

RESOURCE MANAGEMENT ACT 1991

DECISION OF THE CHRISTCHURCH CITY COUNCIL ON A RESOURCE CONSENT
APPLICATION

APPLICATION REFERENCE:	RMA/2019/1361A (Reclamation A) RMA/2019/1361B (Reclamation B)
APPLICANT:	Lyttelton Port Company
SITE ADDRESS:	2 Cashin Quay and 45 Godley Quay, and reclaimed land
PROPOSAL:	Establish container terminal and other port activities on 34 hectares of reclaimed land in Te Awaparahi Bay in two stages, being Reclamation A (Phases 1 and 2) and Reclamation B.
DISTRICT PLAN ZONING:	Reclamation site is within the Coastal Marine Area, and is therefore not zoned in the Christchurch District Plan
TYPE OF ACTIVITY:	Discretionary
DATE OF HEARING:	28 and 29 November 2019
HEARINGS PANEL:	Commissioner Ken Lawn
APPEARANCES:	<u>Applicant</u> Jo Appleyard, Lawyer Michael Copeland, Economist (evidence tabled) Paul Williams, LPC Terminal Development Andrew Metherell, Traffic Nevil Hegley, Noise John Forrester, Power Mike Dent, Lighting Andrew Craig, Landscape Phil de Joux, LPC Strategic Engagement Jared Pettersson, LPC Project Manager Andrew Purves, Planning <u>Council Officers</u> Kent Wilson, Planner Jennifer Dray, Landscape Architect Isobel Stout, Environmental Health Andrew Milne, Traffic Engineer

Submitters

Stephanie Brown, 38 Reserve Terrace, Lyttelton

Thomas Kulpe, 73 Purau Port Levy Road

Diamond Harbour Community Association (Mr Kulpe)

Matthew Ross, 175 Marine Drive, Diamond Harbour

Background

1. I have been appointed by the Christchurch City Council as a Commissioner to make a decision on an application by Lyttelton Port Company to establish a container terminal and other port activities on 34 hectares of reclaimed land in Te Awaparahi Bay, Lyttelton Harbour.
2. The location is in Te Awaparahi Bay, and is located to the east of the existing Cashin Quay container terminal, extending up to Battery Point, and located on the seaward side of the existing coal storage area. The reclamation areas, including the wharf, extend out into the sea some 220 metres beyond the current Cashin Quay wharf.
3. The application seeks two consents, one for Reclamation A (Phases 1 and 2), being RMA/2019/1361A and one for Reclamation B, being RMA/2019/1361B.
4. Reclamation A, includes an area of 10 hectares (Phase 1) already reclaimed, and currently being used for port activities, under a previous consent in 2011, and a further area of 6 hectares (phase 2), for which reclamation has begun. The development of the container terminal on Reclamation A is expected to be completed in 2024 to 2026.
5. Reclamation B has an area of 18 hectares. A bund around and containing this area is expected to be constructed in 2024 to 2026. Reclamation of this area, including settlement of the land, is expected to take about 15 years, with completion of the container terminal in this area likely to be post 2040.
6. The filling and reclamation of the 34 hectare site has already received consent from Environment Canterbury (December 2017). That consent also approved the installation of a wharf structure along the seaward boundary of the reclamation. The reclamation, and wharf structure, is not part of the consents before me.
7. This application seeks the staged development of a container terminal and port activities on the 34 hectares of reclaimed land. The competed container terminal will be used for the storage and movement of full and empty shipping containers (stacked up to 9 high), storage of cargo such as cars and logs, and includes proposals for buildings for servicing and repair of cranes and other port equipment.
8. Throughout this decision I refer to Reclamation A and Reclamation B, whereas they could perhaps more correctly be called New Container Terminal Area A and New Container

Terminal Area B. The consents are for the container terminal and other port activities, and not for the reclamations (which have already been approved). However the Applicant and Council officers have referred to the areas as Reclamation A and Reclamation B, and I will continue with that approach.

Planning Framework

9. The application site is currently located in the Coastal Marine Area. The site is not zoned within the Christchurch District Plan.
10. Section 89(2) of the Resource Management Act provides that where an application is made for a resource consent for an activity which the applicant intends to undertake once the proposed location has been reclaimed, and at the time of the application the location is still within the coastal marine area, then the authority may hear and decide the application as if the application related to an activity within its district. Case law (*Tairua Marine Limited v Waikato Regional Council*) has determined that such an application is to be considered as a discretionary activity.
11. Under Section 116(2) of the Resource Management Act, any consent granted does not “commence” (able to be exercised) until the land has been reclaimed, and the Regional Council has approved a survey plan in accordance with Section 245(5) of the Resource Management Act.
12. Construction and completion of the reclamation on Reclamation A will take place, and the consent will commence, well in advance of Reclamation B. This is the reason for separating the application into two consents, as otherwise the use of Reclamation A would have to await the completion of reclamation B.
13. Once the land has been reclaimed it is likely (possibly at the time of a District Plan Review) that the reclaimed area will be proposed to be zoned Special Purpose Lyttelton Port Zone, which is the Zone that covers the balance of Lyttelton Port operations. That is a matter that I will consider later in this decision.
14. The Lyttelton Port Recovery Plan (2015) has signalled the extension of the Lyttelton Port container terminal to the east into Te Awaparahi Bay, as well as shifting some general cargo from the Inner harbour to Cashin Quay, and the staged development of the Inner Harbour for additional marina and commercial development. That Recovery Plan was prepared, including a consultation process, under the Greater Christchurch Regeneration Act 2016. Through that consultation process the southern extent of the reclamation area was reduced by 50 metres, an exclusion area around and close to Battery Point was introduced, and LED lighting was introduced to reduce potential effects of lighting. A decision maker on a resource consent must not make a decision that is inconsistent with a Recovery Plan.
15. Up to 8 new ship to shore cranes (4 adjacent to Reclamation A and 4 adjacent to Reclamation B) are proposed along the wharf that was approved by the Canterbury Regional Council. These cranes will be located in the Coastal Marine Area, and are a permitted activity under the Regional Coastal Environment Plan. It was submitted that I have no jurisdiction to consider or impose conditions with respect to those cranes.
16. The application was publicly notified on 24 August 2019. 37 submissions were received, 24 in support, 9 in opposition, and 4 neutral (although some expressed areas of concern). A further 4 properties were notified on 18 October 2019, being properties in Lyttelton that had been identified as being subject to (small) increases in noise levels. No submissions were received in respect of those properties.

Summary of the Evidence Heard in the Hearing

The Applicant

17. Ms Jo Appleyard presented legal submissions on behalf of the Lyttelton Port Company. She described the background to the application, the Lyttelton Port Recovery Plan, the reclamation consents, the commencement date of the consents, the likelihood of the Lyttelton Special Purpose Port Zone applying in the future, and the requirement not to be inconsistent with Recovery Plan. Ms Appleyard also provided responses to matters raised in submissions and in the Council Officer's reports.
18. Mr Paul Williams, Terminal Development Manager (LPC), spoke to his pre-circulated evidence. He described expected future freight demand (rising from 437000 TEU's (twenty foot equivalent containers) to in excess of 1,500,000 TEU's in mid-2040's), the inability of the current port facilities to deal with this increase, the factors which determine container terminal capacity, and the proposed container terminal design. He responded to issues raised in submissions (height of lights).
19. Evidence of Mr Michael Copeland (economics) had been pre-circulated, and was taken as read. That evidence had described the economic benefits of the port expansion.
20. Mr Andrew Metherell (Traffic) spoke to his pre-circulated evidence. He described the Integrated Transport Assessment prepared as part of the Recovery Plan, and his traffic assessment prepared for the application. He confirmed that there was no traffic need for new road access to the Port to replace the use of Norwich Quay, and that the intersections along Norwich Quay will operate with acceptable delays and levels of service, although there may need to be traffic management responses (eg traffic lights) at intersections at the western end later in the planning cycle. He also commented on a condition sought by NZTA concerning debris cleaning on Norwich Quay.
21. Mr Nevil Hegley (noise) spoke to his pre-circulated evidence. He described the Port Noise Management Plan, and the Port Liaison Committee, both requirements of the Lyttelton Port Zone rules in the Christchurch District Plan, and the noise measurements and monitoring that sits behind the Plan. He predicted noise reductions in much of Lyttelton from the shifting of Port operations to the east, and predicted the noise levels from the expanded, and relocated operations, for Diamond Harbour residents. He responded to noise issues raised in submissions and the officer reports.
22. Mr John Forrester (power) spoke to his pre-circulated evidence. He described the current and potential future power supply to Lyttelton Port, and responded to submitter suggestions for the use of ship to shore power to reduce emissions from ships in the Port.
23. Mr Mike Dent (lighting) spoke to his pre-circulated evidence. He described the lighting effects of light spill (onto adjoining properties), glare (visibility from harbour locations, especially Diamond Harbour, Purau, and Governors Bay), and sky glow (especially effects of blue light spectrum from LED lights). He presented photo montages showing the extent of glare, and showed the difference between newer LED luminaires, and the existing HPS (High Pressure Sodium) lights. He discussed the necessary height of lighting poles.
24. Mr Andrew Craig (landscape) spoke to his pre-circulated evidence. He discussed his assessment of the landscape and visual effects of the extended container terminal. He considered that the container terminal represents an extension of the existing operations, that it is an activity that people would reasonably expect in the location, and will maintain

landscape and visual coherence with its overall setting. He accepted that there would be appreciable visual effects on some areas, both during the day, and from lighting at night, that will vary depending on the location and vantage points. He concluded that there is no other better location for an expanded port area. He responded to submitter concerns on naturalness, and visual effects, and suggested (by a submitter) compensation native planting in Diamond Harbour. He responded to Council officer suggestions of limits on the height of lighting structures, colour of terminal surface, and colour of ship to shore cranes.

25. Mr Philip de Joux, Strategic Engagement Manager for Lyttelton Port Company, spoke to his pre-circulated evidence. He responded to submitter suggestions of requiring ship to shore power. He described the operation and successes of the Port Noise Management Plan and the Port Liaison Committee. He described difficulties with providing alternative traffic access to the Port away from Norwich Quay. He responded to funding requests in the submission from the Lyttelton Seafarers Centre.
26. Mr Andrew Purves spoke to his pre-circulated planning evidence. He described the background, and planning context, for the application. He confirmed the need for two consents, one for each of the Reclamation areas. He confirmed the likely eventual zoning of the land as Special Purpose Lyttelton Port Zone. He concluded that the small number of submissions (1600 properties notified) reflected general support in the community for the proposal. His pre-circulated report concluded that the application could be granted, and at the hearing he tabled a set of recommended conditions for both consents.

Submitters

27. Ms Stephanie Brown, who lives at 38 Reserve Terrace in Lyttelton, spoke to her submission. In her submission she had expressed disappointment that a proposed set of conditions were not included with the application, and she raised issues with amenity, lighting, noise and traffic. At the hearing she accepted that consent would be granted, but wanted to ensure adverse effects are appropriately avoided or mitigated. She referred to Policy 13.8.2.2.1 of the Christchurch District Plan, which seeks to “ensure that (recovery) activities undertaken within the Special Purpose Lyttelton Port Zone, including to enhance and reconfigure Lyttelton Port infrastructure and operations, are designed to reduce existing and minimise new adverse effects generated within the Port operational areas”. Ms Brown accepted that the tabled conditions now deal clearly with noise issues. She suggested some specific changes to conditions relating to lighting (discussed later in this Decision).
28. Mr Thomas Kulpe spoke to the submission from the Diamond Harbour Community Association. That submission was neutral to the granting of the application, but raised concerns about likely noise levels in Diamond Harbour, about whether the proposed lighting will sufficiently reduce glare (including reflection on the water), and impacts of air pollution caused by diesel exhausts from ships. At the hearing Mr Kulpe questioned whether improvements of existing lighting will keep pace with the scale of the development. He commended the noise management arrangements, but noted that it is difficult to deal with individual and random noises. He suggested some microphone recording of noises to assist with determining the causes of those noises. He also promoted the future use of ship to shore electric power to reduce emissions of air pollutants from the operation of ship engines and generators while in port.
29. Mr Kulpe, who lives at 73 Purau Port Levy Road in Diamond Harbour, then spoke to his own submission. In that submission he questioned the growth scenarios of the applicant given likely trade consequences of global warming, and he questioned the likelihood of the use of larger ships. He was concerned about habitat being replaced by a sealed industrial area. He also raised the promotion of the use of ship to shore power. At the hearing he

expanded on those concerns, and questioned the forward projections of the Lyttelton Port Company, which he contends have not taken account of documents such as the Paris Agreement, the declarations of a Climate Emergency, and Carbon Neutral Targets. He suggested a 25 year consent so that the future can be reassessed.

