

Scenario 1

Table 4-5: Soil Features - Risk Ratings for OWM Checklist

Site Address: Scenario 1
Owner and Applicant: Jo Bloggs
Council OWMS Reference: OWMS 2025-001

Soil Feature	Data/ Observation	Risk Rating	Mitigation Measures	Notes
Depth to bedrock or hardpan (m)	Boreholes dug to >1.5m on Site (BH1-BH3).	Minor		
Depth to high episodic/ seasonal water table (as evidenced by mottling) (m)	No mottling or standing groundwater encountered in boreholes to 1.5m. Moist soil was encountered in BH3 at 0.8m. The watertable is expected to be similar to the depth of water in the dam, which is located in a low-lying area on the Site at ~1.6m AHD. This would be >1.4m below the ground surface in the majority of the available EAA.	Minor to mod.		
Soil Category	Sand (Category 1).	Mod. to major		
Coarse fragments (%)	<2% coarse fragments in topsoil or subsoil.	Minor		
Bulk density (g/cm ³)	Assumed to be 1.8 based on soil category.	Minor		
pH	BH1-BH2: Topsoil: 5.95-6.11 Subsoil: 4.75-5.7 Slightly to very strongly acidic. BH3: Topsoil: 4.37 Subsoil: 4.46-4.71 Very strongly to extremely acidic.	Minor to major		
Electrical conductivity (dS/m)	Topsoil: 0.92 - 1.47 Subsoil: 0.51 -0.88 Non- saline.	Minor		
Sodicity (exchangeable sodium percentage)	3.8% Based on soil chemical analyses undertaken for a soil sample from nearby site.	Major		
Cation exchange capacity (cmol ⁺ /kg) (0-40cm)	0.9 Based on soil chemical analyses undertaken for a soil sample from nearby site.	Major		
Phosphorus sorption (kg/ha)	44 Based on soil chemical analyses undertaken for a soil sample from nearby site.	Major		
Modified Emerson Aggregate Test	Not applicable due to the lack of structure in sand soils.	Minor		

