

Examination of block of land, Windermere.

W.L. Matthews

Mr R.J. Montague of Launceston owns a block of land covering about $\frac{1}{4}$ acre at Windermere on the East Tamar. He has intentions of building a house on the land in the near future and requested advice on the stability of the area before final arrangements for the building are made. The block is situated about $\frac{1}{4}$ mile west of the Windermere jetty on the north side of the road. It is about 80 ft wide and about 400 ft deep. The block is situated in an area where only the road separates the subdivision from the shore line.

RELIEF AND GEOLOGY

There are three relief features on the block, each of approximately the same area. The front third is flat, the middle third is an area of land sloping at about 8-10° and the back third is another almost flat piece of land. The sloping land is slightly hummocky.

The block is underlain by basalt soil with occasional basalt boulders. A low ridge with large basalt boulders occurs about 100 yd north of the block and these have either weathered from underlying *in situ* basalt or have migrated from basalt outcrops at higher elevations on the slopes. Along the shore in front of the block, there are alternations of Tertiary clay and probable *in situ* basalt.

DISCUSSION OF STABILITY

The slightly hummocky nature of portion of the block could be due to the effects of old landslips that have since stabilised or it could be caused by normal weathering and erosion of the material underlying the block. Any future landslip that did develop in the area would almost certainly occur on the sloping ground so that either of the two flat areas would be the most suitable area to build a house. Regulations do not permit building on the front flat area. It is suggested that if building proceeds, then the house should be built as close as practicable to the northern boundary of the block.

As an aid to the maintenance of the stability now prevailing, particular attention should be given to drainage. Although no seepages were seen on the block at the time of the examination, any that develop during wet periods should be drained, so that water does not accumulate in the material underlying the block. Water should not be allowed to accumulate on the flat areas and drains should be installed to conduct storm waters away. This applies particularly to the northern flat area. Discharge of storm water or any other water from drains on to the slope should be avoided. This water should be conducted at least to the lower flat area.

CONCLUSIONS

Any landslips that might have occurred in the past have stabilised. If the house is placed on the northern part of the block and particular attention is given to drainage, then it should be unaffected by landslips.

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