30. Mr Matthew Ross, who lives at 175 Marine Drive in Diamond Harbour spoke to his submission. His submission raised issues of noise, lights and landscape impacts, for residents of Diamond Harbour, users of public areas, and recreational users of Lyttelton Harbour. His submission questioned whether the new activities were reducing or minimising adverse effects. He suggested native planting restoration on the Diamond Harbour cliff reserves as an offset to increased effects. At the hearing Mr Ross emphasised Policy 13.8.2.1.1, which seeks to reduce existing or minimise new adverse effects. He questioned how well the Port Noise Management Plan deals with noise issues. He described noises at night, especially sudden noises when items are dropped or banged, and the low rumbling noise of certain Rio class ships that visit the port, which he said has been on-going for some time. He suggested conditions on any consent should include managing operational hours, avoiding ships with low frequency noise, and avoiding unexpected noise at night. He supported the use of ship to shore power for visiting ships. He supported changes to exiting lighting as new lighting is installed in the new container terminal area, and suggested those changes should occur within 5 years.
31. I record that I have also read the other 33 submissions received. 24 submissions were in support of the application, generally referring to the economic benefits of extending the container terminal. The other submissions opposed to the application (or neutral) generally referred to the noise, lighting, and landscape issues, and the traffic issues on Norwich Quay, that have been referred to by the four submitters who appeared before me. One submission sought further funding of the Lyttelton Seafarers Centre.

The Council

32. Mr Kent Wilson spoke to his pre-circulated planning report. Overall he was satisfied that the location of the extended container terminal is appropriate, is a natural extension of the Port, and is anticipated by the Lyttelton Port Recovery Plan. However he considered that this application is the opportunity to look at the details, and develop appropriate conditions.
33. He noted that the noise modelling does include loading and unloading of ships, and anticipates some individual louder noises from time to time. He accepted that the stacking of containers is not an earthquake issue (a matter he raised in his report), and that use of gantry cranes to store the containers will make them more stable. He acknowledged that the new ship to shore cranes will be within the Coastal Marine Area, and any condition about the height or colour of those cranes would need to be volunteered by the Applicant.
34. In his report, Mr Wilson had recommended that one third of the existing sodium lights be replaced by LED lights by the completion of the container terminal on Reclamation A, and 100% by the completion of the container terminal on Reclamation B. He recognised that the changes to existing lighting was in an area outside of this application, and that if I was not satisfied with the conditions offered by the Application my option would be to decline the application.
35. Mr Wilson discussed climate change issues referred to by Mr Kulpe. He noted that the District Plan deals with hazards and consequences of climate change rather than about effects on climate change. He also noted that discharge from ships is a Regional Council matter.

36. Mr Wilson worked his way through and commented on the set of conditions offered by the Applicant (these will be discussed later in this decision).
37. Mr Andrew Mine spoke to his transport assessment. He accepted that Norwich Quay can operate efficiently and safely with the projected increased heavy traffic, with local upgrades considered when necessary. He referred to a request in a letter from New Zealand Transport Authority (NZTA) about material being tracked out onto Norwich Quay (from timber storage), and agreed that this matter could be resolved between the applicant and NZTA.
38. Ms Jennifer Dray spoke to her landscape assessment. She commented that her suggested condition on the colour and texture of ground surfaces was intended to produce less reflection. She would prefer some darker colours (she tabled a plan with her suggestions) for the ship to shore cranes. She questioned the suggested (by the applicant) area demarcated for taller buildings.
39. Ms Isobel Stout spoke to her noise assessment. She commented on the success of the Port Noise Management Plan, and agreed that it was the best method for dealing with noise issues. She considered that that process was the correct method for dealing with sudden noises referred to by submitters.

Adjournment of hearing

40. At the end of the hearing I adjourned the hearing to enable me to undertake site visits, and for the Applicant's Counsel to prepare a written Right of Reply (closing submissions).
41. During the week of 2 to 5 December I undertook a number of site visits to the Port (accompanied by Mr Jared Pettersson, Lyttelton Port Company Project Manager), and by myself to sites and areas to look over, or towards, the Port and the area the subject of this application. I undertook those visits during the day and at night. I would comment that the Port activities and structures appeared slightly larger and closer than was depicted on the photograph representations produced by the Applicant at the hearing. I have taken that into account in my deliberations.

Right of Reply

42. On 11 December Ms Appleyard provided written closing submissions as the right of reply for the Applicant.
43. In those closing submissions she responded to issues raised by submitters. She agreed with some of the suggested condition changes from Ms Brown. She noted that Policy 13.8.2.2.1 (referred to by submitters) focuses on adverse effects on Lyttelton Township. She repeated that the Port Noise Management Plan is the appropriate method for dealing with noise issues. She submitted that emissions from ships are not relevant to this application, and that effects "of" rather than "on" climate change are covered by the Resource Management Act. She repeated that Lyttelton Port Company does not agree with offsetting planting suggested for the Diamond Harbour Cliff Top Reserves.
44. She also responded to issues raised by Council Officers. She disagreed with suggested conditions from Ms Dray concerning colour and texture of container terminal ground surfaces, colour of ship to shore cranes, building heights and closeness to Battery Point.

45. The closing submissions then provided, and commented on, a new set of offered conditions (these will be discussed later in this decision), and provided information on the type of lighting currently installed on the existing Stage 1 10 hectare reclamation area (a matter I raised on the site visit).

Closure of hearing

46. On 3 September 2019 I issued a Commissioner's Note advising that I had all the information I needed to make my decision, and closed the hearing.

Lyttelton Port Expansion signalled in Plans and consents

47. The expansion of Lyttelton Port into Te Awaparahi Bay has been well signalled by a variety of planning documents and decisions.
48. In 2011 the Minister for Canterbury Earthquake Recovery issued an Order in Council which enabled Lyttelton Port Company to apply to the Canterbury Regional Council, and the Christchurch City Council, for a 10 hectare reclamation in Te Awaparahi Bay. That consent was granted in June 2011, and covered the reclamation, quarrying and haul roads, and the use of the reclaimed land for port activities.
49. The preparation of the Lyttelton Port Recovery Plan was directed by the Minister for Canterbury Earthquake Recovery, and the Plan was gazetted by the Minister in November 2015. That Plan clearly identifies the area in Te Awaparahi Bay as a reclamation area (total 34 hectares including the 10 hectare initial reclamation) for a new container terminal. The Plan directed amendments to the Canterbury Regional Policy Statement, the Regional Coastal Environment Plan, the Christchurch Replacement District Plan, the Canterbury Land and Water Regional Plan, and the Proposed Canterbury Air Regional Plan. All of those documents now clearly provide for, or envisage, an expansion of the container terminal into a defined area in Te Awaparahi Bay.
50. The proposed area of the reclamation was marginally reduced through the public consultation process for the Lyttelton Port Recovery Plan. The southern extent of the reclamation area (out into the sea) was reduced by 50 metres, and an exclusion area around and close to Battery Point was introduced.
51. Section 60(2)(a) of the Christchurch Regeneration Act 2016 provides that a decision maker on a resource consent application must not make a decision that is inconsistent with a Recovery Plan.
52. The amended Canterbury Regional Policy Statement includes a policy to "*provide for the expedited recovery of the Lyttelton Port, including its repair, rebuild and reconfiguration*". The Statement also records "*that the recovery of Lyttelton Port includes a container terminal being established in Te Awaparahi Bay on up to 34 hectares of reclaimed land*".
53. The amended Regional Coastal Environment Plan for the Canterbury Region includes in Policy 10/1/1;

An expedited recovery of the Lyttelton port is enabled by...

- a) *Establishing a container terminal on a maximum of 34 hectares of reclaimed land in Te Awaparahi Bay*
- b) *Shifting some general cargo from the Inner Harbour to Cashin Quay*

c) *Redeveloping Dampier Bay to provide for a marina and associated activities, commercial development, as well as enhanced public access and amenity in the coastal environment' including parking and access facilities for the marina activities and commercial development.*

54. Policy 10.1.11 of the Regional Coastal Environment Plan also starts with “*enable the development of a container terminal within...TeAwararahi Bay, as shown on Planning Map 10.10, which includes reclaimed land and wharf structures...*”
55. The New Zealand National Coastal Policy Statement has been considered and taken into account in the development of the Regional Policy Statement, the Regional Coastal Environment Plan, and the Lyttelton Port Recovery Plan.
56. Lyttelton Port Company has applied to, and obtained consent from, the Canterbury Regional Council, for the balance 24 hectares of the reclamation. The application, which was for a controlled activity, was publicly notified, attracted 6 submissions, and was considered and decided by two Commissioners.

Christchurch District Plan

57. The Christchurch District Plan includes the Specific Purpose (Lyttelton Port) Zone, which covers all of the operational areas of Lyttelton Port, including the Gollans Bay Quarry area. The zone does not include the reclamation area the subject of this application.
58. Policy 13.8.2.1.1 (Elements of recovery) reads
- Recognise that the repair, rebuild and configuration of Lyttelton Port enables the progressive phased movement east of port operations resulting in;*
- i. Operational port activities being established on reclaimed land in Te Awararahi Bay;*
 - ii. The shifting of some general cargo from the Inner Harbour to Cashin Quay; and*
 - iii. Redevelopment of land in Dampier Bay in a staged manner to provide for a commercial marina and associated land side activities, including limited commercial activity, with enhanced public access and connectivity between Lyttelton township, surrounding residential area and other parts of Naval Point.*
59. Policy 13.8.2.1.3 also refers, among other things, to “*providing for expansion of the Port operational area onto reclaimed land in Te Awararahi Bay*”.
60. The Special Purpose (Lyttelton Port) Zone provides generally for “port activities”. There are limited activity standards controlling port operations. There are some building height limits for buildings, but not for cranes, towers, or containers. The only lighting standard relates to light spill onto residential or commercial properties. There are no noise limits for port activities, instead these are managed through the Port Noise Management Plan. Traffic accessing state highway or local roads is a permitted activity.
61. The application site is not zoned as until it is reclaimed it is part of the Coastal Marine area. Any resource consent is not commenced until the land is approved through a survey plan by the Canterbury Regional Council. Evidence before me is that the land is likely to be included in the future in the Special Purpose (Lyttelton Port) Zone. That could happen through a Plan Change, or more likely at an appropriate Review of the Christchurch District Plan. I accept that the current provisions of the Special Purpose (Lyttelton Port) Zone are a useful indication of the future zoning and rule regime. However, it is also likely

that any conditions included in this, or other, consents will also find their way into rules in the future District Plan.

Tangata whenua input

62. Mr Wilson in his evidence recorded the long history of Maori settlement in Banks Peninsula, and Whakaraupo (Lyttelton Harbour). Te Hapū o Ngāti Wheke, based at Rapaki, are the papaitipu rūnunga in the area. The coastal marine area has been recognised to be of importance to Ngāi Tahu by way of a Statutory Acknowledgement Area (Te Tai o Mahaanui). Mr Purves undertook in his evidence an analysis of the Mahaanui Management Plan.
63. Lyttelton Port Company undertook extensive consultation with Te Hapū o Ngāti Wheke during preparation of the Lyttelton Port Recovery Plan. Te Hapū o Ngāti Wheke did not require a Cultural Impact Assessment as part of this application, and they did not submit to this application.

Overall conclusions on Objectives and Policies

64. The expansion of Lyttelton Port into Te Awaparahi Bay has been well signalled by a variety of planning documents and decisions, including the Lyttelton Port Recovery Plan, the Canterbury Regional Policy Statement, the Regional Coastal Environment Plan, and the Christchurch District Plan.
65. Given my conclusions above, and the directions/policies of the various Plans and Documents, I have concluded that, subject to a consideration of effects on the environment, the application is consistent with the strong directions/policies which anticipate the establishment of an expanded container terminal in Te Awaparahi Bay.

Effects on the Environment

66. Policy 13.8.2.2.1 (Recovery opportunities to reduce adverse effects) of the Christchurch District Plan reads;

“ensure activities undertaken within the Special Purpose (Lyttelton Port) Zone, including to enhance and reconfigure Lyttelton Port infrastructure and operations, are designed to reduce existing and minimise new adverse effects generated within the Port operation areas.”
67. Ms Appleyard noted in her closing submissions that this Policy follows an Objective that is directed more at the Lyttelton township than the wider Lyttelton Harbour Basin. However, it provides a useful principal for considering adverse effects.

Noise effects

68. Noise from the Port was one of the key issues raised in the submissions. It appeared from those submissions that the normal noise from port operations is generally accepted as part of the environment, but that some specific noises are less welcome, including unexpected loud noises from containers, hatches, or other items being dropped or hit, especially at night, and the low rumbling sound emanating from some ships.
69. Mr Hegley provided evidence about the noise levels from the Port, and the noise management regime. He described how the Port Noise Management Plan was prepared,

and operated, and the input of the Port Liaison Committee. As part of that Plan, noise monitoring and prediction models are implemented, and every two years a noise contour map is prepared. Noise levels include noise from ships, and occasional individual noises from items being dropped or banged. Noise levels do not include the use of the dry dock facility, which is controlled through defined hours of operation.

