



RISING TO THE **CHALLENGE**



ANNUAL REVIEW

HALL

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**2020...WELL
THAT HIT US
ALL OUT OF
NOWHERE,
DIDN'T IT!**



20 20

RISING TO THE CHALLENGE

2020...well that hit us all out of nowhere, didn't it!

I don't think any of us could have predicted the world events we saw this year, but we made it to the other side as a business in a strong position.

The way everyone at Hall responded to the COVID-19 pandemic was incredible. Whether it was working from home whilst juggling home schooling, or the huge sacrifices made by some of our FIFO crews at remote sites like Ranger Mine – where team members missed seeing their family and friends for months on end due to state border closures – everyone went over and above to do their part for the business and the broader community. These efforts meant we continued to deliver on our promises to our clients and set us up well for 2021.

Some of the more memorable jobs for the year have included the Ewen Maddock Dam upgrade, which saw us innovate and install one of the largest siphon systems in Australia to drain the dam safely, whilst saving tonnes of greenhouse gas emissions.

Our backhoe dredge, *Woomera*, carried out the Clinton Channel widening works at Port of Gladstone on time and within budget. This set the tone for a positive few years ahead, with Hall being awarded dredging and reclamation works as part of the Port of Townsville Channel Upgrade Project, which will commence in 2021 and take two years to complete.

This year also saw us commence construction of the 2.2km rock wall at Port of Townsville, and we have built an impressive bridge, lock and weir at Pelican Waters, powered on with residential stages at North Harbour, and completed the first stage of the Halcyon lifestyle community at Buderim.

Of course, there were many other highlights too, and I hope you enjoy reading about them in the 2020 yearbook.



CAMERON HALL
CEO





CONFRONTING COVID-19

IT'S FAIR TO SAY THAT WHEN THE CLOCK STRUCK MIDNIGHT ON 31 DECEMBER AND WE ALL RAISED A TOAST TO RING IN THE NEW YEAR, WE HAD LITTLE IDEA OF THE UNPRECEDENTED SERIES OF EVENTS THAT AWAITED US IN 2020.

Australia breathed a sigh of relief when its horror fire season came to an end early in the new year, but the world took a collective gasp when the COVID-19 pandemic took hold.

The impacts of the virus were felt around the globe and Hall was no exception. States and countries closed their borders, planes were grounded, lockdowns were enforced, and social distancing and working from home became commonplace as Australia did its best to 'flatten the curve'.

For a business that relies heavily on interstate and international travel, the new restrictions certainly threw the proverbial spanner in the works for Hall. However, it wasn't all bad news, with the Australian Government deeming construction an essential service. This allowed Hall to continue operating and contributing to the economy while so many other businesses around the country were sadly forced to close their doors.

The transition to COVID-safe practices was much more straightforward for some work sites than others, with Project Manager Matthew Brown reporting operations were largely business as usual for the Townsville rock wall project.

"While we intensified our hygiene practices, introduced social distancing and mandatory COVID-19 inductions,

and adhered to designated room capacities within our site offices, our day-to-day operations surprisingly weren't impacted significantly," Matthew said.

"It was standard practice for the majority of our crew members to work inside individual machine cabins day-in and day-out, so the one major change we enforced was stopping staff from rotating between machines.

"That ensured that if one team member was to contract the virus, the risk of them contaminating other staff was extremely low.

"Our project workforce was also 100 per cent Townsville based, so there were never any instances of workers needing to seek permission to transit between states or having to enter quarantine."

The transition wasn't quite as simple for staff working on the Clinton Vessel Interaction Project in Gladstone, with some fly-in, fly-out (FIFO) workers based outside of Queensland.

General Manager – Dredging Mark McCurdy said with regulations changing frequently, the team had to stay abreast of the latest travel restrictions and ensure they had the necessary paperwork to transit between home and work.

"We introduced a COVID-19 travel form that every worker had to complete each time they returned to site in Gladstone, which traced their movements and assessed their health status," Mark said.

"Some interstate workers chose to step away from the project temporarily to ensure the ever-changing border restrictions didn't prevent them from returning home to their families, which was completely understandable.

"Others underwent several quarantine periods as a precautionary measure when returning to their home state, which was a remarkable commitment."

Mark said the team went from sharing accommodation to occupying single rooms, and from rotating crew members between vessels to assigning set crews for each tug and dredge.

"As part of our COVID-safe plan, we kept each crew isolated from others and introduced strict hygiene procedures, so in the event that one team member caught the virus, there was a very low likelihood of it infecting the broader workforce.

"The pandemic posed such a massive threat to our operations and while it would have been easy to throw up our hands and say 'this is too hard', the team recognised the importance of following the stringent protocols and did a fantastic job of prioritising the health of their colleagues and the broader community."

Mark said workers at Ranger Mine in the Northern Territory were some of the hardest hit by COVID-19 restrictions, with some FIFO crew members working away from their families for as long as 19 weeks.

"In an effort to protect remote communities from the virus, the Australian Government closed Kakadu National Park – which surrounds the project site – for several months, preventing staff from coming and going as they normally would," he said.

"Our FIFO workers were given the option to fly home to be with their families or to base themselves at Jabiru and continue working until the park's reopening. This was a particularly difficult decision as there was no certainty surrounding the park's reopening date or future interstate border restrictions."

To assist with morale and mental wellbeing during the period, the various crew members who opted to stay behind were based at the Mecure Kakadu Crocodile Hotel for around eight weeks, providing them with access to amenities such as a pool and restaurant. Hall also provided a boat, mountain bikes and sporting equipment for staff to use for recreational purposes, and ensured they were well compensated for their efforts.

Hall CEO Cameron Hall said while there was no doubt the COVID-19 pandemic had been challenging for everyone, it would undoubtedly have been made more difficult for staff who lacked the support of family nearby.

"I am truly grateful to all the team members who made this commitment as well as those who spent time in quarantine when interstate travel was permitted, and I commend them on their dedication and tenacity," Cameron said.

"To have wrapped up 2020 without a single case of COVID-19 within our workforce speaks volumes about the efforts our team and Australians in general have taken to stop the spread."



DID YOU KNOW?

Mental health and wellbeing support organisation Beyond Blue recorded a 30 per cent increase in calls following the introduction of social restrictions due to COVID-19.

With the majority of Hall head office staff working from home at the height of the pandemic, Hall introduced daily online group workout sessions to help keep staff connected and minimise feelings of isolation.

Coach Chris from Peak2Peak Performance put staff members through their paces, leading the team in everything from planks and push-ups, through to sit-ups and squats.

2020

RIISING TO THE **CHALLENGE**



JANUARY



- › Hall renews annual sponsorship of West Fiji Dolphins
- › William Blank celebrates 10 years at Hall
- › Commencement of civil works at SunCentral – Maroochydore’s new city centre
- › Commencement of first highway project for Queensland Government Department of Transport and Main Roads (TMR) at Deception Bay after successfully attaining a TMR prequalification status of ‘R3 B2’

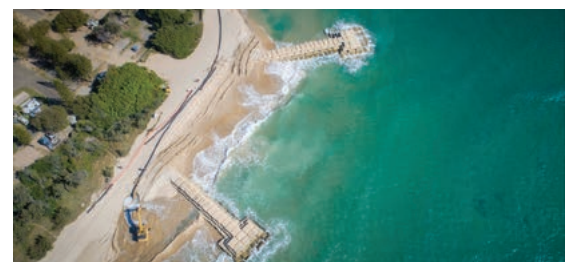
- › Completion of Clinton Vessel Interaction Project
- › Hall celebrates 30 years working with Pelican Waters
- › Tony Erb celebrates 10 years at Hall
- › Engineering student Haydyn Cliff graduates from university
- › Completion of civil works at Flagstone Shopping Centre on behalf of Stockwell



