



COLES TRUGANINA

Vaughan Constructions has completed the new Coles DC at Truganina in Melbourne's west almost two months ahead of a tight deadline. The centre four times the size of the MCG holds approx 50,000 pallets and is valued at over \$50 million.

With construction commencing in late June 2011, the erection of the main warehouse, dispatch and receiving offices' steel structure was completed by the end of January 2012, and the construction and installation of its roof by the end of March.

Staged handovers of the warehouse and ancillary buildings occurred to allow Coles early fit-out access, with completion achieved some seven weeks ahead of contracted completion, on 29 May 2012.

Indicative of the sheer scale of the centre are the statistics: the project required more than 200 workers on-site at peak and included more than 80,000 sqm of undercover warehouse space, 62 loading docks and 502 parking spaces.

Construction materials included 1,500 tonnes of steel and more than 23,000 m³ of concrete, and 3.1 km of line marking. The centre includes 35 B-double docking bays and is designed to house over 40,000,000 m³ of stock.

Vaughans worked closely with Coles throughout the entire project, from the design and planning phase on what was formally rural land, through to the completion of construction.

The client specified a number of special requirements, including increasing the height of the structure to maximise racking height and stock volume of the facility, as well as the coordination of structure grids and column locations that were integrated into racking bays to maximise forklift access.

Vaughans also provided a full review of specified products and suggested alternative contractors and suppliers where practical, as well as providing Coles with quality assurance through



the certification of construction in accordance with engineering specifications.

Given the tight timeline, building sequencing was employed to achieve a quarter-by-quarter staged handover of the warehouse facility to allow racking contractors to commence installation as early as possible, with internal and external concrete trader split and separated to ensure project completion within the specified timeframe.

The structure's walls, roofing and electrical services were all installed prior to slab pouring to minimise construction traffic, along with the use of specialised laser screeds to ensure finished slab floors were within 1.5 mm. These measures along with the utilisation of fibre-crete with armour joints to minimise joints ensured a perfect, continuous flat warehouse floor.

Vaughans also employed a range of measures to 'future-proof' the project design, such as the inclusion of additional loading docks to provide spare capacity to allow for the potential increase in the volume of stock processed at the centre, along with the provision of 15,000 sqm of future

expansion land at the west end of site.

An integrated picking management system was also installed by Coles to allow the utilisation of automated picking machinery in the future.

An environmental management plan was employed throughout the project to ensure minimal disruption to the surrounding ecosystem, with run-off water filtered and channelled to nearby Dogherty's Creek to minimise erosion and pollution of the waterway.

Vaughans enjoyed a productive and collaborative partnership with all project partners, including the land owner, developer, investor, tenant and builder, and achieved a practical completion of the project ahead of deadline, ensuring quality of the asset and client satisfaction.

Other similar projects Vaughans has completed in recent years include Woolworths' distribution centre in Laverton North, ALDI Stores' and Kraft's distribution centres in Dandenong and three facilities for Coca Cola Amatil in Sydney.

For more information call (03) 9362 5655 or visit www.vaughans.com.au. **mhd**