70. The model used dBA Ldn as a measurement tool. This is a day/night measurement that gives a 10dB weighting against night time noise. He described for me that 55dBA Ldn was a level where the average person would generally have no issues with noise, at 60dBA Ldn noise issues would be becoming an issue, especially when windows are open, and at 65dBA Ldn noise issues were becoming serious, and special treatment of houses to reduce noise levels should be considered. Much of Lyttelton Township is within the 60 and 65 levels, and the Port Company has implemented a progressive house improvement regime for houses above the 65dBA Ldn level.
71. The modelling done by Mr Hegley, assuming the new container terminal is fully developed, shows noise levels lowering in some of Lyttelton. This is because port operations shift further to the east and away from Lyttelton. Lyttelton is partly shielded from the new container terminal by a ridge on its eastern side. The reductions are most noticeable in the western areas of Lyttelton.
72. The modelling did show 4 properties in Reserve Terrace and Randolph Street where there would be a 1dBA Ldn increase, which Mr Hegley said would be barely noticeable. Those properties were specifically notified, and no submissions were received.
73. Noise predictions for Diamond Harbour indicate a level of 50dBA Ldn at the closest residential houses, and 52 and 53 dBA Ldn on the headlands within the Diamond Harbour reserve area. Those levels are approximately 1dBA Ldn above existing levels. Mr Hegley considered that those levels are acceptable, but he agreed that noise would still be heard in Diamond Harbour.
74. All parties before me (with some reservations from Mr Ross) agreed that the Port Noise Management Plan, together with the Port Liaison Committee, is the best and most appropriate method to deal with noise issues. It provides for regular monitoring, and provides opportunities to deal with particular noise issues.
75. An example given to me, and raised by submitters, was noise issues (low rumbling noise) from the Maersk Rio Class vessels since October 2018. Investigations showed that this reasonably unique noise is generated from the vessel's generators at the rear of the vessel, and is worse when they have a large amount of refrigerated containers on board. The Port Company has arranged that these ships, weather permitting, are moored with the rear of the vessel pointing out to the Heads, and the operator is in the process of fitting silencers to the generators. I understand that the first vessel with silencers fitted is calling in to Lyttelton this December. While Mr Ross argued that the resolution process took too long, this is a good example of the more flexible Port Noise Management Plan operating.
76. Mr Kulpe suggested that the installation of microphones that permanently record noises may be helpful in identifying the source and timing of loud unexpected noises. It was suggested at the hearing that this may be a useful technique that could be considered through the Port Liaison Committee.
77. The Applicant has included in their proposed conditions that the Port Noise Management Plan is reviewed within the first three months of the commissioning of the container terminal (in each of the two reclamation areas). This is rather than waiting until the next

two yearly review. That is a sensible condition, and ensures that any noise issues are picked up early in the implementation phase.

78. My conclusion is that noise levels from the implementation of the new container terminal are acceptable, with some improvements in Lyttelton Township, and with noise levels slightly elevated, but still at an acceptable level, in Diamond Harbour. I agree that the Port Noise Management Plan, and the input of the Port Liaison Committee, is the appropriate management and planning regulation tool for dealing with any noise issues.

Lighting effects

79. The effect of lighting at night was another key issue raised in submissions. The main concern is whether the lighting of the new terminal area will add to and increase the current lighting effects that occur from the existing Port operations.
80. The Port operates on a 7 day 24 hour basis, and lighting of the Port operational area is essential. Currently the Port uses HPS (high pressure sodium) vapour lights, which have a golden colour appearance, and which produce reflections in the water when viewed from the other side of the Harbour. Lighting technology is evolving, and now most outside lighting installations use LED (light emitting diode), or LEP (light emitting plasma) lights. These have a cool white appearance, and are generally less bright from a distance, and do not produce the same level of reflections on the water. The difference in lighting effects is also influenced by the height, and degree of angling, of the bulbs (or luminaires for LEDs).
81. Mr Dent in his evidence described three types of lighting effects. The first is light spill, which is the direct lighting effects that are directed beyond the application area. These are measured in lux, which measures the density of light directed onto adjoining land. Because of the location of the Port, there are no light spill issues for adjoining properties.
82. The second is glare, which is the visual disability or discomfort resulting from contrast between the light source and the background. It is the degree to which the lights are visible, noticeable, and uncomfortable for persons looking towards them. The current Port lights are clearly visible from Diamond Harbour, in the distance from Governors Bay, and from some properties within Lyttelton. They are reasonably bright and noticeable, but it would be hard to describe them as uncomfortable. They clearly mark the location of the port activities against the darker hills behind them. The golden colour of the sodium lights is quite distinctive, and produces reflections on the water area adjacent to the Port. The visual simulations of the new container area, assuming LED lighting, produce a cooler white light, with limited or no reflections on the water. Assuming those simulations are accurate, the effects of glare from the new container terminal area, will be less than when compared to the existing container terminal. It is the combination of the two areas that needs further consideration (below).
83. The third is sky glow, which is the increased brightness of the night sky from artificial light scattered by atmospheric molecules and particles. The current lights produce some sky glow affects. They sit alongside sky glow emanating from the lights of Christchurch over the Port Hills. LED lights are better screened from upwards light, but they also produce more light in the "blue" spectrum, which produce more refraction, and results in more scatter of light affecting and increasing sky glow. There are also some biological effects (to humans for close and regular exposure), and potentially for the ecology of nearby plants and animals.
84. Mr Dent acknowledged that the addition of LED type lights to the new container terminal area, when added to the sodium lighting of the existing port areas, would increase the

effects of glare for Diamond Harbour, in the distance for Governors Bay, and add a new source of lights for some areas in Purau. For Lyttelton, generally the new lighting will not be visible.

85. Lyttelton Port Company intend to progressively replace the existing sodium lights with LED lights. Mr Dent was of the view that the total replacement of the existing sodium lights with LED lights would compensate for the addition of new lighting of the new container terminal, such that eventually the total lighting of the combined existing and new container terminal and port operations would be no greater than, and probably better than, the existing lighting. The lighting would be spread over a longer, or greater area, but the effects of glare would be less. He accepted that the effects on sky glow would be marginally worse.
86. Mr Craig also considered the effects of lighting in his consideration of visual matters. He considered that the increased (extended) lighting shown on the visual simulations was still acceptable from a visual perspective, because it would be an extension of the existing lighting in a location that most people would expect because of the presence of the Port.
87. Mr Wilson for the Council considered that there would be cumulative effects arising from the addition of further lighting for the new container terminal, and that these would only be acceptable in the context of phasing out the Sodium lights.
88. Mr Wilson also recommended that the new LED lights should be in the 3000⁰K to 4000⁰K colour temperature range, and tentatively recommended a condition that they be kept as close as possible to 3000⁰K, and no greater than 3500⁰K. He did this because he understood that the higher the colour temperature, the higher the degree of light scatter.
89. Dealing with the colour temperature issue first, Mr Dent explained that existing Sodium lights have a colour temperature of about 2100⁰K, whereas LED type lights have a colour temperature range of 3000⁰K to 4000⁰K. Higher colour temperatures result in a cool white appearance, but also have emissions in the blue range. Refraction from the blue rich light sources produces more scatter, and contributes to sky glow. It can be up to 3 times that of comparable Sodium lights. However, Mr Dent considered prescribing a maximum colour temperature range would be a blunt instrument, as blue light content can differ between manufacturers and ranges, and that as technology develops environmental lighting effects will be reduced, and blue light spectral content will be moderated. I accept the advice of Mr Dent that it is not appropriate to limit the colour temperature below 4000⁰K. I understood Mr Wilson also accepted that advice.
90. At the hearing, and later in the right of reply, the applicant offered conditions to require the progressive replacement of the existing sodium lights. At the hearing they offered a condition that required one fifth (20%) being removed by the commissioning of the container terminal in Reclamation A, and one half (50%) by the commissioning of the container terminal in Reclamation B. In the closing submissions they offered 35% being removed on commissioning of up to 9 hectare with reclamation B, 50% on commissioning of more than 9 hectares, and 75% within 10 years of commissioning Reclamation B. They also noted that the replacement of Sodium lamps with LED or other advanced technology lamps may happen more quickly.
91. Replacement of the sodium lights with LED luminaires is not a straight forward matter of replacing bulbs. They are different technologies, and require different pole structures. They are also being replaced in a working container terminal area, and can really only be replaced as part of the redevelopment of that area. Realistically, while some can be replaced early, the redevelopment of the existing container terminal area will probably have to wait until the commissioning of at least the area in Reclamation A, and probably

the Reclamation B area. While the development of both Areas A and B is reasonably long (stretching to the 2040's), the need to replace existing old technology lighting may well speed up the replacement process.

92. I was reminded at the hearing that the existing container terminal area is not part of the application before me, and that I am reliant on the applicant volunteering conditions for the replacement of lights in that area. If I am not satisfied with the volunteered conditions, my option is to decline the application on the basis of effects.
93. I have concluded that with the volunteered conditions requiring the progressive removal of sodium lights (and replacement with LED or other more modern lighting), the effect of the additional lighted areas is acceptable. I reach that conclusion based on the advice of Mr Dent (that in the longer term the lighting effects will be no worse, and probably better), and the conclusions of Mr Craig (that from a visual perspective, the increased area of lighting is acceptable). I also take into account my own site visits, and my conclusion that while the lighting (existing and future) is reasonably bright and noticeable, it is not at a level that is uncomfortable. The effects will be most noticeable from Diamond Harbour. The distance of the Port from Governors Bay compensates for the additional glow. The distance from Purau also compensates for the new lighting that will be seen from parts of Purau.
94. I have also concluded that the potential additional sky glow caused by the blue spectrum from LED lights is minor and acceptable. I am heartened by the conditions suggested that require the use of modern technology and suitably qualified and experienced lighting engineers.

Landscape and visual effects

95. Landscape issues were also raised in submissions, and in the planning evidence before me. Lyttelton Port is located in a harbour area with high landscape and amenity values. Mr Craig, appearing for the Applicant, described the amenity of the Harbour Basin as generally high, due to the presence of natural land and water based features, moderately sized settlements all located on the lower hill slopes, the relatively discreet presence of infrastructure, the extensive open space, the dominance of the rural and natural environment, and the abrupt contrasts between hills, sea and settlements.
96. Lyttelton Port is an urban/industrial activity that sits within that high amenity area. This application seeks to extend the Port, particularly its container terminal, further into that environment. Mr Craig described the site as "entirely artificial rather than natural", and "clearly the product of human agency rather than natural processes", and that it "unequivocally reflects its utilitarian working port function".
97. However, Mr Craig considers that the new container terminal will be a landscape change that occurs within a horizontal and vertical (up to 40 metres high) envelope that sits below the outstanding landscape features that sit behind. He considered that the new container terminal is not entirely foreign to the setting, sitting in front of the current coal handling area. As an expansion of the existing port areas, it will be seen as more of the same.
98. From Diamond Harbour, Mr Craig accepted that the full extent of the container terminal will be apparent, but will be back-dropped by high natural character areas of the Port Hills and skyline views, and will sit in front of the lower slopes of the Port Hills which have been extensively modified by roads, and quarry operations. He considered that visibility of the container terminal will however be high due to the contrast of it with the natural character of the surrounding port hills and water body environment. Overall he considered the visual effects on Diamond Harbour to be "moderate".

99. From Governors Bay Mr Craig considered the primary visual effect to be the partial intrusion into views of the harbour entrance. The Port facilities will appear larger against the harbour entrance and headlands. However the considerable distance (around 7 kilometres) will mean these effects will not be visually dominant. Overall, Mr Craig considered that “the visual appreciation of the harbour basin in its entirety will be maintained, although the view quality will be lessened, particularly for those residing at the northern end of Governors Bay”.
100. From Lyttelton Township, Mr Craig considered that the majority of residents will not be able to see the new container terminal area, although some residents south and west of Simeon Quay, depending on elevation and orientation, will be able to see it. For those residents affected, “there will be a view intrusion and loss of view quality amounting to a more than minor adverse effect”, but that “the presence of existing port activity will inform view quality”.
101. From the Port Hills summit ridgeline, for the most part the container terminal will be obscured by intervening land form. There will be views of the Port at certain points on the walking tracks, but they will mostly be back dropped by the sea. Mr Craig considered the visual effects from the hill tops will be “moderately low”.
102. From water borne vantage points, which will be infinite and highly variable, Mr Craig considered that the site “will appear as one element of many within the harbour basin, and would not be visually dominant”. “The container terminal will appear as an extension of the existing rather than an isolated entity alien to its setting”.
103. Mr Craig did not specifically refer in his evidence to views from Purau. From my site visit, and from discussion at the hearing, parts of Purau will now have views across the water to the new container terminal area. Purau does not currently have views of the existing Port, other than of the coal handling area. The views of the new container terminal will be new and different to current views. The new container terminal is however some distance away, although it is slightly closer than the views from Governors Bay. Without expert evidence before me, my conclusion is that the effects would be “moderate” based on the changes that will occur to the views. Those views however will only affect residents on the eastern side of Purau.
104. Ms Jennifer Dray, Landscape Architect, produced a landscape assessment for the Christchurch City Council. In that assessment she largely agreed with the assessment and conclusions of Mr Craig, although she considered that users of unpowered craft (eg kayaks and yachts) would be affected for longer when out on the water than for powered craft, and she considered that the effects of the additional lighting, particularly in Governors Bay, would have visual effects that were moderate to high. I have covered lighting effects earlier in this Decision.
105. Overall I agree with, and adopt the landscape assessment and conclusions of Mr Craig. The new, expanded, container terminal, will have landscape effects that range from low to moderate. However, they represent a natural, and not unexpected, extension of the existing port operations into the high amenity area of the overall Lyttelton Harbour Basin that overall is acceptable.

