

# THE HIGH POINT OF HEALTH

CLIENT : Victorian Health Building Authority  
MAIN CONSTRUCTION COMPANY : Kane Constructions  
ARCHITECT : Lyons  
STRUCTURAL ENGINEER : Meinhardt Group  
CONSTRUCTION VALUE : \$76 million  
TYPE : Healthcare



The Wonthaggi Hospital expansion involved a high degree of interfacing with the existing live facility with services and infrastructure upgrades to cater for the new facility, future expansion and improved reliability of existing services.

**Multi-award-winning Kane Constructions were responsible for bringing to life the \$76 million expansion of the Wonthaggi Hospital.** In the works since 2018, the expansion was earmarked for redevelopment as part of the 2018 State Election commitment to give one of the fastest growing regional areas in Victoria additional and much-needed health facilities.

Community integration and continuity of existing services was the overall theme of the development with construction taking place while the existing hospital still in operation.

Kane Constructions collaborated with Bass Coast Health to deliver the project which involved the construction of a new, four-storey hospital facility adjacent to the existing facility with three new operating theatres, a day procedure room, central sterilising department (CSSD), a new emergency department with 18 additional treatment spaces and a new, 32-bed inpatient ward to meet the capacity to treat 26,000 extra emergency patients each year.

The building is connected to the existing facility via new, undercover link ways and includes a new 'Central Energy Node' to centralise and provide upgraded plant, critical infrastructure and services connections to both facilities.

"Although a practical health facility, the new building also features several striking architectural elements such as the multi-coloured 4mm anodised solid aluminium cladding system on the external façade of the building in coastal tones, which is a credit to the project Architect Lyons and provides a unique and distinctive building for the community," said Kane Project Manager, Brendan de Neef.

"In addition, the main atrium and entry is a spacious, 3-storey space filled with natural light from large, north-west facing windows."

Green spaces were integrated strategically into the design on levels one and three, to provide multiple spaces for patients and staff to access fresh air and calm areas for respite.

Effective communication between the Kane team, Bass Coast Health and all contractors was the key during the 22-month build and Kane was managing up to 230 workers onsite at any given time. Ensuring the existing hospital's operations were uninterrupted during construction added another element to the project.

"Working and living regionally and delivering this project through the pandemic was a significant challenge as the availability of material and labour was compromised. We supported and used local subcontractors and suppliers whenever possible," Brendan said.

"In addition the location of the new building, high water table and perched water was another challenge which meant a significant amount of work went into the design and construction of waterproofing and hydrostatic slab elements to prevent leaks and building uplift over time."

The Wonthaggi Hospital has recently been approved for an additional \$290 million from the State Government, for future works. Plans include new wards and extra beds, an improved medical imaging unit and the construction of a new helipad and at least 750 local jobs will be created through the development.

The new hospital means more patients can receive treatment much closer to their homes and families, while also reducing the number of patient transfers to other hospitals.

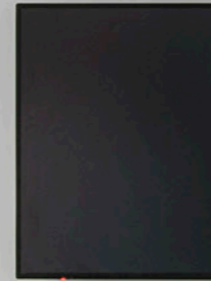
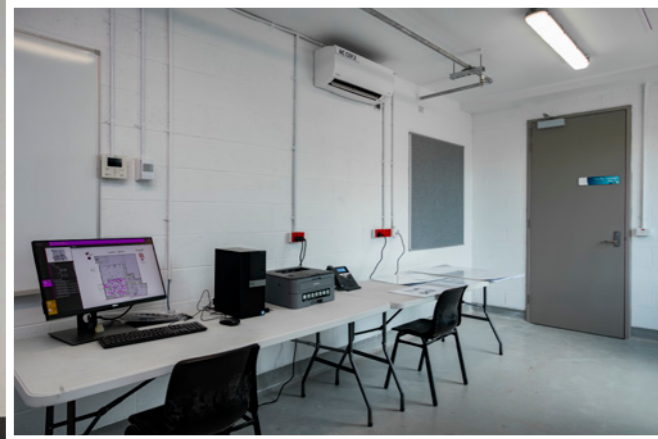
"The end result here at Wonthaggi is a high quality outcome and we're pleased to have delivered this world-class healthcare facility for the Bass Coast region," Brendan said. "It's an important piece of infrastructure and the fact that an additional 26,000 patients can be treated each year is a fantastic outcome for the local area."

