



Bunbury Port – Berth 8 Repairs

PROJECT DETAILS

The Port of Bunbury (PoB) is located on Leschenault Drive, Bunbury, Western Australia. The works described are part of the concrete remedial works package located at Berth 8 at the PoB.

The scope of work included the supply of all labour, plant and equipment and materials to complete the following works:

- Rectification of sill beam defects at 42 pile locations (each side of each pile) due to rear concrete sill beam bearing failures over supporting pile caps in addition to varying degrees of concrete splitting and spalling to the sill beams

Rectification works included the following:

- Install temporary support frame on Berth concrete deck to support load from the sill beam to the pile
- Hydro-demolition of the complete sill beam end (approx. 700mm wide at the base, 500mm wide at the top surface), leaving existing reinforcing bars intact
- Complete re-design works to the existing pile capping plate detail (new 40mm capping top plate 600 x 600 with bearing plates) and gussets welded to pile including removal of the existing collar and cap plate
- Chemset in new reinforcing bars, weld to existing reinforcing bars and apply zinc rich paint
- Install new through bolts and sleeves
- Install formwork
- Recasting of the sill beam end with HES micro concrete (50Mpa)
- Modification to tie back end plates
- Grouting / epoxying gaps between the existing capping plates and soffit of the sill beam
- Sealing cracks and/or reinstating spalled/split sill beam ends
- Install pile jackets and denso wrapping to all remediated piles

Client: Southern Ports Authority (SPA)

Location: Bunbury, WA

Duration: 29 months

Completion: September 2017

Value: \$1.5M



PROJECT HIGHLIGHTS

Personnel on Site: 7

Manhours: 5,951



Before



After