



Future-proofing infrastructure for generations to come

Creating, connecting, and caring for communities



Donovan Wallace
General Manager Civil

As problem solvers, we engineer solutions to social, economic and environmental changes. This requires considered, lateral approaches to the infrastructure that underpins our lives.

The next few pages are an insight into Fulton Hogan Civil's part in this — in engineering the best possible future for New Zealand and its people.

We hope you find it of interest, and of value.

Front cover: Pukekohe East Reservoir under construction.



Contents

| | |
|---|-----------|
| 90 years of New Zealand | 02 |
| From quarrying to quality sign-off | 03 |
| Creating, connecting, and caring for communities | 04 |
| Doing it right | 06 |
| Nurturing the future of our industry | 07 |
| Developing diverse and specialised leaders | 08 |
| Expanding our network with diverse suppliers | 09 |
| Structures and marine | 12 |
| Taramakau Bridge | 15 |
| Taipa Bridge Replacement | 17 |
| Ground engineering | 18 |
| Milldale Branch Sewer | 21 |
| Hairini Link | 23 |
| Mechanical and electrical | 24 |
| Lyttelton Wastewater Project | 27 |
| Pukekohe Trunk Sewer | 28 |
| Temporary works | 30 |
| New Brighton Pier | 32 |
| AMETI Busway Bridge | 35 |

90 years of New Zealand

For nine decades Fulton Hogan has built the bridges, roads, ports, airports, and infrastructure that connects people, and underpins our quality of life.

We also play a growing role in Australia, where the business now matches Fulton Hogan New Zealand in scale.

All of which is some way from the fledgling partnership forged by surveyor Jules Fulton and mechanic Bob Hogan during the Great Depression. Their descendants, along with thousands of New Zealanders nationwide, have built a foremost civil engineering and construction company.





From quarrying to quality sign-off

We're involved from the start of a project, through to completion.

"From quarrying aggregates to the final surface and paint, our investment in every link of the supply chain is our biggest point of difference," says Fulton Hogan New Zealand CEO Ben Hayward.

"Wherever you go in New Zealand, there's something we've touched; something we've made."

As important as our breadth is our depth – of relationships, of knowledge, and of expertise. Ninety years on, our DNA continues to be built on Respect, Energy & Effort, Attitude, and Leadership – REAL values that drive all our actions.

This also ensures we understand, implicitly, that it is more than simply 'the' environment we work in. It is 'our' environment – something shared by us all, and by generations to come.

“

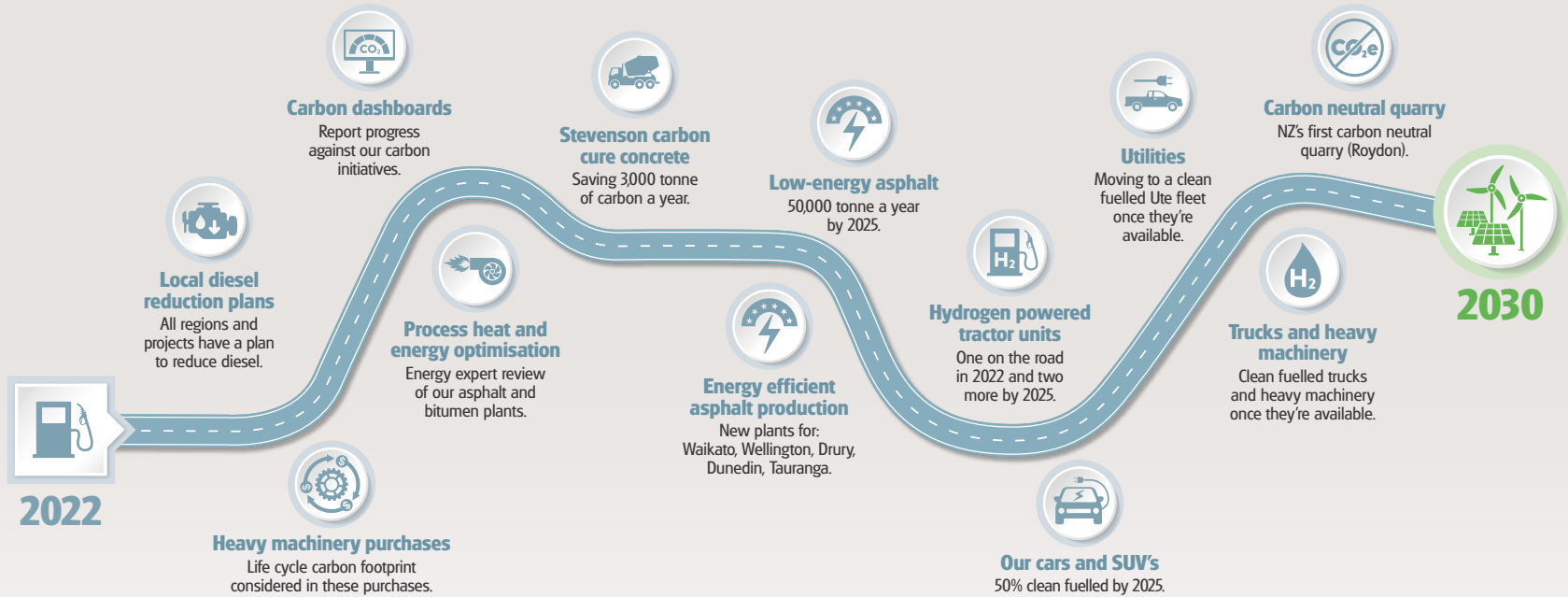
“Wherever you go in New Zealand, there's something we've touched; something we've made.”