SEPTEMBER

AUGUST

- › Completion of Gladstone Marina Maintenance Lustrum Dredging Project (Stage 1)
- › Marine civil division hands over new groynes at Maroochydore to dredging team for commencement of renourishment works



- › Cameron Hart celebrates 20 years and Richard Webber celebrates 10 years at Hall
- › Commencement of drainage upgrades at Gympie Terrace, Noosaville
- › Commencement of next stage of Mooloolaba Transport Corridor Upgrade on Walan Street
- › Completion of Rosebud Beach Renourishment Project
- › Backhoe dredge *Woomera* arrives in Gladstone as part of Clinton Vessel Interaction Project
- › Acquisition of 937-tonne hopper barge *Stradbroke* and 80-tonne excavator
- › Hall forms its first touch football team
- › Halcyon crew carries out working bee at Buderim Men's Shed
- › Commencement of *Eastern Aurora* refit



FEBRUARY

MARCH



- › Hall celebrates International Women's Day
- › Hall launches online work-out sessions for staff working from home due to the COVID-19 pandemic
- › Commencement of Maroochy Groyne Renewal Project on behalf of Sunshine Coast Council
- › Arrival of amphibious dredge *Maroochy River* on the Sunshine Coast
- › Commencement of Ewen Maddock Dam upgrade (first project undertaken for Seqwater)
- › Commencement of Redland Bay Early Works dredging project
- › Official launch of Port of Townsville Channel Upgrade Project and commencement of rock wall construction

- › Craig Pitts and Clint Gogerly celebrate 10 years at Hall
- › Acquisition of 625hp Mercedes Benz Actros truck
- › Colin Beveridge wins McNab monthly safety award for Sunshine Coast City Hall project
- › Hall celebrates six years working at North Harbour and the delivery of more than 1,000 lots to date
- › Pelican Waters lock and weir reaches commissioning milestone
- › Completion of Gladstone Marina Maintenance Lustrum Dredging Project (Stage 2)
- › Commencement of first civil project on behalf of Defence Housing Australia at Warner
- › Commencement of *Woomera* spud tilt installation
- › Hall awarded three-year maintenance dredging contract at Bluewater Canals for Cairns Regional Council (commencing 2021)

OCTOBER

NOVEMBER

- › Commencement of Gladstone Marina Maintenance Lustrum Dredging Project (Stage 2)
- › Commencement of contract variations at Port of Gladstone including construction of weirs and a revetment wall
- › Moranbah North Coal Handling and Preparation Plant dam desilting contract extended to December 2021
- › Greg Busse celebrates 10 years at Hall
- › Commencement of the last stage of civil works at River Breeze residential community on behalf of Trask Land
- › Construction at Port of Townsville reaches a major milestone with joining of the two ends of the 2.2km rock wall
- › Hall joins DFAT panel of providers for the delivery of head contractor capital infrastructure services in the Pacific Islands



- › Commencement of Newport canals and entrance dredging
- › Commencement of Gladstone Marina Maintenance Lustrum Dredging Project (Stage 1)
- › Completion of Redland Bay Early Works dredging project
- › Ashlee Williams celebrates 15 years at Hall



APRIL

MAY



- › Acquisition of three new 45-tonne articulated dump trucks
- › Jordan James celebrates 10 years at Hall
- › Commencement of construction of temporary siphon system at Ewen Maddock Dam

DECEMBER

- › Hall awarded early works contract for Beerburrum to Nambour Rail Upgrade (the largest TMR project Hall has undertaken to date)
- › Commencement of dredging and sand nourishment works at Holloways Beach
- › North Harbour crews commence drilling a large diameter water main under the Bruce Highway
- › Commencement of Jacobs Well (Main Channel and Calypso Bay) dredging project
- › Completion of Newport canals and entrance dredging
- › Hall awarded Noosa Civic expansion project for Stockwell
- › Completion of contract variations at Port of Gladstone
- › Hall donates more than \$5,000 worth of Christmas gifts to SunnyKids as part of inaugural 'Hall Gift Haul'
- › End-of-year celebrations take place across business

- › Tony Walker celebrates 20 years at Hall
- › Completion of the first stage of civil works at Chambers Pines residential development on behalf of Ingenia Lifestyle
- › Hall awarded three-year beach replenishment dredging contract at Maroochydore and Mooloolaba for Sunshine Coast Council



- › Hall unveils purpose-built, 17-tonne marine rock bucket
- › Bokarina Beach project named as finalist in the 2020 Civil Contractors Federation Queensland Excellence in Construction Awards
- › Jamie Shakespeare celebrates 20 years at Hall
- › Completion of final civil works at Oceanside on behalf of Stockland
- › Commencement of 600,000m³ of bulk earthworks and 120 new lots at North Harbour



WE LOOK FORWARD TO ANOTHER GREAT YEAR TOGETHER IN 2021



“WHILE WORKS OF THIS NATURE WOULD TYPICALLY NEED TO BE CARRIED OUT BY TWO SEPARATE CONTRACTORS, WE’RE THRILLED TO HAVE BEEN ABLE TO COMBINE OUR DREDGING AND MARINE CIVIL EXPERTISE TO DELIVER A FULL-SERVICE SOLUTION.”



PROTECTING THE COTTON TREE

coastline





HALL HAS PLAYED A VITAL ROLE IN PROTECTING THE COTTON TREE COASTLINE AGAINST EROSION, CONSTRUCTING TWO GROYNE STRUCTURES AND A 220-METRE SEAWALL AS PART OF THE MAROOCHY GROUYNE RENEWAL PROJECT.

Hall Operations Manager Marine/Pacific Jacob Restall said Sunshine Coast Council had engaged Hall to undertake the works after identifying a need to replace the original structures which had naturally deteriorated over time.

“The structures play an important role in protecting community infrastructure such as the nearby caravan park, surf lifesaving tower, viewing deck, car parks, roads, park and playground from severe erosion,” Jacob said.

“AS PART OF THE PROJECT, WE ENGAGED GEOFABRICS TO PURPOSE-BUILD 5m³ GEOTEXTILE CONTAINERS.

“Weighing in at around 11 tonnes when filled with sand, these are much larger and heavier than standard geotextile containers and have increased the stability of the groynes significantly.

“Handling containers of this size certainly put our skills to the test, and we successfully used an excavator-mounted Dragflow pump to fill containers quickly and accurately, enabling us to deliver the project weeks ahead of schedule.”

Jacob said weather and tidal conditions had also posed challenges for the 16-strong workforce.

“Handling larger containers and placing them in an active surf zone required a lot of careful planning as well as rigid safety protocols,” he said.

“Our crew also had to stage work around tides and weather conditions to ensure exposed sections of the seawall were not left unprotected during adverse weather.

“With the bottom of the seawall situated two metres below the low tide level and less than 20 metres from the water’s edge, we had a very narrow tide window each day to undertake dewatering and install the foundation layer, so precise scheduling was critical.”

With construction having concluded ahead of schedule in July, Hall soon turned its attention to beach renourishment works in the area.

General Manager – Dredging Mark McCurdy said dredging crews were tasked with pumping 50,000m³ of sand from the lower Maroochy River.

“The material was used to replenish sand along Maroochyore Beach and has assisted in upholding the erosion buffer,” Mark said.

“While works of this nature would typically need to be carried out by two separate contractors, we’re thrilled to have been able to combine our dredging and marine civil expertise to deliver a full-service solution.”



