

Port Bonython Transhipment Port

EOI Design for 10mtpa Common User Bulk Ore Transhipment Port Project



Project

Port Bonython Ore Transhipment Port

Location

Port Bonython, South Australia

Client

Port Bonython Bulk Users Group Inc

Commencement Date

April 2008



Port Bonython Port Layout

Description

Como Engineers were engaged by the Spencer Gulf Group to complete a pre-feasibility study for inclusion in the Expression of Interest to Major Projects, South Australia Government for the development of a multi user bulk transhipment port facility.

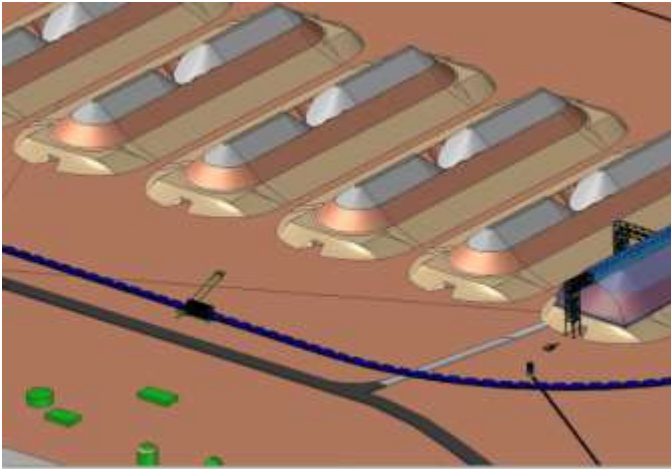
It was proposed that this facility would be built on Point Lowly at Port Bonython.

Preferred Options were:

- Preference 1 – Directly off of the rocky point at Point Lowly – 433m jetty – 1,767m buried conveyor to jetty – capex \$207m – construction duration 24 months - estimated user cost \$5.18 / tonne; or
- Preference 2 – Fitzgerald Bay on the northern side of Point Lowly, 1km northwest of the light house - 1,726m jetty 725m conveyor to jetty – capex \$247m - construction duration 27 months – estimated user cost \$6.15 / tonne.

Other Options considered were

- Option 1 - False Bay 3.5 to 4km due west of Point Lowly – 2,903m jetty – 754m conveyor to jetty – capital cost \$306m – construction duration – 30 months – estimated user cost \$9.35 / tonne. Construction of this Option is hindered by the need to avoid undertaking marine works during the giant cuttlefish breeding period. Dredging over an area of approximately 20k m2 removing approximately 80k m3 of spoil is required during construction. Periodic dredging will be required for channel maintenance.



Aerial View of Site



Preferred Layout



Point Lowly

In addition, a new rail loop would be constructed at the Port

The longer construction leadtime together with the high capital cost make this an unattractive option to the potential users. Its location across the giant cuttlefish breeding area and need for dredging are also environmentally unattractive.

- Option 2 - False Bay approximately 3km due west of Point Lowly – 2,682m jetty – 598m conveyor to jetty – capital cost \$293m – construction duration – 30 months – estimated user cost \$7.50 / tonne. Construction of this Option is also hindered by the need to avoid undertaking marine works during the giant cuttlefish breeding period. Dredging over an area of approximately 20k km² removing approximately 80k m³ of spoil is required in construction. This Option also requires departing vessels to pass through the outer Santos exclusion zone which is closed to shipping for approximately 5 days per month, reducing loader availability. The longer construction lead time and high capital cost makes this an unattractive option to the potential users. Its location across the giant cuttlefish breeding area are also environmentally unattractive.

- Option 5 - Fitzgerald Bay on the northern side of Point Lowly, 1km northwest of the lighthouse – 220m jetty – 725m conveyor to jetty – capex \$212m – construction duration 24 months – estimated user cost \$5.78 / tonne. This Option requires massive dredging over an area of approximately 575km² removing approximately 2.9million m³ of spoil during construction. The environmental impact of this Option and the ongoing cost of channel maintenance make this Option unattractive.

Project Director

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Project Manager

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