A WALK ON THE RIVER-SIDE

DEVELOPER : Brisbane City Council MAIN CONSTRUCTION COMPANY : Georgiou and Brady Marine and CONSTRUCTION VALUE : \$58 million



Indooroopilly Riverwalk is an elevated 5m wide two-way cyclist and pedestrian thoroughfare which will connect the Western Freeway bikeway with the University of Queensland and includes dedicated bike lanes, new pedestrian and cycle crossings, lighting, landscaping, viewing platform, and wayfinding signage creating a safer environment for all road users.

Indooroopilly Riverwalk is a 790m long cyclist and pedestrian thoroughfare curving over and alongside the Brisbane River. The 5m wide Riverwalk will cater for up to for 540 pedestrians and 1,400 cyclists per day and includes safer pedestrian and cycle crossing points, viewing platforms, new lighting, wayfinding signage and landscaping creating a scenic and safer transport corridor.

In a joint venture, Georgiou and Brady Marine and Civil (GBJV) commenced work with Brisbane City Council in 2019. As part of the Early Tender Involvement process GBJV concentrated on various constructability and cost saving options as well as addressing time critical activities such as environmental approvals.

"Prior to accessing the site, we spent several months designing a number of unique temporary works, utilising our engineering capabilities to develop safer and more cost-effective solutions for the build," said Project Manager, Tristan Ogden. "Most of this work was completed by our inhouse designers having had an in-depth understanding of the project and the way GBJV was proposing to construct the works." Construction commenced in early April 2020, with the establishment of access to the three land connections and installing a temporary jetty for the delivery of materials by water, saving both time and money, especially compared to road transport.

The site was steep with sloping rock, existing infrastructure, contaminated land and a heritage-listed boat ramp. "We spent time planning the sequencing of the works, taking into account the operations of the canoe club and access to a nearby school," explained Tristan. "We dealt with the movements of 6,000 vehicles and hundreds of cyclists and pedestrians each day, implementing traffic arrangements and road closures to ensure the safety of construction workers and the general public."

The land connection at Radnor Street proved quite a challenge as there was only one access point available, requiring a temporary earth retaining wall to be built and to enable access for piling machinery.

"Over the water we worked under existing road, rail and pedestrian bridges, using specialised low height cranes and piling equipment," said Tristan. "We also designed and fabricated low height rigging equipment to install precast deck units."

The geotechnical conditions and strong tides of the Brisbane River also proved challenging for the piling works. Due to the lack of overburden (soft material above the rock) GBJV designed and fabricated piling gates which fitted to the barges, enabling the team to position pile liners and accurately pour 88 concrete piles.

GBJV delivered the \$58 million project under budget and three months ahead of schedule. "From the early tender stage there was always a clear strategy and we were confident that we could complete the project ahead of schedule," explained Tristan. "We also worked on multiple work fronts concurrently, bringing in additional marine plant for over-water works. We had three barges carrying out piling works, headstock construction and landing deck units."

Georgiou has a long standing relationship with Brady Marine and Civil as well as with Brisbane City Council, completing the Botanic Gardens Riverwalk together and Civil in 2019. "It was a smaller scale



project than Indooroopilly, but had its own challenges due to the urban location and an emphasis on architectural design," said Tristan.

"This project has been a great success for Georgiou and Brady Marine and Civil. It demonstrates our strengths in partnership and our expertise in delivering these types of projects. The project has been well-received by the community and I am proud to be part of the team," said Tristan. "Georgiou is in the process of delivering some great projects and tendering on some exciting opportunities – with the 2032 Olympics now secured, it's going to be an exciting time for infrastructure in QLD."

As an Australian-owned company, Georgiou continues to deliver quality infrastructure projects, maintain relationships with their clients and subcontractors and continue to be 'the best people to work with'.

For more information contact Georgiou, Level 5, 757 Ann Street, Fortitude Valley QLD 4006, phone 07 3319 4500, email qld@georgiou. com.au, website www.georgiou.com.au



In business 53 years, Barges Australia specialises in the hiring of marine plant, barges and pontoons, to provide floating work platforms for water based construction projects, along with marine qualified operators, as required.

