD³ CLASS AA CONCRETE/FT	3.163	3.372	3.583	3.797	4.012							
LB BAR REINF STEEL/FT	309.1	337.9	415.5	499.0	589.9							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 90° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	10.5	10.7	10.9	11.2	11.4							
LB BAR REINF STEEL	1425	1425	1424	1424	1423							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 75° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	10.9	11.1	11.4	11.6	11.9							
LB BAR REINF STEEL	1736	1738	1740	1741	1743							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 60° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	12.1	12.4	12.7	13.0	13.2							
LB BAR REINF STEEL	1833	1835	1837	1840	1842							
PARAPET, BARREL END, AND TOEWALL QUANTITIES - 45° SKEW - TOTAL												
YD³ CLASS AA CONCRETE	14.9	15.3	15.6	15.9	16.3							
LB BAR REINF STEEL	2063	2067	2071	2075	2078							

		DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA									
		REVISION	STANDARD REINFORCED CONCRETE DOUBLE BOX CULVERT 9'X7', 9'X8', 9'X9' AND 9'X10' NO SCALE SEPTEMBER 2017									
		BY	DES. YSK DRW. FGS TRA. CHK. JWB	(SUBMITTED) <i>B. A. H.</i> STATE DESIGN POLICY ENGINEER (APPROVED) <i>Margaret B. Puelo</i> CHIEF ENGINEER	NUMBER 2402 SHEET 2-K OF							