



# ASCOT GREEN BY MIRVAC

AUG 2022 - MAY 2023  
MIRVAC  
\$3.6 M

Ascot Green by Mirvac is located in Brisbane's northside. As part of ongoing residential developments, DEMEX was engaged by Mirvac to undertake bulk earthworks, shotcreting, installation of FRP capping beams, stormwater works, and other minor site works for Tower C (Charlton House) of the development; the third tower in the series.

## PROJECT METHODOLOGY

DEMEX was engaged as a subcontractor to complete site early works, implement sediment and erosion controls, site establishment, civil stormwater works, bulk earthworks, site dewatering, shotcrete works, detailed excavation, basement finishing works, piling works spoil management, and backfilling and ramps.

Working in collaboration with Mirvac, the DEMEX crew created a platform to install piles.

This was followed by excavation of clay earth for a two level basement approximately six metres deep, which was completed in increments.

This approach allowed the shotcrete subcontractor access to the site in order to complete progressive shotcrete works. Additionally, DEMEX was responsible for engaging subcontractors to form steel fix reinforcement and pour capping beams. These beams were positioned around the full basement perimeter.

## CHALLENGES

To facilitate a higher rate of productivity in terms of the basement excavation and retention system, the team devised a method whereby progressive smaller levels of material was excavated following a spiral sequence, to allow works to be undertaken concurrently with shotcrete works.





MATERIALS REMOVED	43,010 M <sup>3</sup>
BASEMENT EXCAVATION	6 METRES
CAPPING BEAM	345 LINEAL METRES

This meant the exclusions zones needed to be readjusted almost daily to ensure all WHSQ requirements for the work were met.

On reaching the agreed basement level, DEMEX installed a second piling platform allowing the piling subcontractor to be remobilised and complete the balance of the piles. The crew also supported other subcontractors to complete their work packages. For example, DEMEX dug trenches for plumbing infrastructure, assisted concreters with installation of a basement drainage layer, and excavated a crane pad.

Simultaneously, other works were completed on an excavated Energex pad mount. Stormwater infrastructure was redirected to suit a new basement location

As a result of demonstrated capability, Mirvac requested a significant number of variations in works to be completed by the onsite team.

Given the site's location, DEMEX undertook close monitoring of vibration and dust for the duration of the project to ensure impact to neighbouring residents was minimised. Together with cessation of works on weekend and weekday race days, this helped prevent community impact and disturbances to horses.