Barges Australia provide assembly and disassembly of platform configurations and they can also supply a purpose built road transportable crane barge.

Barges Australia supplied two 12.2m pontoons on a dry hire basis for Indooroopilly Riverwalk. The pontoons are modular units that are transported by road to anywhere in Australia. Once onsite the pontoons can be bolted together in various configurations to accommodate whatever the client's requirement may be.

"Our first delivery was in May 2020 and our pontoons stayed there for over a year," said Daniel Semrov, Manager of Barges Australia."We've completed work for Georgiou before, in 2018, supplying equipment for the Tabulam Bridge build in northwest New South Wales."

"We supply and work all over the country but mainly along the east coast carrying out infrastructure works and private contracts," said Daniel.

"Currently we have ongoing work supplying a number of our modular transportable pontoons to construction sites at the West Gate Tunnel and the Point Wilson Defence Force Project in Victoria and we recently finished supply for Transport for NSW, on the Thule Street Bridge over the Murray River."

With road transportable pontoons, barges and equipment available, Barges Australia can supply from their base in Sydney to marine construction sites anywhere, including remote locations and overseas.

"In 2017, we supplied equipment to Newcrest Mining on Lihir Island in New Guinea, this required four of the 12.2m Steel Pontoons and two hydraulic spud mooring systems to secure the barges in position whilst the drilling operations were underway," explained Daniel.

For more information contact Barges Australia, 99 Forrester Road, St Marys NSW 2760, phone 02 9673 2505, email info@bargesaustralia. com.au, website www.bargesaustralia.com.au Established in 1979, Kenro is team of expert metal manufactures passionate about creating simple solutions for steel fabrication. Based in Queensland, they manufacture and deliver for projects Australia wide.

The company fabricated, delivered, and installed all the galvanized steel balustrading which included 698 posts, 692 panels and 312 lengths of rail for the Indooroopilly Riverwalk. Kenro worked to supplied specifications, replacing some non-standard sections with standard elements to make the fabrication process run more smoothly and produce more cost-effective items.

"The Riverwalk was a large-scale job for us," said Operations Manager, Luke McNalty. "Our first delivery was in October 2020, and we continued up until April 2021. A challenge of the project was scheduling deliveries to co-ordinate with Georgiou's barges."

