

TR2-120-122

PROPOSED WATER STORAGE AREA FOR A.P.P.M. AT BURNIE, TASMANIA (2nd REPORT)

by **TERENCE D. HUGHES**

On 1st October, 1957, a report was furnished on an area of land, adjacent to the Australian Pulp and Paper Mill at Burnie, where it was proposed to erect water storage tanks. As this area was composed of slip material from the basalt hill behind the mill it was not considered suitable.

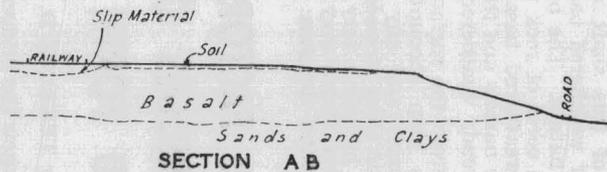
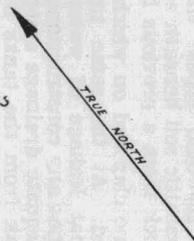
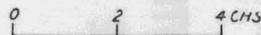
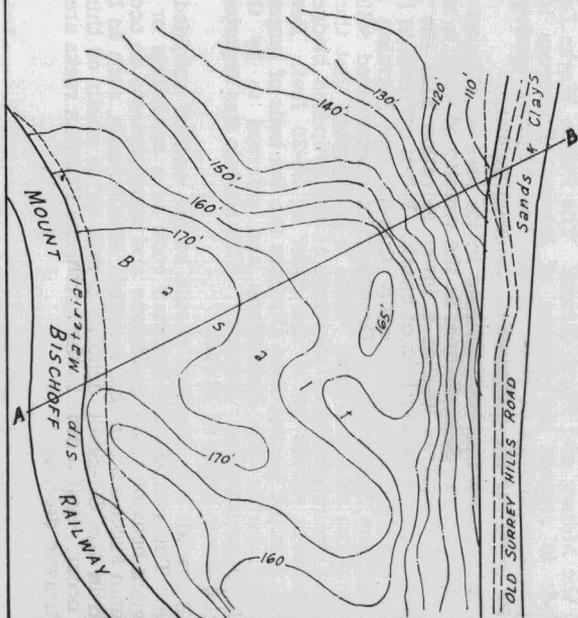
An alternate area has now been suggested. This is situated in the same general locality to the east of the previous site. Although any area on the edge of a basaltic hill should be suspect as a good foundation for a large structure, this second area has certain merits not present at the first site. The slip material here does not seem to extend much beyond the Emu Bay Railway Line and the actual area selected appears to consist of a small platform of solid basalt 60-70 feet in width. Above the basalt will probably be found several feet of soil and pieces of weathered rock, and beneath this, weathered basalt, with cores of hard rock, before solid unweathered basalt is reached.

Beneath the basalt are beds of clay and sand which can be seen in road cuttings near the junction of the Stowport Road.

The relationship between these various materials is shown in the accompanying sketch plan and section. What is not known is the nature of the basalt at this site. Is there a solid flow, 60 feet in thickness or are there two or more narrow flows with clay beds in between? This matter will have to be further investigated.

Thus it is considered that this site, although not ideal, is worthy of further investigation and a place where a shaft should be put down has been indicated. Information gained from this shaft will show the thickness of soil, of weathered basalt and the necessary amount of solid rock below. When this shaft has been sunk a further examination and recommendation will be made.

PROPOSED SITE OF WATER STORAGE TANKS
A.P.P.M. BURNIE

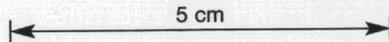


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1519-28 DEPT OF MINES

Plate 31



ADDENDUM TO SECOND REPORT

Since the second report was submitted a shaft has been sunk for 24 feet.

An examination of this shaft showed 11 feet of basalt soil, followed by 10 feet of weathered basalt and three feet of basaltic soil of a fairly sandy nature. The basalt itself has weathered considerably leaving solid cores of rock up to a few inches in diameter in a matrix of soft, weathered basalt. It would appear that this original flow was quite narrow and the basaltic soil beneath suggests that it flowed over already weathered rock from a previous flow.

Thus for 24 feet from the surface, no clay bed on which upper layers could slip, has been encountered. At the same time the basalt is quite permeable and any great leakage of water could cause trouble. It is therefore stressed that any constructional work in this locality should include a very adequate drainage system, not only to drain the water which may leak from the tanks but also that from the soak behind the area.