



Artist's impression of the new Te Ana Marina

Development of the new Te Ana Marina is underway, with the first boats expected to be at the new moorings before the end of this year and 170 berths completed by April 2018.

Te Ana Marina will be built at the site of the Inner Harbour pile moorings in Lyttelton Harbour. It is the first stage of LPC's wider regeneration plan to improve public access and amenities in the area.

It will be Canterbury's only walk-on floating marina for yachts and powerboats and will provide a waterfront promenade linking the marina to Lyttelton's town centre.

Lyttelton resident Robyn Robinson says Te Ana is going to be a "fantastic area" for locals and visitors alike:

"It makes my heart sing to think about what this area will soon look like and represent, particularly as it has been underdeveloped for so long."

Robyn's property is situated on Godley Quay, which overlooks the Te Ana development. She was delighted to see the development getting underway and offered to host the LPC time-lapse camera on her property which is now providing live images to the public 24/7 of the marina's progress. Take a look here: <http://www.lpc.co.nz/lpc/harbour-webcam/te-ana-marina/>.

"I am really excited about the Te Ana Marina and what it means for the local community," says Robyn. "The new waterfront promenade will be a great asset providing an essential link between the town centre and the marina."

The marina development is also good news for property values of those living in the Te Ana Marina area.

Last month LPC commissioned independent valuation company, Telfer Young, to review Lyttelton's residential property market and estimate the impact Te Ana Marina could have on property values in the development's vicinity. The report concluded that, "the

positive attributes of the development will flow through to the desirability of properties overlooking the development, and to a lesser degree to those within walking distance." This reflects the regional significance and unique appeal of Te Ana.

There are still limited spaces available to secure a berth, and people are encouraged to contact LPC if they wish to put their name down for licensing a berth.

LPC continues to regularly communicate with the community about the project. This follows the extensive community consultation undertaken as part of the Lyttelton Port Recovery Plan (LPRP). Feedback revealed a strong message from local residents that they supported future development of the Inner Harbour and wanted safe and increased access to the waterfront. The central theme of the LPRP, which had Ministerial approval, is to shift Port operations east, freeing up space on the western side of the Inner Harbour to build the marina and develop Te Ana.

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LPC will also continue to provide community updates on vehicle access and environmental noise control. Vehicle access to Te Ana Marina will be via Godley Quay. The Christchurch City Council is looking at how roading in the area can be improved, particularly with the expected increase in vehicles. This includes making a submission to the Council's 2017/18 Annual Plan, to address intersection and road safety issues at both Simeon and Godley Quays.

LPC and the community are looking forward to the positive impact that this development will bring to Lyttelton and the region.

Take a look at this 30 second video of Te Ana here: <https://vimeo.com/221667624>

Great Port Great City

Our Port and our city need each other to grow and prosper,” says LPC Chief Executive Peter Davie.

“The Port needs to be fit to service the growth and prosperity of the region and our customers’ increasing requirements. It is this region’s most significant freight link with the world - a pivotal gateway that provides the most comprehensive shipping services in the South Island. Almost all the goods our economy thrives on enter our lives through the Port – from the cars we drive to the coffee we drink.

“We sit in one of the world’s top-quality food bowls, boosted by the increase in Canterbury Plains irrigation. With increasing global food demand and container volumes set to double in a decade, Lyttelton Port needs to be ready for bigger vessels carrying more containers. We need to deepen our harbour so they have access – create more space for freight and expand the Container Terminal.

“Our reclamation in Te Awaparahi Bay has reached 10 hectares and we are looking to increase it another 24 hectares, to give us the space needed to move the Port east. As we expand the Container Terminal onto the reclamation, this will increasingly free up areas in the west of the Inner Harbour for the community to enjoy.

“This is already starting. Last month we began work to develop Christchurch’s first walk-on marina for 170 boats. There’ll be boardwalks to stroll down and good quality amenities for boaties and the community. We’ve worked with Lyttelton residents and businesses to ensure their input into the development.

