

TR 12-38-40

## 7. ROADMAKING MATERIALS IN THE OATLANDS MUNICIPALITY

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### EXISTING QUARRY SITES AND MATERIALS

In November 1966, the following areas were visited in company with Mr J. Cashion of the Oatlands Council.

(A) *Morrison's, Spring Cottage Farm, and Swanstons Quarries*

These are in decomposed dolerite. Morrison's is a relatively stable sugary limonitic gravel, the other two, however are clayey dolerite derivatives and are therefore inferior material.

(B) *Whitefoord and Jones Quarries*

These are in clayey Permian siltstone which although reputed to compact well is greasy when wet and too dusty when dry. It would be too high in plasticity and too low in abrasion resistance to be suitable for road making.

(C) *A Gravel pit on the S side of the Whitefoord-Stonehenge Road*

This is a weathered grit which occurs either in the Upper Permian beds or between Permian and Triassic sequences. The grit bed is normally a hard conglomerate of rounded quartz pebbles in a ferruginous sandy matrix but it weathers readily to a gravel which can be easily removed and is highly suitable for road making.

(D) *Webbs Quarry*

This quarry is on Lemon Hill and is in Triassic sandstone which has been indurated by a dolerite intrusion. This is also highly suitable for road making.

(E) *The Quarry on the Midland Highway half a mile S of  
York Plains*

This quarry is in fresh dolerite which is used for crushed metal by the Public Works Department. On the dolerite contact, which at this point is almost parallel to the highway, there is an indurated mudstone. This is slightly inferior to the indurated sandstone already discussed but still appears to be a satisfactory quality.

(F) *Harts Quarry*

Harts Quarry is on the N side of the Whitefoord-Stonehenge road and is in indurated Permian siltstone colluvium. The material forms at the base of hills in areas of dolerite highlands. It binds well and is non-plastic. The particle size ranges from silt size to sub-rounded grains  $\frac{3}{4}$ -inch in diameter.

### RECOMMENDATIONS FOR NEW QUARRY SITES

The following list has been compiled from departmental records and the results of field inspections during the current investigation. In many cases the areas are not proven and will require some testing either by hand boring or earth moving machinery.

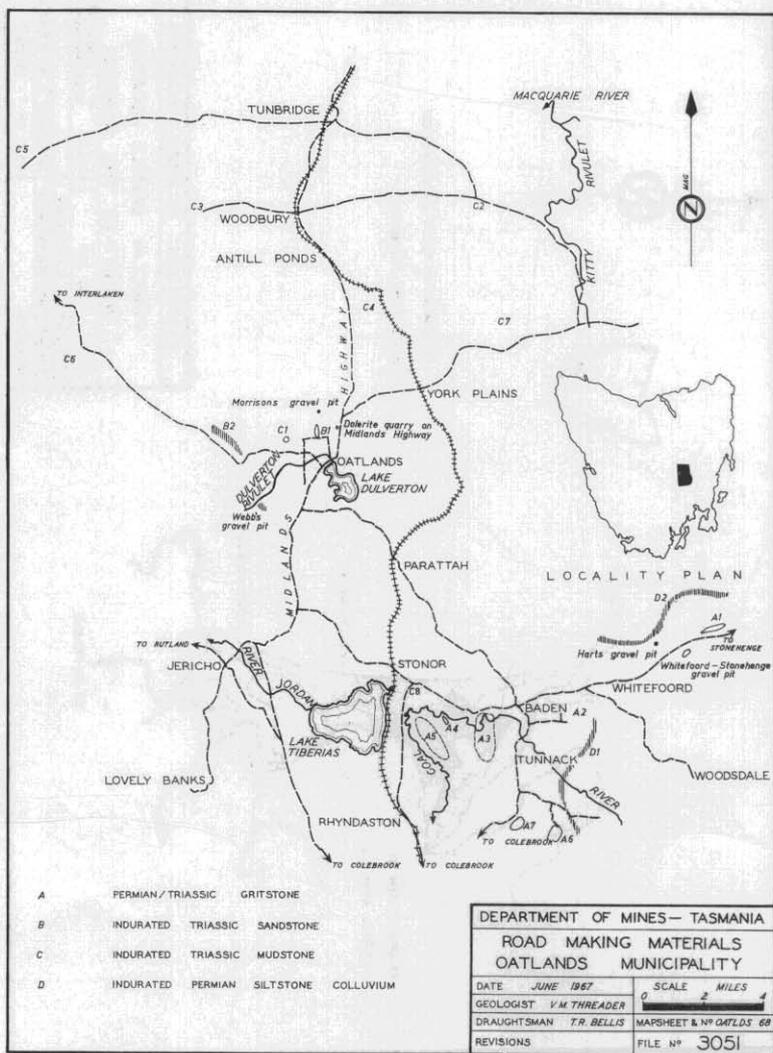


FIGURE 11

5 cm

Each material type is identified by a letter and each locality by a number. All localities are shown on the accompanying map.

A. Gritstone—as in the Whitefoord-Stonehenge gravel pit—

- A1. This area is a continuation of the existing pit on the N side of the road.
- A2. A small hill capped with gritstone above a disused pit in clay-siltstone on the property of R. Mayne (previous owner, A. Allen).
- A3, A4, and A5. Occurring in the area bounded by Stonor, Baden and Tunnack. These are not continuous areas of gritstone outcrop but rather areas in which it is known to be present and in which suitable quarry sites should be found.
- A6 and A7. Hilltop outcrops two miles S of Tunnack.

B. Indurated Triassic sandstone—as in Webb's quarry on Lemon Hill—

- B1. An extensive deposit occurs on J. Fisher's property on the N boundary of Oatlands township. Mr Cashion states that the material was tested by the Public Works Department and found to be suitable.
- B2. A ridge of this material occurs on the N side of the Oatlands-Interlaken Road, three-and-a-half miles from Oatlands, and extends for one-and-a-half to two miles towards Interlaken.

C. Indurated Triassic mudstone—as in the quarry on the highway, half-a-mile from the York Plains Road—

- C1. A hill capping of flint-like stones between Flinty Bottom and Flinty Marsh, one-and-a-miles NW of Oatlands. Scattered boulders of basalt are also present on the surface indicating that the induration was probably due to basalt which has since been removed by erosion.
- C2. Six miles E of Woodbury in the Brents Sugarloaf area.
- C3. Four-and-a-half miles W of Woodbury on the old Tiers Road.
- C4. Three miles SE of Antill Ponds and along old sections of the railway N of York Plains.
- C5. Ten miles W of Tunbridge towards Interlaken.
- C6. Twelve miles NW of Oatlands towards Interlaken.
- C7. One mile NE of Mt Pleasant.
- C8. One mile SE of Stonor at the junction of the Baden and Rhyndaston Roads, surrounding a dolerite hill. The cutting on the Baden branch passes through a portion on the contact zone.

D. Indurated Permian siltstone colluvium—as at Hart's quarry.

Further supplies of this material could only be located by test boring; the most likely localities would be—

- D1. On the lower slopes of Mt Ponsonby.
- D2. N of the Whitefoord-Stonehenge Road adjacent to the dolerite hills.