



FAST TRACK TO SUCCESS

DEVELOPER : Byron Shire Council
 MAIN CONSTRUCTION COMPANY : Hazell Bros
 PROJECT BUDGET : \$25.75 million

The Byron Bay Bypass improves connectivity and traffic flow between the north and south of Byron Bay providing an alternative route that reduces the number of cars travelling through the town centre by an estimated 30%.

The opening of the Byron Bay Bypass at the end of February 2021 has been widely welcomed by the local community with clear evidence of faster commutes around Byron Bay and reduced traffic volumes in Jonson Street, the main road going through the town centre. The Bypass, funded by the NSW Government and the Byron Shire Council, was the largest single infrastructure project Council has ever undertaken.

Hazell Bros Group was awarded the contract to build the Bypass in May 2019 and construction commenced in July 2019. The purpose of the project was to improve connectivity and traffic flow between the north and south of Byron Bay, provide an alternative route that avoided the town centre, reduce the number of cars in the town centre on a daily basis by an estimated 30% and prioritise pedestrians over cars in the town centre.

“The building of the Bypass was regarded as a priority by many in the community and giving pedestrians priority over vehicles in the town centre was strongly expressed by the local community throughout

the Shire’s Masterplan process,” said Byron Shire Council’s Project Manager, Josh Winter.

The Bypass was approved following a rigorous environmental and planning process. All the necessary approvals required under New South Wales law were obtained and were approved by the NSW Land and Environment Court. Council and all contractors adhered to the very strict environmental protocols on this project including pre-clearing surveys undertaken by qualified ecologists and wildlife specialists prior to the removal of any vegetation.

In addition to this, as part of the strict approvals from the NSW Office of Environment and Heritage, the Shire Council is now undertaking the restoration and conservation of 44.5 hectares of similar wetlands to an amount of 1.56 hectares that was removed to provide space for the Bypass.

A number of challenges arose during construction, including an area of soft ground necessitating some design changes. The area where



the road was built was very flat with a high water table, so creating adequate drainage was a necessity. A number of old services were discovered during excavations, including asbestos mains and other material that had to be removed. “We also uncovered some heritage footings and tanks from the old Norco Butter Factory which we were able to remove after the necessary approvals were obtained,” Josh said.

The pandemic created some issues, particularly because the principal contractor and a number of other subcontractors were based in Queensland, so during the border closure imposed by the Queensland government, local subcontractors had to be found to keep the construction programme moving forward.

The Bypass project delivered an upgraded roundabout at Shirley, Butler and Jonson Streets, 1.2kms of new road construction, 250m of road renewal and resurfacing, increased road width by 6-10m on average, increased size of the Butler Street drain, construction of a pedestrian

footbridge on Butler Street, 12 safer crossing points, 2.3kms on road cycleway, noise mitigation works at 19 properties and construction of 200m of noise wall.

“The overwhelming positive community reaction to the opening of the Bypass, together with the recognition that very tight environmental controls were adhered to during construction, has justified the Council’s decision to move ahead with the project which has been substantially supported by the NSW Government,” Josh said. “Byron Bay residents are already experiencing the benefits of improved traffic flow and reduced vehicle numbers in the town centre. We’re looking forward to seeing how it performs during peak holiday periods when Byron welcomes thousands of visitors.”

For more information contact Byron Shire Council, 70 Station Street, Mullumbimby NSW 2482, phone 02 6626 7000, email majorprojects@byron.nsw.gov.au, website www.byron.nsw.gov.au

Below Bishton Group completed the acoustic attenuation upgrades along Butler Street for the project.



Below GeoLINK were responsible for the environmental management plans to protect the endangered fauna.



Bishton Group is a privately owned construction company established on the Gold Coast in 2014 specialising in residential, commercial and industrial projects, particularly for local government, councils and Tier 1 builders. Bishton Group undertakes both new buildings and remediation of existing structures.

Engaged on the Byron Bay Bypass, they undertook acoustic attenuation upgrades along Butler Street. The scope of work included custom acoustic fencing, installing acoustic glazing, doors and air conditioning in homes and other rectifications as required. "In order to maintain the integrity and significance of the street, the materials and designs of the fences were varied to suit the houses," said Director, Scott Bishton.

Bishton Group's specialty is difficult, commercially sensitive, high stakeholder engagement type projects. "We focus on minimal disruption to the day-to-day activities of our clients' businesses or homes." Bishton Group has also built a reputation for excellence in project and construction management.

For more information contact Bishton Group, phone 07 5628 7032, email admin@bishtongroup.com.au, website www.bishtongroup.com.au QBCC 1286359 NSW 291907C



In 2021, GeoLINK is celebrating 30 years of excellence and success in the environmental engineering and management business. Now well established with an impressive portfolio of projects to their credit, GeoLINK's multi-disciplinary team works across the public and private sectors including land development, mining, power, water, transportation and intensive agriculture.

A recent project for GeoLINK has been the Byron Bay Bypass, a complex development by the Byron Shire Council. GeoLINK assisted both Council and the contractor, Hazell Bros with environmental management over the 18 month construction period.