“Another recent milestone was the announcement in May of the new \$56 million cruise berth which will be developed at Gladstone Pier. This is a partnership of community and business interests that will future proof Christchurch as a cruise destination of choice. In the spring of 2019, the first cruise ship to use the new berth will be here. The berth will be able to accommodate not only some of the largest cruise vessels visiting New Zealand now – but some of the largest that will come in the future.

“There are about 20 major developments to future proof the Port. Some are completed and already boosting our operations and providing strong support for the regional economy and the recovery. These



LPC Chief Executive, Peter Davie

include the new \$85 million Cashin Quay 2 container wharf, which has increased our container trade capacity and ability to service the predicted freight increases - and our new Inland Port at Rolleston, MidlandPort. It is a milestone in improving container transport efficiency for the South Island. The train service for containers between MidlandPort and Lyttelton takes about 80 trucks a day off the road route, and provides efficient transportation for the increasing production from the Canterbury Plains.

“The Port has experienced significant domestic container volume growth following the North Canterbury earthquakes, with a 27% increase since late last year. There has been a slight softening recently but the coastal shipping container volume remains strong and the Port is effectively meeting this demand and supporting the region’s recovery.

“This coastal shipping volume increase is good news for Christchurch. It is strengthening Lyttelton Port’s position as the South Island’s major international trade gateway. We have our eyes firmly fixed on the future and are taking steps now to ensure that we continue to provide world-class facilities and worldwide connections that keep our Port and city thriving.”

Here is a short video of some of the initiatives mentioned: <https://vimeo.com/222608271>



Part of the new crane arriving for assembly

There will soon be a new crane working on Cashin Quay. LPC’s state of the art Liebherr crane arrived from Ireland on board the MV Langeoog at Cashin Quay 2 wharf in early May and is being assembled and tested. It will replace LPC’s oldest crane which is 40 years old. It will be dismantled and removed.

The new crane is part of our commitment to having a thriving Port with high quality infrastructure and services to meet customer needs for the future.

The crane is being constructed behind Cashin Quay 1 wharf and will be operational in late July.

Check out this video of the new crane arriving and being assembled <https://vimeo.com/22211842>

