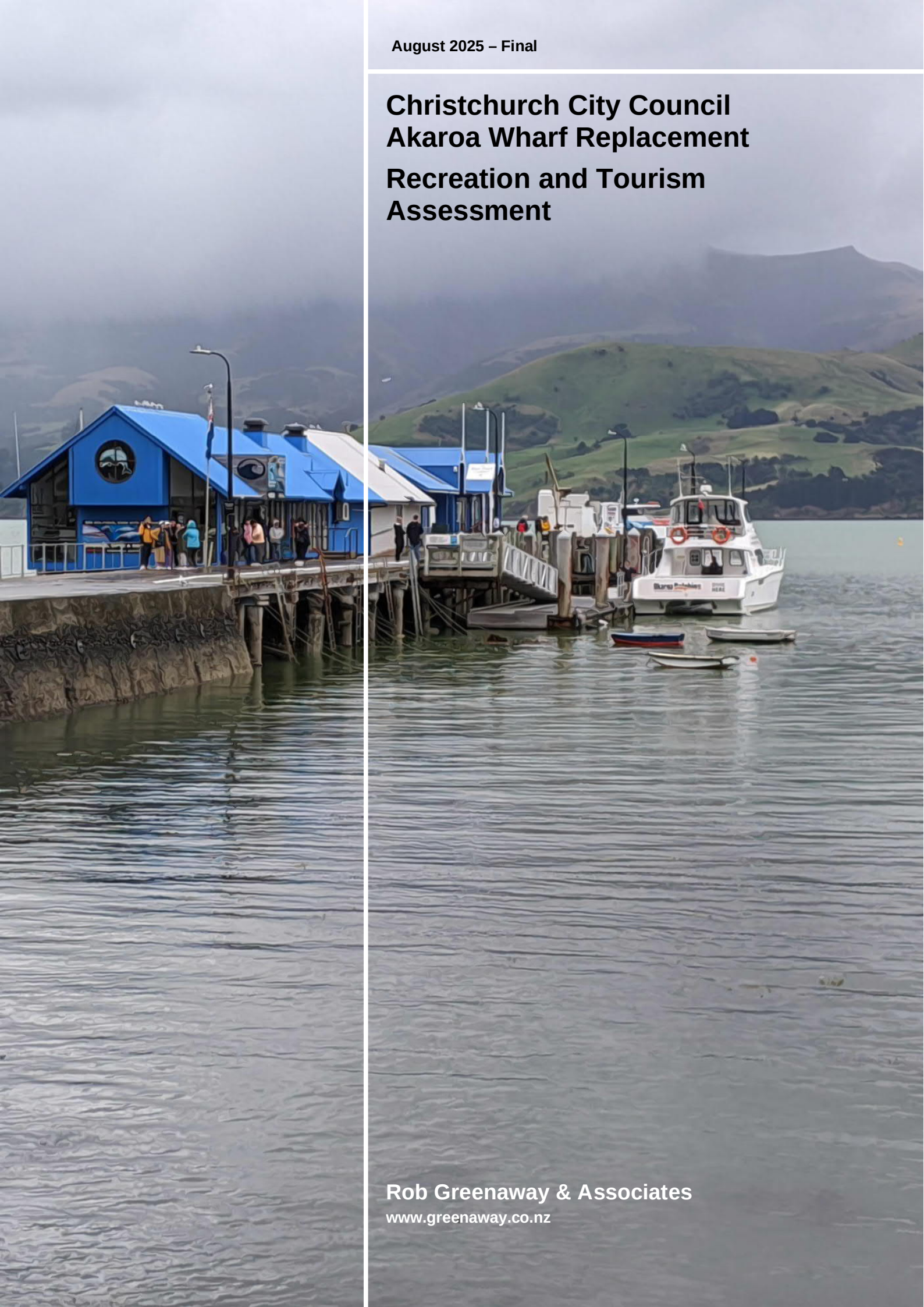
August 2025 – Final

Christchurch City Council
Akaroa Wharf Replacement

Recreation and Tourism Assessment



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Prepared for Christchurch City Council

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Figures

1 Executive Summary

Christchurch City Council (CCC) is proposing to replace the Akaroa Wharf, which has reached the end of its design life. The proposal is the result of a substantial period of consultation. The key mitigations of effects on recreation and tourism arising from the temporary loss of access to the wharf have been implemented through the redevelopment of Drummonds and Daly's Wharves, with alternative facilities at those locations.

The construction process will have additional temporary effects on recreation in Akaroa, and this report considers these and any residual effects from the wharf replacement on other recreation settings.

The effects of interest are the use of several areas for construction laydown and operations and a temporary pocket berth adjacent to the Akaroa Boat Ramp.

During the preparation of this report the potential effects of the removal of much of the existing abutment on the Akaroa Wharf on the future scale of the beach opposite the Britomart Reserve have been considered. This issue has been resolved via the retention of much of an abutment structure in the new wharf design.

Four temporary laydown and operational areas are required at the:

- Akaroa Recreation Ground. The scale and form of this area has been minimised to allow for the continuance of junior summer cricket. Adult cricket will be played at an alternative location. The area of open space remaining will be adequate for the staging of the various annual events and other users which fully or partly rely on the Grounds, and the CCC is advising users well in advance to allow for the revision of any layout planning. The Pavillion remains fully accessible.
- Akaroa Boat Ramp. This includes the occupation of several car parks and some roading access to the ramp. Traffic management will ensure continued access to the ramp. A similar area has been occupied during the redevelopment of Dalys and Drummonds Wharves with no reported issues. A pocket berth adjacent to the ramp will be developed for loading and unloading construction material via a barge. This is located away from the ramp access channel. The site will be rehabilitated to its original state on completion.
- Entrance to the Akaroa Wharf. With the wharf decommissioned during its redevelopment, there will be no loss of amenity here, with most existing wharf users otherwise accommodated at Dalys and Drummonds Wharves.
- Bruce Slipway. This area will be used occasionally for the queuing of concrete trucks. There are local alternative launching areas for small craft.

