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## Brick-Making Materials at Ten Mile Hill

by Terence D. Hughes

Triassic sandstones and shales of the Knocklofty Series occupy A. Risby's property, which is situated between the Main Launceston Road and Railway, ten miles from Hobart.

The shale members of this series can, in general, be used for brick-making, although some beds are too sandy and either have to be discarded as overburden or mixed with the very fine-grained members.

Three areas may be considered in this locality.

1. Above and to the north of the private road at a few hundred feet from the Main Road.

The road cutting shows an excellent section of shales for about seven hundred feet at right angles to the strike of the rocks. These are dipping at 12-14° in a direction of 250°. Some of these shales would make excellent brick material, some are too sandy.

5 cm

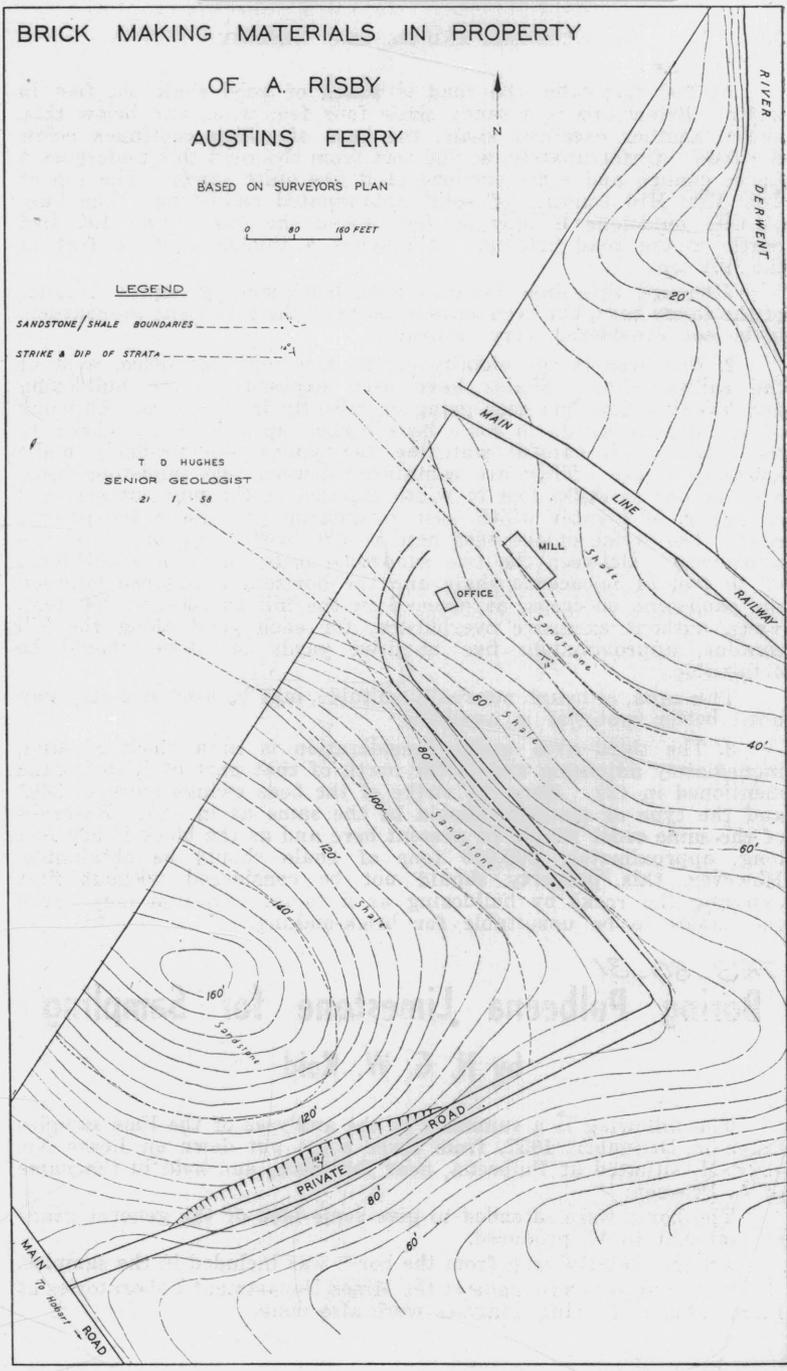


Figure 10

At 200 feet from the road is a bed of good shale six feet in width. Below this is a sandy shale four feet wide, and below this, again, another excellent shale, the base of which continues below the road. Unfortunately, at 700 feet from the road this undergoes a facies change and some portions of it are quite sandy. The top of Ten Mile Hill consists of solid un laminated sandstone. The base of this sandstone is only 30 feet above the shales and 100 feet north of the road cutting. It reaches a thickness of 20 feet at the hill top.

Although this area contains good brick-making shales, because of the sandy beds, but even more because of the sandstone overburden, it is not considered very desirable.

2. The area in the vicinity of the new mill and office, west of the railway line. Shales have been exposed by the bulldozing and levelling that has been going on recently in this area. Although of an inferior grade to some beds higher up (i.e., those closer to the road), with careful watching the shales will probably make adequate bricks. They are contained between two sandstone beds, a lower one of seven feet in width exposed in the mill cutting, and an upper, of greater width, seen in outcrop just above the private road. The strike of the beds here is  $300^{\circ}$  with a dip of  $14^{\circ}$  to the south-west. Between the two sandstone beds, there is a thickness of 30 feet of micaceous shale and the horizontal distance between the sandstone outcrops, as exposed in the hill surface, is 300 feet. Thus, without excessive overburden, for each yard along the hill contour, approximately five hundred yards of stone should be obtainable.

This area, although not really suitable, may be used as a stop-gap until better material is available.

3. The third area under consideration is in a block of land, immediately adjoining and to the north of that part of Risby's land mentioned in (2). Here the strike of the beds swings more to  $360^{\circ}$  and the type of material should be the same as in (2). Reserves of the same order should be present here and as the block is 600 feet long, approximately 200,000 tons of shale should be obtainable. However, this property should not be considered without first exposing the rocks by bulldozing as a facies variation may cause the shales to be unsuitable for brick-making.