Monitoring the health of the harbour

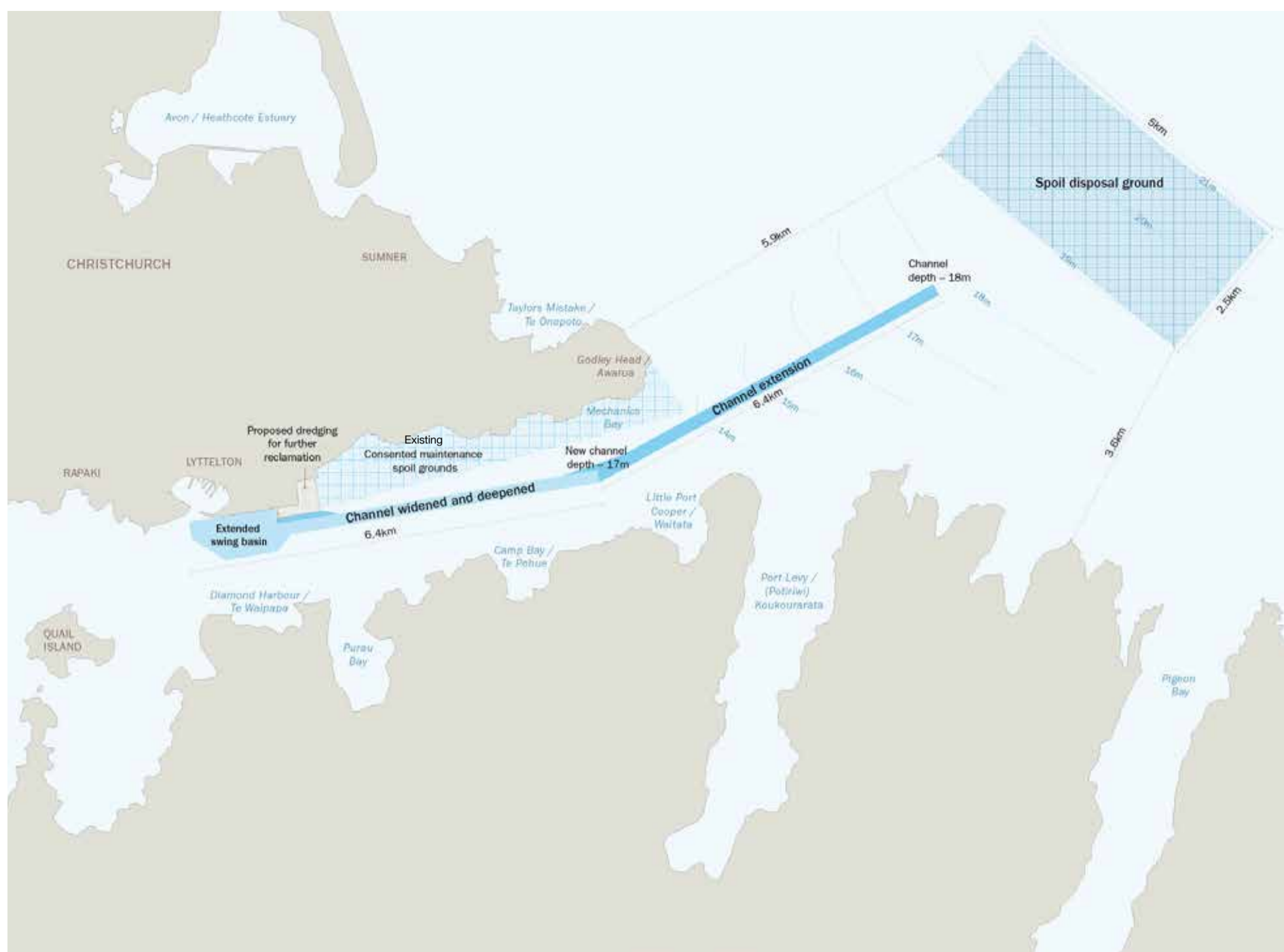
In September 2016 LPC installed a water quality monitoring system in Lyttelton Harbour worth over \$3 million. It is part of LPC’s commitment to collect at least a year of baseline water quality data. This scientific data, combined with Manawhenua’s historical and cultural knowledge, will allow a much greater understanding of how the harbour’s marine system operates.

The monitoring network is the most advanced and extensive to be installed by a Port in New Zealand, and was co-developed with the Technical Advisory Group, with representatives from LPC,

Te Rūnanga o Ngāi Tahu, Te Hapū o Ngāti Wheke, Te Hapū o Koukourārata, Sanfords and Ngāi Tahu Seafoods.

Made up of 14 real-time water monitoring buoys throughout Lyttelton Harbour, Port Levy and offshore marine areas, the programme is currently providing continuous information on water quality, waves, tides and sedimentation rates.

The project will provide a baseline for future monitoring as it will continue during, and for a period after, the channel deepening completion. The waves, tide and water temperature information is available publicly 24/7: www.lpc.co.nz/lpc/weather-forecast/offshore-weather/. A summary of the water quality data is at <http://vmh18812.hosting24.com.au/public> Data not gathered in real time, such as marine ecological and marine mammal monitoring, will soon be made available in monthly updates www.lpc.co.nz/port-development/dredging/



Proposed dredging and disposal

Proposed Channel Deepening Project

LPC is proposing to deepen, widen and lengthen the harbour channel to allow larger ships to access the Port.

Over the last 10 years the size of container ships internationally has virtually doubled. To accommodate larger vessels, LPC is proposing a channel deepening project which will see the depth of the shipping channel increase by 5-6 metres to allow for these larger, deeper ships. With 99 percent of New Zealand's freight carried by sea, it is important that this dredging project occurs so LPC can continue to provide efficient transport services for the region.

LPC's resource consent application to Environment Canterbury for the Channel Deepening Project was

heard by a panel of three independent commissioners in early May.

LPC understands that Lyttelton Harbour/Whakaraupō, Port Levy/Koukourārata and the surrounding areas are important, for many reasons, to the whole community. LPC has worked closely with representatives from the community, iwi, environmental and commercial groups to consult on the proposed project and to seek feedback on plans. A cultural impact assessment to identify potential effects of the project on manawhenua values and interests has been undertaken.