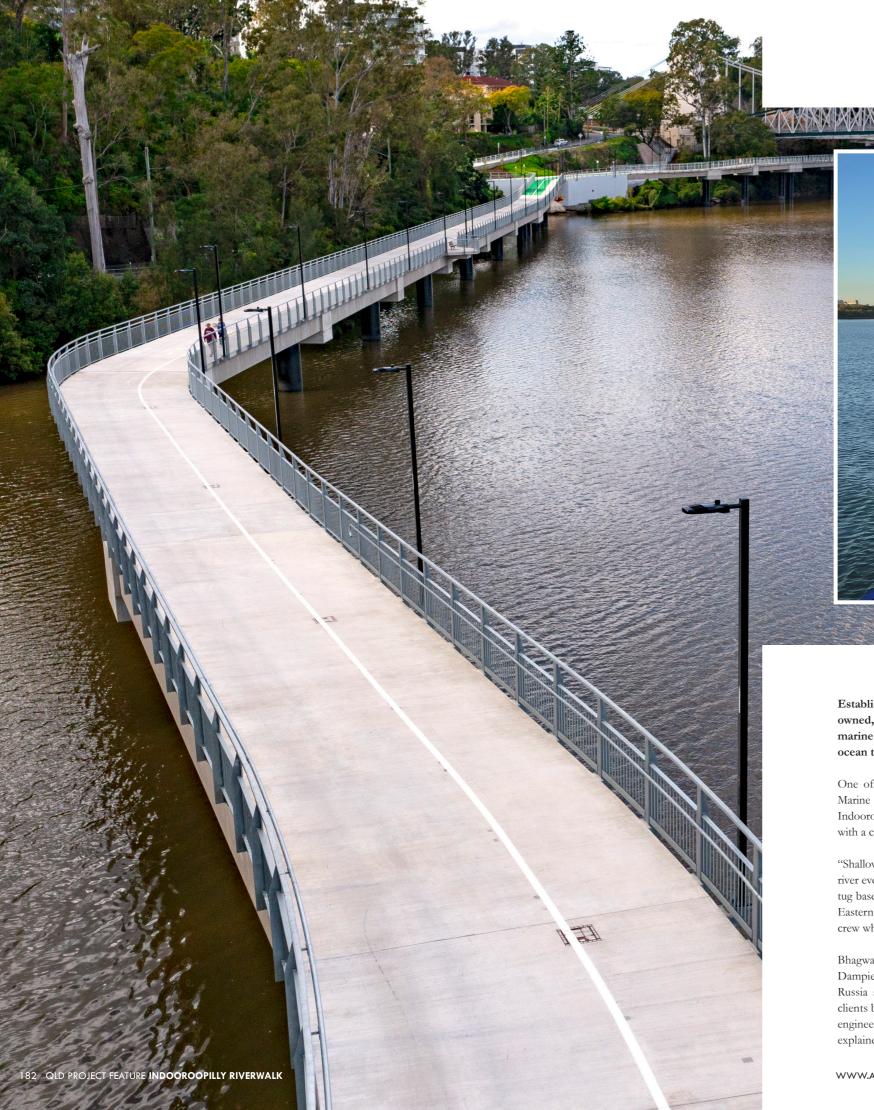
Kenro provides fabrication services from their 2,500m² facility in Toowoomba. Some projects of note are the 1,600m of anti-climb screens which they manufactured for the Toowoomba Second Range Crossing Viaduct, and the detailed decorative balustrade for the award-winning Toogoolawah pedestrian bridge. They have also supplied the steelwork to Georgiou on previous projects, including manufacturing the traffic barrier for the bridge on Green Camp Road Upgrade in 2019.

"We are passionate about simplifying our processes to make it as easy as possible for our clients," added Luke. "We manufacture our own jigs and tools to improve our manufacturing process and achieve quality results to the clients' specifications."

Kenro are prequalified manufacturers with the Department of Transport and Main Roads and have completed numerous supply and install contracts for the government department. In late 2020 they were manufacturing and installing steel barriers and accessories for the bridge at Deception Bay as well as anti-climb screens for the Sumners Rd interchange upgrade.

For more information contact Kenro Metal Services, 720 Greenwattle Street, Toowoomba QLD 4350, phone 07 4699 9888, email sales@kenrometal.com.au, website www.kenrometal.com.au





Established in 1998, Bhagwan Marine is Australian and family owned, providing marine construction support, salvage work, marine dredging support, emergency towage of ships and long ocean towage contracts.

One of the largest vessel service providers in Australia, Bhagwan Marine started the supply contract for barges, tugs and operators at Indooroopilly Riverwalk in May 2020. The company had a small fleet with a crew of seven and completed the job within 13 months.

"Shallow water and strong tides are challenges we deal with on the river every day, but these are very significant at Indooroopilly and our tug base was some distance from the site," said General Manager for Eastern Operations, Kevin Clifford. "We left a tug onsite and supplied crew when needed saving the cost of a long river trip.

Bhagwan Marine have bases in Brisbane, Melbourne, Perth, Onslow, Dampier and Darwin and recently completed contracts in Eastern Russia and Vietnam. "We endeavour to be a one stop shop for clients by providing a complete service including our inhouse subsea engineering division as well as our own cranes and equipment," explained Kevin.

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Bhagwan Marine have worked with Georgiou and their partner Brady Marine previously on the Botanic Gardens walkway and are currently working at Isle Of Capri on the Gold Coast, building a new bridge.

"We were the marine services provider on the Kingsford Smith Drive project which was the largest marine fleet ever to be assembled on one project in Brisbane. We provided 13 barges and three tugs as well as four utility vessels to service them," said Kevin.

For more information contact Bhagwan Marine, Level 3, 251 St Georges Terrace, Perth WA 6000, phone 08 9424 2300, email admin@ bhagwanmarine.com, website www.bhagwanmarine.com