Extensive effort has been made to ensure current recreation and tourism users of Akaroa Wharf are accommodated during the construction period. The project must be considered differently from a private construction exercise where some effects might be socialised generally, but the benefits privatised. In this case, the project is largely a public good and there should be very high acceptance of the necessary temporary compromises. In any event, these compromises are slight and have been well-managed to avoid any major impacts..

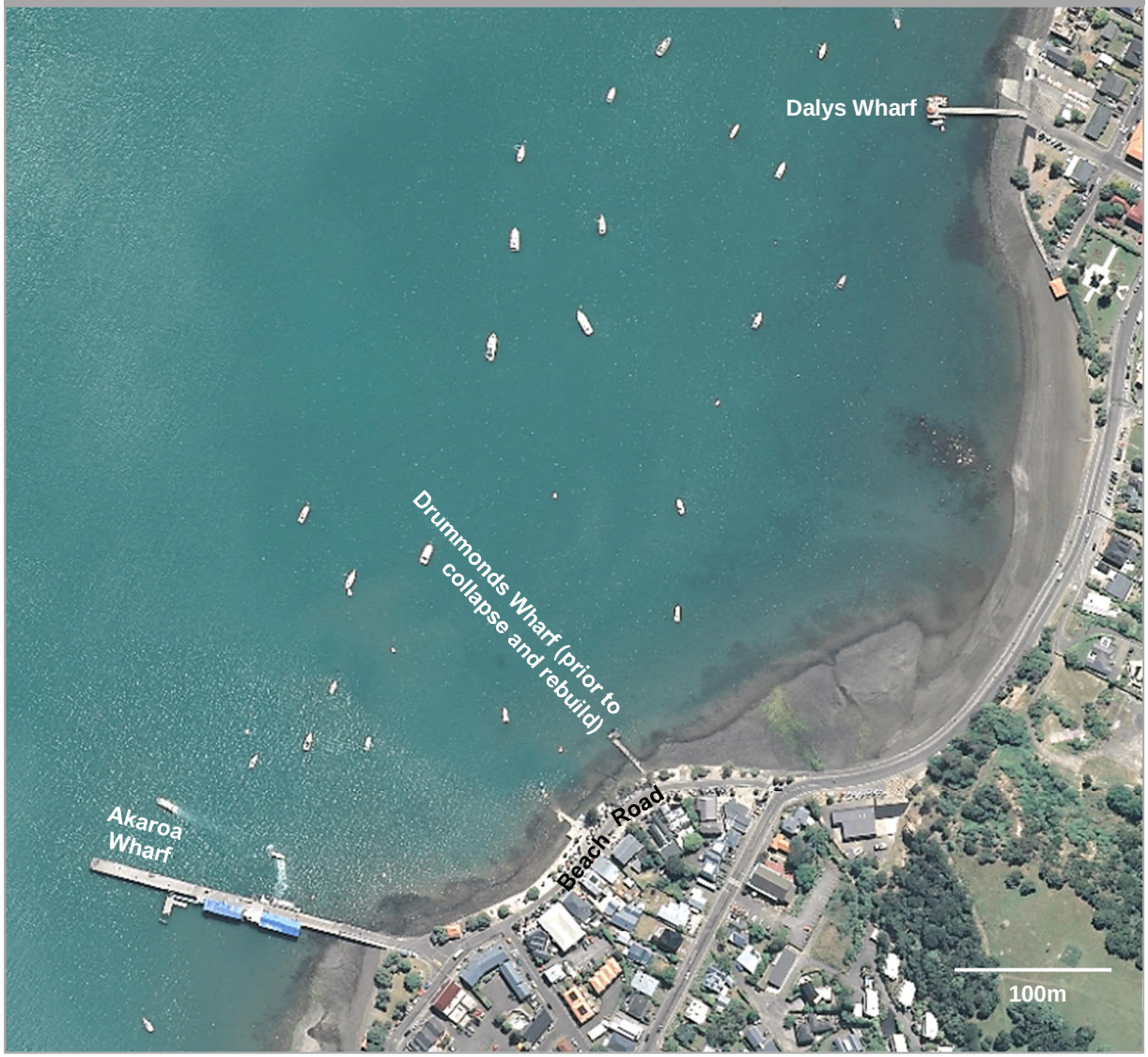
2 Introduction

Akaroa Wharf has reached the end of its design life and is no longer cost-effective to maintain. Christchurch City Council (CCC) plans to construct a replacement at the current location of the wharf. The rebuild will take 11 - 14 months.. The new wharf structure will be designed to meet the modern needs of both commercial and recreational users and will include floating pontoons on both the northern and southern faces to provide additional berth space.

The Akaroa Wharf will be rebuilt generally in the existing wharf's location. To allow for minor adjustments in the alignment of the wharf through detailed design, a construction envelope (of 185m in length and 8m in width) is proposed for the new wharf. This envelope covers the existing alignment of the wharf, as inclusive of an option to move the wharf to the north by up to 2.5m. The alignment may also be adjusted to avoid clashes with the existing pile layout. The wharf deck and supporting piles will all be constructed within this envelope. Ancillary features, like ladders, fender piles and other fittings, may extend beyond the envelope. The exact orientation of the wharf will be dependent on the piling layout and will be refined during detailed design.