LPC will undertake at least a year of baseline water quality measurement before any dredging commences. Installed in September/October 2016, LPC has 14 real-time water quality monitoring buoys planted throughout Lyttelton Harbour, Port Levy and offshore marine areas to ensure the monitoring programme has continuous live information.

LPC worked with a range of expert scientists to undertake investigations into the effects the proposed dredging could have. The experts include specialists in marine ecology, sea bird and marine mammals, sediment,

waves and tidal modelling and water quality monitoring, among others. LPC's assessments to evaluate and mitigate potential effects of the project are ongoing.

The proposed plans, expert reports and videos of the Proposed Channel Deepening Project can be viewed at: www.lpc.co.nz/port-development/projects/dredging/

Community feedback can be sent to: feedback@lpc.co.nz

New Lyttelton cruise ship berth to be built

LPC has commenced work to develop a new \$56 million cruise ship berth at the Port. It will be operating by the spring of 2019 off Gladstone Pier.

The new berth will be able to accommodate not only some of the largest cruise vessels visiting New Zealand now – but some of the largest that will come in the future.

The cruise ship berth has been designed to accommodate cruise ships the size of the world's largest, such as the *MS Oasis of the Seas*, as in the artist's impression. This ship is:

- 362 metres long
- weighs 225,282 tonnes and carries around 5,400 people and 2,394 crew

LPC engineers are designing the cruise berth to withstand significant

seismic events and to ensure ships are safe in wind and waves, especially the southerly storms that can buffet this area.

The cruise berth is part of LPC's long-term plan to ensure a resilient Port that efficiently services the region's needs for the future. It is an important part of the Lyttelton Port Recovery Plan developed in consultation with the community and approved by the Minister for Earthquake Recovery in 2015.

Before the earthquakes, 50 cruise vessels a year came into Lyttelton Port. They brought about 100,000

passengers. With the new cruise berth, there'll be the potential to attract at least another 20,000 passengers who have been sailing past.

When the cruise ship berth development was announced, Christchurch Mayor, Lianne Dalziel said it represents a massive investment in the future of the city and the wider region, bringing more life and economic activity into the city. The cruise ship industry was worth \$484 million to the New Zealand economy in the 2015–2016 year and is forecast to grow to \$490 million in the 2016–2017 season.

The new cruise berth is a partnership of community and business interests that will future-proof Christchurch as a cruise destination of choice.

Check out this short video of the cruise berth announcement on Gladstone Pier: <https://vimeo.com/216586968>



Artist's impression: Lyttelton Port of Christchurch cruise berth with *MS Oasis of the Seas* (362m) at berth



The reclamation has reached 10 hectares

Reclamation expansion to meet the region's freight growth

LPC lodged a Resource Consent Application with Environment Canterbury in April this year to extend by 24 hectares the reclamation in Te Awaparahi Bay to 34 hectares. Ten hectares has already been reclaimed as part of the Lyttelton Port Recovery Plan, following the 2010/2011 earthquakes.

The Port will need the 34 hectare reclamation to provide the space needed to meet the South Island's growing freight requirements. While the Port does not need all 34 hectares immediately, it will within 10 to 15 years.

This is because freight volumes through Canterbury are forecast to double in the next 10 years and the Port must be ready to meet those increasing volumes. This growth is vital for the economic prosperity of not only Christchurch and Canterbury, but the whole South Island.

The export volume growth is driven primarily by the agricultural sector, with the increasing irrigation of the Central Plains boosting exports such as dry and refrigerated dairy, frozen meat and vegetables. In central Canterbury, 60,000 hectares of mostly dryland farms will be transformed by the Central Plains irrigation scheme that will increase agricultural output by about \$264 million a year.

Lyttelton Port is considered a barometer of economic prosperity for

the South Island. It is essential that the Port is future-proofed to make sure it can meet Canterbury's increasing freight demands. The reclamation will support this, while at the same time being mindful of the harbour's health.