2 GROYNES

220m SEAWALL

50,000 CUBIC METRES
SAND DREDGED



30 YEARS ON AND GOING STRONG

THEY'VE SURVIVED A PANDEMIC, A GLOBAL FINANCIAL CRISIS AND BUILT AN ENTIRE SUNSHINE COAST SUBURB FROM THE GROUND UP. IN 2020, HALL AND DEVELOPER PELICAN WATERS CELEBRATED 30 YEARS OF WORKING TOGETHER IN ONE OF THE SUNSHINE COAST REGION'S MOST LONG-STANDING PARTNERSHIPS.

The duo first began working together in 1990, and has delivered every lot, canal, park, road and bridge within the popular Pelican Waters community.

To mark the milestone, Hall commissioned Indigenous artist Jandamarra Cadd to create a painting of a pelican using traditional Aboriginal art techniques, and presented the artwork to the Pelican Waters team at a celebratory lunch in September.

Hall family member and retired company director Peter Hall said the relationship between the two businesses had been strong and mutually beneficial from day one.

"Looking back to when we first started working together, our team was obviously appreciative to have steady work flowing through the door, and Pelican Waters benefited from our willingness to deliver advance works, which enabled them to offer a continuous supply of lots to the market," Peter said.

"Our very first contract involved carrying out earthworks and concrete works on the south-western side of Lake Magellan, which was completely undeveloped at that time.

"Prior to that, we'd delivered some smaller subdivisional works for other clients, but had predominantly been focused on supplying sand, gravel and Readymix concrete, so this was our first large-scale canal development and heralded a change in direction for the business."

In the years since, Hall has gone on to deliver more than 2,800 lots; 35km of roads; 10km of canals; various bridges; locks and weirs; an 18-hole, Greg Norman-designed championship golf course; and sewerage and water infrastructure at Pelican Waters.

Hall's latest contribution to the suburb includes a new lock and weir, as well as a four-span car, pedestrian and bike bridge which provides a new access point into Pelican Waters via Golden Beach.

Hall Sunshine Coast Operations Manager Alex Brouard said the new lock and weir would allow boats to travel safely between Pelican Waters' southern canals and Pumicestone Passage.

"We built a lock and weir servicing the northern canals at the development back in 2004, and with the suburb now home to more than 6,000 people and continuing to grow, the new infrastructure will provide residents moving into the new Marina Village with more direct access to Moreton Bay Marine Park," Alex said.

"One of the biggest challenges we had to overcome as part of the project was building the new lock and weir system and bridge so close together, particularly as the foundation levels for both structures were at different heights and we were constrained by stormwater outlets and completed land lots downstream."



“With only two metres separating the two build locations, there wasn’t enough space to construct a stable earth bund.

“To address this, we worked with consulting engineers Covey Associates to design a sheet-pile wall. We also redesigned the bridge so the pile caps were situated on the canal floor, which allowed us to build both structures concurrently.”

Alex said the Hall team had also amended the preliminary lock and weir design, improving safety and reducing costs and build timeframes.

“Locks are typically rectangular in shape and contain numerous internal concrete walls and chambers that are filled with sand; however, building all those chambers can be very slow and expensive, and pose increased safety risks,” Alex said.

“With this in mind, we optimised the shape, which reduced the amount of concrete and labour hours required, and enabled us to build the concrete structure safely in a third of the time it would normally take.

“We also established a new remote-control system and adjusted the sequencing on the gates, eliminating the need for a pontoon and card reader on the internal canal, which ultimately saved the client hundreds of thousands of dollars.”

Hall CEO Cameron Hall said he was thrilled to have watched the new infrastructure and broader Pelican Waters community come to life over the years, and attributed the success of the long-term partnership to teamwork and transparency.

“The level of trust between both parties is incredibly high and we do our best to communicate openly and work collaboratively,” Cameron said.

“Pelican Waters and Covey Associates are always happy for our team to provide input in the design phase of a project, which enables us to address any construction issues before commencing work and deliver a first-rate outcome every time.

“It truly is an amazing partnership and we’re incredibly grateful to have had the opportunity to work with the Pelican Waters team for three decades.”

The new lock, weir and bridge officially opened to the public in early 2021.

2,874 LOTS	
2 LOCKS & WEIRS	1 SALINITY EXCHANGE SYSTEM
35KM OF ROADS	1 18-HOLE GOLF COURSE
10 KM OF CANALS	12 BRIDGES



DAM UPGRADE GOES SWIMMINGLY

INNOVATION WAS THE NAME OF THE GAME WHEN HALL UNDERTOOK A SAFETY UPGRADE AT EWEN MADDOCK DAM ON THE SUNSHINE COAST IN 2020, BRINGING THE DAM IN LINE WITH MODERN ENGINEERING DESIGN STANDARDS.

Hall Contracting Project Manager Lachlan Blanch said to undertake the safety upgrade successfully, it had been necessary to lower the dam to around 60 per cent of its full supply capacity, enabling construction crews to commence raising and strengthening the existing embankment walls.

“During tender and early construction, our team and Seqwater developed a plan to install six gravity-based siphons – some of the largest temporary siphons in Australia – to manage the safe release of water over the spillway and into the Mooloolah River catchment,” Lachlan said.

“Using this technology in place of more traditional systems like diesel-fuelled pumps reduced carbon emissions by an estimated 235 tonnes, or the equivalent of driving an average family car around the world 45 times.”

Lachlan said the methodology had also helped to reduce the duration of the project, with other approaches such as constructing a cofferdam likely to have taken significantly longer.

“The siphon was fully constructed in nine weeks, and we released approximately 4,200ML of water over a period of 15 days,” he said.

“This allowed us to undertake all bulk earthworks before the wet season set in, minimising the risk of seepage and overtopping due to severe wet weather events.”

As part of the project, Hall reconstructed the existing embankment including a sand filter chimney and increased the floodwater capacity by constructing a concrete wall on top of the embankment.

Lachlan said the crew had also been tasked with upgrading the existing shelters and barbecue facilities, undertaking landscaping works and installing new footpaths in the recreational park area.

“Dam construction works are very complex and highly regulated, so it takes a skilled team to successfully deliver these types of projects,” he said.

“We’re very lucky to have this specialised talent on the Sunshine Coast and I can’t commend the crew highly enough for their efforts.”

Lachlan said one of the most challenging aspects of the project had been managing seepage within the existing embankment.

“More than 40 years had passed since the original embankment was constructed, and we discovered around half the material in the embankment did not meet specification, making it more vulnerable to seepage.

“While we’d initially planned to reuse the existing clay to rebuild the wall, it became apparent some of it was unsuitable for use moving forward, so we imported additional material to safeguard the structural integrity of the new embankment.”

Lachlan said the COVID-19 pandemic had also posed a number of challenges, with global impacts on supply chains threatening the availability of various construction materials.

“As the pandemic began to take hold around the world, our crew undertook careful planning to ensure we could source all required materials.



ONE OF AUSTRALIA'S LARGEST TEMPORARY SIPHON SYSTEMS

"We made the decision early on to purchase three specialist valves from Spain while it was still possible to do so.

"This forward planning ensured there were no delays to the project."

Lachlan said another important consideration during construction was the preservation of cultural heritage sites and environmental habitats.

