

11/05/2021

Geotechnical Memo – Soil Parameters for Retaining Walls
52 Kaurilands Rd, Titirangi, Auckland

Geotechnical site investigation was undertaken in March 2021. As requested by the client, this memo presents soil parameters for retaining wall design for the feasibility study of the subdivision. A full geotechnical report will be provided when cut/fill depth and retaining walls are defined. Please note that in some cases, retaining wall design may be governed by stability analysis (e.g. for steep slope or significant fill). Hence, final design of retaining wall for the building consent is subject to confirmation of the stability analyses.

A permanent retaining wall is required for any excavation or filling deeper than 0.3m unless a proper safe batter is constructed.

Vehicle loading, building surcharge, boundary/neighbouring site conditions and sloping ground (both in front and at back of a retaining wall) should be considered in the design where applicable.

Table 1: Retaining wall design parameters

Soil Layer	Existing Ground
Parameters	
Unit weight, γ (kN/m ³)	18
Friction angle	27°
Unfactored undrained shear strength, S_u (kPa)	40

Yours Faithfully,

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