LPC is working with Cawthron Institute scientists to understand how to design the reclamation in an ecologically relevant way and contribute to marine biodiversity and harbour mahinga kai values. Some ideas under consideration include mimicking rock pools and placing blocks with crevices and rough surfaces which are suitable for larvae to settle on.

For locals, the expansion of the reclamation is good news. Moving Port container operations east, away from Lyttelton's residential area, will free up the Inner Harbour for increased community access.

Take a look at this short video of the reclamation <https://vimeo.com/221667499>



MidlandPort going from strength to strength

In the year since LPC's new Inland Port at Rolleston, MidlandPort, opened (1 June 2016) it has been growing from strength to strength, welcoming new customers and expanding services to meet their requirements.

MidlandPort provides unprecedented connectivity throughout the South Island for shippers in our region, giving access to the eight shipping services and 14 shipping lines that come to Lyttelton. MidlandPort saves a journey to Lyttelton for customers. Import containers can be picked up at Rolleston and export containers dropped off. It's in the heartland of

the increased production from the irrigation of the Canterbury Plains and strategically positioned to transport the resulting freight, being at the intersection of major transport routes.

The Warehouse Group (TWG) and Westland Milk were early users of MidlandPort services after it opened and TWG has recently signed on for another two years to move their imports through the facility. Earlier this year the Talley's Group also joined the growing customer base.

Talley's, an exporter of a wide range of premium New Zealand produce including meat, dairy, vegetables and seafood, is using MidlandPort to freight frozen meat and vegetable cargo from its AFFCO and Talley's processing plants south of Christchurch to Lyttelton Port by rail.

To meet such growing customer requirements, MidlandPort's services have been expanded with the addition of a weekend train. MidlandPort now operates five return train trips during week days carrying container freight to and from Lyttelton Port - and a sixth train trip train on Saturdays.

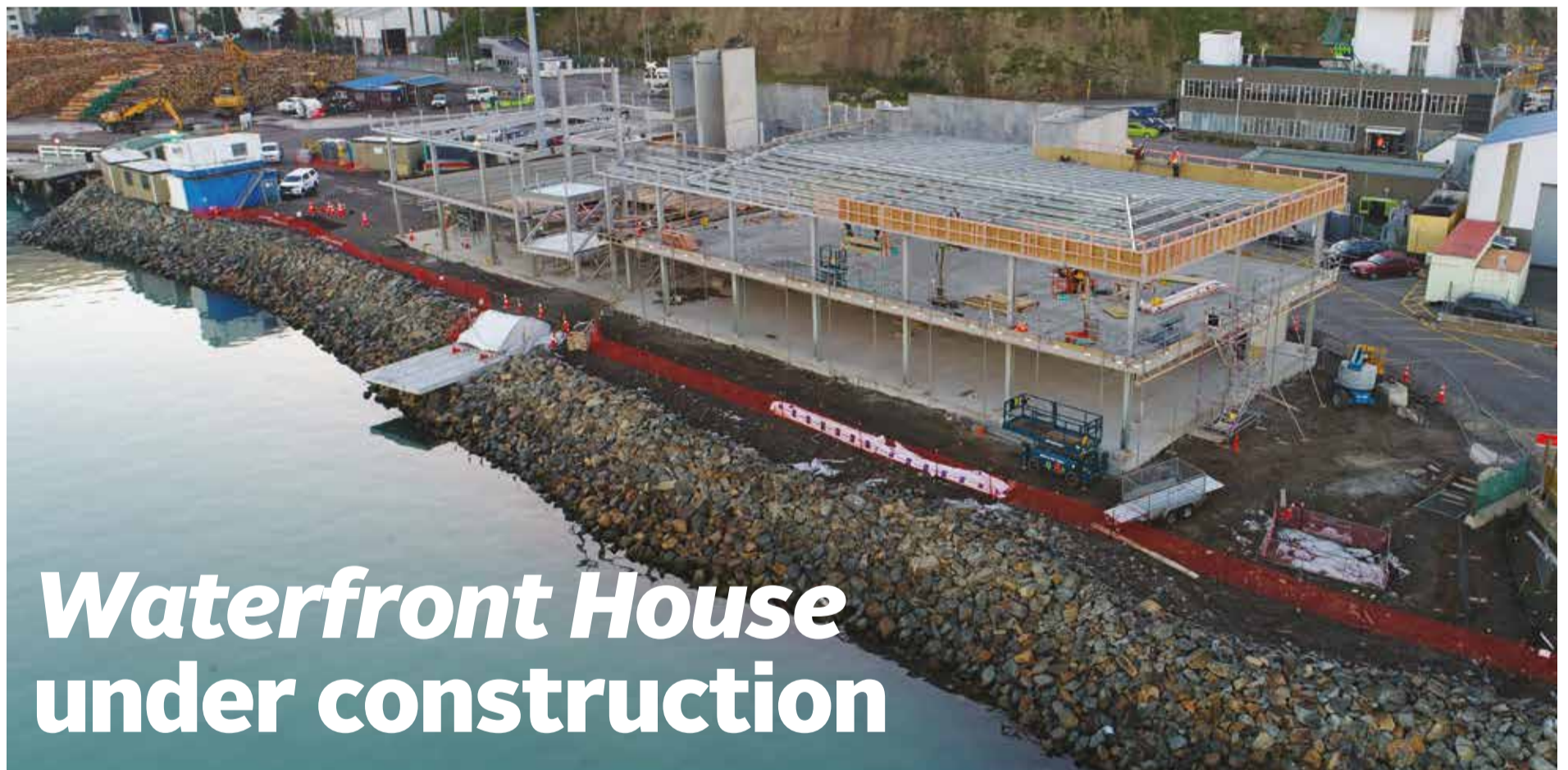
The new weekend train service not only provides increased flexibility for export and import customers using MidlandPort, it also further reduces the number of trucks on the road and the carbon footprint of container freight transport in the area.

