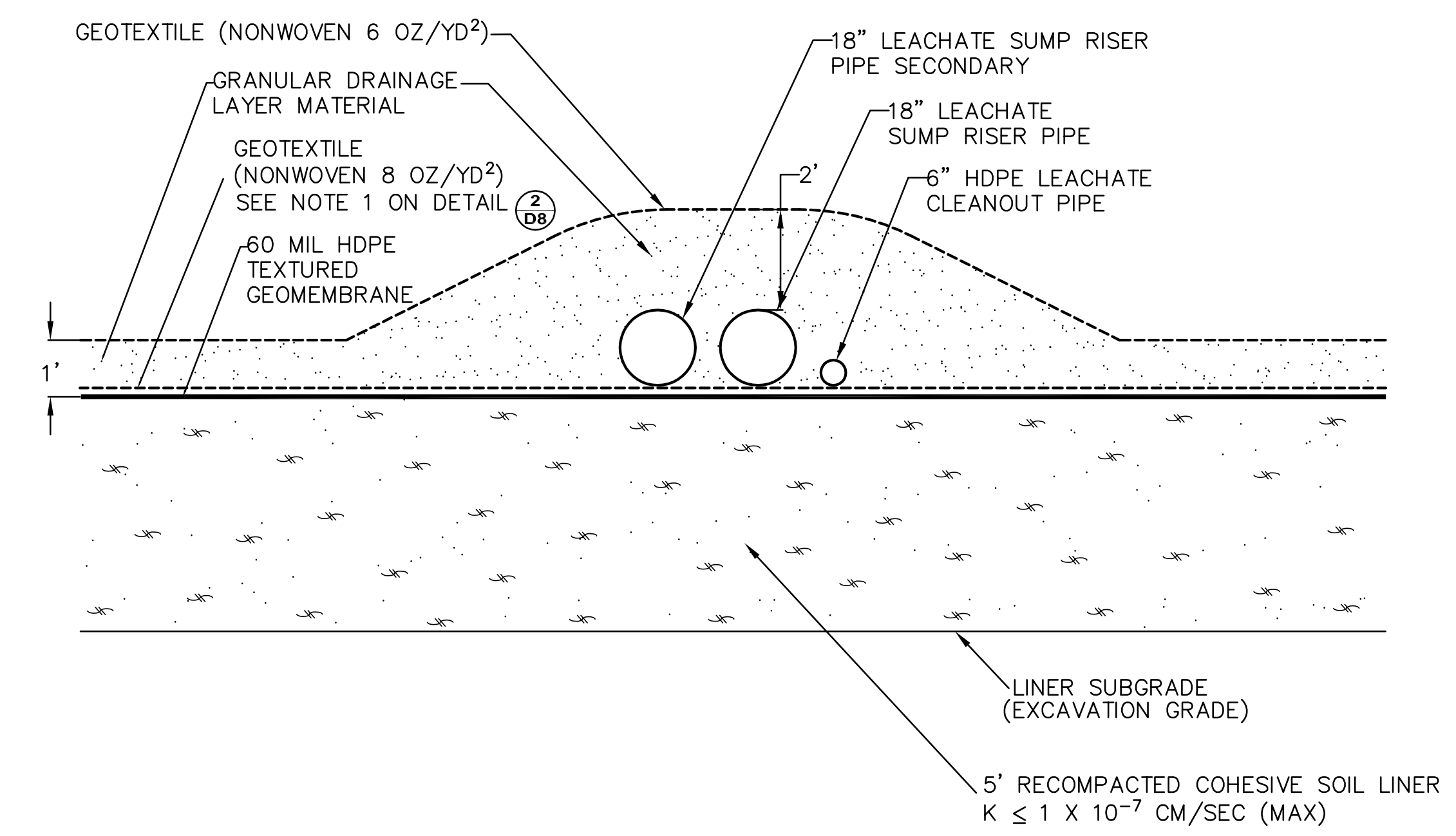


1
D9 TYPICAL LEACHATE SIDESLOPE RISER PROFILE
NOT TO SCALE

NOTES:

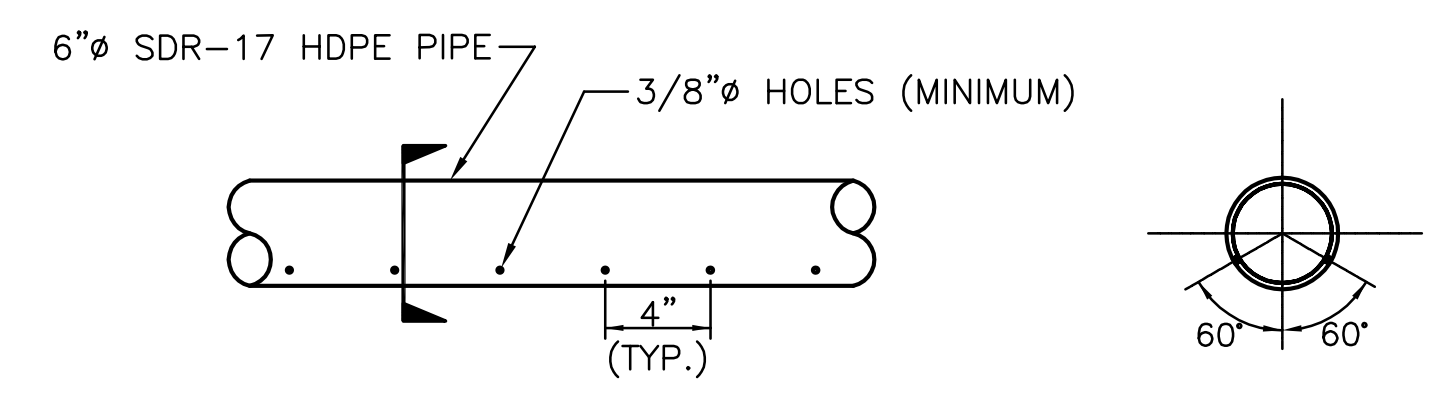
1. PIPING PROJECTING THROUGH THE FINAL COVER GEOMEMBRANE SHALL BE FITTED WITH A BOOT OR SIMILAR.
2. DIMENSIONS AND DIAMETERS ARE TYPICAL, AND MAY VARY DURING CONSTRUCTION.
3. ALTERNATE LEACHATE COLLECTION STRUCTURES OR CLEANOUT RISERS MAY BE PROVIDED IN ACCORDANCE WITH IEPA PERMIT APPROVALS.



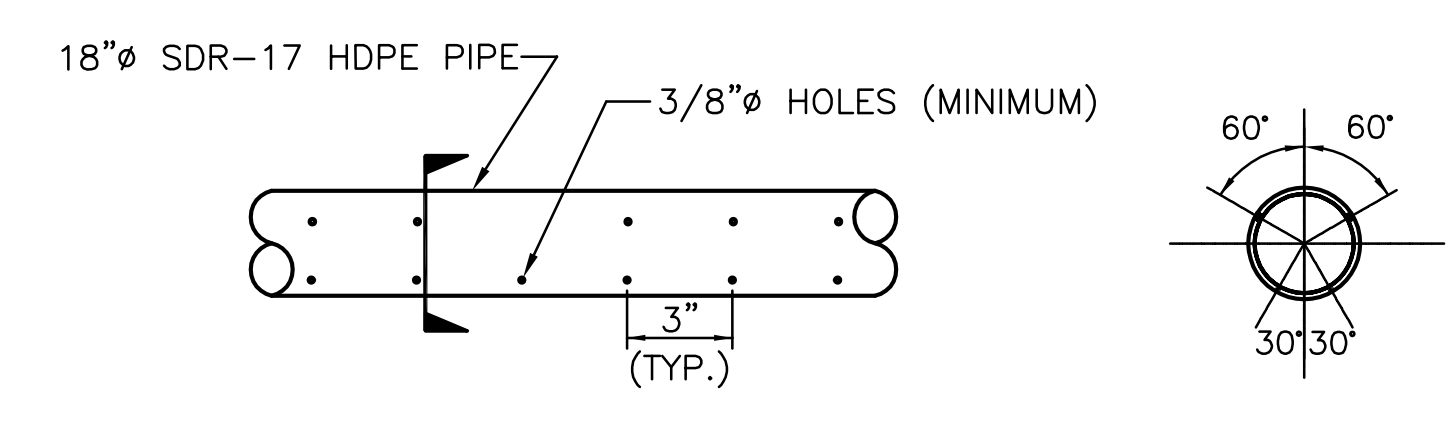
2
D9 TYPICAL LEACHATE SIDESLOPE RISER CLEANOUT SECTION
NOT TO SCALE

NOTES:

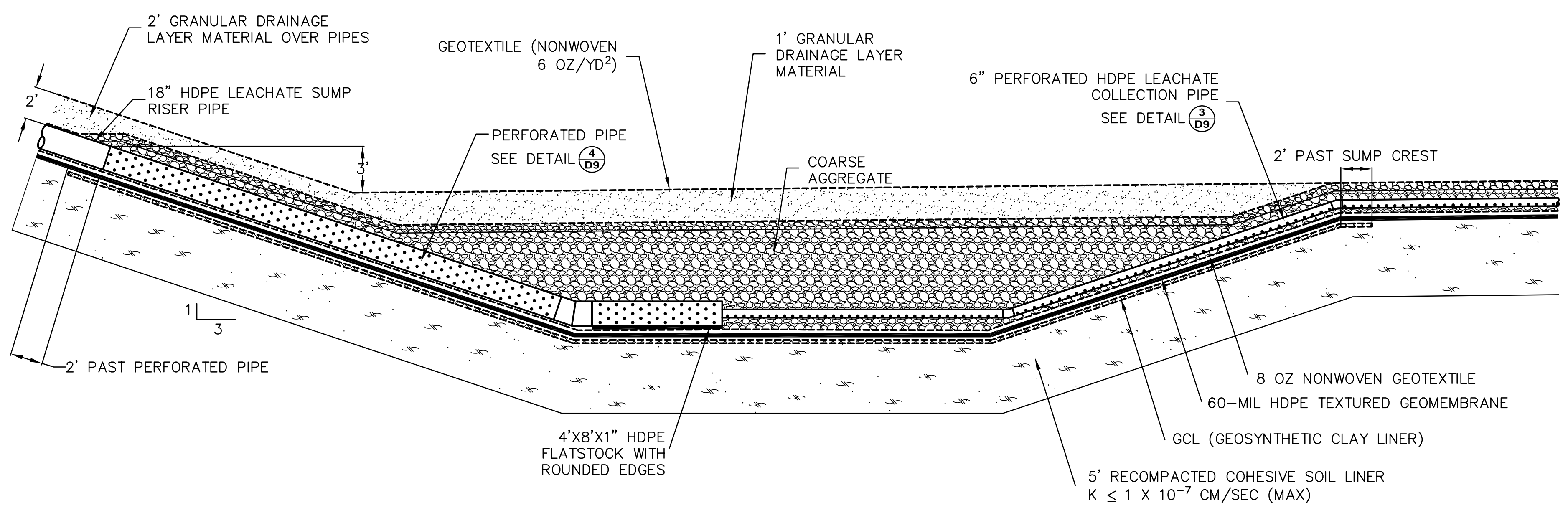
1. THE MINIMUM HYDRAULIC CONDUCTIVITY SPECIFIED FOR THE DRAINAGE MATERIAL LAYER IS $k \ge 1.0 \times 10^{-3}$ CM/SEC (MIN.). THIS HYDRAULIC CONDUCTIVITY IS SHOWN TO MEET PERFORMANCE REQUIREMENTS, BASED ON LEACHATE CALCULATIONS WITHIN THE APPLICATION.
2. ALTERNATE LEACHATE COLLECTION RISERS MAY BE PROVIDED IN ACCORDANCE WITH IEPA PERMIT CONDITIONS.