GeoLINK assisted with the preparation and implementation of environmental management plans which required approval prior to construction. There were particular concerns about water quality, contaminated land and threatened species, requiring careful assessment and management. They were also involved with the designs for fauna underpass structures.

Threatened species of concern included koalas and the critically endangered Mitchell's Rainforest Snail which required referral to the Australian Government for approval. During the clearing

phase, GeoLINK had a team of ecologists working day and night. "We had to carefully monitor the clearing of the road corridor to reassure interested community members every part of the approved management plan was followed to the letter," said Director, Simon Williams. "We supplied the contractor with monitoring data to then be shared with the Council and the community."

GeoLINK focuses their environmental consultancy work on regional areas from their offices in Lennox Head, Coffs Harbour, Armidale and Lismore. GeoLINK was appointed as the environmental manager for the Chaffey Dam pipeline project and was engaged by Transport for NSW to provide environmental and ecological services during the construction of the new Tabulam Bridge. Current projects include the proposed inland rail, the Newcastle inner-city bypass and the Coffs Harbour bypass. "Being privately owned and independent, we can rapidly respond to the changing needs of projects and can quickly assemble a multi-skilled team to provide clients with a cost effective practical solution for any project," Simon said.

For more information contact GeoLINK, Level 1, 64 Ballina Street, Lennox Head NSW 2478, phone 02 6687 7666, email info@geolink.net.au, website www.geolink.net.au

Below Coastal Asbestos safely removed and disposed of the unexpected asbestos discovered during construction.

Below Clearpro Water Solutions were responsible for the dewatering and water treatment for Byron Bay Bypass.



The team at Coastal Asbestos knows everything there is to know about the safe removal and disposal of all asbestos products. Licensed by Workplace Health and Safety, Coastal Asbestos works with corporate, municipal and private clients from Brisbane to northern New South Wales, providing professional asbestos services, including removal, inspection and reporting, and management and awareness programmes for businesses.

Coastal Asbestos have been contracted for many major infrastructure projects, including the Byron Bay Bypass. Work at the bypass for the Hazell Bros Group extended over two years, with Coastal Asbestos available at call to manage any asbestos finds and then undertake safe removal. "One of the unexpected discoveries was asbestos product buried in a railway carpark," said Director, Jason Spaul. "With the area fenced off and the appropriate warning signs in place, we proceeded to remove all the offending product and certify the area as safe."

Coastal Asbestos was also present when construction work was proceeding in an area where it was suspected that asbestos might be found, including old pipes and dumped or buried building material. Once any asbestos product was removed, Coastal Asbestos arranged appropriate compliance certificates for the principal contractor.

The work at the Byron Bay Bypass had to be handled with sensitivity for the environment. "There was also a need to ensure the safety of nearby residents and allay their fears about the asbestos removal process. When local people engaged with us, we would reassure them about the absolute safety of our procedures and our standing as licenced asbestos removal specialists."

The quality of the work undertaken by Coastal Asbestos is exemplified in their 2020 Queensland Master Builders Award for Excellence in Workplace Safety at the Gold Coast Sewage Pump Station project. The company has also worked for the Gold Coast Council on the removal of asbestos from 200m of retaining walls and is regularly engaged by Energen on network activities.

For more information contact Coastal Asbestos, 4/55 Upton Street, Bundall QLD 4217, phone 07 5570 3706, email info@coastal-asbestos.com.au, website www.coastal-asbestos.com.au

Clearpro Water Solutions has achieved great success as a specialist water treatment contractor and system manufacturer for industrial and construction industries. Based in southeast Queensland and servicing the east coast of Australia, Clearpro combines expert water treatment knowledge with manufacturing skills to provide mobile water treatment equipment for all dewatering requirements.

Having completed projects as varied as tunnel boring, major bridge construction, dewatering basements in high rise residential projects to providing purified water for large scale hydroponic tomato production, Clearpro was engaged by Hazell Bros as the dewatering and water treatment contractor on the Byron Bay Bypass project. The bypass, opened in late February 2021, is reducing traffic congestion through the Byron Bay town centre and assisting communities to the south of Byron Bay access the Pacific Highway.

The project attracted concern from local environmental groups as the bypass was being built through sensitive wetlands with vulnerable plant and animal species. Clearpro's role was to assist in the mitigation of any adverse environmental impacts. A number of culvert installations required dewatering and the installation of drain bypass systems.

Due to the shallow groundwater table, high flow volumes were extracted from the wellpoint spear systems. "The groundwater was very acidic and iron rich, with high concentrations of heavy metals," said Director, Nathan Piper. "We therefore had to deal with high turbidity through the duration of the project. Various combinations of water treatment equipment were used at different locations to achieve the required discharge criteria, including the latest LB15 treatment systems."

After Clearpro's treatment, the water was suitable to be released into the adjacent wetland system, achieving a positive environmental outcome for the Bypass project.

Clearpro can professionally manage water treatment projects from preliminary reporting and system design, through to onsite implementation and compliance reporting. The company is currently working on the M1 upgrade at Palm Beach and the Gold Coast recycled water upgrade.

For more information contact Clearpro Water Solutions, 1/40 Township Drive, Burleigh Heads QLD 4220, phone 1300 702 288, email enquiries@clearpro.com.au, website www.clearpro.com.au