One round trip for the train between Rolleston and Lyttelton Port takes about 40 trucks off the road. Each week the use of the train for freight transport between Rolleston and Lyttelton Port is taking 240 trucks off the road. Over a year this means more

than 12,000 trucks are removed from the road, making a useful contribution towards reducing heavy vehicle traffic on the main route south of the city.

LPC has started providing significant community sponsorship support in Rolleston and Selwyn since it began operating in the area, making contributions to Selwyn's new St John Ambulance facility, Weedons Primary School, the Rolleston Scout Group, Rolleston Warriors Rugby League Club (RWRLC), Waikirikiri Basketball Club, Waikirikiri Sport junior hockey teams and Canterbury United young footballers in Rolleston.

It is an exciting time for MidlandPort as it continues to grow in the community and provide services to strengthen the economic prosperity of the region.



Waterfront House, LPC's new Operations and Administration building, is being developed inside the Port near the Container Terminal. LPC's former administration building on Norwich Quay in Lyttelton was demolished after suffering significant earthquake damage.

The new facility inside the Port will bring LPC's operations and administration staff together, for the first time, under one roof. All LPC staff will be able to enjoy the new building which will provide improved amenities. It is purpose-designed with high quality facilities and part of LPC's wider vision to provide all staff with better amenities. LPC teams who have already moved into new facilities include those in Civil Maintenance, the Dry Dock and MidlandPort.

The new building is part of our committed presence in Lyttelton, as

is our *Port Talk* Information Centre in Lyttelton, on the corner of London and Oxford Streets.

It is expected that the new head office building will be completed by the end of 2017.

Watch the building construction on our live webcam: www.lpc.co.nz/lpc/harbour-webcam/

Check out the latest video of progress made so far here:
<https://vimeo.com/222441142>

Port Saddle Ecological Restoration

LPC and the Banks Peninsula Conservation Trust have developed a draft restoration plan for the Port Saddle and we are keen to share the plan and get feedback from the community as we embark on this long-term restoration initiative to increase the native biodiversity. You are welcome to download the draft ecological plan and provide feedback here: www.lpc.co.nz/community/environment/.