New Zealand CEO
Ben Hayward

Our purpose

Creating, connecting,
and caring for
communities





Sustainability Doing it right

After 90 years in operation, the word 'sustainability' has profound and multiple meanings for our business. Most fundamentally, it means always doing things with an eye to future generations. We are acutely conscious that this means acting differently from previous generations – when people did not know the extent of human environmental impact.

With knowledge comes responsibility. Although sustainability has many strands, at its heart lies the environment that supports us, that makes our lives

possible. We have committed to reducing our carbon emissions (Scope 1 and 2) by 30% by 2030 (from a 2021 baseline) and to be carbon neutral (Scope 1 and 2 emissions) by 2050.

Given the energy intensity of some of our core activities, including the production of asphalt, we are under no illusion about the scale of this challenge, and are committed to applying our people's passion for problem solving to helping address the sustainability challenges of the future.

Carbon reduction targets

- Fulton Hogan is certified under the Toitū 'carbonreduce' programme, which verifies we have measured our greenhouse gas inventory in accordance with ISO 14064-1:2018
- Our near term reduction target is a 30% absolute reduction by 2030 compared to a 2021 baseline (Scope 1 and 2 emissions), utilising carbon offsets as required
- Annual 'carbonreduce' audits will verify our measurement and progress
- We are also working towards achieving net zero Scope 1 and 2 emissions by 2050
- This target was set after our 2021 Toitū certification, and we are seeking certification for both the 2030 and 2050 targets in 2022

Infrastructure Skills Centre

Nurturing the future of our industry

There are few more diverse careers than those in infrastructure. There are also few better opportunities to get a foothold in this industry than the Infrastructure Skills Centre (ISC).

Established by Fulton Hogan with the Ministry of Social Development and Civil Contractors New Zealand (CCNZ), the ISC helps New Zealanders, with little or no experience, discover the diverse opportunities in our industry. After just six weeks, during which time they are fully paid and guaranteed a job on completion, course cadets leave with the foundation laid for a career in our industry.

The role the ISC plays in career development and training was recognised in 2022, with Fulton Hogan

receiving the CCNZ National Connexis Training award for large companies. Its success reflects a core tenet of Fulton Hogan — that while skills can be taught, attitude is innate.

The ISC has been designed to be flexible, accommodating the unique needs of particular groups. In mid-2022, the ISC held its first course in conjunction with iwi. Partnering with Waikato-Tainui, with whom Fulton Hogan has a longstanding relationship, the course was designed around Te Ao Māori, and included tohu marae (overnight marae stay) and study of the history of Waikato-Tainui.



Graduate Development Programme

Developing diverse and specialised leaders

With an emphasis on providing skills, experience, knowledge, and opportunity, our Graduate Development Programme gives graduates the tools to excel in their new careers.

Combining networking and personal development opportunities, mentoring, and rotations through multiple areas of our business, graduates finish our programme with critical skills that supplement their specialist education.