Some specific landscape issues

106. Ms Dray identified some specific landscape issues, and suggested mitigation measures that require consideration.

Colour of ship to shore cranes

107. Ms Dray considered that the new ship to shore cranes would be a significant feature of the new container terminal, and that they would be visible against the skyline and the water surface when viewed from certain points. The existing Port cranes have light green and blue colours which she considered provide little integration into the surrounding context of the harbour basin. She recommended an alternative darker green and blue specification. Mr Craig pointed out that the views of the cranes will depend on the vantage point and backdrop, and darker cranes may work for views from Diamond Harbour (against the hill backdrop), but not from Governors Bay (sea backdrop). He considered the current colours used by Lyttelton Port Company are satisfactory.
108. On my site visits, I specifically looked at the colour of the existing cranes, especially from Diamond Harbour. I found those colours unobtrusive, and that the cranes did not particularly stand out because of their colour. I acknowledge that the new cranes will be marginally larger (higher and deeper), and that the new wharf will sit further out into the sea. However, I am not convinced that I need to impose a condition in respect to colour of the cranes.
109. In any event the cranes are located on a wharf that is in the Coastal Marine Area, and will not be part of any future zoning in the Christchurch District Plan. I accept that it is outside of my jurisdiction to impose such a condition even if I wanted to.

Height and location of lighting poles

110. Ms Dray was also concerned about the proposed height of the new LED lighting poles (40 metres compared to the existing 30 metre poles). She was concerned that from a landscape perspective they would appear more dominant. She recommended a condition that they be a maximum of 30 metres. She also recommended that they be set back from the water's edge to reduce potential reflection off the water's surface.
111. Mr Craig was of the view that the additional height of the slender poles would contribute little in terms of visual bulk, and that they would often be shielded by ships and cranes.
112. I agree with the views of Mr Craig. I do not think that 40 metre poles will have any greater visual effect than the existing 30 metre poles. From a distance they appear slender. I am also not convinced that the poles need to be located a minimum distance back from the water's edge. Evidence before me is that the LED lighting will result in far less reflection on water compared to the existing sodium lights.

Colour and texture of surface treatment

113. Ms Dray suggested that in order to reduce light reflection, the treatment of illuminated sealed surfaces should use darker colours and rougher surfaces. I understand that her concerns came from a photograph in the application of a new container terminal that had extensive light coloured concrete ground surfaces. Mr Craig considered that the terminal will be a complex area comprising a variety of structural forms, with diverse colour and reflectivity. The terminal surface areas without structures, containers, or vehicle movements, will be limited. Mr Pettersson, Project Manager for the Port Company, advised that most of the surfaces would be bitumen seal, with very limited areas of concrete.
114. My conclusion is that the surface treatment will be a minor aspect of the visual effects of the container terminal, and that it is not necessary to impose any conditions with respect to the surface treatment.

Height of buildings

115. Mr Wilson in his report recommended a condition that buildings (not including lighting structures, or cranes) have a maximum height of 15 metres.
116. Mr Craig in his evidence advised that buildings are likely to be located at the rear of the site so as not to impinge on Port operations. They would therefore be hard up against the landform backdrop, which will reduce their apparent bulk. They would also be obscured by multiple layers of foreground Port activity. Mr Purves agreed that a height limit of 15 metres would be generally appropriate, although the workshop building is likely to be higher.
117. At the hearing Mr Pettersson advised that the proposed building to house and repair the new straddle cranes (which pick up and move containers) is likely to be 24 to 30 metres high, and up to 6 bays wide. Buildings are likely to be concentrated in the rear of the container terminal, and are likely to be grouped in the area on Reclamation A, with maybe one or two buildings on Reclamation B.
118. At the hearing the Applicant offered conditions that defined an area within which buildings could have a maximum height of 30 metres (generally an area that commenced at a line extending from the Cashin Quay wharf face across both reclamation areas and extending back to the rear of the new container terminal areas), and with a maximum combined footprint for buildings exceeding 15 metres of 5000m² (with the maximum footprint of any one building being 2500m²) in Reclamation A, and a maximum combined footprint of buildings exceeding 15 metres of 2500m² in Reclamation B. Outside that defined area, building would have a maximum height of 15 metres. It is noted that the height limits do not apply to containers, container handling equipment, or ship to shore cranes.
119. Ms Dray expressed concerns that the areas identified for buildings up to 30 metres were too large, too far forward, and encroached too close to Battery Point.
120. In the closing submissions the Applicant offered to amend the defined area within which building could have a maximum height of 30 metres, by shifting the line 50 metres behind to the north of the Cashin Quay wharf face in Reclamation A, and 100 metres north of the Cashin Quay wharf face in Reclamation B.
121. I accept that buildings are likely to be located towards the rear of the container terminal, as placing them within the container manoeuvring areas would disrupt port handling operations. I agree with Mr Craig that with buildings towards the rear of the container terminal, even up to 30 metres, the landform backdrop will reduce their apparent bulk. I am satisfied that the conditions offered in the closing submissions are appropriate. It could be argued that the line defining the forward position of the area for buildings up to 30 metres is still too far forward, but I accept that in reality they are likely to be further back.
122. I am also comforted by the limits on the quantum of buildings exceeding 15 metres included in the condition. I am also comfortable about the location of the defined area for higher buildings being adjacent to Battery Point (a matter raised by Ms Dray). As pointed out in the closing submissions, the reclamation consents from Canterbury Regional Council have defined an exclusion zone around Battery Point to protect mahinga kai and other ecological issues. While that exclusion area had nothing to do with visual effects, I do not consider that providing a further exclusion for taller buildings would add value. In any event, taller buildings are unlikely to be located as far east as close to Battery Point.

Native planting in Diamond harbour as compensation

123. Mr Ross in his submission suggested that the visual effects of the container port on Diamond Harbour could be offset by enhancing their amenity value through native planting restoration on the Diamond Harbour cliff reserves. At the hearing he suggested that some of the planting could assist in screening views of the Port from some of the public walkway areas.
124. Ms Appleyard submitted that any such planting would not offset any visual amenity effects of the container terminal, and that providing ‘compensation’ was not appropriate. At the hearing Mr Pettersson and Mr Craig outlined extensive plantings undertaken behind the Port around the haul roads, above the coal storage area, below Sumner Road, and in the revegetation of the quarry. The reclamation consent from Canterbury Regional Council includes a condition requiring a strip of planting on the eastern edge of Reclamation B.
125. I agree that adding a requirement for native planting in the Diamond Harbour cliff reserves is unnecessary for offsetting or screening any visual effects of the container terminal. I have already concluded that the effects on Diamond Harbour are moderate, but acceptable. Environmental compensation is beyond my powers, and has not been offered by the Lyttelton Port Company.

Traffic Effects

126. Three submissions (Stephanie Brown, Ken Maynard, on behalf of the Lyttelton Community Association, and James and Heather Bundy) dealt with the issue of road access to the Port. The main road access to the Port is along and from Norwich Quay, which is the main road servicing Lyttelton Township, as well as the Port. The submitters seek the re-routing of heavy port related traffic to a new purpose built road through the Lyttelton Port land between Norwich Quay and the wharf area in the Inner Harbour.
127. Mr Metherall for the Applicant provided evidence that Norwich Quay is operating well within the through traffic carrying capacity of this two lane arterial road, and that access from side road intersections is at an acceptable level of service, with formal opportunities available for pedestrians to cross Norwich Quay. He considered that longer term there may need to be some locally focussed traffic management responses to the western intersecting roads, but these could be dealt with through normal traffic management responses.
128. Mr Metherall also advised that alternative access to the Port was considered through the Integrated Transport Assessment prepared for the Lyttelton Port Recovery Plan. That assessment identified that an alternative route (between the railway line and Norwich Quay), would require substantial capital investment, would have a number of engineering and land availability challenges, and would still result in some traffic effects associated with access to and across Norwich Quay. The benefits of an alternative road would only likely be realised closer to 2041, and would form part of a wider consideration of access such as with a second tunnel. The Lyttelton Port Recovery Plan Hearing Panel concluded that Norwich Quay would continue to be the route to the Port.
129. Mr Milne, for the Council, also concluded that the use of Norwich Quay for both light and heavy port related traffic is appropriate at this time.
130. I also note that Policy 13.8.2.1.4 of the Christchurch District Plan provides for;

- i. Efficient, safe and effective access along Norwich Quay to the Lyttelton Port as a strategic transport and freight hub; and*
- ii. Safe, direct and accessible provision for all transport modes between the Lyttelton Town Centre and surrounds to the ferry, cruise ships, marina and publicly accessible areas of Naval Point and the Dampier Bay/Inner Harbour waterfront.*

131. I can understand the submitter's desire to separate heavy Port traffic from Norwich Quay, which provides the main traffic access to the commercial and residential area of much of Lyttelton Township. However, the traffic advice is that from a traffic engineering perspective this is not necessary. This matter has been appropriately aired and considered through the Lyttelton Port Recovery Plan, and in the Christchurch District Plan, and it is not necessary or appropriate for me to reach a different conclusion on this container port land use consent application.
132. The New Zealand Transport Agency responded to the Christchurch City Council (through Mr Milne), and encouraged the use of multiple modes of transport, including rail, encouraged the use of buses to service cruise ship passengers, and sought measures to avoid tracking of material from the Port area onto the State Highway roads (Norwich Quay).
133. Evidence before me was that the use of rail for the transport of containers is likely to grow over time from about 12% to 20% of movements. The use of buses for cruise ship passengers, while likely, is outside of the area of the Port that this application relates to. The tracking of material (understood to be from log storage and movement) is a matter for the Port and NZTA to discuss and resolve, and I was informed (by Mr Milne), that it mainly occurs within the Port access road rather than on public roads.

Projections of future demand

134. Mr Kulpe in his submission, and in his presentation before me, questioned the projections and assumptions made by Lyttelton Port Company for future demand for cargo handling. The Lyttelton Port projections assume a growth rate of approximately 5% per annum. Mr Kulpe questioned whether climate change, and/or limiting economic factors, could significantly reduce potential growth of worldwide trade, especially in the rural export trades undertaken by New Zealand, and in the demand for imported goods. He therefore questioned the need for the scale of the container terminal extensions.
135. In the right of reply, Ms Appleyard submitted that if in the future there was diminishing freight volumes, the Lyttelton Port Company would cease to proceed to build to its allowable extent, and possibly would not proceed with exercising the Reclamation B land-use consent.
136. At the hearing Mr Williams, for Lyttelton Port Company, commented that it is much easier to slow down development than to speed it up.
137. I understood Mr Kulpe's approach, and he may be right in the future. World trade, and responses to climate change and other factors may well affect the level and methodology of ports. However, I agree with the Applicant that the speed of development of the new container terminal areas can change over time. These consents, and the reclamation consents from the Canterbury Regional Council, give the Applicant, and the community, some certainty about the future development strategy. A smaller, or slower, container terminal development, will not have any adverse effects, and potentially have benefits, for the Lyttelton Harbour environment.

138. Mr Kulpe suggested a 25 year consent so that the consents could be reviewed/reconsidered to take into account changes in demand or character. I consider that to be unnecessary. Development can be slowed down if necessary. There are likely to be District Plan Review opportunities within a 25 year period. Also, this Decision includes a Review condition pursuant to Section 128 of the Resource Management Act to deal with any adverse effect on the environment which may arise from the consent.

Shore to ship power

139. Mr Kulpe, and other submitters, encouraged the use of ship to shore power. As I understand it, the use of (electric) power from the Port to power ships while they are moored at the wharf results in the reduction of the use of on-board generators (often diesel) for powering the ship and its facilities, and reduces the discharge of emissions into the air. Actually, I think the practice should be called shore to ship rather than ship to shore power.
140. Mr John Forrester provided evidence on power for the Lyttelton Port. He described the current power supply arrangements for Lyttelton Port, which uses extensive electric power. There is currently sufficient power supply, and options for future demand.
141. With regard to shore to ship power, he advised that none of the ships calling at Lyttelton currently have shore power connection facilities. With the high infrastructure costs, uncertain uptake from vessels, and potential for different connection systems, he considered it would be many years before shore to ship power was possible. He agreed that Lyttelton Port Company should continue to investigate shore to ship power.
142. I agree that any suggestion to “require” the provision of shore to ship power is premature. In any event, emissions to air are a matter for the Regional Council. Also, emissions for vessels are a permitted activity under the Resource Management (Marine Pollution) Regulations 1998. Ms Appleyard also submitted that the Resource Management Act takes into account effects “of” climate change rather than effects “on” climate change.