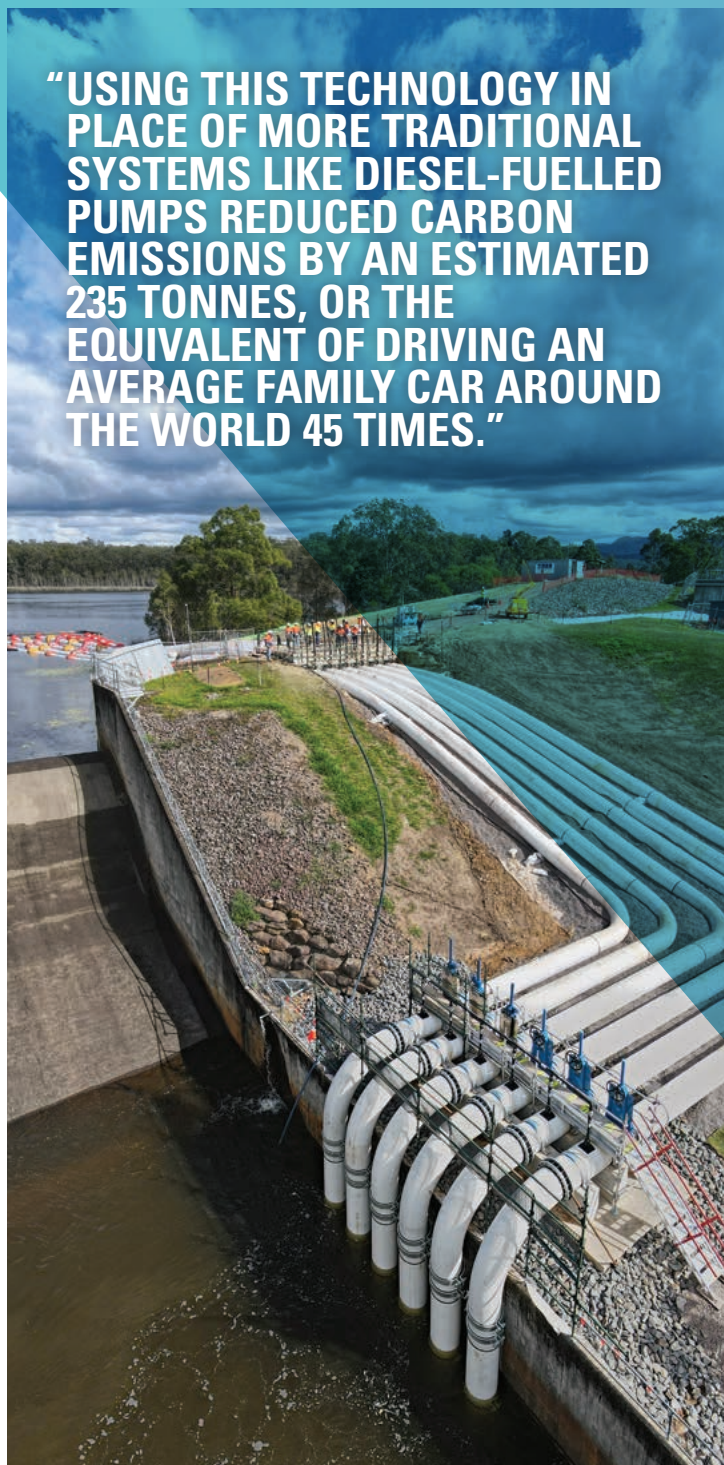
"Maddock Park is home to The Coach House – a pit-sawn house built in the 1800s – as well as a number of other sites that are steeped with historical significance.

"The Richmond Birdwing Butterfly vine also grows in the area, so we established exclusion zones around these important sites to preserve them, which proved very effective."

Works commenced in March 2020, with the project concluding several months ahead of schedule.



"USING THIS TECHNOLOGY IN PLACE OF MORE TRADITIONAL SYSTEMS LIKE DIESEL-FUELLED PUMPS REDUCED CARBON EMISSIONS BY AN ESTIMATED 235 TONNES, OR THE EQUIVALENT OF DRIVING AN AVERAGE FAMILY CAR AROUND THE WORLD 45 TIMES."



WOOMERA MAKES MARK IN GLADSTONE

FOLLOWING WOOMERA'S SUCCESS AT PORT OF CAIRNS IN 2019, THE BACKHOE DREDGE TACKLED ANOTHER CAPITAL DREDGING PROJECT IN QUEENSLAND WATERS IN 2020: THE CLINTON VESSEL INTERACTION PROJECT IN GLADSTONE.

Gladstone Ports Corporation (GPC) engaged Hall to widen and deepen the Clinton Channel, creating a greater passing distance between cruising vessels and those berthed at the RG Tanna Coal Terminal.

Hall Senior Project Engineer Allison Bridges said ships leaving the nearby Wiggins Island Coal Terminal had previously been required to pass within 80 metres of the berthed ships, with the interaction between vessels generating wash that had the potential to break mooring lines and cause a vessel collision.

"While GPC had actioned a series of mitigation measures to address the issue, they were eager to implement a more permanent solution," Allison said.

"Our team was contracted to widen the Clinton Channel by approximately 100 metres and dredge to a design depth of -16m LAT, which involved dredging just under 800,000m³ of material."

Allison said tidal movements had added an extra layer of complexity to the project and necessitated careful planning.

"At times, tides dictated where and when we could moor the barges along the off-loading facility to unload the dredged material," she said.

"There were also a few days each month – during spring tides, when low tides are very low – when we would have to alter our normal procedures to be able to unload the barges into the dump trucks.

"To avoid delays to the project, we would use any down time to relocate the dredge or undertake maintenance where required.

"The currents in the area could also be quite strong, so we had to take this into account in our planning as well."

General Manager – Dredging Mark McCurdy said another challenging aspect of the project had been ensuring the port remained fully operational throughout the period of works.

"The Port of Gladstone is Queensland's largest multi-commodity port, so it was crucial that we did not interfere with its existing shipping operations," Mark said.

"Our team worked collaboratively with GPC, the Regional Harbour Master and harbour pilots to be clear of the shipping channel each time a ship was due to enter or exit the port, and we planned our activities around these movements.

"With so many bulk carriers transiting through the port, I'm incredibly proud of the team for completing the project without a single delay or shipping incident."

Mark said supporting local had been a strong focus throughout the project, with 97 per cent of total expenditure directed to Queensland-based companies.

"With COVID-19 having had such a significant impact on our economy, we considered it more important than ever to get behind local businesses and workers," Mark said.

"Hall spent more than \$13.5 million within Gladstone alone as part of the project, and 92 per cent of our workforce hailed from Queensland."

"It's been great to be able to provide so many local jobs at a time when many people have felt the financial impacts of COVID-19."

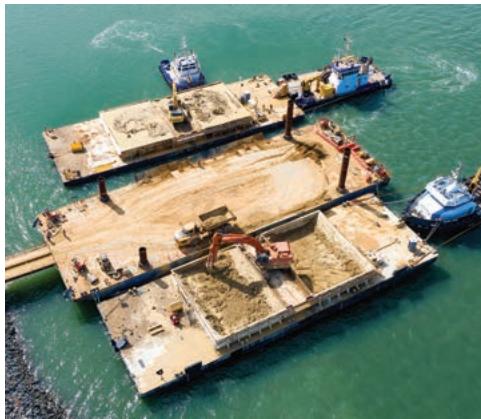
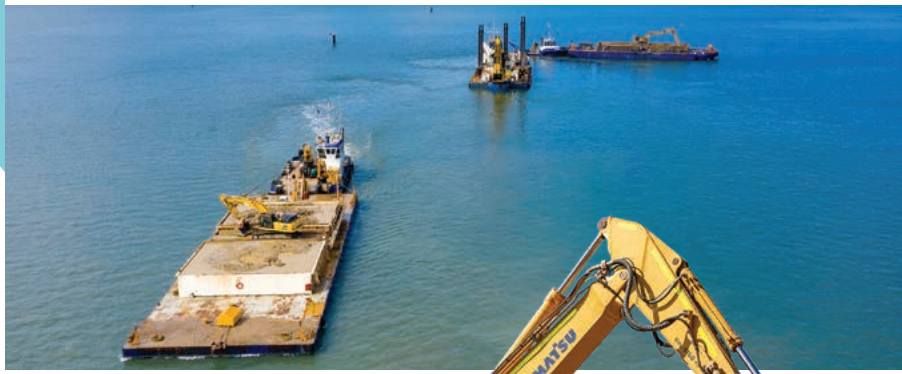
Hall wrapped up works on the Clinton Vessel Interaction Project in September 2020, achieving zero significant environmental and quality incidents and no lost-time injuries across the life of the project.