The number of graduates we welcome to our business is growing each year, as is the diversity of their skills. While engineers and accountants have typically made up our graduate numbers, those with backgrounds in procurement and sustainability are bringing new and specialised skills to our ranks.

We know that investment in our industry's newcomers is crucial in our ever-evolving industry, and to the diverse needs of our customers.

Our commitment to this is reflected by the recognition our programme has received. In 2022, the Fulton Hogan Graduate Development Programme was voted number one in the Construction and Property Services category of New Zealand's Top 100 Graduate Employer's Survey.



Amotai Partnership

Expanding our network with diverse suppliers

In 2021 Amotai was launched. In essence, a register of Māori and Pasifika-owned businesses that makes them more visible and accessible to the wider business community.

As a founding member of Amotai, Fulton Hogan is deeply committed to increasing Māori and Pasifika involvement in civil construction. Amotai acts as a bridge between Māori and Pasifika businesses, and purchasers of services. The goal is to bring additional environmental, social, cultural, and economic benefits through projects, and increasing suppliers' and subcontractors' capabilities in health and safety, financial health, environmental policies, and general business processes.

One such supplier is personal protection equipment (PPE) company, Hamilton-based Safety and Apparel.

Safety and Apparel Director Mike Beadle whakapapas to Ngāi Tahu, and the company has a diverse mix of people of Māori, Pasifika, African, Asian, and European descents.

Mike says involvement with Amotai is “expanding our view of what it means to be a New Zealand company, to be New Zealanders, and is helping us to embrace our New Zealandness.”

He says the key is knowing our history — the good and bad — for a more rounded view of the last 200 years. Recent history is also important to Safety and Apparel.

When they won the contract to provide Fulton Hogan its PPE in 2016, he says it “was a big bite”. The business grew by 20 percent almost immediately.

“We had a choice: did we have Fulton Hogan as a special status customer within our business, or did we make their standard the standard for the whole company, across our 6,000 clients?”

“We chose the latter, and Fulton Hogan helped make us a better business. They helped in our goal to be exemplary across everything we do, and that includes introducing us to Amotai.”

Focusing solely on PPE and PPC (personal protective clothing) gives the company a focus they see as an additional competitive advantage.

“There’s a lot of pride when we see Fulton Hogan people across the country wearing our gear.”



Ehara taku toa i te toa takitahi,
engari he toa takitini

Success is not the work of one, but the work of many



The Huntly Bypass, a 15km section of the Waikato Expressway completed in 2020

Structures and marine works

Innovative engineered structures delivered across land and water





Belfast Bridge intersection, part of
Christchurch's Northern Corridor



Taramakau Bridge

Minimising disruption, maximising enjoyment

Project scope

This Waka Kotahi project involved development of 1.5km of off-road facilities for cyclists and pedestrians, a new two-lane rail overpass, and a two-lane road bridge.

The rail overpass was skewed to the railway line and required 100m of double hollow-core beams on the southern approach to the new road bridge. It consisted of seven spans of super-tee bridge beams of 250m in length.

The project also required 300m of culvert pipe, three permanent sediment ponds, riprap protection on outlets, subsoil drainage, kerbs, and channels. There was 150,000m³ of imported bulk fill and road pavements, 80,000m³ of cut-to-waste, and 6,000m³ of imported topsoil, which was shaped on batters for reinstatement works.

Challenges and innovation

Challenges included geographical isolation, logistics for delivery of precast beams from Christchurch, and complex health, safety and environmental management within a high risk flood zone.

The Taramakau River often floods, blocking access to the riverbed and threatening temporary works. To reduce and – where possible – eliminate temporary works over the river, accelerated bridge construction (ABC) principles were used, with the pier columns and

headstocks precast on site to enhance safety and reduce construction time.

This enabled the piles, columns and headstocks, and the pre-casting of the bridge beams to occur concurrently in Christchurch, eliminating temporary works on site. The team also set up, and pre-cast, the retaining blocks for all engineered walls on site. This guaranteed an uninterrupted supply for the project, and removed the need for long-haul delivery from the east coast.

Client and community

Given the river's significance to the community, the team engaged with stakeholders to minimise disruption, and to avoid any disruption to fish passage. River access for the public was also upgraded to give unhindered access to the riverbed area downstream, and access to the West Coast Wilderness Trail.

