

## Examination of the Village Motel, Launceston

W.L. Matthews

Gutteridge, Haskins and Davey, Consulting engineers requested an examination of the Village Motel with a view to determining the likely stability of the area. The motel is situated on sloping land on the northern side of Westbury Road. A small stream runs along the northern boundary of the motel property.

## GEOLOGY

The motel is situated on Tertiary sediments near the contact of these sediments with dolerite. The Tertiary sediments around the motel are poorly exposed but where small sections can be seen in road cuttings, drains and in the creek, they consist mainly of clay and sandy clay. The surface material often consists of silt with pisolites of limonite. On the sloping ground between the motel and the creek there are accumulations of limonite fragments suggesting that limonite seams occur within the Tertiary sediments.

Good exposures of the Tertiary sediments can be seen about  $\frac{1}{4}$  mile down the valley from the motel where clay pits have been developed. Here and in the surrounding area the section consists mainly of feldspathic sand with some interbedded beds of clay.

Large dolerite boulders and possibly *in situ* dolerite occurs just west of the motel and definite *in situ* dolerite is exposed further west.

## DISCUSSION OF LAND STABILITY

The geological map of the Launceston Quadrangle (Longman *et al* 1964) shows a landslide along Westbury Road where the motel has been built. It is thought that this landslide has been misplaced as there is a known landslide around the clay pits, down-hill from the motel, which is still active and requires repairs to Westbury Road to be made at regular intervals. One of the older blocks of units of the motel is said to have cracked just after construction but this is thought by the engineers to be due to poor foundations. No further damage has been reported.

Although the slip on the Launceston geological plan has probably been misplaced, the motel is situated in an area where a slip could develop under certain circumstances as the area is relatively steeply sloping, particularly around the creek. For this reason careful attention should be given to drainage from and around the motel. A storm water drain between Westbury Road and the motel on the southern side which has been filled with broken bricks should be lined to prevent water seeping underground. Similarly, if the drain along the north-east side of Westbury Road was lined it would also prevent the possibility of water seeping underground. Water from the motel should not be allowed to discharge onto the slopes of the creek, but be piped to the creek. A number of seepage areas and one pipe outlet can be seen along this bank and it is apparent that they originate from the motel area. One small area of scouring has occurred on the slope below the motel and this should be filled in, as excessive removal of material could cause a lowering of support for material under the motel area. Careful attention should be given to erosion by the creek as this could also have an undercutting effect.

## CONCLUSIONS

It is probably that a landslide indicated on the Launceston geological plan as being in the motel area has been misplaced and should have been placed

around the clay pits to the north.

There are no signs of instability at present. Certain drainage could be undertaken which would be an aid to maintaining stability.

REFERENCE

LONGMAN, M.J.; MATTHEWS, W.L.; ROWE, S.M. 1964. Geological atlas 1 mile series. Zone 7 Sheet 39 (8315S) Launceston. *Department of Mines Tasmania*

[21 November 1972]