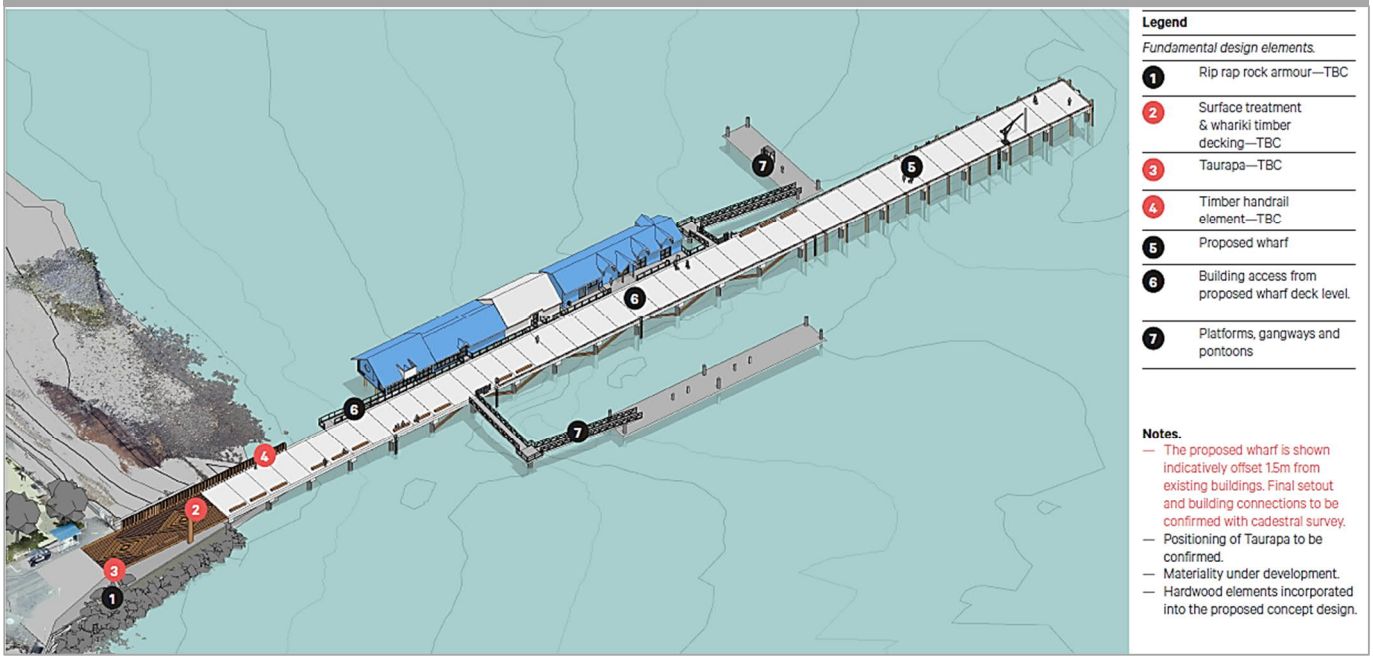
The wharf will be approximately 185m long and 8m wide for most of its length. The wharf replacement effectively retains the current footprint.

Figure 1: Akaroa, Drummonds and Dalys Wharves. CCC aerial



The new wharf will follow a similar form to the existing wharf (**Error! Reference source not found.**).

Figure 2: Akaroa wharf replacement concept - Isthmus graphic



The proposed general working hours for construction activities will be Monday to Saturday from 7:30 am to 6 pm, with piling activities confined to weekdays during daylight hours only. There will be no work conducted on Sundays or public holidays, with a limit on operations over the Christmas and New Year holiday period (two weeks).

The proposed design of the Wharf – aimed at accommodating both current and future recreational and tourism demands – is based on assessments conducted for the CCC since 2021 (primarily Enviser (2021) and Greenaway & Enviser (2023). These evaluations incorporated extensive community consultation and – to support the temporarily displaced commercial and recreational activities of Akaroa Wharf during its reconstruction – recommended the redevelopment of Drummonds and Dalys Wharves. Consent for this recommended work was obtained in 2024, and works have been completed to provide for the relocation of commercial and recreational uses during the main wharf rebuild. This effort mitigates almost all of the temporary effects of construction resulting from loss of access to the Wharf.

This report summarises the construction effects already mitigated by Dalys and Drummonds Wharves redevelopment, and, for operation of the new Akaroa Wharf, the proposed design responds to its projected future use. Both of these assessments rely on previously completed consultation.