On behalf of the client, Fulton Hogan worked with the adjacent Grey and Westland Councils to vary the Notice of Requirement/Designation to allow accelerated works; enabling weekend works to compensate for delays caused by delivery issues, weather, and changing river conditions. The project finished ahead of schedule.

Almost 90% of staff employed at the site were locals, delivering approximately 60% of the project's value.

Location

Taramakau River,
Gymouth

Objective

Improve transportation
for pedestrians, cyclists,
road users, and rail

Client

Waka Kotahi

Value

\$23.7 million

Location

Taipa River, Northland

Objective

Improve connectivity for a growing community

Client

Waka Kotahi

Value

\$17.5 million



Taipa Bridge Replacement

Collaborating with iwi and hapū-selected designers

Project scope

This collaborative ECI project, with Aurecon, Waka Kotahi, and local iwi, improved connectivity for a growing community. It involved a 600m improvement to SH1 with road widening, a shared use path, three intersection improvements, and a new 160m bridge.

Designs were developed with significant input from the community, the local school, iwi, and hapū-selected cultural designers. Streetscape design included a cycleway, footpath, parking, monument replacement, handrails, and viewing platforms. The bridge and embankment required consideration of a sensitive shellfish ecosystem near the project site. Safety in design was another critical issue, particularly in developing platforms for public viewing and for bridge jumping – a popular local pastime!

Challenges and innovation

Before construction, the stormwater team undertook flood-modelling assessments on the Taipa estuary to confirm requirements to prevent increased upstream flooding.

A new stormwater pipe was laid from Oruru Road and along SH10, which has been critical in reducing flood risk at the local school. Beam types, lengths, and pier locations were considered in detail during development, reflecting geotechnical, environmental, and constructability constraints. Bridge designs were completed using 3D Revit models, including Infracore for initial optioneering and visualisation, and Navisworks for clash detection.

The nine-month fill settlement phase ran alongside construction, providing continuity of follow-on pavement works. As part of the consents, an archaeological authority was obtained from Pouhere Taonga Heritage New Zealand for earthworks.

Client and community

Fulton Hogan engaged environmental specialists to assess impact and support consenting applications. Mitigation measures were incorporated in the design to manage critical environmental impacts, like fern bird habitats, salt marshes, coastal processes, and contamination.

Containment systems were developed to protect the river during construction, eliminating environmental incidents and ensuring there would be no impact on downstream pipi beds. After feedback from local iwi, stormwater treatment swales were added to improve water quality.

To protect the community, extra measures to reduce speed within the township were added. This included narrowing traffic lanes, adding landscape planting, and placing gateway features at project extents. Communication between urban designers, road designers, and structural engineers was critical throughout the design development to satisfy all parties.

Ground engineering

Advanced design supported by in-house geotechnical support





Maungatapu Underpass, part of the Hairini Link project in Tauranga



Milldale Branch Sewer

Future-proofing infrastructure for growing communities

Project scope

Milldale Stage 7 comprised 1,209m of trunk sewer line with 13 manholes running under a main road, beneath a tidal creek, across a pipe bridge, through a golf course, and connecting with the trunk line. The project ensures sufficient capacity for a new, 4,500 household residential development in Wainui East, Auckland, and had an 11-month construction programme to mobilise, construct, test, and reinstate.

The construction of 13 manholes required three secant piled temporary shafts and two sheet piled temporary shafts, in-situ concrete works, and installation of precast elements of up to six tonne and 3m in diameter. The tunnelling works included a drive beneath a live main road and a tidal creek, requiring sediment and erosion control measures throughout.

A pipe bridge was built, consisting of 31m of encased 651mm diameter PE pipe supported on two piles. An additional 772m portion of open cut works was carried out using 675mm diameter reinforced-concrete skid-ring joint-jacking (RCSRJ) pipe installed through the golf course.

Challenges and innovation

This project required four 100m drives of micro-tunnelling, and pipe jacking of 1050mm diameter RCSRJ pipe at depths of up to 10m.

Fulton Hogan used experience gained on the previous phases of the Milldale Branch Sewer construction to optimise manhole construction.

