



Government of South Australia

Department for Transport,
Energy and Infrastructure

NEW JETTY AT RAPID BAY GEOTECHNICAL INVESTIGATION

Client: Project Director, Office of Major Projects and Infrastructure
Mr Robert B Jenkins

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1. Introduction

The current Jetty at Rapid Bay is deteriorating and has passed its design life. The government has proposed to build a new 300 metre long jetty between 10 and 30 metres east of the existing jetty. The proposed new jetty will provide safe access for divers, anglers and tourists to the deep waters.

The existing Rapid Bay Jetty is located approximately 100 kms to the south of Adelaide on the Fleurieu Peninsula. The current jetty was constructed in 1941 by BHP Pty Ltd for the purpose of shipping limestone from the adjacent quarry to Whyalla. The jetty also supported a significant conveyor system.

Adelaide Brighton Cement later used the jetty for the same purpose, with the last shipment occurring in 1991. The conveyor system was dismantled in 1998. Ownership of the jetty was transferred to the Department of Marine and Harbours in 1982. From approximately mark 120m the Rapid Bay Jetty has been closed to the public due to further deterioration.

In response to the request by Mr Robert B Jenkins (Project Director, Office of Major Projects and Infrastructure), a geotechnical investigation has been undertaken. This report presents the results of this investigation.

2. Investigations

Detailed site inspections were conducted on September and December 2006. As a reasonably comprehensive investigation had been performed in 1938 for the existing jetty, it was considered that no additional geotechnical investigation was required. The results of the 1938 investigation are summarised in the "Results" section of this report.

Historical information was gathered relating the construction of the existing jetty from the "*Friends of Rapid Bay Jetty*" website and "*The Use and Abuse of Jetties – State Government Control in the Construction and Maintenance of Jetties in South Australia*" thesis.

The thesis "*The Structural Geology of the Rapid Bay – Second Valley Area, Fleurieu Peninsula, South Australia*" was used to gather information regarding the geology of the area.

Meeting with contractors were held to discuss the complexity of pile driving at this location.