In addition, and based on new data, this assessment reviews:

- Construction effects on recreation and tourism from the location and operation of proposed temporary construction laydown areas in Akaroa;

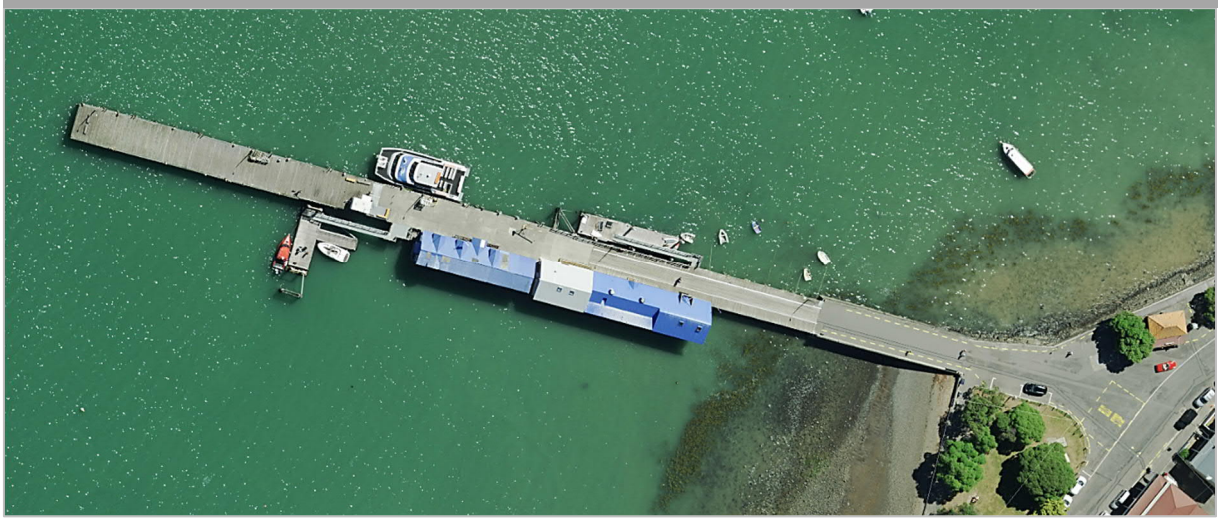
Blue Pearl and Black Cat will vacate the buildings during the rebuild and accordingly, this assessment does not consider effects on them. Capacity for these businesses are incorporated into the final design, with the existing buildings retained.

3 Existing Environment

3.1 Akaroa Wharf

Akaroa Wharf is a 155m long with two floating pontoons (185m in length as inclusive of the abutment), one on the northern and one on the southern sides (Figure 3). Gangways provide access to these pontoons.

Figure 3: Existing Akaroa Wharf



The wharf is used in a recreational manner by pedestrians, swimmers, casual fishers, tourists, recreational boats and for dinghy tie-up. Commercial fishing vessels generally tie up to the main wharf structure for loading and unloading, but occasionally tie up on the southern pontoon if the main wharf structure is in use. Commercial tourism boats and cruise ship tenders use the floating pontoons almost exclusively. By preference, the tourist vessel operators generally use the pontoon on the northern side, and cruise tenders generally use the southern side, although they will also use the northern side on days when multiple cruise ships are visiting.

A diesel bowser and a privately-owned hoist is available on the northern side, with a water supply available on both sides, including on the northern pontoon. If users require petrol, it is typically supplied via a trailer-mounted portable tank driven onto the wharf or via a tank mounted on the tray of a ute.

Akaroa Wharf can be accessed in all tidal conditions by the currently operating vessels, although water depth may restrict which part of the wharf the deeper draught vessels can use at low tides. Access to the water from the wharf is via gangways, stairs and ladders.

The buildings accessed via the wharf are privately-owned and are not operated or managed by CCC. Businesses operating from the buildings are the Blue Pearl Gallery and Black Cat Cruises.

Temporary parking for buses is provided for just off Beach Road at the wharf end.

By limiting long-shore drift, the wharf abutment has influenced the development of an area of beach adjacent to the Britomart Reserve made up of large and small gravels (Figure 4).

Figure 4: Akaroa Wharf abutment and southern beach area

Enviser (2021) identified four groups relying on berthage at Akaroa Wharf. The proposed Wharf design and, for the construction period, the redeveloped Dalys and Drummonds Wharves, responds to the needs of these users.

3.1.1 Commercial fishing (including aquaculture)

Most current fishing operators frequent the wharf daily, sometimes twice daily and for 365 days of the year. All commercial fishing operators use the main structure of the wharf to load and unload catch into small refrigerated trucks which drive on the wharf, or onto larger trucks which park off the wharf due to restrictions on deck loading. When loading the larger trucks, a forklift is used to transport the catch down the wharf. On busy days this requires coning off half of the wharf to separate other wharf users from the forklift operations.

Akaroa Salmon is frequently using the Akaroa Wharf (at 2023) due to damage to the Wainui Wharf, but would otherwise depend on the Akaroa Wharf only approximately six times per year when weather precludes use of Wainui.

Power, water and fuel supplies on the wharf are important for the commercial fishers. A privately-owned hoist is critical for unloading catches, loading supplies and for boat maintenance. Vehicle access to the berth-side is also critical to unload catches. Loading and unloading times vary but generally sit in the range of 30-120 minutes per visit.

Fishing vessels using the wharf are typically single hulled aluminium or wooden boats with a maximum length overall (LOA) of approximately 13m and beam (width) of 3.5m, and draught of 1.5m. The maximum displacement of the larger of the vessels is up to 45 tonnes.

3.1.2 Commercial passenger tourism

Commercial tourism operations in the Akaroa Harbour include dolphin swimming, powered and unpowered (sail) harbour cruises and nature and wildlife cruises.

Currently six commercial tourism operations use the wharf in some manner. Many of the commercial tourism operations run on a seasonal schedule, typically operating between October and April. Dolphin Encounters and Black Cat Cruises are an exception to this, operating 365 days of the year, albeit at a reduced frequency over winter. Both of these operators also run multiple vessels. Most operators typically run two to three trips per day, with some operators running up to four. This results in each operator requiring up to eight visits to the wharf daily with a loading and unloading time of 15-30 minutes per visit.

