LaRose Surveys, P.C.
Performance Based Calculations

Client: Sabourin
Site Address: Spear Street, Charlotte

Project#: 18036
Date: July 25, 2018

	SYSTEM
	replacement
Simplified Desktop Mounding Analysis	
Wastewater flow (gpd)	420
Slope (%)	9.3%
Soil texture	sil
Linear loading rate factor (f)	6.7
Depth to seasonal high water table (in)	18
Depth to seasonal high water table (ft)	1.5
Max. soil thickness available for groundwater mounding (ft) (SHWT-0.5')	1.0
Linear loading rate (LLR)	6.7
Calculated minimum length of seepage bed (ft)	62.7
Calculated maximum width of seepage bed (ft)	6.7
Is calculated length to width ratio = or > 3:1?	Yes
Required sand thickness beneath seepage bed (ft)	2.5'
Proposed System Parameters	
Length of seepage bed (ft)	65
Width of seepage bed (ft)	6.5
Total seepage area (ft)	422.5
Linear loading rate factor (f)	6.7
Calculated induced groundwater mound thickness (ft)	0.96
Calculated linear loading rate (LLR)	6.46
Calculated depth to seasonal high groundwater & induced mound (ft)	0.54
Minimum sand thickness required beneath seepage bed (ft)	2.46
Confirm Design Parameters Comply with Simplified Mounding Analysis	
Proposed LLR </= Simplified LLR	Yes
Proposed seepage bed length >/= Simplified minimum bed length	Yes
Proposed seepage bed width </= Simplified maximum bed width	Yes
Calculated length to width ratio =/> 3:1	Yes
Depth to proposed induced groundwater mound >/= 0.5'	Yes
Thickness of "dry" soil from induced groundwater mound & seepage bed >/= 3'	Yes