TR10-24-25

3. QUARRY SITE FOR BUILDING STONE, WINKLEIGH

by V. M. Threader

A proposed quarry site at Winkleigh was inspected for Mr J. G. Joyce of Launceston who proposes marketing stone for paving, walling and facing. It is understood that Mr Joyce has been assured of a ready sale for the stone and his request is only for a geological report on the site, not of the suitability of the product.

The survey was conducted by pace, compass, and aneroid barometer and heights are given with reference to an arbitrary datum on the upper road at 1100 feet.

The area is on the SE boundary of Lot 518, 600 acres, charted in the name of William Brown. A gravel road connects this property with the Flowery Gully-Winkleigh road, 1 mile from Winkleigh Post Office.

Sandstone outcrops along the banks of a small gully over a distance of 1000 feet. The sandstone bed is 20 to 30 feet thick at the S end of the outcrop but may be thinner at the N end where a thickness of only 10 feet is exposed.

The stone is coarse-grained, clean grey in colour and friable, with micaceous bedding planes and numerous shaly partings which give it a high degree of fissility. There are bands of small pebbles near the base and where the overburden has been exposed in 8 feet of test quarry face, there are interbedded sandstone and shale above it. The cleared grazing land above to the E of the gully is strewn with waterworn pebbles of quartzite, a feature characteristic of the weathered Permian pebbly mudstone which is abundant in the area. Such beds are well exposed in road cuttings on the Winkleigh-Exeter road 3 miles to the E.

The beds strike E-W with a 3°-4° northerly dip, and they probably continue as indicated on the map (Figure 7).

The depth of overburden to the 1100 feet contour increases from 20 feet at the S end of the outcrop to 90 feet at the N end. The thickness of the sandstone also appears to be greater at the S end.

Approximately 18,000 cubic yards of stone could be obtained from a 100 yards length of outcrop at the S end by working back to the 1100 feet contour. The average gradient of the gully bank is 20° or 1 in 3 and the overburden to stone ratio would be 5 to 1 which is uneconomic.

An equal amount of stone could be won from a 300 yard length and a 30 foot advance: the ratio would be slightly better than 1 to 1.

If only small quantities of stone are required it may be better to prospect for a site in the angle of the two tracks in the N of the area where stone should be found closer to road level.

The test quarry face was excavated by working from the top but removal of stone would best be accomplished by working from the lower tracks.

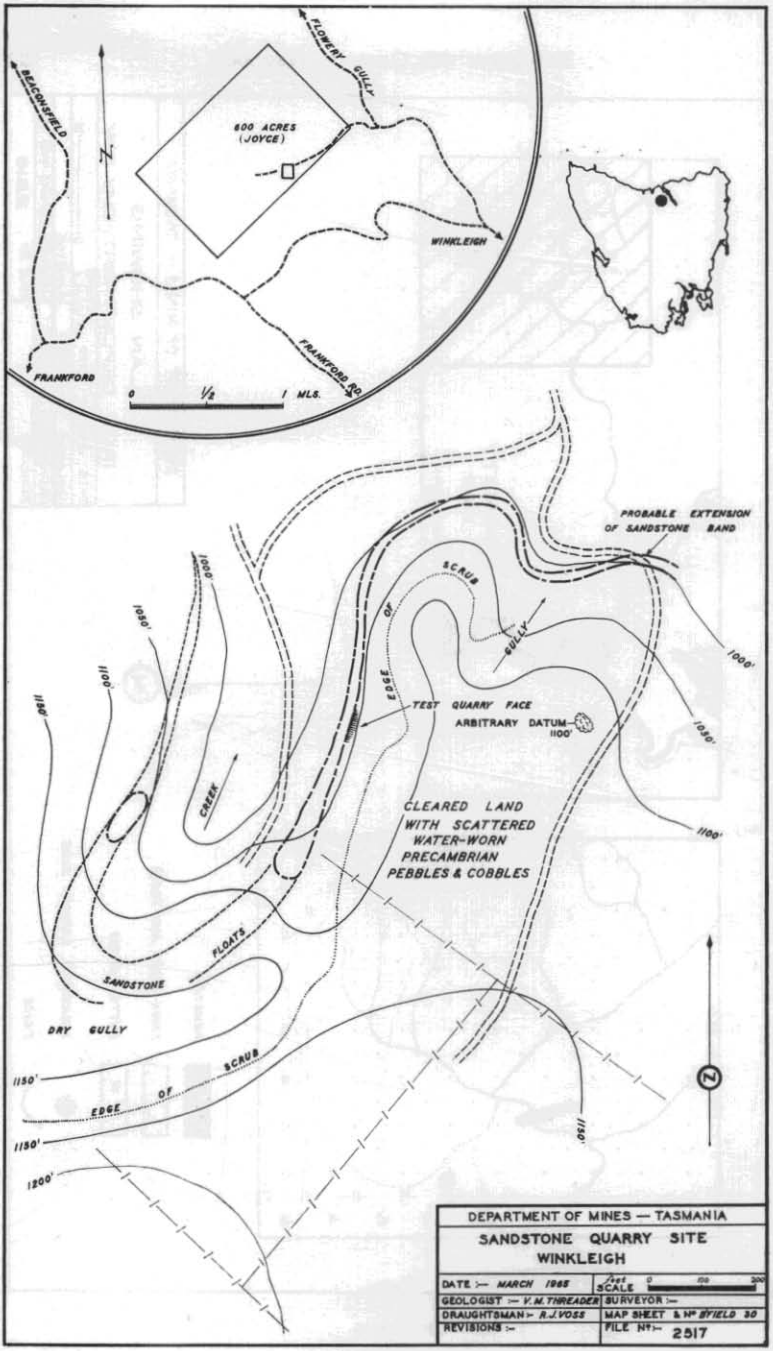
FLOWERY GULLY
BEACONSFIELD
600 ACRES (JOYCE)
N
WINKLEIGH
FRANKFORD
FRANKFORD RD.
0 1/2 1 MLS.
PROBABLE EXTENSION OF SANDSTONE BAND
SCRUB
EDGE OF
GULLY
TEST QUARRY FACE
ARBITRARY DATUM 1100'
1000'
1050'
1100'
CREEK
CLEARED LAND WITH SCATTERED WATER-WORN PRECAMBRIAN PEBBLES & COBBLES
FLOATS
SANDSTONE
DRY GULLY
1150'
1200'
DEPARTMENT OF MINES — TASMANIA
SANDSTONE QUARRY SITE
WINKLEIGH
DATE :— MARCH 1965
SCALE 0 100 200 Feet
GEOLOGIST :— V. M. THREADER
SURVEYOR :—
DRAUGHTSMAN :— R. J. VOSS
MAP SHEET & No. SFIELD 30
REVISIONS :—
FILE No :— 2517

FIGURE 7.

5 cm