3
D9 TYPICAL LEACHATE COLLECTION PIPE DETAIL
NOT TO SCALE



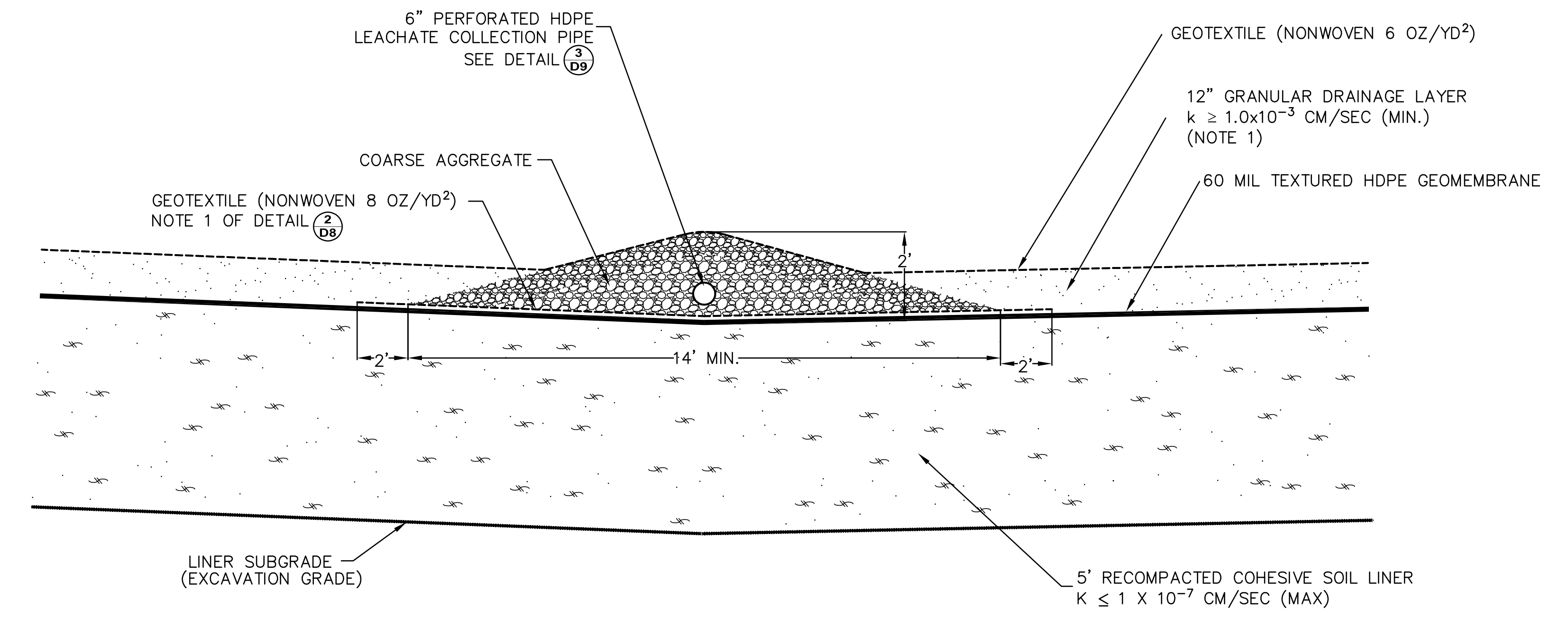
4
D9 TYPICAL PERFORATED SIDESLOPE RISER PIPE DETAIL
NOT TO SCALE



5
D9 TYPICAL LEACHATE SUMP COLLECTION STRUCTURE
NOT TO SCALE

NOTES:

1. DIMENSIONS AND DIAMETERS ARE TYPICAL, AND MAY VARY DURING CONSTRUCTION.
2. ALTERNATE LEACHATE COLLECTION SUMP STRUCTURES MAY BE PROVIDED IN ACCORDANCE WITH IEPA PERMIT CONDITIONS.
3. GRANULAR DRAINAGE LAYER MATERIAL AND COARSE AGGREGATE SHALL MEET FILTER CALCULATION CRITERIA OR BE SEPARATED BY AN INTERMEDIATE AGGREGATE TO MEET FILTER CRITERIA.



6
D9 TYPICAL LEACHATE COLLECTION TRENCH SECTION
NOT TO SCALE

NOTES:

1. THE MINIMUM HYDRAULIC CONDUCTIVITY SPECIFIED FOR THE DRAINAGE MATERIAL LAYER IS $k \ge 1.0 \times 10^{-3}$ CM/SEC (MIN.). THIS HYDRAULIC CONDUCTIVITY IS SHOWN TO MEET PERFORMANCE REQUIREMENTS, BASED ON LEACHATE CALCULATIONS WITHIN THE APPLICATION.
2. GRANULAR DRAINAGE LAYER MATERIAL AND COARSE AGGREGATE SHALL MEET FILTER CALCULATION CRITERIA OR BE SEPARATED BY AN INTERMEDIATE AGGREGATE TO MEET FILTER CRITERIA.

REV. NO.	DATE	DESCRIPTION



**VEOLIA E.S. ZION LANDFILL-SITE 2 EAST EXPANSION
CITY OF ZION, ILLINOIS**

LINER / LEACHATE COLLECTION SYSTEM DETAILS - 2

PROJ. NO.:	122150	DATE:	FEBRUARY 2010
DESIGNED BY:	RDS	DRAWING NO.:	D9
DRAWN BY:	BWM		
CHECKED BY:	RDS		
APPROVED BY:	DAM		
			9 OF 22 SHEETS