

1976/17. Damage to a house at Dilston, East Tamar.

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Severe cracking has occurred in a house at Dilston [EQ055244] belonging to Mr J.S. Roxburgh. The house is situated at the back of an old landslip, with the eastern half of the house situated on the crown of the slip and the western half resting on piers standing on the steep main scarp of the slip. A flat area of internal drainage occurs at the base of the main scarp while the ground 15 m west of the house is heaved into a pronounced rise (fig. 1). It is not evident how far the toe of the slip extends towards the river, but it is likely that mudflows have passed beyond the lower road.

Severe cracking is concentrated in the eastern extension of the house, but is also present in the chimney area and where the veranda joins the original dwelling. A septic tank is located at the head of the slip, where the original slip plane would be expected to intersect the surface.

There is no present indication that the whole slip has been reactivated, as the concrete retaining walls above and below the lower road would show some disturbance if this had occurred. The house damage is most likely due to a minor failure occurring in the main scarp of the slip. The slip surface of this minor failure intersects the ground surface at a minor scarp which extends northwards from the house extensions.

RECOMMENDATIONS

The occurrence of such a scarp failure is serious for the stability of the house and immediate measures are needed to maximise stability before winter. It is recommended that:

- (1) all drains be tested for breaks and, where necessary, replaced by surface drains which may be easily inspected; and
- (2) storm water should be directed away from the head area of the slip. It may be possible to direct this water into Jetty Road where a sealed gutter could be constructed to take the water to the river; and
- (3) vegetation should not be cleared; and
- (4) Old Georgetown Road should be maintained in a reasonably smooth condition. The present hummocks cause vehicles to produce vibrations many times the normal amounts.

The old landslip on which the house is situated is one of a number of such slips, some of which coalesce, occurring below Rostella Road and Old Georgetown Road.

[26 March 1976]

17-2

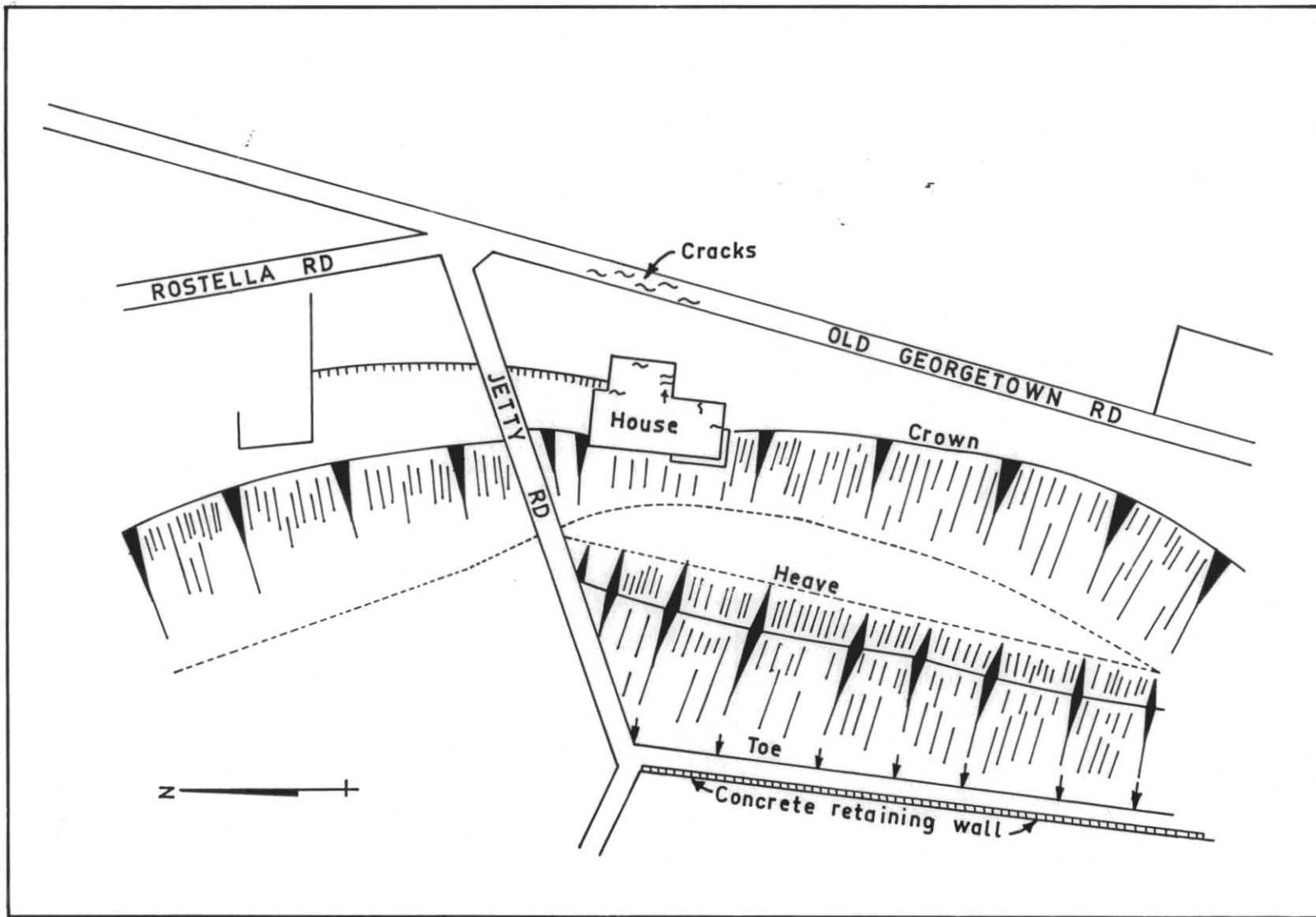


Figure 1. Location of house and landslip.

5 cm

2/2