



BUILT TO HELP YOU LIVE UP TO YOUR POTENTIAL

DEVELOPER : Derebin City Council
 MAIN CONSTRUCTION COMPANY : Kane Constructions
 CONSULTANTS : Root Partnerships, Warren and Mahoney, WT Partnership, Taylor Thomson Whitting (TTW), Integral Group and ARUP
 CONSTRUCTION VALUE : \$59 million
 TYPE : Sports and Leisure



Kane Constructions was awarded the \$59 million Design and Construct contract for the Northcote Aquatic and Recreation Centre (NARC), an ambitious project set to transform the concept of aquatic, fitness and wellness facilities.

The Northcote Aquatic and Recreation Centre (NARC) renewal project is a leading example of sustainable and community-centric design.

With its innovative features, commitment to energy efficiency, and 6 Star Green Star rating, NARC will redefine the concept of aquatic and fitness/wellness facilities. Through close collaboration with the community and indigenous representatives, NARC embodies inclusivity and cultural sensitivity.

As a flagship project in the City of Darebin's climate action efforts, NARC sets a new standard for environmentally sustainable development. Kane Constructions' involvement further solidifies their reputation for excellence, expertise and delivering high-quality construction projects.

"Council committed to achieving a 6 Star Green Star rating in response to their Climate Emergency Plan," said Project Manager, Sebastian Angus. "This is a demanding target for an aquatic centre, which is traditionally very energy-intensive, and has necessitated innovation across all disciplines, including structural and civil."

The design process involved close collaboration with the community and indigenous representatives to ensure a respectful and inclusive space. From the enhanced outdoor pools to the fitness and wellness facilities, NARC's vision embraces innovation and sets a new standard for environmentally sustainable projects.

Driven by the commitment to sustainability and achieving a 6 Star Green Star rating, NARC includes a range of stand out energy-efficient design choices, such as the elimination of gas for pool heating

and space conditioning, and the selection of glulam timber structures and ceilings. The incorporation of large-scale photovoltaic arrays and other sustainable techniques further contributes to minimising the building's carbon footprint.

Mass timber features strongly within the main pool hall, the roof structure is framed with large double Glulam timber beams that conceal ventilation ducts and services. An innovative timber product 'Dowel Laminated Timber (DLT)' is being adopted for the pool hall's structural ceiling, combining structural, acoustic and thermal properties, while achieving a unique architectural finish.

"Programming efficiencies were employed to optimise the drying and curing periods of the elongated pools," said Sebastian. "During each phase we ensured that no time was wasted by completing all overhead superstructure works (structural steel, precast and timber beams)."

A number of measures were taken to combat the corrosive environments, such as chlorinated air, by implementing quality

assurance processes to identify any dissimilar metal issues, ensuring air-tightness barriers were in place, epoxy paint for all structural steel elements and positive air introduced for all ceiling cavities.

"It was a necessity to ensure that the entire facility is completely air tight as a requirement for optimum thermal performance (6 Star Green Star) and mechanical system (Open Balance)," said Sebastian.

Kane Constructions is a multi award winning, privately owned commercial construction company active in all sectors of the industry.

With a turnover in excess of \$1 billion and over 450 full time employees, Kane Constructions operate throughout the east coast of Australia and overseas from offices in Melbourne, Sydney, Brisbane, Sunshine Coast and Canberra.

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