

Wacol Youth Remand Centre

BRISBANE

Hutchinson Builders & QPS



Client: Hutchinson Builders | Contract Value: \$10M | Completion: 2025

Overview

The New Wacol Youth Remand Centre was officially opened in April 2025. The new 76 bed state of the art facility was constructed by Hutchinson Builders for the Queensland Police Service (QPS) providing additional Youth Detention capacity as well as access to education and vocational training, rehabilitation programs, health care and support services

Project Scope

The centre features modular steel cells, observation and processing areas as well as visitor and administration areas served by air handling plant located in the roof North, Centre and South roof plantrooms.

The mechanical services include :-

- 3 air cooled chillers in a variable primary arrangement located in a chiller compound external to the main detention centre
- 3 multi-zone chilled water air handling units with electric reheats, providing conditioned air to various zones within the facility.
- 7 single-zone chilled water air handling units with dedicated electric reheat, providing conditioned air to various zones within the facility.
- 2 Preconditioners providing conditioned outside air to the single-zone air handling units.
- 4 fan coil units (FCU), serving high-load areas such as comms, MDF and UPS room.
- Carpark exhaust system consisting of exhaust fan and carbon monoxide sensors.
- Loading dock/sally port ventilation system
- Miscellaneous ventilation systems consisting of exhaust and supply air fans.
- Building Management System based on Delta Controls including purge control for the detention cells



The Challenge

Accelerated Delivery Timeline: VAE were awarded the design and construction of the Mechanical Services contract as part of an accelerated programme where the centre was designed, constructed and handed over within 14 months.

Early Design Engagement: VAE were initially awarded the early engagement design and document contract at the end of 2023, with a construction contract start in March 2024.

This meant the early engagement of our in-house design, engineering and drafting team was required to meet the rapid construction programme, with a design completion 12 weeks after award.

High-Level Collaboration: The rapid mobilisation of the site construction team meant that Hutchies and all trades were required to work in very close collaboration to achieve the design outcomes while site construction proceeded to meet the programme.

VAE worked in close coordination with the Hutchies Construction and ESD teams to achieve a truly remarkable result. Many thanks to our supplier and subcontract partners that enabled VAE to achieve the successful completion of this project.

Our supply chain partners

- Delta Controls
- MES - Multiple Electrical Services Pty Ltd
- QFab Pty Ltd – duct manufacturers
- York Chillers
- GJ Walker Air Handling Units
- Fantech