LPC has 17 hectares of land on the eastern hill side of Lyttelton straddling the saddle between Christchurch City Council's Urumau Reserve and Department of Conservation's Scenic Reserves (Buckleys Bay and Tauhinu-Korokio).

Original vegetation cover on this land would have been dry woodland dominated by ngaio, akeake, golden akeake, kanuka, broadleaf, matagouri and other small-leaved shrubs. Initially, bracken and silver tussock would have replaced the forest after the Polynesian fires. After Europeans arrived with more burning, grazing and spreading of weeds and pests,

native forests were reduced and fragmented so that the land is now dominated by exotic grasses and woody weeds, pines and eucalypts.

The good news is there is much potential here to slowly restore the site by controlling weeds and pests, planting natives and hopefully seeing some of the native plants and animals start to flourish again in this area.

Keep an eye out for our first planting days coming up in August – they will be advertised locally and on our website.

Check out this short video
<https://vimeo.com/187271090>.



LPC Environmental Manager Kim Kelleher planning the upcoming native planting days

Centuries old hangi pits uncovered on Norwich Quay

Construction work undertaken last year for the Port's power upgrade project uncovered some interesting European and Maori artefacts, including the evidence of two Maori ovens or hangi pits at 7 Norwich Quay.

Underground Overground, which provides LPC with archaeological services, has been examining samples from the hangi pits and has made interesting discoveries using numerous sample analysis methods.

These methods include radiocarbon dating, which determines the age of an object containing organic material, microfossil analysis and faunal analysis - the study of remains of items left behind when an animal dies.

The results uncovered from samples found in the hangi pits help to tell a story of what the area was used for and what it looked like hundreds of years ago.

Using radiocarbon dating, it was revealed shells uncovered in the hangi pits were from 1558 and 1672 –

providing evidence that Maori occupied the area during the mid 16th to late 17th century.

Microfossil analysis of the charcoal found in the hangi pits identified pollen from the native plant *Lepidium oleraceum*, also known as nau, ngau, naunau and heketara. This native plant is edible and provides a great source of Vitamin C. Its discovery suggests that it formed part of Maori diet. It is more commonly known as Cook's Scurvy grass, as he used it to fight off scurvy in his crew. *Lepidium oleraceum* was once wide spread in coastal areas across New Zealand but it is now threatened and is only found in off-shore rocks, stacks and islands.

Bracken ground fern was also identified through microfossil analysis. The



Uncovered hangi pit

presence of this fern can be associated with human settlement and large-scale repeated burning of forest, which is linked to the burning technique used by Maori as a method of hunting Moa. Bracken ground fern was also used as an insulating layer in hangi pits.

Faunal analysis revealed information on the types of birds, fish and shellfish that were cooked in the hangi pit, painting a picture of local Maori diet from the mid 16th to late 17th century. Evidence of cat's eyes, pipis, cockles, muddle snails, turret shell blue and green lipped mussel, oyster and paua, red cod, shark and spotted shag were found.

A single stone artefact was also uncovered in the hangi pits. Analysis identified that it is similar in appearance to material from deposits found along

the Kaikoura coast, and it is possibly a fragment from a stone tool used at this site.

The archaeological work is part of LPC's on going study into Lyttelton's Maritime history. LPC has commissioned archaeologists to assess the heritage value of structures on the Port and establish what needs to be done to record and preserve the history.

The archaeological study is ongoing and archaeologists play a significant role throughout LPC's recovery projects.

The full archaeological report of all artefacts uncovered during the Port's power upgrade project will be made available on LPC's website Port History page: www.lpc.co.nz/about-us/history/

Port Cargo Handler Polly Bysterveld

A truck driver from the age of 16, LPC Crane and Straddle Driver Polly Bysterveld has never been one to shy away from a challenge.

Polly joined LPC in 2004. She has always believed that no matter the obstacle, you should always give it a go.

In 2001 Polly gave up driving trucks full-time, deciding she was ready for a change, and moved to Nelson to work in the orchards there. Following that, she worked for nearly two years as a Forklift Driver on the wharf at Port Nelson.

Due to family commitments, she returned to Christchurch in 2002 with a transfer to Lyttelton Stevedore Services.