Kane Constructions, a privately-owned construction company which is active in all sectors of the industry, was founded in Melbourne in 1973, operates throughout the east coast of Australia. Responsible for delivering more than 2,500 world-class projects, Kane is currently working on several exciting projects including 120 Collins Street, Ground Floor Plane Revitalisation project, Aikenhead Centre for Medical Discovery, Main Works project and the Melbourne Racing Club, Caulfield Public Realm and Administration Building project.

**For more information contact Kane Constructions Pty Ltd**, Level 9, 510 Church Street, Cremorne Victoria, phone 03 8420 1200, email [viccontact@kane.com.au](mailto:viccontact@kane.com.au), website [www.kane.com.au](http://www.kane.com.au)

Below Phoenix Fire provided integrated fire protection services for the Wonthaggi Hospital.

Below Meinhardt completed the structural engineering for the Wonthaggi Hospital expansion.



Phoenix Fire is a 100% Australian owned and operated Victorian based company, which specialises in integrated fire protection services for the construction and building maintenance industries. Experienced in the installation of smoke detection and alarm systems, EWIS, Vesda and Special Hazards.

Managing Director, Travis Cox has more than 20 years of experience in the industry and a proven track record for completing projects with a safety first, cost effective and time efficient approach. The Phoenix Fire team were engaged by Kane Constructions and were onsite at the Wonthaggi Hospital Expansion for 15 months, to complete their scope of work within the working hospital environment.

“We’ve worked with Kane on a number of projects over the years and enjoy a close working relationship with them,” Travis said. “I’ve done a lot of work in and around hospital environments and know all too well the importance of having their services uninterrupted and operating the whole time, so this was where we could best apply our knowledge and expertise.”

Phoenix Fire kicked off their scope by designing and implementing strategies to comply with the requirements for the hospital expansion,

including the networked fire and alarm systems and the Emergency Warning Intercommunication System (EWIS) throughout the new build. They are also upgrading the fire protection systems in the existing hospital and integrating the network across all buildings for maximum efficiency.

Working alongside a live hospital environment in the building next door was not without its challenges and required Travis and his team to be one step ahead at all times in order to minimise any disruption. “The result here at Wonthaggi Hospital is one that everyone involved can be really proud of and it’s a great addition to the area,” Travis said. “It will meet the demand of the growing population and gives the locals a place where they can go for medical services and treatment when they would previously have had to travel for this.”

Phoenix Fire’s portfolio boasts several large-scale projects including Iglu Flagstaff Student Accommodation on King Street and the company is once again joining forces with Kane on Iglu Russell Street, a 28-storey accommodation facility in the heart of Melbourne’s CBD.

For more information contact Phoenix Fire, phone 03 9738 7183, email [info@phoenix-fire.com.au](mailto:info@phoenix-fire.com.au), website [www.phoenix-fire.com.au](http://www.phoenix-fire.com.au)

At the Wonthaggi Hospital Expansion, the team at Meinhardt was engaged to carry out the structural engineering, including the design of the super structure, as well as the civil engineering aspect for the site roads and car parking.

Associate Director Structural Engineering, Elian Kocibelli whose experience in the industry spans some 16 years, spent close to two years on this project. He and his team were tasked with design and documentation for the hospital, which would need to meet the demands of a growing community.

“I looked after the project from day one and was involved in the coordination and development of the design with the architects, Lyons,” Elian said.

One challenge was the location of the original building, placed further south within the development site, where the ground water pressure was very high and deeper excavation would have been required. Not only costly, but water seeping through would pose safety risks to the construction crew as well. Meinhardt’s advice was to relocate the building footprint a further 25m north, resulting in a lesser depth of excavation and also reducing water pressure to the ground floor slab.

“This expansion at Wonthaggi Hospital is such an important piece of infrastructure and has resulted in a fantastic product for the local community,” Elian said. “It has a high standard design and in terms of buildability, Kane has done an amazing job once again.

With an emphasis on building long-term relationships with its clients, Meinhardt has gained a reputation for going above and beyond the scope of works, utilising its full complement of specialist teams including environmental, façade and project management with specific industry knowledge to meet today’s standards and safety codes.

Meinhardt’s relationship with Kane continues to grow and the two companies are currently collaborating on several projects at the moment. The recently completed Northern Hospital in Epping joins Wonthaggi and a long list of hospitals that the two companies have delivered together.

