

Gateway - Leach Hwy / Abernethy Rd

Perth, WA

Successful completion of the first metropolitan CFA pile bridge for MRWA



The project

The \$1 billion Gateway WA project is designed to ease the daily gridlock that chokes Perth Airport, Kewdale and Welshpool. The Leach Highway / Abernethy Road interchange comprised a dual level roadway which utilised CFA piles to retain 7m of soil. A top-down construction methodology was employed to minimise the disturbance to the surrounding areas and maintained traffic flow in both directions throughout the course of the works.

The challenge

A landmark MRWA project for this piling technique called for stringent quality control measures to construct and test piles to the client requirements. The intersection is a key industrial interchange and piling works were carried out adjacent to heavy live traffic with full length pile cages up to nearly 20m in length being lifted in close proximity to the live roadway.

The solution

Keller drew upon vast experience in construction of deep CFA piles and secant piling works to produce a retaining wall that maintained strict positioning requirements when exposed at depth. Multiple phases of piling works were adopted to allow traffic flows to be largely unhindered during the construction phase.

Project facts

Owner(s)

Gateway WA

Keller business unit(s)

Keller Australia

Main contractor(s)

Gateway WA

Solutions

Excavation support

Markets

Infrastructure

Techniques

CFA piles

Secant piled walls