

Osborne Naval Shipbuilding Precinct

Osborne, SA

Keller was contracted to design and construct the foundation piles for 3 no. large manufacturing buildings used to process steel plate and fabricate new warships.



The project

Osborne, located some 25km north of the Adelaide central business district, will be home to one of Australia's largest naval projects, with the A\$35 billion future frigate program. Keller was contracted to design and construct the foundation piles for 3 no. large manufacturing buildings used to process steel plate and fabricate new warships.

The challenge

The pile loads were relatively high with stringent settlement performance criteria and with the buildings located close to the Port Adelaide River where the top 10m of soil was weak. Substantial amounts of plant and personnel interaction with up to five rigs plus ancillary plant operating simultaneously. Keller was required to manage the precast stock with the ability to initially cast and complete 60 pile segments per day.

The solution

To meet programme demand on such a large project, Keller utilised five rigs and had taken the innovative step of setting up a large-scale, on-site casting yard. The pile segments were transferred from the yard using a Keller-designed side-loader ensuring safety and efficiency of pile movements.

Project facts

Owner(s)

Lend Lease

Keller business unit(s)

Keller Australia

Main contractor(s)

Australian Naval Infrastructure

Solutions

Heavy foundations

Markets

Institutional / public

Techniques

Franki piles
Driven precast piles