

INVESTIGATION OF COASTAL INSTABILITY

NEAR LYME REGIS, DORSET

A dissertation submitted in partial fulfilment of the requirements for the degree of Master of Science in Engineering Geology of the University of London, and for the diploma of membership of the Imperial College of Science and Technology.

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ABSTRACT

A site of coastal instability at Ware, to the West of Lyme Regis, has been investigated. It is situated within a classic area of landslip activity, where permeable arenaceous deposits (Upper Greensand in age) overlie relatively impermeable, overconsolidated Lower Lias Clays.

A literature review, including historical data, is used in conjunction with field evidence to form the basis for the investigation. Both past and present activity within the site are examined. The latter has a significant effect on an existing property - Underhill Farm.

The landforms have been mapped and the probable mechanisms of failure identified; geological and hydrological relationships have also been established. The above is discussed in light of the recent theories advanced for the region.

Detailed geomorphological mapping is presented as a site investigation technique of considerable merit, in an area of difficult access and unfavourable terrain.