TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO. ---

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	2014	NH-29(86)	

CONST. NO. 65001-3268-14

TABLE 2 - DESIGN PARAMETERS FOR ANCHOR WALL

STATION LIMITS	ELEVATION INTERVAL	MATERIAL	FRICTION ANGLE	COHESION	UNIT WEIGHT
WALLS 3 AND 3A (continued)					
326+25 TO SR 29 327+80/HANGING ROCK ROAD 57+50	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	40°	0 ksf	0.100 kcf
	TOP OF GROUND TO ELEV. 896	SOIL	25°	0.200 ksf	0.130 kcf
	ELEV. 896 TO BASE OF WALL	SHALE	25°	125 ksf	0.140 kcf
SR 29 327+80/HANGING ROCK ROAD 57+50 TO HANGING ROCK ROAD 58+75	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	40°	0 ksf	0.100 kcf
	TOP OF GROUND TO ELEV. 884	SOIL	25°	0.200 ksf	0.130 kcf
	ELEV. 884 TO BASE OF WALL	SANDSTONE	40°	350 ksf	0.160 kcf
HANGING ROCK ROAD 58+75 TO HANGING ROCK ROAD 60+00	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	40°	0 ksf	0.100 kcf
	TOP OF GROUND TO BASE OF WALL	SOIL	25°	0.200 ksf	0.130 kcf
WALLS 4 AND 4A					
SR 328 80+48 TO SR 29 346+50	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	40°	0 ksf	0.100 kcf
	TOP OF GROUND TO BASE OF WALL	SHALE	25°	125 ksf	0.140 kcf
346+50 TO 348+00	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	40°	0 ksf	0.100 kcf
	TOP OF GROUND TO BASE OF WALL	SILTSTONE	35°	225 ksf	0.150 kcf

TABLE 3 - RESISTANCE PARAMETERS

STATION LIMITS	ELEVATION INTERVAL	MATERIAL	NOMINAL ANCHOR BOND STRESS, τ_n	UNCONFINED COMPRESSIVE STRENGTH	UNIT WEIGHT
WALLS 3 AND 3A (continued)					
326+25 TO SR 29 327+80/HANGING ROCK ROAD 57+50	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	NOT APPLICABLE	0 ksf	0.100 kcf
	TOP OF GROUND TO ELEV. 896	SOIL	0.7 ksf	0.400 ksf	0.130 kcf
	ELEV. 896 TO BASE OF WALL	SHALE	12 ksf	250 ksf	0.140 kcf
SR 29 327+80/HANGING ROCK ROAD 57+50 TO HANGING ROCK ROAD 58+75	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	NOT APPLICABLE	0 ksf	0.100 kcf
	TOP OF GROUND TO ELEV. 884	SOIL	0.7 ksf	0.400 ksf	0.130 kcf
	ELEV. 884 TO BASE OF WALL	SANDSTONE	35 ksf	700 ksf	0.160 kcf
HANGING ROCK ROAD 58+75 TO HANGING ROCK ROAD 60+00	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	NOT APPLICABLE	0 ksf	0.100 kcf
	TOP OF GROUND TO BASE OF WALL	SOIL	0.7 ksf	0.400 ksf	0.130 kcf
WALLS 4 AND 4A					
SR 328 80+48 TO SR 29 346+50	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	NOT APPLICABLE	0 ksf	0.100 kcf
	TOP OF GROUND TO BASE OF WALL	SHALE	12 ksf	250 ksf	0.140 kcf
346+50 TO 348+00	TOP OF WALL TO TOP OF GROUND	ASTM D448 NO.57 STONE	NOT APPLICABLE	0 ksf	0.100 kcf
	TOP OF GROUND TO BASE OF WALL	SILTSTONE	20 ksf	450 ksf	0.150 kcf

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

RETAINING WALL
DESIGN AND RESISTANCE
PARAMETERS

RETAINING WALLS
NOS. 3, 3A, 4, AND 4A
STATE ROUTE 29
MORGAN COUNTY, TENNESSEE
2014

U-58-192