Loading and unloading predominantly occurs via the northern floating pontoon, using the gangway for access to the wharf for passengers. If the northern pontoon is unavailable and weather conditions allow, the southern pontoon is also used by the tourism vessels, although this is not a preference.

Water and diesel are used by the commercial passenger vessels, and Black Cat has installed an external holding tank to which it pumps wastewater from its boats. Commercial vessels which operate from Dalys Wharf – Ecoseeker and Fox II – also rely on Akaroa Wharf for services such as diesel and water as these are not provided at Dalys.

The types of commercial tourism vessels are varied and range from small powerboats through to large catamarans and historic wooden yachts. Due to the varied nature of the vessels in this user group, boat LOA ranges from 7- 18m with a maximum beam of 7.1m and draught of 1.6m. The vessels also have varying freeboards which impact on the ease of access to wharfs/pontoons. The maximum displacement of the larger catamarans is up to 70 tonnes, the smaller powerboats are approximately 3 tonnes.

3.1.3 Cruise vessel tenders

Cruise ships generally visit Akaroa Harbour in the October – April season with passenger loads ranging from 120 to 3560. Cruise ship passengers are transported from their ship to Akaroa Wharf to offload and continue with sightseeing excursions. At times, up to four cruise ships have been in harbour at the same time, although there are normally no more than two ships simultaneously, and mostly only one. Since the construction of the purpose-built cruise wharf at Lyttelton, the number and size of cruise ships visiting Akaroa has significantly reduced, and it is anticipated that – due to the construction of cruise ship facilities in Lyttelton – large-scale cruise ship activity in Akaroa is unlikely during the reconstruction period for Akaroa Wharf.

Passenger transfers are made by tenders, loading and unloading passengers mostly from the southern floating pontoon at the wharf. Load times is typically a maximum of 15 minutes, with a tender arriving every 10-15 minutes at peak times, with up to six tenders operating simultaneously. Depending on the time of cruise ship arrival in the harbour, tenders generally operate between 8am and 6pm, with a constant stream moving from the ship to the wharf throughout that period.

The largest cruise ship tenders in this user group have a LOA of 16m, a beam of 5m and draught of approximately 1m. The maximum displacement of the largest of these vessels is 43 tonnes. Over a ten-hour period (8am-6pm), approximately 60 tender trips would be undertaken to deliver passengers from one large cruise ship, and an additional 60 trips to collect passengers at the end of the day, with 120 vessel visits to the wharf requiring a total of 30 hours of mooring time, based on 15 minutes berthage per trip. This does not take into account multi-ship days, with additional cruise ships operating in a similar manner.

The tenders do not use any services on Akaroa Wharf, such as water or diesel. Cruise passengers range in age and mobility.

3.1.4 Recreational vessels and pedestrians

Recreational users of the Akaroa Wharf include casual powerboat and yacht users and occasional unpowered craft (dinghies and paddle craft). Recreational use of the wharf also includes pedestrians, casual fishers, visitors to the Blue Pearl Gallery and Black Cat shop, and general sightseers. In summer and winter weekends, a food cart selling fresh fish and fish & chips also attracts locals and tourists.

Recreational use of the wharf is year-round, with high use in the warmer months from October – April. Recreational boaters often moor while a crew member goes ashore for refreshments or supplies. The time spent ashore is variable but averages a maximum of 45 minutes. Water and diesel are also accessed. Petrol is generally required in low quantities and is carried via jerrycans by hand or in a trolley.

Recreational vessels at of the wharf are typically small powerboats, with approximately 64% of vessels less than 6m LOA. The largest of vessels in this user group are powerboats with an approximate LOA of 10m and beam of 3m, and a displacement up to 5.5 tonnes and a draught of 1.2m. Larger recreational yachts and launches would normally be no bigger than commercial passenger craft.

Pedestrian traffic from people entering from the shore is a significant contribution to the overall usage of the wharf. A preliminary assessment completed by CCC in early 2020 indicated that up to 1100 pedestrians visited the wharf in a one-hour period during a large-scale cruise visit (a figure now unlikely to be reached).

3.2 Laydown areas

Two laydown areas, an operational area and truck staging site are required by the construction contractor beyond the construction site of the Akaroa Wharf. Figure 5 shows the required areas near the Akaroa Recreation Ground and Akaroa Boat Ramp. These areas in more detail are:

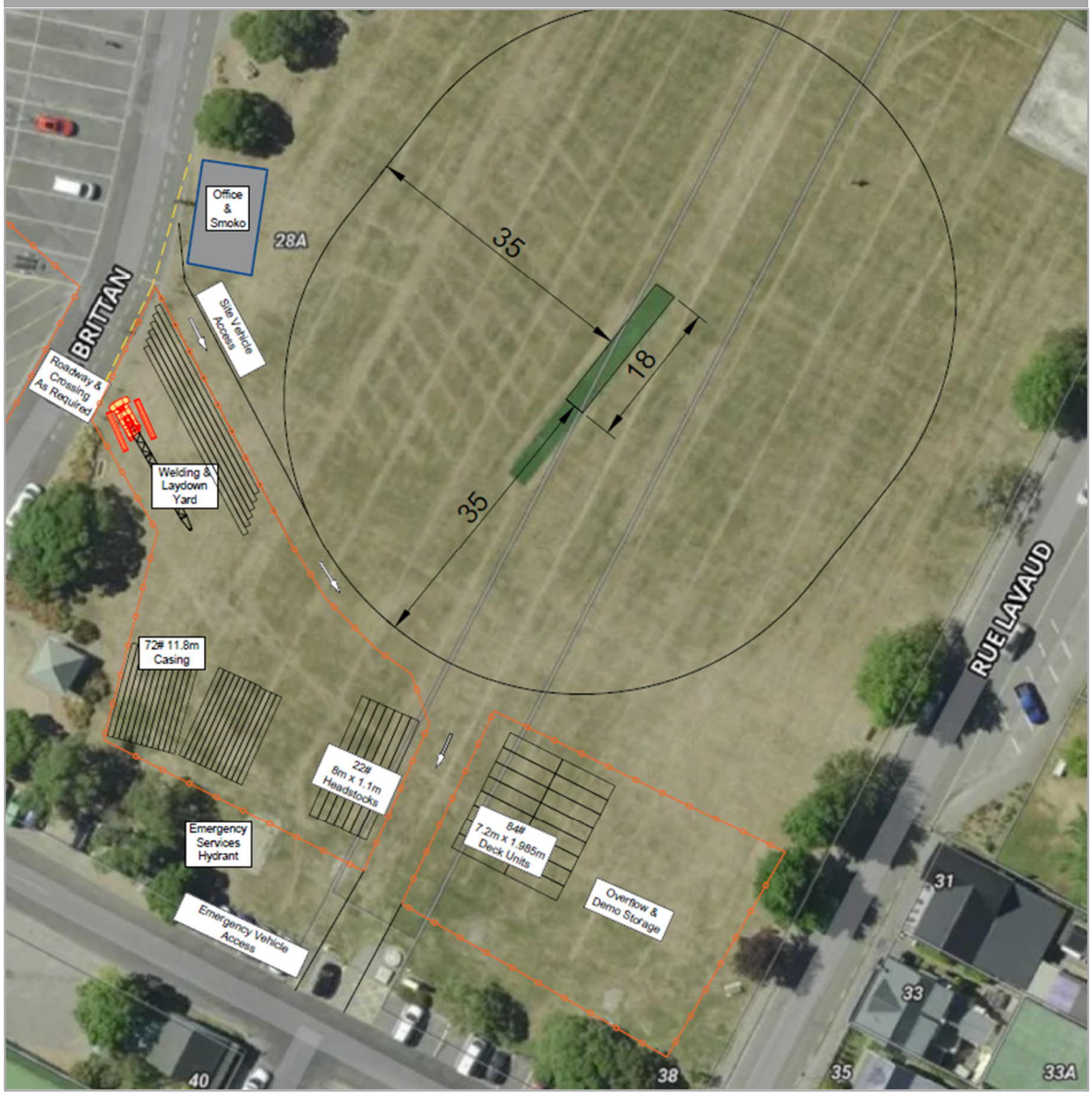
Laydown 1: Within the grassed area of the Akaroa Recreation Ground with access off Rue Jolie or Rue Brittan. The fields are used for summer cricket, and features four hydrant connection points on small concrete pads for firefighter training on the southern edge. Winter football was previously played on the Ground, but not currently. The southeast corner of the Recreation Ground – outside the laydown area – is used casually by the Akaroa Corner Café during summer for café seating. Several annual events – such as Le Race and the Akaroa French Festival (three days annually) also use the Grounds.[1] The parking area on the southern edge of the Ground includes an EV charging station, with public toilets on its south-west corner (both outside the laydown area).

Figure 6 shows the laydown area indicating its design to allow the continued play of junior summer cricket.

Figure 5: Laydown area 1 and Operational Area near ramp

[1] The recreation use description has been largely provided by the CCC, and this report relies on CCC consultation with the users of the Recreation Ground as communicated to the author.

Figure 6: Laydown area 1 detail showing cricket play area



Operational area: On the southern boat ramp shoulder in the Akaroa Boat Park accessed via the boat ramp parking area and extending into the coastal marine area to provide a pocket berth and loading ramp for barge operations. The area currently provides two-way vehicle access to the dual-access public ramp, and includes several car and trailer parks. The Ramp is usable at low tides with dredged access, allowing, for example, the 12m Department of Conservation boat to launch at low tide. An existing timber accessway on each side of the ramp is provided to assist launching and retrieval of boats. The Ramp is the most accessible and popular in Akaroa Harbour, with some commercial use. Akaroa Kayaks parks and launches kayaks from the beach between the Ramp and the Akaroa Bowling Club (their vehicle and trailer shown in the lower corner of the Operational Area in (Figure 5).

Figure 7 shows the proposed use of the marine portion of the operational area at the Akaroa Boat Ramp. This will require a temporary reclamation, disturbance of the seabed, placement of geotextile, granular fill and rip rap protection. A concrete surface may be required. Two to four steel piles (610mm diameter) will be driven along the southern side of the existing boat ramp to form a training wall to facilitate the barge loading and unloading.

The seaward approach to this ramp will require dredging to allow barge access. The dredge channel will extend approximately 90m from the shoreline, and be approximately 30m wide. In total, approximately 1500m^3 of seabed will be dredged with the spoil placed to the southwest of the dredged channel. Dredging will be undertaken via mechanical excavator, either based on a barge, or from shore at low tide, or a combination of both.

Rehabilitation of the site will include return of the site to its original condition.