For more information contact Meinhardt Australia, Level 12, 501 Swanston Street, Melbourne VIC 3000, phone 03 8676 1200, email [contact@meinhardtgroup.com](mailto:contact@meinhardtgroup.com) website [meinhardtgroup.com](http://meinhardtgroup.com)

Below Jefferson Industries provided power and lighting for the Wonthaggi Hospital expansion.

Below R&R Bricklaying were contracted to complete the brickworks for the Wonthaggi Hospital expansion.



At the Wonthaggi Hospital Expansion, an uninterrupted power supply was particularly important to keep the site running during the construction of the new, three-storey hospital facility. Engaged by Kane Constructions to provide power and lighting 24/7, Jefferson Industries had their first generator onsite in January 2021 and worked hard to keep up with each stage of the project, which progressed at a rapid rate.

“We started with one, 100 KVA diesel-powered generator and as the build progressed, we had up to five generators onsite of various sizes,” said Managing Director, Eden Jefferson. “We also implemented uninterrupted power supply (UPS) solutions for all fridges and electronics onsite using battery-powered generators. Not only did this save Kane money on the overall running costs, but it reduced noise and allowed the security and CCTV systems to keep running at all times.”

Opting for both Cummins and Perkins generators at Wonthaggi Hospital, chosen for their reliability and outstanding performance, Eden and his team were onsite almost daily checking full levels and managing their equipment. “The Wonthaggi Hospital Expansion is an amazing project and Kane is so efficient at coordinating workers and all stakeholders and we are proud to have been involved,”

Eden said. “We not only met the requirements, but exceeded them and I’m looking forward to what we can achieve with Kane in the future.”

Jefferson Industries has been powering up and lighting up building sites and major events all across Victoria since 2018 and continues to build on its reputation for reliability, efficient service and a promise to maintain its competitive rates. “What started as a small operation with just a few generators to service the local builders, has since expanded to three trucks, five full-time workers and around 30 generators to meet the demand in the industry for temporary power and lighting on building sites,” said Eden. “We pride ourselves on our customer service and offer refueling and regular servicing for our units and all outside of business hours, so as to maintain an uninterrupted power supply for our clients.”

The company is currently working on significant projects for the Victoria Police and the Australian Defence Force, as it looks to expand on its already impressive portfolio.

For more information contact Jefferson Industries, Factory 4/32 Boys Home Road, Newhaven VIC 3925, phone 0492 915 877, email admin@jeffersonindustries.net, website www.jeffersonindustries.net

When it comes to large scale commercial projects, the experience and professionalism of R&R Bricklaying meant they were the perfect team for construction of the new Wonthaggi Hospital.

The R&R team were led by Darren Read, who first established the business in 1999, and today is known to be one of Gippsland’s most sought after and reliable bricklayers.

“It was great to work with Kane Constructions on such a large commercial project on the Bass Coast; especially a project that will offer much needed services to the area,” Darren said.

The job involved pattern brick work and a lot of core fill block work for both plant and electrical rooms, with the team laying around 20,000 blocks and 25,000 bricks for the new hospital.

R&R Bricklaying aren’t new to completing commercial construction projects; they’ve also worked on the Yarram Medical Centre, Cowes Nursing Home, Cowes Medical Centre, Ashwood Nursing Home, Cheltenham Nursing Home, Mary MacKillop Secondary School, Foster Basketball Stadium and the list goes on.

Bricklaying for Darren isn’t just a business - it’s in his genetics.

Darren started out as an apprentice at the age of 17, working alongside his father for seven years before going out on his own, working in London for two years as a foreman for a company building highrises in Chelsea Heights before returning home and establishing R&R Bricklaying.

Based in Leongatha, Darren and his team now service the South Gippsland region, South East Melbourne, Latrobe Valley and Bass Coast, making them accessible to a wide variety of projects in both metro and regional areas.

With a large team, the R&R crew has decades of experience between them, across a wide variety of bricklaying skills and projects, and have earned their reputation for providing both quality customer service and attention to detail, which has made them a favourite choice for builders - both local and high end.

For more information contact R&R Bricklaying, PO Box 466, Leongatha VIC 3953, phone 0409 270 500, email randrbricklaying@bigpond.com, website www.rrbricklaying.com.au



Wonthaggi Hospital Expansion, Victoria