Other matters

143. A number of submissions referred to water quality and marine wildlife issues. These have all been considered and determined in the reclamation decision by Canterbury Regional Council. They are outside my jurisdiction on this application.
144. The Lyttelton Seafarers Centre lodged a submission seeking that the Port Company adhere to the Maritime Labour Convention (which concerns the health, safety and welfare of seafarers), and meet two Christchurch City council resolutions relating to funding of the Seafarers Centre. Both of those matters are outside my jurisdiction.
145. Mr Wilson tentatively raised the issue of safety of stacking containers (up to 8 containers high) from an earthquake perspective. Mr Williams (Lyttelton Port Company) advised that the use of straddle cranes will stack the containers close together, which assists in stability.

Number and extent of submissions

146. Both Mr Wilson, for the Council, and Mr Purves, for the applicant, commented on the number of submissions received. The application was publicly notified, and over 1600 property owners were individually notified. A total of 37 submissions were lodged, 24 in

support, 9 in opposition, and 4 neutral (although most of the neutral raised some issues or concerns). 4 submitters attended the hearing to make their submissions before me.

147. Mr Wilson noted that the number of submissions was very low. He was not sure whether that meant that property owners are unconcerned about the proposal, or that they are not interested given the previous reclamation approval, or they see it as a foregone conclusion. He took the view that there would seem to be support in the broader community for the proposal. Mt Purves agreed with that conclusion.
148. I have not placed any significant weight on the level of submissions, but I have taken the limited number of submissions opposing the application as an indication that the Community is at least tolerant and expectant that the container terminal will expand to the east into Te Awaparahi Bay. The submissions provided useful and valuable input into the possible effects, and possible remedial conditions.

Positive effects

149. Mr Wilson identified a number of positive effects that should be taken into account. These included efficiency gains in port handling, ability to handle larger ships, employment and economic development, implementing the Lyttelton Port Recovery Plan, greater use of rail, and improving the amenity values of Lyttelton by freeing up areas in the Inner Harbour for public use and recreation.
150. It should also be acknowledged that Lyttelton Port received major damage from the Christchurch earthquakes, and the repair and recovery of the Port has significant regional benefits.

Overall Conclusions on effects

151. My conclusion is that noise levels from the implementation of the new container terminal are acceptable, with some improvements in Lyttelton Township, and slightly elevated, but still acceptable, levels in Diamond Harbour. I agree that the Port Noise Management Plan, and input of the Port Liaison Committee, is the appropriate management and planning regulation tool for dealing with any noise levels.
152. My conclusion is that with the progressive removal of Sodium lights in the existing Port areas, and replacement with LED or other more modern lighting, the effects of the additional lighting on the new Container Terminal area, are acceptable. I acknowledge that in the short to medium term, the total effects of lighting may at times be greater, but that longer term the overall effect will be no worse than, and probably better than, the existing lighting effects.
153. My conclusion is that with respect to landscape and visual matters, the expanded container terminal will have landscape effects that range from low to moderate, and that they represent a not unexpected, and acceptable, extension of the existing port operations into the high amenity area of the overall Lyttelton Harbour Basin.
154. I have considered some suggested conditions on the colour of ship to shore cranes, the height of lighting poles, the colour and texture of surface treatments, height of buildings, native plantings in Diamond harbour and shore to ship power. Other than those offered by the Applicant (which responded to issues raised through the hearing) I have not determined that any further conditions are required in addition to those produced by the Applicant through the Right of Reply, although I have undertaken some limited fine tuning

of the wording in some of the conditions. These are described later in the section of this decision on Conditions.

155. Overall I have concluded that the effects of the container terminal will range from insignificant (less than minor) to minor/moderate. I am satisfied that they will reduce some existing effects, and will minimise new adverse effects to a level that is acceptable given the policy directions that this is the appropriate location for the new and expanded container terminal.

Statutory consideration

156. Most of the land the subject of this application has not yet been reclaimed. Pursuant to Section 89(2) of the Resource Management Act I may hear and decide the application as if the application relates to an activity within its District. Case law has determined that such an application is to be considered as a discretionary activity.
157. Pursuant to Section 60(2)(a) of the Christchurch Regeneration Act 2016, a decision maker on a resource consent application must not make a decision that is inconsistent with a Recovery Plan.
158. I have had regard to the Lyttelton Port Recovery Plan. That Plan clearly identifies an area in Te Awaparahi Bay, covering 34 hectares, as a reclamation area for the expansion of the container terminal. The application before me covers that area.
159. I have had regard to the Canterbury Regional Policy Statement. That Statement, as directed by the Lyttelton Port Recovery Plan, includes a policy to provide for the expedited recovery of the Lyttelton Port, which includes a container terminal being established in Te Awaparahi Bay on up to 34 hectares of reclaimed land.
160. I have had regard to the Regional Coastal Environment Plan for the Canterbury Region, which also includes a policy for the expedited recovery of Lyttelton Port, including establishing a container terminal on a maximum of 34 hectares of reclaimed land in Te Awaparahi Bay.
161. I have considered the New Zealand Coastal Policy Statement. That National Policy Statement has been considered and taken into account in the development of the Regional Policy Statement, the regional Coastal Environment Plan, and the Lyttelton Port Recovery Plan.
162. I have had regard to the objectives and policies of the Christchurch District Plan. Those objectives and policies recognise operational port activities being established on reclaimed land in Te Awaparahi Bay.
163. I am satisfied, having regard to all those documents and policies, that the use of the reclaimed land (up to 34 hectares) has been well signalled and provided for. To refuse consent would be inconsistent with those documents, and in particular with the Lyttelton Port Recovery Plan.
164. The reclamation of the 34 hectares has already been consented by the Canterbury Regional Council, and the application before me is for works and structures to establish a Container Terminal (in two stages) on that land when it is reclaimed.
165. I have had regard to the Objectives and Policies of the Christchurch District Plan which seek to ensure that activities to enhance and reconsider Lyttelton Port infrastructure and

operations are designed to reduce existing and minimise new adverse effects generated within the Port operational areas, although that policy is directed more at the Lyttelton township than the wider Lyttelton Harbour Basin.

166. The land the subject of this application is not zoned. I have had regard to the provisions of the Special Purpose (Lyttelton Port) Zone which covers the current operation areas of Lyttelton Port. I accept the evidence before me that the land the subject of this application will likely be included in the Special Purpose (Lyttelton Port) Zone by way of Plan Change or Review. The Special Purpose (Lyttelton Port) Zone has quite limited controls over port development and operations. However, I also consider that when the relevant Plan Change or Review takes place, it will likely take into account and may well include rules based on any conditions imposed on this or other consents.
167. Pursuant to Section 104(1)(a) I have considered any actual and potential effects of allowing the activity. Overall I have concluded that the effects of the container terminal will range from insignificant (less than minor) to minor/moderate. I am satisfied that they will reduce some existing effects, and will minimise new adverse effects to a level that is acceptable given the policy directions that this is the appropriate location for the new and expanded container terminal.
168. The relevant Plans and Documents described in this Decision have given effect to Part II of the Resource Management Act, and there is no need for a clause by clause analysis of Part II of the Act.
169. Pursuant to Section 104B I may grant or refuse the application. Given my conclusions above, and the directions/policies of the various Plans and Documents, and given my conclusions on adverse effects, I have concluded that the application should be granted.
170. This Decision, as sought in the application, results in two consents, one for Reclamation A (RMA/2019/1361A), and one for Reclamation B (RMA/2019/1361B). This is because the construction and completion of Reclamation A will take place well in advance of Reclamation B.
171. Pursuant to Section 108, I may impose conditions. A final set of conditions were produced on behalf of the Applicant as conditions that the Applicant was agreeable to accepting. The final list of conditions was a result of input/suggestions from submitters, and Council officers. I accept that list of conditions, and will adopt them as part of my decision. I have prepared a commentary on those conditions to assist in the reasons and inputs to those conditions, and perhaps to assist in their interpretation, although at the end of the day their implementation will depend on a legal interpretation of their meaning.

Conditions

172. There are two sets of conditions, one for the area of Reclamation A (Consent RMA/2019/1361A) and one for Reclamation B (Consent RMA/2019/1361B). The numbers vary, generally by 1, because there is an additional surrender condition for the Reclamation A area.
173. Condition 1 (Reclamation A) contains an agreement that there will be a partial surrender of RMA92018173 (which granted land use consent for port activities for the initial 10 hectare reclamation area in 2011) upon first exercise of the consent the subject of this application. This means that the conditions of consent RMA/2019/1361A will apply.
174. Condition 2 (Reclamation A) provides that consent RMA/2019/1361A will lapse 7 years after the commencement of the consent. There is an advice note which records that the

consent does not “commence” until the area of Reclamation A has been reclaimed, and a survey certificate has been issued by Canterbury Regional Council under section 245(5) of the Resource Management Act. Condition 1 (Reclamation B) does the same for Consent RMA/2019/1361B, but the lapse date is 25 years after the commencement of the consent. This is because of the much longer timeframe for Reclamation B.

175. Condition 3 (Reclamation A) and Condition 2 (Reclamation B) allow “port activities” to occur on the reclaimed land. “Port activities” are defined at the beginning of the conditions, and includes a quite extensive list of activities.
176. Condition 4 (Reclamation A) and Condition 3 (Reclamation B) provide that flood lighting structures shall not exceed 40 metres in height. The height of flood lighting structures was the subject of some discussion at the hearing, with 30 metres suggested by Council officers and some submitters. In the end, I agreed with 40 metres as being more practical to ensure adequate coverage without having to angle luminaires (lights).
177. Condition 5 (Reclamation A) and Condition 4 (Reclamation B) provide a defined area (Area A in Figure 1 for each of Reclamation A and Reclamation B) where buildings shall not exceed 30 metres, and there are limits on the maximum footprint of individual and combined buildings exceeding 15 metres. The rationale for this condition is covered in paras 115 to 122 of this decision. The defined area for taller buildings was reduced in the conditions put forward in the right of reply.
178. Condition 6 (Reclamation A) and Condition 5 (Reclamation B) provide a maximum height of buildings (other than defined in Condition 5 and 4) of 15 metres. There is an advice note that there is no height limit on containers, or container handling equipment, including ship to shore cranes.
179. Conditions 7 to 9 (Reclamation A) and Conditions 6 to 8 (Reclamation B) require the preparation, supply, operation, and review, of a Construction Noise Management Plan.
180. Conditions 10 to 14 (Reclamation A) and 9 to 13 (Reclamation B) require the preparation, operation, and review of a Port Noise Management Plan. Conditions 13/12 require the preparation of a Port Noise Contour Map, and Conditions 14/13 require it to be reviewed within 3 months of the commissioning of each of the new container terminal areas. The Port Noise Management Plan, and the Port Liaison Committee, have been found to be appropriate management and planning regulation tools for dealing with any noise issues. As explained in paras 187 and 188 of this decision, I have modified the proposed definition of “commissioning” for the Reclamation B container terminal in case that part of the container terminal is developed in stages.
181. Condition 15 (Reclamation A) and Condition 14 (Reclamation B) relate to using advanced technology luminaires (lighting) such as LED or LEP in the new container port areas. The wording for reclamation A was slightly altered to ensure that all luminaires installed and used after the first exercise of the consent use the advanced technology, because there are a few sodium lights installed in the area first reclaimed under the 10 hectare 2011 decision. These lights will need to be replaced with new technology luminaires before the new consent is exercised.
182. Condition 16 (Reclamation A) and Condition 15 (Reclamation B) require luminaires to be designed so that the principle output is, as far as possible, directed to within the container terminal and adjoining wharfs or Port areas. This condition was modified from a previously worded condition which sought to direct lights away from the opposite side of the Harbour. This change was made following the suggestion of one of the submitters (Ms Brown).