224,144 HOURS WORKED

0 LOST-TIME INJURIES

0 SIGNIFICANT ENVIRONMENTAL & QUALITY INCIDENTS

795,317 CUBIC METRES DREDGED





TOWNSVILLE PRESENCE SOLID AS A ROCK

HALL EXPANDED ITS NORTH QUEENSLAND FOOTPRINT IN 2020, CONSTRUCTING A 2.2KM ROCK WALL AS PART OF THE PORT OF TOWNSVILLE'S \$232 MILLION CHANNEL UPGRADE PROJECT.

Hall Contracting General Manager – Civil Daniel Grey said the upgrade aimed to improve accessibility and enable larger cargo, cruise and defence vessels to access the port.

“The rock wall marks the first stage of the upgrade, forming a protective bund around a new reclamation area at the eastern end of the port,” Daniel said.

“When dredging commences in 2021, material dredged from various sea channels will be deposited into the 62-hectare reclamation area.”

Project Engineer Matthew Brown said working in a tidal environment had undoubtedly put the team to the test when constructing the rock wall.

“When the tide was relatively low, we were able to build out to the full width of the bund,” Matthew said.

“As the tide started to rise, we’d pull back until the water reached the mean high water spring – the highest level that spring tides reach on average – then resume works on the areas that weren’t submerged.

“Our dump truck drivers had to be particularly vigilant when reversing out onto the narrow rock walls as there was minimal margin for error.

“To address this and mitigate risk, we installed a number of 360-degree cameras on the trucks, which provided operators with a complete picture of where the trucks were relative to the water and everything else around them.”

Matthew said the 360-degree cameras weren’t the only innovative element of the project, with the crew also making use of RTK drones to generate 3D renders of the work site.

“This enabled us to undertake settlement monitoring and

conduct quick and accurate stockpile quantity surveys and as-constructed surveys at minimal cost,” he said.

“We also used Carlson Command GPS technology within our fleet of excavators to accurately place all rock bund wall materials to the required tolerances.

“The system was able to conduct as-constructed surveys at the time of placement which guaranteed accuracy.”

Hall CEO Cameron Hall said the company had employed approximately 14 full-time workers as part of the project, including an undergraduate engineer studying at James Cook University.

“As a Queensland-based company, we’re proud to generate employment and training opportunities in our home state,” Cameron said.

“We also made a concerted effort during construction to source services and materials through local businesses wherever possible, which has provided a much-needed boost to local industry during the COVID-19 pandemic.”

Cameron commended the crew on a job well done and said their first-rate workmanship had held Hall in good stead when tendering for additional works at the Port of Townsville.

“We’re thrilled to have recently been awarded the contract for capital dredging and land reclamation works as part of the Channel Upgrade Project,” he said.

“This will be the third major Queensland port project our backhoe dredge, *Woomera*, has been tasked with, having previously worked on the Cairns Shipping Development Project in 2019 and the Clinton Vessel Interaction Project at Port of Gladstone in 2020.”

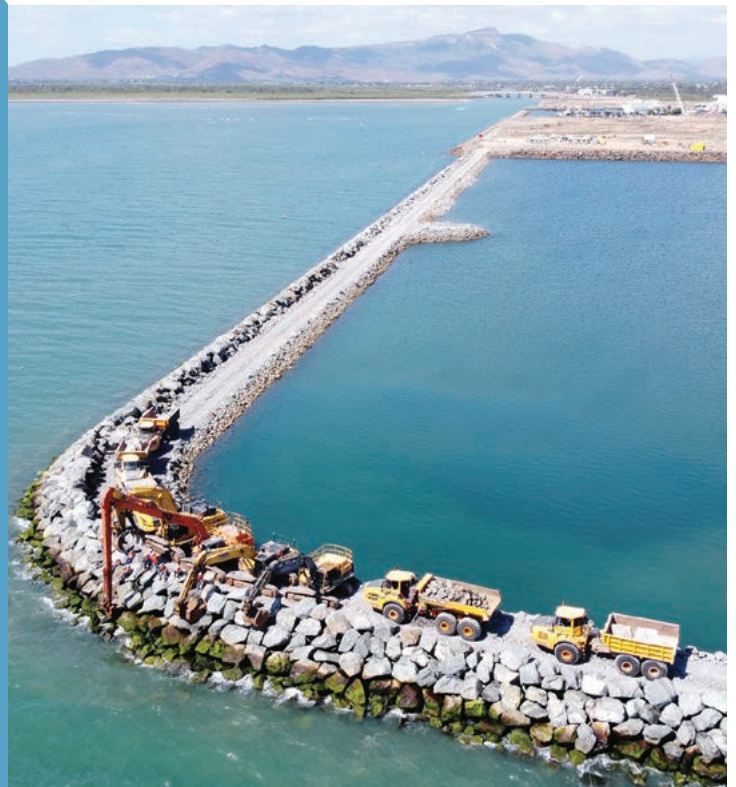
Dredging works are scheduled to commence in late 2021.

14 FULL-TIME
JOBS
CREATED

1 PAID
UNIVERSITY
PLACEMENT

100%
TOWNSVILLE-BASED
WORKFORCE ON SITE

13%
INDIGENOUS
REPRESENTATION
IN WORKFORCE



BUILDING A HOUSING HOTSPOT

WITH INTERSTATE MIGRATION TO QUEENSLAND AT A 20-YEAR HIGH, HALL'S CIVIL CONSTRUCTION DIVISION WAS PUT TO THE TEST IN 2020, TASKED WITH DELIVERING 147 RESIDENTIAL LOTS IN JUST FIVE MONTHS AT THE NORTH HARBOUR DEVELOPMENT IN MORETON BAY.

North Harbour Project Manager Greg Busse said COVID-19 had strengthened demand for housing in the area, with many home-hunters eager to escape areas like Sydney and Melbourne during the pandemic.

"As the year progressed, the North Harbour Holdings team quickly realised that more stock would be required to meet such unprecedented demand, so our crew fast-tracked the delivery of stages 42B, 43, 44 and 45," Greg said.

As part of the works, Hall constructed a bio-basin and carried out bulk earthworks, including cutting and filling 288,000m³ of material.

"It was critical for us to maintain the flood capacity of the development while undertaking the earthworks, ensuring nearby residents were not negatively impacted," Greg said.

"To achieve this, we created flood offset models and programmed these into our earthmoving plant, and made sure material placed below the flood offset was sourced from a designated 'borrow' area – the future marina site – rather than areas located above the flood offset."

Greg said one of the most challenging aspects of the project had been installing a trunk water main beneath the Bruce Highway.

"These works involved jacking an 800mm concrete pipe under the busy transport corridor using a laser-guided slurry microtunnelling machine.

"We created a bore that was 105 metres in length and around four metres deep, and the crew then threaded a polyethylene water main pipe through the concrete pipe, and grouted the gap in between these.

"Obtaining a Road Corridor Permit from the Department of Transport and Main Roads was a very lengthy process and we were required to undertake nightworks on the highway including service location and potholing works before commencing tunnelling.

"Once the tunnelling machine was in place, we had to work quickly to prevent it from becoming stuck beneath the highway."

Hall CEO Cameron Hall said the company had a long history of working with the North Harbour Holdings team, having commenced work on the development in 2014 and delivered 25 stages, five wetlands, two sewer pump stations, various road upgrades and numerous sewer rising, gravity and trunk water mains in the years since.

