

CONSOLIDATION AND SUCTION PROPERTIES

OF

ADELAIDE PLEISTOCENE CLAY

by

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SUMMARY

The suction characteristics of the Adelaide pleistocene clay in the remoulded, and undisturbed state are examined in detail. By taking densities of samples at the insitu ambient suction, and after equilibrating at a controlled suction, a relationship between density and suction has been established. These densities have been converted in many cases to void ratios to give a consolidation curve for the material. These curves, when compared with those obtained in the consolidometer, illustrate the difficulties encountered if attempting to compute settlements on unsaturated or quasi-saturated materials. A way of overcoming this problem has been suggested.

To the best of the knowledge and belief of the undersigned candidate this thesis contains no material which has been accepted for the award of any other degree or diploma in any University, and contains no material previously written or published by another person except where reference to such is made in the text.