183. A condition originally suggested that all permanent lighting shall not exceed 10 lux within the boundary of any site in residential or commercial zones was deleted because it would always be complied with. Again this change was made following the suggestion of one of the submitters (Ms Brown).
184. Condition 17 (Reclamation A) and Condition 16 (Reclamation B) require the colour temperature of LED or LEP lamps to be no more than 4000°K. Mr Wilson had suggested that the limit be 3500°K in order to reduce light scatter from higher temperature colours, but I accepted the evidence of Mr Dent that limiting the colour temperature to 3500°K would restrict better technology solutions.
185. Condition 18 (Reclamation A) and Condition 17 (Reclamation B) require the consent holder to engage a suitably qualified and experienced lighting engineer to design, measure and assess the required luminaire and lighting outcomes. This is a sensible condition given the need to take advantage of the latest and appropriate lighting technology.
186. Condition 19 (Reclamation A) requires the removal, prior to the commissioning of lighting in the Reclamation A area of at least 20% of the existing sodium lights in the existing Cashin Quay operational area. Condition 18 (Reclamation B) requires the further staged removal of more of the sodium lights in the existing Cashin Quay operational area. The rationale, and acceptance, of these conditions is discussed in para 90 of this Decision. The existing “Cashin Quay operational area” is defined (by a blue colour) in Figure 2 attached to each decision. I note that the conditions offered by the applicant referred to this area as “Area A”, but I have changed that to the “blue Cashin Quay operational area” to remove confusion from another Area A referring to the area for taller buildings. Lighting conditions also refer to a comparison date of 16 May 2019, which is the date of the lighting visual assessments which were produced for this application.
187. The reductions in Sodium lamps are to be determined at the time of commissioning of each of the reclamation areas. The applicant proposed that “commissioning” would be defined as;
Commissioning means the first operation of a complete network of Flood Lighting required for the entire container terminal shown in Figure 1 attached with this consent.
188. It is possible, particularly for Reclamation B, that the development of a container terminal on that area may not occupy the entire reclamation site. In other words the development could be implemented in stages. The graduated reduction of sodium lights envisaged in para 90 above reflects that. I have therefore decided to modify the definition of “Commissioning” for Reclamation B to the following;
Commissioning, for reclamation B, means the first operation of a complete network of Flood Lighting required for all or part of the Reclamation B container terminal area shown in **Figure 1** attached with this consent.
- I have also modified proposed condition 18 (Reclamation B) so that the commissioning reflects the possible staged development of the Reclamation B area.
189. Condition 20 (Reclamation A) and Condition 19 (Reclamation B) require a schedule of existing sodium lights in the existing Cashin Quay operational area (again defined in Figure 2) to be supplied within six months of the issuing of this consent (which is the date of this Decision rather than when it commences).
190. Condition 21 (Reclamation A) and Condition 20 (Reclamation B) require a schedule of sodium lights existing in the existing Cashin Quay operational area at 2 months prior to

the commissioning of lights in the relevant reclamation area. The purpose of condition 20/21 and 19/20 is to prove compliance with conditions 19/18.

191. Condition 22 (Reclamation A) and Condition 21 (Reclamation B) provide an opportunity for the Christchurch City Council to initiate a Review of the conditions for the purposes of dealing with any adverse effect on the environment that may arise from the exercise of these consents.

Decision

192. For the above reasons the application to establish a container terminal and other port activities on 34 hectares of reclaimed land in Te Awaparahi Bay, Lyttelton Harbour, in two stages (Reclamation A, consent RMA/2019/1361A), and Reclamation B consent RMA/2019/1361B) is granted, subject to the conditions set out in Attachment A and Attachment B.

A handwritten signature in black ink, appearing to read 'Ken Lawn', written in a cursive style.

Ken Lawn
Independent Commissioner
14 January 2020

Attachment A

Conditions applying to Land use Consent (Reclamation A)

RMA/2019/1361A: To establish a container terminal and other port activities on reclaimed land

Definitions

“**Commissioning**”, for reclamation A, means the first operation of a complete network of Flood Lighting required for the entire container terminal area shown in **Figure 1** attached with this consent.

“**Flood Lighting**” means luminaires (including lamps) that are attached to poles that are fixed to the ground and which exceed 10m in height.

“**HPS**” means High pressure sodium vapour lamps

“**LED**” means Light Emitting Diode lamps

“**LEP**” means Light Emitting Plasma lamps

“**Port Activities**” means the use of land, buildings and structures for:

- a. cargo handling, including the loading, unloading, storage, processing and transit of cargo;
- b. passenger handling, including the loading, unloading and transit of passengers;
- c. maintenance and repair activities;
- d. port administration;
- e. marine-related industrial activities;
- f. marine-related trade and industry training facilities;
- g. activities associated with the surface navigation, berthing, manoeuvring, refuelling, storage, servicing and provisioning of vessels;
- h. warehousing in support of (a)–(f), (h) and distribution activities, including
- i. ancillary transport infrastructure, buildings, structures, signs, utilities, parking areas, landscaping, hazardous facilities, offices and other facilities, and earthworks; and
- j. Utilities to support (a)-(i) including electricity, lighting, water, wastewater, stormwater networks and facilities, fuel storage and ancillary pipeline networks.

Conditions

Partial Surrender of RMA92018173

1. The consent holder upon first exercise this consent shall surrender under section 138 of the Act that part of RMA92018173 referring to Recommendation A (Port Activities) set out in pages 12-15 of land use consent.

Lapsing of Consent

2. Pursuant to Section 125(1) of the Resource Management Act 1991 this resource consent shall lapse 7 years after the commencement of the consent.

Advice Note:

Pursuant to section 116(2)(b) of the Resource Management Act 1991 this resource consent shall not commence until the proposed location of the activity has been reclaimed and a certificate has been issued under section 245(5) in respect of the reclamation.

Location

3. Port Activities may occur on reclaimed land located in the area shown on **Figure 1** attached to this consent.

Height of Structures

4. Flood Lighting structures shall not exceed 40 metres in height.
5. Buildings within Area A of **Figure 1** shall not exceed 30 metres in height provided that:
 - a. Any portion of an individual building that exceeds 15 metres in height does not exceed a footprint of 2,500m²; and
 - b. The combined portions of all buildings exceeding 15 metres in height do not exceed a total combined footprint of 5,000m².
6. Buildings, other than the buildings and structures specified in conditions 4 and 5, shall not exceed a height of 15 metres.

Advice Note:

There are no height limits on containers or container handling equipment, including the ship-to-shore cranes.

Construction Noise

7. Prior to the first exercise of this consent, the consent holder shall provide the Council a written copy of a Construction Noise Management Plan that has been prepared in accordance the requirements contained in **Appendix 1** attached to this consent.

8. The consent holder shall manage noise during construction of the container terminal in accordance with the Construction Noise Management Plan.
9. The consent holder may review the Construction Noise Management Plan in accordance with the requirements contained in **Appendix 1** attached to this consent.

Port Noise

10. Prior to the Commissioning, the consent holder shall provide the Council a written copy of a Port Noise Management Plan that has been prepared in accordance the requirements contained in **Appendix 2** attached to this consent.
11. The consent holder shall manage port noise in accordance with the Port Noise Management Plan.
12. The consent holder may review the Port Noise Management Plan in accordance with the requirements contained in **Appendix 2** attached to this consent.
13. The consent holder shall incorporate noise from Port Activities undertaken on the reclaimed land into a Port Noise Contour Map which must be attached to Port Noise Management Plan in accordance with the requirements contained in **Appendix 2**.
14. The consent holder shall review the Port Noise Contour Map within three months from the Commissioning in accordance with the requirements contained in **Appendix 2**.

Lighting

15. All luminaires installed and used for Flood Lighting after the first exercise of this consent shall use LED or LEP lamps or any other advanced technology lamps. At Commissioning, no HPS lamps shall be in use within Reclamation A.
16. All luminaires used for Flood Lighting shall be designed so that the principal output is, as far as is practicable, directed to within the container terminal and adjoining wharfs or to land that is zoned Special Purposes (Lyttelton Port) Zone.
17. The colour temperature of the LED or LEP lamps used for Flood Lighting shall be no more 4000°K.
18. The consent holder shall engage a suitably qualified and experienced lighting engineer to design, measure and assess the required luminaire and lighting outcomes specified in conditions 15-17.
19. Prior to the Commissioning, the consent holder shall, as a minimum, remove 20% of the existing HPS lamps used for Flood Lighting which are located, as of 16 May 2019, within the Cashin Quay operational area defined in blue in **Figure 2** attached to this consent. The consent holder may replace, at any time, any of the removed HPS lamps with LED or LEP lamps or any other advanced technology lamps.
20. For the purposes of determining compliance of condition 19, the consent holder shall within six months after the issuing of this consent provide the Council a schedule of

the HPS lamps used for Flood Lighting existing within the Cashin Quay operational area defined in blue in **Figure 2** as of 16 May 2019.

21. For the purposes of determining compliance of condition 19, the consent holder not less than two months prior to the Commissioning provide a schedule of the of the HPS lamps used for Flood Lighting existing within the Cashin Quay operational area defined in blue in **Figure 2**.

Review

22. Pursuant to Section 128(1) of the Act, the Christchurch City Council may, during the last 5 working days of May or November in each year, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.

Advice notes:

i) *Scope of this consent*

This consent only applies to land use activities undertaken on reclaimed land which is landward of the mean high water springs.

ii) *Monitoring*

The Council will require payment of its administrative charges in relation to monitoring of conditions, as authorised by the provisions of section 36 of the Resource Management Act 1991. The current monitoring charges are:

- (a) A monitoring programme administration fee of \$102.00 to cover the cost of setting up the monitoring programme; and
- (b) A monitoring fee of \$175.50 for the first monitoring inspection to ensure compliance with the conditions of this consent; and
- (c) Time charged at an hourly rate if more than one inspection, certification of conditions, or additional monitoring activities (including those relating to non-compliance with conditions), are required.

The monitoring programme administration fee, initial inspection fee and inspection fees will be charged to the applicant with the consent processing costs. Any additional monitoring time will be invoiced to the consent holder when the monitoring is carried out, at the hourly rate specified in the applicable Annual Plan Schedule of Fees and Charges.

iii) *Development Contributions*

Please note that a development contribution will be required under the Development Contributions Policy. The Council requires Development Contributions to be paid prior to the issue of a Code Compliance Certificate for a building consent, the commencement of the resource consent activity, the issue of a section 224 certificate for a subdivision consent, or authorisation of a service connection.

The contributions are defined in the Council's *Development Contributions Policy*, which has been established under the Local Government Act 2002 and

is included in the Council's Long Term Plan. Full details of the Policy are available at www.ccc.govt.nz/dc. If you have any queries in relation to this matter, please contact our Development Contributions Assessors on phone (03) 941 8999.

Figure 1

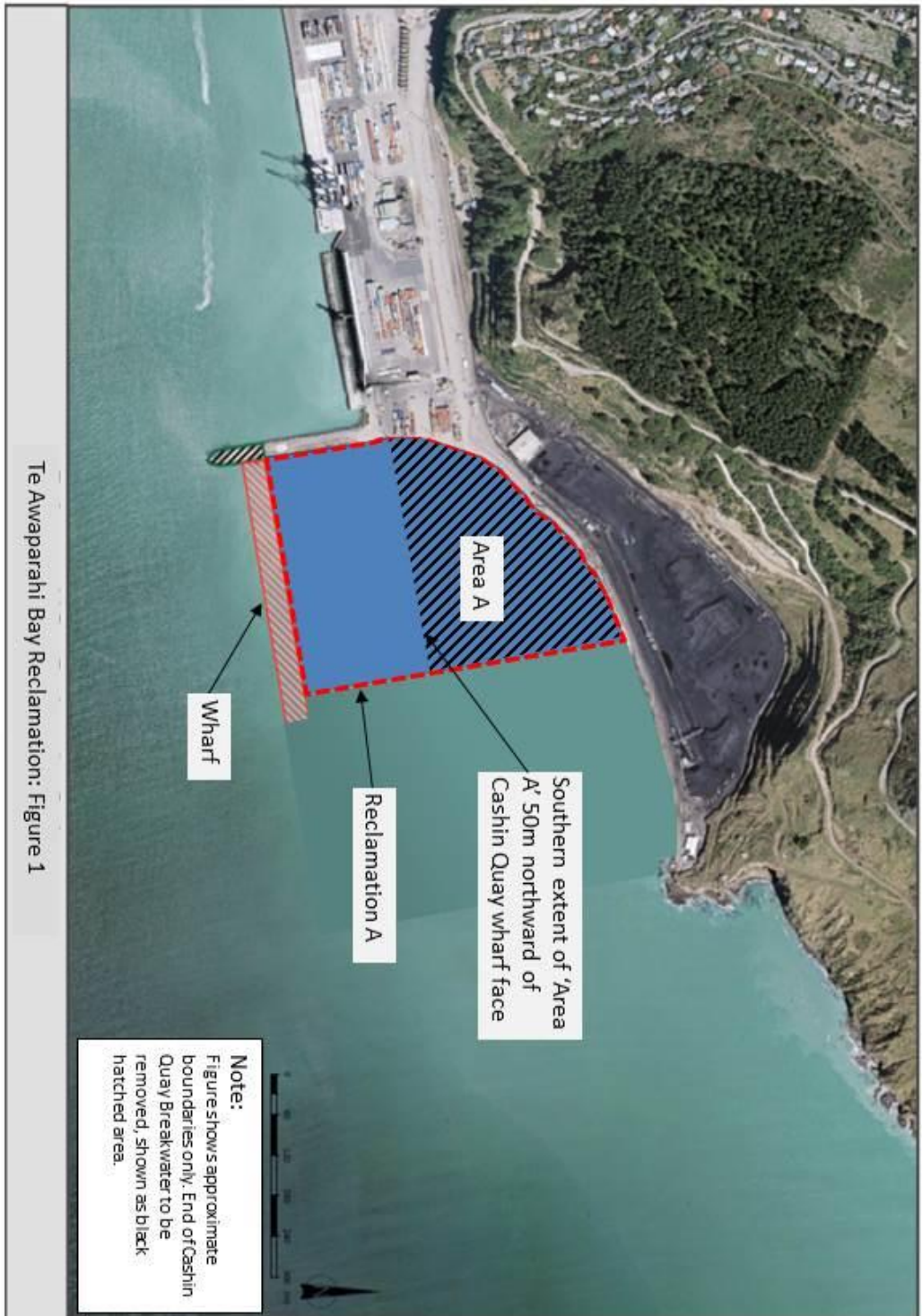


Figure 2



Te Awaparahi Bay Reclamation: Figure 2
Existing Cashin Quay Operational Area (in blue)

Appendix 1 –Construction Port Noise Management Plan

Advice note:

These provisions follow Appendix 13.8.6.9 of the operative Christchurch District Plan as of November 2019

1. Where the cumulative effect of construction noise and operational port noise (5-day busy period) falls within the 65dBA Ldn contour, then no further assessment of the construction noise is required.
2. Where the cumulative effect of construction noise and operational port noise (5-day busy period) exceeds the 65dBA Ldn contour, then further assessment of the construction noise under a Construction Noise Management Plan is required.
3. The Construction Noise Management Plan will include but not be limited to the following:

1. Purpose of the Construction Noise Management Plan

Owners and operators of the Port of Lyttelton commitment to manage construction noise.