The haunching was constructed in two pours, and construction of these elements was partially phased in parallel. Open cut works were accelerated by running two pipe-laying crews in the final phase of the project.

Among other challenges was pipe installation in unfavourable ground, requiring considerable dewatering and substitution of unsuitable soil. Once these works were complete, Fulton Hogan carried out reinstatement works to the golf course.

Client and community

Management and construction teams reported to Fulton Hogan Land Development regularly, in compliance with contract requirements and our in-house contract management system.

A project steering group met regularly from inception to develop and agree the project delivery process.

Physical works commenced in December 2020 with an 11-month construction programme. Regular reviews of progress against programme, and increased plant resources on site, ensured that the project was kept on track and within budget. This is despite significant rain and unforeseen ground conditions, which could easily have caused considerable delay and additional costs.

Location

Milldale, Auckland

Objective

Create sewer capacity for 4,500 new homes

Client

Fulton Hogan
Land Development

Value

\$10.4 million

Location

Tauranga

Objective

Improve safety and travel times in a growing region

Client

Waka Kotahi

Value

\$35 million





Hairini Link

Safer, faster travel for Tauranga community

Project scope

The Maungatapu Underpass is a two-lane link beneath Tauranga's Maungatapu roundabout that improves traffic flow in the area. It comprises bridge decks supported on propped retaining walls, constructed using a top-down construction method to minimise disruption to the travelling public.

The scope of works involved:

- a 1.2km two-lane road with two new road bridges;
- local road realignment;
- a single-span pedestrian bridge linking two existing pedestrian underpass structures;
- a pedestrian underpass carrying a shared path under the SH2A on-ramp from Maungatapu Roundabout;
- a large culvert carrying the link road over Kaitemako Stream;
- two discrete retaining walls at Welcome Bay Road;
- 150,000m³ of earthworks, 25,000m² of new pavement, service relocations, and landscaping.

Challenges and innovation

With 45,000 vehicles per day using the roundabout, innovative traffic management was required. Teams also had to work around construction of two bridges within the SH29 Maungatapu Roundabout and its underpass.

Potential traffic delays were avoided with strategically staged works, temporary diversion roads, and night tie-in works. Throughout construction, advanced warning signs (VMS), social media, and regular programme updates to road users including emergency services, kept everyone informed. Waka Kotahi's highly scored performance evaluation is a testament to this careful planning and execution.

Client and community

Fulton Hogan delivered the project a month ahead of schedule, and Waka Kotahi recognised the environmental compliance as 'exceptional' and 'an exemplar of best practice'. Key risk areas were identified, and affected parties were consulted and informed of upcoming works at all times. Controls included the use of water carts, dust suppressants, and hydro-seeding of exposed surfaces.

The project has improved the safety and movement of traffic on key urban roads by separating State Highway 29A from local traffic. This created a route that is much safer for pedestrians and cyclists, as well as allowing faster travel times by solving congestion at the Hairini and Maungatapu roundabouts.

The importance of this asset to the community is reflected in the urban design works, including artworks on the Maungatapu Underpass and a waka-inspired design for the pedestrian overbridge.

Mechanical and electrical works

Delivering complex solutions for the water, wastewater, and industrial sectors





Papakura pump station begins operations following its completion in 2022



Lyttelton Wastewater Project

Designing enterprise into an operating model

Project scope

Fulton Hogan has helped return Lyttelton Harbour to a pristine environment by permanently halting wastewater discharge from Diamond Harbour, Governors Bay, and Lyttelton treatment plants.

The \$53 million Lyttelton Wastewater Project took all wastewater from Diamond Harbour and Governors Bay across the harbour to Lyttelton, then through the Lyttelton tunnel to the Bromley treatment plant, 4.5km north.

Challenges and innovation

The project involved construction of wet wells in Diamond Harbour and Governors Bay, a buffer tank in Lyttelton, and installation of three seven-metre cavity pumps in the Lyttelton pump station to pump wastewater through the tunnel. The team also installed 4.7km of 355mm diameter polyethylene (PE) pipeline to Pump Station 15. This work included a challenging double railway line crossing – trains were kept running by digging an entry pit at one side and thrusting a 24m long, 600mm steel pipe underneath.