"The transfer was not an easy process," said Polly. "Neither was forklift driving at Port Nelson. It was a real challenge being the only female, but I love a challenge."

While still working on a casual basis at Port Nelson and Stevedores, Polly heard that LPC was looking for casual Cargo Handlers. Her application was successful and she became the only female working on the wharf at LPC.

"I love big machines. The bigger the better," said Polly. "I had already conquered driving a forklift and was slowly overcoming my fear of heights, so I set my sights on straddles at LPC and, pretty quickly after that, cranes."

Describing crane driving as like being on a 'rollercoaster', Polly finds the rocking and bouncing at a height that would instil fear in most people exciting. "It's like sitting on the edge of your seat," she said. "I love it."

However, as much as Polly has loved the job, being the only female on the wharf also came with its challenges. "I really had to prove myself - to show everyone that as a woman, I could do this job," she said.

Thirteen years into her LPC career, Polly is now one of four female staff working on the wharf. "It's great seeing more and more females join the team," she said. "But I want to see more!"

Having recently taken on a role as a relief Tally Clerk, she has set her sights on a new goal - moving into LPC Administration. "This is a whole new challenge for me. My previous roles have been physically demanding, whether it be shift work or lashing containers, but I now want to challenge myself mentally by taking on more administrative tasks."

When asked if she had any advice for other females wanting to go into a similar role but not sure how to start,



Polly Bysterveld driving a crane

Polly remarked that things are really changing and "if this is something you want to do - do it. Go for that dream!"

Extremely glad that she had the confidence to go for it herself, Polly has loved every opportunity she has been given so far in her career and is excited to take on new challenges and overcome new obstacles.

LPC sponsorships in the community

LPC was pleased to again sponsor the fireworks display this month at the annual Lyttelton Festival of Lights. It is one of our many sponsorships in the Harbour Basin. We focus on providing support for the communities in which we operate – the Lyttelton Harbour Basin, Rolleston, Christchurch and the wider Canterbury area.

One of LPC's new sponsorships is Kris Herbert's project "Lyttelton Stories – if this town could talk."

She draws on stories from past and present residents through radio documentaries. With hopes to soon put her stories on a mobile application so that they can be easily accessed, Kris has enlisted the help of pupils

from Lyttelton Primary School to speak to the people and to help teach the children interview skills while connecting with the community.

Other recent new sponsorships include the Peninsula Art Auction, which raised funds for Lyttelton Primary School, the New Zealand Marine Sciences Society Conference, to help support our focus on harbour health, the Waikirikiri Sport Hockey Club, the Waikirikiri Basketball Club, the Rolleston Warriors Rugby League Club, the Canterbury United Selwyn Youth league teams and the provision of storage containers for the Naval Point Club, Lyttelton.

LPC is committed to encouraging sporting development, especially of youngsters, and provides sponsorship to the Lyttelton Rugby Club, the Lyttelton Football Club, the Lyttelton Netball Club, the Diamond Harbour Cricket Club and the Whangaraupo Netball Club.



We also sponsor the Diamond Harbour Scouts and the Rolleston Scout Group.

A supporter of the Ronald McDonald House South Island since 2008, LPC helps fund the Family Dinner Programme, and we have provided funding to assist the St John Selwyn Area Central Committee's fundraising initiative to build a new ambulance centre in Rolleston.

LPC also provides sponsorship support for the work of the Banks Peninsula Conservation Trust and the Quail Island Ecological Restoration Trust and, annually, we are a sponsor of the Champion Canterbury Business Awards.

Free Port Tours

LPC runs a free Port Tour by boat on the last Sunday of each month. The 90 minute tour departs from the Lyttelton Ferry Terminal at 1.30pm and includes the Inner Harbour, Te Ana Marina, Container Terminal operations and Te Awaparahi Bay reclamation.

If you'd like to take a free tour please book by calling LPC reception on **(03) 328 8198**.

Pop into Port Talk

Our Information Centre 'Port Talk' on the corner of London and Oxford Streets in Lyttelton is open 11am to 1pm Fridays.

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