1. Identify construction activities that can give rise to construction noise.
2. Set a framework for monitoring, measuring and reporting on construction noise.
3. Set a framework for dealing with complaints.

2. Owners and operators of the Port of Lyttelton obligations

1. Allocate an annual budget to the Port Liaison Committee for the preparation and implementation of the Construction Noise Management Plan and the Construction Noise Mitigation Plan.
2. Provide administrative and advisory support for the Port Liaison Committee for construction noise matters.
3. Deal with construction noise complaints.

3. Owners and operators of the Port of Lyttelton

1. Prepare and implement the Construction Noise Management Plan and, in conjunction with the Port Liaison Committee, the Construction Noise Mitigation Plan, utilising the concepts in [NZS 6803:1999 Acoustics – Construction Noise](#).

4. Port Liaison Committee

1. Provide details on representation and administration of the committee.
2. Provide a list of functions, including but not limited to the administration of the Construction Noise Mitigation Plan and associated budget, consideration of

complaints, monitoring port operators' performance of their obligations with respect to construction noise issues, and reporting to residents affected by noise.

5. Keep within the annual budget provided by the owners and operators of the Port of Lyttelton.

6. Certification

1. Provide documentation confirming the Plan has been certified by the Christchurch City Council as meeting the requirements set out in (i) to (iv) above.

4. Complaints

1. Develop procedures to record complaints and steps to investigate such complaints.

5. Review and alteration of the Plan

1. Develop procedures to alter, review and update the Construction Noise Management Plan.
2. Produce and append to the Construction Noise Management Plan annually a report on the implementation and, where relevant, alteration and update of that Plan.

6. Construction Noise Mitigation Plan

The Construction Noise Mitigation Plan will include but not be limited to the following:

1. Setting out procedures on how affected property owners are to be contacted and the documentation of feedback and proposed mitigation measures discussed.
2. Criteria that specify mitigation measures, having regard to the length of time the construction affected property is to be exposed to construction noise and the levels of construction noise involved.
3. The mitigation measures determined under the criteria developed in (ii) will include but not be limited to:
 - provision of temporary accommodation;
 - acoustic mitigation (such as upgrading the dwelling) in accordance with the criteria set out in the Plan for Acoustic Treatment and Purchase of Dwellings set out in [Appendix 13.8.6.8\(d\)](#) Acoustic Treatment of the operative Christchurch District Plan as of November 2019;
 - an offer to purchase the property; and
 - where an offer to purchase a property is made, a fair market value of the property shall be determined as if the property was situated in Lyttelton, not taking into account the effect of construction noise and also port noise. Procedures shall be put in place so a fair valuation is reached.
4. Documentation confirming the Plan has been certified by the Christchurch City Council as meeting the requirements set out in (i) to (iii) above.

7. Review and alteration of the Plan

1. Develop procedures to alter, review and update the Construction Noise Mitigation Plan.
2. Produce and append to the Construction Noise Mitigation Plan annually a report on the implementation and, where relevant, alteration and update of that Plan.

Appendix 2 - Port Noise Management Plan

Advice note:

These provisions follow Appendix 13.8.6.7 of the operative Christchurch District Plan as of November 2019

1. Port Noise Management Plan

The Port Noise Management Plan will include but not be limited to the following:

1. Purpose of the Port Noise Management Plan

1. State owners and operators of the Lyttelton Port's commitment to manage and to reduce/mitigate port noise.
2. Set a framework for the Port Liaison Committee.
3. Identify Port Activities that can give rise to noise.
4. Set a framework for monitoring, measuring and reporting on port noise.
5. Set a framework for dealing with complaints.
6. Document noise management activities.

2. Obligations of the owners and operators of Lyttelton Port

1. Allocate an annual budget to the Port Liaison Committee for the preparation and implementation the Port Noise Management Plan and the Plan for Acoustic Treatment and Purchase of Dwellings.
2. Provide administrative and advisory support for the Port Liaison Committee.
3. Deal with noise complaints.

3. Owners and operators of the Port of Lyttelton in conjunction with the Port Liaison Committee

1. Prepare and implement the Port Noise Management Plan and the Plan for Acoustic Treatment and Purchase of Dwellings.
2. Develop noise modelling, monitoring and measurement procedures that follow the concepts in NZS 6809: 1999 Acoustics – Port Noise management and land use planning, for the purpose of preparing a Port Noise Contour Map that shows contour lines in 1dB increments from 55dB Ldn to 70dB Ldn inland of the Specific Purpose (Lyttelton Port) Zone. This Port Noise Contour Map is to be attached to the Port Noise Management Plan and is to be regularly updated as required by the Port Liaison Committee and at the expense of the owners and operators of the Port of Lyttelton. The model for the Port Noise Contour Map shall be reviewed at least once every two years to determine whether it needs to be updated.

3. Develop methods to monitor port noise, in order to verify the port noise contour lines.
4. In developing the Port Noise Contour Map, recognise that noise from water and grit blasting at the dry dock facilities is excluded and instead noise from the water and grit blasting operation is managed by controlling the hours of operation.

4. Port Liaison Committee framework

1. Meet at least once a year.
2. Provide details on representation and administration of the committee.
3. Provide a list of functions, including but not limited to the administration of the Plan for Acoustic Treatment and Purchase of Dwellings and associated budget, consideration of complaints, monitoring port operators' performance of their obligations with respect to noise issues, and reporting to residents affected by noise.
4. Keep within the annual budget provided by the owners or operators of the Port of Lyttelton.
5. Advise any property owner in writing where the property is partly or wholly contained within an area seaward of the 70dBA Ldn contour or greater as shown by the Port Noise Contour Map following the preparation or the update of the Port Noise Contour Map.

5. Complaints

1. Develop procedures to record complaints and steps to investigate such complaints.

6. Documentation

1. Current version of the Port Noise Management Plan to be made available by the operators of the Port of Lyttelton to the public on a website.
2. Names and contact details for current staff of the operators of the Port of Lyttelton, Port Liaison Committee members and consultants involved in noise management.
3. Noise model and measurement details and procedures.
4. Summary of scenarios tested in the acoustics model.
5. Summary noise monitoring conducted.
6. Summary of complaints annually and a description of actions taken to address a complaint.

7. Review and alteration of the Plan

1. Develop procedures to alter, review and update the Port Noise Management Plan.
2. Produce and append to the Port Noise Management Plan annually a report on the implementation and, where relevant, alteration and update of that Plan.

Attachment B

Conditions applying to Land use Consent (Reclamation B)

RMA/2019/1361B: To establish a container terminal and other port activities on reclaimed land

Definitions

“Commissioning”, for reclamation B, means the first operation of a complete network of Flood Lighting required for all or part of the Reclamation B container terminal area shown in **Figure 1** attached with this consent.

“Flood Lighting” means luminaires (including lamps) that are attached to poles that are fixed to the ground and which exceed 10m in height.

“HPS” means High pressure sodium vapour lamps

“LED” means Light Emitting Diode lamps

“LEP” means Light Emitting Plasma lamps

“Port Activities” means the use of land, buildings and structures for:

- a. cargo handling, including the loading, unloading, storage, processing and transit of cargo;
- b. passenger handling, including the loading, unloading and transit of passengers;
- c. maintenance and repair activities;
- d. port administration;
- e. marine-related industrial activities;
- f. marine-related trade and industry training facilities;
- g. activities associated with the surface navigation, berthing, manoeuvring, refuelling, storage, servicing and providing of vessels;
- h. warehousing in support of (a)–(f), (h) and distribution activities, including
- i. ancillary transport infrastructure, buildings, structures, signs, utilities, parking areas, landscaping, hazardous facilities, offices and other facilities, and earthworks; and
- j. Utilities to support (a)-(i) including electricity, lighting, water, wastewater, stormwater networks and facilities, fuel storage and ancillary pipeline networks.

Conditions

Lapsing of Consent

1. Pursuant to Section 125(1) of the Resource Management Act 1991 this resource consent shall lapse 25 years after the commencement of the consent.

Advice Note:

Pursuant to section 116(2)(b) of the Resource Management Act 1991 this resource consent shall not commence until the proposed location of the activity has been reclaimed and a certificate has been issued under section 245(5) in respect of the reclamation.

Location

2. Port Activities may occur on reclaimed land located in the area shown on **Figure 1** attached to this consent.

Height of Structures

3. Flood Lighting structures shall not exceed 40 metres in height.
4. Buildings within Area A of **Figure 1** shall not exceed 30 metres in height provided that the combined portions of all buildings exceeding 15 metres in height does not exceed a total combined footprint of 2,500m².
5. Buildings, other than the buildings and structures specified in conditions 3 and 4, shall not exceed a height of 15 metres.

Advice Note:

There are no height limits on containers or container handling equipment, including the ship-to-shore cranes.

Construction Noise

6. Prior to the first exercise of this consent, the consent holder shall provide the Council a written copy of a Construction Noise Management Plan that has been prepared in accordance the requirements contained in **Appendix 1** attached to this consent.
7. The consent holder shall manage noise during construction of the container terminal in accordance with the Construction Noise Management Plan.
8. The consent holder may review the Construction Noise Management Plan in accordance with the requirements contained in **Appendix 1** attached to this consent.

Port Noise

9. Prior to any Commissioning, the consent holder shall provide the Council a written copy of a Port Noise Management Plan that has been prepared in accordance the requirements contained in **Appendix 2** attached to this consent.
10. The consent holder shall manage port noise in accordance with the Port Noise Management Plan.
11. The consent holder may review the Port Noise Management Plan in accordance with the requirements contained in **Appendix 2** attached to this consent.
12. The consent holder shall incorporate noise from Port Activities undertaken on the reclaimed land into a Port Noise Contour Map which must be attached to Port Noise Management Plan in accordance with the requirements contained in **Appendix 2**.
13. The consent holder shall review the Port Noise Contour Map within three months from any Commissioning in accordance with the requirements contained in **Appendix 2**.

Lighting

14. All luminaires used for Flood Lighting shall use LED or LEP lamps or any other advanced technology lamps. For avoidance of doubt no Flood Lighting shall use HPS lamps.
15. All luminaires used for Flood Lighting shall be designed so that the principal output is, as far as is practicable, directed to within the container terminal and adjoining wharfs or to land that is zoned Special Purposes (Lyttelton Port) Zone.
16. The colour temperature of the LED or LEP lamps used for Flood Lighting shall be no more 4000°K.
17. The consent holder shall engage a suitably qualified and experienced lighting engineer to design, measure and assess the required luminaire and lighting outcomes specified in conditions 13-16.
18. The consent holder shall, as a minimum, have removed:
 - i. 35% of the existing HPS lamps used for Flood Lighting which are located, as of 16 May 2019, within the Cashin Quay operational area defined in blue in **Figure 2** attached to this consent, on Commissioning of a container terminal of up to 9ha within Reclamation B;
 - ii. 50% of the existing HPS lamps used for Flood Lighting which are located, as of 16 May 2019, within the Cashin Quay operational area defined in blue in **Figure 2** attached to this consent, on Commissioning of a container terminal of more than 9ha within Reclamation B; and
 - iii. 75% of the existing HPS lamps used for Flood Lighting which are located, as of 16 May 2019, within the Cashin Quay operational area defined in blue in

Figure 2 attached to this consent within ten years after Commissioning of a container terminal pursuant to condition 18 ii above.

- iv. The consent holder may replace, at any time, any of the removed HPS lamps with LED or LEP lamps or any other advanced technology lamps.
- 19. For the purposes of determining compliance of condition 18, the consent holder shall within six months after the issuing of this consent provide the Council a schedule of the HPS lamps used for Flood Lighting existing within the Cashin Quay operational area defined in blue in **Figure 2** as of 16 May 2019.
- 20. For the purposes of determining compliance of condition 18, the consent holder not less than two months prior to any Commissioning provide a schedule of the HPS lamps used for Flood Lighting existing within the Cashin Quay operational area defined in blue in **Figure 2**.