"One of the reasons I believe this relationship has been so successful is due to both parties' willingness to work collaboratively. Our team will often provide input on design concepts and methodologies, which assists in ensuring various works packages can be delivered on time and within budget," Cameron said.

We are very fortunate to have recently been awarded the contract for stages 25, 26, 27 and 27 External, as well as additional bulk earthworks and trunk water main works, and we look forward to continuing to deliver a high standard of work at North Harbour in the coming years.

- Cameron Hall



216 LOTS

1 TRUNK
WATER
MAIN

500 +

HALL WORKERS AND
SUB-CONTRACTORS

0

LOST-TIME
INJURIES

6 STAGES





TOP MARKS FOR *MAROOCHY RIVER*

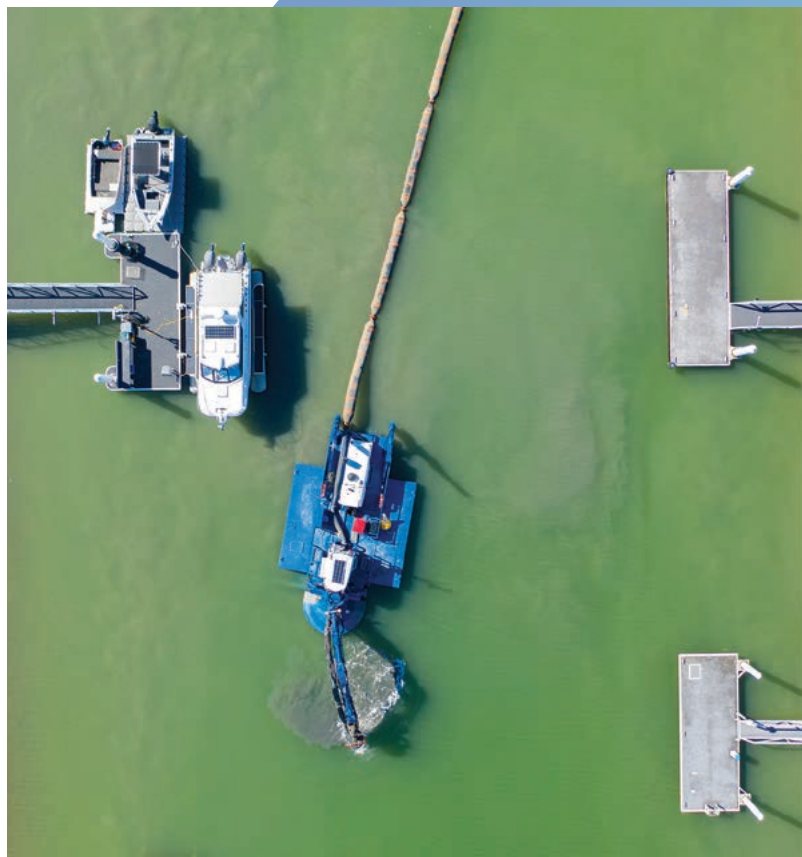
HALL'S BRAND NEW DREDGE, *MAROOCHY RIVER*, WAS PUT THROUGH ITS PACES IN 2020, UNDERTAKING MAINTENANCE DREDGING WORKS WITHIN THE NEWPORT CANAL SYSTEM FOR MORETON BAY REGIONAL COUNCIL.

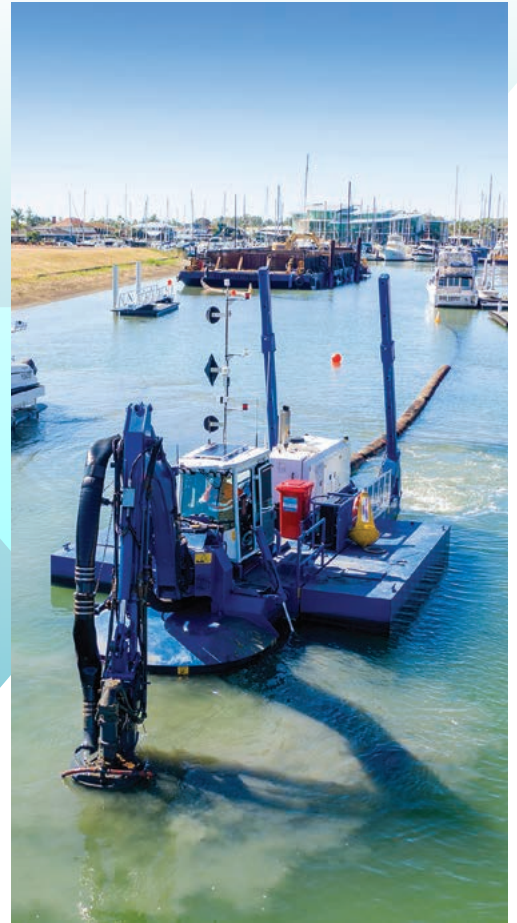
General Manager – Dredging Mark McCurdy said the amphibious dredge had showcased its capabilities, performing well in the network of canals.

“Maroochy River worked in combination with our new Dragflow pump to pump sediment to a hopper barge located more than 1km away in some instances,” Mark said.

“The dredge was able to mobilise itself into the water using its spuds, outriggers and boom, which negated any accessibility challenges, and its compact size enabled our operators to successfully navigate around pontoons and recreational vessels in the canals without incident.”

Mark said during the period of works, the crew had encountered some stiff clays which had put the dredge to the test.





"To address this, we were able to interchange *Maroochy River's* cutter head with a bucket attachment, enabling the crew to trim some of the clay and bring the respective canals closer to design depth.

"The dredge performed admirably, dredging just over 30,000m³ of material throughout the nine-month project."

Mark said keeping nearby residents and other waterway users informed had been an important consideration during the works.

"With so many recreational vessels accessing the canals, our team made a consistent effort to keep the local boating community up-to-date regarding our actions and whereabouts to minimise disruptions.

"The works were finalised in December and supported six full-time jobs."

Hall is no stranger to the Newport community, having also constructed a lock, weir and pedestrian bridge, and carried out some minor dredging works in the area in 2018-19.

"THE DREDGE PERFORMED ADMIRABLY, DREDGING JUST OVER 30,000m³ OF MATERIAL THROUGHOUT THE NINE-MONTH PROJECT."



FULL STEAM AHEAD FOR COAST COMMUNITY

WITH BUDERIM A POPULAR HAVEN FOR RETIREES, HALL HAS HELPED TO INTRODUCE A NEW 277-LOT, OVER-55S LIFESTYLE COMMUNITY, *B BY HALCYON*, TO THE SOUGHT-AFTER SUNSHINE COAST SUBURB.

Project Manager Brett Fairlamb said Hall had been engaged to undertake 86,000m³ of bulk earthworks as well as design and construct two lakes and deliver five culvert crossings, four bio-retention basins, and approximately 60,000m² of retaining walls. The team also built a new road and undertook a shoulder upgrade on Old Maroochydore Road on behalf of the Department of Transport and Main Roads.

“Halcyon was eager to establish some display homes and kickstart the sales process, so our immediate focus when commencing civil works was to fast-track the first stage of lots,” Brett said.

“We managed to deliver them within just four months, and from that point onwards, we worked concurrently with a range of builders who constructed houses while we undertook civil works for the remaining lots.

“We had up to 100 builders on site at any given time, so while accommodating such large volumes of workers certainly posed its fair share of logistical challenges, it enabled Halcyon to release homes to the market quickly, which was a fantastic outcome.”

Brett said when commencing construction of the two lakes, the Hall team had identified an opportunity to generate significant cost savings for the client.

