

Woolooware Bay Town Centre - stage 4

Cronulla, NSW

Read how Keller improved the existing bearing capacity from 100kPa to greater than 250kPa through the rapid impact compaction works



The project

As part of the fourth stage of the WBTC projects, the client were proposing a mixed-use residential development over the existing Cronulla Sharks League Club carpark, previously an old landfill site. As part of the works approximately 11,000m³ of material was required to be removed to enable the development to commence. Due to contamination in the landfill, the client was faced with an expensive disposal if the material could not remain on site. Following a number of site trials, Keller were engaged to reduce the surface level using Rapid Impact Compaction (RIC) to minimise the removal of the contaminated site material.

The challenge

Works were performed within a contaminated and sensitive public environment which required intelligent work sequencing and planning in order to minimise the effects of construction noise and disturbance of in ground asbestos.

The solution

Keller were appointed Principal Contractor and established site contamination controls prior to mobilising 2 no. RIC machines to compact the existing landfill material. Keller compacted the landfill material by up to 1.1m removing the need for off-site disposal of this material. The RIC works further improved the existing bearing capacity as part of the compaction process, introducing further potential savings for the client in future piling platform requirements. Keller used earth bunds to direct the noise away from local amenities and timed other works for sensitive parts of the day to reduce impact on the public and neighbours.

Project facts

Owner(s)

Capital Bluestone

Keller business unit(s)

Keller Australia

Main contractor(s)

Keller Pty Ltd

Solutions

Containment

Markets

Commercial

Techniques

Rapid Impact Compaction (RIC)