Review

- 21. Pursuant to Section 128(1) of the Act, the Christchurch City Council may, during the last 5 working days of May or November in each year, serve notice of its intention to review the conditions of this consent for the purposes of dealing with any adverse effect on the environment which may arise from the exercise of the consent.

Advice notes:

- iv) *Scope of this consent*

This consent only applies to land use activities undertaken on reclaimed land which is landward of the mean high water springs.

- v) *Monitoring*

The Council will require payment of its administrative charges in relation to monitoring of conditions, as authorised by the provisions of section 36 of the Resource Management Act 1991. The current monitoring charges are:

- (a) A monitoring programme administration fee of \$102.00 to cover the cost of setting up the monitoring programme; and
- (b) A monitoring fee of \$175.50 for the first monitoring inspection to ensure compliance with the conditions of this consent; and
- (c) Time charged at an hourly rate if more than one inspection, certification of conditions, or additional monitoring activities (including those relating to non-compliance with conditions), are required.

The monitoring programme administration fee, initial inspection fee and inspection fees will be charged to the applicant with the consent processing costs. Any additional monitoring time will be invoiced to the consent holder when the monitoring is carried out, at the hourly rate specified in the applicable Annual Plan Schedule of Fees and Charges.

iii) *Development Contributions*

Please note that a development contribution will be required under the Development Contributions Policy. The Council requires Development Contributions to be paid prior to the issue of a Code Compliance Certificate for a building consent, the commencement of the resource consent activity, the issue of a section 224 certificate for a subdivision consent, or authorisation of a service connection.

The contributions are defined in the Council's *Development Contributions Policy*, which has been established under the Local Government Act 2002 and is included in the Council's Long Term Plan. Full details of the Policy are available at www.ccc.govt.nz/dc. If you have any queries in relation to this matter, please contact our Development Contributions Assessors on phone (03) 941 8999.

Figure 1

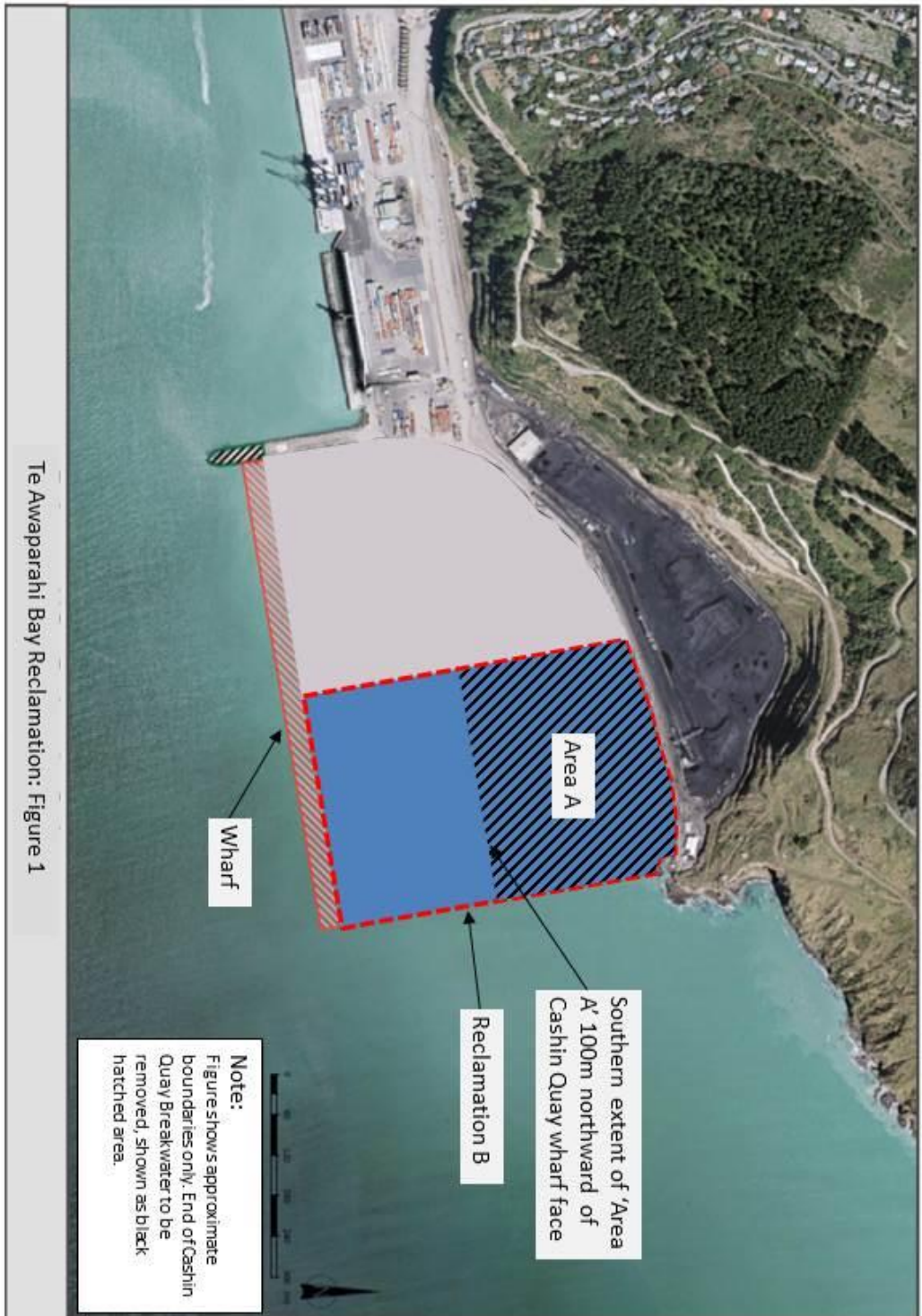


Figure 2



Te Awaparahi Bay Reclamation: Figure 2
Existing Cashin Quay Operational Area (in blue)

Appendix 1 – Construction Port Noise Management Plan

Advice note:

These provisions follow Appendix 13.8.6.9 of the operative Christchurch District Plan as of November 2019

1. Where the cumulative effect of construction noise and operational port noise (5-day busy period) falls within the 65dBA Ldn contour, then no further assessment of the construction noise is required.
2. Where the cumulative effect of construction noise and operational port noise (5-day busy period) exceeds the 65dBA Ldn contour, then further assessment of the construction noise under a Construction Noise Management Plan is required.
3. The Construction Noise Management Plan will include but not be limited to the following:

1. Purpose of the Construction Noise Management Plan

Owners and operators of the Port of Lyttelton commitment to manage construction noise.

1. Identify construction activities that can give rise to construction noise.
2. Set a framework for monitoring, measuring and reporting on construction noise.
3. Set a framework for dealing with complaints.

2. Owners and operators of the Port of Lyttelton obligations

1. Allocate an annual budget to the Port Liaison Committee for the preparation and implementation of the Construction Noise Management Plan and the Construction Noise Mitigation Plan.
2. Provide administrative and advisory support for the Port Liaison Committee for construction noise matters.
3. Deal with construction noise complaints.

3. Owners and operators of the Port of Lyttelton

1. Prepare and implement the Construction Noise Management Plan and, in conjunction with the Port Liaison Committee, the Construction Noise Mitigation Plan, utilising the concepts in [NZS 6803:1999 Acoustics – Construction Noise](#).

4. Port Liaison Committee

1. Provide details on representation and administration of the committee.
2. Provide a list of functions, including but not limited to the administration of the Construction Noise Mitigation Plan and associated budget, consideration of

complaints, monitoring port operators' performance of their obligations with respect to construction noise issues, and reporting to residents affected by noise.

5. Keep within the annual budget provided by the owners and operators of the Port of Lyttelton.

6. Certification

1. Provide documentation confirming the Plan has been certified by the Christchurch City Council as meeting the requirements set out in (i) to (iv) above.

4. Complaints

1. Develop procedures to record complaints and steps to investigate such complaints.

5. Review and alteration of the Plan

1. Develop procedures to alter, review and update the Construction Noise Management Plan.

2. Produce and append to the Construction Noise Management Plan annually a report on the implementation and, where relevant, alteration and update of that Plan.

6. Construction Noise Mitigation Plan

The Construction Noise Mitigation Plan will include but not be limited to the following:

1. Setting out procedures on how affected property owners are to be contacted and the documentation of feedback and proposed mitigation measures discussed.

2. Criteria that specify mitigation measures, having regard to the length of time the construction affected property is to be exposed to construction noise and the levels of construction noise involved.

3. The mitigation measures determined under the criteria developed in (ii) will include but not be limited to:

- provision of temporary accommodation;
- acoustic mitigation (such as upgrading the dwelling) in accordance with the criteria set out in the Plan for Acoustic Treatment and Purchase of Dwellings set out in [Appendix 13.8.6.8\(d\)](#) Acoustic Treatment of the operative Christchurch District Plan as of November 2019;
- an offer to purchase the property; and
- where an offer to purchase a property is made, a fair market value of the property shall be determined as if the property was situated in Lyttelton, not taking into account the effect of construction noise and also port noise. Procedures shall be put in place so a fair valuation is reached.

4. Documentation confirming the Plan has been certified by the Christchurch City Council as meeting the requirements set out in (i) to (iii) above.

7. Review and alteration of the Plan

1. Develop procedures to alter, review and update the Construction Noise Mitigation Plan.
2. Produce and append to the Construction Noise Mitigation Plan annually a report on the implementation and, where relevant, alteration and update of that Plan.

Appendix 2 - Port Noise Management Plan

Advice note:

These provisions follow Appendix 13.8.6.7 of the operative Christchurch District Plan as of November 2019

Port Noise Management Plan

The Port Noise Management Plan will include but not be limited to the following:

1. Purpose of the Port Noise Management Plan

1. State owners and operators of the Lyttelton Port's commitment to manage and to reduce/mitigate port noise.
2. Set a framework for the Port Liaison Committee.
3. Identify Port Activities that can give rise to noise.
4. Set a framework for monitoring, measuring and reporting on port noise.
5. Set a framework for dealing with complaints.
6. Document noise management activities.

2. Obligations of the owners and operators of Lyttelton Port

1. Allocate an annual budget to the Port Liaison Committee for the preparation and implementation the Port Noise Management Plan and the Plan for Acoustic Treatment and Purchase of Dwellings.
2. Provide administrative and advisory support for the Port Liaison Committee.
3. Deal with noise complaints.

3. Owners and operators of the Port of Lyttelton in conjunction with the Port Liaison Committee

1. Prepare and implement the Port Noise Management Plan and the Plan for Acoustic Treatment and Purchase of Dwellings.
2. Develop noise modelling, monitoring and measurement procedures that follow the concepts in NZS 6809: 1999 Acoustics – Port Noise management and land use planning, for the purpose of preparing a Port Noise Contour Map that shows contour lines in 1dB increments from 55dB Ldn to 70dB Ldn inland of the Specific Purpose (Lyttelton Port) Zone. This Port Noise Contour Map is to be attached to the Port Noise Management Plan and is to be regularly updated as required by the Port Liaison Committee and at the expense of the owners and operators of the Port of Lyttelton. The model for the Port Noise Contour Map shall be reviewed at least once every two years to determine whether it needs to be updated.

3. Develop methods to monitor port noise, in order to verify the port noise contour lines.
4. In developing the Port Noise Contour Map, recognise that noise from water and grit blasting at the dry dock facilities is excluded and instead noise from the water and grit blasting operation is managed by controlling the hours of operation.

4. Port Liaison Committee framework

1. Meet at least once a year.
2. Provide details on representation and administration of the committee.
3. Provide a list of functions, including but not limited to the administration of the Plan for Acoustic Treatment and Purchase of Dwellings and associated budget, consideration of complaints, monitoring port operators' performance of their obligations with respect to noise issues, and reporting to residents affected by noise.
4. Keep within the annual budget provided by the owners or operators of the Port of Lyttelton.
5. Advise any property owner in writing where the property is partly or wholly contained within an area seaward of the 70dBA Ldn contour or greater as shown by the Port Noise Contour Map following the preparation or the update of the Port Noise Contour Map.

5. Complaints

1. Develop procedures to record complaints and steps to investigate such complaints.

6. Documentation

1. Current version of the Port Noise Management Plan to be made available by the operators of the Port of Lyttelton to the public on a website.
2. Names and contact details for current staff of the operators of the Port of Lyttelton, Port Liaison Committee members and consultants involved in noise management.
3. Noise model and measurement details and procedures.
4. Summary of scenarios tested in the acoustics model.
5. Summary noise monitoring conducted.
6. Summary of complaints annually and a description of actions taken to address a complaint.

7. Review and alteration of the Plan

1. Develop procedures to alter, review and update the Port Noise Management Plan.
2. Produce and append to the Port Noise Management Plan annually a report on the implementation and, where relevant, alteration and update of that Plan.