

1976/47. Further inspection of road routes near St Marys.

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Route 2 (Sloane, 1976) has now been accurately delineated by the Forestry Commission, and areas of possible instability have been examined (fig. 1).

Area 1 lies about 2 km north of St Marys. The route passes around the toe of a spur and along a steep hillside. Hill slope angles have been marked on Figure 1; the maximum slope in this area is 31° . The slope is mantled by a scree of angular quartzite fragments derived from Mathinna sediments. Some weathered matrix is associated with this material below the surface but solid bedrock is likely to be at shallow depth.

Instability problems are generally minor on this rock type where solid bedrock is struck at shallow depth. However, the structural direction of the rock is important as the alignment of fractures may result in the need for benching embankments to prevent and control rock falls.

Area 2 lies about one kilometre west of German Town. Here the route passes around the head of a large creek and strikes north along the hillside. The area of doubtful stability is about 500 m in length and is underlain by dolerite solifluction(?) deposits 1-2 m in thickness, overlying a sequence of Triassic sandstone and coal measures. Failures have occurred in similar areas but no sign of old or new landslips has been seen in this area. The maximum angle of slope is 28° (average angle 25°).

This section, although steep, has the shortest length of all routes examined, which pass over an area of doubtful stability. If adequate drainage is provided during road construction then the potential instability of this section will be reduced. The sealing of all drains should be considered to ensure rapid surface runoff of rain water. Some retaining structures may also be required if slips occur on the upper embankment.

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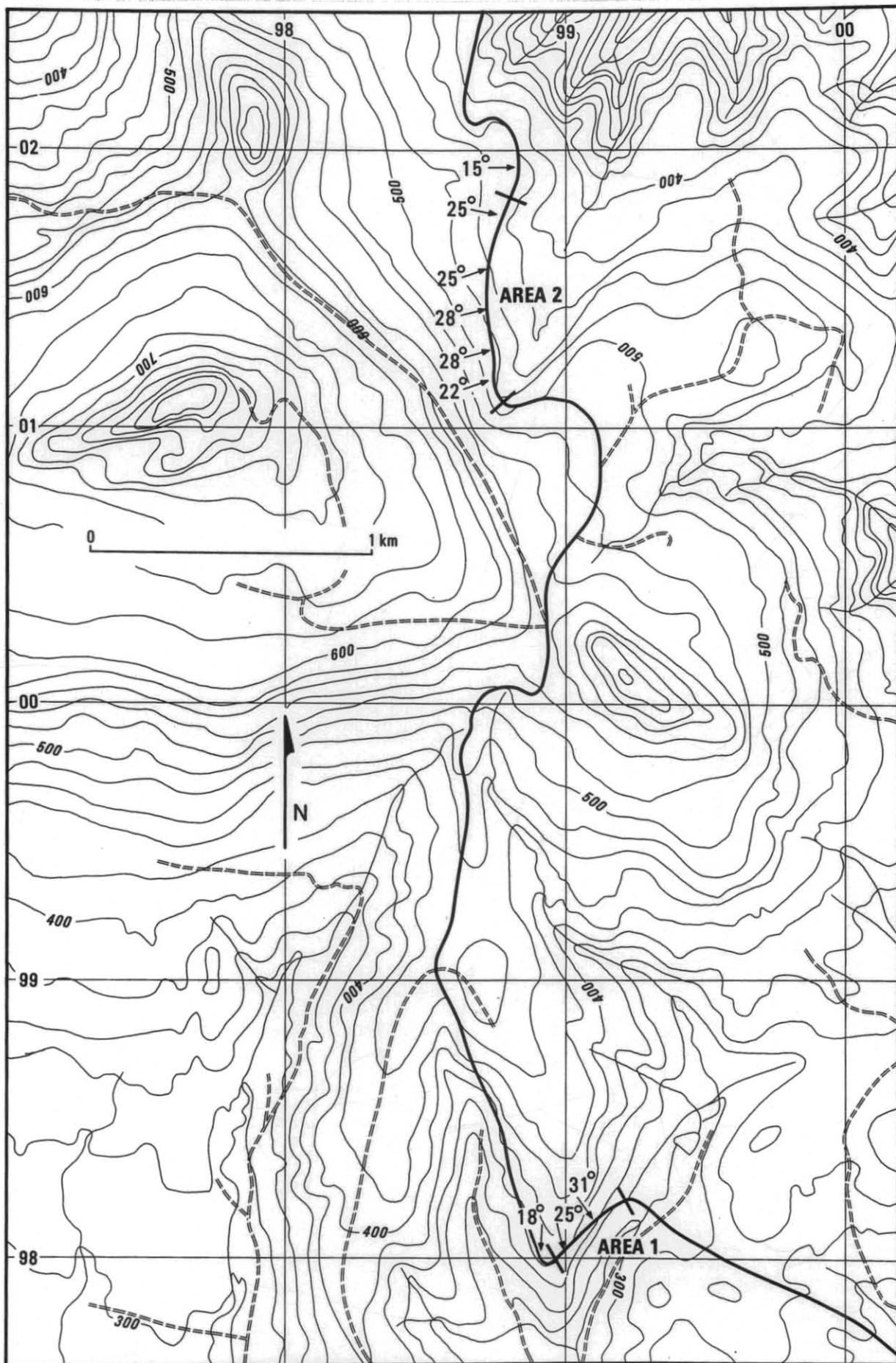


Figure 1. Areas of possible instability.