“The initial lake designs included geotextile liners to address acid sulfate soils and maintain the water levels for aesthetic purposes,” Brett said.

“When we assessed the existing clay material on site, our team discovered it was suitable for retaining water, negating the need for the geotextile membranes. Acid sulfate soils were also negligible, so we were able to safely construct both lakes without the costly liners.”

Brett said with one of the lakes situated within a metre of an existing waterway, the crew had taken steps to maintain the structural integrity of the shared embankment.

“We had to contend with some significant wet weather events during the construction period, which had the potential to wash away the bank and negatively impact native fish species inhabiting the waterway,” he said.

“To address this, we constructed several clay bunds, and used swales and rock checks to manage water run-off in the area.

“The various retaining walls and drainage systems we built also helped to direct the flow of water around the site, protecting the waterway and enabling us to get back to work sooner following rain events.”



86,000m³ OF BULK EARTHWORKS

Brett said while the COVID-19 pandemic had prompted Halcyon to pause construction activity temporarily, the project was now full steam ahead.

“The COVID-19 lockdowns prevented prospective buyers from coming to inspect the display homes which was unfortunate; however, housing remains in strong demand across the Sunshine Coast, so since completing the initial works, we’ve been engaged to deliver a further 30 lots as part of stage one.

“We’re also gearing up to commence stage two works in the new year, including preloading as well as the delivery of another 160 lots.

“It’s always a pleasure working with the Halcyon team and we’re looking forward to bringing the next stage of the development to life.”



CURBING CONGESTION IN MOOLOOLABA

FAMED FOR ITS SPECTACULAR BEACHES AND RELAXED COASTAL ATMOSPHERE, MOOLOOLABA HAS LONG BEEN A HOTSPOT FOR SUNSHINE COAST LOCALS AND TOURISTS ALIKE.

To alleviate traffic congestion in the area and enhance the southern entrance to the suburb, Sunshine Coast Council engaged Hall to deliver stages 1A and 1B of the Mooloolaba Transport Corridor Upgrade.

Stage 1A – which involved extending Naroo Court through to Muraban Street – was successfully completed in 2019, prompting Hall to focus its efforts on widening Walan Street to four lanes between Smith Street and Venning Street in 2020.

Project Manager Richard Hooper said Stage 1B also involved establishing a new signalised intersection at Walan Street and Naroo Court, installing an underground water main as well as underground drainage and electrical services, undertaking landscaping works, and constructing pedestrian crossings with pram and disability-compliant access ramps.

“More than 15,000 vehicles travel on Walan Street each day, so complex traffic management and staging was crucial in ensuring the project could be carried out safely and with minimal impact to road users and pedestrians,” Richard said.

“An incredible amount of planning went into every aspect of the works and involved input from field workers; the project management team; senior management; and health, safety, environment and quality (HSEQ) specialists.

“With the works taking place in the heart of Mooloolaba, space was at a premium, so careful

consideration was given to working around live services and with buildings in close proximity.”

Richard said at one point during the project, the team had to install a water main beneath a condemned awning, four metres deep and within two metres of a commercial building.

“Once the awning had been secured, one of the biggest challenges we faced was the inability to install shoring boxes in the trench as the height of the awning prevented them from being lifted into place,” he said.

“To address this, we implemented a specific task risk assessment and work methodology, and arranged for tectonic geotechnical engineers to visit the site daily to assess trench stability and the integrity of the awning support structure.

“The water main was successfully installed with no incidents, and I commend Tim Goode, Tynnan Byrne and the entire crew involved for their thorough planning, teamwork and ability to work within such tight constraints.”

Richard said as part of the water main and drainage works, the team also had to remove and treat acid sulfate soils and acid sulfate-affected groundwater.

Hall will continue working on the Mooloolaba Transport Corridor Upgrade in 2021 and beyond, having recently been engaged to undertake Stages 2 and 3 following the successful completion of Stage 1B.



“WE DEWATERED ALL OF OUR TRENCHES TO A CENTRALLY LOCATED WATER TREATMENT AREA TO ACHIEVE THE STRICT WATER RELEASE CRITERIA FOR THE MOOLOOLABA CANALS, AND ARE PROUD TO HAVE RECORDED ZERO SIGNIFICANT ENVIRONMENTAL INCIDENTS THROUGHOUT THE PROJECT.”



AWARDS AND RECOGNITION

BOKARINA BEACH IN THE SPOTLIGHT

There was plenty of cause for celebration in July, with the Bokarina Beach master-planned development named as a finalist in the 2020 Civil Contractors Federation Queensland Earth Awards. The prestigious awards recognise excellence in civil construction, with the project competing in the \$30 million to \$75 million category.

Project Manager Brett Fairlamb said it was rare to come across a construction project that incorporated such a diverse range of deliverables, and the team was honoured to be recognised for their efforts.

“Our team members undertook everything from acid sulfate soil management, right through to the construction of a lake, multi-lane bridge, roads, sewerage and water infrastructure, a pedestrian underpass and much more between 2016 and 2019,” Brett said.

“We’re incredibly proud to have delivered the \$37.7 million project ahead of schedule, within budget and with zero lost-time injuries, and it was fantastic to have these achievements recognised with an award nomination.

“I commend the crew for their amazing contribution to the Sunshine Coast community and their dedication to getting the job done.”

Brett said one of the most noteworthy aspects of the project was the use of a purpose-built excavator attachment in relocating approximately 2,000m² of vegetation to preserve a sensitive wetland habitat.

The Hall crew also successfully delivered a six-lane major road upgrade, bridge and underpass under live traffic volumes of 50,000 vehicles per day as part of the project.

SAFETY FIRST

Trade Assistant Mark Challis proved himself cool under pressure when he was surprised with a random safety spot-check, resulting in a company safety award.

Mark was tasked with painting a building roof at Hall’s Buderim workshop when General Manager – Dredging Mark McCurdy happened to see him in action and quizzed him regarding the activity.

Mark was wearing all the appropriate personal protective equipment, had his verification of competency in working at heights, had undertaken a task risk assessment, and was able to explain the emergency procedure if required and how to safely lower the elevated platform. He also had a fellow team member working nearby who could assist with lowering the platform if needed, ensuring he met all the necessary safety requirements.

Fellow Hall team member Col Beveridge was also recognised for his commitment to safe work practices in November, winning the McNab City Hall monthly safety award for his work on the Maroochydhore civil project.

It’s great to see safe work procedures are the norm at Hall and we commend Mark, Col and all team members for prioritising safety in the workplace.





“WE’RE INCREDIBLY PROUD TO HAVE DELIVERED THE \$37.7 MILLION PROJECT AHEAD OF SCHEDULE, WITHIN BUDGET AND WITH ZERO LOST-TIME INJURIES, AND IT WAS FANTASTIC TO HAVE THESE ACHIEVEMENTS RECOGNISED WITH AN AWARD NOMINATION.”



NEW ADDITIONS

KEEPIN' ON TRUCKIN'

Christmas came early for the workshop crew who welcomed a new Mercedes Benz Actros in November.

Boasting a 625hp engine, the Actros is the most powerful truck in our fleet, making it ideal for hauling large loads. Prime Mover Operator 'Gus' Guthrie quickly put the truck through its paces with a long-haul trip to Port Hedland, collecting cutter suction dredge *Mabuiag* and transferring it to Cairns to commence work on the Holloways Beach Sand Nourishment Project.

ROCK ON

With supporting local more important than ever during the COVID-19 pandemic, Hall banded together with Queensland company Atlas Heavy Engineering in 2020 to build one of the toughest marine digging buckets in Australia.

The custom backhoe bucket – which weighs in at a whopping 17 tonnes and measures 7m³ in size – was designed for use on Hall's 65-metre-long backhoe dredge, *Woomera*, as part of the Clinton Vessel Interaction Project.