The pipe pull was completed in a single night shift, after the pipe was pre-welded and tested. The pipeline was pulled up onto Tunnel Road and along Ferry Road to St Johns Street during the night. The pipe attached to the reamer and pulled back through the pre-drilled hole under Ferry Road.

Another engineering challenge was pulling 542m of 355mm pipeline under Ferry Road and the Heathcote River. Specialist subcontractors Hadlee and Brunton were chosen to complete the horizontal directional drill under the Heathcote River, Ferrymead roundabout, and along Ferry Road to Alport Place.

“

There are big challenges in taking wastewater under a harbour, through a mountain, and under a river. But the benefits for Lyttelton Harbour will be there for generations to come.”

Project Manager
Laurence da Silva

Client and community

The project was part of the Council's wider Whaka-Ora Healthy Harbour plan to restore the cultural and ecological health of Lyttelton Harbour. Working with Te Hapū o Ngāti Wheke, Te Rūnanga o Ngāi Tahu, Lyttelton Port Company, and harbour communities, the goal was to improve water quality in the harbour, address erosion, sedimentation and pollution of waterways, and to increase biodiversity.

Location

Lyttelton, Christchurch

Objective

Halt wastewater discharge into Lyttelton Harbour

Client

Christchurch City Council

Value

\$53 million

Location

Pukekohe, Auckland

Objective

Future-proof essential services

Client

Watercare Services Limited

Value

\$39 million

Pukekohe Trunk Sewer

Early contractor involvement pays major dividends

Project scope

The Pukekohe Trunk Sewer Upgrade comprised a 6.5km wastewater pipeline, two pump stations, and a lift station linking to the existing Pukekohe Treatment Plant. The project was developed through an early contractor involvement (ECI) process to meet an 18-month construction programme for design, construction, testing and commission.

The project included a 650 litre-per-second main pump station with a large dry well, two wet wells, and a 1,000m³ precast and cast insitu concrete storage tank. The pump station construction required sheet piling, scaffold access systems, concrete civil works, mechanical and electrical fit out, and process control installation. A 10 litre-per-second satellite pump station and emergency storage tank built from glass-reinforced plastic was also constructed.

Challenges and innovation

Unrestrained pipe required the pouring of thrust blocks for connection, while also allowing for pipe expansion and contraction during pressure tests. Fulton Hogan managed seven working fronts concurrently, and a large number of stakeholders. Work included the construction of Pukekohe and Buckland pump stations, three open cut pipe laying sites, horizontal directional drilling sites, and works at the wastewater treatment plant.

Pinch valves were used to overcome the challenge of a significant downhill slope adjacent to the wastewater treatment plant, giving adjustable flow restriction to control volumes and velocities of waste entering the plant.

The project recorded 98% zero harm days over 305 working days and more than 170,000 man-hours. The Waikato Regional Council and Auckland Council's environmental reports also showed full compliance. Fulton Hogan ensured that safety in maintenance was considered throughout the project, and the design life of elements was maximised to minimise future maintenance.

Client and community

The ECI process ensured timely planning, construction and response to project works. Working with the client's design representatives meant capitalising on different perspectives and expertise, and achieving best value for money. This also led to a better team-wide understanding of the required outcomes, resulting in fewer changes and less risk.



Temporary works

Overcoming challenges with industry-leading design and fabrication





Project Engineer Alison Craigie during construction of the AMETI Busway Bridge

New Brighton Pier

Conducting repairs above and below sea level

Project scope

The 2010 and 2011 Christchurch earthquakes and aftershocks caused the New Brighton Pier's 17 columns to flex, creating large sections of spalled concrete, loss of cover to the reinforcing steel, and reduction of the cross-sectional area of the columns' reinforcement bars.

The repair involved excavating below the seabed, installing a five-metre steel jacket around the hinge area, bolting it with stainless 2205 M30 fixings, and filling the annulus of the jacket with 60Mpa self-compacting concrete. The plastic hinge zone was repositioned further up the column, making any future damage more visible and accessible.

A four-metre wide caisson, divided into 2.4m high sections, was assembled from a temporary gantry system suspended from the underside of the pier deck. The caisson was lifted onto the gantry via an 18 tonne excavator operating from the pier deck, then assembled by a team working from a suspended scaffold. The caisson was gradually lowered to the seabed with a Freyssinet bar hydraulic jacking system.