Figure 7: Marine component of operational area adjacent to Akaroa Boat Ramp

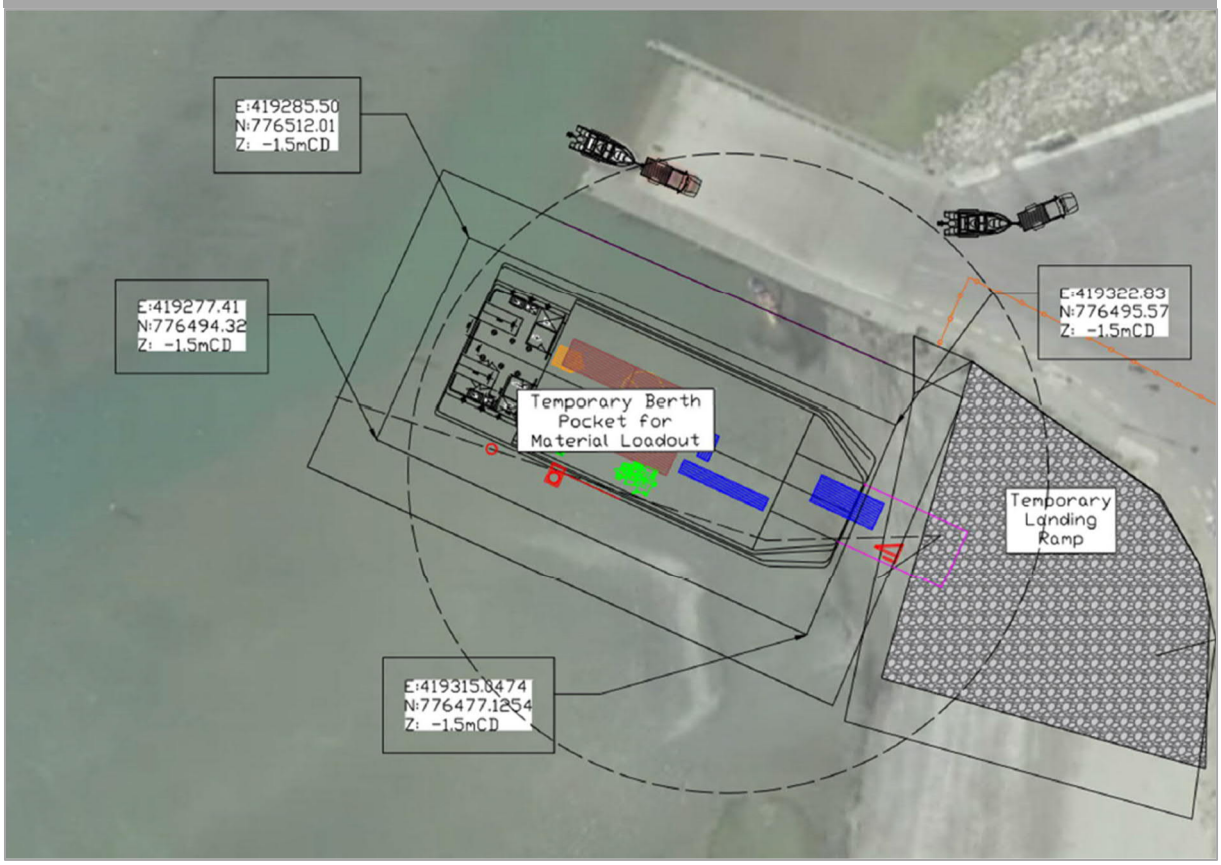


Figure 8 shows the working areas required near the Akaroa Wharf. These are:

1. **Laydown 2**:The base of the Akaroa Wharf, outside the heritage areas and the public road. This area includes the former Weighbridge Building and its immediate surround currently occupied by Akaroa Dolphins. Signage will be positioned here to direct movements and maintain traffic along Beach Road without impacting the corner of Church Street. The use of this area is predominantly associated with commercial, tourism and recreational use of Akaroa Wharf, with a bus drop-off site and walking access. The Wharf will be unusable for the construction period.
2. **Truck staging area**: At the Bruce Slipway, to be used only for queuing concrete trucks during concrete pours. The Slipway is used for casual small craft launching, predominantly near high tide. There are many other options locally for launching small craft – such as paddle boards, kayaks and dinghies – off local beaches, and larger craft have better all-tide access at Dalys Wharf and the Akaroa Boat Ramp. There is no car or trailer parking adjacent to the Slipway.

Figure 8: Laydown area 2 and vehicle staging area

4 Effects and mitigations

This section considers the temporary construction effects of the project, and one longer-term issue, that of potential narrowing of the Britomart Beach. The beach at the Akaroa Boat Ramp will be returned to its original condition.

4.1 Temporary displacement of commercial marine use of Akaroa Wharf

As discussed, the mitigation of the temporary loss of commercial access to Akaroa Wharf during construction is addressed by Greenaway & Enviser (2023). This assessment recommended that, to provide for the maximum number of activities displaced during the Akaroa Warf reconstruction period, the following services both Dalys and Drummonds Wharves are required (in addition to the base proposal for a temporary floating pontoon on the rebuilt Drummonds Wharf):

Drummonds Wharf – for commercial passenger tourism, cruise vessel tenders, recreational vessels and pedestrians:

- Water (for washdown and potable water).
- Vertical fender stanchions on the commercial section of the wharf.
- Ensure the gangway is sufficiently structurally sounds to allow for queuing. While operators would aim at avoiding queues forming, it is a risk.
- Appropriate operation controls and rules similar to those in operation at Akaroa Wharf, although in practice, commercial users operate cooperatively and have established their own flexible operating procedures.

