

Landslip risk assessment of a house and block at Dilston

by W. R. Moore

A brick veneer house and its large block were examined on 17 December. The house and its block are situated on the western side of the East Tamar Highway overlooking Humbug Reach on the River Tamar. The block has two topographic units; a high, flat river terrace and a terrace slope which continues downslope outside the block boundary to the river flood plain. The house is situated parallel with the terrace edge. It has a large concrete patio or terrace forming the roof of a large workshop and garage built at the break in slope between the river terrace and the terrace slope. The slope of terrace is 1° which at the break in slope increases to 3°. The terrace slope in front of the house is 5° to 6° increasing to 8° at the lower western boundary of the block.

No tension cracks were seen in the extensive lawns. All of the long walls of the house, transverse to the slope, were vertical with no buckling visible. No cracks or any old repaired cracks were seen on the brick walls.

The concrete floor of the garage and its extensive concrete roof show no evidence of any tension cracking resulting from soil creep or landslide movement downslope.

Some minor cracking was present in the concrete foundation walls of the house. There was also some minor separation of the steps and ornamental brick walls away from the main structure of the house. All of this is considered to be minor for a house of this age which is located in area known to be underlain by expansive clay.

As with all such expansive clay areas of Dilston, consistent light watering in summer is considered more useful in reducing future house cracking than over-watering or no watering. This is particularly true of this house which has some of its trees close to the building foundations. The potential risk from landslide on this block and house is considered to be minimal and no evidence of any downslope soil creep was observed.

[22 December 1986]