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Stability of T.E. Atkinson's property, Don.

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Mr. Atkinson proposes to subdivide about 12 ha of land at Don. The area adjoins land owned by L.M. Marshall which has been the subject of a previous report (Matthews, 1969). The land is situated to the south of Don and adjacent to Forth Main Road.

RELIEF AND GEOLOGY

There are fairly steep slopes on either side of a creek which runs through the middle of the land.

Most of the property is underlain by Permian rocks which are overlain by basalt on the western part of the property. There are no outcrops of either rock type, each being deeply weathered and represented only by fragments and grey soil in the case of Permian rocks, and chocolate soil and boulders in the case of basalt. Tertiary sediments may occur between the basalt and the Permian rocks but because of the steepness of the land and the weathered nature of the other rock types, the contact has been covered with debris thus making it difficult to ascertain this from surface inspection.

STABILITY

Burns (1963) mapped the area to the west of the creek as an area of mass movement in the Permian rocks. There is one recently active slip near the northern boundary of the land. Another old slip occurs on the opposite side of the creek. Apart from these two slips there are no definite signs of slips in the areas underlain by Permian although there are some slightly hummocky areas. On the western boundary of the land, there is a large old slip in the basalt. Two seepages or small streams come out of the basalt area in the vicinity.

CONCLUSIONS AND RECOMMENDATIONS

Much of the area is fairly steep and slips have occurred in a number of places. There is thus some risk in developing the area. If the subdivision proceeds, blocks should be large and housing widely spaced and in safe locations. Before any further plans are proceeded with, some test pits should be dug to examine the subsurface material, the degree of weathering, its depth and also the groundwater conditions. It seems likely that some of the flatter areas may be suitable for a house from surface examinations, but the number of such areas are limited.

REFERENCES

BURNS, K.L. 1963. Geological atlas 1 mile series. Zone 7 sheet 29 (8115N). Devonport. Department of Mines, Tasmania.
MATTHEWS, W.L. 1969. Stability of land, Don area. Tech.Rep.Dep.Mines Tasm. 13:96-98.

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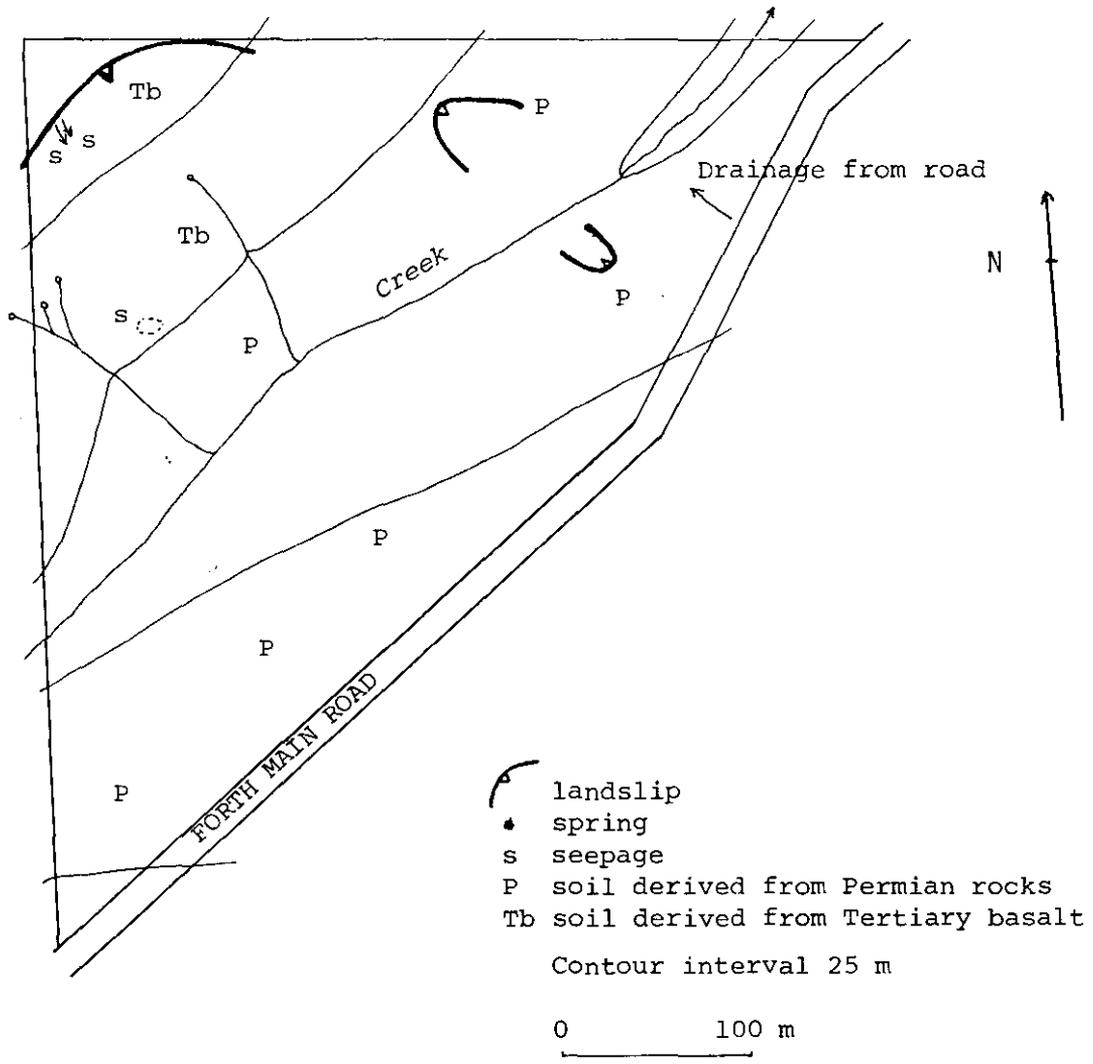


Figure 1. Sketch map of T.E. Atkinson's property, Don.