

MOTORING ON

CLIENT : Brisbane City Council
MAIN CONSTRUCTION COMPANY : Georgiou Group
CONSTRUCTION VALUE : \$38.8 million



The \$38.8M Telegraph Road upgrade – Stage 2, has been designed to improve safety, travel times, facilities for pedestrians and cyclists, and reduce congestion. The development saw the road widened to incorporate a four-lane median divided carriageway, removal of the existing roundabout to allow for a new signalised intersection, as well as parking areas, shared pathways and dedicated turning bays, and a four-lane three span bridge.

Brisbane City Council awarded the Stage 2, \$38.8 million Telegraph Road corridor upgrade to Georgiou Group in April 2017. A major upgrade involving the widening to four-lanes of one of north Brisbane's busiest arterial roads which links the Gateway motorway to Gympie Road, the project improves travel times and supports the growth of the northern suburbs, as well as improving infrastructure for cyclists and pedestrians. With three main legs of the project, Telegraph Road, Lemke Road and Depot Road, the existing roundabout was replaced with a signalised intersection, with the existing single span bridge on Lemke Road replaced with a three span bridge which will improve the flood immunity along the corridor.

Due to the widening of the existing corridor, a significant amount of utilities (PUP) through the project were required to be relocated. In the first six months of the project, Georgiou focused on the relocation of these utilities, while undertaking the contaminated land remediation works, the construction of the new three-span bridge consisting of

138 deck units, reconstructing the pedestrian underpass under Depot Road, decommissioning old services and programming re-diversions and diversions of drainage channels. There was extensive landscaping undertaken which also included reinstatement of part of an AFL field.

"The project was not without its challenges," says Project Manager, Matt Christensen. With some of the first works being the removal of ash and old rubbish, approximately 30,000 tonne of material was removed, up to 7m deep and replaced with an engineered fill. The removal of the material to a licensed facility had to be carefully planned and executed.

"The area of contamination was beside a tidal creek and was below the water table. The inflow of water into the excavation needed to be managed and treated prior to discharging offsite," explained Matt. "We built a series of reinjection trenches and pumped the water into them, allowing the water to naturally filter. A testing regime was

adopted, which showed the trenches were filtering the water and the creek experienced no impacts as a result. It was a great outcome for all involved."

The project further adopted a complex staging programme that limited the impact on an already busy road network. By creating temporary switches, and completing a lot of the works offline, the impact to motorists was significantly reduced. Switching from a roundabout into a signalised intersection was something that Georgiou worked closely with the Council and their Congestion Reduction Unit to ensure the best for project outcome was achieved.

Georgiou offer a range of civil, engineering and building construction services across Western Australia, New South Wales, and Queensland. With a sizable team of over 600 people, they are currently delivering close to 30 projects across Australia. Their services include building construction in feasible and cost effective ways; earthworks and site preparation for building, mining and infrastructure; land development such as earthworks and remediation; precast facilities specialising in bridge spans, retailing structures etc; roads and bridges; water infrastructure and marine construction.

With a project portfolio spanning the project sectors of building, civil and precast, the Georgiou collection is extensive. Current examples

include the Green Camp Road Upgrade in Queensland and the Northern Road Upgrade project between Mersey Road, Bringelly and Eaton Road, Luddenham and M1 Weakleys Drive Intersection Upgrade in New South Wales.

Across the board, Georgiou show a commitment to reducing their impact on the natural environment and diversity in company culture. Their very own Reconciliation Action Plan (RAP) was the first in Australia's construction industry to gain endorsement.

For more information contact Georgiou Group, Level 5, 757 Ann Street, Fortitude Valley QLD 4006, phone 07 3319 4500, fax 07 3319 4545, email qld@georgiou.com.au, website www.georgiou.com.au



QUICKCELL TECHNOLOGY

Quickcell Technology Products recently supplied all bridge beams to the Stage 2 four-lane bridge at the Telegraph Road upgrade. Stretching across Cabbage Tree Creek, the three-span bridge includes a full-lit pedestrian and cyclist underpass and stands higher to withstand any probable flooding.

“It was a delight to work with Georgiou and we delivered the project to the full satisfaction of both ourselves and the client,” said Hossein Shamsai.

The Lucinda Bridge located at the Port of Brisbane utilises a world first, Australian owned and Queensland designed, Quickcell Wide Flange Super I-Girder innovation with a span of 46m. This innovation has been recognised for its sustainability within the project and is receiving excellent ratings for its design by the Infrastructure Sustainability Council of Australia (ISCA).

Trading since 1993, Quickcell Technology Products service the building industry in Queensland and Northern New South Wales.

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A SUNBURNT COUNTRY

South Qld Soils recent contract at Brisbane’s Telegraph Road corridor upgrade, saw to a range of material and geotechnical engineering testing services.

With Stage 2 completed in late 2018, the upgrades see to a higher capacity for new and upcoming traffic incursions, and an overall improvement in safety, flood immunity and travel efficiency. It was South Qld Soils’ task to ensure that all geotechnical testing was performed in a timely manner.

“Telegraph Road required extensive material testing of the new pavements and concrete bridge. These compaction tests helped us assess material density and subsequent durability. With the project close to waterways the pavement assessment had to also consider material permeability,” said Project Manager, Ray Hicks. “Our geotechnical tests using a nuclear densometer also helped us assess all site related earthworks which included nature strips.”

The project had the usual challenges found on road projects, particularly those relating to traffic flow. “Generally the hold ups were due to wet weather and heavy traffic. Telegraph Road is a popular traffic route and although Georgiou installed traffic signals, peak hour was busy.”

South Qld Soils’ were established in 1994 and are specialists in geotechnical services throughout Queensland and Northern New South Wales.

With over 80% of their projects coming from repeat business, they have a strong reputation for smart solutions in methodology and reliable testing services. They work with a team of 50 staff across Queensland and New South Wales. The South Qld Soils’ expert testing services provide for a range of projects from roadworks to siteworks, aerodromes, mining/ resources, building structures or other related fields.

With a range of clients across a range of diverse projects, South Qld Soils’ offer services both through their fixed laboratories and throughout Australia with their NATA accredited onsite mobile laboratories. Other projects include Kingsford Smith Drive Upgrade, Logan Enhancement Project, Warrego Highway Passing Lanes and many more.

For more information contact South Qld Soils Pty Ltd, 15 Malduf Street, Chinchilla QLD 4413, phone 07 4668 9716, fax 07 4668 9449, email chinchilla@sqs.net.au, website www.sqs.net.au