Dalys Wharf – for commercial fishing and all vessel servicing:

- Hoist with 250kg lift capacity.
- Diesel fuel with a fixed tank ashore and fixed line leading to a bowser at the seaward end.
- Ability to use a trolley or powered cart (no cars or trucks) deck for fish unloading and petrol refuelling.
- Limited lighting
- Temporary removal of shelter building for restoration and later return.
- Operational controls to minimise health and safety conflicts during commercial loading and unloading and refuelling.

Dalys Wharf has space landward for parking and the location of a fixed diesel tank. Due to the weight requirements of Akaroa Salmon, which typically uses 1-tonne fish bins, the deck loading capacity of Dalys Wharf is insufficient to safely accommodate their operations. Akaroa Salmon generally relies on Wainui Wharf, and only uses Akaroa Wharf approximately six times per year when weather conditions preclude access to Wainui. To operate from Dalys Wharf during the Akaroa Wharf reconstruction, Akaroa Salmon will need to adjust their operations, such as splitting loads into smaller quantities for safe transportation along the wharf decking.

Alternatively, when Wainui wharf is precluded from use, they would need to utilise another facility with more suitable structural capacity.

All of these recommendations have informed the current (2024) consented reconstruction project for the two wharves.

4.2 Other commercial services on Akaroa Wharf

Two businesses are accessed via the Wharf structure: the Blue Pearl Gallery and Black Cat Cruises.

Council hold lease agreements in place with the building owners which provides for access. Their lease agreements will be paused for the duration of the works and the business have plans in place for alternative operations. For Blue Pearl Gallery, they will operate online only. For Black Cat, they will operate from their office space on Beach Road.

Accordingly, this assessment does not consider effects on them.

4.3 Effects on Britomart Beach

Jacobs has provided a review of the potential for effects on the extent of the Britomart Beach subsequent to the removal of the existing Wharf abutment.[2] This identifies that the historical abutment has been acting as a groyne, trapping sediment on the south side which is assumed to be sourced from the small stream south of the Britomart Reserve. The replacement of the abutment with a more open structure would result in some of this sediment being able to be transported further north past the Wharf. As a result, the beach in front of Britomart Reserve would narrow. However, the degree of change may be moderated by the location of local bedrock and the form of the final abutment at the new Wharf.

Britomart Beach provides some recreation amenity (Figure 9) and its retention is desirable.

Figure 9: Britomart Beach, Labour Weekend 2024

2 Letter to Kristine Bouw, CCC. 16 August 2021. Project Name: Akaroa Wharf Coastal Hazards Review Project Number: IS346200. Derek Todd Principal Coastal and Hazards Scientist. Jacobs Christchurch

4.4 Laydown and operation areas

Each laydown area is assessed individually, below.

4.4.1 Laydown Area 1: Akaroa Recreation Ground

The partial occupation area of the Akaroa Recreation Ground has been designed to allow continued use by summer cricket. Access to the Akaroa Sports Pavillion will remain, with a substantial area of accessible greenspace (1.1ha approx.). Access to the public toilets and carparking will also remain. Casual family games remain possible. The temporary loss of space will represent some diminution of capacity for annual events, but no impediment to their staging. A passageway on the southern border is retained to ensure easy access. The Christchurch City Council has identified all formal users of the Grounds and will advise them of the proposal, enabling appropriate planning.

4.4.2 Operational Area at Akaroa Boat Ramp

A traffic movement plan for the partial occupation of the vehicle access and parking area at the Akaroa Boat Ramp will be developed during detailed design. A similar scaled area of the ramp car park has been used for the redevelopment of Dalys Wharf with no reported loss of amenity or access. Standard traffic management methods are suitable to retain access to the ramp. Residual effects are minor (loss of parking spaces) and temporary.

4.4.3 Laydown Area 2: Akaroa Wharf

This area includes the former Weighbridge Building and its immediate surround currently occupied by Akaroa Dolphins. CCC own this building and leases it to Akaroa Dolphins. During the rebuild, Akaroa Dolphins will vacate and operate solely from their main office on Beach Road, near Drummonds Jetty.

Otherwise, this area is primarily used to access Akaroa Wharf, and as this will not be accessible during construction, the effects are mitigated by the provision of services on Dalys and Drummonds Wharf. Traffic management requirements will be identified in the traffic movement plan and will be designed to minimise effects on nearby business and traffic movement. No further mitigations are required.

4.4.4 Bruce Slipway Truck Staging

The Bruce Slipway will be used only occasionally for queuing concrete trucks during concrete pours. There are many other options locally for launching small craft – such as paddle boards, kayaks and dinghies – off local beaches, and larger craft have better all-tide access at Dalys Wharf and the Akaroa Boat Ramp. Effects of use of this laydown area on recreation will be minor and infrequent.

5 Conclusion

The redevelopment of Akaroa Wharf is necessary to support many of the main recreation and tourism opportunities in the Harbour. Considering the scale of benefit of the project for recreation and tourism over the long-term, and the actual adverse effects of the construction activities, the short term construction effects will be minor. The project must be considered differently from a private construction exercise where the effects might be socialised generally, but the benefits privatised. In this case, the project is largely a public good and there should be very high acceptance of the necessary temporary compromises. In any event, these compromises are slight and have been well-managed to avoid any major impacts – particularly with regard to retaining the junior summer cricket opportunity on the Akaroa Recreation Ground.

References

Enviser (2021). *User Requirements Needs Assessment Akaroa Wharf*. Client report prepared for Christchurch City Council March 2021

Greenaway, R. & Enviser (2023). *Christchurch City Council Drummonds Wharf Replacement Use and Effects Analysis*. Client report prepared for Christchurch City Council September 2023