

## Examination of a building site at Camms Road, Kayena, West Tamar.

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The area [DQ926379] was examined on 13 March 1974 at the request of A.H. Stabler. It is shown in the Tamar Valley Landslip Zone Map as Class IV land, requiring special investigation and design (fig. 1).

The area lies at the foot of a basalt excarpment, about 30 m above sea level, and the detailed features of the land surface are mainly due to deposits derived from this basalt.

Immediately below the cliff is a steep, timbered, talus slope which is unsuitable for development. At the foot of this slope a plateau of basalt gravel, 40 m wide extends across the property. The housing development is planned for this plateau area, which lies about 18 m above sea level.

The land between Mr. Stabler's house and Camms Road consists of a series of more or less steep slopes of large basalt blocks (doubtfully *in situ*) and gravel.

Below the road, at the sea shore, white plastic clay is exposed; this is known to underlie the whole area and is a landslip hazard.

The question to be resolved is how stable is the basalt and basalt gravel overlying the clay? The answer will depend on the thickness and consolidation of the basalt gravel, and this can only be determined by a specialised investigation. At least one bore hole drilled by auger, percussion or diamond methods to a depth of at least 20 m is required to establish the thickness of the basalt gravel and the depth to the clay. A slide or rotational failure in which the gravel would be carried passively on clay is a possible hazard, and the purpose of the bore hole would be to examine this possibility.

[27 March 1974]

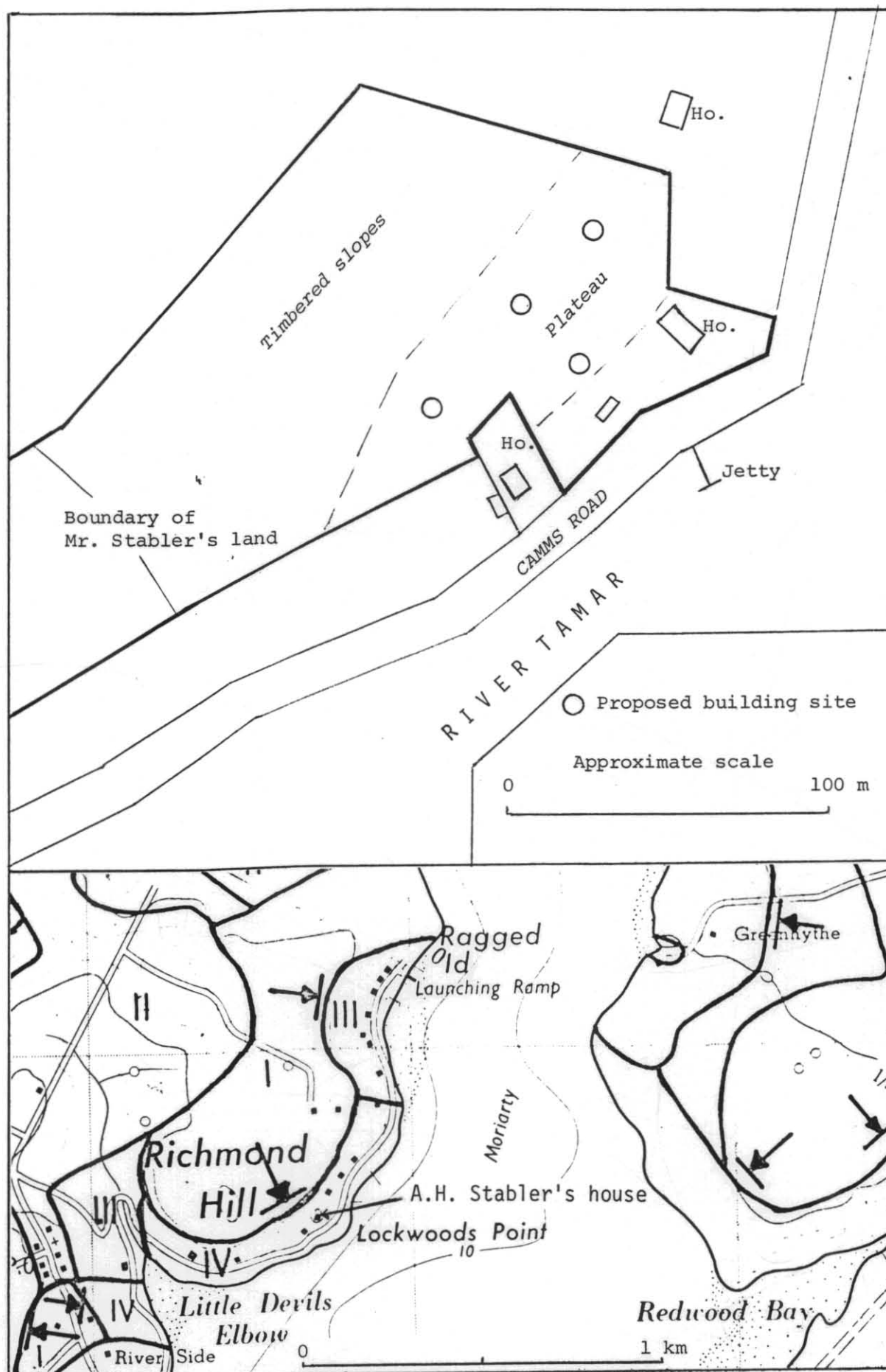


Figure 1. A.H. Stabler's property, Kayena.

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