

Geological investigation of proposed industrial site at Margate

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Geological investigation of a proposed industrial site near Margate indicates that the site is underlain by up to 50 feet of clay and gravel, which in turn overlies sandstone and mudstone of Triassic or Permian age. The surface layer of clay and gravel outcrops along the shoreline and in occasional excavations but the available exposures are not sufficient to obtain a detailed section of the strata.

From the results of a water bore put down on a neighbouring property it seems fairly sure, although not proven, that one would expect to find a similar sequence beneath the proposed site, probably thinning out towards the highway and thickening towards the shoreline. The clays are partially consolidated in surface exposures and the gravel, where exposed, is often well cemented.

Material similar to that found on this site occurs at several localities in the Hobart district and experience indicates that foundation loads of up to a maximum of 3 tons per square foot can normally be tolerated. In the case of a major building having loadings higher than that indicated it would be necessary to conduct specific soil tests which are outside the scope of this Department. Excavations in this material can be effected by normal earth-moving equipment at standard rates and it is expected that pile driving for harbour installation would not present any unusual difficulties.

The geological information available is sufficient to show that the site presents no geological problems if loadings below 3 tons per square foot are contemplated.

If it is desired to proceed beyond this stage it would be necessary to put in a few bores (up to six) over the area to check the depth to bedrock and to obtain samples of the superficial material. These holes would have to be drilled with a percussion plant in order to penetrate the gravel layers. Being disturbed the samples obtained would be of geological value only. For detailed foundation studies if high loadings are contemplated it would be necessary to employ outside resources with soil testing facilities.

[14 December 1965]