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TYNDALL'S PAVING STONE, KINGSTON

by F. Blake

Situation and Access

Tyndall's property is situated half a mile north of Kingston Beach and quarter of a mile east of the junction of Proctors Road with the Channel Highway. Access is gained by means of the highway on which the land fronts for about 100 yards.

General

A paving stone quarry has been operated intermittently on a small scale by the Tyndall family over the past 40 years. No work has been undertaken for a considerable period and, as the land is now for sale, a potential buyer requested an examination to determine the extent of paving and wall stone on the property.

Geology

The rocks underlying the surface consist of fine grained siliceous sandstones. They are generally very thinly laminated although some thick, massive beds also occur. The sandstones dip at a low angle to the west. Two prominent sets of joint planes intersect at right angles and dip at 80°.

The sandstones outcrop prominently in a road cutting along the whole frontage of the property to a maximum height of 20 feet. They are also well exposed near the south-west corner of the land where a road-side quarry has been excavated for paving stone over a width of 30 yards and to a depth of 25 yards, giving a face height of 30 feet.

On the adjoining property to the south, owned by Cornish, a much larger quarry has been cut in the same beds up to the southern boundary of Tyndall's land.

Dolerite is in contact with the sandstone to the east and south of the area but is not exposed on the property.

Working Facilities

Conditions for quarrying on the site are good. The surface rises steeply to a height of 130 feet from the road frontage and good working faces are quickly attained. The low dip of the strata towards the road facilitates drainage and produces a smooth, gently sloping quarry floor.

In blasting, large masses of stone break along the joint planes and, where the bedding is closely laminated, these are readily split into the required sheets for use as paving stones. In places where the bedding planes are more widely spaced, blocks suitable for walling stone can be cut.

Road transport facilities leave little to be desired since motor vehicles pass directly from the site to a sealed highway leading to Hobart, the principal market for the stone, within a distance of nine miles.

Quantities Available

In this type of deposit where specified sizes and thickness of stone are required, it is inevitable that a large proportion will be waste rock. Overburden in the form of soil and weathered rock varying from two to six feet in thickness must also be dumped and this, together with the waste rock in quarrying operations, would probably range up to 50% of the deposit as a whole.

The total quantity of material in the block from road level to a height of 130 feet would approximate 600,000 tons. Allowing for 50% wasted this would give a possible reserve amounting to 300,000 tons of paving and wall stone.