Challenges and innovation

The pier remained open through most of the contract and there was limited access from the pier and beach. To minimise public impact, all movements were facilitated by comprehensive job safety environmental analysis and daily pre-starts.

Bluetooth gas detectors ensured that if a hazardous gas was encountered, the site office and Health, Safety, Quality, and Environment (HSQE) team would be immediately informed via a text, enabling them to co-ordinate any resulting rescue.

A cofferdam caisson capable of withstanding the dynamic loads from a surf environment provided a cost effective, safe work environment. To enable this, a jetting ring was installed at the base of the jacket with a smaller surface area and a greater point load. The jacket was then able to advance past the invert of the caisson. Once the jacket had achieved depth, an airlift was used to remove debris from the jacket annulus. The jacket was then filled with seawater and the tremmie poured in-situ.

Client and community

Working with subcontractor Upright Scaffolding, temporary scaffold provided access to the bolted flanges of the caisson cofferdam and restrained workers utilising work-positioning.

As the pier remained open, Fulton Hogan worked with stakeholders to manage closures for critical tasks and minimise any impact to public and businesses located in the terminus building. Feedback from the community remained positive throughout the works, especially during management of the works around community events like the Duke Surf Festival and Guy Fawkes.





Location

New Brighton,
Christchurch

Objective

Conduct repairs on
a quake-damaged
regional landmark

Client

Christchurch City Council

Value

\$7 million

Location

Auckland

Objective

Improve public transport routes in an ecologically significant area

Client

Waka Kotahi

Value

\$103 million



AMETI Busway Bridge

Clever methodology protects people, the past, and the environment

Project scope

Auckland Manukau Eastern Transport Initiative (AMETI) is part of Auckland Transport's portfolio of integrated transport projects. The first section is a new busway on the north side of Lagoon Drive and Pakuranga Road, a busway bridge alongside the existing Panmure Bridge, and a signalised roundabout intersection.

The project included stormwater management (a watermain and sewer pipe assembled into the superstructure ahead of each launch of the new bridge). Temporary works included floating formwork and temporary staging that required a 120 tonne crane on the eastern and western banks of the Tāmaki estuary to enable unrestricted channel access for estuary users during the project. An RT3 drill platform, supported on an 80 tonne crane operating from the temporary staging, was used to drill the permanent piles.

Fulton Hogan self-performed the construction of the bridge, utilising a 'push' launch methodology. Concurrently with the construction of the pile caps and piers, the bridge superstructure was assembled at the eastern abutment and launched across the estuary in four separate push launches.

Challenges and innovation

An innovative floating formwork boat was designed and built to construct the pier caps safely in the river without being affected by the tide. This enabled quicker and safer construction, as well as improved environmental outcomes for the Tāmaki River. The use of these boats reduced traffic disruption, by avoiding the need for cranes on the existing bridge during closures.

The push launch methodology was chosen, in part, because it was safest for our workers, reducing work at height over the waterway and providing more rigid and stable access. The methodology also minimised the impact of construction on the surrounding environment. Because the push launch method contained pile spoil and concrete slurry, it avoided excessive work near the archaeologically sensitive Mokoia Pa site.

Using temporary supports to facilitate cantilevering across the centre span, the assembled steelwork was raised with hydraulic jacks, transferred from support stools to self-aligning, polytetrafluoroethylene-coated rocker boxes, and then manoeuvred and adjusted to accommodate the arch of the bridge. Any reaction forces were monitored via hydraulic pressure in the vertical adjustment rams.

Client and community

Fulton Hogan worked closely with Auckland Transport and its advisor Beca to ensure the project was delivered safely, to a high quality, on time and on budget. Close project involvement with mana whenua was achieved through monthly forum meetings.

Working across areas of high cultural and ecological significance, input from mana whenua representatives and from specialist archaeological, ecological, and acoustic consultants was invaluable in ensuring compliance with all designation and resource consent conditions.

Fulton Hogan's stakeholder management team informed stakeholders of upcoming works and fostered strong relationships with impacted parties.





Fulton Hogan Civil
47 Airdrie Rd
PO Box 21124, Henderson
Auckland 0650
+ 64 9 831 0107
fultonhogan.com



SHW36 Matarawa Pedestrian Bridge in Tauranga