

Monitoring of Ambrose's landslide at Rokeby: 1987 - 1991

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INTRODUCTION

A survey was carried out and a plan produced of a landslide affecting Mrs Ambrose's house at 39 Droughty Point Road in the Hobart suburb of Rokeby. Direction lines for boreholes were set out from the bottom of the garden near the foreshore, to hit targetted points at the rear of the house (see Mineral Resources Tasmania plan S.121, 1986).

In 1987, a line, consisting of two end control stations and two intermediate stations opposite the front corners of the Mrs Ambrose's house, was set out along Droughty Point Road. Surveys were then carried out periodically to check the alignment of the two intermediate stations and the measurements from these stations to the house. The northern station on the house was at the northwest corner, and the southern station was near the house steps.

SURVEY RESULTS

The results of movement of the two intermediate stations were as follows:-

- The northern intermediate station, by the entrance gate, moved approximately 10 mm east during the survey period from November 1987 to August 1991.
- The southern intermediate station moved approximately 12 mm east during the same period.

Levelling was also carried out during the period from 1987 to 1991. This showed that there was a variation in height of approximately 8 mm to 10 mm on the intermediate stations.

As the measurements to the house remained constant, this means the house also moved about 10 mm to 12mm in an easterly direction .

With all landslip monitoring studies the end pegs are always assumed to be in stable ground and the results are therefore relative to this assumption.

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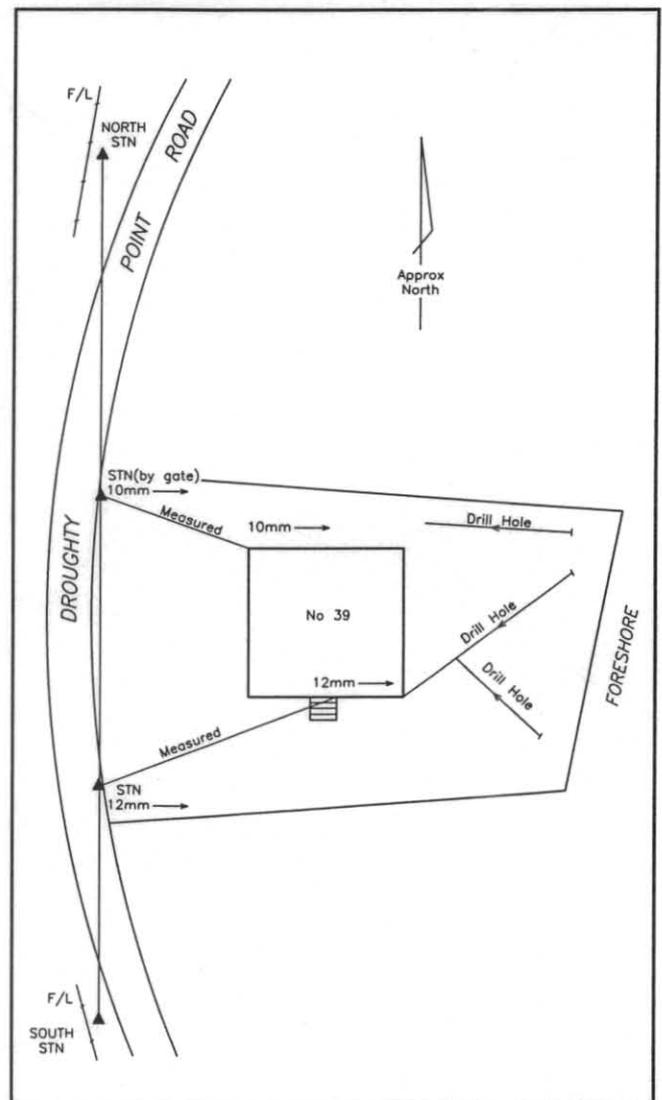


Figure 1

5 cm