Hall CEO Cameron Hall said the bucket's strength was what set it apart from others.

"Most buckets used in the civil and mining sectors would be unable to withstand the extreme forces this one will be subjected to. It is by far the strongest bucket we own and undoubtedly one of the more robust in Australia," Cameron said.

"While buckets of this nature are typically made in Europe and Asia, this project highlights that we have the capability within Australia to take on a wide range of manufacturing projects and achieve a first-rate outcome."

The build took around four months to complete, with the bucket capable of excavating hard rock.

SEEING DOUBLE

Following the acquisition of *Mooloolah River* in 2019, Hall added a second amphibious dredge to its fleet in 2020.

Christened *Maroochy River*, the dredge is capable of operating both on land and in water, and features a range of interchangeable attachments including mud, rock and clamshell buckets, as well as a cutter head and rake and piling tools.

Its compact size and ability to mobilise itself enables it to work within combined spaces and on sites with limited accessibility, as demonstrated in Newport this year while undertaking canal dredging.

In addition to cleaning urban canals, *Maroochy River* can also remove sediment and invasive vegetation from waterways, deepen shallow waterways, undertake tailings dredging, and assist with flood mitigation.

STRADBROKE SAILS IN

February marked the acquisition of Hall's new steel hopper barge, *Stradbroke*.

The 937-tonne barge – which spans 54.86 metres long and 18.29 metres wide – houses two storage bins that can hold up to 800m³ of material.

Hall purchased *Stradbroke* for use on the Clinton Vessel Interaction Project in Gladstone and also acquired an 80-tonne Hitachi excavator which was mounted on board and used to unload the storage bins. The long-arm excavator is the largest in Hall's fleet and can also be used for land-based applications.



SPREADING THE CHRISTMAS CHEER

Christmas morning was one to remember in 2020, with the Hall team having donated more than \$5,000 worth of gifts to at-risk children who may otherwise not have had anything awaiting them under the Christmas tree.

As part of the company's inaugural 'Hall Gift Haul', team members were invited to donate toys, books or funds to Sunshine Coast charity SunnyKids. North Queensland workers also threw their support behind The Smith Family Townsville.

SunnyKids General Manager Kathleen Hope said with many Queensland families having experienced homelessness, economic hardship or domestic violence, it was understandably not always possible for parents to fund a gift for their child.

"I think many of us take for granted having a pile of Christmas gifts under the tree, but the reality is that so many local children go empty-handed, which can be especially tough when they see their peers showered with presents," Ms Hope said.

"While 2020 was a challenging year for businesses around the globe, it was really heart-warming to see the Hall team rallying to support those in need within the community."

Hall management and staff compiled a range of bikes, scooters and skateboards as well as books, backpacks, sport and musical equipment, toys and vouchers.

Hall CEO Cameron Hall said with many Hall staff members parents themselves, the team had been thrilled to get behind SunnyKids and bring smiles to the faces of local children.

"It's clear from the overwhelming response we received from staff that this initiative has really tugged at the heart strings and reminded us of the importance of giving to others.

"We were able to donate a range of items for toddlers, teens and every age group in between, so there was something for everyone.

"We're incredibly proud to be a long-term supporter of SunnyKids, which delivers a range of essential services within our community."

The print, radio, television and online media Hall generated regarding the initiative also prompted a number of other businesses and community members to donate to the cause, generating plenty of excitement on Christmas Day.

SunnyKids provides thousands of nights of emergency accommodation, as well as counselling, domestic violence support, mentoring programs and more to vulnerable children, young people and their families each year. The Smith Family Townsville also supports disadvantaged children and young people, and focuses on breaking the poverty cycle through education.



HELPING HEALTHY MINDS

While the COVID-19 pandemic unfortunately prevented the annual Kakadu Triathlon from going ahead in 2020, that certainly didn't stop Hall from getting behind the Jabiru community in other ways this year.

The company donated a range of fishing and outdoor equipment to the Red Lily Health Board Aboriginal Corporation's 'Healthy Minds' program, which supports Aboriginal and Torres Strait Islander people living with mental health challenges.

The program is one of many facilitated by Red Lily Health Board Aboriginal Corporation that empower First Nations people in the West Arnhem region to achieve positive health outcomes.

A number of Hall team members called Jabiru home in 2020 while carrying out dredging and reclamation works at the nearby Ranger Mine.

DOLPHINS WELCOME NEW TOUCH TEAM

While the West Fiji Dolphins are already known for their prowess on the rugby field, they also became fierce competitors at touch football in 2020!

The newly formed team made its debut at the Touch Tavu competition held in Nadi in October, making it through to the quarter finals.

Hall is proud to have sponsored the club once again in 2020 and looks forward to a stellar 2021 season.

GIVING BACK

Rainy conditions couldn't dampen the spirits of the Halcyon crew, who spent a few hours at Buderim Men's Shed in February tending to the gardens and spreading mulch from their work site.

Buderim Men's Shed is a not-for-profit community organisation that provides a safe and friendly setting for men to meet, socialise and undertake meaningful projects under the guidance of experienced tradespeople.

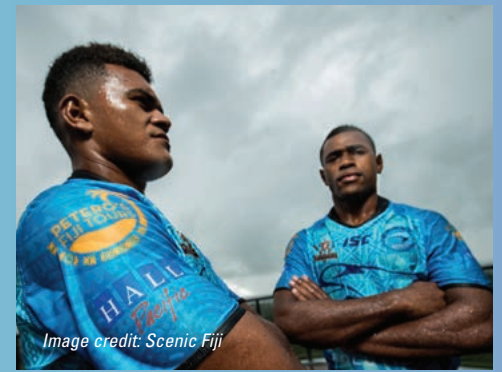
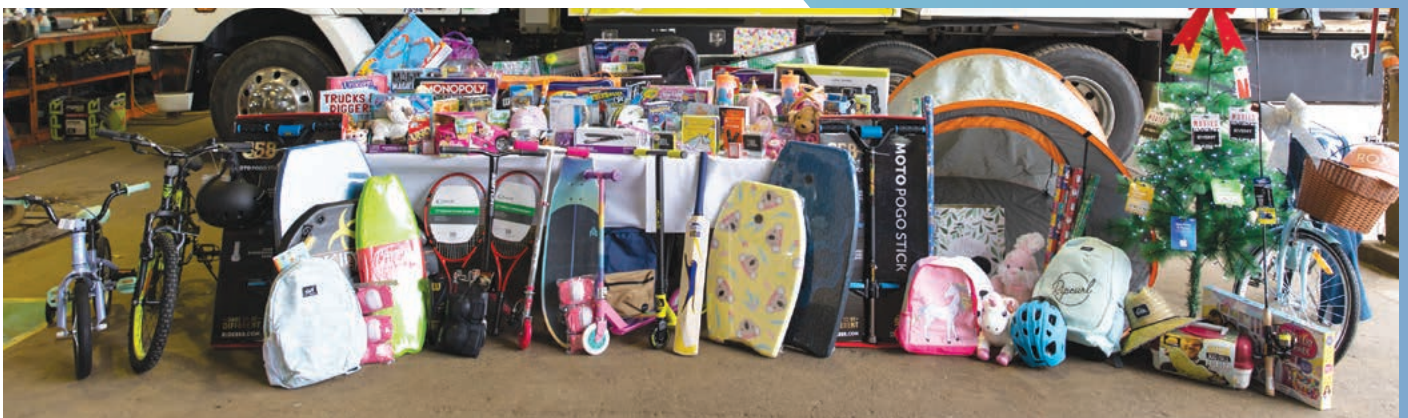


Image credit: Scenic Fiji



Image credit: Scenic Fiji





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