



Division of Mines and Mineral Resources — Report 1991/37

Inspection of a hotel and winery site at Rosevears

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The site of a proposed hotel and winery at Rosevears was examined to assess stability conditions.

The land comprises a narrow flattish piece of land fronting on to the West Tamar Highway, a steep portion just to the east, and a gently undulating area between the foot of this steeper slope and Rosevears Drive which bounds the property on the eastern side. The majority of the land is made up of gently sloping land west of Rosevears Drive. Basalt boulders and soil derived from the weathering of basalt underlie most of the property but it is expected that clay and sandy clay of Tertiary age will underlie these at depth.

The steep land is in class 4 on the landslide zone map of the Tamar Valley (fig. 1) while the remainder is in class 3. Class 4 land consists of areas of old landslides and adjacent areas which appear similar geologically and topographically, while class 3 land consists of land underlain by unconsolidated material.

The general area has been subject to widespread landslide movements in the past. Some recent movements are known in nearby areas affecting the main highway near Bradys Lookout, road cuttings and steeper slopes along the foreshore. No recent movements are known on the property. Development involving changes in drainage and associated

excavations could alter this situation or a particularly wet period could result in landslides developing naturally.

Before development proceeds on the land some subsurface investigations are recommended. The surface inspection suggests that the most favourable area for development is a subdued ridge feature near the boundary with Rebecca Vineyard and some 50 to 75 metres from the foot of the steep slope. Several test pits (three to five to about 3–4 m depth) would allow the nature of the underlying material and groundwater conditions to be examined. If no problems are indicated, the information from these pits could be used in foundation design.

Because of nearby steep slopes and previous instability, more extensive investigations should be undertaken on the favoured site for development on top of the steep slope near the West Tamar Highway. Initially test pits are recommended as above but it may be advisable to have information and samples from deeper levels (7–10 m) depending on what is found in the test pits. Strength tests (from material in the test pits and/or deeper holes) would be used to undertake stability analyses on the site.

[25 June 1991]

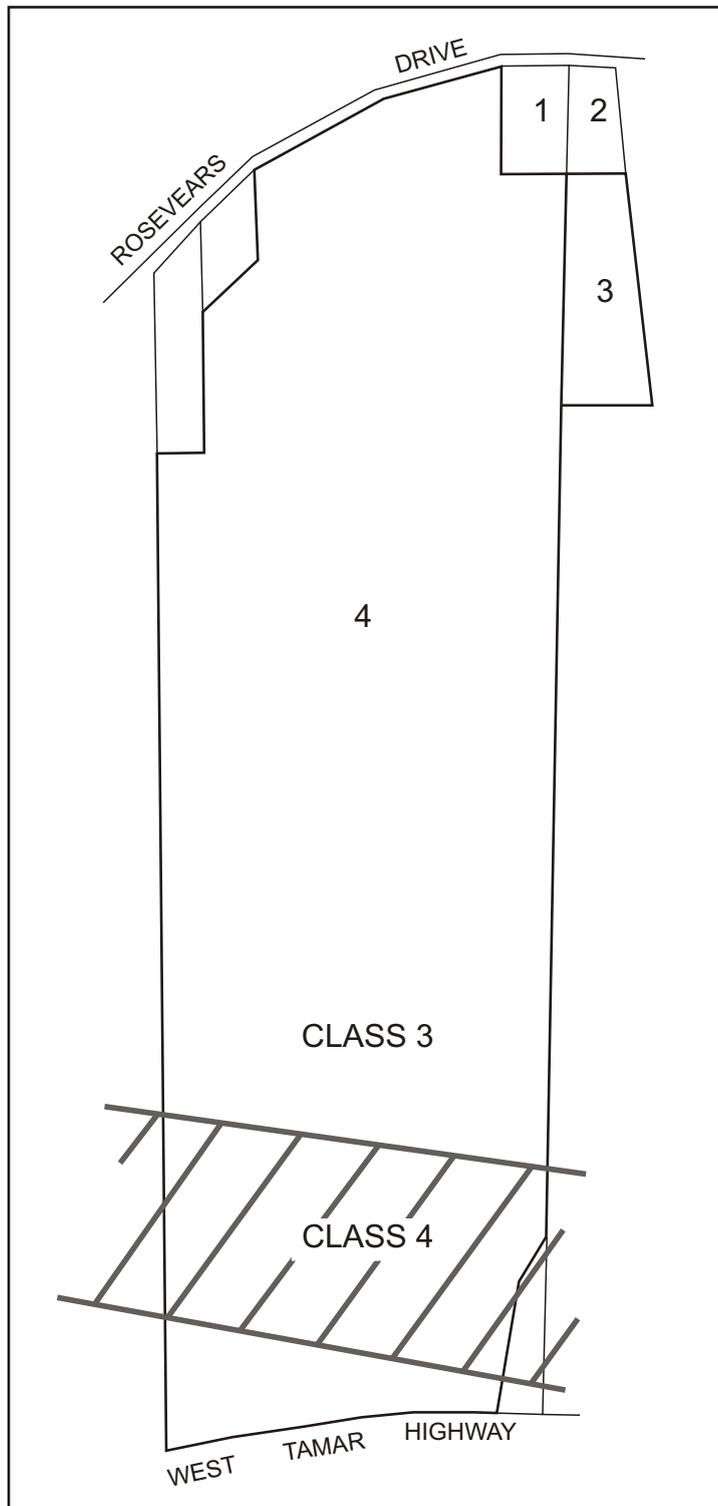


Figure 1