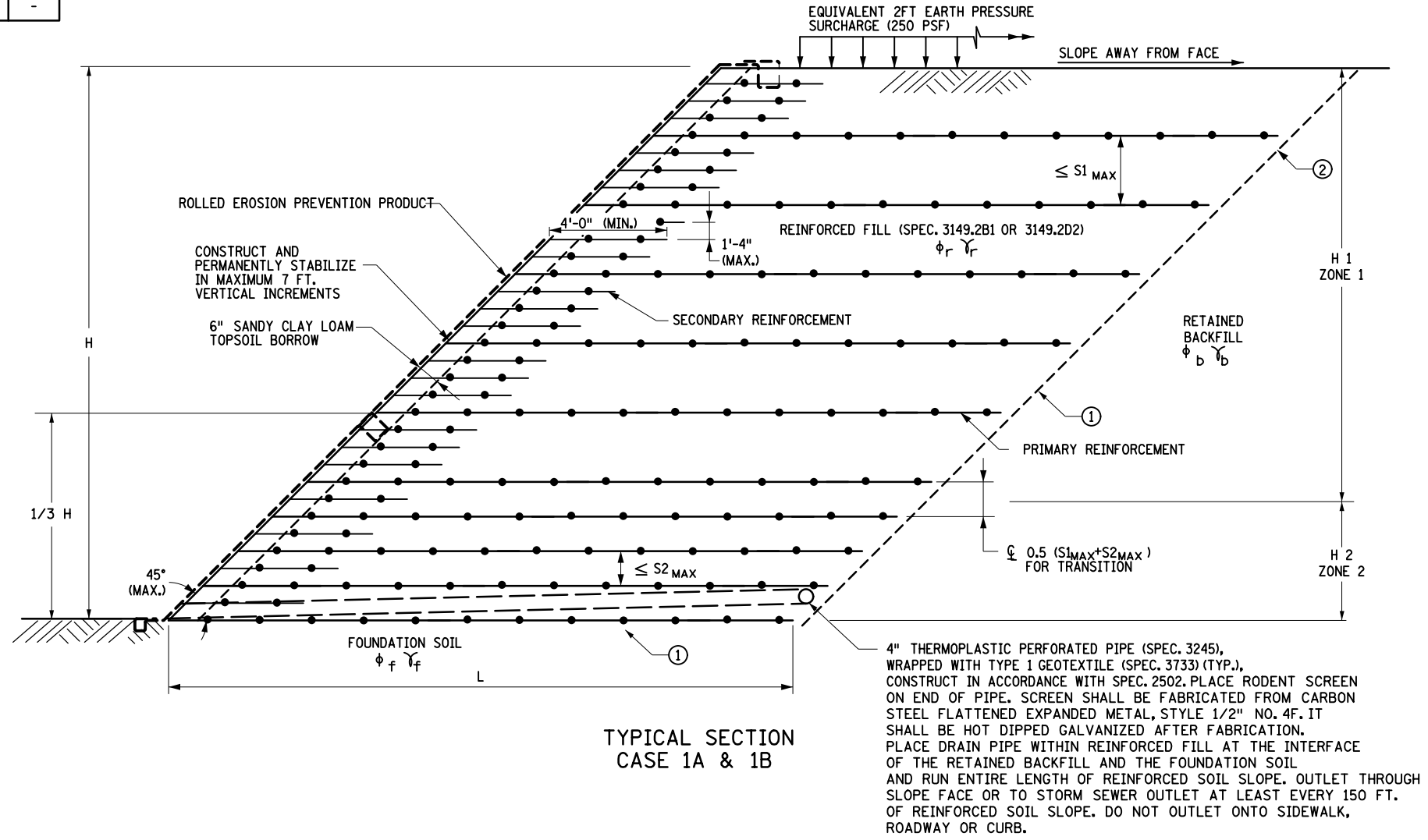


REINFORCED SOIL SLOPES									
CASE 1A - 45° MAXIMUM SLOPE ANGLE, GRANULAR MATERIAL (SPEC. 3149.2B1) REINFORCED SOIL FILL									
MAX. SLOPE ANGLE (DEGREES)	REINFORCED SOIL FILL FRICTION ANGLE (DEGREES)	MINIMUM PRIMARY REINFORCEMENT LENGTH, L (FT)	PRIMARY SOIL REINFORCEMENT ③		MAXIMUM SLOPE HEIGHT H (FT)	ZONE 1 ③		ZONE 2 ③	
			RSS CLASS	LONG TERM STRENGTH (T _q) (PLF)		H1 (FT)	S1 _{MAX} (IN)	H2 (FT)	S2 _{MAX} (IN)
45	30	1.1 H	700	700	26.2	11.5	40	14.7	20
					26.2	26.2	24	-	-
			1050	1050	26.2	21.3	40	4.9	20
					26.2	17.7	48	8.5	24
1400	1400	26.2	26.2	48	-	-			

CASE 1B - 45° MAXIMUM SLOPE ANGLE, STRUCTURAL BACKFILL (SPEC. 3149.2D2) REINFORCED SOIL FILL									
MAX. SLOPE ANGLE (DEGREES)	REINFORCED SOIL FILL FRICTION ANGLE (DEGREES)	MINIMUM PRIMARY REINFORCEMENT LENGTH, L (FT)	PRIMARY SOIL REINFORCEMENT ③		MAXIMUM SLOPE HEIGHT H (FT)	ZONE 1 ③		ZONE 2 ③	
			RSS CLASS	LONG TERM STRENGTH (T _q) (PLF)		H1 (FT)	S1 _{MAX} (IN)	H2 (FT)	S2 _{MAX} (IN)
45	34	0.8 H	700	700	26.2	26.2	40	-	-
					26.2	17.7	48	8.5	-
			1050	1050	26.2	26.2	48	-	-
					26.2	26.2	48	-	-

NOTES:
 SECONDARY REINFORCEMENT SHALL BE ON THE APPROVED SECONDARY REINFORCEMENT LIST. ③



- NOTES:
- SEE STANDARD PLAN 5-297.646 FOR STORMWATER MANAGEMENT AND VEGETATION ESTABLISHMENT NOTES.
 - ① OBSERVE EXCAVATION SLOPES FOR ACTIVE SEEPAGE AND PLACE ADDITIONAL AND/OR LARGER DRAINS WHERE SEEPAGE OCCURS. DRAINS SHALL OUTLET SLOPE EVERY 150 FT.
 - ② PAY LIMITS OF STRUCTURAL EXCAVATION EQUAL TO ANGLE OF SLOPE FACE 45° MAXIMUM. ACTUAL EXCAVATION SLOPE IS DETERMINED BY OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS AND IN-SITU SOILS; EXCAVATION BEYOND "LIMITS OF STRUCTURAL EXCAVATION" SHALL BE AT CONTRACTOR'S EXPENSE.
 - ③ PRIMARY SOIL REINFORCEMENT RSS CLASS 700,1050,1400 AND SECONDARY SOIL REINFORCEMENT ARE FOUND ON MnDOT'S APPROVED/QUALIFIED PRODUCTS LIST CURRENTLY AT <https://www.dot.state.mn.us> ZONE 1 AND ZONE 2 ONLY APPLY TO PRIMARY REINFORCEMENT.